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Technical Report on the Los Helados and Lunahuasi Projects, Chile and Argentina

Report for NI 43-101

NGEx Minerals Ltd.

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Prepared by:

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Making Sustainability Happen

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FINAL

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1.0 Summary

1.1 Executive Summary

SLR Consulting (Canada) Ltd. (SLR) was retained by NGEx Minerals Ltd. (NGEx) to prepare an independent Technical Report on the NGEx Vicuña Project (the Project or the Property), which consists of the Los Helados deposit (Los Helados), located in Chile near the border with Argentina, and the Lunahuasi deposit (Lunahuasi), located 10 km south of Los Helados in Argentina. The purpose of this Technical Report is to disclose an updated Mineral Resource estimate for the Los Helados copper-gold-silver deposit, to provide information on the recent exploration discovery of the Lunahuasi copper-gold-silver deposit, and to support a listing on the Toronto Stock Exchange.

This Technical Report conforms to National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101). The classification for Mineral Resources in this Technical Report conforms to the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves dated May 10, 2014 (CIM (2014) definitions). The SLR Qualified Person (QP) visited the Project from September 18 to 22, 2023. The QPs for this report are Luke Evans, M.Sc., P.Eng., and Giovanni Di-Prisco, Ph.D., P.Geo.

NGEx is a TSX-V listed Lundin Group copper and gold exploration company based in Vancouver, Canada, with projects in Argentina and Chile. NGEx is advancing its newly discovered Lunahuasi deposit located in San Juan Province, Argentina, in the emerging Vicuña District. NGEx also holds a majority interest in the large-scale Los Helados copper-gold development project located in Region III, Chile.

1.2 Property Description and Location

The Project is located approximately 125 km southeast of the city of Copiapó in Chile. The approximate latitude and longitude centroid of the Los Helados deposit is 28.3408° S, 69.5857° W. The approximate latitude and longitude of the Lunahuasi discovery is 28.4196° S, 69.6226° W (decimal degrees, WGS84 datum).

1.2.1 Land Tenure

The Project is comprised of claims in Chile owned by NGEx's Chilean subsidiary, Minera Frontera del Oro SpA (MFDO) (the MFDO Claims) and claims in Argentina owned by its Argentine subsidiaries RioEx S.A. (the La Rioja Properties) and Pampa Exploración S.A. (the Pampa Claims). NGEx Minerals holds an indirect approximate 69.1% interest in the MFDO Claims, a 60% interest in the La Rioja Properties, and a 100% interest in the Pampa Claims. The MFDO Claims and the La Rioja Properties are subject to a joint exploration agreement with Nippon Caserones Resources Co. Ltd. (NCR), which holds the remaining approximately 30.9% and 40% respective interests. The combined area of the mineral tenures comprising the Project is approximately 28,730 ha.

The NGEx Vicuña Project is subject to a protocol, the "Proyecto de Prospección Minera Vicuña" (Vicuña Mineral Prospecting Project) established under the "Tratado entre la República de Chile y la República Argentina sobre Integración y Complementación Minera" (Mining Integration and Complementation Treaty between Chile and Argentina; or the Treaty) between Chile and Argentina. The Treaty provides a legal framework to facilitate the development of mining projects located in the border area of both countries. The Treaty objective is to facilitate the exploration and exploitation of mining projects within the area of the Treaty.



This protocol allows for prospecting and exploration activities in the NGEx Vicuña Project area, on both sides of the international border. The main benefit of the protocol is the authorization which allows for people and equipment to freely cross the border in support of exploration and prospecting activities within an area defined as an "operational area".

The Los Helados Mineral Resource is entirely located in Chile, on the MFDO Claims and the Lunahuasi discovery is entirely located in Argentina on the Pampa Claims.

1.3 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Property spans the border between Chile and Argentina, and access is possible from either country under the limits of NGEx's "*Proyecto de Prospección Minera Vicuña*". There is a well-developed network of mining roads on the Property that connect with neighbouring project infrastructure, allowing for several route options to reach different parts of the Property.

Access to Los Helados is most direct from Copiapó, Chile, a total driving distance of approximately 177 km. Copiapó has a modern airport, with several daily flights to Santiago, the capital city. The Lunahuasi deposit is in Argentina, approximately 23 km by road from Los Helados.

Access from Argentina is via the city of San Juan. The road route travels northward from San Juan for 264 km on National Route No. 40 passing through the towns of San José de Jáchal and Huaco to Guandacol in the Province of La Rioja. At Guandacol, the route transitions to a gravel road for 210 km northwestward through the La Brea field site to the Batidero camp, owned by Lundin Mining Corporation (Lundin). Lunahuasi is approximately 20 km in a northwesterly direction from the Batidero camp at the headwaters of Rio Blanco.

The Property is in a high altitude dry to arid climate. It is characterized by low temperatures throughout the year, typically below 15°C in the summer.

Elevation on the Property ranges from less than 3,000 MASL to 5,800 MASL. The area is mountainous with steep west facing slopes on the Chilean side, and more moderate topography on the eastern Argentinian side.

There is no local infrastructure in the vicinity of either Los Helados or Lunahuasi, other than the Batidero camp, which is located in Argentina approximately 20 km to the southeast of Lunahuasi at 4,000 MASL.

1.4 History

The claims in the Los Helados area were staked by NGEx in 2004. Prior to NGEx staking the Property, there is no record of significant exploration activity in the area. The first mineral exploration work was carried out by Shell (subsequently Billiton) at the end of the 1980s. This work apparently included geological mapping, rock, talus and stream sediment geochemical sampling, test pits for sampling and mapping, and some geophysical surveying, but there are no available reports. In 1994, Barrick Gold Corporation apparently worked in the general area of Los Helados for approximately 15 days, sampling stream sediments and rocks for geochemistry; however, results are unknown.

There is no known history of any exploration activity in the Lunahuasi area prior to acquisition of the claims by NGEx.

1.5 Geological Setting and Mineralization

The Property is located within the Oligocene-Miocene porphyry belt of the central Andes, in the Vicuña District.

The Los Helados porphyry copper-gold system is situated in the northern part of the Vicuña structural magmatic corridor, along the Los Helados fault. The host rocks of the deposit are largely Permo-Triassic in age, with Permian-age granite being the oldest and most regionally extensive unit. In the deposit area, it is intruded by Triassic rhyodacitic intrusive complex and tonalitic to dioritic dykes and stocks, both approximately 230 Ma to 225 Ma.

Los Helados occurs within a mid-Miocene porphyry-breccia system that was emplaced into basement rocks. Copper-gold mineralization is predominantly hosted within the magmatic-hydrothermal breccias and contemporaneous biotite-hornblende dacitic porphyries, with some peripheral mineralization also within the immediate country rock although grades rapidly decline away from the breccia and porphyry intrusive contacts.

Lunahuasi is situated in the central part of the Vicuña structural magmatic corridor, approximately mid-way between the Los Helados deposit ten kilometres to the north and the Filo del Sol porphyry-epithermal system nine kilometres to the south. It occurs in a structurally complex area where northeast-trending faults that are related to a deep-seated lithosphericscale structure transect the dominant north-northeast trend of the Vicuña belt.

At Lunahuasi, stocks and dykes of diorite to quartz-diorite composition intrude the host volcanosedimentary units and are cut by the mineralized structures. The copper-gold-silver mineralized veins are vertical to steeply subvertical, appear to trend primarily north-northwest, and, where drilled to date, have a true thickness up to approximately 20 m. Massive pyrite and enargite occur within mineralized structures that have siliceous cores, vuggy silica, and advanced argillic alteration. Limited surface mapping suggests at least a one kilometre continuous trend to the vein system, although further work needs to be completed to adequately test the dimensions of the system.

There are two other areas of known mineralization, Cerro Blanco and Solitario, that occur towards the eastern side of the Property. They are aligned along a north-south trend that also includes the Josemaria porphyry copper-gold deposit to the south of the Project. All of the dated intrusions related to mineralization along this trend are approximately 25 Ma (Late Oligocene) and they define the eastern, Late Oligocene domain within the Vicuña belt.

1.6 Exploration

1.6.1 Los Helados Exploration

The Los Helados area of the Property was staked in 2004 with initial exploration work beginning that year. ASTER and LandSAT imagery identified an alteration target in the Los Helados area and preliminary mapping, rock-chip sampling, and talus sampling were conducted early in 2005. Additional geochemistry as well as 22 km of induced polarization (IP) resistivity and magnetometry survey were done during the 2005-2006 summer season. It was a geological interpretation supported by IP geophysics and surface geochemistry that led to targeting the first drilling of Los Helados in the 2006-2007 season.

A deep-penetration geophysical survey (MIMDAS) was completed in 2009. Between 2010 and 2011, existing and new IP-resistivity lines were surveyed using a 200 m dipole in order to investigate deeper parts of the deposit. New geological mapping of the deposit was completed



in 2015 and subsequently updated in 2017 with new surface information from relogging of several sections in the deposit area.

Simultaneous with the new geological interpretation, the existing geophysics data was reprocessed by Condor North Consulting ULC, Canada, resulting in a series of drill target recommendations.

New geophysical surveys consisting of a drone magnetometry survey, a direct current IP (DCIP) survey, and a magnetotelluric (MT) survey over the Los Helados deposit area were completed between 2021 and 2023.

During the 2022-2023 season, extensive new surface geological mapping and compilation was completed, complemented by a district-wide structural study that included detailed work in the Los Helados area, as well as more extensive work along the Vicuña belt to the south. The Los Helados geology team brought together a new geological map that includes new structural insights as well as additional detail and new interpretation of the deposit area geology.

1.6.2 Lunahuasi Exploration

Prospecting in the region by NGEx began in the 1999-2000 season and ran discontinuously during 2004, 2008, 2016, and 2018. Between 1999 and 2008, three campaigns of talus fine sampling were completed, resulting in the collection of 230 samples over an area of 30 km². A total of 133 rock samples were also collected during these programs. Gold values in talus were generally between 0.03 g/t Au and 0.15 g/t Au, with copper values between 1 ppm and 564 ppm. The strongest geochemical anomaly was near the intersection of Rio Hediondo and Rio Blanco, just over one kilometre east of the Lunahuasi discovery.

A comprehensive surface exploration program was implemented during the 2022-2023 season, comprising additional prospecting and geological mapping, talus fine rock chip samples for geochemical and Short Wavelength InfraRed (SWIR) analysis, and DCIP and MT geophysical surveys. A structural mapping and compilation of the Vicuña District in 2023 includes a more detailed structural interpretation of the Lunahuasi area.

1.7 Drilling

1.7.1 Los Helados Drilling

A total of ten drilling campaigns were carried out between 2006 and 2023 resulting in a total of 96,448 m drilled in 110 holes of which 105 were diamond core holes and five were reverse circulation. The Los Helados deposit was discovered by drilling during the 2007-2008 season.

Recent drilling has discovered two new high-grade zones, the Fenix and Alicanto Zones, within the main breccia unit. These zones need further drilling to define their limits, and both are open to depth with existing drilling ending in high-grade mineralization. Similarly, the high-grade central Condor Zone remains open to depth.

Drill core was transported by truck by company personnel from the drill sites to the Los Helados permanent core logging and sampling facility located in Copiapó for sampling, detailed logging, and core storage.

In 2015, specific geotechnical core logging was performed on six drill holes totalling 3,350 m to estimate the rock mass rating. Subsequent to this, a dedicated block cave geomechanics study was conducted, which included drilling two oriented geotechnical drill holes (2,241 m). Testing included televiewer surveys, Lugeon testing, and 230 point load tests.



Core recovery at Los Helados is typically very good due to the competent rock, averaging better than 95%.

Drill collar locations were surveyed using a differential global positioning system (GPS).

Downhole surveys were carried out using a Reflex multi-shot instrument until the 2012–2013 campaign when an SRG-gyroscope survey was completed for each drill hole by Comprobe Limitada. For the 2021-2022 and 2022-2023 drilling campaigns, drill hole trajectory measurements were conducted by Comprobe Limitada, using a north-seeking fibre optic gyroscope system.

1.7.2 Lunahuasi Drilling

An initial drill program was conducted in the 2022-2023 season including eight holes for a total of 4,912 m, returning 43 individual high-grade intersections. Drill core was transported by pickup truck by company personnel from the drill sites to a temporary core facility near the drill site. The core was photographed, logged for rock quality designation (RQD) and recovery, and a quick log of the key geological features was prepared. The core was then packaged for delivery by NGEx personnel to the company's permanent core logging and sampling facility located in Copiapó for sampling, detailed logging, and core storage.

Core recovery from holes drilled averages 97.7%. Drill collar locations were surveyed using a differential GPS system. Drill hole trajectory measurements were conducted by Comprobe Limitada, using a north-seeking fibre optic gyroscope system.

1.8 Sampling, Analysis and Data Verification

1.8.1 Drill Hole Sampling

RC holes drilled during the 2006–2007 campaign were sampled on two-metre intervals.

Drill core was sampled continuously from the beginning of recovery to the end of the hole. Samples are generally two metres long (except for the initial drill holes, LHDH01 to LHDH04, which were sampled on one-metre intervals). Drill core was cut in half using a circular, watercooled rock saw with one half of the core used as a geochemical sample and the other half stored in boxes or trays for reference and future revisions.

1.8.2 Density Determinations

Specific gravity (SG) has been systematically measured beginning with the 2010–2011 drilling program. A total of 25,158 core samples have been measured for SG by NGEx technicians using the water immersion method at the company's core logging and sampling facility in Copiapó.

1.8.3 Analytical and Test Laboratories

ALS in Chile was used as the primary analytical laboratory for the five RC holes. At the time of analysis, ALS held ISO 9001 accreditations for selected procedures.

The primary assay laboratory for the pre-2021 core drilling programs was ACME Laboratories in Chile (ACME). ACME is an internationally certified laboratory. In 1994, ACME began adapting its Quality Management System to an ISO 9000 model. ACME implemented a quality system compliant with the ISO 9001 Model for Quality Assurance and ISO/IEC17025 General Requirements for the Competence of Testing and Calibration Laboratories. In 2005, the Santiago laboratory received ISO 9001:2000 registration and in July 2010, the Copiapó facility



was added to the Santiago registration. The Santiago hub laboratory has also been ISO 17025:2005 compliant since 2012. ISO/IEC 17025 includes ISO 9001 and ISO 9002 specifications, CAN-P-1579 (Mineral Analysis) for specific registered tests by the Standard Council of Canada. CAN-P-1579 is the Standard Council of Canada's requirements for the accreditation of mineral analysis testing laboratories.

During the 2021-2022 and 2022-2023 campaigns, drill core for both Los Helados and Lunahuasi was delivered directly to the ALS sample preparation facilities in Copiapó and analyzed at the ALS facility in Santiago, Chile, or Lima, Peru. ALS facilities are accredited to ISO 9001-2008 and ISO 17025.

All laboratories are independent of NGEx.

1.8.4 Sample Preparation and Analysis

Sample preparation consisted of:

- Drying in a large electric oven with temperature control
- Crushing to better than 85% passing 10 mesh
- Splitting to a 0.5 kg subsample
- Pulverizing the subsample to 95% passing 200 mesh
- Screening to pass 200 mesh

Multi-acid digestion was used for all NGEx samples with the exception of one submission during the 2009–2010 campaign.

Gold was determined mostly on 30 g aliquots and some 50 g aliquots using fire assay with an atomic absorption spectroscopy (AAS) finish. A suite of 37 elements, including copper and silver, was analyzed by inductively coupled plasma (ICP)-emission spectroscopy (ES).

Prior to 2010, copper was analyzed only by ICP, with re-assay by AAS only if the ICP result exceeded the upper detection limit of 10,000 ppm Cu. From 2010 to 2012, all samples with copper grades over 5,000 ppm Cu were re-assayed by AAS. Starting in 2012, all samples were analyzed for copper by both ICP and AAS. Copper was also analyzed by sequential leach if the ICP result exceeded 500 ppm. Starting in 2021, silver was also analyzed at ALS using AAS (AA-62 method code).

Mercury analyses by cold vapour/AA were performed on all samples until 2010, after which they were discontinued.

1.9 Quality Assurance and Quality Control

1.9.1 Los Helados QA/QC

No quality assurance/quality control (QA/QC) program was in place for samples from drill holes LHDH001 to LHDH004, from the 2009–2010 drill program, which corresponds to 2,540 samples representing 3.6% of the metres drilled.

A quality control program was implemented for the 2009-2010 drilling campaign, beginning with hole LHDH005, and has been in place for all subsequent drill programs. The 2010–2011 campaign included two standards, whereas for subsequent campaigns three standards were used. Coarse blank samples and duplicate samples were inserted and collected from the beginning of the QA/QC programs. Sample collection, preparation, analysis, and security are in

line with industry-standard methods for porphyry deposits and QA/QC program results do not indicate any issues with the analytical programs.

QA/QC insertion rates are listed below in Table 1-1.

Season	Samples	Blank	Standard	DUPa	DUPf	DUPp
2006-2007	127					
2007-2008	1,742					
2008-2009	1,507					
Sub-Total	3,376					
2009-2010	2,136	60	61	30	31	30
2010-2011	4,681	143	122	66	63	66
2011-2012	10,466	297	299	137	129	139
2012-2013	15,456	370	557	196	193	196
2014-2015	1,639	14	21	7	6	7
2021-2022	5,437	138	207	69	67	69
2022-2023	4,708	119	179	59	59	60
Sub-Total	44,523	1,141	1,446	564	548	567
Average Insertion Rate	9.6%	2.6%	3.2%	1.3%	1.2%	1.3%

 Table 1-1:
 QC Insertion Rates at Los Helados Project

Note: DUPa, DUPf, and DUPp correspond to assay, field, and preparation duplicates.

1.9.2 Lunahuasi QA/QC

For the Lunahuasi 2022-2023 season, the blank, standard, and duplicate insertion rates are provided in Table 1-2.

Table 1-2: QC Insertion Rates at Lunahuasi Project

Туре	Total QC	Total Samples	Insertion Rate (%)
DUPa	36		1.3
DUPf	36		1.3
DUPp	36		1.3
Blanks	72		2.5%
Standards	110		3.8%
Total	290	2,867	10.1%

Note: DUPa, DUPf, and DUPp correspond to assay, field, and preparation duplicates.

1.9.3 Databases

Data was migrated to MX Deposit in May 2022, which is an SQL database hosted on Amazon's cloud service. All quality assurance is performed in this software prior to release of assays.



Data stored for each drill hole include collar information, downhole surveys, codes and comments for lithology, alteration and mineralization, assays, SG, magnetic susceptibility, recovery, RQD, and metallurgical sample information.

1.9.4 Sample Storage

Drill core boxes are stored in racks inside a warehouse in a core storage yard in Copiapó. RC drill chips are stored in lidded, plastic core trays, most of which are also kept in Copiapó.

The laboratory returned the pulps and coarse reject for each sample that was sent for analysis. These are stored at the Copiapó facility.

1.10 Data Verification

The SLR QP visited the Los Helados deposit in Chile, the Lunahuasi deposit in Argentina, and the core logging facility in Copiapó, Chile, from September 18 to 22, 2023. The SLR QP was accompanied by NGEx geologists for the visit. The Los Helados site was visited on September 19, 2023. Surface exposures and a number of diamond drill hole collars were examined. The Lunahuasi site was visited on September 20, 2023. Surface exposures and a number of diamond drill hole collars were of diamond drill hole collars were examined.

The SLR QP visited the core, pulp, and reject storage and core logging and sampling facility in Copiapó, which is conveniently located next to Copiapó office. The SLR QP examined core from Los Helados drill holes LHDH076, LHDH083, and LHDH084, which were representative of the mineralization at the Condor, Alicanto, and Fenix zones, respectively. Core in Lunahuasi drill hole DPDH002 was also reviewed and compared with the copper and gold assay results and drill log.

Data verification of the drill hole database included manual verification against original digital sources, a series of digital queries, and a review of the QA/QC procedures and results, and visual comparisons between the assay results and three drill holes from Los Helados and one drill hole from Lunahuasi.

SLR's review of the resource database included collar, survey, lithology, mineralization, and assay tables. Database verification was performed using tools provided within Leapfrog Geo Version 2023.1.0 software package (Leapfrog). A visual check on the drill hole Leapfrog collar elevations and drill hole traces was completed. No major discrepancies were identified.

In addition, the SLR QP completed database validity checks for out-of-range values, overlapping intervals, gaps, and mismatched sample intervals. Overall, SLR found no significant issues with the Los Helados and Lunahuasi drill hole databases.

1.10.1 Los Helados

SLR carried out cross-checks between the Los Helados MX Deposit assay database and the ACME and ALS assay certificates. SLR compiled 33,270 samples from 300 certificates from 2008 to 2023 and compared values for copper, gold, and silver against the MX Deposit assay database. This allowed for approximately 60% the MX Deposit database to be verified. No significant errors were identified.

1.10.2 Lunahuasi

The SLR QP verified 97% of the copper, gold, and silver assays in the eight diamond drill holes (a total of 3,156 samples) at Lunahuasi and found no errors.



1.11 Mineral Processing

The Los Helados metallurgical testwork program was conducted at SGS in Santiago, Chile in two phases, Phase I in 2013 and Phase II 2015. The work was completed under the supervision of Amec Foster Wheeler plc, acquired by Wood Group in 2017, and included:

- Sample selection for the metallurgical test programs
- Chemical characterization including mineralogical analysis
- Physical characterization
- Gold recovery using gravity processing techniques
- Copper, gold and silver recovery using conventional sulphide flotation practices
- Settling testwork

Vendor testing of High-Pressure Grinding Rolls (HPGR) was also conducted by ThyssenKrupp AG on selected samples from the Los Helados deposit.

Upon completion of the Phase I metallurgical testwork program, it was concluded that the deposit was largely homogeneous throughout with respect to chemical and physical characteristics. An updated geological model was subsequently developed for Los Helados, which led to the second testwork phase which focused primarily on the characteristics of the deposit at different periods within a conceptual block cave production plan. In the second round of metallurgical testwork, the deposit homogeneity was confirmed. Three separate composites were created representing production periods from a conceptual mine schedule.

Metal recoveries from the Locked Cycle Tests carried out in the two programs ranged from 83.1% to 93.1% for copper, 68.1% to 82.5% for gold, and 31.0% to 77.8% for silver.

The mineralogical analysis indicated that the main copper sulphide mineral present is chalcopyrite (97% average by weight) with traces of chalcocite/digenite and bornite.

No deleterious elements issues were noted in the concentrates produced from the testwork completed and the concentrates are considered to be marketable without incurring penalties for deleterious elements.

No metallurgical testwork has been carried out yet at the Lunahuasi deposit.

1.12 Mineral Resource Estimate

An updated MRE was completed by SLR using the database provided by NGEx. The MRE was prepared in accordance with CIM (2014) definitions as incorporated by reference into NI 43-101.

The updated MRE is based on results from 106 drill holes, totalling 93,750 m of drilling.

The estimate is based on an interpreted breccia body intruding the local country rock. The breccia hosts three internal higher-grade zones: Condor, Fenix, and Alicanto. The mineralization model was created in Leapfrog Geo 2023.1 by NGEx geologists and refined by SLR.

The sub-block model was created, and the Mineral Resource estimation was completed in Leapfrog Edge software. The parent block size used was 20 m by 20 m by 20 m, with subblocking to 2.5 m by 2.5 m by 2.5 m. Grades for copper, gold, silver, and molybdenum were estimated into parent blocks using ordinary kriging (OK). Inverse distance cubed (ID³) and nearest neighbour (NN) interpolations were also carried out for validation purposes. Geometallurgical wireframes prepared for the previous 2019 MRE were used to generate a



Geometallurgical model in Leapfrog Geo 2023.1 to assign domains with different metallurgical recoveries onto the block model.

Mineral Resources were classified into Indicated and Inferred categories using a combination of drill hole spacing and confidence in the continuity of mineralization. Drill hole spacings of up to approximately 150 m for Indicated and up to approximately 300 m for Inferred have been used to support the classification.

To meet the reasonable prospects for eventual economic extraction (RPEEE) requirement for Mineral Resources, an underground bulk mining scenario was considered. The Mineral Resource is reported within a block cave shape generated at a 0.33% CuEq cut-off grade. A series of block cave shapes were also prepared using increasing cut-off grades to allow for an assessment of the Project's sensitivity to different cut-off grades.

A summary of the updated MRE is provided in Table 1-3.

	Tonnogo	Grade			Metal Content			
Category	(Bt)	Cu (%)	Au (g/t)	Ag (g/t)	CuEq (%)	Cu (Mlb)	Au (Moz)	Ag (Moz)
Indicated	2.08	0.40	0.15	1.5	0.51	18,426	10.2	97.5
Inferred	1.08	0.34	0.10	1.5	0.42	8,152	3.6	50.2

Table 1-3: Summary of Mineral Resources – October 31, 2023

Notes:

- 1. CIM (2014) definitions were followed for Mineral Resources.
- Mineral Resources are estimated at a cut-off grade of 0.33 g/t CuEq based on an underground block cave mining cost of US\$8/t, a processing cost of US\$12/t, and a G&A cost of US\$1/t.
- Mineral Resources are estimated using a long-term copper price of US\$3.90 per pound, a gold price of US\$1,800 per ounce, and a silver price of US\$20 per ounce.
- 4. Metallurgical recoveries used correspond to three geometallurgical zones:
 - a. Upper: Cu 83.1%, Au 72.8%, Ag 31.0%
 - b. Intermediate: Cu 90.2%, Au 80.3%, Ag 54.9%
 - c. Deep: Cu 93.1%, Au 82.5%, Ag 70.5%
- 5. The formulas used for the CuEq calculation are:
 - a. Upper: CuEq % = Cu % + (0.681008 x Au (g/t)) + (0.002989 x Ag (g/t))
 - b. Intermediate: CuEq % = Cu % + (0.692039 x Au (g/t)) + (0.004877 x Ag (g/t))
 - c. Deep: CuEq % = Cu % + (0.688852 x Au (g/t)) + (0.006068 x Ag (g/t))
- 6. Bulk density is 2.67 t/m³.
- Mineral Resources are reported within an optimized underground block cave mining shape to demonstrate reasonable prospects for eventual economic extraction (RPEEE). The block cave considered a column size of 20 m x 20 m x (≥ 80 m).
- 8. There are 40 million tonnes of unclassified material excluded from inside the block cave shape.
- 9. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 10. Numbers may not add due to rounding.

Table 1-4 presents the Los Helados Mineral Resource tabulated within conceptual block cave shapes developed using increasing cut-off grades. This is presented to provide grade-distribution data that allows for an assessment of the Project's sensitivity to various cut-off grades.

Cut-Off	Category	Tonnage (Bt)	Grade				Metal Content		
Grade CuEq (%)			Cu (%)	Au (g/t)	Ag (g/t)	CuEq (%)	Cu (MIb)	Au (Moz)	Ag (Moz)
0.25	Indicated	2.39	0.38	0.15	1.4	0.49	19,881	11.3	106.6
0.25	Inferred	1.84	0.30	0.10	1.3	0.38	12,247	5.8	75.4
0.2	Indicated	2.20	0.39	0.15	1.4	0.50	19,044	10.7	101.2
0.5	Inferred	1.30	0.33	0.10	1.4	0.41	9,462	4.3	58.0
0.33	Indicated	2.08	0.40	0.15	1.5	0.51	18,426	10.2	97.5
	Inferred	1.08	0.34	0.10	1.4	0.42	8,152	3.6	50.2
0.4	Indicated	1.65	0.43	0.16	1.5	0.55	15,696	8.5	82.2
0.4	Inferred	0.60	0.38	0.11	1.6	0.46	5,012	2.1	31.5
0.5	Indicated	0.88	0.50	0.19	1.7	0.64	9,698	5.4	48.8
0.5	Inferred	0.18	0.47	0.12	2.1	0.56	1,877	0.7	12.0
0.6	Indicated	0.51	0.56	0.21	1.8	0.72	6,271	3.5	30.2
	Inferred	0.04	0.62	0.09	2.4	0.70	593	0.1	3.4

 Table 1-4:
 Cut-off Grade Sensitivity

The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

No Mineral Resources have been estimated for the Lunahuasi deposit.

1.13 Conclusions

1.13.1 Los Helados Geology and Mineral Resources

At Los Helados, NGEx has completed 23 new surface diamond drill holes totalling 23,014 m since the previous Mineral Resource estimate dated April 26, 2019. During the past two years of exploration at Los Helados, this drilling has discovered two new high-grade zones within the main breccia unit. These zones need further drilling to define their limits, and both are open to depth with existing drilling ending in high-grade mineralization. Similarly, the high-grade central Condor Zone remains open to depth.

