

NGEx Minerals Announces Updated Mineral Resource Estimate At Los Helados Including High-grade Fenix And Alicanto Zones

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Indicated Mineral Resources Exceed 2.0 Billion Tonnes At 0.51% Copper Equivalent

VANCOUVER, Dec. 5, 2023 - [NGEx Minerals Ltd.](#) (TSXV: NGEX) ("NGEx" or the "Company") is pleased to announce an updated Mineral Resource Estimate ("MRE" or the "Resource") for the Los Helados Project ("Los Helados" or the "Project") located in the Vicuña District in Region III, Chile, approximately 17 kilometres from the operating Caserones mine. [View PDF](#)

Highlights

- Increased grades: 6% increase to the copper ("Cu") grade in the Indicated Resource category and a 7% increase to the Cu grade in the Inferred Resource category compared to the previous Mineral Resource Estimate in 2019;
- Increased total contained metal: increase of approximately 0.8 billion pounds ("Blbs") Cu in Indicated Resources and 2.4 Blbs Cu in Inferred Resources compared to the previous Mineral Resource Estimate in 2019;
- Increased Inferred Mineral Resources by 30% to 1.1 billion tonnes ("Bt") at a grade of 0.42% copper equivalent ("CuEq"), containing 8.2 Blbs Cu, 3.6 million ounces ("Moz") of gold ("Au"), and 50.2 Moz of silver ("Ag");
- Higher quality resource: Conversion of Fenix zone from exploration potential to Indicated and Inferred Resources and additional definition of high-grade zones in Condor zone;
- Mineral Resource Estimate now includes 510 million tonnes ("Mt") at 0.72% CuEq in the Indicated Resource category at a 0.60% CuEq cut-off grade;
- Future growth: Potential to convert Fenix Inferred Resources to Indicated Resources with minimal additional drilling.

Wojtek Wodzicki, President and CEO, commented, "The delivery of this updated Mineral Resource Estimate is another key milestone in the advancement of Los Helados with a notable increase in copper and gold grades and contained metal compared to the 2019 Mineral Resource Estimate. With over 2 billion tonnes of Indicated Resources and a substantial higher-grade core above a 0.6% CuEq cut-off, Los Helados is one of the largest undeveloped copper projects globally and has the potential to provide a clean supply of copper for many decades as the world accelerates the decarbonization of the global economy."

"Although the Company's current exploration efforts are focused on the Lunahuasi project, we continue to be very excited about the exploration upside at Los Helados. The Fenix and Alicanto zones remain open for expansion and new mapping and geophysical surveys conducted earlier this year successfully defined new exploration targets with geological and geophysical signatures similar to the Fenix and Alicanto zones to be tested in the future."

Mineral Resource Estimate

The MRE is reported with an effective date of October 31, 2023, in Table 1.

Table 1: Los Helados Mineral Resource Estimate Summary and Cut-Off Grade Sensitivity

Cut-Off Grade CuEq (%)	Category	Tonnes (Bt)	Grade				Contained Metal		
			Cu (%)	Au (g/t)	Ag (g/t)	CuEq (%)	Cu (Blbs)	Au (Moz)	Ag (Moz)
0.25	Indicated	2.39	0.38	0.15	1.4	0.49	19.9	11.3	106.6
	Inferred	1.84	0.30	0.10	1.3	0.38	12.2	5.8	75.4
0.3	Indicated	2.20	0.39	0.15	1.4	0.50	19.0	10.7	101.2
	Inferred	1.30	0.33	0.10	1.4	0.41	9.5	4.3	58.0
0.33	Indicated	2.08	0.40	0.15	1.5	0.51	18.4	10.2	97.5
	Inferred	1.08	0.34	0.10	1.4	0.42	8.2	3.6	50.2
0.4	Indicated	1.65	0.43	0.16	1.5	0.55	15.7	8.5	82.2
	Inferred	0.60	0.38	0.11	1.6	0.46	5.0	2.1	31.5
0.5	Indicated	0.88	0.50	0.19	1.7	0.64	9.7	5.4	48.8
	Inferred	0.18	0.47	0.12	2.1	0.56	1.9	0.7	12.0
0.6	Indicated	0.51	0.56	0.21	1.8	0.72	6.3	3.5	30.2
	Inferred	0.04	0.62	0.09	2.4	0.70	0.6	0.1	3.4

Notes to Table 1:

