



Nexa Resources S.A.

**INFORMATION RELATING TO
MINERAL PROPERTIES**

As of March 27, 2025

TABLE OF CONTENTS

NOTE TO READER REGARDING DISCLOSURE.....	1
FORWARD-LOOKING STATEMENTS	2
SUMMARY OF INFORMATION CONCERNING MINERAL RESERVES AND MINERAL RESOURCES	8
SUMMARY OF MATERIAL MINERAL PROPERTIES.....	16
Mines.....	16
Cerro Lindo.....	16
Vazante.....	26
Cerro Pasco Complex	36
Aripuanã	57
Project.....	67
Magistral	67
SUMMARY OF OTHER MINERAL PROJECTS	76
Bonsucesso	76
Hilarfón and El Padrino	78
Florida Canyon Zinc	79

NOTE TO READER REGARDING DISCLOSURE

This annual report contains certain disclosure relating to mineral properties of Nexa Resources S.A. (“Nexa Resources”, “Nexa” or the “Company”) that has been prepared in accordance with the requirements of Canadian securities laws. Unless otherwise indicated, all Mineral Reserve and Mineral Resource estimates included in this annual report have been prepared in accordance with the May 10, 2014 edition of the Canadian Institute of Mining, Metallurgy and Petroleum (or CIM) Definition Standards for Mineral Resources and Mineral Reserves (“2014 CIM Definition Standards”) and disclosed in accordance with National Instrument 43-101 – Standards of Disclosure for Minerals Project (“NI 43-101”).

Readers should understand that “Inferred Mineral Resources” are subject to uncertainty as to their existence and as to their economic and legal feasibility. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Descriptions in this annual report of our mineral properties were prepared in accordance with NI 43-101, as well as similar information provided by other issuers in accordance with NI 43-101 and may not be comparable to similar information prepared in accordance with subpart 1300 of SEC Regulation S-K (“S-K 1300”) that is present elsewhere outside of this annual report.

Our mineral properties are comprised of: (a) material mineral properties, including four mines (Cerro Lindo, Cerro Pasco Complex Integration that contains El Porvenir, and Atacocha, Aripuanã and Vazante) and one material project (Magistral); and (b) other mineral properties and greenfield projects, including, among others, projects in Peru (Hilarión, and Florida Canyon Zinc).

On July 1, 2024, we sold the Morro Agudo Complex in Minas Gerais, Brazil to Casa Verde Holding Ltda. for R\$80 million (approximately US\$16 million). Also, in the third quarter of 2024, we entered into agreements to sell our non-operational Peruvian subsidiary, Minera Pampa de Cobre S.A.C. (owner of the Chapi copper mine) as well as Compañía Minera Cerro Colorado S.A.C. (owner of the greenfield Pukaqaqa Project). As a result, the fair value of the assets and liabilities expected to be transferred in the transaction (disposal group) are presented as held for sale on the balance sheet on these condensed consolidated interim financial statements.

For the meanings of certain technical terms used in this annual report, see “Glossary of Certain Technical Terms”.

For a table summarizing the Mineral Reserve and Mineral Resource estimates prepared in accordance with NI 43-101 for our mines and projects, see “Summary of Information Concerning Mineral Reserves and Mineral Resources”.

For additional information regarding our mines and projects prepared in accordance with NI 43-101, see “Summary of Material Mineral Properties” and “Summary of Other Mineral Projects” below.

FORWARD-LOOKING STATEMENTS

This annual report includes statements that constitute estimates and forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, and Section 21E of the Securities Exchange Act, as amended, or Exchange Act. The words “believe,” “will,” “may,” “may have,” “would,” “estimate,” “continues,” “anticipates,” “intends,” “plans,” “expects,” “budget,” “scheduled,” “forecasts” and similar words are intended to identify estimates and forward-looking statements. Estimates and forward-looking statements refer only to the date when they were made, and we do not undertake any obligation to update or revise any estimate or forward-looking statement due to new information, future events or otherwise, except as required by law. Estimates and forward-looking statements involve risks and uncertainties and do not guarantee future performance, as actual results or developments may be substantially different from the expectations described in the forward-looking statements.

These statements appear in a number of places in this annual report and include statements regarding our intent, belief or current expectations, and those of our officers and employees, with respect to, among other things: (i) our future financial or operating performance; (ii) our growth strategy; (iii) future trends that may affect our business and results of operations; (iv) the impact of competition and applicable laws and regulations on our results; (v) planned capital investments; (vi) future of zinc or other metal prices; (vii) estimation of Mineral Reserves and Mineral Resources; (viii) mine life; and (ix) our financial liquidity.

Forward-looking statements are not guarantees of future performance and involve risks and uncertainties. Actual results and developments may be substantially different from the expectations described in the forward-looking statements for several reasons, many of which are not under our control, among them the activities of our competition, the future global economic situation, weather conditions, market prices and conditions, exchange rates, and operational and financial risks. The unexpected occurrence of one or more of the above-mentioned events may significantly change the results of our operations on which we have based our estimates and forward-looking statements. Our estimates and forward-looking statements may be influenced by the following factors, including, among others:

- the cyclical and volatile prices of commodities;
- the changes in the expected level of supply and demand for commodities;
- foreign exchange rates, fluctuations, inflation and interest rate volatility;
- the risks and uncertainties relating to economic and political conditions in the countries in which we operate;
- changes in global market conditions, impacting demand and pricing stability, including uncertainties relating to global trade as a result of the threat or imposition of tariffs between and among the United States and different countries and jurisdictions;
- the impact of expanded regional or global conflict, including the conflicts between Russian and Ukraine, the Israel-Hamas conflict, tensions between China and Taiwan and the resulting potential impacts on supply and demand for commodities, global security concerns, and market volatility;
- outbreaks of contagious diseases or health crises impacting overall economic activity regionally or globally, and the potential impact thereof on commodity prices and exchange rate variations in the currencies to which we are exposed to, our business and operating sites, and the global economy;
- increasing demand and evolving expectations from stakeholders with respect to our environmental, social and governance (“ESG”) practices, performance and disclosures, including the ability to meet energy requirements while complying with greenhouse gas emissions regulations and other energy transition policy

- changes and laws in the countries in which we operate;
- the impact of climate change on our operations, workforce and value chain;
 - environmental, safety and engineering challenges and risks inherent to mining;
 - severe natural disasters, such as storms, prolonged heavy rainfalls and floods, or earthquakes, disrupting our operations;
 - operational risks, such as operator errors, mechanical failures and other accidents;
 - the availability of materials, supplies, insurance coverage, equipment, required permits or approvals and financing;
 - supply-chain and logistic related interruptions, including impacts to international freight and transportation networks;
 - the implementation of our growth strategy, the availability of capital and the risks associated with related capital expenditures;
 - failure to obtain financial assurance to meet closure and remediation obligations;
 - the possible material differences between our estimates of Mineral Reserves and Mineral Resources and the mineral quantities we actually recover;
 - the possibility that our permits, concessions, environmental studies, modificatory environmental studies and other governmental authorities requests may be terminated, not renewed, or not granted by governmental authorities in the countries in which we operate which may result in impairment charges, fines and/or penalties;
 - the impact of political and government changes in the countries in which we operate, and the effects of potential new legislation, including changes in taxation laws and any related agreements that Nexa has entered or may enter into with local governments;
 - legal and regulatory risks, including ongoing or future investigations by local authorities with respect to our business and operations, as well as the conduct of our customers, along with the impact to our financial statements regarding the resolution of any such matters;
 - labor disputes or disagreements with local communities or unions in the countries in which we operate;
 - loss of reputation due to unanticipated operational failures or significant occupational incidents;
 - failure or outage of our digital infrastructure or information and operating technology systems;
 - cyber events or attacks (including ransomware, state-sponsored, data breaches and other cyberattacks) due to negligence, IT security failures or the increased use of artificial intelligence;
 - the future impact of competition and changes in domestic and international governmental and regulatory policies that apply to our operations;
 - regulatory changes in the countries where we operate, including new trade restrictions, tariff escalations, and policy shifts affecting cross-border commerce and supply chains, such as recent tariff increases on Canada, Mexico, and China; and
 - other factors discussed under “Risk Factors” in our annual report on Form 20-F.

Considering the risks and uncertainties described above, the events referred to in the estimates and forward-looking statements included in this annual report may or may not occur, and our business performance and results of operation may differ materially from those expressed in our estimates and forward-looking statements, due to factors that include but are not limited to those mentioned above.

These forward-looking statements are made as of the date of this annual report, and we assume no obligation to update them or revise them to reflect new events or circumstances. There can be no assurance that the forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements.

GLOSSARY OF CERTAIN TECHNICAL TERMS

C&F: cut and fill

concentration: The process by which crushed, and ground ore is separated into metal concentrates and reject material through processes such as flotation.

D&F: drift-and-fill

development: The process of constructing a mining facility and the infrastructure to support the facility is known as mine development.

exploration: Activities associated with ascertaining the existence, location, extent or quality of a mineral deposit.

ha: hectares

km: kilometer

kt: thousand tonnes

LOM: Life of Mine

m: meter

MASL: meters above sea level

mineralization: The process or processes by which a mineral or minerals are introduced into a rock, resulting in a potentially valuable or valuable deposit.

mine site: An economic unit comprised of an underground and/or open pit mine, a treatment plant and equipment and other facilities necessary to produce metals concentrates, in existence at a certain location.

Mt: million tonnes.

Mtpa: million tonnes per annum.

NSR: Net smelter return is the net revenue that the owner of a mining property receives from the sale of the mine's metal/nonmetal products less transportation and refining costs.

open pit: Surface mining in which the ore is extracted from a pit. The geometry of the pit may vary with the characteristics of the ore body.

ore: A mineral or aggregate of minerals from which metal can be economically mined or extracted.

ounces or oz.: Unit of weight. A troy ounce equals 31.1035 grams. All references for ounces in this annual report are to troy ounces unless otherwise specified.

R&P: room and pillar

reclamation: The process of stabilizing, contouring, maintaining, conditioning and/or reconstructing the surface of disturbed land (i.e., used or affected by the execution of mining activities) to a state of "equivalent land capability". Reclamation standards vary widely, but usually address issues of ground and surface water, topsoil, final slope gradients, overburden and revegetation.

refining: The process of purifying an impure metal; the purification of crude metallic substances.

skarn: Metamorphic zone developed in the contact area around igneous rock intrusions when carbonated sedimentary rocks are invaded by large amounts of silicon, aluminum, iron and magnesium. The minerals commonly present in a skarn include iron oxides, calc-silicates, andradite and grossularite garnet, epidote and calcite. Many skarns also include ore minerals. Several productive deposits of copper or other base metals have been found in and adjacent to skarns.

SLS: sublevel longhole stoping

tailings: Finely ground rock from which valuable minerals have been extracted by concentration.

tonne: A unit of weight. One metric tonne equals 2,204.6 pounds or 1,000 kilograms. One short tonne equals 2,000 pounds. Unless otherwise specified, all references to "tonnes" in this annual report refer to metric tonnes.

tpd: tonnes per day

VRM: vertical retreat mining

zinc oxide: A chemical compound that results from the sublimation of zinc (Zn-metal) by oxygen in the atmosphere. Zinc oxide is in the form of powder or fine grains that is insoluble in water but very soluble in acid solutions.

NI 43-101 and 2014 CIM Definition Standards

Feasibility Study: A comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable modifying factors, together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate, at the time of reporting, that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a pre-feasibility study.

Inferred Mineral Resource: That part of a Mineral Resource for which quantity and grade or quality can be estimated based on geological evidence and limited sampling and reasonably assumed, but not verified, geological

and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Indicated Mineral Resource: That part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed. An Indicated Mineral Resource has a lower level of confidence than that applying to a measured mineral resource and may only be converted to a Probable Mineral Reserve.

Measured Mineral Resource: That part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Mineral Reserve: A Mineral Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of modifying factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which mineral reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The public disclosure of a mineral reserve must be demonstrated by a pre-feasibility study or feasibility study.

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

Modifying Factors: Considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social, and governmental factors.

Preliminary Economic Assessment: A study, other than a pre-feasibility or feasibility study, that includes an economic analysis of the potential viability of Mineral resources.

Pre-feasibility Study: A pre-feasibility study is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the modifying factors and the evaluation of any other relevant factors which are sufficient for a qualified person, acting reasonably,

to determine if all or part of the Mineral Resource may be converted to a Mineral Reserve at the time of reporting. A pre-feasibility study is at a lower confidence level than a feasibility study.

Probable Mineral Reserve: The economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the modifying factors applied to a Probable Mineral Reserve is lower than that applied to a Proven Mineral Reserve.

Proven Mineral Reserve: The economically minable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the modifying factors.

Qualified Person(s): An individual who: (a) is an engineer or geoscientist with a university degree, or equivalent accreditation, in an area of geoscience or engineering, relating to mineral exploration or mining; (b) has at least five years of experience in mineral exploration, mine development or operation, or mineral project assessment, or any combination of these, that is relevant to his or her professional degree or area of practice; (c) has experience relevant to the subject matter of the mineral project and technical report; (d) is in good standing with a professional association; and (e) in the case of a professional association in a foreign jurisdiction, has a membership designation that (i) requires attainment of a position of responsibility in his or her profession that requires the exercise of independent judgment; and (ii) requires (A) a favorable confidential peer evaluation of the individual's character, professional judgement, experience, and ethical fitness; or (B) a recommendation for membership by at least two peers, and demonstrated prominence or expertise in the field of mineral exploration or mining.

SUMMARY OF INFORMATION CONCERNING MINERAL RESERVES AND MINERAL RESOURCES

Mineral Reserves

The following table shows our estimates of Mineral Reserves prepared with an effective date of December 31, 2024 (unless otherwise indicated below) and in accordance with the 2014 CIM Definition Standards, whose definitions are incorporated by reference in NI 43-101, for the metals indicated per mine.

Interest ⁽¹⁾	Ownership Interest (%)	Class	Tonnage ⁽¹⁾ (Mt)	Grade					Contained Metal				
				Zinc (%)	Copper (%)	Silver (g/t)	Lead (%)	Gold (g/t)	Zinc (kt)	Copper (kt)	Silver (koz)	Lead (kt)	Gold (koz)
Cerro Lindo ⁽²⁾	83.55%	Proven	24.88	1.56	0.57	19.7	0.19	-	387.3	141.3	15,779	46.5	-
		Probable	14.19	1.07	0.43	24.2	0.22	-	152.2	60.4	11,057	31.5	-
		Subtotal	39.07	1.38	0.52	21.4	0.20	-	539.5	201.8	26,836	78.1	-
Vazante ⁽³⁾	100%	Proven	5.45	8.74	-	14.3	0.26	-	476.7	-	2,511	14.0	-
		Probable	6.32	9.06	-	10.3	0.24	-	572.1	-	2,095	15.2	-
		Subtotal	11.77	8.91	-	12.2	0.25	-	1,048.8	-	4,606	29.2	-
Vazante Aroeira Tailings ⁽⁴⁾	100%	Proven	-	-	-	-	-	-	-	-	-	-	-
		Probable	1.98	4.14	-	7.5	0.25	-	82.2	-	480	4.9	-
		Subtotal	1.98	4.14	-	7.5	0.25	-	82.2	-	480	4.9	-
El Porvenir ⁽⁵⁾	83.55%	Proven	4.10	4.11	0.25	76.2	1.29	-	168.2	10.2	10,035	52.9	-
		Probable	11.13	4.16	0.23	70.9	1.14	-	463.4	26.1	25,387	127.1	-
		Subtotal	15.23	4.15	0.24	72.3	1.18	-	631.6	36.3	35,442	180.1	-
Atacocha Underground ⁽⁶⁾	81.78%	Proven	1.79	3.94	0.33	86.2	1.56	-	70.5	5.9	4,956	27.8	-
		Probable	4.08	4.54	0.43	76.6	1.27	-	185.1	17.4	10,047	51.9	-
		Subtotal	5.87	4.36	0.40	79.5	1.36	-	255.6	23.3	15,003	79.7	-
Atacocha Open Pit ⁽⁸⁾	81.78%	Proven	1.44	1.08	-	38.9	1.17	0.18	15.5	-	1,797	16.8	8.2
		Probable	2.22	0.97	-	33.3	1.15	0.22	21.5	-	2,376	25.6	15.9
		Subtotal	3.66	1.01	-	35.5	1.16	0.21	37.0	-	4,173	42.4	24.1
Aripuanã ⁽⁹⁾	100%	Proven	5.86	3.79	0.20	33.1	1.37	0.24	222.0	11.9	6,230	80.3	44.7
		Probable	26.82	4.69	0.11	42.6	1.81	0.19	1,258.2	29.7	36,719	485.3	163.7
		Subtotal	32.68	4.53	0.13	40.9	1.73	0.20	1,480.2	41.6	42,949	565.6	208.3
Total		Proven	43.52	3.08	0.39	29.5	0.55	0.04	1,340.3	169.3	41,308	238.5	52.9
		Probable	66.74	4.10	0.20	41.1	1.11	0.09	2,734.7	133.6	88,162	741.5	179.6
		Total	110.26	3.70	0.27	36.5	0.89	0.07	4,074.9	302.9	129,470	980.0	232.5

Notes: The estimation of Mineral Reserves involves assumptions as to future commodity prices and as to technical mining matters. Numbers and totals may not sum due to rounding.

The qualified person responsible for the Mineral Reserve estimates are not aware of any mining, metallurgical, infrastructure, permitting, or other relevant factors that could materially affect the Mineral Reserve estimate.

The El Porvenir, Atacocha Underground and Atacocha Open Pit mines are part of the Cerro Pasco Complex.

(1) The tonnage and content amounts presented in this table have not been adjusted to reflect our ownership interest. The information presented in this table includes 100% of the Mineral Reserves estimates of our consolidated subsidiaries and of our joint ventures, certain of which are not wholly owned, as set out in this ownership interests' column.

(2) Cerro Lindo Mine

The Qualified Person for the Mineral Reserves estimate is Cesar Moreno, B.Eng., MAusIMM, a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Reserves, which also are consistent with the CIM (2014) definitions. Mineral Reserves are estimated at an NSR break-even cut-off value of US\$44.94/t processed. Some incremental material with values between US\$33.33/t and US\$44.94/t was included. Mineral Reserves estimates are based on average long-term metal prices of zinc: US\$2,864.90/t (US\$1.30/lb); copper: US\$9,095.61/t (US\$4.13/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades are 87.86% for Zn, 84.47% for Cu, 65.65% for Pb, and 68.78% for Ag. A minimum mining width of 7.0 m was used. Dilution and extraction factors are applied based on stope type and location. Bulk density varies depending on mineralization domain.

(3) Vazante Mine

The Qualified Person for the Mineral Reserves estimate is Mateus Gomes Ribeiro, B.Eng., MAusIMM, a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Reserves, which also are consistent with the CIM (2014) definitions. Mineral Reserves are estimated at a NSR cut-off value of US\$70.52/t processed. Mineral Reserves estimates are based on average long-term metal prices of: zinc: US\$2,864.90/t (US\$1.30/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades are 86.52% for Zn, 37.07% for Pb, and 42.0% for Ag. A minimum mining width of 2.0 m was applied.

(4) Vazante Aroeira Tailings

The Qualified Person for the Mineral Reserves estimate is Mateus Gomes Ribeiro, B.Eng., MAusIMM, a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Reserves, which also are consistent with the CIM (2014) definitions. Mineral Reserves are estimated at a NSR cut-off value of US\$28.42/t processed. Mineral Reserves estimates are based on average long-term metal prices of: zinc: US\$2,864.90/t (US\$1.30/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at Vazante Aroeira Tailings average head grades are 67.98% for Zn, 36.00% for Pb and 42.00% for Ag. A minimum mining unit of 10 m x 10m x 2m was applied.

(5) El Porvenir Mine

The Qualified Person for the Mineral Reserves estimate is Renzo Suarez, B.Eng., MAusIMM, a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Reserves, which also are consistent with the CIM (2014) definitions. Mineral Reserves are estimated at NSR cut-off grade ranging from US\$68.31/t to US\$71.59/t for SLS areas and US\$70.31/t to US\$73.58/t for C&F areas depending on the zone. A number of incremental material (with values between US\$44.44/t and US\$70.31/t for SLS and values between US\$46.44/t and US\$68.31/t for C&F mining) was included in the estimates. Mineral Reserves estimates are based on average long-term metal prices of: zinc: US\$2,864.90/t

(US\$1.30/lb); copper: US\$9,095.61/t (US\$4.13/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grade are 89.23% for Zn, 15.03% for Cu, 79.99% for Pb, and 62.92% for Ag. Minimum mining width of 5.0 m for C&F mining and 4.0 m for SLS mining were used for reserves shapes and development design and are reported inclusive of extraction losses and dilution.

(6) Atacocha Underground Mine

The Qualified Person for the Mineral Reserves estimate is Renzo Suarez, B.Eng., MAusIMM, a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Reserves, which also are consistent with the CIM (2014) definitions. Mineral Reserves are estimated at NSR cut-off of US\$73.54/t for SLS areas and US\$75.61/t for C&F areas depending on the zone. A number of incremental material (with values between US\$49.67/t and US\$73.54/t for SLS and values between US\$51.73/t and US\$75.61/t for C&F mining) was included in the estimate. Mineral Reserves estimates are based on average long-term metal prices of zinc: US\$2,864.90/t (US\$1.30/lb); copper: US\$9,095.61/t (US\$4.13/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades 89.30% for Zn, 15.73% for Cu, 80.02% for Pb, and 62.92% for Ag. Minimum mining width of 5.0 m for C&F mining and 4.0 m for SLS mining were used for reserves shapes and development design and are reported inclusive of extraction losses and dilution.

(7) Atacocha Open Pit Mine

The Qualified Person for the Mineral Reserves estimate is Renzo Suarez, B.Eng., MAusIMM, a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Reserves, which also are consistent with the CIM (2014) definitions. Mineral Reserves are estimated at a NSR cut-off values of US\$20.42/t. A number of incremental material (with values between US\$15.12/t and US\$20.42/t) was included in the estimates. Mineral Reserves estimates are based on average long-term metal prices of zinc: US\$2,864.90/t (US\$1.30/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz; and gold: US\$1,946.05/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades are 70.44% for Zn, 83.98% for Pb, 75.76% for Ag, and 65.46% for Au.

(8) Aripuanã Mine

The Qualified Person for the Mineral Reserves estimate is Vitor Ferraz Viana, B.Eng., FAusIMM, a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Reserves, which also are consistent with the CIM (2014) definitions. Mineral Reserves are estimated at a NSR break-even cut-off value of US\$60.68/t processed was estimated from forecasted operating costs and some incremental material between US\$49.00/t and US\$60.68/t was included. A minimum mining width of 4.0 m was used for SLS and 15.0 m for VRM. The long-term prices derived are in line with the consensus forecasts from banks and independent institutions. Mineral Reserves estimates are based on average long-term metal prices of: zinc: US\$2,864.90/t (US\$1.30/lb); copper: US\$9,095.61/t (US\$4.13/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz; and gold: US\$1,946.05/oz. Recoveries at LOM average head grades are 91.08% for Zn, 60.00% for Cu, 84.92% for Pb, 68.00% for Ag, and 67.80% for Au.

Mineral Resources

The following table shows our estimates of Mineral Resources (exclusive of Mineral Reserves) prepared with an effective date of December 31, 2024 (unless otherwise indicated below) and in accordance with the 2014 CIM Definition Standards, whose definitions are incorporated by reference in NI 43-101, for mines in operation.

Interest ⁽¹⁾	Ownership	Class	Tonnage ⁽¹⁾ (Mt)	Grade					Contained Metal				
				Zinc (%)	Copper (%)	Silver (g/t)	Lead (%)	Gold (g/t)	Zinc (kt)	Copper (kt)	Silver (koz)	Lead (kt)	Gold (koz)
Cerro Lindo ⁽²⁾	83.55%	Measured	3.60	2.04	0.72	23.0	0.23	-	73.3	26.1	2,663	8.4	-
		Indicated	2.88	0.99	0.50	22.3	0.19	-	28.4	14.5	2,065	5.6	-
		Subtotal	6.48	1.57	0.63	22.7	0.22	-	101.7	40.6	4,727	14.0	-
		Inferred	10.04	1.53	0.27	25.5	0.39	-	153.3	26.9	8,213	39.3	-
Vazante ⁽³⁾	100%	Measured	0.46	8.99	-	16.2	0.30	-	41.4	-	240	1.4	-
		Indicated	1.43	10.15	-	4.9	0.09	-	145.1	-	225	1.3	-
		Subtotal	1.89	9.87	-	7.7	0.14	-	186.5	-	465	2.7	-
		Inferred	12.75	10.11	-	12.4	0.21	-	1288.4	-	5,068	27.4	-
Vazante Aroeira Tailings ⁽³⁾	100%	Measured	-	-	-	-	-	-	-	-	-	-	-
		Indicated	-	-	-	-	-	-	-	-	-	-	-
		Subtotal	-	-	-	-	-	-	-	-	-	-	-
		Inferred	0.61	4.26	-	7.6	0.25	-	26.0	-	150	1.5	-
El Porvenir ⁽⁴⁾	83.55%	Measured	0.82	3.12	0.24	55.6	0.96	-	25.5	2.0	1,461	7.8	-
		Indicated	4.04	3.19	0.20	59.7	0.92	-	129.0	7.9	7,757	37.2	-
		Subtotal	4.86	3.18	0.20	59.0	0.93	-	154.5	9.9	9,217	45.1	-
		Inferred	15.46	3.67	0.22	81.6	1.33	-	567.3	34.6	40,550	205.5	-
Atacocha (Underground) ⁽⁵⁾	81.78%	Measured	1.12	3.34	0.27	55.4	0.98	-	37.4	3.0	1,995	10.9	-
		Indicated	2.60	3.18	0.37	55.3	0.92	-	82.6	9.6	4,618	24.0	-
		Subtotal	3.72	3.23	0.34	55.3	0.94	-	120.0	12.7	6,613	34.9	-
		Inferred	8.26	4.02	0.55	76.6	1.20	-	332.2	45.5	20,366	98.9	-
Atacocha (Open pit) ⁽⁶⁾	81.78%	Measured	1.96	1.21	-	29.4	0.82	0.18	23.7	-	1,860	16.2	11.1
		Indicated	4.29	0.99	-	28.4	0.87	0.23	42.5	-	3,918	37.1	31.5
		Subtotal	6.25	1.06	-	28.8	0.85	0.21	66.2	-	5,778	53.4	42.6
		Inferred	1.84	1.33	-	31.3	1.11	0.20	24.4	-	1,851	20.5	11.9
Aripuanã ⁽⁷⁾	100%	Measured	0.48	2.20	0.39	18.8	0.72	0.51	10.6	1.9	293	3.5	7.9
		Indicated	4.90	3.41	0.19	33.6	1.26	0.28	167.2	9.5	5,286	61.6	44.5
		Subtotal	5.38	3.30	0.21	32.2	1.21	0.30	177.8	11.4	5,578	65.0	52.4
		Inferred	44.18	3.16	0.31	41.2	1.21	0.38	1396.0	137.5	58,520	533.8	545.0
Total		Measured	8.45	2.51	0.39	31.3	0.57	0.07	212.0	33.0	8,512	48.3	19.0
		Indicated	20.13	2.95	0.21	36.9	0.83	0.12	594.7	41.6	23,868	166.8	76.0
		Total	28.58	2.82	0.26	35.2	0.75	0.10	806.7	74.5	32,380	215.0	95.1
		Inferred	93.15	4.07	0.26	45.0	1.00	0.19	3787.6	244.6	134,718	926.9	556.9

The following table shows our estimates of Mineral Resources (exclusive of Mineral Reserves) prepared with an effective date of December 31, 2024 (unless otherwise indicated below) and in accordance with the 2014 CIM Definition Standards, whose definitions are incorporated by reference in NI 43-101, for the zinc exploration projects.

Interest ⁽¹⁾	Ownership	Class	Tonnage ⁽¹⁾ (Mt)	Grade					Contained Metal				
				Zinc (%)	Copper (%)	Silver (g/t)	Lead (%)	Gold (g/t)	Zinc (kt)	Copper (kt)	Silver (koz)	Lead (kt)	Gold (koz)
Bonsucesso ⁽⁸⁾	100%	Measured	-	-	-	-	-	-	-	-	-	-	-
		Indicated	9.83	3.78	-	-	0.51	-	371.6	-	-	50.1	-
		Subtotal	9.83	3.78	-	-	0.51	-	371.6	-	-	50.1	-
		Inferred	3.38	4.17	-	-	0.52	-	140.9	-	-	17.6	-
Hilarión ⁽⁹⁾	83.55%	Measured	14.54	3.39	-	30.9	0.69	-	493.6	-	14,460	100.0	-
		Indicated	34.03	3.62	-	27.0	0.54	-	1,231.5	-	29,530	183.2	-
		Subtotal	48.57	3.55	-	28.2	0.58	-	1,725.1	-	43,990	283.2	-
		Inferred	42.17	4.06	-	25.0	0.41	-	1,712.6	-	33,868	173.0	-
Florida Canyon Zinc ⁽¹⁰⁾	50.97%	Measured	0.81	11.32	-	15.4	1.39	-	91.7	-	401	11.3	-
		Indicated	1.63	10.28	-	14.9	1.31	-	167.6	-	781	21.4	-
		Subtotal	2.44	10.62	-	15.1	1.34	-	259.3	-	1,182	32.7	-
		Inferred	14.86	9.64	-	11.3	1.26	-	1,431.0	-	5,399	187.2	-
Total		Measured	15.35	3.81	-	30.1	0.73	-	585.3	-	14,862	111.3	-
		Indicated	45.49	3.89	-	20.7	0.56	-	1,770.8	-	30,311	254.7	-
		Total	60.84	3.87	-	23.1	0.60	-	2,356.0	-	45,172	366.0	-
		Inferred	60.40	5.44	-	20.2	0.63	-	3,284.5	-	39,267	377.8	-

The following table shows our estimates of Mineral Resources prepared with an effective date of December 31, 2024 (unless otherwise indicated below) and in accordance with the 2014 CIM Definition Standards, whose definitions are incorporated by reference in NI 43-101, for the copper exploration projects.

Interest ⁽¹⁾	Ownership	Class	Tonnage (Mt)	Grade						Contained Metal					
				Zinc (%)	Copper (%)	Silver (g/t)	Lead (%)	Gold (g/t)	Molybdenum (%)	Zinc (kt)	Copper (kt)	Silver (koz)	Lead (kt)	Gold (koz)	Moly (kt)
Magistral ⁽¹¹⁾	83.55%	Measured	98.69	-	0.52	2.8	-	-	0.05	-	510.1	8,905	-	-	51.0
		Indicated	90.68	-	0.43	2.8	-	-	0.04	-	394.3	8,041	-	-	36.1
		Subtotal	189.38	-	0.48	2.8	-	-	0.05	-	904.5	16,946	-	-	87.1
		Inferred	11.06	-	0.38	3.1	-	-	0.05	-	42.2	1,089	-	-	5.5

Notes: The estimation of Mineral Resources involves assumptions as to future commodity prices and as to technical mining matters. Numbers and totals may not sum due to rounding. Mineral Resources are reported exclusive of those Mineral Resources that were converted to Mineral Reserves, and Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

The El Porvenir, Atacocha Underground and Atacocha Open Pit mines are part of the Cerro Pasco Complex.

- (1) The tonnage and content amounts presented in this table have not been adjusted to reflect our ownership interest. The information presented in this table includes 100% of the Mineral Resources estimates of our consolidated subsidiaries and of our joint ventures, certain of which are not wholly owned, as set out in this ownership interests' column.

- (2) **Cerro Lindo**

Mineral Resources are effective date as of December 31, 2024. The Qualified Person for the Mineral Resources estimate is Jerry Huaman Abalos, B.Geol., MAusIMM CP (Geo), a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Resources, which also are consistent with the CIM (2014) definitions. Mineral Resources are reported on a 100% ownership basis. Nexa owns 83.55%. Mineral Resources are estimated at an NSR cut-off value of US\$44.94/t. Mineral Resources estimates are based on average long-term metal prices of: zinc: US\$3,294.64/t (US\$1.49/lb); copper: US\$10,459.95/t (US\$4.74/lb); lead: US\$2,412.07/t (US\$1.09/lb); and silver: US\$28.55/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at Life of Mine average head grades are 87.86% for Zn, 84.47% for Cu, 65.65% for Pb, and 68.78% for Ag. A minimum mining width of 4.0 m was used to create resource shapes. Bulk density varies depending on mineralization domain.

- (3) **Vazante and Vazante Aroeira Tailings**

Mineral Resources are effective date as of December 31, 2024. The Qualified Person for the Mineral Resources estimate is José Antonio Lopes, B.Geol., FAusIMM (Geo), a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Resources, which also are consistent with the CIM (2014) definitions. Mineral Resources are estimated at various NSR cut-off values appropriate to the mineralization style and mining method. For Supergene Mineralization (Calamine) the resources are estimated at a NSR cut-off value of US\$27.91/t for soil and US\$32.92/t for fresh rock and transition material. For Aroeira Tailings the resources are estimated at a NSR cut-off value of US\$28.42/t and for Hypogene Mineralization (Willemite) a cut-off value of US\$70.52/t for all resources shapes. Mineral Resources are estimates are based on average long-term metal prices of: zinc: US\$3,294.64/t (US\$1.49/lb); lead: US\$2,412.07/t (US\$1.09/lb); and silver: US\$28.55/oz for Aroeira Tailings and Hypogene Mineralization (Willemite), and US\$3,250.30/t (US\$1.47/lb) for Supergene Mineralization (Calamine). Metallurgical recoveries are accounted for NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at Life of Mine average hypogene mineralization (Willemite) head grades are 86.52% for Zn, 37.07% for Pb, and 42.00% for Ag. Recovery at Life of Mine average supergene mineralization head grade is 55.00% for Zn. Recoveries at Life of Mine average Aroeira Tailings head grades are 67.98% for Zn, 36.00% for Pb and 42.00% for Ag. A minimum thickness of 3.0 m for underground SLS, open pit shell for Calamine and above original topography for tailings. Bulk density was assigned based on rock type.

