



Berg Copper Project

NI 43-101 Technical Report and Pre-Feasibility Study

British Columbia, Canada

Effective Date June 12, 2026

Report Date July 28, 2026

Prepared for

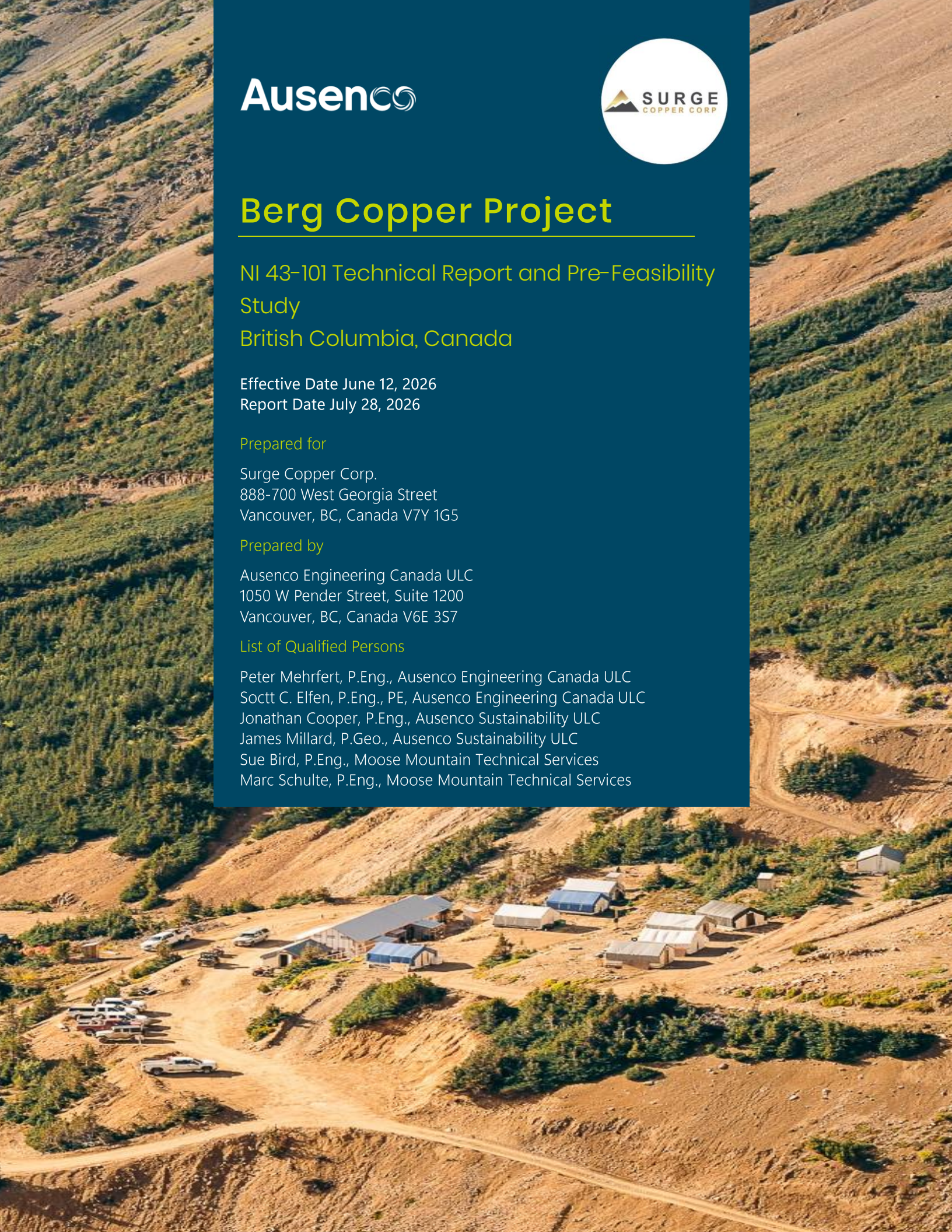
Surge Copper Corp.
888-700 West Georgia Street
Vancouver, BC, Canada V7Y 1G5

Prepared by

Ausenco Engineering Canada ULC
1050 W Pender Street, Suite 1200
Vancouver, BC, Canada V6E 3S7

List of Qualified Persons

Peter Mehrfert, P.Eng., Ausenco Engineering Canada ULC
Soctt C. Elfen, P.Eng., PE, Ausenco Engineering Canada ULC
Jonathan Cooper, P.Eng., Ausenco Sustainability ULC
James Millard, P.Geo., Ausenco Sustainability ULC
Sue Bird, P.Eng., Moose Mountain Technical Services
Marc Schulte, P.Eng., Moose Mountain Technical Services



Certificate of Qualified Person

Peter Mehrfert, P.Eng.

I, Peter Mehrfert, P.Eng., certify that:

1. I am employed as a Principal Process Engineer with Ausenco Engineering Canada ULC, (Ausenco), with an office address of 1050 W Pender St., Vancouver, BC, Canada, V6E 3S7.
2. This certificate applies to the technical report titled "Berg Copper Project NI 43-101 Technical Report and Pre-Feasibility Study, British Columbia, Canada" (the "Technical Report"), prepared for Surge Copper Corp. (the "Company"), with a report date of July 28, 2026 and an effective date of June 12, 2026 (the "Effective Date").
3. I graduated from the University of British Columbia with a Bachelor of Applied Science in Mining and Mineral Process Engineering in 1996.
4. I am a professional engineer registered with Engineers and Geoscientists British Columbia (No. 24527).
5. I have practiced my profession continuously for 30 years, with experience in the design, evaluation and operation of mineral processing facilities during that time. half of my professional practice has been the supervision and management of metallurgical test work related to feasibility and pre-feasibility studies of projects involving flotation and leaching technologies. Previous projects that I have worked on that have similar metallurgical features to Berg Copper are Santo Tomas, Copper Creek, Mt. Milligan, and the North Island project. I have also collaborated on financial analysis and model development on multiple projects, including Panuco, North Island, Lawyers/Ranch and Copper Creek.
6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of this Instrument.
7. I visited the project site on August 27-28th, 2025.
8. I am responsible for Sections 1.1, 1.2, 1.10, 1.14, 1.15, 1.16.1-1.16.4, 1.17, 1.19-1.22, 2.1-2.3, 2.4.4, 2.5-, 2.7, 3.1, 3.4, 3.5, 13, 17, 18.1, 18.2, 18.3.1-18.3.6, 18.3.8, 19, 21.1, 21.2.1, 21.2.2, 21.2.3.2 21.2.4-21.2.8, 21.2.9.1, 21.2.9.3 21.2.10, 21.3.1, 21.3.3-21.3.5, 22, 24, 25.1, 25.6, 25.10, 25.11, 25.12, 25.14, 25.15, 25.16.1.1, 25.16.1.4-25.16.1.6, 25.16.2.2, 25.16.2.5, 25.16.2.6, 26.1, 26.4, and 27 of the Technical Report.
9. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101.
10. I have been previously involved with the Berg Copper Project through managing pilot scale testing in 2010 and being the Qualified Person for mineral processing in the 2023 PEA study.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: July 28, 2026

"Signed and sealed"

Peter Mehrfert, P.Eng.

Ausenco Engineering Canada ULC Permit to Practice 1001905, Engineers and Geoscientists British Columbia

Certificate of Qualified Person

Scott Elfen, P.Eng., PE

I, Scott Elfen, P.Eng., PE, certify that:

1. I am employed as SME and Global Leader GC Mine Waste Solution with Ausenco Engineering Canada ULC, (Ausenco), with an office address of 1050 W Pender St., Suite 1200, Vancouver, BC, Canada, V6E 3S7.
2. This certificate applies to the technical report titled "Berg Copper Project NI 43-101 Technical Report and Pre-Feasibility Study, British Columbia, Canada" (the "Technical Report"), prepared for Surge Copper Corp. (the "Company"), with a report date of July 28, 2026 and an effective date of June 12, 2026 (the "Effective Date").
3. I graduated from the University of California with a Bachelor of Science in Civil Engineering (Geotechnical) in 1991.
4. I am a professional engineer (civil) registered with the State of California in the United States of America (No. C56527) by exam since 1996. I am a professional engineer registered within the province of British Columbia, Canada (No. 64064) by Exam since 2025.
5. I have practiced my profession continuously for 32 years with experience in the development, design, construction and operations of mine waste storage facilities, such as waste rock storage facilities and tailings storage facilities ranging from slurry to dry stack facilities, focusing on precious and base metals, both domestic and international. I have developed geotechnical design parameters for pit slope design, plant foundation design, and other supporting infrastructure. Examples of projects I have worked on include Skeena's Eskay Creek Project PEA, PFS, and FS, O3 Mining's Marban Project PEA and PFS, and First Mining Gold's Springpole PEA and PFS.
6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of this Instrument.
7. I visited the project site from September 13 to 14, 2025.
8. I am responsible for Sections 1.16.5, 2.4.1, 18.3.7, 26.5.1-26.5.3 and 27 of the Technical Report.
9. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101.
10. I have been previously involved with the Berg Copper Project as the SME for mine waste management in the 2023 PEA study and 2023 NI 43-101 Technical Report.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: July 28, 2026

"Signed and sealed"

Scott Elfen, P.Eng., PE

Ausenco Engineering Canada ULC Permit to Practice 1001905, Engineers and Geoscientists British Columbia



Certificate of Qualified Person

Jonathan Cooper, P.Eng.

I, Jonathan Cooper, P.Eng., certify that:

1. I am employed as a Water Resources Engineer with Ausenco Sustainability ULC, (Ausenco), with an office address of 320 Bay Street, Suite 603, Toronto, Ontario M5H 4A6.
2. This certificate applies to the technical report titled "Berg Copper Project NI 43-101 Technical Report and Pre-Feasibility Study, British Columbia, Canada" (the "Technical Report"), prepared for Surge Copper Corp. (the "Company"), with a report date of July 28, 2026 and an effective date of June 12, 2026 (the "Effective Date").
3. I graduated from the University of Western Ontario with a Bachelor of Engineering Science in Civil Engineering in 2008, and the University of Edinburgh with a Master of Environmental Management in 2010.
4. I am a professional engineer registered and in good standing with the Professional Engineers Ontario (No. 100191626), Engineers and Geoscientists British Columbia (No. 37864) and NWT and Nunavut Association of Professional Engineers and Geoscientists (No. L4227).
5. I have practiced my profession continuously for 15 years with experience in the development, design, operation, and commissioning of surface water infrastructure. Previous projects that I have worked on that have similar features to the Berg Copper Project are New Polaris Gold Project located in Northern British Columbia, Colomac Gold Project located in the Northwest Territories and the Crawford Project located in Ontario.
6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of this Instrument.
7. I have not visited the project site.
8. I am responsible for Sections 18.3.9, 26.5.4 and 27 of the Technical Report.
9. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101.
10. I have been previously involved with the Berg Copper Project as a water management lead in the 2023 PEA study and water management QP for the 2023 NI 43-101 Technical Report.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: July 28, 2026

"Signed and sealed"

Jonathan Cooper, P.Eng.

Ausenco Engineering Canada ULC Permit to Practice 1003471, Engineers and Geoscientists British Columbia

Certificate of Qualified Person James Millard, P.Geo.

I, James Millard, P.Geo., certify that:

1. I am employed as a Director, Strategic Projects with Ausenco Sustainability ULC, (Ausenco), with an office address of 18-4515 Central Blvd, Burnaby, BC, Canada, V5H 0C6.
2. This certificate applies to the technical report titled "Berg Copper Project NI 43-101 Technical Report and Pre-Feasibility Study, British Columbia, Canada" (the "Technical Report"), prepared for Surge Copper Corp. (the "Company"), with a report date of July 28, 2026 and an effective date of June 12, 2026 (the "Effective Date").
3. I graduated from Brock University in St. Catharines, Ontario in 1986 with a Bachelor of Science in Geological Sciences and from Queen's University in Kingston, Ontario with a Master of Science in Environmental Engineering in 1995.
4. I am a professional geologist and member in good standing with the Engineers and Geoscientists British Columbia (No. 64426), the Association of Professional Geoscientists of Nova Scotia (No. 021), and the Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories and Nunavut (No. 1624).
5. I have practiced my profession continuously for over 30 years. I have worked for mid- and large-sized mining companies, serving in senior technical, management, and environmental consulting roles and providing technical advice and subject matter expertise. My areas of expertise include feasibility-level study reviews; NI 43-101 technical report writing and review; environmental, social, and governance (ESG) due diligence for proposed mining operations and acquisitions; and the management of environmental impact assessments (EIAs) and permitting applications to support the construction, operations, and closure of mining projects. Recently, I acted as Qualified Person for environmental/sustainability sections in the following project reports: "Colomac Gold Project, NI 43-101 Technical Report and Preliminary Economic Assessment, Northwest Territories, Canada"; "New Polaris Project NI 43-101 Technical Report and Feasibility Study, British Columbia, Canada"; and, "Goldfields Project Updated NI 43-101 Technical Report & Preliminary Economic Assessment, Saskatchewan, Canada."
6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of this Instrument.
7. I have not visited the project site.
8. I am responsible for Sections 1.18, 3.3, 20, 25.13, 25.16.1.7, 25.16.2.7, 26.6 and 27 of the Technical Report.
9. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101.
10. I have not been previously involved with the Berg Copper Project.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: July 28, 2026

"Signed and sealed"

James Millard, P.Geo.

Ausenco Engineering Canada ULC Permit to Practice 1003471, Engineers and Geoscientists British Columbia



Certificate of Qualified Person

Marc Schulte, P.Eng.

I, Marc Schulte, P.Eng., certify that:

1. I am a Mining Engineer with Moose Mountain Technical Services, (MMTS), with an office address of Suite 210, 1510 2nd Street North Cranbrook, BC, Canada.
2. This certificate applies to the technical report titled "Berg Copper Project NI 43-101 Technical Report and Pre-Feasibility Study, British Columbia, Canada" (the "Technical Report"), prepared for Surge Copper Corp. (the "Company"), with a report date of July 28, 2026 and an effective date of June 12, 2026 (the "Effective Date").
3. I graduated from the University of Alberta with a Bachelor of Science in Mining Engineering in 2002.
4. I am a member of the self-regulating association of Engineers and Geoscientists BC (No. 54035).
5. I have worked as a mining engineer continuously for 24 years since my graduation from university. Throughout my career, I have worked on numerous open-pit base metals projects, within project engineering studies and within mine operations, on mineral reserve estimates, mine planning, and mine cost estimates.
6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of this Instrument.
7. I visited the project site on August 27 and 28, 2025 for two days.
8. I am responsible for Sections 1.12, 1.13, 2.4.2, 15, 16, 21.2.3.1, 21.2.9.2, 21.3.2, 25.8, 25.9, 25.16.1.3, 25.16.2.4, 26.3 and 27 of the Technical Report.
9. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101.
10. I have been previously involved with the Berg Copper Project as mining engineer for mine plan in the 2023 PEA study and mining QP for the 2023 NI 43-101 Technical Report.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: July 28, 2026

"Signed and sealed"

Marc Schulte, P.Eng.

Moose Mountain Technical Services Permit to Practice 1002591, Engineers and Geoscientists British Columbia



Certificate of Qualified Sue Bird, P.Eng.

I, Sue Bird, P.Eng., certify that:

1. I am a Geological Engineer with Moose Mountain Technical Services, (Ausenco), with an office address of #210 1510 2nd Street North Cranbrook, BC, Canada V1C 3L2.
2. This certificate applies to the technical report titled "Berg Copper Project NI 43-101 Technical Report and Pre-Feasibility Study, British Columbia, Canada" (the "Technical Report"), prepared for Surge Copper Corp. (the "Company"), with a report date of July 28, 2026 and an effective date of June 12, 2026 (the "Effective Date").
3. I graduated from Queen's University with a Bachelor of Science in Geologic Engineering in 1989, and earned a Master of Science in Mining in 1993.
4. I am a member of the self-regulating Association of Engineers and Geoscientists British Columbia (No. 25007).
5. I have practiced my profession continuously for 33 years. I have worked on precious metals, base metals and coal mining projects, including mine operations and evaluations. Similar resource estimate projects specifically include those done for Northisle's North Island Project, Artemis' Blackwater Gold Project, in BC; Selkirk's Minto Mine, in the Yukon, Gold Mining's Whistler Project in Alaska, World Copper's Zonia Project in Arizona, Greenland Resource's Malmbierg Project in Greenland, as well as numerous due diligence gold projects in the southern US done confidentially for various clients.
6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of this Instrument.
7. I visited the project site on August 27 and 28, 2025 for two days.
8. I am responsible for Sections 1.3-1.9, 1.11, 2.4.3, 3.2, 4-11, 12.1-12.4, 12.5.1, 14, 23, 25.2-25.5, 25.7, 25.16.1.2, 25.16.2.1, 25.16.2.3, 26.2 and 27 of the Technical Report.
9. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101.
10. I have been previously involved with the Berg Copper Project as a QP for the Resource in 2023.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: July 28, 2026

"Signed and sealed"

Sue Bird, P.Eng.

Moose Mountain Technical Services Permit to Practice 1002591, Engineers and Geoscientists British Columbia

Important notice

This report was prepared as National Instrument 43-101 Technical Report for Surge Copper Corp. (Surge Copper) by Ausenco Engineering Canada ULC and Ausenco Sustainability ULC (Ausenco), Moose Mountain Technical Services (MMTS), collectively the Report Authors. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in the Report Authors' services, based on i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Surge Copper subject to terms and conditions of its contracts with each of the Report Authors. Except for the purposes legislated under Canadian provincial and territorial securities law, any other uses of this report by any third party is at that party's sole risk.

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1 Summary

1.1 Introduction

Ausenco Engineering Canada ULC and Ausenco Sustainability ULC (Ausenco) has prepared a Pre-Feasibility Study (PFS) and associated technical report for Surge Copper Corp. (Surge Copper) on the Berg Copper Project (the "Project") located in British Columbia, BC, Canada. The technical report was prepared in accordance with the Canadian disclosure requirements of National Instrument 43-101 (NI 43-101) and Form 43-101 F1.

The responsibilities of the engineering consultants are as follows:

- Ausenco managed and coordinated the work related to the report and developed PFS-level design, including capital and operating cost estimates for the process plant, general site infrastructure, water management, tailings storage facility, geotechnical assessment, environment and permitting, and economic analysis.
- Moose Mountain Technical Services ("MMTS") developed the Mineral Resource and Reserve Estimate for the Berg Copper Project and completed the work related to property description, accessibility, local resources, geological setting, deposit type, drilling, exploration works, sample preparation and analysis and data verification. They also designed the open pit mine, developed the mine production schedule and mine operations descriptions, and ran mine capital and operating cost estimates.

1.2 Terms of reference

The report supports disclosures by Surge Copper in a Press Release dated June 15, 2026, entitled "Surge Copper Announces Results of Berg Copper Pre-Feasibility Study with After-Tax NPV8% of C\$4.6 Billion and 24% IRR."

All measurement units used in this report are SI units unless otherwise noted. Currency is expressed in Canadian dollars (C\$ or CAD) unless otherwise noted.

Mineral Resources and Mineral Reserves are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (CIM, 2014) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (CIM, 2019).

1.3 Project description

The Berg Copper property is located in the Tahtsa Ranges, which is a 15 to 20-kilometre-wide belt of mountains within the Hazelton Mountains. The Hazelton Mountains lie along the eastern flank of the Kitimat Range of the Coast Mountains and form part of the Skeena Arch. The Tahtsa Ranges represent a transitional zone between the rugged, predominantly plutonic, Coast Mountains to the west and the rolling hill region of sedimentary and volcanic rocks that underlie the Nechako Plateau to the east.

1.4 Mineral tenure, surface rights, water rights, royalties and agreements

On December 22, 2023, the Company entered into a definitive purchase agreement to acquire a 100% interest in the Berg Property from Thompson Creek Metals Company Inc., a wholly owned subsidiary of Centerra Gold Inc., for total consideration of 21,221,165 common shares. On January 19, 2024, the transaction was completed. This purchase agreement replaced an earlier option agreement dated December 15, 2020, under which the Company was earning into a 70% interest in the Berg Property through the issuance of \$5 million in common shares of Surge and \$8 million in exploration expenditures over a period of up to five years as outlined in the Table 4-1.

Surface rights over the Berg property are owned by the Province of British Columbia.

A 1% net smelter return royalty is held by Royal Gold on eight of the mineral claims and the one mining lease, including those which host the deposit on the main Berg property.

1.5 History

The Tahtsa Ranges were first prospected in the early 1900's after gold was discovered near Sibola Mountain. Within the Berg deposit area, drilling by Kennecott during 1965 and 1966 delineated two main mineralized zones; a northeast zone that contains primary (hypogene) and some supergene mineralization, and a south zone with widespread supergene mineralization.

In 1972, exploration and development of the property were taken over by Canex Placer Limited (Placer Dome Inc.). A total of 119 diamond drill holes for 20,127.9 m had been completed on the Berg Property to 1980.

Between 1982 and 2007, there was no active exploration on the project. In September 2006, Terrane purchased Kennecott's share of the Berg Joint Venture to become 100% owners.

In 2010, Thompson Creek Metals Company Inc. (TCM) purchased Terrane and continued exploration and drilling. TCM continues as a subsidiary of Centerra gold which purchased TCM in 2016.

Several other prospects and showings within the greater Berg Copper Project are important targets as discussed in the Section 6 of this report.

1.6 Geology and mineralization

The Berg deposit consists of two main intrusive bodies: a north-trending, elongate body of quartz diorite (Unit QDR) that intrudes the contact between Hazelton Group and Skeena Group east of the mineralized area, and the Berg Stock which is a multi-phase composite quartz monzonite stock that intrudes the Hazelton Group andesitic rocks.

Alteration and mineralization at Berg are localized in and adjacent to the quartz monzonite Berg Stock. Hydrothermal alteration zones are spatially related to the central Berg Stock and extend up to 1,000 m from the intrusive contact. Typical copper and molybdenum mineralization occurs primarily in potassically-altered rocks related to the earlier phases of the Berg Stock (QPP-P1 and PBQP-P2), with most hypogene mineralization occurring in several generations of quartz-sulphide veins.

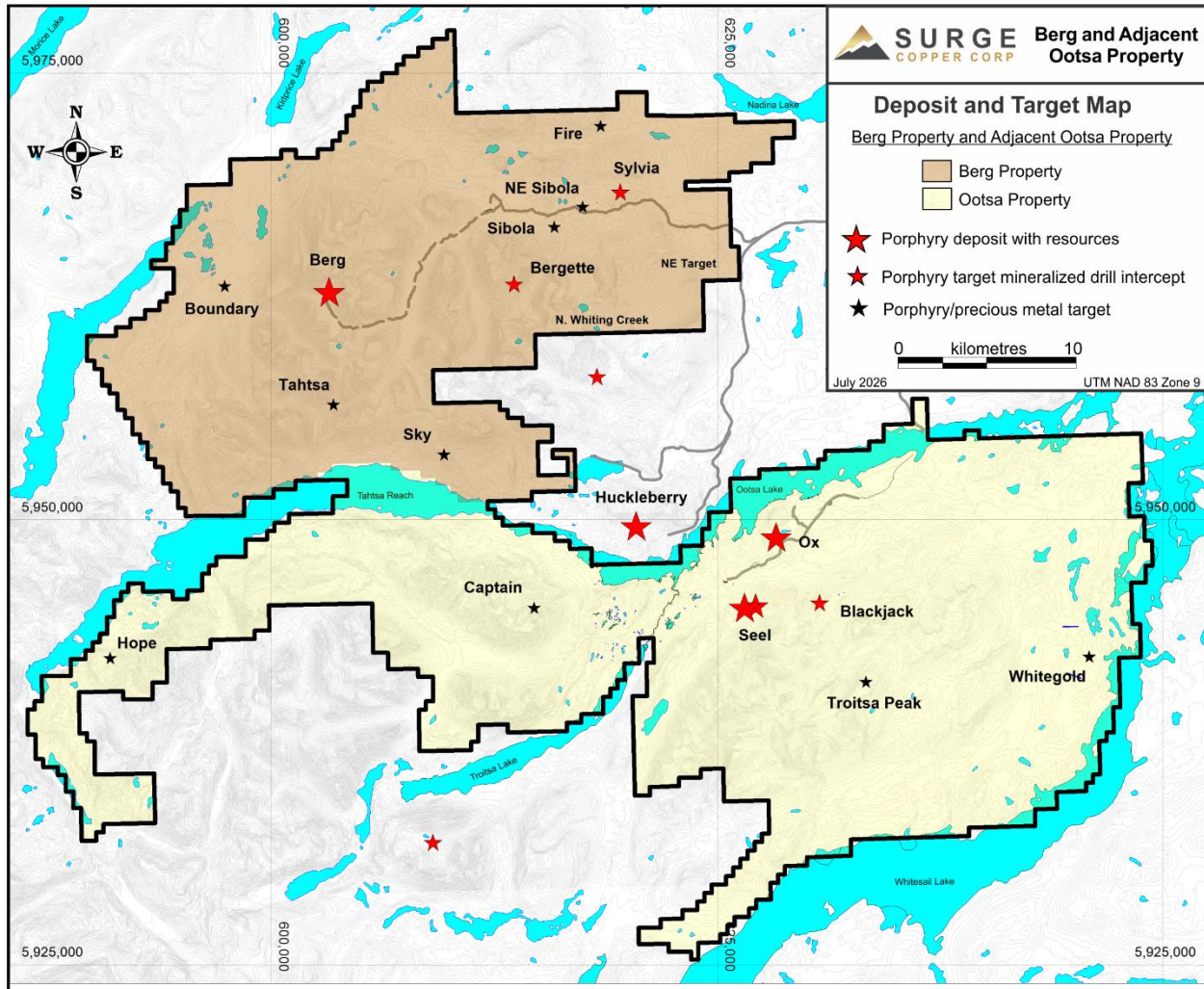
1.7 Exploration

In total Surge Copper owns a 100% interest in 251 mining claims totalling 135,375.35 hectares (ha) along with an option to acquire a 100% interest in an additional 6,323.7 ha of contiguous mineral claims covering over 50 kilometres of strike length across a porphyry district including the Seel, Ox, and Berg deposits (Figure 4-1). The northern part of Surge's claim package located north of Tahtsa Reach, and which hosts the Berg deposit, is referred to as the Berg Property. The southern part of the district is referred to as the Ootsa property and is the subject of a separate report (Stacey and Gray, 2022) and is not described here.

Surge Copper started exploring the Berg property in 2021 and between 2021 and 2025 Surge Copper has drilled 56 holes for 18,006 m of drilling on the Berg property. Since becoming operator of the Berg property Surge Copper has rehabilitated the historic Berg access trail, upgraded the Berg camp and built the Sibola camp, conducted substantial drilling, completed 20 IP lines over multiple targets, conducted widespread soil and rock sampling, and completed a property wide airborne ZTEM-Magnetic survey. Surge Copper has a soil database for the Berg property containing 10,108 soil samples, composed of 4082 samples that have been compiled from historic sources dating to 1971, and 6026 samples have been collected by Surge. Soils are dominantly collected from the B horizon, or talus fines where the B horizon is not developed. Most samples have been analysed either by inductively coupled plasma after an aqua regia digestion or by portable X-ray fluorescence. Surge Copper has compiled a rock database containing 458 samples, of these 129 samples have been compiled from historic reports dating to 1988 and 329 samples have been collected by Surge.

The main exploration targets outside of the Berg deposit are Bergette and Sylvia which have both returned mineralized drill intercepts, and Sibola, NE Sibola, Tahtsa, Sky, and Boundary, which have large surface geochemical or geophysical expressions and require additional exploration work to evaluate. The Berg and Bergette systems show large-scale copper in soil anomalies spanning kilometres in scale. Both of these systems occur at elevation and do not have extensive glacial cover. The Tahtsa and Sky targets also occur at higher elevation with limited glacial cover, and although soil coverage is incomplete, both show potential to contain large-scale copper in soil anomalies. The NE Sibola and Boundary targets show potential for modest size copper in soil anomalies at 1 km in scale. Both of these targets occur at lower elevation within valleys and are overlain by glacial and other surficial deposits. The surface geochemical expressions of potential mineralized zones within these covered areas will be more subtle with significantly lower values than those over residual bedrock.

Figure 1-1: Berg property deposits/prospects



Source: Surge Copper, 2026

Recent compilation work at Bergette shows a prominent magnetic ring structure that has been truncated by a northwest trending fault. This fault also offsets and divides the large Bergette copper in soil anomaly into a West Target area and an East Target area. The West Target area is well constrained by historic soil sampling whereas the East Target area remains open for expansion and has seen no historic drilling. In 2022 Surge Copper outlined a 1200 by 800 m copper in soil anomaly at the NE Sibola target, this anomaly remains open for expansion along its northern edge and has not yet been covered by IP surveying. As part of a land options deal Surge consolidated claims covering the Boundary target on the west side of the Berg claim block. The Boundary target contains a 900 m by 600 m copper in soil anomaly that has not been fully evaluated.

1.8 Drilling

Drilling on the Berg deposit started in 1964 with Kennecott and has continued intermittently to 2025 with Surge Copper completing 12,657 m of drilling in 35 holes between 2021 and 2025. There is a total of 249 drillholes with 66,229 m of drilling used in the resource estimate. In 2022 Surge drilled 10 holes at the Bergette, Sibola, and Sylvia targets for an additional 4,782 m of drilling. Also, in 2022 Surge Copper collected 7,261 samples of historic Berg drill core along with available drill core pulps and analyzed for gold as these intervals had not been analyzed for gold previously. In 2025 Surge re-sampled 18 historic Berg holes utilizing full quality control measures to allow these holes to be utilized for resource categorization.

1.9 Sample preparation, analyses and security

The methods implemented by Surge Copper during the 2021-2025 drilling for sample collection, preparation and analysis were developed using standard industry practices. Analytical results for QA/QC insertions are being monitored internally once lab reports become available. The analytical laboratories selected are independent accredited laboratories which adhere to recognized ISO standards and are well known in the mining and exploration industry. Sample handling and processing is being completed with appropriate chain of custody and samples get stored in a secure facility.

Blanks and standards demonstrate acceptable levels of contamination and accuracy, respectively. Analysis of field duplicates indicates good reproducibility for silver, gold, copper, and molybdenum at the sampling stage. Select reviews of lab-internal sample size reduction control via coarse and pulp duplicates show no significant errors.

1.10 Metallurgical testwork

A series of metallurgical test programs were conducted on samples from the Berg deposit between 2008 and 2012, on behalf of previous owners and by Surge Copper in 2025. The earlier test programs, conducted by G&T Metallurgical, included 16 locked cycle tests conducted across 10 grade varying composites and two bulk composites. Pilot scale testing was also conducted that generated bulk concentrate for subsequent bench scale copper-moly separations.

The most recent test program, conducted by ALS Metallurgy, evaluated three composites and 27 variability samples from hypogene, transition and supergene materials, as well as a single oxide sample. The head grades of the samples covered the range of feed grades anticipated in the mine plan.

Comminution testing conducted in the recent test program indicated that the samples were very competent in terms of impact breakage in a SAG mill. The 75th percentile of the Axb values for the total sample set was 26, however the supergene and transition materials had an average Axb value of 33. Similarly, the Bond ball mill work index (BBWi) test results suggested that the materials were hard with respect to grinding in a ball mill, as the 75th percentile BBWi value of the data set was 17.8 kWh/t.

Primary grind sizes of 160 μm P₈₀ were applied to the transition and hypogene samples, while finer grind sizes of 115 μm could be targeted on supergene samples due to their lower hardness characteristics. More selective process chemistry was introduced in this program which improved the metallurgical performance over previous testing. Locked cycle tests were conducted on master composites of one hypogene and two supergene lithologies. Staged regrinding was investigated and determined to be an effective method to reduce regrinding energy. Coarse particle flotation in a rougher scavenger application was evaluated but the limited testing was not sufficient to include in the developed process.

Large mass batch tests were conducted to generate bulk concentrate for Cu-Mo separation testing, which was demonstrated to be effective. Molybdenum concentrates grading 51% Mo on average were produced in open circuit testing on all three composites, at total circuit recoveries averaging 75%. The Cu-Mo separation circuit molybdenum recovery for these open circuit tests averaged 88.4%. Closed-circuit molybdenum recovery across the Cu-Mo separation is expected to be higher, given the low Mo contents of the Mo rougher tailing streams.

Recovery models were developed from the results of the 2025 test program, which estimated recoveries as functions of feed grades for copper, molybdenum and silver for each of the lithologies. Gold contents in the feeds were quite low, and recoveries did not relate well to feed grades, so a conservative constant value was estimated. The resulting LOM recoveries based on the mine plan grades were 84.1% for copper, 87.7% for molybdenum, 55.5% for silver and 52% for gold.

The test programs indicated that copper concentrates grading from 21% Cu on supergene material to 31% Cu on hypogene material could be produced using the developed conditions. Minor element analyses were conducted on copper and molybdenum concentrates generated on the main lithologies. Hypogene and supergene concentrates did not contain deleterious elements at problematic levels that would affect marketability of the concentrates. The transition material copper concentrate did contain levels of antimony, cadmium, lead and zinc that could attract smelter penalties; however, it is likely that these levels could be mitigated by blending of the mill feed materials and concentrate blending if required. The molybdenum concentrates averaged 3.3% Cu and also contained 94 ppm rhenium.

1.11 Mineral Resource Estimate

The Mineral Resource Estimate (MRE) has an effective date of June 12, 2026, and is summarized in Table 1-1 below. The resource is constrained by an open pit with a "reasonable prospect of eventual economic extraction" using a cut-off of C\$8.00/t which covers the Processing + G&A costs, and the parameters as defined in the notes to Table 1-1. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

The net smelter return (NSR) inputs are summarized in the notes to the table. The copper equivalent values (CuEq) are calculated from NSR. Mineral Resources that are not reserves do not have demonstrated economic viability.

There are no other known factors or issues that materially affect the MRE other than normal risks faced by mining projects in the Province of British Columbia, Canada, in terms of environmental, permitting, taxation, socio-economic, marketing, and political factors.

Table 1-1: Summary of the Mineral Resource Estimate at the base case cut-off of C\$8.00 NSR cut-off

Zone	Class	Tonnage (ktonne)	Grades - In situ						Metal - In situ				
			NSR (\$/tonne)	Cu (%)	Mo (%)	Ag (g/t)	Au (g/t)	CuEq (%)	CuEq (Mlbs)	Cu (Mlbs)	Mo (Mlbs)	Ag (koz)	Au (koz)
Cap Material	Measured	2,173	23.01	0.11	0.026	4.1	0.03	0.32	15	5	1.2	284	2.3
	Indicated	49,245	20.86	0.13	0.018	3.5	0.03	0.29	313	143	19.2	5,589	49.4
	Meas+Ind	51,418	20.95	0.13	0.018	3.6	0.03	0.29	328	148	20.4	5,873	51.7
	Inferred	1,618	19.89	0.17	0.009	2.9	0.02	0.27	10	6	0.3	152	1.1
Supergene	Measured	9,645	61.75	0.44	0.025	4.6	0.04	0.62	133	94	5.4	1,430	12.3
	Indicated	162,340	47.62	0.34	0.021	4.2	0.03	0.49	1,764	1,218	76.1	22,078	151.9
	Meas+Ind	171,985	48.41	0.35	0.022	4.3	0.03	0.50	1,896	1,312	81.5	23,507	164.2
	Inferred	4,425	28.13	0.24	0.007	3.3	0.03	0.31	31	23	0.7	469	4.0
Hypogene	Measured	24,716	48.34	0.25	0.034	4.8	0.03	0.46	250	136	18.8	3,830	20.7
	Indicated	1,164,490	36.25	0.19	0.026	4.0	0.02	0.35	9,034	4,901	670.1	147,885	726.3
	Meas+Ind	1,189,206	36.51	0.19	0.026	4.0	0.02	0.35	9,285	5,037	688.9	151,715	747.1
	Inferred	997,495	33.35	0.16	0.027	4.3	0.01	0.33	7,237	3,560	598.2	137,260	397.7
Total	Measured	36,534	50.38	0.29	0.032	4.7	0.03	0.49	398	235	25.4	5,543	35.3
	Indicated	1,376,075	37.04	0.21	0.025	4.0	0.02	0.37	11,111	6,262	765.4	175,552	927.6
	Meas+Ind	1,412,609	37.39	0.21	0.025	4.0	0.02	0.37	11,509	6,497	790.8	181,095	962.9
	Inferred	1,003,538	33.30	0.16	0.027	4.3	0.01	0.33	7,278	3,590	599.3	137,882	402.7

Notes to Table 1-1:

- The Mineral Resource Estimate has been prepared by Sue Bird, P.Eng., an independent Qualified Person.
- Resources are reported using the 2014 CIM Definition Standards and were estimated in accordance with the CIM 2019 Best Practices Guidelines.
- The Mineral Resource has been confined by a "reasonable prospects of eventual economic extraction" pit using the following assumptions:
 - Cu price of US\$4.50/lb, Mo price of US\$20.00/lb, Au price of US\$3,000/oz, Ag price of US\$40/oz at an exchange rate of 1.35 C\$ per US\$.
 - 96.3% payable for Cu, 90.0% payable for Ag and Au, 99.0% payable for Mo, 1%-unit deduction for Mo.
 - Concentrate smelting of US\$50/dmt, US\$0.05/lb Cu refining, US\$1.25/lb Mo refining, transport and off-site costs of US\$100/wmt and US\$130/wmt for Cu and Mo concentrates respectively, a 1.0% NSR royalty.
 - Average recoveries in the hypogene of: 86% for Cu, 89% for Mo, 56% for Ag, and 52% for Au. In the supergene of: 82% for Cu, 79% for Mo, 65% for Ag and 52% for Au, and in the Leach Cap: 60% for Cu, 67% for Mo, 67% for Ag and 52% for Au.
 - Net Smelter prices of C\$5.47 /lb Cu, C\$24.19/lb Mo, C\$1.48/g Ag and C\$110.89/g Au.
 - NSR within the Cap material: $72.41 \cdot \text{Cu}\% + 0.0357 \cdot \text{Moppm} + 0.99 \cdot \text{Ag g/t} + 0.0577 \cdot \text{Au ppb}$.
 - NSR within the Supergene material: $98.97 \cdot \text{Cu}\% + 0.421 \cdot \text{Moppm} + 0.96 \cdot \text{Ag g/t} + 0.0577 \cdot \text{Au ppb}$.
 - NSR within the Hypogene material: $103.79 \cdot \text{Cu}\% + 0.0475 \cdot \text{Moppm} + 0.83 \cdot \text{Ag g/t} + 0.0577 \cdot \text{Au ppb}$.
 - $\text{CuEq} = \text{NSR}/72.41$ in cap material, $\text{CuEq} = \text{NSR}/98.97$ in Supergene, and $\text{CuEq} = \text{NSR}/103.79$ in Hypogene.
 - Mining costs of C\$2.50/t ore and waste.
 - Processing costs of C\$7.00 and G&A costs of C\$1.00/t.
- Pit slopes vary with rock type and slope azimuth.
- Numbers may not sum due to rounding.

1.12 Mineral Reserve Statement

The Berg deposit is amenable to open-pit mining methods. Proven and Probable Mineral Reserves have been modified from Measured and Indicated Mineral Resources. Inferred Mineral Resources are set to waste. Mineral Reserves are supported by the 2026 PFS life-of-mine plan.

The mine engineering supporting the Mineral Reserve Estimate is based on open-pit shell targets derived from pseudoflow sensitivity analysis and then designed into detailed pit phases for production scheduling purposes. This production schedule feeds a PFS financial model that demonstrates the economic viability of the estimated ROM (run-of-mine) mill feed from the open pits.

ROM mill feed quantities and grade are estimated within a 15x15x15 m SMU (selective mining unit) block that is estimated to account for the effects of 5% mining dilution and 95% mining recovery. ROM mill feed quantities are run at a \$9.25/t NSR grade cut-off, and an additional 4% tonnage loss is incorporated as part of the mine planning process.

Mineral Reserves are reported at the point of delivery to the primary crusher using the 2014 CIM Definition Standards and have an effective date of June 12, 2026. The Qualified Person for the estimate is Mr. Marc Schulte, P.Eng., a member of MMTS.

Mineral Reserves are summarized in Table 1-2.

Table 1-2: Mineral Reserve Estimate

Reserve Class	Run of Mine (Mtonnes)	Cu Grade (%)	Mo Grade (%)	Ag Grade (g/t)	Au Grade (g/t)	Cu Metal (Mlbs.)	Mo Metal (Mlbs.)	Ag Metal (Moz.)	Au Metal (koz.)
Proven	35	0.30	0.033	4.8	0.03	231	25	5	34
Probable	1,174	0.21	0.026	4.1	0.02	5,565	662	154	810
Total Reserve	1,209	0.22	0.026	4.1	0.02	5,796	687	160	844

Footnotes:

1. The Mineral Reserve estimate has been prepared by an independent Qualified Person, Marc Schulte, P.Eng., of Moose Mountain Technical Services, with an effective date of June 12, 2026.
2. The Mineral Reserves are a subset of the MRE which also has an effective date of June 12, 2026.
3. The Mineral Reserves are based on engineering and technical information developed at a pre-feasibility level for the Berg deposit.
4. Mineral Reserves are mined tonnes and grade, with a reference point of ROM mill feed at the crusher. This ROM mill feed includes estimates of mining dilution and recovery.
5. Mineral Reserves are reported at an NSR cut-off grade of \$9.25/t. NSR grade is based on US\$4.50/lb Cu, US\$20/lb Mo, US\$40/oz Ag, US\$3,000/oz Au, 1.35 C\$:US\$ exchange rate, US\$50/t concentrate smelter costs, US\$0.05/lb Cu refining costs, US\$1.25/lb Mo refining costs, 96.3% payable Cu, 1% refining deduction and 99% payable Mo, 90% payable Ag, 90% payable Au, \$230/t off-site costs, and 1.0% royalty. NSR value also considers grade and lithology dependent metallurgical recovery formulas for all metals.
6. Columns may not sum exactly due to rounding.

Changes in the following factors and assumptions may affect the Mineral Reserve estimate: metal prices and foreign exchange rates; interpretations of mineralization geometry and continuity of mineralization zones; geotechnical and hydrogeological assumptions; ability of the mining operation to meet the annual production rate; changes to operating and capital cost assumptions; mining and process plant recoveries; the ability to meet and maintain permitting and environmental license conditions; and the ability to maintain the social license to operate.

1.13 Mining methods

Mine planning is based on conventional drill, blast, load, and haul open-pit methods suited for the deposit and site location. Open-pit operations will commence three years prior to mill start-up and are planned to run for 28 years following mill start-up.

Ultimate pit limits are split into phases or pushbacks to target higher economic margin material earlier in the mine life. The pit is split into six phases, with initial phases containing higher metal grades and lower waste to ore ratios.

The open pit is planned on 15 m bench heights, with minimum 8 m wide berms placed every bench. Upper benches will be accessed via internal cut ramps on topography, or via ramps left behind on phased pit walls. In-pit ramps will access material below the pit rim. The geotechnical analysis of the rocks in the open pit prescribes bench face and inter-ramp angles for various lithologies and sectors of the open pit. Inter-ramp angles range from 35 to 46 degrees. Geotechnical berms, 20 m wide, are included in any highwall not cut by a pit ramp for over 150 m vertical.

Mill feed targets are 43.8 Mt/a. An increased throughput target of 48 Mt/a is applied in the first 4 years of milling, as the supergene material, which is anticipated to allow for a higher mill throughput than the hypogene, makes up the majority of the mill feed during this time.

Ore will be hauled to a ROM pad and crusher directly west of the open pit, which feeds the process plant via conveyor. During the pre-stripping phase of mine operations, all mined ore will be stockpiled directly south of the ROM pad and then rehandled to the crusher and mill. A cut-off grade strategy applied over the entire mine plan sends lower-grade ore to the stockpile and reclaims it to the mill. Some low-grade Measured and Indicated Resources are also wasted in the early years of the mine life to improve mill feed grades and where storing this low grade would exceed the planned stockpile capacity. All stockpiled ore is planned to be rehandled back to the crusher and mill before the open pit is exhausted.

A PAG (potentially acid-generating) and NAG (not potentially acid-generating) boundary has been modelled, based on limited ABA (acid-base accounting) test work and analysis. Waste materials are categorized as PAG or NAG based on this boundary. PAG waste rock will be sent to a ROM pad and crusher, located directly adjacent to the ore ROM pad, and conveyed to the TWMP for subaqueous disposal and storage. Some NAG waste will also be sent to waste ROM pad and crusher and will be conveyed to the TWMP to supply material for dam construction. Some NAG waste will be used for construction of ex-pit haul roads connecting the pits to various haul destinations. The remaining NAG waste will be stored in one of three rock storage facilities (RSF) adjacent to the open pit.

Owner-managed mining and fleet maintenance operations are planned for 365 days/year, with two 12-hour shifts planned per day. No mine production is planned for 10 days per year to account for adverse weather conditions and unplanned shutdowns.

Mining will be undertaken using an electric and diesel driven fleet of tracked rotary drills capable of 305 mm diameter holes, 49 m³ bucket electric cable shovels, 600 t class diesel hydraulic shovels, 25 m³ bucket wheel loaders, 360 t payload class haul trucks, and various support, ancillary, and service equipment. Contractor executed explosive storage and blasting operations are planned, utilizing an emulsion based explosive product.

In-pit and perimeter pumping dewatering systems will be established. All surface water and precipitation in the pits will be gravity drained, or directed by skid-mounted mobile diesel pumps, to ex-pit settling ponds.

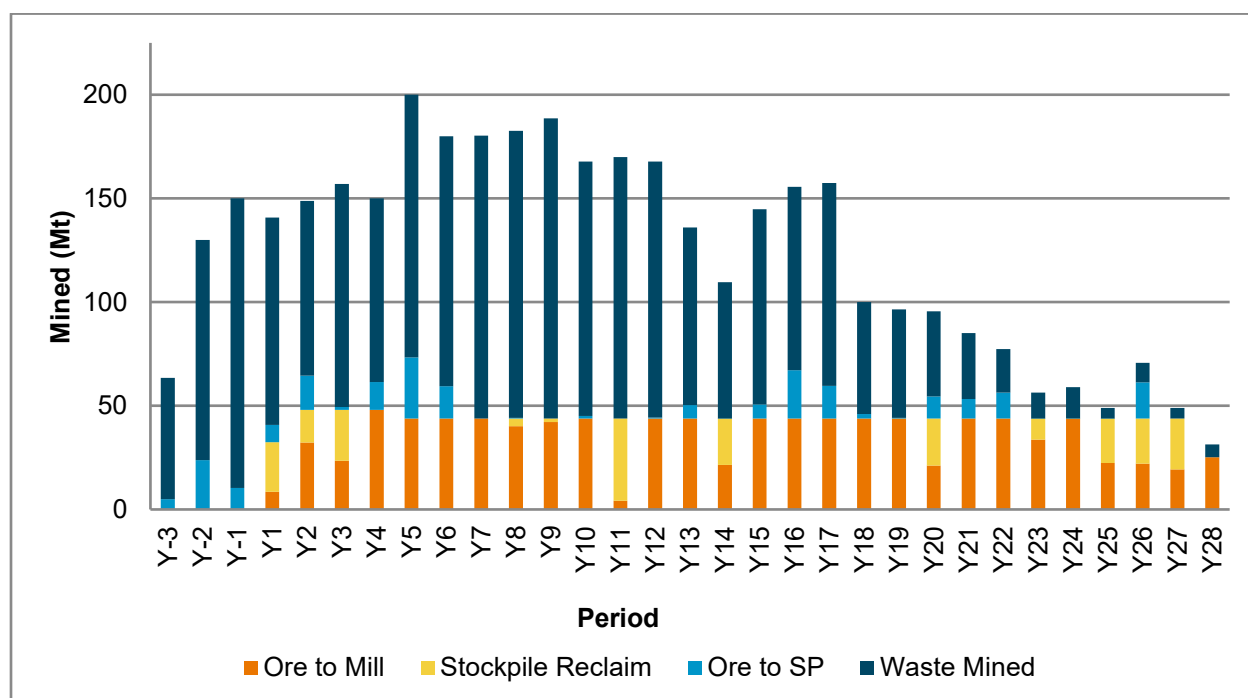
Maintenance on mine equipment will be performed in the field with major repairs to mobile equipment conducted in the workshops that will be located on the mine infrastructure pad directly south of the open pit.

Estimated annual mine operating costs range from \$1.94–\$4.66/t mined with a LOM average of \$2.53/t mined during the operational period. Peak headcount to support the mine operations is 460 hourly personnel and 51 salaried personnel.

After mining is completed, the mining equipment will be removed, and the pits will be allowed to fill with water-producing ponds. Contouring and revegetation of the waste facilities, haul roads, and foundation of the ore stockpile will be completed. All mine buildings will be removed.

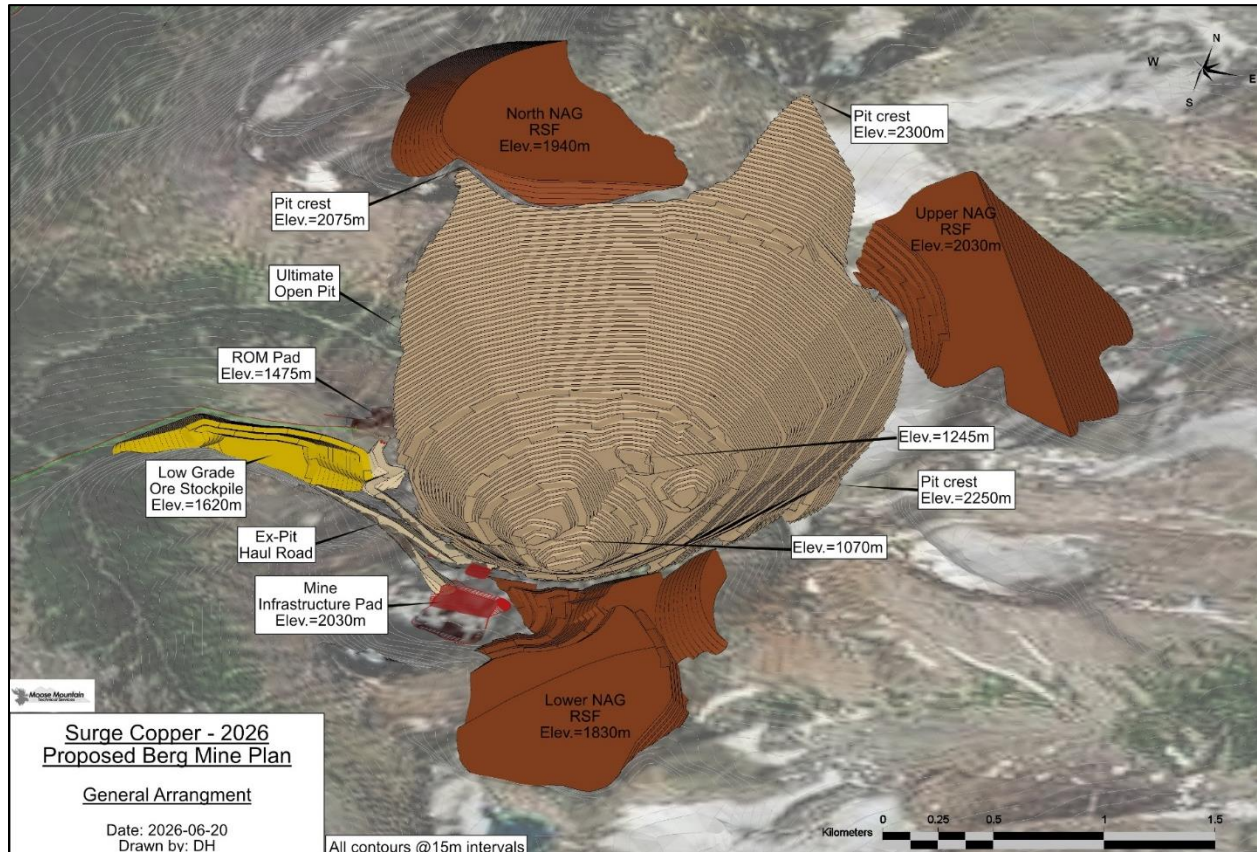
Figure 1-1 summarizes the proposed mine production schedule for the 2026 PFS mine plan. The mine area general arrangement is shown in Figure 1-2.

Figure 1-2: 2026 PFS LOM Production Schedule



Source: MMTS, 2026

Figure 1-3: Mine area general arrangement



Source: MMTS, 2026

1.14 Recovery methods

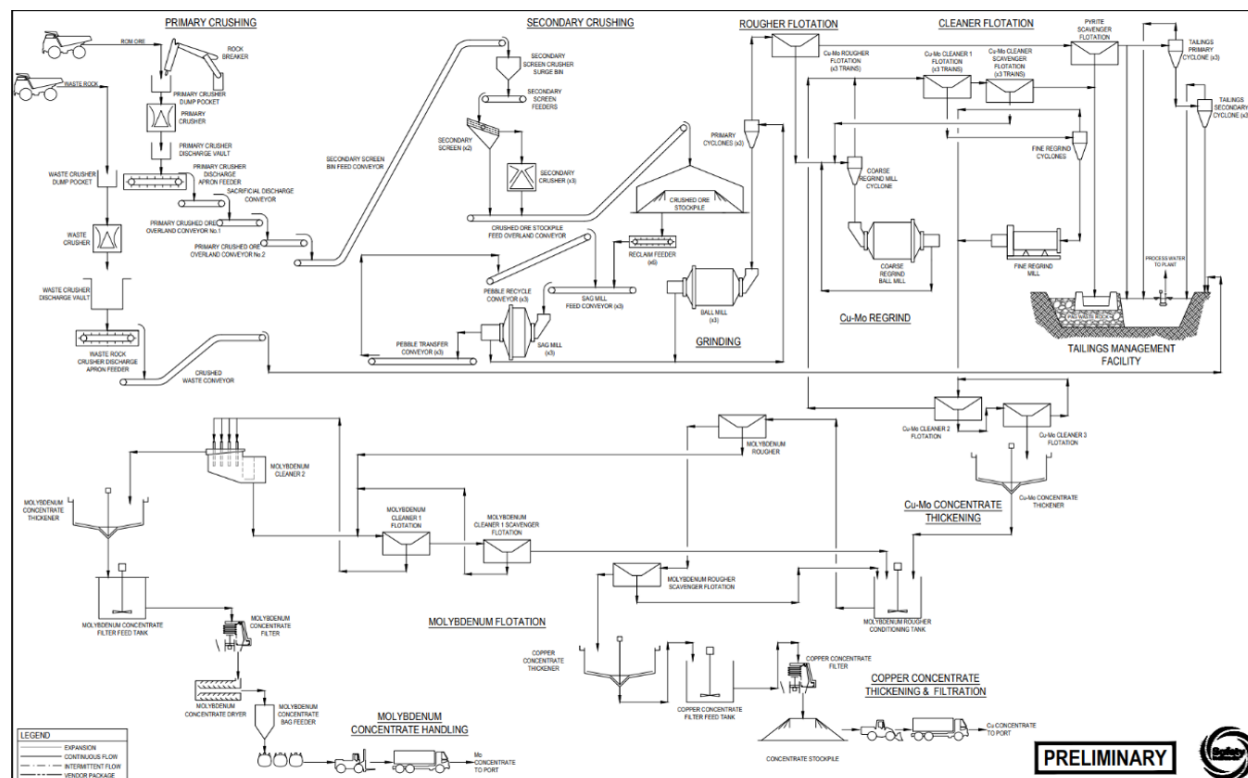
Based on the analysis of past metallurgical testing, discussed in Section 13, and Ausenco's process design expertise, a conventional copper-molybdenum flotation process was chosen as the most suitable for the deposit and project economics. The unit operations selected are typical for copper-molybdenum recovery and the proposed flowsheet uses standard processes and technologies.

The process beneficiates copper and molybdenum from both supergene and hypogene materials. Key process design parameters include:

- Nominal throughput of 120,000 t/d or 43.8 Mt/a
- Bulk rougher flotation to be conducted at a feed sizing of 80% passing 160 μm .
- The process design is comprised of the following circuits:
- Two-stage crushing of ROM material
- A crushed ore covered longitudinal stockpile to provide buffer capacity ahead of the grinding circuit
- SAG mill with trommel screen and pebble recycle followed by a ball mill with cyclone classification
- Copper and molybdenum bulk flotation with coarse and fine regrinding prior to cleaner flotation
- Copper - molybdenum separation flotation

- Thickening, filtration and loading of copper concentrate
- Thickening, filtration, drying and loading of molybdenum concentrate
- Tailings pumping and disposal to a tailings management facility.

Figure 1-4: Process flowsheet



Source: Ausenco, 2026

1.15 Project infrastructure

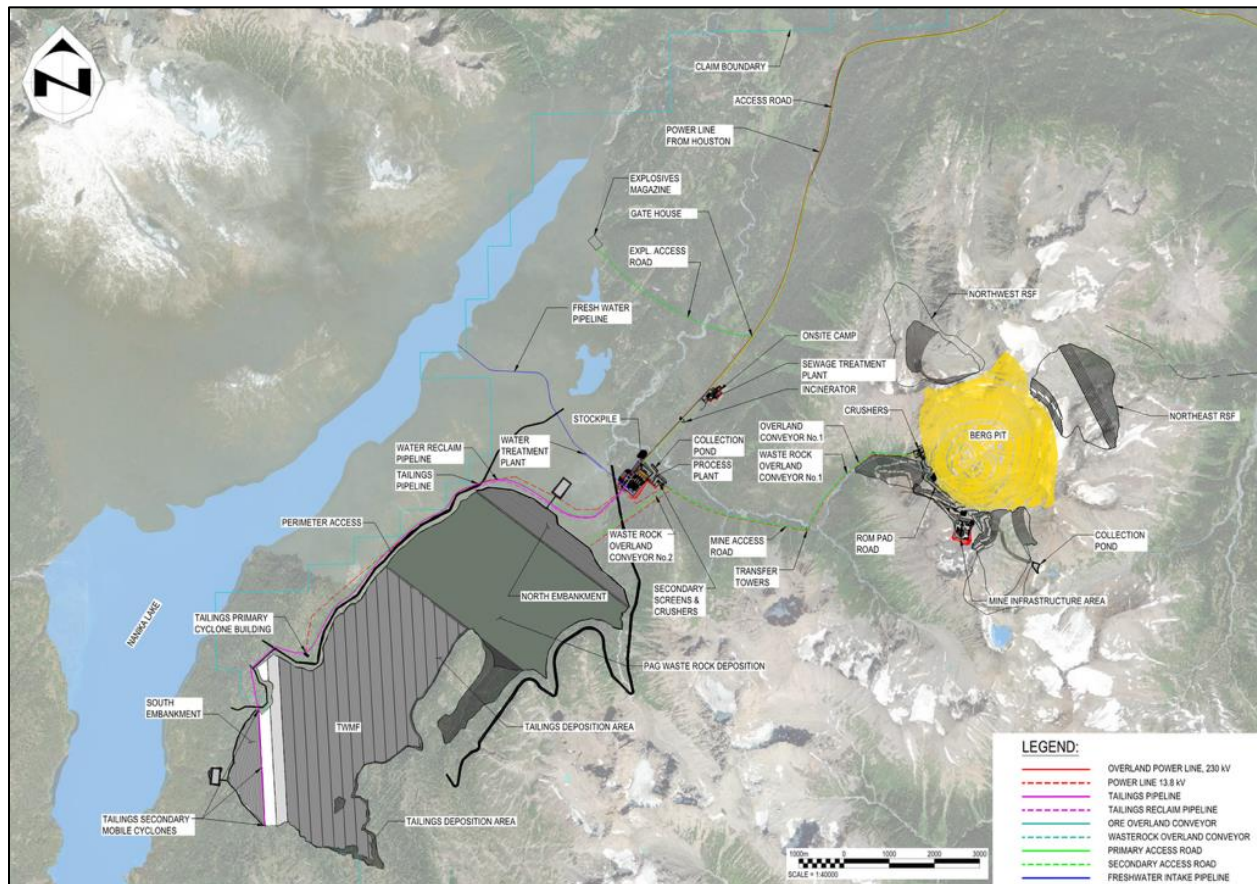
Infrastructure at the Berg Copper Project includes on-site infrastructure such as earthworks development, site facilities and buildings, on-site roads, water management systems, and site electrical power facilities. Off-site infrastructure includes site access roads, fresh water supply, power supply, piping, camp, and tailings storage facility. The project infrastructure will include:

- Mine facilities, including mining administration offices, a mine fleet truck shop and wash bays, and mine workshop.
- Common facilities, including an entrance/exit gatehouse, a security/medical office. Overall site administration building, potable water and fire water distribution systems, compressed air, power distribution facilities, diesel reception and communications area.
- A near pit ore and waste crushing facility with associated electrical infrastructure.
- Process facilities housed in the process plant, including grinding and classifications, flotation, regrinding, concentrate handling, reagent mixing and distribution, assay laboratory and process plant workshop and warehouse.

- Other infrastructure includes on-site camp, tailings, and waste management facility (TWMF) and non-acid generating rock storage facility (NAG RSF).
- The overall site layout was developed using the following criteria and factors:
 - The facilities described above must be located on the Berg property to the greatest extent possible.
 - The location of the process plant is at a lower elevation to the Berg open pit to reduce risks and lower operating costs.
 - The location of the NAG RSF must be close to the open pit to reduce haul distance.
 - The location of the primary ore and potentially acid-generating (PAG) waste crushing must be close to the Berg deposits to reduce haul distance.
 - The TWMF should be located at a site that takes advantage of sloped natural terrain to adequately drain entrained water and reduce earthworks, concrete, and structural development if possible.
 - The arrangement of the administration buildings, mine workshops, processing plant and additional offices should be optimized for foot and vehicle traffic.

The Berg Copper Project layout is shown in Figure 1-5.

Figure 1-5: Project Layout



Source: Ausenco, 2026

1.16 On-site infrastructure

1.16.1 Site preparation

The infrastructure will be cleared, and the topsoil will be removed before construction. Drains, safety bunds and backfilling with granular material and aggregates for road construction are all elements of the initial site development.

Site civil work includes design for the following infrastructure:

- Roads for light vehicles and heavy equipment
- Access roads
- Topsoil and overburden stockpile area
- Mine facility platforms and process facility platforms
- ROM stockpile area
- TWMF area
- WRSF area
- Water management facilities, ditches, and drainage channels.

1.16.2 On-site roads

The project site will have unpaved roads connecting the access road to the gatehouse. In addition to the existing roads on site, new roads will be constructed linking the guard house, the administration building, the process plant, the explosive storage buildings, the primary and waste crusher and the TWMF.

1.16.3 Fuel storage

The diesel storage facility consists of three vertical storage tanks. Each tank will have 415,000 L of capacity, for a total storage capacity of 1,245,000 L.

1.16.4 Mining infrastructure

The truck shop/wash is a pre-engineered building with a concrete floor, overhead crane, and overhead doors with fire protection and alarm systems. There will be a total of six maintenance bays. Two maintenance bays will be assigned to preventive maintenance, one will be for corrective maintenance, and the three bays will be multipurpose. Additionally, a two-bay welding and truck wash facility will be located at the front of the truck workshop building.

1.16.5 Tailings and waste management facility (TWMF)

Slurry tailings (tailings) and PAG waste rock will be permanently stored in the TWMF, located southwest of the process plant, using the natural topography to minimize the need for dam fill material and reduce the overall footprint. The TWMF is designed to hold 1,263 Mt of tailings and 1,304 Mt of PAG waste rock. PAG waste rock will be stored subaqueously in the northeast section of the TWMF, and tailings in the southwest section. The primary design objectives for the TWMF are the secure confinement of process tailings and the subaqueous deposition of PAG waste rock to prevent acid rock drainage (ARD) and metal leaching (ML), and the protection of regional groundwater and surface water during mine operations and in the long-term post-closure.

1.17 Off-site infrastructure

1.17.1 Site access

The Berg Copper Project is located approximately 85 km from the town of Houston, BC. Access to the site is via forest service roads, specifically the Morice Forest Service Road (FSR) and Sibola Forest Service Road. The Morice FSR currently serves as access for industrial use in the region including forestry, the Huckleberry Mine site and active construction of the Coastal Gaslink Pipeline. At approximately the 100 km mark of the Morice FSR begins the Sibola FSR that leads to both Surge's current Sibola exploration camp and the Berg access road. It should be noted that the project is envisioned to access the Berg site via a newly created road to the north and west of Mount Ney with the length of 16km.

1.17.2 Water supply

Freshwater will be sourced from Nanika Lake. The water will be transported through pumps. 4,200 m of overland pipeline will be installed from Nanika Lake to the process plant where freshwater tanks will be located. This water will be the source of potable water on site, used for the building facilities and process plant.

1.17.3 High voltage power supply

Total installed load of the project is 261 MW and permanent electrical power is provided by a transmission line and connects to the BC Hydro electrical grid. This assumes the right-of-way for transmission lines and estimated alignment and design. The 230-kV transmission line will connect to BC Hydro Telkwa substation at the site before being stepped down to 25 kV for distribution to different power requirements across the project site.

1.17.4 Logistics

The copper concentrate will be transported from the project site to Stewart, BC, where the concentrate will subsequently be transported by sea to clients. Molybdenum concentrate will be transported from the project site to one of several North American molybdenum smelter locations. Each of the transport options is envisioned to use a mix of truck and rail where possible.

1.18 Environmental, permitting and social considerations

1.18.1 Environmental considerations

The Berg Copper Project is located in west-central British Columbia within a mountainous alpine and subalpine environment characterized by steep terrain, glacial deposits, and extensive surface water features associated with the Bergeland Creek and Nanika River watersheds. Environmental baseline studies completed since 2007 include investigations related to hydrology, hydrogeology, surface water quality, aquatic resources, soils, vegetation, wildlife, geochemistry, and climate.

Surface water quality studies indicate generally low nutrient and dissolved constituent concentrations across the Project area, with localized elevated metals concentrations associated with natural mineralization. Hydrogeological information remains limited and is currently based on regional interpretation and preliminary geotechnical observations. Additional groundwater investigations which are currently underway, and monitoring would be required to support future project development.

Fish and fish habitat studies identified several waterbodies that support the predominant species across the project development area which is Dolly Varden and Rainbow Trout. Both Kokanee and Chinook Salmon are identified species within the Morice Watershed and ecosystems further downstream, however, they have not been identified in the preliminary fish and fish habitat studies undertaken in 2024, 2025 and continued through 2026. Fish distribution within the Bergeland Creek watershed is influenced by natural barriers to fish passage, including waterfalls, steep gradient channels, and seasonally dewatered reaches. Higher quality habitat is generally associated with downstream reaches that present lower-gradient stream reaches and lake environments.

Wildlife and vegetation studies identified alpine, subalpine, riparian, wetland, and old growth associated ecosystems, including habitat-suitability mapped habitat for the Tweedsmuir heard of the Northern Group of the Southern Mountain caribou herd near the Project area. Habitat potential was also identified for several provincially and federally listed wildlife species.

Geochemical investigations indicate that portions of the waste rock and tailings have the potential to generate acid rock drainage and metal leaching under oxidizing conditions. Preliminary mitigation concepts include subaqueous storage of potentially acid-generating material and water cover management strategies within the tailings and waste storage facility. Additional geochemical characterization and testing is required to support future project development stages.

Conceptual environmental management measures completed to date include preliminary water and mine waste management strategies intended to minimize potential effects on downstream water resources and aquatic habitat.

1.18.2 Permitting considerations

The Berg Copper Project is expected to require both provincial and federal environmental assessment and permitting approvals prior to construction and operation. Major approvals anticipated for the Project may include permits and authorizations under the BC Environmental Assessment Act, Mines Act, Environmental Management Act, Water Sustainability Act, Fisheries Act, and Heritage Conservation Act.

The Project has been identified as a priority project under British Columbia's Critical Minerals strategy, which may support coordinated regulatory review processes but does not alter substantive environmental assessment, permitting, or Indigenous consultation requirements.

Future permitting activities will be informed by continued baseline studies, environmental assessment investigations, consultation and engagement activities, and refinement of project design and mitigation measures.

1.18.3 Social considerations

The Berg Copper Project is located within the traditional territories of the Wet'suwet'en Nation and Cheslatta Carrier Nation. The Wet'suwet'en is subject to both a hereditary and elected chief governance structures which include the Office of the Wet'suwet'en (administrative arm for hereditary system), Nee Tahi Buhn Indian Band, Skin Tyee First Nation, Wet'suwet'en First Nation, and Witset First Nation. Existing land use within the broader region includes mineral exploration, forestry, recreation, hunting, fishing, trapping, and traditional cultural activities.

Community and Indigenous engagement activities have been ongoing since 2013 and have included meetings, site visits, correspondence, information sharing, and participation in regional initiatives.

Engagement activities have focused on project updates, environmental studies, exploration planning, permitting discussions, and potential economic participation opportunities.

Archaeological investigations completed to date identified low to moderate archaeological potential across portions of the Project area. Additional archaeological investigations would likely be required in areas proposed for future ground disturbance.

1.18.4 Closure and reclamation considerations

Conceptual mine closure and reclamation planning has been completed in accordance with the BC Mines Act framework. Current closure concepts include flooding of the open pit, reclamation of ore stockpiles, decommissioning and removal of surface infrastructure, and re-contouring and revegetation of disturbed areas.

Additional closure measures may include revegetation of tailings storage facility embankments, removal of access road infrastructure where appropriate, and long-term water quality management where required. Closure planning is expected to continue through future engineering, environmental assessment, and permitting stages.

1.19 Markets and contracts

Project economics were estimated based on long-term metal prices of US\$4.75/lb Cu, US\$20.00/lb Mo, US\$45.00/oz Ag and US\$3,500.00/oz Au. These prices are in accordance with consensus market forecasts from various financial institutions and are consistent with historical prices for these commodities.

No contracts for transportation or offtake of the concentrates are currently in place, but if they are negotiated, they are expected to be within the industry norms. Similarly, there are no contracts currently in place for supply of reagents, utilities, or other bulk commodities required to construct and operate the Project.

1.20 Capital and operating cost estimates

1.20.1 Capital cost estimate

The capital cost estimate conforms to Class 4 guidelines of the Association for the Advancement of Cost Engineering International (AACE International), with an estimated accuracy of $\pm 25\%$. The capital cost estimate was developed in Q2 2026 Canadian dollars based on vendor's quotes, Ausenco's in-house database of projects and advanced studies as well as experience from similar operations.

The total initial capital cost for the Berg Copper Project is C\$4,678 million, and the LOM sustaining cost including financing is C\$1,730 million. The capital cost summary is presented below in Table 1-3. Table 1-4 provides a summary of the same capital costs for the Project, categorized by the work breakdown structure (WBS) of the capital cost estimate.

Table 1-3: Capital cost summary as shown in the press release

Capital category	Initial capital (C\$M)
Pre-stripping	806.4
Mining Fleet	679.3
Site Development & Mine Infrastructure	204.1
Subtotal	1,689.8
Crushing & Materials Handling	261.5
Process plant	817.1
Tailings & Water Management	449.1
Power, Roads & Site Infrastructure	353.0
Subtotal	1,880.7
Total Directs	3,570.5
Indirects	431.8
Owner's Costs	101.4
Contingency	574.1
Total	4,677.9

Note: Values shown in the press release are rounded to zero decimal places.

Table 1-4: Capital cost summary

WBS description	Initial capital (C\$M)	Sustaining capital cost (C\$M) LOM	Total cost (C\$M)
Mining and waste rock handling	1,689.8	916.4	2,606.0
Process plant	1,078.7	-	1,078.7
Tailings facilities	449.0	629.2	1,078.2
On-Site infrastructure	223.2	26.4	249.6
Off-Site infrastructure	129.8	-	129.8
Total Directs	3,570.3	1,572.0	5,142.3
Indirects	188.7	16.0	204.7
EPCM services	243.3	-	243.3
Owner's cost	101.4	-	101.4
Total Indirects	533.6	16.0	549.6
Contingency	574.1	140.6	714.7
Project Total	4,677.9	1,728.6	6,406.6

Note: Totals may not sum due to rounding.

1.20.2 Operating cost estimate

The costs considered on-site operating costs are those related to mining, processing, tailings handling, and general and administrative activities (G&A).

A summary of the operating costs is presented below in Table 1-5. The unit operating cost is C\$15.00/t processed; Annual G&A cost are estimated at C\$39.2 million.

Table 1-5: Operating cost summary

Cost area	Annual costs (C\$M)	C\$/t processed
Mining	296.0	6.86
Process	304.7	7.00
TWMP	10.6	0.24
G&A	39.2	0.90
Total	650.5	15.00

Note: Totals may not sum due to rounding.

1.21 Economic analysis

The economic analysis was performed assuming an 8% discount rate. On a pre-tax basis the net present value (NPV) discounted at 8% is C\$6,611 million; the internal rate of return (IRR) is 23.8%, and payback period is 3.2 years. On a post-tax basis, the NPV discounted at 8% is C\$4,592 million; the post-tax IRR is 23.8%, and the post-tax payback period is 2.9 years. The analysis was done on an annual cashflow basis; the cashflow output is shown graphically in Figure 1-6 and summarized in Table 1-6.

Table 1-6: Economic analysis summary

Item	Units	Total/Avg
Macro Economic Inputs		
Foreign exchange rate	CAD:USD	0.73
Discount Rate	%	8.0%
Copper price	US\$ /lbs	4.75
Molybdenum price	US\$ /lbs	20.00
Silver price	US\$/oz	45.00
Gold price	US\$/oz	3,500.00
Production		
Mine life	yrs	27.7
Total Resource mined	Mt	1,209
LOM Cu grade	%	0.22%
LOM Mo grade	%	0.03%
LOM Ag grade	g/t	4.11
LOM Au grade	g/t	0.02
Total waste mined	Mt	2,409
Strip ratio	waste:ore	1.99
Average annual mined resource	Kt/a	43,699
Ore processed	Mt	1,209

Item	Units	Total/Avg
Cu recovery	%	84.1%
Mo recovery	%	87.7%
Ag recovery	%	55.5%
Au recovery	%	52.0%
Total recovered Cu	MLbs	4,875
Total recovered Mo	MLbs	602
Total recovered Ag	koz	88,641
Total recovered Au	koz	439
Total recovered Cu Eq	MLbs	8,575
Average annual recovered Cu	MLbs/a	176
Average annual recovered Mo	MLbs/a	22
Average annual recovered Ag	koz/a	3,204
Average annual recovered Au	koz/a	16
Average annual recovered Cu Eq	MLbs/a	308
Average annual realized Cu payability	%	96.3%
Average annual realized Mo payability	%	99.0%
Average annual realized Ag payability	%	90.0%
Average annual realized Au payability	%	90.1%
Total payable Cu	MLbs	4,695
Total payable Mo	MLbs	596
Total payable Ag	koz	79,776
Total payable Au	koz	396
Total payable Cu Eq	MLbs	8,253
Average annual payable Cu	MLbs/a	170
Average annual payable Mo	MLbs/a	22
Average annual payable Ag	koz/a	2,884
Average annual payable Au	koz/a	14
Average annual payable Cu Eq	MLbs/a	297
Revenue/Costs		
Total revenue	C\$ M	53,700.0
Average annual revenue	C\$ M/a	1,930.8
EBITDA	C\$ M	31,632.4
Average annual EBITDA	C\$ M/a	1,143.4
Total on-site operating costs (mining, process, G&A)	C\$ M	18,130.5
Annual average on-site operating costs	C\$ M	654.0
Mining unit cost	C\$ /t mined	2.53
Mining unit cost	C\$ /t processed	6.86
Process unit cost	C\$ /t processed	7.00
TMWF unit cost	C\$ /t processed	0.24
G&A unit cost	C\$ /t processed	0.90
"Total off-site operating costs (transport, treatment & refining)"	C\$ M	3,434.5
Annual average off-site operating costs	C\$ M	123.6
Royalties	C\$ M	502.7

Item	Units	Total/Avg
Annual average royalties	C\$ M	18.1
Cash Costs		
C1 cost – by-product basis ⁽¹⁾	US\$ /lb Cu	(0.17)
C3 cost – by-product basis ⁽²⁾	US\$ /lb Cu	0.10
C1 cost – co-product basis ⁽³⁾	US\$ /lb Cu Eq	1.95
C3 cost – co-product basis ⁽⁴⁾	US\$ /lb Cu Eq	2.10
Capital Costs		
Initial capital cost – Mining	C\$ M	1,690
Initial capital cost – Ausenco (non-mining)	C\$ M	2,988
Initial capital cost	C\$ M	4,678
Sustaining capital cost	C\$ M	1,729
Annual average sustaining capital costs	C\$ M	62
Closure capital cost	C\$ M	236
Salvage value	C\$ M	(179)
Capital, pre-production and closure costs	C\$ M	6,463
Pre-Tax Economics		
NPV (8%)	C\$ M	6,611
IRR	%	23.76%
Payback	y	3.2
NPV/initial capital	-	1.4
Free cash flow	C\$ M	25,169
Average annual free cash flow	C\$ M	1,071
Post-Tax Economics		
NPV (8%)	C\$ M	4,592
IRR	%	23.79%
Payback	y	2.9
NPV/initial capital	-	1.0
Cash taxes	C\$ M	8,302
Average annual cash taxes	C\$ M	336
Free cash flow	C\$ M	16,867
Average annual free cash flow	C\$ M	735

1. C1 cost is the sum of mine, mill and G&A costs, off-site costs and royalties less by-product credits.

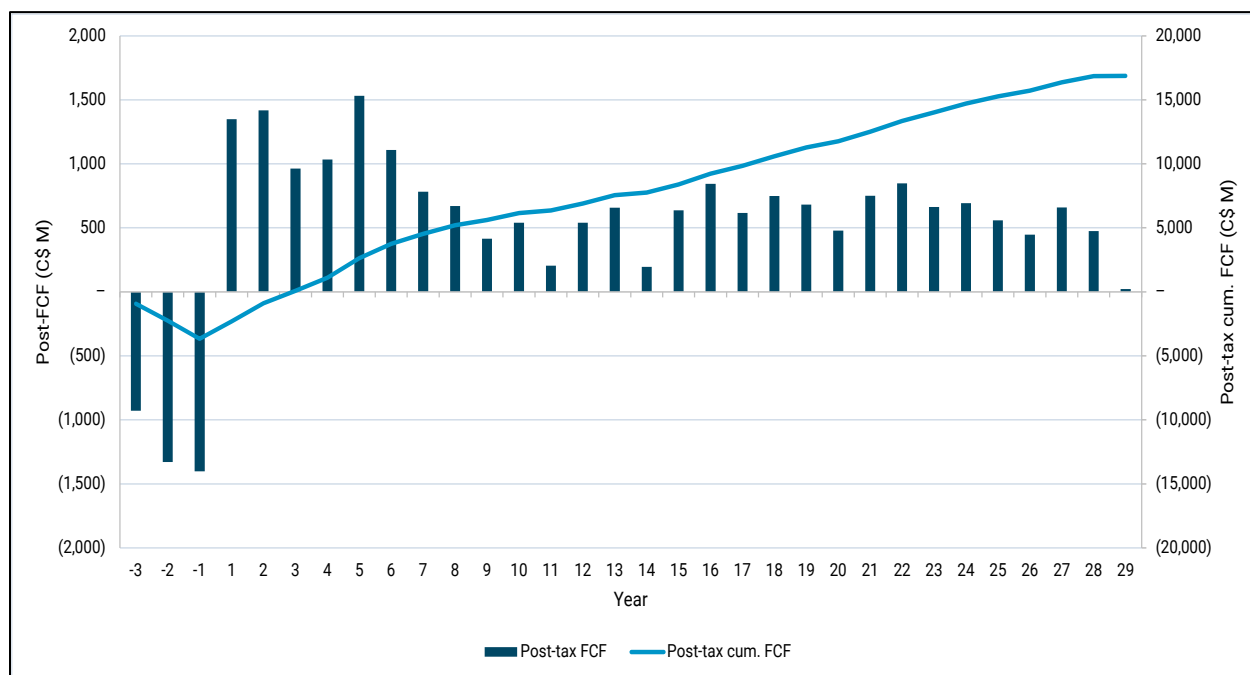
2. C3 cost is the C1 costs plus sustaining CAPEX.

3. C1 cost is the sum of mine, mill and G&A costs, off-site costs and royalties.

4. C3 cost is the C1 costs plus sustaining CAPEX.

5. Cu equivalent = Cu mass + (Mo mass * (Mo price / Cu price)) + (Ag mass * (Ag price / 1000 / Cu price)) + (Au mass * (Au price / 1000 / Cu price))

Figure 1-6: LOM Post-tax free cash flow



Source: Ausenco, 2026

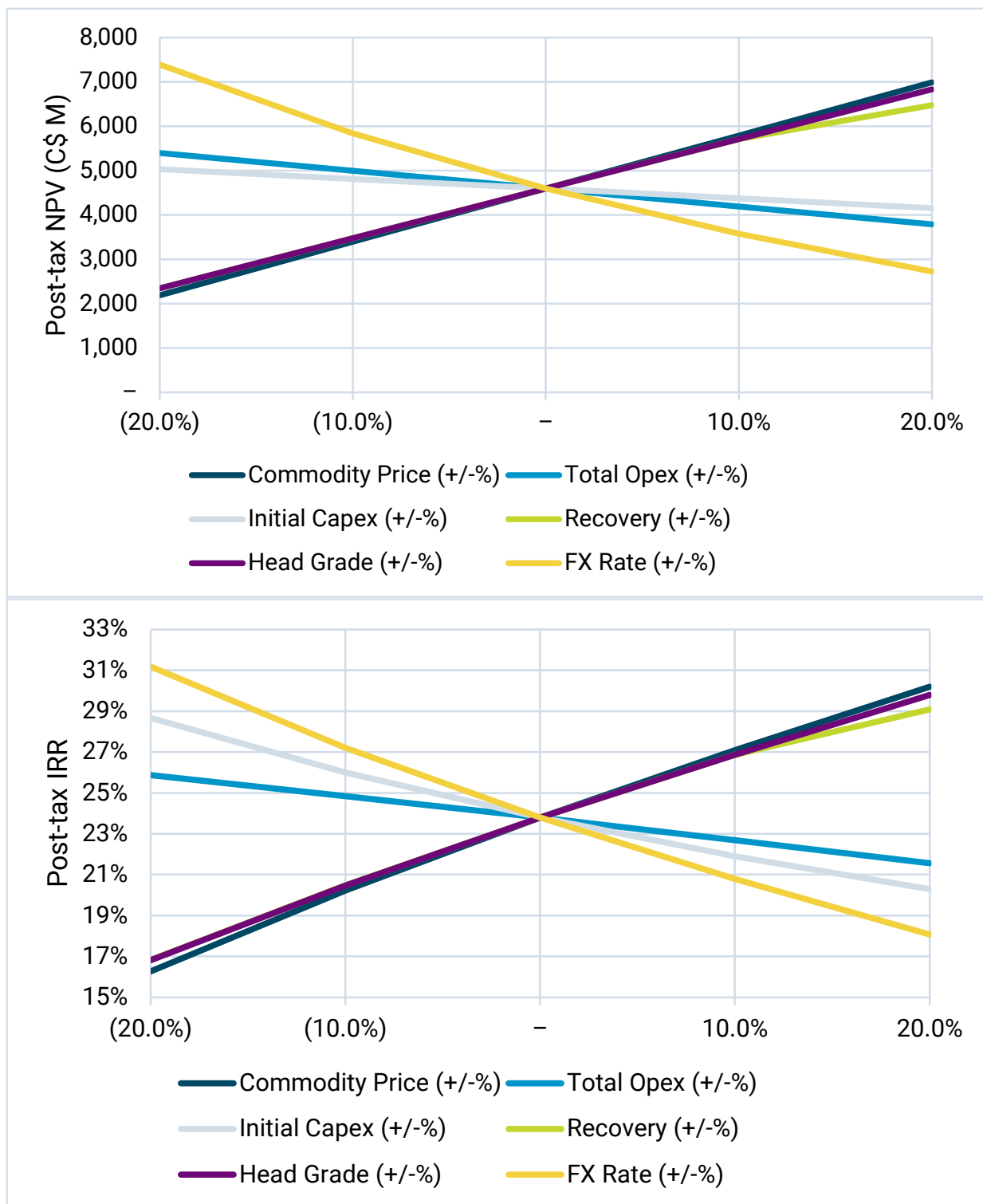
1.21.1 Sensitivity analysis

A sensitivity analysis was conducted on the base case pre-tax and post-tax NPV and internal rate of return of the project, using the following variables: commodity prices, discount rates, operating costs, initial capital costs, metal recovery, head grade and exchange rate.

A summary of post-tax economic sensitivities to commodity prices, operating costs, initial capital costs, metal recovery, head grade and exchange rate is shown in Figure 1-7.

The project is most sensitive to changes in foreign exchange rate, commodity price, head grade and recovery; it is less sensitive to total operating cost, and initial capital cost.

Figure 1-7: Post-tax sensitivity summary



Note: Commodity price and recovery overlap. Source: Ausenco, 2026

1.22 Conclusions and recommendations

The Berg Copper Project shows positive economics, as demonstrated by the results presented in this technical report. It is recommended that the project be advanced through to feasibility study. The following sections detail the recommended future work for the project. The estimated costs for the recommended work program are summarized in Table 1-7.