At Lunahuasi, an initial drill program was conducted in the 2022-2023 season including eight holes for a total of 4,912 m, returning 43 individual high-grade intersections. The vein system at Lunahuasi Bajo is part of an alteration system that is mapped as being at least four kilometres wide by six kilometres long. Exploration for similar style veins within the area immediately below the current drilled depth, as well as the entire thickness of rock below advanced argillic and sericitic alteration to the west of the existing discovery remains wide open.

The other known prospects on the Property, Cerro Blanco and Solitario, also require more follow-up work. Only limited exploration has been completed on these prospects in the past. Both prospects have geological and structural similarities to other projects in the area.

An updated Mineral Resource estimate (MRE) as of October 31, 2023, was prepared in accordance with CIM (2014) definitions as incorporated by reference into NI 43-101.

To meet the reasonable prospects for eventual economic extraction (RPEEE) requirement for Mineral Resources, an underground bulk mining scenario was considered. The Mineral Resource is reported within a block cave shape generated at a 0.33% CuEq cut-off grade. Metallurgical recoveries used correspond to three geometallurgical zones.

Compared to the previous estimate, the October 31, 2023 Mineral Resource estimates an additional 41% contained copper, 33% contained gold, and 43% contained silver in the Inferred category. The Indicated Mineral Resources are estimated to be similar tonnage (within 1%), with slightly higher contained metal. Both Indicated and Inferred categories estimate slightly higher grades for all reported metals. These increases are attributed to drilling success which has extended and added material to both the Fenix and Alicanto internal high-grade zones, as well as updated procedures and approaches taken during estimation.

The SLR QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

Block cave shapes generated at higher cut-off grades demonstrate good continuity and potential for higher grade scenarios with lower tonnages. For example, at a 0.6% CuEq cut-off grade, Indicated Mineral Resources are estimated at 510 million tonnes (Mt) averaging 0.56% Cu, 0.21 g/t Au, and 1.8 g/t Ag and containing 6.3 billion pounds (Blb) of copper, 3.5 million ounces (Moz) of gold, and 30 Moz of silver.

The sample collection, preparation, analytical, and security procedures and the QA/QC program, as designed and implemented by NGEx, are adequate, and the assay results within the database are suitable for use in Mineral Resource estimation.,

The SLR QP is of the opinion that the Los Helados diamond drill hole assay results and database management procedures are of high quality and the assay results for gold, copper, and silver are acceptable for the purposes of Mineral Resource estimation.

The QA/QC program indicates good precision for copper and gold, negligible sample contamination, and the certified reference material (CRM) results confirm that no significant biases exist for the copper and gold results. The silver grades at Los Helados are nearing the detection limit and exhibit poor precision. There is more uncertainty in the silver resource grades, however, they contribute less than two percent of the total copper equivalent value. Copper and gold contribute approximately 78% and 20%, respectively.

SLR carried out cross-checks between the Los Helados MX Deposit assay database and the ACME and ALS assay certificates. SLR compiled a subset of 33,270 samples from 300 certificates from 2008 to 2023 and compared values for copper, gold, and silver against the MX Deposit assay database, which has 48,927 samples. SLR found matches for 28,416 samples, which represents 58% of the MX Deposit database. SLR found no significant errors.

Miocene copper-gold mineralization at Los Helados is volumetrically most significant within the magmatic-hydrothermal breccia. The breccia forms a pipe-like body with minimum dimensions of 1,100 m east-west, 1,200 m north-south, and at least 1,500 m vertically. The breccia body is surrounded by a broad halo of moderate to low grade copper-gold mineralization which diminishes in grade with increasing distance from the breccia contact.

There are a number of targets at Los Helados that warrant more diamond drilling including:

• The high-grade Fenix Zone



- A potential northeast-trending link between the Fenix and Alicanto zones
- The South Breccia Target

1.13.2 Lunahuasi Geology

Lunahuasi was discovered by eight diamond drill holes in early 2023. A new drilling program began recently. The high-grade copper-gold-silver mineralization is open in all directions and there is excellent potential to define a large deposit with more drilling, surface mapping, sampling, and other work.

The mineralization discovered at Lunahuasi is part of a high-sulphidation epithermal vein system. Mineralization is hosted by structures which are interpreted to be subvertical and to strike north-south to north-northeast. These structures are characterized by massive to semi-massive and disseminated sulphides, principally pyrite and enargite with locally abundant covellite. The sulphides tend to be coarse grained and include some very coarse crystalline sections.

Approximately 97% of the copper, gold, and silver assays in the eight diamond drill holes (a total of 3,156 samples) at Lunahuasi were verified by SLR and no errors were found.

1.14 Recommendations

Additional work is warranted at both Los Helados and Lunahuasi, as outlined below. Given the magnitude of expenditures for the programs and the high-grade mineralization discovered at Lunahuasi, it is recommended to prioritize the Lunahuasi work program.

1.14.1 Los Helados

Additional work is recommended at Los Helados, with three main objectives:

- 1 Continue to upgrade Inferred Mineral Resources to Indicated, with a focus on the highgrade Fenix Zone.
- 2 Investigate a potential northeast-trending link between the Fenix and Alicanto zones.
- 3 Investigate the high-potential South Breccia Target through additional data collection and compilation, followed by exploration drilling.

The Fenix Zone represents an underexplored high-grade hydrothermal breccia which warrants additional drilling in order to fully define its size, geometry, and grade distribution. This drilling should utilize directional drilling to minimize the metres required to achieve the objective. The experience gained during the 2022-2023 campaign with directional drilling shows that this is an effective technique given the competent rock and good drilling conditions at Los Helados, with the ability to branch off multiple daughter holes from each pilot hole and to hit targets with good accuracy.

Now that the geometry of the Fenix Zone has been largely established, an efficient program of infill and expansion holes can be planned. Highest priority should be given to drilling to the south of hole LHDH084 (390 m at 1.13% CuEq; 1.02% Cu, 0.15 g/t Au, 2.4 g/t Ag plus 187 ppm Mo), below LHDH076 (including 142 m at 1.38% CuEq; 1.14% Cu, 0.35 g/t Au, 3.8 g/t Ag plus 77 ppm Mo), and below LHDH081-2, which ended in strong mineralization with the final 63.8 m at 1.25% CuEq; 1.14% Cu, 0.14 g/t Au, 3.6 g/t Ag plus 741 ppm Mo).

Another key target is the top of the Fenix breccia body. Intersecting it closer to surface would improve the potential economics of mine planning at a shallower depth. In addition, there is



some evidence to suggest that gold values in particular are high along the contacts of the hydrothermal breccias.

1.14.2 Lunahuasi

The initial 2023 drill program established a significant copper-gold-silver deposit at Lunahuasi and an additional amount of drilling, likely to be in the tens of thousands of metres, is recommended as the next stage of evaluation. Drilling for the 2023-2024 season is limited by available rigs and seasonality, but planning for winter operations throughout the 2024-2025 season should begin with the goal of continuous, year-round drilling starting in November 2024.

Two complementary objectives should be targeted for the 2023-2024 drill program, which is recommended to total approximately 15,000 m:

- 1 Definition and expansion of the deposit to achieve an initial 50 m spacing internally and work towards defining the deposit limits to the north, south, east, and west and at depth, (10,000 m); and
- 2 Drill testing of other high-potential target areas on the property later in the season, following additional surface work to refine drill targets (5,000 m).

1.14.2.1 Deposit Drilling

Drilling should be planned to initially infill the deposit area to approximately 50 m spacing and to step out to the north, south, east, and west and at depth in order to establish the deposit limits. Due to logistical and seasonal constraints, the program is recommended to start with 10,000 m utilizing four drill rigs, which is estimated to require 3.5 months of continuous drilling. Hole depth will vary depending on location and results; however, assuming an average depth of 500 m this program could see up to 20 holes completed.

1.14.2.2 Drilling on Other Targets

Several other exploration targets occur on the property, defined by geological mapping, talus fine and rock chip sampling, and WorldView3 satellite data interpretation. Additional detailed field work should be completed on these targets during the 3.5 months of deposit drilling in order to develop them into drill targets and prioritize them for drill testing. This target-testing program will total approximately 5,000 m and will commence following the deposit drilling using the same four drill rigs. This program is estimated to require approximately two months of drilling, and should be completed by mid- to late April prior to the onset of winter in Argentina.

2.0 Introduction

SLR Consulting (Canada) Ltd. (SLR) was retained by NGEx Minerals Ltd. (NGEx) to prepare an independent Technical Report on the NGEx Vicuña Project (the Project or the Property), which consists of the Los Helados deposit (Los Helados), located in Chile near the border with Argentina, and the Lunahuasi deposit (Lunahuasi), located 10 km south of Los Helados in Argentina. The purpose of this Technical Report is to disclose an updated Mineral Resource estimate for Los Helados copper-gold-silver deposit, to provide information on the recent exploration discovery of the Lunahuasi copper-gold-silver deposit, and to support a listing on the Toronto Stock Exchange.

This Technical Report conforms to National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101). The classification for Mineral Resources in this Technical Report conforms to the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves dated May 10, 2014 (CIM (2014) definitions.

NGEx is a TSX-V listed Lundin Group copper and gold exploration company based in Vancouver, Canada, with projects in Argentine and Chile. NGEx is advancing its newly discovered Lunahuasi deposit located in San Juan Province, Argentina, in the emerging Vicuña District. NGEx also holds a majority interest in the large-scale Los Helados copper-gold development project located in Region III, Chile.

The Los Helados Mineral Resource is located entirely in Chile, on the Minera Frontera del Oro SpA (MFDO) claims and the Lunahuasi discovery is entirely located in Argentina on the Pampa Exploración S.A. (Pampa) claims. NGEx holds an indirect approximate 69.1% interest in the MFDO claims and a 100% interest in the Pampa claims. The MFDO claims are subject to a joint exploration agreement with Nippon Caserones Resources Co. Ltd. (NCR), which holds the remaining approximately 30.9%. NCR is a Japanese company that is owned by JX Nippon Mining and Metals (JX Nippon). JX Nippon, together with certain affiliates, holds a 49% interest in the Caserones open pit copper mine that is located approximately 17 km north of Los Helados.

2.1 Sources of Information

Luke Evans, M.Sc., P.Eng., visited the Los Helados deposit in Chile, the Lunahuasi deposit in Argentina, and the office and core logging facility in Copiapó, Chile, from September 18 to 22, 2023. Mr. Evans is the Qualified Person (QP) responsible for the entire Technical Report except Section 13 (Table 2-1).

All aspects that could materially impact the integrity of the data informing the Mineral Resource estimate for Los Helados and the exploration results at Lunahuasi were reviewed by SLR, including outcrop inspection, core logging, sampling methods and security, analytical and quality assurance/quality control (QA/QC) procedures, and database management.

SLR was given full access to relevant data and conducted interviews with NGEx personnel to obtain information on exploration work and to understand the procedures used to collect, record, store, and analyze historical and current exploration data.

Dr. Giovanni Di-Prisco, Ph.D., P.Geo., President of Terra Mineralogical Services Inc. (Terra) based in Ontario, is the QP responsible for Section 13 (Table 2-1). Dr. Di-Prisco was the QP on the previous NI 43-101 Technical Report dated August 6, 2019. There has been no further update on metallurgical testing for the Project since the time of that Technical Report.



Table 2-1: Qualified Persons and Responsibilities

QP, Designation, Title	Company	Responsible for
Luke Evans, M.Sc., P.Eng. Global Technical Director, Geology Group Leader	SLR	Entire report except Sections 1.11, 13, and 25.2
Giovanni Di-Prisco, Ph.D., P.Geo. President	Terra Mineralogical Services Inc.	Sections 1.11, 13, and 25.2

SLR would like to acknowledge the excellent co-operation in discussions and transmittal of technical material by the NGEx geology team and Terra. SLR would also like to thank specifically Fionnuala Devine, M.Sc., P.Geo., for assistance in assembling the geology and history sections of this report. Ms. Devine is familiar with Los Helados and was a QP in the previous Technical Reports in 2018 and 2019.

Discussions were held with personnel from NGEx:

- Wojtek Wodzicki, President and CEO
- Bob Carmichael, P.Geo., Vice President Exploration
- Richard Flynn, P.Geo., Principal Resource Geologist
- Humberto Brockway, Independent Consulting Geologist
- Aylén Ibis Tremea, Chief Geologist
- Fernando Richard, Copiapó Office Manager
- Fabian Wagner Soto, Project Geologist
- Eduardo Espinosa, Junior Geologist
- Yasmin Godoy, Junior Geologist

This is the first NI 43-101 Technical Report on Lunahuasi. Past Technical Reports on Los Helados include:

- Devine, F., Zandonai, G., and Di Prisco, G., 2019: Technical Report on the Los Helados Porphyry Copper-Gold Deposit, Chile; Effective Date: April 26, 2019, Report Date: August 6, 2019.
- Devine, F., et al., 2018: Technical Report on the Los Helados Porphyry Copper-Gold Deposit, Chile; Effective Date: May 27, 2017, Report Date: December 14, 2018.
- Ovalle, A., et al., 2016: Constellation Project; Incorporating the Los Helados Deposit, Chile and the Josemaria Deposit, Argentina, NI43-101 Technical Report on Preliminary Economic Assessment; Effective Date February 12, 2016, Amended March 31, 2016.
- Quiñones, C., Ovalle, A., Frost, D., Priscu, D., Khera, V., Pizarro, N., and Zandonai, G., 2014: Los Helados Cu-Au Deposit, Atacama Region III, Chile, NI 43-101 Technical Report on Preliminary Economic Assessment: technical report prepared by AMEC and Behre Dolbear for NGEx Resources Inc., effective date October 1, 2014.
- Zandonai, G., and Frost, D., 2013: Updated Mineral Resource Estimate for the Los Helados Property, Region III of Atacama, Chile: technical report prepared by Behre Dolbear and AMEC for NGEx Resources Inc., effective date October 15, 2013, amended March 24, 2014



- Zandonai, G., Carmichael, R., Charchaflié, D., and Frost, D., 2013: Updated Mineral Resource Estimate for the Los Helados Property, Region III of Atacama, Chile: technical report prepared by Behre Dolbear, NGEx, LPF Consulting SRL, and AMEC for NGEx Resources Inc., effective date October 15, 2013
- Zandonai, G., Carmichael, R., and Charchaflié, D., 2012: Mineral Resource Estimate for the Los Helados Property, Region III of Atacama, Chile: technical report prepared by LPF Consulting SRL, NGEx and Micron Geological Limited for NGEx Resources Inc., effective date October 15, 2012
- Charchaflié, D. and LeCouteur, P.C., 2012: Geological Report on the Los Helados Property, III Region of Atacama, Chile: technical report prepared by LPF Consulting SRL and Micron Geological Limited for NGEx Resources Inc., effective date February 15, 2012

The documentation reviewed, and other sources of information, are listed at the end of this Technical Report in Section 27 References.

2.2 List of Abbreviations

Units of measurement used in this Technical Report conform to the metric system. All currency in this Technical Report is US dollars (US\$) unless otherwise noted.

Blb	billion pounds	kWh	kilowatt-hour
Bt	billion tonnes	kWh/t	kilowatt-hour per metric tonne
°C	degree Celsius	L	litre
C\$	Canadian dollars	lb	pound
cm	centimetre	m	metre
d	day	Μ	mega (million); molar
dmt	dry metric tonne	m²	square metre
g	gram	m ³	cubic metre
g/t	gram per tonne	MASL	metres above sea level
ha	hectare	m³/h	cubic metres per hour
in.	inch	mm	millimetre
in ²	square inch	Moz	million ounces
k	kilo (thousand)	ΟZ	Troy ounce (31.1035g)
kcal	kilocalorie	ppm	part per million
kg	kilogram	S	second
km	kilometre	t	metric tonne
km²	square kilometre	US\$	United States dollar
kVA	kilovolt-amperes	W	watt
kW	kilowatt	wmt	wet metric tonne

The following symbols are used for chemical elements:

Au – gold

- Ag silver
- As arsenic

Cu - copper

Fe - iron

Hg - mercury

Mo - molybdenum

S - sulphur

3.0 Reliance on Other Experts

This Technical Report has been prepared by SLR for NGEx. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to SLR at the time of preparation of this Technical Report.
- Assumptions, conditions, and qualifications as set forth in this Technical Report.

For the purpose of this Technical Report, SLR has relied on ownership information provided by NGEx. The client has relied on an opinion by Bofill Mir Abogados Limitada dated October 20, 2023 for Los Helados Project in Chile and an opinion by Randall Legal dated October 30, 2023 for Los Helados-Lunahuasi Project in Argentina and these legal opinions are relied on in Section 4 and the Summary of this Technical Report. SLR has not researched property title or mineral rights for the Los Helados and Lunahuasi Projects and expresses no opinion as to the ownership status of the Property.

Except for the purposes legislated under provincial securities laws, any use of this Technical Report by any third party is at that party's sole risk.

4.0 **Property Description and Location**

4.1 **Project Location**

The Project is located approximately 125 km southeast of the city of Copiapó in Chile (Figure 4-1). The approximate latitude and longitude centroid of the Los Helados deposit is 28.3408° S, 69.5857° W. The approximate latitude and longitude of the Lunahuasi discovery is 28.4196° S, 69.6226° W (decimal degrees, WGS84 datum).

4.2 **Project Ownership**

The Project is comprised of claims in Chile owned by NGEx's Chilean subsidiary, Minera Frontera del Oro SpA (MFDO) (the MFDO Properties), and claims in Argentina owned by its Argentine subsidiaries RioEx S.A. (the La Rioja Properties) and Pampa Exploración S.A. (the Pampa Claims). NGEx holds an indirect approximate 69.1% interest in the MFDO Properties, a 60% interest in the La Rioja Properties, and a 100% interest in the Pampa Claims. The MFDO Claims and the La Rioja Properties are subject to a joint exploration agreement with Nippon Caserones Resources Co. Ltd. (NCR), which holds the remaining approximately 30.9% and 40% respective interests. The combined area of the mineral tenures comprising the Project is approximately 28,730 ha.

The Los Helados Mineral Resource is entirely located in Chile, on the MFDO Properties, and the Lunahuasi discovery is entirely located in Argentina, on the Pampa Claims.





4.3 Joint Exploration Agreement

Part of the Project is subject to a Joint Exploration Agreement with NCR (the NCR JEA), whereby NGEx holds an approximate 69.1% interest and NCR holds an approximate 30.9% interest in the MFDO Claims, and NGEx holds a 60% interest and NCR holds a 40% interest in the La Rioja Properties. NCR is a Japanese company that is owned by JX Nippon Mining and Metals.

The NCR JEA applies to the MFDO Claims and the La Rioja Properties; however, the terms of the agreement are slightly different for each property.

On the MFDO claims, each party (Participant) in the NCR JEA is expected to fund its pro-rata share of expenditures or be diluted. If the Participant interest in the NCR JEA is diluted to below 5%, the Participant interest will automatically convert to a 0.5% net smelter return (NSR) royalty. The NCR JEA includes a reciprocal right of first offer if one Participant wishes to sell its interest.

NCR did not contribute to its share of expenditures on the MFDO Claims under the NCR JEA between 2015 and 2021. As a result, it has incurred dilution of its Project interest resulting in the NGEx interest increasing and the NCR interest decreasing to the current 69.1/30.9 split. Beginning with the 2021-2022 work program, NCR began contributing its proportion of the project costs ending the dilution and fixing the project interests as above.

On the La Rioja Properties, NCR is deemed to have funded US\$3.5 million in expenditures which is offset against future funding obligations of NCR. Therefore, the ownership interest on the La Rioja Properties is 60% in favour of NGEx and 40% in favour of NCR.

For as long as NGEx holds at least a 50% interest in the NCR JEA, NGEx has the right to act as the Operator.

4.4 Mineral Tenure (Chile)

Legal opinion was provided that MFDO holds 134 mining concessions in Chile, of which: 54 are constituted exploration mining concessions; 43 are exploration mining concessions in the process of being granted; and 37 are constituted exploitation concessions (collectively, the MFDO Properties).

Aggregate tenure areas in Chile can be misleading as the mineral tenure system allows for valid overlapping tenures, creating the potential for several "layers" of claims to cover the same ground. The first layer holds the actual legal tenure; however, if for some reason this tenure lapses then ownership automatically transfers to the second layer. This system leads to essentially three categories of tenure areas: legal tenure; pre-emptive tenure; and preferential tenure. The legal tenure is the aggregate area of the tenures owned by an entity, regardless of which layer they occupy. The pre-emptive tenure is the aggregate area of tenures owned by an entity which occupy the first layer, giving the entity effective ownership of the mineral rights to this area. The preferential tenure is the actual area over which the entity has ownership of mineral title and can be different (smaller) than the pre-emptive tenure in cases where an entity holds claims on more than one layer, which can then overlap on the same geographic area.

The total area of the MFDO Properties legal tenure is 31,428 ha. Of this total, MFDO holds 27,443 ha with pre-emptive rights and 20,929 ha with preferential rights. The Los Helados deposit is covered by concessions "Limite 23 1/245" and "Limite 24 1/215".

All of the property in Chile, including the option agreements, is subject to the NCR JEA as described above.

Details of the name and area in hectares of the titles are presented in Table 4-1 to Table 4-3. Figure 4-2 is a location plan showing the mineral tenures.

Table 4-1:	Exploitation	Mining	Concessions	(Granted)
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Concession Name	Area (ha)
EL RANCHO 1/60	300
EL RANCHO III 1/36	158
ODILIA 1/20	80
LOS HELADOS 1/5	30
ANDREA 1/10	100
EVELYN 1/10	100
NAPOLEON II 1/10	100
LIMITE 1 1/40	200
LIMITE 2 1/40	200
LIMITE 3 1/26	116
LIMITE 4 1/35	168
LIMITE 5 1/51	255
LIMITE 6 1/49	234
LIMITE 7 1/30	131
LIMITE 23 1/10	50
LIMITE III 1/100	100
LIMITE 8 1/174	174
LIMITE 9 1/158	158
LIMITE 10 1/96	96
LIMITE 11 1/235	235
LIMITE 12 1/141	141
LIMITE 13 1/20	20
LIMITE 14 1/200	200
LIMITE 15 1/200	200
LIMITE 16 1/220	220
LIMITE 17 1/198	198
LIMITE 18 1/199	199
LIMITE 19 1/190	190
LIMITE 20 1/143	143
LIMITE 21 1/110	110

Concession Name	Area (ha)
LIMITE 22 1/14	14
LIMITE 23 1/245	245
LIMITE 24 1/215	215
LIMITE 25 1/129	129
LIMITE 26 1/190	190
LIMITE 26-A 1/11	11
LIMITE 27 1/218	218

Table 4-2: Exploration Mining Concessions (Granted)

Name	Area (ha)	Expiration Date
REFUGIO III 28	200	08/04/2024
REFUGIO III 29	200	23/04/2024
LOS HELADOS IV 1	300	07/03/2024
LOS HELADOS IV 2	300	12/09/2024
LOS HELADOS IV 3	200	05/04/2024
LOS HELADOS IV 4	300	07/03/2024
LOS HELADOS IV 5	300	07/03/2024
LOS HELADOS IV 6	300	07/03/2024
LOS HELADOS IV 7	300	13/03/2024
LOS HELADOS IV 8	300	07/03/2024
LOS HELADOS IV 9	300	19/04/2024
LOS HELADOS IV 10	300	19/04/2024
LOS HELADOS IV 11	100	07/03/2024
LOS HELADOS IV 12	200	10/03/2024
LOS HELADOS IV 13	300	19/04/2024
LOS HELADOS IV 14	300	22/04/2024
LOS HELADOS IV 15	300	07/03/2024
LOS HELADOS IV 16	300	10/03/2024
LOS HELADOS IV 17	300	19/04/2024
LOS HELADOS IV 18	300	22/04/2024
LOS HELADOS IV 19	300	07/03/2024
LOS HELADOS IV 20	300	10/03/2024



Name	Area (ha)	Expiration Date
LOS HELADOS IV 21	300	19/04/2024
LOS HELADOS IV 22	100	22/04/2024
LOS HELADOS IV 23	200	07/03/2024
LOS HELADOS IV 24	300	10/03/2024
LOS HELADOS IV 25	300	19/04/2024
LOS HELADOS IV 26	300	22/04/2024
LOS HELADOS IV 27	300	07/03/2024
LOS HELADOS IV 28	300	22/04/2024
LOS HELADOS IV 29	300	14/03/2024
LOS HELADOS IV 30	300	05/04/2024
LOS HELADOS IV 31	300	22/04/2024
LOS HELADOS IV 32	300	14/03/2024
LOS HELADOS IV 33	300	05/04/2024
LOS HELADOS IV 34	300	22/04/2024
LOS HELADOS IV 35	200	14/03/2024
LOS HELADOS IV 36	200	05/04/2024
LOS HELADOS IV 37	200	22/04/2024
LOS HELADOS IV 38	200	07/03/2024
LOS HELADOS IV 39	300	05/04/2024
LOS HELADOS IV 40	300	22/04/2024
LOS HELADOS IV 41	300	13/03/2024
LOS HELADOS IV 42	200	05/04/2024
LOS HELADOS IV 43	300	22/04/2024
LOS HELADOS IV 44	300	07/03/2024
LOS HELADOS IV 45	300	13/03/2024
LOS HELADOS IV 46	100	22/04/2024
LOS HELADOS IV 47	200	07/03/2024
LOS HELADOS IV 48	300	13/03/2024
LOS HELADOS IV 49	300	22/04/2024
LOS HELADOS IV 50	300	07/03/2024
LOS HELADOS III 51	200	28/01/2024
MAGDA III 27B	100	06/04/2024

Table 4-3: Exploration Mining Concessions in the Process of Being Granted

Concession Name	Area (ha)
LOS HELADOS IV A	300
LOS HELADOS IV B	300
LOS HELADOS IV C	300
LOS HELADOS IV D	300
LOS HELADOS IV E	300
LOS HELADOS IV F	300
LOS HELADOS IV G	300
LOS HELADOS IV H	300
LOS HELADOS IV I	300
LOS HELADOS IV J	300
LOS HELADOS IV K	300
LOS HELADOS IV L	300
LOS HELADOS IV M	300
LOS HELADOS IV N	300
LOS HELADOS IV O	300
LOS HELADOS IV P	300
REFUGIO IV 1	200
REFUGIO IV 2	300
REFUGIO IV 3	300
REFUGIO IV 4	200
REFUGIO IV 5	200
REFUGIO IV 6	300
REFUGIO IV 7	200
REFUGIO IV 8	300
REFUGIO IV 9	300
REFUGIO IV 10	300
REFUGIO IV 11	300
REFUGIO IV 12	300
REFUGIO IV 13	300
REFUGIO IV 14	300
REFUGIO IV 15	200
REFUGIO IV 16	200
Concession Name	Area (ha)
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REFUGIO IV 17	100
REFUGIO IV 18	200
REFUGIO IV 19	200
REFUGIO IV 20	200
REFUGIO IV 21	300
REFUGIO IV 22	300
REFUGIO IV 23	300
REFUGIO IV 24	300
REFUGIO IV 25	200
REFUGIO IV 26	200
REFUGIO IV 27	300





4.4.1 **Option Agreements**

Pursuant to article 169 of the Chilean Mining Code, a person may unilaterally and irrevocably grant a third party the option to enter into a sale and purchase agreement regarding mining rights. The execution of such sale and purchase agreement is at the sole discretion of the beneficiary, contingent upon the proper exercise of the option in accordance with the terms and conditions stipulated in the corresponding agreement. Both the option agreement and its exercise must be granted by means of a public deed and registered before the competent Mining Registrar. Consequently, upon the fulfillment of the obligations outlined in the option agreement, the beneficiary is empowered to effect the transfer of the mining concessions covered by the said agreement.

As at the date of this Technical Report, MFDO is the beneficiary of three mining option agreements (jointly the Option Agreements), all of which are legal and binding agreements, registered in the Mining Registrar of Copiapó, and thus enforceable to its counterparties pursuant to the terms set forth in each of such agreements.

A summary of the key terms of the Option Agreements is provided below:

• Borchert Option Agreement (the Borchert Agreement)

By public deed dated August 14, 2012 before the Copiapó notary public of Mr. Luis Contreras Fuentes, Mr. Guillermo Borchert Poblete granted to MFDO an irrevocable option to purchase the exploitation concession "Los Helados 1/5". Following certain amendments to the Borchert Agreement, MFDO may exercise the Borchert Agreement any time until February 27, 2024.

The purchase price of the Borchert Agreement is US\$689,500, to be paid in installments during the term of the Borchert Agreement. Installment payments totalling US\$653,700 have been paid and MFDO is currently in the process of paying the final installment of US\$35,800 and drafting the public deeds to exercise the option granted in the Borchert Agreement.

• Billik Option Agreement (the Billik Agreement)

By public deed dated August 14, 2012 before the Copiapó notary public of Mr. Luis Contreras Fuentes, Ms. Judith Perla Billik Folatre granted to MFDO an irrevocable option to purchase the exploitation concession "Odilia 1/20". Following certain amendments to the Billik Agreement, MFDO may exercise the Billik Agreement any time until February 27, 2024.