- (4) **El Porvenir**

Mineral Resources are effective date as of December 31, 2024. The Qualified Person for the Mineral Resources estimate is Jerry Huaman Abalos, B.Geol., MAusIMM CP (Geo), a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Resources, which also are consistent with the CIM (2014) definitions. Mineral Resources are reported on a 100% ownership basis. Nexa owns 83.55%. Mineral Resources are estimated at NSR cut-off grade values ranging from US\$68.31/t to US\$71.59/t for SLS areas and US\$70.31/t to US\$73.58/t for C&F areas depending on the zone. Mineral Resources estimates are based on average long-term metal prices of zinc: US\$3,294.64/t (US\$1.49/lb); copper: US\$10,459.95/t (US\$4.74/lb); lead: US\$2,412.07/t (US\$1.09/lb); and silver: US\$28.55/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at Life of Mine average head grades are 89.23% for Zn, 15.03% for Cu, 79.99% for Pb, and 62.92% for Ag. A minimum mining width of 4.0 m was used for C&F and 3.0 m was used for SLS resource stope shapes respectively. Bulk density varies depending on mineralization domain.

(5) Atacocha (Underground)

Mineral Resources are effective date as of December 31, 2024. The Qualified Person for the Mineral Resources estimate is Jerry Huaman Abalos, B.Geol., MAusIMM CP (Geo), a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Resources, which also are consistent with the CIM (2014) definitions. Mineral Resources are reported on a 100% ownership basis. Nexa owns 81.78%. Mineral Resources are estimated at a NSR cut-off value of US\$73.54/t for SLS, and US\$75.61/t for C&F. Mineral Resources estimates are based on average long-term metal prices of: zinc: US\$3,294.64/t (US\$1.49/lb); copper: US\$10,459.95/t (US\$4.74/lb); lead: US\$2,412.07/t (US\$1.09/lb); and silver: US\$28.55/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at Life of Mine average head grades are 89.30% for Zn, 15.73% for Cu, 80.02% for Pb, and 62.92% for Ag. A minimum mining width of 4.0 m was used for resources shape. Density was assigned based on rock type.

(6) Atacocha (Open Pit)

Mineral Resources are effective date as of December 31, 2024. The Qualified Person for the Mineral Resources estimate is Jerry Huaman Abalos, B.Geol., MAusIMM CP (Geo), a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Resources, which also are consistent with the CIM (2014) definitions. Mineral Resources are reported on a 100% ownership basis. Nexa owns 81.78%. Mineral Resources are reported within an optimized pit shell. Mineral Resources are estimated at a NSR cut-off value of US\$20.42/t. Mineral Resources estimates are based on average long-term metal prices of: zinc: US\$3,294.64/t (US\$1.49/lb); lead: US\$2,412.07/t (US\$1.09/lb); silver: US\$28.55/oz; and gold: US\$2,237.96/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at Life of Mine average head grades are 70.44% for Zn, 83.98% for Pb, 75.76% for Ag, and 65.46% for Au. Mineral resources are reported within open pit shell. Density was assigned based on rock type.

(7) Aripuanã

Mineral Resources are effective date as of December 31, 2024. The Qualified Person for the Mineral Resources estimate is José Antonio Lopes, B.Geol., FAusIMM (Geo), a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Resources, which also are consistent with the CIM (2014) definitions. Mineral Resources reported using a cut-of value of US\$60.68/t. Mineral Resources estimates are based on average long-term metal prices of: zinc: US\$3,294.64/t (US\$1.49/lb); copper: US\$10,459.95/t (US\$4.74/lb); Lead: US\$2,412.07/t (US\$1.09/lb); silver: US\$28.55/oz; and gold: US\$2,237.96/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at Life of Mine average head grades are 91.08% for Zn, 60.00% for Cu, 84.92% for Pb, 68.00% for Ag, and 67.80% for Au. A minimum thickness of 3.0 m was used for stopes shapes. Bulk density varies depending on mineralization domain.

(8) Bonsucesso

Mineral Resources are effective date as of December 31, 2024. The Qualified Person for the Mineral Resources estimate is José Antonio Lopes, B.Geol., FAusIMM (Geo), a Nexa employee. Subpart 1300 of Regulation S-K definitions were followed for Mineral Resources, which also are consistent with the CIM (2014) definitions. Mineral Resources are estimated at a NSR cut-off value of US\$55.83/t. Mineral Resources estimates are based on average long-term metal prices of: zinc: US\$3,218.90/t (US\$1.46/lb) and lead: US\$2,300.33/t (US\$1.04/lb). Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recovery at Life of Mine average head grades are 92.50% for Zn and 61.10% for Pb. A minimum thickness of 3.0 m was applied. Density was assigned based on rock type.

(9) Hilarión

Mineral Resources have an effective date as of December 31, 2022. The Qualified Person for the Mineral Resources estimate is Jerry Huaman Abalos, B.Geol., MAusIMM CP (Geo), a Nexa Resources employee. Mineral Resources are reported on a 100% ownership basis. Nexa owns

83.55%. Mineral Resources are estimated at a NSR cut-off value of US\$45.00/t for SLS resource shapes for the Hilarión deposit, and US\$50.00/t for Room & Pillar (R&P) resource shapes for the El Padrino deposit. Mineral Resources estimates are based on average long-term metal prices of: zinc: US\$3,245.91/t (US\$1.47/lb); lead: US\$2,332.46/t (US\$1.06/lb); and silver: US\$22.66/oz. Mineral Resources are reported within underground mining shapes. A minimum mining width of 3.0 m was used for Hilarión and El Padrino. Bulk density varies depending on mineralization domain.

(10) Florida Canyon Zinc

Mineral Resources have an effective date as of October 30, 2020. The Qualified Person for the Mineral Resources estimate is Jerry Huaman Abalos, B.Geo., MAusIMM CP (Geo), a Nexa Resources employee. Mineral Resources are reported on a 100% ownership basis. Nexa owns 50.97%. Mineral Resources are reported using a cut-off value of US\$41.40/t NSR for SLS, US\$42.93/t for C&F and US\$40.61/t for Room & Pillar mine areas. Forecast long term metal prices used for the NSR calculation are Zn: US\$ 2,816.35/t (US\$ 1.28/lb); Pb: US\$ 2,196.50/t (US\$ 1.00/lb) and Ag: US\$ 19.38/oz. Average metallurgical recoveries for the resource are Zinc (80%), Lead (74%) and Silver (52%). Mineral Resources are reported within underground mining shapes. Minimum thickness is 3.0 m for SLS and C&F, and 4.0 m for Room & Pillar. Bulk density varies depending on mineralization domain.

(11) Magistral

Mineral Resources have an effective date as of December 31, 2021. The Qualified Person for the Mineral Resources estimate is Jerry Huaman Abalos, B.Geo., MAusIMM CP (Geo), a Nexa Resources employee. Mineral Resources are reported on a 100% ownership basis. Nexa owns 83.55%. Mineral Resources are estimated at NSR cut-off values of US\$5.99/t for porphyry, US\$5.51/t for mixed, and US\$5.48/t for skarn rock types. Metallurgical recoveries are accounted for in the NSR calculations based on metallurgical data and vary from 79.3% in skarn to 92.5% in San Ernesto porphyry for Cu, 51.3% in skarn and 79.2% in San Ernesto porphyry for Mo, and 70% for Ag. Mineral Resources are estimated using an average long term metal price of US\$8,272.00/t (US\$3.75/lb); silver: US\$21.34/oz; and molybdenum: US\$21,829.00/t (US\$ 9.90/lb). Mineral Resources are reported constrained within a Whittle optimized pit shell. Mineral Resources are stated considering dilution into the regularized block. Bulk density varies depending on mineralization domain.

SUMMARY OF MATERIAL MINERAL PROPERTIES

Mines

Cerro Lindo

*The most recent NI 43-101 technical report with respect to Cerro Lindo is the technical report titled “Technical Report on the Cerro Lindo Mine, Department of Ica, Peru” with an effective date of December 31, 2020 (the “**Cerro Lindo Technical Report**”) prepared by RPA, now a part of SLR Consulting Ltd., in particular by: Rosmery J. Cardenas Barzola, P.Eng., Normand Lecuyer, P.Eng., Lance Engelbrecht, P.Eng., and Luis Vasquez, M.Sc., P.Eng. The Cerro Lindo Technical Report has been filed in accordance with NI 43-101, and is available, under Nexa’s SEDAR+ profile at www.sedarplus.ca.*

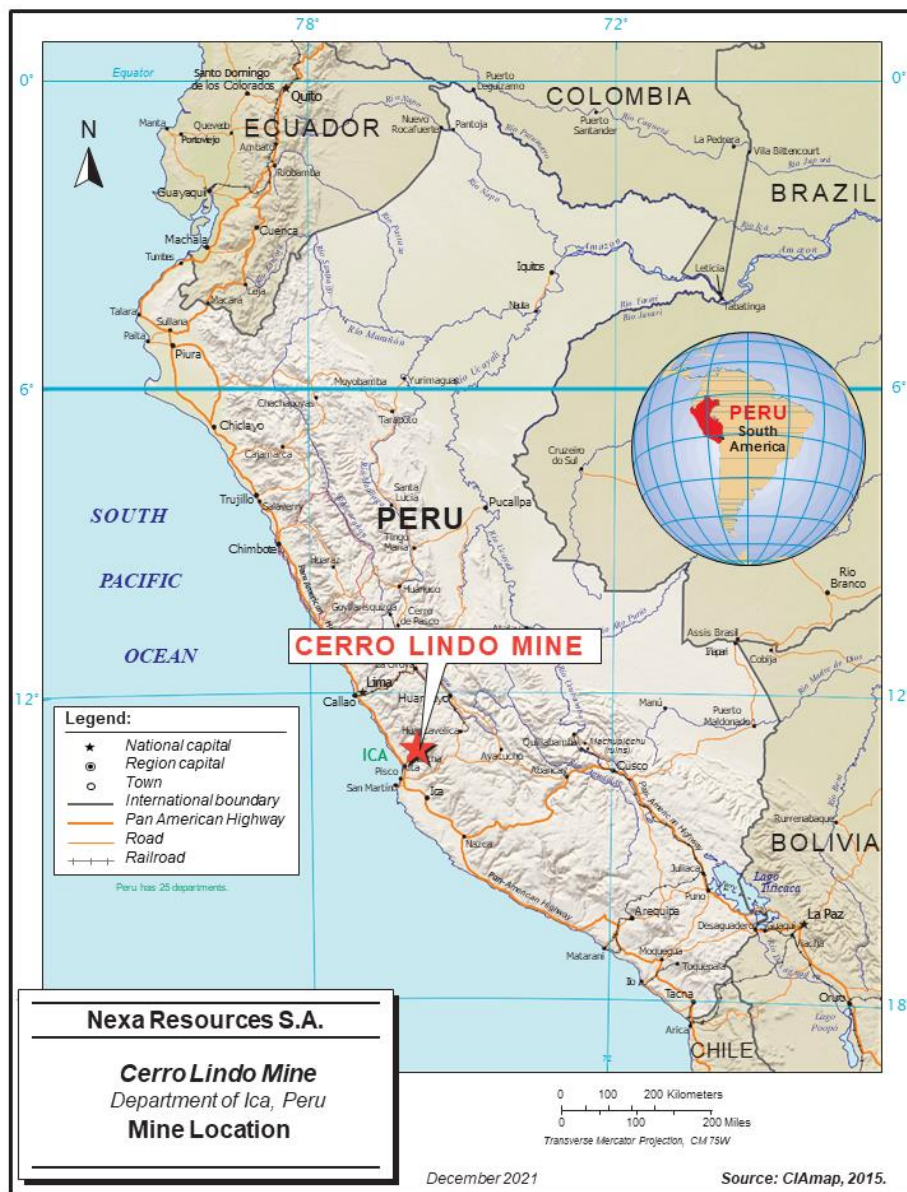
Certain of the scientific and technical information set out herein with respect to Cerro Lindo is based on information presented in the Cerro Lindo Technical Report. The Mineral Resources and Mineral Reserves for the Cerro Lindo Mine have been estimated by Nexa as of December 31, 2024, and reviewed by a Qualified Person. The Qualified Person for the Mineral Resources estimate is Jerry Huaman Abalos, B.Geo., MAusIMM CP (Geo), a Nexa Resources employee. Jerry Huaman Abalos has also reviewed and approved certain information set out herein that has been updated since the date of the Cerro Lindo Technical Report. The Qualified Person for the Mineral Reserves estimate is Cesar Moreno, B.Eng., MAusIMM., a Nexa Resources employee. Cesar Moreno has also reviewed and approved certain information set out herein that has been updated since the date of the Cerro Lindo Technical Report.

Project Description, Location and Access

Project Setting

The Cerro Lindo mine is an underground, polymetallic mine located in the Chavín District, Chincha Province, Peru, approximately 268 km southeast of Lima and 60 km from the coast. Access from Lima is available via the paved Pan American Highway south to Chincha, and then via an unpaved road up the Topará River valley to the mine site. Internal roadways connect the various mine site components. The approximate coordinates of the mine are 392,780m East and 8,554,165m North, using the Universal Transverse Mercator WGS84 datum and the project site is located at an average elevation of 2,000 m above sea level.

Site Location Plan



Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

All mineral concessions are held in the name of Nexa Resources Peru S.A.A. (“Nexa Peru”). The tenure consists of 68 mining concessions totaling approximately 43,927.8 hectares and one beneficiation concession, covering an area of 518.8 hectares.

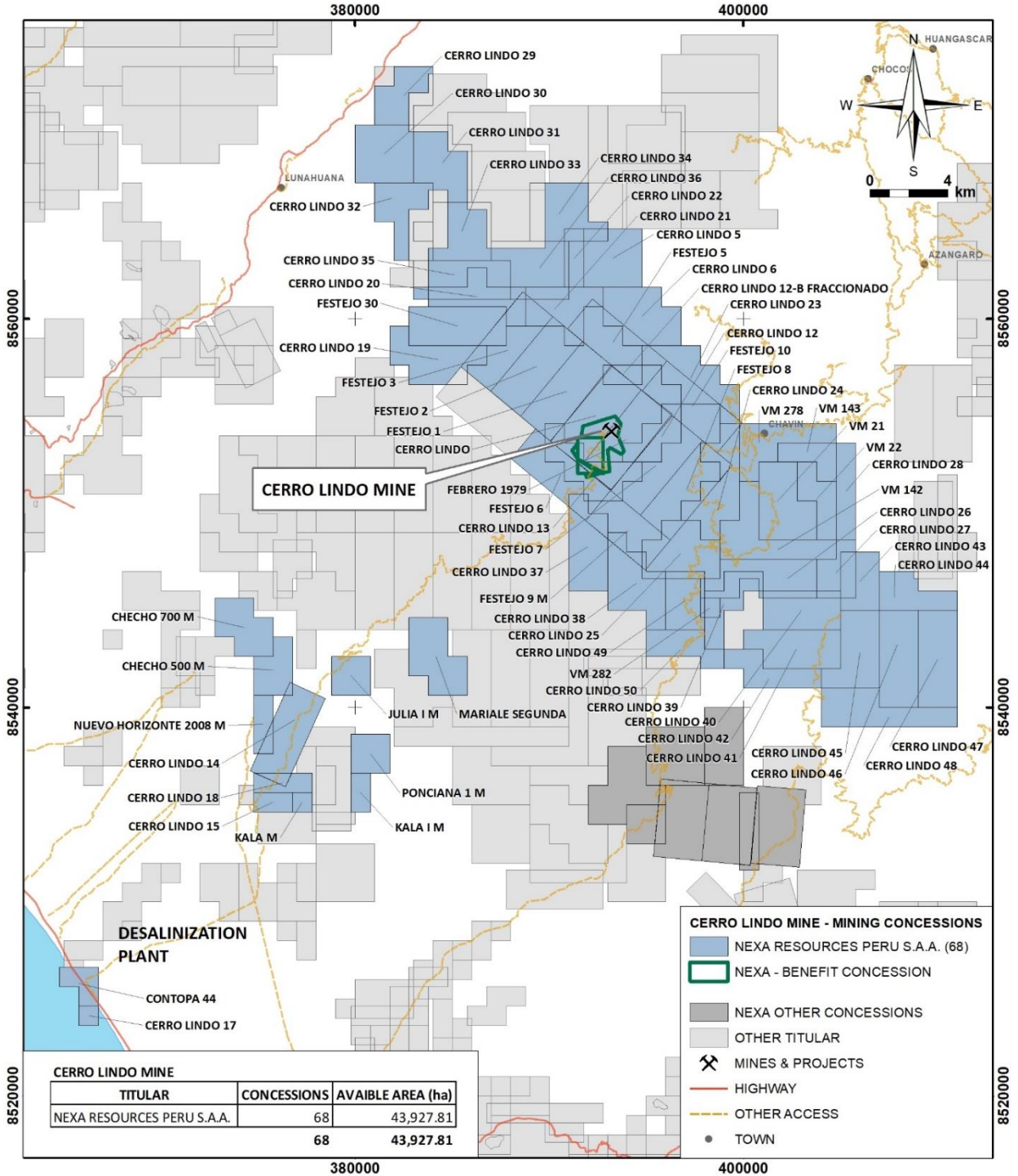
Nexa Peru currently holds surface rights or easements for the following infrastructure at Cerro Lindo: mine site, access roads, power transmission line and water pipeline for the mine, old and new power transmission lines to Cerro Lindo, desalination plant, water process plant, and the water pipeline from the desalination plant to the mine site. There is sufficient suitable land available within the mineral tenure held by Nexa Peru for tailings disposal, mine waste disposal and installations such as the process plant and related mine infrastructure.

Cerro Lindo is currently subject to payment of royalties. The tax stability agreement expired on December 31, 2021, and the historical applicability thereof is subject to certain disputes with tax authorities. For more information, see “Additional Information—Legal Proceedings—Other legal proceedings,” of our annual report on Form 20-F for the fiscal year ended on December 31, 2024. As of January 2022, Nexa Peru is required to pay royalties and special mining tax to the Peruvian government. For more information, see “Information on the Company—Regulatory matters—Peruvian regulatory framework,” of our annual report on Form 20-F for the fiscal year ended on

December 31, 2024. As of December 31, 2024, Nexa Peru had a total of six water licenses, one for use of seawater, and the remaining five for ground water extraction.

Cerro Lindo holds a number of permits in support of the current operations. The permits are Directorial Resolutions issued by the Peruvian authorities upon approval of mining environmental impact assessments filed by the mining companies. Nexa Peru maintains an up-to-date record of the legal permits obtained to date.

Regional Mineral Tenure Plan



History

Artisanal-style mining of outcropping barite bodies for use by the oil industry began in the early 1960s. The Cerro Lindo deposit was discovered in 1967, during a color anomaly reconnaissance program. Compañía Minera – Milpo S.A.A. (“Milpo”), a predecessor company to Nexa Peru, acquired the property in 1984. From 1984 to 2011, Milpo carried out geological mapping, geophysical surveys, geochemical sampling, drilling, and trenching over the property. In 2002, a feasibility study was completed and construction started in 2006. Formal production started in 2007, and mine has been operational since that date. The last three years mine production is shown in the table below:

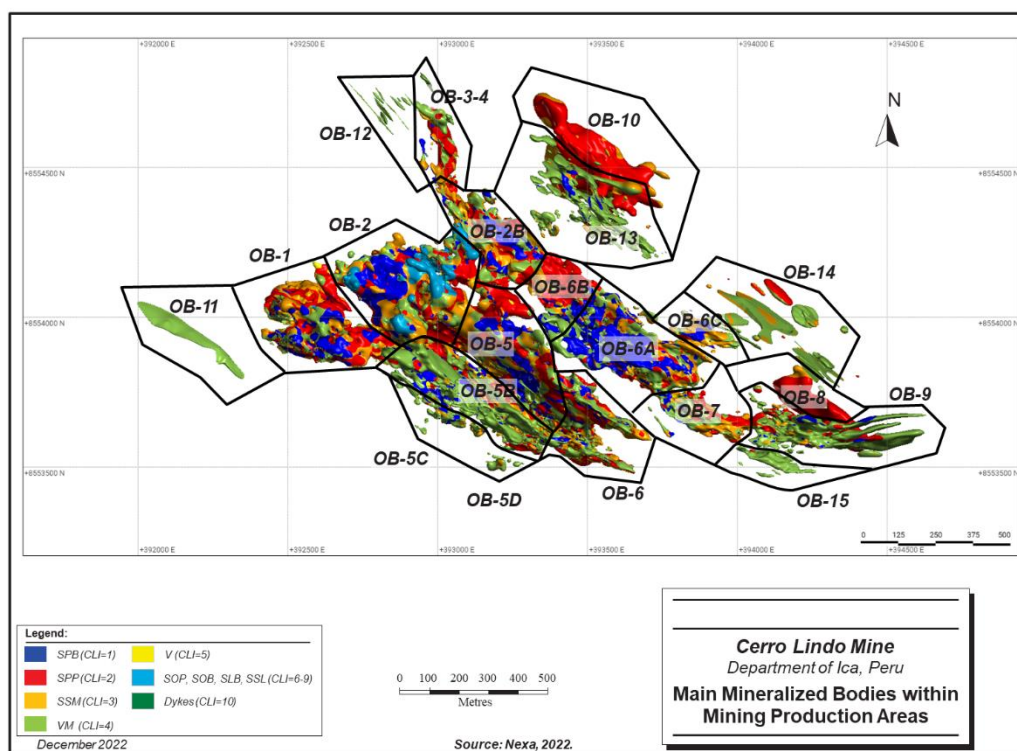
Mine Production from Cerro Lindo (2022 – 2024)

	Unit	2022	2023	2024
Tonnage	Mt	6.24	5.99	6.08
Zn Grade	%	1.55	1.51	1.62
Cu Grade	%	0.61	0.57	0.58
Pb Grade	%	0.33	0.31 </td <td>0.31</td>	0.31
Ag Grade	oz/t	0.89	0.80	0.93
Ag Grade	g/t	27.68	24.99	29.00

Geological Setting, Mineralization and Deposit Types

Cerro Lindo is classified as a volcanogenic massive sulfide (“VMS”) deposit. The Cerro Lindo deposit is 1,500 m long, 1,000 m wide, and has a current vertical development of 470 m below the surface. Mineralization consists of at least 10 discrete mineralized zones. The Cerro Lindo deposit comprises lens shaped massive bodies, composed of pyrite (50.0% to 90.0%), yellow sphalerite, brown sphalerite, chalcopyrite, and minor galena. Significant barite is present mainly in the upper portions of the deposit. A secondary enrichment zone, composed of chalcocite and covellite, has formed near the surface where massive sulfides have oxidized. Silver rich powdery barite remains at the surface as a relic of sulfide oxidation and leaching.

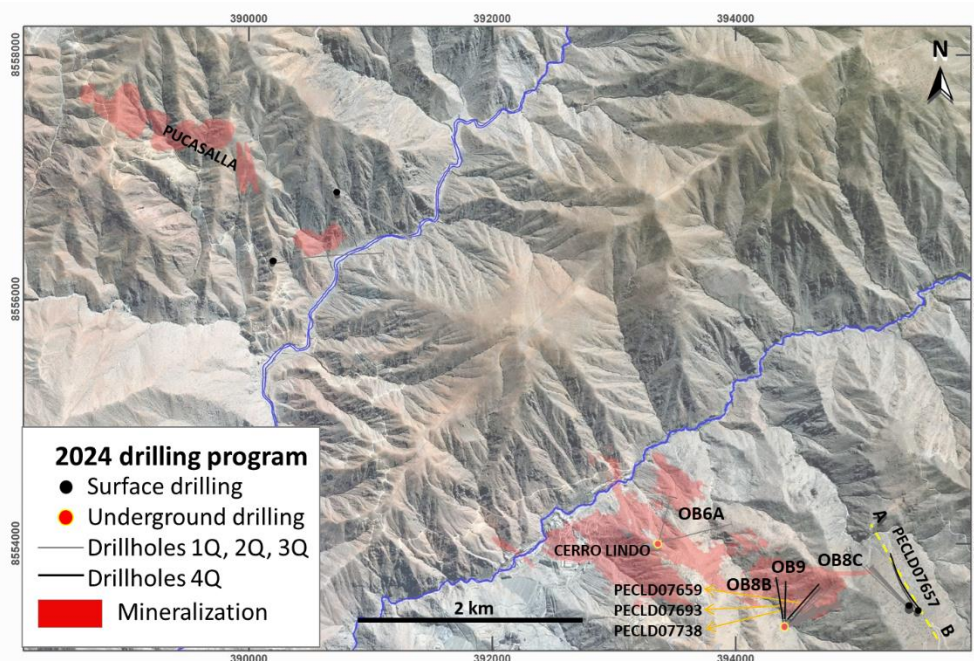
Mineralized Bodies



Exploration

In 2024, mineral exploration in Cerro Lindo focused on extending known orebodies, particularly OB-8B and OB-8C, located southeast of the mine, and investigating potential new mineralized zones. Exploration efforts also targeted the Patahuasi Millay geophysical anomaly, which was the main focus of exploration drilling in 2024 and resulted in its transition to an early-stage greenfield target. Drill holes at the Pucasalla target and its extensions indicated the presence of sulfide zones but without significant results. Drilling activities also continued at the Puca Punta target. Despite some delays caused by weather and operational challenges, significant progress was made in advancing the exploration program.

Regional Exploration Targets



Drilling

During 2024, we completed approximately 25.4 km of diamond drilling in 25 drill holes with 4 drill holes currently in progress that are expected to be concluded in 2025, divided between surface and underground exploration drills. By the end of 2024, we had achieved key milestones, including significant advancements in extending known orebodies and evolving the exploratory drilling program.

During 2025, we expect to complete a total of 7.6 km of exploratory drilling. Our goals are to continue extending known orebodies, including OB-8C, and to construct new access and platforms to support the exploratory drilling program.

In 2024, we spent US\$9.2 million in exploration expenses for Cerro Lindo, primarily associated with diamond drilling, geochemistry analysis and geological research works. We have budgeted US\$3.5 million for 2025 to continue our exploration program, including data interpretations, geochemistry, geophysical and an exploratory drilling campaign, including near mine drilling.

Sampling, Analysis and Data Verification

Several sample types have been collected as part of the production cycle to form part of the database, including underground channel, longhole sampling, core sampling, density and geotechnical sampling. Drill-hole and channel sample spacing is considered adequate for the type of deposit. Sample collection and core handling are in accordance with industry standard practices.

Quality assurance ("QA") consists of evidence to demonstrate that the assay data has precision and accuracy within generally accepted limits for the sampling and analytical method(s) used in order to have confidence in the resource estimation. Quality control ("QC") consists of procedures used to ensure that an adequate level of quality is

maintained in the process of sampling, preparing, and assaying the drill core samples. In general, QA/QC programs are designed to prevent or detect contamination and allow analytical precision and accuracy to be quantified. In addition, a QA/QC program can disclose the overall sampling – assaying variability of the sampling method itself.

At Cerro Lindo, QC samples have been inserted into the sample stream since 1996 and channel samples since 2012. The mine routinely sends in-house certified reference materials (CRMs), blanks, field (twin), coarse reject, and pulp duplicates, and external checks for analysis. Prior to Nexa’s drilling campaigns, standard reference materials (SRM) were used, however, during 2017, Nexa replaced SRMs with CRMs. No SRMs or blanks were submitted during the 1999-2001 Phase 1 drilling campaign. Since 2018, Nexa incorporated systematic external checks into the QA/QC program, and pulps have since been sent to external laboratories for analysis. Currently, CERTIMIN analyzes samples from recategorization, and infill drilling and ALS Lima analyzes samples from brownfield exploration drilling.

Mineral Processing and Metallurgical Testing

The current LOM plan continues to 2031. Test work on ore type, production blend and variability samples supported the plant designs, and included a full suite of comminution tests, flotation test work, and penalty element analysis.

Metallurgical parameters for the concentrator are well understood, and optimization and plant control is supported by ongoing research and development geometallurgical testing on samples of ore mainly based on: hardness work index, mineral flotation kinetics, abrasion index, flotation reagent scheme evaluation, flotation kinetics, grind sensitivity, mineralogy and routine circuit evaluations.

The main objectives of geometallurgical studies are to reduce risk in:

- the variability tonnage of the plant and consumables;
- the recovery of valuable minerals;
- the quality of the final concentrate and contaminants;
- the identification of fatal falls in new bodies; and
- the identification and characterization of domains and geometallurgical parameters.

Cerro Lindo Polymetallic Circuit, Metallurgical Performance (2022 - 2024)

	Unit	Item	2022	2023	2024
Production	tonnes		6,236,058	5,991,156	6,080,038
Mill Head Grade	g/t	Ag	27.55	24.99	29.00
	%	Cu	0.61	0.57	0.58
	%	Pb	0.33	0.31	0.31
	%	Zn	1.55	1.51	1.62
Cu Concentrate	%	Cu Recovery	86.37	83.66	84.51
	%	Cu Grade	26.63	26.13	24.78
	oz/t	Ag Grade	17.42	16.01	18.02
	%	Ag Recovery (to Cu)	38.80	36.39	38.33
Pb Concentrate	%	Pb Recovery	74.98	71.02	73.71
	%	Pb Grade	63.86	59.63	57.98
	oz/t	Ag Grade	70.60	70.67	75.87
	%	Ag Recovery (to Pb)	31.31	32.11	32.07
Zn Concentrate	%	Zn Recovery	87.39	86.36	87.60
	%	Zn Grade	56.34	56.89	55.82

Mineral Reserve Estimate

The Mineral Reserves estimate dated December 31, 2024, is reported using the 2014 CIM Definition Standards and was based on costs and modifying factors from the Cerro Lindo Mine. The Mineral Reserves are estimated at an NSR cut-off value of US\$44.94/t processed. A number of incremental material (with values between US\$33.33/t and US\$44.94/t) was included. A minimum mining width of 7.0 m was used, inclusive of extraction factors and dilution are applied based on stope type and location. The NSR cut-off value is determined by using the

mineral reserve metal prices, metal recoveries, concentrate transport, treatment and refining costs, as well as mine operating costs. Metal prices used for Mineral Reserves are based on consensus, long-term forecasts from banks, financial institutions and other sources. Mineral Reserves estimates are based on average long-term metal prices of zinc: US\$2,864.90/t (US\$1.30/lb); copper: US\$9,095.61/t (US\$4.13/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades are 87.86% for Zn, 84.47% for Cu, 65.65% for Pb, and 68.78% for Ag. The current LOM plan continues to 2031.

Mineral Resource Estimate

The Cerro Lindo Mineral Resource estimate dated December 31, 2024, is reported using Datamine Studio RM (“Datamine”) and Seequent’s Leapfrog Geo (“Leapfrog”) software. Wireframes for geology and mineralization were constructed in Leapfrog based on geology sections, assay results, lithological information, underground mapping and structural data. Assays were capped to various levels based on exploratory data analysis and then composited to 2.5 m lengths. Wireframes were filled with blocks sub-celled at wireframe boundaries. Blocks were interpolated with grade using the Ordinary Krig (“OK”) and Inverse Distance to the cube (“ID3”) interpolation algorithms. Block estimates were validated using industry standard validation techniques. Classification of blocks used distance-based and other criteria. Mineral Resources estimates were reported using all the material within resource shapes generated in Deswik Stope Optimizer (“DSO”) software. The estimate satisfied the minimum mining width of 4.0 m for resource shapes and used NSR cut-off value of US\$44.94/t. Mineral Resources estimates are based on average long-term metal prices of: zinc: US\$3,294.64/t (US\$1.49/lb); copper: US\$10,459.95/t (US\$4.74/lb); lead: US\$2,412.07/t (US\$1.09/lb); and silver: US\$28.55/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades are 87.86% for Pb, and 68.78% for Ag.

Mining Operations

Mining Methods

Cerro Lindo has been operating since July 2007, recently at rates of approximately 6 Mtpa. The mining method utilized is sub-level longhole stoping with sub-level intervals of up to 30 m in height. The mine is mechanized, using rubber-tired equipment for all development and production operations. Mining is carried out in ten separate orebodies, using large longhole stoping methods, in a primary/secondary/tertiary sequence. Stopes are backfilled with a low-cement content paste fill made from flotation tailings.

The highest operating level is the 1,970 m level, the lowest operating level is the 1,520 m level, and the ultimate bottom level is planned to be the 1,490 m level. Mine access is through 14 portals, in which 8 are prepared for access and 6 exclusives for ventilation use. The majority of the ore is delivered to grizzlies on the 1,830 m level that feed the jaw crusher installed on the 1,820 m level. Crushed ore is delivered to the surface stockpile via inclined conveyor through a portal at the 1,940 m level. From the surface stockpile, ore is delivered to the concentrator via a system of inclined overland conveyors.