Table 1-7: Recommendations cost summary

Program component	Estimated total cost (C\$M)
Exploration and mineral resource	6.1
Mine planning	6.1
Metallurgical testing and process recovery	0.8
Infrastructure	2.7
Socio-environmental studies, Environmental Assessment and permitting	28.3
Total	44.0

2 Introduction

2.1 Overview

Ausenco Engineering Canada ULC (Ausenco) has prepared a Pre-Feasibility Study (PFS) and associated technical report for Surge Copper Corp. (Surge Copper) on the Berg Copper Project located in British Columbia, BC, Canada. The technical report was prepared in accordance with the Canadian disclosure requirements of National Instrument 43-101 (NI 43-101) and Form 43-101 F1.

The responsibilities of the engineering consultants are as follows:

- Ausenco managed and coordinated the work related to the report and developed PFS-level design, including capital and operating cost estimates for the process plant, general site infrastructure, water management, tailings storage facility, geotechnical assessment, environment and permitting, and economic analysis.
- Moose Mountain Technical Services ("MMTS") developed the Mineral Resource and Reserve Estimate for the Berg Copper Project and completed the work related to property description, accessibility, local resources, geological setting, deposit type, drilling, exploration works, sample preparation and analysis and data verification. They also designed the open pit mine, developed the mine production schedule and mine operations descriptions, and ran mine capital and operating cost estimates.

2.2 Terms of reference

The report supports disclosures by Surge Copper in a Press Release dated June 15, 2026, entitled "Surge Copper Announces Results of Berg Pre-Feasibility Study with Post-Tax NPV8% of C\$4.6 billion and 24% IRR."

All measurement units used in this report are SI units unless otherwise noted. Currency is expressed in Canadian dollars (C\$ or CAD) unless otherwise noted.

Mineral resources and Mineral Reserves are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (CIM, 2014) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (CIM, 2019).

2.3 Qualified persons

The following serve as the qualified persons for this Technical Report as defined in National Instrument 43-101, Standards of Disclosure for Mineral Projects, and in compliance with Form 43-101F1:

Table 2-1: Report contributors

Qualified person	Professional designation	Position	Employer	Independent of Surge Copper Corp.
Peter Mehrfert	P. Eng.	Principal Process Engineer	Ausenco Engineering Canada ULC	Yes
Scott Elfen	P. Eng., PE	Geotechnical Engineer	Ausenco Engineering Canada ULC	Yes

Qualified person	Professional designation	Position	Employer	Independent of Surge Copper Corp.
Jonathan Cooper	P. Eng.	Water Resources Engineer	Ausenco Sustainability ULC	Yes
James Millard	P. Geo.	Director – Strategic Projects	Ausenco Sustainability ULC	Yes
Marc Schulte	P. Eng.	Vice President – Mine Engineering	Moose Mountain Technical Services	Yes
Sue Bird	P. Eng.	Vice President - Resources	Moose Mountain Technical Services	Yes

2.4 Site visits and scope of personal inspections

2.4.1 Personal inspection details by qualified person Scott C. Elfen, P.Eng., PE

Scott C. Elfen visited the property on September 13 and 14, 2025. During the visit, he reviewed the general topography, location of the TWMF, superficial geotechnical condition of the proposed infrastructure sites, the site access from Houston, BC, and the progress of the geotechnical field program.

2.4.2 Personal inspection details by qualified person Marc Schulte, P.Eng.

Marc Schulte visited the property on August 27 and 28, 2025 for two days. During the visit he reviewed selected drill core, site access from Houston, BC, and the general topography of the open pit area and tailings areas.

2.4.3 Personal inspection details by qualified person Sue Bird, P.Eng.

Sue Bird visited the property on August 27 and 28, 2025 for two days. During the visit she reviewed selected drill core, verified several drillhole locations, and collected three samples for check-assaying. Also, the site access from Houston, BC, and the open pit area was visited.

2.4.4 Personal inspection details by qualified person Peter Mehrfert, P.Eng.

Peter Mehrfert visited property on August 27 and 28, 2025 for two days. During the visit he reviewed the general topography, overall site layout, potential crusher and processing plant locations, overland conveyor corridor, location of the TWMF, site access from Houston, BC and inspected some drill core samples.

2.5 Effective dates

The report contains the following effective dates:

- Effective date of Mineral Resource Estimate: June 12, 2026.
- Effective date of Mineral Reserve Estimate: June 12, 2026.
- Effective date of Financial Model: June 12, 2026.
- Effective date of the Report is: June 12, 2026.

2.6 Information sources and references

2.6.1 Previous reports

- Berg NI 43-101 Technical Report and Preliminary Economic Assessment". Effective Date: June 12, 2023.
- "Updated Technical Report and Mineral Resource Estimate on the Berg Copper Project, British Columbia." Report prepared by Tetra Tech Canada Inc. Prepared for Surge Copper Corp. Effective Date: March 9, 2021.
- "Updated Technical Report and Mineral Resource Estimate on the Berg Copper Project, British Columbia." Report prepared by Tetra Tech Canada Inc. Prepared for Thompson Creek Metals Company Inc. Effective Date: October 22, 2018.
- "2009 Mineral Resource Estimate on the Berg Copper-Molybdenum-Silver Property, Tahtsa Range, British Columbia." Report prepared by Stewart Harris of Equity Exploration Consultants Ltd. and Darin Labrenz of Terrane Metals Corp. Prepared for Terrane Metals Corp. Effective Date: June 2009.

2.7 Currency, units, abbreviations and definitions

All units of measurement in this report are metric and all currencies are expressed in Canadian dollars (symbol: C\$ or currency: CAD) unless otherwise stated. Contained gold metal is expressed as troy ounces (oz), where 1 oz = 31.1035 grams (g). All material tonnes are expressed as dry tonnes (t) unless stated otherwise. A list of abbreviations and acronyms is provided in Table 2-1, and units of measurement are listed in Table 2-2.

Table 2-2: Abbreviations and acronyms

Abbreviation	Description
AAS	Atomic Absorption spectrometry
AACE	Association for the Advancement of Cost Engineering International
ABA	acid-base accounting
AIA	Archaeological Impact Assessments
ALS	ALS Metallurgy Laboratory and ALS Geochemistry Laboratory (Canada)
AOA	Archaeological Overview Assessment
ARD	acid rock drainage
BBWi	Bond ball mill work index
BC	British Columbia
BCEAA	BC Environmental Assessment Act
BCGS	British Columbia Geological Survey
BEC	Biogeoclimatic Ecosystem Classification
CAD	Canadian dollar
CAD:USD	Canadian-American Exchange rate
CaNP	carbonate neutralization potential
Capex	capital expenditure
CDA	Canadian Dam Association
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIM Definition Standards	CIM Definition Standards for Mineral Resources and Mineral Reserves 2014
CN	cyanide
CoG	cut-off grade

Abbreviation	Description
CPF	Coarse Particle Flotation
CPO	Chief Permitting Officer
CPP	cumulative probability plots
CRM	certified reference materials
CTM	Clean Technology Manufacturing
Cu	copper
CuCN	copper cyanide
CuOx	copper oxide
CV	coefficient of variation
DCF	discounted cash flow
DDH	diamond drill hole
DFO	Department of Fisheries and Oceans Canada
DL	detection limit
DTH	down-the-hole
EA	Environmental Assessment
EAC	Environmental Assessment Certificate
EAO	Environmental Assessment Office
ECCC	Environment and Climate Change Canada
EDGM	earthquake design ground motion
EIA	environmental impact assessments
EM	electromagnetic
EMA	Environmental Management Act
EOP	End-of-period
ESG	environmental, social, and governance
EV	expected values
FA	fire assay
FET	federal excise tax
FDP	Final discharge points
FoS	factors of safety
FS	feasibility study
FSR	Forest Service Road
G&A	General and administrative
GME	General Mine Expense
GPR	gross production royalty
GPS	global positioning system
HCA	Heritage Conservation Act
HDPE	high-density polyethylene
HSRC	Health, Safety and Reclamation Code for Mines in British Columbia
HVAC	heating, ventilation, and air conditioning
IAA	Impact Assessment Act
IAAC	Impact Assessment Agency of Canada
ICP-OES	inductively coupled plasma – optical emission spectrometry
IDF	inflow design flood
ILC	Indirect Lognormal correction
IP	induced polarization
IRR	internal rate of return

Abbreviation	Description
ISO	International Organization for Standardization
ITC	Investment Tax Credit
LiDAR	Light detection and ranging
LMST	limestone
LOM	life-of-mine
MCE	Maximum Credible Earthquake
MDE	Maximum Design Earthquake
ML	metal leaching
MMTS	Moose Mountain Technical Services
MRE	Mineral Resource Estimate
MTO	Material take-offs
MYAB	Multi-Year Area-Based
NAD 83	North American Datum of 1983
NI 43-101	National Instrument 43-101 (Regulation 43-101 in Quebec)
NaCN	sodium cyanide
NAG	non-acid-generating
NaHS	sodium hydrosulphide
NN	Nearest neighbour
NNP	net neutralization potential
NPR	neutralization potential ratio
NPV	net present value
NSP	Net Smelter Prices
NSR	net smelter return
NTS	National Topographic Service
OBPS	Output Based Pricing System
OK	ordinary kriging
Opex	operating expenditure
OREAS	Ore Research & Exploration Pty Ltd (standards)
OW	Office of the Wet'suwet'en
PAG	potentially acid-generating
PAX	Potassium amyl xanthate
PEA	preliminary economic assessment
PFD	process flow diagram
PFS	pre-feasibility study
PGA	peak ground acceleration
PMF	probable maximum flood
QA/QC	quality assurance/quality control
QEMSCAN	Quantitative Evaluation of Minerals by Scanning Electron Microscopy
QDR	quartz diorite
QFP	quartz-feldspar porphyry
QMP	quartz monzonite porphyry
QP	Qualified Person (as defined in National Instrument 43-101)
ROM	run of mine
RQD	rock quality designation
RSF	rock storage facilities
SAG	Semi-autonomous grinding

Abbreviation	Description
SAP	Site Alteration Permit
SCC	Standard Council of Canada
SD	standards deviation
SD-BWi	micro hardness or Bond ball mill work index on SAG ground material
SDS	Safety Data Sheets
SG	specific gravity
SMU	selective mining unit
TCM	Thompson Creek Metals Company Inc
TSA	Timber Supply Area
TWMF	Tailings and waste management facility
UCF	undiscounted cash flow
UCS	unconfined compressive strength
UG	underground
US	United States
USD	United States dollar
UTM	Universal Transverse Mercator coordinate system
WBS	work breakdown structure
WRSF	waste rock storage facility
YLP	Yinkah Dene Limited Partnership

Table 2-3: Units of measurement

Abbreviation	Description
%	percent
% solids	percent solids by weight
CAD	Canadian dollar (currency)
C\$	Canadian dollar (as symbol)
\$/t	dollars per metric ton
°	angular degree
°C	degree Celsius
µm	micron (micrometer)
a	annum
B	billion
cm	centimetre
cm ³	cubic centimetre
ft	foot (12 inches)
g	gram
g/cm ³	gram per cubic centimetre
g/L	gram per litre
g/t	gram per metric ton (tonne)
h	hour (60 minutes)
ha	hectare
kg	kilogram
kg/h	Kilograms per hour
kg/t	kilogram per tonne
km	kilometre

Abbreviation	Description
km ²	square kilometre
kV	Kilovolt
kW	Kilowatt
kWh/t	kilowatt-hour per tonne
L	litre
lb	pound
m, m ² , m ³	metre, square metre, cubic metre
M	million
Ma	million years (annum)
masl	meters above mean sea level
mE	metres Easting
mm	millimetre
mN	metres Northing
Moz	million (troy) ounces
Mt	million metric tonnes
Mt/a	Million tonnes per annum
MW	Megawatt
oz	troy ounce
oz/t	ounce (troy) per tonne
oz/ton	ounce (troy) per short ton (2,000 lbs)
ppb	parts per billion
ppm	parts per million
t	metric tonne (1,000 kg)
ton	short ton (2,000 lbs)
t/d	tonnes per day
USD	US dollars (currency)
US\$	US dollar (as symbol)

3 Reliance on other experts

3.1 Introduction

The QPs have relied upon the following other expert reports, which provided information regarding [mineral rights, surface rights, property agreements, royalties, environmental, permitting, social licence, closure, taxation, and marketing] for sections of this Report.

3.2 Property agreements, mineral tenure, surface rights, and royalties

The QPs have not independently reviewed ownership of the Project area and any underlying property agreements, mineral tenure, surface rights, or royalties. The QPs have fully relied upon information derived from Surge Copper and legal experts retained by Surge Copper for this information through the following documents:

- Kennecott, 2006 Berg Property Sale and Royalty Agreements with Terrane Metals Corp. September 12, 2006 14 p.
- International Royalty Corporation, 2008. Notice of Assignment of royalties from TCM to IRC
- Thompson Creek Metals Company, 2008. Notice of Assignments with Terrane Metals Corp. September 12, 2006 14 p.

This information is used in Section 1.3, 1.4, 1.9, 4, 14, 16, and 18 and in support of Sections 22, 23, and 25, as well as any other sections of the report that rely on the ownership and underlying agreements.

3.3 Environmental, permitting, closure, and social and community impacts

The QPs have fully relied upon, and disclaim responsibility for, information supplied by Surge Copper and experts retained by Surge Copper for information related to environmental (including tailings and water management) permitting, permitting, closure planning and related cost estimation, and social and community impacts as follows:

- AMEC Earth & Environmental. (2007). ARD Testing Results, Berg deposit, BC. Prepared for Terrane Metals Corporation.
- AMEC Earth & Environmental. (2008). Reconnaissance (1:20,000) Fish and Fish Habitat Inventory of Selected Streams in the Nanika and Tahtsa Watersheds. Prepared for Terrane Metals Corporation.
- BC Ministry of Forests and Range. (2021). Biogeoclimatic Ecosystem Classification (BEC) and Ecology Research Program. Available at: <https://www.for.gov.bc.ca/hre/becweb/index.html> (Accessed May 2023).
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This information is used in Sections 1.18, and 20 of the Report. The information is also used in support of the Section 25.13 and 26.

3.4 Taxation

The QPs have fully relied upon information supplied by experts retained by Surge Copper for information related to taxation as applied to the financial model as follows:

- Surge Copper Berg PFS FM Rev 0 2026-06-12, prepared by Leif Nilsson and Wentworth Taylor.

This information is used in Section 1.21, 22, and 25.15 of the Report.

3.5 Markets

The QPs have not independently reviewed the marketing or information. The QPs have fully relied upon information derived from Deno Advisory, MarketEye and others retained by Surge Copper for this information through the following documents:

- A Marketing Study for Copper Concentrate Production from Berg Project, Deno Advisory, April 2026.
- Molybdenum Market Study & Price Forecast, Andrew Zemek, Marketeye, March 2026.

This information is used in Section 1.19, 19, and 25.12 of the Report. The information is also used in support of the Section 22.

4 Property description and location

4.1 Introduction

The Berg property is located in west-central British Columbia within the Tahtsa Ranges, which is a 15- to 20-kilometre-wide belt of mountains within the Hazelton Mountains. The Hazelton Mountains lie along the eastern flank of the Kitimat Range of the Coast Mountains and form part of the Skeena Arch. The Tahtsa Ranges represent a transitional zone between the rugged, predominantly plutonic, Coast Mountains to the west and the rolling hill region of sedimentary and volcanic rocks that underlie the Nechako Plateau to the east. The centre of the Berg property lies at 53° 47' 53.02"N, and 127° 24' 51.27"W, or 5,962,220 mN and 604,444 mE, UTM Zone 9, WGS 84. The Berg deposit is centred at 603,450 mE, 5,962,920 mN (Figure 4-1).

4.2 Mineral Tenure

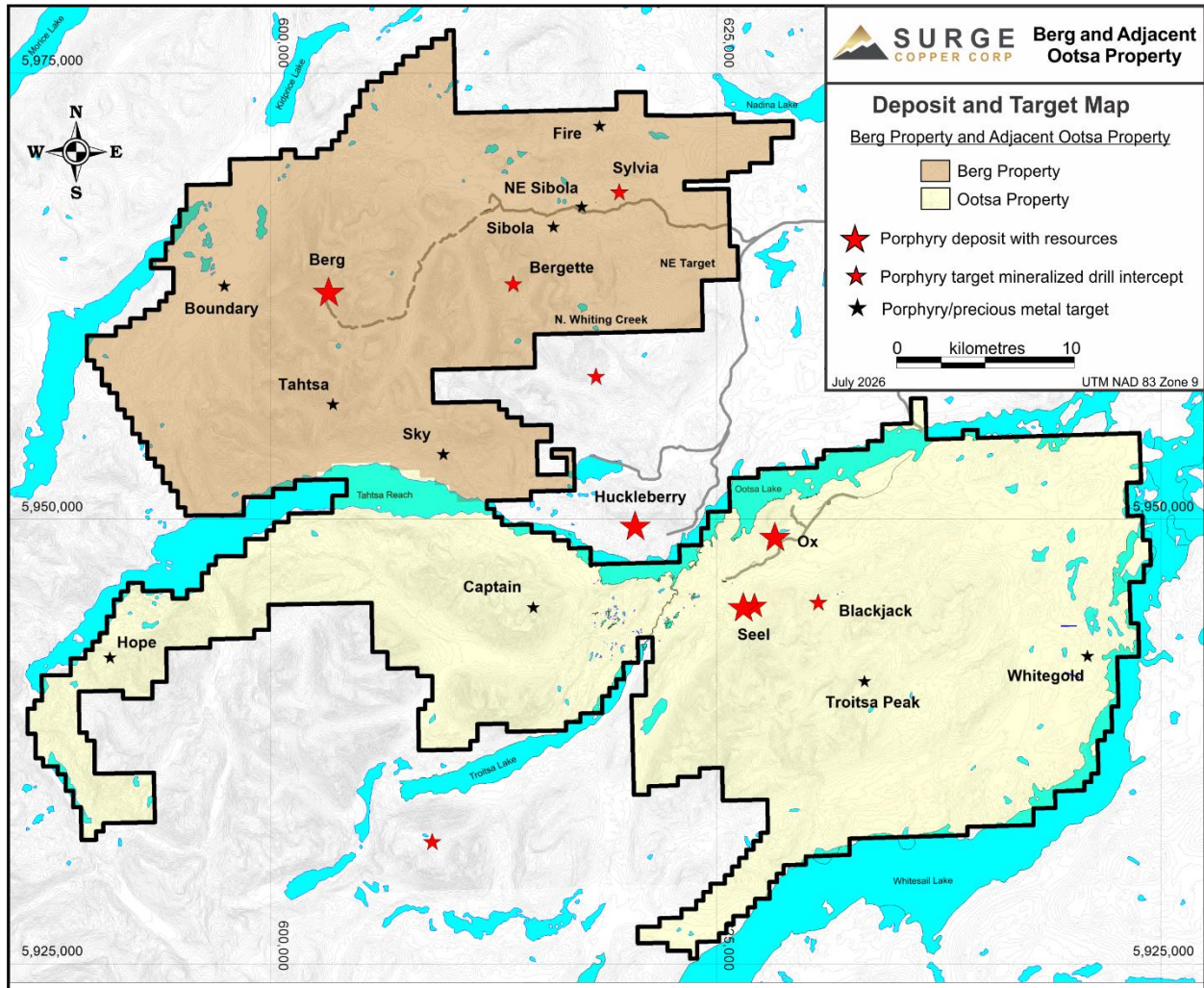
In total Surge Copper owns a 100% interest in 251 mining claims totalling 135,375.35 hectares (ha) along with an option to acquire a 100% interest in an additional 6,323.7 ha of contiguous mineral claims covering over 50 km of strike length across a porphyry district including the Seel, Ox, and Berg deposits (Figure 4-1). The northern part of Surge's claim package located north of Tahtsa Reach, and which hosts the Berg deposit, is referred to as the Berg Property. The southern part of the district is referred to as the Ootsa property and is the subject of a separate report (Stacey and Gray, 2022) and is not described here.

The Berg Property is geographically separate from the southern part of the claim package, has its own exploration permit, and prior to Surge consolidating 100% ownership it was operated under a joint venture agreement with split ownership. The Berg Property consists of 112 mineral claims and one mining lease covering an area of 41,894.96 ha that is 100% owned by Surge Copper (Figure 4-2). In addition, the Berg Property contains two mining claims covering 6,323.72 ha where Surge has an option to acquire a 100% interest (Figure 4-2). This report only discusses deposits and exploration activity on the Berg Property.

On December 22, 2023, the Company entered into a definitive purchase agreement to acquire a 100% interest in the Berg Property from Thompson Creek Metals Company Inc., a wholly owned subsidiary of Centerra Gold Inc., for total consideration of 21,221,165 common shares. On January 19, 2024, the transaction was completed. This purchase agreement replaced an earlier option agreement dated December 15, 2020, under which the Company was earning into a 70% interest in the Berg Property through the issuance of \$5 million in common shares of Surge and \$8 million in exploration expenditures over a period of up to five years as outlined in the Table 4-1.

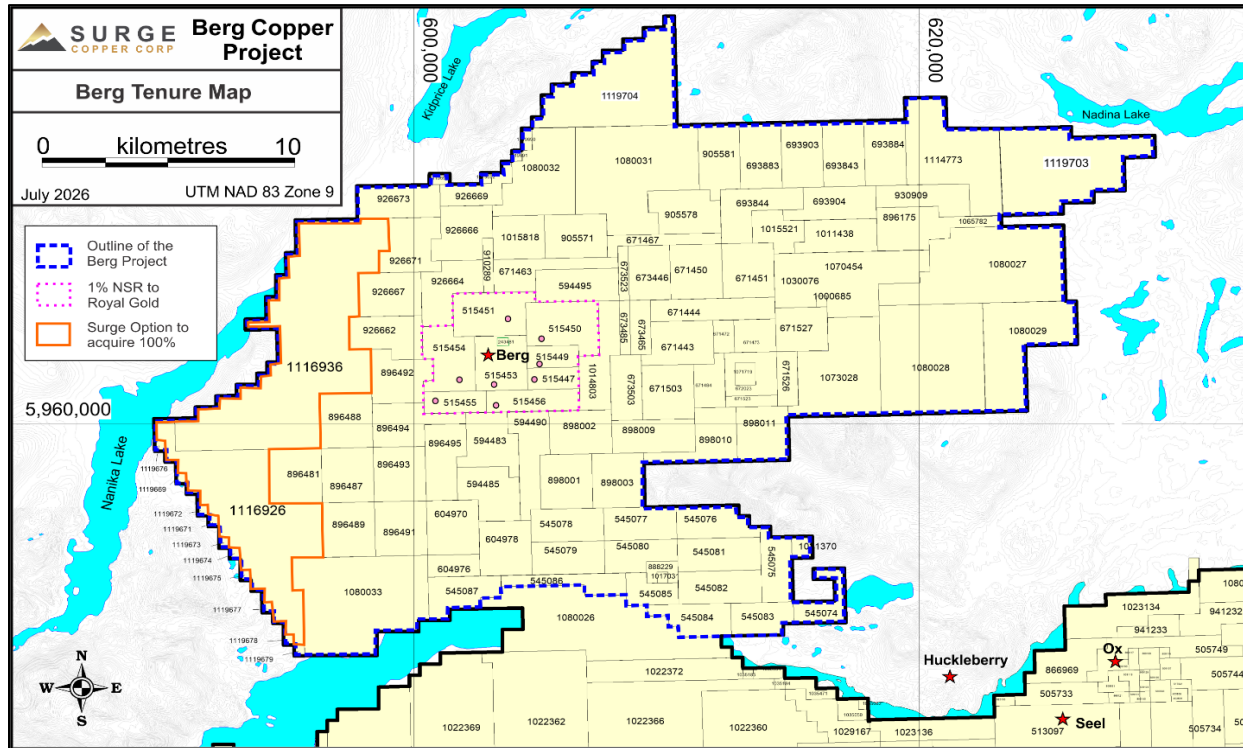
On December 13, 2024, the Company entered into an option agreement to secure mineral claims totaling 6,323.72 ha on the west side of the Berg Property (Figure 4-2). This acquisition secured all privately owned mineral claims required for the development of the Berg Copper Project as envisioned in the 2023 Preliminary Economic Assessment. Under the terms of the option agreement Surge will issue \$1.685 million in cash or shares to the vendor over five years and the vendor will retain a 3.5% NSR royalty.

Figure 4-1: Surge Copper's Berg and adjacent Ootsa properties



Note: There are no descriptions of Ootsa property deposits or targets in Sections 6 to 12. Source: Surge Copper, 2026

Figure 4-2: Mineral tenure map



Source: Surge Copper, 2026

Table 4-1: Mineral tenure for the Berg Property

Tenure #	Claim Name	Owner	Title Type	Title Subtype	Map Number	Issue Date	Good To Date	Status	Area (ha)
243481	-	201965 (100%)	Mineral	Lease	093E	8/27/1968	8/27/2027	GOOD	16.81
515447	-	201965 (100%)	Mineral	Claim	093E	6/28/2005	5/30/2035	GOOD	191.00
515449	-	201965 (100%)	Mineral	Claim	093E	6/28/2005	5/30/2035	GOOD	190.97
515450	-	201965 (100%)	Mineral	Claim	093E	6/28/2005	5/30/2035	GOOD	572.74
515451	-	201965 (100%)	Mineral	Claim	093E	6/28/2005	5/30/2035	GOOD	553.59
515453	-	201965 (100%)	Mineral	Claim	093E	6/28/2005	5/30/2035	GOOD	477.44
515454	-	201965 (100%)	Mineral	Claim	093E	6/28/2005	5/30/2035	GOOD	496.52
515455	-	201965 (100%)	Mineral	Claim	093E	6/28/2005	5/30/2035	GOOD	229.25
515456	-	201965 (100%)	Mineral	Claim	093E	6/28/2005	5/30/2035	GOOD	343.88
545074	SOUTH 1	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	287.10

Tenure #	Claim Name	Owner	Title Type	Title Subtype	Map Number	Issue Date	Good To Date	Status	Area (ha)
545075	SOUTH 2	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	363.54
545076	SOUTH 3	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	401.64
545077	SOUTH 4	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	401.64
545078	SOUTH 5	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	401.64
545079	SOUTH 6	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	401.76
545080	SOUTH 7	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	344.36
545081	SOUTH 8	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	459.15
545082	SOUTH 9	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	459.28
545083	SOUTH 10	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	325.42
545084	SOUTH 11	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	363.70
545085	SOUTH 12	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	229.65
545086	SOUTH 13	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	306.17
545087	SOUTH 14	201965 (100%)	Mineral	Claim	093E	11/10/2006	5/30/2035	GOOD	401.88
594483	BERG C	201965 (100%)	Mineral	Claim	093E	11/18/2008	5/30/2035	GOOD	477.79
594485	BERG D	201965 (100%)	Mineral	Claim	093E	11/18/2008	5/30/2035	GOOD	478.00
594490	BERG A	201965 (100%)	Mineral	Claim	093E	11/18/2008	5/30/2035	GOOD	477.84
594495	BERG I	201965 (100%)	Mineral	Claim	093E	11/18/2008	5/30/2035	GOOD	458.03
604970	-	201965 (100%)	Mineral	Claim	093E	5/26/2009	5/30/2035	GOOD	478.14
604976	-	201965 (100%)	Mineral	Claim	093E	5/26/2009	5/30/2035	GOOD	191.32
604978	-	201965 (100%)	Mineral	Claim	093E	5/26/2009	5/30/2035	GOOD	478.24
671443	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	477.37
671444	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	458.14
671450	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	477.06
671451	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	477.06

Tenure #	Claim Name	Owner	Title Type	Title Subtype	Map Number	Issue Date	Good To Date	Status	Area (ha)
671463	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	381.64
671467	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	228.93
671472	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	114.56
671473	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	229.13
671484	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	248.32
671503	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	477.58
671523	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	95.53
671526	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	191.01
671527	-	201965 (100%)	Mineral	Claim	093E	11/19/2009	5/30/2035	GOOD	381.86
672023	-	201965 (100%)	Mineral	Claim	093E	11/20/2009	5/30/2035	GOOD	305.61
673446	-	201965 (100%)	Mineral	Claim	093E	11/24/2009	5/30/2035	GOOD	381.65
673465	-	201965 (100%)	Mineral	Claim	093E	11/24/2009	5/30/2035	GOOD	190.92
673485	-	201965 (100%)	Mineral	Claim	093E	11/24/2009	5/30/2035	GOOD	95.46
673503	-	201965 (100%)	Mineral	Claim	093E	11/24/2009	5/30/2035	GOOD	343.84
673523	-	201965 (100%)	Mineral	Claim	093E	11/24/2009	5/30/2035	GOOD	95.41
693843	-	201965 (100%)	Mineral	Claim	093E	1/4/2010	5/30/2035	GOOD	457.51
693844	-	201965 (100%)	Mineral	Claim	093E	1/4/2010	5/30/2035	GOOD	476.80
693883	-	201965 (100%)	Mineral	Claim	093E	1/4/2010	5/30/2035	GOOD	457.51
693884	-	201965 (100%)	Mineral	Claim	093E	1/4/2010	5/30/2035	GOOD	457.51
693903	-	201965 (100%)	Mineral	Claim	093E	1/4/2010	5/30/2035	GOOD	457.51
693904	-	201965 (100%)	Mineral	Claim	093E	1/4/2010	5/30/2035	GOOD	438.64
888229	SOUTH 15	201965 (100%)	Mineral	Claim	093E	9/11/2011	5/30/2035	GOOD	95.67
896175	Sylvia	201965 (100%)	Mineral	Claim	093E	9/7/2011	5/30/2035	GOOD	476.9
896481	BERGW2	201965 (100%)	Mineral	Claim	093E	9/11/2011	5/30/2035	GOOD	477.91

Tenure #	Claim Name	Owner	Title Type	Title Subtype	Map Number	Issue Date	Good To Date	Status	Area (ha)
896487	BERGW8	201965 (100%)	Mineral	Claim	093E	9/11/2011	5/30/2035	GOOD	477.91
896488	BERG W11	201965 (100%)	Mineral	Claim	093E	9/11/2011	5/30/2035	GOOD	477.68
896489	BERGW10	201965 (100%)	Mineral	Claim	093E	9/11/2011	5/30/2035	GOOD	478.15
896491	BERGW6	201965 (100%)	Mineral	Claim	093E	9/11/2011	5/30/2035	GOOD	478.14
896492	BERG W15	201965 (100%)	Mineral	Claim	093E	9/11/2011	5/30/2035	GOOD	458.40
896493	-	201965 (100%)	Mineral	Claim	093E	9/11/2011	5/30/2035	GOOD	477.91
896494	BERG W15	201965 (100%)	Mineral	Claim	093E	9/11/2011	5/30/2035	GOOD	458.59
896495	BERG W17	201965 (100%)	Mineral	Claim	093E	9/11/2011	5/30/2035	GOOD	458.74
898001	BERG EXT 1	201965 (100%)	Mineral	Claim	093E	9/19/2011	5/30/2035	GOOD	477.95
898002	BERG EXT 2	201965 (100%)	Mineral	Claim	093E	9/19/2011	5/30/2035	GOOD	458.63
898003	BERG EXT 3	201965 (100%)	Mineral	Claim	093E	9/19/2011	5/30/2035	GOOD	477.95
898009	BERG EXT 4	201965 (100%)	Mineral	Claim	093E	9/19/2011	5/30/2035	GOOD	458.66
898010	BERG EXT 5	201965 (100%)	Mineral	Claim	093E	9/19/2011	5/30/2035	GOOD	477.78
898011	BERG EXT 6	201965 (100%)	Mineral	Claim	093E	9/19/2011	5/30/2035	GOOD	477.77
905571	BERG N1	201965 (100%)	Mineral	Claim	093E	10/6/2011	5/30/2035	GOOD	457.83
905578	BERG N6	201965 (100%)	Mineral	Claim	093E	10/6/2011	5/30/2035	GOOD	476.81
905581	BERG N7	201965 (100%)	Mineral	Claim	093E	10/6/2011	5/30/2035	GOOD	476.58
910289	BERG W21	201965 (100%)	Mineral	Claim	093E	10/12/2011	5/30/2035	GOOD	95.41
926662	BERG NW1	201965 (100%)	Mineral	Claim	093E	10/31/2011	5/30/2035	GOOD	458.22
926664	BERG NW2	201965 (100%)	Mineral	Claim	093E	10/31/2011	5/30/2035	GOOD	477.13
926666	BERG NW4	201965 (100%)	Mineral	Claim	093E	10/31/2011	5/30/2035	GOOD	476.88
926667	BERG NW7	201965 (100%)	Mineral	Claim	093E	10/31/2011	5/30/2035	GOOD	458.06
926669	BERG NW6	201965 (100%)	Mineral	Claim	093E	10/31/2011	5/30/2035	GOOD	286.02
926671	BERG NW8	201965 (100%)	Mineral	Claim	093E	10/31/2011	5/30/2035	GOOD	476.93

Tenure #	Claim Name	Owner	Title Type	Title Subtype	Map Number	Issue Date	Good To Date	Status	Area (ha)
926673	BERG NW10	201965 (100%)	Mineral	Claim	093E	10/31/2011	5/30/2035	GOOD	457.67
930909	BERG NE1	201965 (100%)	Mineral	Claim	093E	11/24/2011	5/30/2035	GOOD	400.48
1000685	BERGETTE 1	201965 (100%)	Mineral	Claim	093E	6/24/2012	5/30/2035	GOOD	19.09
1011438	BERG NE2	201965 (100%)	Mineral	Claim	093E	7/24/2012	5/30/2035	GOOD	419.70
1014803	BERGETTE 2	201965 (100%)	Mineral	Claim	093E	11/26/2021	5/30/2035	GOOD	477.44
1015521	BERG NE3	201965 (100%)	Mineral	Claim	093E	12/27/2012	5/30/2035	GOOD	286.14
1015818	BERG N11	201965 (100%)	Mineral	Claim	093E	1/8/2013	5/30/2035	GOOD	381.52
1017031	SOUTH 16	201965 (100%)	Mineral	Claim	093E	2/19/2013	5/30/2035	GOOD	19.14
1030076	BERG NE4	201965 (100%)	Mineral	Claim	093E	8/6/2014	5/30/2035	GOOD	1278.66
1031370	SOUTH 17	201965 (100%)	Mineral	Claim	093E	10/4/2014	5/30/2035	GOOD	76.52
1065782	Sylvia	201965 (100%)	Mineral	Claim	093E	1/15/2019	5/30/2035	GOOD	95.4
1070454	-	201965 (100%)	Mineral	Claim	093E	8/18/2019	5/30/2035	GOOD	19.08
1071719	BERGETTE	201965 (100%)	Mineral	Claim	093E	10/29/2021	5/30/2035	GOOD	76.4
1073028	East Bergette	201965 (100%)	Mineral	Claim	093E	11/30/2020	5/30/2035	GOOD	1222.4
1073027	Porphyry Creek	201965 (100%)	Mineral	Claim	093E	11/30/2020	5/30/2035	GOOD	345.8
1114773	-	201965 (100%)	Mineral	Claim	093E	8/1/2024	5/30/2035	GOOD	1258.13
1119669	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.1
1119671	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.1
1119672	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.12
1119673	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.13
1119674	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.13
1119675	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.13
1119676	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.11
1119677	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.14

Tenure #	Claim Name	Owner	Title Type	Title Subtype	Map Number	Issue Date	Good To Date	Status	Area (ha)
1119678	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.14
1119679	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.15
1119690	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	38.12
1119691	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.06
1119692	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	19.07
1119694	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	38.13
1119703	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	1677.71
1119704	-	201965 (100%)	Mineral	Claim	093E	2025/Jan/30	5/30/2035	GOOD	1638.37

4.3 Surface ownership and land access agreements

Surface rights over the Berg property are owned by the Province of British Columbia. In June of 2025 Surge received approval for an amended five-year exploration permit that allows for further exploration activities on the Berg property until March 31, 2030. It should be noted that a small portion of the proposed project infrastructure sits within a no-staking reserve, and appropriate approvals will be required to complete any disturbance-related baseline work in this area.

No major existing environmental liabilities have been noted by the authors. There is an access trail leading to the property dating from the historic drilling programs that may require reclamation in the future. There are also drill access roads on the property from historic and recent drilling since 2007, and two exploration camps and two core storage areas.

To the extent known, there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the property.

4.4 Royalties and Liens

A 1% net smelter return royalty is held by Royal Gold on eight of the mineral claims and the one mining lease, including those which host the deposit on the main Berg property (Figure 4-2).

4.5 Environmental liabilities

Surge Copper's operations are subject to various laws and regulations governing the protection of the environment, exploration, development, production, taxes, labour standards, occupational health, waste disposal, safety and other matters. The Berg Copper Project is subject to all of the environmental concerns common to all potential development projects in British Columbia. No site-specific environmental liabilities have been identified at Berg.

Surge Copper is actively completing field programs designed to support the next stage of technical advancement of the Berg Copper Project to support the Project's readiness to enter the environmental assessment and permitting process. These studies include programs to collect geotechnical, groundwater, hydrogeological, acid rock drainage ("ARD"), and baseline environmental data in and around the Berg deposit and across proposed project infrastructure areas. This work is being conducted under Surge Coppers Mineral Exploration permit, with specific fish, wildlife, and other studies potentially requiring additional specialized permits that are typically applied for and obtained by the qualified professionals conducting those studies.

Refer to Section 20.2 for a summary of environmental studies completed to date and related considerations.

4.6 Permitting considerations

Surge Copper is currently advancing exploration, deposit definition, geotechnical and geochemical characterization, and certain baseline environmental studies under a Mines Act mineral exploration permit MX-1-836. This permit currently allows for two exploration camps, an additional 86 drill sites, 40 test pits, and 109 line km of geophysical surveys. Additional permits, authorizations, and/or permit amendments may be required as the Berg deposit is advanced to feasibility. A summary of existing and anticipated provincial and federal approvals and authorizations are provided in Section 20.3.

4.7 Social and community considerations

Social and community considerations related to the Project are summarized in Section 20.2.7 of this report.

5 Accessibility, climate, local resources, infrastructure, and physiography

5.1 Accessibility

Site access is currently achieved by the Berg access road, with staging areas from the nearby forest service roads including an exploration camp located on the Sibola forest service road. The Berg deposit is centred at 603,450 mE, 5,962,920 mN (UTM WGS 84 Zone 9), and is located on the National Topographic Service (NTS) map sheet 093E/14W.

The site can be accessed by road by heading south on the Morice-Nadina FSR (Huckleberry Mine Road) which joins BC Highway 16 near Houston. The Morice-/Nadina FSR is an all-season gravel road that was upgraded to provide access to the Huckleberry Mine. At kilometre marker 100.5, head west on the Sibola FSR which has seen recent work and upgrades to allow for forestry and exploration activities.

At kilometre 16.4 on the Sibola FSR the Berg access road starts and traverses 16 km across creek fords and a mountain pass to arrive at the Berg camp and the Berg deposit. The Berg camp is located on a tributary to the north fork of Bergeland Creek, 6 km northwest of the pass at 1,555 m asl. Historically, this is the route used for road access to the Berg deposit. The southern portion of the Property can be reached via the Sweeny Lake Road, which departs from the Huckleberry Mine Road at ~113 km and continues to Tahtsa Lake. This road connects to a series of logging access roads that reach the southwestern corner of the property.

The route is typically free of snow between July and October.

5.2 Physiography

The Berg deposit is located in the Tahtsa Range, a 15 to 20 km wide belt of mountains within the Hazelton Mountains. The Hazelton Mountains lie along the eastern flank of the Kitimat Ranges of the Coast Mountains and form part of the Skeena Arch. The Tahtsa Ranges represent a transitional zone between the rugged, predominantly granitic Coast Mountains to the west and the rolling hill region of sedimentary and volcanic rocks that underlie the Nechako Plateau to the east.

The 2021 version of the biogeoclimatic ecosystem classification subzone/variant map for the Morice Subunit, Nadine Resource District, Skeena Region identifies the following biogeoclimatic zones in the project area (Government of BC 2021):

- Boreal Altai, Fescue Alpine: The terrain is often steep and rugged. Much of Boreal Altai Fescue Alpine is well-vegetated alpine tundra. Soils are typically shallow and derived from weathered bedrock. Vegetation is primarily dwarf willows, grasses, sedges, and lichens.
- Engelmann Spruce-Subalpine Fir, Moist Cool: Soils in this biogeoclimatic zone are typically coarse-textured Humo-Ferric Podzols. Major tree species include subalpine fir, mountain hemlock, amabilis fir, whitebark pine, and lodgepole pine.
- Mountain Hemlock, Leeward Moist Maritime: Soils in this biogeoclimatic zone are typically Humo-Ferric and Ferro-Humic Podzols. Major tree species include mountain hemlock, amabilis fir, western hemlock, and subalpine fir.

The Berg property is located within the Morice Timber Supply Area (TSA) administered by the Nadina Natural Resource District office in Burns Lake. This TSA covers 1.5 million hectares of the Skeena Natural Resource Region.

The Tahtsa Ranges are further subdivided into the Tahtsa, Sibola, Whitesail, and Chikamin Ranges; of these, the Berg deposit is hosted in the Sibola Range. These are separated by major valleys whose bottoms range in elevation from 800 to 950 masl. Mt. Ney is the highest peak in the Tahtsa Ranges at 2,470 m and is 4 km northeast of the Berg property. A number of other mountain and ridges are 2,000 m or more in elevation and occur as serrate peaks modified by cirque glaciation.

5.3 Climate

The weather, typical of mountainous terrain along the east flank of the Coast Mountains, can be unsettled with rapid changes. Seasonal temperatures vary from -20°C in winter to 20°C during the summer. The mean daily temperatures for July and January are 15°C and -9°C, respectively. The Tahtsa region receives 1,009 mm of rain and 976 mm of snow annually. The Kemano region receives 1771 mm of rain and 215 mm of snow annually. In winter, snow is typically less than 2 m deep on the valley floors, but deeper snow can accumulate in creek gullies and on north and east-facing slopes, giving rise to small permanent snowfields. The Berg property is snow-covered between mid-November and late-May, thereby limiting exploration activities to the summer months.

High winds and dense fog are common in the area, with rapid weather changes typical of mountainous regions.

5.4 Local resources and infrastructure

5.4.1 Community services

Personnel for construction, exploration, mining, and support are available in local northern BC communities such as Prince George, Terrace, Smithers, and Houston. Prince George and Terrace are four hours driving distance from the property, while Smithers and Houston are two and one, respectively. Helicopter services are available from Smithers and Houston. Except for Houston, each of these communities has daily scheduled flights to Vancouver and elsewhere.

5.4.2 Infrastructure

Infrastructure available for the Berg property consists of the Morice Tahtsa and Sibola Mainline Forest Service Roads, providing road access to 16 km from the Berg deposit. The remaining length of the Berg access road has been recommissioned by Surge in recent years and allows for seasonal access by light duty all wheel drive vehicles.

Sufficient low-relief terrain resides within the Property for siting of infrastructure for mining or process operations, such as waste disposal facilities, haul roads and plant site. Land use for exploration and mining purposes is governed by the Mineral Tenure Act, the Mines Right of Way Act, the Mines Act, and other applicable laws of the Province of British Columbia.

The CN rail mainline parallels Highway 16 linking Prince George and Prince Rupert.

5.4.3 Power

There is currently no power available on the property. The nearest source of electric power is the Huckleberry Mine transmission line, 22 km to the east that sources power from the BC provincial grid at the Houston substation. Rio Tinto also operates the Kemano power-generating station 50 km to the west of the Berg Copper Project.

5.4.4 Water

An abundance of water as lakes, rivers and groundwater is available in valleys and base level elevation. Melting of mountain snow and ice lenses found at elevation supply overland flow and perched groundwater flow in the warmer months of June through September. The shallow groundwater flow contributed to the leaching and supergene enrichment found on the property. Artesian water flow is observed from uncapped historical drilling holes on the main slopes of the Berg cirque.

6 History

The following has been compiled from several Assessment Reports primarily from Harris and Peat (2008), and from Harris (2012).

The Tahtsa Ranges were first prospected in the early 1900's after gold was discovered near Sibola Mountain. Prior to the late 1920's, several lead-zinc-silver, gold-tungsten and copper showings had been staked. In 1948, the Lead Empire Syndicate re-staked claims originally located by Cominco Ltd. In 1929 over several lead-zinc occurrences. These are now recognized as part of the Berg porphyry system.

6.1 Regional history

The Tahtsa Reach area of west-central British Columbia first underwent significant industrial development in 1951 with the construction of the Kenney Dam and the flooding of the Nechako Reservoir. A 16-kilometre tunnel through the Coast Mountains was constructed at the west end of Tahtsa Reach to power a hydro electric facility at Kemano. In 1962, Kennco Explorations discovered the Huckleberry porphyry copper deposit after following up anomalous copper concentrations in stream sediments. Following significant deposit delineating, construction of the Huckleberry Mine began in the mid-1990's and the mine was commissioned in 1997. The Huckleberry Mine was a major local employer up until the operation was placed on care and maintenance in 2016. Starting in the 1970s and 1980s, the forest industry expanded into the Morice and Tahtsa areas and extensive networks of logging roads and cut blocks were developed. Forestry operations continue through the area to this day.

6.2 Exploration history

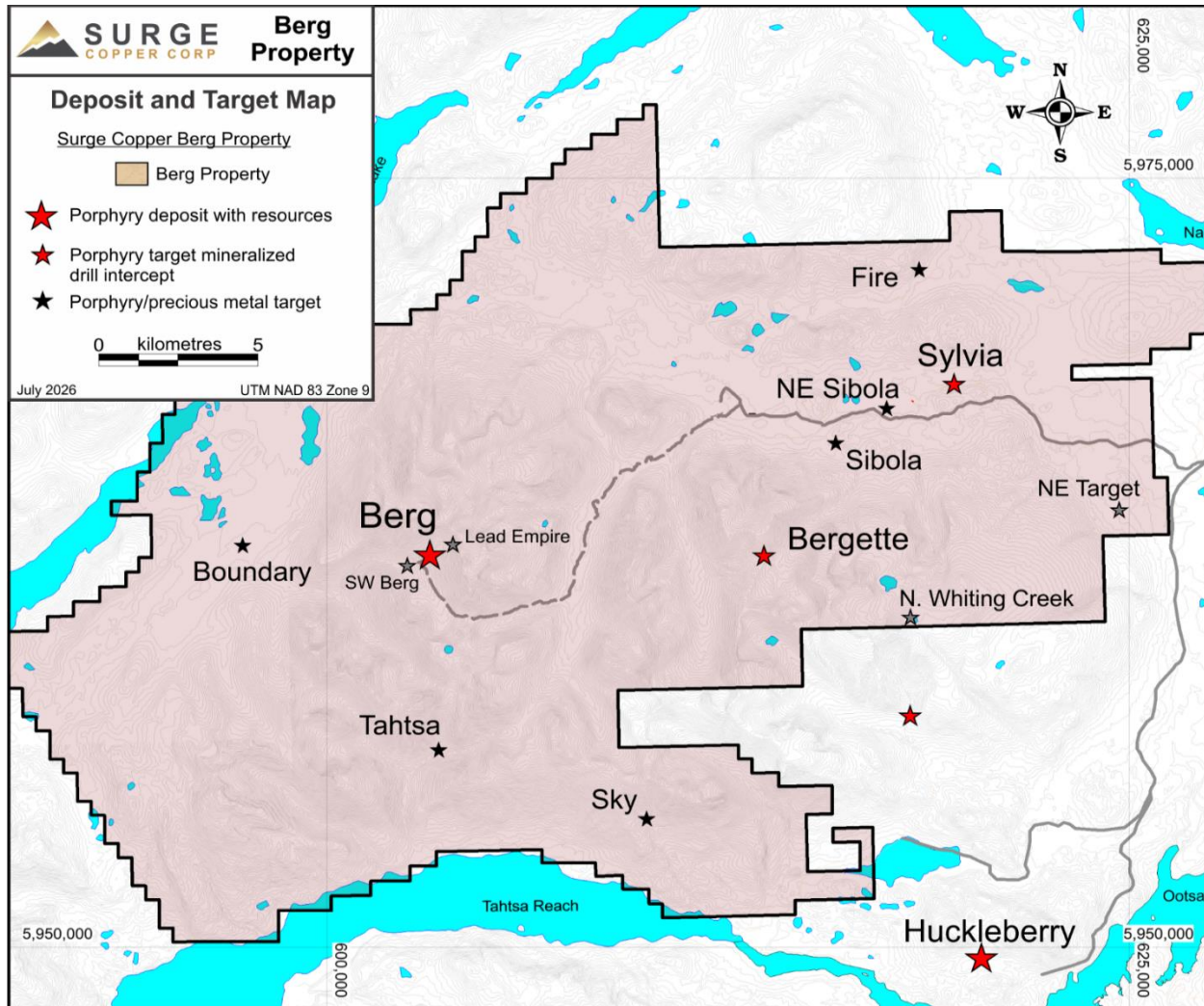
The potential for porphyry copper style mineralization at Berg was first understood by Kennco (formerly Kennecott), based on their experience in the southwestern United States. In 1964 Kennco conducted bulldozer trenching and diamond drilling that demonstrated the deep effects of surface leaching and revealed the widespread presence of supergene mineralization, a feature not common in the Canadian Cordillera. Subsequent work shows that rocks are leached in places to depths of more than 30 m, and these rocks are underlain by an extensive "blanket" of supergene copper enrichment.

Drilling by Kennecott during 1965 and 1966 delineated two main mineralized zones: a northeast zone that contains primary (hypogene) and some supergene mineralization, and a south zone with widespread supergene mineralization. At the end of the 1966 field season, the property consisted of 108 mineral claims on which there had been a total of 3,886 m of diamond drilling in 23 holes. During 1967, a 3,325-m drill program tested the south zone on a widely spaced grid and three holes explored areas peripheral to the main area of interest. From 1968 to 1970, the property was dormant but metallurgical testing was done on composite samples of drill core. In 1971, three additional holes were drilled in the northeast zone. At the end of the 1971 exploration program, a total of 49 diamond drill holes of mainly NQ (47.6 mm diameter) and BQ (36.5 mm diameter) core had been completed with a total length of 7,875.8 m.

In 1972, exploration and development of the property were taken over by Canex Placer Limited (Placer Dome Inc.) under agreement with Kennecott. From 1972 to 1975, Placer Dome drilled an additional 52 drill holes of NQ and PQ (85 mm diameter) core totalling 9,689.4 m. The PQ holes were utilized to collect metallurgical samples and to address low core recovery issues from previous years. Another 8 HQ (63.5 mm diameter) core holes totalling 1,099.0 m were drilled in 1980.

A total of 119 diamond drill holes for 20,127.9 m had been completed on the Berg property to 1980. A limited amount of pre-2007 drill core is still cross stacked on the property at the old camp site, but most of the mineralized sections have been consumed for metallurgy test work and core box identification is sometimes difficult due to deterioration over the years.

Figure 6-1: Berg property deposit and target map



Source: Surge Copper 2026

Between 1982 and 2007, there was no active exploration on the project, although Placer had arranged for/or conducted in-house revised resource estimates, additional economic analyses, conceptual mine layouts, and environmental reports. No mining activity has occurred on the property. Detailed descriptions of these activities can be found in reports prepared in accordance with NI 43-101 in June 2008 by Harris and Stubens titled "Technical Report — Mineral Resource Estimate, Berg property, Tahtsa Range, British Columbia", and in June 2009 by Harris and Labrenz titled "2009 Mineral Berg 2017 Aeromagnetic and Geological Mapping Surveys January, 2018 Thompson Creek Metals Company Inc. 9 Resource Estimate on the Berg Copper-Molybdenum- Silver Property, Tahtsa Range, British Columbia". This information has been summarized below.

In 2006, Placer Dome was purchased by Barrick Gold, who sold the Canadian assets to Goldcorp Inc. Terrane Metals Corp. (Terrane) purchased certain Canadian assets from Goldcorp, including their share of the Berg Copper Project. In September 2006, Terrane purchased Kennecott's share of the Berg Joint Venture to become 100% owners.

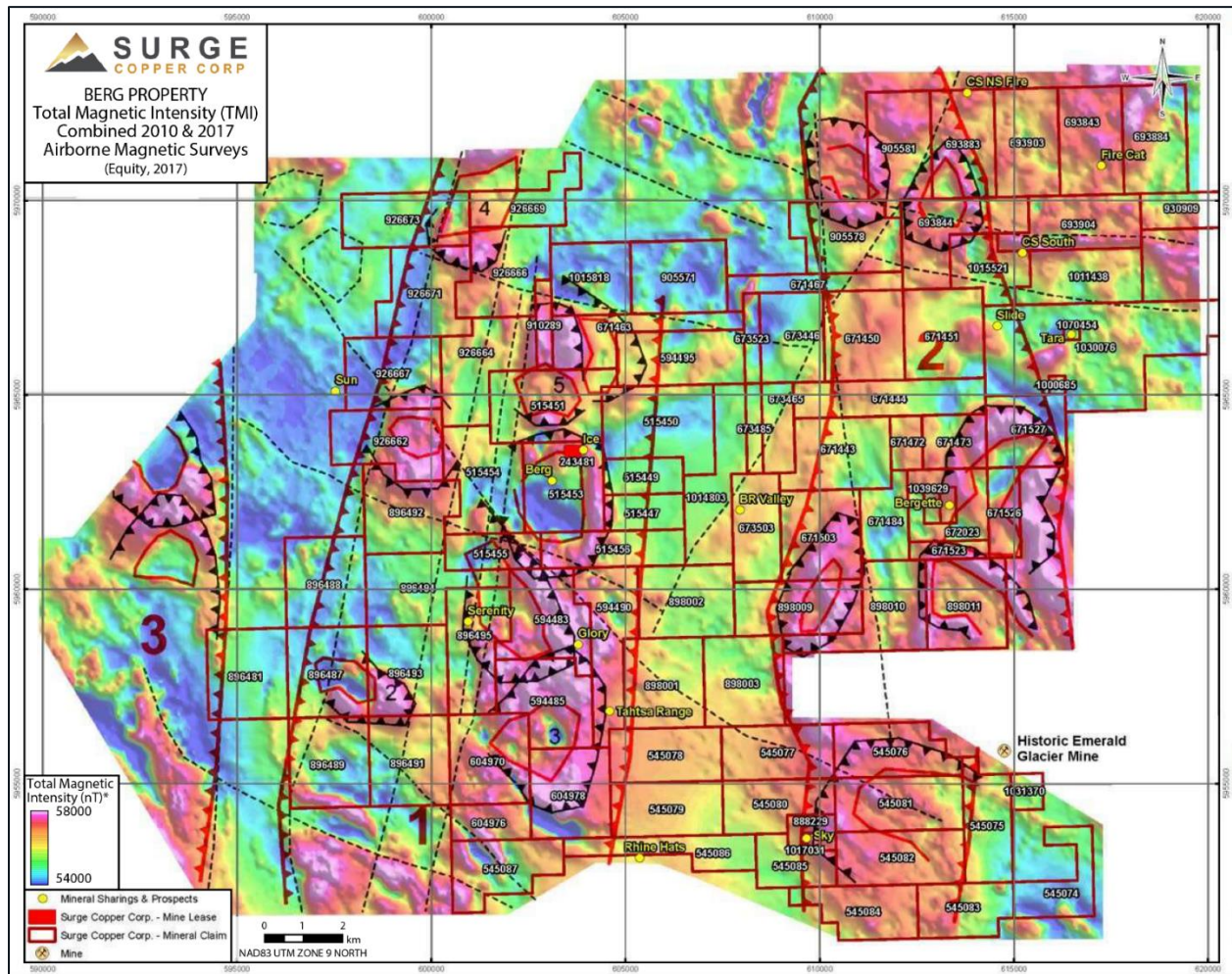
An exploration program consisting of 11,288.8 m of diamond drilling in 29 holes and a pole-dipole induced polarization (IP) survey was performed in 2007 by Terrane. A subsequent follow-up exploration program was carried out on the property in 2008 by Terrane, consisting of 11,659.6 metres of diamond drilling in 31 holes and a total field ground magnetic survey performed in the deposit area to determine the geophysical characteristics of the deposit. Both the 2007 and 2008 programs were carried out by Equity Exploration Consultants Ltd. (formerly Equity Engineering Ltd.) under contract to Terrane Metals Corp., from a camp constructed in the drill area. Environmental baseline studies commenced in 2007 and continued into 2008 and were implemented by AMEC Earth and Environmental. This work included review of environmental data for the project site and collection of long lead time data including water quality, hydrology, meteorology, and acid rock drainage/mine leachate test work.

In 2010, Thompson Creek Metals Company Inc. (TCM) purchased Terrane and, in 2011, drilled 36 diamond drill holes for 10,677.6 m. The program was carried out by Equity under contract to Berg Metals from the re-established Berg camp within the drill area. The program was successful in providing data to refine the deposit's geological model and test prospective areas outside the limits of previous drilling (Harris and Peat, 2011). Terrane Metals conducted an airborne geophysical (magnetic and EM) survey in 2010 over an area of ~130 km² covering what is now the east-central portion of the current Property. The survey encompassed the Berg, Bergette, BR Valley and CS South areas as they are defined in the current report. Results of the survey showed a clearly defined conductivity anomaly over the Berg deposit, with similar anomalies in the Bergette and CS South areas. In addition to the broad conductors defined over these zones, several strong linear conductors were identified paralleling both the BR Valley and the unnamed valley to the east (Labrenz, 2010).

During March 3 to 12, 2017, Geotech Ltd. Carried out a helicopter-borne geophysical survey over the Berg Property that extended the coverage completed in 2010 over the Berg Property. The survey results were merged and levelled with the 2010 coverage (Figure 6-2).

In the summer of 2017, Equity, on behalf of TCM, conducted a regional target evaluation program which investigated 13 magnetic anomalies from the aeromagnetic survey completed earlier in 2017. Two targets were interpreted to be most prospective for follow-up work, these being: target 12 (target had not been named in 2017 Assessment report) consisting of an altered pyritic diorite which is cross-cut by quartz-molybdenite veinlets; and targets 3/4/6 (Bergette), which form a cluster of low magnetic anomalies and strong limonitic alteration.

Figure 6-2: Merged 2010 and 2017 total magnetic intensity geophysics



Source: Equity, 2017

In 2014, TCM contracted UTM Exploration Services Ltd., of Smithers, BC to conduct a 21-day prospecting and sampling program of the Berg claims. The program involved predominantly expansive, wide reaching reconnaissance work on all “soon to lapse” peripheral claims surrounding the main Berg deposit. A total of 24,939 ha were acquired from 2011 to 2014 requiring ongoing active exploration. The design and intention of the 2014 program was to physically examine other areas that showed potential for new mineralization and extensions to known mineralization.

A 2015 surface exploration program was conducted by Equity Exploration Consultants Ltd. On behalf of Berg Metals. A crew of four people were on-site for five weeks, and conducted geological mapping and rock, soil, and silt sampling on eight separate zones outside the main Berg deposit.

In 2016, Equity Exploration Consultants were retained to conduct field exploration at Berg. Work on the Property consisted of camp construction, 17.4 line-km of induced polarization (IP) geophysical surveying, geological mapping, rock, soil and till sampling over a four-week period.

In 2017, an exploration program at Berg was carried out by Equity under contract to TCM, between July 19 and September 11, 2017. The program was split into three phases. The first phase comprised a review of Berg core to determine if further exploration work was required at the deposit. The second phase comprised geological mapping of the Tahtsa-Serenity map area by a crew of three people (refer to Section 9.3). A small camp (Tahtsa) was established in a south-facing alpine cirque at the foot of the southern spur of Mt. Ney, referred to as “Tahtsa Valley” for the Tahtsa-Serenity mapping. This camp was taken down September 6, 2017. The third phase consisted of evaluating regional magnetic anomalies, through focused geological mapping and prospecting. Where feasible, the geological mapping of the Tahtsa and Serenity Valleys proceeded on foot, with the more outlying areas being accessed by helicopter.

Additionally, a mineralogical program consisting of 237 samples were analyzed by Terraspec from various locations around the Berg Property and a targeted magnetic susceptibility program on 253 samples was completed to characterize the various lithologies and alteration styles observed on the property (Nielson, 2017).

On October 20, 2016, Thompson Creek Metals Company Inc. was acquired by Centerra Gold Inc. TCM continues as a subsidiary of Centerra Gold.

6.2.1 Additional prospects

The prospects discussed below occur outside of the Berg Mineral Resource Estimate boundary. However, they occur on the broader continuous claim blocks which comprise the Berg property.

6.2.2 Bergette

Bergette is currently the most extensively explored area on the Berg property outside the main Berg deposit itself and has returned significant drill intersections of copper and molybdenum mineralization. The Bergette Prospect located 10.3 km to the east-northeast (Figure 6-1) of the Berg deposit, forms part of the broader Berg Copper Project and has seen intermittent exploration since its discovery. It represents an important prospect on the Property. It was initially prospected and silt sampled by Kennecott Explorations during their exploration programs in the region between 1961 and 1964 (Church, 1971); the results of this work were moderately encouraging and from 1971 to 1973 a program of drilling, mapping and soil sampling was undertaken by Granges Exploration. Geologic mapping by Church (1971) showed the area to be underlain by volcanic and sedimentary rocks of the Hazelton Group intruded by the Sibola Stock, a composite granodiorite intrusion with both equigranular and porphyritic phases.

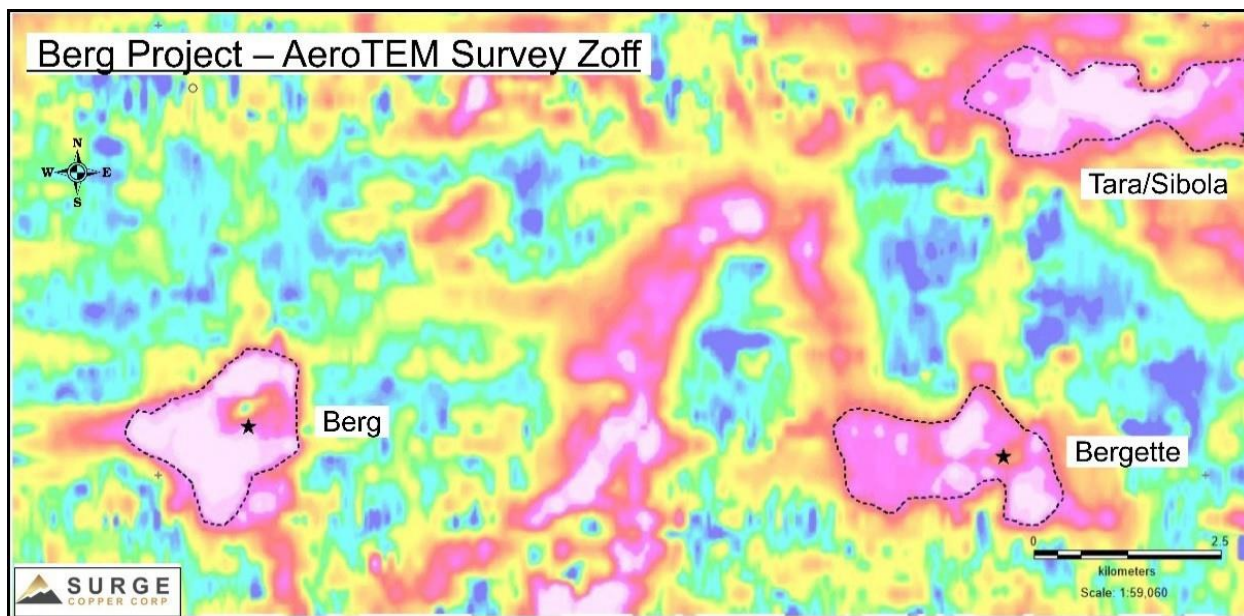
Soil sampling during the 1971 and 1972 programs demonstrated that mineralization at Bergette is marked by a strong Cu-Mo response in soil (Reid, 1971), which extends over a 2 x 5 km northeast-trending zone (Reid, 1972). Responses are strongest over the core of the Bergette mineralization, but are continuous both north and south along strike, suggesting that the mineralized system is larger than what is currently outlined by drilling and rock sampling.

In 1973, an 11.3 line-km frequency domain IP survey was completed over Bergette, extending 1,600 m to the north up Bergette Valley. The survey identified several IP anomalies to the east and northeast of the main Bergette mineralization; however, the depth of penetration for the survey was only 100 – 150 m with gaps in the survey over geochemical anomalies (Hallof and Goudie, 1973). Several shallow drill holes were proposed to test the IP anomalies surrounding the main Bergette mineralization; however, there is no record of any follow-up work done on this survey. Several of these IP anomalies extend onto the Property.

In 1977, a report was prepared for New Frontier Exploration Inc., by Granges' personnel summarizing the findings of the early 1970s exploration programs and recommending additional soil sampling, mapping, and drilling (Shear, 1977). No recorded work was undertaken to implement the recommendations of the report.

An airborne AeroTEM III survey flown over the Berg and Bergette areas in 2010 shows Bergette has a similar size resistivity response (Z1-Off) as the Berg deposit (Figure 6-3 below). The Tara/Sibola prospect (now termed Sibola) to the north of Bergette also shows a very prominent anomaly in the airborne survey.

Figure 6-3: Data from a 2010 Airborne AeroTEM III Survey showing Z1-Off results (in nT/s)



Source: Surge, 2023

Known mineralization at Bergette is hosted within a large (6 km²) gossan, which itself contains a 4 km² copper in soil anomaly that remains open to the east. Most historic work and drilling occurred within two zones within the west side of the copper in soil anomaly, a Southern Zone, and a Northern Zone. The eastern side of the copper in soil anomaly remains underexplored.

The Southern Zone is a fractured and vuggy breccia zone that is hosted by the Sibola Stock and healed/filled with gypsum, pyrite, molybdenite, chalcopyrite, pyrite, magnetite, and epidote. This was the largest zone of mineralization defined by the historical drilling and contains zones grading 0.3% Cu over tens of metres. The Northern Zone comprises sets of mineralized fractures that extend over a much larger part of the Sibola Stock and are responsible for much of the gossan in the area (Church, 1971). These fractures are typically filled with quartz, pyrite, and chalcopyrite with rare occurrences of molybdenite and other copper sulphide minerals. Where these fracture sets are well-developed, they are associated with intervals, up to tens of metres thick, that consist of vein-hosted and disseminated copper sulphide minerals and mantled by barren country rock. For example, a 1972 percussion drill hole (P9-72, collared 1 km north of the breccia zone within the Southern Zone; Table 9-1) returned 0.45% Cu over 12.2 m within a 64.0 m zone hosting 0.32% Cu. Highlights from percussion and diamond drilling conducted between 1971-1973 include 0.29% Cu over 70.1 m (GF #1), 0.24% Cu over 88.39 m (GF #4), 0.15% Cu over 203.76 m (GF #2), 0.74% Cu over 12 m (GF

#3), 0.42% Cu over 30.48 m (P9-72) and 0.45% Cu over 12.2 m (P9-72). A compilation of significant historical drill results is shown in Table 6-1.

Table 6-1: Significant historical Bergette drilling intercepts

Year	Hole ID	From (m)	To (m)	Interval (m)	Cu (%)	Mo (%)	Ag (oz/t)
1971	GF-1	170.69	240.79	70.10	0.29	0.011	0.02
1971	incl.	219.46	240.79	21.33	0.43	0.008	0.02
1971	GF-2	5.49	209.25	203.76	0.15	0.003	0.02
1971	incl.	45.72	76.20	30.48	0.2	0.002	0.02
1971	incl.	176.78	182.89	6.10	0.34	0.003	0.02
1971	GF-3	36.58	48.77	12.19	0.74	0.005	0.04
1971	GF-4	106.68	195.07	88.39	0.24	0.012	0.03
1971	incl.	106.68	112.78	6.10	0.38	0.001	0.02
1971	incl.	152.4	195.07	42.67	0.34	0.020	0.04
1972	P2-72	45.72	51.82	6.10	0.12	0.044	-
1972	P2-72	67.06	70.10	3.04	0.26	0.009	-
1972	P9-72	6.10	70.10	64.00	0.32	0.010	-
1972	incl.	18.29	48.77	30.48	0.42	0.010	-
1972	incl.	39.62	48.77	9.15	0.54	0.008	-
1972	P9-72	100.58	112.78	12.20	0.45	0.011	-
1972	P11-72	45.72	54.86	9.14	0.25	0.005	-

Source: Nielsen, 2017

6.2.3 Tahtsa and Sky

The Tahtsa showing (093E 007) occurs just over 4 km to the south-southeast of the Berg deposit (Figure 6-1). Tahtsa was historically reported to be a series of northeast-trending, steeply-dipping quartz veins with pyrite, chalcopyrite, galena, specular hematite, and trace amounts of gold (Duffell, 1957). Historical work conducted in this area prior to 2014 has documented the presence of Cu-Zn ±Ag grades and Au mineralization from a northeast-trending and steeply-dipping vein systems with rock samples in the northwestern area known as the Saddle Showing up to 1.2% Cu, 1.8% Zn and 269 g/t Ag (Hooper, 1984). Follow-up work in 2015 at this showing confirmed the presence of polymetallic Cu-Zn-Pb-Ag-Au mineralization, and a broader geochemical anomaly with elevated Cu, Mo, Pb, Zn, Ag, Au, and Sb values (Swanton, 2015).

A silt sample collected as part of the QUEST-WEST project (Jackman, 2009) reported strongly anomalous Mo-Cu-Ag-Pb from the drainage south of the Tahtsa Range Showing. As follow-up to historical work which identified Cu-Zn±Ag and possible gold mineralization, a prospecting and soil sampling was completed in the Tahtsa-Serenity area in 2015. Re-sampling of the "Saddle Showing" confirmed high-grade mineralization with the best sample returning 13,140 g/t Ag, >20.0% Pb, 1.04% Cu, 6.20% Zn, and 5.72 g/t Au. Within the Serenity Cirque and northwest of the "Saddle Showing," several rock grabs from northeast-trending and

steeply-dipping polymetallic veins were collected containing up to 2.25% Cu and 1.23% Zn. To the south along the east-west trending creek, rock grabs from previously unsampled outcrops returned assay values from 100–1,220 ppm Cu. Contour soil sampling above the creek confirmed the presence of a copper-bearing hydrothermal system of unknown size and extent, revealing a 1.5 x 0.75 km zone of elevated Cu, Mo, Pb, Zn, Ag, Au, and Sb (Swanton, 2015).

Also, in 2015, a set of magnetite-epidote veins with isolated occurrences of chalcopyrite, extending over 300–400 m, were discovered one kilometre north of the Serenity Cirque, 2.5 km south of the Berg deposit, and within a couple hundred metres of the Berg access road. These veins are weakly anomalous in Cu (50–200 ppm) and slightly enriched in As and Zn (100–300 ppm and 50–70 ppm, respectively). Though the metal contents of the veins are low, they may represent a distal part of the Berg porphyry system or another centre of mineralization (Swanton, 2015).

In 2016, a limited campaign of prospecting was conducted in various areas within the Tahtsa-Serenity drainage system (Branson and Guestrin, 2016). This mapping defined a ~1,000 m gossan zone centred on the confluence of Tahtsa Creek and the south-flowing unnamed creek that originates in the Tahtsa cirque. Rock and soil samples from this area returned anomalous Au, Cu, and Mo. The Saddle Showing was visited but not sampled, as this had been done the previous year (Swanton, 2015).

In 2017, Equity on behalf of TCM, undertook a geological mapping program of the Tahtsa-Serenity area with the aim of investigating the magnetic anomaly surrounding the Serenity Valley and the argentiferous veins at the Tahtsa Range showing. The program concluded that the magnetic anomaly is likely related to topographically high magnetic intrusive rocks and adjacent hornfelsed sedimentary rocks. The argentiferous veins at the Tahtsa Range were found to be subvertical and NNE-striking (10–30°), which Nielson (2017) concluded is not compatible with the hypothesis that these veins are porphyry-related D-veins (Branson and Guestrin, 2016; Swanton, 2015).

The Sky Showing (MINFILE 093E/098) occurs in the south-eastern corner of the Berg property, 10 km northwest of the Huckleberry Mine (Figure 6-1). Following initial government mapping of the region in the 1930s and 1960s, two field programs were undertaken in 1988 and 1989. In 1988, Geostar Mining Corporation undertook a program consisting of reconnaissance soil sampling along contour lines with minor accompanying prospecting. Pardoe (1988) notes the significance of a large gossan and reports anomalous copper, silver, lead, and molybdenum from isolated rock sampling. The results of the soil survey were quite encouraging with well-defined copper-silver and lead-zinc anomalies, as well as sporadic enrichment in gold. A follow-up program was recommended and conducted by Canadian-United Minerals in 1989 and consisted of tightly focused soil sampling, detailed mapping, and extensive rock sampling of the mineralized zones. Harrison (1989) concluded that the Au-Ag-Cu-Pb-Zn mineralization is associated with massive pyrite-arsenopyrite veins, and that vein formation was most likely related to hydrothermal fluids exsolved from the porphyry body during cooling. Additional work was recommended to explore for additional veining in the surrounding area, but that work was never carried out.

A single silt sample from the area downslope of the Sky Showing was analyzed as part of the 2008 QUEST-WEST project (Jackman, 2009). The sample is strongly anomalous in copper, zinc, arsenic, lead, and molybdenum, suggesting the stream sediments were sourced from well-mineralized bedrock. Interestingly, the drainage indicated as the source for the sample does not flow directly over the 1988/1989 work area but instead drains a lower portion of the slope below this showing.

In 2015, a soil and prospecting grid was sampled several hundred vertical metres below the Sky Showing. Prospecting and soil sampling on the lower portion of the grid showed no evidence of mineralization. The upper portion however hosts a 2 km long soil anomaly directly downslope from the veins of the Sky Showing. Follow-up work was recommended to fill in the gap between the 1988 and 2015 sampling areas (Swanton, 2015).

6.2.4 Lead Empire

While it does not contain any mineral resources or contribute to the Berg deposit, the Lead Empire represents an important prospect on the Property. The Lead Empire Showing (MINFILE 093E/014) lies 1.2 km to the northeast of the Berg deposit (Figure 6-1). This area was first staked by W.H. Padmore in 1948 and 1951 to cover the stockwork veins and shear zones associated with a diorite or gabbro stock. Mineralization includes vein-hosted galena, sphalerite, pyrite and molybdenite, in addition to covellite, chalcopyrite and disseminated pyrite. Mineralization was also noted to contain minor gold and silver content although no values are known. Work completed in the 1951-52 seasons focused mostly on claim access and included trail cutting and cabin construction along with some stripping and trenching (Duffell, 1957).

Further work was completed during the 1969-71 field seasons when the LOST, ICE, SET, and IT claims were staked by Sierra Empire Mines Ltd ("Sierra Empire"). In 1969, Sierra Empire surveyed historical surface workings, conducted geological mapping, bulldozed 29 trenches (totalling 925 m) to bedrock, constructed 2.4 km of road and drilled 17 holes for 976 m (EMPR, 1969). The following year, further surface geological mapping, 1.6 km of road construction and 150 m of trenching was completed (EMPR, 1970). In 1971, another eight drill holes totalling 1,529 m was completed (EMPR, 1971).

Unfortunately, there are no records for this work; however, it appears from air photos that the focus of this work was completed up to 2 km northeast of the Lead Empire MINFILE occurrence, though at least one road was constructed to within one kilometre from the MINFILE location. Furthermore, MacIntyre (1985) denotes Pb-Zn mineral occurrences in both the MINFILE location and proximal to the extensive road workings to the northeast.

The Lead Empire area was prospected during the 2016 field program with no significant results (Branson and Guestrin, 2016).

6.2.5 CS, NS, Fire, Smoke Mountain, Fire Cat

While they do not contain any mineral resources or contribute to the Berg deposit, the CS, NS, Fire, Smoke Mountain, and Fire Cat represent important prospects near the north boundary of the Property clustered around the Fire target on Figure 6-1. The CS and NS showings (MINFILE 093E/090) lie on the northern boundary of the Property 15.0 km from the Berg deposit (Figure 4-2) and was previously worked as part of the Smoke Mountain (Belik, 1974; Walker, 1974) and Fire (Ditson, 1990; Linden, 1991; Lui, 2007) claims. The first publicly recorded work is a 9.3 line-km dipole-dipole IP survey that identified four or five anomalous zones (Walker, 1974) that were followed-up with 646 m of diamond drilling over seven holes (Belik, 1974). Belik (1974) reported minor chalcopyrite and molybdenite along with carbonate, gypsum, magnetite/hematite, and chlorite alteration, but did not include assay results. Additional surface work and re-sampling of the 1974 drill holes was completed by Placer Dome in 1990 and 1991 (Ditson, 1990; Linden, 1991).

Of note, numerous silt and soil samples collected in 1990 contain elevated gold values. Re-sampling of the drill core returned up to 1,530 ppm Cu over 1.7 m and 0.15 g/t Au over 2.4 m in DH74-3, and 0.48 g/t Au over 1.0 m in DH74-1. No further work on the claims was recommended due the lack of economic mineralization. However, it was noted that porphyry style mineralization and alteration is restricted to the northern contact of the Kasalka intrusion and the Jurassic Hazelton Group volcanic rocks, though it appears this was not the target of the 1974 drilling and has not been fully tested at depth.

The area southeast of the CS Showing was staked as the Fire Cat claims by Patti Walker of Smithers, BC, and optioned by Rimfire Minerals Corporation, who conducted a program of mapping, rock, soil, and silt sampling in 2007. Lui (2007) concluded that copper mineralization at the main Fire Cat (and nearby Hulk) Showing is related to hydrothermal fluid flow along lithological contacts and does not have characteristics of porphyry style mineralization. In addition to the moderate copper values at the Fire Cat and Hulk showings (0.1–1% Cu), a gold-in-soil anomaly was noted near the southern end of the Property, and follow-up work was recommended in the form of a grid soil survey over the area. No further work has been conducted on these showings.

6.2.6 Sibola (CS South, Tara, Slide)

The CS South, Tara, and Slide prospects are now collectively referred to as the Sibola target (Figure 6-1). The CS South area is located 4.0 km south of the CS and Fire showings, 7.0 km north of Bergette and west of the Tara Showing (MINFILE 093E/091). It is traversed by the historical access road from the Sibola FSR to the Berg deposit (Figure 6-1) and was previously worked as the Slide claims during the 1970s when owned by Hudson's Bay Oil and Gas Corporation. Exploration by Hudson's Bay consisted of 11 percussion drill holes and a ground-based magnetometer survey covering 4 km². Work was centred on a small quartz diorite plug belonging to the Bulkley Plutonic Suite; it is not clear if the existence of this plug was known prior to the initial exploration, though its presence would likely explain targeting work in this area.

The first five holes were drilled in 1974 and, despite revealing low base metal contents, Kilby (1974a) concluded that as only two of the holes had reached bedrock, the program was not a complete test of the mineralization potential of the area. The following year, a magnetometer survey showed the presence of a 1 x 1 km magnetic high corresponding to a quartz diorite body. A further six percussion holes were attempted, none of which reached bedrock (Hall, 1975a).

An additional five diamond drill holes were completed by Noranda in 1975 on their Sibola Property, located on the Tara Showing. The holes contained only minor mineralization, with two 10-foot samples returning >0.1% Cu (Belik, 1975).

A geological and sampling program done on the Sibola Property in 1991 described the Tara Showing as comprising minor chalcopyrite and malachite associated with a weak stockwork of drusy quartz veinlets and local, irregular shaped zones of intense bleaching and silicification, 200 m east of the most easterly 1975 Noranda drill hole. The best rock assay returned 0.13% Cu, 137 ppb Au and 42.7 ppm Ag, with two other samples returning anomalous Au, As and Sb. Trenching the overburden to the north, east and southwest was recommended, but was never carried out (Belik, 1991).

Approximately 200 m south of the Tara Showing, a tertiary felsic stock within a broad quartz-sericite-pyrite alteration zone with good exposure in the creek canyon was identified. In the canyon, altered rocks are typically pale greenish grey to white and contain abundant finely disseminated pyrite with a quartz-sericite-clay matrix with patchy silicification imparting a spotted Dalmatian-type texture to altered units. At the southern end of the canyon, a late stage, steeply-dipping, hydrothermal breccia body exposed over 12 m contains angular to rounded, altered, pyritic, felsic fragments up to 10 cm hosted in a brown-weathering,

crystalline, pyritic carbonate matrix. Geochemical results collected from the canyon were not encouraging (Belik, 1991).

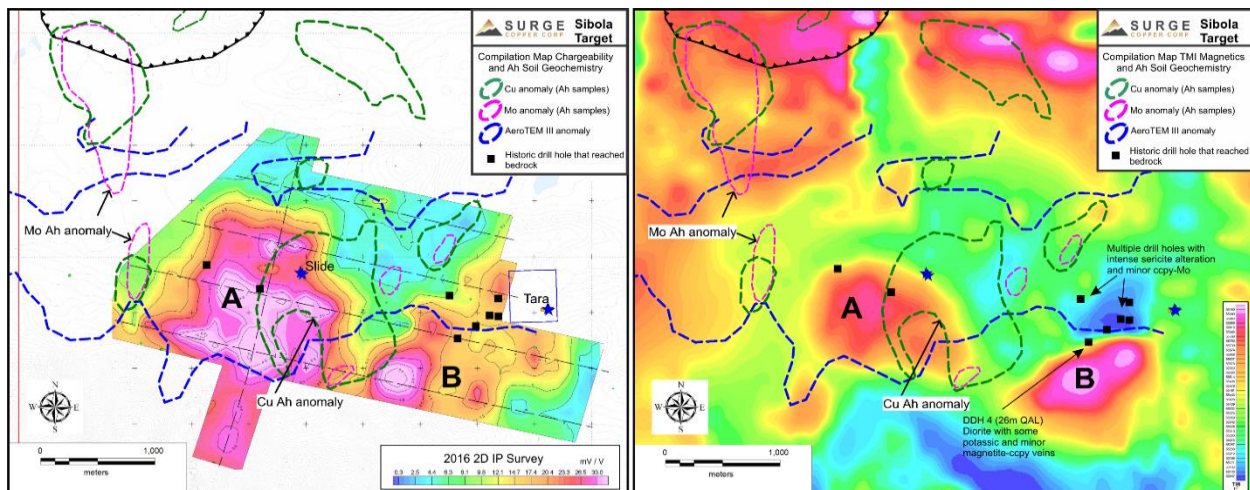
In 2015, a total of 454 Ah horizon soil samples were collected in the CS South area and three distinct multi-element anomalies were identified, with the largest 3.0 x 0.75 km in size. Further work was recommended due to its proximity to an airborne-detected conductor with a similar response to the Berg deposit (Swanton, 2015).

In 2016, a single prospecting and mapping traverse was carried out in the CS South area. No significant mineralization was encountered (Branson and Guestrin, 2016). A 17.4 line-km IP survey was completed in the CS South zone to follow up on three distinct multi-element geochemical anomalies from Ah sampling completed in 2015 (Swanton, 2015). Four east-west lines were initially completed and produced a high chargeability and low resistivity response. As a result, a fifth north-south cross-line was surveyed to define the centre of the response and better characterize the anomaly. The anomaly was determined to be 1,500 m x 1,000 m and at least 400 m in depth, dipping to the east and centred at 614,045 mE, 5,966,380 mN. The anomaly is coincident with an oval-shaped 1,300 m x 900 m high magnetic and electromagnetic response from a helicopter-borne survey completed in 2010 (Branson and Guestrin, 2016).

Geophysical data and limited historic drilling suggest the Slide and Tara targets are related to the same large porphyry alteration system, and collectively this zone is referred to as the Sibola target. Limited historic drilling shows the target area is covered by four to 50 m of overburden with multiple drill holes hitting intense sericite alteration with or without pyrite-chalcopyrite-molybdenite, and minor secondary potassium feldspar, biotite, and magnetite.

A compilation map of the Sibola target is shown in Figure 6-4. An IP survey over the area shows a 2 km by 2 km chargeability anomaly that is open to the south. Two prominent magnetic highs correspond with zones of high chargeability (labelled A and B in the Figure) and remain largely untested. The nearest drill hole to target B intersected altered diorite with patchy zones of potassic alteration and magnetite-chalcopyrite veinlets, highlighting the potential of the target.

Figure 6-4: Compilation maps of the Sibola target



Notes: (Left) induced polarization chargeability, Outline of the AeroTEM Airborne Geophysical Anomaly, and Anomalous Ah Soil Geochemistry. (Right) Total Magnetic Intensity Airborne Magnetics. Source: Surge, 2023

6.2.7 Boundary (Sun)

The Boundary target is located 6 km west of the Berg deposit, downstream along Bergeland Creek (Figure 6-1). The area was first explored for mineral potential by Placer Development Ltd., in 1980 to determine if the ground had any viable exploration targets, as the area was being considered as a potential storage site for tailings from the Berg deposit. Outcrop is limited in the area and, as such, the 1980 program consisted of soil sampling and ground geophysics. Examination of the limited outcrop that is present shows a lack of any sulphide or other mineralization (Cannon and Pentland, 1980). Results of the soil survey show several minor anomalies, the best of which is a Cu- Mo-Ag-Pb-Zn zone near the northeastern corner of the grid. Notably, the entire area is covered by a thick layer of glacial till, thus any soil anomalies are likely reflective of transported material. In the case of this anomaly, it is also downstream of the Berg deposit and transport of material from that source must be considered as a potential source of the soil anomaly. Follow-up soil sampling was conducted in 1981 and is reported to have extended the anomaly slightly to the north and west (Smee, 1991), though the original data is not available for this survey and these results have not been verified. Similarly, results of the IP and magnetometer surveys showed several minor anomalies but did not present any highly compelling targets for future work.

