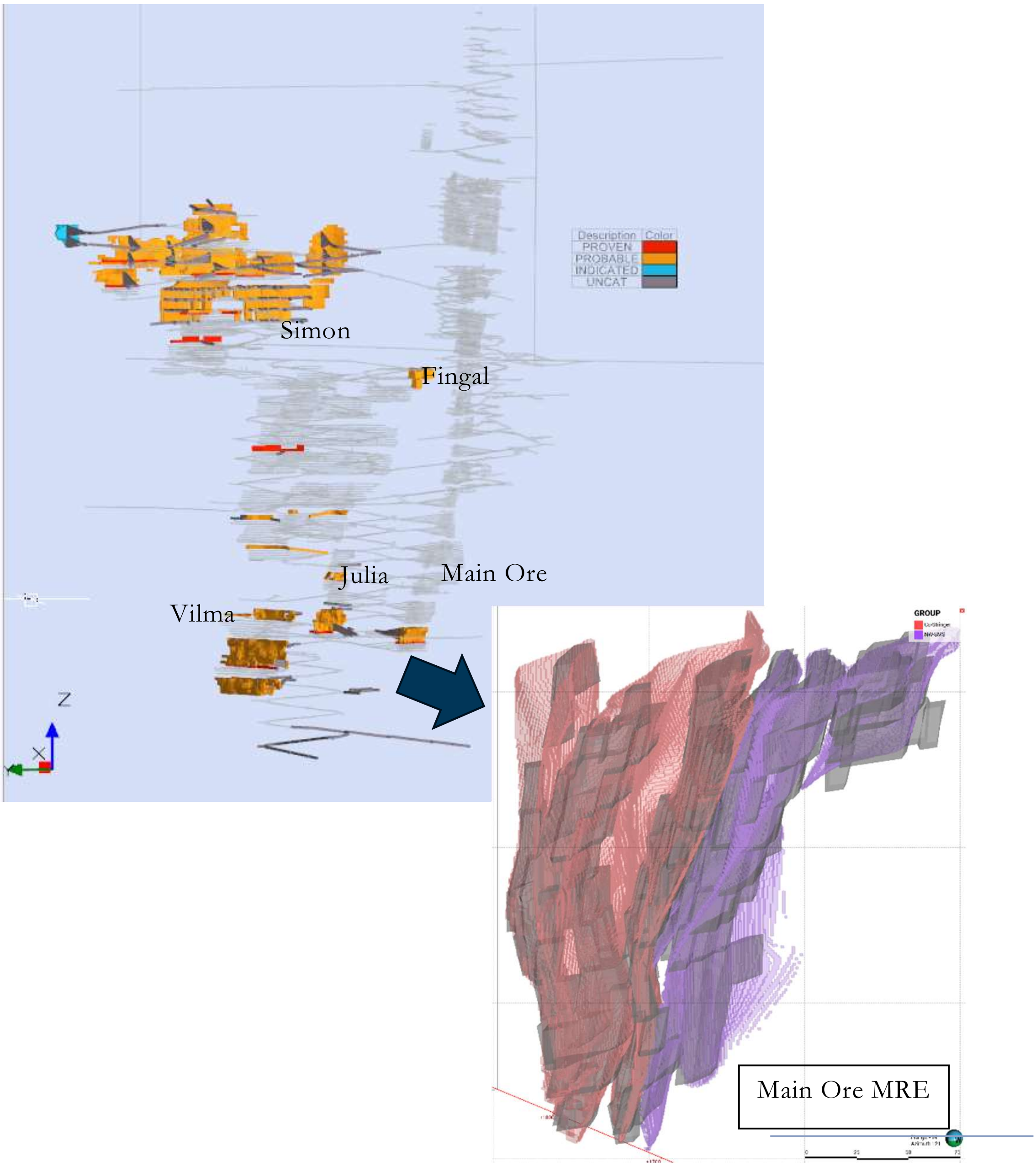
NEW BOLIDEN

Boliden Summary Report

Mineral Resources and Mineral Reserves | 2024

Renström



Prepared by
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1 SUMMARY

This annual summary report concerns Boliden's wholly owned Renström mine (Sweden) and is a summary of underlying technical reports which have been prepared in accordance with the guidelines set out in the Pan-European Reserves and Resources Reporting Committee (PERC) "PERC Reporting Standard 2021". The report is updated and issued annually to provide the public (stakeholders, shareholders, potential investors and their advisers) with:

- An overview of the Renström mine and Boliden Area Operations.
- Mineral Resource and Mineral Reserve statements for the mine and an overview of methods used to estimate these.

A summary of Mineral Reserves and additional Mineral Resources is presented in Table 1.

The effective date of this report is 31 December 2024.

Table 1. Mineral Reserves and additional Mineral Resources from the Renström Mine 31-12-2024 and comparison against previously reported tonnes and grades

Classification	2024 kt	2024 Au (g/t)	2024 Ag (g/t)	2024 Cu (%)	2024 Zn (%)	2024 Pb (%)	2023 kt	2023 Au (g/t)	2023 Ag (g/t)	2023 Cu (%)	2023 Zn (%)	2023 Pb (%)
Mineral Reserves												
Proved	**400**	**1.7**	**101**	**0.4**	**5.4**	**0.9**	300	1.8	89	0.6	5.2	0.8
Probable	**4 500**	**1.7**	**106**	**0.3**	**5.7**	**1.1**	4 800	1.8	101	0.3	5.7	1.1
Total	*4 900*	*1.7*	*105*	*0.3*	*5.7*	*1.1*	*5 000*	*1.8*	*103*	*0.3*	*5.8*	*1.1*
Mineral Resourcess												
Measured	**0**	**0.0**	**0**	**0.0**	**0.0**	**0.0**	0	0.0	0	0.0	0.0	0.0
Indicated	**1 500**	**1.7**	**67**	**0.5**	**4.3**	**0.8**	800	1.5	82	0.6	3.5	0.7
Total M&I	*1 500*	*1.7*	*67*	*0.5*	*4.3*	*0.8*	*800*	*1.5*	*82*	*0.6*	*3.5*	*0.7*
Inferred	**2 800**	**1.2**	**57**	**0.7**	**2.2**	**0.5**	1 200	1.5	81	0.4	4.5	0.9

Notes on Mineral Resource and Mineral Reserve statement.

- *Mineral Resources are reported exclusive of Mineral Reserves.*
- *Mineral Resource and Mineral Reserves is a summary of Resource estimations and studies made over time and adjusted to December 31 2024 terms.*
- *Mineral Resource are reported with 15% dilution.*
- *Applied cut-off depends on selected mining method.*
- *Mineral Reserves are selected and reported from the parts of the block model which fall within mining design volumes (LoMP).*
- *Existing tailings capacity is sufficient to include material from the LoMP up to mid 2029. An implementation project "BAO Sand recycling" for extended tailings capacity until end of BAO LOMP (capacity approx. until 2036) is ongoing.*
- *Tonnes and grades are rounded which may result in apparent summation differences between tonnes, grade and contained metal content.*

1.1 Competence

The contributors and Competent Persons responsible for the preparation of this report are presented in Table 2 below.

Table 2. Contributors and responsible competent persons for this report

Report Section	Contributors	Responsible CP
Overall compilation of this report	Fredrik Jonsson	Robin Bernau
Geology	Luc Collin, Johan Magnusson	
Resource estimation	Luc Collin, Robin Bernau	
Mineral processing	Erika Dahlberg	
Mining & Reserve estimation	Lisa de Vahl, Markus Isaksson, Luc Collin	
Environmental, Social and Governance (ESG)	Viktoria Lindberg, Emma Gustavsson	Seth Mueller

Robin Bernau is employed by Boliden as a Specialist Resource Geologist with over 20 years of experience in mineral exploration and resource estimation. He works in the Mineral Resources and Project Evaluation Team and is a Competent Person under PERC for the reporting of Mineral Resources (MAusIMM (CP) #314651).

Seth Mueller is employed by Boliden as a Specialist Engineer in the Sustainability Department with over 20 years of experience in geochemistry, water management, and environmental permitting. Seth is Competent Person under PERC for reporting of Environmental Aspects and a professional member of FAMMP.

2 GENERAL INTRODUCTION

Boliden AB ("Boliden") is a Swedish mining and smelting company focusing on production of copper, zinc, lead, gold and silver. Boliden operates six mining areas and five smelters in Sweden, Norway, Finland, and Ireland. The company primarily processes zinc, copper, nickel, gold, lead, and silver and is engaged in exploration, mining, smelting, and metals recycling.

This annual report is issued to provide the public (stakeholders, shareholders, potential investors and their advisers) with an overview of Boliden's Renström mine, including the data and assumptions used to support the latest Mineral Resource and Mineral Reserve statements.

This annual report is a summary of internal technical reports, which provide a full evaluation of supporting information for the Mineral Reserves and additional Mineral Resources, having been prepared in accordance with the guidelines set out in the Pan-European Reserves and Resources Reporting Committee (PERC) "PERC Reporting Standard 2021".

The PERC Reporting Standard is an international reporting standard that has been adopted by the mining associations in Sweden (SveMin), Finland (FinnMin) and Norway (Norsk Bergindustri), to be used for exploration and mining companies within the Nordic countries.

Boliden is reporting Mineral Resources exclusive of Mineral Reserves.

2.1 Pan-European Standard for Reporting of Exploration Results, Mineral Resources and Mineral Reserves – The PERC Reporting Standard

PERC is the organisation responsible for setting standards for public reporting of Exploration Results, Mineral Resources and Mineral Reserves by companies listed on markets in Europe. PERC is a member of CRIRSCO, the Committee for Mineral Reserves International Reporting Standards, and the PERC Reporting Standard is fully aligned with the CRIRSCO Reporting Template.