The Cerro Lindo Mine does not produce any significant quantities of water and exploration drilling to date has not intersected any water-bearing structures that could introduce major inflows into the mine.

Processing and Recovery Operations

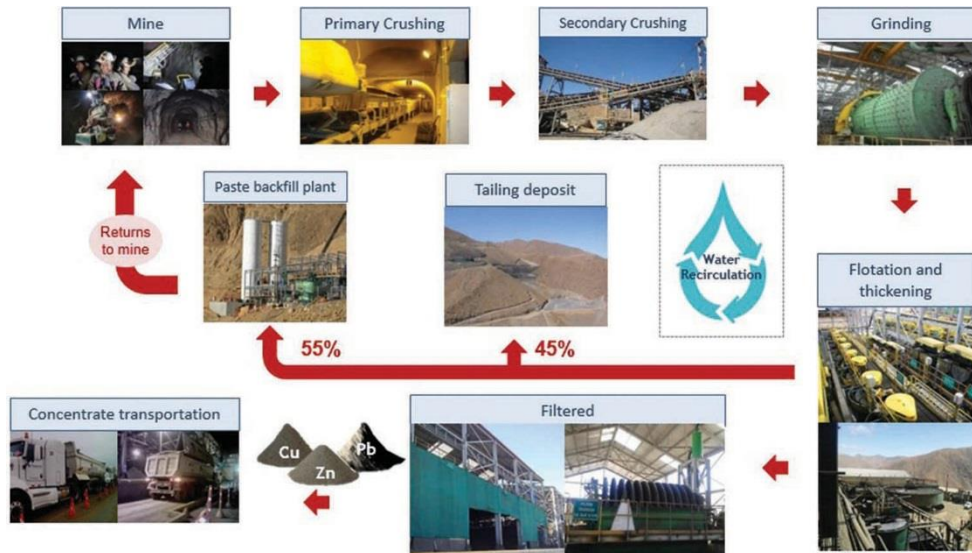
The Cerro Lindo processing plant is located on a ridge adjacent to the mine and is at an altitude of 2,100 to 2,200 MASL. The plant commenced operations in 2007 with a processing capacity of 5,000 tpd, however, has since been expanded to a name-plate capacity of 21,000 tpd. Processing consists of conventional crushing, grinding, and flotation to produce separate copper, lead, and zinc concentrates. The tailings are thickened and filtered for use as backfill or trucked to the dry stack tailings storage facility.

Filtered lead, copper and zinc concentrates are transported by road to the Port of Callao for sale in the case of lead and copper concentrates, and to Nexa Cajamarquilla’s zinc refinery for the treatment of zinc concentrate.

Final tailings consist of zinc scavenger tails. The tails are directed to the tails’ thickener. The thickened underflow is divided, with a portion going to the paste-backfill plant, and the remainder going to the dry-stack tailings filtration plant. The split ratio between tailings to paste backfill and dry stack tailings is 45:55.

Water is supplied from a desalination plant located at the coast, with a production capacity of 60 L/s and is pumped 60 km to the mine site. This is sufficient to supply the requirements for make-up water and potable water (treated at the mine site). Most of the processed water required is recovered from tailings thickening and filtration and is returned to the three 3,600 m³ water storage tanks. Approximately 90% of total tailings water is recovered and recycled to the plant as process water.

Cerro Lindo Simplified Overall Process Material Flow Diagram



Infrastructure, Permitting and Compliance Activities

Project Infrastructure

All key infrastructure required for mining and processing operations is constructed. This includes the underground mine, access roads, powerlines, water pipelines, desalination plant, offices and warehouses, accommodations, process plant/concentrator, conveyor systems, waste rock facilities, temporary ore stockpiles, paste-fill plant, and the dry-stack tailings storage facilities.

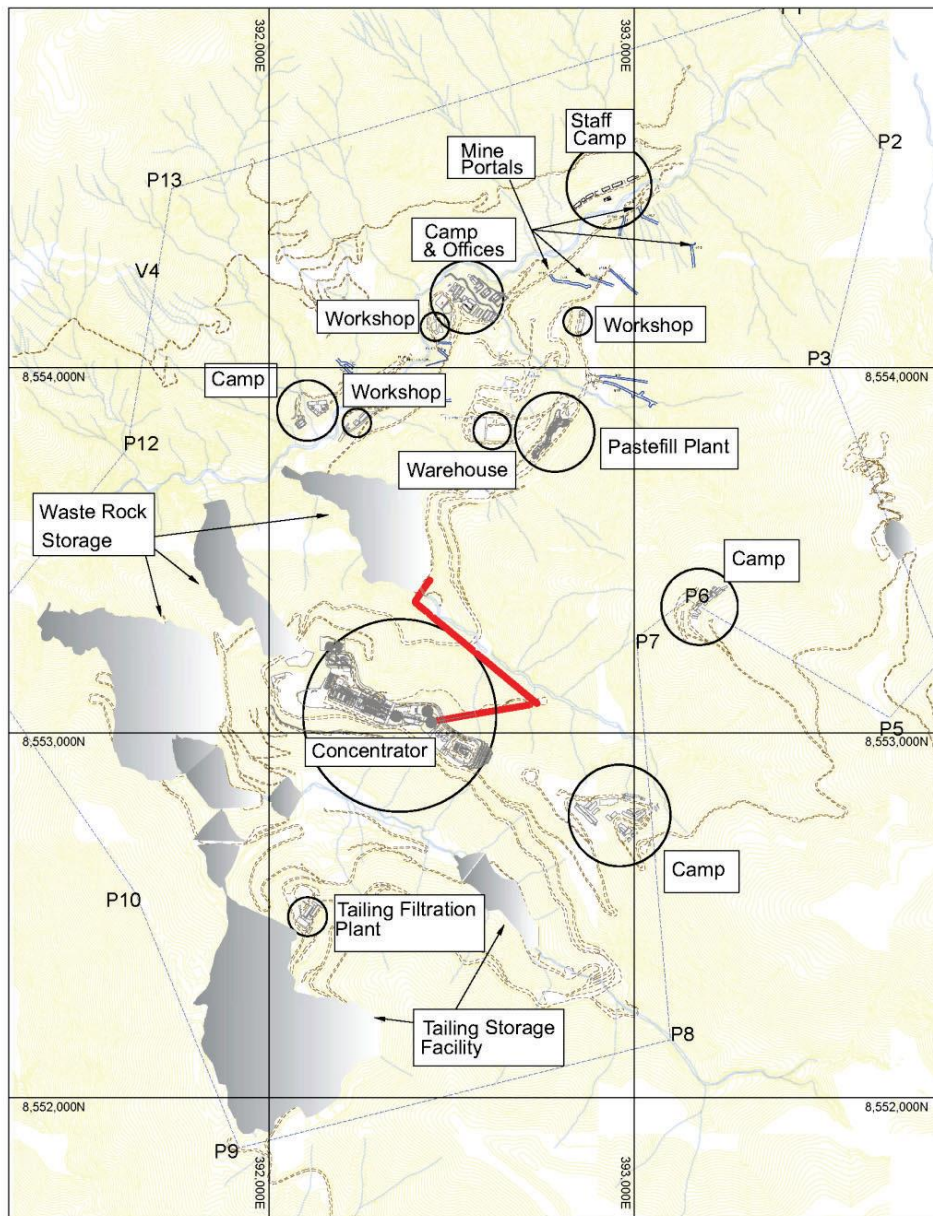
Access to the mine site is via paved highway to Chincha (180 km from Lima), followed by a 60 km unpaved road. The unpaved road covers a significant gain in elevation and has a number of narrow sections that restrict speeds for heavy haulage. Nexa maintains rest stops at wide areas and enforces safe speed limits on employees and contractors.

Electrical power is provided to the mine is supplied via the National Grid. The overall site demand to sustain a production rate of 21,000 tpd is approximately 36.5 MW. The mine has a backup generator to support the main ventilation system.

There is no freshwater withdrawal from natural water bodies at the Cerro Lindo Mine site, and the mine obtains very little water from the underground mine workings. Approximately 40% of total demand is extracted from five local groundwater wells/boreholes. The remaining 60% of industrial fresh water is supplied from a desalination plant located on the coast. The pumping system from the desalination plant is divided into three stages to transport the water approximately 45 km to an elevation of 2,200 m. Three pump stations are located along the six-inch pipeline route from the desalination plant to the mine site.

Service water is primarily used underground for drilling water, cooling, dust control, and concrete/shotcrete service. Service water is provided from a central plant-wide source and distributed underground via a system of pipelines to all working areas. Service water is collected and pumped to the surface where it is treated for re-use. The following figure is a site layout plan.

Site Layout Plan of Infrastructure



Environmental, Permitting and Social Considerations

The most recent modification of the Environmental Impact Assessment, the Second Modification of the Environmental Impact Assessment (MEIA 2024), was approved and was carried out in 2024. Cerro Lindo has a PMA, which addresses mitigation measures and monitoring programs for discharges of industrial and domestic effluents, quality of surface waters and sediments, quality of groundwater, surface flow, air quality (emissions of particulate matter and gases), non-ionizing radiation, noise, vibrations, soil quality, terrestrial and aquatic flora, and terrestrial and aquatic fauna. The most recent update of the environmental plan was presented at the MEIA 2024.

Tailings from the process plant are thickened and then further dewatered in either the paste plant to be deposited underground, or to the filter plant to the south of the processing plant to be filtered and subsequently placed in two dry-stack storage facilities, Pahuaypite 1 and Pahuaypite 2. As much as 90% of the process water from dewatered tailings is recycled with industrial fresh water being supplied from a desalination plant at the coast to meet site and process water make-up requirements. The mine site operates with a zero-water discharge commitment.

In 2024, the 4th amendment to the formal Mine Closure Plan for the mine components was submitted for evaluation in the context of Peruvian legislation. Nexa is currently awaiting government approval for the amendment.

The Mine Closure Plan addresses temporary, progressive and final closure actions, and post-closure inspection and monitoring.

Nexa adheres to international standards to provide best practices for public reporting on economic, environmental, and social impacts in order to help Nexa and its shareholders and stakeholders understand their corporate contribution to sustainable development. The Company has an integrated management system that establishes guidelines that govern the conduct of the businesses, with a focus on quality management of environmental, health, and workplace safety and social responsibility issues. In addition, the Company follows applicable environmental laws and regulations pertaining to its business in each country where it operates.

Cerro Lindo holds a number of permits in support of the current operations. The permits are Directorial Resolutions issued by the Peruvian authorities upon approval of mining environmental management instruments filed by the mining companies. Nexa maintains an up-to-date record of the legal permits obtained to date. Nexa uses an ISO 14001 compliant environmental management system at Cerro Lindo to support environmental management, monitoring and compliance with applicable regulatory requirements during operation.

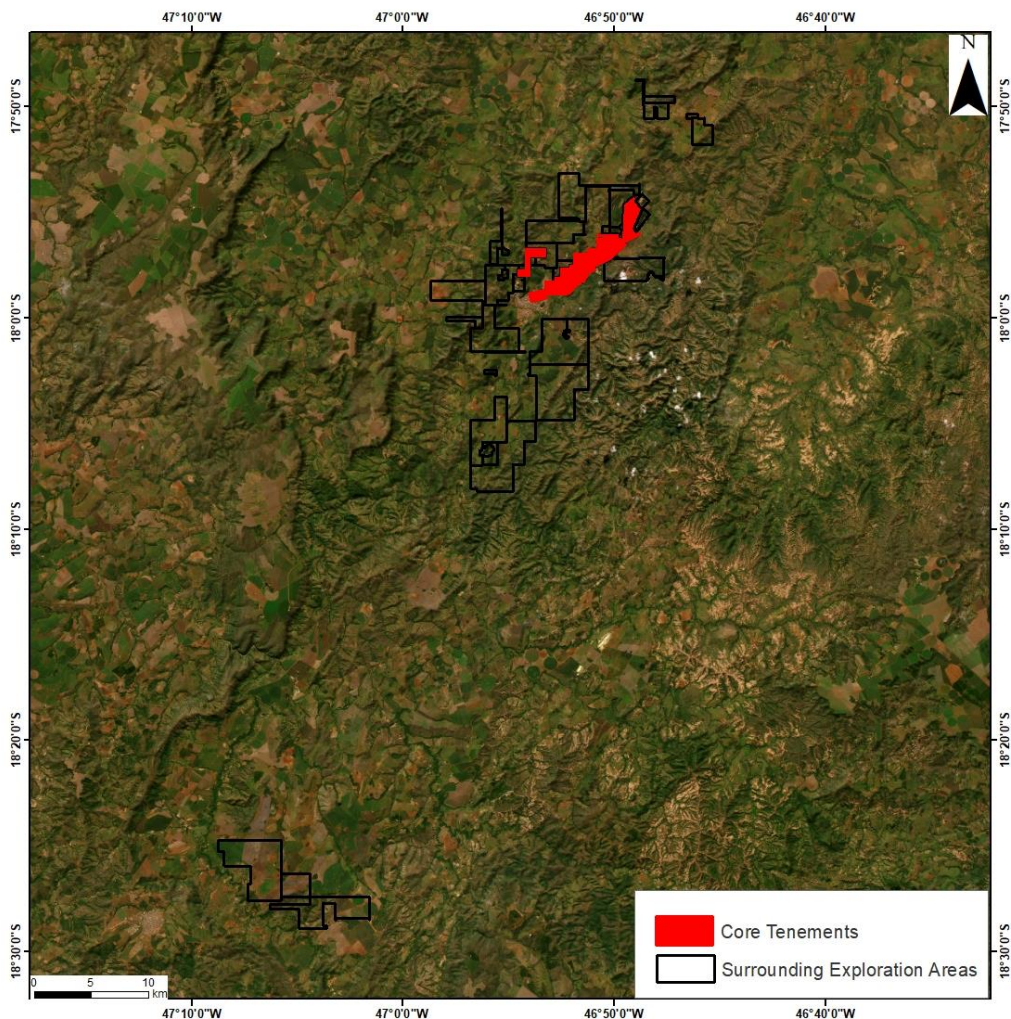
Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

Nexa Recursos Minerais S.A. (“Nexa Brazil”) owns 100.0% of the Vazante mine. Mineral concessions are divided into core tenements, where the known mineral deposits are located and where we have active mining operations and the surrounding exploration concessions. Nexa Brazil holds three mining concession applications, nine mining concessions, and one group of mining concessions in the core area with a total area of 2,174.5 hectares. The group of mining concessions comprises six mining concessions, totaling an area of 819.5 hectares. The Mineral Reserves and Resources are located within the limits of two mining concession applications, two exploration authorizations and four mining concessions with a total area of 1,595.7 hectares, which host the active mining operations. One mining concession (tenement # 14,840/1967), which is part of the group of mining concessions, has the potential to host zinc and lead mineralization, however it does not yet have associated Mineral Reserves and Mineral Resources.

Nearby the main area, Nexa Brazil also holds, 27 exploration authorizations totaling 17,145.6 hectares and one right to apply for mining concession totaling 344.5 hectares, in addition to the core tenements. Nexa Brazil holds surface rights sufficient to support the current operations. Some surface rights agreements require annual payments to the owners. Two easements have been granted in support of the mining activities. Sufficient suitable land is available within the mineral tenure held by Nexa Brazil for tailings disposal, mine waste disposal, and installations such as the process plant and related mine infrastructure.

Nexa Brazil holds surface rights sufficient to support the current operations. Some surface rights agreements require annual payments to the owners. Two easements have been granted in support of the mining activities. Sufficient suitable land is available within the mineral tenure held by Nexa Brazil for tailings disposal, mine waste disposal, and installations such as the process plant and related mine infrastructure.

Vazante Mine Mineral Tenure



Brazilian companies that hold mining concessions are subject to a royalty payment imposed by the Federal Government. For more information, see “Information on the Company—Regulatory matters—Brazilian regulatory framework—Royalties and other taxes on mining activities,” of our annual report on Form 20-F for the fiscal year ended on December 31, 2024.

Nexa Brazil holds all required licenses for water management and water use in the operations. Nexa Brazil has lodged renewal applications, where applicable, for the water management and use.

The Vazante Operation holds several permits in support of the current operations. The main instrument to regulate the Vazante Operation is a set of operating licenses issued by the COPAM from the state of Minas Gerais. The licenses are active, some of which are under renewal process.

History

Mineralization in the Vazante Operation area was initially discovered by Angelo Solis in 1933 who acquired the first mineral titles to the area. The mineral rights to the Vazante Mine portion of the Vazante Operation land holdings were first acquired by Companhia Mineira de Metais (“CMM”) in 1956. CMM later became Votorantim Metais in 2005 and more recently Nexa Resources S.A. in 2014. The original land titles for the Vazante Operation were added and expanded over the years by means of direct land acquisition (claim staking) and various option agreements and purchases. The Extremo Norte Mine portion of the current Vazante Operation land holdings was acquired by purchase in 2007.

Mechanized open pit mining at the Vazante Operation commenced in 1969. The initial mining operations exploited the supergene calamine mineralization which was formed by a mixture of hemimorphite ($Zn_4(Si_2O_7)(OH)_2 \cdot 2H_2O$) and smithsonite ($ZnCO_3$) that were derived from weathering of the primary willemite mineralization. Open pit mining operations of willemite mineralization were suspended in 2000, followed by the suspension of open pit production of calamine mineralization in 2008.

Development of the Vazante Operation underground mines began in 1983, with initial minor production of willemite mineralization taking place in 1984. Access is through two portals for Vazante and one portal for Extremo Norte. As development progresses at Extremo Norte, a connecting drift will be established from Vazante to Extremo Norte. The underground mines exploit the primary willemite mineralization (Zn_2SiO_4) along with minor to trace amounts of sphalerite.

Historical ore production and zinc grade figures are shown in the table below.

Production of Vazante (2021 - 2024)

	Unit	2022	2023	2024
Tonnage	Mt	1.52	1.63	1.77
Zn Grade	%	9.97	10.19	9.22
Pb Grade	%	0.33	0.33	0.28
Ag Grade	oz/t	0.63	0.67	0.63
Ag Grade	g/t	19.50	20.99	19.56

Geological Setting, Mineralization and Deposit Types

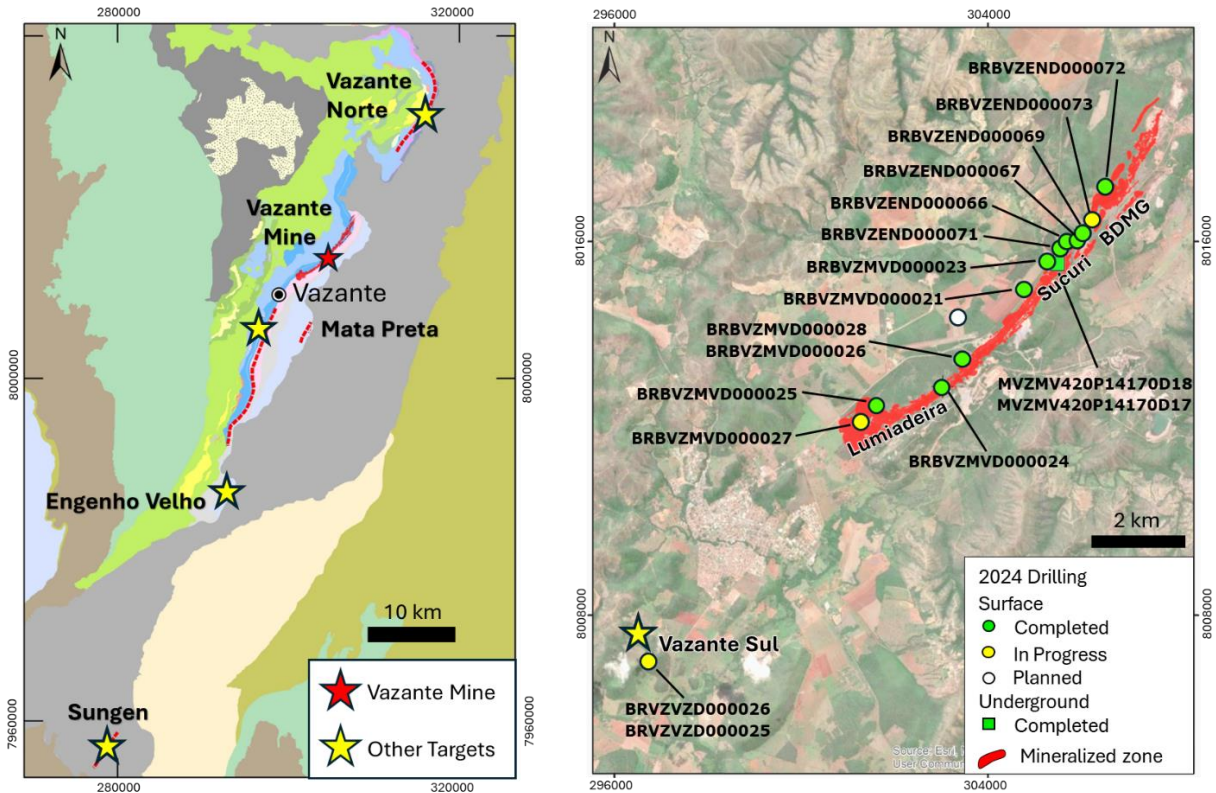
The geology of the Vazante Operation area consists of a sequence of pelitic carbonate rocks belonging to the Serra de Garrote and Serra do Poço Verde formations of the Vazante Group. The currently known mineralization has been traced along a strike length of approximately 10.5 km, extending from the southern end of the Vazante Mine to the northern limits of the Extremo Norte Mine.

The zinc-lead-silver mineralization at the Vazante Operation is hosted by the Vazante Shear Zone which has been traced by drilling and sampling along a strike length of approximately 12 km. The Vazante Shear Zone has a general strike of azimuth 50° and dips approximately 60° to the northwest at surface. The hanging wall lithologies of the Vazante Shear Zone are comprised of dolostone and sericitic phyllite, slates and marl units of the Serra do Poço Verde Formation while the footwall lithologies to the Vazante Shear Zone are dominated by dark grey dolostones of the Upper Morro do Pinheiro Member. Drilling information indicates that the dip of the zinc mineralized zone gradually decreases with depth in the southern portions of the structure.

The zinc mineralization at the Vazante and Extremo Norte mines is composed largely of hypogene zones that are composed mainly of willemite (Zn_2SiO_4) veins, veinlets, and stockworks that are hosted by sphalerite-rich carbonate. The mineralization typically contains willemite (50% to 70%), dolomite (10% to 30%), siderite (10% to 20%), quartz (10% to 15%), hematite (5% to 10%), zinc-rich chlorite (5% to 10%), barite (<5%), franklinite (<5%), and zincite (<5%), with subordinate concentrations of magnetite and apatite (Monteiro *et al.*, 2006). Lead and silver are also recovered from the hypogene mineralization is produced from the Vazante Operation. While no detailed studies regarding the specific lead and silver bearing minerals have been carried out on samples of the hypogene mineralization, several detailed mineralogical studies have been conducted using concentrate samples. It is remarkable that the majority of the lead mineralization in the concentrates has been found to be related to galena (PbS), with lesser amounts of lead being contained in cerussite ($Pb(CO_3)$). Mineralogical studies have indicated that the silver values are contained in the minerals acanthite (Ag_2S) and jalpaite (Ag_2CuS_2).

Supergene zones of zinc-rich mineralization have been developed in the near-surface portions of the hypogene mineralized zones. These supergene zones are referred to as the calamine zones at the Vazante Operation. The calamine mineralization is composed principally of smithsonite ($ZnCO_3$) that includes subordinate amounts of hemimorphite ($Zn_4(Si_2O_7)(OH)_2 \cdot H_2O$) and quartz. The calamine mineralized zones were derived from the weathering of the primary willemite mineralization. The figure below shows the geological setting of the Vazante area.

Geological Map and Local Mineralized Zones



Exploration

Zinc was first discovered at the Vazante Operation in 1951 when areas of gossan and calamine mineralization were discovered in surface outcrops. Since 1951, exploration has largely consisted of geological mapping and geophysical surveying, with minor amounts of geochemical sampling programs being carried out to locate outcropping mineralized zones. In the Vazante Operation area, exploration programs (including drilling) have strategically been carried out in support of extensions of mining operations, including the possibility of deepening of the mine infrastructure.

Mineral exploration activities in 2024 were focused on expanding the mineralization of known ore bodies, such as Extremo Norte, Sucuri, Vazante Sul and Lumideira. In 2024, we experienced drilling delays related to operational problems of drilling in carbonate rocks of the Vazante deposit, but such delays did not significantly interfere with the results of the exploration campaign. We are conducting ongoing tests to explore extensions of known

mineralization, intensifying drilling in areas near the mine and identifying other areas where mineralization may be present.

Drilling

In 2024, we completed approximately 8.3 km of diamond drilling across 14 drill holes, with an additional three drill holes currently in progress and expected to be concluded in 2025. The drilling was divided between exploratory and extension drilling. The focus of the near mine extension drilling was on the extension of the Vazante mine ore bodies, exploring the targets Extremo Norte, Vazante Sul and Sucuri Norte, which confirmed the mineralized system and opened lateral and depth continuity.

In 2025, Nexa intends to continue extending the near mine orebodies such as Sucuri, Varginha, Lumiadeira and Vazante Sul, as well as converting inferred resources into indicated resources in the BDMG area, which was acquired in 2022. In 2024, we invested US\$3.8 million in the Vazante brownfield program for extending the LOM, which included a drilling program and geological activities. For 2025, we have allocated a budget of US\$6.4 million for the Vazante mine expect to drill 21.0 km.

Sampling, Analysis and Data Verification

Sample collection and core handling are in accordance with industry standard practices. Procedures to limit potential sample losses and sampling biases are in place. Sample intervals are consistent with the type of mineralization. Underground channel samples range from 0.5-1.5 m long, and respect lithological, alteration, mineralization, and other natural boundaries.

Prior to 2014, mine samples were analyzed by the Vazante laboratory on the mine site. The exploration samples were analyzed by an external laboratory. Samples were prepared using the mine laboratory machinery. This laboratory was not accredited. ALS, an independent laboratory, has been the primary laboratory for preparation of exploration and production samples since 2014. Samples are prepared and analyzed at either of the ALS laboratories located in Vespasiano, Minas Gerais and Goiânia, Goiás. Both laboratories are ISO 9001:2008 certified, and independent of the Company. ALS Lima performs the sample analytical step. This laboratory is independent of the Company and holds ISO 9001:2008 and ISO 17025 accreditation.

Sample analysis at the mine laboratory and ALS Lima is performed using standard procedures that are widely used in the industry. In both cases, analytical procedures are adequate to support Mineral Resource and mineralized material estimation and mine planning.

Company-wide QA/QC protocols were implemented in 2009 and have improved over time. The current program includes submission of twin, coarse and pulp duplicates, or CRMs, external controls, and coarse blank samples. Nexa considers the data to be adequately accurate and precise to support Mineral Resource and mineralized material estimation and mine planning.

Nexa staff periodically prepare reviews on sampling procedures, geological logging procedures, core drilling and core handling procedures, and QA/QC procedures. Current procedures are considered acceptable to support Mineral Resource, mineralized material and Mineral Reserve estimates. Sample data collected adequately reflect the deposit dimensions, true widths of mineralization, and the style of the deposits.

Mineral Processing and Metallurgical Testing

Zinc is the primary metal of economic importance, with minor quantities of lead as galena and associated silver minerals allowing for the production of relatively small amounts of lead concentrate as well. Due to the ore mineralogy, zinc concentrate produced at the Vazante Operation is elevated in silica, as well as calcium, magnesium, and carbonates resulting from carbonate gangue presence (predominantly dolomite). Nexa's Três Marias zinc smelter includes a circuit specifically configured to process the zinc silicate concentrate produced at the Vazante Operation and as a result all of the concentrate produced at the Vazante Operation is exclusively processed at the Três Marias smelter where zinc metal is produced.

Metallurgical studies have been completed since plant operations began in 1969. Studies incorporated mineralogy, crushing, and grinding characteristics, flotation separation testing with current and new technologies, thickening and filtering tests for concentrates and tailings and X-ray ore sorting. Much of the testwork has been completed in the Votorantim laboratory at the Vazante Operations. Studies have been supported by universities including the Federal University of Minas Gerais ("UFMG") and the University of Sao Paulo and by external

consultants and suppliers. Most studies have focused on factors affecting zinc recovery, concentrate quality and grades and costs reduction

Recent test work has focused on the reprocessing of historical tailings, ore sorting and improving recovery from calamine material (versus historical recovery) to support calamine resource evaluation. The Aroeira TSF contains both willemite and calamine tailings, with the willemite tailings generally deposited on top of the calamine tailings. The Vazante Operation currently processes tailings reclaimed by truck and front-end loader (FEL) from the Aroeira TSF. Aroeira tailings comprise a small portion of the feed to the processing plants. The most recent test work performed for Aroeira Tailing was conducted by Nexa’s technology and process teams with SGS GEOSOL support and aimed at the production of a concentrate with 39% Zn and a minimum recovery of 55%. Preliminary test work was completed on calamine samples by Nexa at the Vazante Operation with the objective of improving on the historical recovery from calamine ore (approximately 50%), with bench scale tests completed in 2017, followed by pilot tests in 2018.

In 2019, Nexa’s Vazante started its first x-ray ore sorting plant in crushing line C with very good results in zinc recovery, grade and cost reduction. Due to these results, Nexa is developing an expansion in this plant to increase crushing and sorter capacity from 40 ton/h to 140 ton/h.

In 2020, Nexa installed a new high frequency screen in crushing line C. This project generated an 8% increase in mill C throughput from 42 ton/hour to 47 ton/hour.

In 2023, the Vazante unit changed its grinding circuit C mill to increase its capacity from 45 ton/hour to 60 ton/hour.

Typical deleterious elements or compounds of zinc concentrates sourced from Vazante that could negatively affect the refining process include carbonates, magnesium oxide (MgO), and fluorine. Vazante Operation concentrate contains levels of carbonates, MgO, and fluorine close to but under the specifications. Several projects that consist in geometallurgy, carbonate separation and filtering are on course with the objective to keep the deleterious elements under its specification. The lead concentrate grade is approximately 15% Pb to 28% Pb and does not contain penalty levels of deleterious elements. Silver content ranges from approximately 2,800 g/t Ag to 3,000 g/t Ag.

The Vazante Operation’s concentrate production for the past three years is summarized in following table.

Vazante Circuit Metallurgical Performance (2022 -2024)

	Unit	Item	2022	2023	2024
Production	tonnes		1,524,637	1,633,357	1,769,646
Mill Head Grade	%	Pb	0.33	0.33	0.28
	%	Zn	9.97	10.19	9.22
	%	Pb Recovery	22.83	26.78	18.87
Pb Concentrate	%	Pb Grade	23.60	23.60	22.05
	ppm	Ag Grade	3,137.9	3,198.9	3,405.8
	%	Ag Recovery (to Pb)	49.53	52.13	42.23
Zn Concentrate	%	Zn Recovery	86.49	87.49	86.27
	%	Zn Grade	39.08	39.31	39.49

Mineral Reserves Estimate

The Vazante Mineral Reserve estimate dated December 31, 2024 is reported using the 2014 CIM Definition Standards and consider actual costs and modifying factors from the Vazante mine, as well as operational level mine planning and budgeting. The Vazante Mineral Reserves estimates consider actual costs and modifying factors from the Vazante mine and Vazante Aroeira tailings, as well as operational level mine planning and budgeting. The dilution that has been applied is related to the selected mining method. The NSR cut-off value was determined using the mineral reserve metal prices, metal recoveries, transport, treatment and refining costs, as well as mine operating costs. The Vazante mine Mineral Reserves are estimated at a NSR cut-off value of US\$70.52/t processed. A minimum mining width of 2.0 m. Recoveries for the Vazante mine at average head grades are 86.52% for Zn, 37.07% for Pb, and 42.00% for Ag. The Vazante Aroeira Tailings Mineral Reserves estimates in the table above consider actual costs and modifying factors from the Vazante Aroeira tailings, as well as operational level TSF reclaiming plan and budgeting. The Vazante Aroeira Tailings Mineral Reserves are estimated at a NSR cut-off value of US\$28.42/t processed. A minimum mining unit of 10m x 10m x 2m was applied. Recoveries for Vazante Aroeira Tailings at average head grades are 67.98% for Zn, 36.00% for Pb, and 42.00% for Ag. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Long-term metal prices used for Mineral Reserves are based on consensus and long-term forecasts from banks, financial institutions and other sources. Mineral Reserves estimates are based on average long-term metal prices of: zinc: US\$2,864.90/t (US\$1.30/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz. The current LOM plan, based in our current reserves, continues to 2032.