The purchase price the Billik Agreement is US\$689,500, to be paid in installments during the term of the Billik Agreement and the Billik Agreement must be exercised together with the Borchert Agreement described above. Installment payments totalling US\$653,700 have been paid and MFDO is currently in the process of paying the final installment of US\$35,800 and drafting the public deeds to exercise the option granted in the Billik Option Agreement.

Borchert Billik Option Agreement

Sociedad Contractual Minera Borchert Billik granted MFDO a unilateral and irrevocable option on February 28, 2013 to purchase the exploitation mining concessions "El Rancho 1/60", "El Rancho III 1/60", "Napoleón II 1/10", "Evelyn 1/10", and "Andrea 1/10". Following certain amendments to the Borchert Billik Agreement, MFDO may exercise the Borchert Billik Agreement any time until February 27, 2024.

The purchase price of the Borchert Billik Agreement is US\$1,008,000, to be paid in installments during the term of the Borchert Billik Agreement. Installment payments totalling US\$980,200 have been paid and MFDO is currently in the process of paying the final installment of US\$27,800 and drafting the public deeds to exercise the option granted in the Borchert Billik Agreement.

4.4.2 Surface Rights

In accordance with the provisions set forth in the Chilean Mining Code any titleholder of a mining concession, whether for exploration or exploitation, shall have the right to establish an occupation easement over the surface land as required for the exploration or exploitation of its concessions. If the surface property owner is not agreeable to grant the easement voluntarily, the titleholder of the mining concessions may request said easement before the relevant Court of Justice, which shall grant it upon determination of the compensation to be paid to the surface property owner.

MFDO has entered into four agreements related to the surface property of the Project, the key terms of which are summarized as follows.

4.4.2.1 Intention Agreement with *Comunidad Civil Ex Estancia Pulido* (the "Intention Agreement")

Public deed dated January 26, 2021, granted before the Copiapó Notary Public Ms. Gaby Hernández Soto, and expiring on January 26, 2026.

Comunidad Civil Ex Estancia Pulido (Comunidad) authorizes MFDO to enter their surface property, which covers a portion of the Property location, for the sole purpose of carrying out environmental monitoring tasks, measuring water flows and, in general, those activities necessary to comply with the obligations and commitments established by law or the authority for the maintenance of the Project.

Also, the parties declared their intention to enter into a new agreement, establishing an authorization for MFDO to enter the surface property in broad terms for the Project's development, once the technical, economic, and financial circumstances allow MFDO to restart the Project's development.

Compensation for the Intention Agreement was agreed as follows (Table 4-4).

Table 4-4: Compensation under Intention Agreement

Amount (US\$)	Due Date	Status
200,000	January 26, 2021	Paid
200,000	January 26, 2022	Paid
250,000	November 22, 2022	Paid
250,000	November 22, 2023	Pending
250,000	November 22, 2024	Pending

4.4.2.2 Authorization for Extraordinary Exploration with Comunidad Civil Ex Estancia Pulido (the "Authorization")

Public deed dated November 22, 2022, granted before the Copiapó Notary Public Ms. Gaby Hernández Soto, and expiring on December 31, 2023.

Comunidad Civil Ex Estancia Pulido (Comunidad) authorized MFDO to occupy and transit the superficial properties located within the Property area, to develop an extraordinary drilling campaign on the Project, which would consist of the use of four drilling machines to carry out up to approximately 15,000 m of drilling. As a compensation for the Authorization, MFDO paid US\$450,000 to the *Comunidad.*

4.4.2.3 Pascuala Irma Cruz Easement

Public deed dated November 3, 2016, granted before the Copiapó Notary Public Mr. Luis Contreras Fuentes, and expiring on January 26, 2026.

Ms. Cruz Olivares, owner of the surface property, granted MFDO an easement for the transit of vehicles and equipment through the private road located inside of her property. Additionally, MFDO is entitled to purchase that part of the surface property required for the construction and operation of the Project, the price and terms of such purchase will be negotiated in good faith by the parties, considering the amounts paid under the easement agreement.

In accordance with this agreement, MFDO must pay the following amount as compensation for the easement (Table 4-5).

Amount (US\$)	Due Date	Status
15,000	January 26, 2021	Paid
15,000	January 26, 2022	Paid
18,500	November 22, 2022	Paid
18,500	November 30, 2023	Pending
18,500	November 30, 2024	Pending

Table 4-5: Compensation for Pascuala Irma Cruz Easement

4.4.2.4 Abel Cruz Olivares Easement

Public deed dated November 3, 2016, granted before the Copiapó Notary Public Mr. Luis Contreras Fuentes, and expiring on January 26, 2026.

Mr. Cruz Olivares, owner of the surface property, granted MFDO an easement for the transit of vehicles and equipment through the private road located inside of his property. Additionally, MFDO is entitled to purchase that part of the surface property required for the construction and operation of the Project, the price and terms of such purchase will be negotiated in good faith by the parties, considering the amounts paid under the easement agreement.

In accordance with this agreement, MFDO must pay the following amount as compensation for the easement (Table 4-6).

Amount (US\$)	Due Date	Status
3,250	January 26, 2021	Paid
3,250	January 26, 2022	Paid
4,000	November 22, 2022	Paid
4,000	November 30, 2023	Pending
4,000	November 30, 2024	Pending

Table 4-6: Compensation for Abel Cruz Olivares Easement

4.4.3 Royalties and Encumbrances

The concessions are not subject to royalties, back-in rights, or other obligations in favour of third parties and all concessions are free of mortgages, encumbrances, prohibitions, and injunctions.

Chilean government royalties are levied in the form of a mining tax on dividends paid by any Chilean company. There is also a specific tax on mining activities. This tax is levied on the operational income obtained by any individual or legal entity that extracts mineral substances and sells them at any state of production. The mining tax rate depends on the values of annual production expressed by the equivalent value of the metric tonne of fine copper. The metric tonne value is calculated using average copper price at the London Metal Exchange.

4.4.4 Permits

On July 21, 2022, MFDO made an Environmental Relevance Application (*Consulta de Pertinencia*) in relation to the Los Helados Second Exploration Campaign project (*Segunda Campaña de Prospección Los Helados*) consisting of the execution of 24,000 m of drilling over 24 months. This permit was approved on November 25, 2022.

4.4.5 Environmental Liabilities

Existing environmental liabilities are limited to those associated with exploration-stage properties and would involve rehabilitation of drill sites and drill site access roads.

4.5 Mineral Tenure (Argentina)

Legal opinion was provided that NGEx owns five exploitation licences (minas) in La Rioja Province and one in San Juan Province. Concessions held by NGEx total approximately 7,800 ha although the actual area is smaller due to overlapping concessions related to uncertainty over the final border between La Rioja Province and San Juan Province. The Lunahuasi discovery is located on the Nacimiento I concession in San Juan Province, Argentina.

Details of the identification number, status, area in hectares, and name of the titles are presented in Table 4-7. Figure 4-3 and Figure 4-4 illustrate the NGEx mineral tenure in Argentina.

The Potro I, Potro II, and Nacimientos I exploitation licences are affected by the unresolved boundary between the provinces of La Rioja and San Juan.

An annual exploration fee due to the Province of La Rioja or San Juan is paid in proportion to the number of mining units covered by each exploitation licence (mina). All required fees have been paid for 2023.

The Argentine Mining Code also requires the presentation of a plan of investment for each exploitation licence (mina).

Table 4-7:	Exploitation Mining	Concessions for the Los	Helados Project in Argentina
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Concession	File Number	Hectares	Mining Units	Annual Fee (ARP\$)
Chola 1*	037-F-04	2,500	25	475,000
Potro I*	169-F-97	1,073	11	209,000
Potro II*	170-F-97	531	6	114,000
Potro III*	48-F-99	151	2	38,000
Solitario 17**	61-P-96	2,100	21	399,000
Nacimientos 1**	520-0348-D-99	1,446	15	285,000

Notes:

ARP\$ = Argentinean peso

* Part of the La Rioja Properties – owned 60% by NGEx

** Part of the Pampa Claims – owned 100% by NGEx









4.5.1 Surface Rights

The Argentine Mining Code (AMC) sets out rules under which surface rights and easements can be granted for a mining operation, and covers aspects including land occupation, rights-of-way, access routes, transport routes, rail lines, water usage, and any other infrastructure needed for operations.

In general, compensation must be paid to the affected landowner in proportion to the amount of damage or inconvenience incurred. However, no provisions or regulations have been enacted as to the nature or amount of the compensation payment.

In instances where no agreement can be reached with the landowner, the AMC provides the mining right holder with the right to expropriate the required property.

The properties in La Rioja are located in the Iglesias Department of the Province of La Rioja, in the area called "Usos Múltiples" (Multiple Uses), which is the marginal area of the Laguna Brava Provincial Reserve, where mining activities are fully authorized.

A request for access easements in La Rioja and San Juan was initiated in 2013, tied to the Chola I permit. The easement docket is currently being analyzed by the authorities due to filings by members of the Lancaster family. The Lancaster family, allegedly based on their capacity as owners of the property where the Project is located, filed an opposition to the easement. Access to the properties has not been affected, and is also provided through transit agreements with Deprominsa, the Lundin Mining Corporation (Lundin) subsidiary which holds the Josemaria Project, for the use of the main access road.

4.5.2 Royalties and Encumbrances

The properties Nacimientos I, Potro I, Potro II, and Potro III are subject to payment of US\$2.0 million in the event that any of these claims become productive as mining projects. Furthermore, NGEx shall pay the owners an NSR royalty of 0.5% of the amount of the project benefits over 10 years, less costs.

The property Solitario 17 is subject to a payment of 7% Net Profits Interest.

4.5.3 Permits

The Nacimiento I claim has an approved environmental impact report and current permit to allow for exploration activities to take place. The La Rioja Properties and Solitario 17 do not have current permits to allow for exploration activities to take place, as no work is currently contemplated on these claims.

4.5.4 Environmental Liabilities

Environmental liabilities on the Argentina properties are limited to reclamation of a few drill platforms and associated access roads.

4.6 Mining Integration and Complementation Treaty

On December 29, 1997, Chile and Argentina signed the "*Tratado entre la República de Chile y la República Argentina sobre Integración y Complementación Minera*" (Mining Integration and Complementation Treaty between Chile and Argentina; or the Treaty), in an effort to strengthen their historic bonds of peace and friendship, and intensify the integration of their mining activities.



The Treaty provides a legal framework to facilitate the development of mining projects located in the border area of both countries. The Treaty objective is to facilitate the exploration and exploitation of mining projects within the area of the Treaty.

On August 20, 1999, Chile and Argentina subscribed to the Complementary Protocol and, as a result, on July 18, 2001, an Administrative Commission was created.

Additional Protocols have been signed between Chile and Argentina which provide more detailed regulations applicable to specific mining projects.

One of these protocols, and the first granted for exploration purposes, is NGEx's "*Proyecto de Prospección Minera Vicuña*" (Vicuña Mineral Prospecting Project), dated January 6, 2006. This Protocol allows for prospecting and exploration activities in the Los Helados area, on both sides of the international boundary. The main benefit of the Vicuña Additional Protocol is the authorization which allows for people and equipment to freely cross the border in support of exploration and prospecting activities within an area defined as an "operational area".

In September 2012, the "*Proyecto de Prospección Minera Vicuña*" was amended by the "Protocol of Amendment to Article 8". With this amendment, the defined "operational area" was expanded, enabling a new border crossing area to be demarcated.

SLR is not aware of any environmental liabilities on the Property. NGEx has all required permits to conduct the proposed work on the Property. SLR is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the Property.

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Property spans the border between Chile and Argentina, and access is possible from either country under the limits of NGEx's "*Proyecto de Prospección Minera Vicuña*" (Vicuña Mineral Prospecting Project, described in subsection 4.6). There is a well-developed network of mining roads on the Property that connect with neighbouring project infrastructure, allowing for several route options to reach different parts of the Property.

Access to Los Helados is most direct from Copiapó, Chile, a total driving distance of approximately 177 km (Figure 5-1). Copiapó has a modern airport, with several daily flights to Santiago, the capital city. The C-35 paved road route leaves Copiapó travelling in a southeasterly direction through the towns of Tierra Amarilla and Punta del Cobre, along the Copiapó River valley, through the small villages of Pabellon, Los Loros, La Guardia, and Iglesia Colorada. After these small villages, the road continues towards the El Potro bridge. At about kilometre 130, the paved road ends, and the last 42 km to the Los Helados Project area is gravel. To travel to the rest of the Property, including the claims in Argentina, one continues through Los Helados and climbs up on a mining road to the international border and on to the mining road network on the Argentina side. The Lunahuasi deposit is in Argentina, approximately 23 km by road from Los Helados.

Another access option to the Property from Chile is to enter through the Filo del Sol Project via Route 31 CH and C-33 along the Copiapó River until the junction with the Quebrada de Montosa road that leads to the Filo del Sol Project. From Filo del Sol there is an 18 km mining road with a general northeast direction that passes through the Los Portones site to the Río Blanco valley.

Access from Argentina is via the city of San Juan. The road route travels northward from San Juan for 264 km on National Route No. 40 passing through the towns of San José de Jáchal and Huaco to Guandacol in the Province of La Rioja (Figure 5-1). At Guandacol, the route transitions to a gravel road for 210 km northwestward through the La Brea field site to the Batidero camp, owned by Lundin. Lunahuasi is approximately 20 km in a northwesterly direction from the Batidero camp at the headwaters of Rio Blanco.



Figure 5-1: Access



5.2 Climate

The Property is in a high altitude dry to arid climate. It is characterized by having low temperatures throughout the year, typically below 15°C in the summer. Exploration fieldwork is typically carried out from mid-October to early-May, although year-round operations would be possible with additional preparation.

Precipitation is almost always in the form of snow with most precipitation happening during the winter. The average for the Project area is approximately 193 mm per year.

The entire region is known for adiabatic winds where air masses are forced up the western side of the Andes, then cool with possible resulting precipitation, and descend onto the eastern side of the mountain range. Wind speed can be significant, particularly at the higher, exposed elevations.

5.3 Local Resources and Infrastructure

5.3.1 Los Helados

There is no local infrastructure in the vicinity of Los Helados.

The most important logistics centre in the region is Copiapó, Chile approximately 177 km (3 hour drive) away. Copiapó has an airport with daily scheduled flights to Santiago and Antofagasta, and companies that offer services for mining and exploration.

5.3.2 Lunahuasi

Lunahuasi is an early stage project focused on a new discovery and other than drilling support resources, there is no infrastructure at site. Field crews are based at the Batidero camp, owned by Lundin, which is located in Argentina approximately 20 km to the southeast of Lunahuasi at 4,000 MASL. The camp can accommodate up to 1,000 people and is well equipped with sleeping facilities, cafeteria, offices, first aid support, equipment and machinery shops, water supply reservoirs, and sewage treatment plant. In addition to hosting NGEx staff and crews, it serves as a base of operations for staff and contractors working at the Josemaría and Filo del Sol projects. There is an agreement between NGEx and Lundin for ongoing use of the camp.

The area is remote and, other than the Batidero camp, there is no significant infrastructure in the region. Access is exclusively by road with the most important logistical supply centre being the city of San Juan located approximately 470 km (8 hour drive) away. Copiapó is also used as a supply base.

5.4 Physiography

The Property straddles the border between Chile and Argentina in the high Andes. The border runs along the height of land between the two countries with elevations up to 5,800 MASL. The area is mountainous with steep west facing slopes on the Chilean side, and more moderate topography on the eastern Argentinian side.

Los Helados is located in a steep sided northwest-facing cirque at the head of a valley that leads down into Chile. The main area of drilling in the base of the cirque is at 4,500 MASL. The area is largely covered in colluvium, with no vegetation.

Lunahuasi site is located at the head of the Rio Blanco in Argentina. An impressive wall at the head of the valley has up to 800 m vertical relief, with narrow incised gulleys draining down into



the river. The lower drill sites are near the base of this steep east-facing slope at 4,700 MASL with the upper sites on a plateau at the top of the slope at 5,400 MASL. It is a dynamic surficial environment with no vegetation and large areas of colluvial cover.

The Property is in a seismically active area; however, no Project-specific seismic profiling has been completed.

6.0 History

6.1 **Prior Ownership**

The Property was originally part of a larger block of claims that formed the NGEx Resources Inc. (NGEx Resources) holding in the area. Starting in 1999, NGEx Resources' precursor companies put together a land package that covered a large part of what is now called the Vicuña District. The claims in the Los Helados area were staked by NGEx Resources in 2004. Starting in 2016, three companies were spun out of NGEx Resources to hold different assets within the district. As a result of these changes, NGEx now holds the Property described in this report that includes both the Los Helados and Lunahuasi deposits.

6.2 Exploration and Development History

Prior to NGEx Resources' staking the Property, there is no record of significant exploration activity in the area. The area is remote, high-altitude, and had no road access.

In the Los Helados area, the first mineral exploration work was carried out by Shell (subsequently Billiton) at the end of the 1980s. This work apparently included geological mapping, rock, talus and stream sediment geochemical sampling, test pits for sampling and mapping, and some geophysical surveying, but there are no available reports. In 1994, Barrick Gold Corporation (Barick) apparently worked in the general area of Los Helados for approximately 15 days, sampling stream sediments and rocks for geochemistry; however, results are unknown.

There is no known history of any exploration activity in the Lunahuasi area prior to acquisition of the claims by NGEx.

6.3 Historical Resource Estimates

There are no historical resource estimates from the Property.

6.4 Past Production

There is no past production from the Property.

7.0 Geological Setting and Mineralization

7.1 Regional Geology

The Property is located within the Oligocene-Miocene porphyry belt of the central Andes, in the Vicuña District (Figure 7-1, 28.5°S). Located between the prolific Maricunga and El Indio belts, the Vicuña metallogenic belt (Vicuña belt) is host to several large porphyry copper-gold and epithermal copper-gold-silver deposits. The belt is known to have both Late Oligocene porphyry copper-gold mineralization, for example at the Josemaría porphyry copper-gold deposit, and also significant Miocene-age mineralization. The Los Helados and Lunahuasi deposits are both situated along a north-northeast trending structural corridor hosting several Miocene-age mineral deposits and prospects. The Los Helados porphyry copper-gold deposit occurs 10 km to the north of the recently discovered Lunahuasi epithermal copper-gold-silver deposit, and the Filo del Sol epithermal copper-gold-silver deposit (with associated porphyry copper-gold mineralization currently being drilled by Filo Corp.) occurs 8 km to the south. In a more broad sense, the Caserones porphyry copper mine is along the same general trend, approximately 18 km to the north of Los Helados.



Figure 7-1: Location of Los Helados and Lunahuasi within the Vicuña Belt

Source. NGEx, 2023

7.2 Local Geology

The deposits in the Vicuña belt are located along, or at intersections of, major structures, some of which are considered to be lithospheric-scale structures (Farrar et al., 2023). In the Vicuña belt, some of these structures and their ancillary faults were inverted as reverse faults through compression during Oligocene and Miocene Andean arc building. These faults dominate the geology of the area placing Permian-Triassic basement rhyolite and granites adjacent to, and over, both Cretaceous sedimentary and volcaniclastic sequences as well as Late Oligocene to Miocene volcanic rocks (Figure 7-2).

The Miocene-age mineralization within the district occurs within a north-northeast trending faultbound block of uplifted volcano-sedimentary rocks along the crest of the Andes. The block is approximately five kilometres wide by 20 km long, and is bound by two major north-northeast trending structures, the Los Helados fault on the east and the Ventana and Vicuña faults to the west. These faults have oppositely oriented apparent reverse fault motion that places Permo-Triassic basement granite and rhyolites over and adjacent to Cretaceous to Lower Miocene volcanic rocks. Recent mapping has defined a more focused structural domain within the block, which is known as the Vicuña structural magmatic corridor (Dietrich, 2023). Mid-Miocene aged porphyry and epithermal mineralization is focused along this structural domain, emplaced into the Cretaceous sedimentary rocks and/or the immediately underlying Permo-Triassic basement rocks.

The mid-Miocene Vicuña structural magmatic corridor within the district is defined by a one to two kilometre wide domain of faults and fault zones that coincide with occurrences of contemporaneous mineralization. In the northern part of the belt, the Los Helados fault defines the northern segment of the structural corridor, which then steps westward towards the southern part of the district. The Filo del Sol deposit and associated prospects are situated along the structural corridor in the southern segment. The west-stepping nature corresponds to the intersection of a series of northeast-trending faults that cut across the dominant north-northeast trend of the belt. These northeast faults correspond to a deep lithospheric-scale structure that transects the region in this area (Farrar et al., 2023). The new Lunahuasi discovery and its associated broad zone of alteration occur at this important intersection.

The location of the Los Helados deposit along the northern segment of the Vicuña structural magmatic corridor is also correlated with an important structural intersection. A series of northwest-trending faults cut through the deposit area and influence the northwest orientation of the northwest-trending porphyry phases. They are part of a trend of northwest faults across the district that run up Rio Blanco and through the Los Helados area, all of which are part of a larger, northwest structural trend that is a recognizable 80 km lineament at a regional scale that trends down the Copiapó valley.

Uplift and structural inversion of the region was coincident with mid-Miocene porphyry emplacement. Within the district, the mineralized systems that fall within the earlier age range display a high degree of telescoping. At Filo del Sol, porphyry emplacement is dated to approximately 15 Ma to 14 Ma and the system developed with high-sulphidation epithermal alteration and mineralization overlapping the deeper potassic domain due to the uplift and erosion at surface taking place at a rapid rate as the system was emplaced. It is estimated that approximately one kilometre of surface material was eroded during emplacement of the Filo del Sol system (Perello et al., 2023). For the slightly younger system at Los Helados (14 Ma to 13.5 Ma), the same telescoping is not apparent. Presumably, the tectonic uplift that was at its apex near 15 Ma had slowed by 13.5 Ma and the Los Helados area did not see the same degree of uplift during porphyry emplacement. The epithermal vein system discovered this past season at



Lunahuasi has not yet been dated. However, as the epithermal system is more thoroughly investigated, the age of porphyry-epithermal emplacement and its relationship to district-scale structural development may help guide the exploration for a related porphyry system.

Figure 7-2: Geology of the Vicuña Belt



Source. NGEx, 2023

7.3 Property Geology

The Property covers the northern end of the Vicuña belt. It includes the northern segment of the mid-Miocene structural and porphyry-epithermal corridor. The Lunahuasi deposit lies near the Property's southern limit, and the Los Helados deposit near its northwestern limit; both deposits occur near to and along the Los Helados fault. The Property also extends downslope into Chile and includes a section of the Potro fault, one of the major lithospheric-scale structures that displays extensive Miocene inversion. The Property boundary encompasses the Potro fault in an area that is coincident with potential extension of the northwest fault trend that is suggested to have localized the Los Helados deposit to the east.

7.4 Los Helados Geology

The Los Helados porphyry copper-gold system is exposed in a northwest-facing cirque with high topographic relief. The bottom of the cirque, where the uppermost part of the deposit is exposed at surface, is at 4,500 MASL, while the sides of the valley rise steeply above to 5,300 m on the eastern side: a difference of at least 800 m (Figure 7-3 and Figure 7-4). The abundant rock exposures on this steep eastern slope provide the best outcrop for mapping geological relationships at surface, including excellent alteration vectors towards the largely talus-covered deposit in the cirque bottom.

The deposit is located along the Los Helados fault, a district-scale structure that is part of the structural corridor that defines the Miocene mineralization within the district (Dietrich, 2023). Minor faults of northwest and west-northwest orientation cut across the deposit area, and intrusive bodies and breccias have a preferential northwest trend. In addition, faults in the area have altered gouge and damage zones, suggesting that structural adjustment coincided with porphyry and breccia emplacement and that the structural intersection of the two major trends (north-northeast and northwest) was important for localizing the deposit.

The host rocks of the deposit are largely Permo-Triassic in age. Permian-age granite is the oldest and most regionally extensive unit. In the deposit area, it is intruded by Triassic rhyodacitic intrusive complex and tonalitic to dioritic dykes and stocks, both approximately 230 Ma to 225 Ma.

The deposit occurs within a mid-Miocene porphyry-breccia system that was emplaced into basement rocks. Copper-gold mineralization is predominantly hosted within the magmatic-hydrothermal breccias and contemporaneous biotite-hornblende dacitic porphyries, with some peripheral mineralization also within the immediate country rock although grades rapidly decline away from the breccia and porphyry intrusive contacts.

A progressive intrusive sequence is defined that includes emplacement of a main phreatomagmatic breccia, with hydrothermal breccia centres, all associated with the development of a dacitic porphyry intrusive complex with dates ranging from approximately 14 Ma to 13.5 Ma (Guitart, 2020). An early magmatic pulse is represented by an early-mineral quartz-feldspar porphyry intrusion with associated potassic alteration and an envelope of porphyry-type stockwork veining. The second magmatic pulse intruded into and around the first, and includes two phases of feldspar-porphyry dykes, one intermineral and one late-mineral, along with an associated large body of phreato-magmatic breccia. Copper and gold grades increase within the phreato-magmatic breccia, and are especially enhanced within several identified centres of hydrothermal breccia where copper and gold-rich mineral cement replaces the earlier breccia matrix. The late-mineral porphyry dyke phase occurs as northwest-trending narrow dykes with low copper and gold grades.



Where presently defined, the entire breccia complex measures at least 1.2 km north-south and 1.3 km east-west at its widest dimensions, with a northward-tapering footprint. Within the overall phreato-magmatic breccia, there are three main centres of copper-gold-rich hydrothermal breccia development. The central Condor Zone is the locus of the early quartz-feldspar porphyry body that is engulfed by a 500 m wide hydrothermal breccia body. Two other main centres of enhanced mineralization, the Alicanto and Fenix zones, do not have the early porphyry phase, but are defined by rich hydrothermal breccia bodies. There is significant potential to expand the size of the complex towards the north and south.



Figure 7-3: View North towards the Los Helados Deposit

Note. The arrow shows the direction of view for Figure 74.





Source. Photograph courtesy of NGEx

7.4.1 Lithology

The lithology map of the Los Helados area is shown in Figure 7-5.

7.4.1.1 Permo-Triassic Basement Units

Granite underlies the majority of the Project area, particularly outside of the deposit area (Figure 7-6). The medium- to fine-grained granite with minor granodiorite is included within the Montosa-El Potro plutonic complex (265 Ma to 245 Ma; Martínez et al., 2015). Granite in the Project area returned an age of 257 Ma (Guitart, 2020).

A sub-volcanic feldspar-phyric rhyolitic to rhyodacitic intrusive complex with a northeast trend intrudes the granite to the east of the Los Helados fault. It is dated at approximately 230 Ma.

An intrusive complex comprised of stocks and dykes of tonalitic, dioritic, and quartz-diorite composition cuts the granite and rhyodacite intrusions. It has been dated at 230 Ma to 225 Ma (Guitart, 2020). The main mass of the mafic intrusive complex is situated in the north of the Los Helados area. Intrusive breccia textures with coarse-grained tonalite are common, although the unit ranges to plagioclase porphyritic in places. Clasts of the mafic intrusive complex are entrained within the Los Helados breccias. Fine-grained dykes (andesitic), which are inferred to be related to the complex, trend northeast, including those that cut across the rhyodacite on the slope above the east side of the deposit.

7.4.1.2 Miocene Porphyry System

The Los Helados porphyry system is defined by three main intrusive phases of porphyritic granodioritic intrusions in the deposit area that are punctuated by the emplacement of a mineralized phreato-magmatic breccia body, and associated hydrothermal breccia centres. Copper and gold grades are highest in the early porphyry phase, lower in the intermineral phase, and minimal within the late porphyry phase.

The early-mineral porphyry phase is the quartz-feldspar porphyry (QFP), occurring as a northwesterly elongate body in the southeastern part of the deposit, in the Condor area. It is also identified in one drill hole in the Alicanto Zone, but it is absent from the Fenix Zone. Early potassic alteration within the system is linked to this phase which also developed a surrounding A-type quartz veinlet stockwork. Quartz and feldspar phenocyrsts make up approximately 60% of the rock, within a groundmass of microcrystalline quartz and fine-grained feldspar aggregate, with minor biotite and hornblende. It is included as distinctive quartz-phyric clasts within the later breccias and intrusive phases.

The intermineral porphyry phase (PF1) is considered to be contemporaneous with the emplacement of the phreato-magmatic breccia and hydrothermal breccia centres. A northwest-trending swarm of 15 m to 40 m wide PF1 dykes cuts across the Condor Zone. They are plagioclase and K-feldspar phyric and have scarce quartz, with a crowded porphyritic texture. They display minor development of A-type quartz veinlets. Fluidized juvenile clasts of PF1 are documented within the breccia near contacts with the porphyry unit.