An additional follow-up survey was conducted in 1991 by Placer Dome, to determine conclusively if the soil anomaly is the result of bedrock mineralization or simply derived from transported material from the Berg deposit. Smee (1991) examined the anomalous zone with a variety of techniques, subjecting it to several extraction methods and assessing variation in metal content with soil profile depths, coming to the conclusion that the anomaly was formed in situ (as opposed to as the result of hydromorphic transport), but that its source material had been transported downstream from the Berg deposit as a result of catastrophic flooding events. Further work was not recommended.

Several highly anomalous silt samples from this area are included in the 2008 QUEST-WEST database (Jackman, 2009), though the mineralization in these samples is believed to be sourced from the Berg deposit itself, as opposed to a downstream source near the Sun Zone.

6.2.8 Sylvia

The Sylvia prospect was originally staked by Hudson Bay Oil and Gas Limited in 1973 (Sylvia claims) to cover a regional induced polarization anomaly situated on the flank of a prominent airborne magnetic high. During 1974 and 1975, HBOG carried out soil sampling, a ground magnetic survey and drilled 16 percussion holes totalling 2,880 feet. One of these holes (S-8) intersected 207 feet averaging 0.33% Cu and 0.02% Mo with higher-grade intervals grading up to 0.63% Cu and 0.13% Mo. This intersection occurs on the inside edge of a boomerang-shaped pyritic zone, 2.0 km long and up to 500 metres wide, that straddles the south edge of a Late Cretaceous granodiorite/quartz monzonite stock. Volcanics adjacent to the stock are hornfelsed and cut by numerous dykes.

In 1995 four holes, totalling 608 metres were drilled at Sylvia by Westly Technologies Ltd. (Belik, G.D., 1996). Hole 1 was a vertical twin of 1974 percussion hole S-8 and was drilled to verify the previous intercept, determine the style of mineralization, the host units, characterize alteration, and see if mineralization extends to depth. Holes 2 and 3 were drilled from the same setup as hole 1, to test continuity to the north and south, respectively. Hole #4 was collared 160 metres to the east to test for the possible extension of the mineralized zone in this direction. Hole 1 intersected a mineralized section similar to percussion hole S-8 but was lower grade. The interval 17.7 - 82.7 m averaged 0.19% Cu, 0.004% Mo, 1.8 ppm Ag. Gold values are uniformly low. Mineralization in hole 1 consists of pyrite, chalcopyrite and rare molybdenite as fine-grained disseminations, thin veinlets and fracture coatings. The principal host unit is a grey, strongly fractured, fine-grained, granular granodiorite with up to 30% very fine-grained biotite which may be secondary. Fractures

with K-spar alteration envelopes were noted in some sections. Hole 2 was drilled at a bearing of 3600, toward the centre of the stock. The hole intersected fresh to weakly altered granodiorite and quartz monzonite with 1%-3% disseminated pyrite. Weakly disseminated chalcopyrite occurs throughout most of the hole. Hole 3 was drilled to test the volcanic/intrusive contact south of hole 1. The top part of the hole contained pyritic, altered intrusive with low-grade, fracture-controlled copper mineralization throughout (8.5 metres ave. 0.11% Cu). Pyritic hornfels was intersected at 90.8 metres and continued through to the bottom of the hole. A bleached, strongly pyrite, quartz-sericite alteration zone, intersected at a depth of 86.3 m to 90.8 m, was found to contain anomalous gold values (ave. 790 ppb across an assay width of 5.0 m). The top part of hole 4, to a depth of 167.2 m, intersected medium-grained granodiorite with low-grade, mainly disseminated, pyrite/chalcopyrite/molybdenite mineralization throughout (82.5 m interval averages 0.10% Cu, 0.011% Mo). Fine-grained, secondary biotite, replacing chloritized hornblende, occurs in sections with better grade mineralization. Past 167.2 metres to the final depth of 188.1 metres, hole 4 intersected unmineralized to weakly mineralized, fine-grained, granular, biotite granodiorite similar to the unit exposed in the top part of holes 1 and 3.

6.3 Previous operator drilling

6.3.1 Berg deposit drilling summary to 2011

Previous drill programs on the Property have been carried out by Kennecott (1964-1971), Sierra Empire (1972), Placer Dome (1972-1980), Terrane (2007-2008), and Berg Metals (2011), and includes 215 core holes for 53,754 m of drilling at the Berg deposit. A summary of drilling complete by previous operators at Berg is shown in Table 6-2 with a summary of results presented in Table 6-3.

Table 6-2: Summary of drilling from 1964-2011

Company	Date	No. of Holes	Total Metres	Core Size	No. of Samples
Kennecott	1964	7	969.71	NX	297
Kennecott	1965	6	1,236.14	BX	374
Kennecott	1966	10	1,680.20	NQ	534
Kennecott	1967	22	3,324.95	NQ	995
Kennecott	1971	3	664.77	NQ	202
Sierra Empire	1972	10	1,463.65	-	499
Placer Dome	1972	14	3,465.24	NQ	1,011
Placer Dome	1973	12	3,313.02	NQ	986
Placer Dome	1974	19	1,843.75	PQ	583
Placer Dome	1975	8	1,067.39	PQ	339
Placer Dome	1980	8	1,099.08	HQ	330
Terrane	2007	29	11,288.90	HQ, NQ	5,347
Terrane	2008	31	11,659.61	HQ, NQ	5,841
TCM	2011	36	10,677.64	HQ, NQ	6,140
TOTAL	-	215	53,754.05	-	23,478

Table 6-3: Summary of select Berg drill hole results from previous operators

Hole	From (m)	To (m)	Interval (m)	Cu (%)	Mo (%)	Ag (g/t)
S24	21.3	182.0	160.6	0.54	0.015	-
BRG010	27.4	270.2	242.8	0.43	0.025	-
BRG023	30.5	189.0	158.5	0.52	0.025	-
BRG036	39.6	182.9	143.3	0.56	0.037	-
BRG074	24.4	231.7	203.9	0.48	0.021	-
BRG092	201.2	579.1	378.0	0.30	0.038	-
BRG117	24.4	121.9	97.5	0.98	0.058	-
BRG07-142	41.8	196.5	154.7	0.42	0.022	3.8
BRG07-165	12.8	500.2	487.4	0.25	0.044	3.5
BRG08-189	23.1	401.0	377.9	0.45	0.032	4.1
BRG08-194	21.5	866.0	844.5	0.28	0.048	4.5
BRG08-195	44.0	266.0	222.0	0.47	0.035	5.0
BRG11-201	12.0	350.2	338.2	0.31	0.022	4.1
BRG11-213	15.0	359.4	344.4	0.28	0.048	4.1
BRG11-215	54.0	404.2	350.2	0.41	0.031	8.3
BRG11-216	41.5	119.6	78.1	0.48	0.008	10.5
BRG11-217	19.7	301.5	281.8	0.40	0.020	5.6
BRG11-219	6.0	69.0	63.0	0.56	0.070	60.5
BRG11-221	15.0	350.2	332.2	0.46	0.039	5.6
BRG11-228	33.0	294.6	261.6	0.35	0.035	5.3
BRG11-229	15.5	325.4	309.9	0.46	0.016	4.6

6.3.2 Bergette deposit drilling results by previous operators

The Bergette targets were drilled in 1971 and 1972 G.O.M. as part of an option and joint venture agreement between G. Stewart, R. Blusson, Frontier Exploration Limited, and Granges Exploration Aktiebolag, of Sweden. A compilation of significant historical drill results from that program is shown in Table 6-4.

Table 6-4: Significant historical Bergette drilling intercepts

Year	Hole ID	From (m)	To (m)	Interval (m)	Cu (%)	Mo (%)	Ag (oz/t)
1971	GF-1	170.69	240.79	70.10	0.29	0.011	0.02
1971	incl.	219.46	240.79	21.33	0.43	0.008	0.02
1971	GF-2	5.49	209.25	203.76	0.15	0.003	0.02
1971	incl.	45.72	76.20	30.48	0.2	0.002	0.02
1971	incl.	176.78	182.89	6.10	0.34	0.003	0.02
1971	GF-3	36.58	48.77	12.19	0.74	0.005	0.04
1971	GF-4	106.68	195.07	88.39	0.24	0.012	0.03
1971	incl.	106.68	112.78	6.10	0.38	0.001	0.02
1971	incl.	152.4	195.07	42.67	0.34	0.020	0.04
1972	P2-72	45.72	51.82	6.10	0.12	0.044	-
1972	P2-72	67.06	70.10	3.04	0.26	0.009	-
1972	P9-72	6.10	70.10	64.00	0.32	0.010	-
1972	incl.	18.29	48.77	30.48	0.42	0.010	-
1972	incl.	39.62	48.77	9.15	0.54	0.008	-
1972	P9-72	100.58	112.78	12.20	0.45	0.011	-
1972	P11-72	45.72	54.86	9.14	0.25	0.005	-

Source: Nielsen, 2017

6.4 Production

There have been no recorded mineral productions from the Berg deposit or any of the prospects located on the Berg Property.

7 Geological setting and mineralization

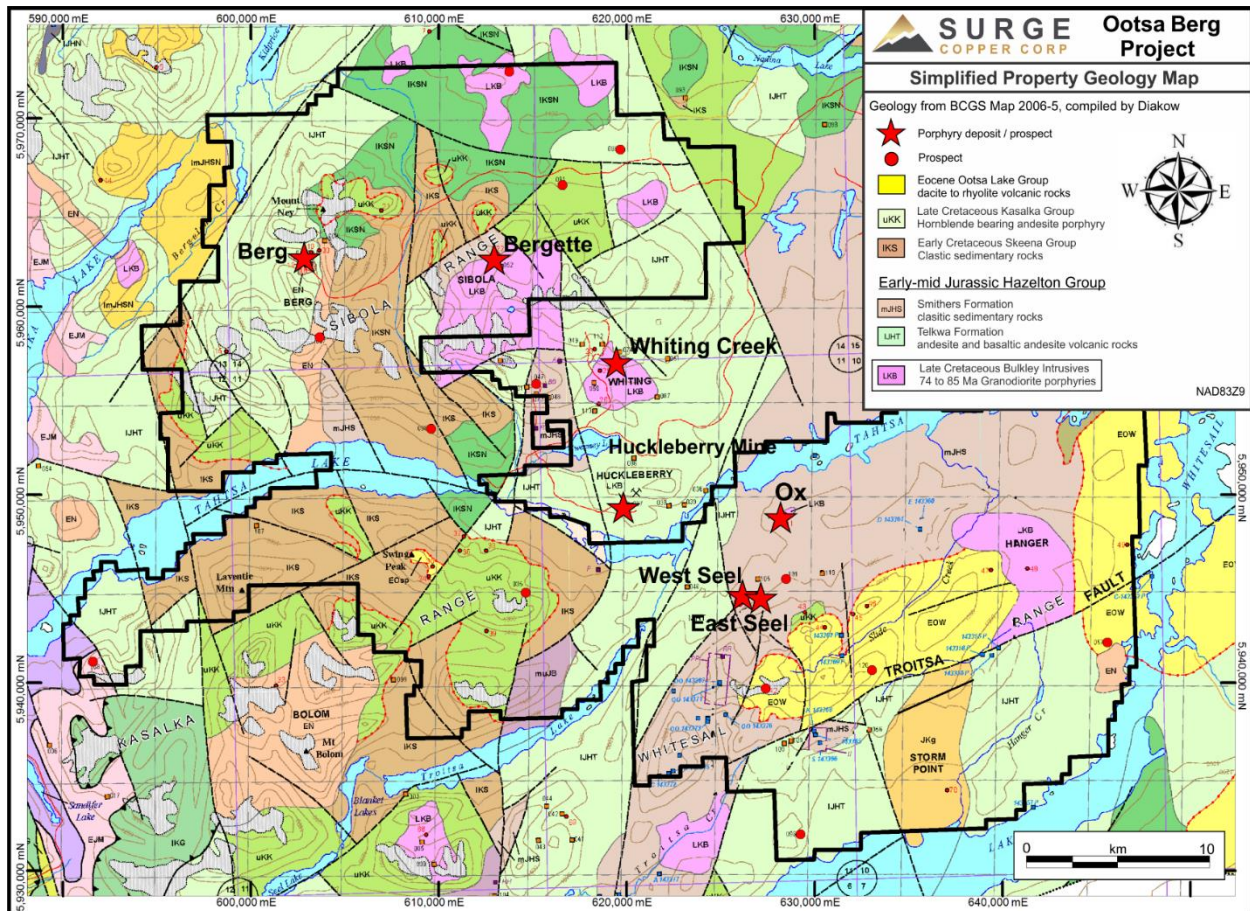
The following descriptions of regional and local geology have been extracted and modified from Harris and Stubens (2008), Harris and Labrenz (2009) and Neilsen (2017).

7.1 Regional geology

The Berg Property occurs within the western margin of the Stikine Tectono-stratigraphic terrane composed of volcanic and marine sedimentary strata of Lower Devonian to Middle Jurassic age, and supracrustal sequences of Middle Jurassic to Early Tertiary age. The main rocks exposed across the region are Early to Mid-Jurassic Hazleton Group andesitic volcanic and minor sedimentary rocks, Early Cretaceous Skeena Group, including sedimentary rocks of the Smithers Formation and volcanic rocks of the Telkwa Formation, and late Cretaceous Kasalka Group hornblende bearing andesites. Intruding into these rocks through the region are several igneous suites including the Late Triassic Stikine Suite, the Early to Middle Jurassic Topley Suite, the Middle Jurassic Three Sisters Suite, the Late Jurassic to Early Cretaceous Francois Lake Suite, the Late Cretaceous Bulkley Suite, and the Tertiary Nanika, Babine, Quanchus, and Goosly Lake Suites. In the region, the Bulkley Intrusive Suite (70 to 84 M) is associated with numerous important mineral deposits and occurrences including Huckleberry, Whiting Creek, Bergette, Coles Creek, and the Ox and Seel deposits. The Bulkley Suite has calc-alkaline chemistry suggesting the magmatism formed in a typical arc setting. The Berg deposit occurs around a Middle Eocene (52 Ma to 47 Ma) composite quartz monzonite stock associated with the Nanika Intrusive suite.

The region contains structural elements dominated by dextral shearing, compressional faulting, and crustal extension and rifting. The amalgamation of the Stikine Terrane with ancestral North America in the Middle Jurassic resulted in compressional stresses and the development of deep-seated faults. Subsequent relaxation and extension were accompanied by the emplacement of calc-alkalic intrusive rocks and associated porphyry-related mineralization. Extensional tectonics in the late Eocene resulted in the formation of north-south trending horsts and grabens which are a key control on exposed levels of mineralization in the district and add structural complexity to some mineralized zones.

Figure 7-1: Simplified district geology and main porphyry occurrences



Source: BCGS Map 2006-5, age data from Carter (1981), MacIntyre (1985), MDRU, and Surge Copper.

7.2 Project geology

The Berg deposit is hosted primarily within Hazelton Group Telkwa Formation andesitic volcanic and volcanoclastic rocks and Cretaceous to Eocene granitic bodies. The well-studied Berg deposit description is based upon research conducted on the geology, alteration, and mineralization by Panteleyev (1976, 1981), Heberlein and Godwin (1984), and Heberlein (1995).

Two main intrusive bodies are exposed in the Property area. The largest consists of a north-trending, elongate body of quartz diorite (Unit QDR) that intrudes the contact between Hazelton Group and Skeena Group east of the mineralized area. The intrusion extends from 750 m north of the Berg Stock to over 6.5 km to the south (see Figure 7-2). It ranges in width from 600 m on the property area to over 2 km at its southern extremity. Compositional and textural zonation of the quartz diorite is evident with a central core of pink quartz monzonite exposed 1.6 km south of the camp that grades outwards into quartz diorite and hornblende quartz diorite. Porphyritic phases are also present.

The other prominent intrusion in the deposit area is the Berg Stock, a multi-phase composite quartz monzonite stock that intrudes the Hazelton Group andesitic rocks. It is broadly cylindrical, 600 to 750 m in diameter with typically sharp, subvertical contacts. Locally, these contacts are complex with brecciated xenoliths of andesitic rocks with diffuse clast boundaries. Panteleyev (1976, 1981) subdivided this composite stock into four main phases:

- A core of pre-mineral, very coarsely porphyritic quartz monzonite (Unit QMP) as shown in the photo of Figure 7-2.
- A pre-mineral coarse-grained plagioclase-biotite-quartz porphyry (Unit PBQP) that wraps around the northern flank of the QMP core as shown in Figure 7-3.
- A northwest trending, pre-mineral medium-grained porphyritic quartz-plagioclase porphyry (Unit QPP) that extends to the west from the southern and western portion of the QMP core; and
- A narrow, subvertical and northeast-trending late-to post-mineral quartz-feldspar porphyry (Unit QFP) dyke or zone of dyking that cuts across each of the above phases and also cuts quartz diorite along trend and northeast of the stock.

Figure 7-2: QMP Unit



Source: TetraTech, 2021

Figure 7-3: PBQP Unit



Source: TetraTech, 2021

These units are illustrated on the map in Figure 7-4 and described below.

The QMP unit is characterized by very coarse-grained plagioclase, quartz, biotite and commonly megacrystic orthoclase. The quartz, in particular, is distinctive and commonly comprising coarse resorbed crystals with sub-rounded and wormy boundaries and with poikilitic intergrowths of plagioclase. Feldspars and biotite are euhedral and minor hornblende is typically replaced by biotite.

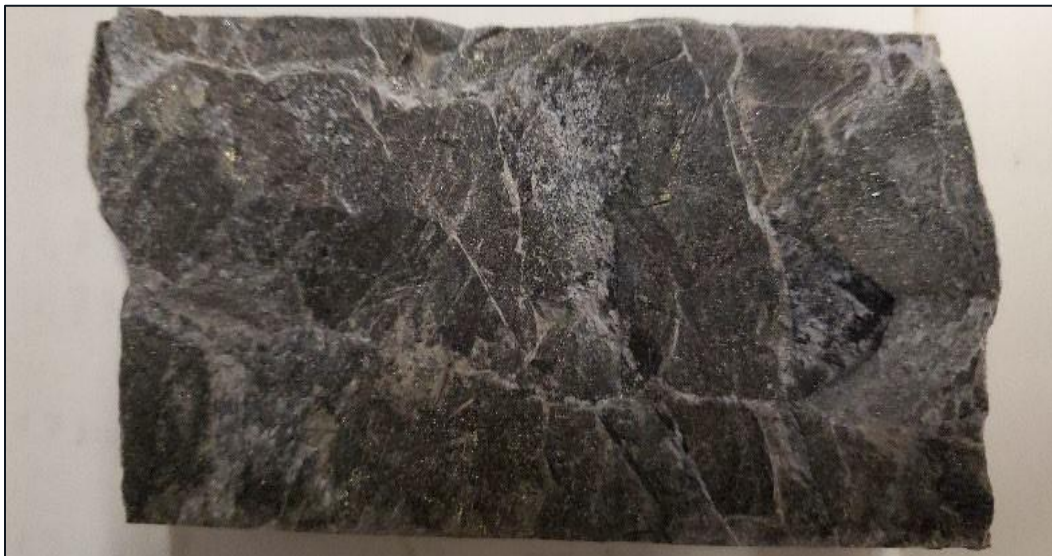
The PBQP is a slightly finer-grained quartz monzonite than the QMP with a typically darker grey to brown matrix containing plagioclase, quartz, and biotite with rare orthoclase. Biotite is twice as abundant and typically finer-grained than in the QMP, comprising 2 mm books compared with the 4 - 6 mm books in unit QMP. Internal contacts and cross-cutting relationships within the Berg Stock between the PBQP and the QMP are poorly understood due to lack of drilling, but contacts with the andesitic country rocks appear to be largely subvertical.

Unit QPP is also quartz monzonitic in composition and has the finest grain size of the Berg Stock phases. This leucocratic phase is medium-grained, comprised mainly of plagioclase and quartz with notably absent or rare orthoclase and biotite. The QPP also exhibits characteristically strong and pervasive sericite alteration and local fine secondary biotite. This unit appears to cut the QMP and to have a strong degree of structural control in its emplacement forming a west-northwest trending subvertical keel along the southern margin of the stock.

The QFP dyke forms the backbone of the northeast-trending ridge that transects the Berg deposit. This dyke is also very coarse-grained, closely resembling the QMP with coarse-grained plagioclase, biotite, resorbed and sub-rounded quartz, hornblende, and common orthoclase megacrysts. Distinctive and characteristic coarse-grained crystals of sphene are also present. Epidote commonly replaces orthoclase and chlorite. Calcite and pyrite are also present as alteration products, particularly after mafic minerals. Quartz-molybdenite veining and chalcopyrite are rare within the QFP. This unit is also the only phase of the Berg Stock that intersects the quartz diorite. This dyke narrows or bifurcates to only a few metres wide where it has been intersected by drilling at the southwest and northeast margins of the stock.

Dark green, typically fine-grained to aphanitic andesite dykes (Unit AND) as shown in Figure 7-4 cut all units. These dykes are typically very narrow and comprise plagioclase and hornblende with accessory magnetite and calcite amygdales. They are likely to be steeply-dipping or subvertical and appear to be coincident with narrow zones of faulting and clay±sericite alteration, particularly along dyke contacts.

Figure 7-4: Aphanitic andesite dykes (AND unit)

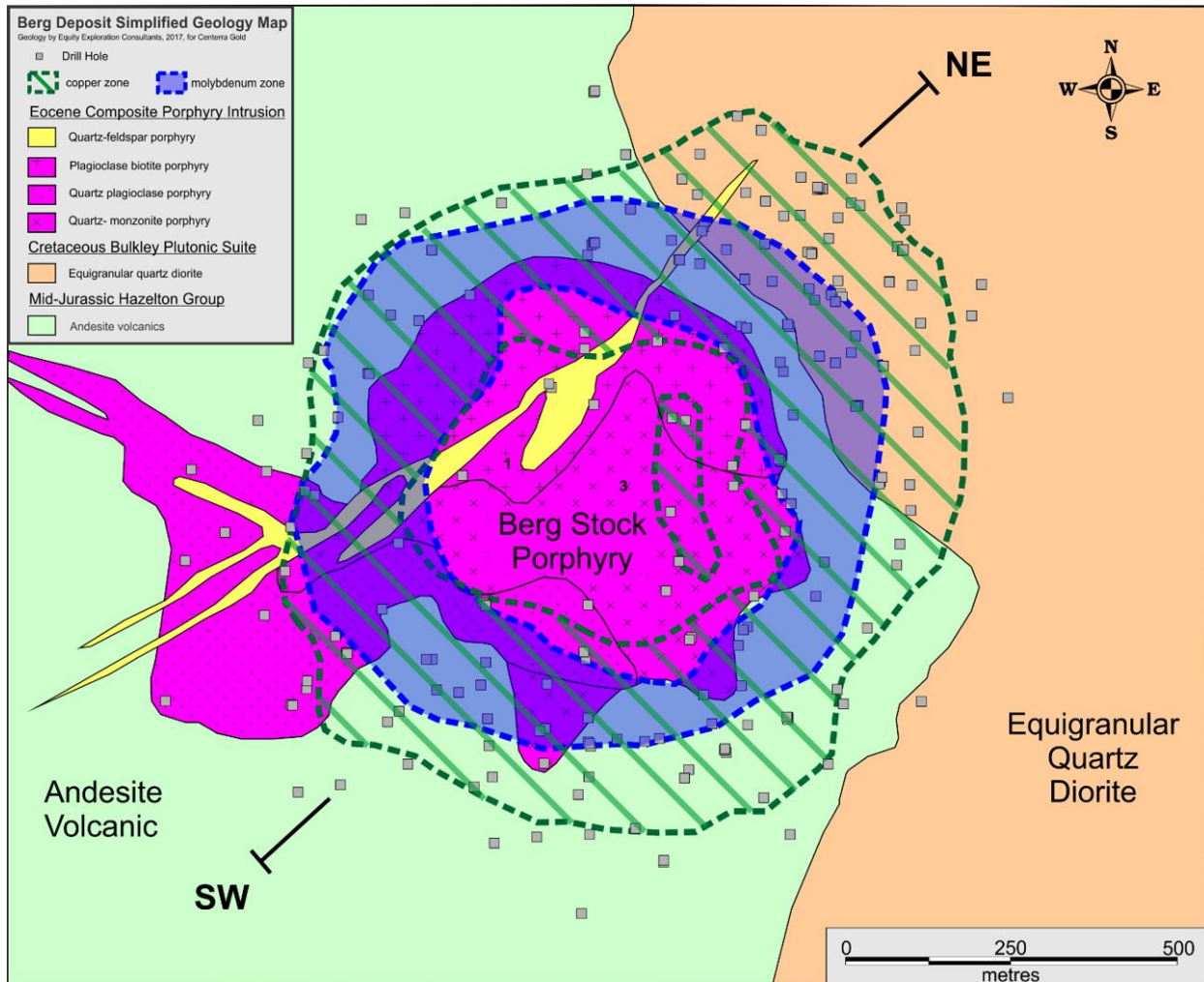


Source: TetraTech, 2021

These various intrusive phases intrude Hazelton Group volcanic and sedimentary rocks, comprising dominantly subaerial medium to coarse-grained andesitic lapilli tuffs (Units ANTF and ANLT) and lesser flows (Unit ANDF), breccias and volcanoclastic sediments (Unit GRWK) of Minor shale (Unit SHAL), siltstone (Unit SLST), chert (Unit CHRT) and limestone (Unit LMST) are also present as illustrated in the plan map of Figure 7-5 and the section Figure 7-6. Outside the area influenced by the quartz diorite and Berg Stock, the Hazelton Group rocks vary from dark grey to grey-green, purple, and red with obvious textures and bedding (Harris and Stubens, 2008).

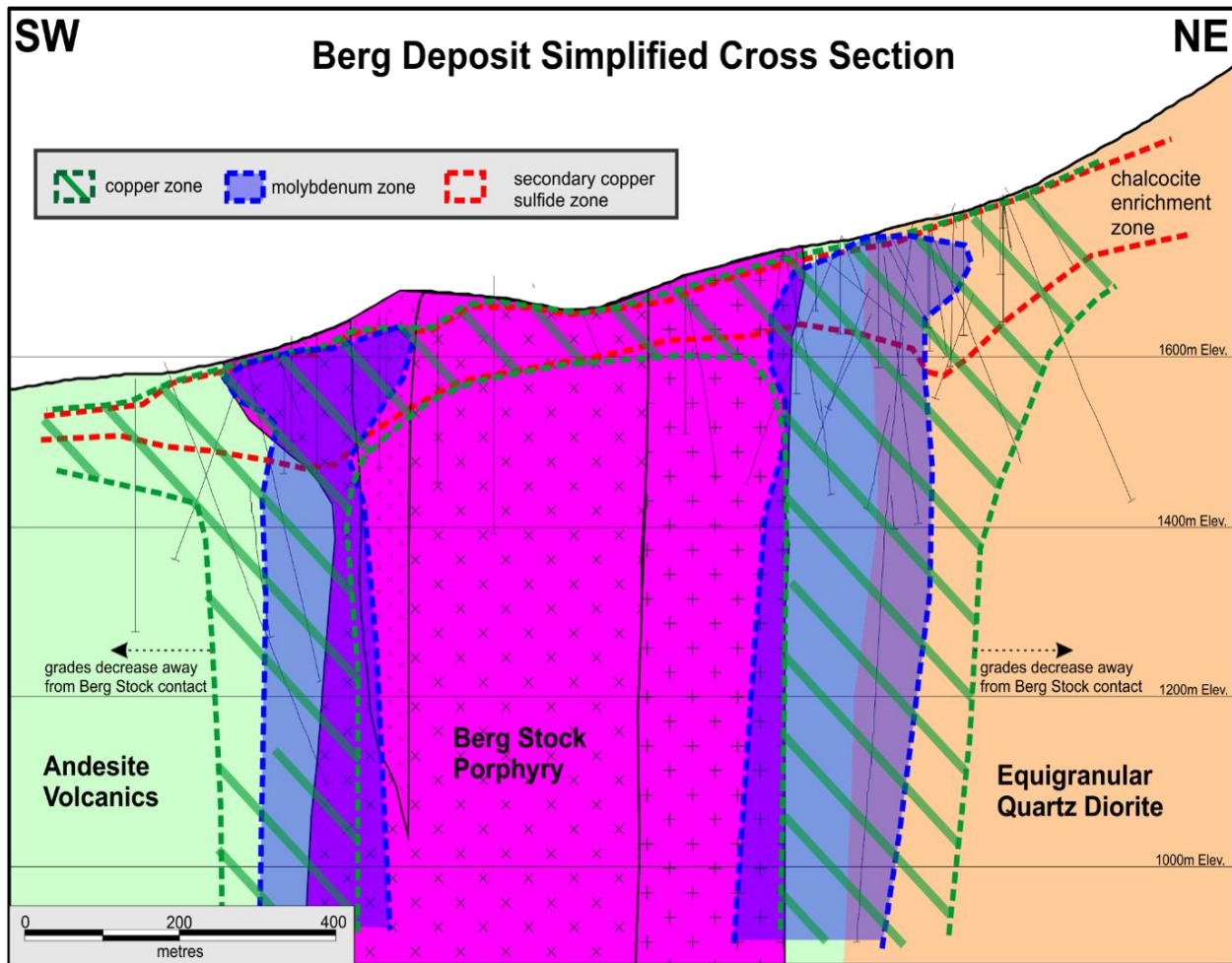
Mapping and sampling results to date suggest the Serenity-Tahtsa South area could be the top of a porphyry system that is spatially related to the north-south trending Boundary Stock (Eocene). However, this target area lacks a prominent limonite-jarosite zoned gossan as seen in the upper parts of the Berg deposit, 6 km to the north along trend. The Bergette target area lies within the Sibola Stock (Late Cretaceous) 10 km east of the Berg deposit within a parallel N-S oriented regionally anomalous aeromagnetic trend (Jago and Pond, 2018).

Figure 7-5: Berg geology map



Source: Surge Copper, 2026

Figure 7-6: Berg deposit cross-section



Source: Surge Copper, 2026

7.2.1 Structure

Structures at the deposit consist of poorly developed open folds with north to northeast axial trends causing local dips of 10° to 30°. Fractures and Miocene basalt dykes parallel this structural trend that may have acted as the principal structural control for the emplacement of intrusions in the area. This relationship is supported by the pronounced elongation of the quartz diorite intrusion (Harris and Stubens, 2008).

Presence of QFP dykes is possibly hosted within steep northeast-trending structures, which may represent early mineralization related conduits or be strictly post-mineralization. Numerous post-mineralization dykes, such as the QFP, have been logged in drill core. Geophysical surveys over the deposit do not suggest that there are any major dislocating faults, which transect the Berg deposit. However, little work has been completed to characterize local deposit scale structure.

7.2.2 Alteration

At hand-specimen scale the quartz diorite, comprising the intrusive body into the Hazelton and Skeena Group of the Berg property, is fine-grained and pale grey or dark grey-brown where hornfelsed or biotite-

altered. This unit is a fine-grained rock consisting of plagioclase, hornblende, biotite, and quartz overprinted by biotite, chlorite, and minor epidote alteration. Where the quartz diorite is mineralized, quartz veining, chalcopyrite, pyrite and molybdenite are present in association with biotite alteration. This grades outwards into biotite-chlorite±epidote alteration with pyrite overprinting primary magnetite. A well-developed thermal aureole up to 120 m wide occurs on both sides of the intrusion and into Hazelton Group andesitic rocks in the deposit area. The western contact of the quartz diorite and Hazelton Group andesitic rocks is subvertical and diffuse in nature in the deposit area due to the nature of the hornfelsing and overprinting alteration. Hornfelsed rocks are typically brownish purple due to the abundance of secondary biotite.

Within the alteration aureoles of the various intrusive phases, primary textures are largely obscured, or rocks are recrystallized and dark grey or brown in colour. Relict clasts and phenocrysts are locally recognizable within the alteration halos. This succession strikes north and dips shallowly to moderately to the east and is tops-up.

Alteration and mineralization at Berg are localized in and adjacent to the quartz monzonite Berg Stock. Hydrothermal alteration zones are spatially related to the central quartz monzonite stock and extend up to 1,000 m from the intrusive contact. Alteration types are divided into potassic, phyllic, argillic and propylitic facies whose diagnostic mineral assemblages vary with lithology. Potassic alteration is expressed as pervasive orthoclase alteration in unit QMP, orthoclase on fracture/veinlet selvages and pervasive fine-grained biotite in the matrix of the PBQP, and pervasive fine-grained biotite alteration and replacement of mafic minerals in the quartz diorite and andesite. A subzone of biotite alteration with anhydrite veining lies proximal to the inner contact of this biotite-altered one against the Berg Stock. This phase of alteration is also associated with the replacement of plagioclase phenocrysts in the Berg Stock.

A phyllically-altered zone is dominantly controlled by fractures with quartz and pyrite and is best developed in all units around the margins of the Berg Stock. Where fracture densities are greatest this fracture selvage-controlled alteration can be pervasive as in the QPP and in portions of the QMP. Similar to the biotite alteration zone, propylitic alteration is also concentrically zoned about the Berg Stock. A transitional zone of biotite-chlorite alteration lies inboard of a zone of chlorite-epidote-carbonate-albite as biotite decreases. Primary magnetite is also present, particularly within the biotite-chlorite zone, where not completely sulphidized to pyrite and chalcopyrite. Fracture-controlled retrograde chlorite-epidote-carbonate alteration is also present overprinting other alteration facies as the hydrothermal system collapsed. Chlorite, epidote, calcite, and hematite are present in the late-mineral QFP dykes and carbonate-chlorite-sphalerite-pyrite veins are likely also related to this retrograde event (Technical Report Mineral Resource Estimate, 2008).

A cap of pervasive kaolinite-clay±silica (argillic alteration) overprints potassic and phyllic alteration within the supergene zone and is likely related to acidic solutions formed from the breakdown of pyrite (Technical Report Mineral Resource Estimate, 2008).

Thus far, a porphyry target has not been identified in the Serenity Valley; however, two targets have been identified based on alteration and mineralization mapping. These targets sit at the headwall of the Bergeland Valley and at the confluence of Tahtsa Creek and an unnamed creek draining the Tahtsa Valley (Assessment Report, 2018).

7.2.3 Mineralization

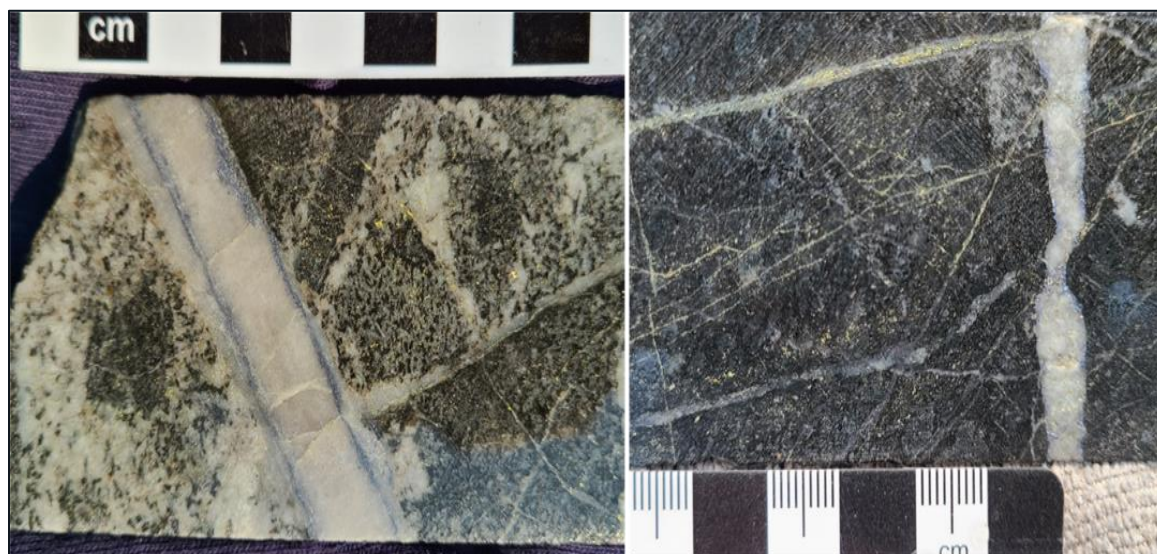
Mineralization is related to hydrothermal activity associated with the intrusive granitic bodies of the Berg Stock and consists of porphyry style mineralization with minor late polymetallic veins. Such mineralization is extensive throughout the region, and similar examples of both vein and porphyry systems have been

mined within several kilometres of the Property boundary, including at the Emerald Glacier (polymetallic veins) and Huckleberry (porphyry) mines.

Mineralization at the main Berg deposit is localized in and adjacent to a composite quartz monzonite Eocene intrusion termed the Berg Stock. Three phases of porphyry mineralization and their relative ages were identified during relogging in 2017 of 1,555 m of drill core collected from the 2011 campaign. The relogging program concluded that cross-cutting vein relationships and the distribution of alteration assemblages identified at least three porphyry intrusion events (QPP-P1, PBQP-P2, and QMP-P3) despite their similar mineralogy. QPP-P1 is strongly altered, with only relict phenocrysts and contains the highest vein density of all the porphyry bodies. PBQP-P2 is also altered, but to a lesser degree, and has lower vein density. QMP-P3 hosts the fewest veins and is the least altered of the intrusive bodies within the Berg composite stock and includes well preserved igneous biotite books. Previous logging had identified sericitic alteration within QMP-P3, with the 2017 relogging program suggesting this is instead supergene-related clay (2017 Assessment Report). The Berg Stock is the prime control on copper-molybdenum mineralization at the Berg property as the deposit forms an annulus around the stock. Mineralization occurs in a highly fractured zone superimposed on hornfelsed Hazelton Group andesitic volcanic rocks, the adjacent quartz diorite intrusion, and, to a lesser degree, the Berg Stock (Harris and Stubens, 2008). Current known mineralization extends in a cylinder about the central core with a diameter of 1,300 m and remains open at depth (Figure 7-6).

Typical copper and molybdenum mineralization (Figure 7-7) occur primarily in potassically-altered rocks related to the earlier phases of the Berg Stock (QPP-P1 and PBQP-P2), with most hypogene mineralization occurring in several generations of quartz-sulphide-anhydrite veins. The earliest veins appear to be the most copper- and molybdenum-rich. Associated alteration envelopes are either potassic or non-existent, implying equilibrium with the potassically- altered wall rocks. Later veins are typically poor in Cu ± Mo sulphides and are associated with phyllic and propylitic alteration assemblages. Calcite ± gypsum ± quartz-sphalerite-pyrite±galena veins are a common late vein type and contain up to 1,020 g/t Ag. This argentiferous mineralization is particularly prevalent within the PBQP-P2 in the West Shell and to a lesser extent with PBQP-P2 in the north Shell.

Figure 7-7: Typical copper and molybdenum mineralization



Source: Surge Copper, 2023

A well-developed supergene enrichment blanket overprints and is developed above the hypogene mineralization and is subdivided into three mineralogically distinct zones: (1) supergene sulphide (chalcocite with lesser covellite, and digenite) which the dominant supergene zone, (2) supergene oxide (malachite/azurite, cuprite, tenorite, and native copper) which forms a thin cap to the supergene sulphide zone locally and (3) and a thin leached cap which is not always preserved.

The presence or absence of these zones is determined by several factors including fracture intensity, abundance of hypogene sulphide and topography. Topography has the greatest effect on supergene profile development. Three different profiles corresponding to ridge-top, slope and valley floor environments are recognized (Neilsen, 2017). In the ridge-top environments the supergene profile is complex, consisting of a strong leached and oxidized zone underlain by a thick but poorly enriched supergene sulphide zone. In the valley floor environments, where the water table is at or close to the surface, leaching is minimal and fresh hypogene minerals occur at surface. The most complex profile is developed on steep slopes, where highly variable water table levels and a high rate of ground water migration have coupled to produce a strongly enriched supergene sulphide zone overlain by a zone of supergene oxide. The supergene sulphide zone is dominant with supergene oxide and leached zones making up a small portion of the preserved supergene profile. The supergene sulphide zone overprints hypogene mineralization with the proportion of supergene sulphides relative to hypogene sulphides decreasing with depth.

Figure 7-8: Supergene mineralization



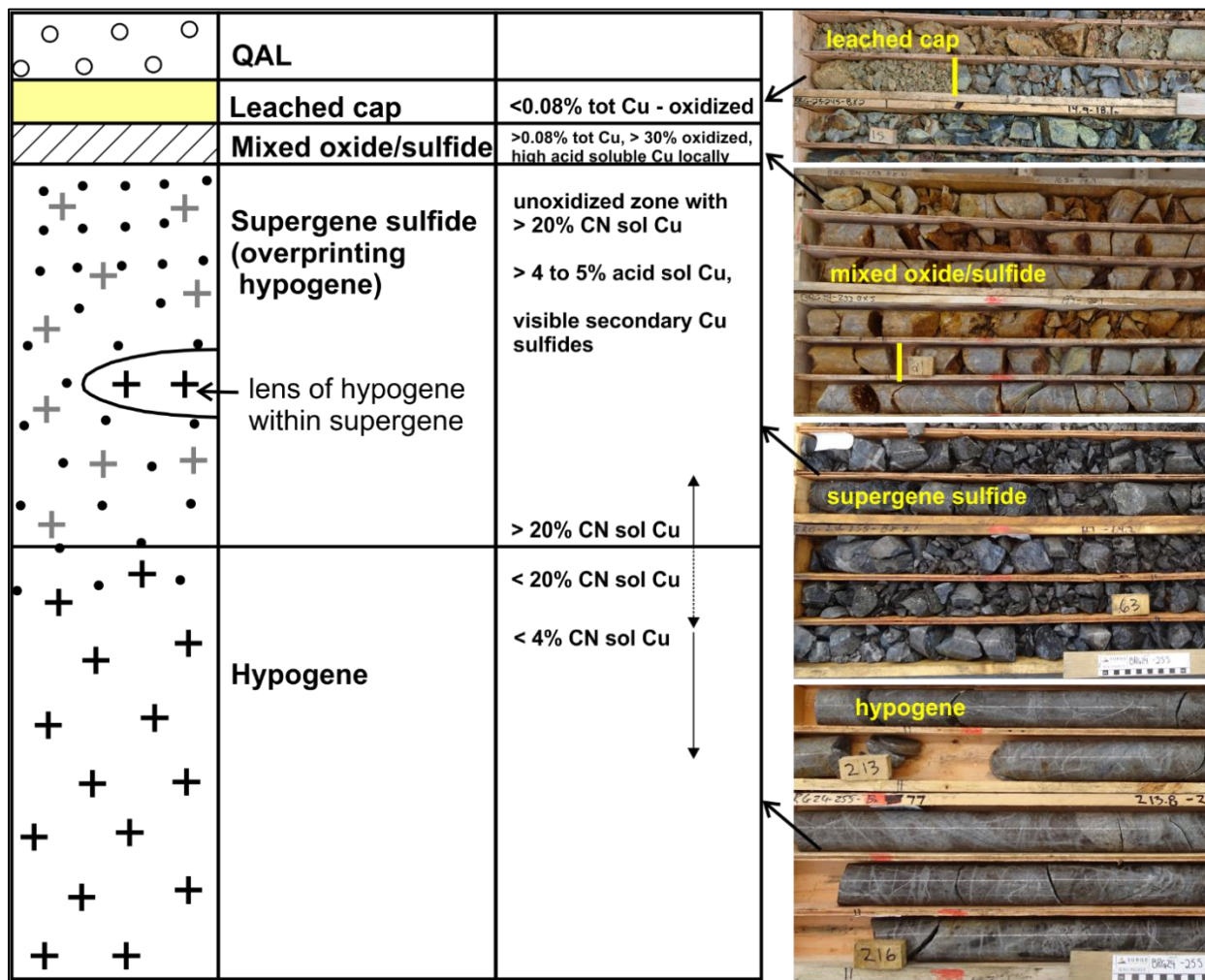
Source: Surge Copper, 2023

In 2025 Surge Copper reviewed and re-modelled the Berg supergene blanket with the intent of more accurately constraining the supergene zone into logical metallurgical domains. The remodelling has utilized available geologic data, core photographs, and results from sulphuric acid-soluble copper and cyanide soluble copper where available. The supergene zone is divided into the following three domains:

- 1) **Leached Cap.** Defined as the unmineralized leached zone that, if present, directly underlies overburden and directly overlies mineralization and has the following characteristics: Unmineralized with total Cu values below $< 0.08\%$ and a very high degree of oxidation, high clay content, and low anticipated "recoverable" sulphide.
- 2) **Mixed oxide-sulphide.** Is a thin zone, and where present typically sits immediately below the Leached Cap or immediately above supergene sulphide. It can contain both supergene oxides, supergene sulphides and some remnant hypogene sulphides. The zone is defined by:
 - a. Strong visual oxidation exceeding 30% of the rock volume.
 - b. Elevated sulphuric acid-soluble copper percent is common but not mandatory
 - c. Mineralized with total Cu values $> 0.08\%$.
 - d. Expected to have reduced sulphide recovery which is confirmed by metallurgical sample OX VAR 1 which comes from a mixed oxide-sulphide zone and was the worst performing met sample in the 2024/25 program (overall recovery of 59.9%).
- 3) **Supergene sulphide.** The supergene sulphide zone at Berg is a relatively weakly developed heterogeneous blanket of supergene chalcocite-covellite-digenite overprinting hypogene chalcopyrite-molybdenite (the entire blanket is mixed supergene-hypogene). In places supergene copper is greater than hypogene copper, however, over large areas hypogene copper is greater than or equal to supergene copper content. Drill core observations at Berg show clear vertical and lateral changes in the strength of supergene enrichment, as well as areas internal to the blanket with very sparse secondary copper sulphides.

The hypogene sulphide zone underlies the supergene sulphide zone and extends laterally and vertically below it to the depths drill tested. All material below and lateral to the supergene sulphide zone is considered hypogene regardless of grade. Subhorizontal zones that occur internal to the supergene sulphide zone that contain $<20\%$ cyanide soluble copper, or <4 to 5% sulphuric acid-soluble copper are modeled as hypogene.

Figure 7-9: Simplified Berg supergene model and modelling criteria with examples from core photographs.



Source: Surge Copper, 2026

8 Deposit types

8.1 Deposit model

The following has been extracted from Nielsen, 2017.

"The Berg deposit is a classic calc-alkaline copper-molybdenum porphyry deposit of Eocene age. These deposits are typically associated with commonly zoned and/or multi-phase granodiorite to quartz monzonite intrusions and volcanic or sedimentary country rocks. These deposits are marked by complex alteration zones that are usually centred about the intrusive complex. The alteration systems are typically comprised of a potassic core enveloped by an overlapping peripheral zone of propylitic alteration. These alteration assemblages can be overprinted by zones of phyllic and/or argillic alteration that are either zonal in distribution (between the potassic and propylitic zones) or structurally-controlled.

Copper and molybdenum mineralization are more abundant in the potassic core while pyrite is more prevalent in the propylitic and phyllic zones. The abundance of pyrite in these systems can result in the formation of strongly acidic groundwaters that, under appropriate climactic conditions, generate argillically-altered oxidized zones and supergene Cu mineralization. Mineralization consists of: chalcopyrite, chalcocite, covellite, digenite, bornite, molybdenite and locally Cu oxide minerals. The sulphides are hosted in quartz veinlet stockworks, veins, breccias, disseminations and replacements. The oxides are found close to surface in the Oxidized and Supergene Zones."

8.2 Basis for exploration program

The exploration and advancement of the Berg Copper deposit is founded on a large body of historic and current exploration data, geological modeling, and geophysical surveying. A very large and compelling mineralized body has been defined with strong potential to discover additional mineralized centers within the property.

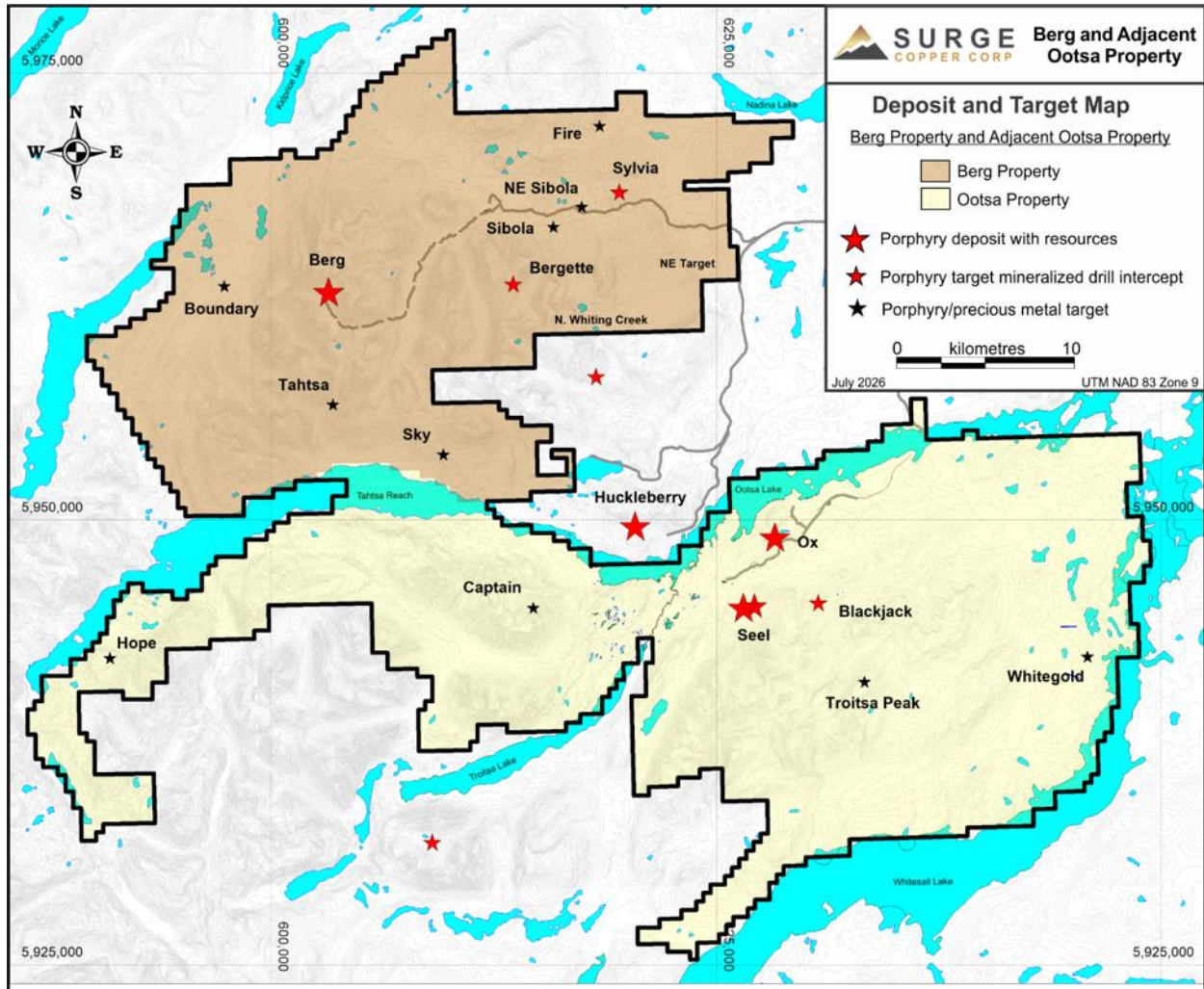
Surface geochemistry and various geophysical techniques (induced polarization, airborne magnetics and resistivity) help outline the Berg deposit and show promise for discovering new zones of porphyry style mineralization that can build the resource base in the district. The highly favorable economic potential displayed by the Berg deposit justifies a substantial exploration effort across the district.

9 Exploration

Surge Copper started exploring the Berg property in 2021 and between 2021 and 2025 Surge Copper has drilled 56 holes for 18,006 m of drilling on the Berg property. Since becoming operator of the Berg property Surge Copper has rehabilitated the historic Berg access trail, upgraded the Berg camp and built the Sibola camp, conducted substantial drilling, completed 20 IP lines over multiple targets, conducted widespread soil and rock sampling, and completed a property wide airborne ZTEM-Magnetic survey. Surge Copper has a soil database for the Berg property containing 10,108 soil samples, composed of 4082 samples that have been compiled from historic sources dating to 1971, and 6026 samples have been collected by Surge. Soils are dominantly collected from the B horizon, or talus fines where the B horizon is not developed. Most samples have been analyzed either by inductively coupled plasma after an aqua regia digestion or by portable X-ray fluorescence. Surge Copper has compiled a rock database containing 458 samples, of these 129 samples have been compiled from historic reports dating to 1988 and 329 samples have been collected by Surge.

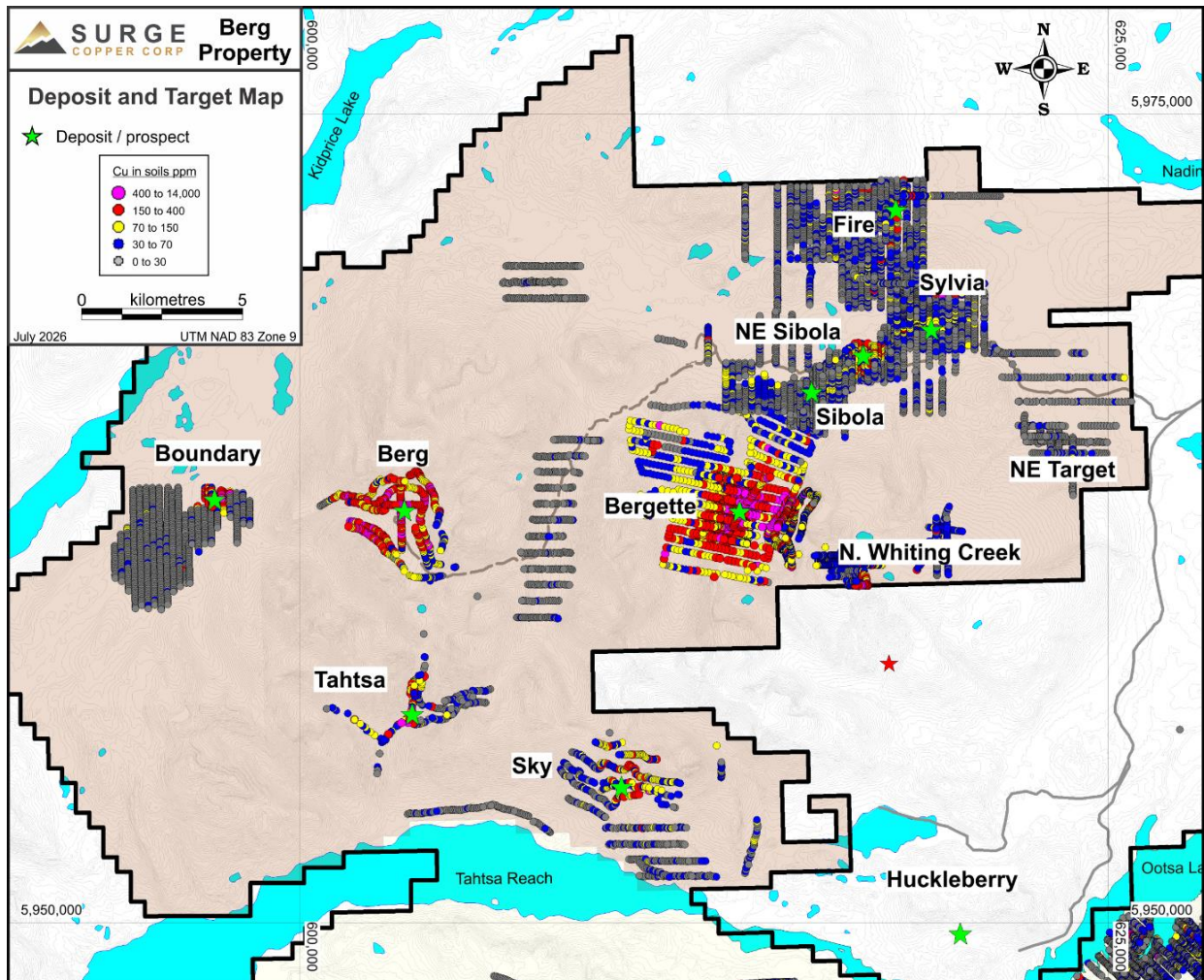
The locations of the main deposits and prospects on the Berg property are shown on Figure 9-1 and Figure 9-2 shows them with copper in soil results illustrated. The main exploration targets outside of the Berg deposit are Bergette and Sylvia which have both returned mineralized drill intercepts, and Sibola, NE Sibola, Tahtsa, Sky, and Boundary, which have large surface geochemical or geophysical expressions and require additional exploration work to evaluate. The Berg and Bergette systems show large-scale copper in soil anomalies spanning kilometres in scale. Both of these systems occur at elevation and do not have extensive glacial cover. The Tahtsa and Sky targets also occur at higher elevation with limited glacial cover, and although soil coverage is incomplete, both show potential to contain large-scale copper in soil anomalies. The NE Sibola and Boundary targets show potential for modest size copper in soil anomalies at 1 km in scale. Both of these targets occur at lower elevation within valleys and are overlain by glacial and other surficial deposits. The surface geochemical expressions of potential mineralized zones within these covered areas will be more subtle with significantly lower values than those over residual bedrock.

Figure 9-1: Berg and adjacent Ootsa properties



Source: Surge Copper, 2026

Figure 9-2: Berg Property Deposit and Target Map showing copper in soils



Source: Surge Copper, 2026

9.1 Exploration targets

Surge Copper has conducted exploration work on the Berg property from 2021 to 2026. The results of those programs, by year, is summarized below, highlighting the main exploration targets on the property whose locations are shown on Figure 9-1 and Figure 9-2.

9.1.1 2021 Exploration

In 2021 Surge Copper rehabilitated the historic Berg access road to allow 4-wheel drive and heavy equipment access, re-established the Berg exploration camp and completed 2,855 metres of core drilling in 10 holes. Drilling commenced in early September 2021 and ended in early October. A property wide helicopter-borne ZTEM and aeromagnetic survey was conducted over the combined Ootsa and Berg Properties by Geotech Ltd.

9.1.1.1 Airborne ZTEM-Mag survey

In June 2021 Geotech Ltd. carried out a helicopter-borne ZTEM and aeromagnetic survey over the Berg property and the adjacent Ootsa property (Figure 9-3) and the entire survey is shown for completeness. A total of 4,224 line km of geophysical data were acquired over a total contiguous area of 1,154 km². Lines were survey flown in a south to north direction with traverse line spacings of 300 m. Tie lines were flown perpendicular to traverse lines at 3,000 m spacings. Details of the survey logistics can be found in Geotech (2021).

The ZTEM system is proprietary to Geotech Ltd. and is a modern geophysical technique that can quickly and cost-effectively image the subsurface three-dimensional distribution of certain physical quantities down to depths exceeding 2 km. Combined with other information, this data can be used to map geological structures, lithology, and alteration zones critical in exploring porphyry copper deposit systems.

The following description is summarized from Ebert (2022). Mineralized zones at all known deposits in the district are associated with relative conductors. Berg displays a subtle resistive centre likely reflecting the weakly altered Berg central intrusion, with a large and prominent conductive zone that correlates very well with known mineralization. The ZTEM expression over Berg forms a very pronounced circular donut feature. The Seel Deposit also shows a strong correlation with a subcirculate ZTEM conductor. Both the Berg and Seel deposits occur along linear conductor zones up to 10km long, and both occur at the termination of the linear trend or at the intersection of linear trends with different orientations. The Berg deposit is located with a large magnetic low sitting at the center of circular magnetic high, likely reflecting the intrusive geometry and a hornfelsed ring surrounding the intrusion. The gold enriched porphyry mineralization at Seel is associated with magnetic highs. Therefore, ZTEM conductors with an overlapping magnetic high could have Cu-Au porphyry potential.

Figure 9-4 and Figure 9-5 show vertical pseudo-sections through the inverted 3D resistivity data, showing the deposit scale signatures for the Berg and Seel deposits. These ZTEM resistivity responses are similar for all the known deposits and major prospects in the district and collectively characterize porphyry style mineralization as broad resistivity lows directly associated with mineralization surrounded by a larger resistivity high.

Figure 9-3: ZTEM 90 Hz total divergence (DT) map over the Berg and adjacent Ootsa Property

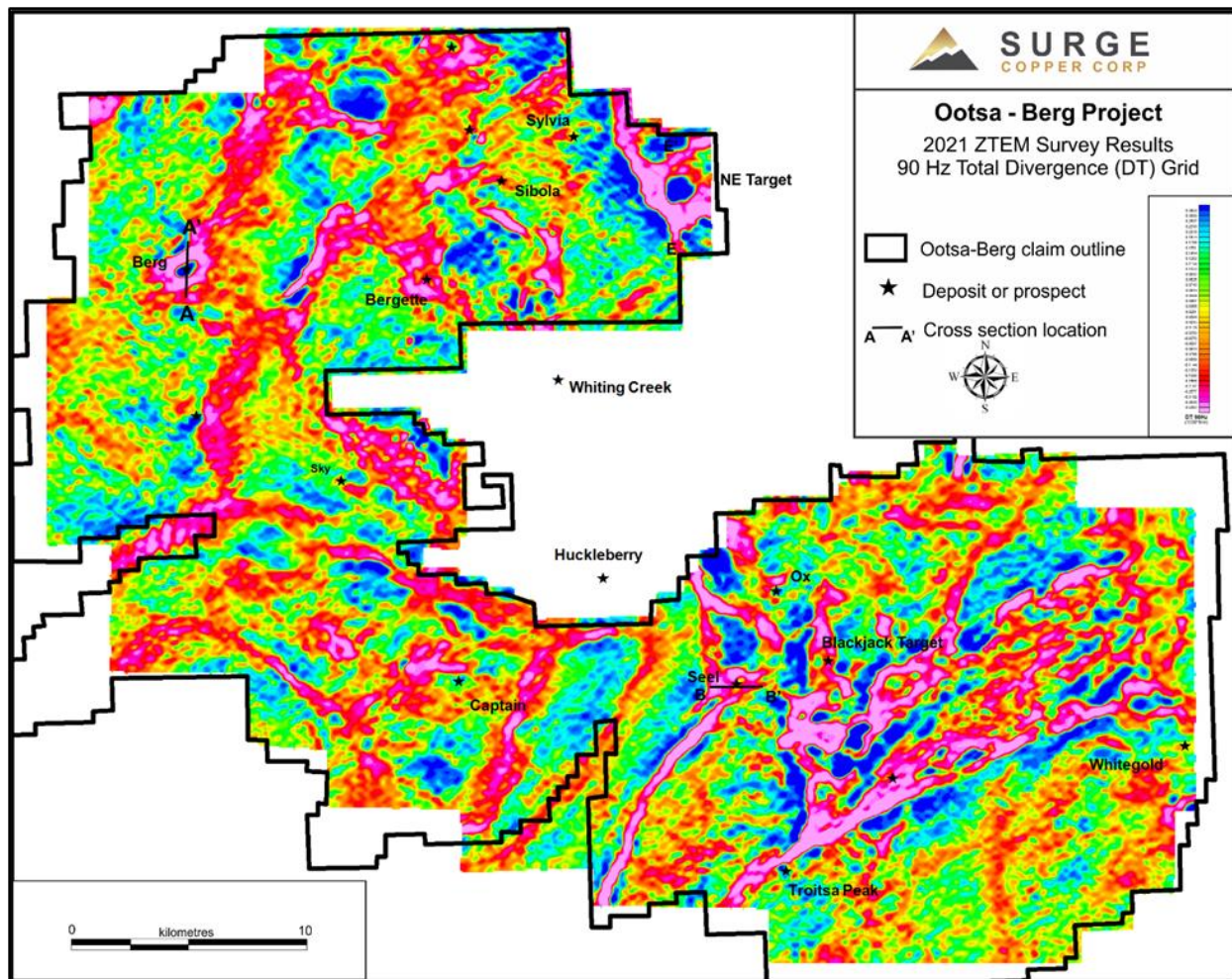
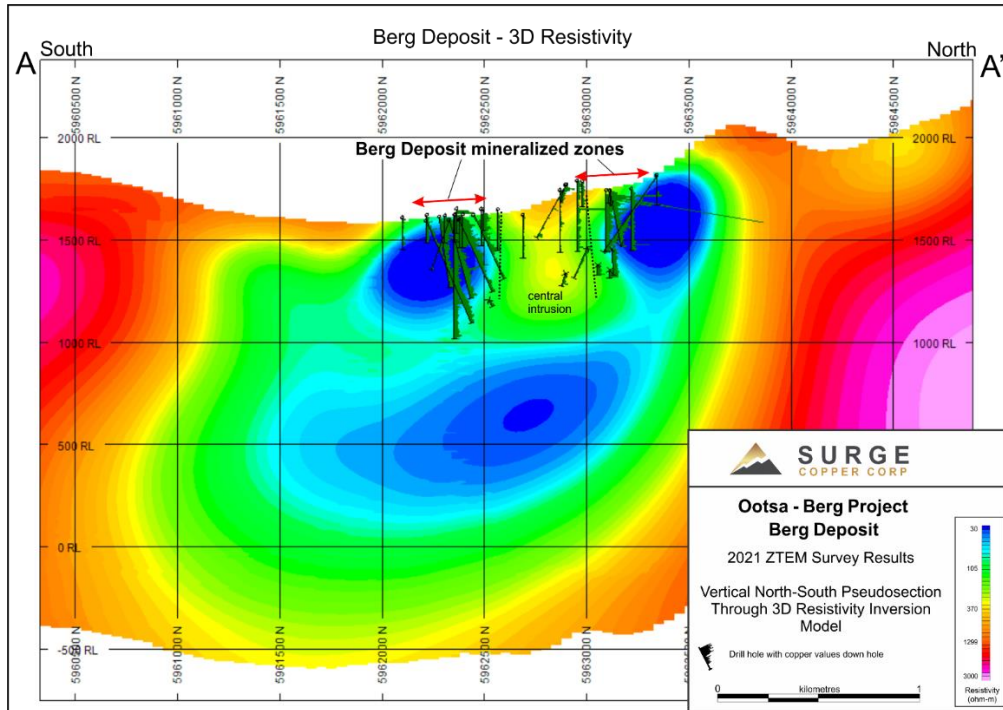
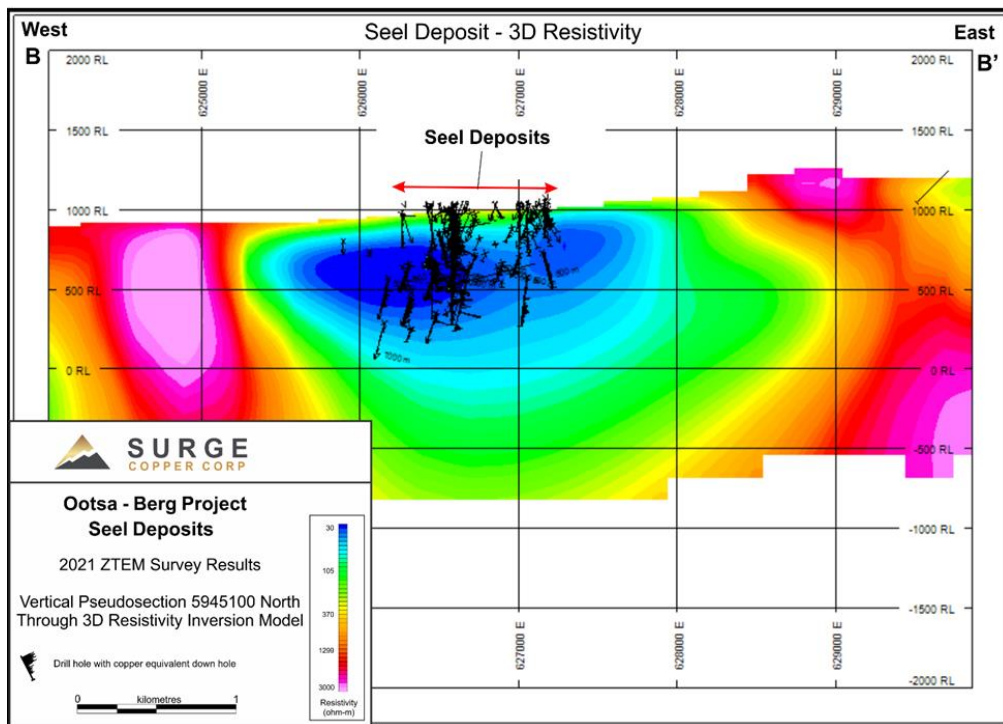


Figure 9-4: ZTEM resistivity voxel slice through Berg, view looking north



Source: Surge Copper, 2021

Figure 9-5: ZTEM Resistivity Voxel slice through the Seel deposit



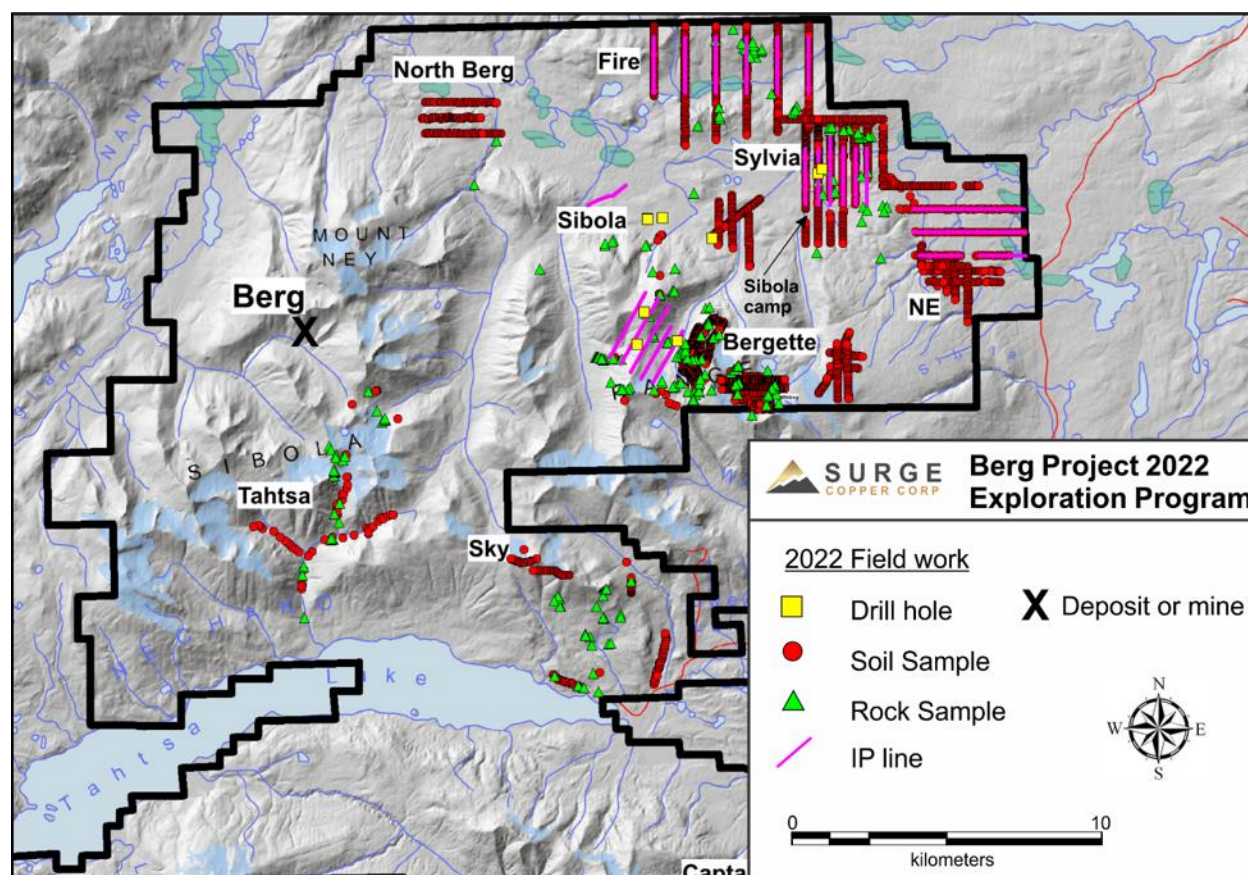
Source: Surge Copper, 2021

9.1.2 2022 Exploration

From August to mid-September 2022 Surge Copper conducted exploration programs on the Berg property which included 4,782 m of NQ diamond drilling in 10 holes, the collection of 333 rock (both chip and grab samples) and 2,265 soil samples, and 47.5 line km (20 lines) of DC resistivity-induced polarization geophysical surveys as illustrated in Figure 9-6 and Figure 9-7. Surge also sent a total of 7,067 historic drill core and stored pulps from the Berg deposit to the lab for gold fire assay. These samples had not been previously tested for gold.

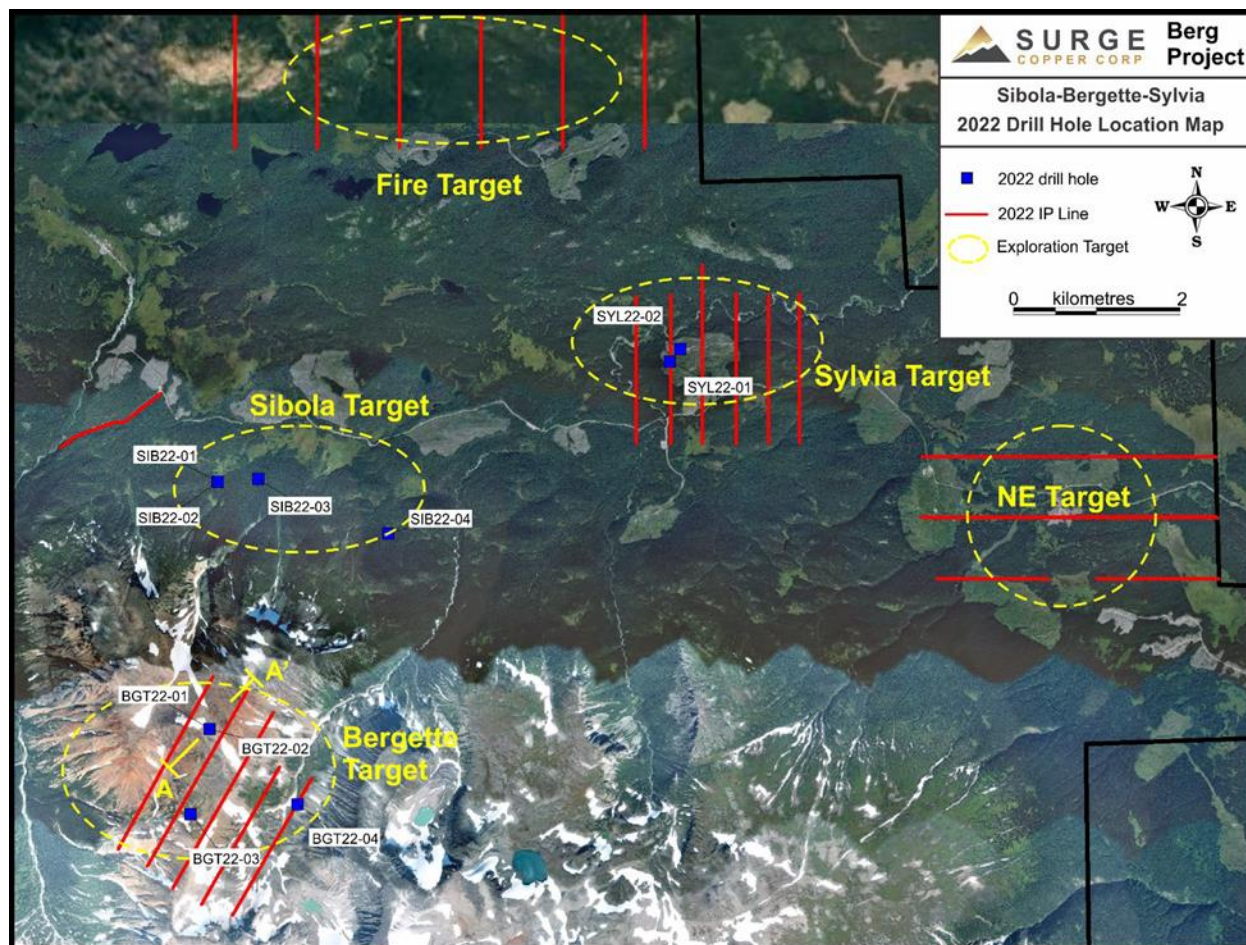
During 2022, the 20-man Sibola exploration camp was established at low elevation, and all Berg property exploration was staged out of this camp. During 2022, ten core holes were drilled on the Berg property including four holes at high elevation at Bergette that were helicopter-supported and 6 holes at low elevation at Sibola and Sylvia that were drilled with a skid-mounted rig. Twenty induced polarization (IP) geophysical lines were completed on the Bergette, Sylvia, Fire, NE, and Sibola targets.

Figure 9-6: 2022 Surge Copper exploration map showing IP survey lines and drill collars



Source: Surge Copper, 2021

Figure 9-7: 2022 Drill Holes and IP lines at the Sibola-Bergette-Sylvia-Fire Targets



Source: Surge Copper, 2022

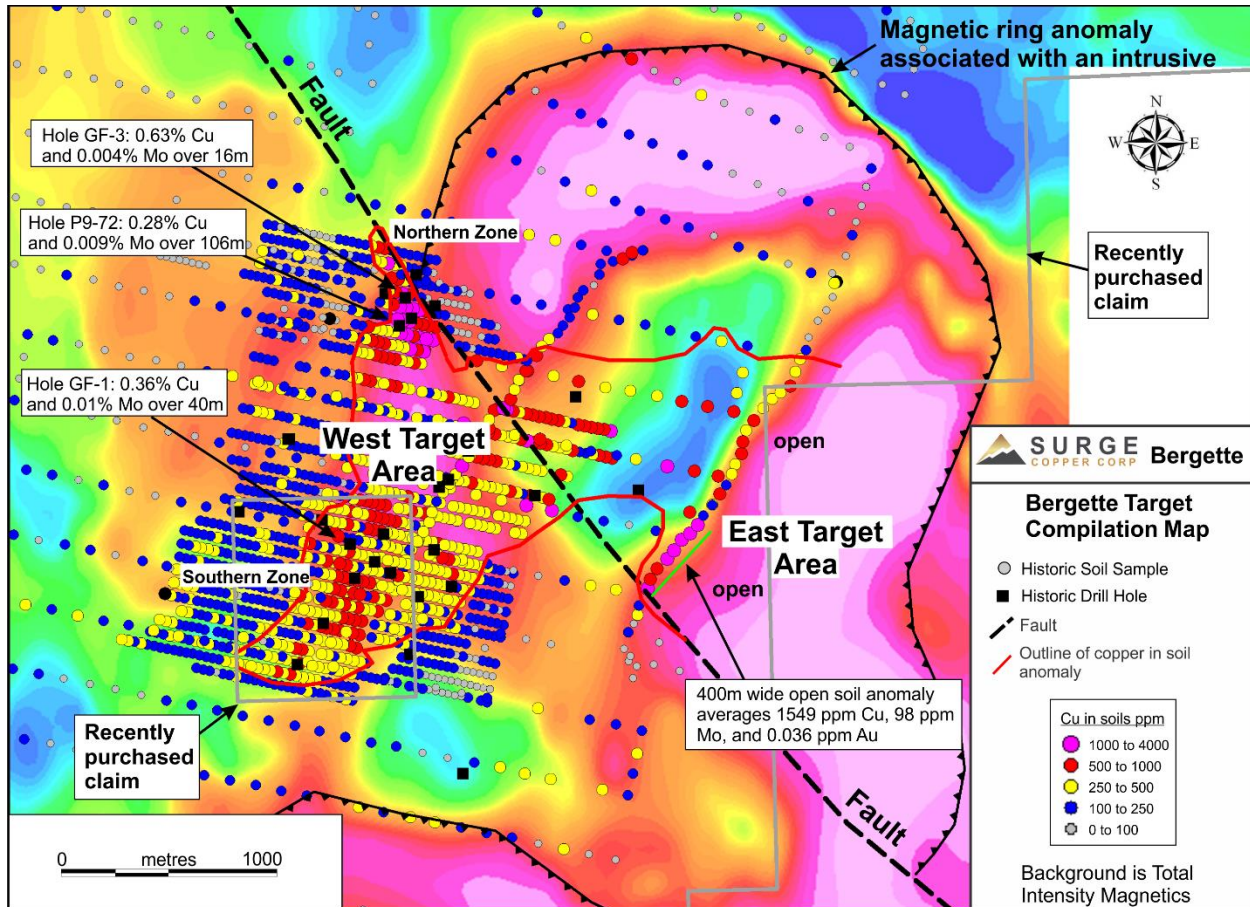
9.1.2.1 Bergette target

In 2021 Surge Copper consolidated the claim holdings over the Bergette Prospect and in 2022 Surge undertook a program of surface sampling mapping, IP surveying and diamond drilling at Bergette. The Bergette target is hosted within a kilometre scale copper-in-soil anomaly that overlies a distinct ZTEM geophysical anomaly. The target has been drilled previously, most notably in 1972, with encouraging results. The 2022 helicopter-supported drilling indicates mineralization at Bergette is coincident with a moderate induced polarization chargeability response and moderate to high magnetic values and is hosted in stockwork quartz veining containing magnetite-chalcopyrite-molybdenite-pyrite.

Recent compilation work shown in Figure 9-8 shows a prominent magnetic ring structure at Bergette that has been truncated by a northwest trending fault. This fault also offsets and divides the Bergette copper in soil anomaly into a West Target area and an East Target area. The West Target area is well constrained by historic soil sampling whereas the East Target area remains open for expansion and has seen no historic drilling. The East Target area contains a 1.25 km long copper (Cu) in soil anomaly that is open to the east and includes a 400 m wide section with soil values averaging 1,549 ppm Cu, 98 ppm Mo, and 0.036 ppm Au. This zone of very high Cu in soils correlates well with a magnetic high interpreted to represent the eastern contact of the Sibola Stock (inner part of the magnetic donut shaped feature). The presence of high

copper in soils corresponding with the projected contact of the intrusion, makes for an excellent target for “contact style” mineralization within wallrocks adjacent to the main stock, such as that seen at the Berg, Huckleberry, and Ox deposits.

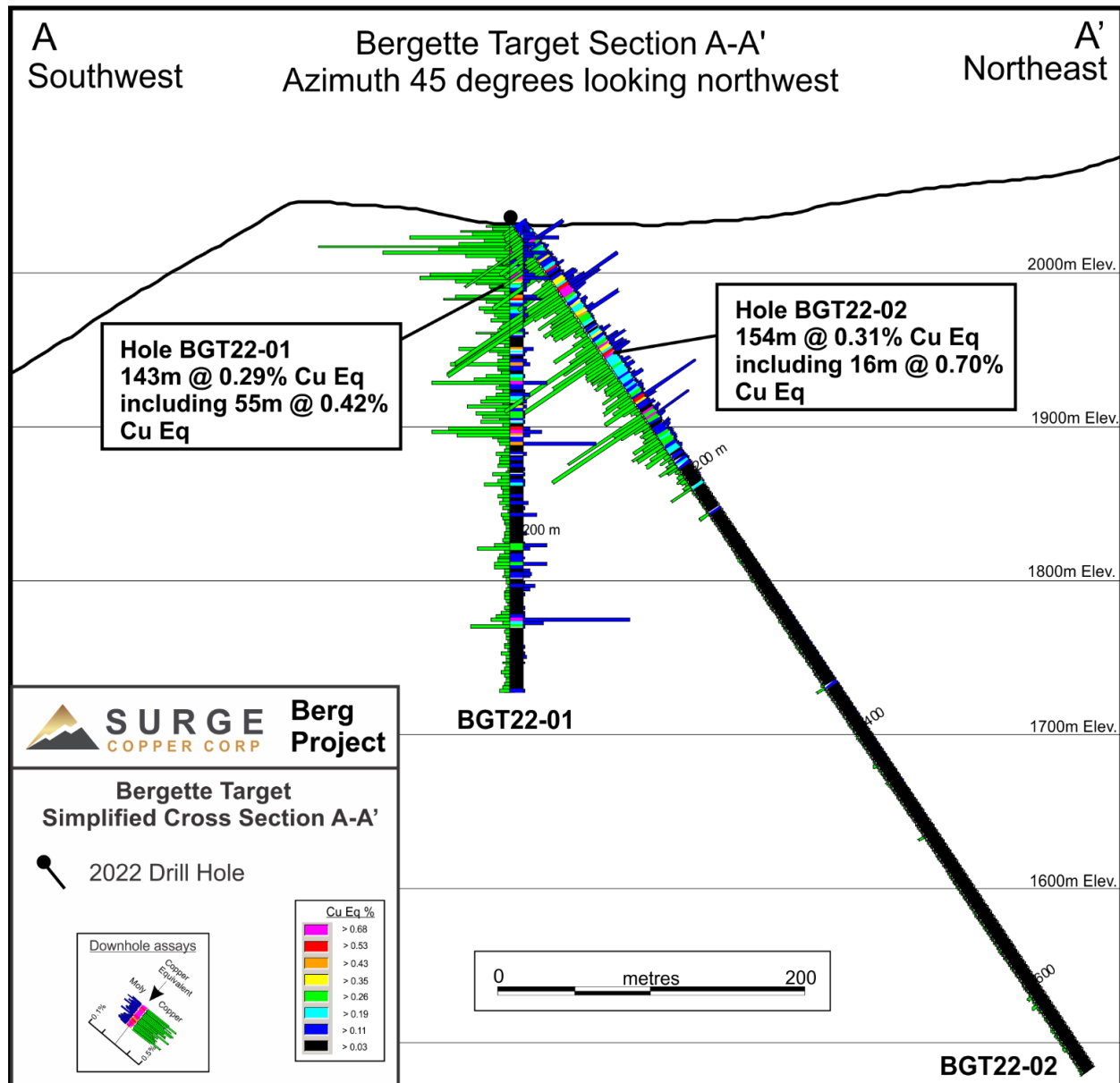
Figure 9-8: Compilation map of the Bergette target showing copper in soil values and historic drill hole collars overlain on airborne total intensity magnetics



Source: Surge, 2023

As shown in Figure 9-9, BGT22-01 was drilled vertically and returned 143 m grading 0.23% Cu, 0.01% Mo and 0.03 g/t Au from 3 m depth. The host rock is a biotite dominant intrusive with multiple brecciated fault-affected horizons. BGT22-02 (same drill pad as BGT22-01) demonstrated the longest mineralized intercept from the Bergette target to date. The hole intersected 176 m grading 0.22% Cu, 0.012% Mo and 0.03 g/t Au from 8m depth in a faulted biotite intrusive as in BGT22-01. BGT22-03 & 04 did not encounter significant mineralization. Both holes targeted chargeability and associated magnetic highs and both encountered magnetite bearing intrusions with or without minor pyrite.