Mineral Resources Estimate

The Vazante Mineral Resources estimates dated December 31, 2024 were completed using Datamine and Leapfrog software. The Mineral Resources at Vazante comprise three styles of mineralization. The first style of mineralization is represented by the hypogene (Willemite) mineralized zones that are found in the underground portions of the Vazante and Extremo Norte deposits. The second style of mineralization is represented by the supergene (Calamine) mineralized zones found in the Cava 3A, Matas dos Paulistas, and Braquiara areas of the Extremo Norte and Vazante deposits. This supergene (Calamine) mineralization is referred to at the Vazante Operation as calamine mineralization and comprises a mixture of smithsonite and hemimorphite minerals. The third type of mineralization comprises tailings that are contained within the Aroeira TSF. The material found in the Aroeira tailings comprise a mixture of hypogene (willemite) and supergene (calamine) minerals. Mineral Resources estimates for the underground hypogene (willemite) mineralization are prepared within reporting panels using the native functions and workflows available through the Deswik mine modelling software package considering spatial continuity, a minimum width of 3.0 m and a NSR cut-off value of US\$70.52/t for Hypogene Mineralization (Willemite). The Mineral Resources estimates for the supergene (calamine) mineralization are prepared using an open pit shell that considers appropriate metal prices, mining costs, metallurgical recoveries and geotechnical considerations with NSR cut-off value of US\$27.91/t for soil and US\$32.92/t for fresh rock and transition material. The Mineral Resources estimates for the tailings at Vazante are reported considering the material with an NSR value of greater than US\$28.42/t which lies above the original topographic surface. Mineral Resources estimates are based on average long-term metal prices for Willemite and Aroeira TSF of: zinc: US\$3,294.64/t (US\$1.49/lb); lead: US\$2,412.07/t (US\$1.09/lb); and silver: US\$28.55/oz, and for Calamine of: zinc: US\$3,250.30/t (US\$1.47/lb) Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average: hypogene head grades are 86.52% for Zn, 37.07% for Pb, and 42.00% for Ag, supergene (calamine) is 55.00% for Zn, and tailings are 67.98% for Zn, 36.00% for Pb, and 42.00% for Ag.

Mining Operations

Mining Methods

The Vazante Operation consists of two mechanized underground mines, the Vazante Mine and Extremo Norte Mine. The treatment plant current capacity is approximately 1.8 Mtpy, including tailings retreatment. The mineralized zones dip between 45° and 70° and the mine extends over a strike length of five km. With the addition of the North Extension, this will increase to approximately 10 km.

The Vazante Mine currently extends over a vertical depth of 500 m from surface to the 140 level. There are former open pits along portions of the strike of the Vazante deposit. There are two access ramps to the Vazante Mine and one to the Extremo Norte Mine. Mine headings range from 5 m high by 4.5 m wide ore drives to 6 m high by 5 m wide main ramps.

The Vazante Operation is designed based upon mechanized longitudinal longhole stoping for areas with a dip greater than 45°. Longhole stopes are developed with footwall access drives parallel to the orebody. Crosscuts are driven from the footwall drive and then the ore is developed along strike. Sublevels are typically 30 m apart though the distance varies depending on the orebody. Longholes are often a combination of downholes or VRM and uppers or sublevel longhole open stopes (“SLOS”). Both longhole methods employ a retreat sequence along strike. The SLOS stopes are not backfilled where the VRM stopes are backfilled.

The Vazante Operation has a fleet of mobile equipment to enable development and production activities to be completed in an efficient manner while meeting all mine regulatory requirements for underground mining operations.

Dewatering at the Vazante Operation is a critical aspect of the mine operation as a high rate of dewatering is required to enable mining to be carried out in a safe and efficient manner on a continual basis. A significant amount of water is pumped to surface for discharge. The total pumping system has a capacity of 16,000 m³/h plus a secondary 2-stage pumping station (PS300-PS500) with total capacity of 3,500 m³/h. The two pumping stations combined have a total capacity of about 19,500m³/h.

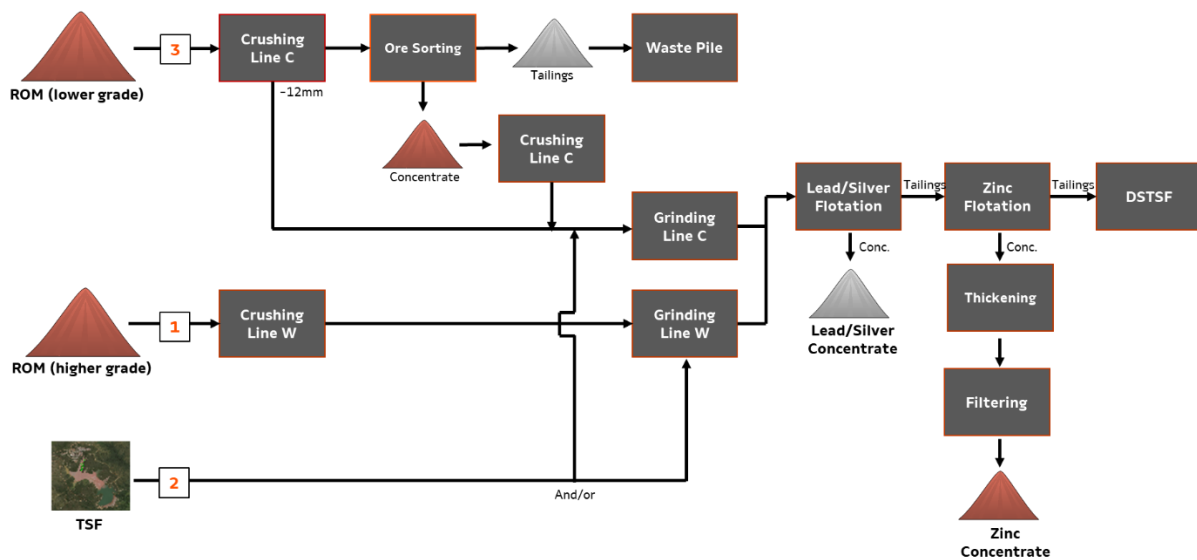
Processing and Recovery Operations

The Vazante Operation processing facilities have a nominal design processing capacity of approximately 5,000 tpd or 1.7 Mtpa at 96% utilization and produce approximately 350,000 tonnes per annum (tpa) to 370,000 tpa of zinc concentrate and approximately 4,000 tpa to 5,000 tpa of lead concentrate that contains small amounts of silver. They consist of two adjacent plants, Plant C and Plant W, that are interconnected at various points.

Processing at the Vazante Operation comprises unitary processes such as crushing, ore sorting, grinding, flotation, concentrate dewatering, TSF recovery, water treating and tailings disposal. The main difference between the two plants is that Plant C incorporates an ore sorting plant to increase lead and zinc grade and reduce costs. Both plants include crushing, grinding, and zinc flotation. Combined Plant W and Plant C tailings are thickened and filtered prior to disposal in the Pilha Garrote dry stack TSF (“DSTSF”).

Zinc concentrates are trucked in bulk approximately 250 km to Nexa’s Tres Marias smelter while lead—silver concentrates are exported.

Simplified Flowsheet of the Current Vazante Processing Facilities



Infrastructure, Permitting and Compliance Activities

Project Infrastructure

The Vazante Operation is immediately adjacent to a public highway and situated approximately 8.5 km from the town of Vazante. Site access is via paved roads to the mine office. All infrastructure required for the current mining and processing operations has been constructed and is operational. This includes the underground mines,

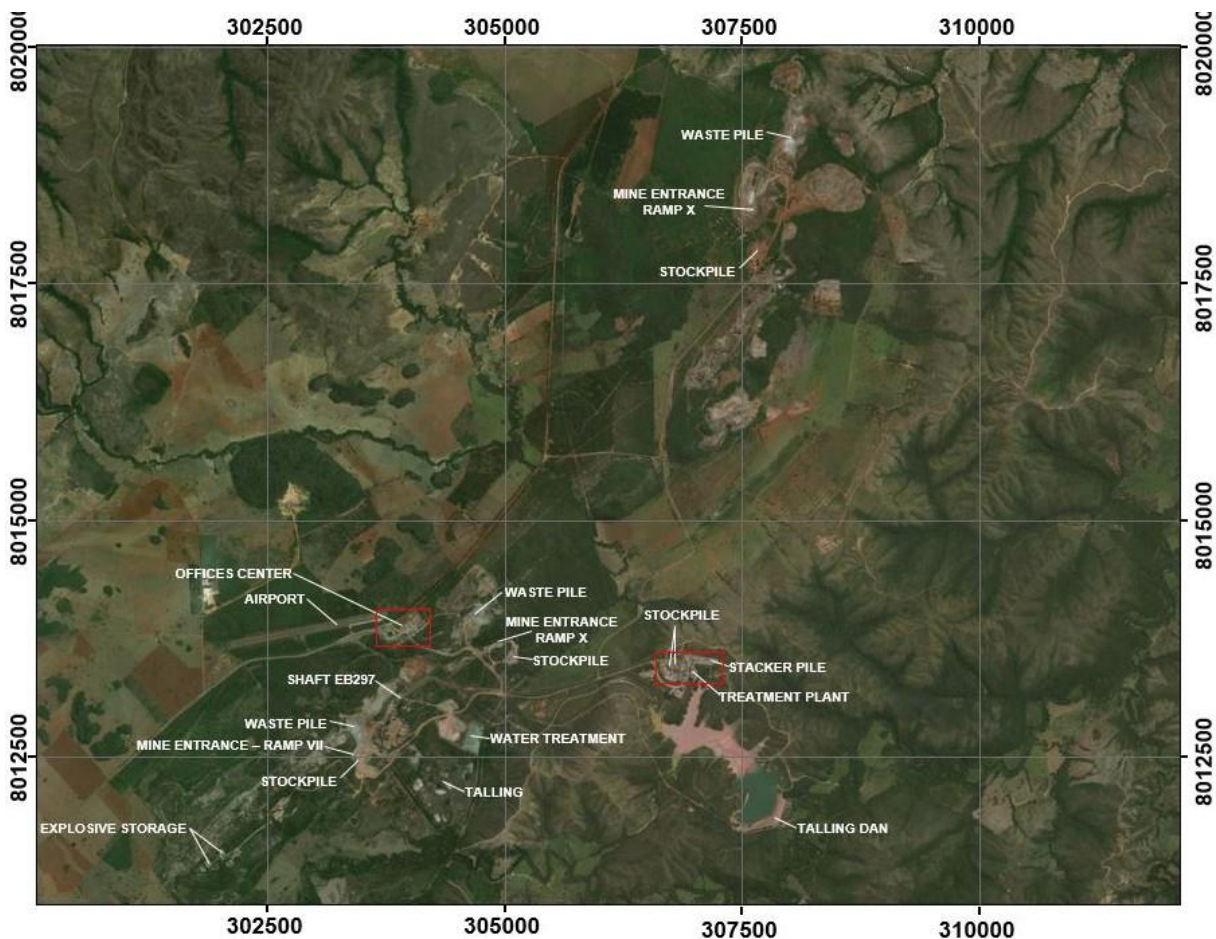
access roads, powerlines, water pipelines, offices and warehouses, process plant/concentrator, conveyor systems, waste rock facilities, temporary ore stockpiles, and tailings storage facilities.

The surface and underground infrastructure of the Vazante Operation include:

- Seven open pit mines that have exploited the near-surface calamine mineralization.
- Two underground mines (Vazante and Extremo Norte) that together extend for a strike length of approximately nine km and to a depth of approximately 500 m from surface.
- An ore blending and reclaim facility.
- Two processing plants, Plant W and Plant C, totalizing throughput capacity at 1.7 Mtpa.
- Several TSFs (three active).
- A core logging and sampling facility.
- Warehousing.
- An assay laboratory.
- A millwright and electrical shop.
- An administrative building.
- A first aid station.

The power supply to the Vazante Operation is provided by two independent 138 kV transmission lines that feed the site and that can provide up to 55 MW.

Site Layout Plan



Environmental, Permitting and Social Considerations

The Vazante operation has a dewatering system whose most of the groundwater has a non-consumptive use and it is discharged back to the environment. Industrial effluents from the Vazante Operation are directed to the Aroeira TSF, together with surface runoff from the crushing area, chemical laboratory area, and channel network for surface water collection. Underground mine dewatering is pumped to surface and conveyed via gravity to the Aroeira TSF tailings pond through a concrete channel. Water is pumped from the Aroeira TSF to offset make up water requirements for ore processing. Excess water collected in the Aroeira TSF is released to the Santa Catarina River. Dewatering from the Extremo Norte Mine is pumped to a sediment sump prior to release to the Ouro Podre stream.

Tailings are currently disposed of in the Pilha Garrote DSTSF as filtered tailings, and at the Aroeira TSF as a slurry. The Pilha Garrote DSTSF is the primary TSF. Waste rock is used for backfilling or disposed of at surface in mined-out open pits.

Six Environmental Impact Assessments (“EIAs”) complemented with other studies have been developed since 2000 to identify potential environmental effects resulting from project activities for the construction, operation, and closure stages. The mitigation measures are mostly addressed through a number of environmental control programs (including environmental monitoring) presented in the EIAs.

The Vazante Operation holds several permits in support of the current operations. The main instrument to regulate the Vazante Operation is a set of operating licenses issued by the COPAM from the state of Minas Gerais. These licenses are currently active, some of them under renewal process.

Periodically, the operation unit sends several reports to the local authorities in compliance with environmental control and monitoring programs necessary for maintenance of operating licenses.

The closest community is the municipality of Vazante, located 8.5 km from the Vazante Operation with a population of approximately 20,692 residents. The closest major urban center is Brasilia, approximately five hours away via roadways, with a population of approximately 4.7 million residents.

The most recent Mine Closure Plan was prepared in 2022. The Mine Closure Plan has been designed to address remediation of the operational areas, and to meet Brazilian engineering requirements for such plans at a conceptual level. The plan identifies three key phases: pre-closure, closure, and post-closure. Most facilities will be dismantled, and equipment removed from the site. Underground openings will be sealed, and groundwater levels will be allowed to stabilize.

Vazante Operation is a positive contribution to sustainability and community well-being. Nexa has established and continues to implement its various corporate policies, procedures, and practices in a manner consistent with relevant IFC PSs. Nexa has, and continues to make, a positive contribution to the communities most affected by the site operations and has done a thorough job in documenting potential effects on stakeholders and protecting the rights, health, and safety of its employees.

Cerro Pasco Complex

*The most recent NI 43-101 technical report with respect to Cerro Pasco Complex is the technical report titled “Technical Report on The Cerro Pasco Complex Integration, Pasco Province, Central Peru” dated March 27, 2024 (the “**Cerro Pasco Complex Technical Report**”) prepared by SLR Consulting Ltd. The Cerro Pasco Complex Integration Technical Report has been filed in accordance with NI 43-101, and is available under Nexa’s SEDAR+ profile at www.sedarplus.ca.*

Certain of the scientific and technical information set out herein with respect to Cerro Pasco Complex is based on information presented in the Cerro Pasco Complex Integration Technical Report. The Mineral Resources for the Cerro Pasco Complex have been estimated by Nexa as of December 31, 2024. The Qualified Person for the Mineral Resources estimate is Jerry Huaman Abalos, B.Geo., MAusIMM CP (Geo), a Nexa Resources employee. Jerry Huaman Abalos has also reviewed and approved certain information set out herein that has been updated since the date of the Technical Report. The Qualified Person for the Mineral Reserves estimate is Renzo Suarez, B.Eng., MAusIMM., a Nexa Resources employee. Renzo Suarez has also reviewed and approved certain information set out herein that has been updated since the date of the Cerro Lindo Technical Report.

The Cerro Pasco Complex consists of the El Porvenir underground mine, which produces zinc, copper, lead, silver and gold; the Atacocha San Gerardo open pit mine, producing zinc, lead, silver and gold; and the Atacocha underground mine, which has been suspended since 2020 and remains under care and maintenance due to our efforts to reduce costs and improve our operational efficiency.

The Atacocha and El Porvenir mines are located in Peru, specifically in the province of Pasco, which is a region recognized for its intensive mineral economic activities, where many polymetallic mines have been operating for several decades.

El Porvenir is an underground mine with multiple accesses and a shaft where the mined ore is extracted and where workers and inputs are also transported. There are multiple accesses to the Atacocha underground mine from the surface and the mine is currently connected to the El Porvenir mine through two active tunnels located at 4070 and 3300 levels. These tunnels are used by operators of heavy mine equipment and conventional trucks, as well as for transporting mining crews between the Atacocha surface and the El Porvenir mine.

Currently, production from the Atacocha San Gerardo open pit mine feeds the Atacocha processing plant with a nominal throughput capacity of 4,400 tonnes of ore per day, while production from the El Porvenir underground mine feeds the El Porvenir processing plant with a nominal throughput capacity of 6,500 tonnes of ore per day. The Atacocha processing plant is expected to be decommissioned by 2027, when the Atacocha San Gerardo pit reaches the end of its mine life based on our current depletion schedule.

Project Setting

The Cerro Pasco Complex integration project (“Integration Project”) involves the continued integration of the El Porvenir and Atacocha underground mines. The Cerro Pasco Complex is a material property for the purposes of S-K 1300 comprising the two mines, El Porvenir and Atacocha. The Integration Project is intended to continue to capture synergies between the two mining operations, as a result of their proximity and operational similarities, with ore from both the underground mines being processed at the El Porvenir processing plant. The goal of the Integration Project is to achieve cost and investment savings, thereby reducing the environmental footprint and extending the combined LOM of the two mines.

The Integration Project has been developed over the past few years. The first stage involved the administrative integration of both mines, completed in 2014. The second stage, completed in 2015, involved the integration of the tailings disposal system, which allowed the Atacocha plant to send its tailings to the El Porvenir dam in the short-term, thus contributing to the reduction of our environmental footprint. Operations of the integrated tailings disposal system began in 2016. The third stage, completed in 2016, involved the construction of a new 138-kilovolt (“kV”) energy transmission line connecting both mines, replacing the two previous 50 kV transmission lines. The fourth stage, concluded in 2019, involved the development of a 3.5 km tunnel connecting both underground mines, allowing us to initiate exploration programs in the integration zone between the two mines.

In 2021, modernization and debottlenecking studies to assess the mine deepening and the extension of the LOM of El Porvenir were postponed due to Nexa’s capital allocation strategy and the reassessment of the integration with the Atacocha underground mine. In 2022, we advanced the Integration Project with an optimization study to

evaluate the increase in capacity of our tailings and El Porvenir shaft, in addition to enhancing the El Porvenir processing plant to potentially increase production and extend the LOM of both mines.

In 2023, we continued to advance the technical studies of the Integration Project, aiming to develop a robust organic growth option for Nexa. The technical studies for the Integration Project covered diverse areas, from planning to projects to sustain and expand production, such as studies for underground interconnection, shaft upgrade, engineering assessments, and key routes to increase capacity to provide a long-term solution for tailings disposal. A Front-End Loading 3 (“FEL3”) study to increase the El Porvenir hoisting was completed in 1Q23 and a FEL3 tailings pumping system study was also completed in 2Q23. As a result of the advancements in technical studies in 2023, we increased the overall Mineral Reserves of the El Porvenir and Atacocha mines in the Cerro Pasco Complex, as of December 31, 2023.

In 2024, Nexa achieved important milestones in the Integration Project. During the fourth quarter of 2024, our Board of Directors, through the Finance Committee, approved the first phase of the Integration Project – the tailings pumping and piping system, following a recommendation from the Sustainability and Capital Projects Committee. This phase aims to expand tailings storage capacity at the Cerro Pasco Complex, thereby extending substantially the operational life of the site. Additionally, we developed an investment plan consisting of two phases that includes constructing a tailings treatment plant and its auxiliary structures at El Porvenir, and the second involves installing a 6 km pipeline (mostly underground) to connect El Porvenir to Atacocha’s tailings storage facility. This initiative will enable the Cerro Pasco Complex to operate for over a decade and represents a pivotal step toward sustainability.

Construction of the tailings pumping and piping system is expected to begin in the second quarter of 2025. As part of the first phase of the project, investments to raise the El Porvenir Tailings dam and expand Atacocha’s tailings storage capacity are already in progress. Studies for the second phase of the project, which includes the underground connection of the mines and the El Porvenir shaft upgrade are progressing well and are expected to be completed by the third quarter of 2025.

The capital expenditure for the tailings pumping system is estimated to be between US\$85 million and US\$90 million, with investments planned from 2025 to 2026, with operations expected to commence in 2027. During the first phase, we intend to upgrade the tailings facilities at both El Porvenir and Atacocha, as well as improve water and effluent treatment systems, with construction planned for 2027-2028 following the completion of environmental impact assessments. In the second phase, we aim to build an additional 2.3 km underground tunnel at a deeper level to connect the El Porvenir and Atacocha Mines and upgrade the El Porvenir shaft, which is expected to unlock access to high-grade mineral resources. Support activities, such as technical reviews, environmental studies, and community engagement, are also progressing as planned. We are confident in the long-term value this project will generate for Nexa and remain focused on its successful execution.

The Integration Project plan includes, among other areas:

- (i) the restart and rehabilitation of the Atacocha underground mine, revitalizing operations to improve production capacity;
- (ii) the development of an additional 2.3 km long connection tunnel (Tunnel 2900), which will connect the Atacocha underground mine to the base of the El Porvenir (Picasso) shaft, allowing ore hoisting and processing at the El Porvenir plant;
- (iii) the expansion of the Picasso shaft capacity to support production and extraction from both underground mines;
- (iv) the closure of the Atacocha processing plant, following the depletion of Atacocha’s open pit Mineral Reserves in 2027, resulting in operations being consolidated at El Porvenir;
- (v) the construction of a new tailings pumping and pipeline system, establishing a long-term tailings disposal solution by transporting the tailings from the El Porvenir processing plant to the Atacocha tailings storage facility, extending the operational life of the combined mines.

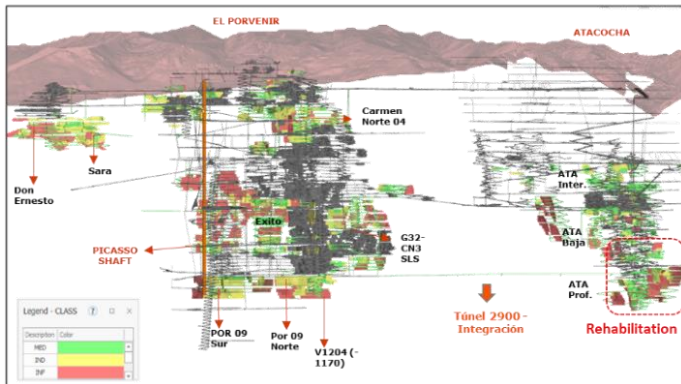
Nexa also continues to advance on other work fronts related to the Integration Project, including the process to obtain the required environmental studies and permits.

Integration Strategy Overview

Asset Facilities Overview



Underground Mines



Site Location Map



(i) **El Porvenir**

Project Description, Location and Access

Project Setting

The El Porvenir mine is an underground, polymetallic mine (located in the Cerro Pasco Complex) in the central Andes mountains region of Peru, specifically in the district of San Francisco de Yarusyacán, in the province of Pasco, Peru. The approximate coordinates of the mine are 367600m E, 8826850m N, using the Universal Transverse Mercator WGS84 datum, Z18S and the project site is located at an average elevation of 4,200 m above sea level. The mine is situated at km 340 of the Carretera Central Highway (Lima — Huánuco route), 13 km from the city of Cerro de Pasco. The mine is located in the Central Cordillera zone, which contains the communities of Parán, Lacsanga and Santo Domingo de Apache.

Site Location Plan



Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

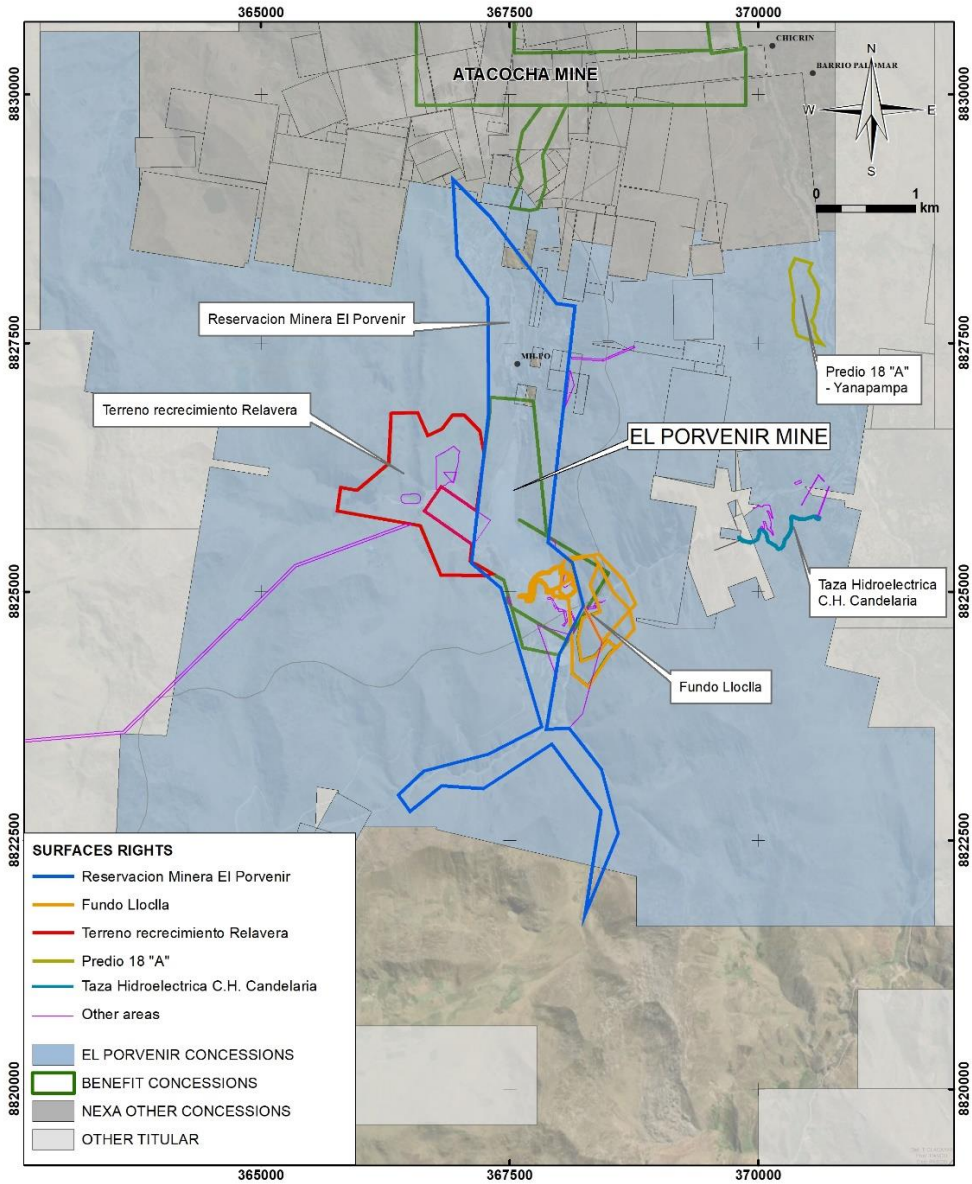
The El Porvenir mine is operated by Nexa Resources El Porvenir S.A.C. (“Nexa Resources El Porvenir”), a subsidiary of Nexa Peru in which Nexa Peru has directly and indirectly a 100% equity interest.

The El Porvenir mine has a total of 25 concessions covering approximately 4,846.7 hectares, as well as a beneficiation plant, “Acumulacion Aquiles 101”. With respect to the surface property at El Porvenir mine, there is a mining site of 450.8 hectares, where the mining concession is located, as well as additional surface property where tailings dams/ponds, camps sites and other ancillary infrastructure are located.

Mining operations at the El Porvenir mine are subject to certain royalties payable by Nexa Resources El Porvenir S.A.C. For more information, see “Information on the Company—Regulatory matters—Peruvian regulatory framework—Royalties and other taxes on mining activities,” of our annual report on Form 20-F for the fiscal year ended on December 31, 2024.

The El Porvenir mine holds several permits in support of the current operations. The permits are Directorial Resolutions issued by the Peruvian authorities upon approval of mining environmental management instruments filed by the mining companies. Nexa Peru maintains an up-to-date record of the legal permits obtained to date.

El Porvenir Mineral Rights



History

The El Porvenir Mine has a long history in the Peruvian mining sector, extending back over 70 years. It began operating as a small-scale artisanal mine in 1949, and Compañía Minera Milpo S.A. (“Milpo”) was incorporated the same year to operate the mine. A gravity separation plant was built at the site in 1953, and a flotation plant was completed in 1979. Milpo acquired the adjacent Atacocha Mina in 2008. In 2010, Nexa (then Grupo Votorantim) gained control of Milpo and its assets, including El Porvenir. The mine has a current production capacity rate of approximately 6,500 tpd. In 2014, the Company began integrating the El Porvenir and Atacocha operations, including administration, the TSFs and the electrical power supply.

In 2020, in response to COVID-19 and based on our cost management strategy, the integration process was temporarily suspended and Atacocha’s underground operations were not resumed after the mandatory restriction period from the Peruvian Government was lifted in June.

Mine Production from El Porvenir (2022 - 2024)

	Unit	2022	2023	2024
Tonnage	Mt	2.11	2.22	2.21
Zn Grade	%	2.80	2.86	2.61
Cu Grade	%	0.16	0.16	0.14
Pb Grade	%	1.34	1.37	1.44
Ag Grade	oz/t	2.46	2.34	2.50
Ag Grade	g/t	76.59	72.91	77.61

Geological Setting, Mineralization and Deposit Types

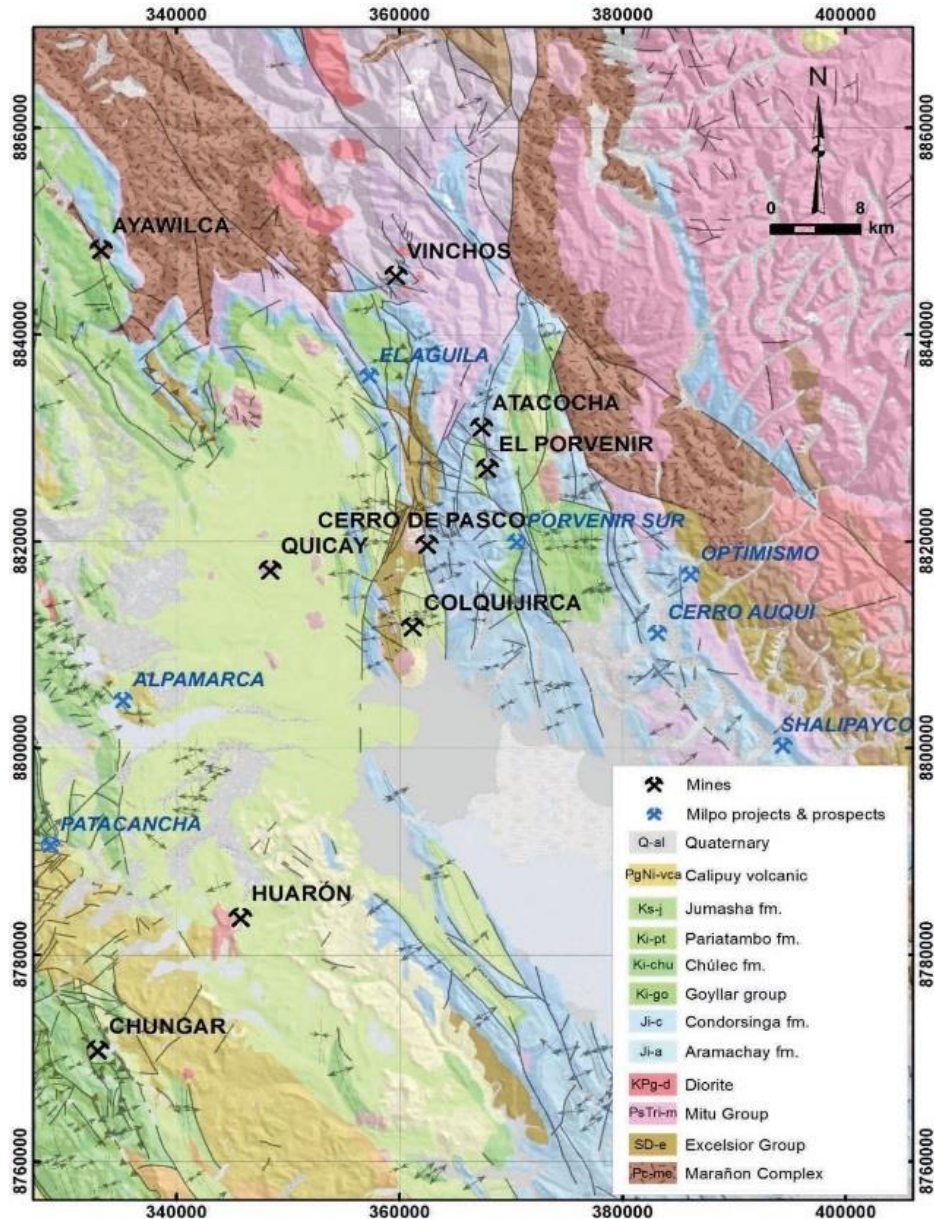
El Porvenir is situated in the Pasco region of the Western Cordillera of the Andes, within the Eocene-Miocene Polymetallic and Miocene Au-Ag Epithermal Belts. Within the property area, the stratigraphic units of primary interest are the Pucará and the Goyllarisquizga groups. The Goyllarisquizga Group outcrops in the area of the deposit comprising quartz rich sandstone, corresponding to the Goyllarisquizga Formation. Sandstones may vary from quartz arenite to arkose. The matrix is argillaceous to siliceous. Above the 4,000 level, lithology and stratification are well defined and easy to recognize. Below the 4,000 level, strong alteration has obliterated the original rock intensity forming siliceous breccias and massive silica where it is still possible to recognize quartz grains and in few places the stratification.

Intrusive rocks within the property are variably porphyritic dacite to quartz diorite with hornblende and biotite phenocrysts. The Milpo-Atacocha fault is a major structural feature in the region, which can be traced for nearly 15 km from Yaruyacán in the north to Carmen Chico in the south.