The breccias at Los Helados are considered to be related to one main intermineral magmatichydrothermal breccia event. They include textural variation related to clast size, type and density, as well as type of matrix or cement. The main body of phreato-magmatic breccia (BXF) has a dominant rock flour matrix, while the hydrothermal breccias (BXH) have a mineral cement. The variation in cement (and associated mineralization) is considered to be a result of differing permeability within the overall heterogenous breccia body. For the purposes of geological modelling at Los Helados, the breccia has been divided into the two types. The breccia body at Los Helados has a central domain in the Condor Zone that is polymictic including a variety of clast types that are found within the basement and early porphyry phase, with clasts ranging up to several metres in size. The overall breccia body changes outward into monomictic clast-supported breccia towards its margins, and is transitional into the country rock, grading from areas with transported breccia fragments, to jigsaw fit textures, out to fractured and then coherent wall rock. Several discrete centres within the phreato-magmatic breccia are recognized to have a dominant sulphide mineral cement, with associated copper and gold grade increases. These areas are designated 'hydrothermal breccia' (unit BXH) where increased permeability within the main breccia body has allowed for hydrothermal fluid flow and mineral cement precipitation and replacement of the original rock flour matrix.

The hydrothermal breccia domains include the Condor, and recently recognized Alicanto and Fenix zones (Figure 7-6 and Figure 7-7). The Alicanto Zone is located at the northern end of the main breccia body, while Fenix is located to the west and both are blind to the surface. The breccias in these areas have a mineral cement (Figure 7-8) that is typically tourmaline-pyrite-hematite-gypsum in the relatively shallow areas, anhydrite>gypsum-hematite>magnetite-pyrite-chalcopyrite-molybdenum in intermediate levels, and magnetite-biotite-chalcopyrite-anhydrite-molybdenum in deeper parts.

The late mineral porphyry phase (PF2) occurs as west-trending dykes, similar in location and orientation to the PF1 phase, with narrower width (5 m to 10 m). It is plagioclase and K-feldspar phyric (approximately 40% volume, more weakly porphyritic than PF1), with biotite and hornblende. It contains few A-type porphyry veinlets and is only weakly mineralized.



Figure 7-5: Los Helados Surface Map – Lithology

Source. NGEx, 2023







Source. NGEx, 2023





Source. NGEx, 2023



Figure 7-8: Core Photographs of Unit BXH (Hydrothermal Breccia)



Source. Photograph courtesy of NGEx

Note. From hole LHDH12 at 640 m with a mineral cement of pyrite, chalcopyrite, magnetite, hematite, anhydrite with chlorite-sericite alteration.



Source. Photograph courtesy of NGEx

Note. From Hole LHDH073 at 471 m, with chalcopyrite-pyrite-hematite-magnetite breccia cement cutting rhyodacitic host rock.

7.4.2 Alteration

Five main alteration types are recorded within the Los Helados system: potassic, chloritesericite, sericitic, advanced argillic, and argillic. Each has a distinctive mineral assemblage, which can be significantly controlled by the host rock lithology with a large difference between assemblages in felsic and mafic rock types. Together, where mapped on surface, these types define an alteration footprint of approximately three kilometres north-south and two kilometres east-west (Figure 7-9). The steep topography and erosion in the valley bottom into the uppermost part of the deposit allowed for clear alteration vectoring to the central part of the system.

The deepest assemblage, in the potassic domain, is not exposed at surface, and is intersected in drilling from approximately 200 m below surface to the deepest part drilled to date at approximately 1,500 m. Biotite is the defining mineral of the potassic domain where mafic host rocks are altered, while K-feldspar dominates in the more felsic units. Remnants of overprinted potassic alteration are found in the lowermost outcrops at surface, as inherited quartz-sulphide and quartz-tourmaline veins within intense sericitic alteration.



Chlorite-sericite alteration overprints the potassic assemblage and is the predominant alteration within the deposit area. A chlorite-hematite assemblage defines the alteration within mafic lithologies changing to chlorite-sericite-clay in the felsic host rocks.

The predominant alteration at surface around the deposit area is quartz-sericite. The sericitic alteration is strong to intense in the lowermost exposures on the slope above the deposit with a quartz-sericite-pyrite assemblage that gives way upslope and outwards to a sericite-quartz-dominant assemblage with no pyrite. Sericite gives way to illite in the outermost regions with a transition to a weak propylitic halo.

Argillic alteration is recorded locally, particularly intense along some fracture zones within the peripheral parts of the system.

Advanced argillic alteration is present at surface in exposures of magmatic-hydrothermal breccia. Small breccia bodies up slope from the deposit to the south also display advanced argillic alteration.

7.4.3 Mineral Zones

Four mineral zones are recognized within the deposit based on sulphide occurrence. Zone definition does not include late pyrite veinlets or the total volume of sulphides present in the rock. In order of increasing depth, the zones are: pyrite-only (Py); pyrite>chalcopyrite (Py>Cpy); chalcopyrite>pyrite (Cpy>Py); and chalcopyrite-only (Cpy).

This sulphide zoning sequence reflects a progressive downward increase in the amount of chalcopyrite relative to pyrite.

7.4.4 Mineralization

Miocene copper-gold mineralization at Los Helados is hosted within the early and intermineral intrusive phases but is volumetrically most significant within the magmatic-hydrothermal breccia.

The breccia limits have been established by drilling to the west, east and south, although the low drilling density still allows for significant room for further high-grade discoveries within the breccia limits. The system also remains open at depth, and the lateral extent of the breccia at depth is also poorly constrained by the current drilling. The eastern contact appears to be subvertical, whereas the western contact dips outwards at approximately 70°, hence the width of the breccia body increases progressively downwards.

The copper grade increases downwards, either in the lower parts of the sericitic zone or in the underlying chlorite-sericite alteration zone, and elevated grades are maintained into the potassic alteration zone. In the central part of the breccia body, within the Condor Zone, consistent grades in the order of 0.5% Cu and 0.2 g/t Au to 0.3 g/t Au in the core zone are flanked by domains of approximately 0.3% Cu to 0.4% Cu and 0.1 g/t Au to 0.2 g/t Au. High-grade zones within mineral cemented breccia exceeding 1% Cu and 1.5 g/t Au are found locally.

The new discoveries of high-grade zones at Alicanto and Fenix, on the margins of the main body, are in chalcopyrite mineral-cemented breccias that return grades in the order of 0.6% Cu to greater than 1% Cu and 0.2 g/t Au to 1 g/t Au. Both of these zones contain significant molybdenum values, which are not typically seen in the Condor Zone. Best intersections include 343.8 m at 0.81% Cu, 0.12 g/t Au and 204 ppm Mo, including 63.8 m at 1.14% Cu, 0.14 g/t Au, and 741 ppm Mo in hole LHDH081-2 in the Fenix Zone, and 122.1 m at 0.94% Cu, 0.14 g/t Au, and 190 ppm Mo in hole LHDH083 in the Alicanto Zone. Gold grades generally correlate well with copper; however, within the sericitic alteration zones in the upper part of the deposit, where pyrite content exceeds chalcopyrite, high gold grades can be locally independent from copper values and are typically higher than in the underlying potassic zone. High gold grades are also associated with the apex of at least the Alicanto hydrothermal breccia (Figure 7-6, e.g., hole LHDH083 with 46 m at 0.96 g/t Au) and sporadic very high grade gold-quartz veins have been intersected peripheral to the main breccia (e.g., LHDH086-1 with 4 m at 11.2 g/t Au and LHDH087 with 4 m at 17.9 g/t Au).

Consistently high copper and gold grades are present in the potassic and chlorite-sericite zones where chalcopyrite is more abundant than pyrite.



Figure 7-9: Los Helados Surface Map – Alteration

Source. NGEx, 2023



7.5 Lunahuasi Geology

The new discovery at Lunahuasi is situated in the central part of the Vicuña structural magmatic corridor, approximately mid-way between the Los Helados porphyry-copper-gold deposit 10 km to the north, and the Filo del Sol porphyry-epithermal system 9 km to the south (Figure 7-2). It occurs in a structurally complex area within the district where northeast-trending faults that are related to a deep-seated lithospheric-scale structure transect the dominant north-northeast trend of the Vicuña belt.

Drilling in early 2023 at Lunahuasi Bajo discovered a copper-gold-silver mineralized vein swarm within pre-mineral host rocks. Massive pyrite and enargite occur within mineralized structures that have siliceous cores, vuggy silica, and advanced argillic alteration. The veins are vertical to steeply subvertical and appear to trend primarily north-northwest, although additional work is required to fully understand their orientation, and analogy with similar deposits suggests there may be several orientations of mineralized structures. Where drilled to date, they have a true thickness to approximately 20 m. Limited surface mapping suggests at least a one kilometre continuous trend to the vein system, although further work needs to be completed to adequately test the dimensions of the system.

Lunahuasi Bajo is situated near the base of a steep east-facing slope at the head of the Rio Blanco valley (Figure 7-10). While the veins themselves display advanced argillic alteration, they are emplaced into propylitic altered wall rock. Upslope to the west, however, the alteration changes quickly to a thickness of 500 m of sericitic alteration capped by advanced argillic alteration. The indication is that the new discovery is likely part of a much larger epithermal system with over 800 m of vertical thickness to the west, above the new discovery, that is yet to be explored.



Figure 7-10: View West up the Cerro Blanco Valley towards the Lunahuasi Area

Source. Photograph courtesy of NGEx

7.5.1 Lithology

The Lunahuasi area is underlain by volcano-sedimentary rocks that present a regular stratigraphy mapped up the Potro cliffs. This sequence is cut locally by small intrusive bodies of presumed Miocene age.

The lowermost unit is a volcano-sedimentary sequence that is inferred to be part of the Cretaceous units defined farther south along the belt. The stratified rocks include rhyolitic conglomerates and sandstones that locally have a reddish oxidized appearance near the base of the section, with a change to more andesitic to dacitic agglomerates and epiclastic tuffs upsection. Rhyolitic clastic intercalations also occur at higher levels in the stratigraphic sequence.

A younger volcanic sequence overlies the Cretaceous package. It includes a volcaniclastic base, overlain by dacitic tuffaceous rocks. In the northern part of the area, a younger andesitic unit overlies the tuffs. This sequence is inferred to be a Late-Oligocene – Miocene Doña Ana Group equivalent.

Stocks and dykes of diorite to quartz-diorite composition intrude the volcano-sedimentary units in the Lunahuasi area. In the Lunahuasi Bajo area, quartz-diorite stocks are transected in drilling and are cut by the mineralized structures. Hydrothermal breccias and pebble dykes were also intersected in drilling, their surface extent is yet to be determined. In the Upper Lunahuasi area, small dioritic stocks have been dated at 22 Ma.

7.5.2 Alteration

Alteration in the Lunahuasi area is interpreted to be part of a temporally related hydrothermal system. The steep topography across the area allows for significant variation in depth of exposure of the system, with the area to the west (Lunahuasi Alto) being higher level, and the area to the east (Lunahuasi Bajo) being a deeper, although perhaps peripheral, part of the same system. The lateral extent of alteration at Lunahuasi is at least two kilometres, with approximately 900 m of vertical relief.

Lunahuasi Alto (5,600 MASL) has seen little exploration to date; however, alteration on surface includes a steam-heated domain of powdery quartz above intense quartz-alunite alteration. This transitions eastward, and downslope, to quartz-sericite alteration.

At Lunahuasi Bajo (4,700 MASL), propylitic wall rock, and chlorite-sericite altered quartz diorite intrusions, are cut by structural zones with strong advanced argillic (alunite-pyrophyllite) alteration and pyrite-enargite mineralization.

Drilling of the structural zones at Lunahuasi defines an alteration sequence within the mineralized zones: a pervasive core replacement of very fine silica, partly with vuggy quartz (residual) textures with dickite and alunite, is present in veinlets or filling cavities, flanked by a quartz-alunite and quartz-kaolinite alteration halo towards the edges of the siliceous nucleus. Towards the edges of the advanced argillic halo, a quartz-sericite-pyrite halo develops that affects rocks of rhyolitic to andesitic composition. In the latter it produces a colouration change from the original greenish grey to a light yellowish-brown tone.

The outboard propylitic alteration at Lunahuasi Bajo is characterized by chlorite-epidote-pyrite with scarce quartz and carbonate. Chlorite is the main alteration mineral, resulting from alteration of the mafics and feldspar of the wall rocks. Epidote, less abundant than chlorite, appears as patches and veinlets. The presence of epidote, tourmaline, and anhydrite with pyrite and chalcopyrite veinlets in the propylitic zone is evidence that the chlorite-epidote association



is part of the propylitic halo of a porphyry system rather than a greenschist facies of regional metamorphism (Sillitoe 2023, internal report).

Potassic alteration at Lunahuasi Bajo is identified only within the diorite porphyry unit. K-feldspar occurs in veinlets and selectively alters feldspar phenocrysts with weak biotitization of mafic minerals. This alteration is very poorly developed and it is difficult to identify as it is overprinted by chlorite-sericite alteration.





Source: NGEx, 2023



Figure 7-12: Lunahuasi Project Area Alteration

Source: NGEx, 2023

7.5.3 Mineralization

Mineralization is hosted by structures which are interpreted to be subvertical and to strike northsouth to north-northeast. These structures are characterized by massive to semi-massive and disseminated sulphides, principally pyrite and enargite with locally abundant covellite. Sulphides tend to be coarse grained and include some very coarsely crystalline sections. Hole DPDH004 intersected pyrite-tennantite-chalcopyrite and pyrite-bornite assemblages, possibly indicating a zonation towards intermediate-sulphidation conditions to the west.

Of particular interest are the high gold and silver grades seen in the structures, with individual samples assaying up to 43.9 g/t Au and 1,165 g/t Ag. Bonanza-grade gold values near the top of hole DPDH007, in a structure that contains more quartz and less sulphide, possibly reflect a zonation from high-sulphidation sulphide veins towards gold-quartz veins at shallower levels and towards the east.




Source: NGEx, 2023

Notes. Call outs are Drilled Length at CuEq% above Cu% / Au g/t / Ag g/t.

Copper Equivalent (CuEq) for drill intersections is calculated based on US3.00/lb Cu, US1,500/oz Au, and US18/oz Ag, with 80% metallurgical recoveries assumed for all metals. The formula is: CuEq. % = Cu % + (0.7292 * Au g/t) + (0.0088 * Ag g/t).

7.6 Mineralization in Other Parts of the Property

There are two other areas of known mineralization that both occur towards the eastern side of the Property (Figure 7-2). They are aligned along a north-south trend that also includes the Josemaria porphyry copper-gold deposit to the south of the Project. All of the dated intrusions related to mineralization along this trend are approximately 25 Ma (Late Oligocene) and they define the eastern, Late Oligocene domain within the Vicuña belt.

The Cerro Blanco porphyry prospect is centred on a main plagioclase-biotite-quartz-hornblende porphyry intrusion (with few satellite dykes) that in exposed dimension is approximately 200 m wide and 750 m long, north-south elongate. Potassic alteration is preserved within the porphyry intrusions and is overprinted and surrounded by strong sericite-chlorite-clay (SCC) alteration in the host granites. The entire SCC alteration domain is one kilometre wide by 2.5 km long and open to the north. Phyllic alteration flanks and locally overprints the SCC alteration. A marginal propylitic alteration of secondary hematite and chlorite occurs outboard of all other alteration and is in part overprinted by the younger Los Helados system to the west. Mineralization is centred on the potassic zone and is strongly spatially coincident with the strongest SCC alteration. Single stage quartz \pm chalcopyrite veins define a north-south trending domain two kilometres long and 500 m wide. Values of 1,000 ppm (0.1%) Cu are consistently measured in talus in the area affected by SCC alteration. The upper parts of this zone are strongly oxidized and secondary copper and iron minerals are most common. Three drill holes in the 2007-2008 season returned several two metre to 10 m intervals of 0.1% Cu to 0.2% Cu and up to 0.2 g/t Au.

The Solitario prospect is a deep red gossan associated with a series of 5 m to 10 m wide northeast-trending dacite porphyry dykes. The dykes have moderate sericite-chlorite-clay alteration, which is inferred to be locally continuous with the copper-gold porphyry-related mineralization to the south of the Property. Surface mineralization is lacking at Solitario; however, the gossan is related to a coarse muscovite alteration that is controlled by northwestand northeast-trending minor faults. The northwest-trending faults align with the orientation of the northwest faults that trend through the Los Helados system and localized mineralization there.

8.0 Deposit Types

8.1 Los Helados

Based on geological features and location, the Los Helados deposit is classified as a porphyry copper-gold system. Porphyries are well documented along the Andes and represent a widespread type of deposit in Chile and Argentina.

Porphyry deposits in general are large, low- to medium-grade magmatic-hydrothermal deposits in which primary (hypogene) sulphide minerals occur as veinlets and disseminations within large volumes of altered rock. They are spatially and genetically related to felsic to intermediate porphyritic intrusions (Seedorf et al., 2005). The large size and styles of mineralization (e.g., veins, vein sets, stockworks, fractures, 'crackled zones', and breccia pipes), and association with intrusions distinguish porphyry deposits from a variety of other deposit types that may be peripherally associated, including skarns, high-temperature mantos, breccia pipes, peripheral geothermal veins, and epithermal precious metal deposits. Secondary minerals may be developed in supergene-enriched zones in porphyry copper deposits by weathering of primary sulphides. Such zones typically have significantly higher copper grades, thereby enhancing the potential for economic exploitation (Sinclair, 2007).

Porphyry deposits occur throughout the world in extensive, relatively narrow, linear metallogenic provinces. They are predominantly associated with Mesozoic to Cenozoic orogenic belts in western North and South America and around the western margin of the Pacific Basin, particularly within the South East Asian Archipelago. However, major deposits also occur within Paleozoic orogens in Central Asia and eastern North America, and to a lesser extent, within Precambrian terranes (Sinclair, 2007).

Porphyry deposits are large and typically contain hundreds of millions of tonnes of mineralization, although they range in size from tens of millions to billions of tonnes. Grades for the different metals vary considerably but generally average less than one percent copper and one gram per tonne gold. In typical porphyry copper deposits, copper grades range from 0.2% to more than 1%; molybdenum content ranges from approximately 0.005% to about 0.03%; gold contents range from 0.004 g/t Au to 0.35 g/t; and silver content ranges from 0.2 g/t to 5 g/t (Sinclair, 2007).

8.2 Lunahuasi

The mineralization discovered at Lunahuasi Bajo is recognized to be part of a high-sulphidation epithermal vein system.

High-sulphidation epithermal systems are known to be important sources of gold-silver-copper mineralization. Precious metal mineralization develops in zones of high permeability within the hydrothermal system in coeval volcanic rocks or pre-mineral host rocks, typically within 1.5 km of surface. Disseminated mineralization in breccias, coarse clastic rocks, and strongly leached rocks may occur and produce lower grade mineralization; however, steep veins are common and may produce bonanza grades. High-sulphidation systems are typified by quartz-alunite-pyrophyllite-dickite alteration and gangue, with native gold, electrum, pyrite, enargite, and covellite as common ore minerals.

The size and shape of epithermal systems varies, from less than 10 km² to districts with several deposits that cover 200 km² (Simmons et al., 2005) and the location of high-grade veins within



an alteration system can be particularly challenging to assess as mineralization may lie beneath expanses of altered cap rock.

High-sulphidation epithermal vein systems are genetically linked to porphyry systems, although the spatial relationship between the two deposit types can vary laterally and with depth. Highsulphidation vein systems may form directly above the related porphyry system, or may be displaced up to two kilometres away from the porphyry centre. There are known epithermal systems where the related porphyry system has not been discovered, in situations where the porphyry system was presumably too deep; conversely there are also systems where the epithermal systems are known to be developed directly on top of, or telescoped over, the underlying porphyry system as a result of tectonic uplift during emplacement. Exploration for a porphyry system related to a known epithermal vein system will rely on a good understanding of alteration patterns and geological knowledge of the mineral deposit type.

9.0 Exploration

The earliest exploration in the region by NGEx Resources in the early 2000s, including areas outside of the current Property boundary, involved remote sensing work with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) and LandSAT imagery to identify areas of alteration that might be associated with porphyry and epithermal systems. Targets were then followed up with preliminary mapping and talus fines sampling.

9.1 Los Helados Exploration

The Los Helados area of the Property was staked in 2004 with initial exploration work beginning that year. ASTER and LandSAT imagery identified an alteration target in the Los Helados area and preliminary mapping, rock-chip sampling, and talus sampling were conducted early in 2005. There was no road access into the deposit area at this time, and access was gained on horseback. Additional geochemistry as well as 22 km of induced polarization (IP) resistivity and magnetometry survey were done during the 2005-2006 summer season. It was a geological interpretation, supported by IP geophysics and surface geochemistry that led to targeting the first drilling of Los Helados in the 2006-2007 season.

A deep-penetration geophysical survey (MIMDAS) was completed in 2009. Between 2010 and 2011, existing and new IP-resistivity lines were surveyed using a 200 m dipole in order to investigate deeper parts of the deposit. The IP surveys outlined a pyritic halo that showed as a high-chargeability ring feature around the breccia body. New geological mapping of the deposit was completed in 2015 and subsequently updated in 2017 with new surface information gleaned from relogging of several sections in the deposit area.

In the lead-up to the renewed drilling that began early in 2022, an intensive relogging program was initiated in December 2021 with the objective of developing a comprehensive geology model. The goal was to understand the geometry of the high-grade copper-gold zones identified in previous drill campaigns, and look for indications of extensions both laterally and vertically of the known high-grade core zone. A total of 22 existing diamond drill holes were relogged, comprising 15,780 m. Geological sections were compiled on both north-south and east-west sections.

Simultaneous with the new geological interpretation, the existing geophysics data was reprocessed by Condor North Consulting ULC, Canada, resulting in a series of drill target recommendations over discrete semi-circular to elongate shapes of combined resistivity, chargeability, and magnetic anomalies.

A drill hole geochemistry study was completed by Scott Halley to provide criteria to discriminate porphyry phases belonging to the mineralized porphyry event from those magmatic events of Upper Paleozoic to Permian-Triassic that represent the main host rock of the system.

Geophysical surveys consisting of a drone magnetometry survey (Pioneer Exploration Consultants Ltd.), a direct current IP (DCIP) survey (DIAS Geophysical Ltd.), and a magnetotelluric (MT) survey (Quantec Geoscience) covered the Los Helados deposit area.

During the 2022-2023 season, extensive new surface geological mapping and compilation was completed. This was complemented by a district-wide structural study by Andreas Dietrich that included detailed work in the Los Helados area, as well as more extensive work along the Vicuña belt to the south. The Los Helados geology team brought together a new geological map that includes new structural insights as well as additional detail and new interpretation of the deposit area geology.

9.1.1 Los Helados Exploration Potential

The past two years of exploration at Los Helados have discovered two new high-grade zones within the main breccia unit. These zones need further drilling to define their limits and both are open to depth with existing drilling ending in high-grade mineralization. Similarly, the high-grade central Condor Zone remains open to depth. It has been suggested that large phreato-magmatic breccias similar to Los Helados are known to focus higher grade mineralization in their centers and peripheral margins in zones of higher permeability (Sillitoe, 2023). With the existing drilling to date at Los Helados, there are still domains along the margin of the breccia that have not seen a high drill density and there remains ample room for further high-grade discoveries.

Outside of the main breccia body, the topographic slope rises steeply to the east and south, with approximately one kilometre of vertical relief. To the south-southeast of the breccia, up to one kilometre away, along a structural corridor that ties into the main Los Helados breccia body, there are a series of dacite porphyry intrusions and hydrothermal breccias mapped at surface (Figure 7-5). Porphyry style veining is noted to be minimal in the area; however, narrow domains of advanced argillic alteration are mapped at surface. There is no drilling yet into this zone. It remains an attractive target for further breccia-type porphyry mineralization, or potentially epithermal type mineralization particularly southward given the topographic relief.

9.2 Lunahuasi Exploration

Prospecting in the region by NGEx began in the 1999-2000 season and ran discontinuously during 2004, 2008, 2016, and 2018. In the Lunahuasi area (previously called Don Peter or Potro Cliffs), the large expanse of white sericitic alteration drew the attention of geologists.

Between 1999 and 2008, three campaigns of talus fine sampling were completed, resulting in the collection of 230 samples over an area of 30 km². A total of 133 rock samples were also collected during these programs. Gold values in talus were generally between 0.03 g/t Au and 0.15 g/t Au, with copper values between 1 ppm and 564 ppm. The strongest geochemical anomaly was near the intersection of Rio Hediondo and Rio Blanco, just over one kilometre east of the Lunahuasi discovery.

Rock samples returned values up to 1 g/t Au and 13,400 ppm Cu, with anomalies centred on the Rio Hediondo – Rio Blanco intersection and an area about one kilometre west of the Lunahuasi discovery in the middle of the cliffs.

Despite the compelling geology and sampling results, no work was done in the Lunahuasi area between 2018 and 2022 due primarily to a focus on other areas of the property. A comprehensive surface exploration program was implemented during the 2022-2023 season, including a provision to drill at least two diamond drill holes, one at the top of the cliffs and one at the bottom, to be targeted based on results of the surface work results. Surface work comprised additional prospecting and geological mapping, the collection of 168 talus fine samples and 122 rock chip samples for geochemical and Short Wavelength InfraRed (SWIR) analysis, and DCIP and MT geophysical surveys. MT was restricted to the relatively flat plateau at the top of the cliffs, while DCIP was completed on this area as well as a small area covering the discovery at Lunahuasi Bajo.

A structural mapping and compilation of the Vicuña District by Andreas Dietrich in 2023 includes a more detailed structural interpretation of the Lunahuasi area.

9.2.1 Lunahuasi Exploration Potential

The mineralization at Lunahuasi Bajo was discovered in 2023. Six holes were drilled into the discovery zone, all of which had multiple high-grade intersections, and it remains open in all directions. The surface manifestation of the vein system has been mapped along a domain that is at least one kilometre long. Given the challenging terrain and limited time spent so far on the ground in the area, there remains excellent potential for expanding the system.

The vein system at Lunahuasi Bajo is part of an alteration system that is mapped as being at least four kilometres wide by six kilometres long. Lunahuasi Bajo veins overprint porphyryrelated propylitic alteration near the base of a steep slope with more than 800 m of vertical relief. Exploration for similar style veins within the area immediately below the current drilled depth, as well as the entire thickness of rock below the advanced argillic and sericitic alteration to the west of the existing discovery remains wide open; almost a one kilometre thick package of rock.

Lunahuasi Bajo mineralization is comparable in style and width with the mineralized veins at the El Indio deposit. At El Indio, however, there were also late-stage gold-quartz veins that carried gold grades. Gold grades in excess of 40 g/t were encountered in some of the mineralized structures at Lunahuasi and there is the possibility of a similar discovery.

In addition to the large area open to exploration for further high-sulphidation epithermal veins, the system is almost certainly linked to a porphyry copper centre. Alteration and geological relationships suggest that the porphyry system is likely to be lateral to, rather than underlying, the Lunahuasi Bajo veins, and it is suggested to be nearby. The potential for a third Miocene porphyry centre in the Vicuña belt is high, with Los Helados 10 km to the north and Filo del Sol 9 km to the south, all along the same structural corridor.

9.3 Exploration in Other Parts of the Property

Prospecting and follow-up work with talus fines sampling was conducted by field crews at the Solitario and Cerro Blanco prospects. In the 2008-2009 season, diamond drilling of three holes into the Cerro Blanco porphyry prospect was completed. The holes were targeted on surface geochemistry and geological mapping to drill the central potassic zone and peripheral sericite-chlorite-clay alteration with porphyry-type veining. Results returned weak to moderate copper and gold values, with best two metre to 10 m intervals at 0.1% Cu to 0.2 % Cu and 0.2 g/t Au. Geological mapping was undertaken around the Cerro Blanco and Solitario prospects in 2016 and 2017 as part of a property-wide geological compilation.

9.3.1 Exploration Potential of Other Parts of the Property

The other known prospects on the Property also require more follow-up work. The Cerro Blanco porphyry copper prospect, while dated to be Late Oligocene in age and not age equivalent to the Miocene-age deposits in the region, is age equivalent to the Josemaria copper-gold deposit to the south. It has only seen limited drilling to date.

Similarly, the Solitario porphyry prospect requires more follow-up work. It does not have a large alteration footprint. However, it has geological similarities to the Cerro Blanco prospect and other Late Oligocene alteration in the region. It also lies along a southeast trend from the Los Helados deposit, a major lithospheric structural orientation in the region.

10.0 Drilling

10.1 Los Helados Drilling

All of the early drilling at Los Helados was completed by NGEx Resources, including the deposit discovery holes. A total of nine drilling campaigns were carried out from 2006 to 2015. After a hiatus and a company name change, NGEx resumed exploration and drilling at Los Helados with diamond drilling campaigns over the past two seasons (2021-2022 and 2022-2023).