- 1) Mineral Resource prepared in accordance with CIM (2014) definitions.
- 2) All dollar amounts are presented in U.S. dollars.
- 3) Mineral Resources are estimated at a cut-off grade of 0.33 g/t CuEq based on an underground block cave mining cost of \$8.00/t, a processing cost of \$12.00/t, and a general & administrative cost of \$1.00/t.
- 4) Mineral Resources are estimated using a copper price of \$3.90/lb, a gold price of \$1,800/oz, and a silver price of \$20/oz.
- 5) Metallurgical recoveries used for the CuEq calculation correspond to three geometallurgical zones, defined by depth below surface:
 - 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%
- 6) The formulas used for the CuEq calculation are:
 - a) Upper: $\text{CuEq \%} = \text{Cu \%} + (0.681008 \times \text{Au (g/t)}) + (0.002989 \times \text{Ag (g/t)})$
 - b) Intermediate: $\text{CuEq \%} = \text{Cu \%} + (0.692039 \times \text{Au (g/t)}) + (0.004877 \times \text{Ag (g/t)})$
 - c) Deep: $\text{CuEq \%} = \text{Cu \%} + (0.688852 \times \text{Au (g/t)}) + (0.006068 \times \text{Ag (g/t)})$
- 7) Bulk density is 2.67 t/m³.
- 8) 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 20m x 20m x (? 80m).
- 9) There are 40 Mt of unclassified material excluded from inside the base case block cave shape.
- 10) Cut-off grades refer to diluted cut-off grades used to generate the corresponding block cave shapes. For each cut-off grade, the tonnes and grade represent the total Indicated or Inferred material within each of these shapes.
- 11) Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The MRE incorporates results from 21 new drill holes from the 2021/2022 and 2022/2023 seasons, as well as 12) No personal or confidential information is disclosed.
- 12) No personal or confidential information is disclosed. In addition, the MRE is based on a new geological modeling approach and a newly improved dyke model, all of which contribute to increased confidence in the estimation at Los Helados.

As shown in Table 2, the Indicated Resource copper grade has increased by 6%, and contained copper metal has increased by 5%. The differences between the 2019 and 2023 Mineral Resource Estimates are primarily due to: (a) inclusion of the Fenix zone at depth; (b) the exclusion of near or below cut-off grade material within the mineralized zone through the improved geological modeling and estimation approaches; and (c) the conversion of previously Inferred higher-grade material through the inclusion of 2021/2022 and 2022/2023 in-fill drilling data.

Tonnage has increased in the Inferred Resources category due to inclusion of additional mineralization discovered by the recent drilling.

Table 2: Comparison of 2023 and 2019 Mineral Resource Estimates

October 2023 Mineral Resource Estimate at 0.33% CuEq Cut-Off Grade

Category	Tonnes (Bt)	Grade				Contained Metal		
		Cu	Au	Ag	CuEq	Cu	Au	Ag
		(%)	(g/t)	(g/t)	(%)	(Blbs)	(Moz)	(Moz)
Indicated	2.08	0.40	0.15	1.5	0.51	18.4	10.2	97.5
Inferred	1.08	0.34	0.10	1.4	0.42	8.2	3.6	50.2

April 2019 Mineral Resource Estimate at 0.33% CuEq Cut-Off Grade

Category	Tonnes (Bt)	Grade				Contained Metal		
		Cu	Au	Ag	CuEq	Cu	Au	Ag
		(%)	(g/t)	(g/t)	(%)	(Blbs)	(Moz)	(Moz)
Indicated	2.10	0.38	0.15	1.4	0.48	17.6	10.1	92.5
Inferred	0.83	0.32	0.10	1.3	0.39	5.8	2.7	35.1

Percentage Change from 2019 Mineral Resource Estimate to 2023 Mineral Resource Estimate

Category	Tonnes (Bt)	Grade				Contained Metal		
		Cu	Au	Ag	CuEq	Cu	Au	Ag
		(%)	(g/t)	(g/t)	(%)	(Blbs)	(Moz)	(Moz)
Indicated	(1 %)	+6 %	+2 %	+6 %	+7 %	+5 %	+1 %	+5 %
Inferred	+30 %	+7 %	+4 %	+10 %	+8 %	+41 %	+33 %	+43 %

Notes to Table 2 for the 2019 MRE. See Table 1 notes for 2023 MRE.