Figure 9-9: Cross-section through Bergette showing drill holes BGT22-01 and BGT22-02



Source: Surge Copper, 2022

Mineralization at Bergette occurs as distinct veins containing quartz-magnetite-chalcopyrite-molybdenite-pyrite (locally K-feldspar), and as silica flooded veins/zones containing chalcopyrite > pyrite and molybdenite. Chalcopyrite and pyrite partially replace biotite for several centimetres surrounding veins as illustrated in Figure 9-10. Some areas include chalcopyrite along hairline fractures. The majority of the mineralized veins and zones are interpreted to have a subvertical orientation, consistent with mapped veins exposed in the cliffs to the east. The mineralized zones typical contain discrete veins and veinlets which are separated by considerable intervals of unmineralized rock.

Different intrusive phases are apparent from drilling with a significant portion of the mineralization hosted in a relatively fine-grained intrusive phase characterized by abundant feldspar with elongate feldspar laths

2 to 7 mm in length, 5% biotite, and up to 5% quartz. This unit is distinct from a feldspar metacystic unit characterized by 1 to 2 cm feldspar megacrysts in a phaneritic feldspar-biotite matrix with minor quartz eyes. It is not yet clear if the finer-grained intrusive phase is a preferred host for mineralization.

Figure 9-10: Photographs from Bergette hole BRG22-01



Source: Surge Copper, 2022

Mineralized veins contain bleached silicified halos with disseminated chalcopyrite and patchy sericite. Bergette mineralization contains some characteristics consistent with an early halo style porphyry system.

9.1.2.2 Sibola target

The Sibola target features a large zone of coincident ZTEM, IP chargeability and magnetic anomalies within a low-lying till-covered valley. Four holes drilled into the target in 2022 over a 2 km strike length confirmed strong hydrothermal alteration including variable amounts of pyrite, sericite, propylitic alteration and silicification. SIB22-01 intersected a 3 m interval of high-grade silver (312 g/t Ag) and 0.12% Cu from 66 m depth. The hole also intersected a 53 m wide interval grading 0.10 g/t Au and 2.0 g/t Ag from 224 m depth.

This broad interval of anomalous gold is associated with thin silica-pyrite and calcite veinlets and variable silica and sericite alteration in a fine-grained volcanic rock. SIB22-02, drilled from the same pad as SIB22-01, intersected a 2 m zone with 66.1 g/t Ag at 492 m depth. SIB22-03 was weakly mineralized overall apart from a discrete 2 m horizon that graded 3.68 g/t Au and 12.1 g/t Ag at 410 m depth in millimetre scale quartz-carbonate-magnetite pyrite veins. The host rock is a weakly porphyritic to equigranular felsic intrusive (diorite?) that has undergone moderate to strong silica-chlorite-sericite-epidote-potassic alteration. SIB22-04 intersected mixed volcanics and weakly porphyritic dioritic intrusives with variable chlorite-sericite-silica-epidote (propylitic) alteration. Magnetite is common to abundant in this drill hole. Overall, the hole was weakly mineralized with only discrete horizons of Ag-Zn-Pb±Cu in localized quartz-carbonate veins. Propylitic alteration is common to dominant in the Sibola holes with pyrite abundance ranging from present to abundant throughout.

9.1.2.3 Sylvia target

The Sylvia target occurs along a mostly covered east – west trending valley with a creek through the centre and hills to the immediate north and south. Logging cut blocks cover a portion of the south side of the target. Exploration access to the south side is very good whereas access to the north side is limited.

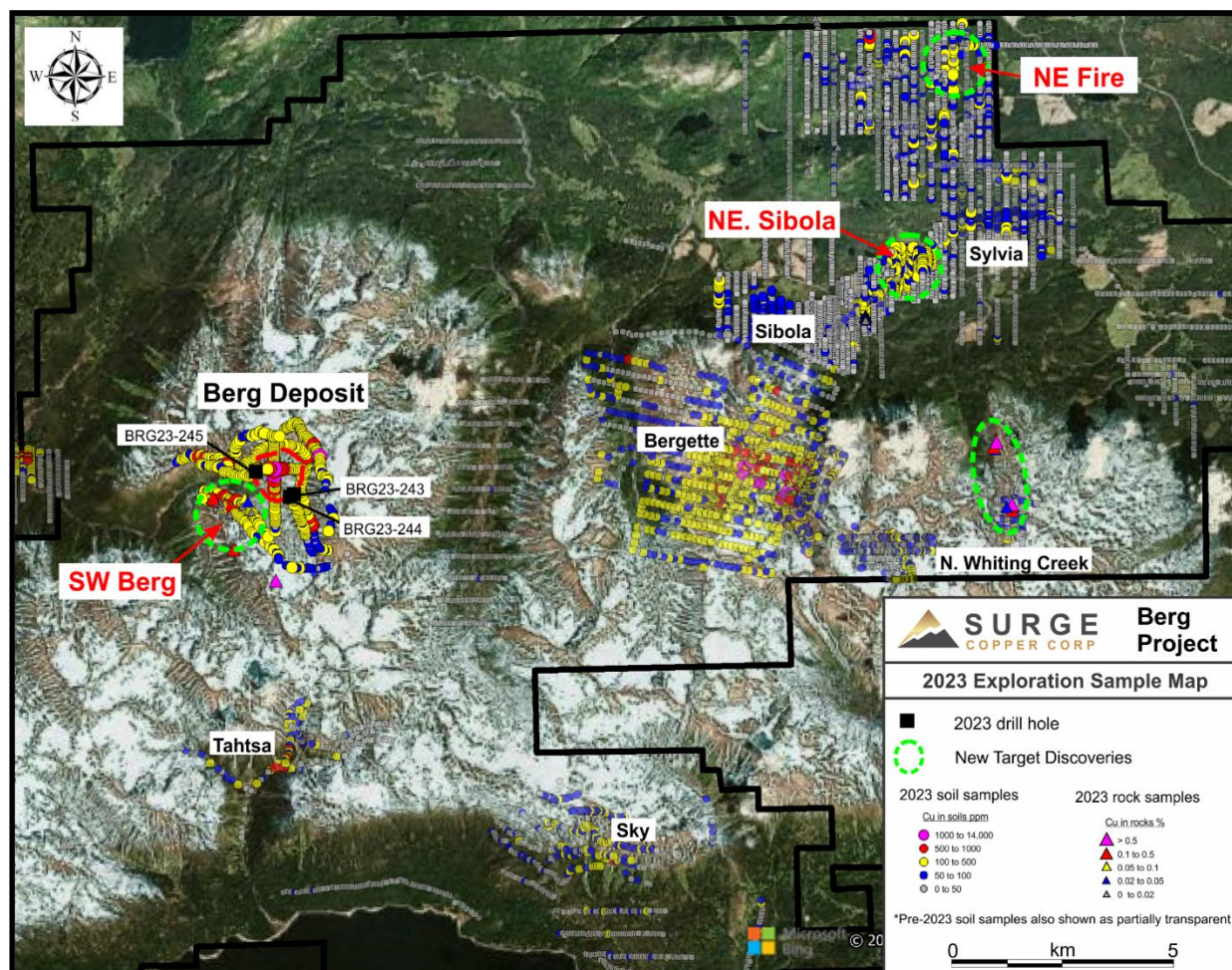
Multiple soil lines, prospecting, mapping, five north-south oriented IP lines, and two incomplete drill holes were completed over the Sylvia prospect in 2022. Historic drill data compilation shows copper and molybdenum mineralization associated with the southern contact of the Sylvia intrusive. This southern contact area also contains a significant pyrite halo that extends a few hundred meters into the volcanic wall rocks surrounding the Sylvia intrusive, weakening in pyrite content away from the intrusive. The north side of the Sylvia intrusive is not exposed and has not been drill tested previously. Mapping of the cliffs north of the Inferred northern intrusive contact has identified malachite and chalcopryite, highlighting the potential of the northern intrusive contact to host mineralization. Four of the 5 IP lines do not fully cover the northern contact. Line 619,500 mE was extended to fully cover and northern contact and shows a moderate IP anomaly at depth. The 2022 IP survey has defined a chargeability zone 2 by 1.2 km centred over and around the Inferred Sylvia intrusion.

The first hole at Sylvia in 2022 (SYL22-01) was abandoned due to difficult ground conditions and the rock produced was not sent out for analytical testing. SYL22-02 intersected intrusive dykes but did not intersect the main Sylvia intrusion. It did produce widespread alteration including quartz veinlets and disseminated pyrite with local chalcopryite and molybdenite and intersected 8 metres of anomalous mineralization grading 0.12% Cu from 186 to 194 m depth. The main IP and geologic targets at Sylvia remain incompletely tested by drilling.

9.1.3 2023 Exploration

In June and July 2023 Surge Copper conducted an exploration program on the Berg Property based out of the road accessible Sibola camp early in the season, transitioning to the higher elevation Berg camp later in the season. Surface exploration included sampling, prospecting, and mapping across select zones at the Sibola target and around Berg. During 2023 the Company collected 3,149 soil samples and 87 rock samples as illustrated in Figure 9-11. New copper in soil anomalies and new zones of alteration and veining were identified at the NE Sibola target and the SW Berg target. In mid-July the Berg camp was opened and 2,077 m of drilling was completed on the Berg deposit.

Figure 9-11: Berg Copper Project 2023 surface sample and drill hole location map showing new target discoveries



Source: Surge Copper, 2023

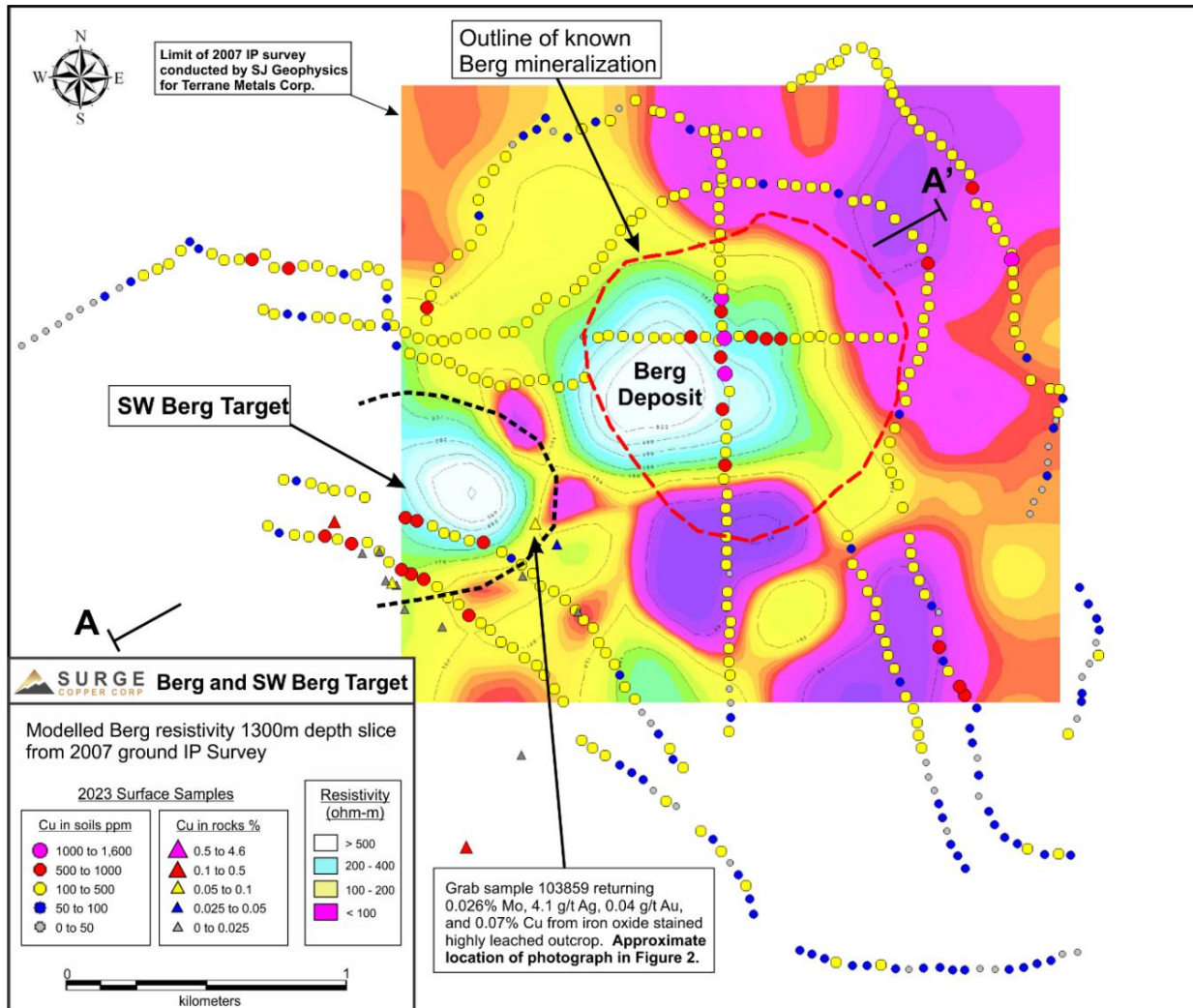
9.1.3.1 SW Berg target

Soil sampling in 2023 has identified a 600 by 300 m (and still open) copper in soil anomaly located immediately southwest of the Berg deposit at the SW Berg target. This target area has geophysical and surface geochemical similarities to Berg. Figure 9-12 shows a compilation map over the Berg-SW Berg target area with a 2007 induced polarization geophysical survey that partially covers the SW Berg target. The Figure shows a prominent resistive feature at the SW Berg target that remains open to the west and has a similar expression and dimensions as a resistive feature that corresponds to the Berg Stock. This resistive feature could represent a second mineralizing intrusion, similar to the Berg Stock, and is a compelling exploration target. The SW Berg target area correlates with a zone of strong chargeability that also remains open to the west.

A cross-section through the ZTEM 3D resistivity and magnetic models is shown on Figure 9-13. The SW Berg target shows similar ZTEM resistivity and magnetic expressions as the mineralized Berg deposit, where mineralization is associated with relatively conductive rocks with low magnetic values. Limited available geologic data combined with geophysical data indicate the new copper in soil anomaly at the SW Berg

target could potentially occur near the contact between an intrusive stock and andesite volcanic wall rock. This geologic setting is significant as the best hypogene mineralization at Berg is located within wall rocks proximal to the Berg Stock.

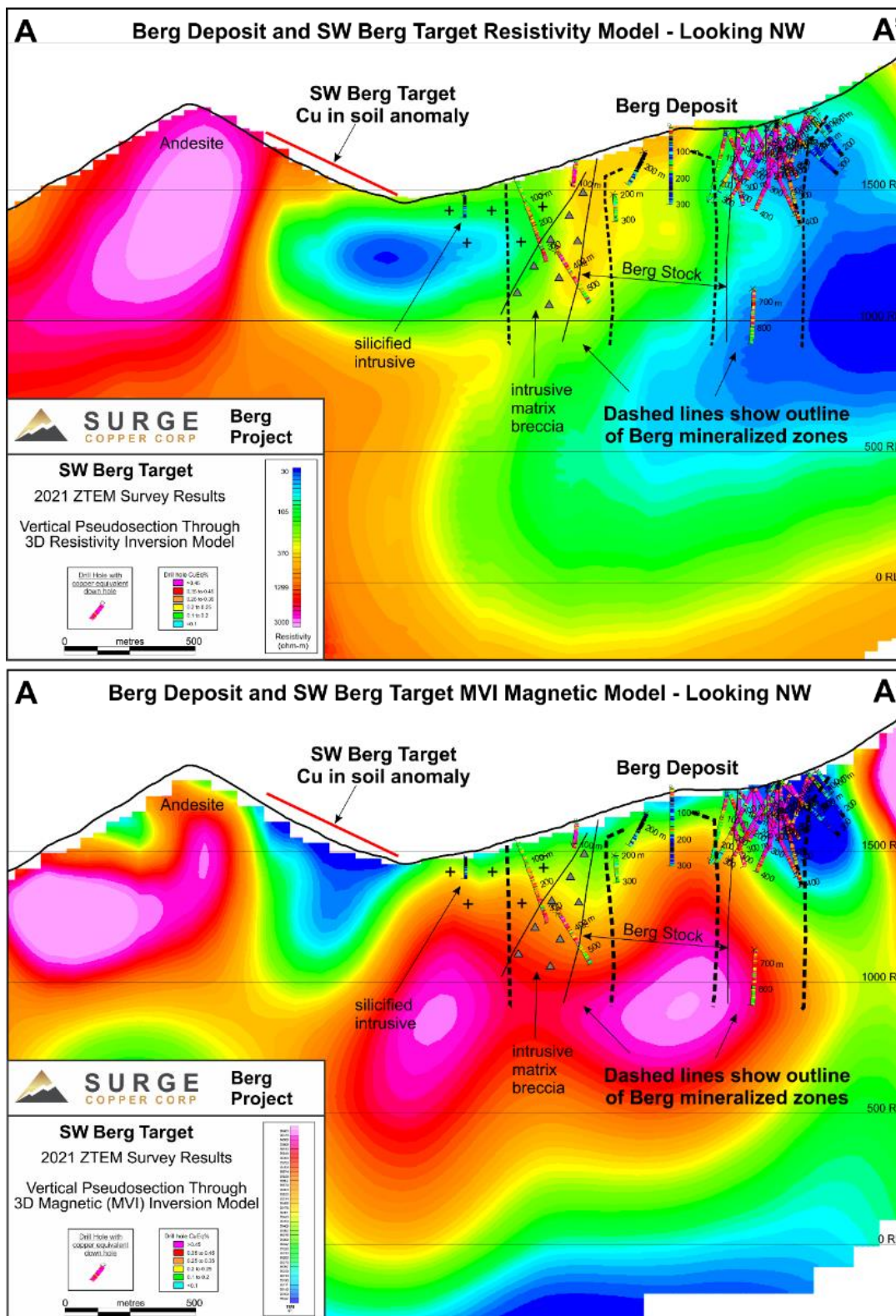
Figure 9-12: SW Berg target



Source: Surge Copper, 2023

Prospecting at the SW Berg target identified large areas of intensely iron oxide stained and strongly leached outcrops with remnants of stockwork veining as shown in Figure 9-14. A grab sample from one of these leached outcrops, (sample 103859), returned 0.07% Cu, 0.026% Mo, 4.1 g/t Ag, and 0.04 g/t Au. It should be noted that the values for molybdenum, silver, and gold from the outcrop sample are similar to deposit averages for these metals at Berg, whereas copper within this surficial environment is expected to be leached, similar to exposures located immediately above the Berg deposit.

Figure 9-13: Cross-section through the SW Berg target showing resistivity and magnetics



Source: Surge Copper, 2023

Figure 9-14: Surface outcrop from the SW Berg target near sample 103859. The zone contains strong iron oxide stained, leached, and stockwork veined rock exposed over a large area.



Source: Surge Copper, 2023

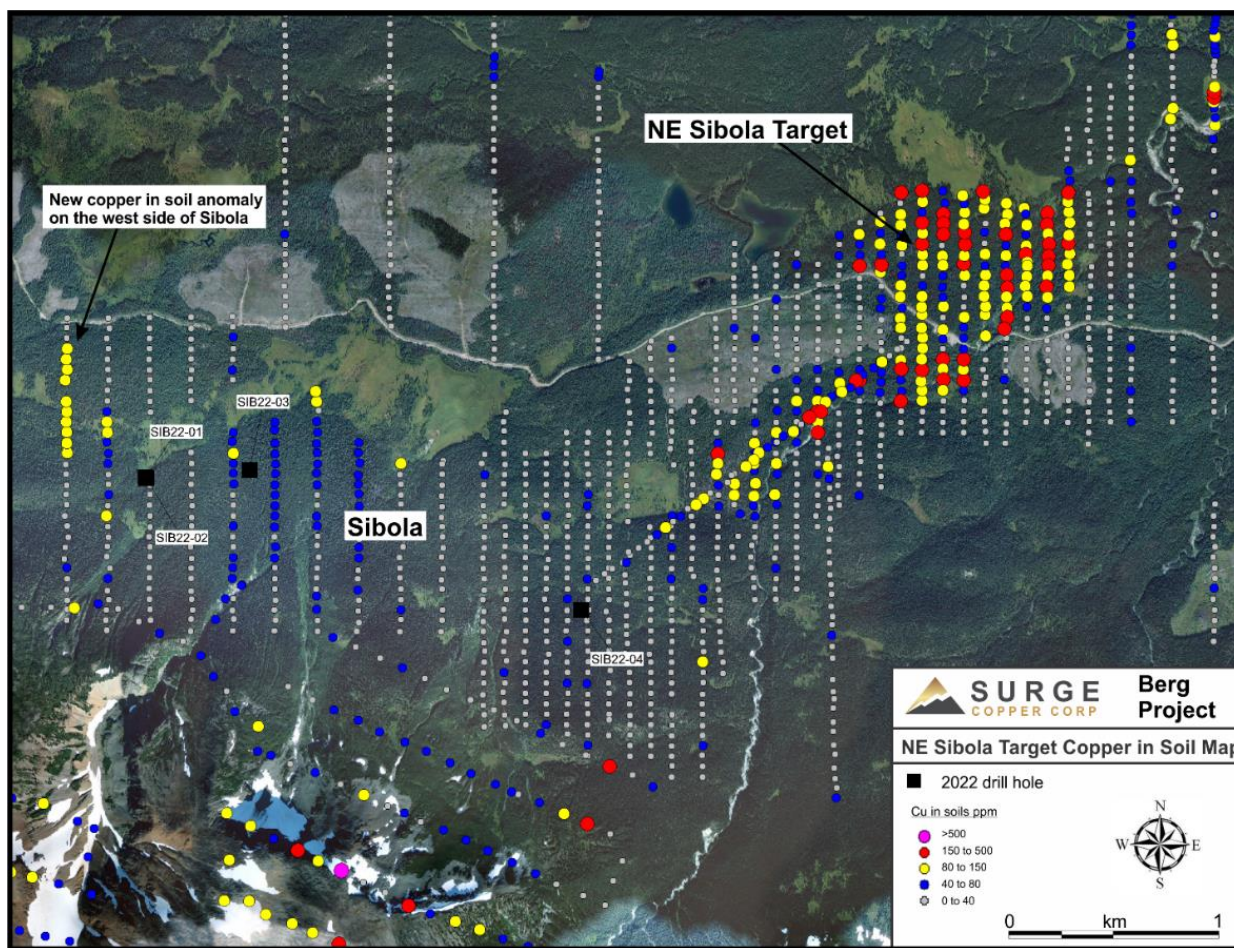
The SW Berg target was tested with a single drill hole, BRG24-252 in 2024. The hole was oriented toward the southwest with a -45-degree dip and drilled to a total depth of 450 metres. Multiple intervals of mineralization were encountered in the hole, with copper grades lower than what is typically observed in the main Berg deposit, but with comparable molybdenum, silver, and gold grades.

Very strong alteration containing quartz-molybdenite veinlets occurs within the upper portions of the drill hole potentially indicating proximity to a “porphyry centre”. The deeper portions of the hole encountered highly magnetic hornfelsed and pyritic sedimentary/volcanic rocks characteristic of a more distal setting and providing a useful exploration vector. The Berg style magnetic low in the target area was not encountered in drilling and remains unexplained. This initial drill test of the target is encouraging. The hole returned 36 metres grading 0.19% Cu, 0.004% Mo, 5.06 g/t Ag, and 0.042 g/t Au from the start of bedrock at 10 m depth to 46 m depth. Multiple narrow zones of mineralization were encountered highlighted by 12 m grading 0.17% Cu, 0.001% Mo, 46.38 g/t Ag, and 0.192 g/t Au from 370 to 382 m depth.

9.1.3.2 NE Sibola target

A copper and molybdenum in soil anomaly on the NE end of the large Sibola alteration system has been expanded and better defined during 2023. This soil anomaly is termed the NE Sibola Target and has now been defined over an area 1200 m by 800 m and remains partially open to the north where a large swamp prevents B horizon soil sampling. The anomaly contains copper in soil values around 100 to 200 ppm, and molybdenum in soil values around 5 to 20 ppm, values which are considered very significant for a till-covered area. No outcrop was found in the immediate area of the soil anomaly, but a large exposure of unmineralized altered and pyritic rock was sampled in a stream canyon 500 metres to the southwest and possibly represent distal pyritic alteration around a porphyry system. The next steps for this target will include ground-based induced polarization surveying and drill testing if warranted.

Figure 9-15: NE Sibola Target copper in soil map



Source: Surge Copper, 2023

A soil line on the far west side of the Sibola area has intersected a new continuous low-level copper in soil anomaly that extends for 500 metres along the line. This new anomaly occurs within a flat till covered valley and warrants additional follow up.

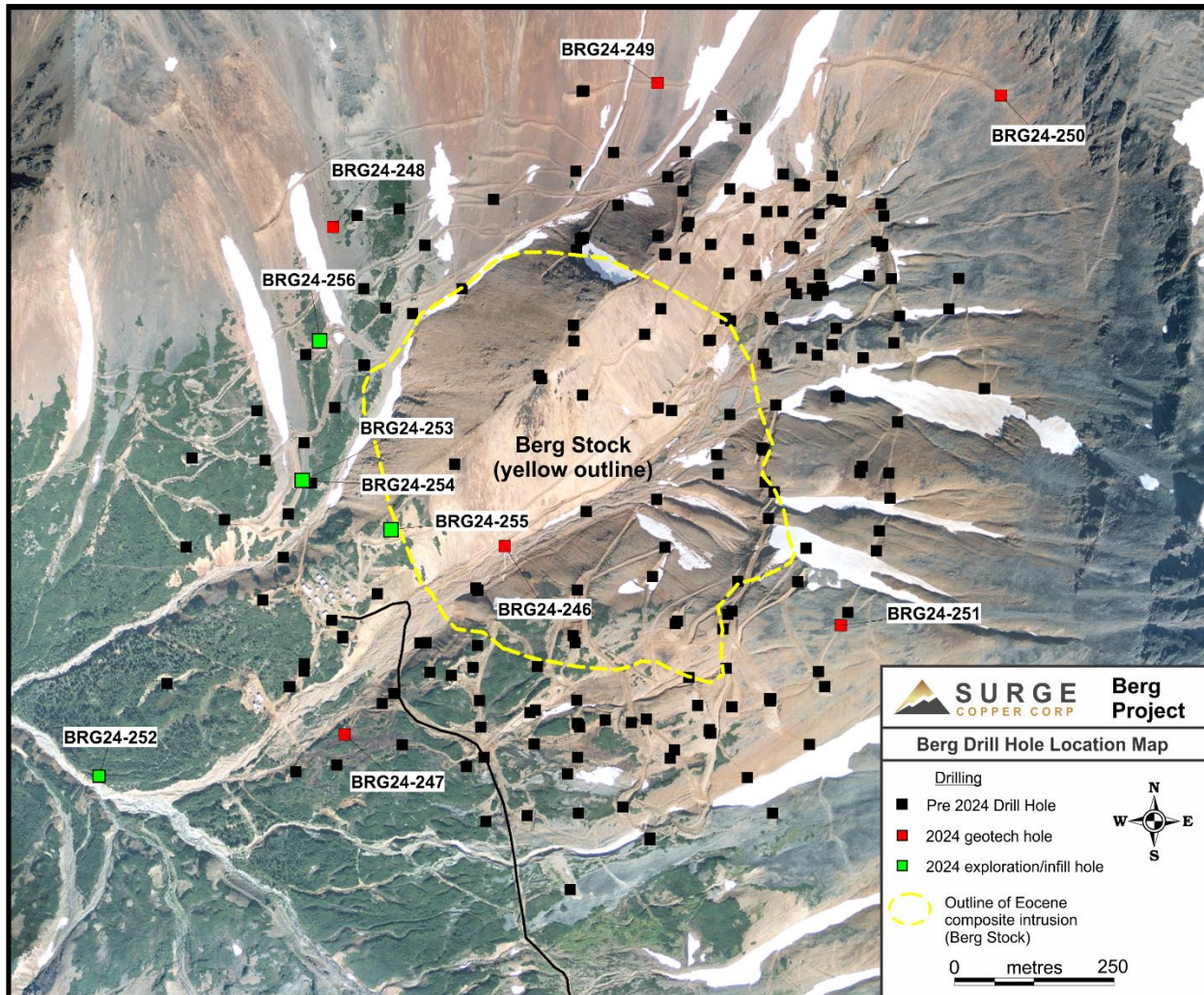
9.1.3.3 NE Fire target

A zone of patchy copper and molybdenum in soil values over an area 800 by 250 metres has been identified in the NE part of the Berg claim block and is termed the NE Fire Target. Copper values up to 100 to 200 ppm occur within a till covered area near the contact zone of a Bulkley Suite diorite intrusive and Telkwa Formation volcanic rocks. No outcrop was found within the main soil anomaly, however, adjacent to the anomaly altered diorite with thin quartz veinlets and minor disseminated pyrite were discovered. The coarse diorite intrusive is dark gray, strongly magnetic, coarse to medium-grained, and is equigranular. It is composed of 15 to 25% mafic minerals, dominantly hornblende with biotite books 2 to 3 mm in size. Feldspar makes up most of the rock along with 2 to 5% disseminated magnetite. This unit forms cliffs along the main hill west of the soil anomaly and is highly magnetic. In this unit thin veinlets of pyrite and chalcopyrite were observed locally. Outcrop is very limited in the area and no large pervasive alteration zones were identified.

9.1.4 2024 and 2025 Exploration

During 2024 Surge completed 13 diamond drill holes for 5,054 metres of drilling. A total of 11 holes were completed at the Berg Copper Project, including one hole drilled at the SW Berg target (described above), and two holes were drilled at Ootsa. All 10 holes at the Berg deposit supported resource definition, metallurgical studies, geotechnical testing, acid rock potential studies. During 2024 a variety of environmental baseline studies were initiated across the project area.

Figure 9-16: Berg 2024 drill hole location map

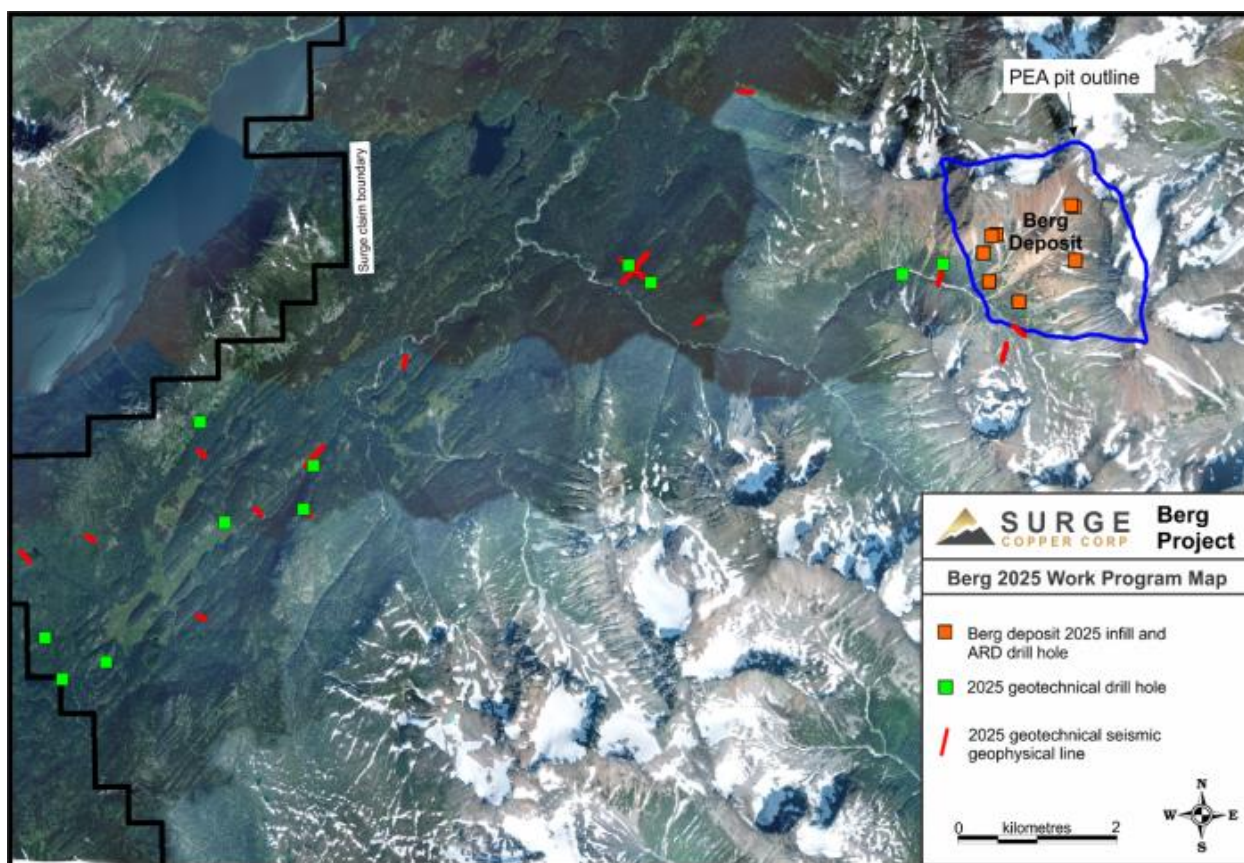


Source: Surge Copper, 2024

During 2025 Surge completed a field program at Berg designed to address key technical data gaps required to advance the Berg Copper Project from a Preliminary Economic Assessment (“PEA”)-level study to PFS, including improvements to resource confidence, geotechnical design parameters, and environmental characterization. During the program, Surge completed a total of 4,143 m of diamond drilling, comprising four resource conversion holes targeting upgrades of Inferred resources (1,926 m), four acid rock drainage (“ARD”) characterization holes designed to define the boundary between potentially acid-generating and non-acid-generating rock within the waste rock envelope surrounding Berg mineralization (1,522.6 m), and 11 geotechnical drill holes completed in areas of planned project infrastructure (618.4 m). In addition, three short anchor holes were drilled to support the ARD program; these holes were logged and sampled for assay and contribute an additional 76 m of data to the Berg drill database. In parallel with the drilling program, the Company re-sampled and assayed 18 historic Berg core holes drilled between 1964 and 1973. The objective of this work was to apply modern analytical methods and QA/QC procedures to increase confidence in the historical dataset, add gold and silver analyses that were previously unavailable, and enable these holes to be incorporated into future resource classification. Geotechnical investigations

focused on characterizing soil and rock properties relevant to mine infrastructure design and ground stability in support of the ongoing PFS. Fieldwork included detailed geotechnical logging, collection of samples for laboratory strength testing and physical property measurements, standard penetration tests, packer tests, and installation of vibrating wire piezometers. In addition, 20 seismic refraction geophysical survey lines were completed to map overburden thickness, depth to bedrock, and measure shear and compressional wave velocities for geotechnical design applications. Baseline environmental studies also continued in 2025, including additional fish and fish habitat assessments, installation of hydrometric stations to collect water flow data, and ongoing water sampling.

Figure 9-17: Berg 2025 work program map

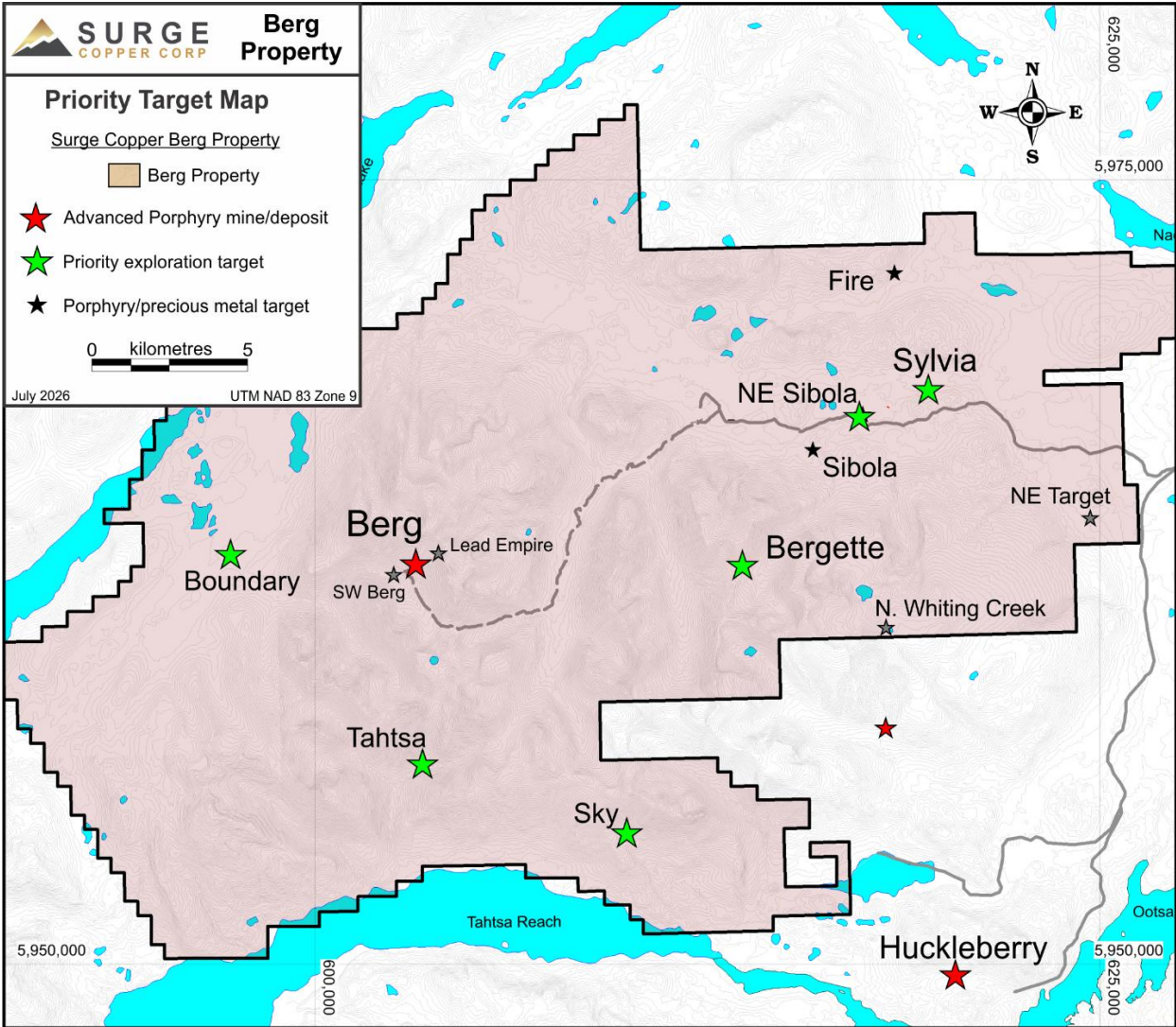


Notes: Map shows the location of Berg deposit infill and acid rock drainage characterization (ARD) holes, geotechnical drill holes, and geophysical lines (seismic refraction). Source: Surge Copper, 2025

9.2 Exploration targets for further exploration

The Berg property hosts numerous exploration targets that show promising potential to host large zones of porphyry Cu style mineralization. All require further exploration work to evaluate their potential. The location of the targets are shown on Figure 9-18 and the targets are listed in Table 9-1. The Bergette and Sylvia targets have returned significant intervals of porphyry style copper and molybdenum mineralization and are the most advanced of the exploration targets. NE Sibola, Tahtsa, Sky, and Boundary contain large surface soil anomalies and have never been tested by drilling.

Figure 9-18: Berg Property targets for further exploration location map



Source: Surge Copper 2026

Table 9-1: List of Berg property targets for further exploration

Target	Exploration work completed	Key results	Priority/Recommendations
Bergette	soils, IP, mapping, drilling	Hole BGT22-01 intersected 176m grading 0.22% Cu and 0.012% Mo	High priority - close to planned infrastructure/additional drilling and economic evaluation
Sylvia	soils, IP, mapping, limited drilling	2 km long chargeability anomaly, hole S-8 returned 63m grading 0.33% Cu and 0.02% Mo	High priority - close to planned infrastructure/ drill test main target
NE Sibola	soils	1200m by 800 m copper in soil anomaly	Mod-high priority - close to planned infrastructure/ IP surveying and drill testing
Tahtsa	soils, rocks, prospecting	polymetallic soil anomaly, 1.5km long	Moderate priority further from planned infrastructure/ additional soils, rocks, prospecting and mapping
Sky	soils, rocks, prospecting	polymetallic soil anomaly, 1300 by 800m	Moderate priority - further from planned infrastructure/ additional soils, rocks, prospecting and mapping
Boundary	soils, partial IP	copper-in-soil anomaly over 850 by 500m	Moderate priority - close to planned infrastructure/ additional soils, mapping-prospecting, geophysics

Source: Surge Copper 2026

10 Drilling

10.1 Introduction

Section 10 outlines the details of all known drilling at Berg to date. The technical report from 2021 (Tetra Tech, 2021) 'Updated Technical Report and Resource Estimate on the Berg Copper Project, BC' report from 2021 contained a comprehensive description of historical drilling campaigns, major parts of which have been copied into Section 10.1, with modifications and additions by MMTS as noted.

Surge Copper completed 12,657 m of diamond core drilling in 35 holes between 2021 and 2025 with the results of that drilling is reported in Section 10.3.

10.2 Drilling by Surge Copper

10.2.1 Surge drilling overview

Drilling at the Berg deposit by Surge Copper commenced in early September 2021 after two months of access road rehabilitation, camp construction and road and drill pad building. A total of 2,855 m was drilled at Berg, in 10 holes. This program was designed to test the expansion potential of the near-surface high-grade mineralization and fill in data gaps within areas of lower drill density. In 2023 drilling at Berg was conducted from late July to early September and three diamond core holes totalling 2077 metres of drilling were completed. The program was designed to learn more about the deep characteristics of the deposit while also providing fresh material for metallurgical testwork and converting Inferred resources to Measured and Indicated in areas of low drill density.

In 2024 drilling was conducted from late July to late September with 11 holes drilled for a total of 4,200 m of drilling in support of resource definition, conversion of Inferred resources to higher confidence categories, and target testing. Six of the holes underwent downhole geotechnical testing, including Packer tests, piezometer installations, and televiewer surveys, supporting pre-feasibility studies. In addition, samples were collected for acid-base accounting test work and metallurgical studies.

In 2025 drilling was conducted from late July to late September and was designed to address key technical data gaps required to advance the Berg Copper Project from a preliminary economic assessment-level study to a pre-feasibility-level study. During 2025 a total of 11 holes for 3,525 m of drilling was completed at the Berg deposit with additional geotechnical drilling completed within the proposed Berg tailings and infrastructure areas to the west (11 holes for 618.4 m of drilling). The 2025 Berg deposit drilling was comprised of four resource conversion holes targeting upgrades of Inferred resources (1,926 metres), four near-horizontal holes completed with an underground drill designed to define the boundary between potentially acid-generating and non-acid-generating rock within the waste rock envelope surrounding Berg mineralization (1,522.6 m), and three short anchor holes to support (76 m) the near-horizontal drilling. In parallel with the drilling program, Surge re-sampled and assayed 18 historic Berg core holes drilled between 1964 and 1973. The objective of this work was to apply modern analytical methods and QA/QC procedures to increase confidence in the historical dataset, add gold and silver analyses that were previously unavailable, and enable these holes to be incorporated into future resource classification.

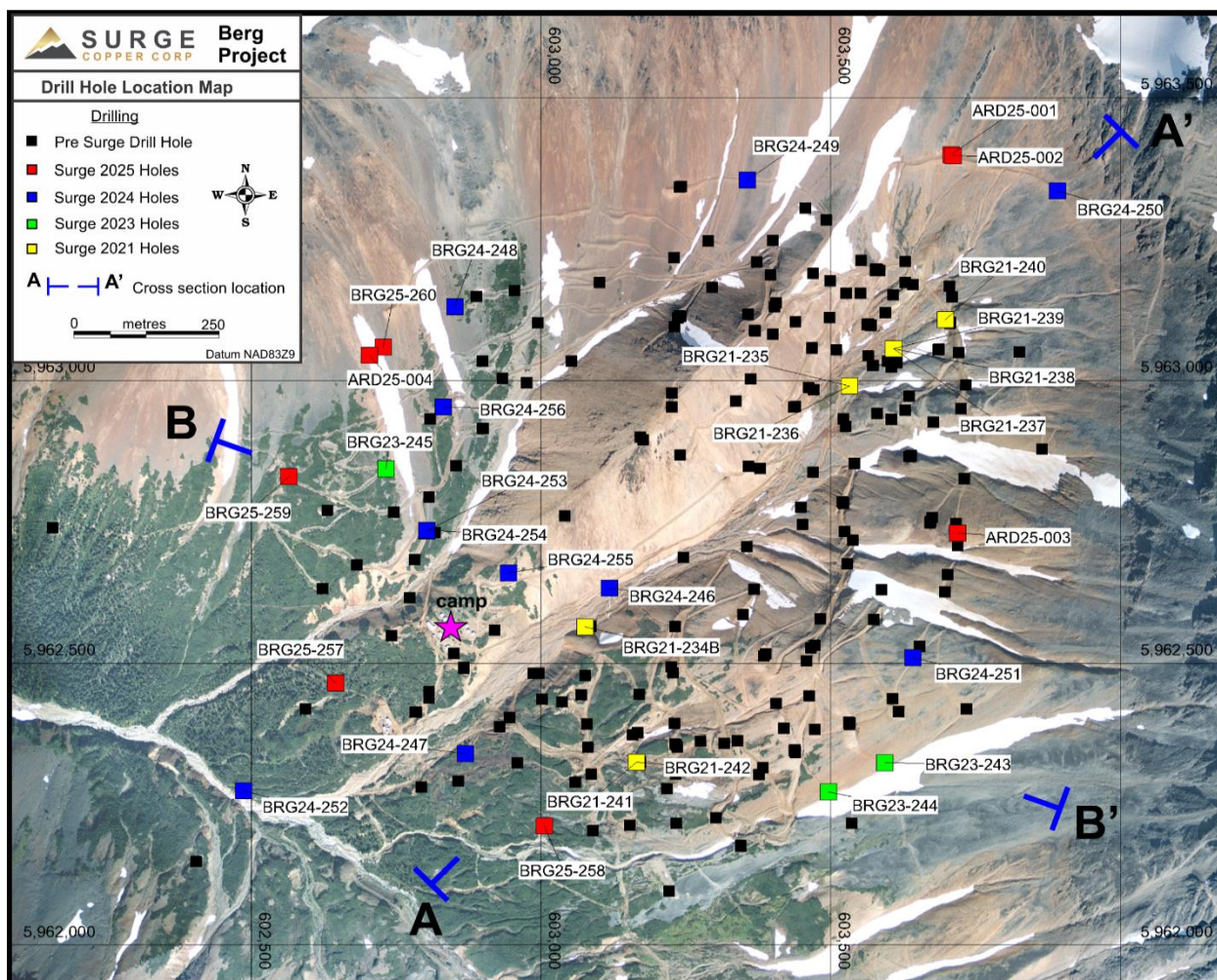
All Surge drill holes at the Berg deposit have downhole surveys done with a Reflex downhole survey instrument with the collar locations surveyed by differential GPS surveying methods.

A plan map of all drilling to date is illustrated in Figure 10-2 showing the Year drilled, with the resource pit outline also plotted.

Table 10-1: Drilling on the Berg deposit by Surge Copper

Company	Date	No. of Holes	Total Metres	Core Size	No. of Samples
Surge Copper	2021	10	2,855	NQ2	1,342
Surge Copper	2023	3	2,077	NQ2 HQ	1,036
Surge Copper	2024	11	4,200	NQ2 HQ	2,066
Surge Copper	2025	11	3,525	NQ2 HQ	2,730
TOTAL	-	35	12,657	-	7,174

Figure 10-1: Plan map of Surge drill holes by year



Source: Surge Copper, 2026

10.2.2 Significant intercepts

The drill hole results shown in Table 10-2 were compiled by Surge Copper and reported in separate news releases between March 8, 2022, and January 8, 2026.

Width referred to drill hole intercepts; true widths had not been determined. EOH = end of hole.

Table 10-2: Summary of significant Surge Copper Drill intercepts 2021 to 2025

Drill Hole	From (m)	To (m)	Width (m)	Cu (%)	Mo (%)	Ag (g/t)	Au (g/t)
BRG21-234	15	340.1 EOH	325.1	0.3	0.016	4.3	0.03
including	15	120	105	0.57	0.028	4.6	0.04
BRG21-235	20	182	162	0.37	0.075	4.3	0.03
including	20	110	90	0.43	0.073	4.5	0.04
BRG21-236	24	381 EOH	357	0.38	0.038	5.6	0.04
including	24	116	92	0.52	0.07	4.8	0.05
BRG21-237	34	166	132	0.56	0.047	7.6	0.05
BRG21-237	184	255 EOH	71	0.32	0.077	5.1	0.03
BRG21-238	24	168	144	0.47	0.014	5.1	0.04
including	26	126	100	0.59	0.016	6.2	0.05
BRG21-239	20	243 EOH	223	0.42	0.022	5.4	0.04
including	76	190	114	0.51	0.025	5.7	0.05
including	76	114	38	0.67	0.032	8.2	0.05
BRG21-240	14	96	82	0.22	0.006	3.1	0.03
including	26	44	18	0.31	0.003	2.7	0.04
BRG21-241	20	166	146	0.4	0.014	6.5	0.02
including	22	90	68	0.58	0.038	6	0.03
including	30	52	22	0.85	0.024	8.2	0.04
BRG21-242	28	396	368 EOH	0.37	0.039	5.5	0.03
including	28	138	110	0.51	0.021	3.9	0.03
including	52	96	44	0.62	0.019	4.4	0.04
BRG23-243	22	778.0 EOH	756	0.26	0.026	3.6	0.02
including	34	206	172	0.35	0.008	2.8	0.03
including	66	156	90	0.42	0.004	2.8	0.03
including	286	324	38	0.31	0.016	4.1	0.02
including	562	764	202	0.2	0.051	3.6	0.02
BRG23-245	14	660.0 EOH	646	0.21	0.034	3.34	0.02
including	14	432	418	0.26	0.032	3.54	0.02
including	352	392	40	0.35	0.03	4.14	0.03
BRG23-245	303	304.5	1.5	4.49	0.025	2110	0.34
BRG24-246	6	190	184	0.26	0.008	1.5	0.016
including	116	152	36	0.32	0.007	1.11	0.017

Drill Hole	From (m)	To (m)	Width (m)	Cu (%)	Mo (%)	Ag (g/t)	Au (g/t)
BRG24-246	316	332	16	0.16	0.019	1.94	0.011
BRG24-253	12	300 EOH	288	0.23	0.013	4.49	0.026
including	26	82	56	0.43	0.017	5.11	0.052
BRG24-254	36	448	412	0.24	0.042	5.4	0.019
including	38	320	282	0.29	0.051	6.27	0.024
including	70	124	54	0.39	0.036	4.43	0.039
including	194	212	18	0.52	0.042	5.36	0.046
BRG24-255	10	330	320	0.29	0.048	4.26	0.024
Including	42	130	88	0.57	0.093	5.34	0.037
Including	58	86	28	0.99	0.052	10.82	0.07
BRG24-256	10	188	178	0.3	0.017	7.99	0.024
Including	14	116	102	0.34	0.019	6.45	0.023
BRG25-258	234	501 EOH	267	0.16	0.018	2.5	0.014
including	316	423	107	0.21	0.021	2.64	0.016
BRG25-259	278	513 EOH	235	0.19	0.025	8.61	0.016
including	350	498	148	0.22	0.027	12.8	0.019
BRG25-260	132	411 EOH	279	0.16	0.007	2.51	0.016
including	360	411 EOH	51	0.2	0.011	4.27	0.02

10.2.3 Berg drilling

From 2021 to 2025 Surge drilled 12,657 m of diamond core drilling in 35 holes utilizing NQ2 and HQ size core. The holes were drilled with skid-mounted hydraulic core drills with four holes drilled in 2024 utilizing an underground core drill to facilitate sub horizontal holes. The hole locations are shown on Figure 10-1 and a summary of drill highlights is presented in Table 10-2.

The upper 60 to 140 m of rock directly overlying the Berg deposit is typically highly fractured, rubbly, and can be challenging to drill and recover. This zone marks the gypsum line, above which surficial groundwaters have dissolved gypsum and primary anhydrite, leaving rubbly fractured rock. Below this line drilling recovery is typically excellent, with drill runs recovered as solid runs well cemented with anhydrite which is abundant in the mineralized zone. At Berg the upper fractured zone also corresponds to the zone of supergene sulphide enrichment. To mitigate drill recovery and circulation issues, and to increase drill production, Surge typically has its drill contractor start each hole with larger diameter HQ and then decrease to NQ2 once competent core is encountered below the gypsum line.

Figure 10-2: Typical drill set up at Berg



Notes: Left, skid-mounted hydraulic core drill. Right, underground drill secured to a road cut and drilling a sub horizontal hole. Source: S. Ebert, 2025

Figure 10-3: Photos of typical Berg core condition and recovery



Notes: Left, highly fractured and rubbly core from above the gypsum line, hole BRG24-254, 72.9 to 83.6 m. Right, solid competent core from below the gypsum line, hole BRG24-254, 143.8 to 153.7 m. Source: S. Ebert, 2024

In 2021, Surge drilled 10 holes at Berg (holes BRG21-234 to 242) which includes 2 holes for BRG21-234 (drilled as BRG21-234 and 234B) as the first holes was lost at a depth of 133 m due to difficult ground conditions. This drilling was designed to test the expansion potential of the near-surface high-grade supergene mineralization and fill in data gaps within areas of lower drill density. Hole BRG21-234B was located in the southern part of the Berg deposit and was mineralized from the start of bedrock at a 15 m depth to the end of the hole at a 340.1 m depth, returning 325.1 m grading 0.30% Cu, 0.016% Mo, and 4.3 g/t Ag including a near-surface higher-grade zone associated within a chalcocite blanket that returned 105 m grading 0.57% Cu, 0.028% Mo, and 4.6 g/t Ag from a 15 to 120 m depth. The hole encountered alternating feldspar-biotite porphyritic lithologies with variably hornfelsed and sericitized volcanic horizons throughout its length. Holes BRG21-235 to 240 were collared in the northeast part of the Berg deposit. These holes intersected a near-surface supergene chalcocite blanket underlain by hypogene mineralization and largely hosted in quartz-feldspar porphyritic intrusion and quartz diorite with minor andesite tuff units. Typical grades encountered with this drilling include hole BRG21-236 which returned 357 m grading 0.38% Cu,

0.038% Mo, and 5.6 g/t Ag from a 24 m depth to the end of the hole at a 381 m depth, including higher-grade mineralization within the chalcocite blanket which returned 92 m grading 0.52% Cu, 0.070% Mo, and 4.8 g/t Ag from a 24 to 116 m depth. Holes BRG21-241 and BRG21-242 were drilling in the south-southeast part of the deposit and encountered a thin leached cap underlain by chalcocite enrichment blanket and hypogene porphyry mineralization hosted mainly in andesite tuff. Hole BRG21-242 returned 368 m grading 0.37% Cu, 0.039% Mo, and 5.5 g/t Ag from 28 m to the end of the hole at 368 m, and the hole ended in mineralization. Hole BRG21-242 intersected 110 m of chalcocite blanket grading 0.51% Cu, 0.021% Mo, and 3.9 g/t Ag from a 28 to 138 m downhole, including 44 m grading 0.62% Cu, 0.019% Mo, and 4.4 g/t Ag from 52 m depth.

In 2023, Surge completed three diamond core holes at Berg (holes BRG23-243 to 245) designed to learn more about the deep characteristics of the deposit while also providing fresh material for metallurgical test work and facilitating resource conversion. Hole BRG23-243 tested the southeast side of the Berg deposit and was drilled to a total depth of 778 m. The hole encountered variably developed secondary chalcocite blanket from a 22 to 206 m depth, then encountered a large interval of veined and mineralized andesite wall rock to a 758 m depth and ended within mineralized porphyritic intrusive of the Berg Stock. The hole successfully demonstrated continuity of mineralization from near-surface to depths well beyond the limit of current drilling. The hole returned 756 m grading 0.26% Cu, 0.026% Mo, 3.6 g/t Ag, and 0.02 g/t Au from a 22 m depth. The secondary chalcocite blanked returned higher grades including 90 m of 0.42% Cu, 0.004% Mo, 2.8 g/t Ag, and 0.03 g/t Au from a 66 m depth. Hole BRG23-244 was located on the southeast side of Berg and was designed to intersect the Berg Stock at depth and provide fresh material for metallurgical testwork and was drilled to a total depth of 639 m.

The hole encountered variably developed secondary chalcocite blanket from a 28 to 136 m depth, then encountered a large interval of veined and mineralized andesite wall rock to a 554 m depth and ended within mineralized porphyritic intrusive of the Berg Stock. Copper grades are highest within the near-surface secondary chalcocite blanket, remain consistent through a large zone of mineralized andesite wall rock, and decrease within the Berg Stock. Molybdenum grades are highest adjacent to and within the Berg Stock. Hole BRG23-244 returned 627 m grading 0.25% Cu, 0.026% Mo, 3.5 g/t Ag, and 0.02 g/t Au from 12 m depth to the end of the hole at 639 m depth. Within this interval is a continuous zone of copper mineralization returning 548 m grading 0.28% Cu, 0.018% Mo, 3.6 g/t Ag, and 0.02 g/t Au from a 12 m depth to the edge of the Berg Stock at a 560 m depth. The supergene sulphide zone returned higher grades including 108 m of 0.42% Cu, 0.007% Mo, 2.6 g/t Ag, and 0.03 g/t Au from a 28 m depth.

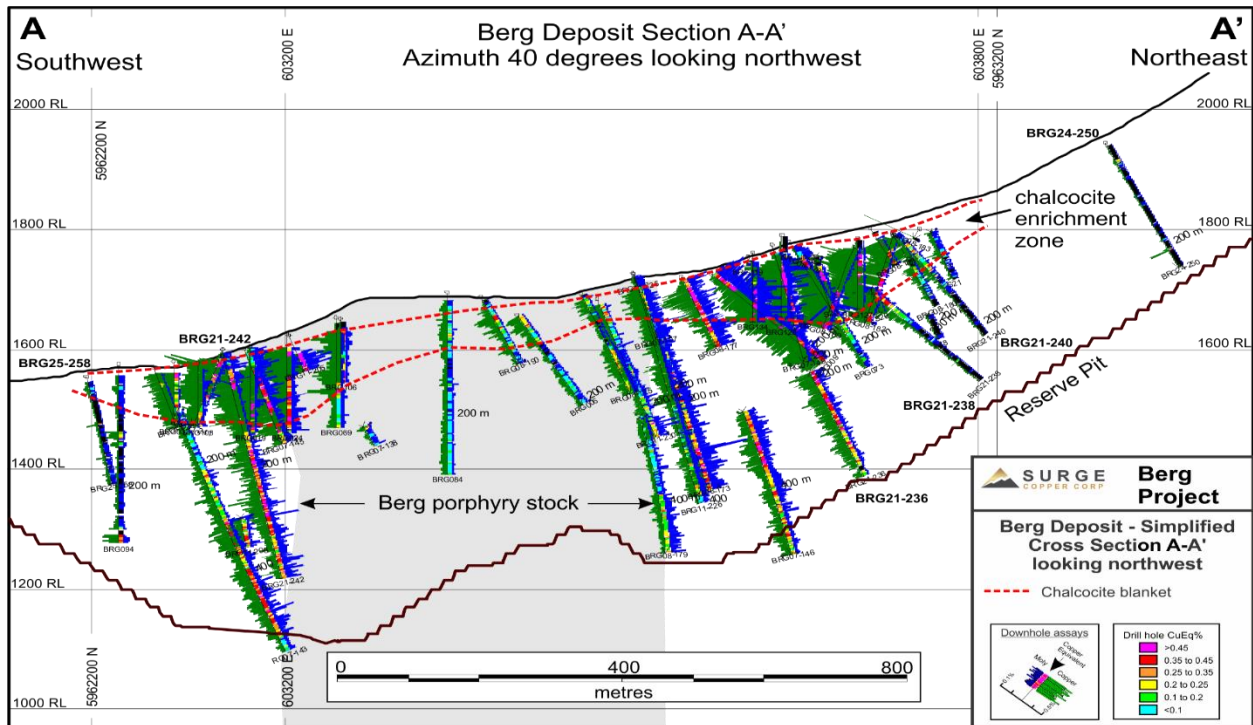
The hole ended within molybdenum mineralized Berg Stock returning 79 m grading 0.085% Mo, 0.07% Cu, and 2.8 g/t Ag from 560 m to the end of the hole at 639 m. Hole BRG23-245 tested the northwest side of the Berg deposit and was designed to intersect the Berg Stock at depth and provide additional information on the deeper portions of the deposit and provide fresh material for metallurgical testwork. The hole was drilled to a total depth of 660 m and encountered weak but variably developed secondary chalcocite blanket from a 14 to 110 m depth and encountered veined and mineralized rock to the end of the hole at a 660 m depth. The hole returned 646 m grading 0.21% Cu, 0.034% Mo, 3.3 g/t Ag, and 0.02 g/t Au from a 14 m depth to the end of the hole at a 660 m depth, including a higher-grade zone of hypogene mineralization returning 40 m grading 0.35% Cu, 0.030% Mo, 4.1 g/t Ag, and 0.03 g/t Au from a 352 m depth. Hole BRG23-245 encountered a silver rich quartz-carbonate-sphalerite-galena-pyrite-chalcopyrite vein that returned 2,110 g/t Ag over 1.53 m from a 303 m depth. This vein was oriented at 30 degrees to the axis of the drill core and is estimated to have a true width of about 0.3 m.

In 2024, Surge completed 11 holes (BRG24-246 to 256) focused on resource conversion with one hole dedicated to target testing. Six of the holes underwent downhole geotechnical testing, including Packer

tests, piezometer installations, and televiewer surveys, supporting pre-feasibility studies. Multiple samples were collected for acid-base accounting test work and metallurgical studies. Highlights from this drilling include BRG24-254 which encountered various intrusive phases of the porphyritic Berg Stock from a 30 m depth to the end of the hole at a 489 m depth. Zones of brecciation with intrusive and volcanic clasts and intrusive matrix occur between 180 and 440 m in depth. A variably developed secondary chalcocite blanket was observed from a 40 to 130 m depth. Hole BRG24-254 contains both increased brecciation and stronger grades than have typically been encountered in the Berg Stock. The hole returned 412 m grading 0.24% Cu, 0.042% Mo, 5.40 g/t Ag, and 0.019 g/t Au from 36 m depth to 448 m depth. An interval within the supergene sulphide zone from 70 to 124 m depth returned higher grades of 0.39% Cu, 0.036% Mo, 4.43 g/t Ag, and 0.04 g/t Au. The hole also intersected strong grades within the hypogene system returning 18 m from a 194 to 212 m depth of 0.52% Cu, 0.042% Mo, 5.36 g/t Ag, and 0.05 g/t Au. This higher-grade hypogene zone corresponds to both zones of brecciation and an interval of strongly biotite-altered and veined andesite. Hole BRG24-255 was drilled to a total depth of 426 m and was designed to upgrade a sizable zone of Inferred resources on the outer margin of the deposit and better define the edge of mineralization in a zone with sparse drilling. The hole encountered porphyritic intrusive rocks of the Berg Stock from the start of bedrock at a 10 to 59 m depth and then encountered andesite package rocks with minor intrusive dikes from 59 to 127 m. From 127 m to the end of the hole, at a 426 m depth, the hole encountered various porphyritic intrusive rocks and breccias. The hole returned 320 m grading 0.29% Cu, 0.048% Mo, 4.26 g/t Ag, and 0.024 g/t Au from the start of bedrock at a 10 to 330 m depth. An interval within the supergene sulphide zone, from 42 to 130 m in depth, returned higher grades of 0.57% Cu, 0.093% Mo, 5.34 g/t Ag, and 0.037 g/t Au over 88 m including a very high-grade interval from 58 to 86 m depth returning 0.99% Cu, 0.052% Mo, 10.82 g/t Ag, and 0.070 g/t Au over 28 m. The highest molybdenite grades occur within the Berg Stock with copper grade occurring both within the Berg Stock and extending further outboard into the surrounding wallrocks. Hole BRG24-252 was an exploration hole designed to test a coincidental geophysical and geochemical anomaly located a few hundred metres southwest of the Berg deposit at the Berg SW Target. The hole intersected strong alteration containing quartz-molybdenite veinlets within the upper portions of the drill hole and magnetic hornfelsed and pyritic sedimentary/volcanic rocks characteristic of a more distal setting toward the end of the hole. The hole returned 36 m grading 0.19% Cu, 0.004% Mo, 5.06 g/t Ag, and 0.042 g/t Au from the start of bedrock at 10 m in depth to a 46 m depth and another 12 m grading 0.17% Cu, 0.001% Mo, 46.38 g/t Ag, and 0.192 g/t Au from 370 to 382 m in depth.

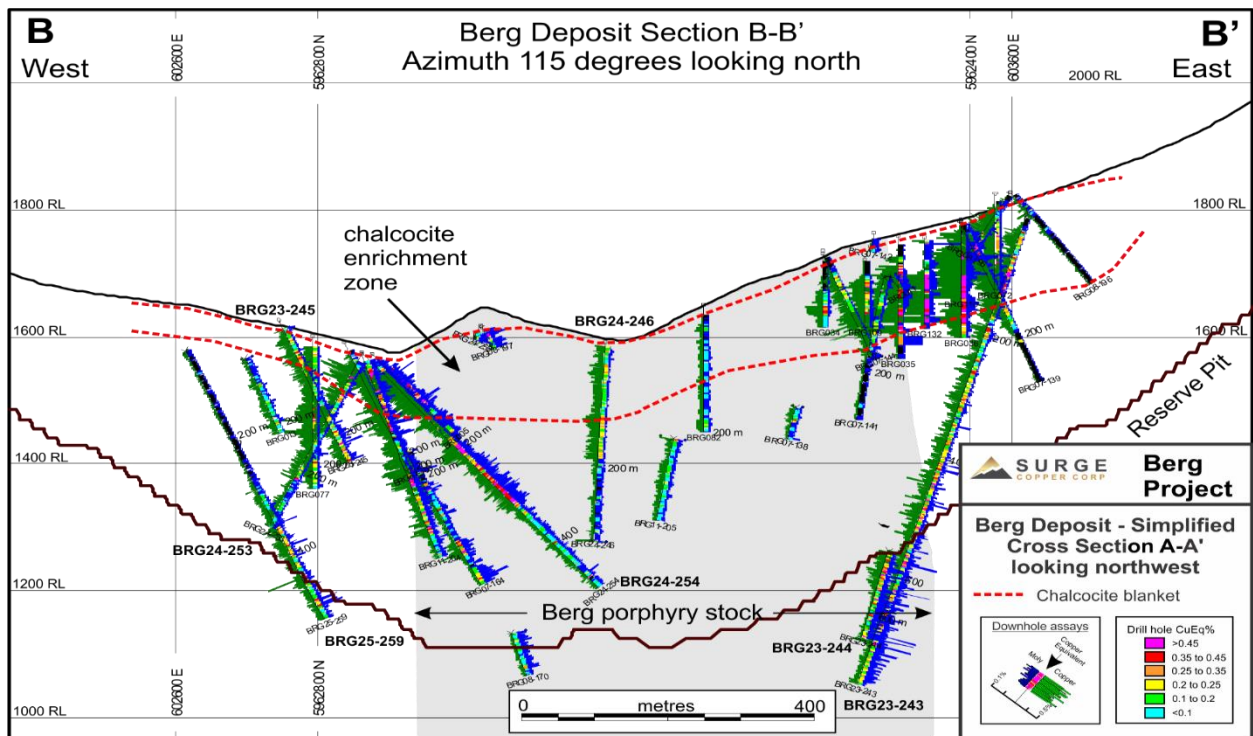
In 2025, Surge completed 11 holes at the Berg deposit (BRG25-257 to 260 and ARD25-001 to 004 along with three anchor holes) largely designed to address key technical data gaps required to advance the Berg Project from a preliminary economic assessment-level study to a pre-feasibility-level study. This drilling was comprised of four resource conversion holes targeting upgrades of Inferred resources, four near-horizontal holes completed with an underground drill designed to define the boundary between potentially acid-generating and non-acid-generating rock within the waste rock envelope surrounding Berg mineralization, and three short anchor holes to support the near-horizontal drilling. The four resource conversion holes (BRG25-257 to 260) were drilled along the western and southwestern margins of the Berg deposit and confirm Berg mineralization extends well below the conceptual pit shell, supporting the continuity of the system at depth and along its outer margins. These holes targeted the low-grade outer margins of the system. Highlights include hole BRG25-259 which returned 235 m grading 0.19% Cu, 0.025% Mo, 8.61 g/t Ag, and 0.016 g/t Au from a 278 m depth to the end of the hole at a 513 m depth.

Figure 10-4: Berg cross-section A-A', see Figure 10-1 for section location



Source: Surge Copper, 2026

Figure 10-5: Berg cross-section B-B', see Figure 10-1 for section location



Source: Surge Copper, 2026

10.3 Drill core storage

As per TetraTech's 2021 updated technical report, all drill core from 2007, 2008 and pre-1980 is being stored on the Berg property either below the original Berg camp or at the Sibola camp. All 2011 core is being stored in a warehouse facility in Prince George.

In addition, half of the 2021 Berg drill core is stored at the Berg site, and half is stored at the Ootsa Exploration Camp where it was transported by helicopter in 2021 and sampled. The 2023, 2024, and 2025 Berg drill core is stored at the Berg site.

10.4 Drill results and database

All geological and geotechnical logs and analytical results have been compiled into a digital drill hole database by previous as well as current operators and consultants over time. From 2007 onwards, the database contains a variety of QA/QC samples including blind blanks, certified reference material, and duplicates that are up to industry standards, and which have been reviewed in detail by MMTS (see Section 11).

The database also contains many pre-2007 data which is currently being referred to as 'historical' with a lower data confidence level as original sample IDs and assay methods are often unknown, records incomplete, and quality control insertion rates at zero. MMTS reviewed scans of hand-written historical internal lab records for the Placer Dome years 1972-1980 and corresponding external lab certificates from which check-assay scatter plots were produced. This analysis is presented in Section 12.

In 2025 Surge re-sampled 18 of the pre-2007 Berg holes utilizing full quality control measures to allow these holes to be utilized for resource categorization.

11 Sample preparation, analyses, and security

11.1 Sampling methods performed by the company

The following sections describe the sample collection, handling, preparation, and analytical methods employed during the 2021-2025 drilling programs. The QP was not present during drilling activities but has since inspected representative intervals of the drill core and has collected independent samples from the site, as described in Section 12.

Description of the sample collection, handling, preparation, and analytical methods employed during the 2007 to 2011 drilling campaigns are described in previous NI 43-101 Technical Reports by Harris and Stubens (2008), Harris and Labrenz (2009) and Norton, Huang and Lui (2021). The QP has read the descriptions contained in these reports.

The 2023 NI 43-101 Technical Report and Preliminary Economic Assessment completed by Ausenco and MMTS contains detailed information about the various protocols and processes deployed at the Berg Copper Project by the company and the contracted laboratories over time, most of which are used for this current report with additional updates.

MMTS has reviewed and reinterpreted the 2007-2011 assay results and QC sample performance after the decision was made to include Au in resource modelling and after a few mislabels were identified (Section 11.7).

In 2022, Surge Copper re-sampled a significant amount of pre-existing core from 2007 and 2008 to generate an additional approximately 4,300 Au results (Section 11.6). Surge also re-submitted almost 3,000 pulps from the 2011 drilling campaign to Actlabs for Au analysis. These samples had only been selectively analyzed previously, with a focus on Ag, Cu, and Mo.

In 2025, a similar re-sampling campaign was completed on core from 18 historical holes which generated quality-controlled Au (FA), Ag, Cu, and Mo assays as part of a full ICP suite of elements for 1,354 samples (including QA/QC), all analyzed at Actlabs.

11.2 Sample collection and sample security 2021-2025

The drill core from the 2021-2025 exploration programs at Berg generally followed best industry practices. The drill crew delivered core to the camp site at the end of each shift. Surge personnel would then photograph, measure, log and mark the core for sampling. Both gas-powered and electric core saws were used to split the core in half with one half placed in marked polyurethane sample bags with corresponding sample tags and sealed with plastic zip ties. Individual core samples were typically 2 m in length and 100% of the drill core length was sampled. Four to five sample bags were inserted into each rice sack and subsequently marked and sealed with plastic zip ties. Half of the drill core has been archived and stored on site for verification and reference purposes.

Duplicate samples, blanks and certified standards were included with every sample batch and subsequently checked to ensure proper quality assurance and quality control.

The drill core samples of the 2021 and 2024 programs were transported to Smithers by Surge personnel or a licensed expediting company and dropped off to Bandstra Transport, a Smithers based bonded carrier, who transported the samples to ALS preparation facilities in Kamloops. After the various prep steps were completed, ALS Kamloops transferred a representative pulp of the sample to ALS North Vancouver for analysis.

For 2024, a total of 2,048 drill core samples were tested for gold by fire assay/ICP-AES (ALS code Au-ICP21) and for 34 elements by HF-HNO₃-HClO₄ acid digestion, HCL leach and ICP-AES finish (ALS code ME-ICP61). Overlimit (Ore Grade) testing for base metals underwent the four-acid digestion/ICP-AES method (code ME-OG62) and gold and silver over-limits were tested via fire assay with a gravimetric finish (codes Au-GRA21/Ag-GRA21). The acid and cyanide leach tests were performed to characterize the nature of the mineralization in the supergene zone (chalcocite) to assess potential metal recoveries with two different leaching protocols. Method Cu-AA05 utilized a sulphuric acid leach with atomic absorption spectrometry AAS finish and method Cu-AA13 involved a cyanide leach with AAS finish. A total of 69 sample pulps (includes 2 blanks) from the 2024 drill campaign were selected and sent to Activation Laboratories in Kamloops for the purpose of comparing analytical results between labs. The pulps were tested for gold (QOP AA-Au Fire Assay/AA) and for silver (QOP AA-Ag Fire Assay/Gravimetric) and 55 other elements via QOP Ultra-trace-4-acid digestion OES/ICP-MS.

In 2023 and 2025, all halved drill core was transported to Smithers by Surge personnel and dropped off to Bandstra Transport, a Smithers based bonded carrier, who transported the samples to the lab preparation facility in Kamloops, BC. Activation Laboratories LTD. (Actlabs) performed all the primary analytical testing on 2023 and 2025 drill core samples.

In 2023, a total of 1,146 drill core and QA/QC samples were tested via the 35-element 4-acid digestion ICP-OES package (1F2) and Au by fire assay (1A2) detailed in the next section of this report. Surge also commissioned Actlabs to perform acid and cyanide leach tests on 1,000 of the 2023 drill core samples sourced from the upper portions of the drill holes within or adjacent to the supergene enrichment zone. These analyses were performed to compare copper recovery differences between acid and cyanide leach protocols. In addition to the analytical testing performed by Actlabs, Surge sent select pulp samples from the campaign to ALS Labs Canada in Vancouver to act as check samples for comparison between the two labs.

In 2025, 1,487 core samples were produced, supported by 166 QA/QC samples, and 178 of these were also analyzed for Cu by cyanide leach. Procedures at site and Actlabs matched the 2023 descriptions.

Re-sampling of pre-existing half core was completed at the company's core facilities at Berg in 2022. All archived core from 2007-2008 holes that was still in good enough condition to take a sample from and that did not have a previous gold assay were sampled by splitting the remaining half core contained in the boxes, resulting in a quarter core sample sent to Actlabs for Au analyses and a quarter left in the box for reference.

In 2025, the company decided to fully sample the remaining half core for 18 historical 'BRG' series diamond holes drilled between 1964 and 1973. This allowed for the preparation of frequent and regular field duplicates (quarter core), therefore upgrading the QA/QC regarding reproducibility to expected levels. All samples were analyzed for Au via fire assay (1A2) as well as a full suite of elements by multi-acid digestion and ICP-OES finish (1F2 of Actlabs).

Additionally, all the 2011 pulps sampled for gold in 2022 had been stored in a cold storage facility in Prince George since 2011. They were in pristine condition when sampled and were sent directly from the PG storage to Actlabs in Kamloops by Banstra Transportation on packaged pallets. For logistical reasons, Surge decided to rely on lab-internal blanks, standards, and duplicates for QA/QC for the pulp analyses.

11.3 Assay analytical methods 2021-2025

11.3.1 2021 and 2024 assaying at ALS

2021 and 2024 drill core samples were analyzed by ALS Canada, an ISO/IEC 17025:2017 accredited laboratory, independent of Surge Copper. Upon receipt at ALS's Kamloops preparation facility, the samples were recorded (code LOG-21), weighed (WEI-21), crushed to 70% passing 2 mm (CRU-31), then a split of approximately 250g (SPL-21) was pulverized to 85% passing 75 µm (PUL-31), see descriptions below.

The pulps were then transferred to ALS North Vancouver for the following analyses:

- ME-ICP61: 4-acid digestion with an ICP-AES finish and a 33-element report.
- For samples that exceeded the reporting limit for Cu, Pb, Zn, the ME-OG62 package was requested.
- Au-ICP21: a 30g fire assay method with ICP-AES finish was chosen.

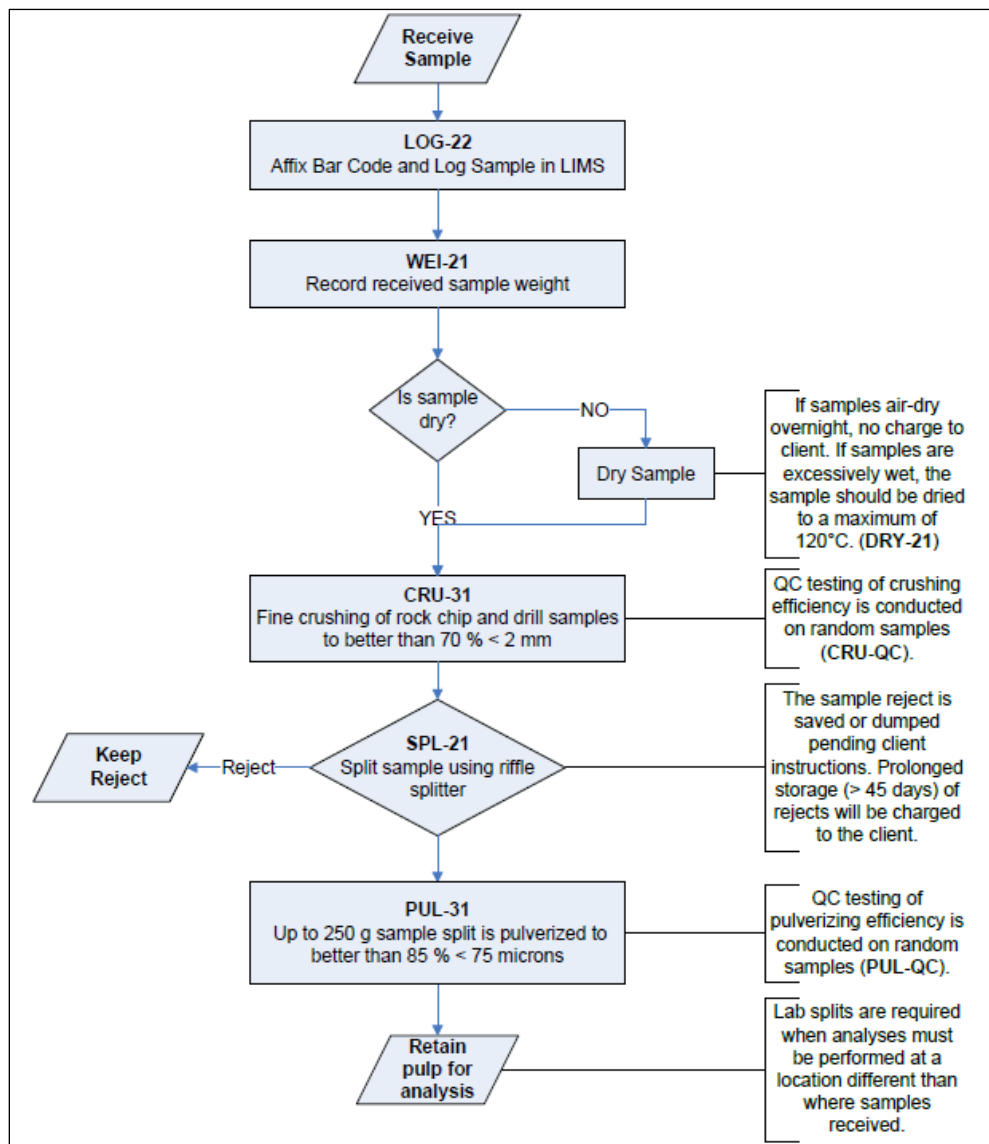
The following descriptions about sample preparation, digestion and analysis were copied from applicable ALS assay procedure fact sheets:

11.3.1.1 Preparation Standard Sample Preparation (PREP-31): dry, crush, split, pulverize

The sample is logged in the tracking system at the ALS Geochemistry preparation facility in Kamloops, British Columbia, weighed, dried and finely crushed to better than 70 % passing a 2 mm (Tyler 9 mesh, US Std. No.10) screen. A split of up to 250 g is taken and pulverized to better than 85 % passing a 75 micron (Tyler 200 mesh, US Std. No. 200) screen. The pulverizer bowl was cleaned with sand after each sample.

The ALS preparation flow chart is shown in Figure 11-1.

Figure 11-1: ALS Sample preparation chart



Source: MMTS, 2026

11.3.1.2 Multi-Element: ME-ICP61 – 4-Acid Digestion with conventional ICP-AES Analysis

Sample Decomposition: HNO₃-HClO₄-HF-HCl digestion, HCl Leach (GEO 4ACID)

Analytical Method: Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP-AES)

A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and the resulting solution is analyzed by inductively coupled plasma atomic emission spectrometry. Results are corrected for spectral interelement interferences.

NOTE: Four-acid digestions dissolve most minerals; however, although the term “near-total” is used, depending on the sample matrix, not all elements are quantitatively extracted.

11.3.1.3 Over-Limits: ME-OG62 - Ore Grade Elements by Four-Acid Digestion with Conventional ICP-AES Analysis

Sample Decomposition: HNO₃-HClO₄-HF-HCl Digestion (ASY-4A01)

Analytical Method: Inductively Coupled Plasma – Atomic Emission Spectroscopy (ICP-AES)

Assays for the evaluation of ores and high-grade materials are optimized for accuracy and precision at high concentrations. Ultra-high concentration samples (>15-20%) may require the use of methods such as titrimetric and gravimetric analysis, to achieve maximum accuracy.

A prepared sample is digested with nitric, perchloric, hydrofluoric, and hydrochloric acids, and then evaporated to incipient dryness. Hydrochloric acid and de-ionized water are added for further digestion, and the sample is heated for an additional allotted time. The sample is cooled to room temperature and transferred to a volumetric flask (100 mL). The resulting solution is diluted to volume with de-ionized water, homogenized and the solution is analyzed by inductively coupled plasma - atomic emission spectroscopy or by atomic absorption spectrometry. Results are corrected for spectral interelement interferences.

NOTE: ICP-AES is the default finish technique for ME-OG62. However, under some conditions and at the discretion of the laboratory an AA finish may be substituted.

11.3.1.4 Gold: Au-ICP21 – Fire Assay Fusion – ICP-AES Finish

Sample Decomposition: Fire Assay Fusion (FA-FUSPG1 & FA-FUSPG2)

Analytical Method: Inductively Couple Plasma – Atomic Emission Spectrometry

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead. The bead is digested in 0.5 mL dilute nitric acid in the microwave oven. 0.5mL concentrated hydrochloric acid is then added, and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 4 mL with de-mineralized water, and analyzed by inductively coupled plasma atomic emission spectrometry against matrix-matched standards.

11.3.2 2022-2025 assaying at Actlabs

Both for the 2022-2025 drilling and the 2022 plus 2025 re-sampling campaigns, the generated core samples and the pulps chosen for re-submission and Au analysis were sent to Actlabs in Kamloops, BC, the facilities are equally ISO/IEC 17025:2017 certified and independent of Surge Copper.

All core was prepared as per method RX1 below while the 2011 pulps did not require any further preparation or homogenization as they had been cold-stored and were determined by the QP of the project to still be in pristine condition.