The Los Helados deposit was discovered by drilling during the 2007-2008 season. The first diamond drill hole, LHDH001, intersected the main breccia body and returned 518 m grading 0.47% Cu and 0.31 g/t Au from 12 m down hole. This hole was following up on encouraging results from reverse circulation (RC) drill holes drilled the previous season. The true significance of the discovery was not recognized until the drilling of hole LHDH016 in the 2010-2011 season. This hole intersected a 737 m interval of 0.64% Cu and 0.30 g/t Au from 40 m down hole, with the last 8 m averaging 1.0% Cu.

Early drilling completed by NGEx Resources includes 75,634 m in 88 drill holes (Table 10-1), of which five holes (1,366 m) are RC and 83 holes (74,268 m) are core. The core drilling produced 33,936 m of NQ (47.6 mm diameter) core and 40,332 m of HQ size (63.5 mm) core. This drilling includes two holes (LHDHG02 and LHDHG03) completed for geotechnical purposes which were not sampled for assay until 2021. A summary of the early drilling at Los Helados is shown in Table 10-1.

The drilling included a number of holes drilled in one season and subsequently re-entered and deepened in a later season. If this deepening was successful, no new drill hole name was created. For some holes, however, the drill string wedged off the main hole creating a daughter hole starting at the branch-off depth in the main hole. In these cases, the daughter hole was indicated by a -1 or -2 following the original drill hole name.

Season	Drill Type	Number of Holes	Metres
2006–2007	RC	5	1,366
2007–2008	Core	2	1,037
2008–2009	Core	2	1,529
2009–2010	Core	6	4,031
2010–2011	Core	14	9,641
2011–2012	Core	25	22,022
2012–2013	Core	32	32,707
2013–2014	Core	_	_
2014–2015	Core	3	3,341
Total		89	75,674

Table 10-1:	Summary of Early Drilling at Los Helados
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Beginning in February 2022, NGEx resumed drilling at Los Helados. The renewed exploration followed a relogging program that began in December 2021, which included a thorough review of historic core, creating a series of new targets to explore by drilling.

Over the past two seasons, 22 diamond drill holes, totalling 20,773 m, have been completed at Los Helados by NGEx (Table 10-2). The drilling continued with the same numbering sequence used previously, beginning with hole LHDH073. The 2021-2022 season drilling ran from February 2022 to July 2022 with 10 new holes drilled for a total of 10,264 m.

Drilling continued during the 2022-2023 season, including 11 new holes, five of which were daughter holes branched off from two mother holes, for a total of 10,509 m. During this season, the focus of drilling was to explore the newly defined Fenix and Alicanto zones. Directional drilling was used to control the orientation of holes drilled by wedging off a mother hole towards a proposed exploration target. The program was successful in extending the recently discovered zones. Highlights include Fenix Zone holes LHDH084 with 390 m at 1.02% Cu, 0.15 g/t Au, 2.4g/t Ag, 187 ppm Mo, and LHDH081-2, which intersected 343.8 m at 0.81% Cu, 0.12 g/t Au, 2.5 g/t Ag, and 204 ppm Mo, both holes ended in mineralization. Sections showing the drilling into the two new zones are shown in Figure 7-6 and Figure 7-7.

Season	Drill Type	Number of Holes	Metres	
2021-2022	Core	10	10,264	
2022-2023	Core	11	10,509	
Total		21	20,773	

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Source. NGEx, 2023

10.1.1 Geological Logging

Drill core was transported by truck by company personnel from the drill sites to the Los Helados camp until 2015. Starting in 2021, Cabañas Quebrada Seca was used as a camp, and drill core was transported to this location. At the field core logging facility, the core was photographed, logged for rock quality designation (RQD) and recovery, and a quick log of the key geological features was prepared. The core was then packaged for delivery by NGEx personnel to the company's permanent core logging and sampling facility located in Copiapó for sampling, detailed logging, and core storage.

Geological logging information was entered into MX Deposit software, and interpretation was performed on north-south sections. New drill logs were added to the database that was established for the deposit-wide relogging program in 2021-2022.

10.1.2 Geotechnical Logging and Testing

In 2015, specific geotechnical core logging was performed on six drill holes totalling 3,350 m to estimate the rock mass rating (RMRL90,) with 18 unconfined compressive strength (UCS) laboratory tests and 717 point load tests also performed.

Subsequent to this, a dedicated block cave geomechanics study was conducted, which included drilling two oriented geotechnical drill holes (2,241 m). Testing included; televiewer surveys, Lugeon testing (also known as Packer testing, which is an in-situ testing method widely used to estimate the average hydraulic conductivity of rock formations), and 230 point load tests.

An additional geomechanics laboratory testing program was conducted consisting of 84 UCS tests, 46 elastic property tests, 51 tensile tests, and 55 triaxial tests. Geotechnical logging, televiewer surveys, and Lugeon tests were also performed on a single core hole (1,100 m) drilled as part of this campaign.

Beginning in 2022, geotechnical logging of specific holes was completed, including detailed structure and fracture measurements. X-ray fluorescence (XRF)-Niton measurements for first-pass geochemistry were conducted on the holes. Magnetic susceptibility of the core and density determinations for all representative rock types were also completed.

10.1.3 Recovery

Core recovery data was not systematically collected on holes drilled before the 2010–2011 campaign. Visual inspection by Charchaflié (as reported in Charchaflié and Le Couteur, 2012), indicated that overall recovery was very good and was estimated to be more than 90%.

Starting with the 2011–2012 field season, core recovery and RQD were measured at the camp. Recovery was measured with a metric tape between drill core marks, annotated, and the percentage recovery calculated. RQD was calculated as the total length of recovered core that exceeded or equalled 10 cm.

Core recovery from holes drilled between 2012 and 2015 averages 97%.

Over the past two seasons, the drilling programs have used the same process. Core recovery has averaged 94%.

10.1.4 Collar Surveys

Drill collar locations were surveyed using a differential global positioning system (GPS).

10.1.5 Downhole Surveys

The RC holes and the first four core holes were not surveyed down hole for azimuth or inclination. Measurements from LHDH23 and LHDH24 were accidentally erased before being downloaded to a computer. All other holes were surveyed for downhole deflection.

Downhole surveys were carried out using a Reflex multi-shot instrument up to the 2011–2012 drilling campaign. On average, measurements were collected at 50 m intervals down the hole.

For the 2012–2013 and 2014–2015 drilling, a SRG-gyroscope survey was completed for each drill hole by Comprobe Limitada. On average, measurements were collected at 30 m intervals down the hole.

For the 2021-2022 and 2022-2023 drilling campaigns, drill hole trajectory measurements were conducted by Comprobe Limitada, using a north-seeking fibre optic gyroscope system with a north finder; it offers the advantage of not requiring an azimuth reference on the surface, which



integrates an electronic accelerometer for inclination measurements. Measurements were taken every 10 m. Where directional drilling was used, trajectory measurements were calculated using the orientation of the mother hole up to the branch-off redirection, then using an average of the measurements provided by STYR Directional Core Drilling from Santiago, Chile who was contracted to complete the directional drilling, and the gyroscope measurements from Comprobe.

Downhole imaging was conducted for holes LHDH081-1, LHDH083, LHDH084, LHDH085, LHDH086-2, and LHDH087 using a BHTV 42 acoustic televiewer (Electromind S.A.). The images are used to calculate the orientation of structures down the hole, which is converted to a true orientation using the drill hole trajectory measurements.

10.1.6 Sample Length/True Thickness

Los Helados is a porphyry deposit with disseminated mineralization. Reported and described interval thicknesses are considered to be true thicknesses. A drill section through the deposit illustrating the typical drill orientations in relation to the mineralization is illustrated in Figure 7-6.

10.2 Lunahuasi Drilling

The initial drill program in the Lunahuasi area was conducted in the 2022-2023 season. Following surface exploration work and targeting in the later part of 2022, diamond drilling began in January 2023.

The initial plan was to drill two exploration holes, but due to the exceptional results yielded by hole DPDH002, the exploration campaign was extended resulting in a total of 4,912 m drilled in eight holes. Two holes were drilled in the Lunahuasi Alto area and six in the lower Lunahuasi Bajo area of the project (Table 10-4).

Drilling began with PQ (85 mm) diameter, then the diameter was changed to HQ for intermediate depths and, in general, reduced to NQ size at the end of hole. Table 10-3 shows the drill hole numbers, drilled targets, drill hole coordinates, elevation, depth reached, azimuth, and inclination.

Hole ID	Easting (m)	Northing (m)	Elevation (MASL)	Azimuth (°)	Dip (°)	Length (m)
DPDH001	437,575.0	6,856,531.0	5,356.7	270	-70	929
DPDH002	439,036.0	6,856,271.1	4,684.9	270	-70	719
DPDH003	437,397.0	6,855,724.0	5,388.9	110	-70	351
DPDH004	439,033.6	6,856,271.0	4,685.8	275	-50	599
DPDH005	439,043.7	6,856,132.3	4,686.6	270	-70	992
DPDH006	439,040.4	6,856,271.0	4,683.5	270	-80	380
DPDH007	439,142.2	6,856,265.8	4,640.7	270	-55	653
DPDH008	439,042.7	6,856,132.3	4,684.7	270	-55	290

Table 10-3:	Lunahuasi Drill Hole Summar	y from the 2022-2023 Season

The two holes drilled in the Lunahuasi Alto area were targeting surface gold and silver geochemical anomalies within polymictic breccias with hydrothermal quartz-alunite alteration. DPDH003 also tested an alunite + buddingtonite anomaly generated from remote sensing (WorldView-3 and ASTER) work. Both holes intersected a sequence of epiclastic and volcaniclastic rocks with weak silicification and clay alteration typical of the shallow and distal part of an epithermal system. No significant assay intervals were recorded in either hole.

Drilling in the Lunahuasi Bajo area was testing a surface geochemical anomaly along a mapped north-northwest structure. The structure included multiple sulphide veins and massive to semimassive breccias that were intercepted by discovery hole DPDH002 at a depth of 212 m, returning 60 m at 5.65% Cu, 2.04 g/t Au, and 44.0 g/t Ag, including 10.0 m at 14.19% Cu, 4.07 g/t Au, and 94.0 g/t Ag and 6.0 m at 10.57% Cu, 3.73 g/t Au, and 80.0 g/t Ag. Drill holes DPDH004 and DPDH006 from the same platform also intersected mineralization (Figure 7-10).

All other holes encountered multiple mineralized structures as shown in Table 10-4.

Hole ID	From (m)	To (m)	Length (m)	Est True Width (m)	Cu %	Au g/t	Ag g/t	CuEq %
DPDH002	150.0	154.0	4.0	1.4	5.81	2.62	81.5	8.44
plus	212.0	272.0	60.0	20.5	5.65	2.04	44.0	7.52
incl	226.0	236.0	10.0	3.4	14.19	4.07	94.0	18.00
incl	244.0	250.0	6.0	2.1	10.57	3.73	80.0	14.00
plus	308.0	312.0	4.0	1.4	3.99	0.26	44.5	4.56
plus	340.0	342.0	2.0	0.7	2.77	1.41	25.0	4.02
plus	520.0	524.0	4.0	1.4	2.53	0.52	112.0	3.89
plus	564.0	566.0	2.0	0.7	3.01	1.02	36.0	4.07
plus	574.0	584.0	10.0	3.4	3.70	1.51	259.4	7.08
incl	580.0	582.0	2.0	0.7	11.81	4.70	1,165.0	25.49
plus	644.0	648.0	4.0	1.4	3.90	4.37	61.0	7.62
DPDH004	112.0	132.0	20.0	12.9	0.31	0.70	9.0	0.90
plus	148.0	180.0	32.0	20.6	0.28	0.31	13.2	0.62
plus	316.0	318.0	2.0	1.3	3.25	1.63	26.0	4.67
plus	334.0	386.0	52.0	33.4	0.51	0.61	6.8	1.01
incl	334.0	342.0	8.0	5.1	1.05	0.59	11.3	1.59
incl	350.0	356.0	6.0	3.9	0.70	1.38	8.0	1.78
incl	364.0	386.0	22.0	14.1	0.56	0.68	8.6	1.14
plus	412.0	416.0	4.0	2.6	2.01	1.68	31.0	3.50
plus	438.0	444.0	6.0	3.9	1.87	0.38	36.3	2.47
plus	452.0	466.0	14.0	9.0	1.99	0.55	81.3	3.10

 Table 10-4:
 Lunahuasi Significant Drill Hole Intersections



Hole ID	From (m)	To (m)	Length (m)	Est True Width (m)	Cu %	Au g/t	Ag g/t	CuEq %
plus	501.8	503.0	1.3	0.8	3.81	2.44	112.0	6.58
DPDH005	109.2	185.0	75.8	25.9	0.86	0.92	41.5	1.90
incl	129.0	142.0	13.0	4.4	0.87	2.33	141.5	3.81
incl	160.3	166.4	6.2	2.1	2.61	1.40	69.0	4.23
incl	176.5	185.0	8.5	2.9	1.66	1.27	46.3	2.99
plus	371.6	375.0	3.4	1.2	3.18	1.32	24.0	4.36
plus	461.6	465.0	3.4	1.2	4.83	2.23	75.5	7.12
plus	488.0	494.0	6.0	2.1	2.67	0.82	31.1	3.54
incl	488.0	489.8	1.8	0.6	7.86	2.53	100.8	10.59
plus	521.6	525.2	3.6	1.2	5.64	0.39	111.6	6.90
plus	530.0	536.7	6.7	2.3	2.05	0.49	6.5	2.47
plus	572.9	578.4	5.5	1.9	3.93	1.24	47.0	5.25
plus	636.0	669.4	33.4	11.4	2.50	1.12	19.8	3.50
incl	648.8	650.8	2.0	0.7	20.38	7.71	65.0	26.57
incl	667.6	669.4	1.8	0.6	9.83	2.89	109.0	12.90
plus	692.0	735.0	43.0	14.7	1.26	0.48	16.3	1.75
incl	719.0	724.0	5.0	1.7	5.34	0.84	22.2	6.15
incl	719.0	735.0	16.0	5.5	2.40	0.56	11.1	2.91
plus	752.7	762.0	9.3	3.2	2.03	0.96	12.4	2.84
plus	940.1	958.0	18.0	6.1	2.66	0.48	18.1	3.16
incl	942.5	946.7	4.3	1.5	9.58	1.64	61.4	11.32
DPDH006	174.0	184.0	10.0	1.7	0.40	1.04	9.0	1.24
plus	261.0	267.0	6.0	1.0	0.76	1.34	16.2	1.88
plus	338.5	342.4	3.9	0.7	2.79	1.53	48.3	4.33
DPDH007	74.0	164.0	90.0	51.6	2.05	2.46	23.2	4.05
incl	74.0	94.0	20.0	11.5	5.49	6.31	57.7	10.60
incl	91.8	94.0	2.2	1.3	6.54	35.07	60.4	32.65
incl	101.6	105.0	3.5	2.0	10.38	8.74	101.0	17.64
incl	107.0	112.0	5.0	2.9	4.78	4.30	41.0	8.28
plus	316.0	359.2	43.2	24.8	0.70	0.89	13.5	1.47
incl	328.0	339.0	11.0	6.3	1.53	1.42	27.2	2.80
plus	380.0	388.0	8.0	4.6	5.19	2.44	36.8	7.29
incl	384.2	388.0	3.9	2.2	9.33	4.17	50.8	12.81



Hole ID	From (m)	To (m)	Length (m)	Est True Width (m)	Cu %	Au g/t	Ag g/t	CuEq %
plus	439.2	460.0	20.8	11.9	5.54	2.02	121.3	8.09
incl	448.8	453.1	4.3	2.5	16.99	6.05	506.9	25.86
plus	482.5	486.2	3.7	2.1	4.13	1.72	127.5	6.51
plus	511.3	514.0	2.8	1.6	1.19	0.76	146.2	3.03
plus	524.0	526.0	2.0	1.1	0.22	4.98	23.0	4.06
plus	564.4	566.2	1.8	1.0	3.77	2.60	75.4	6.32
plus	589.5	598.4	8.9	5.1	2.83	2.90	278.8	7.39
incl	589.5	593.3	3.8	2.2	3.25	3.31	323.6	8.51
plus	634.0	647.7	13.7	7.9	5.51	1.49	170.5	8.10
incl	636.0	643.0	7.0	4.0	9.51	1.93	302.7	13.57
DPDH008	61.7	70.0	8.3	4.8	0.13	1.69	27.5	1.61
plus	142.0	160.0	18.0	10.3	1.25	2.39	31.0	3.26
incl	148.0	156.0	8.0	4.6	1.96	3.97	50.1	5.29
plus	212.0	228.0	16.0	9.2	0.73	1.06	14.3	1.63
incl	216.0	219.0	3.0	1.7	1.64	1.31	21.7	2.78
plus	276.0	280.0	4.0	2.3	1.29	0.76	11.5	1.95

Note. Copper Equivalent (CuEq) for drill intersections is calculated based on US3.00/lb Cu, US1,500/oz Au and US18/oz Ag, with 80% metallurgical recoveries assumed for all metals. The formula is: CuEq % = Cu % + (0.7292 * Au g/t) + (0.0088 * Ag g/t).

Based on the drilling results listed in Table 10-4, a vein swarm with minimum dimensions of 570 m east-west, 170 m north-south, and 940 m vertical was identified.



Figure 10-2: Lunahuasi Diamond Drill Hole Locations

10.2.1 Geological Logging

Drill core was transported by pickup truck by company personnel from the drill sites to a temporary core facility near the drill site. The core was photographed, logged for RQD and recovery, and a quick log of the key geological features was prepared. The core was then packaged for delivery by NGEx personnel to the company's permanent core logging and sampling facility located in Copiapó for sampling, detailed logging, and core storage.

10.2.2 Recovery

Recovery was measured with a metric tape between drill core marks, annotated, and the percentage recovery calculated. RQD was calculated as the total length of recovered core that exceeded or equalled 10 cm.

Core recovery from holes drilled averages 97.7%.

10.2.3 Collar Surveys

Drill collar locations were surveyed using a differential GPS system.

10.2.4 Downhole Surveys

Drill hole trajectory measurements were conducted by Comprobe Limitada, using a northseeking fibre optic gyroscope system with a north finder; it offers the advantage of not requiring an azimuth reference on the surface, which integrates an electronic accelerometer for inclination measurements. Measurements were taken every 10 m.

10.2.5 Sample Length/True Thickness

Lunahuasi is a high-sulphidation epithermal vein system. Drill holes into the lower area were oriented to test the target mineralized structure by drilling across the presumed north to north-northeast vein orientation as suggested by surface mapping. The result is that the holes were drilled approximately perpendicular to the structure. However, the mineralized intervals in each drill hole must be adjusted for drill hole inclination, for example a 60 m interval in DPDH002 equates to approximately 20 m true thickness. Estimated true widths of the mineralized intervals intersections are shown in Table 10-4, above.

11.0 Sample Preparation, Analyses, and Security

11.1 Sampling Methods

11.1.1 Surface Sampling

Soil and talus samples were collected from small holes deep enough to sample the interval below the iron-cemented horizon. Talus samples were composited from 10 stations located within five metres along 100 m long, east-west or north-south oriented lines. Sampled material was finer than #10 Tyler mesh.

Rock outcrops and trenches were sampled by collecting approximately one kilogram to three kilograms of chips. The sample location, length, and a geological description were recorded.

11.1.2 Drill Hole Sampling

RC holes drilled during the 2006–2007 campaign were sampled on two-metre intervals.

Drill core was sampled continuously from the beginning of recovery to the end of the hole. Samples are generally two metres long (except for the initial drill holes, LHDH01 to LHDH04, which were sampled on one-metre intervals). Core was oriented in the core box prior to sampling to ensure that vein material would be evenly sampled. Drill core was cut in half using a circular, water-cooled rock saw. Half-cores were randomly weighed and compared in order to verify that 50% of the material was sampled.

One half of the core was used as a geochemical sample and the other half was stored in boxes or trays for reference and future revisions. Prior to 2011, rice sacks were delivered to the laboratory using a private courier with dispatch tracking. Beginning in October 2011, samples were delivered directly to the ACME preparation facilities in Copiapó by NGEx personnel, considerably reducing turn-around times from previous programs.

During the 2021-2022 and 2022-2023 campaigns, drill core for both Los Helados and Lunahuasi was sampled by NGEx personnel and delivered directly to the ALS Chemex (ALS) preparation facilities in Copiapó.

11.1.3 Density Determinations

Specific gravity (SG) has been systematically measured beginning with the 2010–2011 drilling program. A total of 25,158 core samples have been measured for SG by NGEx technicians using the water immersion method at the company's core logging and sampling facility in Copiapó.

11.2 Analytical and Test Laboratories

ALS in Chile was used as the primary analytical laboratory for the five RC holes. At the time of analysis, ALS held ISO 9001 accreditations for selected procedures.

The primary assay laboratory for the pre-2021 core drilling programs was ACME Laboratories in Chile (ACME). ACME is an internationally certified laboratory. In 1994, ACME began adapting its Quality Management System to an ISO 9000 model. ACME implemented a quality system compliant with the ISO 9001 Model for Quality Assurance and ISO/IEC17025 General Requirements for the Competence of Testing and Calibration Laboratories. In 2005, the Santiago laboratory received ISO 9001:2000 registration and in July 2010, the Copiapó facility



was added to the Santiago registration. The Santiago hub laboratory has also been ISO 17025:2005 compliant since 2012. ISO/IEC 17025 includes ISO 9001 and ISO 9002 specifications, CAN-P-1579 (Mineral Analysis) for specific registered tests by the Standard Council of Canada. CAN-P-1579 is the Standard Council of Canada's requirements for the accreditation of mineral analysis testing laboratories.

The 2021-2022 and 2022-2023 campaigns, drill core for both Los Helados and Lunahuasi was delivered directly to the ALS sample preparation facilities in Copiapó and analyzed at the ALS facility in Santiago, Chile, or Lima, Peru. ALS facilities are accredited to ISO 9001-2008 and ISO 17025.

Vigalab SA (Vigalab; now part of the Intertek Group) was used as an umpire (check) laboratory. At the time of the analyses, Vigalab held ISO9001:2009 accreditation.

All laboratories are independent of NGEx.

11.3 Sample Preparation and Analysis

11.3.1 RC

For the RC drill program, a 27-element suite was used with four-acid digestion and analysis by atomic emission spectroscopy with an inductively coupled plasma finish (ICP-AES). Gold was analyzed by fire assay with an atomic absorption (AA) finish and mercury, by cold vapour/AA.

11.3.2 Core

Upon receipt of samples, ACME assigned a job order and organized the batches. Samples were sorted and weighed. If the number of samples differed from that indicated on the requisition, NGEx was contacted. Sample preparation consisted of:

- Drying in a large electric oven with temperature control
- Crushing to better than 85% passing 10 mesh
- Splitting to a 0.5 kg subsample
- Pulverizing the subsample to 95% passing 200 mesh
- Screening to pass 200 mesh

Bags with 150 g of pulp were submitted internally to ACME's assaying facilities in Santiago.

Multi-acid digestion was used for all NGEx samples with the exception of one submission during the 2009–2010 campaign.

Gold was determined mostly on 30 g aliquots and some 50 g aliquots using fire assay with an atomic absorption spectroscopy (AAS) finish. A suite of 37 elements, including copper and silver, was analyzed by ICP-emission spectroscopy (ES).

Prior to 2010, copper was analyzed only by ICP, with reassay by AAS only if the ICP result exceeded the upper detection limit of 10,000 ppm Cu. From 2010 to 2012, all samples with copper grades over 5,000 ppm Cu were reassayed by AAS. Starting in 2012, all samples were analyzed for copper by both ICP and AAS. Copper was also analyzed by sequential leach if the ICP result exceeded 500 ppm. Starting in 2021, silver was also analyzed at ALS using AAS (AA-62 method code).

Mercury analyses by cold vapour/AA were performed on all samples until 2010, after which they were discontinued.



11.4 Quality Assurance and Quality Control

11.4.1 Los Helados RC

Thirty-two field duplicates representing 3.2% of total RC samples were analyzed, however, no blanks or standard materials were inserted in sample batches to control laboratory performance.

As there are only five RC holes in the deposit, representing 1,366 m of drilling, or approximately 2% of the current overall metres drilled, the lack of QA/QC data for the RC drilling is not a significant risk to the Mineral Resource estimate.

11.4.2 Los Helados Core

11.4.2.1 Insertion Rates

No QA/QC program was in place for samples from drill holes LHDH001 to LHDH004, from the 2009–2010 drill program, which corresponds to 2,540 samples representing 3.6% of the metres drilled.

A quality control program was implemented for the 2009-2010 drilling campaign, beginning with hole LHDH005, and has been in place for all subsequent drill programs. The 2010–2011 campaign included two standards, whereas for subsequent campaigns three standards were used. Coarse blank samples and duplicate samples were inserted and collected from the beginning of the QA/QC programs. QA/QC insertion rates are listed below in Table 11-1.

Season	Samples	Blank	Standard	DUPa	DUPf	DUPp
2006-2007	127					
2007-2008	1,742					
2008-2009	1,507					
Sub-Total	3,376					
2009-2010	2,136	60	61	30	31	30
2010-2011	4,681	143	122	66	63	66
2011-2012	10,466	297	299	137	129	139
2012-2013	15,456	370	557	196	193	196
2014-2015	1,639	14	21	7	6	7
2021-2022	5,437	138	207	69	67	69
2022-2023	4,708	119	179	59	59	60
Sub-Total	44,523	1,141	1,446	564	548	567
Average Insertion Rate	9.6%	2.6%	3.2%	1.3%	1.2%	1.3%

Table 11-1: QC Insertion Rates at Los Helados Project

Note: DUPa, DUPf, and DUPp correspond to assay, field, and preparation duplicates.

11.4.3 Lunahuasi Core

11.4.3.1 Insertion Rates

For the Lunahuasi 2022-2023 season, the blank, standard, and duplicate insertion rates are provided in Table 11-2.

Туре	Total QC	Total Samples	Insertion Rate (%)
DUPa	36		1.3
DUPf	36		1.3
DUPp	36		1.3
Blanks	72		2.5%
Standards	110		3.8%
Total	290	2,867	10.1%

Table 11-2: QC Insertion Rates at Lunahuasi Project

Note: DUPa, DUPf, and DUPp correspond to assay, field, and preparation duplicates.

11.4.4 Certified Reference Materials

11.4.4.1 Los Helados

NGEx acquired certified reference materials (CRMs) from SGS Argentina and CDN Resource Laboratories Ltd. (CDN) and used these CRMs for drill programs completed prior to 2012.

NGEx used materials from Los Helados to create in-house CRMs for the 2011–2012 and 2012– 2013 drilling campaigns. The samples were prepared by Vigalab. Coarse rejects were selected from drill hole intervals in the database with assayed copper and gold grades. Each grade range was used to generate a standard for that range. The resulting standard material was subject to round-robin analysis at four laboratories in Chile, ACME, Actlabs, ALS, and Vigalab. Each laboratory received one envelope of each of the three standard materials. Data from the four laboratories were considered in assigning best values to the CRMs. For the seasons 2021-2022 and 2022–2023, CRMs were sourced from Ore Research & Exploration Pty Ltd (OREAS), Australia. All specifications for CRMs used can be found at their website, www.oreas.com. Performance for the two most recent seasons have been summarized below in Table 11-3. Failures that are deemed inaccurate are followed up at the ALS laboratory for re-assay. Accepted CRM failures have been scrutinized against the preceding and following assays to determine the significance of the failure as well as how far outside the three standard deviation (3SD) tolerance limit the value lies. Most of the accepted failures are very close to the tolerance limits as illustrated below in Figure 11-1 and Figure 11-2. One exception is the silver performance in three low-grade CRMs using an AA assay method which are failing at 16% of the time. The mean silver value is below 6 ppm with tolerance of \pm 0.6 ppm (3SD). The failures are not of concern because the AA methods are accurate at higher grades of silver, which are of interest.