- 1) The 2019 Mineral Resource was prepared in accordance with CIM (2014) definitions.
- 2) All dollar amounts are presented in U.S. dollars.
- 3) The 2019 Mineral Resources are reported using a CuEq cut-off grade. CuEq is calculated using \$3.00/lb copper, \$1,300/oz gold and \$23/oz silver, and includes a provision for selling costs and metallurgical recoveries corresponding to three zones defined by depth below surface. The formulas used are: $CuEq \% = Cu \% + 0.6264 * Au (g/t) + 0.0047 * Ag (g/t)$ for the Upper Zone (surface to ~250m); $Cu \% + 0.6366 * Au (g/t) + 0.0077 * Ag (g/t)$ for the Intermediate Zone (~250m to ~600m); $Cu \% + 0.6337 * Au (g/t) + 0.0096 * Ag (g/t)$ for the Deep Zone (>~600m).
- 4) Cut-off grades refer to diluted cut-off grades used to generate the corresponding block cave shapes. For each cut-off grade, the tonnes and grade represent the total Indicated or Inferred material within each of these shapes.
- 5) The 2019 Mineral Resources are reported within block cave underground mining shapes based on 0.33% CuEq grades, \$13.07/t operating costs, and include a provision for capital expenditure.
- 6) Numbers may not add due to rounding.

Geological Model Update

The Los Helados MRE 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 are shown in Figure 1 and Figure 2.

The mineralization model was created in Leapfrog Geo 2023.1 by NGEEx geologists and refined by SLR Consulting (Canada) Ltd. ("SLR"). The breccia was modeled using interpreted contacts drawn onto level plans by the site project geologists. Higher-grade mineralized zones (Condor, Fenix, and Alicanto) were modeled within the breccia at a modeling threshold of approximately 0.5% Cu. The breccia has a footprint of approximately 1,000 metres ("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 modeled 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 (Figure 3) was created by NGEEx geologists to define the host rocks in more detail: granite, andesite, and porphyries. This lithology model was used to designate bulk density values to the block model.

Data Verification

The data used in this Mineral Resource Estimate is supported by industry standard Quality Assurance and Quality Control ("QA/QC") procedures, such as the insertion of certified standards and blanks into the sample stream and the utilization of certified independent analytical laboratories for all assays. No significant QA/QC issues were discovered during review of the data.

All geological data used in the Mineral Resource Estimate was reviewed and verified by Luke Evans, M.Sc., P.Eng. (SLR Global Technical Director, Geology Group Leader). Mr. Evans visited the Los Helados project from September 18 to 22, 2023. The site visit included a review of historical and recent drill core; a review of procedures used to collect, record, store and analyze project exploration data; observation of drill hole locations and an overview of claim/property boundaries.

All aspects that could materially impact the integrity of the data informing the Mineral Resource Estimate for Los Helados were reviewed by SLR, including outcrop inspection, core logging, sampling methods and security, analytical and QA/QC procedures, and database management.

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

Mineral Resource Estimation Methodology

The updated MRE was completed by SLR using the database provided by NGEEx. 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 is based on results from 106 drill holes totaling 93,750 m of drilling, including 23 new surface diamond drill holes totaling 23,014 m drilled since the previous MRE was completed in 2019. 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. The mineralization model was created in Leapfrog Geo 2023.1 by NGEEx geologists and refined by SLR.

The block model and MRE were completed in Leapfrog Edge software. A parent block size used was 20 m x

20 m x 20 m, with sub-blocking to 2.5 m x 2.5 m x 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) interpolation 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 onto the block model. Representative cross sections showing block grades for copper and gold compared with drill hole composites are shown in Figure 4 and Figure 5.

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, using 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 (Figure 6).

To meet the RPEEE requirement for Mineral Resources, an underground bulk mining scenario was considered. A series of block cave mining shapes were prepared at different cut-off grades to constrain the block model for Mineral Resource reporting purposes (Figure 7).

Technical Report

A NI 43-101 Technical Report associated with the MRE prepared by SLR will be filed on SEDAR+ within 45 days of this news release and will be available at that time on the NGEx website.

Qualified Persons

The technical and scientific information in this news release has been reviewed and approved by Bob Carmichael, B.A.Sc., P.Eng., who is a Qualified Person as defined by NI 43-101. Mr. Carmichael is the Vice President, Exploration of the Company and is not independent of the Company under NI 43-101.

The updated Mineral Resource Estimate disclosed in this news release was prepared by Mr. Luke Evans, M.Sc., P.Eng., Global Technical Director, Geology Group Leader of SLR. Mr. Evans, who is an independent Qualified Person as defined under NI 43-101, has reviewed and approved the Mineral Resource Estimate and the technical information pertaining to it contained in this news release.

About NGEx Minerals

NGEx Minerals is a copper and gold exploration company based in Canada, focused on exploration of the Lunahuasi copper-gold-silver project in San Juan Province, Argentina, and the nearby Los Helados copper-gold project located approximately nine kilometres northeast in Chile's Region III. Both projects are located within the Vicuña District, which includes the Caserones mine, and the Josemaria and Filo del Sol deposits.