The PERC standard sets out minimum standards, recommendations and guidelines for Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves in Europe.

2.2 Definitions

Public Reports on Exploration Results, Mineral Resources and Mineral Reserves must only use terms set out in the PERC standard.

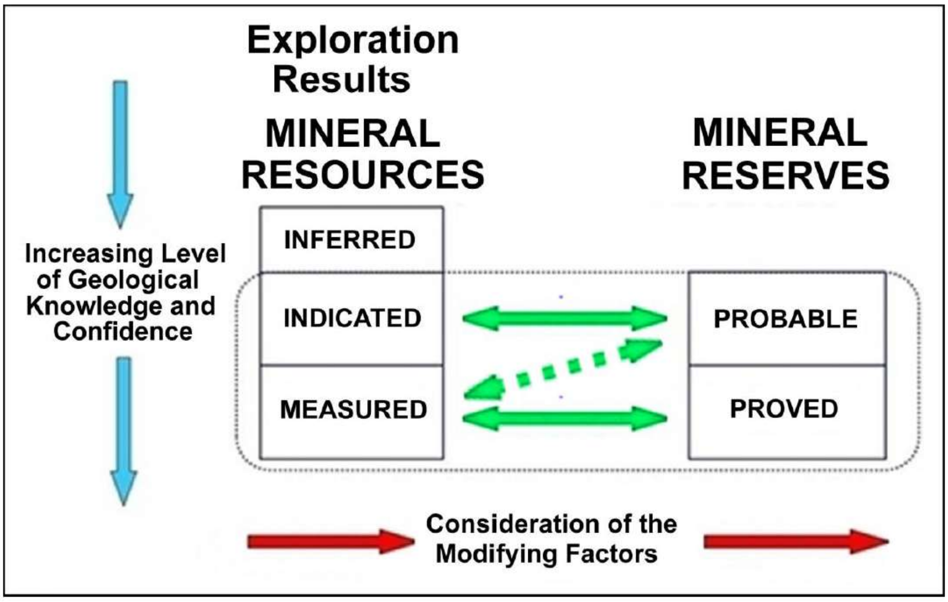


Figure 2.1. General relationship between Exploration Results, Mineral Resources and Mineral Reserves (PERC 2021)

2.2.1 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 (RPEEE). 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.

2.2.2 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.

3 RENSTRÖM

3.1 Project outline

The Renström mine is located 47 km northwest of Skellefteå in Västerbotten county, northern Sweden. Production from polymetallic mineralization of volcanogenic hosted massive sulphide type commenced in 1948 and has continued uninterrupted to the present day. A combination of underground methods are currently used, between depths of 600 and 1500 m. In 2024, the mine produced 528 kt[1] at an average grade of 2.4 ppm gold, 112 ppm silver, 0.4% copper, 5.5% zinc and 1.1% lead. The dominant mining method is cut and fill, however since 2016, an increasing proportion of production is from large scale methods, namely long-hole stoping.

Access to the mine is via a central shaft and ramp-drive system from the historic Petiknäs mine to the northwest. The mine employs roughly 185 staff and an additional 50 contractors. Crushed ore from Renström is trucked 17 km to the Boliden Area Operations Process Plant (BAOPP) for beneficiation by flotation and leaching, before further processing of concentrate to final product at the Rönnskär smelter (65 km). Subaqueous tailings deposition is at the Hötjärn facility west of the BAOPP.

3.2 Major changes 2024

3.2.1 Technical studies

The following technical studies were carried out during 2024:

- An internal project conducted within the mine planning department at the Renström mine resulted in an addition of 66 ktonnes converted from resource to reserve in Vilma position 1399. A change in mining method for V1399 made it profitable to mine an extra part of the mineralization. No official report is written.

3.3 Location

The Renström mine is located 47 km northwest of the town of Skellefteå, on the border between Skellefteå and Norsjö municipalities, Västerbottens County, Sweden (Figure 2).

The mine is centered on the following co-ordinates:

- WGS 84: N 64°55’26.6”, E 20°5’38.8”
- SWEREF: N 7209696, E 740632

[1] Mill throughput

Figure 2: Renström mine location overview (above) and with respect to local population centers & infrastructure (below). Modified from https://minkarta.lantmateriet.se/)

3.4 History

In 1926, Renström East was found in drill holes along with two subsequent principal ores. Test mining and shaft sinking down to the 469 m level were achieved during the period 1944-48. In 1953, Renström was in full production. The shaft was deepened in 1959 down to the 910 m level. The Simon ore was discovered in 1998 and brought into production in 2000. Two additional sulphide lenses in the deep ore zone (Vilma and Julia) were encountered in 2005. Production from Vilma commenced in 2006. A transition to large scale mining method (long-hole stoping) in Simon commenced in 2016.

3.5 Ownership and royalties

Boliden owns the land immediately adjacent to the mine that covers the surface footprint of the majority of the Mineral Reserves. There are several private landowners within the outlying land designation areas related to surface infrastructure, however royalties are applicable only to those permits where active production takes place. Table 3 provides an overview of these by permit.

Table 3: Landowner & royalties

Permit name	Description of royalty payments
Renström K nr 1	Permit granted prior to 2005. Boliden owned land. No royalties are payable to the State.
Renström K nr 2	Permit granted after 2005. The total royalty comprises 0.2% of the value of the minerals recovered, of which 0.15% is payable to the landowner and 0.05% to the State. Only a very small part of the forecast LoMP production lies within this concession.

3.6 Environmental, Social and Governance (ESG)

3.6.1 Existing permits

Boliden Mineral AB is in possession of all required permits to mine at the Renström mine and the necessary land use designation from the Mining Inspectorate. Mining concessions and exploration permits are issued by the Mining Inspectorate of Sweden (Bergsstaten) which is part of the Geological Survey of Sweden (SGU).

Summary details of these permits and concessions are presented the sub-section below and can also be found at the following web address:

- https://www.sgu.se/en/mining-inspectorate/

3.6.1.1 Exploration permits & exploitation concessions

The Renström mine is covered by one exploration permit and two exploitation concessions, as presented in Table 4 below. In addition, the Petiknäs concessions cover surface infrastructure at the historic Petiknäs mine, from which Renström is accessed via a ramp system. Current and forecast mine production is exclusively from the Renström K nr 1 and K nr 2 permits.

Table 4: Exploration permit and exploitation concession summary

Type	Exploration Permit	Exploitation Concession				
Name	Renström nr 1005	Renström K nr 1	Renström K nr 2	Petiknäs K nr 1	Petiknäs K nr 2	Petiknäs K nr 3
Owner	Boliden Mineral AB (100%)					
Licence ID	2016:45	N/A				
Area (ha)	3 387.5	143.0	1.3	3.7	17.7	7.6
Valid from	2016-05-09	2000-01-01	2014-08-12	2001-10-22	2001-10-22	2005-03-04
Valid to	2028-05-09	2035-01-01	2039-08-12	2026-10-22	2026-10-22	2030-03-04
Diary nr	2016000184	1998000695:R:R:R	2014000396	2000000506:R	2000000505	2004000937:R:R:R:R
Municipality	Norsjö, Skellefteå	Skellefteå		Norsjö		

Exploitation Concession Renström K nr 1 was automatically extended at due date 2025-01-01 with 10 years until 2035 accordingly to the mineral legislation 1991:454 kap.8§.

3.6.1.2 Environmental permits

Boliden has full surface rights surrounding and immediately adjacent to the mine. In accordance with Environmental Law, a main permit as a partial decision: 2014-05-27, case nr. M354-13 was issued in May 2014 and updated in 2019 with final conditions for discharges as: 2019-03-27, case nr. M 354-13. A decision on 2019-11-20 (nr. M1832-19) permitted increased annual maximum production to a rate of 520 ktpa. These permits cover matters including:

- Maximum production rate 520 ktpa.
- Maximum total concentrations of elements in discharged water (there is no limitation on quantity).
- Maximum noise levels.
- Dust.
- Vibrations.
- Requirement to run operations as stated in the technical description.
- Acquisition and importation of additional waste rock and/or tailings sand, also temporary storage, for use as fill underground.
- Environmental monitoring.
- Explosives – spillage etc.
- Remediation plans, to be submitted before closure.
- As of 2019-11-20 a new financial bank guarantee of 32.4 MSEK was approved by the Environmental Court in case nr M1832-19. The guarantee shall cover all environmental liabilities in case of bankruptcy.

3.6.2 Necessary permits

The capacity of the tailings management facility at BAOPP is sufficient to include material from the LoMP up to and including 2029. The final years of production are expected to exceed the existing tailings dam capacity. Application of new tailings storage solutions is submitted to competent authorities and expects to be decided during 2025. Capacity will cover current LOMP, approx. 2036, and some additional years. Studies of a subsequent tailing storage facility have been initiated.

3.6.3 Environmental, Social and Governance considerations

3.6.3.1 ESG commitments

Our business model sets our ESG priorities, and takes into consideration the risks and opportunities identified by business intelligence and risk mapping, as well as applicable requirements and expectations such as:

- Stakeholder expectations.
- Current and potential legislative trends.
- ISO 9001, 45001, 14001 and 50001 standards and Forest Stewardship Council (FSC® COC-000122).
- OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-affected and High-risk Areas.
- GRI Standards (Global Reporting Initiative).
- UN Sustainable Development Goals (SDGs).
- UN Global Compact.
- ICMM Mining principles.

We regularly consult prioritized stakeholder groups on our sustainability performance from a broader perspective. These stakeholders are asked to comment on Boliden's performance to drive further improvement.