Mineralization is characterized as a skarn, intermediate sulphidation epithermal vein/breccia-style, or stratabound mineralization in the Goyllarisquizga Formation:

- Skarn-related mineralization is commonly associated with the garnet and silica-skarn-chlorite assemblages, comprising pyrite, chalcopyrite, sphalerite, galena and minor pyrrhotite, pyrite, bornite, covellite, orpiment, and realgar within the Pucará Group sediments around the Milpo stock.
- The silica breccia consists of sub-rounded to sub-angular white to milky grey opaline silica clasts, millimeters to centimeters in size, and to a lesser extent, sandstone and limestone clasts. The silica breccia clasts are cemented by white granular silica, with occasional cross-cutting veins of white silica. Breccias include massive (siliceous) breccias, granular (siliceous) breccias, and Ag-Pb-Zn breccias sub-divided into calcareous, polymictic-monomictic, and karst (collapse). Breccia clasts include limestone, marble, silica (massive), and skarn; the composition of the clasts indicates that brecciation occurred later than skarn development.
- The stratabound Pb-Ag-Zn mineralization occurs in the sandstone strata (mantos) at the base of the Goyllarisquisga Formation (near the contact with the Pucará Group). Several disseminated sulphide mantos have recently been identified at Sara and Porvenir 2W within the quartz sandstone, generally in contact with layers of silt and microconglomerates. The minerals include galena with silver content, sphalerite, and pyrite. Gold is also present.

Regional Geology of the El Porvenir Area



Exploration

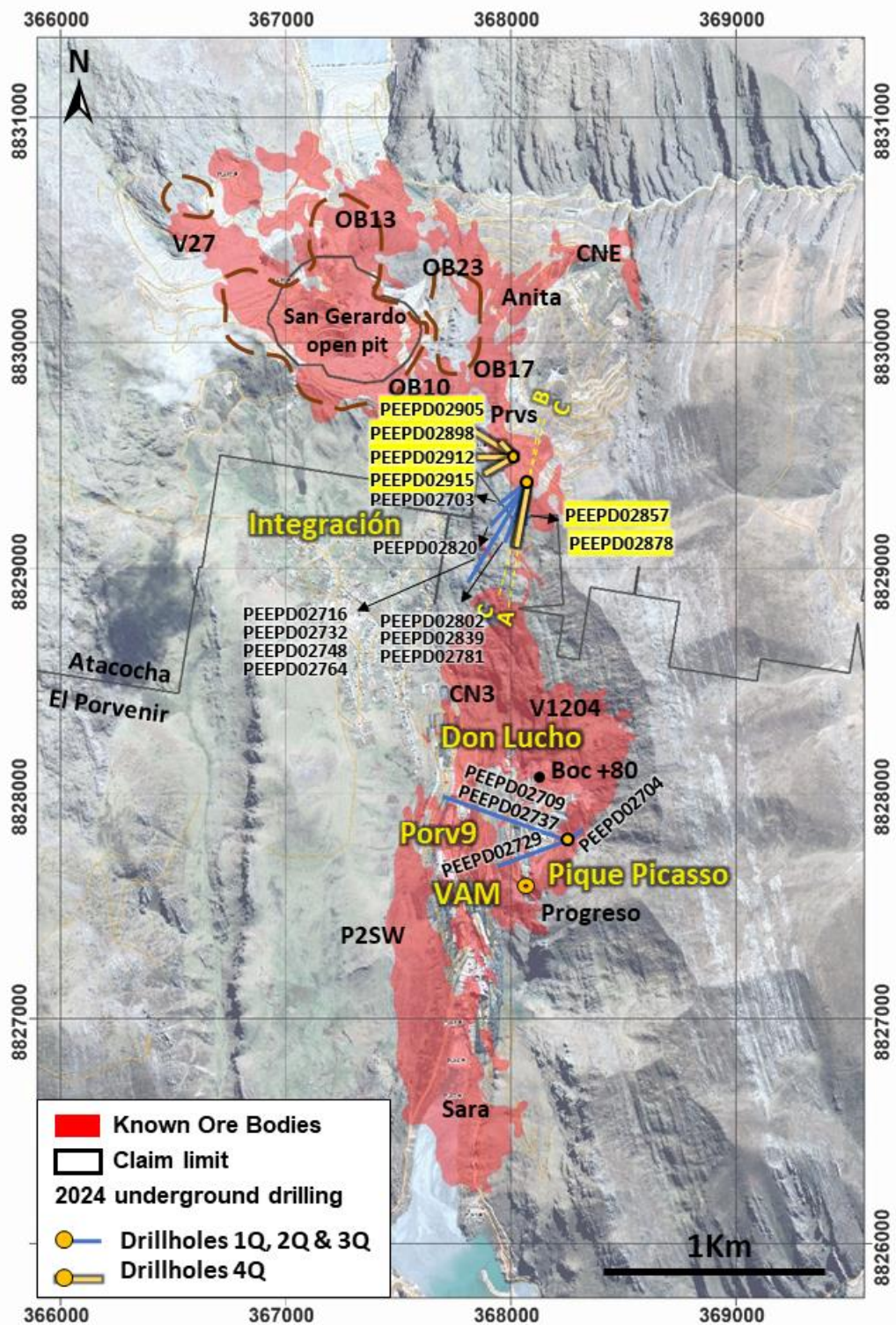
Throughout 2024, the exploration program at El Porvenir was focused on drilling in mineralized zones in the Integration Project, seeking to evaluate the mineralization continuity in strike and at depth, with the goal of increasing mineral resources to expand the life of the El Porvenir and Atacocha Mines. In 2024, we drilled 19 drill holes totaling 10.3 km of exploration drilling. The exploration drilling strategy continues to focus on expanding Mineral Resources and Mineral Reserves in the Integration Project.

In 2025, we will focus our efforts on expanding the El Porvenir LOM with conversion drilling at the Integration Project. This initiative aims to upgrade mineral resources, supporting the long-term sustainability and operational efficiency of the mining complex.

Drilling

We spent approximately US\$1.8 million on the El Porvenir brownfield program in 2024, including the drilling program and geological activities. We have budgeted US\$3.3 million for 2025 activities, and we expect to drill 13.7 km in 2025.

El Porvenir Exploration and Drilled Targets



Sampling, Analysis and Data Verification

Sampling was completed by Nexa geologists following standard operating procedures. The samples are collected from drillholes and channels and sent to several independent laboratories including Inspectorate (at the mine, referred to subsequently as Inspectorate EP), SGS (at the mine), ALS (Lima), and Certimin (Lima). Testing protocols among these laboratories differ in their detection limits and methods applied. El Porvenir has a contract with Inspectorate, which began its operations in 2011, and with ALS in 2018. SGS served as the mine laboratory from 2006 to 2009. Exploration samples were sent to Certimin in 2017 and 2018.

Inspectorate is an independent and commercial laboratory, and is part of Bureau Veritas, which is a global leader in testing, inspection, and certification. Certimin Lima holds ISO 9001 and NTP-ISO/IEC 17025 and 17021 certifications and is accredited by the Organismo Peruano de Acreditación (INACAL). ALS geochemical laboratories are accredited to ISO/IEC 17025:2005 for specific analytical procedures. Both Certimin and ALS laboratories are independent of Nexa.

Exploration drilling samples are sent to ALS Lima, and mine drilling samples are sent to the El Porvenir Inspectorate EP for preparation and analysis. Prepared samples are assayed principally for a suite of seven elements: Zn, Pb, Cu, Ag, Au, Bi, and Mn. The pulverized samples are subsequently analyzed using an aqua regia digestion and atomic absorption spectroscopy (“AAS”).

El Porvenir has both historical and recent data and has implemented a quality assurance/quality control (QA/QC”) program that support Mineral Resources and Mineral Reserves evaluation. These processes comply with current industry best practices which involve appropriate procedures and routine insertion of certified reference materials (“CRM”), standards, blanks, and duplicates to monitor the sampling, sample preparation, and analytical processes. Analysis of QC data is performed to assess the reliability of all sample assay data and confidence in the data used for resource estimation.

Quality control samples have been inserted into the sample stream since 2014 and channel samples since 2012. El Porvenir routinely sends in-house CRMs, blanks, field, reject (preparation), and pulp (laboratory) duplicates. During 2018, Nexa incorporated systematic external checks into the QA/QC program. Check assay programs were also carried out prior to 2018. Pulps were sent to external laboratories for analysis. Currently, the Inspectorate Mine Laboratory and ALS analyze samples from infill drilling and brownfield exploration drilling, respectively. During the 2006 to 2009 drilling campaign, samples were sent to SGS for analysis. From 2010 to present, underground infill drilling samples are sent to Inspectorate. If Inspectorate is running out of capacity, samples are delivered to Certimin and/or ALS laboratories.

Mineral Processing and Metallurgical Testing

Nexa began developing a geometallurgical model for El Porvenir in 2017. The objectives of the work were to develop a geometallurgical model able to predict the recovery of lead, zinc, copper, arsenic, and manganese, concentrate grades, as well as abrasiveness (abrasion index (Ai)) and hardness (Bond ball mill work index (Bwi), and therefore throughput based on ore source within the deposit. The aim of the development work included:

- Maximization of operational value of the El Porvenir mining unit.
- Reduction of risks to production related to plant throughput, grinding media consumption, recovery of valuable minerals and concentrate quality.
- Identification of flaws in the quality and interpretation of the available information.
- Identification of opportunities for improvement and to reduce risk.
- Definition and validation of geometallurgical domains from metallurgical test results.
- Evaluation of contaminants in the deposit.

Since the beginning of the program, three phases of test works were performed (2018, 2019 and 2020 respectively) with the assistance of Transmin Metallurgical Consultants (“Transmin”).

The El Porvenir Mine is in the production stage and has a treatment plant capacity of 6,500 tpd.

The table below summarizes the El Porvenir Mine’s concentrate production, metal contained in concentrates produced and average grades for the periods indicated.

El Porvenir Polymetallic Circuit, Metallurgical Performance (2022- 2024)

	Unit	Item	2022	2023	2024
Production	tonnes		2,111,961	2,220,011	2,205,478
Mill Head Grade	g/t	Ag	76.59	72.91	77.61
	%	Cu	0.16	0.16	0.14
	%	Pb	1.34	1.37	1.44
	%	Zn	2.80	2.86	2.61
Cu Concentrate	%	Cu Recovery	7.85	10.06	9.42
	%	Cu Grade	16.81	17.83	17.36
	oz/t	Ag Grade	91.08	69.22	71.42
	%	Ag Recovery (to Cu)	2.77	2.65	2.18
Pb Concentrate	%	Pb recovery	81.75	82.10	84.31
	%	Pb Grade	50.53	51.31	50.40
	oz/t	Ag Grade	74.55	70.89	70.24
	%	Ag Recovery (to Pb)	65.80	66.20	67.88
Zn Concentrate	%	Zn Recovery	87.27	88.01	87.98
	%	Zn Grade	49.34	50.04	49.94

Mineral Reserve Estimate

The El Porvenir Mineral Reserve estimate dated December 31, 2024 were prepared using Deswik Stope Optimizer (“DSO”) software, mine design and scheduling software. Mining methods used are C&F mining, using unconsolidated rock fill and hydraulic backfill, and Sublevel Stope (“SLS”) using unconsolidated rock fill. NSR values were calculated using mineral reserve metal prices, metallurgical recovery and consideration of smelter terms, including revenue from payable metals, price participation, penalties, smelter losses, transportation, treatment, refining and sales charges. A minimum mining width of 5.0 m for C&F mining and 4.0 m for SLS mining were used for reserves shapes and development design and are reported to be inclusive of extraction losses and dilution. Mineral Reserves were estimated at a NSR cut-off values ranging from US\$68.31/t to US\$71.59/t for SLS areas, and US\$70.31/t to US\$73.58/t for C&F areas depending on the zone. A number of incremental material (with values between US\$44.44/t and US\$70.31/t for SLS and values between US\$46.44/t and US\$68.31/t for C&F mining) was included in the estimates. Mineral Reserves estimates are based on average long-term metal prices of: zinc: US\$2,864.90/t (US\$1.30/lb); copper: US\$9,095.61/t (US\$4.13/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades are 89.23% for Zn, 15.03% for Cu, 79.99% for Pb, and 62.92% for Ag. The current LOM plan continues to 2034.

Mineral Resource Estimate

The El Porvenir Mineral Resource estimate dated December 31, 2024 is reported using 2014 CIM Definition Standards and was completed using Datamine Studio RM and Leapfrog Geo software. Wireframes for geology and mineralization were constructed in Leapfrog based on geology sections, assay results, lithological information, underground mapping and structural data. Assays were capped to various levels based on exploration data analysis and then composited to 2.0 m lengths. Wireframes were filled with blocks and sub-celling at wireframe boundaries. Blocks were interpolated with grade using the OK and ID3 interpolation algorithms. Block estimates were validated using industry standard validation techniques. Classification of blocks used distance-based and mineralization continuity criteria. Mineral Resources are reported using all the material within resource shapes generated in DSO software, satisfying minimum mining width of 4.0 m in areas with C&F stopes shapes and 3.0 m for SLS stopes. The Mineral Resources are estimated at a NSR cut-off grade values ranging from US\$68.31/t to US\$71.59/t for SLS areas and US\$70.31/t to US\$73.58/t for C&F areas depending on the zone. Mineral Resources estimates are based on average long-term metal prices of: zinc: US\$3,294.64/t (US\$1.49/lb); copper: US\$10,459.95/t (US\$4.74/lb); lead: US\$2,412.07/t (US\$1.09/lb); and silver: US\$28.55/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades are 89.23% for Zn, 15.03% for Cu, 79.99% for Pb, and 62.92% for Ag.

Mining Operations

Mining Methods

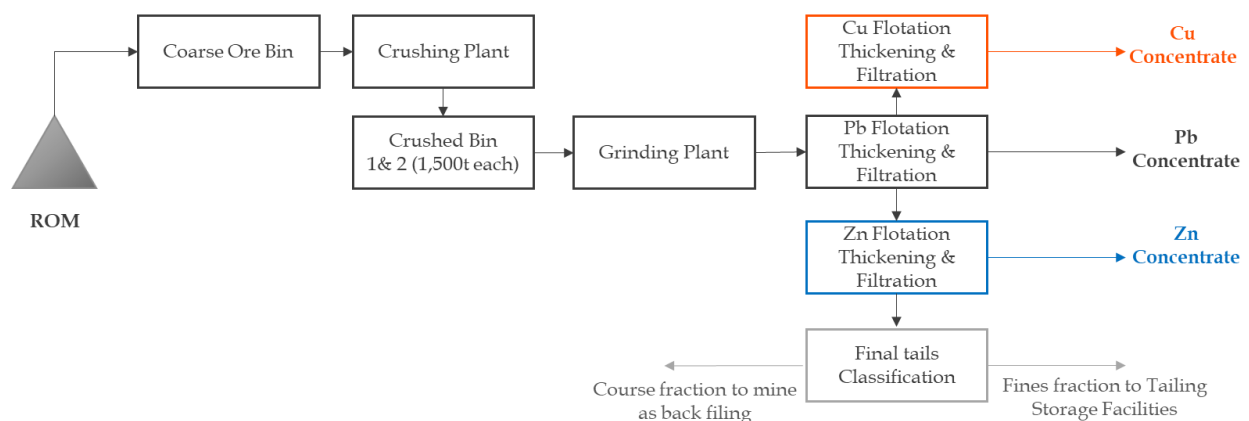
El Porvenir uses two mining methods: mechanized overhand C&F and SLS. C&F is the predominant method, accounting for over 80% of mine's production. El Porvenir uses a version of SLS called Avoca, also referred to as longitudinal longhole retreat mining. C&F and SLS have similar development requirements as they both involve dividing a mining zone into horizons between sublevels and excavating the ore in an ascending fashion. The sublevels are typically spaced at a vertical interval of 20 m and accessed via a spiral ramp. The development on each sublevel includes an access drift, a footwall drive, and crosscuts or attack ramps, which provide access to the orebody. For SLS, the footwall drives can be as close as 15 m from a footwall contact, whereas, for C&F, they have to be offset from it by 60 m to provide sufficient distance for fanning the attack ramps. The geotechnical conditions at El Porvenir result from the rock mass's characteristics and the mine's depth. The host rock and the mineralized zones are generally classified as fair to good, with rock mass ratings ("RMR") ranging from 40 to 60. El Porvenir is one of South America's deepest mines, extending more than 1,800 m below the main access level. Its depth contributes to the occurrence of seismic events, including rock bursts.

Processing and Recovery Operations

The concentrator has an ore processing capacity of approximately 2.2 Mtpa. The copper and lead concentrates are sold to traders and delivered by road and rail to Callao for shipping overseas, while the zinc concentrate is transported by road and rail to Nexa's Cajamarquilla zinc refinery east of Lima. Processing consists of conventional crushing, grinding, and flotation to produce separate copper, lead, and zinc concentrates. Tailings and the coarse fraction is used for mine backfill, which constitutes approximately 45% of tailings produced. Water from tailings dewatering is returned to the process. Overflow from the cyclones containing fine tailings is deposited in the conventional TSF adjacent to the mine and processing plant. Tailings can be discharged at various points in the TSF by means of valved discharge points on the tailings line. Clarified water discharged from the TSF joins natural water flows. Make-up water is supplied from various streams around the TSF, as well as the Carmen Chico River, approximately 3.2 km south of the process facility.

El Porvenir lead and zinc concentrates are generally clean and do not attract penalty charges for deleterious elements.

Process Flowchart



Infrastructure, Permitting and Compliance Activities

Project Infrastructure

The El Porvenir infrastructure consists of the following facilities:

- Approximately 6,500 tpd underground mine
- A 2.2 Mtpa processing plant with associated laboratory and maintenance facilities
- Power plant

- Access roads
- Offices and warehouses
- Accommodations
- Waste rock facilities
- Temporary ore stockpiles
- Hydraulic backfill plant
- Tailings storage facility (“TSF”)

The electrical power supply for the project comes from two sources: connection to the SEIN national power grid by a main substation located near the site, and the Candelaria Hydro, which consists of three turbines connected to the project through the main substation by a transmission line. All other loads of the project are fed from the main substation through overhead power lines. These power lines are used to deliver power to various locations to support activities during operation of the mine.

Raw water is sourced from Tingovado Creek, as well as from other creeks around the TSF. Fresh water supply is obtained from the Carmen Chico River, approximately 3.2 km south of the process facility.

El Porvenir’s tailings dam is currently supported by an authorization for operation up to an altitude of 4,062 meters above sea level (“masl”), which was granted by the Ministry of Energy and Mines on April 26, 2022. The previous authorization was for 4,060 masl. A new expansion authorization of the El Porvenir dam is underway, allowing an elevation up to 4,070 masl.

Waste rock from the underground operations is either used as backfill underground or stockpiled on surface. If waste rock is brought to surface in the future, it will be deposited in a designated area near the secondary TSF embankment southwest of the concentrator plant area.

Environmental, Permitting and Social Considerations

The El Porvenir Mine has a net positive water balance that results in surplus water collected on site being discharged from the TSF to the receiving environment through a decant structure. Clean (non-contact) surface runoff water is managed through upstream diversion ditches that prevent their entrance to the TSF, and convey it downstream to the Lloclla River, a tributary of the Huallaga River. Contact water collected in the tailings pond is recycled via a decant pumping system to the concentrator plant for use in the process. A lined seepage collection monitoring pond is located at the downstream toe of the main embankment of the TSF.

The El Porvenir TSF (originally constructed in the 1970s) receives tailings generated by both Atacocha and El Porvenir concentrator plants. A portion of tailings is used for hydraulic backfill at the El Porvenir Mine. The tailings disposal is performed in subaerial conditions which allows a beach with a gentle slope towards the water or supernatant pond (settling pond). The tailings discharge locations allow for the settling pond to be centrally located within the TSF and a tailings beach to form in front of the main embankment.

Various Environmental Impact Assessments (“EIA”) and supporting Technical Reports have been submitted and approved between 2001 and 2025 to identify potential environmental effects resulting from project activities for the construction, operation, and closure stages. The most recent modification of the EIA has been carried out from 2024 until now, being the Second Modification of the Environmental Impact, which seeks to extend the useful life of the unit and integrate processes with the Atacocha Mine. The most recent update of the environment management plan was presented in the eighth supporting Technical Report issued in 2023. The monitoring program implemented at the mine includes meteorology, air quality, non-ionizing radiation, noise, surface water quality, springs water quality, effluent discharges, fauna and flora, and physical stability of the tailings dam. The results of the monitoring program for air quality, ambient noise, non-ionizing radiations, and water quality are reported to the Peruvian authorities quarterly.

The El Porvenir Mine holds a number of permits in support of the current operations. The permits are Directorial Resolutions issued by the Peruvian authorities upon approval of mining environmental management instruments filed by the mining companies. Nexa maintains an up-to-date record of the legal permits obtained to date.

The communities located within the area of influence of the mine are:

- Comunidad de San Francisco de Asís de Yarusyacán
- Comunidad de Cajamarquilla,
- Comunidad Santa Rosa de Pitic,
- Comunidad San Miguel,
- Comunidad La Candelaria,
- Comunidad de La Quinoa,
- Cooperativa Pucayacu.

Nexa adheres to international standards to provide best practices for public reporting on economic, environmental, and social impacts in order to help Nexa and its shareholders and stakeholders understand their corporate contribution to sustainable development. Corporately, Nexa has made several commitments to improve community health and safety as well as the overall well-being of community members.

A conceptual Mine Closure Plan was prepared in 2009 for the mine components within the context of the Peruvian legislation and has subsequently been amended or updated six times. The government is currently awaiting approval of the 2nd update of the Mine Closure Plan. The Mine Closure Plan addresses temporary, progressive, and final closure actions, and post-closure inspection and monitoring. A closure cost estimate was developed and included in the Mine Closure Plan. The total financial assurance for progressive closure, final closure and post-closure is calculated by Nexa according to the Peruvian regulations (Supreme Decree D.S. N° 262-2012-MEM/DM).

Atacocha

Project Description, Location and Access

Project Setting

The Atacocha property is located in the district of San Francisco de Asís de Yarusyacán, in the province of Pasco, Peru. The property is located in the central Andes mountains region of Peru (with approximate coordinates of 367160m E, 88304000m N, using the UTM_WGS84 datum, Z18S), approximately 4,050 masl. The Atacocha Mine is situated at km 324 of the Carretera Central Highway (Lima—Huánuco route), 16 km from the city of Cerro de Pasco. The processing plant is located near the Huallaga River valley. Cerro de Pasco and Huánuco cities are connected to the mine area by a paved road with heavy traffic. The Atacocha Mine has camps near the plant. The light equipment fuel, maintenance and storage facilities are located on site. Basic supplies are available in the city of Chicrin, and most major items and equipment are provided from Lima.

Site Location Plan



Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

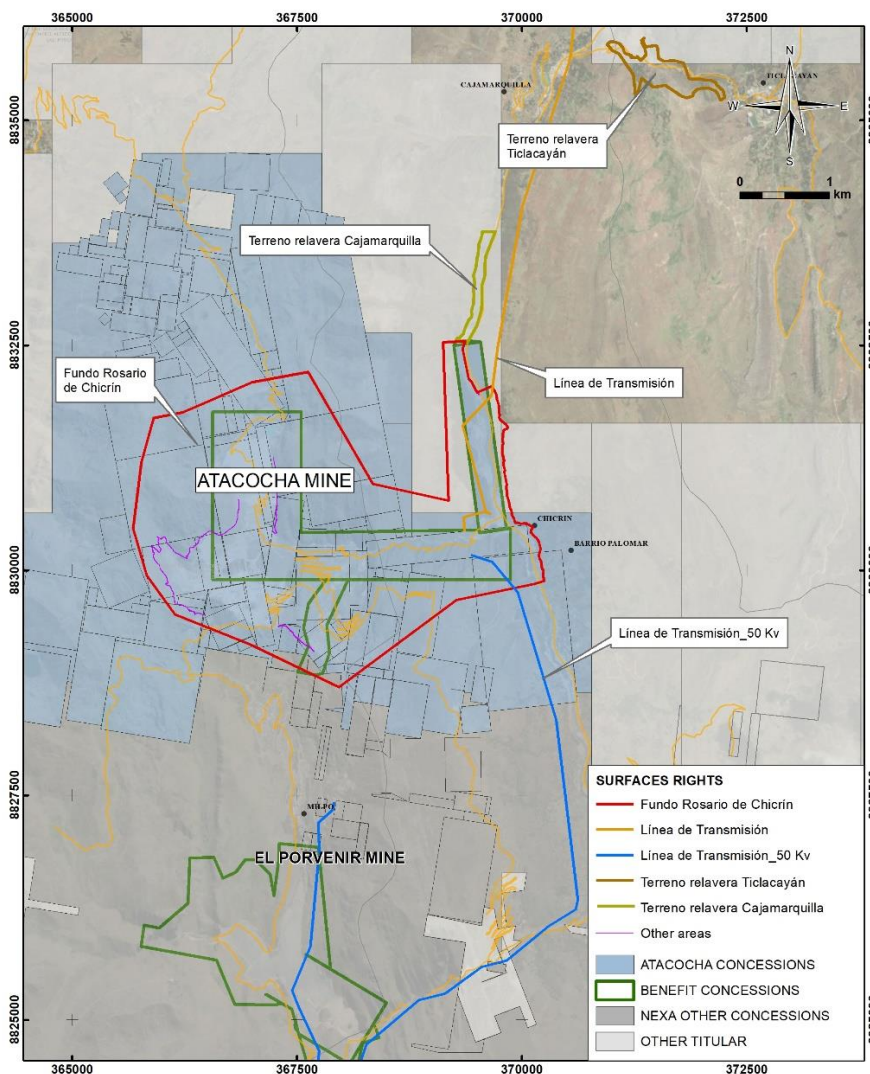
The Atacocha mine is operated by Nexa Resources Atacocha S.A.A., which is controlled by Nexa Peru.

The Atacocha mine has a total of 147 concessions covering approximately 2,872.5 hectares, as well as a beneficiation plant, “Chicrin N° 2.” With respect to the surface property at the Atacocha mine, there is a mining site of 1,343 hectares, where the mining concession is located, as well as additional surface property where tailings dams/ponds, camps sites and other ancillary infrastructure are located. There are royalties payable in respect of mining operations at the Atacocha mine for the mining concessions held by Nexa Resources Atacocha S.A.A. For more information, see “Information on the Company—Regulatory matters—Peruvian regulatory framework—Royalties and other taxes on mining activities,” of our annual report on Form 20-F for the fiscal year ended on December 31, 2024.

The Atacocha mine holds a number of permits in support of the current operations. The permits are Directorial Resolutions issued by the Peruvian authorities upon approval of mining environmental management instruments filed by the mining companies. Nexa Peru maintains an up-to-date record of the legal permits obtained to date.

Atacocha operates two mines: the Atacocha Underground mine and the Atacocha Open Pit mine (Tajo San Gerardo). The underground mine is currently suspended due to our efforts to reduce costs and improve our operational efficiency and remains under care and maintenance. However, mining continues in the San Gerardo open pit mine. Both mining operations feed the Atacocha processing plant.

Land Tenure Map of Atacocha



History

The Atacocha mining unit began operating in the first decade of the 20th century with a production of lead, silver, zinc and copper ores. In 1925 J.H. Fleming, H Rally, J.D. Torbert, T.N. Brown and Carlos Gomez Sanchez established the Pucayacu Mining Company that exploited Atacocha until the company was liquidated after Mr. Fleming's death. The property was declared abandoned. Subsequently, the "Casa Gallo Hermanos" enterprise claimed the Atacocha mines and began working the property in 1928. In 1935, Francisco Jose Gallo Diez, with the collaboration of Eulogio E. Fernandini, German Aguirre and Gino Salocchi, established Atacocha S.A. In 1936, Compañía Minera Atacocha S.A.A. was established to develop exploration and exploitation of mining sites, to produce lead, zinc and copper concentrates.

In the first year of operations, the activities focused on levelling and widening of the San Ramon tunnel at the 4,000 level to prepare it to be used as a mine extraction level. The exploitation work carried out in veins at the 4,000 level verified that these veins represented the limits of a unique mineralized body. In the next two years (1938), the “Marcopampa” hydroelectric central and the Concentrate Plant No 1 in Chicrin were completed. In 1952, the construction of the 3,600 level, with a length of 2,700 m was completed, which allowed a new main level of access and transportation for underground work, while facilitating the extraction and transportation of the minerals to the new concentrate plant No. 2 located also in Chicrin. In 1953, the Chaprin Hydroelectric Plant began operating.

In 2020, in response to COVID-19 and based on our cost management strategy, the integration process was temporarily suspended and in June 2020, once the Peruvian government allowed medium-sized mines to restart operations following COVID-19 restrictions, we announced that Atacocha would resume operations at the San Gerardo open pit mine, but we decided that the higher-cost Atacocha underground mine would remain suspended due to our efforts to reduce costs and improve our operational efficiency, placing it under care and maintenance. As of the date of this annual report, the underground mine remains suspended.

Mine Production from Atacocha (2022 - 2024)

	Unit	2022	2023	2024
Tonnage	Mt	1.35	1.40	1.51
Zn Grade	%	0.89	0.77	0.90
Cu Grade	%	0.00	0.00	0.02
Pb Grade	%	0.97	0.93	0.95
Ag Grade	oz/t	1.05	1.21	1.03
Ag Grade	g/t	32.81	37.69	31.98
Au Grade	oz/t	0.01	0.01	0.01
Au Grade	g/t	0.46	0.30	0.33

Geological Setting, Mineralization and Deposit Types

The Atacocha property is situated in the Pasco region of the Western Cordillera of the Andes Mountain range in central Perú, within the Eocene-Miocene Polymetallic, and Miocene Au-Ag Epithermal Belts. The Pasco region is a prolific mineral district. The oldest known mine in the region is the Polymetallic Cerro de Pasco Mine that has been in production for more than 100 years, which is located 15 km SW of our El Porvenir Mine, and was operated by Cerro de Pasco Copper Corporation, Centromin Peru and the last 15 years, by Volcan Mining Company. This deposit is an overprint of High Sulfidation System (Cu-Ag-Au) and Intermediate Sulfidation System (Polymetallic rich). The Colquijirca Mine is located 12 km south of Cerro de Pasco. It has been mined for 90 years by Compañía Minera El Brocal SA. The geology varies from a Dome center that hosts precious metals of high sulfidation system (Marcapunta) and intermediate sulfidation limestone replacement polymetallic mineralization at the edges to the north (Tinyahuarco) and south (San Gregorio). There are many other polymetallic mines in the region such as Atacocha and Vinchos to the north; Chungar, and Huaron to the south; and a high sulfidation mine such as Quicay that is associated to a hidden Cu-Mo porphyry deposit located 15 km west from Cerro de Pasco. Also, there are many exploration projects at different stages of development such as Shalipayco (Zn-Pb-Ag), Ayahuilca (Zn-Pb-Ag), Alpamarca (Zn-Pb-Ag-Cu-Au), Cero Auqui (Zn-Pb-Ag), Optimismo (Zn-Pb-Ag) and Patacancha (Zn-Pb-Ag-Cu-Au).

Within the property area, the stratigraphic units of primary interest are the Chambará Aramachay and Condorsinga formations, as well as other undifferentiated limestone units of the Pucará Group, the Goyllarisquizga formation, and stratigraphically overlying basalt layers. Intrusive rocks within the property are variably porphyritic dacite to quartz diorite with hornblende and biotite phenocrysts. Dacitic dikes are sub-divided into 2 units: porphyritic with feldspar phenocrysts and little quartz restricted to the groundmass; and porphyritic with abundant quartz phenocrysts, with minor biotite and hornblende. These dacitic dikes generally trend north-south and are observed in 3 areas: Santa Bárbara/central, south along/parallel to the Atacocha Fault, and south of Section 3. The intrusive suite is part of the Milpo-Atacocha-Vinchos, age dated to 29-26 Ma. The Santa Bárbara and San Gerardo stocks are two principal intrusive units within the property.

At Atacocha, mineralization is characterized as either a skarn-, replacement- or hydrothermal vein/breccia-style mineralization. Skarn-related mineralization generally spatially associated with either the Santa Barbara stock or San Gerardo stock is paragenetically earlier, followed by the hydrothermal mineralization. Garnet-skarn related mineralization is associated with Zn, Pb, Ag, and Bi occurring within the Pucara Group sediments around the Santa Bárbara stock. Replacement-style mineralization as well as low-temperature hydrothermal veins and polymitic

breccias comprising an Ag, Pb, Zn mineral assemblage, occurs between the San Gerardo stock and Fault (or Falla) 1, which are also characterized by Mn-skarn, and silica-sericite-halloysite alteration.

Skarn-related mineralization is characterized by pyrite, chalcopyrite, sphalerite, galena, with lesser bismuthinite and a variety of sulfosalts (Bi-bearing) and pyrrotite, bornite, and covellite at lower elevation. Molybdenite may occur proximally to the skarn-related mineralization. Elevated Bi and Au are reported to be associated with skarn-related mineralization. Veins and veinlets with pyrite, chalcopyrite, sphalerite, galena, with quartz and carbonate occur within marble units, and are spatially associated with skarn bodies. Replacement bodies comprising pyrite, sphalerite, galena, chalcopyrite, and possibly other fine undistinguished sulphides occur within garnet-skarn, marble, and silicified zones. Breccias have been grouped in to either Ag-Pb-Zn hydrothermal breccias or siliceous breccias based on their mineralogical assemblages, and textural characteristics.