The requested Au analysis was '1A2', a fire assay method on a 30g sample with an atomic absorption finish for both the core samples and the pre-existing pulps from 2011. The following paragraphs detail the procedures at Actlabs:

11.3.2.1 Preparation: Core and Rock Sample Preparation (Method Code RX1):

As a routine practice, Actlabs cleans the pulverizer bowl with cleaner sand between each sample. The entire sample is dried at 60°C, crushed to 80% passing 2mm (10 mesh), riffle split to obtain a representative 250g sub-sample, and then pulverized to at least 95% passing 105µm (150 mesh). The quality of crushing and pulverization is routinely checked and recorded as part of our quality assurance program.

11.3.2.2 Multi-Element: Method Code 1F2 – 4-Acid Digestion with conventional ICP-OES finish

A 0.25 g sample is digested with four acids beginning with hydrofluoric, followed by a mixture of nitric and perchloric acids. This is then heated using precise programmer-controlled heating in several ramping and holding cycles which takes the samples to incipient dryness. After incipient dryness is attained, samples are brought back into solution using aqua regia. The samples are then analyzed Inductively Coupled Plasma - Optical Emission Spectrometry (ICP-OES). QC for the digestion is 14% for each batch, five method reagent blanks, 10 in-house controls, 10 samples duplicates, and eight certified reference materials. An additional 13% QC is performed as part of the instrumental analysis to ensure quality in the areas of instrumental drift.

11.3.2.3 Multi-Element: Method Code UT-4M - 4-Acid Digestion with conventional ICP-MS finish

A 0.25g sample is digested with four acids beginning with hydrofluoric, followed by a mixture of nitric and perchloric acids. This is then heated using precise programmer-controlled heating in several ramping and holding cycles which takes the samples to dryness. After dryness is attained, samples are brought back into solution using hydrochloric and nitric acids. Digested samples are diluted and analyzed by ICP-MS. One blank is run for every 40 samples. One in-house control is run every 20 samples. Digested standards are run every 80 samples. After every 15 samples, a digestion duplicate is analyzed. The instrument is recalibrated every 80 samples.

11.3.2.4 Overlimit: Method Code 8-Peroxide – Sodium Peroxide Fusion with conventional ICP-OES finish

Samples that report >10,000ppm for Cu, Pb, or Zn are fused with sodium peroxide and undergo an acid dissolution resulting in total metal recovery. It is effective for the decomposition of sulphides and refractory minerals.

11.3.2.5 Gold: Method Code 1A2 – Standard Fire Assay Fusion with AA Finish

A 30 g sample is mixed with fire assay fluxes (borax, soda ash, silica, litharge) with Ag added as a collector and the mixture is placed in a fire clay crucible. The mixture is then preheated at 850°C, intermediate 950°C and finish 1060°C with the entire fusion process lasting 60 minutes. The crucibles are then removed from the assay furnace and the molten (lighter material) is carefully poured from the crucible into a mould, leaving a lead button at the base of the mould. The lead button is then placed in a preheated cupel which absorbs the lead when cupelled at 950°C to recover the Ag (doré bead) + Au.

Samples are processed in batches of 42 samples which contain up to 35 client samples, plus seven internal Quality Control (QC) samples (2 blanks, 3 sample duplicates, and two certified reference materials - one high and one low) for at least 20% QC in each batch.

After fire assay fusion, the entire Ag + Au doré bead is dissolved in aqua regia and the gold content is determined by AA (Atomic Absorption) spectroscopy. AA is an instrumental method of determining element concentration by introducing an element in its atomic form, to a light beam of appropriate wavelength causing the atom to absorb light. The reduction in the intensity of the light beam directly correlates with the concentration of the elemental atomic species. The upper reporting limit of the method is 5g/t.

11.3.2.6 CuCN: Method Code 8-Cu – Cyanide Leach on 30 g split with AA finish and 0.1 ppm lower reporting limit

One gram of the sample is leached in 10% Sodium Cyanide (NaCN) solution and agitated for 30 minutes. The leach solution is then analyzed by atomic absorption instrumentation.

11.3.2.7 CuAS: Method Code 8-Cu – Sulphuric Acid Leach with AA finish and 2ppm lower reporting limit

The method uses 1g of sample that is leached in 5% Sulphuric acid (H₂SO₄) and agitated for one hour. The leach solution is then analyzed by atomic absorption instrumentation.

11.4 QA/QC overview

Over the years, Surge Copper has completed several drilling and re-sampling as well as one re-assaying campaign while changing between ALS and Actlabs as the primary lab (Table 11-1).

Table 11-1: Berg Drilling and Re-sampling Programs Primary Lab by Year

Year	Drilling (core)	Re-sampling (core)	Re-assaying (pulp)
2021	ALS	-	-
2022	-	Actlabs	Actlabs
2023	Actlabs	-	-
2024	ALS	-	-
2025	Actlabs	Actlabs	-

The company has maintained overall acceptable industry standard QA/QC protocols throughout these programs that resulted in the frequent insertion of blanks, blind certified reference materials (CRM or Standards, STD), and field duplicates to be able to identify and control potential laboratory-related preparation or analysis inconsistencies, independent of the respective lab-internal QA/QC systems. Because the material to be tested varied and the programs served different specific purposes, the respective QA/QC protocols saw adjustments which are reflected in the overall insertion rates, for instance.

MMTS notes that the 2022 core re-sampling program data contains an insufficient number of standards (1.2% of total) and no lab-independent sample duplication was performed, presumably to conserve core in the box for later reference. Furthermore, no new QA/QC samples like suitable blind standards or pulverized blanks were inserted into the 2022 pulp re-assaying stream at all, leaving the whole campaign essentially uncontrolled.

The performance of five different blanks contained in the Berg database can be assessed for cross-sample contamination (Sections 11.4, 11.5, and 11.7). The most current blank material is called 'Blank 13.5km' which has been inserted > 200 times in the last 3 years.

Several different and overall suitable CRMs have been utilized to reflect expected metal grades at Berg, at low, medium and high concentrations for Au and Cu in particular. Table 11-2 lists the standards and their expected values (EV) and 'between-labs' standards deviations (SD). A project-specific set of reference material produced from ore sampled at Berg, certified by Smee&Associates in north Vancouver, was used in 2008 and 2011, see Section 11.7 for detailed analysis of the performance. CDN standards dominate the recent programs, while WCM Minerals standards were used in 2007 to 2011 as well, see CU126 and CU133 Table 11-2.

Table 11-2: CRM details

Provider	CRM name	Au EV g/t	Au 2SD	Cu EV pct	Cu 2SD	Ag EV g/t	Ag 2SD	Mo EV ppm	Mo 2SD
project-specific	HYP HIGH			0.264	0.024	3.4		0.031	0.002
project-specific	HYP LOW			0.151	0.012	2.1		0.013	0.0014
project-specific	SUP HIGH			0.343	0.01	4.6	0.6	0.024	0.0032
project-specific	SUP LOW			0.187	0.01	3.9		0.015	0.002
Smee&Associates	BAH-MOD	0.084	0.012	0.7261	0.0378	3.9		0.0092	0.00118
CDN	CDN-CM-1	1.85	0.16	0.853	0.02			0.076	0.008
CDN	CDN-CM-25	0.228	0.03	0.191	0.006			0.019	0.002
CDN	CDN-CM-29	0.72	0.068	0.742	0.03			0.053	0.004
CDN	CDN-CM-34			0.578	0.022	3.7	0.4	0.03	0.002
CDN	CDN-CM-47	1.13	0.11	0.724	0.028	69	6	0.028	0.002
CDN	CDN-CM-54	1.682	0.137	0.356	0.015	55	6	0.013	0.001
CDN	CDN-ME-1201	0.125	0.03	1.572	0.086	37.6	3.4		
WCM Minerals	CU126			0.43	0.018	9.07	1.47	0.082	0.0026 7
WCM Minerals	CU133	1.503	0.132	0.24	0.0068	20.8	1.73	0.033	0.0018 8

Field duplicates were taken by splitting the selected half core sample into two quarters and sending them separately with unique sample IDs. Field duplicate data is also available for the 2025 re-sampling of historical core.

Independent coarse (crush) or pulp duplication has not been requested from either lab over the last five years, except for the 2022 pulp re-assaying program described in Section 11.6.

Table 11-3: QA/QC insertion counts and rates for drilling

Sample type	Material description	Historical (1964-1980)		2007		2008		2011		2021		2023		2024		2025		2007-2025		
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	overall
PRIMARY	1/2 core sample	6,150	100.0%	4,066	72.5%	4,431	72.0%	4,913	79.2%	1,252	85.0%	975	80.8%	1,950	83.4%	1,415	85.6%	25,152	81.7%	87.0%
PRIMARY	chips	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
FIELDORIG	1/4 core sample field original	0	0.0%	135	2.4%	147	2.4%	154	2.5%	73	5.0%	55	4.6%	98	4.2%	72	4.4%	734	2.4%	
CORIG	coarse reject original	0	0.0%	133	2.4%	145	2.4%	153	2.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	431	1.4%	
UMPIREORIG	check-assay original	0	0.0%	210	3.7%	241	3.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	451	1.5%	
FIELD DUP	1/4 core sample field duplicate	0	0.0%	135	2.4%	147	2.4%	154	2.5%	73	5.0%	55	4.6%	98	4.2%	73	4.4%	735	2.4%	3.8%
CDUP	coarse reject duplicate	0	0.0%	133	2.4%	145	2.4%	153	2.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	431	1.4%	
BLANK 1	blanks	0	0.0%	216	3.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	216	0.7%	3.7%
BLANK 2		0	0.0%	0	0.0%	0	0.0%	67	1.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	67	0.2%	
BLANK 3		0	0.0%	52	0.9%	287	4.7%	239	3.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	578	1.9%	
BLANK 13.5km		0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	52	4.3%	101	4.3%	75	4.5%	228	0.7%	
BLANK 15km		0	0.0%	0	0.0%	0	0.0%	0	0.0%	58	3.9%	0	0.0%	0	0.0%	0	0.0%	58	0.2%	
BergHypHigh	standards	0	0.0%	0	0.0%	93	1.5%	89	1.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	182	0.6%	3.0%
BergHypLow		0	0.0%	0	0.0%	96	1.6%	91	1.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	187	0.6%	
BergSupHigh		0	0.0%	0	0.0%	47	0.8%	47	0.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	94	0.3%	
BergSupLow		0	0.0%	0	0.0%	46	0.7%	39	0.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	85	0.3%	
BAH-MOD		0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	9	0.7%	13	0.6%	13	0.8%	35	0.1%	
CDN-CM-1		0	0.0%	122	2.2%	6	0.1%	15	0.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	143	0.5%	
CDN-CM-34		0	0.0%	0	0.0%	0	0.0%	0	0.0%	17	1.2%	0	0.0%	0	0.0%	0	0.0%	17	0.1%	
CDN-CM-47		0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	8	0.3%	0	0.0%	8	0.0%	
CDN-CM-54		0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	5	0.3%	5	0.0%	
CDN-ME-1201		0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.0%	0	0.0%	1	0.0%	
CU126		0	0.0%	76	1.4%	1	0.0%	13	0.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	90	0.3%	
CU133		0	0.0%	70	1.2%	2	0.0%	13	0.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	85	0.3%	
UMPIREDUP	check-assay duplicate	0	0.0%	227	4.0%	270	4.4%	60	1.0%	0	0.0%	54	4.5%	67	2.9%	0	0.0%	678	2.2%	2.5%
UMPIREDUPLABDUP	check-assay duplicate lab dup	0	0.0%	8	0.1%	10	0.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	18	0.1%	
CHECKBLANK	check-assay blank	0	0.0%	12	0.2%	14	0.2%	0	0.0%	0	0.0%	4	0.3%	2	0.1%	0	0.0%	32	0.1%	
CHECKBLANKDUP	check-assay blank duplicate	0	0.0%	1	0.0%	2	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	0.0%	
CHECKSTANDARD	check-assay standard	0	0.0%	13	0.2%	23	0.4%	0	0.0%	0	0.0%	2	0.2%	0	0.0%	0	0.0%	38	0.1%	
CHECKSTANDARD DUP	check-assay standard duplicate	0	0.0%	1	0.0%	1	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	0.0%	
Total analyses		6,150	100.0%	5,610	100.0%	6,154	100.0%	6,200	100.0%	1,473	100.0%	1,206	100.0%	2,338	100.0%	1,653	100.0%	30,784	100.0%	100.0%
Total intervals sampled		6,150	100.0%	4,544	76.5%	4,964	76.0%	5,220	81.2%	1,325	88.8%	1,030	82.9%	2,048	85.8%	1,487	88.8%	26,768	85.0%	
Total blanks		0	0.0%	268	5.9%	287	5.8%	306	5.9%	58	4.4%	52	5.0%	101	4.9%	75	5.0%	1,147	4.3%	
Total CRMs		0	0.0%	268	5.9%	291	5.9%	307	5.9%	17	1.3%	9	0.9%	22	1.1%	18	1.2%	932	3.5%	
Total Duplicates		0	0.0%	268	5.9%	292	5.9%	307	5.9%	73	5.5%	55	5.3%	98	4.8%	73	4.9%	1,166	4.4%	
Total check-assays		0	0.0%	262	5.8%	320	6.4%	60	1.1%	0	0.0%	60	5.8%	69	3.4%	0	0.0%	771	2.9%	

Table 11-3 shows both % of total samples including all QC ('% of total' column right of 'count' for each year) as well as % of interval sampled only at the bottom of the list. The QC insertion rates for 2021 to 2025 are below industry standard for CRMs. Field duplicate and blank insertion rates are acceptable.

11.5 Quality control of laboratory analysis ALS 2021-2024

Surge's QA/QC protocol at Berg in 2021 and 2024 included the regular insertion of blind certified reference materials (only 1 STD type in 2021 – CDN-CM-34) and one blind blank into the sample stream at low to acceptable rates and distributions to control lab reported data for contamination and accuracy. CDN-CM-34 is not certified for Au, but can control Cu, Ag, and Mo. Equally, the Surge team took an acceptable number of field duplicate samples to understand reproducibility at the sampling stage. Table 11-3 reports QA/QC insertion rates and totals for the Berg Copper Project over time, including 2021 and 2024.

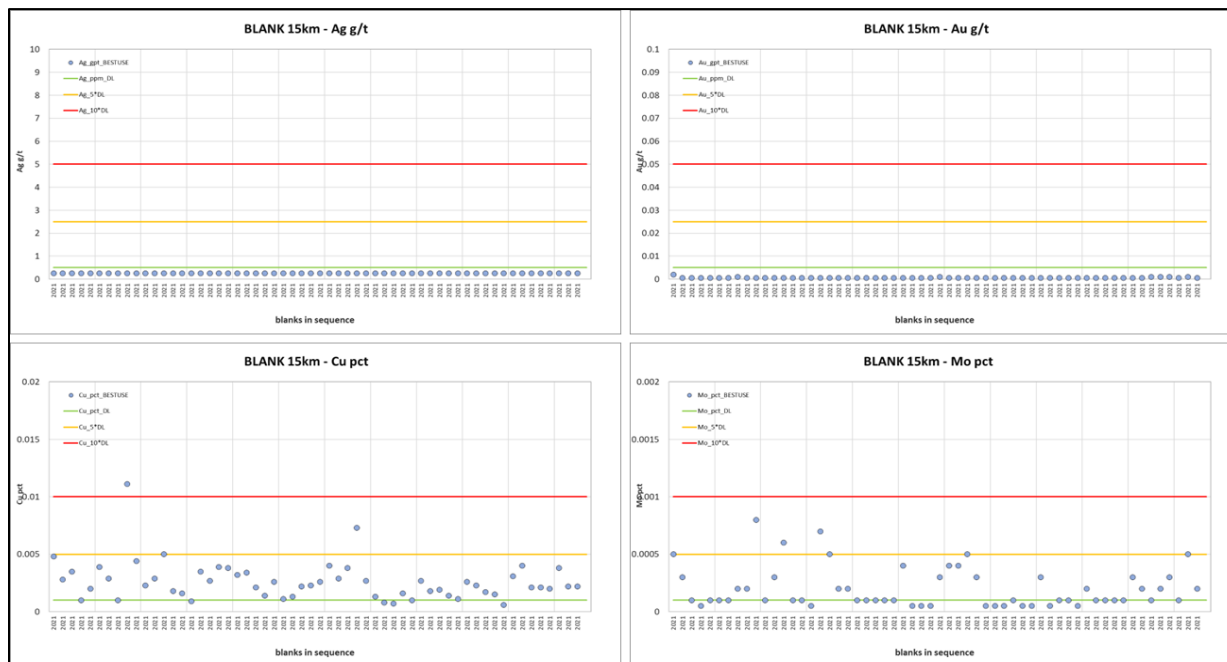
Any standards that returned Au, Cu or Mo data with results outside acceptable limits (greater than one standard deviation) were investigated and any issues resolved, including requesting the lab to batch re-run the suspect samples, prior to accepting the data into the database. Internal lab certified standards were also plotted and reviewed as part of the routine QA/QC checks.

11.5.1 Blanks performance – ALS 2021-2024

In 2021, Surge Copper inserted 58 blind blanks of approximately 1 kg each at regular intervals of approximately 1 blank in 20 samples into the stream of 1,325 sampled intervals, which approached the recommended rate of 5% and is acceptable. A material called 'Blank 15km' was used, which differed geochemically (and therefore most likely in its physical properties) from blanks used at the project previously (2007-2011, see Table 11-3). This blank material is from a reddish to tan-coloured intermediate composition crystal lithic tuff from the Telkwa formation. It is composed of up to 30% angular lithic clasts ranging in size from <1 mm to ~10 mm in a very fine-grained to aphanitic crystal-ash matrix. No sulphide minerals are evident in hand sample and the rock appears to be relatively fresh and unaltered. This material was sourced from a blast pit located near the 15 km marker on the Troitsa Forest Services Road, about 2 km beyond the Ootsa exploration camp.

Figure 11-2 graphs the 2021 blank performance for Ag, Au, Cu, and Mo in 'Blank 15 km'. The plotted data indicates that the blank material contains natural background concentrations of approximately 5-30 ppm Cu and 1-5 ppm Mo. This makes classifying and quantifying of cross-sample contamination at such low concentrations impossible, but since just one Cu value exceeds the 10*DL failure limit, MMTS regards this as without consequence for resource estimation. Also, Ag and Au consistently report below detection limit in the blank which supports the conclusion that Cu and Mo scatter are natural variability. Neither acid-soluble Cu nor Re data is available for 2021.

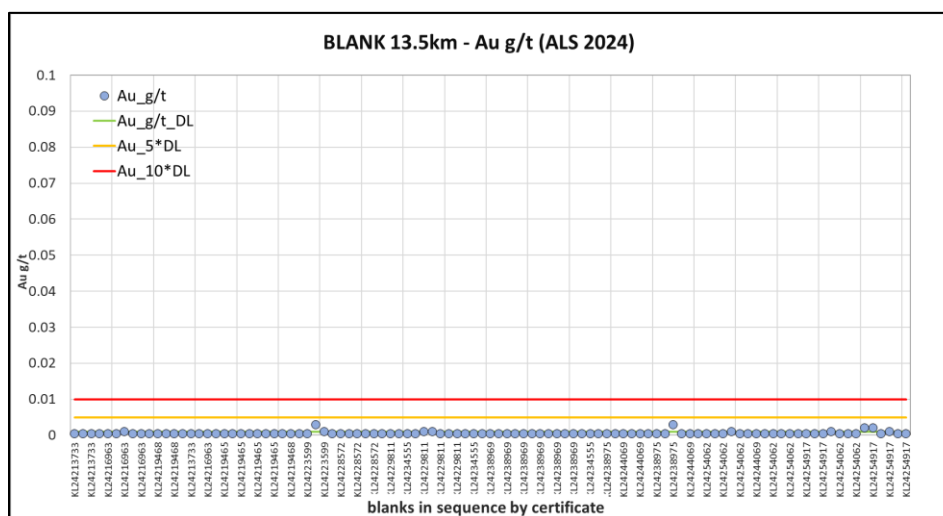
Figure 11-2: Blind blank performance for Ag, Au, Cu, and Mo – ALS 2021



Source: MMTS, 2026

In 2024, apparently unmineralized rhyolite volcanic from a sample site at 13.5 km on the Sibola Forest Services Road was utilized for contamination control ('Blank 13.5 km'). This rock differs geochemically from the material at 15 km on the Troitsa FSR in that it contains much less Ca, Fe, and Ti, and is Si-rich. It also contains low levels of Cu (approximately 5 ppm on average) and possibly Mo (2ppm), but Au is consistently at or below detection limit of 0.001g/t (Figure 11-3).

Figure 11-3: Blind blank performance for Au – ALS 2024



Source: MMTS, 2026

No meaningful cross-sample contamination was recorded for core samples sent to ALS in 2021 or 2024.

11.5.2 Certified reference materials performance – ALS 2021-2024

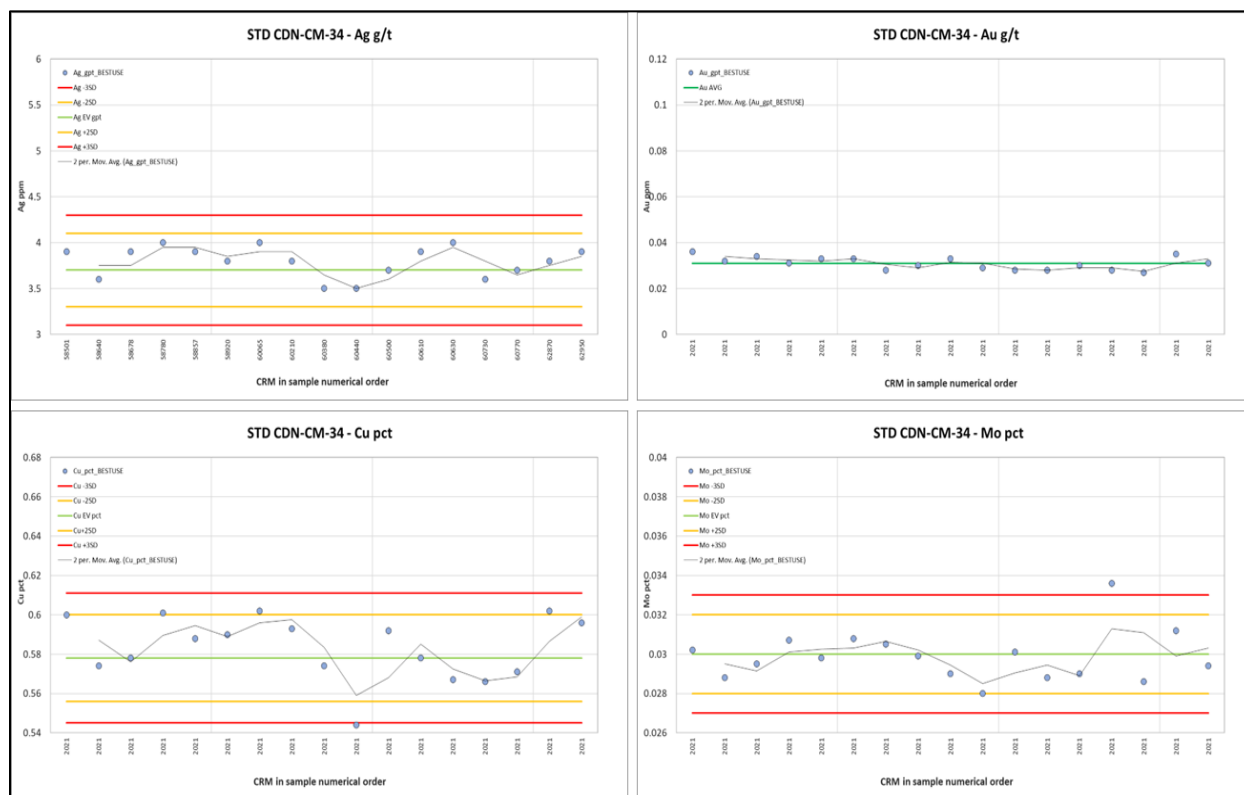
The single utilized CRM for 2021 is CDN-CM-34 which is certified for Cu, Mo, Ag, and S, but not for Au. It was inserted 17 times to control analytical accuracy. The following plots show the performance for each relevant element over the duration of the campaign.

Overall, considering the relatively small number of data, ALS has analyzed CDN-CM-34 accurately, with no significant trends discernible and the results mostly within ± 2 standard deviations (inter-lab 2SD as certified by CDN). Cu appears to report slightly higher than EV of 0.578% Cu, but one single value exceeds the -3SD threshold and as a result, the mean only calculated to 0.583% Cu, matching the Cu EV.

The Mo plot shows one CRM analysis exceeding the +3SD threshold, the other 16 results plotted within ± 2 SD of EV of 0.03% Mo. The Ag results plot within ± 2 SD of EV of 3.7ppm Ag.

CDN-CM-34 is not certified for Au and is therefore not suitable for accuracy control, but the Au data in Figure 11-4 appears to indicate reasonably good precision.

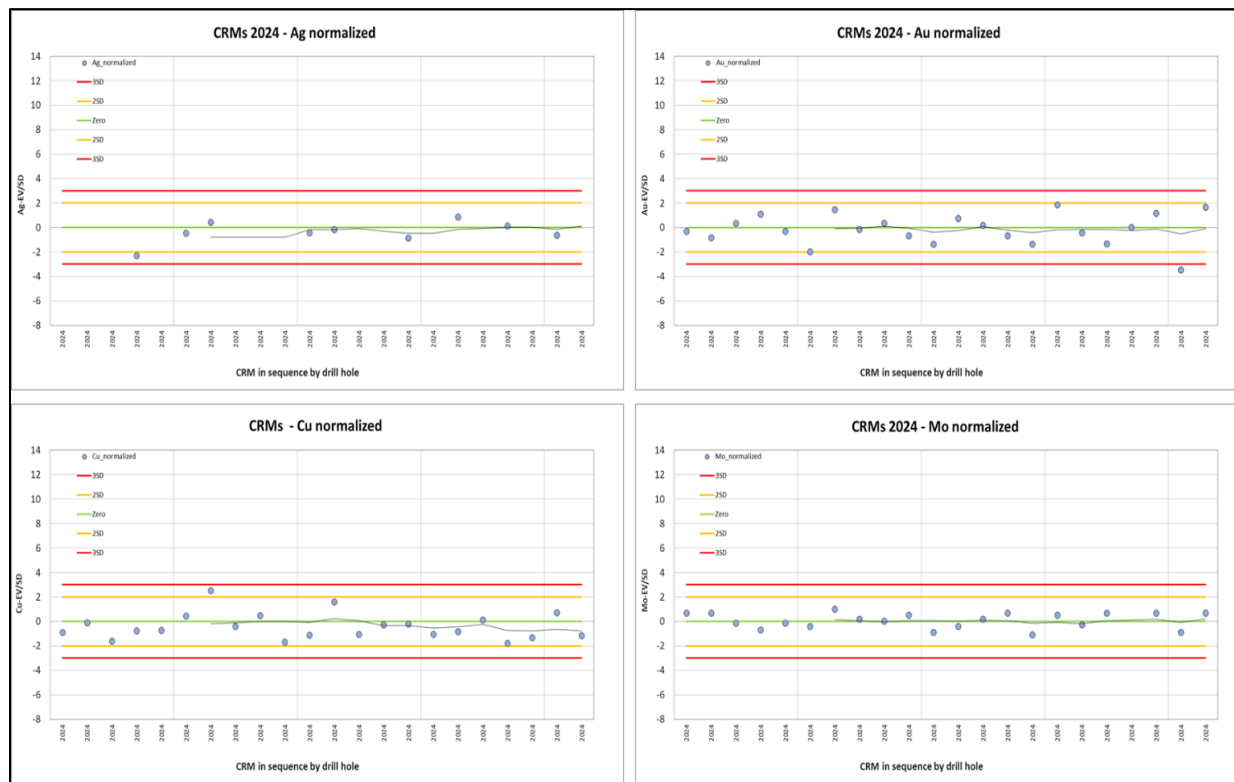
Figure 11-4: CRM performance for Ag, Cu, Mo, Au indicated – ALS 2021



Source: MMTS, 2023

In 2024, Surge Copper inserted 3 different standards, the lab results of which are normalized using the 'in-between labs' standard deviation for each element of interest as reported by the respective certifying company. Figure 11-5 demonstrates acceptable accuracy for Ag, Au, Cu, and Mo. It is noted, however, that two of the three STDs have very similar expected Cu values at a relatively high 0.72% concentration.

Figure 11-5: CRM performance for Ag, Au, Cu, Mo – ALS 2024



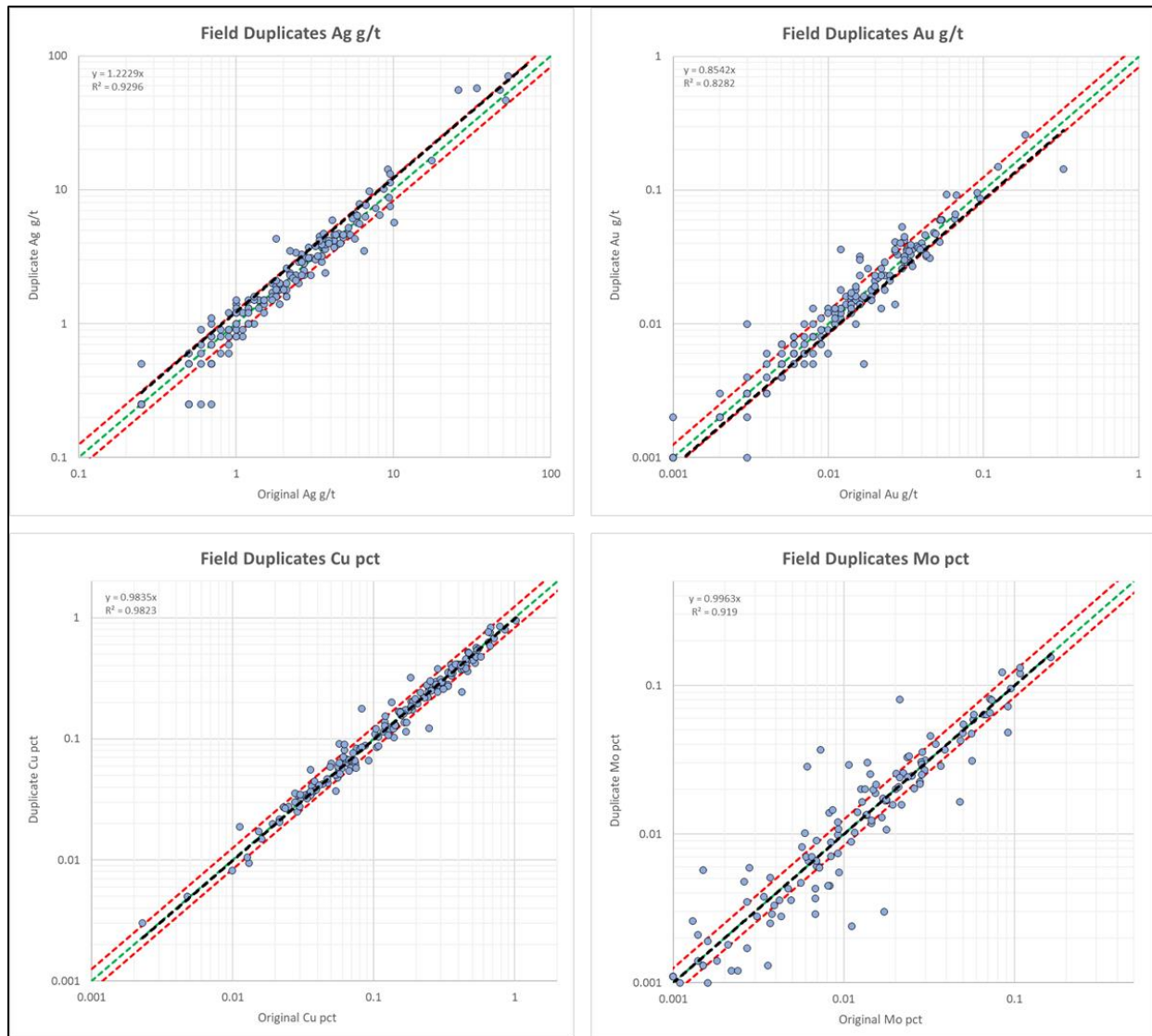
Source: MMTS, 2023

11.5.3 Field duplicates performance – ALS 2021-2024

Field duplicate samples were collected from a total of 171 regularly spaced intervals by cutting the respective core twice to generate two quarter core samples (the original-duplicate pair or 'FORIG'-'FDUP'). Ideally, both samples are of equal sample weight. The two samples were numbered, prepped, and analyzed separately, though generally in succession, then the original assay was compared to the duplicate assay to assess the collective error of sampling, preparation, and analysis (precision or reproducibility).

Logarithmic XY scatter plots with $\pm 20\%$ thresholds (red dash) are produced for each and R2 calculated (Figure 11-6). The field duplicate data indicates good reproducibility for each metal considered here. Four of the highest five silver values shift the trendline (black dash) into slightly duplicate-positive territory, however most of the silver data does not show the same bias. One single relatively high-grade Au original-positive sample pair influences the regression line into a visual bias of 20%, but most of the population appears to be unbiased with very acceptable correlation for Au. The Cu duplicates graph proves good precision even at the sampling stage at Berg. Molybdenum in field duplicates exhibits significant scatter across the full grade range available (approximately 10 ppm to 1,500 ppm) but no relevant bias potentially connected to the sampling/cutting process could be identified.

Figure 11-6: Field duplicate performance for Ag, Au, Cu, and Mo – ALS 2021-2024



Source: MMTS, 2026

The average half absolute relative difference (HARD) for all four elements is within 2%.

11.6 Quality control of laboratory analysis - Actlabs 2022-2025

In 2022, Surge Copper resampled 4,290 intervals from 2007-2008 drill core (holes BRG07-139 to BRG08-197, except for BRG07-142, BRG08-186, and BRG08-196) for which Au data was not yet available and sent the material to Actlabs in Kamloops for fire assay Au analysis.

Surge provided MMTS with a database that detailed which interval of each selected drill hole was resampled, including the original sample number and the new 2022 sample number, which STD and blank were inserted at what position, plus comments. Surge had cut the existing half core into quarter core while maintaining the original sample interval, wherever possible.

To control the quality of the assay results, Surge inserted 205 blanks and 46 standards at mostly regular intervals of approximately 1 QC sample every 10 core samples, often alternating between blank and CRM material, but did not define and take field duplicate samples. Surge also did not re-sample any core for which Au was already available, so ALS's Au-AA23 method of 2007 and the 2022 Actlabs fire assay method 1A2 could not be directly compared.

Fourteen new drill holes were completed in 2023 and 2025 combined, which generated >2,500 core samples and 282 QA/QC samples to control core assay results. This included three relatively short anchor holes and four holes drilled for ARD purposes, nonetheless these were processed under the same sampling and QA/QC protocols and were analyzed at Actlabs for Au (method 1A2) and a full ICP suite (1F2).

Also in 2025, Surge Copper proceeded with re-sampling of core from 18 historical drill holes, specifically BRG006, BRG013, BRG015 to 017, BRG022, BRG076 to 079, BRG082 to 084, BRG088, BRG089, BRG091, BRG-094, and BRG098). Approximately 1,200 core samples were sent to Actlabs, accompanied by 149 QA/QC samples which consist of one blank, three different standards, and field duplicates (see Table 11-4). All 1,356 submissions were analyzed for gold by fire assay (1A2) as well as silver, copper, molybdenum and several other elements as per method 1F2 (see Section 11.2).

The following subsections provide detail and interpretation of all lab-independent QA/QC. Since the sampling protocols for 2022 to 2025 are comparable, irrespective of the age of the core being sampled, and the preparation and analytical methods at Actlabs were not changed over those 4 years, MMTS has combined all available data from 2023-2025 into comprehensive multi-year graphs with the results plotted in drill hole sequence and kept 2022 QA/QC results separate as only Au data was reported.

Table 11-4: Re-sampling of core QA/QC insertion rates and totals

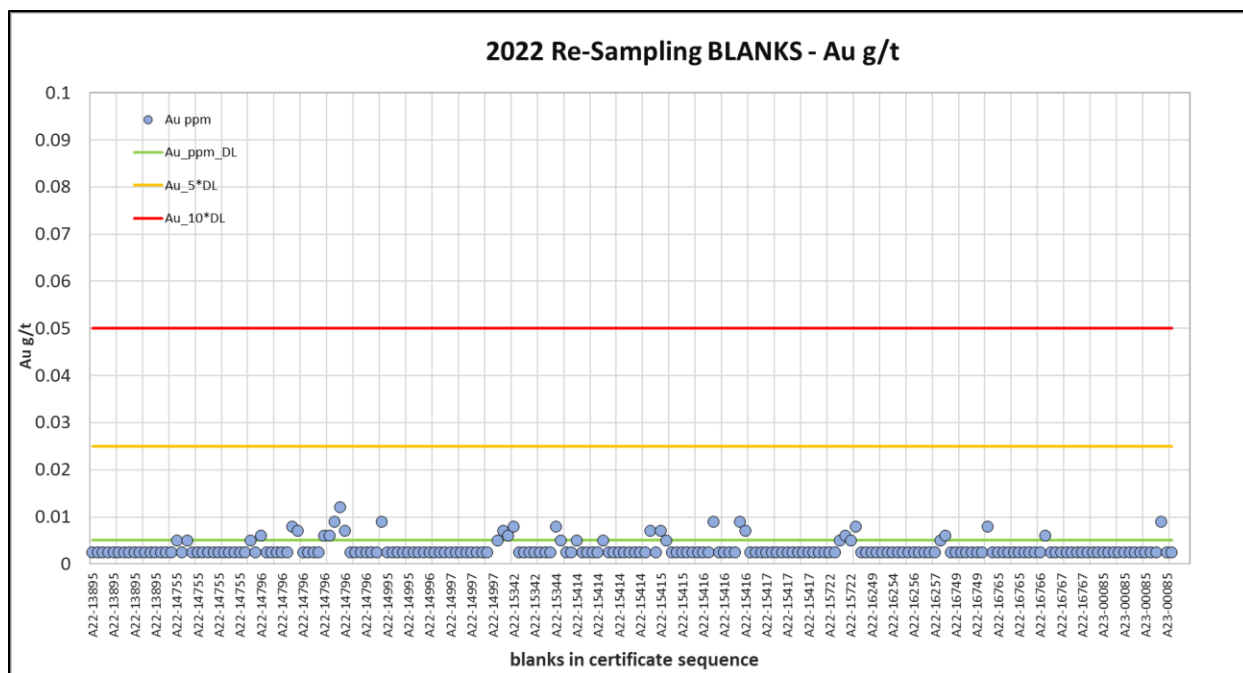
Type	2022 Re-sampling (Au)		2025 Re-sampling		2023 Sampling		2025 Sampling	
	Count	% of total	Count	% of total	Count	% of total	Count	% of total
Intervals (core)	4,281	94.5%	1,207	89.0%	1,030	89.9%	1,487	90.0%
BLK	205	4.5%	64	4.7%	52	4.5%	75	4.5%
CRM	46	1.0%	34	2.5%	9	0.8%	18	1.1%
Duplicates (field)	0	0.0%	51	3.8%	55	4.8%	73	4.4%
Total	4,532	100.0%	1,356	100.0%	1,146	100.0%	1,653	100.0%

11.6.1 Blanks performance – Actlabs 2022-2025

Predominantly, Blank ‘13.5 km’ has been inserted into the sample stream of each drilling and re-sampling program, representing unmineralized, rhyolite volcanic, taken from an outcrop location along the Sibola FSR as mentioned above.

Overall, none of the blanks indicated significant contamination that would have triggered a follow-up with Actlabs, >80% of all blanks reported below detection limit of 0.005 ppm. The 2022 Au data for blanks inserted during core re-sampling is shown in Figure 11-7.

Figure 11-7: Blind blank performance for Au – Actlabs 2022

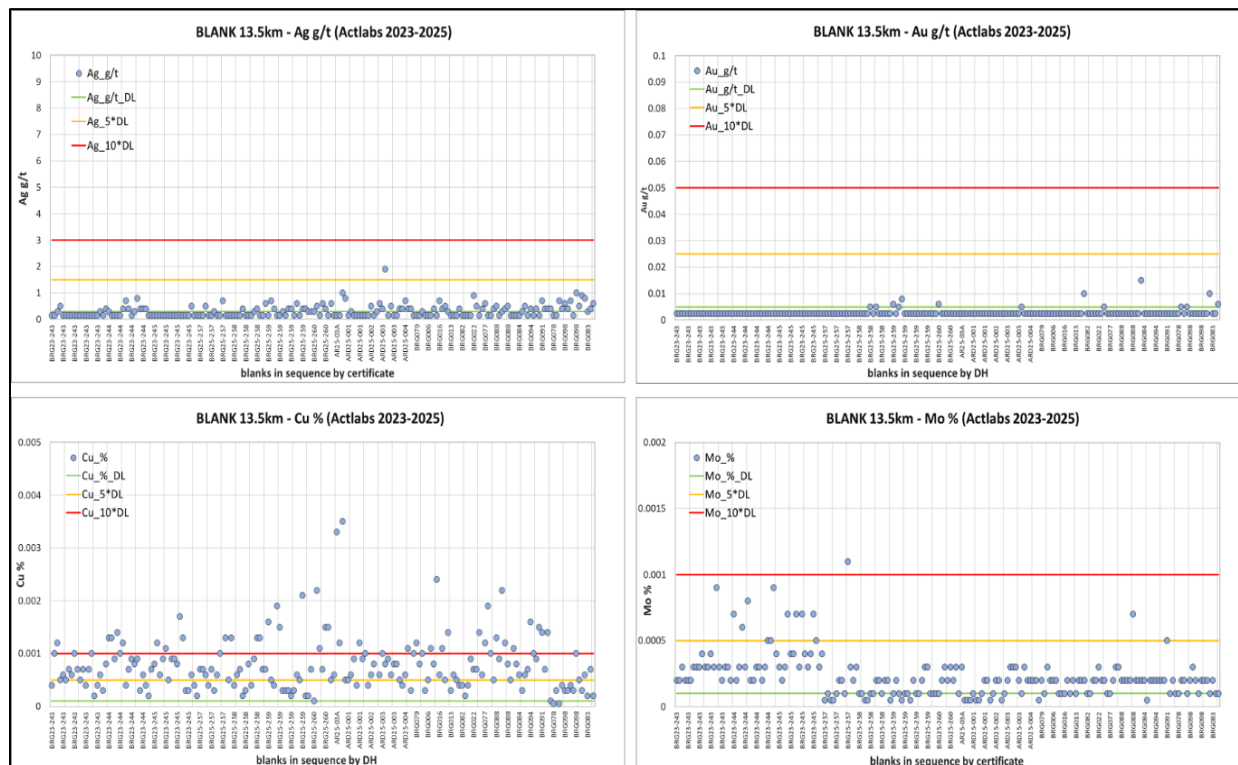


Source: MMTS, 2023

Silver and Gold data for 2023-2025 in Figure 11-8 prove that cross-sample contamination at Actlabs is not a concern, all data plots well below the 10*DL (detection limit) line used here as the ‘failure’ threshold. The Copper graph demonstrates that the blank contains slightly elevated natural levels of Cu in the range of 5-20 ppm, occasionally >30 ppm. MMTS does not interpret this as meaningful contamination. One single strong outlier at 119 ppm from drill hole BRG25-257 was re-prepped from coarse reject material; the second result matched the original, indicating variability in the blank material and not cross-sample contamination. This blank is not shown in Figure 11-8 as it plots off the chart.

A small shift is noticed in Mo concentration from 2023 drilling blanks to 2025 drilling/re-sampling blanks which indicates that maybe two batches of slightly different blank material have been collected from the chosen outcrop at 13.5 km. The average concentration drops from approximately 4–2 ppm. This is not a contamination concern but rather natural variability in the source rock.

Figure 11-8: Blind Blank Performance for Ag, Au, Cu, Mo – Actlabs 2023-2025



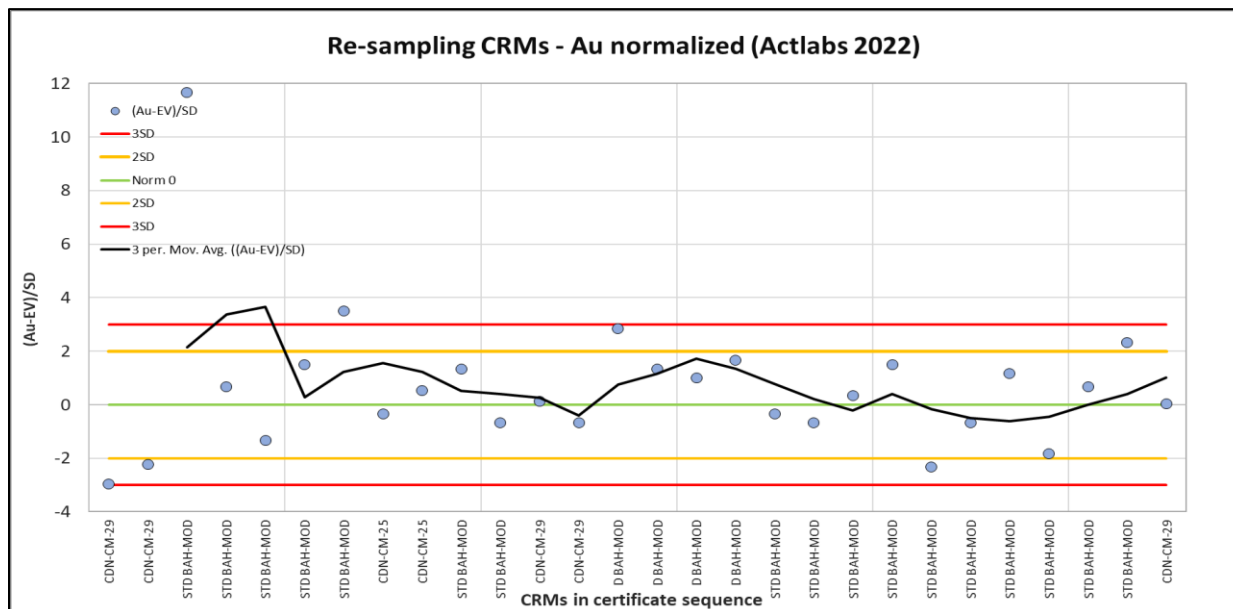
Source: MMTS, 2026

11.6.2 CRM performance – Actlabs 2022-2025

Four different standards were selected by Surge to control analytical accuracy over a representative range of Au grades in 2022, however, the project-specific standard 'BergSupHigh' as the lowest-grade material chosen and inserted 17 times has never been certified for Au, only for Cu. As a result, the following Au-normalized PCC-style plot only included the other three CRMs, CDN-CM-25, CDN-CM-29, and BAH-MOD. The 'between-labs' standard deviation in BAH-MOD was considered by Smee and Associates as too large to fully certify the Au grade of the material, it was therefore considered as an 'indicated mean' only.

The 29 available data points in Figure 11-9 scatter around a Z-score of 0, with three outliers that exceed the 3SD failure threshold, though the strongest outlier is probably a mislabel in the database. On average, the CRMs read slightly high, but MMTS finds the results to demonstrate overall acceptable accuracy for Au by fire assay at Actlabs.

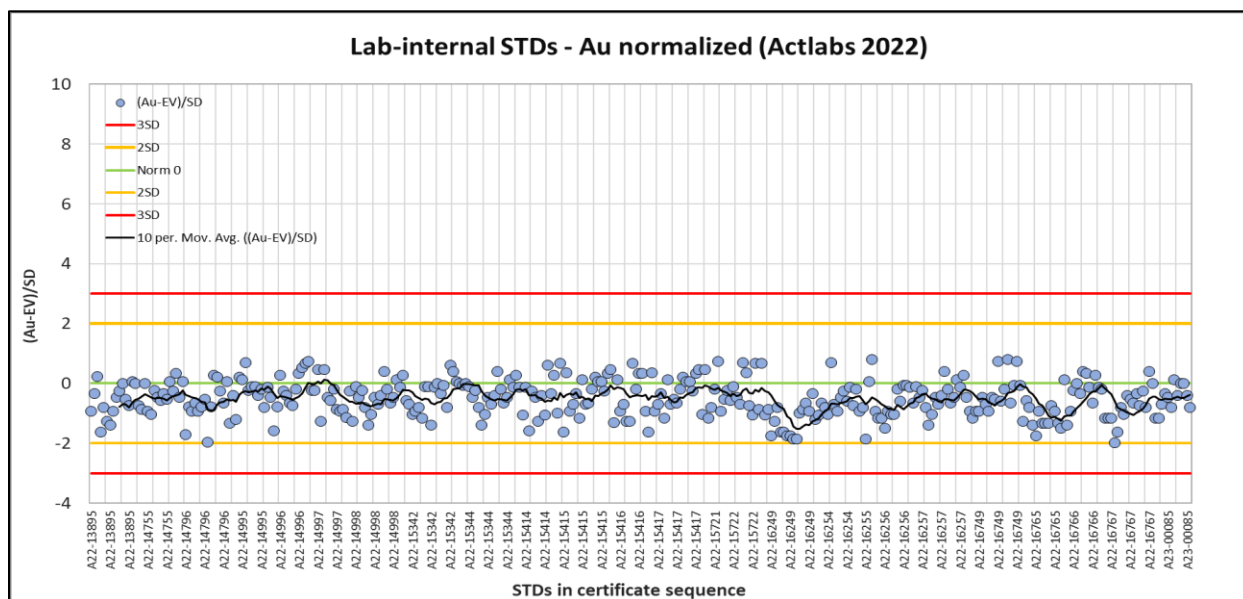
Figure 11-9: CRM performance for Au (normalized) – Actlabs 2022



Source: MMTS, 2023

A review of the lab-internal CRM performance was performed to confirm and support the results shown in Figure 11-9. Figure 11-10 displays a plot of all relevant Au by fire assay results of four different OREAS standards utilized by Actlabs internally at regular intervals during the campaign. The data is biased low throughout but always stays within $\pm 2SD$ warning limits, suggesting that the moderate results of Surge's blind CRMs are probably related to the inconsistent BAH-MOD material and not to accuracy issues at Actlabs.

Figure 11-10: CRM performance for Au (normalized) – Actlabs 2022 (lab-internal QA/QC)



Source: MMTS, 2023

Assay results of 61 standards are available to assess analytical accuracy for Ag, Au, Cu, and Mo at Actlabs in 2023-2025. Sixty (60) of 61 are either BAH-MOD or CDN-CM-54 which effectively limits the representation of the various metal grades at Berg. For Au for example, the two standards only cover the low-grade range at <0.1g/t (BAH-MOD) and the very high-grade range at >1.5g/t (CDN-CM-54). CDN-ME-1201 was inserted once, and while it appears suitable for Au at 0.125g/t EV, it is very high in Cu at 1.57% and not certified for Mo at all.

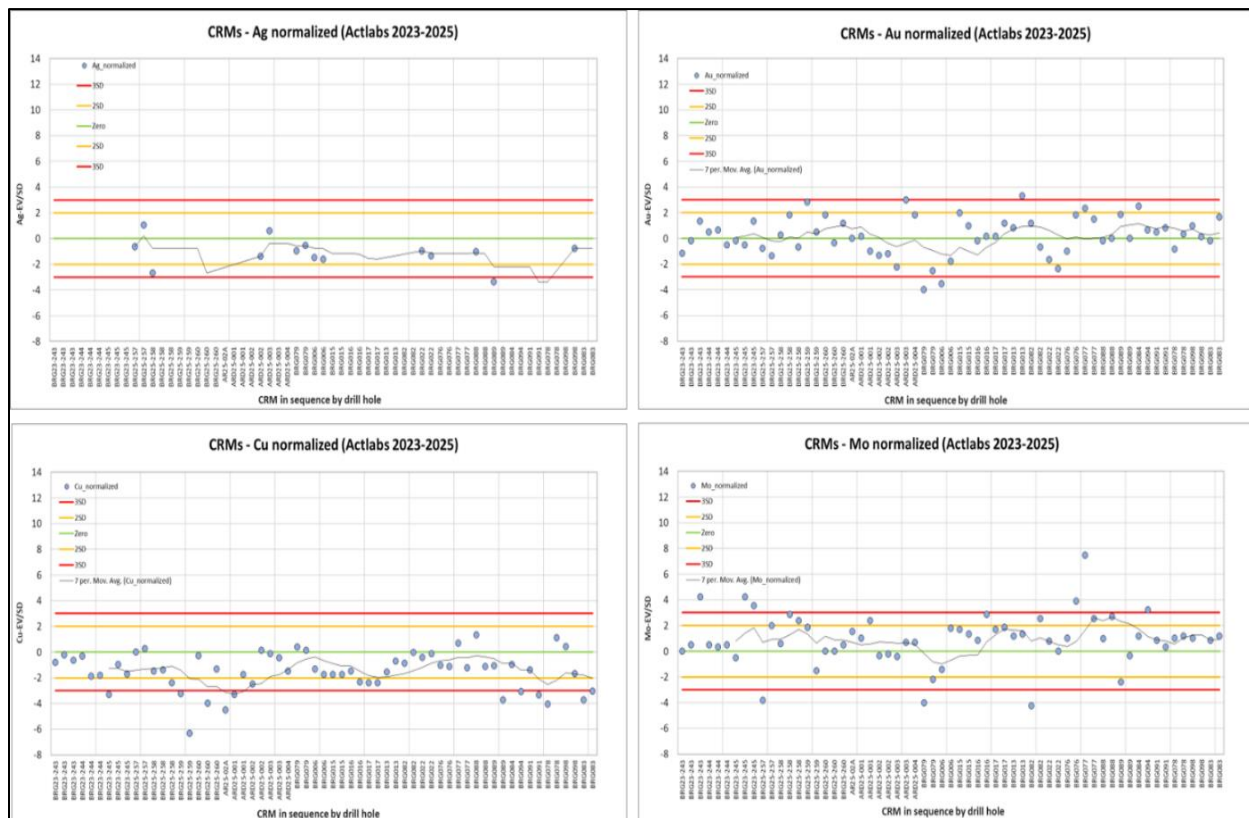
Figure 11-11 illustrates a somewhat inconsistent performance across several metals. Only CDN-CM-54 is certified for Ag which reduces the plotted population to 14 points. These 14 exhibit a slightly low bias.

The Au data is acceptable overall, but it is noted that several standards underperform, with two failures, at the start of the re-sampling program in historical drill hole BRG079 and BRG006.

The reported Cu is clearly biased low which includes 12 low failures for a failure rate of approximately 20%. The grouping of low results around drill hole BRG25-259 triggered a review and re-run at Actlabs for the worst-performing standard with subsequently returned an acceptable value (0.693% Cu vs. the original 0.607%).

Mo records nine failures, but they are scattered across the sample sequence and fail both high and low. The population is biased moderately high by about 6% using a straight average. BAH-MOD represents 47 out of the 61 standards, including six of the seven high outliers and carries most of the high bias.

Figure 11-11: CRM performance for Ag, Au, Cu, Mo (normalized) – Actlabs 2023-2025



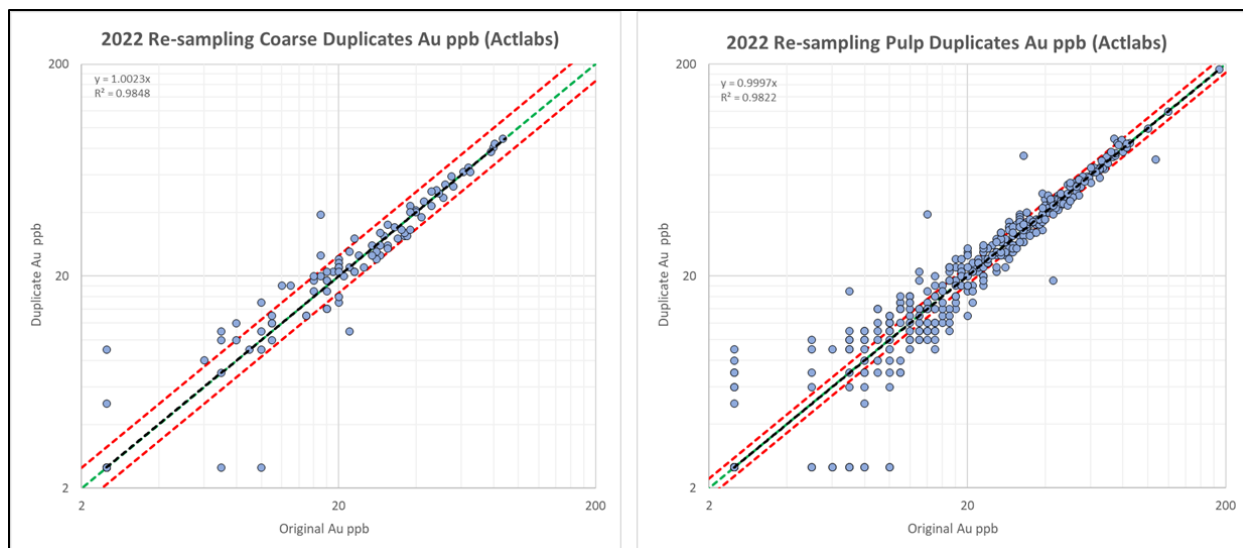
Source: MMTS, 2026

The performance is overall acceptable, and Cu data for this period might be slightly conservative.

11.6.3 Duplicate performance – Actlabs 2022-2025

Surge Copper did not include any field duplicate samples in the 2022 re-sampling program, nor were coarse reject or pulp duplicate samples requested from the lab at specific intervals, so to assess repeatability, MMTS uses Actlabs coarse reject split duplicate (97 data points) and pulp duplicate data (382). Both graphs in Figure 11-12 are taken from the 2023 Technical Report by Ausenco and MMTS and demonstrate good correlations with only few outliers. No bias is noted.

Figure 11-12: Core re-sampling coarse and pulp duplicate performance for Au – Actlabs 2022 (internal QA/QC)



Source: MMTS, 2023 modified

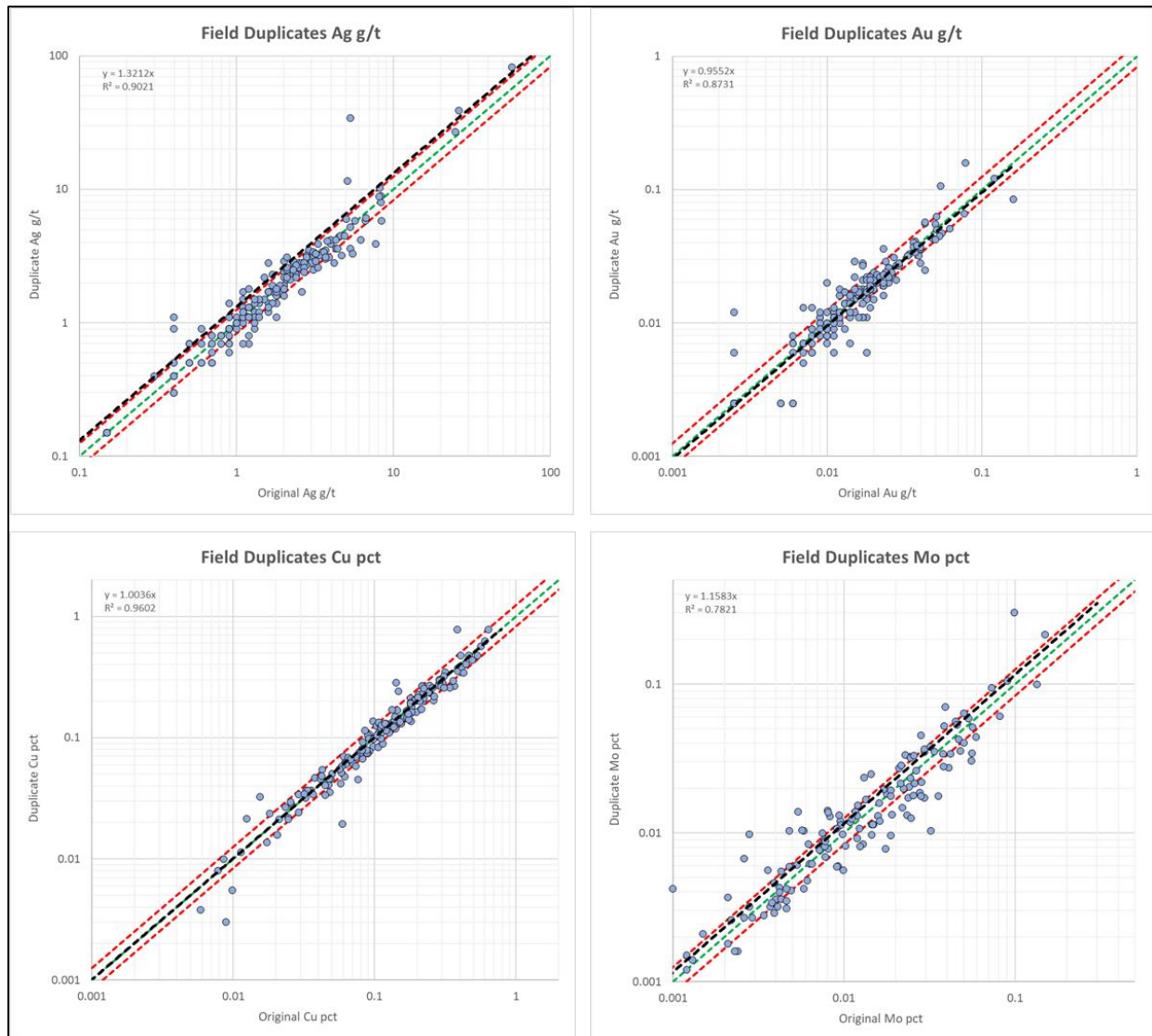
From 2023 onwards, the company took field duplicates by quarter coring select sample intervals and sending the corresponding material under separate and unique sample numbers even when sampling pre-existing core. Actlabs were not asked to report sample weights as received, so no double-checks could be performed on potential weight discrepancies for the original-duplicate pairs or overall sampling errors across the assay dataset in relation to sample length.

Figure 11-13 shows XY scatter plots (log) for Ag, Au, Cu, and Mo in field duplicates 2023-2025 as analyzed by Actlabs. A total of 178 field duplicates are available in the database for these three years. Grade ranges well reflect weakly to strongly ore at Berg. The correlations as displayed by R^2 are strong to very strong (Cu). The Ag and Mo trendlines are moderately affected by a small number of weak outliers that push Y into duplicate-positive territory but most of the pairs in the populations appear unbiased. Mo displays the most scatter, indicating that reproducibility at the sampling stage is weakest for that element, but no significant sampling bias could be identified.

Average HARD is within 2% for each metal. Mo (8.4%) and Au (6.7%) have the highest rate of pairs exceeding 30% HARD (absolute) which is acceptable.

Lab-internal coarse split and pulp duplicate results 2023-2025 were not reviewed by MMTS.

Figure 11-13: Field duplicate performance for Au – Actlabs 2023-2025



Source: MMTS, 2026

11.7 Quality control of laboratory analysis 2022 Re-assaying of pulps (Au)

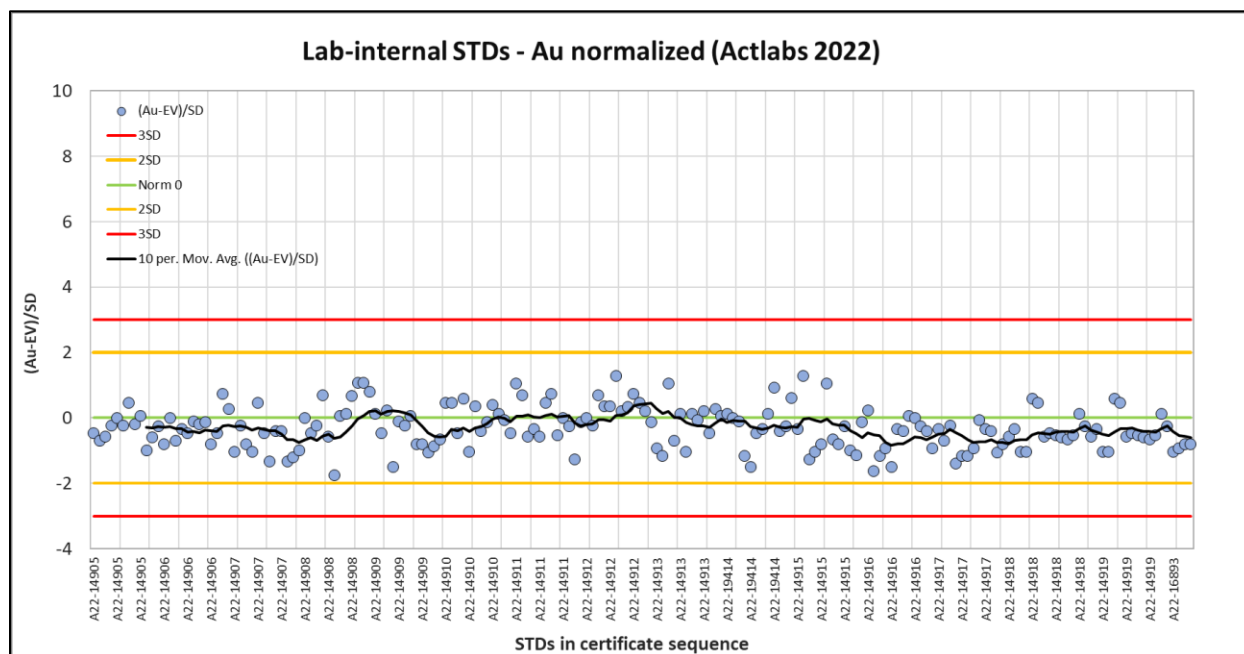
The following section is copied from the 2023 NI 43-101 Technical report and Preliminary Economic Assessment by Ausenco and MMTS, with minor updates.

Of the 6,140 samples submitted to ALS Labs in 2011 by TCM (from 35 holes, including QC samples), only 1,041 across 9 holes were analyzed for Au by fire assay (ALS Au-AA25). Surge Copper selected approximately 3,000 pulps from 31 2011 drill holes that had only been analyzed for Ag, Cu, and Mo via AA46 or AA46 and ME-MS41 and re-submitted them to Actlabs in Kamloops for fire assay Au analysis (1A2).

Less than 15 quality control sample pulps were included in the original program, and Surge did not insert any new QC samples. MMTS therefore reviewed the Actlabs internal standards and duplicates data and presented their performance in Figure 11-14 and Figure 11-15 below.

Actlabs STDs OREAS 239 and OREAS E1336 were normalized and graphed in sequence of received certificates. The expected values for both standards at 510ppb and 3,550ppb Au respectively were somewhat suboptimal for this program as they covered an Au range well above that of a low-Au porphyry system like Berg. The results of the 188 STDs did plot consistently within the $\pm 2SD$ threshold lines but were overall biased low (mean of -0.31), with the certificates at the start and end of the program most pronounced.

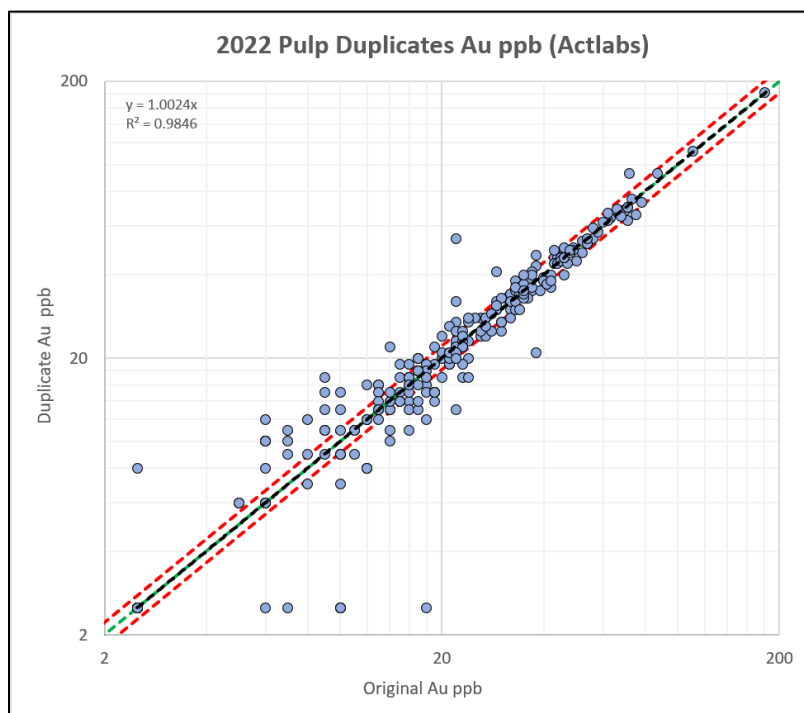
Figure 11-14: Pulp re-assaying STD performance (Au) – Actlabs 2022 (internal QA/QC)



Source: MMTS, 2023

Actlabs internal pulp duplicate procedure also included a total of 250 original-duplicate pairs distributed over all 16 relevant certificates. The correlation as expressed by R^2 in Figure 11-15 is very good as expected, despite the relatively small grade spread from 2.5 ppb (1/2 detection limit or DL) to <200 ppb and general proximity to DL for most of the data.

Figure 11-15: Pulp re-assaying duplicate performance (Au) – Actlabs 2022 (internal pulp duplicate data)



Source: MMTS, 2023 modified

MMTS regarded both the accuracy and precision of the data from the 2022 pulp re-assay program as acceptable.

11.8 Quality control of laboratory analysis 2007-2018 review

The text and figures of this section are taken from the 2023 NI 43-101 Technical Report and Preliminary Economic Assessment by Ausenco and MMTS, with several updates and modifications.

This Section aims to expand on QA/QC review and analysis as shown in previous NI 43-101 Technical Reports by Harris and Stubens (2008), Harris and Labrenz (2009), and TetraTech (2021). Au had not been included in resource estimation prior and accordingly, an acceptable sampling, prepping and analysis performance with respect to Au has not been demonstrated in previous reports. These data are plotted under 11.6.

During the 2007 and 2008 drilling campaigns, Terrane as the operator of the project continuously cut and sampled the produced core, then had every sample analyzed for Ag, Cu, and Mo (by ALS AA46) and additionally every other sample by ME-MS41 (which also reported Ag, Cu, Mo, among many others). The ME-MS41 aqua regia method by ALS includes an Au assay as well, but at a very high detection limit of 0.2 ppm, generally unsuitable for the Berg deposit. In 2007, Terrane requested approximately 2,700 samples to be analyzed for Au via fire assay (ALS Au-AA23) in accordance with their internal system of selecting every other sample in a series, but in 2008 discontinued to do so and no more useful Au data was generated. Select samples were analyzed for acid-soluble Cu by method Cu-AA05 at ALS (named 'CuOx' in the Berg database).

Several CRMs were utilized over multiple drill campaigns and plotting of all available multi-element data over time rather than per drill season is considered potentially beneficial to the understanding of the analytical data.

TetraTech had presented 2011 CRM performances for Ag, Cu, and Mo as z-score control charts, with samples sorted by number rather than by drill hole, certificate, or report date. This could have masked analytical trends in data for which the sample numbering may have been out of sequence. Normalized control charts with data sorted by drill hole were produced by MMTS in 2023 to confirm.

The project-specific CRMs BergHypHigh, BergHypLow, BergSupHigh, and BergHypLow were created in 2008, not analyzed or certified for Au, and individual lab means and standard deviations were of such variability for Ag that all four were released by Smee & Associates as either 'indicated' (>15% relative standard deviation or RSD) or 'provisional' (5-15% RSD), not 'certified'.

The seven analytical labs participating in the certification process were instructed to analyze the provided material by using a 4-acid digestion with ICP-ES or AAS finish. However, for the actual drilling campaigns in 2008 (Terrane) and 2011 (TCM), both operators decided on a more selective aqua regia digestion for all their samples including the CRMs, accepting a possible slight low bias, if any, for Cu and Mo in the CRMs during the QC part of their respective programs.

Purchased CRMs that were utilized prior to 2021 were CDN-CM-1, WCM-CU126, and WCM-CU133. In 2007, these were used exclusively as the project-specific CRMs were not yet available. In 2008, they were inserted only during sampling of the first hole of the campaign (BRG08-167), Terrane then switched to the Berg CRMs after that. In 2011, the purchased CRMs were inserted sporadically during the second half of the drill campaign (41 total, 14% of all inserted CRMs that year).

In 2018, TCM contracted Bureau Veritas to check-assay a selection of 60 single pulps from the 2011 drilling campaign, requesting MA250 4-acid digestion with ICP-MS finish plus Au analysis using a 30g sample and fire assay method FA430. These results are shown in Section 12.

11.9 Blanks performance Au ALS 2007-2011

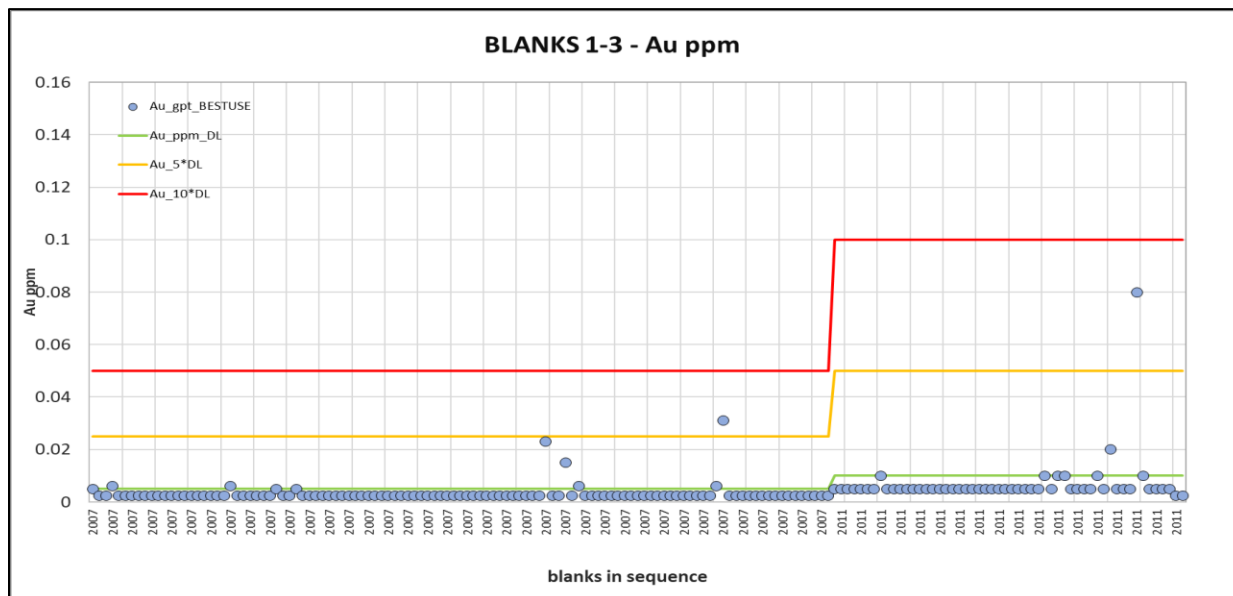
Based on a quick review of the overall assay results, three different materials were inserted into the sample stream as blind blanks between 2007 and 2011. The actual physical properties of the materials like grain size or hardness remain undetermined. For this report, they are generically named blank 1, blank 2, and blank 3 for detailed review but combined for reporting. Blank 1 was used exclusively in 2007, and blank 2 exclusively in 2011, while blank 3 was used during all three seasons.

Since Au was not a focus at the Berg Copper Project at that time, only 167 of a total of 861 blanks were analyzed for Au, none in 2008.

Figure 11-16 illustrates the Au assay results over time with a linear graphic expression of detection limit (DL) as well as 5*DL and 10*DL threshold lines included. For 2011, Thompson Creek Metals requested fire assay method Au-AA25 instead of the previously used Au-AA23 which resulted in a shift in lower reporting limit.

No blank exceeds the 10*DL failure threshold and only three samples plot above the 5*DL warning line. Based on the available data MMTS concludes that sample contamination was not a concern at ALS for the respective time frame.

Figure 11-16: Blanks Performance (Au) – ALS 2007-2011



Source: MMTS, 2023

11.9.1 Certified reference materials performance Au ALS 2007-2011

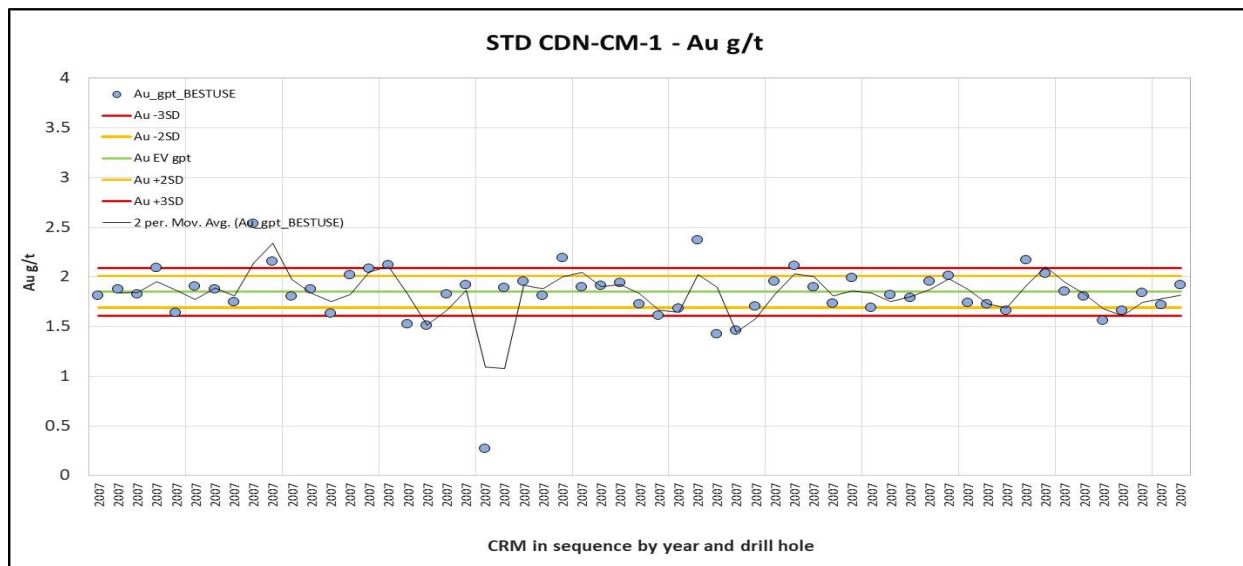
Two standards were used between 2007 and 2011 that are certified for Au: CDN-CM-1 and WCM-CU133. Given the complete sampling yet incomplete assaying protocols of the operators at the time, only 57 of 143 CDN-CM-1 standards were analyzed for Au (28 of 85 for WCM-CU133). All data was generated in 2007 only (Figure 11-17).

CDN-CM-1 is a standard that was produced from 680 kg of material from the Cu-Mo-Au Casino deposit in BC, Canada, which at first approximation could be classified as very similar to the Berg mineralization, and 20 kg of a Au-Cu-Mo concentrate. This resulted in a mean Au grade of 1.85 g/t, which is higher than the best mineralized intercepts at the Berg system would grade.

A total of 12 labs participated in the certification process, each assaying ten 30 g samples by fire assay. The 120 results were used to calculate mean and standard deviation.

The data series for CDN-CM-1 in Figure 11-17 demonstrates 14 CRMs plotting outside the $\pm 3SD$ failure threshold that should have triggered re-assaying of significant portions of the sample set. MMTS is not aware of re-run requests and certificates. The far outlier at Au=0.272 g/t was likely a sample mix-up in the respective lab as the ME-MS41 portion of the requested analyses appears correct. Overall, the data displays significant scatter and 24 samples exceed the $\pm 2SD$ warning threshold, which equals to >40% of the data.

Figure 11-17: CRM CDN-CM Performance (Au) – ALS 2007

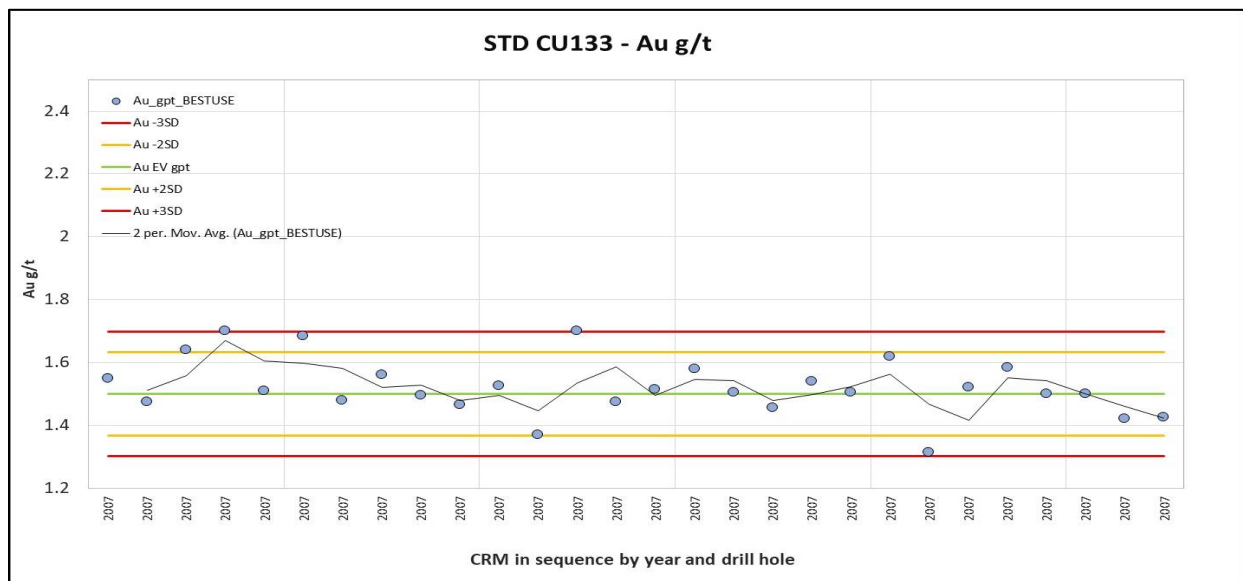


Source: MMTS, 2023

The mean and standard deviation calculation of CRM CU133 by WCM Minerals is based on three reputable laboratories analyzing the material four times each, for a total of 12 data points per respective metal (Au, Cu, Mo).

Overall, the expected value of 1.5 g/t Au is unsuitably high to effectively control the accuracy of analysis of even the highest-grade Berg samples. In Figure 11-18, multiple results approach or slightly exceed the $\pm 3SD$ failure threshold, highlighting the substantial scatter of the dataset, but the average of the Au assays at 1.52 g/t matches the expected value (mean) of the CRM.

Figure 11-18: CRM CU133 Performance (Au) – ALS 2007



Source: MMTS, 2023

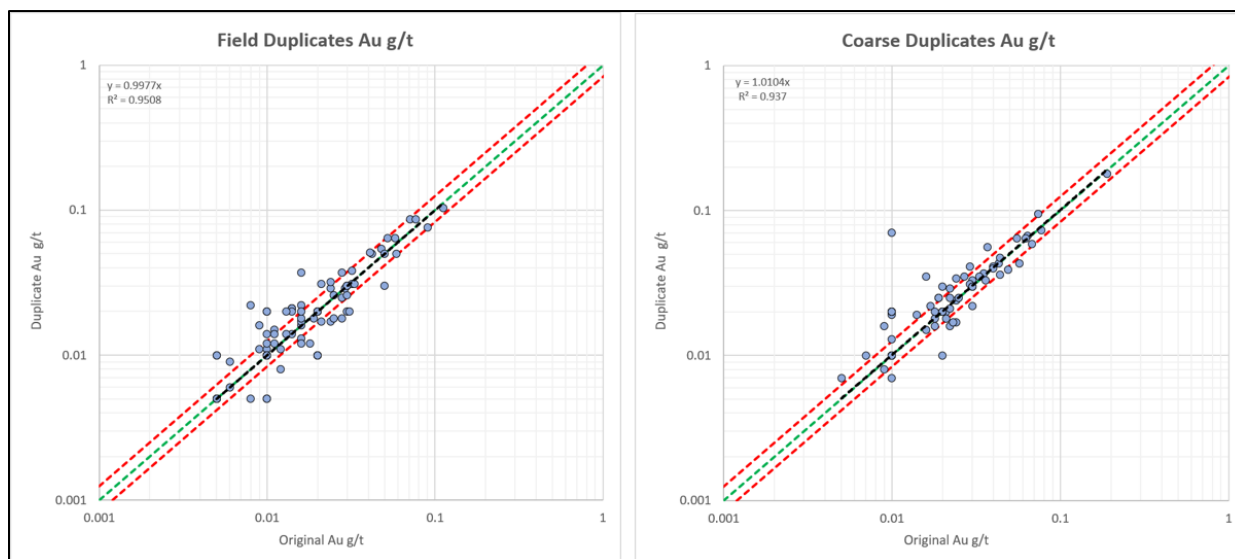
In summary, Au data has been poorly assured and controlled using unsuitable CRMs with inconsistent performance in 2007 and has not been independently controlled at all in 2008 and 2011.

11.9.2 Duplicate performance Au ALS 2007-2011

From 2007 to 2011, a significant and representative number of field duplicate samples were taken, and coarse reject duplicates requested at ALS to control sample precision (see Table 11-2 for insertion rates). In line with the description of the blanks Au analysis, only a selection of the duplicates (or originals) was analyzed for Au to be able to determine repeatability (field duplicates: 109 of 436 or 25%; coarse duplicates: 90 of 431 or 21%).