Boliden is a member of ICMM and the national mining associations in the countries where Boliden Mines operates. These commitments imply implementing relevant international and national Environmental Management System (EMS) standards and guidelines, such as, e.g., the Global Industry Standard on Tailings Management on an international level and Mining RIDAS on a national level. In addition to this, Boliden Mines is certified according to a series of standards, such as:

- ISO 14001:2015 - Environmental management systems.
- ISO 45001:2018 - Occupational health and safety management systems.
- ISO 50001:2018 - Energy management systems.

Boliden has implemented an integrated management system (Boliden Management System, BMS) which sets a common base for all activities developed within the company.

Boliden strive to run a responsible business and expect it´s business partners to do the same. Good business ethics is essential for sustainable and successful business. Boliden has an ethics and compliance department to boost its compliance work. The department is responsible for the strategic development and coordination of Boliden's work regarding anti-money laundering, anti-corruption, competition law, sanctions, human rights, data protection, whistleblowing and Boliden's employees and management work together to create a compliance culture in which everyone knows what is expected of them - Boliden's codes of conduct. Regular risk assessments, trainings, audits and effective controls are important parts of Boliden's compliance efforts. The Group's whistleblower channel enables all employees and external stakeholders to report suspected and actual misconduct confidentially and anonymously. If misconduct is proven, disciplinary actions must be taken. Reprisals against anyone reporting misconduct in good faith will not be tolerated. Group management and the Board of Directors receive regular reports on risks, non-compliance and the status of initiatives in progress.

Boliden's Code of Conduct provides a framework for corporate responsibility based on the company's values and ethical principles. All employees and members of the Board are subject to the Code, which is based on international standards and relevant legislation. As a complement to the Code, there are internal policies that all employees are expected to comply with. Boliden strives for a sustainable value chain and therefore applies an overarching business ethics and risk management strategy when selecting business partners. The Business Partner Code of Conduct reflects the requirements placed on Boliden's own organization and sets the lowest standard of ethical conduct required of all parties in the value chain, whether Boliden is the buyer or seller. As with the internal Code of Conduct, this code is based on international standards such as the UN's Global Compact, the ILO's standard core conventions and guidance from the OECD. Compliance and sustainability risks are assessed when selecting business partners. If there is a risk of non-compliance by a business partner, a more detailed review is made. Depending on the outcome, an action plan may be developed and agreed upon, or the business relation may be terminated or rejected.

Boliden is a member of the United Nations Global Compact and works constantly to implement its ten principles, including preventing and limiting negative impact in the own operations and those of its external business partners. Boliden runs operations in countries where the risk of human rights violations is considered low. No operations are conducted anywhere in UNESCO's World Heritage List. Boliden supports the right of indigenous peoples to consultations under Svemin's interpretation of Free, Prior and Informed Consent (FPIC). Other important aspects are fair working conditions, and the position Boliden has adopted against any form of harassment, discrimination and other behaviour that may be considered as victimization by colleagues or related parties. In addition to this, aspects such as child and forced labour as well as the freedom to form and join trade unions are taken into account when evaluating business partners.

Anti-corruption forms a central part of the ethics and compliance work, and Boliden has a zero-tolerance policy regarding all types of bribery and corruption. Boliden has an anti-money laundering policy for identifying and managing risks in various parts of the business and to strengthen its anti-money laundering efforts.

3.6.3.2 Socio-economical impact

The Renström mine is one of three producing mines owned by Boliden in northern Västerbotten. Together with the BAOPP and Rönnskär smelter, these facilities generate an important source of direct employment and more broadly represent an engine for the local and regional economy. Since the start of production in 1952, Renström has been an important workplace in the district and continues to have a significant positive impact on the socio-economic situation in Skellefteå municipality.

In addition to jobs and tax revenues, Boliden contributes to social sustainability and the socio-economic situation in many other ways. Boliden, for example, is involved in, and supports, many local activities and organizations. The effects of these commitments are difficult to quantify but are considered to contribute positively to the development of the area. Northern Sweden has a long tradition of mining and extractive industries, which has resulted in acceptance and tolerance for even some of the negative effects caused by the industry.

3.6.3.3 Communities and landowners

The Renström community was established when mining operations commenced in the early 1950's. In addition to mining, forestry as well as some agriculture take place in the local area. Today, about 50 people live in the community.

All surrounding land constitutes a reindeer herding area with grazing rights for Mausjaure Sami village. The forest environments are largely affected by modern forestry and the wetlands are to some extent affected by trenching. Near Renström there are also several historic mines, once operated by Boliden.

In addition to forestry and reindeer herding, the most common land use is hunting, fishing, berry picking and recreation. The Renström mine and associated facilities at the BAOPP have a moderate impact on land use in the local area.

In the immediate area around the mine, there are a few smaller areas with high nature values, but no areas with high conservation value (Natura 2000).

3.6.3.4 Indigenous people

The Renström mine is located within the Mausjaure Sami village reindeer grazing area. Mausjaure Sami village is a forest Sami village that operates between the cultivation boundary[2] and the Gulf of Bothnia.

Mausjaure Sami village keeps its reindeer in the traditional way in close contact with the environment where a fundamental aspect is access to coherent and functional pastures with undisturbed grazing for the reindeer. Within the lands used by the community there are areas that have been declared to be of national interest for reindeer husbandry. In general, with respect to reindeer husbandry, it is not necessarily a single activity that leads to disruption, it is more the accumulated effects. For example, mining affects reindeer husbandry in various ways, such as land requirements, noise, dust and transportation. This often results in the reindeer avoiding certain areas. Boliden is aware of the consequences and problems that mining causes for reindeer husbandry. To minimize and compensate for these negative effects, a dialogue is maintained between Boliden and the Sami villages concerned. As part of this dialogue, mutual understanding of the two activities is favored and measures to minimize and compensate for the impacts are developed. In cases where disturbances to reindeer grazing occur, Boliden endeavors to compensate by providing alternatives that are developed together with the Sami village concerned. Examples of measures can be reindeer pastures in strategic locations.

There are also agreements between Boliden and the Sami community concerned that regulate financial compensation for losses caused by Boliden's operations. In addition to this, Boliden conducts research projects and compensation measures to improve forestry, to increase the growth of lichen, or to facilitate the movements of reindeer herds.

3.6.3.5 Historical Legacy

Production from Renström has continued uninterrupted since 1952, together with processing of ore at the BAOPP and storage of tailings at the near-by tailings facilities.

[2] *The boundary for farming as decided by the Swedish government to prevent low productivity farms from interfering with reindeer herding areas.*

3.7 Geology

3.7.1 Regional

The rocks in the Skellefte district formed approximately 1.9 Ga during a period of active volcanism. The felsic magmas intruded as shallow (subvolcanic) intrusions (dykes and sills) at and close to the surface, where they mixed and mingled with wet sediments and mass-flows derived from volcanic slopes resulting in hyaloclastic brecciation and peperites. The active volcanic region also initiated a convection of solutions within the deposited package which enabled the dissolution and transportation of metals and minerals. These solutions also altered the rocks both physically, through (hydro-) brecciation and fragmentation, and chemically resulting in the heavily altered rocks present today.

After the main volcanic period, regional deformation took place within the Skellefte district. The brittle deformation accommodated for fractures and fissures, which would be filled by mafic magmas forming andesitic and basaltic dykes.

3.7.2 Local

The Renström area is located 15km west of Boliden, in the eastern part of the Skellefteå district. The Renström area has a volcanically complex and multiply deformed rock sequence. Rock types include a large range of basaltic andesite to rhyolite volcanic facies. Juvenile basaltic andesite, dacite and rhyolite volcanoclastic facies are particularly abundant, and these have been intruded by numerous basaltic, andesitic dacitic and rhyolitic sills and domes. The area has two main generations of folding with a complex interference pattern, and several generations of faults and intrusions.

The Renström area is one of the most intensely mineralized parts of the Skellefte district and the Renström deposit is one of the most important deposits due to its size (>10 million tonnes), grade (high Zn, Au, Ag values) and metallurgical characteristics (medium grained; low arsenic and antimony contents). The ores in the Renström deposit are associated with strong chlorite, dolomite, sericite and silica alteration.

3.7.3 Mineralization

The Renström mineralization consists of several smaller lenses, which are all characterized by massive to semi-massive pyrite-sphalerite dominated ores with subordinate massive to semi-massive pyrite-chalocopyrite ore and local stringer-type pyrite-chalocopyrite±pyrrhotite mineralization. The main ore minerals are pyrite, sphalerite, galena, chalcopyrite, pyrrhotite and arsenopyrite with minor tetrahedrite-tennantite, other sulphosalts, electrum and amalgam (Helfrich, 1971; Kläre, 2001). Ores in the Renström area have higher zinc, gold, silver and lead contents and lower sulphur and arsenic content than most volcanic-hosted massive sulfide ores in the Skellefte district.

3.8 Drilling procedures and data

3.8.1 Drilling techniques

3.8.1.1 Exploration & delineation drilling

Exploration and delineation drilling is planned and executed by the Near Mine and Field exploration groups, for target-identification, definition and delineation. Drill core sizes are typically BQ (36.5mm core diameter), WL56 (39mm) or NQ (47.6mm). Mineral Resource estimates using this data are prepared by Boliden's DV mine services group, with models handed over to the mine once these have attained the Indicated category. These block models are used by the mine as a basis for Mineral Reserve estimation. In 2024, 22 106 m of exploration drill core was produced.