Three types of mineral deposits are recognized at Atacocha, described as either: skarn (Exo and Endo Skarn); replacement (lithological and structurally controlled); or hydrothermal veins (and collapse breccias).

Exploration

Nexa Peru has been conducting exploration and development work at Atacocha since 1949. Most exploration is generally conducted simultaneously with underground development, which involves diamond core drilling, and channel sampling following underground drifting. Prior to 1997, minor and sporadic drilling was completed; and no channel sampling is documented before 2001. Systematic underground geological mapping is completed at scale of either 1:500 or 1:250, following underground development on all levels and sub-levels. Several underground levels have been developed at Atacocha the most recent at 2,890m, the last one, with additional development on sub-levels. Geological mapping is completed by the mine/ production geologists drawn on paper in the field and subsequently digitized with the help of a modelling assistant. The geological level plan maps are updated and incorporated in a 3D geological model daily to aid future exploration and mine development planning.

In 2024, we spent approximately US\$0.4 million on the Atacocha brownfield program for exploration maintenance. We have budgeted US\$0.3 million for maintenance in 2025.

Drilling

The progress in the exploration campaign on the Integration target occurred on the side of the El Porvenir mine confirming multiple mineralized intersections and potential opportunity to extend the life of mine. The exploration drilling strategy in Pasco Complex continues to extend the existing satellite mineralized bodies. Focus on the integration zone towards El Porvenir mine.

Sampling, Analysis and Data Verification

Sample collection and core handling are in accordance with industry standard practices. Procedures to limit potential sample losses and sampling biases are in place.

The samples from core and channels are sent to several independent laboratories including Inspectorate (at the mine site and Lima), SGS (Lima), ALS (Lima) and Certimin (Lima). Testing protocols among these laboratories differ in their detection limit and methods applied. The Atacocha Mine has a contract with Inspectorate, which began its operations in mid-2011 and with ALS in mid-2017. The samples were collected from drill holes and channels. Samples were bagged and sent to Atacocha Inspectorate Laboratory for preparation and assay.

Since 2013, Nexa has used various laboratories such as ALS, Atacocha Mine, Shalipayco Project and Certimin, for the testing of density samples. Sampling was carried out by Milpo mine geologist staff at Atacocha.

The Atacocha mine has implemented a QA/QC program, which complies with current industry's best practices and involves establishing appropriate procedures and the routine insertion of CRMs, blanks, and duplicates to monitor the sampling, sample preparation and analytical process. Analysis of QC data is performed to assess the reliability of sample assay data and the confidence in the data used for the estimation. QC samples have been inserted into the drill core samples since 2014 and channel samples since 2012. The Atacocha Mine routinely sends certified standards, blanks, field, preparation (coarse reject) and laboratory (pulp) duplicates to the Atacocha Inspectorate laboratory. The Atacocha Inspectorate laboratory has been the primary laboratory for assaying drill core and channel samples since the middle of 2011 with the results of the inserted QC samples detailed below. The samples were sent to SGS from 2006 to 2008. Currently, when Atacocha laboratory is too busy, the samples are delivered to ALS, Certimin, Inspectorate Lima and Inspectorate El Porvenir laboratories.

Mineral Processing and Metallurgical Testing

The Atacocha treatment plant has a capacity of 4,400 tonnes of ore per day. The table below summarizes the Atacocha mine's concentrate production, metal contained in concentrates produced and average grades for the periods indicated. In June 2020, once the Peruvian government allowed medium-sized mines to restart operations following COVID-19 restrictions, we announced that Atacocha would resume operations at the San Gerardo open pit mine, but we decided that the higher-cost Atacocha underground mine would remain suspended due to our efforts to reduce costs and improve our operational efficiency, placing it under care and maintenance. As of the date of this annual report, the underground mine remains suspended. As mentioned above, we are evaluating the integration with El Porvenir mine.

Historically, copper concentrate represents a very small percentage of the production and consequently, revenue due to low copper head grade. Based on the representativeness of it and on studies carried on by Nexa staff, the Company decided to temporally suspend the copper concentrate production in the metallurgical plant, while maintaining the production of zinc and lead concentrate.

The following table shows a summary of the last three years of production.

Atacocha Polymetallic Circuit Metallurgical Performance (2022 - 2024)

	Unit	Item	2022	2023	2024
Production	Tonnes		1,353,681	1,397,192	1,511,875
Mill Head Grade	g/t	Ag	32.81	37.69	31.98
	g/t	Au	0.30	0.42	0.33
	%	Cu	0.00	0.00	0.02
	%	Pb	0.97	0.93	0.95
	%	Zn	0.89	0.77	0.90
Pb Concentrate	%	Pb Recovery	85.51	85.70	85.40
	%	Pb Grade	53.87	52.94	52.77
	oz/t	Ag Grade	53.32	64.49	49.63
	%	Ag Recovery (to Pb)	77.65	82.68	74.39
	oz/t	Au Grade	0.65	0.36	0.39
	%	Au Recovery (to Pb)	67.86	56.19	57.14
Zn Concentrate	%	Zn Recovery	79.07	75.94	76.38
	%	Zn Grade	50.79	50.66	50.19

Mineral Reserve Estimate

The Atacocha Underground Mineral Reserves estimate dated December 31, 2024, were prepared using Deswik Stope Optimizer ("DSO") software, mine design and scheduling software. Mining methods used are C&F mining, using unconsolidated rock fill and hydraulic backfill, and SLS using unconsolidated rock fill. NSR values were calculated using mineral reserve metal prices, metallurgical recovery and consideration of smelter terms, including revenue from payable metals, price participation, penalties, smelter losses, transportation, treatment, refining and sales charges. A minimum mining width of 5.0m for C&F mining and 4.0 m for SLS mining were used for reserves shapes and development design and are reported inclusive of extraction losses and dilution. The Mineral Reserves were estimated at a NSR cut-off of US\$73.54/t for SLS areas, and US\$75.61/t for C&F areas depending on the zone. A number of incremental material (with values between US\$49.67/t and US\$73.54/t for SLS and values between US\$51.73/t and US\$75.61/t for C&F mining) was included in the estimate. Mineral Reserves estimates are based on average long-term metal prices of zinc: US\$2,864.90/t (US\$1.30/lb); copper: US\$9,095.61/t (US\$4.13/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades are 89.30% for Zn, 15.73% for Cu, 80.02% for Pb, and 62.92% for Ag. The current LOM production plan begins in 2028 until 2034.

The Atacocha Open Pit Mineral Reserves estimates were prepared using Deswik Stope Optimizer ("DSO") software, mine design and scheduling software. NSR values were calculated using mineral reserve metal prices, metallurgical recovery and consideration of smelter terms, including revenue from payable metals, price participation,

penalties, smelter losses, transportation, treatment, refining and sales charges. The Mineral Reserves were estimated at a NSR cut-off value of US\$20.42/t. A number of incremental material (with values between US\$15.12/t and US\$20.42/t) was included in the estimates. Mineral Reserves estimates are based on average long-term metal prices of: zinc: US\$2,864.90/t (US\$1.30/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz; and gold: US\$1,946.05/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades are 70.44% for Zn, 83.98% for Pb, 75.76% for Ag, and 65.46% for gold. The current LOM plan continues until 2027.

Mineral Resource Estimate

The Mineral Resource estimate dated December 31, 2024, is reported following 2014 CIM Definition Standards and was completed by Nexa personnel using Leapfrog Geo, Datamine Studio RM, Supervisor and Deswik softwares. Wireframes for geology and mineralization were constructed in Leapfrog based on geology sections, assay results, lithological information, underground mapping and structural data. Assays were capped to various levels based on exploration data analysis and then composited to 2.0 m lengths. Wireframes were filled with blocks and sub-celling at wireframe boundaries. Blocks were interpolated with grade using the OK and ID3 interpolation algorithms. Block estimates were validated using industry standard validation techniques. Classification of blocks used distance-based and mineralization continuity criteria. Mineral Resources are reported using all the material within resource shapes generated in DSO software, satisfying minimum mining width of 4.0 m in areas with C&F stopes shapes and 3.0 m for SLS stopes. Mineral Resources are estimated at a NSR cut-off grade values of US\$73.54/t for SLS areas and US\$75.61/t for C&F areas depending on the zone. Mineral Resources estimates are based on average long-term metal prices of zinc: US\$3,294.64/t (US\$1.49/lb); copper: US\$10,459.95/t (US\$4.74/lb); lead: US\$2,412.07/t (US\$1.09/lb); and silver: US\$28.55/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades are 89.30% for Zn, 15.73% for Cu, 80.02% for Pb, and 62.92% for Ag.

The Atacocha Open Pit Mineral Resources estimates were completed using Datamine and Leapfrog software. Wireframes for geology and mineralization were constructed in Leapfrog based on geology sections, assay results, lithological information, underground and open pit mapping and structural data. Assays were capped to various levels based on exploration data analysis and then composited to 2.0 m lengths. Wireframes were filled with blocks and sub-celling at wireframe boundaries. Blocks were interpolated with grade using the OK and ID3 interpolation algorithms. Block estimates were validated using industry standard validation techniques. Classification of blocks used distance-based and mineralization continuity criteria. Mineral Resources are reported within resources open pit shell. The Mineral Resources are estimated at a NSR cut-off grade values of US\$20.42/t. Mineral Resources estimates are based on average long-term metal prices of: zinc: US\$3,294.64/t (US\$1.49/lb); lead: US\$2,412.07/t (US\$1.09/lb); gold: US\$2,237.96/oz and silver: US\$28.55/oz. Metallurgical recoveries are accounted for in NSR calculations based on historical processing data and are variable as a function of head grade. Recoveries at LOM average head grades are 70.44% for Zn, 83.98% for Pb, 75.76% for Ag, and 65.46% for Au.

Mining Methods

The Atacocha underground mine is mined by the overhand C&F and SLS mining methods. C&F stopes are 20.0m high consisting of 4.0m high cuts and a minimum mining width of 4.0m. C&F stopes are located 55 m from the main ramps and accessed by stope access ramps with grades varying from -15% to +15%. Production is achieved by horizontal drill and blast and backfilled using unconsolidated waste fill or hydraulic backfill. The SLS mining method has demonstrated increased productivity and reduced unit costs as compared to the C&F mining method. SLS stopes are located a minimum of 40m from infrastructure, are 20.0m high, 30.0m long and have a minimum mining width of 4.0m. Production is achieved by vertical blastholes and backfilled using unconsolidated waste fill.

San Gerardo is an open pit operation located at the top of mineralized zone and is mined by 6.0m high benches. Since the temporally suspension of Atacocha underground mine, the open pit production is responsible by the metallurgical plant feed. Operations are carried out by contractor with a mining fleet that allows selectivity in the loading process.

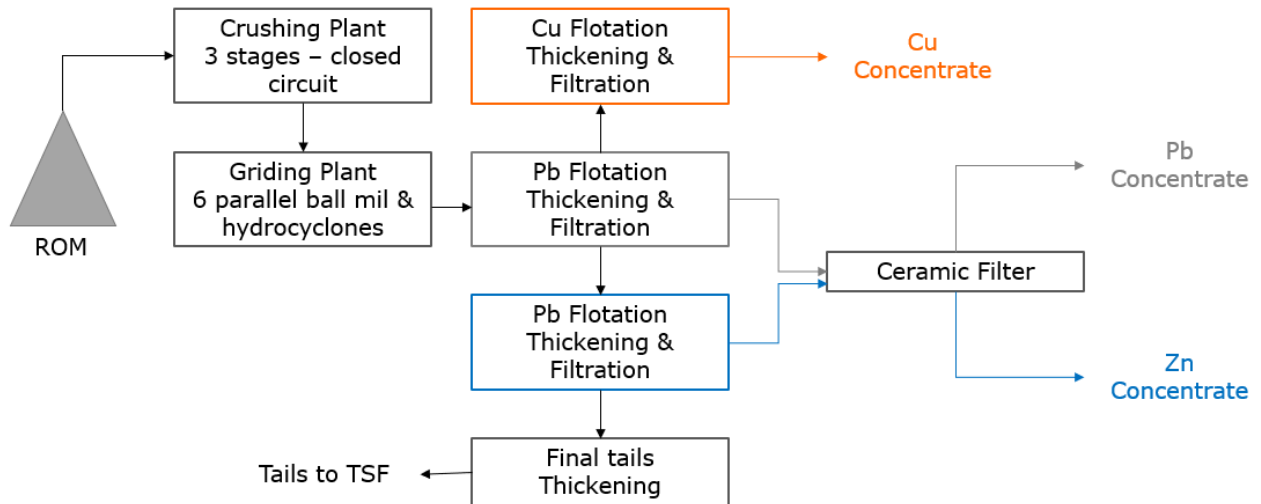
Processing and Recovery Operations

The Atacocha concentrator utilizes conventional crushing, grinding, and sequential flotation scheme to produce lead and zinc concentrates with an average daily processing rate of approximately 4,400 tonnes. A flash-flotation step is included in the grinding circuit that recovers lead at a grade sufficiently high to report directly to the final lead concentrate. The majority of gold and silver reports are into the lead concentrate. Despite the plant having

capacity to produce copper concentrate, the circuit of the plant has been bypassed and the Atacocha metallurgical plant produces only zinc and lead concentrates.

The zinc concentrate is transported to Nexa Cajamarquilla’s zinc refinery in Peru, while the lead concentrate is sold to concentrate traders.

Atacocha Block Flow Diagram



Infrastructure, Permitting and Compliance Activities

Project Infrastructure

The Atacocha mine includes the underground mine, the San Gerardo open pit mine, historical tailings storage facilities, waste rock stockpiles, a beneficiation plant with associated laboratory and maintenance facilities, and maintenance buildings for underground and surface equipment. Facilities and structures supporting operations include warehouses and laydown areas, offices, dry facilities, hydroelectric generating station, power lines and substation, fuel storage tanks, and accommodations camp. The site has well developed systems in place for water supply and distribution, including fresh water and fire suppression water, sewage collection and disposal, and communications. A network of site roads that are approximately six m wide and total 15 km in length are used by authorized mine personnel and equipment, including ore and waste haul trucks, concentrate haul trucks, support and light duty vehicles to provide access to onsite infrastructure.

Waste rock from the San Gerardo open pit mine is disposed of in the Atacocha Waste Dump, which is adjacent to and downstream of the Atacocha TSF. The Atacocha processing plant currently pumps tailings to the El Porvenir TSF, and both the Atacocha and El Porvenir TSFs have capacity for expansion to accommodate tailings production over the LOM.

The electrical power supply for the project comes from two sources: connection to the SEIN national power grid by a main substation 50/13.8kV, located near the site, and the Candelaria Hydro, which consists of 3 turbines (500KVA, 1,200KVA y and 3.5MVA) that is connected to the project through the main substation by a 4.6 km 50kV transmission line of 4.6 km. The installed initial generating capacity of Candelaria is 4,660kW. All other loads of the project are fed at 13.8kV from the main substation through overhead power lines. These power lines are used to deliver power to various locations to support activities during operation of the mine.

Environmental, Permitting and Social Considerations

Atacocha has met all applicable permitting requirements under Peruvian law. These permits include tailings dam and waste rock dump, mine, process plant as well as water usage and effluents. The most recent modification of the EIA has been carried out since 2024 until now, the Third Modification of the Environmental Impact, which seeks to extend the useful life of the unit and integrate processes with the El Porvenir Mine. The most recent update of the environment management plan was presented in the fourth supporting Technical Report issued in 2023.

At Atacocha, the Company promotes the implementation of high environmental standards, highlighting the principles of prevention, mitigation, and control of possible environmental impacts caused by its operations. There is a comprehensive Environmental Management Plan in place, which includes a complete monitoring program for physical and biological components. The Company's practices are based on an Environmental Management System ("EMS"), which makes it possible to identify critical environmental risks ("CERs") at the operations. The CER audit matrix includes the evaluation of legal requirement audit results, monitoring activities and environmental incidents.

A closure plan has been developed for Atacocha at feasibility level for all its components within the context of Peruvian legislation. This closure plan is periodically updated over the LOM. In 2024, the fifth amendment to the closure plan was approved. The closure plan addresses temporary, progressive and final closure actions, and post-closure inspection and monitoring. Two years before final closure, a detailed version of the mine closure plan will have to be prepared and submitted to the Peruvian Ministry of Energy and Mines for review and approval.

Nexa has developed a robust set of policies, protocols and operational procedures and practices that aim to address various aspects of its Social Responsibility with regards to its mining operations. Atacocha's management system is based on an overarching corporate policy defining the environmental and social objectives and principles that will guide the operation to achieve sound environmental and social performance. At Atacocha, Nexa aims to work in an environment of mutual respect, transparency and collaboration with the local population, which contributes to the company's objectives and short- and medium-term local development.

Aripuanã

The most recent NI 43-101 technical report with respect to Aripuanã is the technical report titled “Technical Report on Aripuanã Zinc Project, State of Mato Grosso, Brazil”, with an effective date of November 17, 2020 as amended February 9, 2021 (the “**Aripuanã Technical Report**”) prepared by SLR Consulting Ltd, and in particular: Jason J. Cox, P.Eng., Sean D. Horan, P.Geo., Brenna J. Y. Scholey, P.Eng., and Luis Vasquez, P.Eng. The Aripuanã Technical Report has been filed in accordance with NI 43-101, and is available, under Nexa’s SEDAR+ profile at www.sedarplus.ca.

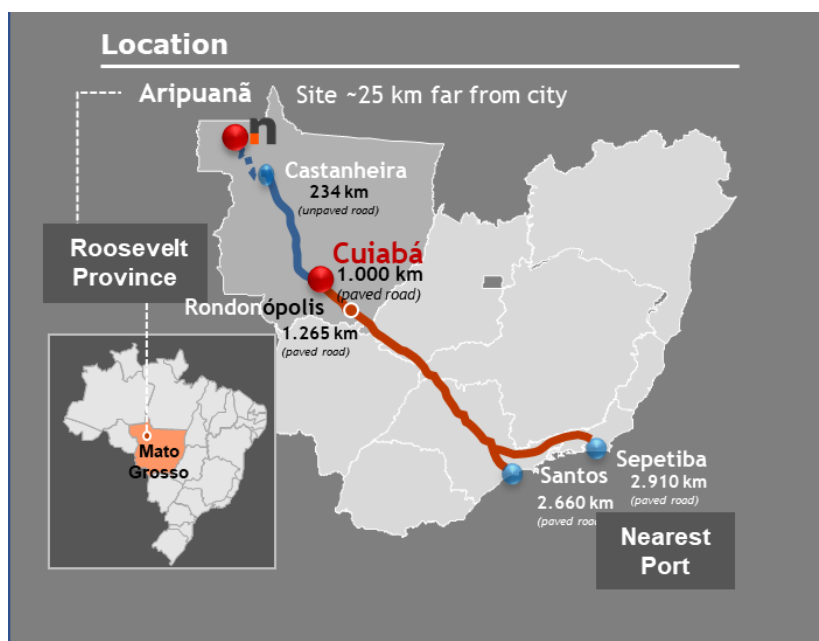
Certain of the scientific and technical information set out herein with respect to Aripuanã is based on information presented in the Aripuanã Technical Report. The Mineral Resources and Mineral Reserves for the Aripuanã Mine have been estimated by Nexa as of December 31, 2024, and reviewed by a Qualified Person. The Qualified Person for the Mineral Resources estimate is José Antonio Lopes, B.Geo., FAusIMM, a Nexa Resources employee. José Antonio Lopes has also reviewed and approved certain information set out herein that has been updated since the date of the Aripuanã Technical Report. The Qualified Person for the Mineral Reserves estimate is Vitor Ferraz Viana, B.Eng., FAusIMM, a Nexa Resources employee. Vitor Ferraz Viana has also reviewed and approved certain information set out herein that has been updated since the date of the Aripuanã Technical Report.

Project Description, Location and Access

The Aripuanã mine is located in the northwest corner of the Mato Grosso State in western Brazil, approximately 2,529 km by railroad and road to the Três Marias smelter, 2,831 km to the Juiz de Fora smelter or 2,660 km to the port of Santos. The approximate coordinates of the mine are 226,000m E and 8,888,000m N UTM 21L zone (South American 1969 datum) and the project is located at an average elevation of 250 masl. The project is accessible from the town of Aripuanã via a 25 km unpaved road, which is well maintained in the dry season. Aripuanã can be accessed from the state capital, Cuiabá, via a 16-hour drive (935 km) on paved and unpaved roads. The final 250 km between Cuiabá and Aripuanã are on unpaved roads.

The town of Aripuanã is also serviced by a paved airstrip suitable for light aircraft. There are no commercial flights travelling between Cuiabá and the town of Aripuanã, however the site can be accessed via a three-hour chartered flight.

Site Location Plan



The Aripuanã mine is comprised of 596 km² (59,695.50 hectares) of concessions with characteristics of Volcanogenic Massive Sulphide (“VMS”) deposits. The Aripuanã region contains polymetallic VMS deposits with

zinc, lead, and copper, as well as small amounts of gold and silver, present in the form of massive mantles and veins, located in volcano sedimentary sequences belonging to the Roosevelt Group of Proterozoic age.

Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

The Aripuanã mine is owned 100% by Nexa Brazil. The mineral rights are divided into core tenements, where the known mineral deposits are located, and the surrounding exploration areas.

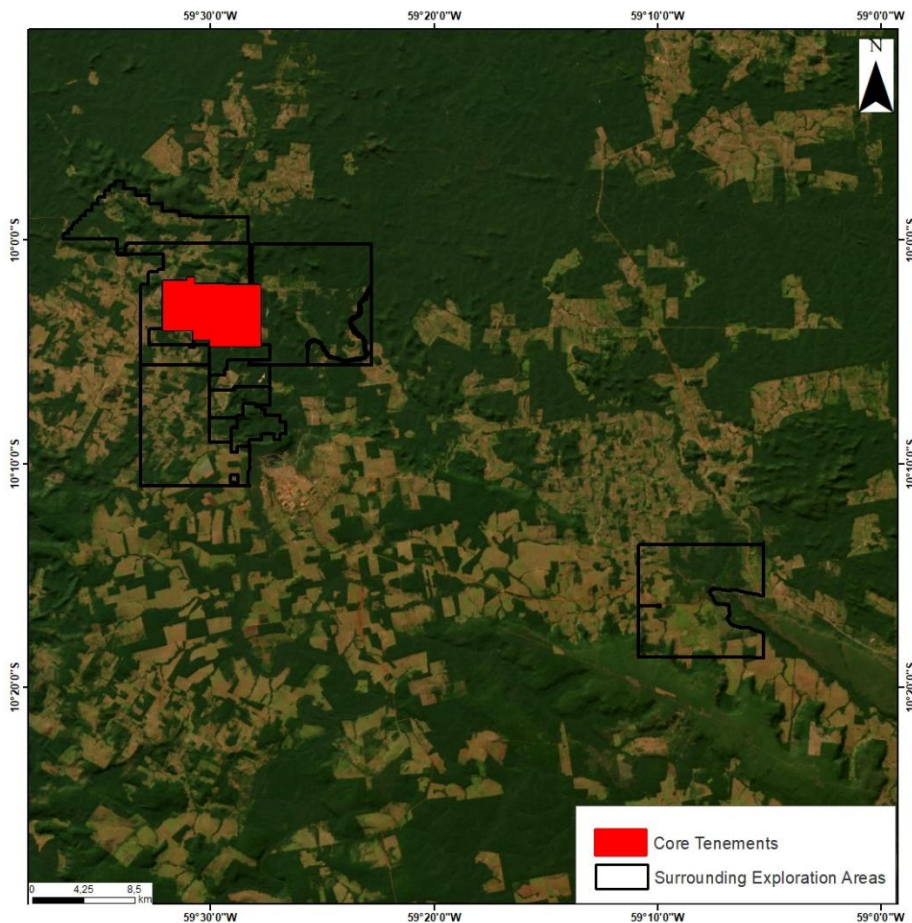
The project holds one mining concession in the core area that has a total area of 3,639.9 hectares, two mining concession applications (1,368.5 hectares), one right to apply for mining concession, (1,000.0 hectares) and nine exploration authorizations (35,152.7 hectares).

The Aripuanã mine holds surface rights sufficient to support the future operations. There is sufficient suitable land available within the mineral rights held by the Company for tailings disposal, mine waste disposal, and installations such as the process plant and related mine infrastructure.

The Aripuanã mine holds several permits and licenses supporting its current operations. The operating license renewal was submitted on time and is currently under review.

The Aripuanã mine holds several permits and licenses supporting its current operations. The renewal of the operating license was submitted on time, and the permit is valid for 3 years, until December 2027.

Aripuanã Mine Mineral Rights



Brazilian companies that hold mining concessions are subject to a royalty payment known as Financial Compensation for the Exploitation of Mineral Resources (*Compensação Financeira pela Exploração de Recursos Minerais* – “CFEM”), imposed by the National Mining Agency - ANM. Revenues from mining activities are subject to CFEM which is paid to the ANM. CFEM is a monthly royalty based on the sales value of minerals; net of taxes levied on the respective sale. When the produced minerals are used in its internal industrial processes, CFEM is

determined based on the costs incurred to produce them or is determined by a reference price of the respective mineral to be defined by the ANM. The applicable rate varies according to the mineral product (currently 2.0% for zinc, copper and lead).

In 2020, we reached an agreement with artisanal miners that are working adjacent to the property belonging to our Aripuanã mine, the ANM and the state government whereby Nexa assigned these artisanal miners an area to exercise their activities subject to certain conditions. The increase of artisanal mining activity or the failure of these artisanal miners to abide with our agreement may have an adverse effect on the development of our operations in Aripuanã.

In 2021, Nexa acquired two estates (584.9 hectares) located at the vicinity of the mine and concluded the process of documenting a third acquired in the past (100.0 hectares). The total land purchase of 684.9 hectares was required to meet the Rural Environmental Registration (CAR in Brazil) which requires areas of native vegetation that are not available within the area of enterprise.

In 2022, Nexa acquired six estates (1,332.4 hectares), located at the vicinity of the mine. The Rural Environmental Registry (CAR) was updated by Nexa and is in the process of being approved by the environmental agency, and, as of the date of this filing, we have not received a response from the environmental agency. On January 25, 2022, we signed an offtake agreement with a third-party international player (the “offtaker”), in which Nexa agreed to sell 100% of the copper concentrate produced by Aripuanã for a 5-year period starting in February 2023 and limited to 30,810 tonnes, at the lower of current market prices or a price cap. In September 2023, the parties agreed to amend the offtake agreement, which states that no penalty will be applied in case of delays in the agreed shipment schedule per year. However, if lower volumes are delivered in any year within the contract period, at the end of the contract period, the remaining balance will be shipped in a single additional delivery to total 30,018 tonnes. The offtake agreement was structured to completely extinguish a previous existing future royalty obligation that Nexa had with the offtaker. Additionally, the Company opted to voluntarily and irrevocably designate the entire offtake agreement at fair value through profit and loss within the scope of IFRS Accounting Standards 9 rather than separate the value of the embedded derivative associated with the price cap, recognizing a non-cash accumulated loss of US\$3.3 million in the income statement for the period ended on December 31, 2024. For further details on the offtake agreement, see Note 16(v) to our consolidated financial statements for the fiscal year ended December 31, 2024.

Besides CFEM and royalty payments to surface rights holders if mining occurs in their property equal to 50% of the related CFEM, the Aripuanã mine is also subject to royalties according to the table below.

Royalty Data

Receiver of Royalty	Tenements 866.569/1992 and 866.570/1992	Tenements 866.173/1992 and 866.174/1992	Other Deposits
artisanal miners Expedito 0.2125% Cleusa 0.2125% Divino 0.4250% Joaquim 0.4250% Neder 0.1000% Max 0.0500%		1.425% NSR from the start of the first sale of concentrate	
Luiz de Almeida	1.275% of net sales from the first sale of the mineral product		
Lacerda Sociedade Individual	0.225% of net sales from the first sale of the mineral product		

On January 25, 2022, we signed an offtake agreement with a third-party international player (the “offtaker”), in which Nexa agreed to sell 100% of the copper concentrate produced at Aripuanã for a 5-year period starting in October 2022, subject to a maximum of 30,810 tons, at the lower of current market prices or a price cap. The offtake agreement was structured to completely extinguish a previous existing future royalty obligation that Nexa had with the offtaker. Additionally, the Company opted to voluntarily and irrevocably designate the entire offtake agreement at fair value through profit and loss within the scope of IFRS 9 rather than separate the value of the embedded derivative associated with the price cap, recognizing a non-cash accumulated income of US\$24.3 million in the income statement for the period ended on December 31, 2022.

History

Aripuanã is an underground polymetallic project containing zinc, lead and copper, located in the state of Mato Grosso, Brazil. In 2000, Dardanelos was created to represent a joint venture, or “contract of association,” between Karmin and Anglo American, with the intent of exploring the areas adjacent to the town of Aripuanã for base and precious metals. Anglo American and Karmin held 70% and 28.5% of Dardanelos, respectively, with the remaining interest (1.5%) owned by SGV Merchant Bank (“SGV”).

In 2004, the initial agreement between Karmin and Anglo American was amended to include Nexa Brazil’s participation. Nexa Brazil subsequently acquired 100% of Anglo American’s interest in the project. In 2007, Karmin purchased SGV’s interests, raising its participation to 30%. In 2015, Nexa Peru acquired 7.7% of Nexa Brazil’s interests in Dardanelos. In 2019, Nexa Brazil became the owner of 100% of the Aripuanã mine.

Up until 2019, Dardanelos was a joint venture between subsidiaries of Nexa (70%) and Karmin (30%), with Nexa acting as the operator. In 2019, Nexa purchased Karmin’s interest and became the sole owner of the project. As a result of this acquisition and following the transfer of the Dardanelos interest in the Aripuanã mine from Nexa Peru to Nexa Brazil, Nexa Brazil became the owner of 100% of the Aripuanã mine.

Ramp-up Activities

Ramp-up activities at the Aripuanã mine started in July 2022, and the mine continued in the ramp-up phase through 2023 and into 2024. In June 2024, the ramp-up phase was concluded and Aripuanã transitioned into an operational mine.

In the fourth quarter of 2024, we achieved an average of 67.0% of capacity utilization level, reflecting the impact of maintenance activities, tailings filter constraints, and heavy rainfall during the period, which was 20% higher than in 2023. We continue to focus on improving operational performance, with a particular focus on the tailings filter circuit. While capacity has significantly increased since production startup, challenges persist due to current constraints. To resolve this, we acquired a fourth tailings filter, which we expect to be delivered and installed during the second half of 2025, with commissioning expected for the first quarter of 2026. This upgrade will further enhance utilization capacity, ensuring optimal performance and in line with our commitment to operational excellence.

At the end of 2024, approximately 57.0kt of ore was stockpiled. Horizontal mine development reached an accumulated of 41.2 m developed for both mines (Arex and Link). As of the date of this filing, the mine is fully operational, and underground activities are focused on developing and preparing new areas for mining operations.

As of December 31, 2024, 855 people were employed at Aripuanã. We also continued the qualification program for future mine and plant operating professionals, which had 95 candidates enrolled in 2024, of which 64.2% (61) obtained professional qualifications in the areas of maintenance and automation, and geology and surveying. The company hired 41.0% (25) of the attendees that obtained professional qualifications, of which 60.0% (15) are men and 40.0% (10) are women.

Mine Production from Aripuanã (2023 - 2024)

	Unit	2022	2023	2024
Tonnage	Mt	0.4	1.31	1.48
Zn Grade	%	2.17	3.31	3.23
Cu Grade	%	0.56	0.68	0.56
Pb Grade	%	0.71	1.05	1.12
Ag Grade	oz/t	0.59	0.96	1.17
Ag Grade	g/t	18.28	29.77	36.26
Au Grade	oz/t	0.01	0.02	0.02
Au Grade	g/t	0.33	0.47	0.54

Geological Setting, Mineralization and Deposit Types

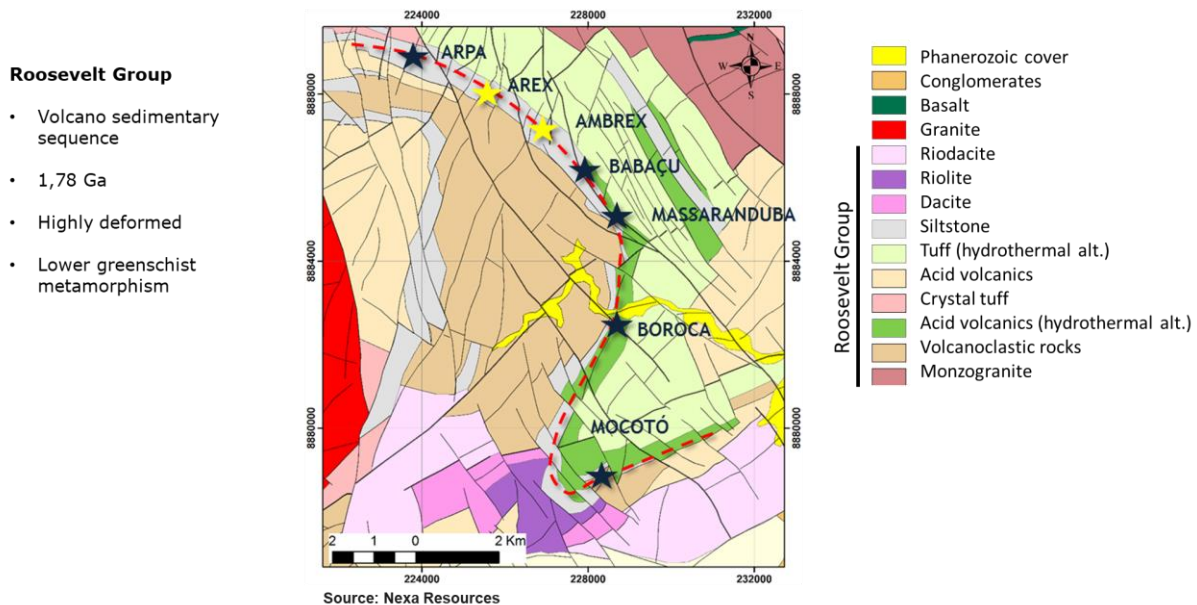
The Aripuanã region contains polymetallic VMS deposits with zinc, lead and copper, as well as small amounts of gold and silver, present in the form of massive mantles and veins, located in volcano sedimentary sequences belonging to the Roosevelt Group of Proterozoic age.