Table 11-3:	CRM Performance	2009 through 2023 a	t Los Helados Project
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Season	Ag	Au	Cu
2009-2010	-	56	61
Passed	-	33	46
Warning	-	11	8
Accepted with failure	-	12	7
2010-2011	-	132	122
Passed	-	80	80
Warning	-	19	23
Accepted with failure	-	33	19
2011-2012	-	302	299
Passed	-	291	263
Warning	-	8	31
Accepted with failure	-	3	5
2012-2013	-	557	557
Passed	-	540	521
Warning	-	17	36
2014-2015	-	21	21
Passed	-	20	21
Warning	-	1	-
2021-2022	207	190	207
Passed	124	154	110
Warning	55	30	91
Accepted with failure	28	6	6
2022-2023	179	179	179
Passed	60	117	130
Warning	84	59	49
Accepted with failure	35	3	-
Total	386	1,437	1,446

Figure 11-1: Los Helados Certified Reference Material Performance for the 2009-2010 through 2014-2015 Seasons



Figure 11-2: Los Helados Certified Reference Material Performance for the 2021-2022 and 2022-2023 Seasons



11.4.4.2 Lunahuasi

Standards were inserted into the sample stream using CRMs purchased from OREAS Australia. All specifications for CRMs used can be found at their website, <u>www.oreas.com.</u> Standards have been inserted in the sampling stream at 110 CRMs in 2,867 assays (3.8% of samples), summarized below in Table 11-4. Failures that are deemed inaccurate are followed up at the ALS laboratory for reassay. Accepted CRM failures have been scrutinized against the preceding and following assays to determine the significance of the failure as well as how far outside the 3SD tolerance limit the value lies. Most of the accepted failures are very close to the tolerance limits as illustrated below in Figure 11-3. One exception is the silver performance in three low-grade CRMs using an AA assay method which are failing at 27% of the time. The mean silver value is below 6 ppm with tolerance of ± 0.6 ppm (3SD). The failures are not of concern because the AA methods are accurate at higher grades of Ag, which are of interest.

	Ag	Au	Cu
2022/2023	110	110	110
Passed	12	90	104
Warning	68	16	6
Accepted with failure	30	4	0
Total	110	110	110

Table 11-4: CRM Performance 2022–2023 Season at Lunahuasi Project





11.4.5 Coarse Blanks

NGEx obtained blank material from an andesite outcrop located near Los Helados for the 2011–2012 drilling campaign. During the 2012–2013 and for subsequent campaigns, material used for blanks was white quartz, which was purchased in Copiapó.

11.4.5.1 Los Helados Seasons 2021-2022 and 2022-2023 Blank Performance

Blank performance is summarized below in Table 11-5. Of the 257 inserted blanks, four gold and silver as well as seven copper accepted failures were scrutinized against their locations in the assay sequence to determine if contamination was present. Further, the inserted blanks preceding and following the Accepted Failure Blank were also validated to ensure that any contamination, if present, was isolated. Performance of the 2009-2010 through 2022-2023 seasons are illustrated below in Figure 11-4 and Figure 11-5.

Season	Ag	Au	Cu
2009-2010	-	60	-
Passed	-	60	-
2010-2011	-	143	143
Passed	-	139	142
Accepted with failure	-	4	1
2011-2012	-	297	297
Passed	-	296	296
Accepted with failure	-	1	1
2012-2013	-	370	370
Passed	-	368	369
Accepted with failure	-	2	1
2014-2015	-	14	14
Passed	-	14	14
2021-2022	138	138	138
Passed	136	134	131
Accepted with failure	2	4	7
2022-2023	119	119	119
Passed	119	119	119
Grand Total	257	1,141	1,081

 Table 11-5:
 Blank Performance 2009 through 2023 at Los Helados Project

Figure 11-4: Los Helados Blank Performance for the 2009-2010 through 2014-2015 Seasons







11.4.5.2 Lunahuasi Season 2022-2023 (DPDH001 to DPDH008) Blank Performance

Blank performance is summarized below in Table 11-6. Of the 72 inserted blanks, one accepted failure was scrutinized against its location in the assay sequence to determine if contamination was present. Further, the inserted blanks preceding and following the Accepted Failure Blank were also validated to ensure that any contamination was isolated. Performance of the 2022-2023 season is illustrated below in Figure 11-6.

Table 11-6: Blank Performance 2022–2023 Season at Lunahuasi Project

	Ag	Au	Cu
2022/2023	72	72	72
Accepted with failure	0	1	0
Passed	72	71	72
Grand Total	72	72	72





11.4.6 Duplicates

NGEx collected field duplicates, coarse duplicates, and pulp duplicates beginning in the 2011–2012 drilling campaign.

11.4.6.1 Los Helados Duplicate Assay Performance

Field duplicates were obtained taking a second split of the sample to be analyzed independently. Both preparation (reject) and assays (pulp) duplicates were made by the laboratory and assigned a specific number in the sequence. The preparation duplicate consisted of a second pulp from the original sample whereas the assay duplicate was a subsample made from the original pulp.

Note that DUPa, DUPf, and DUPp correspond to assay, field, and preparation duplicates, respectively.

Both assay and preparation duplicates have very good copper and gold coefficients of determination ($R^2 > 0.99$). Field duplicates also have good correlation factors for copper and gold and display absolute differences expected in natural systems. The duplicate assays for silver exhibit poor correlation for all three types of duplicates. The differences are due to the lack of precision of the Ag-AAS62 method at low silver grades. Performance of the duplicates is outlined below in Table 11-7.

Performance of the duplicates is illustrated with scatterplots below in Figure 11-7 and Figure 11-8. The assay duplicates show a higher correlation than the field duplicates, specifically in the precious metals gold and silver, which is typical. Preparation duplicates are not shown.

Saacan	Nu	mber of Duplica		R ²		
Season	Ag	Au	Cu	Ag	Au	Cu
2009-2010	-	91	-			
DUPa	-	30	-	-	0.99	-
DUPf	-	31	-	-	0.76	-
DUPp	-	30	-	-	0.98	-
2010-2011	-	195	11			
DUPa	-	66	5	-	1.00	0.91
DUPf	-	63	2	-	0.83	1.00
DUPp	-	66	4	-	0.97	0.99
2011-2012	-	405	395			
DUPa	-	137	133	-	0.99	0.99
DUPf	-	129	126	-	0.97	0.96
DUPp	-	139	136	-	0.97	0.99
2012-2013	-	585	582			
DUPa	-	196	196	-	1.00	1.00
DUPf	-	193	192	-	0.76	0.96
DUPp	-	196	194	-	0.99	0.99
2014-2015	-	20	20			
DUPa	-	7	7	-	0.96	1.00

 Table 11-7:
 Duplicate Performance 2009 through 2023 at Los Helados Project



Season	Nun	nber of Duplica	R ²			
	Ag	Au	Cu	Ag	Au	Cu
DUPf	-	6	6	-	0.94	0.95
DUPp	-	7	7	-	0.99	1.00
2021-2022	205	205	205			
DUPa	69	69	69	0.85	1.00	1.00
DUPf	67	67	67	0.77	0.96	0.92
DUPp	69	69	69	0.82	0.99	1.00
2022-2023	178	178	178			
DUPa	59	59	59	0.70	0.99	1.00
DUPf	59	59	59	0.62	0.83	0.83
DUPp	60	60	60	0.66	0.99	1.00
Grand Total	383	1,679	1,391			

Figure 11-7: Los Helados 2009-2010 through 2014-2015 Seasons Duplicate Performance







Figure 11-8: Los Helados 2021-2022 and 2022-2023 Seasons Duplicate Performance





11.4.6.2 Lunahuasi Duplicate Assay Performance

Field duplicates were obtained taking a second split of the sample to be analyzed independently. Both preparation and assay duplicates were made by the laboratory and assigned a specific number in the sequence. The preparation duplicate consisted of a second pulp from the original sample whereas the assay duplicate was a subsample made from the original pulp.

Duplicates have been inserted in the sampling stream with 108 duplicates versus 2,867 assays (3.8% of samples), summarized below in Table 11-8. Note that DUPa, DUPf, and DUPp correspond to assay, field, and preparation duplicates, respectively.

The assay and field duplicates for copper, gold, and silver all have high R² values above 0.90. The field duplicates have lower correlation factors (Table 11-8).

Performance of the duplicates is illustrated with scatterplots in Figure 11-9. The assay duplicates show a higher correlation than the field duplicates, specifically in the precious metals gold and silver, which is typical. Preparation duplicates are not shown.

Duplicates	Number of Duplicates			R ²		
	Ag	Au	Cu	Ag	Au	Cu
2022/2023	108	108	108			
DUPa	36	36	36	0.90	0.96	0.99
DUPf	36	36	36	0.71	0.52	0.83
DUPp	36	36	36	1.00	1.00	1.00
Grand Total	108	108	108			

Table 11-8: Duplicate Performance 2022–2023 Season at Lunahuasi Project












11.4.7 External Assay Checks

A set of 522 pulps, representing 3.5% of total samples for the 2012–2013 drilling campaign, were selected for a second analysis round at ALS in Chile. No bias between the ALS and ACME laboratories was detected for any of the metals tested.

11.4.8 Databases

Data was migrated to MX Deposit in May 2022, which is an SQL database hosted on Amazon's cloud service. All quality assurance is performed in this software prior to release of assays. Prior to MX Deposit, drill hole data was stored in a GEOVIA GEMS database, which is a Microsoft (MS) Access database platform created and manipulated using GEMS.

Data stored for each drill hole include collar information, downhole surveys, codes and comments for lithology, alteration and mineralization, assays, SG, magnetic susceptibility, recovery, RQD, and metallurgical sample information.

11.5 Sample Storage

Drill core is stored in a core storage yard in Copiapó. RC drill chips are stored in lidded, plastic core trays, most of which are also kept in Copiapó.

The laboratory returned the pulps and coarse reject for each sample that was sent for analysis. These are stored at the Copiapó facility.

During 2015, due to abnormally heavy rains, a portion of the drill core stored in the facility was affected by flooding, and the core and sample pulps and rejects were moved to a new facility, also in Copiapó.

11.6 Sample Security

The logging facility is fenced, locked when not occupied, and is secure. Samples are handled only by company employees or their designates (i.e., laboratory personnel).

NGEx noted that samples are in the control of an NGEx employee or contractor to NGEx from the time they leave the site until they arrive in Copiapó.

11.7 The QP's Comments on Section 11

Sample collection, preparation, analysis, and security are in line with industry-standard methods for porphyry deposits.

Specific gravity data are collected using industry-standard methods. There are sufficient estimates to support tonnage estimates for the various lithologies.

Drill programs included insertion of blank, duplicate, and CRM samples. QA/QC program results do not indicate any issues with the analytical programs.

The QP is of the opinion that the quality of the copper and gold analytical data is sufficiently reliable to support Mineral Resource estimation without limitations on Mineral Resource confidence categories. The silver grades at Los Helados are nearing the detection limit and exhibit poor precision. There is more uncertainty in the silver resource grades at Los Helados, however, they contribute less than two percent of the total copper equivalent value. Copper and gold contribute approximately 78% and 20%, respectively.

12.0 Data Verification

12.1 Site Visits

The SLR QP visited the Los Helados deposit in Chile, the Lunahuasi deposit in Argentina, and the core logging facility in Copiapó, Chile, from September 18 to 22, 2023. The SLR QP was accompanied by NGEx geologists Fabian Wagner Soto and Eduardo Espinosa. The Los Helados site was visited on September 19, 2023. Surface exposures and a number of diamond drill hole collars were examined (Figure 12-1 and Figure 12-2).

Figure 12-1: Los Helados Deposit Looking East



Source. Photograph courtesy of SLR (2023)

Figure 12-2: Los Helados LHDH088 Drill Hole Collar



Source. Photograph courtesy of SLR (2023)



The Lunahuasi site was visited on September 20, 2023. Surface exposures and a number of diamond drill hole collars were examined (Figure 12-3).





The SLR QP visited the core, pulp, and reject storage and core logging and sampling facility in Copiapó (Figure 12-4) that is conveniently located next to Copiapó office. The SLR QP examined core from Los Helados drill holes LHDH076, LHDH083, and LHDH084, which were representative of the mineralization at the Condor, Alicanto, and Fenix zones, respectively. Core in Lunahuasi drill hole DPDH002 was also reviewed and compared with the copper and gold assay results and drill log.

Figure 12-4: NGEx Core Logging Facility in Copiapó



Source. Photograph courtesy of SLR (2023)

Source. Photograph courtesy of SLR (2023)

12.2 SLR Drill Hole Database Validation

Data verification of the drill hole database included manual verification against original digital sources, a series of digital queries, and a review of the QA/QC procedures and results, and visual comparisons between the assay results and three drill holes from Los Helados and one drill hole from Lunahuasi.

SLR's review of the resource database included collar, survey, lithology, mineralization, and assay tables. Database verification was performed using tools provided within Leapfrog Geo Version 2023.1.0 software package (Leapfrog). A visual check on the drill hole Leapfrog collar elevations and drill hole traces was completed. No major discrepancies were identified.

In addition, the SLR QP completed database validity checks for out-of-range values, overlapping intervals, gaps, and mismatched sample intervals. Overall, SLR found no significant issues with the Los Helados and Lunahuasi drill hole databases.

12.2.1 SLR Verification of Assay Certificates

SLR prepared a PowerPoint presentation that summarizes its database verification work and the detailed comparison results are documented in two MS Excel files. The comparisons revealed no significant errors.

12.2.1.1 Los Helados

SLR carried out cross-checks between the Los Helados MX Deposit assay database and the ACME and ALS assay certificates provided in .pdf, .xls and .csv format. SLR compiled 33,270 samples from 300 certificates from 2008 to 2023 using python scripts and compared values for copper, gold, and silver against the MX Deposit assay database. This allowed for approximately 60% the MX Deposit database to be verified. SLR found a small number of discrepancies, mostly related to gold and silver assays. Most of the discrepancies are related to low grades. Overall, no significant errors were identified. The SLR QP is of the opinion that the small number of discrepancies identified are minor and they have no impact on the resource estimate.

12.2.1.2 Lunahuasi

The SLR QP verified 97% of the copper, gold, and silver assays in the eight diamond drill holes (a total of 3,156 samples) at Lunahuasi and found no errors.

12.3 SLR QP Opinion

The SLR QP is of the opinion that the Los Helados and Lunahuasi diamond drill hole assay results and database management procedures are of high quality and the assay results for gold, copper, and silver are acceptable for the purposes of Mineral Resource estimation.

13.0 Mineral Processing and Metallurgical Testing

13.1 Metallurgical Testwork

13.1.1 Introduction

The Los Helados metallurgical testwork program was conducted at SGS Minerals S.A. (SGS) in Santiago, Chile in two phases, Phase I in 2013 and Phase II 2015. The work was completed under the supervision of Amec International Ingeniería y Construcción Ltda. (Amec Foster Wheeler, 2013, 2015), acquired by Wood Group in 2017. Two separate reports were produced by SGS for the Los Helados Project:

- Programa Metalúrgico de Conminución y Flotación en Mineral de Cobre Oro, Proyecto Los Helados (Comminution and Flotation Metallurgical Testing of Copper-Gold Mineralization, Los Helados Project) - 2013
- Programa Metalúrgico de Conminución y Flotación en Mineral de Cobre Oro, Proyecto Los Helados – Fase II (Comminution and Flotation Metallurgical Testing Copper-Gold Mineralization, Los Helados Project – Phase II)- 2015

Vendor testing was also conducted by ThyssenKrupp AG on selected samples from the Los Helados deposit.

The main activities completed during the development of the metallurgical test program were:

- Sample selection for the metallurgical test programs
- Chemical characterization including mineralogical analysis
- Physical characterization
- Gold recovery using gravity processing techniques
- Copper, gold, and silver recovery using conventional sulphide flotation practices
- Settling testwork

13.1.2 Geometallurgical Domains

In Phase I of the program, tests were conducted on three different composite samples representing different depths within the deposit (Table 13-1). Each composite was made up of 20 individual drill core subsamples. The goal at the time was to select samples that were representative of the deposit grades and lithologies from three depth intervals, Upper, Intermediate, and Deep. Upon completion of the Phase I metallurgical testwork program, it was concluded that the deposit was largely homogeneous throughout with respect to chemical and physical characteristics.

Deposit Zone	Depth from Surface (m)	Proportion of Cu This Zone Represents in the Deposit (%)	Proportion of Tonnage This Zone Represents in the Deposit (%)	
Upper	0 to 200–250	6	9	
Intermediate	200–250 to 500–600	32	34	
Deep	deeper than 500–600	62	57	

An updated geological model was subsequently developed for Los Helados, which led to the second testwork phase which focused primarily on the characteristics of the deposit at different periods within a conceptual block cave production plan. In the second round of metallurgical testwork, the deposit homogeneity was confirmed. Three separate composites were created representing production years 1–7, production years 8–15, and production years 16 onward (16+) of a conceptual production plan (Table 13-2). Generally, material for years 1-7 is located at the bottom of the core of the deposit, years 8-15 material is concentrically outward of the core, and years 16+ material is near-surface and around the periphery of the deposit.

The portions of the individual samples that remained following creation of the Phase II samples were used to create 30 variability samples for comminution and flotation testwork.

13.1.3 Head Sample Characterization

Representative splits from each of three different composite samples from each of the Phase I and II programs were chemically analyzed for contained elements. The results show that there was some variability in copper feed grades for all of the composite samples, and low impurity levels throughout the deposit (Table 13-3 and Table 13-4).

Deposit Zone	Main Characteristic	Proportion of Tonnage This Zone Represents in the Deposit (%)	Sample ID
Years 1–7	Early production period	13	Years 1–7
Years 8–15	Mid production period	17	Years 8–15
Year 16 onward	Later production period	70	Year 16+

Table 13-2:	Composite Description, Los Helados Phase II
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Table 13-3:	Head Grade	Chemical	Characterization,	Los	Helados	Phase

Sample ID/Test	CuT (%)	Fe (%)	S (%)	Au (g/t)	Ag (g/t)	Mo (ppm)	As (ppm)	Hg (ppm)
Upper zone	0.293	3.71	4.29	0.244	0.85	4	20	<2
Intermediate zone	0.468	3.72	3.61	0.205	1.45	71	7	<2
Deep zone	0.812	4.14	2.96	0.249	2.70	54	<1	<2

Sample ID/Test	CuT (%)	Cu Sol (%)	Fe (%)	S (%)	Au (g/t)	Ag (g/t)	Mo (ppm)	As (ppm)	Hg (ppm)
1-7 years	0.543	0.006	3.28	2.78	0.17	2.7	30	5	<0.1
815 years	0.585	0.003	4.34	3.59	0.22	2.5	28	4	<0.1
+16 years	0.456	0.003	3.88	3.19	0.17	0.5	66	5	<0.1

Table 13-4:	Head Grade Chemical Characterization,	, Los Helados Phase II
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Note: CuT = total copper; Cu Sol = soluble copper.

13.1.4 Mineralogy

A QemScan mineralogical analysis was completed on representative splits of each of the samples for the Phase I and Phase II programs to better understand the mineralogy of each of the zones in the deposit. The analysis showed that the samples contain mainly quartz and phyllosilicates, indicating that the amount and type of gangue mineral are consistent at different depths within the deposit.

Other minor minerals noted in the samples include feldspars, iron and titanium oxides, pyrite, and copper sulphide minerals.

The pyrite to copper sulphide weight ratio is shown in Table 13-5. The higher the pyrite to copper sulphide ratio, the more difficult it can be to separate copper minerals from pyrite using conventional sulphide flotation techniques.

Table 13-5: Los Helados – Py:Cp Ratios

Sample	Py : Cp Ratio
Upper	6.4
Intermediate	2.8
Deep	0.8
1-7 years	1.5
8-15 years	2.5
+16 years	2.7

Note: Py – pyrite; Cp – copper sulphide

In order to improve this separation, the Phase II testwork program targeted:

- Use of optimum regrind sizes in cleaner flotation
- Pyrite depression using lime buffering
- Selective flotation techniques using selective collectors

The mineralogical analysis indicated that the main copper sulphide mineral present is chalcopyrite (97% average by weight) with traces of chalcocite/digenite and bornite (Figure 13-1).

13.1.5 Physical Characterization

Physical characterization testwork was carried out on representative splits for each of the three samples for the Phase I program. The characterization work included Bond ball mill work indices (BWi), Bond rod mill work indices (RWi), abrasion indices (Ai), semi-autogenous grinding (SAG) power index (SPI) testing, and SAG mill competency (SMC) tests. The average results for these tests are provided in Table 13-6.

The results show that the three composite samples tested can be classified as hard material according to the SMC test results. This classification was also confirmed by the results of the SPI test conducted. In relation to the BWi and RWi results, the three composite samples tested can be considered as moderately hard. Finally, all the samples tested reported a low Ai classification (low to moderate consumption rates of grinding media and other process plant wear consumables).

In Phase II of the program, physical characterization test work was carried out on three composite samples and 30 variability samples. Specifically, the characterization work included BWi, RWi, and SMC testing. Additional work included specific gravity and Ai determinations for each of the three composite samples (Table 13-7). The variability test results (Table 13-8) show that the hardness of the material within each zone defined is very homogeneous and classified as very hard material (A x b < 30) to hard material (A x b 30 to 38). This confirmed the Phase I tests results that the deposit is homogeneous from a hardness perspective and contains very competent material throughout.

Sample ID/Test	Specific gravity	Bond Ball BWi (kWh/t)	Bond Rod RWI (kWh/t)	Bond Abrasion Index (Ai)	SMC (A x b)	Dwi (kWh/m³)	Mia (KWh/t)	Mih (kWh/t)	Mic (kWh/t)
Upper zone	2.78	16.03	16.3	0.081	31.9	8.54	23.5	18.2	9.4
Intermediate zone	2.82	17.10	16.4	0.155	29.1	9.31	25.4	20.1	10.4
Deep zone	2.83	16.12	15.8	0.185	28.1	9.50	26.2	20.8	10.7

Table 13-6: Composite Samples Head Physical Characterization, Los Helados Phase I

Table 13-7: Composite Samples Head Physical Characterization, Los Helados Phase II

Sample ID/Test	Specific Gravity	Bond Abrasion Index (Ai)
Years 1–7	2.762	0.265
Years 8–15	2.792	0.223
Years 16+	2.760	0.197

Zone/ Parameter	Sample ID/Test	Specific Gravity	Bond Ball BWi (kWh/t)	Bond Rod RWi (kWh/t)	SMC (A x b)
Years 1–7	VAR 1 to VAR 10	2.61 to 2.74	15.16 to 20.18	13.48 to 17.90	22.0 to 28.7
Years 8–15	VAR 11 to VAR 20	2.66 to 2.77	15.82 to 18.73	14.84 to 17.82	22.0 to 26.0
Years 16+	VAR 21 to VAR 30	2.66 to 2.76	15.57 to 18.92	14.53 to 18.28	23.0 to 31.8

Table 13-8: Variability Samples Physical Characterization Los Helados Phase II





Note: Phase I to right, Phase II to left. Figures prepared by Amec Foster Wheeler, 2013 and 2015.

13.1.6 Gravity Recoverable Gold

Standard Knelson three-stage gravity recoverable gold tests were conducted. The results indicate that the deposit does not contain appreciable free gold and that most of the gold in the deposit is contained in sulphide minerals. This conclusion is supported by the results of the sulphide flotation testwork which has good gold recoveries.

13.1.7 Conventional Flotation

A sulphide flotation program was developed in the Phase I program on three fresh composite samples for the production of gold-silver rich copper concentrates, using a conventional sulphide flotation circuit flowsheet. The flotation program consisted of the evaluation of roughing and cleaning stages with the following variables assessed:

- Primary grind and cleaner regrind size effects
- Collector, frother, and pulp solids percentage effect on rougher flotation
- Evaluation of pH on rougher and cleaner flotation stages

Four separate locked cycle tests (LCT) were completed for each zone of the deposit utilizing different conditions. The optimized results for each sample from the LCTs considering the average of the last three cycles are presented in Table 13-9 where the metal recoveries are reported.

For the Phase II program, the flotation testwork was performed on three new composites and 30 variability samples in order to improve the copper recoveries and grades from the first program and to understand the deposit variability. Flotation parameter evaluations were performed on the three composite samples, and the optimum parameters then applied to the variability samples in open circuit tests (OCT).

Variables for the OCTs included:

- Rougher flotation:
 - o Primary grind feed size effect
 - o Collector effect
 - o pH and depressor effect for pyrite depression
 - o Rougher stage flotation residence time
- Cleaning flotation:
 - o Rougher concentrate regrind size effect
 - o pH and depressor effect for pyrite depression
 - o First cleaning stage flotation residence time

The variables were optimized and then applied to the LCTs conducted on the composite and variability samples. Tests were predominantly completed using fresh (tap) water, although some initial OCTs were also conducted using seawater.

In general terms, the composite samples tested reported good results using conventional sulphide flotation with respect to global copper and gold grades and recoveries (Table 13-10 and Table 13-11).

Three out of the 30 variability samples were additionally tested using LCTs. The variability samples tested reported high global copper and gold recovery results using conventional sulphide flotation (Table 13-12 and Table 13-13). Thus, the recovery results from the variability samples confirm those for the composite sample LCTs.

In terms of third cleaner copper concentrate grade, high recovery results were reported for the years 1–7 and years 8–15 composite samples. However, a low final copper concentrate grade was reported for the years 16+ composite sample. This is explained by the high percentage of pyrite estimated to be contained in the final concentrate (Table 13-14), because the increased pyrite recovered to the concentrate dilutes the recovered copper.

	Calculated	Mass to	Glo	bal Recov	ery to Fina	I Concent	rate			
Sample ID	Feed Cu Grade (%)	Concentrate (%)	Cu %	Au %	Ag %	Fe %	S % 7.8 19.9			
Upper zone	0.264	1.0	83.1	72.8	31.0	7.7	7.8			
Intermediate zone	0.464	1.6	90.2	80.3	54.9	15.3	19.9			
Deep zone	0.805	2.4	93.1	82.5	70.5	18.0	34.4			

Table 13-9: Metal Recovery from Flotation LCT, Los Helados Phase I

Table 13-10: Composite Samples Metal Recovery from Flotation LCT, Los Helados Phase II Phase II

		Calculated	Mass to	Global	Recovery to	Final Conc	entrate
	Zone/ Parameter	Feed Cu Concentra Grade (%) % Cu %	Concentrate (%) Cu %	Au %	Ag %	Fe %	S %
Years 1–7	0.522	1.59	91.1	69.7	77.8	15.5	19.3
Years 8–15	0.569	1.95	90.8	73.1	49.3	14.2	19.5
Years 16+	0.454	1.78	91.8	68.1	66.1	14.1	20.7

Table 13-11: Composite Samples Elements and Impurities Contained in the LCT Final Concentrate, Los Helados Phase II

Element	Final Concentrate Grades						
Element	Years 1–7	Years 8–15	Years 16+				
Calculated feed Cu grade %	0.522	0.569	0.454				
Cu %	29.9	26.5	23.4				
Au g/t	6.5	8.3	6.8				
Ag g/t	70	50	53				
Fe %	28.1	29.5	31.8				
S %	33.7	34.7	37.3				

Element	Final Concentrate Grades						
Element	Years 1–7	Years 8–15	Years 16+				
Cu Sol %	0.042	0.088	0.091				
Cd %	<0.001	<0.001	<0.001				
Zn %	0.284	0.062	0.108				
As %	0.024	0.013	0.005				
Insoluble %	6.17	8.58	7.52				
Hg ppm	3.1	1.2	0.7				
Sb %	<0.005	<0.005	<0.005				
CI %	0.021	0.031	0.011				

Table 13-12: Variability Samples Metal Recovery from Flotation LCT, Los Helados Phase II

		Calculated	Mass to	Global Recovery to Final Concentrate				
	Zone/ Parameter	Feed Cu Grade %	Concentrate (%) Cu %	Au %	Ag %	Fe %	S %	
VAR 5	0.663	2.15	92.1	76.0	66.4	18.3	25.2	
VAR 17	0.510	1.73	90.8	72.7	66.2	10.5	18.7	
VAR 29	0.490	2.45	89.5	70.7	40.0	20.9	18.1	

Table 13-13: Variability Samples Elements and Impurities Contained in the LCT Final Concentrate, Los Helados Phase II

Element	Final Concentrate Grades						
Element	VAR 5	VAR 17	VAR 29				
Calculated feed Cu grade %	0.663	0.510	0.490				
Cu %	28.3	26.8	17.9				
Au g/t	9,0	7.0	7.4				
Ag g/t	70	63	18				
Fe %	28.5	27.7	36.6				
S %	33.3	31.7	39.8				
Cu Sol %	0.112	0.111	0.126				
Cd %	<0.001	<0.001	<0.001				
Zn %	0.132	0.097	0.036				
As %	<0.005	<0.005	0.009				

Floment	Final Concentrate Grades						
Element	VAR 5	VAR 17	VAR 29				
Insoluble %	5.03	7.12	4.31				
Hg ppm	<0.1	0.4	0.7				
Sb %	<0.005	<0.005	<0.005				
CI %	0.01	<0.005	0.013				

Table 13-14: Pyrite Content Estimation in Feed and Concentrate LCT, Los Helados Phase II Phase II

Zone/ Parameter	Sample ID	Calculated Feed Cu Grade (%)	Feed Estimated Pyrite Content (%)	Concentrate Cu Grade (%)	Concentrate Estimated Pyrite Content (%)
Years 1–7	Years 1–7	0.522	5.1	29,9	3.9
Years 8–15	Years 8–15	0.569	7.8	26,5	13.4
Years 16+	Years 16+	0.454	7.6	23,4	24.2
Years 1–7	VAR 5	0.663	6.0	28.3	7.73
Years 8–15	VAR 17	0.510	8.7	26.8	8.90
Years 16+	VAR 29	0.490	8.2	17.9	44.84

Additional optimization work will need to be conducted for the years 16+ years sample in order to improve the overall concentrate copper grade.