3.8.1.2 Infill drilling

Infill drilling is planned and executed by the mine planning section. Underground infill drilling is carried out within the defined mineralised zones to further define the mineralised contacts ahead of production. Drilling is typically on a pattern of 20 m x 15 m or 15 m x 15 m, with core diameter of 39 mm (WL56) and hole length typically ranging from 100 m to 200 m. The Mineral Resource models, originally prepared by Boliden's mine services group, are subsequently updated by the mine geologist using infill drilling data and face mapping. In total, 22 567 m of infill drill core were produced in 2024.

Both exploration drilling and infill drilling are undertaken by the same contractor.

3.8.2 Downhole surveying

Downhole surveying is done by either EM-measurements or Gyro measurements. Most of the EM-surveys done by exploration are for longer exploration holes and account for approximately 10% of measurements. The EM-surveys are carried out by Boliden's geophysics department. while the Gyro-measurements are done by the contracted drilling team. All infill drillholes are surveyed by the drilling company using a reflex gyro ®tool. Exploration drill holes are surveyed by an IS-gyro tool.

3.8.3 Sampling

Samples with a typical length of 1.5 m to 2 m are taken for the extent of visible sulphide mineralization. Sampling begins up to 10 m before the mineralized zones and extended up to 10 m beyond the mineralized zone to ensure any associated gold is captured.

Exploration holes are sampled as half-cores in 0.5 m to 2 m sections, where core is split length-ways by diamond saw at MS Analytical AB in Stensele. One half is sent for sample preparation and assaying, also by MSA. The other half is stored for reference at Boliden's drill core archive. Between 50 and 100 samples are collected each year for litho-geochemistry. In these instances, a 20-30cm intersection of core is collected per sample.

For infill drill core, of those intersections that are sampled, the whole core is submitted to the ALS Chemex lab in Malå for preparation. This lab closed in 2024 and preparation was moved to the ALS Chemex lab in Piteå. Unsampled core is stored for a few months after which it is discarded.

3.8.4 Logging

Core drilled on behalf of Near Mine Exploration are transported to the core storage and logging facilities in Boliden, whilst infill drill core drilled for the Renström Mine remains on site at Renström for logging. All logging data is captured in WellCAD™ software and uploaded to Boliden's acQuire™ database. Samples are labelled and entered into the database during core logging.

3.8.5 Density

Two density formulas at Renström have been calculated using available specific gravity data, one for the Main Ore lens and the other for all other areas at Renström. The two regression formulae are as follows.

For the Main Ore lens:

$$Density = 2.7 + 0.0043*Cu + 0.004*Zn + 0.02*Pb + 0.027*As+0.0375*S$$

For all other lenses:

$$Density = 2.7 + 0.0043*Cu + 0.004*Zn + 0.02*Pb + 0.027*As+0.034*S$$

Regular specific gravity measurements are undertaken by the assaying laboratory during the year and continue to demonstrate good correlation with estimated densities based on the regression formulae above.

3.8.6 Analysis and QAQC

Exploration group primary samples and QAQC samples, are bagged by Boliden technical staff and sent via contracted courier service to MS Analytical Laboratory, SE-923 41 Stensele, Sweden. Sample preparation method PRP920 is used to prepare the samples for analysis. Prepared exploration core samples are currently sent directly from the affiliate laboratory in Stensele to partner MS Analytical laboratory in Canada.

Infill drill core primary samples from the mine are currently prepared by ALS Chemex, Fabriksgatan 1, SE-930 70, Malå. Sample preparation method Prep-31B is used to prepare the samples for analysis. Infill drill core samples are sent directly from the preparation laboratory in Malå to partner ALS Chemex laboratories for analysis.

Both ALS Chemex and MS Analytical Laboratory maintain both ISO 17025 (Testing and Calibration Laboratories) and ISO 9001 (Quality Management Systems) accreditation.

Table 5: below shows an overview of the preparation and analytical methods used by each laboratory. The "over-range method" applies to samples where assay results reached the upper detection limit of the primary method.

	Prep	Cu	Zn	Pb	Ag	As	Au	S
MS Analytical Laboratory	PRP920	ICA-6	ICA-6 (ICF-6)	ICA-6 (ICF-6)	ICA-6 (FAS418)	ICA-6	FAS214 (FAS415)	SPM210
ALS Chemex	Prep-31B	OG46	OG46 (ME-ICPORE)	OG46	OG46	OG46	AU-ICP-21 (Au-GRA21)	S-IR08

QAQC guidelines and workflow are described in an internal document (INST-24685v.1.O), which resides in Boliden's intranet-based business management system.

QAQC samples are inserted into the sample run by the geologist responsible for logging the drill hole and setting the sampling intervals. Quality control of results is carried out by the same geologist, or another geologist in the group, on a batch-by-batch basis in acQuire™.

In case of failed standards or blanks in a batch, the results are reviewed together with an in-house specialist, before deciding on a course of action, normally the action is to re-assay the failed sample batch. During 2024, no metal assay batches were rejected and sent for reassaying.

Table 6 below provides an overview of exploration group QAQC sample frequency for the calendar year ("CRM" = Certified Reference Material).

Table 6: QAQC sample frequency as percentage of total samples sent for the calendar year under review. "CRM" = Certified Reference Material.

Renström Actual QC Frequency	Boliden CRM	International CRM	Blanks	Check Assays	Rig Duplicates	Total
Exploration drilling		3%	3%	1%		7%
Infill drilling		6%	6%	2%		14%

3.9 Exploration activities and infill drilling

In 2024, exploration drilling focused on the depth extensions of the Vilma, Julia and Main Ore orebodies. Infill drilling focused on Simon G upward and Vilma downward extensions.

3.10 Mining methods, mineral processing and infrastructure

3.10.1 Mining methods

The dominant mining method at Renström is cut and fill, although since 2016, an increasing proportion of production is from long-hole stoping methods. All stopes are backfilled with either hydraulic fill (tailings from mill), cemented rock fill or uncemented rock fill (Barren rock from developments). The proportion of different mining methods is outlined in Table 7.

Table 7: Proportion of different mining methods used in Renström.

Methods	Proportions
Cut & fill	60%
Long-hole stoping	36%
Avoca / Uppers on retreat	3%
Bench	<1 %

Cut and fill mining is a selective open-stope mining method suitable for steeply dipping, high grade deposits. The overhand cut and fill technique is used at Renström, where mining begins at the bottom of the ore lens and progresses upward.

At Renström, cut and fill is selected where:

- Ore is hosted in long, thin lenses.
- Mineralization is geometrically complex and difficult to follow.
- Wall rock is too weak to support larger scale production methods.

Stopes are 5 to 6 m high and typically 6 to 8 m wide, subject to orebody thickness.

Main levels are typically 65 m high, including sill pillars of around 14 m thickness, subject to local geotechnical conditions. Wider ore lenses are mined in panels, using CHF (cemented hydraulic fill) as backfill to provide stable sidewalls.

Long-hole stoping was introduced in 2016. The current LoMP assumes an increasing proportion of production from this method from the Simon orebody. Both longitudinal and transverse stopes are planned.

Primary stopes are backfilled with CHF (cemented hydraulic fill) or CRF (cemented rock fill). The secondary fills are backfilled with waste rock, unless these need to be filled in campaigns, in which case the first filling consists of CHF or CRF.

With the cut and fill method, sill pillars are left between the main levels. These are mined in sequence from upper to lower pillars, once cut and fill production from higher levels within the same lens is complete. This technique is called **"opping" or uppers on retreat** and uses long-hole, 5 to 10 m rounds. Stopes are either left open, in which case pillars are left at regular intervals, or backfilled with waste rock and CHF.

For narrow lenses with CHF hydraulic fill, a 3 to 4 m thick pillar is left. For wider lenses, the full width of the pillar cannot be mined and a larger proportion is left. To date, this method has been longitudinal to the ore lens. A review is underway to assess the applicability of mining pillars transverse to the ore lens, for wider ore bodies, which could lead to an improved ore recovery. The length of round, and type of fill is decided on a case-by-case basis, depending on local ground conditions.

The rill or **Avoca mining** is used in cases where local conditions are suitable for cut and fill, but the wall rock is unusually competent. Costs associated with development may be reduced slightly using this method. The LoMP does not include any positions where this technique is planned.

Bench technique is occasionally used at the bottom of the ore lens, provided extraction of the sill pillar is still deemed to be feasible. Typically stope heights are 3 to 4 m drilled with close spaced vertical holes and mucked with an excavator. A common reason for using this method is if mineralization extends beyond the original design. The method does not feature in the current LoMP and is generally adopted after infill drilling and/or mapping has been completed.

3.10.2 Mineral processing

The process used for treating run of mine ore (ROM) from Renström is well established. Ore is delivered by truck (50 tonne payload) weighed by weigh-bridge and either delivered directly into the plant or stockpiled separately from ore from the other BAO mines.

Ore from the different mines is processed in campaigns. The feed tonnage to the processing plant is determined using a weighing system with a stationary belt scale. Feed tonnage and weights from the weigh-bridge are used to determine current tonnage on the stockpiles.

As shown in Figure 3 below, there are two stages of grinding. The primary mill is a fully autogenous mill and the secondary mill is a pebble mill fed with pebbles extracted from the primary mill. The ground ore is classified using screens and hydrocyclones. Typical mill throughput varies between 80 to 140 tonnes per hour (tph), depending on ore type, but is usually around 100 tph for Renström ore. Ground ore is classified using screens and hydrocyclones.