Four main elongated mineralized zones have been defined in the central portion of the project: (1) Arex, (2) Link, (3) Ambrex and (4) Babaçu. Limited exploration has identified possible additional mineralized bodies including Massaranduba, Boroca and Mocotó to the south and Arpa to the north.

The Aripuanã polymetallic deposits are typical VMS deposits associated with felsic bimodal volcanism. The individual mineralized bodies have complex shapes due to intense tectonic activity. Stratabound mineralized bodies tend to follow the local folds, however, local-scale, tight isoclinal folds are frequently observed, usually with axes parallel to major reverse faults, causing rapid variations in the dips.

Massive, stratabound sulphide mineralization as well as vein and stockwork-type discordant mineralization have been described on the property. The stratabound bodies, consisting of disseminated to massive pyrite and pyrrhotite, with well-developed sphalerite and galena mineralization, are commonly associated with the contact between the middle volcanic and the upper sedimentary units. Discordant stringer bodies of pyrrhotite-pyrite-chalcopyrite mineralization are generally located in the underlying volcanic units or intersect the massive sulphide lenses and have been interpreted as representing feeder zones.

Property Geology of Aripuanã Mine



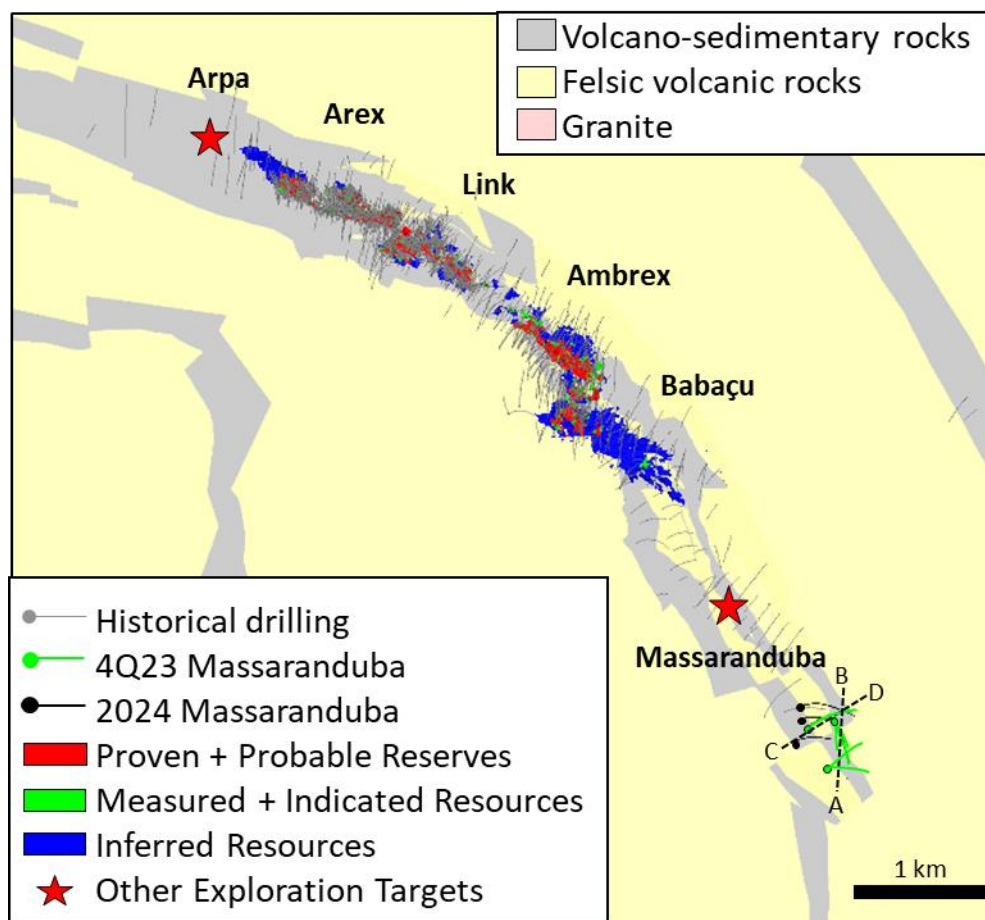
Exploration

The Aripuanã brownfield program in 2024 was focused on identifying new mineralized zones in the Massaranduba target through exploratory drilling and the results confirmed the continuity of mineralization in the southeast extension of the Aripuanã trend.

Drilling

In 2024, we spent a total of US\$4.0 million on the Aripuanã brownfield program, including Aripuanã’s exploratory drilling program and infill drilling campaign. The total investment included drilling, geological activities, geochemistry, and more. In 2024, we drilled 6.5 km of diamond drilling in 9 drill holes, including Massaranduba exploratory drilling. For 2025, we expect to invest US\$4.0 million in the brownfield exploration program to drill 10.0 km focusing on Massaranduba exploratory and conversion drilling.

Aripuanã Exploration and Drilled Targets



Sampling, Analysis and Data Verification

Core is sampled 10 m above and below visible mineralization. Samples respect geological contacts and vary from 0.5 m to 1.5 m in length depending on core recovery, length of the lithological unit, and mineralization. Geologists mark the samples using a felt pen on the core boxes and staple a sample tag wrapped in plastic to the box at the start of the sample. Core is marked with red and blue lines to indicate where it is to be sampled, and which half is to be assayed. Lines are drawn respecting the geological features such as layering to help minimize sampling bias. Prior to sampling, sample numbers are recorded in the Fusion data management system and cross-referenced with the interval depth downhole and the depth recorded in the database. The sample core is cut into two halves by technicians with a diamond saw, returning half of the split core to the core box and submitting the other half for sample preparation and analysis.

Database management is performed by a dedicated onsite geologist supervising the project. Digital logging sheets prepared by the geologist are uploaded to the Fusion database management system. Original drill logs, structural logs, geotechnical logs, details of chain of custody, site reclamation, and drilling analysis results are stored on site in a folder, specific to a single drill hole. Folders are clearly labelled and stored in a cabinet in the office, which is locked during off hours. Assay certificates of exploration and mine drill holes are mailed to the site by ALS Global and emailed to Nexa employees. Certificates are reviewed by Nexa personnel prior to being uploaded to Fusion.

Sample preparation was performed by the ACME preparation facility in Goiania, Brazil, from 2004 to 2007, and from 2007 on, by ALS Global. Both laboratories followed the same preparation procedure, described below. The sample was logged in the tracking system, weighed, dried, and finally crushed to better than 70.0% passing a 2 mm screen. A split of up to 250 g was taken and pulverized to better than 85.0% passing a 75 micron screen. This sample preparation package was coded PUL -31 by ALS Global. Following preparation, samples were shipped to the sample analysis facility in Lima, Peru. ALS Global's preparation facility in Goiania is accredited to the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 9001:2008 standards and ALS Global is accredited to ISO 9001:2008 (expires 2018) and ISO/IEC 17025:2005 (expires 2018), for all relevant procedures. Both laboratories are independent of Nexa.

Nexa has implemented an analytical QC and assurance program to ensure the reliability of data exploration. The program comprises of the insertion of certified reference material (“CRMs” or standards), blanks samples, and different types of duplicate samples into the sample stream. Standards were inserted in the overall sample stream of drill core at a rate of approximately one standard for every 30 drill core samples. Prior to 2012, blank material was river sand and sandstone sourced from the Aripuanã property. After 2012, only coarsely crushed sandstone was used.

Mineral Processing and Metallurgical Testing

Numerous studies were carried out from 2005 to 2013 for the Aripuanã mine to identify the best processing option. The evolution of the key studies and the process technologies under consideration were documented (VMH, 2015) and previously reported (RPA, 2017). The optimum processing route was defined through metallurgical test work and it was determined that sequential flotation (Cu-Pb-Zn) presented better economics due to higher recoveries and concentrate grades than bulk flotation into a single concentrate.

Additional test work on drill core from the Aripuanã mine was conducted by SGS GEOSOL from May 2016 to January 2017 to provide experimental data to support engineering studies. Information on sample validation and additional metallurgical testing has largely been provided by “Validação das Amostras Seleccionadas para Teste Metalurgico” (LCASSIS Consultoria em Recursos Minerais (LCASSIS), 2017), the SGS GEOSOL 2017 Report (SGS GEOSOL, 2017), and the Metallurgical Testwork Report (Worley Parsons, 2017a).

Locked cycle test work was also conducted in November 2017 by SGS GEOSOL to provide experimental data on the treatment of various types of mineralization and the results of the test work were used to define the process route selection. Pilot studies were undertaken by SGS GEOSOL on Aripuanã mineralization, and the results were reported in the 2018 Pilot Study (SGS GEOSOL, 2018). Metallurgical data obtained from testing were integrated into the feasibility study (FEL3) process design by SNC Lavalin.

During 2021, a new pilot flotation test was carried out at Vazante pilot plant in order to study the behavior of ROM samples collected at the Arex mine for copper, lead and zinc flotation using the circuit and reagents defined to project. Talc flotation removed 8.0% of mass and was essential to avoid the contamination of copper, lead and zinc final concentrates with light hydrophobic gang minerals. The losses of copper, lead and zinc in talc flotation were as expected in the project and previously metallurgical tests, lower than 1.5% for all metals. Copper final concentrate with 30.0% copper grade and metallurgical recovery of 78.8% were achieved in the pilot flotation test. Lead final concentrate with 60.0% lead grade and metallurgical recovery of 79.1% were achieved in the pilot flotation test. Zinc final concentrate with 55.0% zinc grade and metallurgical recovery of 87.4% were achieved in the pilot flotation test. The metallurgical tests confirm again the susceptibility of Aripuanã ores to sequential flotation processes in order to produce high grade copper, lead and zinc concentrates.

Based on the metallurgical test work program completed to date, the Aripuanã process flowsheet has been developed using conventional technologies for treatment and the recovery of copper, lead, and zinc as separate concentrates. Plant throughput is forecast to average 2.214 Mtpa of ROM ore over the LOM supplied from the Arex, Link, and Ambrex underground mines. Two main ore types are present at Aripuanã: stratabound and stringer, which have different hardnesses and therefore different throughput rates. Stratabound material, however, will make up the majority of the ore to be processed (approximately 89%) and the feed blend to the plant is expected to peak at 21% stringer material. Estimated processing rates for the two ore types individually based on hardness are approximately 5,000 tpd (dry basis) for stringer material and 6,300 tpd (dry basis) for stratabound material. Throughput for the blended ore is estimated as a weighted average of the throughputs of the two ore types.

The Aripuanã plant is in ramp-up phase and has a nominal design processing capacity of approximately 6,300 tonnes of ore per day. The table below summarizes the Aripuanã mine’s concentrate production, metal contained in concentrates produced and average grades for the periods indicated.

Aripuanã Polymetallic Circuit Metallurgical Performance (2022 - 2024)

	Unit	Item	2021	2022	2024
Production	Tonnes		391,619	1,311,430	1,475,566
Mill Head Grade	g/t	Ag	18.28	29.77	36.26
	g/t	Au	0.47	0.33	0.54
	%	Cu	0.56	0.68	0.56
	%	Pb	0.71	1.05	1.12
	%	Zn	2.17	3.31	3.23

	Unit	Item	2021	2022	2024
Cu Concentrate	%	Cu Recovery	36.54	49.47	67.17
	%	Cu Grade	17.14	21.26	21.18
	oz/t	Ag Grade	7.13	8.82	11.11
	%	Ag Recovery (to Cu)	14.53	14.69	16.82
	oz/t	Au Grade	0.13	0.17	0.23
	%	Au Recovery (to Cu)	14.34	17.97	23.04
Pb Concentrate	%	Pb Recovery	26.26	45.76	79.15
	%	Pb Grade	16.22	31.75	37.11
	oz/t	Ag Grade	8.06	11.38	18.86
	%	Ag Recovery (to Pb)	15.76	18.08	38.58
	oz/t	Au Grade	0.09	0.17	0.23
	%	Au Recovery (to Pb)	9.60	16.19	31.59
Zn Concentrate	%	Zn Recovery	26.89	50.94	66.43
	%	Zn Grade	41.58	49.08	49.65

Mineral Reserves Estimate

The Aripuanã Mineral Reserves estimated dated December 31, 2024, were reported using 2014 CIM Definition Standards and were the estimates are based on four main orebodies: Arex, Link and Ambrex and the two main types of mineralization in the deposit are stratabound and stringer. The main commodities produced are zinc, copper, lead, silver and gold. The dilution that has been applied is related to the selected mining method. The two main mining methods used at Aripuanã are longitudinal longhole retreat (“bench stoping”) and transverse longhole mining (vertical retreat mining, or “VRM”) with primary and secondary stope extraction. Dilution is applied on a percentage basis, with no grade applied to the diluting material. The NSR factors were determined using long term metal price forecasts, metallurgical recoveries, transport, treatment, and refining costs. A break-even NSR cut-off value is US\$60.68/t processed was estimated from forecasted operating costs and some incremental material between US\$49.00/t and US\$60.68/t was included. A minimum mining width of 4.0 m was used for bench stoping and 15.0 m for VRM. The long-term prices derived are in line with the consensus forecasts from banks and independent institutions. Mineral Reserves estimates are based on average long-term metal prices of: zinc: US\$2,864.90/t (US\$1.30/lb); copper: US\$9,095.61/t (US\$4.13/lb); lead: US\$2,097.45/t (US\$0.95/lb); and silver: US\$24.83/oz; and gold: US\$1,946.05/oz. Recoveries at LOM average head grades are 91.08% for Zn, 84.92% for Pb, 60.00% for Cu, 68.00% for Ag, and 67.80% for Au. The current LOM plan continues to 2039.

Mineral Resources Estimate

The Mineral Resources estimated dated December 31, 2024, were reported using 2014 CIM Definition Standards and were completed for Babaçu, Arex, Ambrex and Link. The block models were created using Datamine and Leapfrog software. Wireframes for geology and mineralization were constructed in Leapfrog based on geology sections, assay results, lithological information and structural data. Assays were capped to various levels based on exploration data analysis and then composited to one-meter lengths. Wireframes were filled with blocks measuring 5 m by 5 m by 5 m for with sub-celling at wireframe boundaries. Blocks were interpolated with grade using the OK and ID3. Blocks estimates were validated using industry standard validation techniques. Classification of blocks was based on distance-based criteria. Potentially mineable shapes of underground Mineral Resources are generated using DSO software. The Mineral Resources of the Aripuanã mine are reported using a cut-off value of US\$60.68/t. Mineral Resources estimates are based on average long-term metal prices of: zinc: US\$3,294.64/t (US\$1.49/lb); copper: US\$10,459.95/t (US\$4.74/lb); lead: US\$2,412.07/t (US\$1.09/lb); silver: US\$28.55/oz and gold: US\$2,237.96/oz. Metallurgical recoveries are accounted for in NSR calculations based on metallurgical test work and are variable as a function of head grade and oretype. Recoveries at the LOM average head grades material are 91.08% for Zn, 84.92% for Pb, 60.00% for Cu, 68.00% for Ag, and 67.80% for Au.

Mining Operations

Mining Methods

As mentioned above, the Aripuanã mine targets the mining of three elongate mineralized zones: Arex, Link, and Ambrex. All the targets are separate VMS deposits with differing mineral compositions in stratabound and

stringer forms and complex geometric shapes. The deposit geometry is amenable to a number of underground mechanized mining techniques including C&F and bulk stoping methods. A nominal production target of 6,300 tpd has been used as the basis for the mine production schedule.

Mining will be undertaken using mechanized underground mobile mining equipment via a network of declines, access drifts, and ore drives. Access to the Arex, Link, and Ambrex deposits will be via separate portals from the most favorable topographic locations.

Processing and Recovery Operations

Based on the metallurgical test program completed to date, the Aripuanã process flowsheet has been developed by considering conventional technologies for treatment and the recovery of copper, lead, and zinc as separate concentrates. Plant throughput is forecast to average 2.214 Mtpa of ROM ore over the LOM supplied from the Arex, Link, and Ambrex underground mines. The plant will treat blended mineralization at up to 6,300 tpd (dry basis), with the maximum achievable throughput being for ore consisting mainly of stratabound material. Key elements of the process flowsheet include primary crushing, SAG and ball milling with pebble crushing (SABC), talc pre-flotation, followed by sequential flotation of copper, lead, and zinc.

Infrastructure, Permitting and Compliance Activities

The planned infrastructure at the Aripuanã mine includes dry stack tailings storage facility (“TSF”), power supply, water storage dam, access and site road, maintenance shops and fuel storage.

The current waste management strategy includes the following aspects: production of tailings generated by the processing of zinc, lead, and copper from underground mining at the project; adoption of dry stack (filtered) tailings disposal on surface and tailings disposal as cemented paste backfill underground; tailings production for surface disposal over 13 years is estimated at a total of 6.34 cubic meters (Mm³) with 4.49 Mm³ in the dry season and 1.87 Mm³ in the wet season; waste rock production for surface disposal of 1.33 Mm³ over 13 years; a double lined tailings management facility (TMF) with associated surface runoff collection ponds and access roads; A double lined waste rock storage facility and associated surface runoff collection ponds and access roads.

Due to the high flow rates and expected low concentrations of dissolved metals, water collection and treatment will be carried out using engineered wetlands. Separate facilities will be developed for processing water recovered from the plant and for runoff from stockpiles (ore, waste, and dry stacked tailings) and access roads.

Electrical power will be provided to the Aripuanã mine by SE Juina (National Energy System) through private installations of UHE Dardanelos, where the connection to the Nexa bay will be at 230kV. A 20 km long transmission line will connect the Dardanelos substation to the Project’s main substation at the mine site. Nexa obtained authorization for the connection from the Ministry of Mines and Energy, and in 2019 obtained the access permit provided by Operador Nacional do Sistema Elétrico (“ONS”) and subsequently obtained authorization to connect to the national grid from the Agência Nacional de Energia Elétrica (“ANEEL”).

The Aripuanã mine water balance requires a top-up fresh water supply of approximately 150m³/h. Nexa has undertaken a water supply engineering study based on the construction of a water dam and creation of a freshwater lake in a valley adjacent to the Aripuanã mine’s site. Nexa has obtained authorization from the regional authority to construct the dam and to draw up to 378 m³/h of fresh water from the dam to supply the Aripuanã mine.

Environmental, Permitting and Social Considerations

The Aripuanã mine’s EIA was finalized in 2017, and the said project holds installation and operating approvals. The 2017 EIA concludes that the most significant project-related impacts are those that will directly and indirectly affect, synergistically and cumulatively, vegetation cover and soils in the Permanent Preservation Areas and water resources, as well as changes in fauna communities, both terrestrial and aquatic, highlighting the relevance of local biodiversity, with species of flora and fauna of the Amazon biome, including endangered species. The EIA developed management and monitoring plans to address and monitor key indicators for the identified impacts. A key mitigation measure regarding encroachment on the Permanent Preservation Areas will be the implementation of a compensation plan and programs aimed at connectivity of habitat.

The 2017 EIA described two Indigenous villages located approximately 10 km to 12 km from the Project: Arara do Rio Branco with an area of approximately 114,842 ha and Aripuanã with an area of approximately 750,649 ha. Consultation with Indigenous Peoples regarding Project impacts and mitigation were undertaken under the tutelage

and consent of National Historical and Artistic Heritage Institute (“IPHAN”) with National Indian Foundation (FUNAI) during the preparation of the 2017 EIA. In 2018, Nexa commissioned a study on the Indigenous Component of the Indigenous Lands Aripuanã and Arara do Rio Branco (“ICS”). The study methods were developed based on a Terms of Reference issued by FUNAI and through consultation with the Indigenous Communities. The report identified and assessed potential impacts on the Indigenous Communities and their lands, considered the perspectives of the Indigenous Communities on the potential impacts, and developed management plans to mitigate these impacts.

The ICS was approved by the authorities at the end of 2019, and work began on the Basic Environmental Plan for the Indigenous Component (“PBACI”), whose final report should consider the social realities of the indigenous people and their specificities, as well as the protection of their territories.

In March 2020, FUNAI, through Ordinance nº 419, established temporary measures to prevent the infection and spread of the COVID-19, temporarily suspending field activities, which were resumed in September of this year, considering the necessary safety measures and conditions for activities involving indigenous people in the context of the pandemic.

In 2021, with the resurgence of the pandemic, activities were carried out in a restricted way and following the health and safety protocols related to the pandemic, making it possible to carry out only part of the Plan's programming with indigenous people.

A conceptual Mine Closure Plan has been developed for the Aripuanã mine. The main objective of the plan is to present proposals and solutions to be implemented before, during, and after mine closure in order to avoid, eliminate, or minimize long-term environmental liabilities and possible future obligations. The plan currently considers four alternatives for final land use. The first option is for the whole area to become a Conservation Unit. The other options would allow some of the area to become a Conservation Unit while the remaining areas would be used for (a) a technical school for biodiversity conservation and the development of local communities (b) industrial land use and a technical school facility, and (c) agro-industrial land use and agricultural technical school. The Mine Closure plan was updated in 2022.

Nexa adheres to international standards to provide best practices for public reporting on economic, environmental, and social impacts in order to help Nexa’s shareholders and stakeholders understand Nexa’s corporate contribution to sustainable development. Corporately, Nexa has made several commitments to improve community health and safety as well as the overall well-being of community members.

Project

Magistral

*The most recent NI 43-101 technical report with respect to Magistral is the technical report titled “Technical Report on the Preliminary Economic Assessment of the Magistral Project, Ancash Region, Peru” with an effective date of August 2, 2017 (the “**Magistral Technical Report**”) prepared by RPA and in particular: Ian Weir, P.Eng., Rosmery J. Cardenas Barzola, P.Eng., Philip Geusebroek, P.Geo., Kathleen A. Altman, Ph.D., P.E., and Stephan Theben, Dipl.-Ing. The Magistral Technical Report has been filed in accordance with NI 43-101, and is available, under Nexa’s SEDAR+ profile at www.sedarplus.ca.*

Certain of the scientific and technical information set out herein with respect to Magistral is based on information presented in the Magistral Technical Report. The Mineral Resources for the Magistral Project have been estimated by Nexa as of December 31, 2021, and reviewed by a Qualified Person. The Qualified Person for the Mineral Resource estimate is Jerry Huaman Abalos, B.Geo., AusIMM CP, a Nexa Resources employee. Jerry Huaman Abalos has also reviewed and approved certain information set out herein that has been updated since the date of the Magistral Technical Report.

Project Description, Location and Access

Project Setting

The Magistral Project is located in the Ancash Region, approximately 450 km northwest of the capital of Lima and approximately 140 km east of the port city of Trujillo. The center of the Magistral Project is approximately at Universal Transverse Mercator (“UTM”) co-ordinates 9,090,500 mN and 194,300 mE (WGS 84, Zone 18S). The Magistral property can be reached by vehicle by driving a total of 272 km from Trujillo, much of which consists of secondary, poorly maintained roads that traverse steep topography.

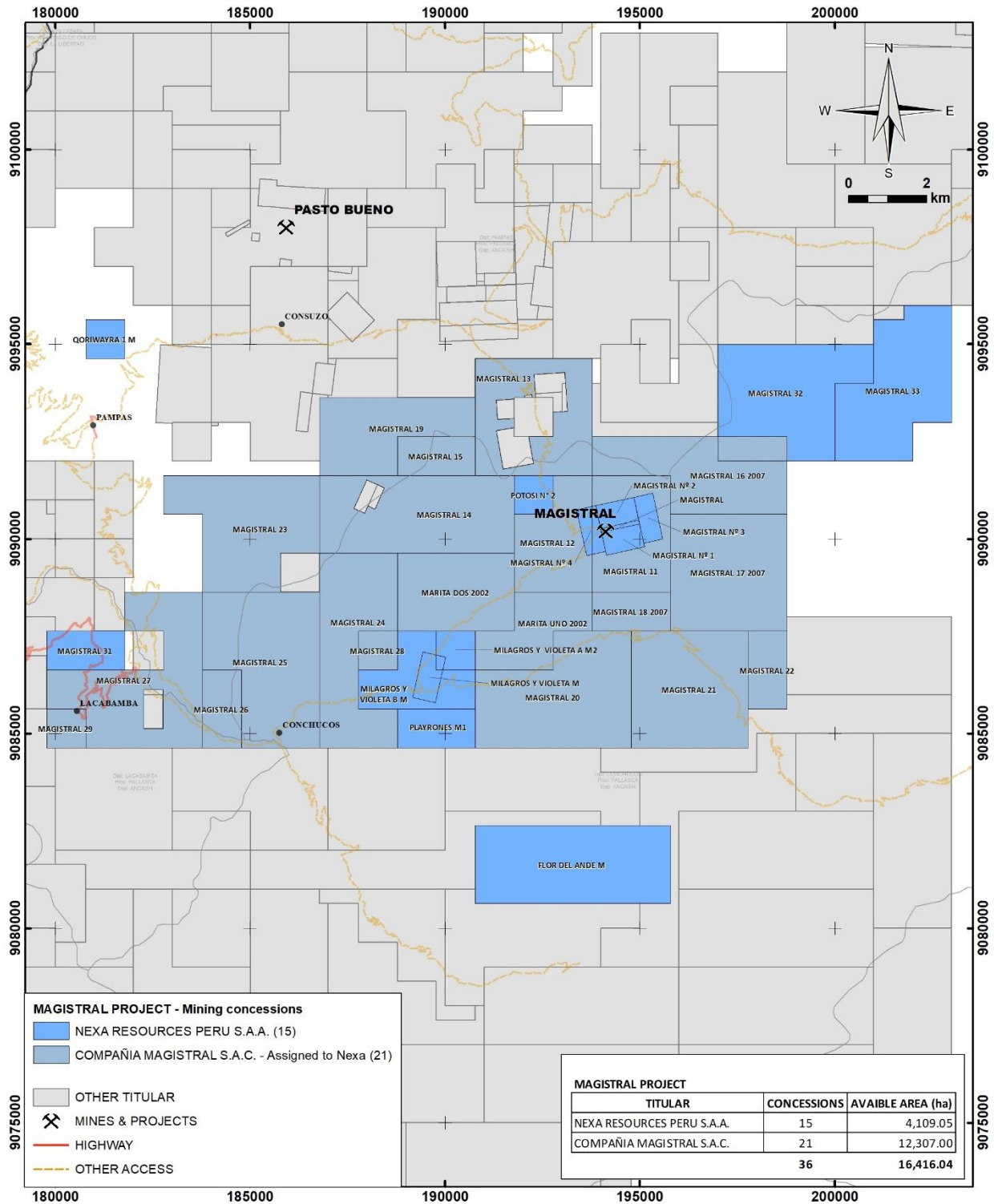
Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

The Magistral Project consists of a large, irregularly shaped block of contiguous concessions and two smaller, non-contiguous single concessions. The Magistral Project comprises 36 mineral concessions, totaling 16,416.04 hectares.

Nexa Resources S.A. owns a total of 83.48% in the Property that corresponds to the sum of Nexa’s direct interest in Nexa Perú (0.18%) and Nexa’s indirect interest in Nexa Perú (83.37%) through its controlled company Nexa Resources Cajamarquilla S.A. (99.92%). Nexa Perú holds 15 of the 36 mineral concessions and Compañía Magistral S.A.C, a company which according to Nexa is 100% controlled directly or indirectly by Nexa Perú, holds 21 of the 36 mineral concessions.

In 2015, Nexa Perú obtained this usufruct right from Comunidad Campesina de Conchucos, in order to perform excavation, drilling, and complementary activities in connection with the Magistral Project (Public Registry Record Partida 11086565). According to the Public Registry, the agreement states that the usufruct right shall be in force until the Mineral Reserves of the Project are exhausted, however, based on Article 1001 of the Civil Code this term would be limited to 30 years (i.e., until 2045).

Magistral Project Mineral Rights



History

The Pasto Bueno—Conchucos district, of which Magistral is a part, was known early in the colonial era as a gold-silver producing district. Early records report the production of 22,000 ounces of gold and 44,000 ounces of silver between 1644 and 1647. The first modern records of exploitation date to 1915 when the Garagorri Mining Company built a small smelting furnace to exploit high-grade surface ores from shallow workings in the Arizona and El Indio outcrops. This operation continued until 1919. In 1920, Cerro de Pasco Corporation (“Cerro de Pasco”) conducted a thorough study of the deposit area, which included topographic and geologic mapping. A total of 854m of underground workings were accessible in 1920.

Cerro de Pasco purchased Magistral concessions in 1950, but no significant work was done until 1969. From 1969 to 1973, Minera Magistral conducted a surface and underground exploration program. Buenaventura Ingenieros S.A. conducted a thorough evaluation of the Magistral deposit in 1980-1981. In 1997, Minero Peru S.A. (Minero Peru) began the process to privatize Magistral by inviting open bidding. An option to purchase the titles to the five Magistral mining concessions was awarded to Inca Pacific Resources Inc. (Inca Pacific) on February 18, 1999. In November 2000, Inca Pacific and Minera Anaconda Peru S.A. (Anaconda Peru) formed Ancash Cobre, as a holding company to carry out exploration and development at Magistral. From 1999 to 2001, Anaconda Peru completed 76 drill holes totaling 24,639.58 m. In March 2004, Inca Pacific acquired Anaconda Peru's 51.0% interest in Ancash Cobre for US\$2.1 million, thus restoring its 100.0% interest in Magistral.

In 2004, Ancash Cobre completed a 7,984.85 m, 34-hole, diamond drill hole program, a geotechnical review, and initiated environmental baseline studies. In 2005, Inca Peru entered into a joint venture with Quadra Mining (Quadra). In 2005 Ancash Cobre (funded by Quadra) drilled 14,349.35 m in 60 holes. In October 2005, Quadra withdrew from the joint venture and retained no interest. In 2006 Ancash Cobre completed a 7,073.5 m, 49-hole, diamond drilling program, and a positive preliminary feasibility study was issued by SRK in October 2006. In 2007, Ancash Cobre drilled 18,222.35 m in 116 drill holes, prepared a new mineral resource estimate, and completed a final feasibility study. In December 2009, the Peruvian government agency responsible for administering the Magistral contract with Ancash Cobre announced that it was terminating the contract.

In December 2009, the Peruvian government agency responsible for administering the contract to develop the Magistral property with Ancash Cobre announced that it was terminating the contract. In April 2011, Compañía Minera Milpo S.A.A. ("Milpo") was awarded the contract to develop Magistral by making an initial US\$8.02 million payment. In September 2011, Milpo announced that it had entered into an agreement to acquire all the issued and outstanding common shares of Inca Pacific.

In 2016, Votorantim Metais ("VMH") increased its share holdings in Milpo, acquiring 80.24% of its shares and focusing its operations on zinc and copper transactions in Brazil and Perú.

In 2017, VMH became Nexa Resources and continued with the development of the Magistral Project through exploration drilling and metallurgical testing.

In 2022, the feasibility study of the Magistral Project was concluded. In 2023, we requested a modification of the EIA and in May 24, 2024, the National Service for Environmental Certification of Sustainable Investments (Servicio Nacional de Certificación Ambiental para las Inversiones Sostenibles, or "SENACE") formally rejected the modification request of the EIA. We are currently addressing the situation with the relevant authorities, and we expect to reach a solution in 2025. The denial of the permit impacts on our assessment of the project's economic feasibility, technical development, as well as our impairment analysis. Additionally, because of the denial, in June 2024, the Magistral project was tested for impairment resulting in a loss of US\$58 million.

Nexa Peru was awarded the contract to develop the Magistral mining project in 2011, which has been amended from time to time. Nexa made an initial payment of US\$8.0 million to acquire the Magistral concessions, subject to a 2.0% NSR royalty upon production. Under the terms of the contract in 2016, Nexa Peru exercised the option by committing to invest a minimum 70% of declared initial capital expenditures by September 2024 and as a result of the COVID-19 pandemic, this term was extended by the government for an additional year, starting in September 2024. In 2023, new alignments were finalized, and an additional 35-month extension period was approved by force majeure, extending the period until August 2028. Pursuant to the terms of this commitment with the Peruvian Government to minimum investments levels in the project during this period, Nexa Peru would be required to pay a penalty of 30% of the unexecuted minimum investment commitment if not completed by August 2028. As of December 31, 2024, the unexecuted minimum investment commitment was US\$323.0 million, and, if not completed, the penalty exposure would be US\$97.0 million. Nexa Peru currently holds a 100.0% interest in 15 of the 36 concessions, Nexa holds 21 concessions by way of a lease agreement entered with Compañía Magistral S.A.C., a company also controlled by Nexa Peru. We spent approximately US\$1.7 million on the Magistral project in 2024 and continue to review capital allocation to this project in our portfolio.