The XY scatter plots and calculated R2 in Figure 11-19 demonstrate acceptable correlations between the Au results for the sample pairs despite the comparatively small grade range of effectively 0.01 g/t to <0.2 g/t. Pulp duplicates were not requested at the time and therefore a data precision progression across the sampling and preparation stages could not be demonstrated. Au assays <DL are not included in the graphs.

Figure 11-19: Field and Coarse Duplicate Performance (Au) – ALS 2007-2011



Source: MMTS, 2023 modified

11.9.3 Normalized control charts for Ag, Cu, Mo ALS 2007-2011

MMTS generated PCC-style plots that included Ag, Cu, and Mo results reported by ALS (AA46) to assess data accuracy over time (2007-2011, 3 drilling campaigns). To normalize, the CRM-specific 'between-labs' calculations for expected value/certified mean and standard deviations for each metal were used across all 866 available assays as follows: Cu (actual assay) minus EV (certified mean), divided by SD (between-labs standard deviation).

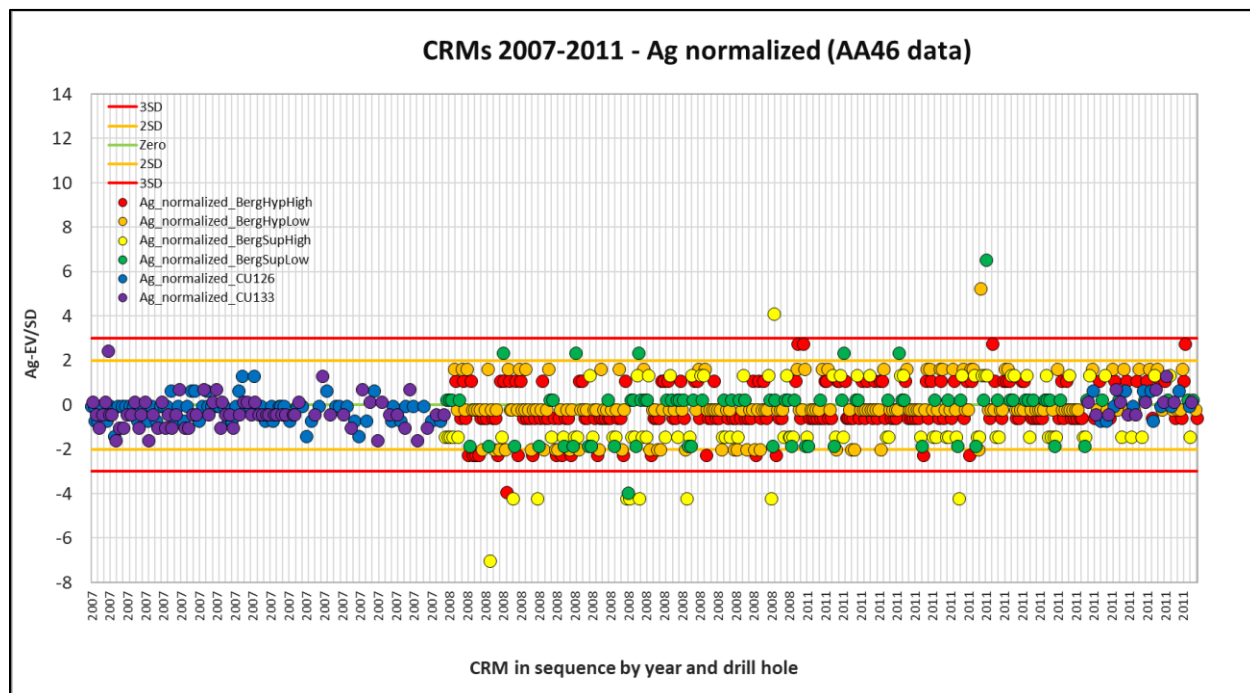
Both Ag and Mo perform reasonably well with an acceptable scatter and number of $\pm 3SD$ or $\pm 3SD$ threshold exceedances and importantly, without significant trends or shifts in the dataset.

The very prevalent 'grouping' of normalized Ag results of the project-specific CRMs around the EV, +2SD, and -2SD is a function of the relatively low Ag grades of <5 g/t for all four of them. Equally, several Ag

results that exceed the $\pm 3SD$ failure threshold could be attributed to the same cause and are therefore not a concern to MMTS.

CU126 and CU133 were certified for significantly higher, more applicable Ag grades (9.1 and 20.8 g/t, respectively) and were analyzed with higher variability as a result. Overall, these 2 standards provide very good accuracy control, with only one result from early 2007 exceeding the $\pm 2SD$ warning limit. CDN-CM-1 is not certified for Ag and its assay results are therefore not considered in the Ag graph Figure 11-20.

Figure 11-20: CRM Performance (Ag normalized) – ALS 2007-2011



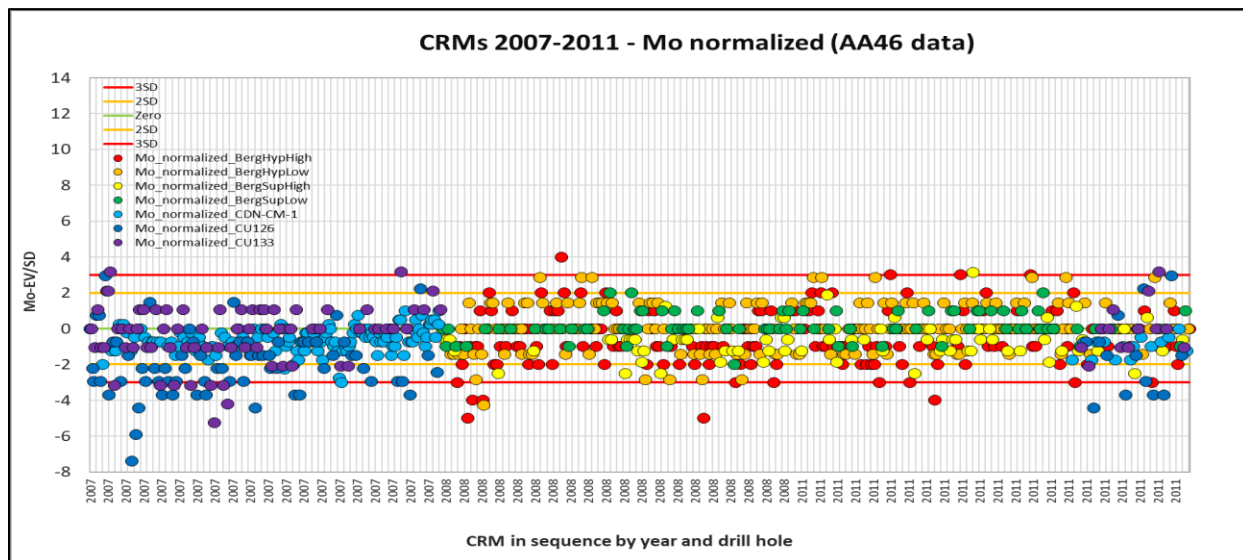
Source: MMTS, 2023

Normalized Mo analyses are predominantly around zero and within the $\pm 3SD$ acceptance window, but several observations can be made in Figure 11-21:

- CDN-CM-1 performed much more consistently than CU126 and CU133 but overall, with a slightly low bias of approximately 5%.
- All STDs except for CDN-CM-1 and CU126 present a pattern of repeating results around zero, a function of the AA46 method reporting in granular 10 ppm increments on STDs that were relatively low-grade Mo (130-330 ppm Mo).
- CU126 analyses contain a few -3SD failures in two certificates that should have triggered re-assaying of batch.
- BergSupHigh reports a small but consistent low bias.

Several project-specific CRM analyses at the start of the 2008 campaign exceed the -3SD control limit. According to Harris and Labrenz (2009), the batches containing these results were re-assayed and the failures corrected.

Figure 11-21: CRM Performance (Mo normalized) – ALS 2007-2011

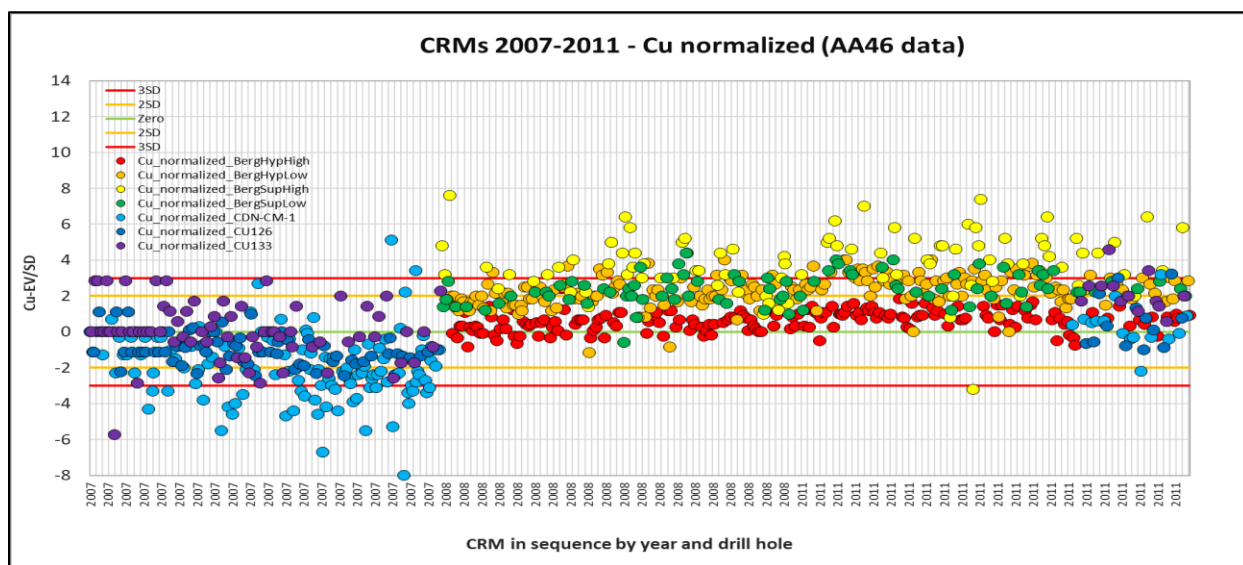


Source: MMTS, 2023

As previously discussed by Harris and Labrenz (2009) for the 2008 data, Cu exhibits a strong high bias in the four project-specific standards BergHypHigh, BergHypLow, BergSupHigh, and BergHypLow, most pronounced in BergSupHigh, while purchased CRMs in 2007 are biased low with a significant number of outliers/failures (see Figure 11-22).

This trend continued into 2011 and increased over time (see moving average trend line in Figure 11-22 below as indication). The use of these standards should have been discontinued after the issue was identified and no cause determined but except for the last 11 holes drilled in 2011, these standards were the only ones inserted.

Figure 11-22: CRM performance (Cu normalized) – ALS 2007-2011



Source: MMTS, 2023

Harris and Labrenz reported in 2009 that ALS internal accuracy control also appeared to record a high Cu bias but did not provide statistical or graphical evidence at the time:

“This bias can also be seen in the internal standards employed by ALS. Although the amount of bias varied, all standards had an increasing high bias over the duration of the program. Consultations with ALS indicated that the problem is restricted to atomic absorption data which has shown some elevation, possibly due to erroneous calibration solutions. There has been no resolution to why the in-house standards are biased to the extent that they are.”

Consequently, MMTS pulled lab-internal QA/QC data to review (Section 11.7.5) and conducted a more in-depth analysis of the project-specific CRM issue in Section 11.7.6.

11.9.4 ALS Lab-internal QA/QC for Cu from 2008-2011

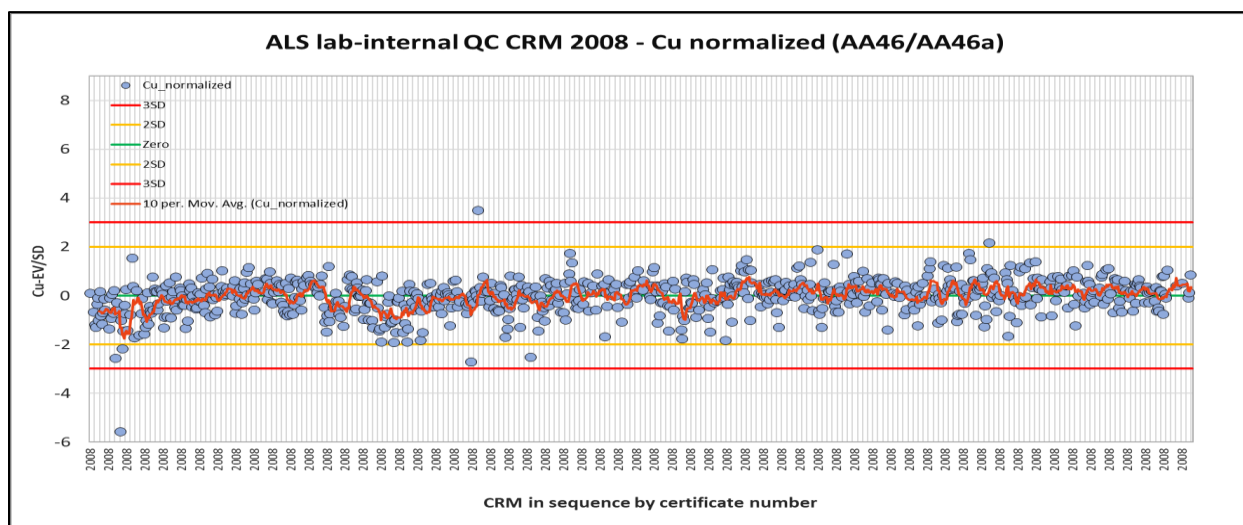
In 2023, MMTS reviewed the respective lab-internal QA/QC data for the two methods reported by ALS (Cu-AA46/46a and ME-MS41), focusing on Cu only and the years 2008 and 2011.

For the AA46/AA46a method quality control, assay results of standards GBM302-10, GBM306-12, GBM306-13, GBM398-4c, GBM399-5, GBM-903-13, and OREAS 14P are shown normalized as above and graphed by year due to the large number of data (1,689 assays), while the available 276 data points from standards GBM3961c, GBM908-5, GBM908-10, and GBM999-5 applicable to ME-MS41 assay results are plotted in one for both years. Certification documentation of some additional standards that were used by ALS at the time could not be retrieved, so these standards were not considered for the plots below.

The resulting graphs confirm that, while biased moderately but consistently high in 2011, the lab-internal control standards performed as expected overall (Figure 11-23 to Figure 11-25), with only very few results that exceed the $\pm 3SD$ failure threshold and no discernible trends over time.

AA46 data for 2008 showed an acceptable performance that matched the expected Cu value for much of the year, despite two intermittent periods early in the campaign where the data showed a low bias. Results averaged 1.83% Cu which compared to the expected average of 1.84% Cu.

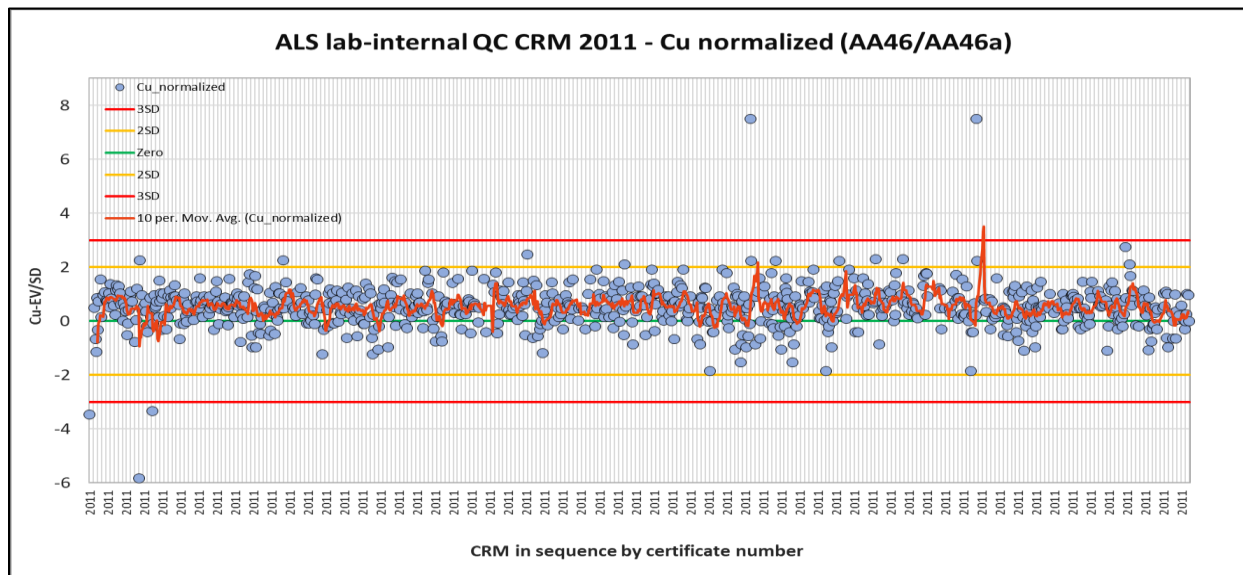
Figure 11-23: CRM Performance for Method AA46/AA46a (Cu normalized) – ALS 2008 (internal QA/QC)



Source: MMTS, 2023

In 2011, the AA46 data averaged 1.22% Cu (versus 1.20% Cu expected average of this dataset), which translated into a normalized ‘value’ of 0.51. Figure 11-24 illustrates the consistency of the moderately high bias for the whole 2011 campaign.

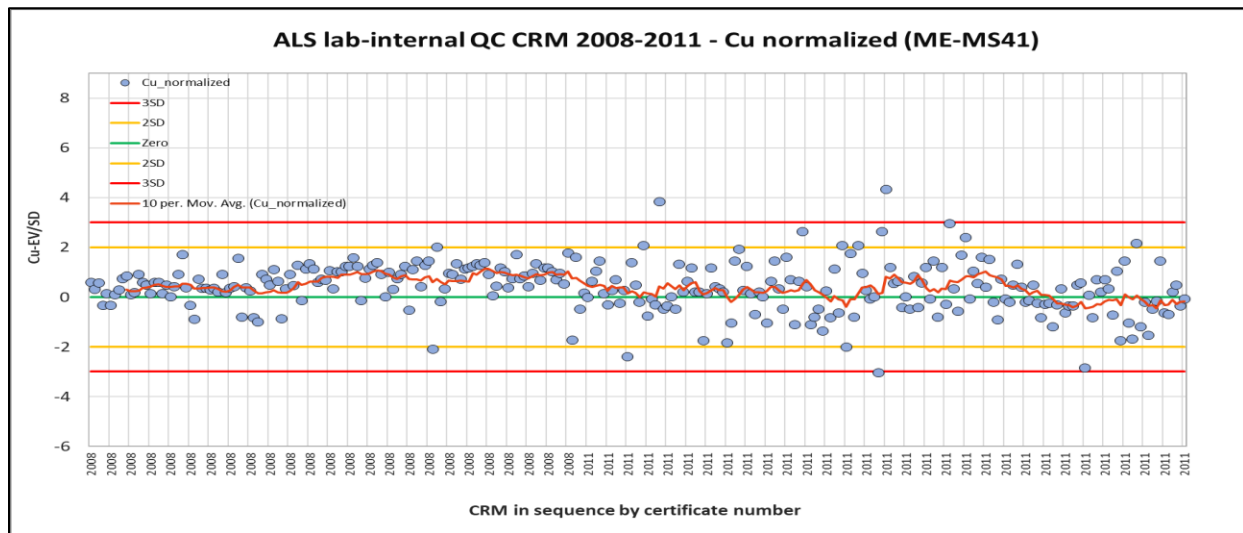
Figure 11-24: CRM performance for Method AA46/AA46a (Cu normalized) – ALS 2011 (internal QA/QC)



Source: MMTS, 2023

Copper analyses by ME-MS41 display a moderately high bias in 2008 internal CRMs, followed by a noticeable increase in scatter starting in 2011 but without the high bias from three years earlier. The utilized standards are certified for significantly lower Cu grades (avg. 0.208% Cu) compared to the AA46 control material above. The actual average of the assays is 0.213% Cu.

Figure 11-25: CRM performance for Method ME-MS41 (Cu normalized) – ALS 2008-2011 (internal QA/QC)



Source: MMTS, 2023

In summary, ALS internal QA/QC results for either method in the reports between 2008 and 2011 are quite consistent and the strong data 'shift' as shown in the CRM data (Figure 11-22) at the start of the 2008 campaign could not be detected. The weak to moderate high bias would not replicate the very strong initial high bias as shown in BergHypLow, BergSupHigh, and BergSupLow. In addition, there is no significant long-term drift in the ALS internal data while the project-specific CRMs displayed a significant drift towards even higher results over the course of the two drill campaigns.

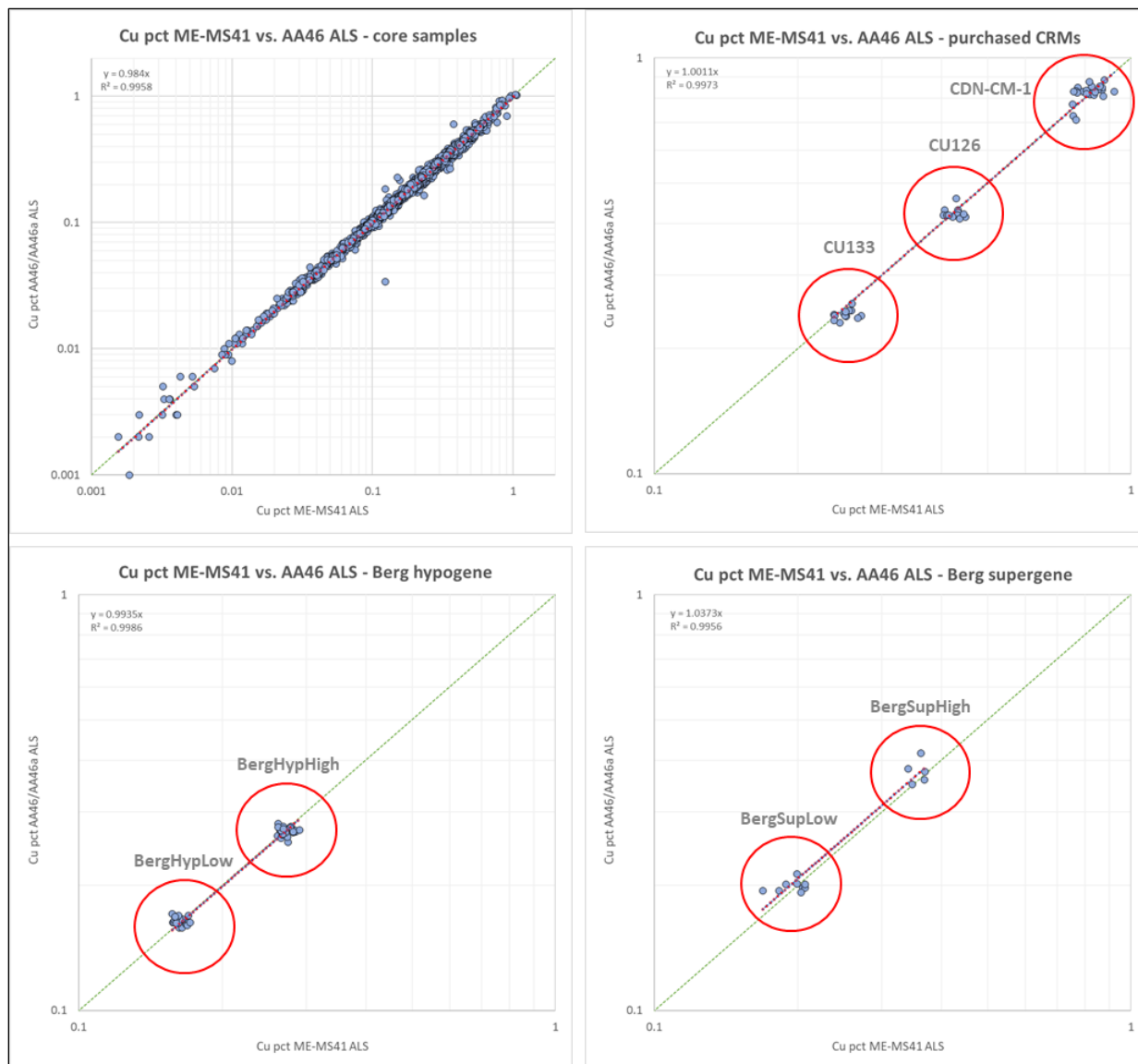
The project-specific standards were not certified on assay results from comparable digestion methods and may not have been fully suitable for Cu quality control for that reason. ALS was one of the seven participating laboratories for the certification process and had reported higher mean Cu values than were calculated for the final certified Cu mean in every instance.

11.9.5 Project-specific CRM performance for Cu ALS

In the 2023 Technical Report, MMTS used 29 2007-2011 assay certificates that were randomly selected to assess the assay database for accuracy and completeness (see Section 12) to compare the internally prioritized Cu-AA46 data against the equally reported ME-MS41 Cu data, where available. The data subset includes 2,288 samples (106 blanks, 111 CRMs, and 2,071 core samples) or approximately 13% of all data. The 106 blanks are not considered for the plots below because the Cu detection limit for AA46/AA46a is unsuitably high at 0.002% (2007-2008) or 0.001% (2011).

The core sample XY scatter plot in Figure 11-26 confirms a very good correlation between the two methods over a representative range of Cu grades from 10ppm to 1% Cu, despite a few outliers on either side of the 1-1 linear trendline. The various CRMs each plot in small groups as expected, indicating overall good precision and good correlation between methods, irrespective of material origin (hypogene, supergene, or purchased external material). CU113 displayed a small bias towards ME-MS41 and the two project-specific CRMs made from supergene Berg material both plot weakly but noticeably towards the AA46 method.

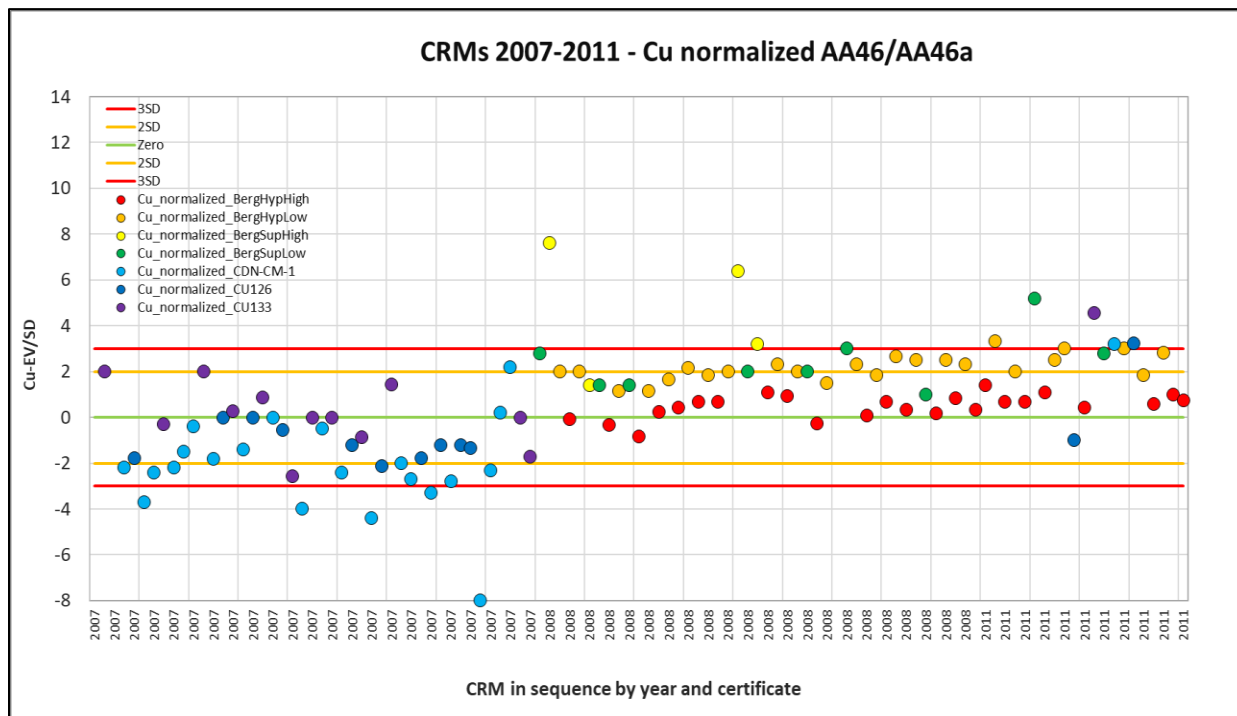
Figure 11-26: Analytical Method AA46/AA46a vs. ME-MS41 (Cu) – ALS 2008-2011



Source: MMTS, 2023

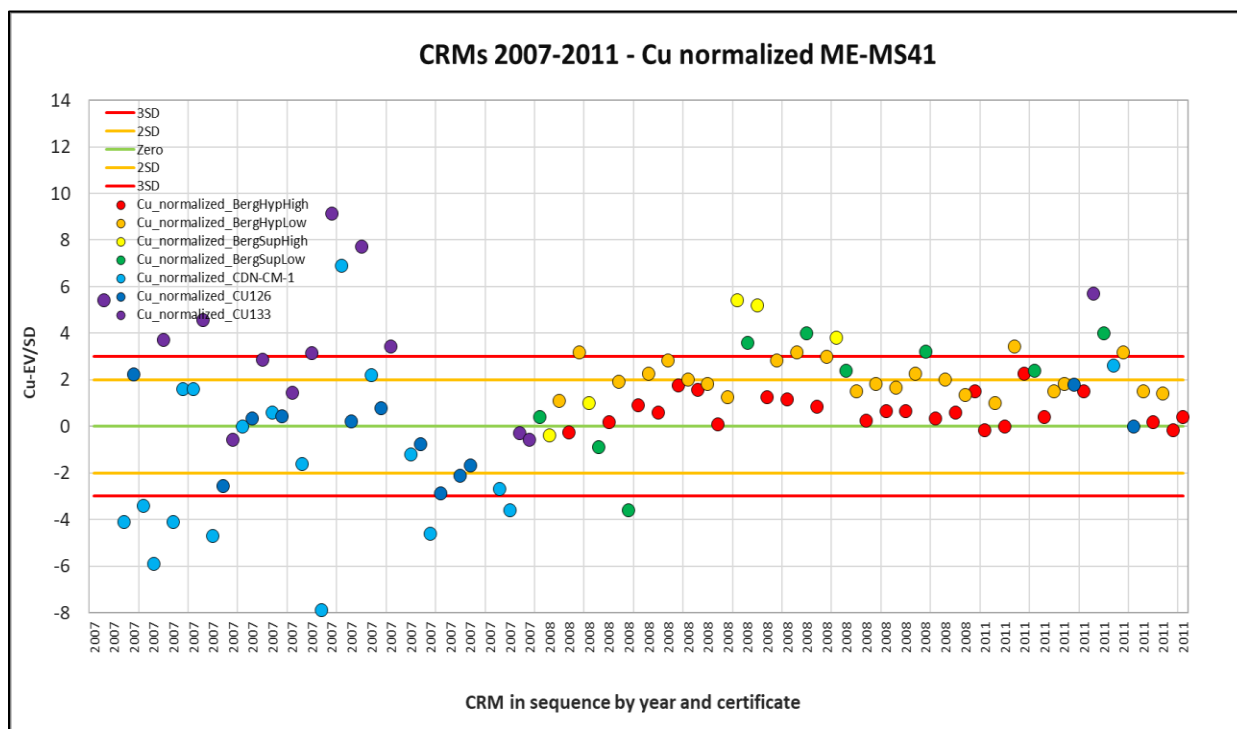
By graphing the CRM Cu data from both methods against certified Cu values and using the respective 'between lab' standard deviations for data normalization (Figure 11-27 and Figure 11-28), the results are shown to be very comparable which leads MMTS to conclude that an erroneous calibration solution for the atomic absorption process as was discussed by ALS in 2009 was not the cause of the high bias for the project-specific standards.

Figure 11-27: CRM Performance for AA46/AA46a (Cu normalized) – ALS 2007-2011



Source: MMTS, 2023

Figure 11-28: CRM Performance for ME-MS41 (Cu normalized) – ALS 2007-2011

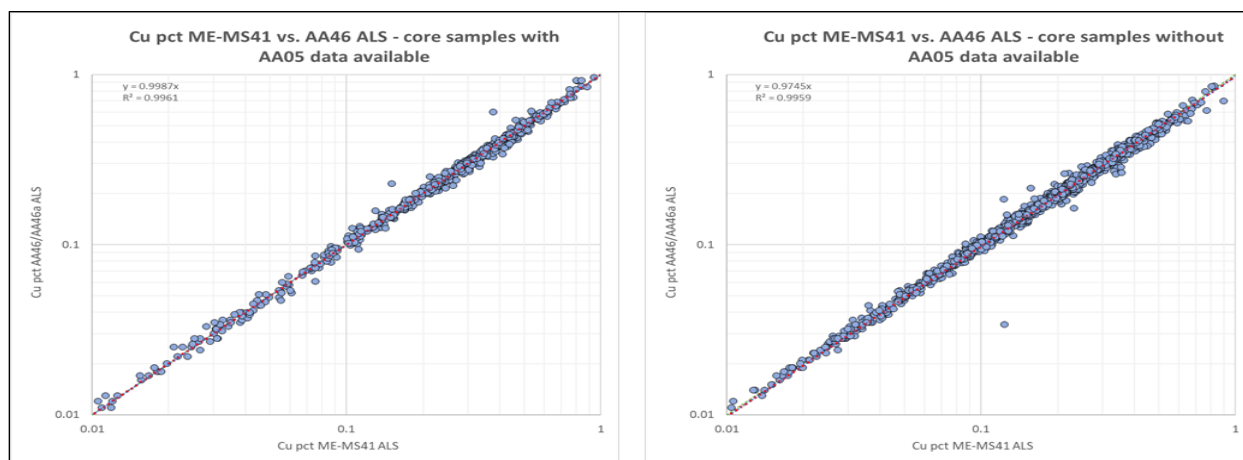


Source: MMTS, 2023

The dataset contains 550 core samples that were additionally analyzed by Cu-AA05 (acid-soluble Cu or CuOx), presumably because they represent the supergene fraction of the mineralization that hypothetically would have been mineralogically comparable to BergSupLow and BergSupHigh source material. These two supergene standards exhibit the strongest high Cu bias in Figure 11-22 which could have indicated that a mineralogical component contributed to or caused the issue.

Filtering the data accordingly did not change R2 or y significantly for 'hypothetical hypogene' against 'hypothetical supergene' samples, as shown in Figure 11-29, indicating that the mineral composition of BergSupLow and BergSupHigh was probably not the cause of the strong high bias.

Figure 11-29: AA46/AA46a vs. ME-MS41 Cu in Core Samples, Split by Cu Soluble Designation – ALS 2007-2011



Source: MMTS, 2023

With respect to the project-specific standards issue for Cu it can therefore be summarized that:

1. The observed strong positive bias was not caused by analytical problems at ALS because lab-internal CRMs did not confirm the issue
2. It was not caused by an erroneous calibration solution for the atomic absorption process since the ME-MS41 data showed the same tendencies.
3. The presumably quite different mineralogical composition of BergHypHigh/BergHypLow (hypogene) versus BergSupHigh/BergSupLow (supergene) likely did not have a noticeable influence on accuracy performance.

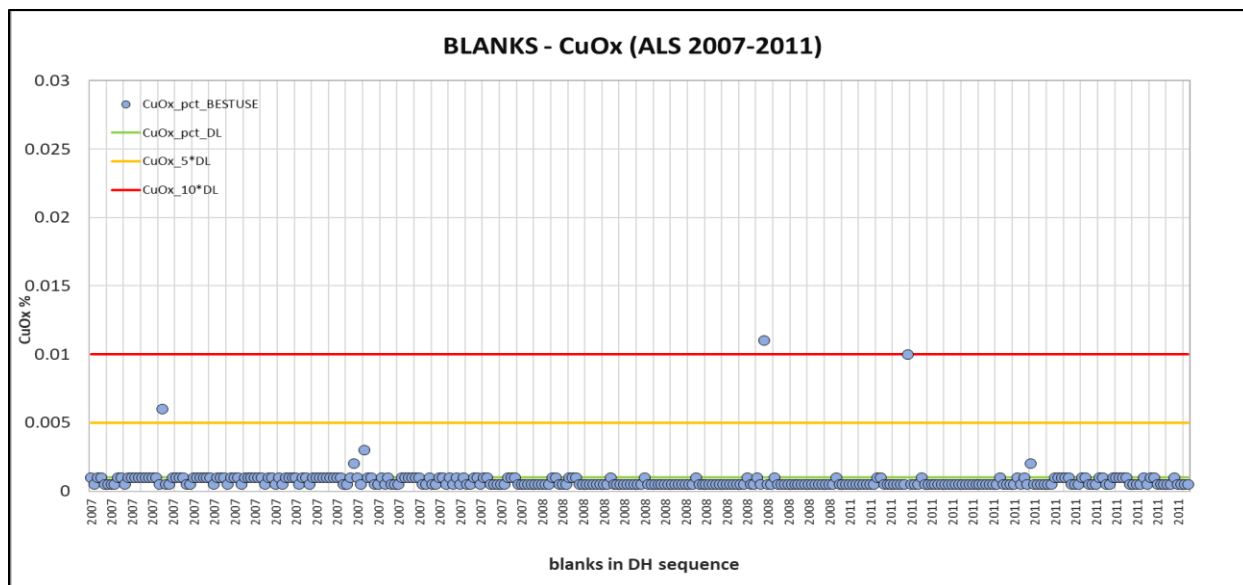
MMTS concludes that the project-specific CRMs themselves are the cause for the poor performances shown, likely because of insufficient homogenization or insufficient "in-between" lab certification or both.

11.9.6 Acid-soluble Cu (CuOx) QA/QC performance ALS 2007-2011

Acid-soluble Cu data has been collected very selectively over time and is therefore less represented in blanks, standards, and duplicates. MMTS is not aware of any reference material in the Berg database that may be specifically certified for acid-soluble Cu concentrations. As a result, only contamination control could be performed, and the reproducibility at the sampling stage can be assessed by displaying field duplicate results (Figure 11-31).

Figure 11-30 graphs 322 CuOx results from three different blanks used in 2007 to 2011 and demonstrates neglectable cross-sample contamination. Two blanks plot around the 10*DL failure line but a review of the preceding core samples did not indicate a connection between CuOx grade and blank failure. Essentially all other blanks record values at or below detection limit of 0.001%. MMTS finds the result acceptable.

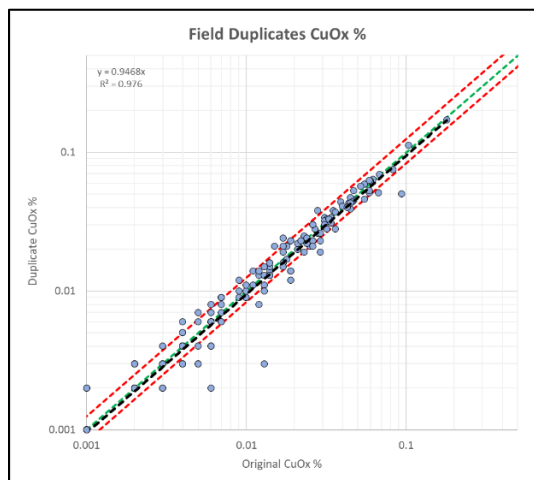
Figure 11-30: Blanks Performance for CuOx – ALS 2007-2011



Source: MMTS, 2026

The Berg database contains 161 field original and field duplicate sample pairs from 2007-2011 that possess CuOx assay results. They are shown in Figure 11-31 to correlate very well and do so over a representative concentration range, given that the average grade of all respective >5,800 core samples of 2007 to 2011 that were analyzed by Cu-AA05 is only 0.025% and only 17 of them exceed 0.3%. No significant bias could be detected.

Figure 11-31: Field Duplicate Performance for CuOx – ALS 2007-2011



Source: MMTS, 2026

11.10 QP opinion of sample collection, preparation, analysis and security

The methods implemented by Surge Copper during the 2021-2025 drilling for sample collection, preparation and analysis were developed using standard industry practices. Analytical results for QA/QC insertions are being monitored internally once lab reports become available. The analytical laboratories selected are accredited laboratories which adhere to recognized ISO standards and are well known in the mining and exploration industry. Sample handling and processing is being completed with appropriate chain of custody and samples get stored in a secure facility.

Blanks and standards demonstrate acceptable levels of contamination and accuracy, respectively. Analysis of field duplicates indicates good reproducibility for silver, gold, copper, and molybdenum at the sampling stage. Select reviews of lab-internal sample size reduction control via coarse and pulp duplicates show no significant errors.

MMTS notes that Surge Copper has not achieved suitable insertion rates for blind standards during their drilling campaigns starting in 2021 and recommends increasing the frequency of CRM insertions to approximately 5% of total core samples in future programs.

The 2022 core re-sampling program did not include a suitable amount of blind QA/QC sample insertions to assess analytical data accuracy and precision independently from lab-internal QA/QC data and protocols. Only the blank insertion rate at approximately 5% to control contamination is sufficient (CRM rate is 1.2% and no field or other duplicates were done).

The 2022 Au pulp re-assaying program also did not include an appropriate amount of QA/QC samples, specifically blind certified reference material to control accuracy of results and pulp blanks to control contamination at the analytical stage.

No check-assaying was performed in 2021, and the umpire assays data for 2025 was not available in time for this report.

The QP confirms the collection, analysis and security is reliable and suitable for mineral resource estimation.

12 Data verification

12.1 Audit of the drill hole assay database

Surge provided Sue Bird, MMTS, with a database export of all available assay results for the Berg deposit. The data can be split into two main groups:

- Historical assays: pre-2007 data for Cu, CuOx, and MoS₂ with limited Au and Ag results. Historical records consist of both certified lab data files (check-assay purposes) and scans of hand-written on-site assay lab records.
- Current assays: 2007-2022, including the 2022 re-sampling program. This data was generated by certified laboratories in Canada and included an acceptable amount of both blind and lab-internal QC samples to control contamination, precision, and accuracy issues, if any.

MMTS performed a detailed review of the assay data which included producing industry standard graphs of multiple elements of interest for blanks, certified reference material, and various duplicates through the preparation stages (field, coarse reject, and pulp). During that validation process, occasional inconsistencies and mislabels were noted and corrected.

In addition, MMTS used raw data from 29 randomly selected ALS certificates of 2007-2011 to assess the overall accuracy of the database for Ag, Au, Cu, CuOx, Mo, and Re. This represents approximately 25% of all results from those years, depending on the element in focus. MMTS also compiled >5,600 acid-soluble Cu-AA05 data from original certificates to further verify the CuOx portion of the Berg database.

Surge Copper's 2022 data generated from re-sampling of 2007-2008 core and analyzing for Au by Actlabs was equally validated by comparing the database against a raw data compilation from original certificates (>4,500 data points, 100% of the re-sampling program including QC samples).

Historical data was verified by double-checking the database against a representative number of scans of original hand-written data sheets, and also manually compiling data from scanned certificates and historical data files for check-assay review.

12.2 Assay data checks

MMTS spot-checked approximately 25% of the 2007-2011 assay data present within the database against original lab certificates and found the assay component of the database to be reliable and accurate. In addition, MMTS verified 100% of 2021 drill assays and 100% 2022 re-sampling and re-assaying data and found the provided data to be reliable and accurate as well.

The database verification against all original acid-soluble Cu data certificates returned 100% data accuracy.

MMTS identified a very small number of mislabels in the database, mainly regarding CRM and BLK samples. These were corrected. MMTS used the 2021 reported sample weight to identify potential sample interval inconsistencies. Surge Copper was notified of the findings. Sample weight data was not readily available for any sampling or re-sampling prior to 2021.

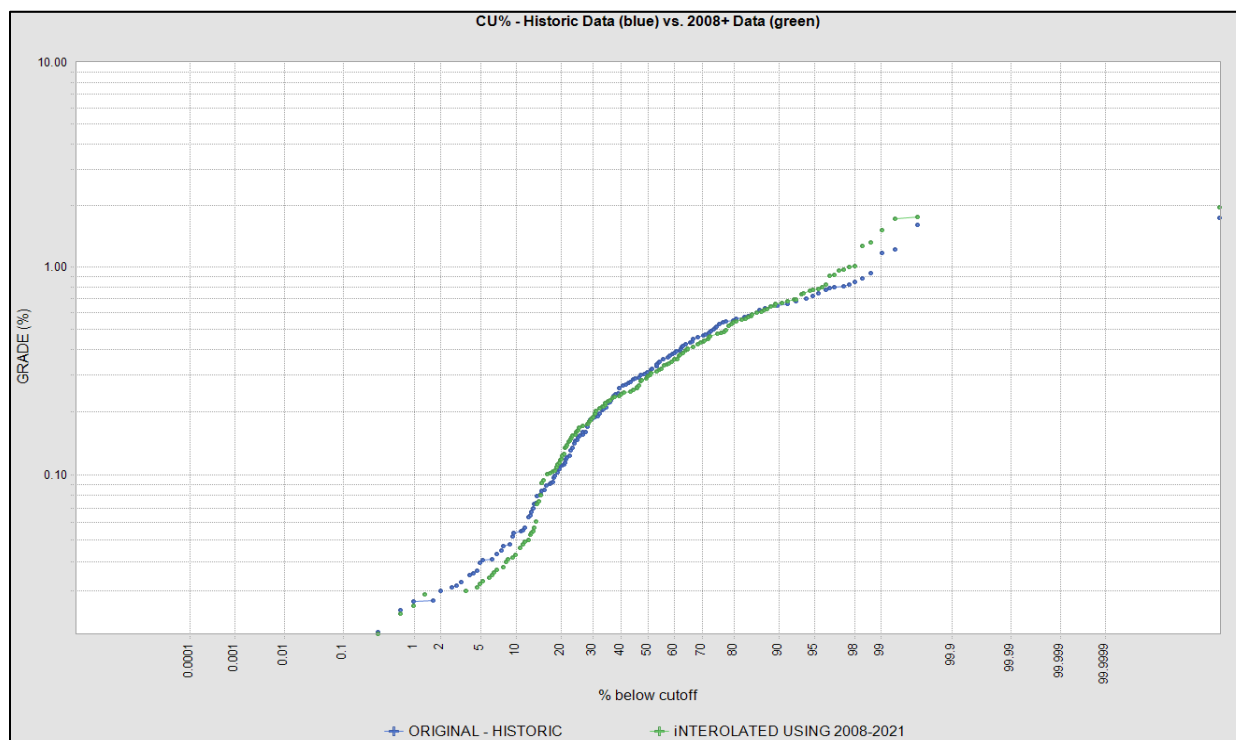
12.3 Validation of historical data

33% of the data is from historical drill holes (years 1964 to 2007) with no QA/QC available. This data has been validated using Point Validation. Point Validation interpolates the assays at the historic locations using all data except the historic data, thus, theoretically, removing any variations in grade due to location alone.

Figure 12-1 through Figure 12-4 illustrate comparisons of the original historic data to the interpolated data using more recent drilling in the form of cumulative probability plots (CPPs). The plots are for Cu, Mo, Ag and Au, respectively. In each case, very little bias is apparent, with a particularly close correlation for Cu. Grades in all cases for the more recent data with QA/QC are higher at the higher end of the distribution. The Mo data indicates a low bias for the historic data with Au slightly high at the lower grades (below 40 ppb) and a slightly low bias above this cut-off grade. Overall, it is found that the historic assaying tends to under-estimate the higher grades and therefore may be slightly conservative.

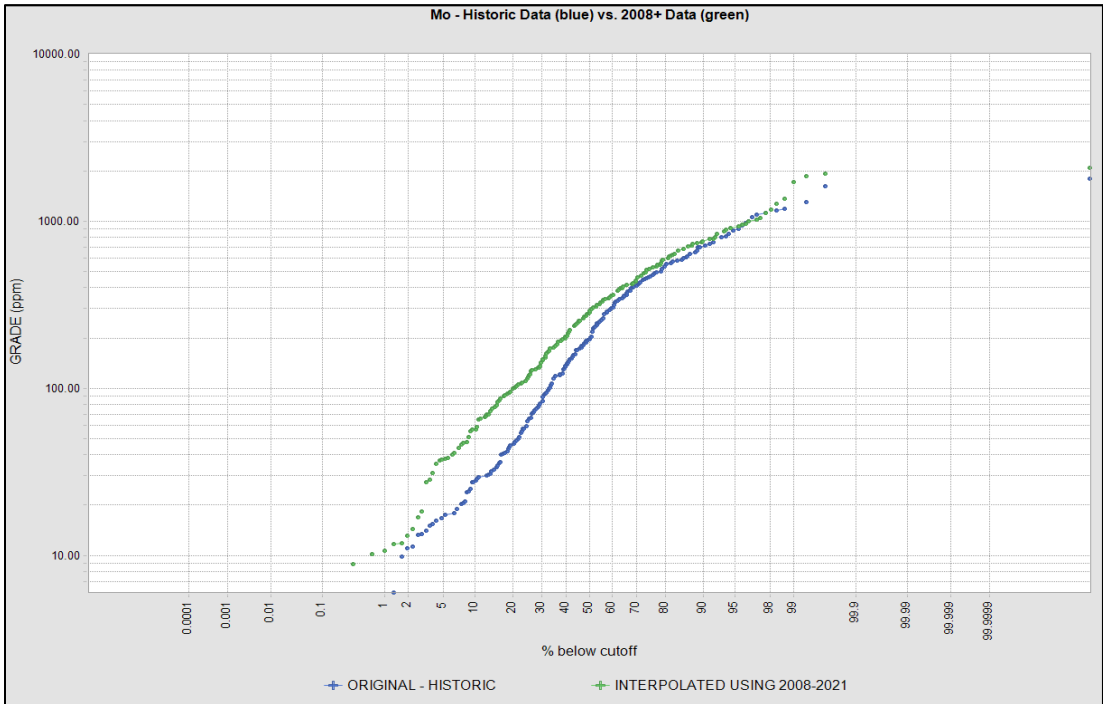
It had been noted previously that data in the "S-series" from 1972 could not be used as it did not match the surrounding data (TetraTech, 2021). This was also investigated with Point Validation, and the results for Cu and Mo are shown in Figure 12-5 and Figure 12-6, respectively. It is found that there is no bias for the Cu grade and therefore the Cu in the 1972 "S-series" has been used in the Cu modelling. However, the Mo data shows a low bias and therefore the data from this drilling has not been used for the Mo interpolations.

Figure 12-1: Historic data validation - Cu



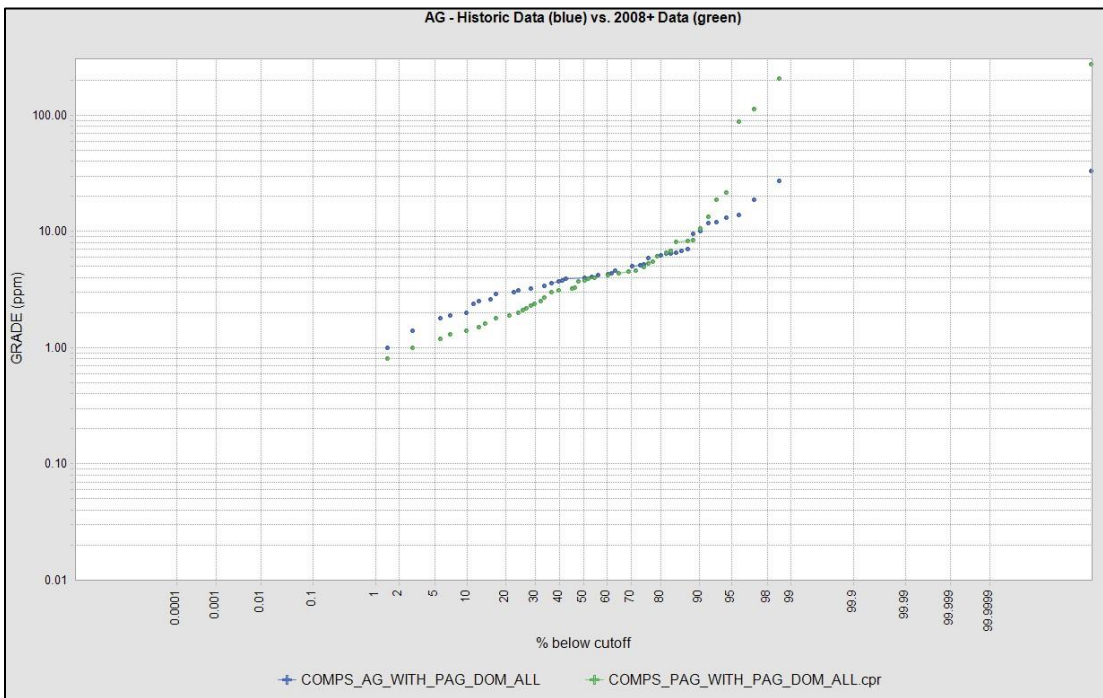
Source, MMTS, 2023

Figure 12-2: Historic data validation - Mo



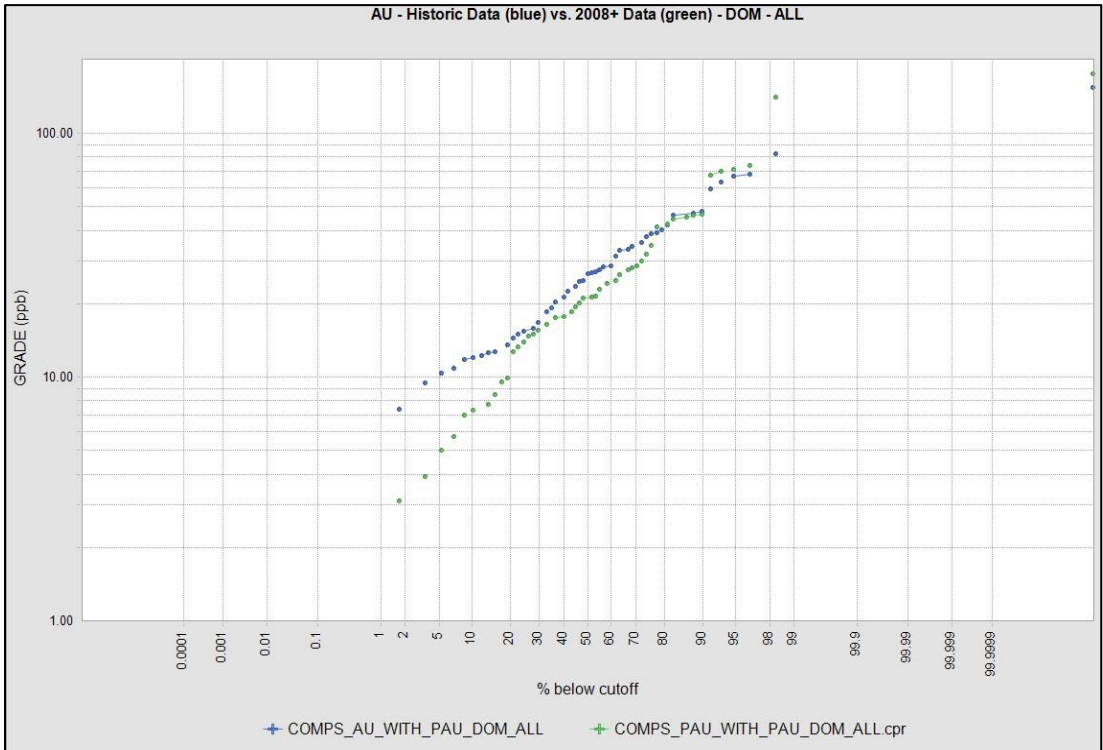
Source: MMTS, 2023

Figure 12-3: Historic data validation - Ag



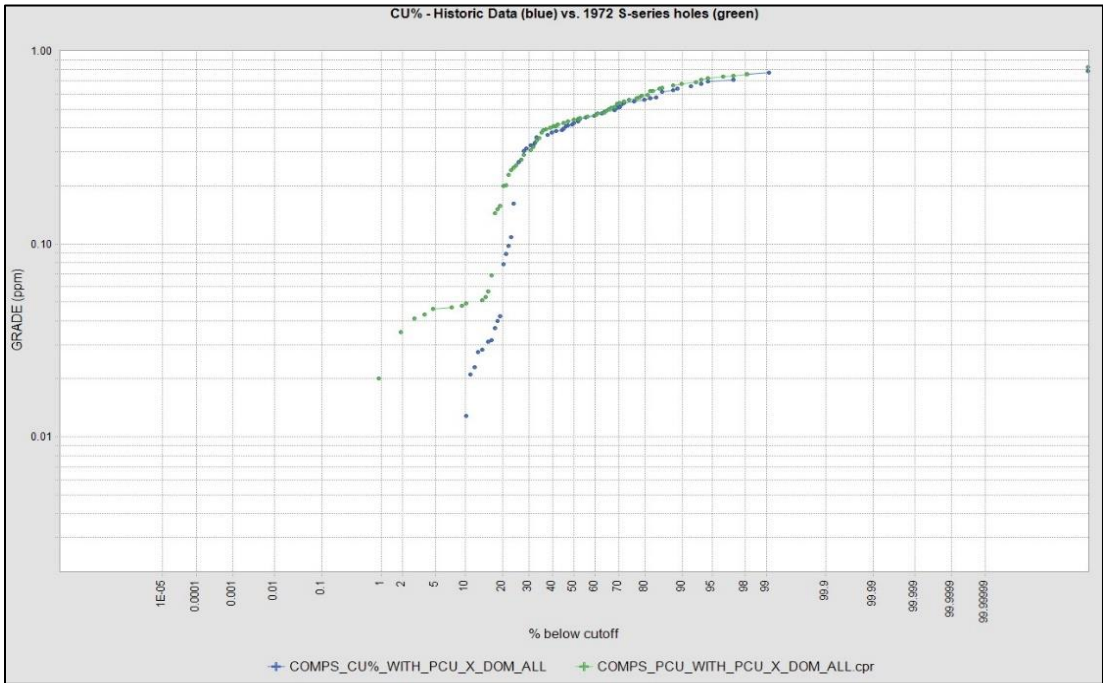
Source: MMTS, 2023

Figure 12-4: Historic data validation - Au



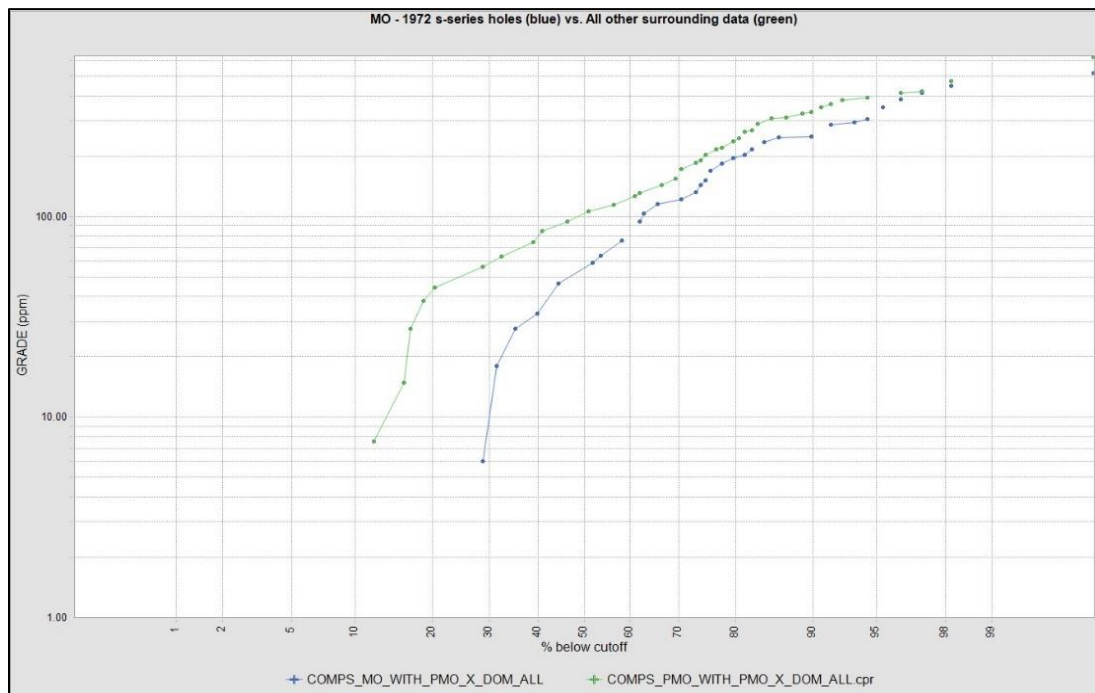
Source: MMTS, 2023

Figure 12-5: Historic data validation of 1972 "S-series" data - Cu



Source: MMTS, 2023

Figure 12-6: Historic data validation of 1972 “S-series” data - Mo



Source: MMTS, 2023

12.4 Check-assays from site visit

During the site visit three samples were taken and analyzed at Actlabs. The results show very similar total Cu grades and higher Mo, Ag and Au grade, as summarized in Table 12-1. This very small data set does not illustrate any issues with the historic samples taken. The large difference for Ag may be due to the increased precision for the Actlab assaying. Mo has been shown to have generally conservative values for the historic data, as discussed above.

Table 12-1: Comparison of assay results for three check-assays

Source	Hole #	From (m)	To (m)	Cu (%)	Mo (ppm)	Ag (g/t)	Au (g/t)
Original	BRG07-165	218.5	221.6	0.209	970	3.0	0.015
	BRG07-149	203.3	206.3	0.446	210	4.0	0.044
	BRG07-149	358.7	361.8	0.211	140	3.0	
	Average			0.289	440	3.3	0.030
Check Assay	BRG07-165	218.5	221.6	0.220	1340	3.3	0.019
	BRG07-149	203.3	206.3	0.388	164	4.3	0.051
	BRG07-149	358.7	361.8	0.260	386	8.7	0.031
	Average			0.289	630	5.4	0.034
Difference				0.2%	43.2%	63.0%	14.1%

12.5 QP Opinion on data verification

12.5.1 Sue Bird

The QP has audited the assay data and drilling logs and compared digital analytical data to laboratory certificates. The QP is satisfied that the geological database accurately reflects field observations and laboratory analysis and is adequate to support mineral resource estimation.

13 Mineral processing and metallurgical testing

13.1 Introduction

A number of metallurgical testwork programs were completed on samples from the Berg deposit from 2008 to 2012. An expanded test program was completed in 2025 that included variability testing for comminution properties and flotation response, including Cu-Mo separation testing on master composites. The testwork programs are summarized in Table 13-1.

Table 13-1: Metallurgical testwork summary

Year	Laboratory / Program	Program Description
2007-2008	G&T Metallurgical Services Ltd. KM2075	Preliminary Metallurgical Assessment optical point counting mineralogy high/low-grade supergene / hypogene master composites bench scale flotation, BBWi measurement
2009-2010	G&T Metallurgical Services Ltd. KM2218	grade range composites of supergene/hypogene optical point counting mineralogy bench and pilot scale flotation, included Cu-Mo separation bulk samples provided for comminution testing
2009	SGS Lakefield Research Limited Project 12156-001	bulk samples from G&T KM2218 MacPherson grindability test Bond BBWi tests
2012	Resource Development Inc.	Scoping metallurgical testing, condition evaluation single blend composite - 85% hypogene / 15% supergene bench scale flotation, preliminary Cu-Mo separation testing
2025	ALS Metallurgy KM7071	PFS metallurgical testing Composites and variability samples QEMSCAN mineralogy comminution testing, bench scale flotation, Cu-Mo separation testing on larger batch samples
2026	ALS Metallurgy KM7840	follow up on KM7071 to evaluate alternate regrinding arrangement, bench scale testing

13.2 Sample representativity and composition

The samples selected for each of the test programs are considered to be reasonably representative of the deposit with respect to grade, spatial coverage and lithology. The chemical compositions of the composites are shown in Table 13-2 and details of the samples each test program are described below.

Four composite samples were constructed for the KM2075 G&T test program using 61 individual samples obtained from 2007 drill holes, each weighing between 3 to 8 kg. The samples were selected by lithology and grade ranges. For the KM2218 G&T test program, the bench scale and pilot plant composites were constructed from coarse crushed rejects obtained from 2008 drill core samples. A total of 946 samples with a mass of 5.5 t were provided, selected from at least 15 drill holes. The composites were assembled by lithology and grade ranges. An additional 69 kg of drill core samples were received at G&T Metallurgical,

of which 39 kg was forwarded to Resource Development Inc. in 2011 for a subsequent metallurgical test program. The samples were combined to form a single composite of 85% hypogene and 15% supergene materials. This testing is not included in the discussion, as cleaner circuit performance was poor and the results are not relevant to the process design.

Table 13-2: Head Assays of the G&T/ALS Composites

Program	Composite	Assay – Percent					Assay - g/t	
		Cu	CuOx	CuCN	Mo	S(t)	Ag	Au
KM2075	Low Cu Oxide supergene	0.37	0.046	-	0.029	1.63	-	-
	High Cu Oxide supergene	0.37	0.056	-	0.025	1.78	-	-
	Low-Grade Hypogene	0.31	-	-	0.034	4.21	-	-
	High-Grade Hypogene	0.38	-	-	0.041	4.79	-	-
KM2218	Supergene Lo Cu Lo Mo	0.21	0.014	-	0.014	3.23	3	-
	Supergene Lo Cu Avg Mo	0.20	0.024	-	0.045	2.60	2	-
	Supergene Avg Cu Avg Mo	0.42	0.043	-	0.033	1.61	3	-
	Supergene Hi Cu Avg Mo	0.79	0.076	-	0.034	1.84	11	-
	Supergene Hi Cu Hi Mo	0.66	0.066	-	0.089	2.23	8	-
	Hypogene Lo Cu Lo Mo	0.20	0.004	-	0.023	2.59	3	-
	Hypogene Lo Cu Avg Mo	0.21	0.003	-	0.041	2.46	3	-
	Hypogene Avg Cu Avg Mo	0.32	0.004	-	0.042	2.80	34	-
	Hypogene Hi Cu Avg Mo	0.56	0.002	-	0.067	2.82	10	-
	Hypogene Hi Cu Hi Mo	0.54	0.003	-	0.075	3.71	7	-
	Supergene PP Composite	0.39	0.045	-	0.033	2.51	5	-
	Hypogene PP Composite	0.29	0.003	-	0.060	3.44	5	-
KM7071	SG Comp 1	0.37	0.049	0.155	0.025	2.82	3	0.030
	SG Comp 2	0.29	0.011	0.029	0.014	2.32	6	0.025
	HG Main	0.25	0.004	0.012	0.025	2.95	3	0.020

The KM7071 samples were assembled from a total of 786 meters of ½ core intervals, selected from 21 drill holes in the 2011, 2021 and 2023 drill programs. A total sample mass of 2094 kg was provided. An image of the drill hole spatial locations is presented in Figure 13-1. Head assay data for the variability samples is presented in Table 13-3. The copper feed grades of the samples are plotted against the production year that material represented by each sample would be mined in Figure 13-2, along with estimated mine plan annual feed grades.

Master composites were assembled from portions of the variability samples. The Supergene 1 material differentiated from the Supergene 2 material based on copper oxide and CN soluble copper contents. Higher values for these copper speciation assay methods are indicative of copper oxide and secondary copper minerals, as opposed to the more abundant primary copper sulphide mineral chalcopyrite. While the CuOx and CuCN values of the Supergene 2 were marginally higher than in the hypogene samples, testing determined that the metallurgical response of the two materials were similar.

Table 13-3: Variability sample head assay data KM7071

Lithology	Sample ID	Assay – Percent					Assay - g/t	
		Cu	CuOx	CuCN	Mo	S(t)	Ag	Au
Oxide	OX VAR 1	0.27	0.053	0.098	0.014	1.71	2	0.03
Supergene Type 1	SG VAR 1	0.26	0.039	0.050	0.016	5.77	3	0.08
	SG VAR 3	0.35	0.059	0.095	0.016	1.76	6	0.07
	SG VAR 6	0.28	0.031	0.140	0.001	3.32	2	0.03
	SG VAR 7	0.22	0.024	0.039	0.006	5.01	3	0.02
	SG VAR 12	0.46	0.051	0.168	0.037	0.99	2	0.03
	SG VAR 13	0.40	0.046	0.200	0.010	3.74	3	0.02
	SG VAR 15	0.52	0.049	0.208	0.100	1.06	4	0.14
Supergene Type 2	SG VAR 2	0.20	0.001	0.014	0.006	4.69	4	0.09
	SG VAR 4	0.40	0.015	0.026	0.007	2.75	10	0.02
	SG VAR 5	0.22	0.010	0.024	0.005	1.81	12	0.02
	SG VAR 9	0.15	0.006	0.012	0.007	2.45	2	0.02
	SG VAR 11	0.26	0.015	0.036	0.041	0.98	2	0.02
	SG VAR 14	0.42	0.007	0.026	0.017	2.09	5	0.09
Hypogene	HG VAR 1	0.14	0.001	0.004	0.007	6.34	2	0.03
	HG VAR 2	0.13	0.001	0.004	0.008	2.24	4	<0.01
	HG VAR 3	0.23	0.002	0.006	0.013	4.73	3	0.01
	HG VAR 4	0.20	0.002	0.006	0.055	2.75	3	0.01
	HG VAR 5	0.20	0.002	0.005	0.015	2.73	2	<0.01
	HG VAR 6	0.25	0.003	0.008	0.059	3.53	2	0.04
	HG VAR 7	0.26	0.002	0.004	0.028	2.24	3	0.01
	HG VAR 8	0.20	0.002	0.008	0.052	2.25	3	0.01
	HG VAR 10	0.27	0.004	0.012	0.037	4.00	3	0.03
	HG VAR 11	0.40	0.011	0.028	0.006	2.87	3	0.03
	HG VAR 12	0.36	0.004	0.012	0.022	2.33	4	0.03
	HG VAR 13	0.31	0.003	0.009	0.012	4.22	4	0.02
	HG VAR 14	0.12	0.002	0.004	0.014	1.37	1	0.01
	HG VAR 15	0.30	0.004	0.011	0.037	0.71	3	0.04

Detailed mineralogical assessments using QEMSCAN technology were completed on the KM7071 master composites at primary grind sizes ranging from 100 to 160 µm P₈₀. Mineralogical assessments using point counting techniques were completed on master composites from the earlier G&T Metallurgical test programs which returned similar sulphide mineral data, however these results are not included in the discussion. Mineral composition data for the KM7071 composites is summarized in Table 13-4. Copper distribution to mineral forms is summarized in Table 13-5.

The primary host minerals of the composites were feldspars, quartz and micas. The sulphide mineral assemblages of the Hypogene and Supergene 2 composites were somewhat similar, while the Supergene 1 composite contained elevated levels of secondary copper sulphides. Sulphide mineral content ranged between 4-5% with pyrite and chalcopyrite being the dominant sulphide minerals. The ratio of pyrite to

copper sulphides contents ranged from 4 to 6.5, indicating that selective flotation conditions and considerable regrinding may be required to generate saleable copper concentrates. Approximately 44% of the copper in the Supergene 1 composite was present in chalcocite/covellite, compared to the Supergene 2 and Hypogene composites in which copper was nearly all present in chalcopyrite. Chalcocite/covellite can be partially digested in a CuOx assay protocol (typically 10% sulphuric acid), which likely accounts for a portion of the values measured in Table 13-4. The elevated levels of chalcocite/covellite in the Supergene 1 composite would contribute to higher-grade copper concentrates due to the higher copper content of these minerals. Chalcocite/covellite is often more fine-grained compared to chalcopyrite and may require a finer primary grind size and slightly higher dosages of collector for effective rougher flotation recovery.

Table 13-4: Mineralogical characteristics of the KM7071 composites

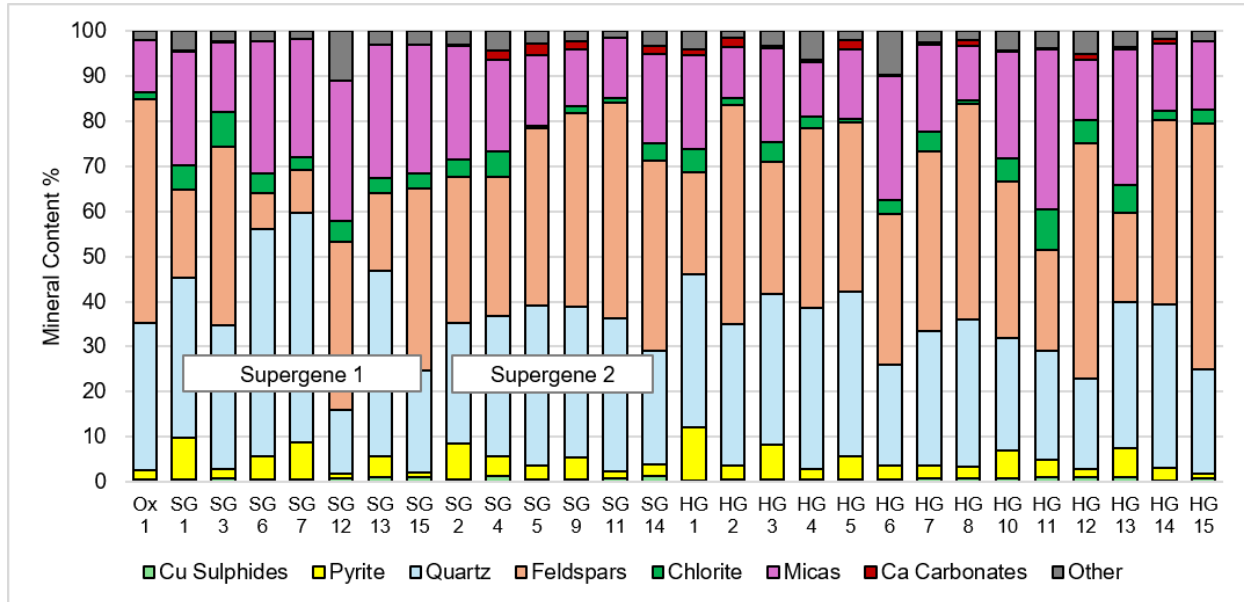
Mineral	Content %		
	Supergene 1	Supergene 2	Hypogene
Chalcopyrite	0.55	0.79	0.70
Bornite	0.01	0	0
Chalcocite/Covellite	0.13	0	0
Tennantite/Enargite	0	0	0
Molybdenite	0	0	0
Galena	0	0.02	0
Sphalerite	0.06	0.08	0.02
Pyrite	4.47	3.27	3.75
Iron Oxides	0.54	0.46	0.68
Quartz	31.1	28.8	27.0
Feldspars	25.4	40.6	39.0
Chlorite	5.24	3.23	4.30
Micas	28.4	18.3	20.3
Pyroxene/Amphibole	1.90	0.36	0.56
Calcium Carbonates	0.11	1.49	0.82
Kaolinite	0.66	0.63	0.28
Others	1.42	1.99	2.55
Sulphides total	5.22	4.18	4.48
Pyrite:CuS ratio	6.47	4.07	5.28

Table 13-5: Copper distribution by mineral form in the KM7071 composites

Mineral	Copper Distribution %		
	Supergene 1	Supergene 2	Hypogene
Chalcopyrite	52.8	96.8	97.8
Bornite	2.32	1.18	0.37
Chalcocite/Covellite	43.6	1.00	1.12
Tennantite/Enargite	0.02	1.01	0.71
Native Copper	0.52	1.03	0
Cu-Fe Oxides	0.18	0	0
Cu silicates	0.52	0	0

Mineral contents of the KM7071 variability samples were also measured using QEMSCAN technology. Results are presented graphically in Figure 13-3.

Figure 13-3: Mineral composition KM7071 variability samples



Source: Ausenco, 2026

Sulphide mineral liberation and association details were measured on the KM7071 composites and analyzed on a mineral mass basis as opposed to simply occurrence. Results are summarized in Table 13-6. Liberation levels of both copper sulphides and molybdenite were sufficient at these primary grind sizes for effective recovery in a rougher flotation circuit. The measurements indicated very limited association between molybdenite and other sulphide minerals. Some association of copper sulphides with pyrite was measured but was generally low.

Table 13-6: Sulphide mineral texture details – KM7071 composites

Mineral Class	Supergene 1 (97µm P ₈₀)			Supergene 2 (106µm P ₈₀)			Hypogene (160µm P ₈₀)		
	Cs	Md	Py	Cs	Md	Py	Cs	Md	Py
Liberated	69.4	84.2	80.7	71.0	79.3	86.6	69.6	84.0	80.3
Binary - Cs	-	0.0	5.1	-	0.0	3.0	-	0.6	2.6
Binary - Md	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0
Binary - Py	4.7	0.6	-	4.1	0.0	-	2.9	0.5	-
Binary - Gn	23.9	14.0	13.1	23.3	19.7	9.5	25.4	14.6	15.7
Multi-phase	1.9	1.2	1.0	1.6	1.0	0.7	1.9	0.3	1.0

Note: Cs: Cu sulphides, Md: Molybdenite, Py: Pyrite, Gn: Non-sulphide gangue

13.3 Comminution testwork

Sixty-three of the samples received in the KM2218 test program were allocated to form hypogene and supergene composites for comminution testing. Each composite had a mass of 175 kg. The composites were shipped to SGS Lakefield for the 2009 grindability test program. These composites were evaluated using a MacPherson autogenous grindability test protocol. The test results are summarized in Table 13-7.

Table 13-7: MacPherson grindability test summary

Sample	Feed (kg/h)	Autogenous Work Index (kWh/t)	Hardness Percentile	Gross Specific Energy Input (kWh/t)	P ₈₀ (µm)
Supergene	9.3	15.0	53	8.6	337
Hypogene	8.3	15.5	59	9.9	285

Based on throughput and gross specific energy input, the supergene sample was classified as medium, while the hypogene sample was classified as moderately hard. Based on the measured autogenous work index (AWi), both samples were classified as having medium competency.

Bond ball mill work index tests were conducted on three composites in the early test programs, two hypogene and one supergene, returning values ranging from 14.2 to 18.4 kWh/t. These grindability tests were performed using a 106 µm closing screen and the results are considered less representative.

Additional comminution testing was completed on variability samples in the KM7071 program, which included Bond abrasion index, Bond ball mill and SMC tests. The test results are summarized in Table 13-8. Bond ball mill Wi and Dwi values from the SMC tests are presented graphically in Figure 13-4. The Bond ball mill work index tests were completed with a closing screen size of 212 µm, resulting in steady state product sizes averaging 148 µm P₈₀.

The SMC results indicate that the Hypogene materials are quite competent, with respect to impact breakage in a SAG mill, as the derived Axb value for this group of samples averaged 28.1. The Bond ball mill work index tests also indicated that the material was hard with respect to attrition grinding in a ball mill, as the BBWi values averaged 17.6 kWh/t. The Supergene 1 and Supergene 2 samples were less competent and softer with respect to these test protocols, on average, than the Hypogene samples.

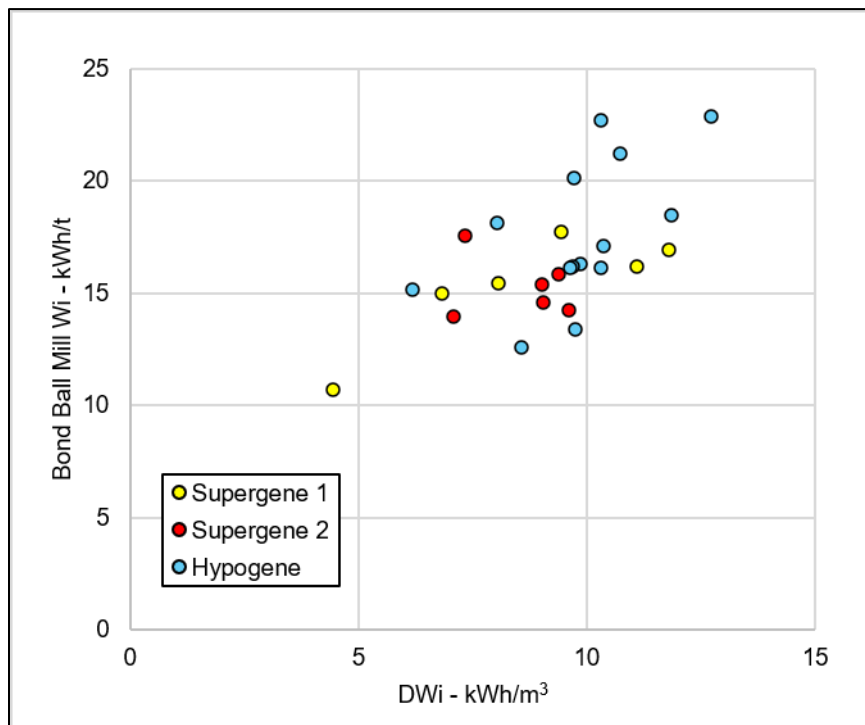
The Bond abrasion index values indicated that the materials were moderately abrasive, as the dataset averaged 0.15 grams of wear on the test coupons. The hypogene samples were slightly more abrasive, averaging 0.19 grams.

Table 13-8: Comminution Test Results KM7071 variability samples

Material Type	Sample ID	Abrasion Index (g)	DWi	SCSE	A x b	Ball Mill Wi
			kWh/m ³	kWh/t		kWh/t
Supergene Type 1	SG Var 1	0.07	11.8	13.2	23.2	16.9
	SG Var 3	0.11	6.8	9.9	38.1	15.0
	SG Var 6	0.02	8.1	10.8	34.5	15.5
	SG Var 7	0.06	9.4	11.6	28.4	17.7
	SG Var 12	0.03	4.5	8.3	60.1	10.7
	SG Var 13	0.03	11.1	12.6	24.1	16.2
Supergene Type 2	SG Var 2	0.09	9.0	11.3	30.8	15.4
	SG Var 4	0.10	9.4	11.5	28.4	15.8
	SG Var 5	0.29	7.3	10.3	35.1	17.5
	SG Var 9	0.23	9.0	11.3	29.6	14.6
	SG Var 11	0.17	7.1	10.1	35.7	14.0
	SG Var 14	0.12	9.6	11.8	26.9	14.2
Hypogene	HG Var 1	0.15	10.3	12.2	27.6	22.7
	HG Var 2	0.41	8.0	10.7	32.7	18.1
	HG Var 3	0.13	10.7	12.5	25.8	21.2
	HG Var 4	0.26	9.9	12.0	27.0	16.3
	HG Var 5	0.28	6.2	9.5	43.0	15.2
	HG Var 6	0.15	9.7	11.8	29.1	13.4
	HG Var 7	0.18	10.3	12.0	26.0	16.1
	HG Var 8	0.29	9.7	11.7	27.2	16.2
	HG Var 10	0.13	11.8	13.1	23.2	18.5
	HG Var 11	0.04	12.7	13.6	21.0	22.9
	HG Var 12	0.15	10.4	12.2	25.8	17.1
	HG Var 13	0.13	9.7	11.8	28.1	20.1
	HG Var 14	0.25	9.6	11.8	26.4	16.1
	HG Var 15	0.15	8.6	11.0	30.2	12.6
Average		0.15	9.3	11.5	30.3	16.5
75 th percentile*		0.24	10.3	12.2	26.0	17.8

*Note: The 25th percentile of the Axb values is listed, as this is an inverse metric; competent samples have low values while non-competent samples have high values.

Figure 13-4: Bond Ball Mill Wi Vs. DWi Results – KM7071 variability samples



Source: Ausenco, 2026

13.4 Early program flotation testwork

13.4.1 2008 G&T metallurgical test program (KM2075)

In 2008, G&T Metallurgical conducted flotation testwork aimed at developing suitable flowsheet and flotation conditions. This test program was carried out on four master composites representing hypogene and supergene deposit types. The bulk of the testing was carried out on the high-grade hypogene and low copper oxide supergene composites. The low-grade hypogene and high copper oxide supergene composites were subjected to only one flotation test each.

Rougher kinetic tests were used to establish the primary grind versus metal recovery relationship in the rougher circuit. Batch open circuit cleaner tests were used to define the grade-recovery relationships through the cleaning steps. The effect of variable regrind discharge sizing was also investigated through the open circuit cleaner tests. In the final stages of the program, locked cycle tests were carried out on three of the four master composites. The developed conventional flowsheet included primary grinding to approximately 110 μm P₈₀, rougher flotation, a single regrind, three stages of dilution cleaning and a cleaner scavenger. Conditions applied in the locked cycle tests are summarized in Table 13-9. Metallurgical balances for closed-circuit tests on the three composites are summarized in Table 13-10. In these metallurgical balances, the bulk concentrates still contain molybdenum which would be removed by subsequent Cu-Mo separation.