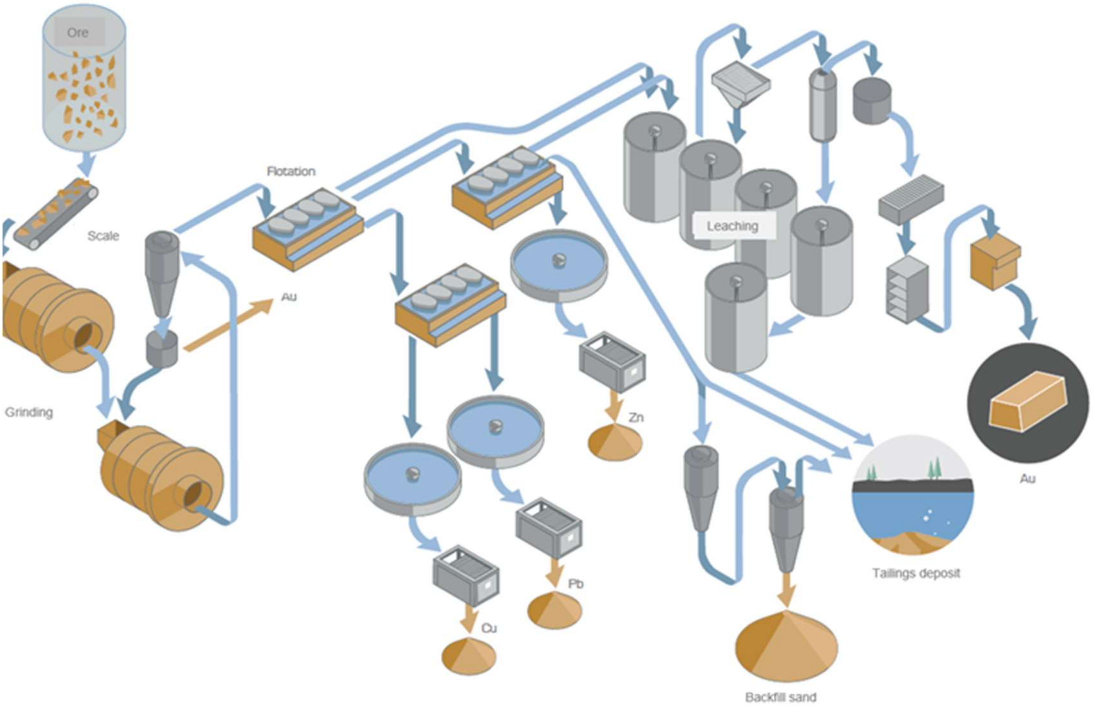


Figure 3: Simplified overview of the different stages of Renström ore processing at BAOPP

A gravimetric concentrate containing coarse grained gold bearing minerals is produced in the grinding circuit and a flash flotation cell is used to extract mainly copper minerals with high flotability. The gravimetric concentrate is packed in big bags of about 800 kg and delivered by truck to the Rönnskär smelter and the flash flotation concentrate is combined with the copper concentrate.

Flotation is done in a three-stage process: copper-lead bulk flotation, copper-lead separation and zinc flotation producing three concentrate qualities, copper, lead and zinc. Following recent test work, the Fingal ore lens (which doesn’t contain lead) will be batch processed to achieve higher copper recovery.

The mineral concentrates are dewatered using thickeners and vertical plate pressure filters. The concentrates are transported by truck to the Rönnskär smelter and shipping port. Lead and zinc are transported by boat to Boliden smelters in Norway and Finland or to external buyers.

Cyanide leaching is performed on flotation tailings when the leaching plant is available. Priority at the leaching plant is otherwise given to run of mine ore from the Kankberg gold mine. Gold and silver are recovered through to a precious metal sludge, which is transported to the Rönnskär smelter for further processing.

Metallurgical accounting where a sum of products calculated using assays from daily composite samples of main process streams and assays and tonnage for delivered products together with feed tonnage is used to determine the head grade of the ore.

Average metallurgical recoveries factors are presented in Table 8 below.

Table 8: Average metallurgical recoveries for the reporting year.

Product	Average metallurgical recoveries
Au	86
Ag	88
Cu	71
Zn	91
Pb	59

The metallurgical performance of new lenses are tested where required, so that processing assumptions can be adjusted in order to support conversion of Mineral Resources to Mineral Reserves. This test work is done in collaboration with exploration and mine geology groups. Typical test work may include grindability, flotation, cyanidation leaching and other investigations when they are applicable and according to Boliden standard laboratory methods.

3.10.3 Infrastructure

Mine access is via a hoisting shaft that extends to 880 m level and through an underground drive at the 800 m level connecting the operation to the surface ramp at the nearby, historic Petiknäs mine. The shaft provides access for personnel and is used for ore and waste rock hoisting, while the Petiknäs drive provides direct vehicle access to surface (Figure 4).

The majority of run of mine ore (ROM) is transported by truck to a jaw crusher at level 810m. The crushed ore is then transported via conveyor belt to two ore passes, where it is stored before being hoisted to surface. Loading of the hoist from ore passes is via a series of conveyors at the 883m level. On occasion, ore and waste rock is driven by truck via the Petiknäs ramp to surface.

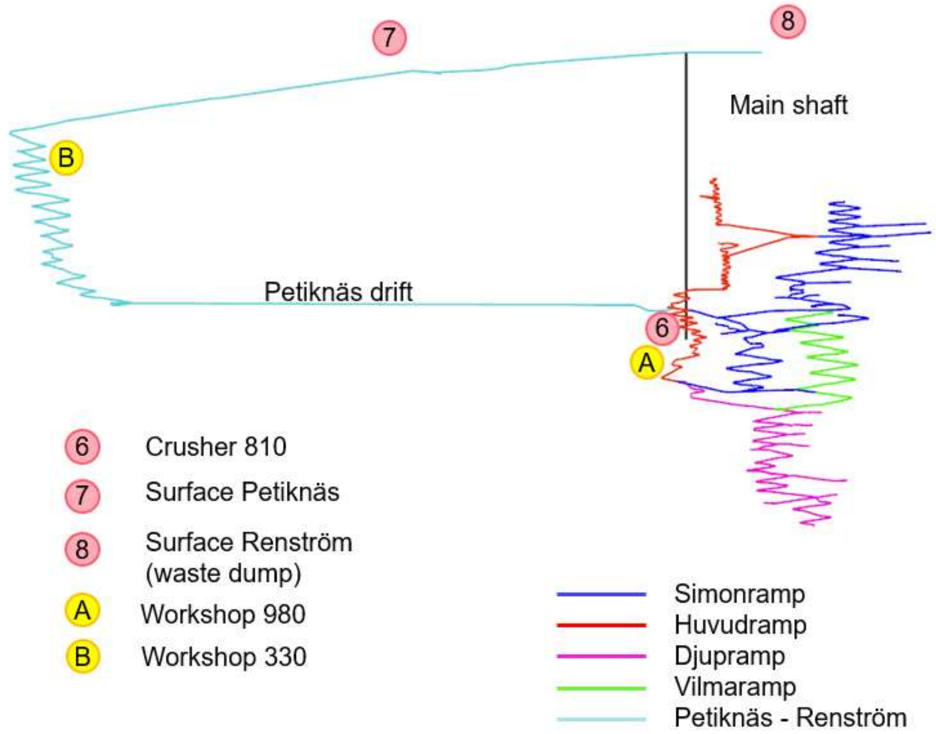


Figure 4: Schematic cross section of the Renström ramp system and Petiknäs decline with crusher and workshop location (looking due north. field of view ~3km horizontal & 1.5km vertical).

Air intake to the mine is via two vent shafts equipped with 1800 mm fans on surface. To avoid freezing during winter months, air is heated via two immersion heaters, which are supplemented by diesel heaters as required during the coldest winter temperatures. Current capacity amounts to approximately 600,000 m^3 / hour. Air is distributed underground via 1600 mm fans, followed by 900 mm fans to individual stopes. Active stopes require ventilation at around 12.5 m^3 / s and 16 m^3 / s during loading. Return air exits the mine via the ramp systems and through an exhaust air shaft located within the mines industrial area. New exhaust fans include two parallel Ø2000 mm, 450 kW fans, which will increase air intake to the mine by approximately 25%. Commissioning is scheduled for Q4 2024.

The underground facilities for managing water at the mine consist of a system of pump stations and sumps, where mine water is collected and pumped to surface in stages. The main pump station is situated at 880 m level and lifts the water directly to surface. There are 2 400 kW pumps operating in parallel at the S880 pump station to pump approximately 120 m^3 water per hour to surface. Additionally, capacity exists to pump up to 300 m^3 water per hour.

Several oil separators are installed adjacent to workshops and filling stations to clean the water used for washing the production machines from oil.

Surface water from both the Renström and Petiknäs industrial areas flow via drainage ditches to collection ponds for subsequent pumping to the mine water treatment plant.

3.11 Prices, terms and costs

3.11.1 Metal prices

Boliden's planning prices, which are an expression of the anticipated future average prices for approximately 10 years, are presented in Table 9 below, along with foreign exchange rate assumptions.

Table 9. Long-term metal prices and currency exchange rates

Metal prices		**LTP 2026->**
Gold	USD/tr.oz	1600
Silver	USD/tr.oz	23.0
Copper	USc/lb	381
Zinc	USc/lb	127
Lead	USc/lb	91

Currency rates	**LTP 2026->**
USD/SEK	9.00

3.11.2 Costs and Cut-off

Table 10 below presents a high-level summary of costs, which define the basis for cut-off assumptions for cut and fill at Renström. Costs will vary according to the production method applied to a particular stope.

Full Cost (Cut-off 1): Breakeven cost, which can be used as a guide for mine planning and Mineral Reserve estimation. Material with NSR above this breakeven cost is sent to the mill. The costs presented in Table 10 are the weighted average costs for the combination of methods applied at Renström. Actual costs will vary with respect to a number of factors including proximity to underground infrastructure, rock conditions and mining method.