13.1.8 Metallurgical Variability

The metallurgical testwork to date is based on samples which adequately represent the variability of the deposit with respect to physical and chemical characterization for this stage of study. Additional testwork will be required to support more advanced mining studies. Physical characterization was conducted on variability samples with relatively consistent results. Flotation OCTs confirmed that the deposit is reasonably homogeneous with respect to physical and chemical properties.

13.1.9 Deleterious Elements

No major deleterious elements issues were noted in the concentrates produced from the testwork completed. The concentrates are considered to be marketable without incurring penalties for deleterious elements.

14.0 Mineral Resource Estimate

14.1 Summary

An updated Mineral Resource estimate (MRE) was completed by SLR Senior Geologist Sarah Conolly, P.Geo., under the supervision of Mr. Evans, using the database provided by NGEx. The MRE was prepared in accordance with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves dated May 10, 2014 (CIM (2014) definitions) as incorporated by reference into NI 43-101.

The updated MRE includes 23 new surface diamond drill holes totalling 23,014 m drilled since the previous MRE was completed in 2019 (NGEx Minerals Ltd, 2019). A summary of the updated MRE is provided in Table-14-1. As of October 31, 2023, underground Indicated Mineral Resources are estimated to total 2.08 billion tonnes (Bt) averaging 0.40% Cu, 0.15 g/t Au, and 1.5 g/t Ag and contain 18.4 billion pounds (Blb) of copper, 10.2 million ounces (Moz) of gold, and 97.5 Moz of silver. In addition, Inferred Mineral Resources are estimated to total 1.08 Bt averaging 0.34% Cu, 0.10 g/t Au, and 1.5 g/t Ag and contain 8.2 Blb of copper, 3.6 Moz of gold, and 50.2 Moz of silver.

	Tonnogo		Gra	ade		Metal Content			
Category	(Bt)	Cu (%)	Au (g/t)	Ag (g/t)	CuEq %)	Cu (MIb)	Au (Moz)	Ag (Moz)	
Indicated	2.08	0.40	0.15	1.5	0.51	18,426	10.2	97.5	
Inferred	1.08	0.34	0.10	1.5	0.42	8,152	3.6	50.2	

Table-14-1: Summary of Mineral Resources – October 31, 2023

Notes:

- 1. CIM (2014) definitions were followed for Mineral Resources.
- Mineral Resources are estimated at a cut-off grade of 0.33 g/t CuEq based on an underground block cave mining cost of \$8/t, a processing cost of \$12/t, and a G&A cost of \$1/t.
- 3. Mineral Resources are estimated using a long-term copper price of US\$3.90 per pound, a gold price of US\$1,800 per ounce, and a silver price of US\$20 per ounce.
- 4. Metallurgical recoveries used correspond to three geometallurgical zones:
 - d. Upper: Cu 83.1%, Au 72.8%, Ag 31.0%
 - e. Intermediate: Cu 90.2%, Au 80.3%, Ag 54.9%
 - f. Deep: Cu 93.1%, Au 82.5%, Ag 70.5%
- 5. The formulas used for the CuEq calculation are:
 - d. Upper: CuEq % = Cu % + (0.681008 x Au (g/t)) + (0.002989 x Ag (g/t))
 - e. Intermediate: CuEq % = Cu % + (0.692039 x Au (g/t)) + (0.004877 x Ag (g/t))
 - f. Deep: CuEq % = Cu % + (0.688852 x Au (g/t)) + (0.006068 x Ag (g/t))
- 6. Bulk density is 2.67 t/m³.
- Mineral Resources are reported within an optimized underground block cave mining shape to demonstrate reasonable prospects for eventual economic extraction (RPEEE). The block cave considered a column size of 20 m x 20 m x (≥ 80 m).
- 8. There are 40 million tonnes of unclassified material excluded from inside the block cave shape.
- 9. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 10. Numbers may not add due to rounding.

The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

14.2 **Comparison to the Previous Mineral Resource Estimate**

A comparison to the previous MRE is presented in Table 14-2. The variance is primarily due to:

- Additional drilling which has extended and added material to both the Fenix and Alicanto zones.
- Updated metal prices and operational costs. •
- New geology and mineralization wireframes •
- New capping, grade interpolation, and resource classification procedures •

Table 14-2:	Los Helad	dos Comparison of 201	9 versus 2023 Mineral	Resources

Estima	ate	2019 MRE		2023 MRE		2019 MRE	:2023MRE
Item/Variable	Unit	Indicated	Inferred	Indicated	Inferred	Indicated	Inferred
Tonnage	Bt	2.10	0.83	2.08	1.08	-1%	30%
	Cu %	0.38	0.32	0.4	0.34	6%	7%
Crada	Au g/t	0.15	0.1	0.15	0.1	2%	4%
Grade	Ag g/t	1.37	1.32	1.46	1.45	6%	10%
	CuEq %	0.48	0.39	0.51	0.42	7%	8%
	Cu Mlb	17,600	5,800	300 18,426		5%	41%
Metal Content	Au Moz	10.1	2.7	10.2	3.6	3.6 1% 3	
	Ag Moz	92.5	35.1	97.5	50.2	5%	43%

14.3 **Resource Database**

The Project database consists of drill holes at approximately 75 m to 450 m spacing. It includes 47,254 assays from 106 drill holes, totalling 93,750 m of drilling. Most of the drill holes are diamond drill holes, with just five RC drill holes. All drilling was conducted from surface and is maintained in Seeguent's MX Deposit drill hole database system.

The data was imported into Seeguent's Leapfrog Geo and Edge 2023.1 software for data review, statistical analysis, wireframe building, and block modelling.

14.4 **Geological Interpretation**

The Los Helados estimate is based on an interpreted breccia body emplaced within the local country rock. The breccia hosts three internal higher-grade zones: Condor, Fenix, and Alicanto. A series of steep, sub-parallel dykes are found cross cutting both the breccia and higher-grade zones. The dykes appear to terminate relatively close to the breccia boundary. Three dimensional views of this geological interpretation can be found in Figure 14-1 and Figure 14-2.

The mineralization model was created in Leapfrog Geo 2023.1 by NGEx geologists and refined by SLR. The breccia was modelled using interpreted contacts drawn onto level plans by the site project geologists. Higher-grade mineralized zones (Condor, Fenix, and Alicanto) were modelled within the breccia at a modelling threshold of approximately 0.5% Cu. The breccia has a footprint of approximately 1,000 m by 650 m at its widest with a vertical extension of 1,600 m. Condor and Alicanto are broad oval shaped bodies, while Fenix is more pipe-like in geometry. The dykes were flagged from the original logged lithology and refined with assay results. They are modelled as steep, narrow domains, dipping at approximately 80° north-northeast. A colluvium surface was also created in this model, using the base of logged colluvium intervals and an offset surface from the topography.

A broad lithology model, displayed in Figure 14-3, was created by NGEx geologists to define the host rocks in more detail: granite, andesite, and porphyries. This lithology model is used to designate bulk density values to the block model.



Figure 14-1: Three-Dimensional Plan View of Los Helados Model of the Breccia, Condor, Fenix, Alicanto and Dykes









14.5 Assay Statistics and Treatment of High-Grade Assays

Table 14-3 summarizes the uncapped and capped assay statistics from the Project. Raw assays were reviewed for each estimation domain using basic statistics, histograms (Figure 14-4 and Figure 14-6), and log probability plots (Figure 14-5 and Figure 14-7) to determine capping levels.

Variable	Domain	Count	Сар	No. Capped	Mean	Capped Mean	Min.	Max.	Capped Max.	CV1	Capped CV	Metal Loss	Capping Percentile
	Condor	8,086	2	10	0.59	0.59	0.031	8.02	2	0.5	0.43	0	99.9
	Fenix	948	3	2	0.82	0.82	0.043	4.3	3	0.59	0.58	0	99.7
	Alicanto	258	2	1	0.71	0.71	0.017	2.49	2	0.6	0.56	0	99.4
Cu %	Breccia	13,667	2	2	0.28	0.28	0.0005	3.79	2	0.76	0.75	0	99.9
	Dykes	2,660	1	6	0.23	0.23	0.0005	1.95	1	0.74	0.72	0	99.8
	Country Rock	22,017	1.5	5	0.22	0.22	0.0005	5.38	2	0.8	0.78	0	99.98
	Condor	8,086	10	8	1.88	1.87	0.15	47.1	10	0.7	0.59	0.53	99.89
	Fenix	948	10	11	2.63	2.5	0.25	49	10	1.11	0.68	4.9	98.8
	Alicanto	258	NA	NA	2.02	NA	0.5	8	NA	0.62	NA	NA	NA
Ag g/t	Breccia	13,667	10	28	1.22	1.19	0.15	94.8	10	1.4	0.84	2.46	99.79
	Dykes	2,660	10	3	1	0.99	0.15	25	10	0.98	0.84	1	99.8
	Country Rock	21,972	10	10	0.96	0.95	0.15	70.2	20	1.32	1.02	1.04	99.96
	Condor	8,086	6	2	0.26	0.26	0.0025	12.3	6	1.06	0.9	0	99.97
	Fenix	948	3	1	0.2	0.2	0.0025	5.67	3	1.37	1.13	0	99.89
	Alicanto	258	NA	NA	0.11	NA	0.008	1.72	NA	1.24	NA	9.09	89.8
Au g/t	Breccia	13,667	10	5	0.14	0.14	0.0025	20.5	10	2.83	2.28	0	99.96
	Dykes	2,660	2	1	0.09	0.09	0	3.49	2	1.3	1.23	0	99.96
	Country Rock	21,972	10	10	0.1	0.1	0.025	27.4	10	3.14	2.29	0	100

Table 14-3: Raw Assay Statistics and Capping Levels

Variable	Domain	Count	Сар	No. Capped	Mean	Capped Mean	Min.	Max.	Capped Max.	CV1	Capped CV	Metal Loss	Capping Percentile
Mo ppm	Condor	8,086	700	3	35.79	35.72	0.78	979	700	1.29	1.26	0.2	99.96
	Fenix	948	1,000	5	123.8	111.36	1	10,000	1,000	2.93	1.23	10.04	99.4
	Alicanto	258	500	6	130.6	119.96	3.26	2,390	500	1.44	0.95	8.18	97.4
	Breccia	13,662	1,000	5	36.62	36.46	0.38	1,814	1,000	1.76	1.68	0.44	99.96
	Dykes	2,660	400	6	24.07	23.61	0.8	974	400	1.69	1.44	1.91	99.8
	Country Rock	21,972	1,000	9	24.69	24.43	0.4	3,454	1,000	2.29	1.96	1.05	99.96

Note. CV - coefficient of variation





Figure 14-5: Log Probability Plot of Copper (%) for Condor Domain, Capped at 2%





Figure 14-6: Histogram of Gold (g/t) for Condor Domain, Capped at 6 g/t





14.6 Compositing

The dominant interval length for the Project is two metres, as shown in Figure 14-8. The block size, driven by the anticipated mining scenario, is 20 m x 20 m x 20 m. As such the capped assay samples were composited to ten metres and broken at domain boundaries. A histogram of assay lengths is presented in Figure 14-8 and composite statistics are summarized in Table 14-4.





Table 14-4:	Summary	v of Composite	e Statistics b	v Domain
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Variable	Domain	Count	Length (m)	Mean	CV	Min	Max
	Condor	1,549	15,105.1	0.60	0.31	0.10	1.45
	Fenix	195	1,887.8	0.82	0.45	0.22	2.33
Cu (%)	Alicanto	54	516.1	0.71	0.48	0.13	1.45
	Dykes	594	5,372.3	0.24	0.58	0.00	0.80
	Breccia	2,706	26,417.9	0.28	0.62	0.00	1.22
	Country rock	4,260	42,251.2	0.22	0.65	0.00	1.00



Variable	Domain	Count	Length (m)	Mean	cv	Min	Max
	Condor	1,549	15,105.1	0.27	0.58	0.03	1.71
	Fenix	195	1,887.8	0.20	0.86	0.02	1.40
Au (a/t)	Alicanto	54	516.1	0.11	1.06	0.02	1.34
Au (g/t)	Dykes	594	5,372.3	0.09	0.84	0.00	0.87
	Breccia	2,706	26,417.9	0.14	1.38	0.00	3.39
	Country rock	4,260	42,251.2	0.10	1.20	0.00	2.40
	Condor	1,549	15,105.1	1.88	0.45	0.25	6.54
	Fenix	195	1,887.8	2.50	0.51	0.60	10.00
$\Lambda \sigma (\sigma/t)$	Alicanto	54	516.1	2.02	0.44	0.70	6.50
Ag (g/t)	Dykes	594	5,372.3	1.02	0.59	0.25	4.04
	Breccia	2,706	26,417.9	1.19	0.63	0.15	8.10
	Country rock	4,260	42,251.2	0.95	0.64	0.15	5.06
	Condor	1,549	15,105.1	36.0	0.9	3.4	486.2
	Fenix	195	1,887.8	111.4	0.8	6.0	493.8
Ma (nnm)	Alicanto	54	516.1	120.0	0.8	19.5	349.7
Mo (ppm)	Dykes	594	5,372.3	24.5	0.9	1.0	242.5
	Breccia	2,705	26,407.9	36.8	1.2	0.7	524.6
	Country rock	4,260	42,251.2	24.7	1.2	0.5	465.8

Note. CV - coefficient of variation

14.7 Trend Analysis

14.7.1 Grade Contouring

Three-dimensional grade contouring was carried out to assess prevalent trends through the deposit. Unconstrained contouring supports the higher-grade mineralized domains for Condor, Fenix, and Alicanto and the overall geometry of the modelled mineralization.

Further grade contouring was carried out within Condor and Fenix, shown in Figure 14-9. These highlight internal high-grade trends within the domains.





14.7.2 Variography

SLR prepared variograms for copper, gold, silver, and molybdenum across various domains. The major axis of the variograms was aligned with the trends highlighted during the grade contouring exercise. Robust variograms could be modelled for copper, especially for the larger domains (Breccia and Condor). The variograms were not as robust for Fenix. This has been reflected in the classification model at depth in Fenix where the continuity and plunge of mineralization is not as well supported.

Example variogram maps are presented in Figure 14-10 and Figure 14-11. The variograms range from 170 m to 600 m along the major axis depending on the domain and variable.

The variogram model parameters that were used for grade interpolation are summarized in Table 14-5.

Figure 14-10: Variogram for Copper within the Condor Domain







Table 14-5:	Variogram Model Parameters
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		Nugget	First Structure				Second Structure			
	Domain	C₀	Sill C ₁	Major Range (m)	Semi Major Range (m)	Minor Range (m)	Sill C ₂	Major Range (m)	Semi Major Range (m)	Minor Range (m)
	Condor	0.25	0.54	80	118	122	0.21	300	250	200
	Fenix	0.2	0.62	50	180	40	0.18	280	180	80
Cu	Breccia, Alicanto and Host Rock	0.05	0.22	39	135	15	0.73	600	300	200
	Dykes	0.1	0.90	240	200	30	-	-	-	-
	Condor	0.25	0.04	171	135	125	0.71	350	250	175
	Fenix	0.1	0.30	39	155	63	0.6	280	180	80
Au	Breccia, Alicanto and Host Rock	0.2	0.46	53	117	14	0.34	600	300	120
	Dykes	0.1	0.90	240	200	30	-	-	-	-
	Condor	0.25	0.53	82.00	110.00	58	0.22	300	150	100
	Fenix	0.2	0.80	180.00	180.00	80	-	-	-	-
Ag	Breccia, Alicanto and Host Rock	0.2	0.20	31.00	117.00	14	0.6	500	200	120
	Dykes	0.25	0.15	35	95	30	0.6	350	160	30
	Condor	0.1	0.10	94.00	150.00	122	0.8	190	190	75
	Fenix	0.2	0.80	280.00	150.00	80	-	-	-	-
Мо	Breccia, Alicanto and Host Rock	0.15	0.29	39.00	117.00	14	0.56	520	175	100
	Dykes	0.1	0.90	240	200	30	-	-	-	-

14.8 Bulk Density

Sporadic bulk density measurements, particularly through Condor, prevented density from being interpolated. Mean bulk density values for each lithological domain were assigned as the density attribute in the block model. These values are summarized in Table 14-6. Outliers from the input data were removed (below 2.25 and above 3.05) prior to calculation of the mean.

Lithology	Number of samples	Mean Density (g/cm³)
Breccia	9,285	2.67
Granite	6,140	2.66
Andesite	6,373	2.71
Porphyry	2,758	2.66
Dykes	1,057	2.63
Colluvium	103	2.57

Table 14-6: Summary of the Density Values Assigned to the Block Model

14.9 Block Model

The block model and mineral resource estimation were completed in Leapfrog Edge software. Block model dimensions are presented in Table 14-7. The block model is not rotated. SLR considers the block model to be appropriate for the deposit geometry and proposed mining methods. Sub-block size is based on the lithology and mineralization models.

Table 14-7: Block Model Dimensions and Location

	X	Y	Z
Base Point	441,270.0	6,863,650.0	5,500.0
Boundary Size (m)	2,500	2,400	2,600
Parent Block Size (m)	20	20	20
Min Sub-block Size (m)	2.5	2.5	2.5

14.10 Search Strategy and Grade Interpolation Parameters

Grades for Cu, Au, Ag, and Mo were estimated into parent blocks using ordinary kriging (OK). Inverse distance cubed (ID³) and nearest neighbour (NN) interpolation were also carried out for validation purposes. The search strategy and composite selections are outlined in Table 14-8 to Table 14-10. Search ellipses were oriented to align with the trends observed during the trend analysis and variography. Second passes were used in domains to ensure blocks were filled on the margins of the domains. The same search strategy and interpolation parameters were applied for all variables estimated: copper, gold, silver, and molybdenum.

Table 14-8:Search Parameters and Interpolation Strategy for Condor, Alicanto,
Breccia, and Country Rock

	Pass 1
Search Ellipse	450 x 375 x 300 (metres)
Min/Max Samples	2/20
Max Samples per Hole	7

Table 14-9:	Search Parameters and Interp	olation Strategy for Fenix
		olution otherogy for Forms

	Pass 1	Pass 2
Search Ellipse	420 x 270 x 120 (metres)	560 x 360 x 160 (metres)
Min/Max Samples	2/20	1/20
Max Samples per Hole	7	7

Table 14-10: Search Parameters and Interpolation Strategy for Dykes

	Pass 1	Pass 2
Search Ellipse	400 x 300 x 30 (metres)	600 x 450 x 30 (metres)
Min/Max Samples	2/20	1/20
Max Samples per Hole	7	7

Estimation domains were defined as per the mineralization model, described in subsection 14.4; however, prior to estimation contact analysis was carried out to determine the treatment of samples across domain boundaries. The analysis supports the use of hard boundaries for both the dykes and higher-grade mineralization zones (Condor, Fenix, and Alicanto) but a soft boundary between the Breccia and Country Rock. Example contact plots are shown in Figure 14-12 to Figure 14-14.









Figure 14-14: Contact Plot for Cu between the Breccia and Country Rock Domains



14.11 Geometallurgical Model

The Geometallurgical domains for Los Helados were developed for the previous technical report (NGEx Minerals Ltd, 2019) and these wireframes were provided to SLR. These wireframes have


been used to generate a Geometallurgical model in Leapfrog Geo 2023.1 to assign domains onto the block model. The three zones are summarized in Table 14-11 and displayed in Figure 14-15.

Table 14-11: Summary of Geometallurgical Zones Assigned to Block Model

Geometallurgical Zone	Approximate Depth from Surface (m)
Upper	0 to 200/250
Intermediate	200/250 to 500/600
Deep	Below 500/600





14.12 Classification

Definitions for resource categories used in this Technical Report are consistent with those defined by CIM (2014) and adopted by NI 43-101. In the CIM classification, a Mineral Resource is defined as "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". Mineral Resources are classified into Measured, Indicated, and Inferred categories. A Mineral Reserve is defined as the "economically mineable part of a Measured and/or Indicated Mineral Resource" demonstrated by studies at Pre-Feasibility or Feasibility level as appropriate. Mineral Reserves are classified into Proven and Probable categories. No Mineral Reserves have been estimated.

Indicated and Inferred Mineral Resources have been defined using a combination of drill hole spacing and confidence in the continuity of mineralization. Drill hole spacings, supported by a minimum of three drill holes of up to approximately 150 m for Indicated and up to approximately 300 m for Inferred have been used to support the classification. The lower zone of Fenix has been classified as Inferred, despite satisfying the drill hole spacing threshold for Indicated, due to the inability to confidently determine the mineralization trends along with a high variance to the local NN estimate.

All blocks outside of the block cave shape are unclassified and both Indicated and Inferred Mineral Resources are limited to the north by the Project's claim boundary. The Indicated and Inferred material are displayed, alongside the claim boundary in Figure 14-16.



Figure 14-16: Oblique 3D View of Indicated and Inferred Resources within the Block Cave Shape at Los Helados, Limited by the Claim Boundary to the North

14.13 Block Model Validation

Blocks were validated using various techniques, including:

- Statistical comparison of assay, composite, and block statistics.
- Visual inspection of composite versus block grades.
- Wireframe to block model volume confirmation.
- Swath plots comparing OK to NN values.

Table 14-12 to Table 14-15 summarize the assay, composite, and block comparisons. SLR observes that the block grades exhibited general accord with the samples and NN estimates, with some slightly larger variance in domains with clustered or limited data. The minimum and maximum NN copper grades do not match the composite values because SLR used 20 m composites for the NN interpolation.

Domain	Data Set	Count	Mean Grade (Cu %)	CV	Minimum (Cu %)	Maximum (Cu %)
	Raw Assays	8,095	0.595	0.45	0.03	8.02
	Composites	1,582	0.594	0.32	0.10	1.45
Condor	ОК	1,024,362	0.597	0.18	0.26	1.06
	NN	1,024,362	0.592	0.28	0.11	1.25
	ID ³	1,024,362	0.597	0.18	0.26	1.06
	Raw Assays	948	0.821	0.59	0.04	4.30
	Composites	195	0.819	0.45	0.22	2.33
Fenix	ОК	159,443	0.748	0.23	0.29	1.54
	NN	159,443	0.723	0.50	0.29	1.79
	ID ³	159,443	0.761	0.34	0.29	1.68
	Raw Assays	258	0.714	0.57	0.02	2.49
	Composites	54	0.713	0.48	0.13	1.45
Alicanto	ОК	37,230	0.698	0.28	0.23	1.30
	NN	37,230	0.675	0.45	0.20	1.32
	ID ³	37,230	0.698	0.28	0.23	1.30
	Raw Assays	2,660	0.233	0.73	0.00	1.95
	Composites	515	0.230	0.59	0.00	0.63
Dykes	ОК	2,556,622	0.219	0.55	0.00	0.68
	NN	2,556,622	0.216	0.57	0.01	0.75
	ID ³	2,556,622	0.215	0.58	0.00	0.74

Table 14-12: Los Helados Assay, Composite, and Block Comparisons for Copper

Domain	Data Set	Count	Mean Grade (Cu %)	CV	Minimum (Cu %)	Maximum (Cu %)
	Raw Assays	13,658	0.278	0.76	0.00	3.79
	Composites	2,747	0.278	0.64	0.00	1.22
Breccia	ОК	2,935,353	0.288	0.44	0.00	0.78
	NN	2,935,353	0.287	0.58	0.00	1.04
	ID ³	2,411,781	0.283	0.51	0.00	1.13
	Raw Assays	21,972	0.220	0.80	0.00	5.38
	Composites	4,312	0.220	0.66	0.00	1.00
Country Rock	ОК	1,995,449	0.205	0.55	0.01	0.68
	NN	1,995,449	0.199	0.66	0.00	1.04
	ID ³	1,995,449	0.202	0.58	0.00	0.79

Table 14-13:	Los Helados	Assay,	Composite,	and Block	Comparisons	for Gol	d
		,					

Domain	Data Set	Count	Mean Grade (Au g/t)	CV	Minimum (Au g/t)	Maximum (Au g/t)
	Raw Assays	8,095	0.263	1.05	0.00	12.30
	Composites	1,582	0.261	0.59	0.02	1.71
Condor	ОК	1,024,362	0.253	0.34	0.08	0.71
	NN	1,024,362	0.251	0.52	0.04	1.00
	ID ³	1,024,362	0.253	0.34	0.08	0.71
	Raw Assays	948	0.200	1.37	0.00	5.67
	Composites	195	0.197	0.86	0.02	1.40
Fenix	ОК	159,443	0.160	0.54	0.04	0.69
	NN	159,443	0.144	0.89	0.03	1.11
	ID ³	159,443	0.159	0.61	0.03	0.98
	Raw Assays	258	0.113	1.21	0.01	1.72
	Composites	54	0.113	1.06	0.02	1.34
Alicanto	ОК	37,230	0.114	0.45	0.06	0.65
	NN	37,230	0.104	0.79	0.04	1.34
	ID ³	37,230	0.107	0.37	0.04	0.90
	Raw Assays	2,660	0.093	1.26	0.00	3.49
	Composites	515	0.092	0.87	0.00	0.87
Dykes	ОК	2,556,622	0.067	0.69	0.00	0.72
	NN	2,556,622	0.074	1.06	0.00	0.76
	ID ³	2,556,622	0.069	0.66	0.00	0.47



Domain	Data Set	Count	Mean Grade (Au g/t)	сv	Minimum (Au g/t)	Maximum (Au g/t)
	Raw Assays	13,658	0.137	2.88	0.00	20.50
	Composites	2,747	0.136	1.41	0.00	3.39
Breccia	ОК	2,935,353	0.114	0.62	0.01	0.92
	NN	2,935,353	0.110	1.05	0.00	1.85
	ID ³	2,935,353	0.111	0.77	0.00	2.49
	Raw Assays	21,972	0.102	3.07	0.00	27.40
	Composites	4,312	0.101	1.22	0.00	2.34
Country Rock	ОК	1,995,449	0.086	0.63	0.01	1.38
	NN	1,995,449	0.083	1.07	0.00	2.00
	ID ³	1,995,449	0.084	0.75	0.00	1.95

Domain	Data Set	Count	Mean Grade (Ag g/t)	CV	Minimum (Ag g/t)	Maximum (Ag g/t)
	Raw Assays	8,095	1.88	0.70	0.15	47.10
	Composites	1,582	1.87	0.46	0.25	6.54
Condor	ОК	1,024,362	1.90	0.28	0.38	4.64
	NN	1,024,362	1.87	0.41	0.25	5.30
	ID ³	1,024,362	1.89	0.31	0.27	5.75
	Raw Assays	948	2.63	1.11	0.25	49.00
	Composites	195	2.50	0.51	0.60	10.00
Fenix	ОК	159,443	2.50	0.26	1.21	6.67
	NN	159,443	2.39	0.45	0.70	10.00
	ID ³	159,443	2.55	0.31	1.05	8.58
	Raw Assays	258	2.02	0.63	0.50	8.00
	Composites	54	2.02	0.44	0.70	6.50
Alicanto	ОК	37,230	2.00	0.20	0.89	4.96
	NN	37,230	1.96	0.34	0.75	6.50
	ID ³	37,230	2.00	0.20	0.89	4.96
	Raw Assays	2,660	1.00	0.98	0.15	25.00
	Composites	515	0.98	0.59	0.25	4.04
Dykes	ОК	2,556,622	0.93	0.48	0.00	2.77
	NN	2,556,622	0.97	0.57	0.25	3.00
	ID ³	2,556,622	0.92	0.53	0.00	3.31



Domain	Data Set	Count	Mean Grade (Ag g/t)	cv	Minimum (Ag g/t)	Maximum (Ag g/t)
	Raw Assays	13,658	1.22	1.36	0.15	94.80
	Composites	2,747	1.19	0.63	0.15	8.10
Breccia	ОК	2,935,353	1.30	0.40	0.15	4.15
	NN	2,935,353	1.27	0.61	0.15	5.83
	ID ³	2,935,353	1.28	0.47	0.15	5.32
	Raw Assays	21,972	0.96	1.32	0.15	70.20
	Composites	4,312	0.95	0.64	0.15	5.30
Country Rock	ОК	1,995,449	0.93	0.40	0.15	2.89
	NN	1,995,449	0.90	0.61	0.15	5.83
	ID ³	1,995,449	0.91	0.48	0.15	3.66

Table 14-15:	Los Helados Assay,	Composite, and E	Block Comparisons	for Molybdenum
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Domain	Data Set	Count	Mean Grade (Mo %)	CV	Minimum (Mo %)	Maximum (Mo %)
	Raw Assays	8,095	36.0	1.32	0.78	979.00
	Composites	1,582	35.9	0.86	3.40	486.20
Condor	ОК	1,024,362	36.5	0.44	0.00	198.28
	NN	1,024,362	36.2	0.73	4.20	278.50
	ID ³	1,024,362	36.7	0.55	4.49	291.02
	Raw Assays	948	123.8	2.94	1.00	10000
	Composites	195	111.4	0.85	6.00	493.82
Fenix	ОК	159,443	138.4	0.49	0.00	381.81
	NN	159,443	159.8	0.68	9.39	463.80
	ID ³	159,443	142.9	0.54	9.70	462.27
	Raw Assays	258	130.6	1.45	3.26	2390.00
	Composites	54	120.0	0.76	19.51	349.70
Alicanto	ОК	37,230	122.4	0.37	51.64	248.80
	NN	37,230	116.3	0.70	23.73	305.00
	ID ³	37,230	120.9	0.40	25.52	302.89
	Raw Assays	2,660	24.1	1.69	0.80	974.00
	Composites	515	23.6	0.90	1.00	162.80
Dykes	ОК	2,556,622	22.6	0.75	0.00	319.66
	NN	2,556,622	21.8	0.84	0.00	438.36
	ID ³	2,556,622	24.8	0.89	1.00	242.50

Domain	Data Set	Count	Mean Grade (Mo %)	cv	Minimum (Mo %)	Maximum (Mo %)
	Raw Assays	13,653	36.5	1.76	0.38	1814.00
	Composites	2,746	36.3	1.16	0.63	524.60
Breccia	ОК	2,935,353	38.9	0.62	1.34	238.41
	NN	2,935,353	38.9	1.04	0.87	437.90
	ID ³	2,935,353	38.8	0.78	1.09	470.06
	Raw Assays	21,972	24.7	2.29	0.40	3454.00
	Composites	4,312	24.4	1.23	0.50	465.82
Country Rock	ОК	1,995,449	24.3	0.80	1.01	205.15
	NN	1,995,449	24.1	1.16	0.75	383.20
	ID ³	1,995,449	23.9	0.92	0.85	268.03

Note. CV - coefficient of variation

Evaluation of the accuracy of the estimate was also carried out by visually comparing the composites against the estimated block grades in plan and cross-sectional views. Examples are presented in Figure 14-17 to Figure 14-22.