NGEx Minerals owns 100% of Lunahuasi and is the majority partner and operator for the Los Helados project, subject to a Joint Exploration Agreement with Nippon Caserones Resources LLC, which is the indirect 49% owner of the operating Caserones open pit copper mine located approximately 17 kilometres north of Los Helados. [Lundin Mining Corp.](#) holds the remaining 51% stake in Caserones.

The Company is listed on the TSX Venture Exchange under the trading symbol "NGEX". NGEx Minerals is part of the Lundin Group of Companies.

Additional information relating to [NGEx Minerals Ltd.](#) may be obtained or viewed on the SEDAR+ website at www.sedarplus.com.

Additional Information

Neither the TSX Venture Exchange ("TSX-V") nor its Regulation Services Provider (as that term is defined in

the policies of the TSX-V) accepts responsibility for the adequacy or accuracy of this news release.

The information contained in this news release was accurate at the time of dissemination but may be superseded by subsequent news release(s). The Company is under no obligation, nor does it intend to update or revise the forward-looking information, whether as a result of new information, future events or otherwise, except as may be required by applicable securities laws.

Cautionary Note Regarding Forward-Looking Statements

Certain statements made and information contained herein in the news release constitutes "forward-looking information" and "forward-looking statements" within the meaning of applicable securities legislation (collectively, "forward-looking information"). All statements other than statements of historical facts included in this document constitute forward-looking information, including but not limited to, statements regarding: the Mineral Resource estimate for the Los Helados Project, including the methodology and geological model in support thereof; the timing of completion and filing of a National Instrument 43-101 technical report related to the Los Helados Project; the size and composition of the mineral deposit at the Los Helados Project; the exploration potential of the Los Helados Project; the nature and timing of the work to be undertaken to advance the Los Helados Project; the timing and nature of the current and future drill programs; and the future operating performance of the Company. Words such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "targets", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or statements that certain actions, events, conditions or results "will", "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" or the negative connotations thereof and similar expressions identify forward-looking information.

Forward-looking information is necessarily based upon various estimates and assumptions including, without limitation, the expectations and beliefs of management regarding the nature, scope and timing of the work to be undertaken to advance the Los Helados Project, the absence of adverse conditions at the Company's mineral properties; no unforeseen operational delays; no material delays in obtaining necessary permits; metal prices remaining at levels that render mineral properties economic; the Company's ability to continue raising necessary capital to finance operations; and the ability to realize on the Mineral Resource estimates at the Company's properties. Although the Company believes that these factors and expectations are reasonable as at the date of this document in light of management's experience and perception of current conditions and expected developments, these statements are inherently subject to significant business, economic and competitive uncertainties and contingencies. Known and unknown risks, uncertainties and other factors may cause actual results or events to differ materially from those anticipated in such forward-looking statements and undue reliance should not be placed on such statements and information. Such factors include, without limitation: the timing and outcome of future work programs at Los Helados, if any, including, but not limited to, unanticipated Mineral Reserve or Resource grades or metallurgical recoveries; the ongoing COVID 19 pandemic and the risk that an intensification of the pandemic or an outbreak at the project could impact the Company's ability to carry out work programs, estimations of costs, and permitting time lines; ability to obtain environmental permits, surface rights and property interests in a timely manner; currency exchange rate fluctuations; requirements for additional capital; changes in the Company's share price; changes to government regulation of mining activities; environmental risks; unanticipated reclamation or remediation expenses; title disputes or claims; limitations on insurance coverage, fluctuations in the current price of and demand for commodities; material adverse changes in general business, government and economic conditions in Chile; the availability of financing if and when needed on reasonable terms; risks related to material labour disputes, accidents, or failure of plant or equipment; and other risks, uncertainties and other factors identified in the Company's periodic filings with Canadian securities regulators which are available on SEDAR+ at www.sedarplus.com under the Company's profile.

The forward-looking information contained in this news release is based on information available to the Company as at the date of this news release. Except as required under applicable securities legislation, the Company does not undertake any obligation to publicly update and/or revise any of the included forward-looking information, whether as a result of additional information, future events and/or otherwise. Forward-looking information is provided for the purpose of providing information about management's current expectations and plans and allowing investors and others to get a better understanding of the Company's operating environment. Although the Company has attempted to identify important factors that would cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated, or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. All the forward-looking information contained in this document is

qualified by these cautionary statements. Readers are cautioned not to place undue reliance on forward-looking information due to the inherent uncertainty thereof.

Cautionary Note to U.S. Readers

Information concerning the mineral properties of the Company contained in this news release has been prepared in accordance with the requirements of Canadian securities laws, which differ in material respects from the requirements of securities laws of the United States applicable to U.S. companies subject to the reporting and disclosure requirements of the United States Securities and Exchange Commission.

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