Table 10: Renström cost summary in SEK/tonne.

Type of cost	Full cost (Cut-off 1)	Cut-off 3	Marginal Cut-off
Operational Development	321	-	-
Drilling and Blasting	66	*	-
Load/Haul/Crushing/Hoisting	90	*	-
Ground support	160	*	-
Process water/electricity/ventilation	23	X	-
Maintenance mobile equip.	55	X	-
Infill Drilling	25	-	-
Backfill	73	X	-
Transport to Mill	30	X	X
Processing at Concentrator	206	**	**
Transport to Smelter	9	X	X
Overhead and sustaining investments	181	X	X
Sum	**1239**	***450-769**	**240**

**Subject for example to assumed mining method, proximity to underground infrastructure and geometry of mineralization.*

***Excluding capitalized costs at the BAOPP.*

Cut-off 3: Used to constrain Mineral Resources. Material with an average NSR above this cut-off can be included within Mineral Resource wireframes. As with Cut-off 1, actual costs applied will vary depending on location and assumed mining method.

Marginal Cut-off (Cut-off 4): Marginal cost. When material with an average NSR between Cut-off 3 and the Marginal Cutt-off must be mined to access higher-grade material, the marginal cut-off is applied and this material trucked as ore. Rock below the Marginal Cut-off would be mined as waste and may be used within the mine as backfill.

NSR (Net Smelter Return) is a revenue evaluation calculated for each intersection (or model block) based on metal prices, costs of processing and smelting, and metallurgical recoveries. The NSR is effectively the value in Swedish Kronor (SEK) from the contribution of each contained product or by-product metal attributed to ore arriving at the process plant. Being a combined product value, it is used as a grade to describe tonnages in terms of SEK/t. The long-term NSR Factors are given for each metal below:

Zinc mineralization:

NSR_24LTP26 = 332.7 * Au + 4.52* Ag + 483.4* Cu + 160.8* Zn + 84.1* Pb

Copper mineralization:

NSR_24LTP26 = 316.6 * Au + 3.5 * Ag + 617.8 * Cu + 88.8 * Zn +0 * Pb

3.11.3 Cut-off grades

The operational costs and NSR factors provided above together define the cut-off grade, which is expressed as a combined NSR value / tonne. The relative contribution of individual metals to this cut-off grade will vary according to ore body, but in general Zn, Au and Ag together typically account over 80% of revenue for any single block, with exception of the Fingal lens, which has a higher copper / zinc ratio.

3.12 Mineral Resources

Mineral Resource estimates for Renström are prepared by Boliden's Mineral Resources and Project Evaluation Team (DV) whose estimation follows the workflow outlined in Figure 5.

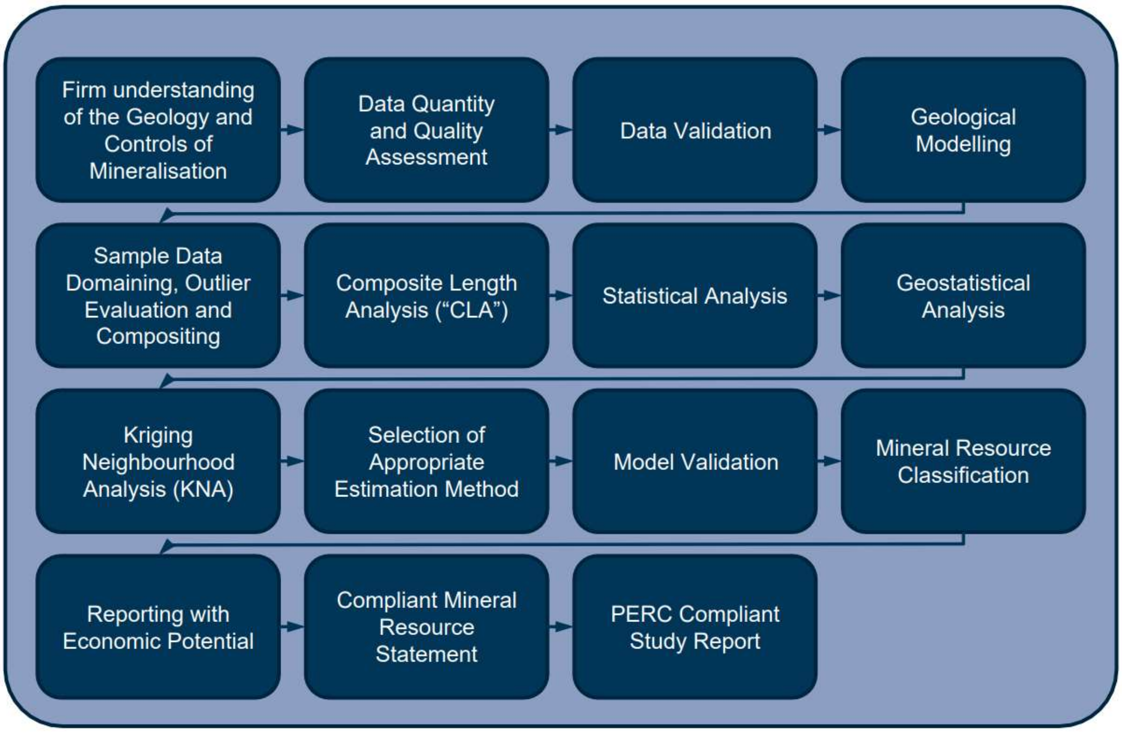


Figure 5: Ore Reserves and Project Evaluation group Mineral Resource estimation workflow

After checking geological models and data provided by the Near Mine exploration group, mineral resource domaining is undertaken by DV using commercial software (Leapfrog or Datamine). This wireframing is based on geology, mining assumptions and NSR value.

Exploratory data analysis is performed for the assay samples within the wireframed domains to determine that the data populations have been sufficiently delineated for a robust resource estimate. Outliers within the data that could cause an overestimation of the grades are identified using log-probability plots and histograms. Top-caps are applied to mitigate this issue and a cap of 10-20g/t Au and 1000g/t Ag has been used historically in the DV estimates. Zinc is commonly uncut although local capping has been applied for lower grade domains (i.e., Simon – Eskil and Fingal). The statistics of the capped and uncapped samples are compared to assess the effect on the mean, standard deviation, and coefficient of variation of the sample populations.

The samples are then composited to either 1m or 2m lengths, depending on the dominant sample lengths. The effect of using different composite lengths is also assessed through composite length analysis (CLA). The statistics of the composited samples are examined to check the effect of the compositing on the sample populations. The spatial continuity of the samples is assessed using geostatistical techniques including the variography and based on this assessment an estimation methodology is selected for the domain. At Renström this has increasingly moved from Inverse Distance Weighted (IDW^2) to Ordinary Kriging (OK).

Kriging Neighborhood Analysis (KNA) is then used to determine the effect of using different block sizes, as well as the effect of varying the minimum and maximum numbers of samples for the estimation pass, on the predicted quality of the estimate.

A block size of 6 m (x) * 5 m (y) * 5 m (z) is typically used at Renström which has been shown to be within acceptable ranges by the KNA and is suitable for the selective mining unit at the mine. Locally a block size of 5 m (x) * 6 m (y) * 5 m (z) is used where more appropriate for the geometry of the ore bodies. The DV estimates typically utilize Dynamic Anisotropy to vary the estimation search ellipse with that of the ore bodies orientation.

The statistics of the estimated blocks are then checked to ensure that a reasonable estimate has been made for each domain. Continuous checking of the statistics facilitates validation of each step of the process, from raw samples, capped samples, composites though to estimated block grades. Other validation checks include visual checks of assayed drillholes and estimated block grades and swath plots. The swath plots geographically divide the model into slices and compare the average grade of the samples, composites and estimated block grades for each slice. This helps to assess the level of smoothing in the estimate and determine whether there is a systematic bias causing either over or under-estimation.

The classification of the resources is based on geological understanding and continuity, quality and quantity of informing drill hole data and confidence in the block estimates. This is often related to the drillhole spacing and typically, for Boliden VMS deposits, a drill spacing grid of 100 m x 100 m is used as a guide for Inferred Mineral Resource and 40 m by 40 m for Indicated Mineral Resource. Measured Mineral Resources require 20 m by 20 m drilling and local mine mapping of the underlying slice to support the geological and grade continuity required for this level of confidence. As such this upgrade is commonly part of the MRE production update.

These drill hole spacing guidelines are based upon Boliden´s history of mining massive sulphides in the Skellefte district.

Mineral Resources at Renström are commonly reported with 15% waste dilution and are exclusive of Reserves. Datamine Studio RM is predominantly used for estimation, although historically Propack, an add-on to the CAD program Microstation have also been used. More recently, Deswik Stope Optimiser has been increasingly used to identify resources with RPEEE. For this, the metal grades of the waste rocks are also estimated, and these grades are used to dilute the mineralization into mineable shapes, resulting in a variable dilution.

The Mineral Resource statement for the period is presented in Table 1 above.

3.13 Mineral Reserves

Conversion of Mineral Resources to Reserves requires:

- Development designs.
- Determination of appropriate mining method.
- Stope design.
- A high-level plan for ventilation and electricity.
- A pre-feasibility level study demonstrating acceptable profitability.

Scheduling is carried out using both Deswik and Mineinfo software. Mineralization wireframes used as a basis for the Mineral Resource estimate are adjusted to the minimum mining unit, based on the applicable mining method, equipment and geotechnical design criteria. These are restricted to material above cut-off grade and any Inferred material contained within the wireframes is excluded prior reporting Mineral Reserves.