Figure 14-18: Level Plan of Gold Blocks Versus Composites Through Condor, Fenix, and Alicanto



Figure 14-19: Level Plan of Copper Blocks Versus Composites Through Fenix



Figure 14-20: Cross Section of Copper Blocks Versus Composites Through Condor



Figure 14-21: Cross Section of Gold Blocks Versus Composites Through Condor



Figure 14-22: Cross Section of Copper Blocks Versus Composites Through Condor and Fenix

Example swath plots are presented to compare OK to NN results and are presented in Figure 14-23 to Figure 14-25. Figure 14-23 and Figure 14-24 show good correlation between the OK and NN results for copper and gold within Condor. Figure 14-25 demonstrates higher variance for copper within Fenix. This variance and therefore confidence in the estimation, due to the search orientation and lack of drilling projecting higher grades into lower Fenix at depth, has been managed by ensuring only Inferred Mineral Resources are defined in this area. Further drilling, considering improved drill hole angles, could reduce uncertainty in this area.













Figure 14-25: Swath Plot for Copper OK and Copper NN in Fenix

14.14 Copper Equivalent and Cut-off Grade

A copper equivalent (CuEq) cut-off value was determined using the Mineral Resource metal prices, metal recoveries, transport, treatment, and refining costs, as well as mine operating cost. Metal prices used for Mineral Resources are based on consensus, long term forecasts from banks, financial institutions, and other sources.

The CuEq calculation considers the price assumptions in Table 14-16. These prices are based on consensus between NGEx and SLR and are supported by SLR's internal mineral resource cut-off grade price guidance.

Table 14-16: Metal Price Assumptions

Metal	Unit	Price
Copper	US\$/lb	3.90
Gold	US\$/oz	1,800
Silver	US\$/oz	20

Metallurgical recoveries, concentrate water content, grade and payables, transport, treatment, and refining costs all contribute to the CuEq calculation and are outlined in Table 14-17:

Table 14-17: CuEq Input Variables

Parameter	Upper Zone	Intermediate Zone	Deep Zone	
Au Recovery	72.8%	80.3%	82.5%	
Ag Recovery	31.0%	54.9%	70.5%	
Cu Recovery	83.1%	90.2%	93.1%	
Concentrate Water Content	8 %			
Cu Conc. Grade	23.9 %			
Concentrate Payable Au	95.5%			
Concentrate Payable Ag	90.0%			
Concentrate Payable Cu	95.8%			
Transport	104 \$/wmt conc.			
Treatment	108.29 \$/dmt conc.			
Au Refining Cost	6.37 \$/oz			
Ag Refining Cost	0.38 \$/oz			
Cu Refining Cost	0.11 \$/lb			

The resultant CuEq equations for the three geometallurgical zones are presented in Table 14-18.

Table 14-18: CuEq Equations

Geometallurgical Zone	Copper Equivalent		
Upper Zone	Cu % + (0.681008 x Au (g/t)) + (0.002989 x Ag (g/t))		
Intermediate Zone	Cu % + (0.692039 x Au (g/t)) + (0.004877 x Ag (g/t))		
Deep Zone	Cu % + (0.688852 x Au (g/t)) + (0.006068 x Ag (g/t))		

The Mineral Resource cut-off grade is based on unit mining, processing, and general and administration (G&A) costs as summarized in Table 14-19 and equate to a cut-off grade of 0.33% CuEq.

Table 14-19: Operating Costs for Los Helados

Item	Unit	Cost		
Mining (Underground)	\$/t moved	8.00		
Processing	\$/t milled	12.00		
G&A	\$/t milled	1.00		
Total Unit Operating Cost	\$/milled	21.00		
COG CuEq	%	0.33		

14.15 Block Cave Optimization and RPEEE

To meet the reasonable prospects for eventual economic extraction (RPEEE) requirement for Mineral Resources, an underground bulk mining scenario was considered. Mining Plus prepared a series of block cave mining shapes to constrain the block model for Mineral Resource reporting purposes.

Datamine StudioUG v3.0.47.0 with the Stope Optimisation Engine v2.0.4.0 was used to generate the optimized block cave outlines using several input parameters presented in Table 14-20. The Mineral Resource is reported within a block cave shape generated at a 0.33% CuEq cut-off grade; however, a series of block cave shapes were prepared using increasing cut-off grades to allow for an assessment of the Project's sensitivity to different cut-off grades. All classified blocks located within the block cave shape, including blocks below the cut-off grade, were used to report the Mineral Resource estimate. SLR notes that the block cave shape includes approximately 40 Mt of unclassified material located mostly around the basal perimeter of the block cave shape that was not included in the Mineral Resource estimate. This excluded material is likely mineralized but requires more drilling before it can be included. It represents approximately one percent of the current resource.

Parameter	Value			
Mining Cost	\$8/t			
Processing Cost	\$12/t			
G&A	\$1/t			
Column Size	20 m x 20 m x (≥ 80 m)			

Table 14-20: Block Cave Input Parameters

Parameter	Value		
Grade Blending	Full Column: grades not broken down by elevation nor diluted/smeared at this stage		

14.16 Cut-off Grade Sensitivities

Table 14-21 presents the Los Helados Mineral Resource tabulated within conceptual block cave shapes developed using increasing cut-off grades. This is presented to provide grade-distribution data that allows for an assessment of the Project's sensitivity to various cut-off grades.

Figure 14-26 and Figure 14-27 show the block model and block cave outlines prepared at increasing cut-off grades in both plan and cross section. All cut-off grade block cave shapes are displayed in Figure 14-26 and Figure 14-27; however, the 0.33% CuEq and 0.6% CuEq cut-off block cave shapes have been highlighted with a slightly thicker line to, respectively, show both the selected MRE scenario and also demonstrate the continuity observed at a higher grade.

Cut-Off	Category Tonnage (Bt)	Grade			Metal Content				
Grade CuEq (%)		Tonnage (Bt)	Cu (%)	Au (g/t)	Ag (g/t)	CuEq (%)	Cu (MIb)	Au (Moz)	Ag (Moz)
0.25	Indicated	2.39	0.38	0.15	1.4	0.49	19,881	11.3	106.6
	Inferred	1.84	0.30	0.10	1.3	0.38	12,247	5.8	75.4
0.3	Indicated	2.20	0.39	0.15	1.4	0.50	19,044	10.7	101.2
	Inferred	1.30	0.33	0.10	1.4	0.41	9,462	4.3	58.0
0.33	Indicated	2.08	0.40	0.15	1.5	0.51	18,426	10.2	97.5
	Inferred	1.08	0.34	0.10	1.4	0.42	8,152	3.6	50.2
0.4	Indicated	1.65	0.43	0.16	1.5	0.55	15,696	8.5	82.2
	Inferred	0.60	0.38	0.11	1.6	0.46	5,012	2.1	31.5
0.5	Indicated	0.88	0.50	0.19	1.7	0.64	9,698	5.4	48.8
	Inferred	0.18	0.47	0.12	2.1	0.56	1,877	0.7	12.0
0.6	Indicated	0.51	0.56	0.21	1.8	0.72	6,271	3.5	30.2
	Inferred	0.04	0.62	0.09	2.4	0.70	593	0.1	3.4

Table 14-21: Cut-off Grade Sensitivity



Figure 14-26: Level Plan of Copper Blocks and Block Cave Outlines Prepared at Increasing Cut-off Grades



Figure 14-27: Cross Section of Copper Blocks and Block Cave Outlines Prepared at Increasing Cut-off Grades

14.17 Mineral Resource Estimate

The Mineral Resources for the Los Helados Project are summarized in Table 14-1. They are constrained by an underground block cave mining shape based on a CuEq cut-off value of 0.33% to ensure continuity and comply with the requirement of RPEEE.

15.0 Mineral Reserve Estimate

No Mineral Reserves have been estimated for the Property.

16.0 Mining Methods

17.0 Recovery Methods

18.0 Project Infrastructure

19.0 Market Studies and Contracts

20.0 Environmental Studies, Permitting, and Social or Community Impact

21.0 Capital and Operating Costs

22.0 Economic Analysis

23.0 Adjacent Properties

There are no adjacent properties to report in this section.

24.0 Other Relevant Data and Information

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

25.0 Interpretation and Conclusions

25.1 Los Helados Geology and Mineral Resources

The SLR QP offers the following conclusions:

- The Los Helados deposit is classified as a porphyry copper-gold system. A number of other large deposits and mines in the Vicuña metallogenic belt occur nearby.
- The Project database consists of drill holes at approximately 75 m to 450 m spacing. It includes 47,254 assays from 106 drill holes, totalling 93,750 m of drilling. Most of the drill holes are diamond drill holes, with just five RC drill holes.
- An updated MRE as of October 31, 2023, was prepared in accordance with CIM (2014) definitions as incorporated by reference into NI 43-101.
 - To meet the reasonable prospects for eventual economic extraction (RPEEE) requirement for Mineral Resources, an underground bulk mining scenario was considered. The Mineral Resource is reported within a block cave shape generated at a 0.33% CuEq cut-off grade based on an underground block cave mining cost of \$8/t, a processing cost of \$12/t, a G&A cost of \$1/t and using a long-term copper price of US\$3.90 per pound, a gold price of US\$1,800 per ounce, and a silver price of US\$20 per ounce. Metallurgical recoveries used correspond to three geometallurgical zones.
 - Underground Indicated Mineral Resources are estimated to total 2.08 Bt averaging 0.40% Cu, 0.15 g/t Au, and 1.5 g/t Ag and contain 18.4 Blb of copper, 10.2 Moz of gold, and 97.5 Moz of silver. In addition, Inferred Mineral Resources are estimated to total 1.08 Bt averaging 0.34% Cu, 0.10 g/t Au, and 1.5 g/t Ag and contain 8.2 Blb of copper, 3.6 Moz of gold, and 50.2 Moz of silver.
 - Compared to the previous estimate, the October 31, 2023 Mineral Resource estimates an additional 41% contained copper, 33% contained gold, and 43% contained silver in the Inferred category. The Indicated Mineral Resources are estimated to be similar tonnage (within 1%), with slightly higher contained metal. Both Indicated and Inferred categories estimate slightly higher grades for all reported metals. These increases are attributed to drilling success which has extended and added material to both the Fenix and Alicanto internal high grade zones, as well as updated procedures and approaches taken during estimation.
 - The SLR QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.
- Block cave shapes generated at higher cut-off grades demonstrate good continuity and potential for higher grade scenarios with lower tonnages. For example, at a 0.6% CuEq cut-off grade, Indicated Mineral Resources are estimated at 510 Mt averaging 0.56% Cu, 0.21 g/t Au, and 1.8 g/t Ag and containing 6.3 Blb of copper, 3.5 Moz of gold, and 30 Moz of silver.
- The sample collection, preparation, analytical, and security procedures and the QA/QC program, as designed and implemented by NGEx, are adequate, and the assay results within the database are suitable for use in Mineral Resource estimation.


- The SLR QP is of the opinion that the Los Helados diamond drill hole assay results and database management procedures are of high quality and the assay results for gold, copper, and silver are acceptable for the purposes of Mineral Resource estimation.
 - o The QA/QC program indicates good precision for copper and gold, negligible sample contamination, and the CRM results confirm that no significant biases exist for the copper and gold results. The silver grades at Los Helados are nearing the detection limit and exhibit poor precision. There is more uncertainty in the silver resource grades, however, they contribute less than two percent of the total copper equivalent value. Copper and gold contribute approximately 78% and 20%, respectively.
 - SLR carried out cross-checks between the Los Helados MX Deposit assay database and the ACME and ALS assay certificates. SLR compiled a subset of 33,270 samples from 300 certificates from 2008 to 2023 using python scripts and compared values for copper, gold, and silver against the MX Deposit assay database, which has 48,927 samples. SLR found matches for 28,416 samples, which represents 58% of the MX Deposit database. SLR found no significant errors.
- Miocene copper-gold mineralization at Los Helados is volumetrically most significant within the magmatic-hydrothermal breccia. The breccia forms a pipe-like body with minimum dimensions of 1,100 m east-west, 1,200 m north-south, and at least 1,500 m vertically. The breccia body is surrounded by a broad halo of moderate to low grade copper-gold mineralization which diminishes in grade with increasing distance from the breccia contact.
- There are a number of targets at Los Helados that warrant more diamond drilling including:
 - o The high-grade Fenix Zone
 - o A potential northeast-trending link between the Fenix and Alicanto zones
 - o The South Breccia Target

25.2 Los Helados Mineral Processing

- The Los Helados metallurgical testwork program was conducted at SGS Minerals S.A. (SGS) in Santiago, Chile in two phases, Phase I in 2013 and Phase II 2015, under the supervision of Amec Foster Wheeler plc, acquired by Wood Group in 2017.
- The testwork confirmed that the deposit was largely homogeneous throughout with respect to chemical and physical characteristics.
- The mineralogical analysis indicated that the main copper sulphide mineral present is chalcopyrite (97% average by weight) with traces of chalcocite/digenite and bornite.
- The higher the pyrite to copper sulphide ratio, the more difficult it can be to separate copper minerals from pyrite using conventional sulphide flotation techniques. This sulphide zoning sequence reflects a progressive downward increase in the amount of chalcopyrite relative to pyrite. The pyrite to copper sulphide ratio decreases from approximately 6.4:1 near surface to 0.8:1 at depth.
- No major deleterious elements issues were noted in the concentrates produced from the testwork completed. The concentrates are considered to be marketable without incurring penalties for deleterious elements.

25.3 Lunahuasi Geology

- Lunahuasi was discovered by eight diamond drill holes in early 2023. A new drilling program began recently. The high-grade copper-gold-silver mineralization is open in all directions. There is excellent potential to define a large deposit with more drilling, surface mapping, sampling, and other work.
- There are several other large deposits and mines in the Vicuña metallogenic belt that occur nearby.
 - Lunahuasi is situated in the central part of the Vicuña structural magmatic corridor, approximately mid-way between the Los Helados porphyry-copper-gold deposit 10 km to the north and the Filo del Sol porphyry-epithermal system nine kilometres to the south.
- The mineralization discovered at Lunahuasi is part of a high-sulphidation epithermal vein system. Mineralization is hosted by structures which are interpreted to be subvertical and to strike north-south to north-northeast. These structures are characterized by massive to semi-massive and disseminated sulphides, principally pyrite and enargite with locally abundant covellite. The sulphides tend to be coarse grained and include some very coarse crystalline sections.
 - o Hole DPDH004 intersected pyrite-tennantite-chalcopyrite and pyrite-bornite assemblages, possibly indicating a zonation towards intermediate-sulphidation conditions to the west.
 - High gold and silver grades are seen in the structures, with individual samples assaying up to 43.9 g/t Au and 1,165 g/t Ag. Bonanza-grade gold values near the top of hole DPDH007, in a structure that contains more quartz and less sulphide, possibly reflect a zonation from high-sulphidation sulphide veins towards gold-quartz veins at shallower levels and towards the east.
- Approximately 97% of the copper, gold, and silver assays in the eight diamond drill holes (a total of 3,156 samples) at Lunahuasi were verified by SLR and no errors were found.

25.4 Lunahuasi Mineral Processing

No metallurgical testwork has been carried out yet at Lunahuasi.

26.0 Recommendations

Additional work is warranted at both Los Helados and Lunahuasi, as outlined below. Given the magnitude of expenditures for the programs and the high-grade mineralization discovered at Lunahuasi, it is recommended to prioritize the Lunahuasi work program.

26.1 Los Helados

Additional work is recommended at Los Helados, with three main objectives:

- 1 Continue to upgrade Inferred Mineral Resources to Indicated, with a focus on the highgrade Fenix Zone.
- 2 Investigate a potential northeast-trending link between the Fenix and Alicanto zones (Figure 26-1).
- 3 Investigate the high-potential South Breccia Target through additional data collection and compilation, followed by exploration drilling (Figure 26-1).

The Fenix Zone represents an underexplored high-grade hydrothermal breccia which warrants additional drilling in order to fully define its size, geometry, and grade distribution. This drilling should utilize directional drilling to minimize the metres required to achieve the objective. The experience gained during the 2022-2023 campaign with directional drilling shows that this is an effective technique given the competent rock and good drilling conditions at Los Helados, with the ability to branch off multiple daughter holes from each pilot hole and to hit targets with good accuracy.

Now that the geometry of the Fenix Zone has been largely established, an efficient program of infill and expansion holes can be planned. Highest priority should be given to drilling to the south of hole LHDH084 (390 m at 1.13% CuEq; 1.02% Cu, 0.15 g/t Au, 2.4 g/t Ag plus 187 ppm Mo), below LHDH076 (including 142 m at 1.38% CuEq; 1.14% Cu, 0.35 g/t Au, 3.8 g/t Ag plus 77 ppm Mo), and below LHDH081-2, which ended in strong mineralization with the final 63.8 m at 1.25% CuEq; 1.14% Cu, 0.14 g/t Au, 3.6 g/t Ag plus 741 ppm Mo).

Another key target is the top of the Fenix breccia body. Intersecting it closer to surface would improve the potential economics of mine planning at a shallower depth. In addition, there is some evidence to suggest that gold values in particular are high along the contacts of the hydrothermal breccias, as evidenced in intersections adjacent to the contact of the Fenix Zone in holes LHDH034 (44 m at 1.56% CuEq; 1.07% Cu, 0.72 g/t Au) and LHDH076 (34 m at 2.12% CuEq; 1.65% Cu, 0.71 g/t Au) and of the Alicanto Zone in holes LHDH083 (46 m at 0.87% CuEq; 0.28% Cu, 0.96 g/t Au) and LHDH086-1 (160 m at 0.82% CuEq; 0.32% Cu, 0.80 g/t Au).

Previous experience at Los Helados shows that existing drill holes can typically be re-entered with little difficulty even two to three years after they have been drilled. This allows for the opportunity of using the existing Fenix holes as pilot holes and creating daughter holes in order to minimize drill metres required for the program. During the 2023 program, daughter holes were successfully branched off as deep as 850 m and up to two daughter holes were branched off from one pilot hole. Rock quality is very good at Los Helados, which should allow for deeper and, with careful planning, several daughter holes to be created from each pilot hole.

This program will need detailed planning to develop the most efficient geometry, and it is recommended that a drill planning consultant be used in order to maximize efficiency. It is estimated that this program will be similar in size and duration to the 2022-2023 program which consisted of 10,325 m drilled in five full holes and three daughter holes for a total of eight

intersections split between the Fenix and Alicanto zones. No additional drilling is recommended for the Alicanto Zone at this time.

There is some evidence for a northeast-trending structural link between the Fenix and Alicanto zones. Coincident magnetic and MT anomalies form a corridor connecting the two zones, and holes drilled near this corridor show elevated molybdenum values, relative to the Condor Zone average. Elevated molybdenum is a feature of both the Fenix and Alicanto zones. Three holes should be drilled across this corridor to test for extensions of the high-grade breccias.

Geological mapping conducted during the 2022-2023 season identified an area of outcropping hydrothermal breccias approximately 300 m to 500 m south of the Condor Zone. This cluster comprises numerous sulphate-clay rich breccias over an area of 250 m x150 m. Where weathered, they appear as outstanding cones with gypsum-clay cement, forming a cauliflower-like surface with degassing holes. In road cuts they display a stockwork array of anhydrite/gypsum veinlets, dissemination of sulphides in wall rock, and frequent sulphide-rich hydrothermal breccia injections. These breccia occurrences might reflect centres of magmatic hydrothermal activity at depths.

This area is also coincident with an MT anomaly which is similar to the anomalies associated with the Fenix and Condor zones, and has not been drill tested. At least one hole into the centre of this area should be completed, as the combination of the breccia cluster mapped at surface and the MT anomaly could be indicating another high-grade hydrothermal breccia, similar to Fenix or Alicanto, at depth.





26.2 Lunahuasi

The initial 2023 drill program established a significant copper-gold-silver deposit at Lunahuasi and an additional amount of drilling, likely to be in the tens of thousands of metres, is recommended as the next stage of evaluation. Drilling for the 2023-2024 season is limited by available rigs and seasonality but planning for winter operations throughout the 2024-2025 season should begin with the goal of continuous, year-round drilling starting in November 2024.

Two complementary objectives should be targeted for the 2023-2024 drill program, which is recommended to total approximately 15,000 m:

- 1 Definition and expansion of the deposit to achieve an initial 50 m spacing internally and work towards defining the deposit limits to the north, south, east, and west and at depth, (10,000 m); and
- 2 Drill testing of other high-potential target areas on the property later in the season, following additional surface work to refine drill targets (5,000 m).

26.2.1 Deposit Drilling

The Lunahuasi deposit was discovered in early March 2023 when hole DPDH002 drilled into strong pyrite-enargite-covellite mineralization in a silicified ledge with sections of massive sulphide. The discovery intersection in this hole returned 60.0 m at 7.52% CuEq; 5.65% Cu, 2.04 g/t Au, 44.0 g/t Ag. This was followed up by holes DPDH004 through 008, all of which intersected significant mineralization, with 43 individual intersections with CuEq x Length from 8 %xm to 451 %xm and averaging 51 %xm over a volume of 140 m north-south, 440 m east-west and 950 m vertical. These drill holes outline a major new discovery, and a program of infill and expansion drilling is recommended.

Drilling should be planned to initially infill the deposit area to approximately 50 m spacing and to step out to the north, south, east, and west and at depth in order to establish the deposit limits. Due to logistical and seasonal constraints, the program is recommended to start with 10,000 m utilizing four drill rigs, which is estimated to require 3.5 months of continuous drilling. Hole depth will vary depending on location and results; however, assuming an average depth of 500 m this program could see up to 20 holes completed.

26.2.2 Drilling on Other Targets

Several other exploration targets occur on the property, defined by geological mapping, talus fine and rock chip sampling, and WorldView3 satellite data interpretation. Additional detailed field work should be completed on these targets during the 3.5 months of deposit drilling in order to develop them into drill targets and prioritize them for drill testing. This target-testing program will total approximately 5,000 m and will commence following the deposit drilling using the same four drill rigs. This program is estimated to require approximately two months of drilling, and should be completed by mid- to late April prior to the onset of winter in Argentina.

The budget breakdown for the recommended Lunahuasi program is shown in Table 26-1.

Table 26-1:	Recommended L	unahuasi Ex	xploration	Program an	d Budget
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Cost Centre	C\$000		
Camp (Room and Board)	2,510		
Logistics	1,610		
Project Travel	510		
Road Works	4,010		
Fuel	1,610		
Drilling (15,000 m)	21,860		
Geochemistry	1,080		
Environmental Management	490		
Core Facility and Logistics	130		
Health & Safety	1,690		
TAXES	8,410		
TOTAL	43,910		

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28.0 Date and Signature Date

This report titled "Technical Report on the Los Helados and Lunahuasi Projects, Chile and Argentina" with an effective date of October 31, 2023 was prepared and signed by the following authors:

(Signed & Sealed) Luke Evans

Dated at Toronto, ON December 13, 2023

Luke Evans, M.Sc., P.Eng. Global Technical Director – Geology Group Leader Principal Geologist

(Signed & Sealed) Giovanni Di-Prisco

Dated at Toronto, ON December 13, 2023

Giovanni Di-Prisco, Ph.D., P.Geo. Consulting Geologist-Mineralogist President of Terra Mineralogical Services Inc.

29.0 Certificate of Qualified Person

29.1 Luke Evans

I, Luke Evans, M.Sc., P.Eng., as an author of this report entitled "Technical Report on the Los Helados and Lunahuasi Projects, Chile and Argentina" with an effective date of October 31, 2023 prepared for NGEx Minerals Ltd. (the Issuer), do hereby certify that:

- 1. I am Global Technical Director Geology Group Leader, and Principal Geologist with SLR Consulting (Canada) Ltd, of Suite 501, 55 University Ave., Toronto, ON M5J 2H7.
- 2. I am a graduate of University of Toronto, Ontario, Canada, in 1983 with a Bachelor of Science (Applied) degree in Geological Engineering and Queen's University, Kingston, Ontario, Canada, in 1986 with a Master of Science degree in Mineral Exploration.
- I am registered as a Professional Engineer and a Consulting Engineer in the Province of Ontario (Reg. #90345885) and as a Professional Engineer in the Province of Quebec (Reg. # 105567). I have worked as a professional geologist for a total of 40 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Consulting Geological Engineer specializing in resource and reserve estimates, audits, technical assistance, and training since 1995.
 - Review and report as a consultant on numerous exploration and mining projects around the world for due diligence and regulatory requirements.
 - Senior Project Geologist in charge of exploration programs at several gold and base metal mines in Quebec.
- 4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 5. I visited the Los Helados deposit in Chile, the Lunahuasi deposit in Argentina and the core logging facility in Copiapó, Chile, from September 18 to 22, 2023.
- 6. I am responsible for overall preparation of the Technical Report, except Sections 1.11, 13, and 25.2.
- 7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
- 8. I have had no prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
- 10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 13th day of December, 2023

(Signed & Sealed) Luke Evans

Luke Evans, M.Sc., P.Eng.

29.2 Giovanni Di-Prisco

I, Giovanni Di-Prisco, Ph.D., P.Geo., as an author of this report entitled "Technical Report on the Los Helados and Lunahuasi Projects, Chile and Argentina" with an effective date of October 31, 2023 prepared for NGEx Minerals Ltd. (the Issuer), do hereby certify that:

- 1. I am consulting geologist-mineralogist and President of: Terra Mineralogical Services Inc., of 78 Cityview Circle, Barrie, Ontario, Canada L4N 7V1.
- 2. I graduated with a Doctoral degree (Ph.D.) in Applied Geology/ Exploration Geology from the University of Franche Comté, in Besançon, France in 1983.
- I am a practicing member of the Association of the Professional Geologist of Ontario (#0366). I have worked as a geologist/geometallurgist for a total of 40 since my graduation. My relevant experience for the purpose of the Technical Report is:
 - I have 33 years of direct experience as a geometallurgist and have been directly involved with the metallurgy teams in the metallurgical testwork and development of dozens of sulphide deposits, including the development and implementation of all the metallurgical work for the Antamina deposit and the early metallurgical testwork of the Oyu Tolgoi deposit.
- 4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 5. I am responsible for the preparation of Sections 1.11, 13, and 25.2 of the Technical Report.
- 6. I reviewed the technical reports regarding the metallurgical test program of Los Helados. I did not visit the Project.
- 7. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
- 8. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
- 9. I have prepared a previous technical report dated August 6, 2019 on the metallurgical work that is the subject of the Technical Report.
- 10. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
- 11. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, Section 13 of the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 13th day of December, 2023.

(Signed & Sealed) Giovanni Di-Prisco

Giovanni Di-Prisco, Ph.D., P.Geo.



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