Table 13-9: Flowsheet conditions – KM2075 locked cycle tests

Condition		Low CuOx Supergene	L/G Hypogene	H/G Hypogene
		Test 33	Test 32	Test 30
Grind size μm P ₈₀	Primary	108	105	120
	Regrind	15	14	14
pH	Rougher	10	7.8	8
	Cleaner	11	10	10
Lime g/t	Rougher	2,000	-	-
	Cleaner	1,040	400	400
PAX	Rougher	20	20	20
	Cleaner	10	8	13
Fuel Oil	Prim. Grind	20	20	10
	Regrind	20	20	20
Aero 3302	Cleaner Scavenger	20	20	20

Table 13-10: Locked cycle test metallurgical balances – KM2075

Composite/Test	Product	Mass %	Assay - %			Distribution - %		
			Cu	Mo	S	Cu	Mo	S
Low Cu Oxide Supergene (Test 33)	Flotation feed	100	0.39	0.033	1.42	100	100	100
	Bulk Concentrate	1.3	26.1	1.60	30.9	85.1	61.4	27.5
	Cleaner Scav Tailings	9.6	0.20	0.06	10.5	4.8	16.3	70.9
	Rougher Tailings	89.1	0.04	0.008	0.02	10.1	22.2	1.6
Low-Grade Hypogene (Test 32)	Flotation feed	100	0.33	0.035	4.11	100	100	100
	Bulk Concentrate	0.93	29.0	2.73	33.6	82.7	72.9	7.6
	Cleaner Scav Tailings	10.9	0.10	0.07	19.7	3.5	20.8	52.3
	Rougher Tailings	88.8	0.05	0.003	1.87	13.8	6.3	40.2
High-Grade Hypogene (Test 30)	Flotation feed	100	0.39	0.04	4.6	100	100	100
	Bulk Concentrate	1.29	26.0	2.53	32.5	86.5	81.6	9.1
	Cleaner Scav Tailings	8.42	0.15	0.06	18.0	3.2	11.6	32.9
	Rougher Tailings	90.3	0.03	0.003	2.96	10.3	6.7	58.0

13.4.2 2009-2010 G&T metallurgical test program (KM2218)

A series of open circuit and locked cycle tests were carried out to help define the copper and molybdenum recoveries as a function of head grade. A pilot plant was used to produce large quantities of bulk copper and molybdenum concentrates for bench scale copper-molybdenum separation testing.

The following comments summarize the key features of the flowsheet used in this test program:

- The feed samples were ground to a primary grind varying between 80 to 160 μm P₈₀. Finer primary grind sizes were applied to the supergene composite; however, it was not confirmed that these were specifically required to achieve acceptable metallurgical performance. The bulk rougher concentrates were reground to between 10 to 30 μm P₈₀ prior to the three stages of cleaning.
- Fuel oil was added to the primary grind as a primary molybdenum collector. Potassium amyl xanthate (PAX) was added in the rougher and cleaner circuit as the primary copper sulphide collector.
- Rougher flotation was carried out at a natural pH of 8.0 for hypogene material and pH 10.0 for supergene. The cleaner circuit pH varied between 10 and 11 throughout the test program.

Locked cycle tests were carried out on 6 of the 10 bench scale composites, representing both supergene and hypogene deposit types. Test conditions are summarized in Table 13-11. The results of the locked cycle tests are shown in Table 13-12.

Table 13-11: Flowsheet conditions – KM2218 locked cycle tests

Condition		Supergene Composites			Hypogene Composites		
		Test 21	Test 23	Test 20	Test 17	Test 18	Test 19
Grind size μm P ₈₀	Primary	87	87	93	147	157	147
	Regrind	13	15	12	22	15	17
pH	Rougher	10	10	10	7.8	7.8	8.1
	Cleaner	11	11	11	10	10	10
Lime g/t	Rougher	850	1100	1850	-	-	-
	Cleaner	750	500	710	200	200	250
PAX	Rougher	10	13	40	12	12	40
	Cleaner	19	11	9	6	8	10
Fuel Oil	Prim. Grind	20	20	31	30	20	20
	Regrind	28	36	46	20	20	20
Aero 3302	Cleaner Scav	20	20	20	20	20	20

Table 13-12: Locked cycle test metallurgical balances – KM2218

Composite/Test	Product	Mass %	Assay - % or g/t				Distribution - %			
			Cu	Mo	S	Ag	Cu	Mo	S	Ag
Supergene Lo Cu Lo Mo (Test 21)	Flotation feed	100	0.21	0.014	3.01	3.8	100	100	100	100
	Bulk Concentrate	0.9	16.5	0.312	33.5	177	69.2	19.5	9.8	40.5
	Cleaner Scav Tailings	12.1	0.33	0.072	21.7	12	19.1	62.0	87	36.8
	Rougher Tailings	87.0	0.03	0.003	0.11	1	11.8	18.5	3.2	22.7
Supergene Avg Cu Avg Mo (Test 23)	Flotation feed	100	0.41	0.031	1.50	3.5	100	100	100	100
	Bulk Concentrate	1.2	30.7	2.40	36.4	220	86.7	92.0	29.1	73.4
	Cleaner Scav Tailings	6.2	0.29	0.025	15.8	5	4.3	5.0	66.4	9.4
	Rougher Tailings	92.7	0.04	0.001	0.10	0.7	9.0	3.0	4.5	17.2
Supergene Hi Cu Hi Mo (Test 20)	Flotation feed	100	0.68	0.093	1.87	9	100	100	100	100
	Bulk Concentrate	2.3	25.7	3.32	29.4	312	85.7	81.0	35.6	78.4
	Cleaner Scav Tailings	10.1	0.26	0.049	11.4	8	3.8	5.3	61.4	8.5
	Rougher Tailings	87.7	0.08	0.014	0.07	1.3	10.5	13.7	3.1	13.1
Hypogene Lo Cu Lo Mo (Test 17)	Flotation feed	100	0.18	0.023	1.96	3.2	100	100	100	100
	Bulk Concentrate	0.9	15.5	2.26	40.1	185	77.7	88.3	18.7	53.1
	Cleaner Scav Tailings	5.33	0.21	0.016	13.4	8	6.1	3.6	36.4	13.0
	Rougher Tailings	93.8	0.03	0.002	0.94	1.1	16.2	8.0	44.9	33.9
Hypogene Avg Cu Avg Mo (Test 18)	Flotation feed	100	0.28	0.039	2.48	11	100	100	100	100
	Bulk Concentrate	0.9	24.8	3.61	36.7	419	79.5	83.0	13.3	35.0
	Cleaner Scav Tailings	6.0	0.33	0.079	12.7	80	7.1	12.2	30.9	45.1
	Rougher Tailings	93.1	0.04	0.002	1.49	2.3	13.4	4.8	55.8	19.9
Hypogene Hi Cu Hi Mo (Test 19)	Flotation feed	100	0.55	0.08	3.50	8.4	100	100	100	100
	Bulk Concentrate	1.8	28.0	4.31	35.3	328	88.3	94.9	18.6	68.7
	Cleaner Scav Tailings	8.4	0.16	0.022	15.6	12	2.5	2.3	39.3	12.5
	Rougher Tailings	89.8	0.06	0.003	1.57	1.7	9.2	2.8	42.2	18.8

The low-grade supergene composite copper returned compromised metallurgical performance, which could be attributed to unoptimized conditions.

Overall, the metallurgical results were reasonable for the mineral assemblages and conditions applied. In the opinion of the QP, it is unexpected that the copper sulphides in these samples could be selectively upgraded to saleable concentrates with the applied dosages of a strong and non-selective collector, PAX, given the relatively high levels of pyrite in the feeds. It may be that excessive levels of regrinding were required to achieve selectivity under these chemical conditions.

13.4.3 Pilot plant testing (KM2218)

G&T Metallurgical conducted a series of pilot plant runs in the 2010 test program. Bulk composites of both hypogene and supergene deposit types, 2.5 and 2.3 tonnes respectively, were processed. The composites were assembled from crushed drill core rejects, and sub-samples were used for bench scale tests in advance of the pilot testing. The principal objectives were to evaluate metallurgical performance on a continuous basis and to produce bulk concentrates for bench scale Cu/Mo separation tests.

Effectively, eight full pilot plant runs were conducted. Crushed feed was processed for 4 to 8 hours each run day in the continuous circuit which included rod mill primary grinding, rougher flotation, stirred mill regrinding and cleaner flotation. Composite samples of the key circuit process streams were collected over 2 or 3-hour periods; assay and mass flow data were then used to construct appropriate metallurgical balances for each sampling period.

A series of locked cycle tests were conducted on both the hypogene and supergene pilot plant feed samples. The test conditions and the results of the locked cycle tests are summarized in Table 13-13 and Table 13-14.

Table 13-13: Locked cycle test conditions – KM2218 pilot composites

Condition		PP Supergene				PP Hypogene	
		Test 29	Test 33	Test 39	Test 52	Test 31	Test 35
Grind size µm P ₈₀	Primary	100	100	100	100	143	143
	Regrind	11	16	14	12	10	13
pH	Rougher	10	10	10	10	8.1	8.1
	Cleaner	11	11	11	11	10	10
Lime g/t	Rougher	2100	2100	2000	1900	-	-
	Cleaner	500	500	500	300	300	350
PAX	Rougher	11	14	14	14	20	20
	Cleaner	19	19	19	19	9	9
Fuel Oil	Prim. Grind	40	40	40	40	10	10
	Regrind	50	50	50	50	20	20
	Cleaner	80	60	100	100	12	12
Aero 3302	Cleaner Scavenger	40	40	-	-	20	20

Table 13-14: Locked cycle test metallurgical balances – KM22018 pilot composites

Composite/Test	Product	Mass %	Assay - % or g/t				Distribution - %			
			Cu	Mo	S	Ag	Cu	Mo	S	Ag
Supergene PP Comp (Avg Test 29 & 33) with Aero 3302	Flotation feed	100	0.38	0.031	2.29	7	100	100	100	100
	Bulk Concentrate	1.3	24.3	1.7	31.0	307	80	81	17	64
	Cleaner Scav Tailings	7	0.38	0.03	25.2	12	7	9	78	13
	Rougher Tailings	91.8	0.053	0.003	0.10	2	13	10	5	23
Supergene PP Comp (Avg Test 39 & 52) without Aero 3302	Flotation feed	100	0.38	0.031	2.29	7	100	100	100	100
	Bulk Concentrate	1.3	22.8	1.9	30.6	275	80	81	19	72
	Cleaner Scav Tailings	7.1	0.4	0.05	23.8	11	7	10	78	15
	Rougher Tailings	91.6	0.053	0.003	0.10	1	13	8	2	14
Hypogene PP Comp (Avg Test 31 & 35)	Flotation feed	100	0.28	0.057	2.98	10	100	100	100	100
	Bulk Concentrate	0.9	26.0	5.8	36.2	431	85	92	11	46
	Cleaner Scav Tailings	8.8	0.12	0.02	17.6	15	4	4	52	15
	Rougher Tailings	90.3	0.032	0.003	1.20	5	11	4	37	39

13.4.4 Pilot plant performance data

The pilot plant performance data for each of the pilot runs is summarized in Table 13-15 and Table 13-16. Between 1 and 3 circuit surveys were conducted each run day, the average results for the surveys are presented. The following points should be considered in evaluating these results:

- The average metallurgical performance for the supergene composite was poorer in the pilot plant compared to locked cycle testing. Average copper recovery was 68% into the final bulk concentrate assaying 15.5% copper.
- Average molybdenum recovery for the pilot runs on the supergene composite was 52% to the bulk concentrate assaying 0.7% molybdenum. The molybdenum recoveries were considerably lower than locked cycle tests, the greatest variance in losses was across the cleaner circuit.
- Replicating bench scale results in a continuous pilot flotation circuit can be challenging, particularly at the throughput of this campaign. At a feed rate of 100 kg/hr and these copper feed grades, maintaining steady mass recoveries through the cleaner circuit may have been difficult. The effects of adding reagents continuously in a full closed-circuit arrangement may have also compromised metallurgical performance over the limited run time.
- The supergene material required high dosages of fuel oil in the locked cycle tests. Application of these dosages in the pilot plant may have compromised froth stability and metallurgical performance.
- Metallurgical performance for the hypogene pilot plant composite was similar to the locked cycle testing. The average copper recovery to the final bulk concentrate was 81.4% and average copper grade was 22.4%.
- Average molybdenum recovery to the final bulk concentrate across all hypogene pilot samples was 87.5%, with an average grade of 4.6%. This compares to an average molybdenum recovery of 92% with an average grade of 5.8% in the locked cycle testing.

Table 13-15: Pilot plant and bulk concentrate performance - supergene

Run Day	Feed (kg) µm P ₈₀	Prm Grd µm P ₈₀	Regrind µm P ₈₀	Mass %	Assay - % or g/t				Distribution - %			
					Cu	Mo	S	Ag	Cu	Mo	S	Ag
P1	502	117	23	1.9	13.4	0.74	38.1	141	68.2	50.4	32.5	57.5
P2	250	95	18	1.7	15.0	1.28	33.9	188	68.1	70.8	23.7	59.4
P7	460	133	18	1.5	18.3	0.29	37.3	227	65.5	18.4	28.8	60.7
P8/9	500	102	13	1.5	15.4	0.39	26.6	167	71.0	35.4	21.1	60.1

Note: Rougher concentrate from P8 was upgraded in a separate cleaner circuit on P9, combined results are presented.

Table 13-16: Pilot plant data and bulk concentrate performance - hypogene

Test	Feed (kg)	Prm Grd $\mu\text{m P}_{80}$	Regrind $\mu\text{m P}_{80}$	Mass %	Assay - % or g/t				Distribution - %			
					Cu	Mo	S	Ag	Cu	Mo	S	Ag
P3	544	119	14	1.0	22.2	4.73	37.1	357	82.3	88.4	14.2	71.4
P4	821	129	23	1.1	20.6	3.25	37.6	310	76.3	81.1	16.9	64.5
P5	764	176	30	1.4	15.4	2.40	41.2	264	79.9	77.1	21.0	67.3
P6	302	175	N/A	1.0	24.2	5.60	36.7	379	84.1	91.0	19.0	68.2

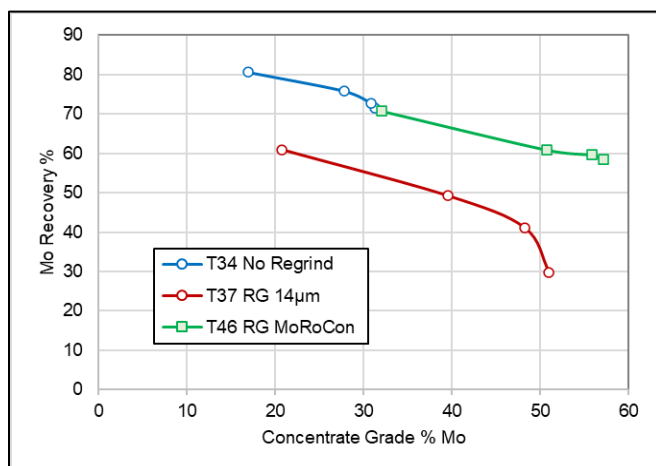
13.4.5 Copper-molybdenum separation testing

In the 2010 test program, KM2218, G&T Metallurgical conducted bench scale testing to evaluate copper-molybdenum separation using bulk concentrates produced in the pilot plant program. A series of tests were conducted on hypogene material, however only a single test was conducted on supergene material. Feed for the hypogene separation tests was a blend of P3 to P6 bulk concentrates. For the supergene deposit type, a sample of rougher concentrate generated in the pilot plant was upgraded on the bench and subsequently used for Cu-Mo separation testing.

Bench scale rougher kinetic and open circuit cleaner tests were carried out on the hypogene bulk concentrate. Selected results are displayed in Figure 13-5 and discussed below:

- The composite sample of final bulk concentrate had a feed grade of 22.5% copper and 4.80% molybdenum.
- Final molybdenum grades of 50% and higher were produced when regrinding was applied, however molybdenum recovery across the circuit was low. It would be expected that circuit recoveries would improve in closed-circuit.
- Regrinding of the molybdenum rougher concentrate appeared to be more effective than regrinding the bulk concentrate prior to rougher flotation. In Test 46, a first cleaner concentrate grading 50.7% Mo was produced at a molybdenum circuit recovery of 61%.

Figure 13-5: Copper-molybdenum separation test results – hypogene KM2218



Source: Ausenco, 2023

Supergene rougher concentrate generated in the pilot plant was upgraded using bench scale equipment to produce a suitable bulk concentrate for subsequent Cu-Mo separation testing. The rougher concentrate was upgraded in three stages of open circuit dilution cleaning. The resulting bulk concentrate was divided into five feed charges to use for a copper-molybdenum separation test, conducted in a locked cycle format.

The results of this testing are discussed below:

- The rougher concentrate was reground to 15 μm P₈₀ prior to dilution cleaning at pH 11, however the bulk concentrate graded 15.5% Cu and 0.8% Mo. Iron and sulphur assays suggest that the bulk concentrate still contained elevated levels of pyrite. Both copper and molybdenum recoveries across the bulk cleaner circuit were low at 65 and 49%, respectively.
- Molybdenum recovery across the Cu-Mo separation circuit was 55% to a final molybdenum concentrate grading 50.5% Mo and 2.3% Cu.

The results suggest that the conditions for Cu-Mo separation were not yet optimized.

13.5 Recent flotation testwork

A considerable flotation test program was conducted at ALS Metallurgy in 2024/2025 which evaluated three master composites and 28 variability samples. Flotation testing details are discussed in the following sections.

13.5.1 Master composite bulk flotation testing

A series of rougher kinetic and open circuit cleaner tests were conducted on the composites to investigate the effect of primary grind size, chemical conditions, and cleaner circuit requirements for the bulk flotation circuit. Rougher kinetic testing evaluated primary grind sizes ranging from 97 μm P₈₀ on supergene material to 344 μm P₈₀ on the hypogene composite. A more selective collector, Aero 3477, and the addition of NaCN as a pyrite depressant were both investigated along with PAX as the primary collector. Rougher and cleaner circuit pH levels were investigated. The developed conditions were applied in locked cycle tests, as summarized in Table 13-17. Metallurgical balances are summarized in Table 13-18.

Table 13-17: Flowsheet conditions – KM7071 locked cycle tests

Condition		Supergene 1	Supergene 2	Hypogene	Hypogene
		Test 74	Test 45	Test 75	Test 44
Grind time minutes	Primary	14	13	16	14
	Regrind	8	9	7	8
Grind size μm P ₈₀	Primary	113	156	160	200
	Regrind	19	17	16	17
pH	Rougher	9	10	10	10
	Cleaner	11	10	10	10
Lime g/t	Rougher	1000	350	460	440
	Cleaner	500	180	125	125
NaCN g/t	Rougher	30	30	10	10
	Cleaner	30	30	10	10
PAX g/t	Rougher	12	13	12	12
	Cleaner	10	11	9	9
Fuel Oil g/t	Prim. Grind	20	20	20	20
	Regrind	20	20	20	20

The lab mill grinding times required to achieve the target primary grind size of 160 μm were 19% lower for the Supergene 2 composite compared to the hypogene composite. The Supergene 1 composite was softer still; therefore, a lower primary grind size target was selected. The lab grind times show agreement with the Bond BBWi results. The difference in hardness between the materials presents a throughput opportunity at plant scale. Sodium cyanide was determined to be a suitable supplementary pyrite depressant for all materials. Open circuit cleaner data suggests that the dosage could be optimized lower for supergene materials. Dosages of PAX and fuel oil were similar to previous test programs, varying appropriately for feed grades. Aero 3302 was not used as a cleaner scavenger collector.

Table 13-18: Metallurgical balances – KM7071 locked cycle tests

Composite/Test	Product	Mass %	Assay - % or g/t				Distribution - %			
			Cu	Mo	S	Ag	Cu	Mo	S	Ag
Supergene 1 (Test 74)	Flotation feed	100	0.37	0.027	2.80	3.6	100	100	100	100
	Bulk Concentrate	1.3	22.8	1.84	40.7	197	80.3	88.6	18.8	70.6
	Cleaner Scav Tailings	13.3	0.20	0.012	16.4	4.5	7.1	6.0	77.9	16.7
	Rougher Tailings	85.4	0.054	0.002	0.11	0.5	12.6	5.4	3.4	12.7
Supergene 2 (Test 45)	Flotation feed	100	0.29	0.015	2.30	6.0	100	100	100	100
	Bulk Concentrate	1.0	26.3	1.37	35.7	468	88.4	91.1	15.3	76.5
	Cleaner Scav Tailings	9.3	0.15	0.005	11.4	6.5	4.6	2.8	46.1	10.0
	Rougher Tailings	89.7	0.023	0.001	0.99	0.9	7.0	6.1	38.7	13.4
Hypogene (Test 75)	Flotation feed	100	0.26	0.028	2.85	3	100	100	100	100
	Bulk Concentrate	0.8	29.7	3.20	34.6	247	90.7	93.0	9.8	62.0
	Cleaner Scav Tailings	9.4	0.06	0.008	4.72	4	2.0	2.9	15.6	11.7
	Rougher Tailings	89.8	0.021	0.001	2.36	0.9	7.3	4.1	74.6	26.3
Hypogene (Test 44)	Flotation feed	100	0.25	0.026	2.80	3	100	100	100	100
	Bulk Concentrate	0.8	28.8	3.03	34.3	242	86.8	91.5	9.3	55.3
	Cleaner Scav Tailings	9.7	0.08	0.008	4.53	3	3.0	3.3	15.7	19.8
	Rougher Tailings	89.6	0.028	0.002	2.35	1.0	10.1	5.3	75.1	25.0

The metallurgical results were improved compared to previous testing, considering the variances in feed grades and the modest increases in primary grind sizes. The locked cycle test conducted on the hypogene composite at a coarser primary grind sizing of 200 μm P₈₀ indicates a modest decrease in metal recoveries compared to the 160 μm test.

Additional tests were conducted on the KM7071 hypogene composite to evaluate an alternate regrinding arrangement that would require less energy. This was evaluated in the KM7840 program using open circuit cleaner tests and culminating in a locked cycle test. In the alternate flowsheet, rougher concentrate was reground to only 35 μm P₈₀ and subjected to one stage of dilution cleaning plus scavenging. The 1st cleaner concentrate was advanced to a 2nd regrind stage, targeting an 18 μm P₈₀ discharge prior to the final two stages of dilution cleaning. In this arrangement, the mass reporting to fine grinding is reduced from 10% to 2%, providing considerable savings in regrinding energy. A locked cycle test was conducted to confirm the effect on cleaner circuit recovery; results are presented in Table 13-19. A pyrite scavenger circuit was also added to this test to evaluate the potential to further reduce sulphur in the rougher tailings stream.

Table 13-19: Metallurgical balance – alternate regrind flowsheet locked cycle test

Composite/Test	Product	Mass %	Assay - %			Distribution - %		
			Cu	Mo	S	Cu	Mo	S
Hypogene KM7480 Test 5	Flotation feed	100	0.25	0.027	2.76	100	100	100
	Bulk Concentrate	0.7	30.0	3.36	33.9	86.1	92.6	9.0
	Cleaner Scav Tailings	5.9	0.12	0.011	5.4	2.8	2.6	11.5
	Pyrite Scav Concentrate	5.3	0.15	0.008	18.8	3.2	1.6	36.5
	Pyrite Scav Tailings	88.0	0.023	0.001	1.35	7.9	3.3	43.1

The rougher circuit copper recovery appeared to be lower than previous tests, which could be attributed to sample aging. Recoveries across the cleaner circuit remained high at 96.9% and 97.3%, for Cu and Mo respectively, compared to 97.8% and 97.0% in KM7071 test 75. The pyrite scavenger stage recovered 46% of the remaining sulphur in the bulk rougher tailings, reducing the sulphur content to 1.35% compared to 2.35% in KM7071 test 75.

Pyrite scavenging was also investigated in an earlier flotation test on the Hypogene composite. In Test 107, a sulphide scavenging flotation step was conducted on the bulk rougher tailings using a PAX dosage of 40 g/t PAX. In this test, the sulphur content of the pyrite scavenger tailings was reduced to 0.78%. The tailings were screened at 75µm to represent a sand cyclone classification step. The coarse screen oversize was submitted for ABA analysis. The sulphur content of this fraction was 0.35% and the net neutralization potential (NNP) measured 3.0, indicating that the material was non-acid-generating (NAG).

13.5.2 Coarse particle flotation testing

Two Coarse Particle Flotation (CPF) tests were conducted on the hypogene composite to evaluate applying CPF in a scavenging application. The tests were completed using 45 kg feed charges ground to 80% passing 328 and 320 µm. Conventional rougher flotation was first applied to the ground feed to recover an initial rougher concentrate; the rougher tailings were then screened at 212 µm to simulate a cyclone classification step. The screen oversize was conditioned with PAX and fuel oil and then processed through a laboratory scale Hydrofloat cell to recover a coarse concentrate. Summarized metallurgical balances are presented in Table 13-20 and compared to the rougher circuit performance of Test 75.

Table 13-20: Coarse particle flotation metallurgical balances

Composite/Test	Product	Size µm P ₈₀	Mass %	Assay - % or g/t				Distribution - %			
				Cu	Mo	S	Ag	Cu	Mo	S	Ag
Hypogene Test 75	Flotation feed	158	100	0.26	0.028	2.85	3	100	100	100	100
	Rougher Concentrate	97	10.2	2.4	0.26	7.1	23	92.7	95.9	25.4	73.7
	Rougher Tailings	158	89.8	0.021	0.001	2.36	0.9	7.3	4.1	74.6	26.3

Composite/Test	Product	Size $\mu\text{m P}_{80}$	Mass %	Assay - % or g/t				Distribution - %			
				Cu	Mo	S	Ag	Cu	Mo	S	Ag
Hypogene Tests 4/5	Flotation feed	328	100	0.23	0.023	2.58	3	100	100	100	100
	Rougher Concentrate	120	9.9	1.8	0.169	19.7	23	77.8	70.9	75.3	75.9
	Hydrofloat Concentrate	392	6.1	0.34	0.025	1.48	2	9.0	6.5	3.5	4.1
	Hydrofloat Tailings	423	27.3	0.058	0.003	0.38	1	6.9	3.6	4.0	6.7
	Ro Tailings - Fines	137	56.8	0.026	0.008	0.78	0.7	6.4	18.9	17.2	13.2
Hypogene Tests 109/110	Flotation feed	320	100	0.27	0.027	2.84	3	100	100	100	100
	Rougher Concentrate	120	10.9	1.9	0.220	8.0	22	76.8	87.5	30.6	69.3
	Hydrofloat Concentrate	393	5.6	0.38	0.015	4.5	3	7.9	3.1	9.0	4.9
	Hydrofloat Tailings	422	24.2	0.071	0.003	0.47	1	6.3	2.8	4.0	5.7
	Ro Tailings - Fines	163	59.4	0.041	0.003	2.69	1.2	9.0	6.7	56.4	20.1

Note: Rougher concentrate sizings for tests 4 and 109 are estimated.

Test 4, the initial bulk rougher test, did not use NaCN as a pyrite depressant as it was not part of the flowsheet conditions at this time. This resulted in a higher sulphur recovery across this flotation stage in comparison to the other tests.

In both CPF tests, the Hydrofloat cell received a feed with a sizing of approximately 420 $\mu\text{m P}_{80}$. Copper and molybdenum stage recoveries across the Hydrofloat cell averaged 60% for both metals, at mass recoveries averaging 15%. This indicates that the material is amenable to CPF, however further evaluation is required to confirm whether this is a more favourable flowsheet in terms of power savings, circuit complexity and overall metal recoveries.

The overall results for the two CPF tests may be biased somewhat low, as the fines portion of the rougher tailings streams contain greater losses than might be expected given the size distribution and mass fraction of these streams. These rougher flotation stages were conducted using a larger batch cell which showed a variance from bench scale flotation cells throughout the test program.

The addition of a CPF circuit introduces additional collector to the circuit, as a dosage of 20-25 g/t was added to the Hydrofloat feeds. To evaluate the potential of increased dosages affecting downstream selective flotation, a conventional open circuit cleaner test was conducted on the hypogene composite with a significantly elevated rougher circuit PAX dosage of 65 g/t. This rougher concentrate was reground to 14 μm with an increased NaCN dosage of 30 g/t followed by dilution cleaning, which produced a bulk concentrate grading 27.7% Cu. The cleaner circuit stage recovery for copper was 90%.

13.5.3 Master composite Cu-Mo testing

Several higher feed mass tests, ranging from 15 to 75 kg, were conducted on each of the master composites in which the bulk concentrate was advanced to Cu-Mo separation flotation. The 75 kg bulk flotation circuits were completed in a locked cycle format, while the lower mass feeds and all Cu-Mo separation stages were completed in open circuit. Each bulk concentrate was conditioned with 40 g/t of sulphuric acid along with a suitable dosage of NaHS to achieve the target ORP value of -550 MV. Flotation was then conducted using

nitrogen gas and multiple stages of dilution cleaning as required. The conditions for tests completed are summarized in Table 13-21. Metallurgical balances of optimized tests are summarized in Table 13-22.

The Supergene 1 and hypogene materials responded well to the separation process. A limited amount of testing was required to demonstrate high recoveries to saleable concentrate qualities of 50% molybdenum. The Supergene 2 composite was more challenging, and several tests were completed to achieve the target concentrate quality. In the final test on Supergene 2 bulk concentrate, a small amount of regrinding was applied to the molybdenum rougher concentrate which appeared to improve upgrading.

Table 13-21: Cu-Mo separation test details – KM7071

Composite	Test	Bulk Test		Cu-Mo Separation Test		NaHS g/t	
		kg	Type	feed g	Type	rougher	cleaner
Supergene 1	112	30	Open Cct	403	1 cleaner	533	670
Supergene 2	76	75	Cycle	706	4 cleaners	4200	8700
	103	15	Open Cct	140	rougher kinetic	1466	-
	106	15	Open Cct	135	3 cleaners	1200	-
	113	75	Cycle	732	3 cleaners	1200	1000
	116	30	Open Cct	299	3 cleaners	1200	670
	117	30	Open Cct	291	RG w/ 1 cleaner	500	200
Hypogene	77	75	Cycle	497	4 cleaners	80	196
	102	15	Open Cct	107	rougher kinetic	1800	-

Table 13-22: Cu-Mo Separation Metallurgical Balances – KM7071

Composite/Test	Product	Mass %	Assay - %			Distribution - %		
			Cu	Mo	S	Cu	Mo	S
Supergene 1 (Test 112)	Cu-Mo feed	100	20.5	1.66	39.5	100	100	100
	Mo Concentrate	3.1	1.4	50.9	37.8	0.2	95.6	3.0
	1st Cleaner Tailings	2.5	25.8	1.21	33.1	3.2	1.8	2.1
	Cu-Mo Ro Tailings	94.0	21.0	0.045	39.7	96.6	2.6	94.9
Supergene 2 (Test 116)	Cu-Mo feed	100	25.2	1.25	35.7	100	100	100
	Mo Concentrate	2.3	4.5	41.3	35.8	0.4	77.3	2.4
	Internal Streams	7.0	24.0	2.37	33.2	6.7	13.3	6.5
	Cu-Mo Ro Tailings	90.3	25.8	0.130	35.9	92.9	9.4	91.1
Supergene 2 (Test 117)	Cu-Mo feed	100	27.3	1.23	35.0	100	100	100
	Mo Concentrate	1.8	1.1	52.7	39.3	0.1	74.9	2.0
	1st Cleaner Tailings	6.1	24.3	1.13	31.8	5.4	5.6	5.6
	Cu-Mo Ro Tailings	92.1	28.0	0.260	35.1	94.5	19.4	92.5
Hypogene (Test 102)	Cu-Mo feed	100	30.0	3.02	34.0	100	100	100
	Mo Ro 1-3	5.7	3.8	49.9	38.8	0.7	94.6	6.5
	Mo Ro 4-6	6.4	31.5	1.90	33.6	6.7	4.0	6.3
	Cu-Mo Ro Tailings	87.9	31.6	0.046	33.7	92.6	1.3	87.2

13.5.4 Variability testing

Open circuit cleaner tests were conducted on 28 variability samples representing the various lithologies of the deposit using the developed conditions. One oxide sample and six supergene samples were considered to be “true supergene” and tested using an appropriate set of conditions for this mineral assemblage. Six supergene samples were considered to be “transition” material and tested using modified conditions, more similar to hypogene. Fourteen hypogene samples were tested using the developed hypogene conditions. Details of the grind size targets and conditions for each group are presented in Table 13-23.

Table 13-23: Flowsheet conditions – variability samples

Condition		Supergene	Transition	Hypogene
Grind size µm P ₈₀	Primary	115	160	160
	Regrind	20	20	20
pH	Rougher	9	10	10
	Cleaner	11	10	10
NaCN g/t	Rougher	30	30	10
	Cleaner	30	30	10
Fuel Oil g/t	Prim. Grind	20	20	20
	Regrind	20	20	20
PAX g/t	Rougher	12	12	12
	Cleaner	10	10	10

Collector dosages were varied as required for head grade ranges. Eight of the samples received repeat tests to optimize metallurgical performance. Average results are summarized in Table 13-24.

Table 13-24: Average Metallurgical balances – variability samples

Litho Group	#	Product	Mass %	Assay - % or g/t				Distribution - %			
				Cu	Mo	S	Ag	Cu	Mo	S	Ag
Oxide	1	Flotation feed	100	0.27	0.014	1.71	2	100	100	100	100
		Bulk Concentrate	1.6	10.1	0.66	48.6	86	64.1	77.9	5.4	44.2
		Cleaner Tailings	8.5	0.53	0.013	10.5	8	13.0	8.5	90.9	34.7
		Rougher Tailings	89.9	0.07	0.002	0.07	0.5	22.9	13.6	3.7	21.1
Supergene	7	Flotation feed	100	0.35	0.03	2.92	3	100	100	100	100
		Bulk Concentrate	1.1	23.4	1.8	39.0	197	70.7	77.0	22.8	60.3
		Cleaner Tailings	10.6	0.55	0.077	18.1	8	13.5	13.4	58.7	21.3
		Rougher Tailings	88.4	0.04	0.003	0.66	0.7	15.8	9.6	18.5	18.3
Transition	6	Flotation feed	100	0.29	0.015	2.30	6	100	100	100	100
		Bulk Concentrate	0.9	26.1	1.3	36.0	482	86.7	83.6	17.5	68.9
		Cleaner Tailings	9.3	0.17	0.011	6.58	8	5.2	6.1	30.1	14.0
		Rougher Tailings	89.8	0.04	0.002	1.50	0.8	8.1	10.3	52.4	17.1
Hypogene	14	Flotation feed	100	0.26	0.028	2.85	3	100	100	100	100
		Bulk Concentrate	0.8	27.1	3.1	33.7	221	85.7	90.8	11.7	52.3
		Cleaner Tailings	9.4	0.17	0.040	4.28	5	4.0	3.3	14.4	14.4
		Rougher Tailings	92.9	0.03	0.002	2.34	1.2	10.3	5.9	73.8	33.4

Variability results for copper are presented graphically in Figure 13-6 and for molybdenum in Figure 13-7.

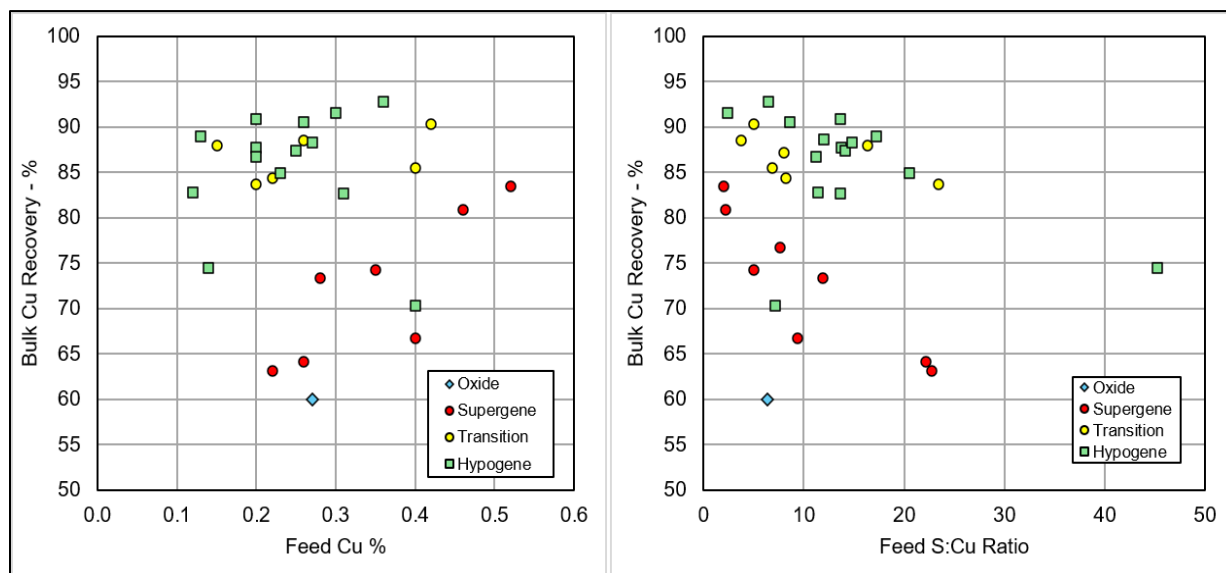
The results for each data set were on average lower than the comparable locked cycle tests, which can be partially attributed to the open circuit protocol. The variance between open and closed-circuit cleaner circuit recoveries was greater for the supergene samples than the transition and hypogene samples.

The metallurgical response of the transition samples was very similar to the hypogene samples.

There were a few outliers in the hypogene data set. HG Var 1, which was a low Cu and high S sample, measured a rougher circuit copper recovery of only 78.2%. This sample required the longest lab grinding time of 21 minutes and measured low copper sulphide liberation values by the QEMSCAN protocols. The HG Var 11 sample had a feed grade of 0.4% Cu but returned a low rougher copper recovery of 81.2%. This sample had a high mica content and also required a longer rod mill grinding time. The HG Var 1 sample was tested only once using the developed conditions and the HG Var 11 sample was tested under two conditions, which included modest changes to PAX and NaCN dosages. It is likely that the metallurgical response of both samples could improve following optimization testing that would include pH variations or other adjustments.

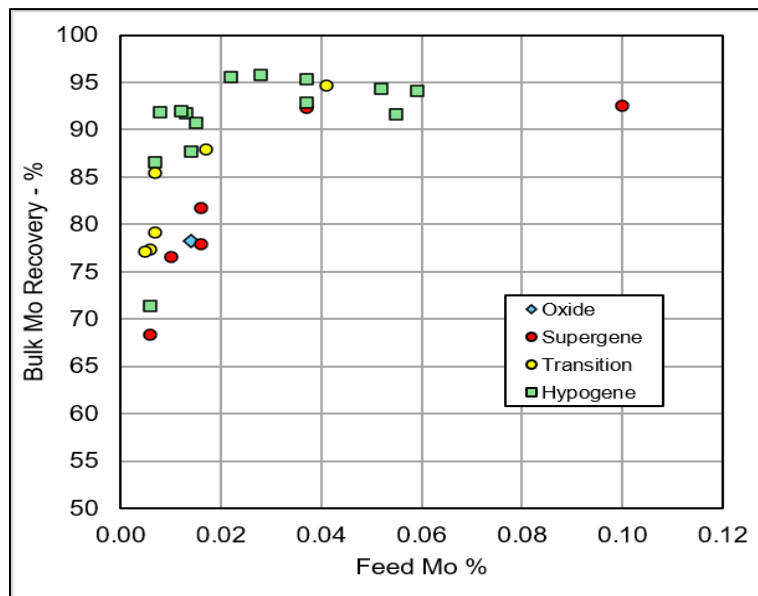
The single oxide sample measured low copper recoveries in the both the rougher circuit and across the cleaner circuit. This sample measured the highest portion of the feed copper as weak acid-soluble (CuOx) at 19% and also had a low natural pH of 6.2 following primary grinding.

Figure 13-6: Copper recovery data – variability samples



Source: Ausenco, 2026

Figure 13-7: Molybdenum recovery data – variability samples



Source: Ausenco, 2026

13.6 Concentrate quality

ALS Metallurgy conducted minor elemental scans on the copper and molybdenum concentrates produced in locked cycle tests with additional Cu-Mo separation from the KM7071 test program. Contents of the elements of interest are summarized in Table 13-22. Concentrate quality observations are summarized in the following comments:

- The concentrates generated from Hypogene and Supergene 1 composites were low in deleterious elements that would attract smelter penalties.
- The Supergene 2 concentrate contained elevated levels of antimony, cadmium, lead and zinc that could affect marketability. Fluorine was measured at 280 ppm which is near penalty limits. While these minor element contents should be reviewed with a concentrate marketing specialist, it is likely that any concentrate quality issues could be mitigated through blending.
- There does not appear to be any other minor element contents in these concentrates that would negatively impact concentrate marketability.
- The copper concentrate silver contents ranged from 187 to 493 g/t and would provide a payable credit. The gold contents ranged from 1.1 to 1.8 g/t, a portion of which are expected to be payable.
- The scans report 68-108 g/t rhenium content in the molybdenum concentrates which could be a source of additional payable metal credits.

Table 13-25: Minor element composition of the concentrates

Element	units	Cu Concentrate Assays			Mo Concentrate Assays		
		Supergene 1 Test 112	Supergene 2 Test 113	Hypogene Test 102	Supergene 1 Test 112	Supergene 2 Test 113	Hypogene Test 77
Arsenic	%	0.01	0.14	0.05	0.02	0.03	0.01
Antimony	ppm	27	1905	287	15	370	23
Bismuth	ppm	50	124	88	7	28	19
Cadmium	ppm	98	520	42	12	91	0
Cobalt	ppm	189	28	15	17	14	6
Copper	%	21.0	27.0	31.6	2.7	1.7	5.6
Fluorine	ppm	250	280	220	170	250	320
Gold	ppm	1.1	1.8	1.5	0.4	0.6	0.5
Lead	%	0.10	2.06	0.11	0.08	0.44	0.03
Mercury	ppm	0.8	6	1	16	9	11
Molybdenum	%	0.04	0.25	0.04	50.9	42.2	49.3
Nickel	ppm	221	56	59	41	30	10
Ni + Co	%	0.04	0.01	0.01	0.01	0.00	0.00
Selenium	ppm	50	80	80	130	130	150
Silver	ppm	187	493	245	25	137	43
Rhenium	ppm	0.1	0.4	0.1	105	68	108
Zinc	%	1.08	4.58	0.29	0.31	0.92	0.07

13.7 Recovery estimates

Results from the flotation tests conducted in the KM7071 test program were used to determine recovery estimates for the Berg deposit. Results for the HG VAR 11 sample were not included in the analysis, as this response was considered to be atypical and required further optimization. Otherwise, the open circuit cleaner test results from all variability samples and composites were included in the analysis. In total, results from 8 supergene, 7 transition and 14 hypogene samples were considered. Recovery model details are discussed below.

Since transition and hypogene samples responded similarly, these two data sets were combined. Rougher circuit copper recovery was found to have a linear relationship to S:Cu ratios in the feeds. A cleaner circuit recovery of 96% was then applied, which is slightly conservative compared to the locked cycle test values but greater than the open circuit test average of 95.5%. Recovery of molybdenum to the bulk concentrate was related to feed Mo% and fitted with a first order rate equation. A Cu-Mo separation circuit recovery of 95% was then applied. Data sets and trend lines are presented graphically in Figure 13-8 and Figure 13-9.

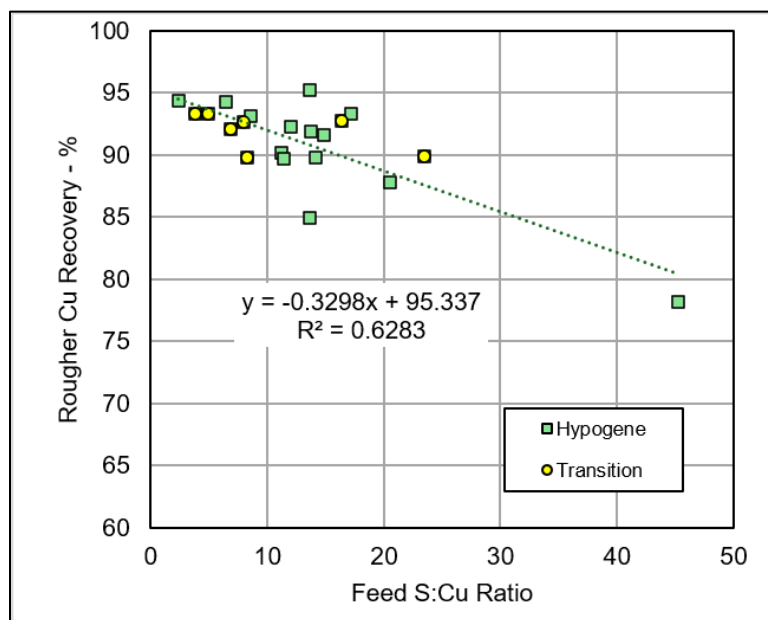
Supergene copper recovery to bulk concentrate was also related to S:Cu ratio in the feed. A 5% recovery increase was applied to the linear equation of the open circuit data to account for expected closed-circuit performance. Results of the open circuit data and the Supergene 1 locked cycle results are presented graphically in Figure 13-10. Molybdenum recovery was determined in a similar manner as the hypogene and transition data, a first order rate equation was fitted to the data and a 95% Cu-Mo separation circuit recovery applied. The data is presented graphically in Figure 13-11.

The data available for predicting copper and molybdenum recoveries from oxide material was limited to a single variability sample. This sample however had head assays that were at the upper range of feed grades in the mine plan for these materials. For this reason, simple equations for copper and molybdenum recoveries as a function of feed grades were estimated to provide reasonable recovery estimates at the lower mine plan grades. This was completed by determining recovery as a function of feed grade on supergene samples and shifting these recovery curves down to match the single oxide sample results. The data is shown graphically in Figure 13-12. A Cu-Mo separation circuit molybdenum recovery of 85% was applied to the bulk concentrate molybdenum equation to obtain total circuit recovery for oxide ores.

Silver recovery to the bulk concentrate showed a weak relationship to both Ag and S:Cu ratio in feed across all the materials, as presented graphically in Figure 13-12. A multi-variable linear regression was used to capture both terms in a single global recovery equation. Gold recovery to the bulk concentrate did not show a strong relationship to any feed terms, possibly because of the low content in the feeds. Gold recovery data versus gold feed grade is presented in Figure 13-14. Since the relationship was poor, a constant recovery estimate of 52% across all materials was proposed, as this value was within the range of the locked cycle test results.

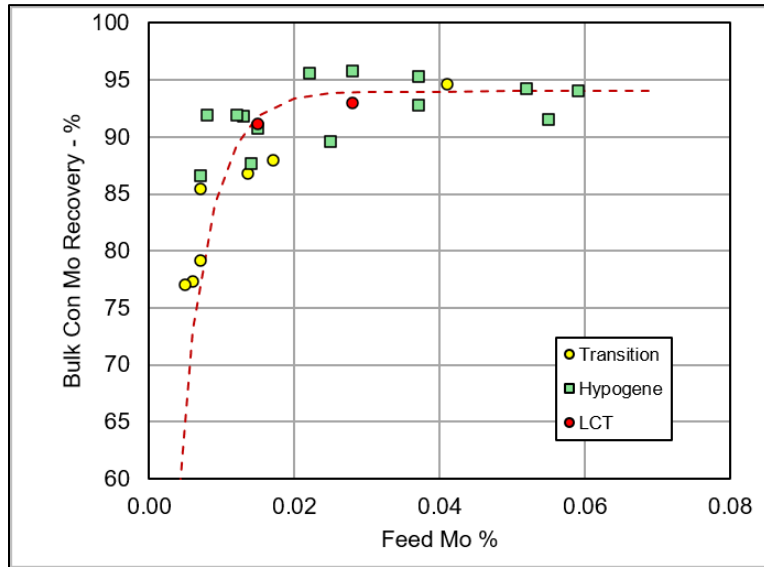
The recovery equations are summarized in Table 13-26.

Figure 13-8: Recovery of Cu to bulk rougher concentrate – transition and hypogene



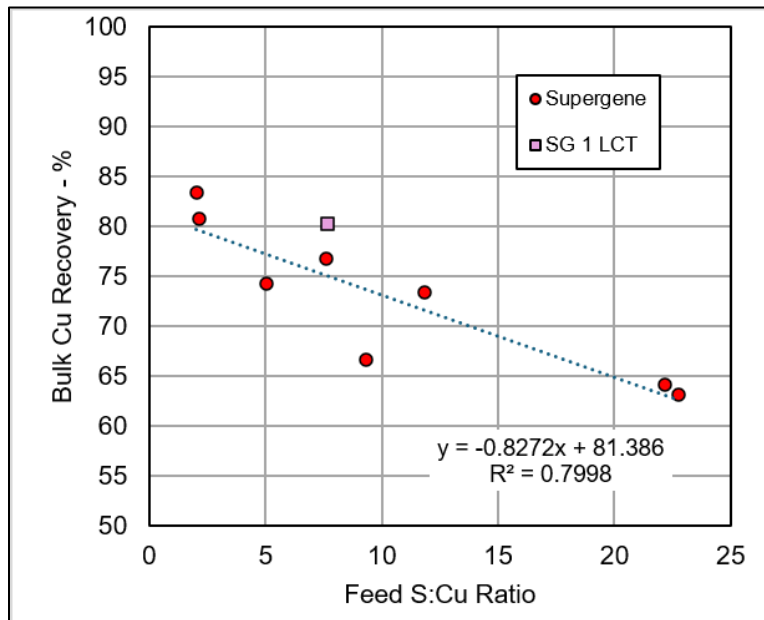
Source: Ausenco, 2026

Figure 13-9: Recovery of Mo to molybdenum concentrate – transition and hypogene



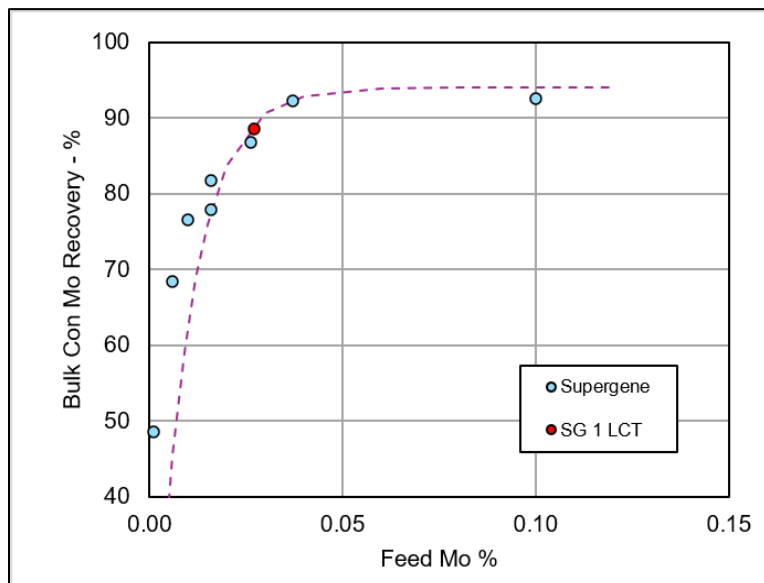
Source: Ausenco, 2026

Figure 13-10: Recovery of Cu to bulk concentrate - supergene



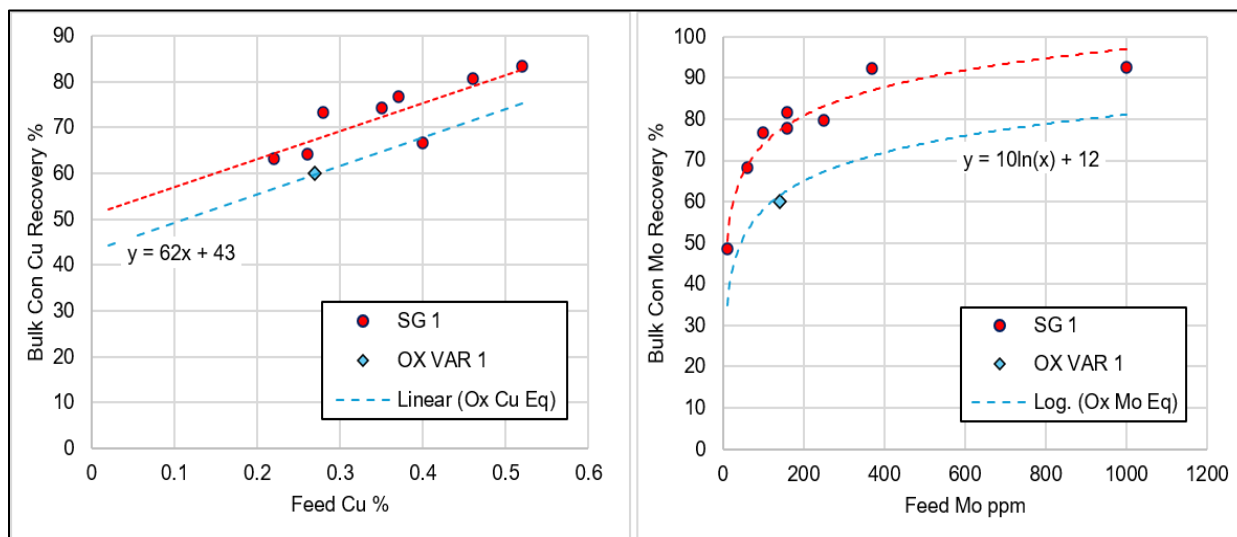
Source: Ausenco, 2026

Figure 13-11: Recovery of Mo to molybdenum concentrate – supergene



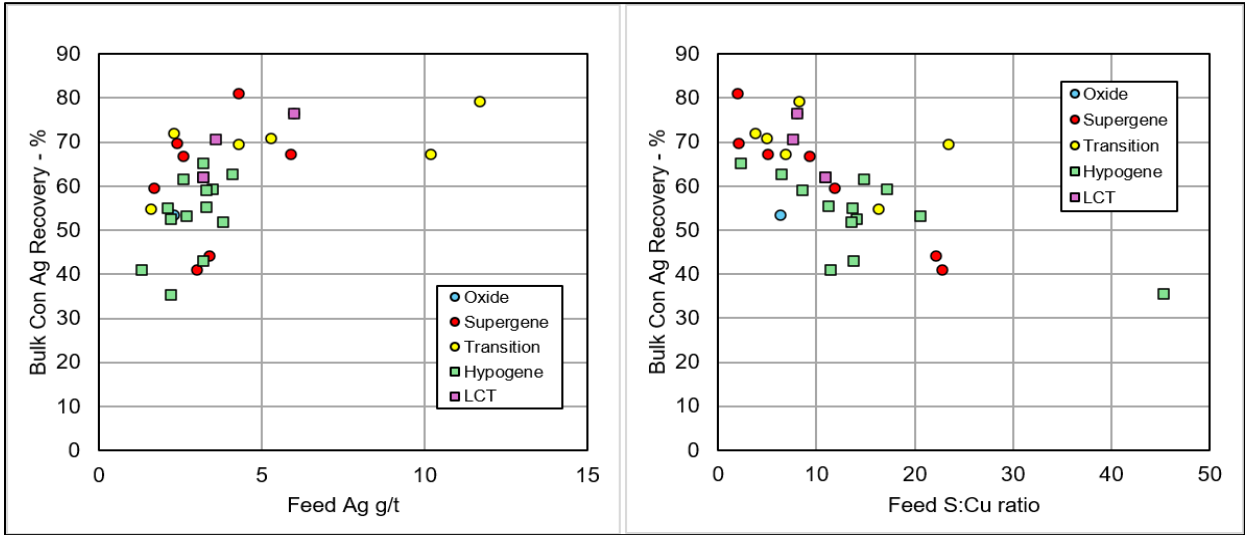
Source: Ausenco, 2026

Figure 13-12: Recovery estimates of Cu and Mo to bulk concentrate – oxide



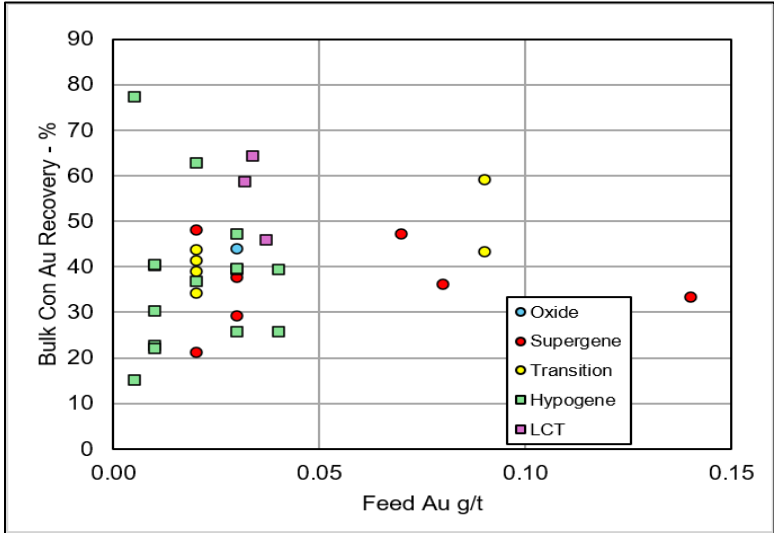
Source: Ausenco, 2026

Figure 13-13: Recovery data of Ag to bulk concentrate – global



Source: Ausenco, 2026

Figure 13-14: Recovery data of Au to bulk concentrate – global



Source: Ausenco, 2026

Table 13-26: Recovery equations to final concentrates

Metal	Material	Equation
Copper	Oxide	$\text{Rec \%} = 43 + 62 * [\text{feed Cu \%}]$
	Supergene	$\text{Rec \%} = 86 - 0.827 * [\text{feed S/C ratio}]$
	Transition / hypogene	$\text{Rec \%} = 91.5 - 0.317 * [\text{feed S/C ratio}]$
Molybdenum	Oxide	$\text{Rec \%} = 10.2 + 8.5 * \text{LN}[\text{feed Mo \%}]$
	Supergene	$\text{Rec \%} = 89.3 * (1 - \text{EXP}(-110 * [\text{feed Mo \%}]))$
	Transition / hypogene	$\text{Rec \%} = 89.3 * (1 - \text{EXP}(-250 * [\text{feed Mo \%}]))$
Silver	Global	$\text{Rec \%} = 62 + 1.25 * [\text{feed Ag g/t}] - 0.827 * [\text{feed S/C ratio}]$
Gold	Global	$\text{Rec} = 52\%$

13.8 Comments

A considerable collection of metallurgical testing has been completed on samples from the Berg deposit, in both in early test programs and a comprehensive recent test program. The recent testwork contributed a significant portion of data used for the process design, as it included comminution testing, variability and master composite flotation testing, and successful Cu-Mo separation testing.

The materials are generally hard with respect to grinding circuit conditions and respond to beneficiation by froth flotation like typical copper porphyry deposits. Controlling pyrite throughout the process is often a challenge in these types of deposits, however suitable process conditions have been developed to address this mineral content. Copper -molybdenum separation was demonstrated in open circuit tests on bulk concentrates across various lithologies. Both copper and molybdenum concentrates produced in the 2025 metallurgical test program were analyzed for minor elements. The transition composite, Supergene 2, produced a copper concentrate that had elevated levels of antimony, cadmium, lead and zinc that could attract smelter penalties; however, these quality issues could likely be controlled through blending. Concentrates generated from supergene and hypogene materials did not contain elevated levels of any deleterious elements.

14 Mineral resource estimates

14.1 Summary

An updated Mineral Resource Estimate (“MRE”) has been completed on the Berg deposit with block model estimation performed by Sue Bird, P.Eng., of MMTS, an independent Qualified Person as defined by NI 43-101. This updated MRE benefits from 9,802 metres of new drilling in 25 holes completed by Surge from 2023 to 2025, 7,261 new gold assays collected by Surge from historical core and pulp samples during 2022 and 2023, and 18 historic holes re-sampled in 2025 with full quality control measures implemented and including gold and silver assays. Improved metallurgical recovery assumptions have also been incorporated based on an extensive review of historical metallurgical testwork by Ausenco and Surge.

14.2 Mineral Resource Estimate

The MRE has an effective date of June 12, 2026, and is summarized in Table 14-1 below at the base case cut-off of C\$8.00/t and at a range of cut-offs with the base case highlighted in Table 14-2. The resource is constrained by an open pit with a “reasonable prospect of eventual economic extraction” using the cut-off of C\$8.00/t which covers the Processing + G&A costs, and the parameters as defined in the notes to Table 14-1 and Table 14-2. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

The net smelter return (NSR) equations and metallurgical recovery formulae are summarized in Section 14.13. The copper equivalent values (CuEq) are calculated from the NSR.

Mineral resources that are not reserved do not have demonstrated economic viability.

There are no other known factors or issues that materially affect the MRE other than normal risks faced by mining projects in the province of British Columbia, Canada, in terms of environmental, permitting, taxation, socio-economic, marketing, and political factors.

Table 14-1: Summary of the Mineral Resource Estimate at the base case cut-off of C\$8.00 NSR cut-off

Zone	Class	Tonnage (ktonne)	Grades - In situ						Metal - In situ				
			NSR (\$/tonne)	Cu (%)	Mo (%)	Ag (g/t)	Au (g/t)	CuEq (%)	CuEq (Mlbs)	Cu (Mlbs)	Mo (Mlbs)	Ag (koz)	Au (koz)
Cap Material	Measured	2,173	23.01	0.11	0.026	4.1	0.03	0.32	15	5	1.2	284	2.3
	Indicated	49,245	20.86	0.13	0.018	3.5	0.03	0.29	313	143	19.2	5,589	49.4
	Meas+Ind	51,418	20.95	0.13	0.018	3.6	0.03	0.29	328	148	20.4	5,873	51.7
	Inferred	1,618	19.89	0.17	0.009	2.9	0.02	0.27	10	6	0.3	152	1.1
Supergene	Measured	9,645	61.75	0.44	0.025	4.6	0.04	0.62	133	94	5.4	1,430	12.3
	Indicated	162,340	47.62	0.34	0.021	4.2	0.03	0.49	1,764	1,218	76.1	22,078	151.9
	Meas+Ind	171,985	48.41	0.35	0.022	4.3	0.03	0.50	1,896	1,312	81.5	23,507	164.2
	Inferred	4,425	28.13	0.24	0.007	3.3	0.03	0.31	31	23	0.7	469	4.0
Hypogene	Measured	24,716	48.34	0.25	0.034	4.8	0.03	0.46	250	136	18.8	3,830	20.7
	Indicated	1,164,490	36.25	0.19	0.026	4.0	0.02	0.35	9,034	4,901	670.1	147,885	726.3
	Meas+Ind	1,189,206	36.51	0.19	0.026	4.0	0.02	0.35	9,285	5,037	688.9	151,715	747.1
	Inferred	997,495	33.35	0.16	0.027	4.3	0.01	0.33	7,237	3,560	598.2	137,260	397.7
Total	Measured	36,534	50.38	0.29	0.032	4.7	0.03	0.49	398	235	25.4	5,543	35.3
	Indicated	1,376,075	37.04	0.21	0.025	4.0	0.02	0.37	11,111	6,262	765.4	175,552	927.6
	Meas+Ind	1,412,609	37.39	0.21	0.025	4.0	0.02	0.37	11,509	6,497	790.8	181,095	962.9
	Inferred	1,003,538	33.30	0.16	0.027	4.3	0.01	0.33	7,278	3,590	599.3	137,882	402.7

Table 14-2: Sensitivity of the Mineral Resource Estimate to the cut-off grade

Class	Cut-off NSR	Tonnage (ktonne)	Grades - In situ						Metal - In situ				
			NSR (\$/tonne)	Cu (%)	Mo (%)	Ag (g/t)	Au (g/t)	CuEq (%)	CuEq (Mlbs)	Cu (Mlbs)	Mo (Mlbs)	Ag (koz)	Au (koz)
Measured	7	36,746	50.129	0.291	0.031	4.7	0.030	0.492	399	236	25.4	5,564	35.4
	8	36,534	50.376	0.292	0.032	4.7	0.030	0.495	398	235	25.4	5,544	35.4
	10	36,003	50.987	0.296	0.032	4.8	0.030	0.500	397	235	25.3	5,498	35.1
	15	34,726	52.411	0.303	0.033	4.8	0.031	0.513	393	232	25	5,404	34.1
	20	33,478	53.699	0.310	0.034	4.9	0.031	0.525	387	229	25	5,274	33.2
Indicated	7	1,389,412	36.760	0.205	0.025	4.0	0.021	0.364	11,138	6,279	766	176,449	933.6
	8	1,376,075	37.043	0.206	0.025	4.0	0.021	0.366	11,109	6,262	765	175,640	924.7
	10	1,345,761	37.675	0.210	0.026	4.0	0.021	0.372	11,037	6,216	762	173,934	912.9
	15	1,236,618	39.881	0.220	0.027	4.2	0.022	0.392	10,695	5,998	746	166,587	854.8
	20	1,101,246	42.628	0.233	0.030	4.4	0.022	0.418	10,136	5,657	717	155,432	778.9
Measured + Indicated	7	1,426,158	37.104	0.207	0.025	4.0	0.021	0.367	11,536	6,515	791.9	182,013	969.1
	8	1,412,609	37.388	0.209	0.025	4.0	0.021	0.370	11,508	6,497	790.8	181,184	960.0
	10	1,381,764	38.022	0.212	0.026	4.0	0.021	0.375	11,434	6,450	787.8	179,432	948.0
	15	1,271,344	40.223	0.222	0.028	4.2	0.022	0.396	11,088	6,230	771.5	171,991	888.9
	20	1,134,724	42.955	0.235	0.030	4.4	0.022	0.421	10,523	5,886	742.0	160,706	812.1
Inferred	7	1,011,769	33.091	0.162	0.027	4.3	0.013	0.327	7,294	3,602	600	138,249	406.6
	8	1,003,538	33.301	0.162	0.027	4.3	0.013	0.329	7,279	3,589	599	137,769	403.3
	10	988,349	33.675	0.164	0.027	4.3	0.013	0.332	7,243	3,565	598	136,955	397.2
	15	925,004	35.097	0.168	0.029	4.5	0.013	0.346	7,048	3,434	588	132,936	374.7
	20	813,647	37.475	0.177	0.031	4.7	0.013	0.367	6,590	3,177	559	121,641	337.5

Notes to Tables 14-1 and 14-2:

1. The Mineral Resource Estimate has been prepared by Sue Bird, P.Eng., an independent Qualified Person.
2. Resources are reported using the 2014 CIM Definition Standards and were estimated in accordance with the CIM 2019 Best Practices Guidelines.
3. The Mineral Resource has been confined by a “reasonable prospects of eventual economic extraction” pit using the following assumptions:

a. Cu price of US\$4.50/lb, Mo price of US\$20.00/lb, Au price of US\$3,000/oz, Ag price of US\$40/oz at an exchange rate of 1.35 C\$ per US\$.

b. 96.3% payable for Cu, 90.0% payable for Ag and Au, 99.0% payable for Mo, 1%-unit deduction for Mo.

c. Concentrate smelting of US\$50/dmt, US\$0.05/lb Cu refining, US\$1.25/lb Mo refining, transport and off-site costs of US\$100/wmt and US\$130/wmt for Cu and Mo concentrates respectively, a 1.0% NSR royalty.

d. Average recoveries in the hypogene of: 86%for Cu, 89% for Mo, 56% for Ag, and 52% for Au. In the supergene of: 82% for Cu, 79% for Mo, 65% for Ag and 52% for Au, and in the Leach Cap: 60% for Cu, 67% for Mo, 67% for Ag and 52% for Au.

e. Net Smelter prices of C\$5.47/lb Cu, C\$24.19/lb Mo, C\$1.48/g Ag and C\$110.89/g Au.

f. NSR within the Cap material: 72.41*Cu% + 0.0357*Moppm+0.99*Agg/t+0.0577*Au ppb

g. NSR within the Supergene material: 98.97*Cu%+0.421*Moppm+0.96*Ag g/t+0.0577*Au ppb

h. NSR within the Hypogene material: 103.79*Cu%+0.0475*Moppm+0.83*Ag g/t+0.0577*Au ppb

i. CuEq = NSR/72.41 in cap material, CuEq=NSR/98.97 in Supergene, and CuEq=NSR/103.79 in Hypogene.

j. Mining costs of C\$2.50/t ore and waste.

k. Processing costs of C\$7.00 and G&A costs of C\$1.00/t.
4. Pit slopes vary with rock type and slope azimuth.
5. Numbers may not sum due to rounding.

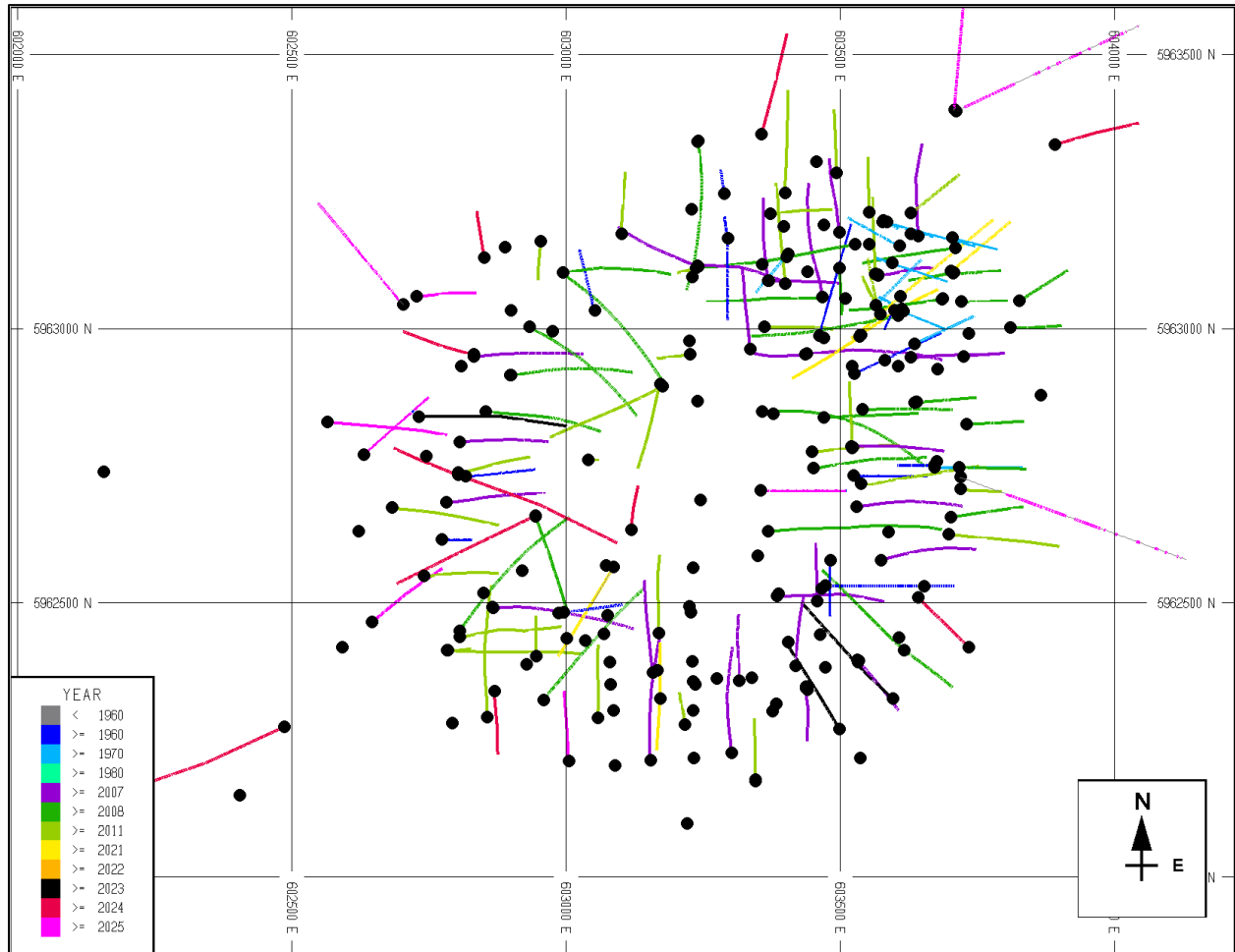
14.3 Key assumptions and data used in the Resource Estimate

A summary of the drill holes used for the resource estimate of the Berg deposit is summarized in Table 14-3. Figure 14-1 is a plan map of all drill holes. Historical drill holes have been validated as discussed in Section 12 of this report and were used for the interpolations. Only data from 2007 onwards (64% of total assayed length) along with 18 pre-2007 holes that were resampled in 2025 incorporating full quality control measures, have been used in the classification of the resource.

Table 14-3: Summary of drill holes used in the MRE by year

Year Drilled	Number of Drill holes	Length of Drill hole (m)	Number of Assays	Length Assayed (m)	Length Assayed in 2025 (m)	% of DH Assayed	% of Total Assayed Length (%)
1964	7	970	238	697	205	93%	1%
1965	6	1,236	310	1,009	204	98%	2%
1966	10	1,680	384	1,127	494	97%	3%
1967	22	3,325	1,017	3,029	-	91%	5%
1971	3	665	205	641	-	96%	1%
1972	24	4,929	962	2,784	1,782	93%	7%
1973	11	3,130	627	1,834	980	90%	4%
1974	19	1,844	602	1,760	-	95%	3%
1975	8	1,067	347	1,027	-	96%	2%
1980	8	1,099	338	1,002	-	91%	2%
2007	29	11,289	4,761	10,973	-	97%	17%
2008	31	11,660	5,057	11,255	-	97%	18%
2011	36	10,678	5,456	10,302	-	96%	16%
2021	10	2,855	1,342	2,654	-	93%	4%
2023	3	2,077	1,036	2,056	-	99%	3%
2024	11	4,200	2,066	4,085	-	97%	6%
2025	11	3,525	2,730	2,981	-	85%	5%
Total	249	66,229	27,478	59,215	3,664	95%	100%

Figure 14-1: Drill hole year



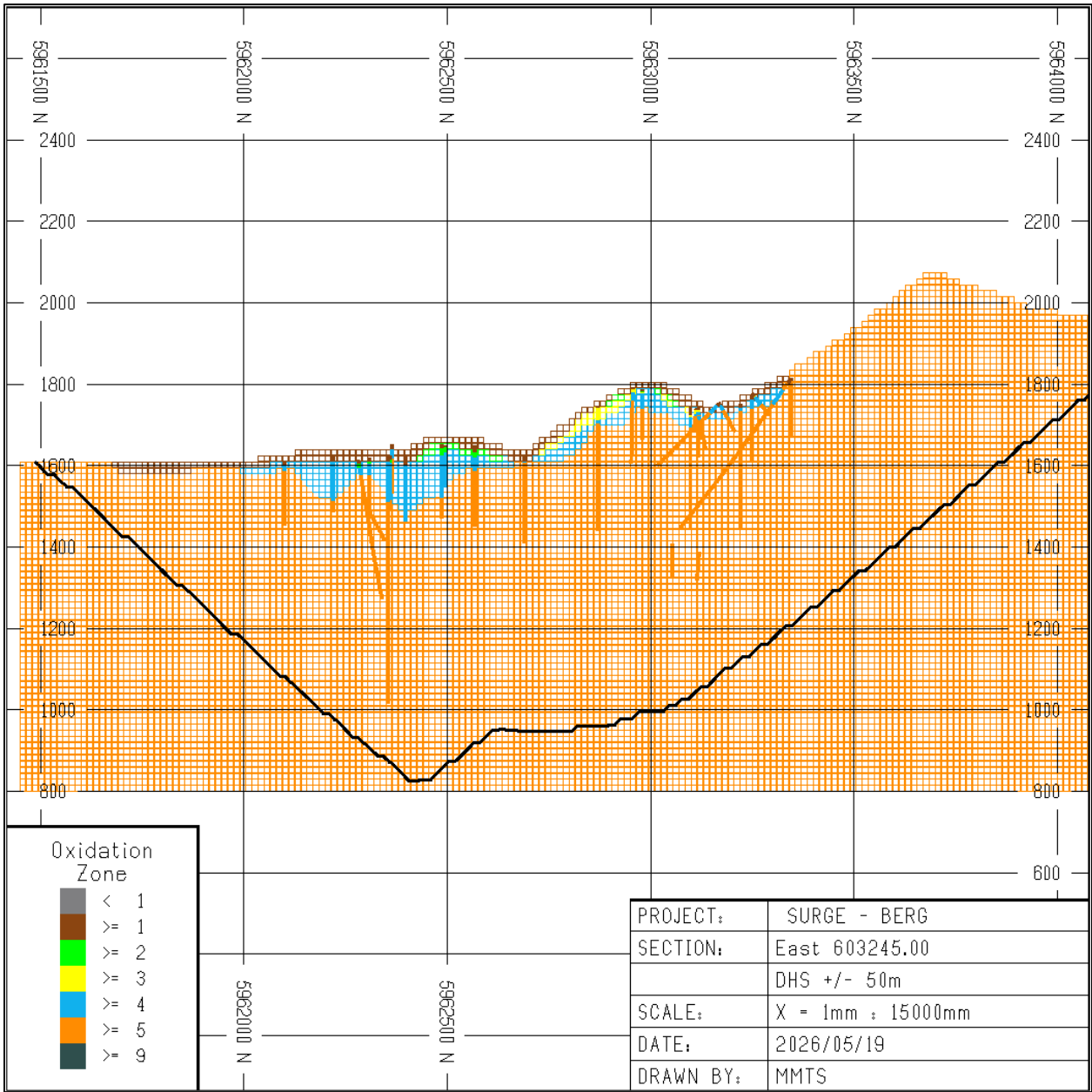
Source: Moose Mountain, 2026

14.4 Domains

The domains modelled include the overburden, the oxide, the leach cap, the supergene enrichment layer, and the hypogene zone as illustrated in Figure 14-2.

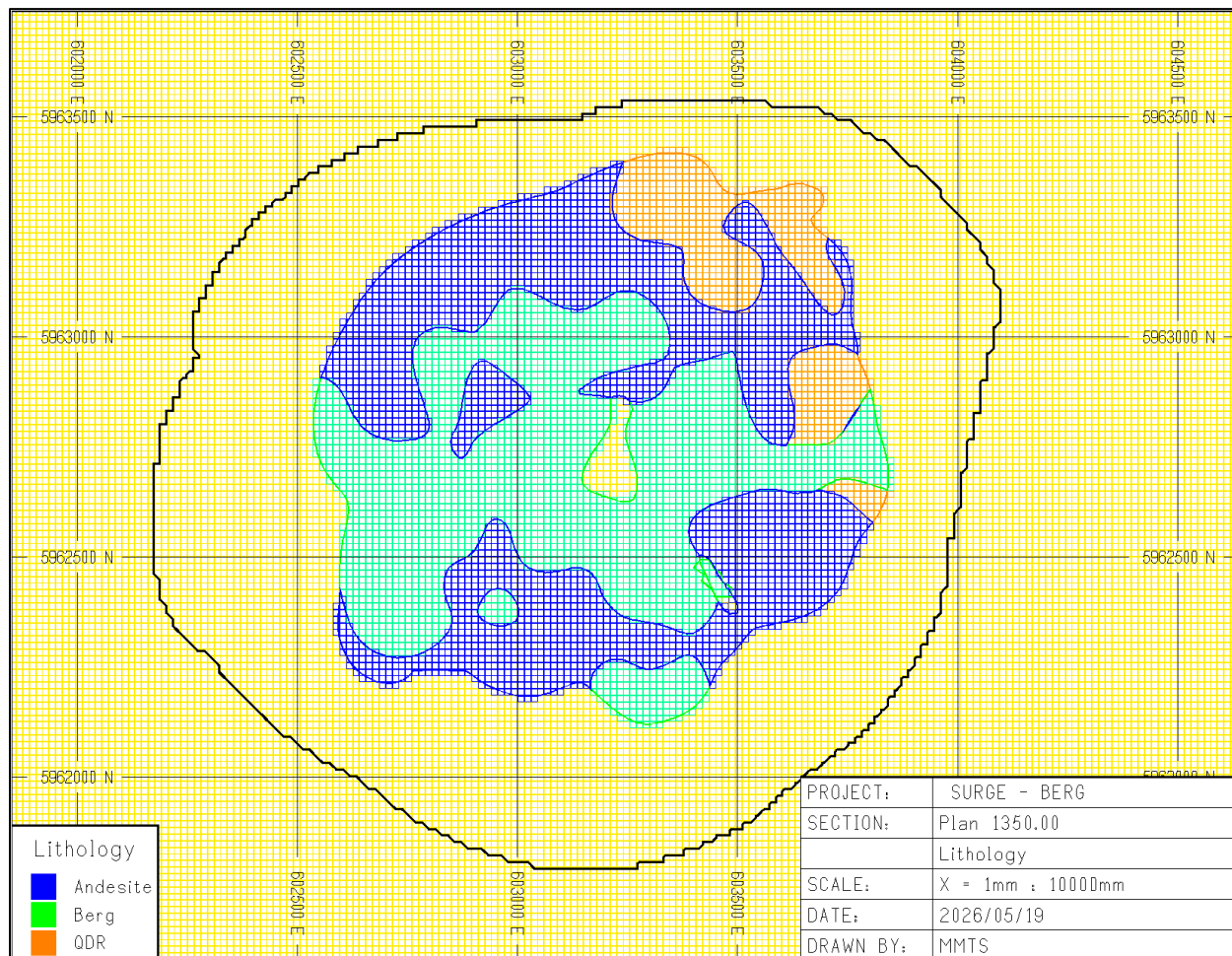
The primary lithologies include the Berg Stock, quartz diorite ("QDR"), and andesite as illustrated in Figure 14-3.

Figure 14-2: Modelled oxidation zones in section



Source: Moose Mountain, 2026. 1 = overburden, 2= leached cap, 3 = oxide (mixed with sulphide), 4 = supergene sulphide, 5 = hypogene sulphide.

Figure 14-3: Modelled lithologies in plan



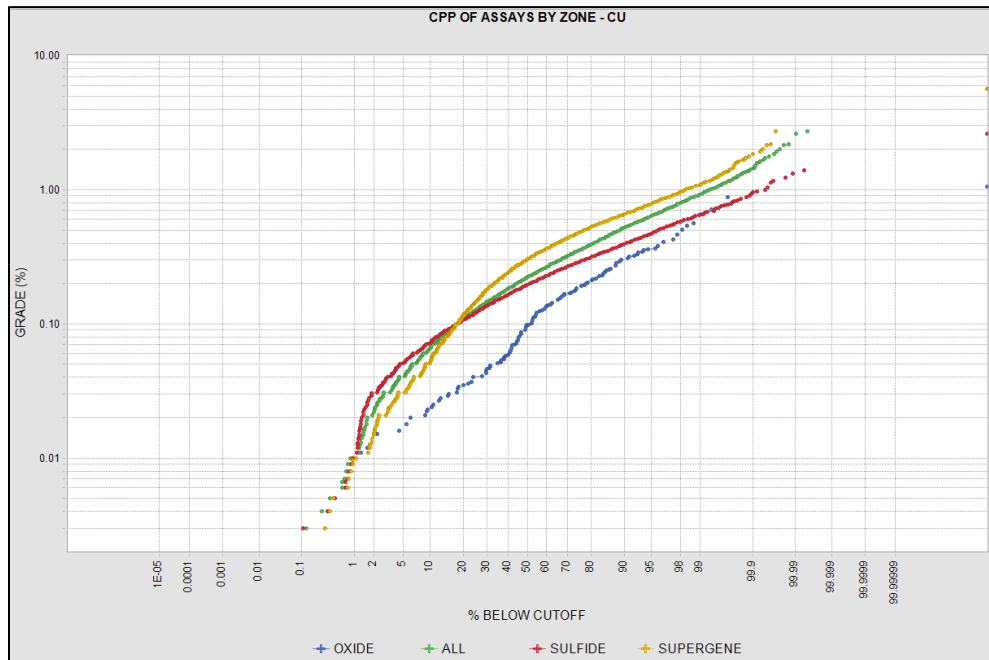
Source: Moose Mountain, 2026

14.5 Assays and composite statistics

The assay statistics were examined using boxplots, histograms, and cumulative probability plots (CPPs). Figure 14-4 through Figure 14-7 are CPPs for the Cu, Mo, Ag and Au by oxidation zone, respectively. The CPPs indicate no significant outlier populations, with the Au plot illustrating potentially two populations above and below 100 ppb. This higher occurrence of Au grades is seen to be concentrated in the north and within the supergene zone.

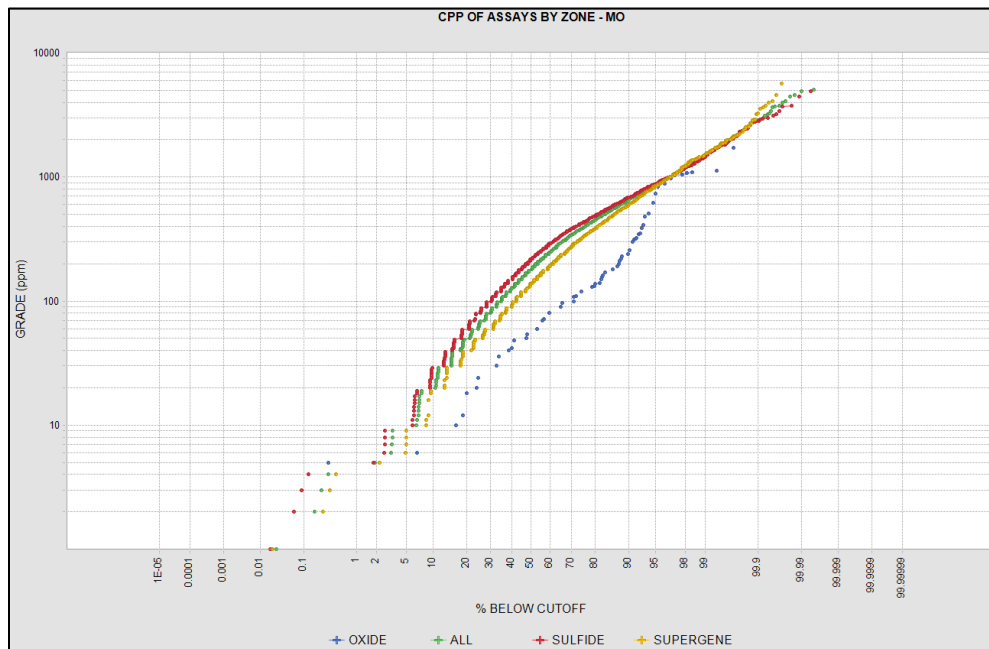
Based on this analysis, no capping has been done on the assays.