Further adjustments are made where appropriate to account for waste rock dilution and ore losses, with respect to a factor of 15% waste rock dilution, which is already included in Mineral Resource estimates. Where possible, dilution and losses are based on monthly stope reconciliation data. In the absence of this, the generic assumptions presented in Table 11 are applied.

Table 11: Waste rock dilution and ore recovery factors by mining method

Mining method	Waste rock dilution (zero grade)	Ore losses
Cut and fill	15%	0%
Avoca / Uppers on retreat	20% / 20%	0%
Long-hole stoping longitudinal/ primary / secondary	15% / 5% / 5%	0%

Figure 6 below provides a schematic illustration of the principles for reporting of Mineral Resource and Mineral Reserve at the Renström mine.

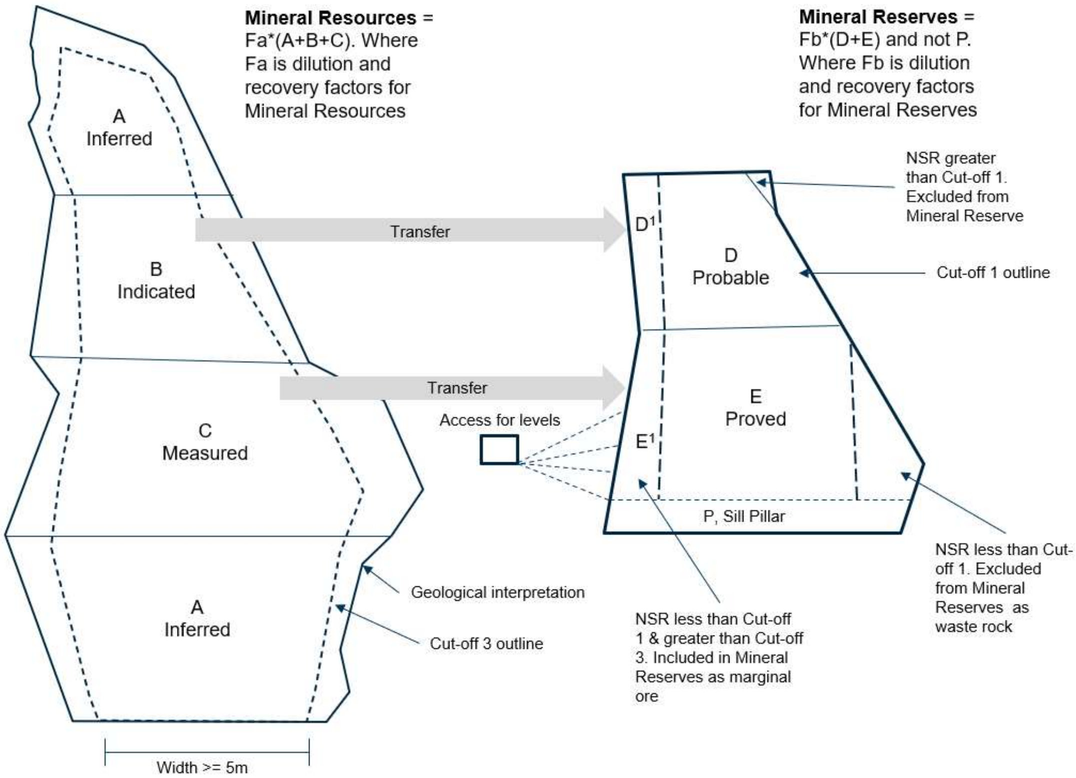


Figure 6: Schematic illustration of the principles for reporting of Mineral Resource and Mineral Reserve at Renström

The above sketch on the left side shows Mineral Resource volumes defined by an NSR equivalent to Cut-off 3 (see Table 10). Mine planning transfers much of the Indicated and Measured categories to Mineral Reserve volumes shown on the right. These are defined mainly by Cut-off 1 (see Table 10), which is shown on the right as a dashed line. Mineral Reserves may also include marginal material (D^1 and E^1) which were previously classified as Mineral Resources are above Cut-off 3 and which need to be mined to access higher grade material.

After LoMP planning, there may be small quantities of Mineral Resources with grade above Cut-off 1 that cannot be included in rooms to be mined. This is generally because to access these would require inclusion of low-grade material such that the average NSR value of the room would be less than Cut-off 1. Such material is illustrated in the sketch above as 'NSR greater than Cut-off 1. Excluded from Mineral Reserve.' This would not be transferred into Mineral Reserves and it would cease to be included in Mineral Resources.

Indicated Mineral Resources are transferred to Probable Mineral Reserves and Measured Mineral Resources are transferred to Proved Mineral Reserves, in each case by the application of a mining plan, which includes application of local Cut-off 1 costs.

When a level is planned to be included in the LoMP, any Mineral Resources that are excluded from the LoMP are dropped from the reported Mineral Resources. This is because once a level is mined and backfilled, these volumes would no longer be accessible for economic extraction.

The Mineral Reserve statement for the period is presented in Table 1 above.

3.14 Comparison with previous year

The Mineral Reserves decreased by 168 kt despite mining a total of 528 kt[3]. Conversion of Indicated Resources from Vilma account for an addition of 298 kt, whilst infill drilling and face mapping gave 142 kt. After review of LOMP "Technical" decrease by 155 kt and position change increased by 39 kt.

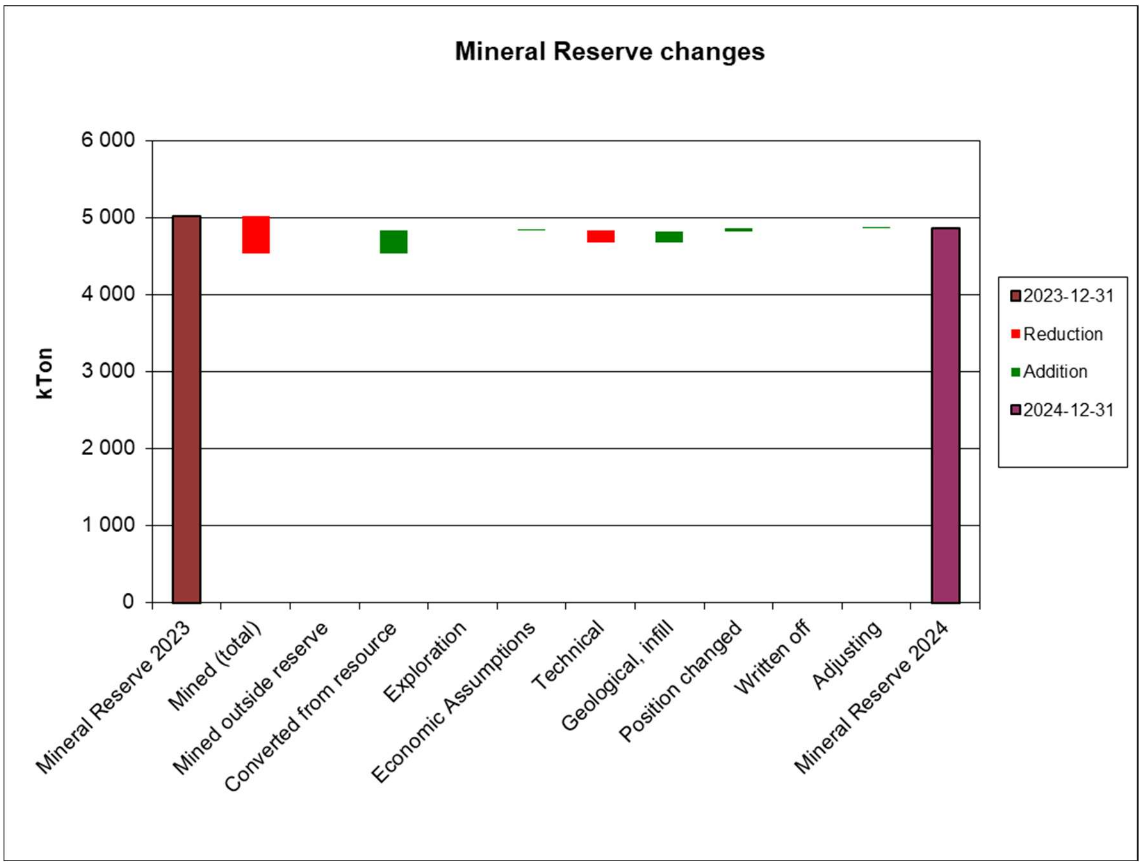


Figure 7: Changes to Mineral Reserve

[3] Milled tonnes

Mineral Resources increased by 2 075 kt from 2 247 kt to 4 322 kt. The 2023 Mineral Resource has been adjusted from 2 015 kt to 2 247 kt based on a review of the LoMP which gained the Resource an additional 232 kt which were converted to Reserves in 2024. In total 282 kt were converted to Reserves in 2024. The increase in tonnage of Inferred Resources reflects an increased proportion of lower grade copper stringer mineralisation from the Main Ore Mineral Resource Estimate, which demonstrated potential economic viability using an open stoping method and lower mining cut-off of 535 SEK/t.