Geological Setting, Mineralization and Deposit Types

The western continental margin of the South American Plate developed at least since Neoproterozoic to Early Paleozoic times and constitutes a convergent margin, along which eastward subduction of Pacific oceanic plates beneath the South American Plate takes place. Through this process, the Andean Chain, the highest non-collisional mountain range in the world, developed.

The Central Andes developed as a typical Andean-type orogen through subduction of oceanic crust and volcanic arc activity. The Central Andes includes an ensialic crust and can be subdivided into three main sections which reveal different subduction-geometry as well as different uplift mechanisms. The Northern Sector of the Central Andes, which hosts the Magistral Project, developed through extensional tectonics and subduction during early Mesozoic times. The sector was uplifted due to compression and deformation towards the foreland. In the last 5Ma a flat-slab subduction developed (Peruvian Flat Slab Segment).

The Magistral property is near the northeastern end of the Cordillera Blanca, a region that is underlain predominantly by Cretaceous carbonate and clastic sequences. These units strike north to northwest and are folded into a series of anticlines and synclines with northwest-trending axes.

The Cretaceous sedimentary rocks are bounded to the east by an early Paleozoic metamorphic terrane composed mainly of micaceous schist, gneissic granitoid and slate. The Cretaceous sedimentary sequence unconformably overlies these metamorphic rocks. The Cretaceous rocks are structurally overlain by black shale and sandstone of the Upper Jurassic Chicama Formation that were thrust eastwards along a prominent regional structure. The Chicama Formation was intruded by granodiorite and quartz diorite related to the extensive Cordillera Blanca batholith, which has been dated 8.2 +/- 0.2 Ma.

Several major structural features are evident in the Cretaceous sedimentary rocks in the Magistral region, including anticlines, synclines, and thrust faults. The trend of the fold axes and the strike of the faults changes from northwest to north near Magistral.

Exploration

Since acquiring the Magistral Project in 2011, the Company has initiated a comprehensive exploration program consisting of geological mapping, prospecting and sampling, ground geophysical surveying, and diamond drilling. Geological mapping at a scale of 1:2,000 was completed in the Ancapata area and the area north-northeast of Magistral over an area of 386.50 hectares. The objective was to verify and supplement the information available from Ancash Cobre's exploration.

Porphyry systems are generally formed by multi-pulse intrusive porphyry centers distributed in clusters. Seven exploration targets have been identified within a two km radius of the San Ernesto, H, and Sara porphyries. The targets are identified by country rock alteration (e.g., marble, skarn), porphyry intrusions, and anomalous rocks identified from rock chip sampling. Of the seven targets, only three were drilled.

No exploration work was carried out on the Magistral Project during 2024, and no exploration drilling program is scheduled for 2025.

Drilling

Until the end of 2021, the database for Magistral Project consists of 687 DDH totaling 126,937.83 m. The total drilling consists of 412 exploration drill holes for a total of 90,358.78 m, 144 geotechnical drills for a total of 14,593.3 m, 84 hydrogeological drill holes for a total of 10,464.8 m and 47 metallurgical drill holes for a total of 11,520.95 m.

A total of 157 drill holes (91 geotechnical drill holes for a total of 4,813.4 m and 66 hydrogeological drill holes for a total of 6,536.8 m) was developed with the purpose of collecting engineering-related information and they did not have assay results.

No drilling program was carried out since 2020 and there is no exploration drilling scheduled for 2025.

Sampling, Analysis and Data Verification

Surface drill hole collars were spotted using a handheld GPS instrument. The azimuth and dip of the holes were established using a compass and inclinometer. The attitude of the holes with depth was determined using a variety of tools over time with readings taken by the drillers. During the 2012 and 2013 drilling programs, the attitude of the holes was surveyed with a Reflex Maxibor instrument; in 2014, a Devico Deviflex instrument was used; and in 2015, a Reflex Gyro instrument was used. The interval between readings varied from 2 m to 5 m, depending on the year in which the holes were drilled. Upon completion of the surface holes, casings were pulled, PVC pipe was inserted, and the collar filled with concrete. Hole locations were surveyed. Drill core is placed sequentially in plastic core boxes at the drill by the drillers. The core is delivered to the Company's secure logging facility by the drilling

contractor on a daily basis where depth markers and core box numbers are checked, and the core is cleaned and reconstructed. The core is logged geotechnically, including the calculation of the core recovery, core loss, and rock quality designation (“RQD”). The fracture type and density are recorded. Core recovery is generally very good in fresh rock, typically in the 90.0% to 100.0% range. RQD is generally good to very good, typically 75.0% or better. The core is descriptively logged and marked for sampling by company geologists with particular attention to lithologies, structure, alteration, and mineralization. Logging is initially on paper and entered into a spreadsheet-based template for integration into the Magistral Project digital database later. The core is photographed wet with a digital camera after logging but before sampling.

Samples for bulk density determination are taken regularly. Core samples are taken by sawing the core in half lengthwise were indicated by the logging geologist. Samples are typically two m long in mineralized intervals. A two-meter-long sample is commonly taken at 10 m intervals in barren intervals. Samples typically do not cross geological boundaries. Half the sampled core was returned to the box, and the other half was placed in plastic bags. Split core samples are tracked using three-part ticket books. One tag is stapled into the core box at the beginning of the sample interval, one tag is placed in the sample bag with the sample, and the last tag is kept with the geologist’s records. Core boxes are stored on racks at the core logging facility for later retrieval if required. Company personnel deliver the split core samples to Trujillo on a regular basis where they are transported by a bonded carrier to Lima for analysis.

For samples analyzed at Certimin/CIMM, batches of samples are dried in stainless steel trays in an oven at either 60°C or 100°C until humidity reaches a desired level. They are then crushed in a jaw crusher using quartz flushes and compressed air to clean the equipment between samples. Secondary crushing is then performed with a roller crusher which is cleaned in the same manner. Secondary crushed samples are then run three times through a Jones riffle splitter to homogenize and the split positions switched before selection of the subsample for pulverisation. Pulverizers use a ring and bowl design. Compressed air and occasionally quartz flushes are used to prevent sample contamination and industrial alcohol is added to prevent samples from adhering to the bowl walls. Pulps are run through a secondary splitter and reject pulp duplicates are packed and stored for future usage. For samples analyzed at ALS Global, the sample was logged in the tracking system, weighed, dried, and finally crushed to greater than 70.0% passing a 2 mm screen. A split of up to 250 g was taken and pulverized to more than 85% passing a 75-micron screen. This sample preparation package was coded PUL -31 by ALS Global. Following preparation, samples were ready for analysis at the same facility in Lima, Peru. ALS Global is accredited to ISO/IEC 17025 for all relevant procedures. These laboratories are independent of the Company.

The QA/QC program as developed at Magistral is divided into three main phases:

- Phase 1: Anaconda Perú (1999 to 2001) and Ancash Cobre (2004 to 2008);
- Phase 2: Milpo (2012 to 2015); and
- Phase 3: Nexa (2018 to 2019).

For the purposes of Mineral Resources, each of the different phases are considered suitable for use.

In 2017, Nexa transferred the drill database from Geexplo System to Fusion. Nexa performed an exhaustive number of checks to confirm the accuracy of the data migration. Nexa performs regular backups to a remote server in Lima and central server in Brazil. Access to the database is strictly controlled.

Mineral Processing and Metallurgical Testing

Metallurgical test work was completed using samples from the Magistral Project starting in 2000. The most recent test work completed in connection with the Magistral Project was developed by Certimin and is referenced as Phases 8 and 9.

The test work completed during these phases had the objective of increasing the understanding of the Magistral Project and validating the historical test work in support of the process design. This test work included mineralogy, comminution, and flotation.

Tests of comminution were conducted on composites representing the three main ore types in addition to variability samples. The test results are consistent with the expectations based on the historical test work and demonstrated that the samples are soft to medium hard in terms of grinding power requirements. The results also indicated that ore abrasiveness can be categorized as medium to hard.

LCTs were conducted on composites representing the three main ore types and provided design parameters, metallurgical recovery, concentrate specifications, and reagent consumptions. The LCT results clearly indicated that the copper and molybdenum recoveries, as well as grades, are lower than the historical work, with few exceptions. The LCT results also demonstrated that the arsenic and antimony grades of the concentrate products are relatively high, and the products could incur smelter penalties.

Variability rougher flotation tests were conducted on 52 ore samples. The variability test results also indicated lower recoveries of copper and molybdenum, as well as lower mass pull compared to some of the historical test work (Phase 7). QEMSCAN analysis conducted during these phases of the test work has confirmed the mineralogical findings of historical test work. The theoretical grade recovery curves generated during the mineralogical work supports the metallurgical recovery forecasts.

The results also confirm the metallurgical assumptions (such as metallurgical recoveries, 91% Cu recovery and 68% Mo recovery, and concentrate product specifications) used for the process plant design.

Mineral Reserves Estimate

There are no Mineral Reserves at the Magistral Project.

Mineral Resources Estimate

The Mineral Resource is reported using 2014 CIM Definition Standards and the update for the Magistral Project was completed by Nexa in December 2021 using Datamine Studio RM (“Datamine Studio”), Seequent’s Leapfrog Geo (“Leapfrog”) and Supervisor software.

Wireframes for geology and mineralization were constructed in Leapfrog Geo based on geology sections, assay results, lithological information, and structural data. Raw assays were capping to copper, molybdenum, and silver assays in order to limit the influence of a small amount of outlier values located in the upper tail of the metal distributions and then the assays were composited to five meters lengths. Grades were interpolated into a sub-block model of parent blocks of 10m by 10m. The blocks were interpolated using OK for all domains for copper, molybdenum, and silver. Arsenic, bismuth, magnesium, iron, antimony, and sulphur were interpolated with ID³. All directions were based on search ellipsoid orientations according to the trend of the mineralization domain and the results were validated using industry standard validation techniques.

Classification of blocks was based on distance-based criteria. Mineral Resources are constrained within a Whittle optimized pit shell and the Mineral Resources are estimated at NSR cut-off values of US\$5.99/t for porphyry, US\$5.51/t for mixed, and US\$5.48/t for skarn rock types and a minimum mining width of 10 m was used. Metallurgical recoveries are accounted for in the NSR calculations based on metallurgical data and vary from 79.3% in skarn to 92.5% in San Ernesto porphyry for Cu, 51.3% in skarn and 79.2% in San Ernesto porphyry for Mo, and 70% for Ag. Mineral Resources are estimated using an average long-term metal price of US\$7,193.45/t for Cu, US\$21.34/oz for Ag and US\$9.90/lb of Mo. Bulk densities for range between 2.59 t/m³ and 3.30 t/m³ depending on the rock type.

Mining Operations

Open pit mining is proposed to be carried out by a contractor as a conventional truck and shovel operation. The Company is currently studying the option to mine using owner-owned equipment, but the trade-off analysis was not available at the time of the Magistral Technical Report. The mining contractor would undertake the following activities: drilling performed by conventional hydraulic production drills; blasting using ANFO (ammonium-nitrate fuel oil) and a down-hole delay initiation system; and loading and hauling operations performed with hydraulic excavators, and 40t 8x4 haulage trucks.

The production equipment would be supported by bulldozers, graders, and water trucks. The Company supervises the overall mining operation with its own employees including mining engineers, geologists, surveyors, and support staff. Mineralized material will be fed directly into a primary crusher located adjacent to the open pit. Material from the crusher will be transported to the processing facility using a system of conveyors. Topsoil stripping will be required to gain access to mineral and waste rock below. The volume is estimated to be approximately 2.2 Mm³, which will be stored to the northeast of the pit. Waste rock will be sent to either the Valley Waste Dump (located west of the pit) or the North Waste Dump (located to the northeast of the pit). Studies at the Preliminary Economic Assessment level typically include Inferred Mineral Resources; however, the Company has used only Measured and

Indicated Mineral Resources in the Whittle optimization and no Inferred Mineral Resources are included in either the mine plan or cash flow analysis.

Processing and Recovery Operations

The conceptual plant designed for Magistral will process 30,000 tpd using:

- Primary crusher
- Semi-autogenous grinding (“SAG”) mill
- Ball mill
- Bulk sulphide flotation circuit to recover copper and molybdenum
- Bulk concentrate regrind mill
- Copper—molybdenum separation flotation circuit
- Molybdenum concentrate regrind mill
- Molybdenum flotation circuit
- Dewatering
- Support systems

ROM mineralization will be delivered to a primary gyratory crusher that is located adjacent to the mine. Crushed mineralization will be transported by a series of overland conveyor belts to a crushed ore stockpile that is located near the processing plant. Vibrating feeders will draw mineralization from the stockpile and transfer it to a conveyor belt that feeds the SAG mill. In the SAG mill the mineralization is mixed with water to form a slurry. Slurry from the SAG mill will discharge onto a vibrating screen. Oversize from the screen is returned to the SAG mill for further size reduction. The design includes sufficient space that a pebble crusher may be added to the circuit at a future date if it is determined that the pebbles reach a critical size that cannot be reduced by the SAG mill alone. Undersize from the screen will be pumped to a series of high frequency vibrating screens that are designed to classify the mineralization to a particle size of 80% passing (P80) 150 µm. Undersize from the screens flows to one of two ball mills while oversize from the screens is the final product from the comminution circuit. Undersize from the high frequency screens will be pumped to a conditioning tank where reagents are added to the slurry. The bulk flotation circuit includes rougher and scavenger flotation circuits to recover bulk sulphide flotation concentrate that contains the copper and the molybdenum. The bulk rougher and scavenger tailings are the final tailings from the plant. The bulk concentrate is reground in a ball mill that is operated in closed circuit with cyclones to produce a product size of P80 45 µm. The ground concentrate is processed in three stages of bulk cleaner flotation. The final bulk cleaner flotation concentrate will flow by gravity to a bulk concentrate thickener where it is dewatered to a slurry density of approximately 55% solids by weight.

The thickener underflow will be processed in a rougher scavenger flotation circuit to separate the molybdenum from the copper. Tailings from the rougher—scavenger circuits are the final copper concentrate. The concentrate from the rougher scavenger circuit flows by gravity to the molybdenum flotation circuit and regrind circuit. The molybdenum concentrate is reground in a ball mill that is operated in closed circuit with cyclones. Overflow from the cyclones is processed in three stages of molybdenum cleaner flotation. Concentrate from the third molybdenum cleaner flotation circuit is the final molybdenum concentrate. High-rate thickeners are used for both the bulk flotation concentrate and for the copper concentrate. The copper concentrate is dewatered to a slurry density of approximately 70% solids by weight. The thickener underflow slurry is sent to a horizontal plate and frame filter press for further dewatering of the copper concentrate. The dewatered copper concentrate discharges into a storage area where it is loaded onto trucks for transport. Molybdenum concentrate is dewatered in a similar, smaller circuit. It is dewatered in a thickener and horizontal plate and frame filter press. The discharge from the molybdenum filter press discharges to a dryer. The dried concentrate is processed in a bagging system where it is loaded into bags for shipment.

Tailings will also be dewatered in a high-density thickener to produce a slurry density of 70% solids by weight prior to pumping to the Tailings Storage Facility. The water from all of the thickener overflows is recycled to the various processing circuits. The conceptual design includes reagent mixing and storage facilities, automation and instrumentation, water supply and distribution, and air supply and distribution.

Infrastructure, Permitting and Compliance Activities

Project Infrastructure

Local resources are minimal. The closest electric power substation connected to the national grid is at Pallasca (69 kV/22.9 kV), a distance of approximately 60 km from the Magistral property. The Magistral Project infrastructure was evaluated by Golder Associates Inc. (“Golder”) in its 2016 feasibility study (or Golder 2016 FS). The facilities and infrastructure for the Magistral Project were grouped into two large areas: the first area is the internal infrastructure (or On-Site Infrastructure) and the second area is the external infrastructure (or Off-Site Infrastructure).

The On-Site Infrastructure comprises the following key components:

- auxiliary concentrator plant infrastructure which includes reagent plant, located at 4,440 masl and occupies an area of 600 m²; reagent storehouse located at 4,458 MASL and the compressor house located on a platform adjacent to the concentrator plant and occupies an area of 550 m²;
- internal mine operation roads, which will connect the different facilities of the Magistral Project.
- the road design has been developed taking into account the regulations established by the Ministry of Transport and Communications (“MTC”) in 2013 and the Occupational Safety and Health Regulations (“OSHR”);
- the electrical distribution system of the Magistral Project, which will supply power to all facilities of the concentrator plant, services and infrastructure plant and mine;
- the supply of fresh water for the Magistral Project will be abstracted from the La Esperanza Lake, which is located in the upper part of the Toldobamba micro basin;
- two camps are envisaged for the Magistral Project: a concentrator plant camp and a mine camp;
- the fuel storage and dispatch station are located at 4,057 MASL on a 7,100 m² platform;
- five warehouses and two workshops are planned within the mine infrastructure; and
- fire suppression system covering the following areas: concentrator and mine camps, central warehouse, processing and concentrate storage areas, mine and concentrator offices, concentrator plant workshops, and the mine maintenance areas.

The Off-Site Infrastructure comprises the following key components:

- the supply of electrical energy for the Magistral Project will be provided by third parties and requires a new 69 kV transmission line between the existing Ramada electrical substation and the projected Magistral electrical substation. The transmission line to the site will be approximately 60 km;
- the main access road to the Magistral Project will be used for external access and transport of concentrates to the port of Salaverry. This route will consist mainly of National Route PE-3N from Trujillo-Huamachuco with a diversion near the La Arena mine, passing through the populated centers of Alto de Tamboras and Pampa El Cóndor, and finally passing Pelagatos Lake, before reaching the Magistral Project; and
- the transport of concentrates is envisaged to be outsourced through a specialized company hired by Nexa. The service includes the transport of copper and molybdenum concentrate, from the Magistral Project, via Huamachuco, to the port of Salaverry for the copper concentrate and to;
- the port of Callao for the molybdenum concentrate. The port logistics of concentrate handling and shipment would be carried out by a logistics operator hired by Nexa.

Environmental, Permitting and Social Considerations

The most recent environmental impact study relating to the Magistral Project was an amendment submitted to the Peruvian authorities in December 2021. The amendment was a modification of the previous EIA approved by the Peruvian authorities in 2016, which reflects changes to the Magistral Project, mainly the relocation of the TSF. An EMP and an Environmental Surveillance Plan (“ESP”) (monitoring programs) were prepared as part of the 2016 EIA and the 2021 EIA amendment. The monitoring programs include industrial and domestic effluent discharges, gas emissions, air quality, ambient noise, vibrations, surface water quality, sediments, groundwater quality, soil quality, terrestrial biology (vegetation and wildlife), aquatic biology and geotechnical surveillance.

An environmental compensation plan for bofedales has been developed for the Magistral Project in accordance with Peruvian regulations. Bofedales are high altitude areas of wetland vegetation commonly found in the central Andes mountains of Perú.

The tailings to be produced by the Magistral Project are known to be PAG but also have a high acid neutralization potential. As such, the tailings deposition plan is designed to ensure that deposited tailings are continually overprinted with fresh tailings to reduce exposure to the atmosphere and the depletion of neutralization potential. At closure, the TSF will be regraded to eliminate the tailings pond and capped with a revegetated isolation cover.

Nexa holds a number of environmental permits in support of its engineering design, preliminary construction activities, and future operation. The permits are Directorial Resolutions issued by the Peruvian authorities upon approval of mining environmental management instruments filed by mining companies. Nexa maintains an up-to-date record of approved and planned legal permits.

Nexa adheres to international standards to provide best practices for public reporting on economic, environmental, and social impacts in order to help its shareholders and stakeholders understand Nexa's corporate contribution to sustainable development. Nexa has also made several corporate commitments to improve community health and safety as well as the overall well-being of community members.

A conceptual Mine Closure Plan (MCP) has been prepared for all components of the Magistral Project in compliance with applicable Peruvian legislation. The MCP addresses temporary, progressive, and final closure actions, in addition to post closure inspection and monitoring. A closure cost estimate was developed and included in the MCP. The total financial assurance for progressive closure, final closure, and post-closure is calculated by the Peruvian government according to the Peruvian regulations (Supreme Decree D.S. N° 262-2012-MEM/DM).

SUMMARY OF OTHER MINERAL PROJECTS

Nexa has interests in several exploration projects, including one project in Brazil (Bonsucesso) and two projects in Peru (Hilarión and El Padrino, and Florida Canyon Zinc). Such projects are undergoing preliminary studies.

Bonsucesso

Project Setting

On July 1, 2024, we sold the Morro Agudo Complex in Minas Gerais, Brazil to Casa Verde Holding Ltda. for R\$80 million (around US\$16 million).

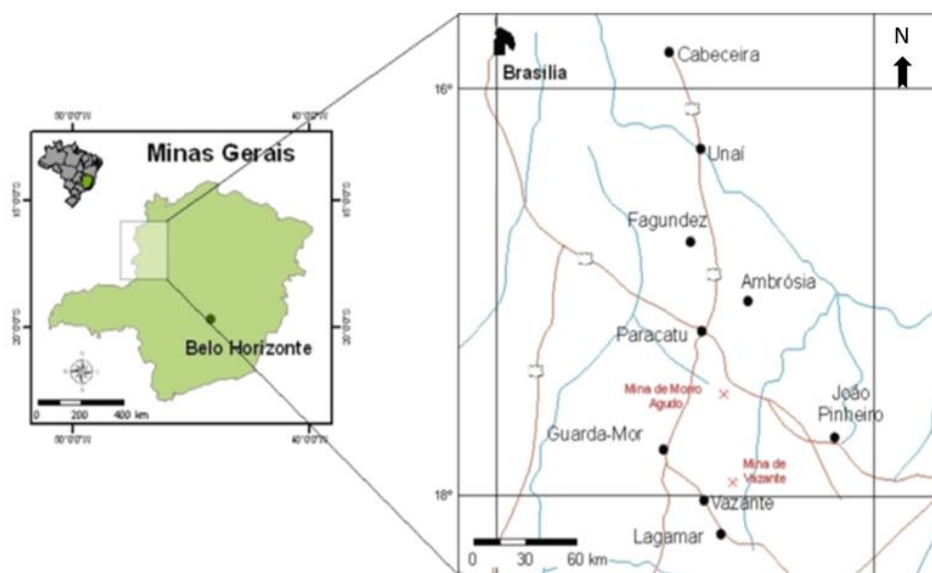
The Bonsucesso Project is a greenfield underground mine project that was formerly part of the Morro Agudo complex (Ambrósia Trend). The Bonsucesso Project was not included in the sale of the Morro Agudo complex. The project is located 8 km north of the Ambrósia Sul mine and approximately 60 km north of the Morro Agudo mine.

In 2024, we had no exploratory activities in the Bonsucesso Project, and no activities are expected for 2025.

The most recent preliminary feasibility study concluded in 2024, was conducted by Nexa with no amount invested since. The total investments related to this project, as of December 31, 2024, totaled US\$12.7 million, which includes all project studies and anticipated expenses related to processing plants, operating and infrastructure.

The strategic review of our assets continues with initiatives to optimize our portfolio. We continue to assess risk-return alternatives, and we are currently revisiting the project, taking into consideration our capital allocation strategy and our focus on free cash flow generation.

Project Location



History

Exploration activities conducted to date have included geological mapping, rock chips, pan concentrate, stream sediment, and soil sampling, airborne and ground geophysical surveys and drilling.

Modern underground mining commenced in 1988 from the Morro Agudo Mine. The Ambrosia Norte deposit was discovered in 1973, Ambrosia Sul in 2011, and Bonsucesso in 2014. Mining of the Ambrosia Sul deposit commenced in 2017. The Ambrosia mine in Morro Agudo reached the end of its LOM during the fourth quarter of 2020 and operations were suspended due to the uncertainties associated with the geological model of the area, safety considerations and a greater movement of ore compared to the original plan. Due to the mine closure, Nexa reviewed Ambrosia's portfolio of assets and analyzed the possibility of using these assets in other operations, such as the Bonsucesso Project, which is currently in the feasibility study stage.

Production from Ambrosia Sul for the Period 2019-2021 and Morro Agudo for the Period 2020-2022 are shown below.

Ambrosia Sul Mine Production (2019 - 2022)

	Unit	2019	2020	2021
Ore Tonnage	kt	225.74	278.38	-
Waste Tonnage	kt	1,477.00	1,077.04	-
Zn Grade	%	2.83	3.62	-
Pb Grade	%	0.18	0.16	-

Morro Agudo Mine Production History (2022 - 2024)

	Unit	2022	2023	2024
Ore Tonnage	Mt	0.86	1.11	0.31
Zn Grade	%	2.30	2.22	2.21
Pb Grade	%	0.93	0.95	0.76

Mineral Processing and Metallurgical Testing

A robust test program was conducted in respect of the Bonsucesso ore, including mineralogy, hardness tests and flotation tests. Bonsucesso presented a mineralogical assemblage very similar to Morro Agudo and hardness lower than Morro Agudo did, and those are very positive results. Bonsucesso also can be treated using a conventional flowsheet like the Morro Agudo concentrator and has presented excellent metallurgical results.

Separate zinc and lead recoveries were assigned to Morro Agudo, Ambrosia Sul and Ambrosia Norte/Bonsucesso mineralization. These are based on a combination of historical plant recoveries, metallurgical test work and assumed zinc recoveries of approximately 86.7% are achievable from Morro Agudo Mine and Ambrosia Sul mineralized material containing approximately 3% zinc. Lead recoveries are more sensitive to head grade and are more variable.

Mineral Reserves

There are no Mineral Reserves at the Bonsucesso Project.

Mineral Resources Estimate

The Mineral Resource estimate dated December 31, 2024, for Bonsucesso Project were reported using 2014 CIM Definition Standards and were completed by Nexa using Datamine Studio RM, Leapfrog Geo, and Isatis softwares. Wireframes for geology and mineralization were constructed in Leapfrog Geo based on geology sections, assay results, lithological information, and structural data. Assays were capped to various levels based on exploratory data analysis and then composited to one-meter lengths. Wireframes were filled with blocks 2m x 12m x 5m with sub-celling at wireframe boundaries. Blocks were interpolated with grade using Inverse Distance Squared (ID2). Blocks estimates were validated using industry standard validation techniques. Classification of blocks used distance-based criteria. Mineral Resources are reported within underground mining shapes and considering the NSR cut-offs: US\$ 55.82/t. Mineral Resources are estimated using an average long-term metal price of Zn: US\$ 3,218.90/t (US\$1.46/lb) and Pb: US\$ 2,300.33/t (US\$1.04/lb). Metallurgical recoveries are accounted for in the NSR calculations based on historical processing data and are variable as a function of head grade. Recovery at the LOM average head grades are 92.50% for Zn and 61.10% for Pb. A minimum thickness of 3 m was applied. Density was assigned based on rock type.

Hilarión and El Padrino

*The most recent NI 43-101 technical report with respect to Hilarión is the technical report titled “Technical Report on the Hilarión Project, Ancash Region, Peru” with an effective date of February 14, 2020 (the “**Hilarión Technical Report**”) prepared by RPA and in particular: Jason J. Cox, P.Eng., Normand Lecuyer, P.Eng., Rosmery J. Cardenas Barzola, P.Eng., Brenna J. Y. Scholey, P. Eng., and Luis Vasquez, M.Sc., P. Eng. The Hilarión Technical Report has been filed in accordance with NI 43-101, and is available, under Nexa’s SEDAR+ profile at www.sedarplus.ca. The scientific and technical information set out herein with respect to Hilarión is based upon information prepared by or under the supervision of a Qualified Person involved with the preparation of the Hilarión Technical Report or approved by such person.*

Certain of the scientific and technical information set out herein with respect to Hilarión is based on information presented in the Hilarión Technical Report. The Mineral Resources for the Hilarión Project have been estimated by Nexa as of December 31, 2022, and reviewed by a Qualified Person. The Qualified Person for the Mineral Resources estimate is Jerry Huaman Abalos, B.Geo., AusIMM CP, a Nexa Resources employee. Jerry Huaman Abalos has also reviewed and approved certain information set out herein that has been updated since the date of the Hilarión Technical Report.

The Hilarión Project is located in the Department of Ancash, approximately 230 km north of Lima, the capital of Peru, and approximately 80 km south of the city of Huaraz and is accessible by paved road from Lima. It consists of 48 mineral concessions covering an area of approximately 9,374 hectares. Hilarión is a skarn mineral deposit made of vertical tabular ore bodies containing sulphide zinc, lead, silver and copper deposits. Hilarión and El Padrino and other occurrences in proximity to them (Mia, Eureka and others) constitute a large mineralized system, open in several directions for a potential increase in resources, extended mine life and increased production capacity in the future. The conceptual plan for the project includes the development of an underground mine that could either use its own processing plant or use one of the several existing plants in the area, such as Pachapaqui, Huanzala and Atalaya plants.

From 2005 to 2014, in addition to mapping, remote sensing, topographical and geophysical surveys, we completed four drilling campaigns totaling 244.0 km on the Hilarión and El Padrino deposits. During 2018-2019, two additional drilling campaigns totaling 17.1 km were carried out. The 2018-2019 drilling predominantly focused on the Hilarión North zone.

In 2022, we advanced the opening of the road that connects the project structures to the main camp and carried out geometallurgical tests to establish better mineralogical and metallurgical knowledge of the deposit, which showed high recovery of zinc and lead concentrates, as well as the presentation of the fifth environmental modification to the competent body.

In 2023 we completed 4.1 km diamond drilling to drill two targets: El Padrino and Chaupijanca. The focus of exploration activities was to identify the continuity of mineralization of the deposit in a SE direction, at the Chaupijanca target, in addition to searching for zones with higher Zn-Cu content at the El Padrino target. Initial results confirmed the presence of zinc mineralized zones in the south-east trend.

In 2024, we spent approximately US\$2.0 million on the Hilarión Project, including mineral rights, project maintenance, geology review works and environmental obligations. We had no drilling activities at the Hilarión Project in 2024. In 2025, we have budgeted US\$1.2 million for Hilarión Project maintenance, and we have planned no drilling activities.

Florida Canyon Zinc

The most recent NI 43-101 technical report with respect to Florida Canyon Zinc is the technical report titled “NI 43-101 Technical Report, Preliminary Economic Assessment, Florida Canyon Zinc Project, Amazonas Department, Peru” with an effective date of July 13, 2017 (the “Florida Canyon Zinc Technical Report”) prepared by SRK Consulting (U.S.) Inc. (“SRK”) and in particular: Walter Hunt, CPG, J.B. Pennington, MSc, CPG, AIPG, Daniel H. Sepulveda, Joanna Poeck, BEng Mining, SME-RM, MMSAQP, Jeff Osborn, BEng Mining, MMSAQP, James Gilbertson, MCSM, CGeol, FGS, and John Tinucci, Ph.D., P.E. The Florida Canyon Zinc Technical Report has been filed in accordance with NI 43-101, and is available, under Nexa’s SEDAR+ profile at www.sedarplus.ca.

Certain of the scientific and technical information set out herein with respect to Florida Canyon Zinc is based on information presented in the Florida Canyon Zinc Technical Report. The Mineral Resources for the Florida Canyon Zinc Project have been estimated by Nexa as of October 30, 2020, and reviewed by a Qualified Person. The Qualified Person for the Mineral Resources estimate is Jerry Huaman Abalos, B.Geo., AusIMM CP, a Nexa Resources employee. Jerry Huaman Abalos has also reviewed and approved certain information set out herein that has been updated since the date of the Florida Canyon Zinc Technical Report.

The Florida Canyon Zinc Project, comprised of 11 contiguous mining concessions, covering approximately 8,700.0 hectares, is owned by Minera Bongará S.A. and operated by Nexa Peru, a joint venture between Nexa Peru, Solitario Exploration and Royalty Corp. and Minera Solitario Peru S.A.C. in existence since 2006. As of December 31, 2022, Nexa Peru owns a 61.00% interest in this joint venture, which may increase up to 70.00% upon Nexa Peru’s satisfaction of certain conditions.

Although a pre-feasibility study relating to the Florida Canyon Zinc Project was released in 2017, the project continues to be treated as an advanced mineral exploration project.

In 2020, we continued to work on the access road repair to reduce logistical costs. Another important activity carried out in 2020 was the update of the geological model based on the 2018-2019 drilling campaign and by improving ore-type definition (oxide-mixed-sulphide) by using qualitative and quantitative analytic data, that helped in ore classification for the 2020 Mineral Resource estimation.

In 2021, field work focused on mapping an access road from 0 km up to 19.5 km, and mapping, sampling and conducting a topographic survey of the Teodolfo, Matias, Berny, and Pizarro targets, in addition to a new mineral occurrence named Aron, as well as metallurgical testing using historic drill core material.

In 2022, our objective at the Florida Canyon Zinc Project was focused on advancing the opening of the road that connects the project structures to the main camp, which we expect to optimize logistical costs for future drilling campaigns. In addition, geometallurgical tests were carried out to establish better mineralogical and metallurgical knowledge of the deposit, which showed high recovery of zinc and lead concentrates, as well as the presentation of the fifth environmental modification to the competent body to release drilling from 2023.

In 2023, drilling at the Florida Canyon Zinc Project began in the third quarter due to a delay in the drilling program caused by lack of transportation for drilling materials.

In 2024, we focused on maintenance of local infrastructure, such as opening access to receiving future drilling campaigns.

We spent approximately US\$2.0 million on the Florida Canyon Zinc Project in 2024, and we have budgeted US\$1.5 million for the Florida Canyon Zinc Project in 2025, including road maintenance, geological review and social programs. No drilling activities are planned for 2025.