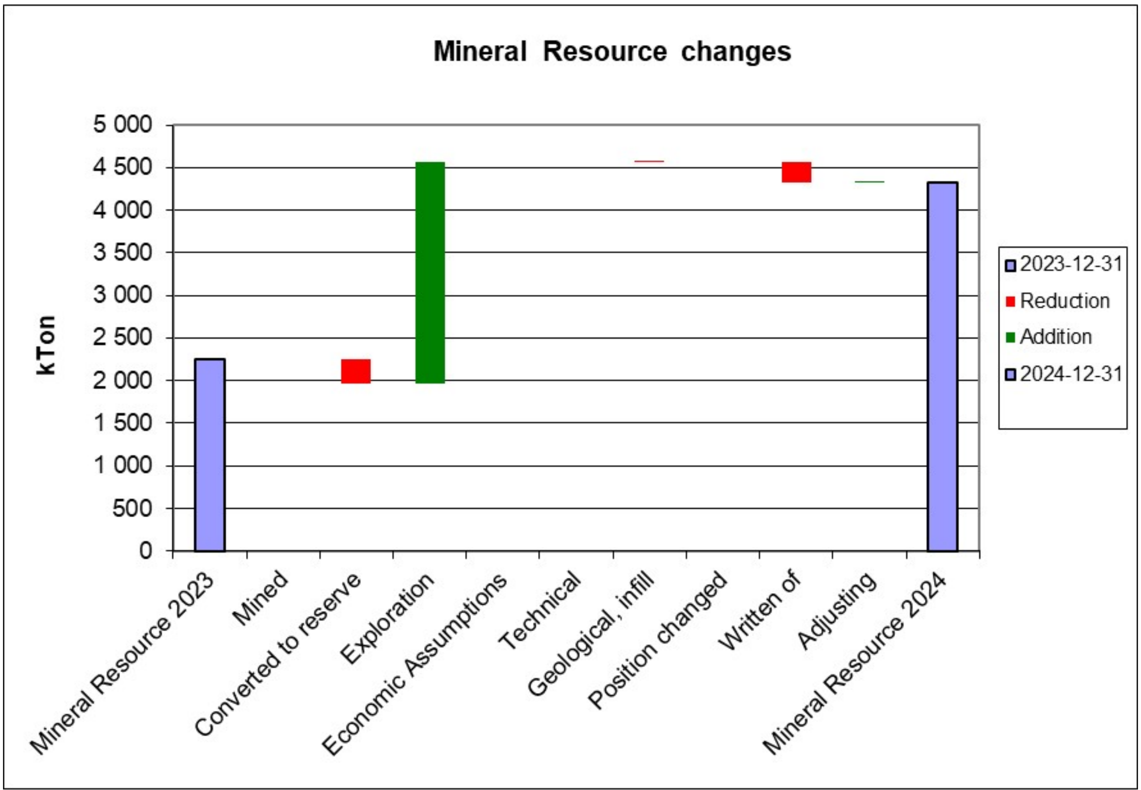


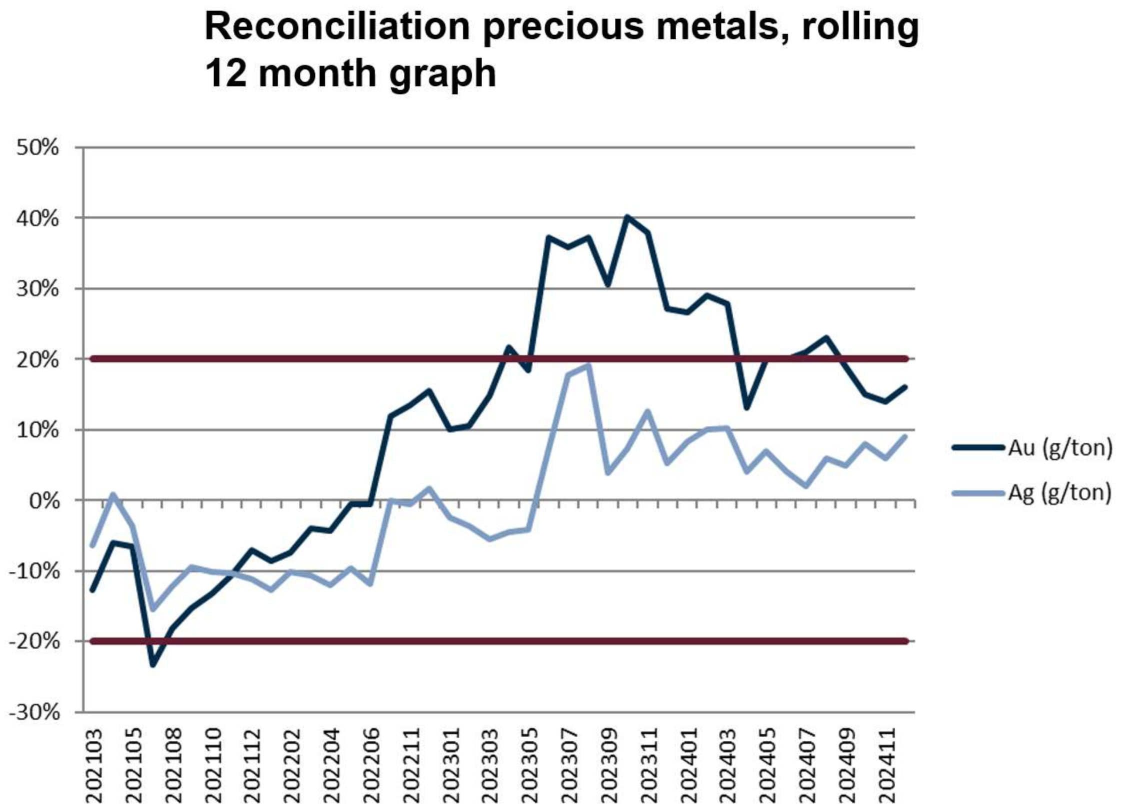
Figure 8: Changes to Mineral Resources

3.15 Reconciliation

Reconciliation data are presented in **Error! Reference source not found.** and **Error! Reference source not found.** below. Gold and copper lie inside tolerance (20% and 10% respectively) and will be monitored closely during 2025.

Table 12: Reconciliation Mine vs. Mill production year 2024

Position	Ton	Au	Ag	Cu	Zn	Pb	S
		g/t	g/t	%	%	%	%
Mine output	**486 255**	**2.0**	**102**	**0.4**	**5.7**	**1.0**	**9.7**
Mill throughput	*528 584*	*2.4*	*112*	*0.39*	*5.5*	*1.1*	*10*
Deviation vs mill	**42329**	**0.3**	**9.3**	**0.0**	**-0.2**	**0.0**	**0.5**
Deviation vs mill %	**9%**	**16%**	**9%**	**5%**	**-4%**	**4%**	**6%**



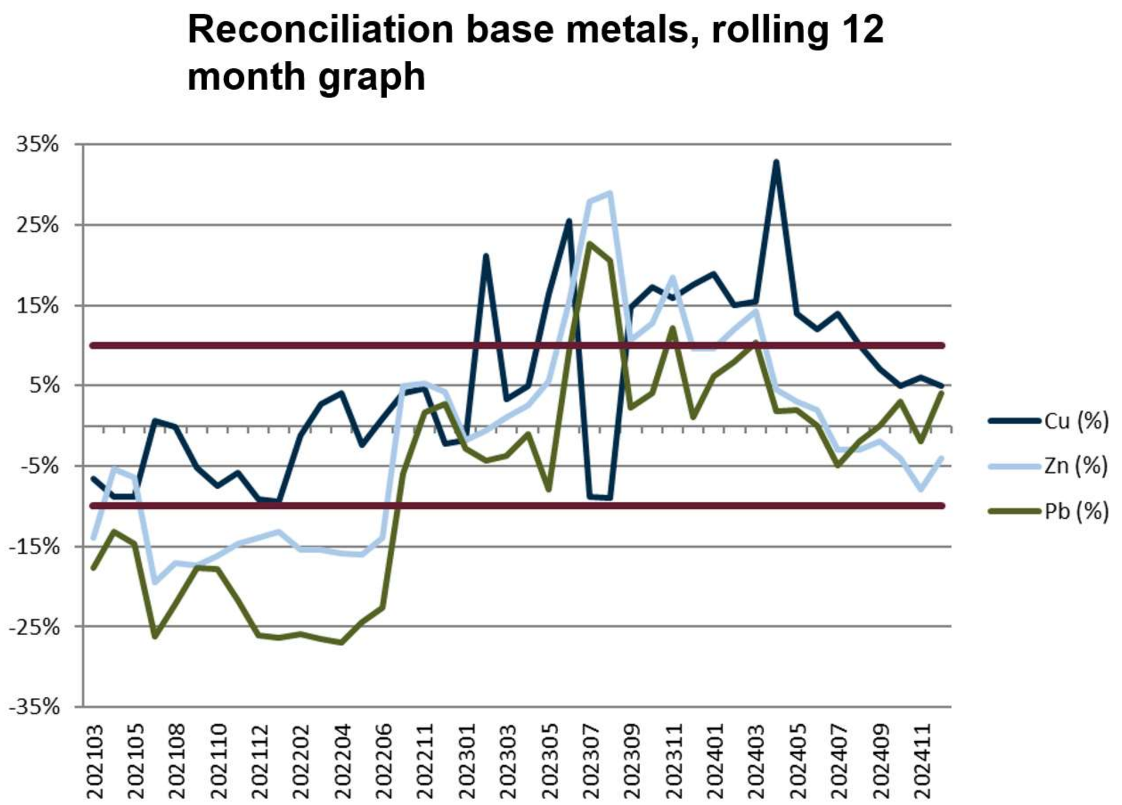


Figure 9: Renström rolling 12-month base and precious metal reconciliation

4 REFERENCES

Internal References:

- Renström_PERC_TechnicalReport_Final, 24-06-2021 (DMS #1787623)
- Ändrad mineralresurs G1R Julia MRE 2024 DMS#1983497-vR
- Ändrad mineralresurs Memo_MO_MRE_2024 DMS# 2030083

External References (public domain):

- Pan-European Standard for reporting of Exploration results, Mineral Resources and Mineral Reserves (The PERC Reporting standard 2021.) www.percstandard.eu