Figure 14-4: CPP of assays – Cu



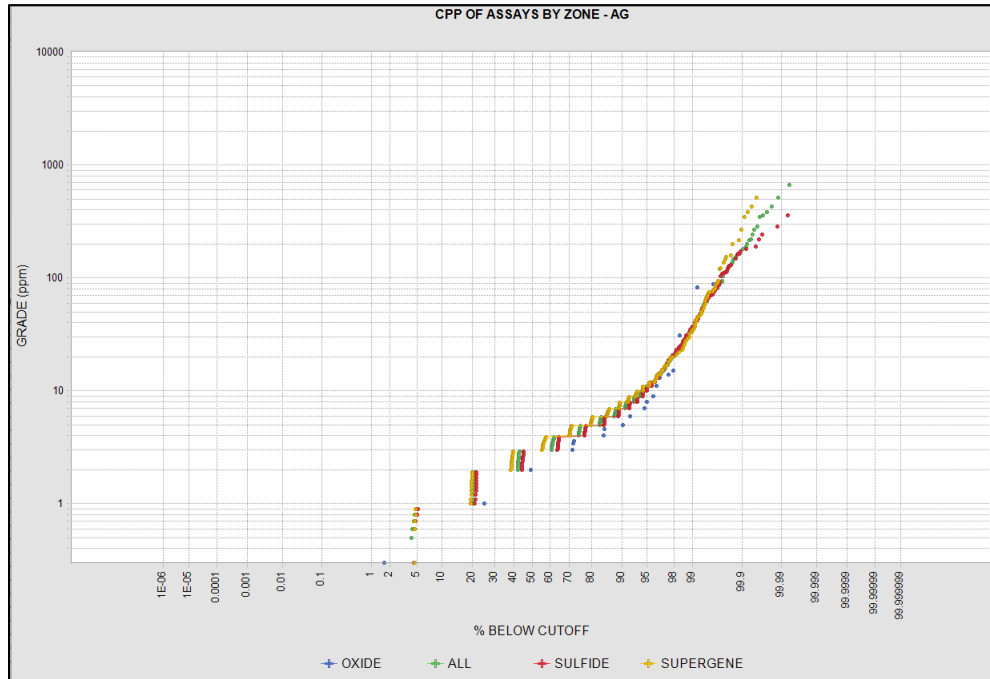
Source: Moose Mountain, 2026

Figure 14-5: CPP of assays – Mo



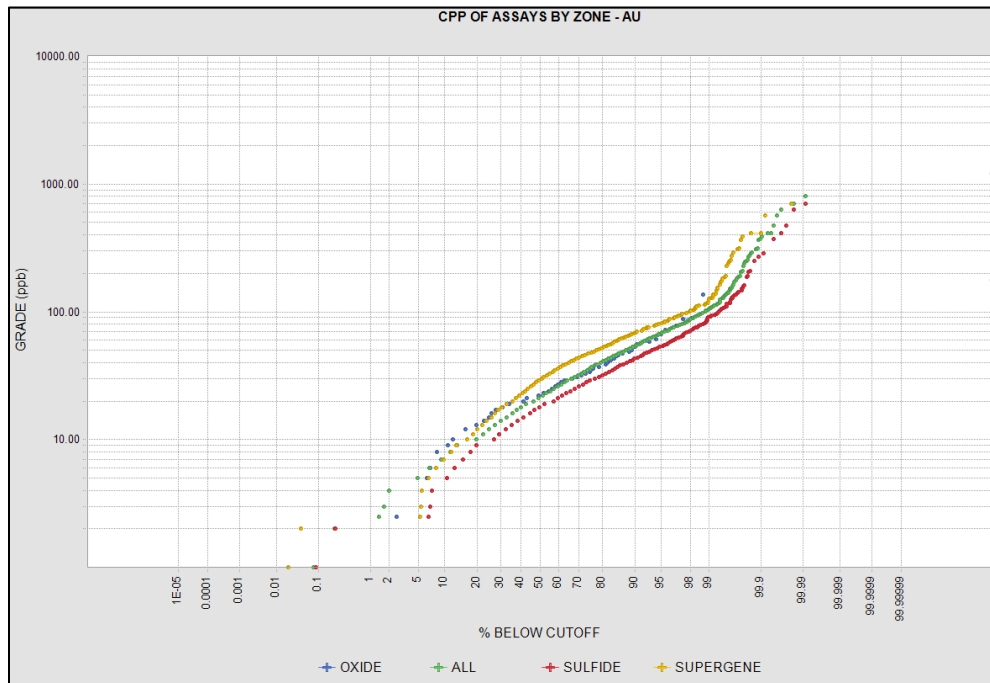
Source: Moose Mountain, 2026

Figure 14-6: CPP of assays – Ag



Source: Moose Mountain, 2026

Figure 14-7: CPP of assays - Au



Source: Moose Mountain, 2026

14.5.1 Compositing

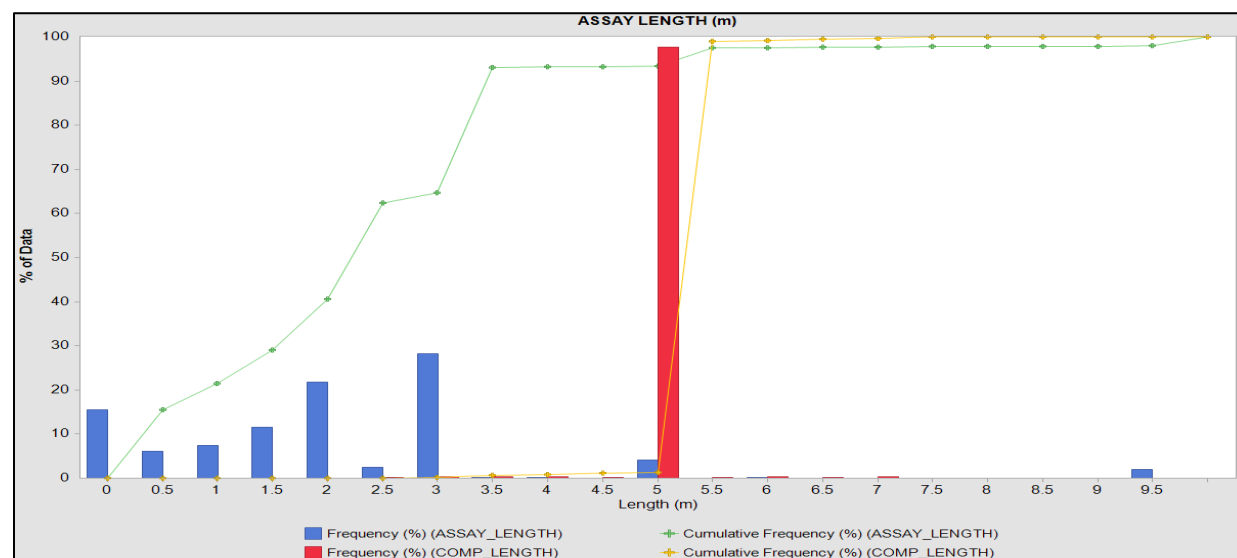
Compositing has been done by 5 m downhole lengths, which is longer than the large majority of assay lengths, as illustrated in Figure 14-8. Lengths shorter than 2.5 m have been combined with the prior composite. The domain boundaries (oxidation zones and lithologies) have been honoured during compositing. Table 14-3 summarizes and compares the assay and composite statistics showing that the weighted average grades for each metal have changed very little during compositing and therefore no bias has been introduced. This table also illustrates that the Coefficient of Variation (CV) of the composites for each metal remains low.

The high CV for Ag is handled during interpolations using outlier restrictions as summarized below.

Table 14-4: Summary of assay and composite statistics

Source	Parameter	Cu	Mo	Ag	Au
		(%)	(ppm)	(ppm)	(ppb)
Assays	Num Samples	40,571	40,571	35,377	27,571
	Num Missing	590	590	5,784	13,590
	Min	0.001	0.5	0.2	0.0
	Max	5.640	6740.0	2110.0	1.2
	Wtd Mean	0.243	253.2	4.4	0.0
	Wtd CV	0.83	1.25	4.32	1.17
Composites	Num Samples	12,694	12,694	9,886	8,156
	Num Missing	622	622	3,430	5,160
	Min	0.001	0.5	0.2	0.0
	Max	3.047	3405.0	701.6	0.6
	Wtd Mean	0.242	252.4	4.4	0.0
	Wtd CV	0.78	1.11	2.87	0.96
Difference (%)		-0.20%	-0.29%	0.00%	-0.94%

Figure 14-8: Histograms of assay and composite length



Source: Moose Mountain, 2026

A summary of the outlier restrictions used during interpolations is summarized in Table 14-4. This outlier has been applied for distances beyond 5 m both to reduce the grade variability and for the interpolated tonnages and grades at all cut-offs to validate the data.

Table 14-5: Summary of outlier restrictions

	Element	Units	Outlier Restriction Value	Distance (m)
Cap material/ Oxides	Cu	%	1	5
	Mo	ppm	1500	5
	Ag	ppm	20	5
	Au	ppb	0.12	5
Supergene/ Sulphides	Cu	%	1.5	5
	Mo	ppm	3000	5
	Ag	ppm	100	5
	Au	ppm	0.22	5

14.6 Bulk density assignment

The bulk density measurements have been assigned by domain based on over 3,000 measurements made on the core as summarized in Table 14-5.

Table 14-6: Summary of bulk density by oxidation zone

Zone	Range of SG
Leach Cap	2.45 - 2.53
Oxide	2.34 - 2.58
Supergene	2.55 - 2.72
Sulphides	2.63 - 2.75

14.7 Variography

Variograms parameters are summarized in Table 14-6. The rotation values are the rotation of the principal axes the Y-axis, X-axis, and Z-axis, respectively, using the right-hand rule with positive rotation upwards.

Table 14-7: Summary of variogram parameters

Zones	Parameter	Cu	Au	Mo	Ag
Oxides	ROTY	140	30	0	0
	ROTX	0	-45	0	0
	ROTZ	0	40	90	90
	Nugget	0.2	0.11	0.2	0.4
	Sill1	0.3	0.55	0.5	0.4
	Sill2	0.3	0.35	0.3	0.2
	Sill 3	0.2			
	Range1-Y	20	40	40	15
	Range1-X	20	25	40	15
	Range 1-Z	30	15	40	15
	Range2-Y	120	125	200	30
	Range2-X	100	250	200	30
	Range2-Z	40	60	200	30
	Range3-Y	350	125		
	Range3-X	200	250		
	Range3-Z	50	60		
Sulphides	ROTY	140	140	140	0
	ROTX	0	0	0	0
	ROTZ	15	15	15	90
	Nugget	0.1	0.3	0.2	0.5
	Sill1	0.2	0.2	0.3	0.3
	Sill2	0.2	0.1	0.2	0.2
	Sill 3	0.5	0.4	0.3	
	Range1-Y	60	40	30	30
	Range1-X	30	10	30	30
	Range 1-Z	60	40	120	6
	Range2-Y	300	200	200	80
	Range2-X	220	80	160	80
	Range2-Z	350	80	500	25
	Range3-Y	470	470	550	
	Range3-X	260	240	250	
	Range3-Z	420	470	800	

14.8 Block modelling

Block dimensions are 5 m x 5 m x 5 m with the extent of the block model summarized in Table 14-7.

Table 14-8: Berg model extents

Direction	Minimum	Maximum	Extent	Block size	# Blocks
Easting	601,700	605,000	3,300	15	220
Northing	5,961,450	5,964,825	3,375	15	225
Elevation	800	2,280	1,380	15	92

The model is a multiple percent model with the with the domains coded and grades interpolated for up to two domains per block. Figure 14-2 and Figure 14-3 illustrated the domain coding in section and plan respectively.

Interpolation has been done using Ordinary Kriging (OK) in all cases with hard domain boundaries. The final total block grades are calculated as the volume weighted mean grades of each domain within the block.

Search parameter orientations varied circularly the centre of the deposit to mimic the cylindrical nature of the mineralization with the interpolations done in four passes. The restrictions on search distances and composite selection for each of the four passes of the interpolations are given in Table 14-9. The interpolations have also been restricted by the high-grade outliers to ensure that metal content is not over-estimated in any domains. The outlier values are summarized in Table 14-4. Composite values above the Outlier Restricted values are used in the interpolations only up to 5 m from the composite.

Table 14-9: Summary of search distances and composites selection

PASS	Distance (m)			Sample Selection			
	Y	X	Z	Min Comps	Max. Comps	Max/Hole	Max/Quad
1	63	56	41	4	8	2	2
2	125	113	83	4	8	2	2
3	188	169	124	4	8	2	2
4	250	225	165	4	8	2	2

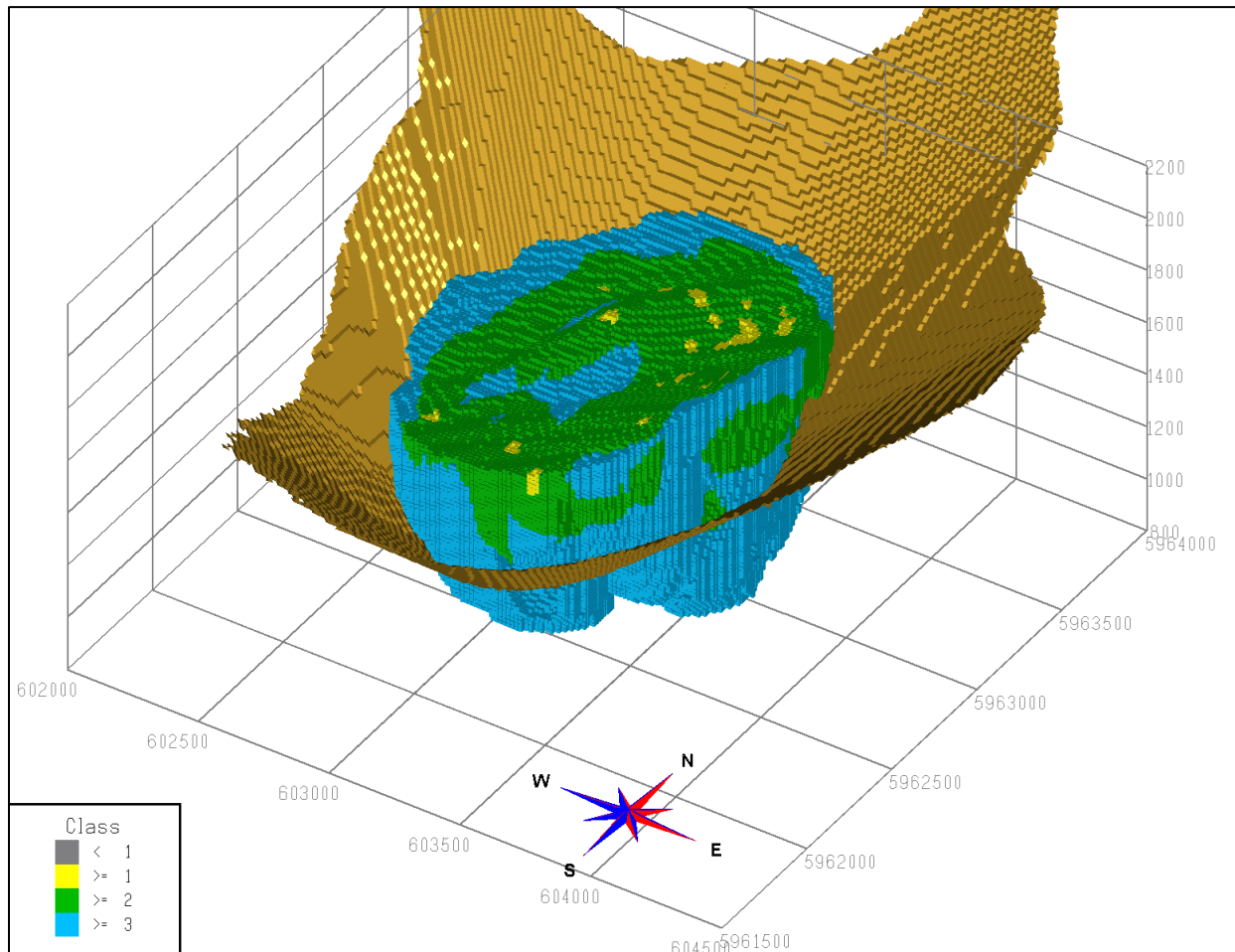
14.9 Classification

The resource estimate is classified using only holes drilled since 2007 and select re-assayed holes. Classification criteria are summarized in Table 14-10 with Measured =1, Indicated=2, and Inferred=3. Distances used to define the classification are based on the variography. Figure 14-9 illustrates the classification in three dimensions with the resource pit also shown.

Table 14-10: Classification criteria

Class	Criteria	Distance (m)	
		Average	to Furthest DH
Measured	Closest 2 Drill holes	<= 30	<= 50
	Closet 3 Drill holes	<= 40	<= 57
Indicated	Closest 2 Drill holes	<= 120	<= 170
	Closet 3 Drill holes	<= 140	<= 200
Inferred	All other blocks within the domains and interpolated with Cu	Range of the Cu Variogram	

Figure 14-9: Three-dimensional view of the resource pit with the classification



Source: Moose Mountain, 2026

14.10 Model validation

14.10.1 Global grade validation

Resource validation was completed to ensure there was no global bias when compared to the Nearest neighbour (NN) grades to those of the final grade interpolation at zero cut-off. The NN model serves to de-cluster the data for comparisons. Table 14-11 summarizes this comparison, illustrating that the difference between the de-clustered composite data (NN model) and the final modelled grades is minimal. Silver is modelled conservatively due to some drill holes ending in relatively high Ag grade, causing higher NN values.

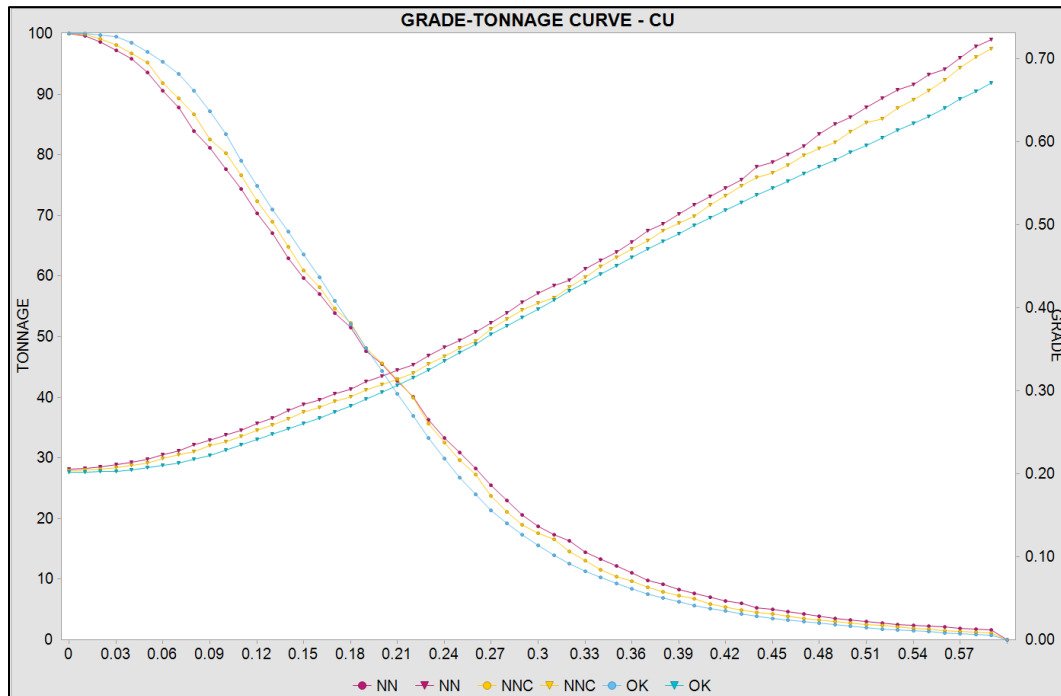
Table 14-11: Summary of model grade comparison with de-clustered comp

Model	Parameter	Cu	Mo	Ag	Au
OK Model	Number of Samples	165,845	165,845	164,608	162,690
	# Missing	25,820	25,820	27,057	28,975
	Min	0.006	3.32	0.40	0.002
	Max	1.139	1,884.25	65.10	0.163
	wtd mean	0.202	244.29	3.90	0.021
	wtd CV	0.55	0.79	0.89	0.58
NN Model	Number of Samples	165,568	165,568	163,687	161,279
	# Missing	26,097	26,097	27,978	30,386
	Min	0.001	1.00	0.50	0.002
	Max	1.527	2,008.00	244.80	0.207
	wtd mean	0.205	247.67	4.41	0.021
	wtd CV	0.65	0.95	2.20	0.85
Difference (%)		-1.62%	-1.36%	-11.56%	1.25%

14.11 Grade-tonnage curves

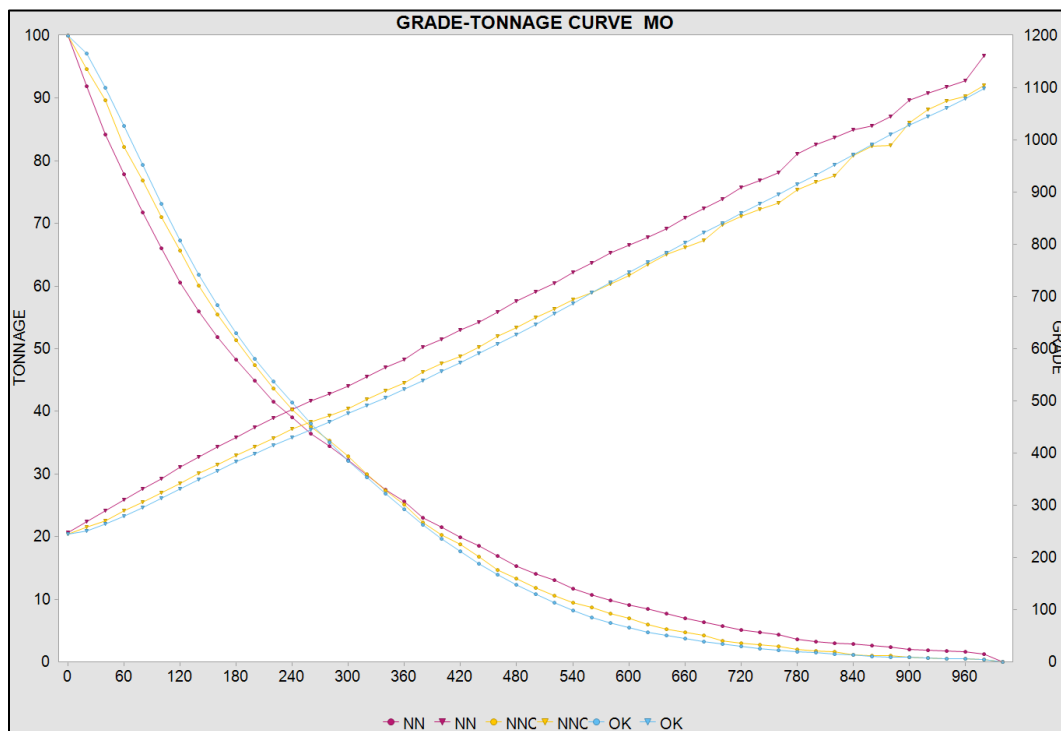
Grade-tonnage curves have been created to compare interpolated grades with the de-clustered composite grades (NN model) throughout the grade distribution. Figure 14-10 through Figure 14-13 illustrate this comparison for Cu, Mo, Ag and Au respectively, showing increased smoothing (reduced grades and increased tonnage) compared to the NN grade curves which increase with cut-off. The NN model has also been corrected for Volume-Variance effects using the Indirect Lognormal correction (ILC) to account for the reduction in variance from composite sample size to block size, as illustrated in the Grade-Tonnage figures as the plots labelled as “NNC”. The final modelled grades (labelled OK in the figures) are at or below the Volume-Variance corrected Grade-tonnage curves throughout the grade distribution.

Figure 14-10: Grade-tonnage curve comparison for Cu



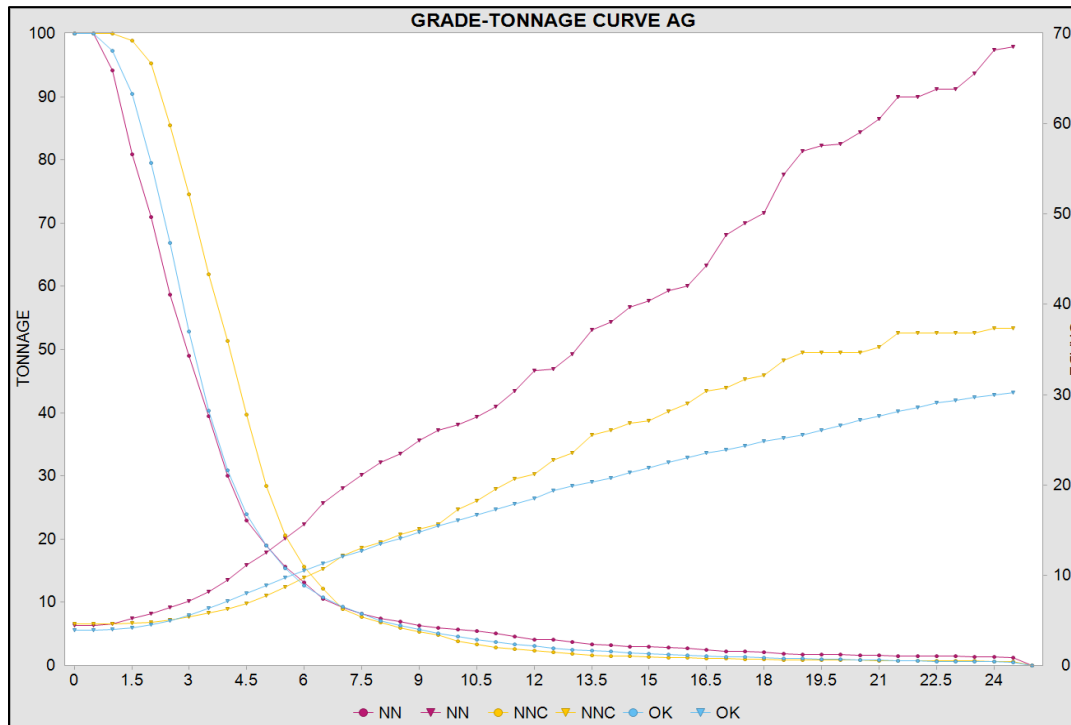
Source: Moose Mountain, 2026

Figure 14-11: Grade-tonnage curve comparison for Mo



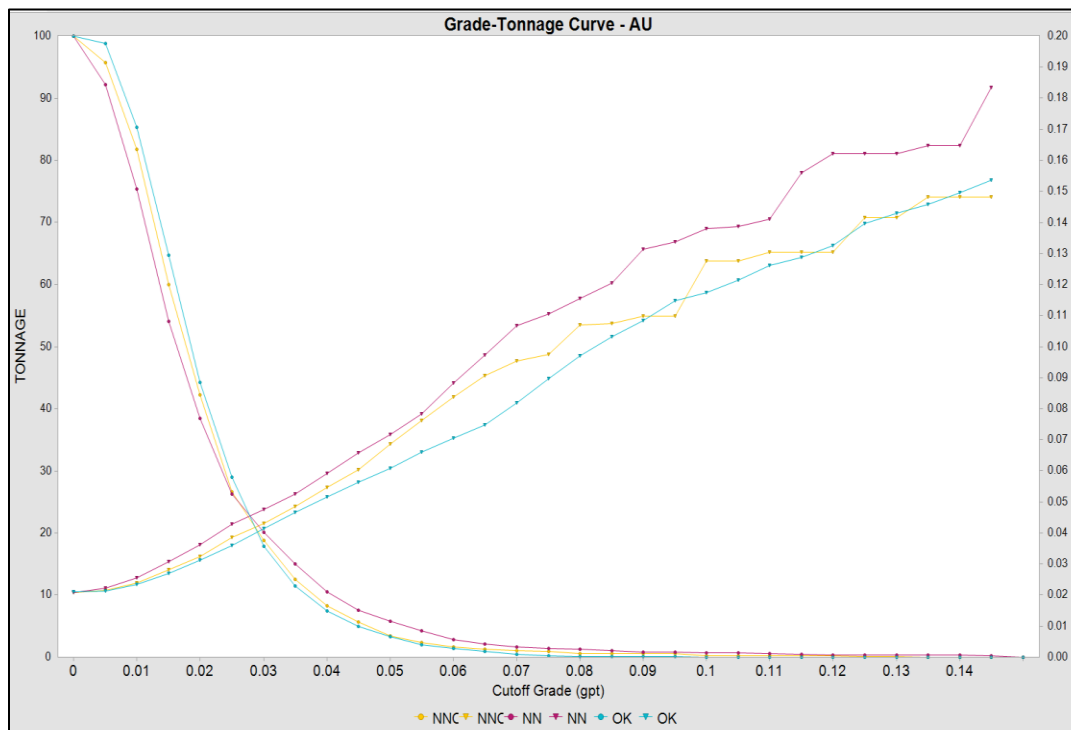
Source: Moose Mountain, 2026

Figure 14-12: Grade-tonnage curve comparison for Ag



Source: Moose Mountain, 2026

Figure 14-13: Grade-tonnage curve comparison for Au

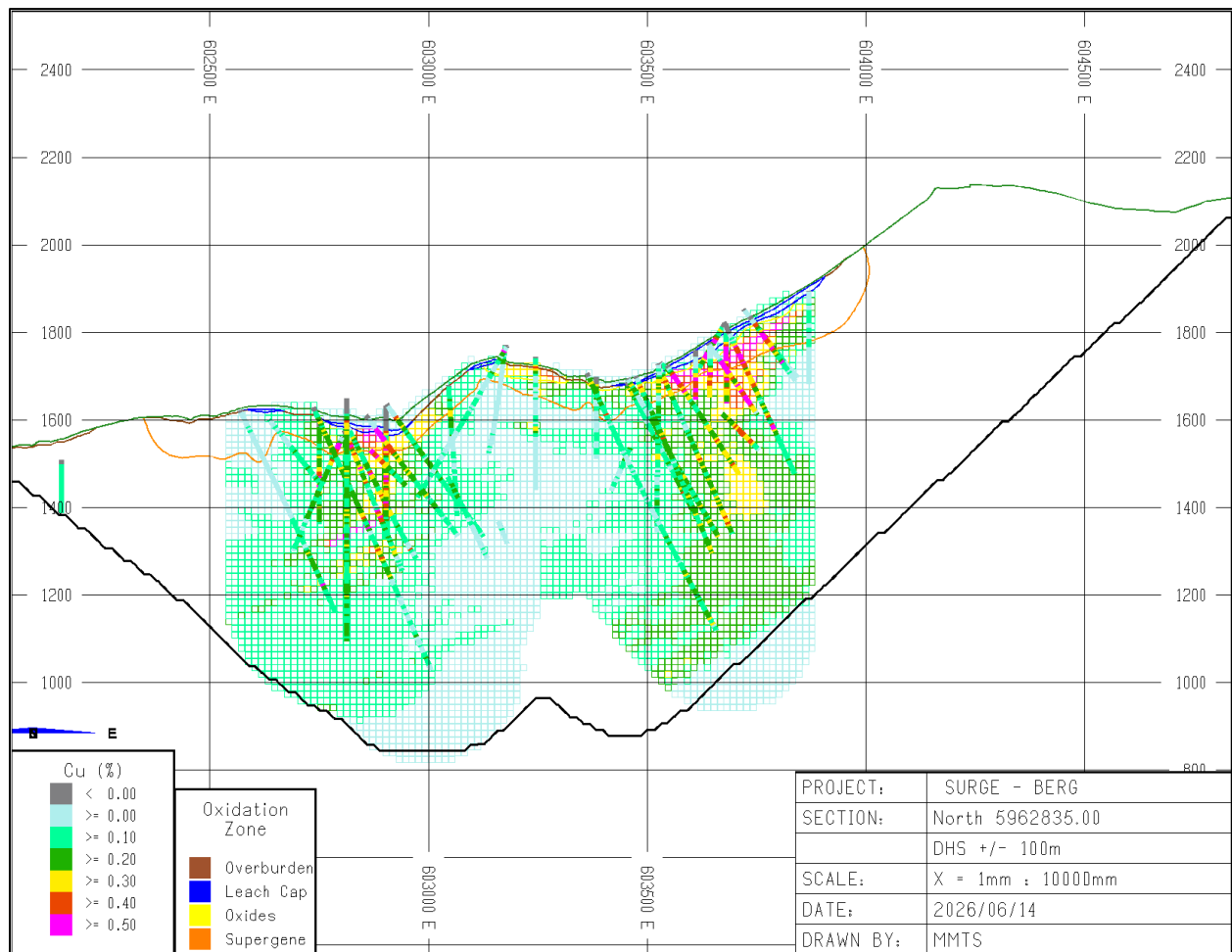


Source: Moose Mountain, 2026

14.12 Visual comparisons

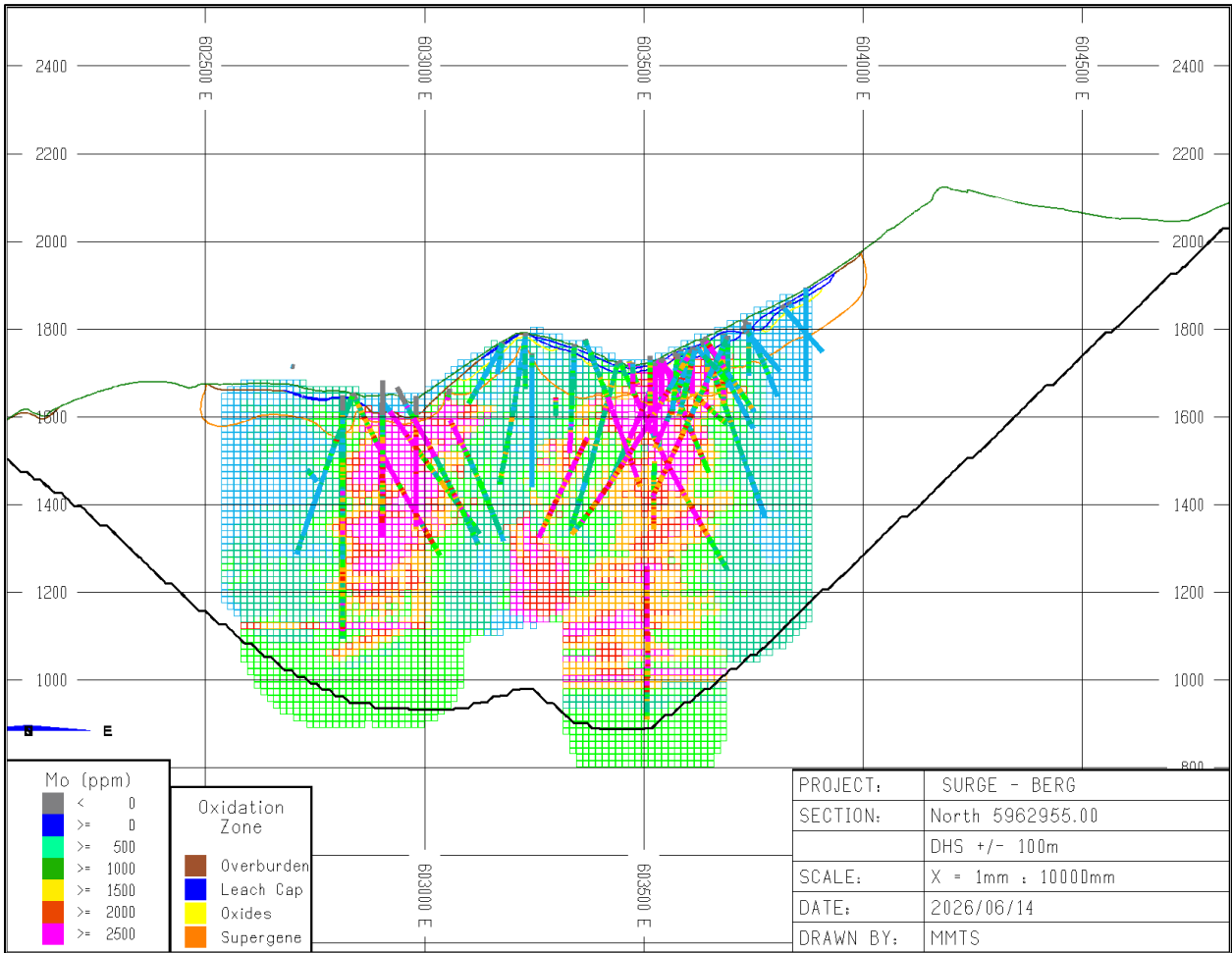
Further validation on local grade estimation has been done through visual comparisons of the modelled grades with the assay and composite grades in section, plan and through three-dimensional checks. Figure 14-14 through Figure 14-17 illustrate the block grades and assay grades in north-south cross-sections for Cu, Mo, Ag, and Au, respectively. The resource pit shape is also illustrated on the sections. Modelled grades show similar grade distributions and values throughout the model to that of the drill hole data.

Figure 14-14: Modelled grades compared to assays – Cu



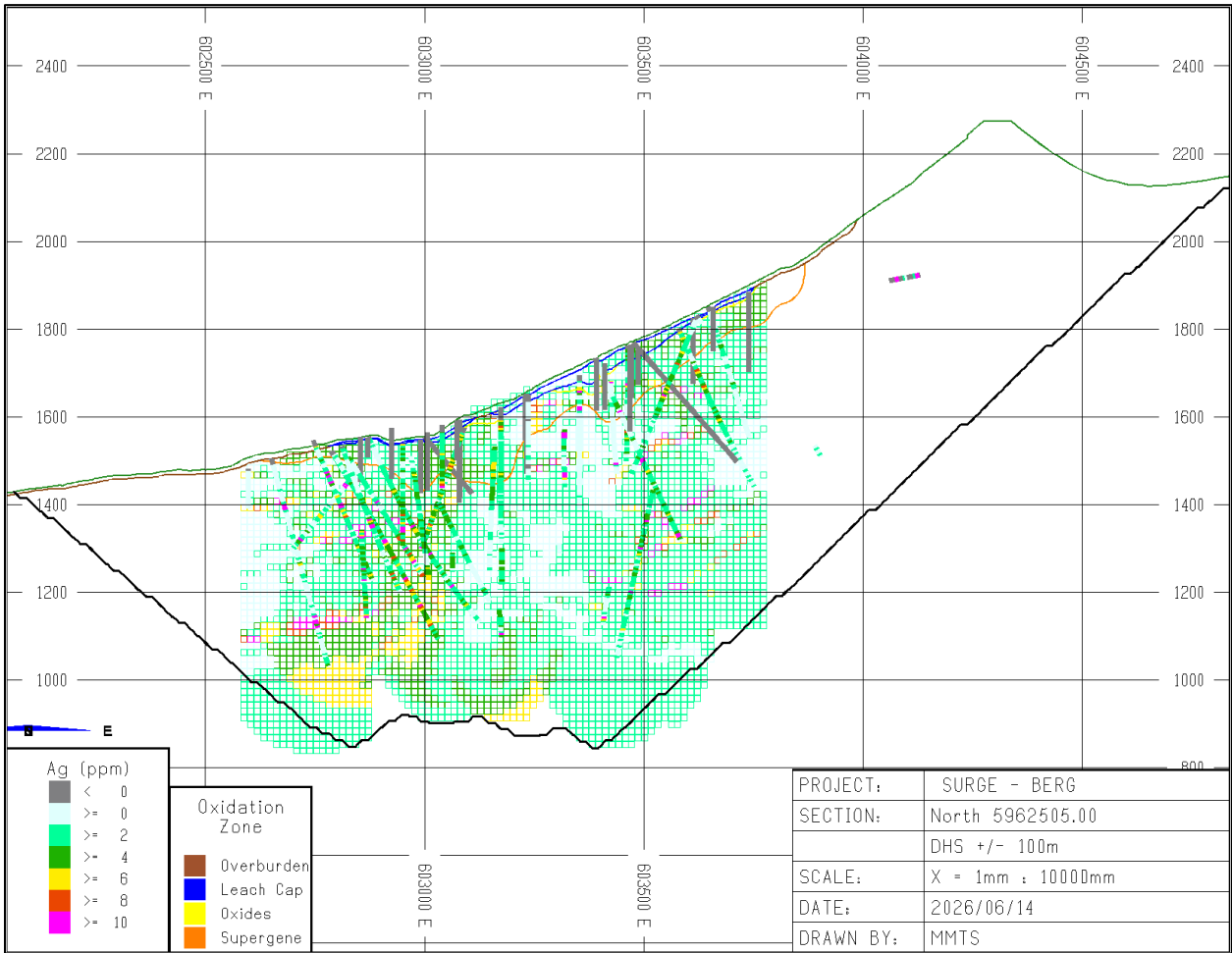
Source: Moose Mountain, 2026

Figure 14-15: Modelled grades compared to assays – Mo



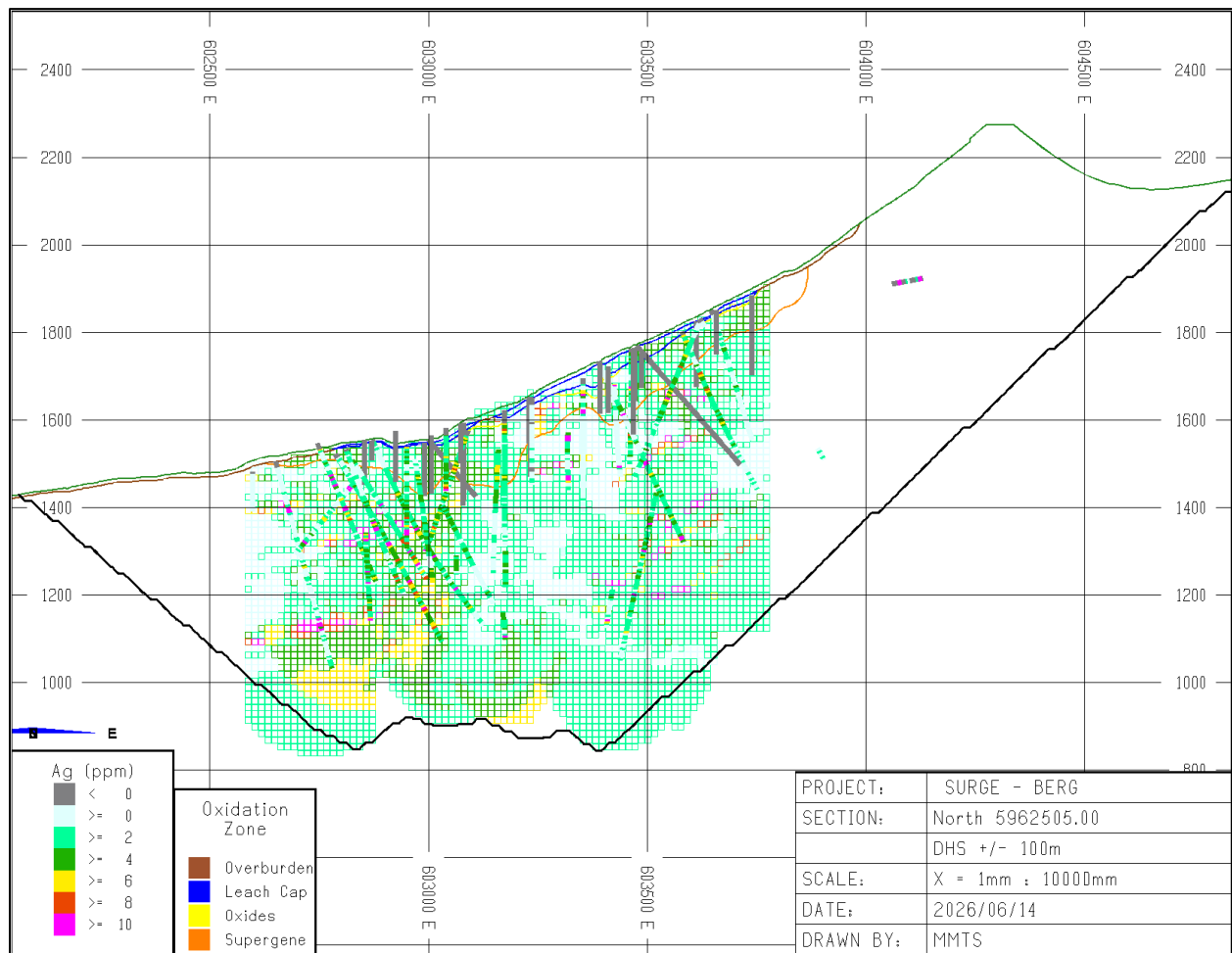
Source: Moose Mountain, 2026

Figure 14-16: Modelled grades compared to assays - Ag



Source: Moose Mountain, 2026

Figure 14-17: Modelled grades compared to assays - Au



Source: Moose Mountain, 2026

14.13 Reasonable prospects of eventual economic extraction

Open-pit resources are confined by a "reasonable prospects of eventual economic extraction" shape defined by a Lerchs-Grossman pit using the 130% case and the Net Smelter Prices (NSPs) which are the same as those used for the mining study of this report. Mining costs are based on studies within this report with open-pit mining costs of C\$2.50/t within both mineralized and waste material, and C\$1.8/t overburden. Incremental costs below the ramp elevation of C\$0.04/bench have also been used. Pit slopes vary by geotechnical domain and slope azimuth in the same manner as the mining pit (see Section 16.2.3).

Metal prices and smelter term inputs for the Net Smelter Price are summarized in Table 14-12.

Table 14-12: Summary of net smelter term values

Item	Unit
Copper Price	US\$4.50/lb
Molybdenum Price	US\$20.00/lb
Silver Price	US\$40.00/oz
Gold Price	US\$3,000.00/oz
US Exchange Rate	1.35 C\$: 1 US\$
Mo unit deduction	1.0%
Payable Copper	96.3%
Payable Molybdenum	99.0%
Payable Silver and Gold	90.0%
Concentrate Moisture	8%
Copper Concentrate Smelting	US\$50/dmt
Copper Refining (includes Silver and Gold Refining)	US\$0.05/lb
Molybdenum Refining	US\$1.25/lb
Off-site Costs (Transport, Insurance) – Cu con	C\$100.00/wmt
Off-site Costs (Transport, Insurance) – Mo con	C\$130.00/wmt
Royalty	1.0%
Copper Net Smelter Price	C\$5.47/lb
Molybdenum Net Smelter Price	C\$24.19/lb
Silver Net Smelter Price	C\$1.48/g or C\$46/oz
Gold Net Smelter Price	C\$110.89/g or C\$3,449/oz

The NSR for each block is calculated as follows:

$$NSR = (Cu\ Grade * NSP\ for\ Cu * Cu\ Process\ Recovery * 2205\ lb/t) + (Mo\ Grade * NSP\ for\ Mo * Mo\ Process\ Recovery * 2205\ lb/t) + (Ag\ Grade * NSP\ for\ Ag * Ag\ Process\ Recovery) + (Au\ Grade * NSP\ for\ Au * Au\ Process\ Recovery)$$

14.13.1 Recoveries

Grade dependent metallurgical recoveries for pit optimization and cut-off grade estimations are based on metallurgical studies done for this report and are summarized below:

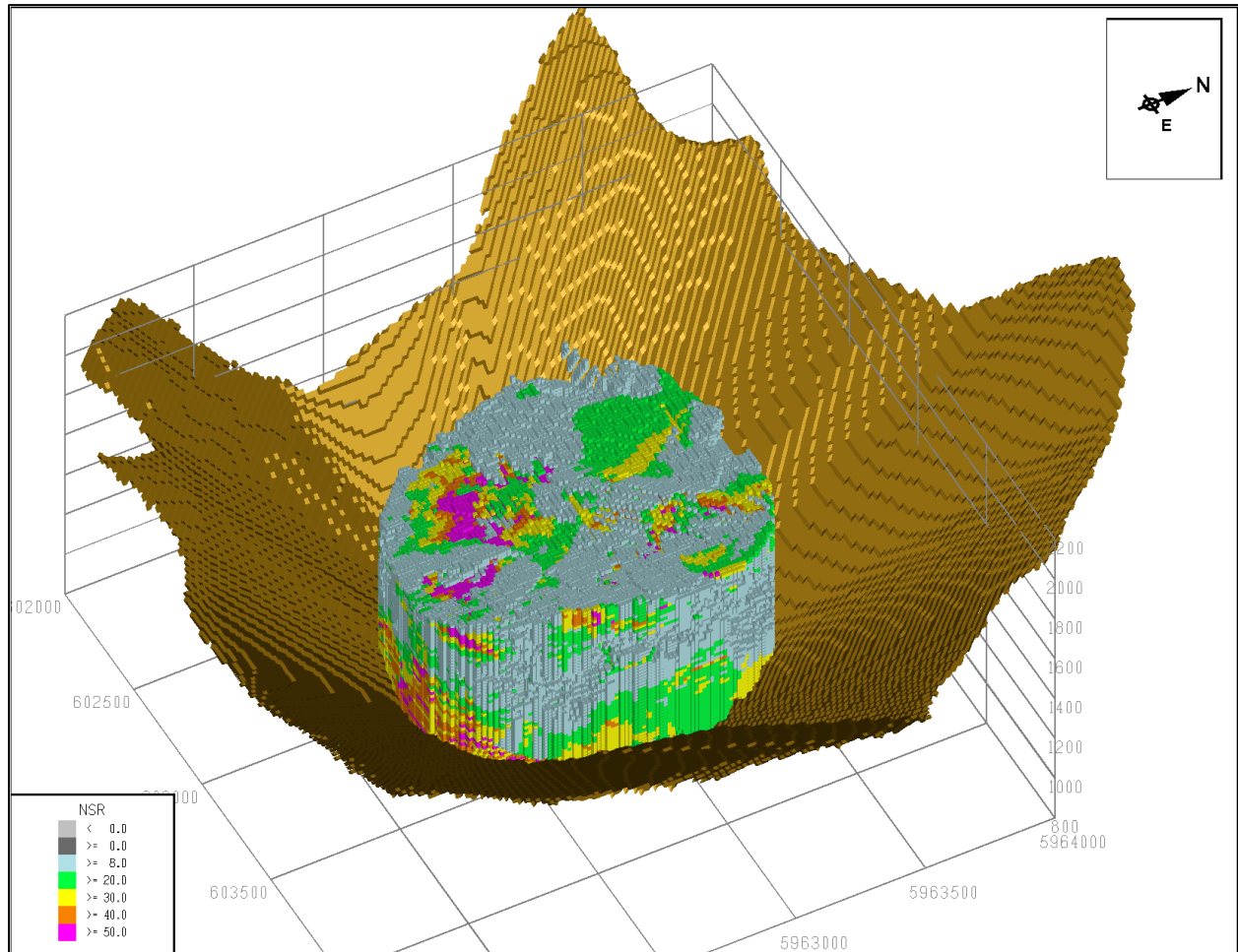
- Leach Cap Cu Recovery = $60 * \ln(Cu\ grade) + 43$
- Supergene Cu Recovery = $86 - 0.827 * (S\%/Cu\%)$
- Hypogene Cu Recovery = $91.53 - 0.317 * (S\%/Cu\%)$
- Leach Cap Mo Recovery = $8.5 * \ln(Mo\ ppm) + 10.2$
- Supergene and Hypogene Mo Recovery = $89.3 * [1 - \exp(-110 * (Mo\ \%))] , \max\ 95\%$

- Ag Recovery = $62 + 1.25 * \text{Ag (g/t)} - 0.7 * (\text{S\%/Cu\%})$, max 70%
- Au Recovery = 52%

The base case cut-off grades are based on Processing costs of C\$7.00/tonne processed, G&A costs of C\$1.00/t processed for a total of C\$8.00/t processed.

The final resource pit with NSR values above the base case cut-off of C\$8.00/t is illustrated in Figure 14-18.

Figure 14-18: Resource pit and NSR of blocks above cut-off



Source: Moose Mountain, 2026

14.14 Risk assessment

A description of potential risk factors is given in Table 14-13 along with either the justification for the approach taken or mitigating factors in place to reduce any risk.

Table 14-13: List of risks and mitigations/justifications

No.	Description	Justification/Mitigation
1	Classification Criteria	Based on Variography and drill hole spacing.
2	Geologic Model	Geologic interpretations are well established, with variography and search parameters following the lithologies and oxidation zones.
3	Metal Price Assumptions	Resource pit and cut-off are based on metal prices below the current 3-year trailing average.
4	High-Grade Outliers	Outlier restriction applied to ensure mean grades match the data. Grade-tonnage curves show model validates well with de-clustered composite data throughout the grade distribution.
5	Processing and Mining Costs	Costs based on Process and Mining studies. Cut-off grade covers Processing plus G&A costs

15 Mineral reserve estimates

15.1 Introduction

The Mineral Reserves for Berg are a subset of the Measured and Indicated Mineral Resources, described in Section 14, as supported by the 2026 Pre-Feasibility Study (PFS) open-pit life-of-mine plan, described in Section 16.

Proven and Probable Mineral Reserves are modified from Measured and Indicated Mineral Resources. Inferred Mineral Resources are set to waste.

15.2 Mineral Reserves statement

Mineral Reserves are estimated using the CIM 2019 Best Practices Guidelines (CIM, 2019) and are classified using the 2014 CIM Definition Standards (CIM, 2014).

Mineral Reserves are reported at the point of delivery to the primary crusher and have an effective date of June 12, 2026. The Qualified Person for the estimate is Mr. Marc Schulte, P.Eng., a member of Moose Mountain Technical Services.

Proven and Probable Mineral Reserves are summarized in Table 15-1.

Table 15-1: Mineral Reserves

Reserve Class	Run of Mine (Mtonnes)	Cu Grade (%)	Mo Grade (%)	Ag Grade (g/t)	Au Grade (g/t)	Cu Metal (Mlbs.)	Mo Metal (Mlbs.)	Ag Metal (Moz.)	Au Metal (koz.)
Proven	35	0.30	0.033	4.8	0.03	231	25	5	34
Probable	1,174	0.21	0.026	4.1	0.02	5,565	662	154	810
Total Reserve	1,209	0.22	0.026	4.1	0.02	5,796	687	160	844

Footnotes:

1. The Mineral Reserve estimate has been prepared by an independent Qualified Person, Marc Schulte, P.Eng., of Moose Mountain Technical Services, with an effective date of June 12, 2026.
2. The Mineral Reserves are a subset of the MRE which also has an effective date of June 12, 2026.
3. The Mineral Reserves are based on engineering and technical information developed at a pre-feasibility level for the Berg deposit.
4. Mineral Reserves are mined tonnes and grade, with a reference point of ROM mill feed at the crusher. This ROM mill feed includes estimates of mining dilution and recovery.
5. Mineral Reserves are reported at an NSR cut-off grade of \$9.25/t. NSR grade is based on US\$4.50/lb Cu, US\$20/lb Mo, US\$40/oz Ag, US\$3,000/oz Au, 1.35 C\$:US\$ exchange rate, US\$50/t concentrate smelter costs, US\$0.05/lb Cu refining costs, US\$1.25/lb Mo refining costs, 96.3% payable Cu, 1% refining deduction and 99% payable Mo, 90% payable Ag, 90% payable Au, \$230/t off-site costs, and 1.0% royalty. NSR value also considers grade and lithology dependent metallurgical recovery formulas for all metals.
6. Columns may not sum exactly due to rounding.

15.3 Mineral Reserves with pit phases

The mine engineering is based on the results of open-pit Pseudoflow sensitivity analysis and then designed into detailed pit phases for production scheduling purposes. This production schedule feeds an overall PFS

financial model that demonstrates the economic viability of the estimated ROM mill feed from the open pits. ROM mill feed quantities and grades are estimated within a 15 m x 15 m x 15 m SMU (selective mining unit) block that is estimated to account for the effects of 5% mining dilution and 95% mining recovery. An additional 4% tonnage loss is incorporated as part of the mine planning process.

The Mineral Reserves by pit phase are shown in Table 15-2. Table 15-3 summarizes the wasted Mineral Resources within the designed pits; these amounts are included in the waste tonnage totals in Table 15-2.

Table 15-2: Mineral Reserves within designation pit

Pit Phase	Pit Name	Mill Feed (Mt)	Cu Grade (%)	Mo Grade (%)	Ag Grade (g/t)	Au Grade (g/t)	Waste (Mt)	Waste:Ore Ratio (t/t)
Start Phase	P691	41	0.31	0.034	5.4	0.03	41	1.0
East Pushback	P692i	103	0.33	0.023	4.5	0.03	204	2.0
North Pushback	P693i	328	0.24	0.026	4.3	0.03	516	1.6
South Pushback	P694ai	111	0.21	0.018	4.0	0.02	271	2.4
Northeast Pushback	P694bi	483	0.19	0.026	3.7	0.02	1,017	2.1
West Pushback	P695i	143	0.16	0.030	4.5	0.02	359	2.5
Total Open-Pit	P695	1,209	0.22	0.026	4.1	0.02	2,409	2.0

Footnotes:

1. An NSR grade cut-off of \$9.25/t is applied.
2. Mined tonnes and grade include operational modifying factors such as loss and dilution.
3. Mineral Reserves in this table are not additive to the Mineral Reserves in Table 15-1. Footnotes to Table 15-1 also apply to this table.

Table 15-3: Wasted Mineral Resources within the designed pits

In-Pit Wasted Resources	Resources (Mt)	Cu Grade (%)	Mo Grade (%)	Ag Grade (g/t)	Au Grade (g/t)
Wasted Measured and Indicated	53	0.13	0.011	3.0	0.03
Wasted Inferred	202	0.15	0.014	3.3	0.02
Total Open-Pit ROM	255	0.14	0.014	3.2	0.02

Footnotes:

1. An NSR grade cut-off of \$9.25/t is applied.
2. These Mineral Resources are not additive to the Mineral Resources summarized in Section 14; they are a subset of the overall Mineral Resource Estimate.
3. Numbers have been rounded as required by reporting guidelines.

15.4 Factors that may affect the Mineral Reserve Estimate

Mineral Reserves are based on the engineering and economic analysis described in Sections 16 to 22 of this Report. Changes in the following factors and assumptions may affect the Mineral Reserve estimate:

- Metal prices and foreign exchange rates
- Interpretations of mineralization geometry and continuity of mineralization zones
- Geotechnical and hydrogeological assumptions
- Ability of the mining operation to meet the annual production rate
- Changes to operating and capital cost assumptions
- Ability of the operations to achieve the estimated mining and process plant recoveries
- Ability to meet and maintain permitting and environmental license conditions and the ability to maintain the social license to operate.

15.5 QP Comment on Mineral Reserve Estimate

The Mineral Reserve estimates are based on the most current knowledge, permit status, and engineering constraints. The QP is of the opinion that the Mineral Reserves were estimated using industry-accepted practice.

16 Mining methods

16.1 Introduction

The Berg deposit is amenable to open-pit mining methods. The Mineral Reserves stated in Section 15 are supported by the open-pit mine plan summarized in this section.

Open-pit mine designs, mine production schedules, mine operation planning, mine fleet selection and productivity estimation, and mine capital and operating costs are developed for the Berg deposit at a Pre-Feasibility Study level of engineering.

16.2 Key mine design criteria

The following mine planning design inputs are used:

- Mine planning datum on UTM NAD83 Zone 9.
- Topography is based on a LiDAR survey of the region.
- The survey does not cover upper areas of the open pit, outside the limits of the resource block model. Regional CANVEC data was used as a supplement in these areas. An updated topography survey should be carried out in advance of any updated engineering studies.
- Whole block resource block model on 15 m spacing in all three dimensions, with diluted element grades, bulk densities, lithologies (Monzonite, Diorite, Volcanics), alterations (Leach Cap, Supergene, Hypogene), resource classifications (Measured, Indicated, Inferred), and PAG classification.
- Elements include Cu, Mo, Ag, Au, Fe, Zn, As, S, and Ca.
- Inferred Mineral Resources are treated as waste rock with no economic value.
- Grade dependent metallurgical recoveries for pit optimization and cut-off grade estimations, with unique criteria for each alteration
 - Cap Material Cu Recovery = $62 * \text{Cu\%} + 43$
 - Supergene Cu Recovery = $86 - 0.827 * (\text{S\%/Cu\%})$
 - Hypogene Cu Recovery = $91.53 - 0.317 * (\text{S\%/Cu\%})$
 - Cap Material Mo Recovery = $8.5 * \ln(\text{Mo ppm}) + 10.2$
 - Supergene Mo Recovery = $89.3 * [1 - e^{-110 * (\text{Mo\%})}]$, max 95%
 - Hypogene Mo Recovery = $89.3 * [1 - e^{-250 * (\text{Mo\%})}]$, max 95%
 - Ag Recovery = $62 + 1.25 * \text{Ag g/t} - 0.7 * (\text{S\%/Cu\%})$, max 70%
 - Au Recovery = 52%.

16.2.1 Net smelter price, net smelter return and cut-off grade

A net smelter return (NSR) block grade item is used in the Project to facilitate the mine planning process.

NSR grade values are calculated for each mineralized block by summing the unit values calculated for each contributing metal using net smelter prices (NSP), process recoveries, and block grades. NSR grade is expressed in dollars per tonne (\$/t) and represents the economic return the mine expects to receive for each recovered tonne before on-site operating costs.

NSP is used in this report to differentiate between market metal prices and net project metal prices. NSP is the net metal price after smelter, refining terms, and off-site charges are applied. The NSP can be considered the price available at the mine gate. The NSP calculation uses the inputs shown in Table 16-1.

Table 16-1: Net smelter price inputs

Item	Unit
Copper Price	US\$4.50/lb
Molybdenum Price	US\$20.00/lb
Silver Price	US\$40.00/oz
Gold Price	US\$3,000.00/oz
US Exchange Rate	0.74 US\$: 1 C\$
Payable Copper	96.3%
Payable Silver and Gold	90.0%
Mo unit deduction	1.0%
Payable Molybdenum	99.0%
Concentrate Moisture, Cu	8%
Concentrate Moisture, Mo	5%
Copper Concentrate Smelting	US\$50/dmt
Copper Refining (includes Silver and Gold Refining)	US\$0.050/lb
Molybdenum Refining	US\$1.25/lb
Off-site Costs (Transport, Insurance), Cu Con	\$100.00/wmt
Off-site Costs (Transport, Insurance), Mo Con	\$130.00/wmt
Royalty	1.0%
Copper Net Smelter Price	C\$5.47/lb
Molybdenum Net Smelter Price	C\$24.19/lb
Silver Net Smelter Price	C\$1.48/g or C\$46/oz
Gold Net Smelter Price	C\$110.89/g or C\$3,449/oz

The NSR in each block of the model is calculated using the following formula:

$$NSR = (Cu\ Grade * NSP\ for\ Cu * Cu\ Process\ Recovery * 2205\ lb/t) + (Mo\ Grade * NSP\ for\ Mo * Mo\ Process\ Recovery * 2205\ lb/t) + (Ag\ Grade * NSP\ for\ Ag * Ag\ Process\ Recovery) + (Au\ Grade * NSP\ for\ Au * Au\ Process\ Recovery)$$

NSR values are calculated for the mineralized blocks in the 3D block model, the economic contribution of individual blocks, sub-benches, and benches can be evaluated. The cut-off grade is based on the calculated NSR value.

Lower-grade blocks located within the open pit design will still be mined if they are required to expose higher-grade material. The material must be mined, regardless of this relative value, so the mining cost is not included in the ore or waste decision.

Instead, the block is evaluated against the incremental cost of treating it as ore. This includes processing costs, general and administrative costs, and any additional rehandling costs if the material is stockpiled prior to processing. A block contributes positively to cash flow when its NSR exceeds these incremental costs. If the NSR does not cover these costs, the block is treated as waste.

The cut-off grade calculation uses the inputs shown in Table 16-2, below. This cut-off grade will cover the incremental production costs of processing, administration, and stockpile rehandle.

Table 16-2: Economics NSR cut-off grade

Description	Values	Units
Process Costs	\$7.00	\$/t
G&A and Site Costs	\$1.00	\$/t
Stockpile Rehandle Costs	\$1.25	\$/t
NSR Cut-off Grade	\$9.25	\$/t
CuEq Cut-off Grade	0.09	%

16.2.2 Mining loss and dilution

Whole block diluted metal grades and tonnages are used for mine planning. Selective mining unit (SMU) block sizes are on 15 m spacing in all three dimensions. It is estimated that the SMU whole block measurements for tonnage and grade cover the effects of 5-8% dilution from mineralization introduced via mining operations.

Based on the spatial distribution of ore and waste blocks in the SMU block model, edge dilution introduced from ore to waste contacts is estimated to be 1.5%. It is assumed the estimated 5-8% dilution from mineralization to the SMU block size is representative of the diluted ROM material the operator will be able to achieve when pursuing the production rate targeted in this mine plan.

A 4% mining loss is applied to lower-grade portions of the mineralization. This loss is assumed to cover the effects of loss from mis-directed loads, carry back on truck bodies used for hauling both ore and waste, and along the bottom lifts of stockpiled ore.

It is recommended to carry out a bulk sample on the orebody, comparing mined metals to modeled metals, to help re-enforce planned dilution and recovery assumptions.

16.2.3 Pit slopes

The pit slope criteria are based on pre-feasibility level geotechnical engineering work done on the Berg deposit (BGC, 2025) based on available data including:

A geologic model consisting of lithologies, weathering zones, and faults.

Geotechnical units with rock properties such as rock quality designation (RQD), fracture intensity, and unconfined compressive strength (UCS), estimated from drill core, outcrop mapping, and laboratory testing.

Structural domains and design discontinuity sets based on televiewer data, outcrop mapping, and photogrammetry models.

Groundwater pressure based on a conceptual model developed from hydrogeologic testing data and experience with similar sites.

Geologic mapping, historical reports, televiewer discontinuity data, photogrammetry models, and rock properties such as rock quality designation (RQD), fracture intensity, and unconfined compressive strength (UCS), obtained via lab work on core samples.

Bench and inter-ramp scale slope designs are supported by a combination of empirical and analytical stability analyses including kinematic analysis of the design discontinuity sets, assessment of bench crest back-break, and two-dimensional limit equilibrium analysis of generic inter-ramp slope stacks within the different geotechnical domains considering rock mass properties, anisotropic weaknesses within the structural domains, and different hydrogeologic conditions.

Pit designs are configured on 15 m bench heights, with minimum 8 m wide effective berm widths on each bench. Unique bench face and inter-ramp slope inputs are based on lithology, alteration, and azimuth. The criteria vary due to anisotropic weaknesses or potential for multi-bench scale wedge failure. These slope criteria are summarized in Table 16-3.

Table 16-3: Pit slope design inputs

Domain	Azimuth Start (°)	Azimuth End (°)	Bench Face Angle (°)	Inter-ramp Angle (°)	Calc. Berm Width (m)	Overall Angle (°) (for pit optimization)
Cap Material	000	360	70	30	20.0	30
Supergene - Saturated	000	360	70	35	16.0	31
Supergene – Depressurized ¹	000	360	70	42	11.0	31
Andesite	000	025	70	40	12.4	38
Andesite	025	050	70	43	10.7	41
Andesite	050	115	70	41	11.5	39
Andesite	115	150	70	43	10.8	41
Andesite	150	245	70	44	9.9	42
Andesite	245	280	70	41	11.7	39
Andesite	280	320	70	40	12.6	38
Andesite	320	360	70	40	12.4	38
Diorite	000	010	70	41	11.7	39
Diorite	010	073	70	40	12.4	38
Diorite	073	140	70	45	9.6	43
Diorite	140	245	70	46	9.2	44
Diorite	245	290	70	43	10.4	41

Domain	Azimuth Start (°)	Azimuth End (°)	Bench Face Angle (°)	Inter-ramp Angle (°)	Calc. Berm Width (m)	Overall Angle (°) (for pit optimization)
Diorite	290	350	70	39	13.1	37
Diorite	350	360	70	41	11.7	39
Berg Stock	000	015	70	38	13.8	36
Berg Stock	015	070	70	41	11.8	37
Berg Stock	070	087	70	43	10.6	41
Berg Stock	087	150	70	45	9.5	43
Berg Stock	150	240	70	46	9.2	44
Berg Stock	240	315	70	45	9.7	43
Berg Stock	315	360	70	38	13.8	36

Note: 1. Pit designs in Supergene assume the Depressurized conditions apply.

Minimum effective berm widths of 8 m are based on crest back-break from the design angle and do not account for hard toes or irregular face profiles.

In-pit haul roads and geotechnical berms are added to the pit slopes and flatten the inter-ramp angles out to a shallower overall slope in all domains. Geotechnical berms, 20 m wide, are placed so that a maximum inter-ramp height of 150 m is maintained wherever in-pit ramps are not present in hypogene and 90 m height for the supergene.

The inter-ramp and overall slopes are judged to be acceptable when the minimum factor of safety values of 1.3 is demonstrated by static slope stability analyses.

The implementation of slope design also requires effective slope depressurization, controlled blasting and excavation practices, and regular inspection and systematic slope monitoring. Plans for depressurization are further described in Section 16.9.1.

It is recommended to continue collecting geotechnical and hydrogeotechnical information from any additional field programs to further refine geomechanical parameters and reduce uncertainties in the geological-geomechanical model.

16.2.4 Hydrogeologic conditions

A conceptual groundwater model informs estimates of the groundwater flow regime from the excavation, depressurization, and dewatering of the open pit, including a cone of depression around the open pit and extending outward.

Packer tests have been conducted to estimate the hydraulic conductivity of the bedrock. The estimated hydraulic conductivity, ranging from 1×10^{-7} to 2×10^{-6} m/s, does not appear to vary appreciably between the tested rock types or weathering zones. There is no apparent relationship between test depth and hydraulic conductivity.

There is not enough data to determine if the presence of faults or other structures have a significant influence on hydraulic conductivity; however, given the presence of artesian conditions and high flow rates

during drilling in the open-pit area, fracture flow is highly likely. Recorded artesian flows range from 4 to 170 L/min during drilling.

16.3 Pit Optimization

The economic pit limits are determined using the Pseudoflow implementation of the Lerchs-Grossman algorithm. This algorithm uses the grades and densities for each block of the 3D block model and evaluates the costs and revenues of the blocks within potential pit shells. The routine uses input economic and engineering parameters and expands downwards and outwards until the last increment is at break-even economics.

Additional cases are included in the analysis to evaluate the sensitivities of open-pit mined resources to waste mining ratio and high-grade/low-grade areas of the deposits. In this study, the various cases or pit shells are generated by varying the input metal prices and comparing the resultant waste and mill feed tonnages and metal grades for each pit shell.

By varying the economic parameters while keeping inputs for metallurgical recoveries and pit slopes constant, various generated pit cases are evaluated to determine where incremental pit shells produce marginal or negative economic returns. This drop-off is due to increasing waste mining ratios, decreasing metal grades, increased mining costs associated with the larger or deeper pit shells, and the value of discounting costs before revenues. The economic margins from the expanded cases are evaluated on a relative basis to provide payback on capital and produce a return for the Berg Copper Project. As the pit expands with each incremental price increase, each additional pushback generally adds less value. Eventually, the additional revenue from mining a larger pit is not enough to justify the additional waste stripping and operating cost. At that point, a practical pit limit is selected that provides an appropriate economic return for the deposit.

For each pit shell, an undiscounted cash flow (UCF) is generated based on the shell contents and the economic parameters listed in Table 16-1 and Table 16-4. The UCFs for each case are compared to reinforce the selected point at which increased pit expansions do not materially increase project value. Note that the economics are only applied for comparative purposes to assist in the selection of an optimum pit shell for further mine planning; they do not reflect the actual financial results of the mine plan.

The chosen pit shell is then used as the basis for more detailed design and economic modelling.

Price assumptions for the pseudoflow runs were provided in Table 16-1 and operating cost assumptions are included as Table 16-4 respectively.

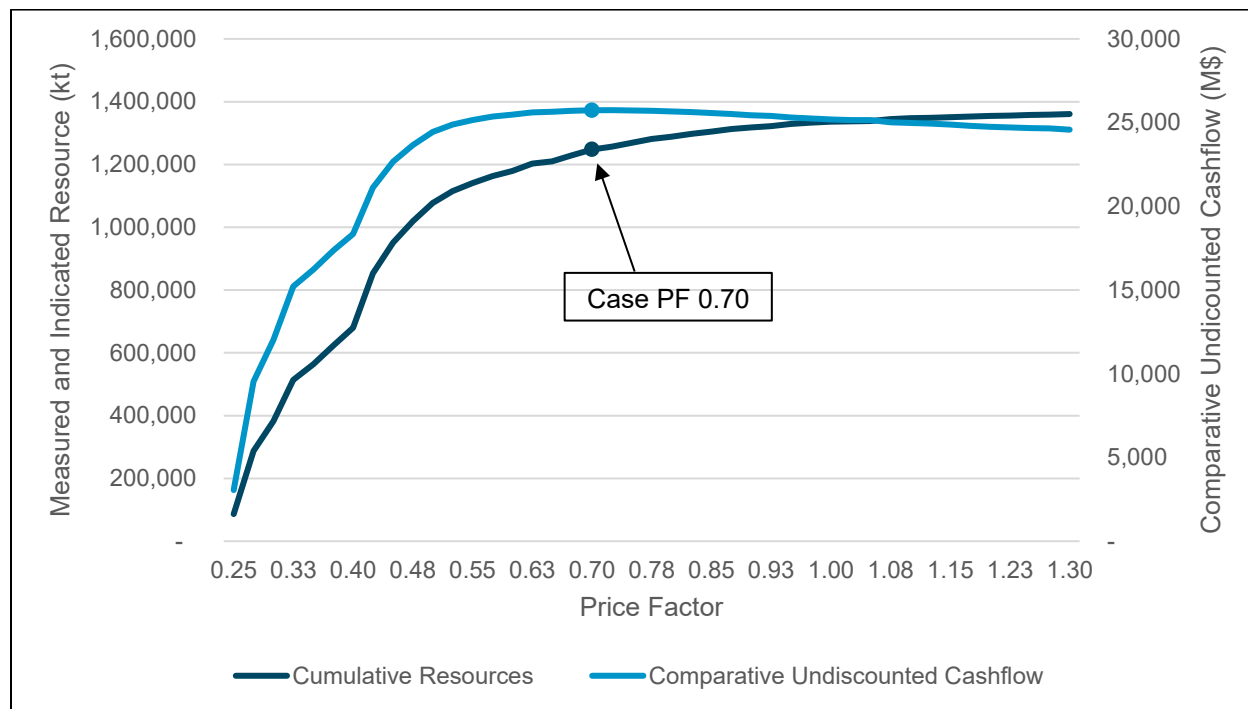
Table 16-4: Inputs into pseudoflow pit optimization

Item	Unit
Pit rim ore mining cost	\$2.50/t, pit rim of 1598 m
Pit rim waste mining cost	\$2.50/t, pit rim of 1598 m
Incremental bench haulage cost	\$0.04 per every 15 m bench below pit rim
Processing cost	\$7.00/t
G&A cost	\$1.00/t
Process recovery	Rock type dependent, listed in Section 16.2

16.3.1 Ultimate pit limits

Figure 16-1 shows the contents of the generated Pseudoflow pit shells for the Berg deposit. An inflection point can be seen in the curve of cumulative resources and UCF by pit case. This point indicates Price Factor (PF) 0.70 shell as a point at which larger pit shells will not produce significant increases to project value. The pit shell generated from PF 0.70 is selected as the ultimate pit limits and is used for further mine planning as a target for detailed open-pit designs with berms and ramps.

Figure 16-1: Pseudoflow Pit Shell Resource Contents by Case

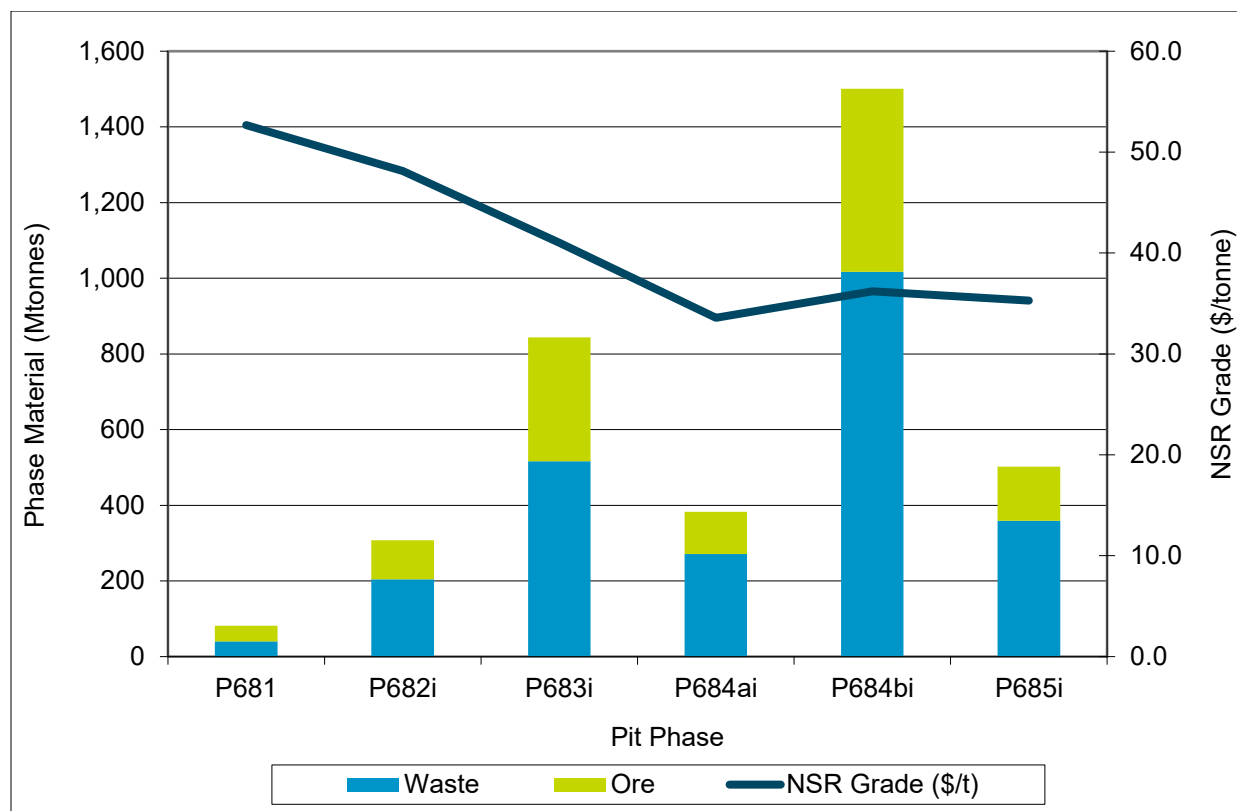


Source: MMTS, 2026

16.4 Pit designs

Contents of the designed open pits are presented in Table 15-2. The contents for each designed pit phase are presented graphically in Figure 16-2.

Figure 16-2: Designed Phase Pit Contents



Source: MMTS, 2026

16.4.1 Pit phasing

Ultimate pit limits are generally split into phases or pushbacks to target higher economic margin material earlier in the mine life as well as reducing the waste stripping hurdles as the pit develops. Minimum pushback distances of 75 m are honoured, with a vast majority of the bench pushbacks well over 100 m.

The Berg pit is split into six phases. While the pit sequence generally targets the Case PF 0.25, 0.28, 0.33, 0.43, 0.55 shells described in Figure 16-1, the pushback sequence is significantly influenced by operational considerations, ensuring adequate pushback distance and ramp access up tall highwalls into and out of each pit phase. The first phase starts in the middle of the deposit with each subsequent phase pushing the walls out to the east, north, south, northeast and west, respectively.

16.4.2 In-pit haul roads

Two-way 35-m wide in-pit haul roads are designed to support the use of 360 t payload haul trucks. Haul road grades are limited to a maximum of 10%. Access ramps are not designed for the last bench of the pit bottom, on the assumption that the bottom ramp segments will be removed using some form of retreat mining. The bottom two ramped benches of the pit use one-way 25-m wide haul roads, at 12% grade, since bench volumes and traffic flow are reduced.

16.4.3 Pit designs

The phased Berg pit designs are shown in Figure 16-3 to Figure 16-8. Sections through the deposit showing the whole block NSR grades are illustrated in Figure 16-9 and Figure 16-12. Where meter (m) elevations are listed below, they refer to the mine grid z-dimension elevation, which is meters above sea level (masl). Property lease boundaries are not shown in these drawings as they sit several km away from the open-pit limits.

Starter Pit, P691 and East Pushback P692 – These phases target the high-grade, low-strip-ratio central portion of the deposit outlined by Case PF 0.28 pit shell as shown in Figure 16-1. These phases contain about three to four years' worth of mill feed. P691 is designed as a standalone phase, targeting the central zone of the deposit, but is effectively mined at the same time as P692. The P692 pit mines from the crest at the 2,250 m elevation, down to the pit phase bottom at the 1,340 m elevation. Upper benches of the pit will be accessed via internal cut ramps from the 1,575 m elevation to the top of the pit. An internal ramp runs counter-clockwise down from the pit exit at the 1,575 m elevation in the south down to the pit bottom. Haul ramps are left in the eastern pit wall to access upper benches of future pit pushbacks.

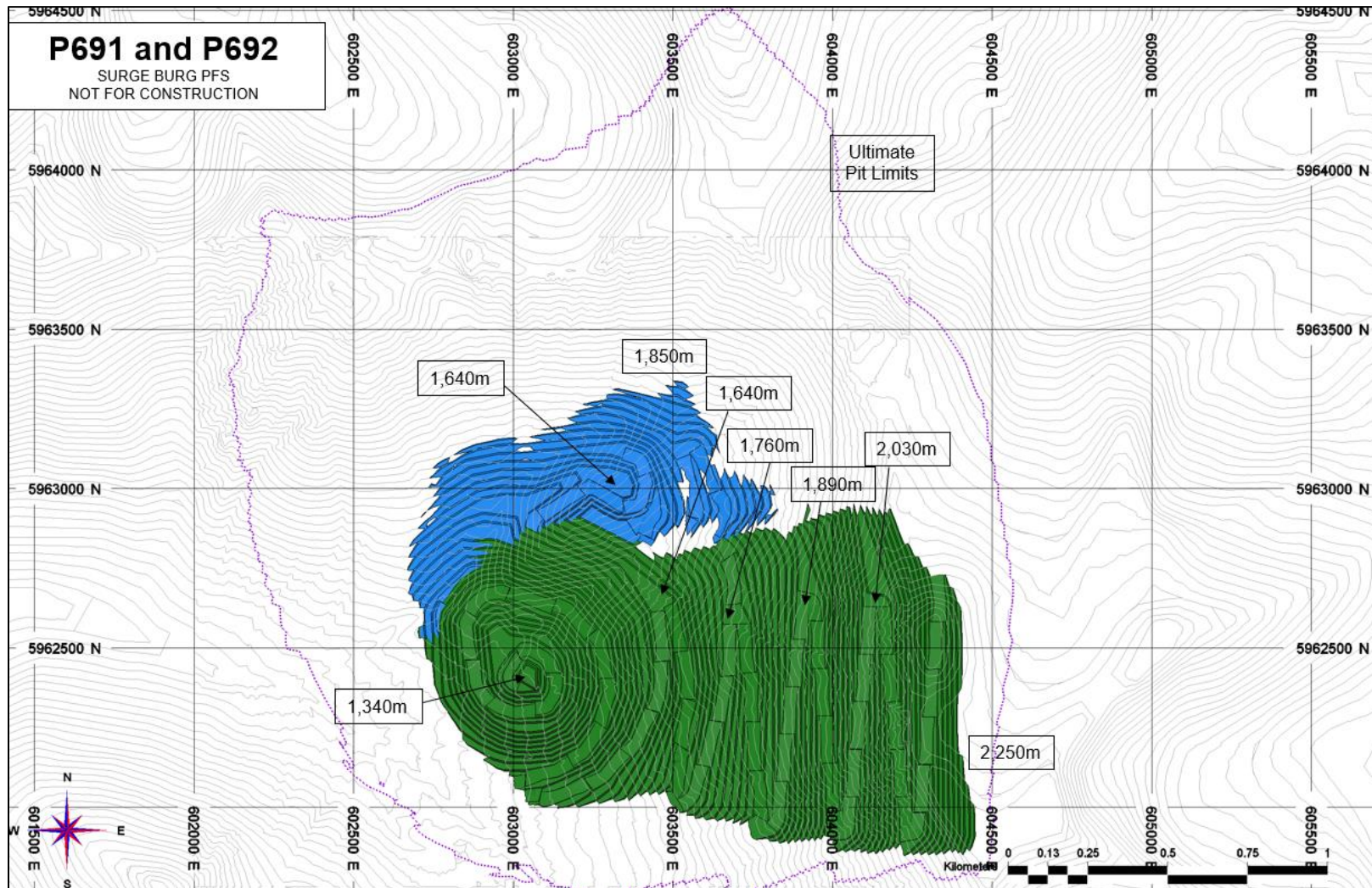
North Pushback, P693 – This phase pushes out the initial phases to the north, leaving room in the north for another pushback to the ultimate pit limits. This phase contains about seven years' worth of mill feed and mines from the pit crest at the 2,180 m elevation, down to the pit phase bottom at the 1,280 m elevation. Upper benches of the pit will be accessed via the same internal cut ramps as the Starter Pit as well as ramps left behind in the P692 pit. An internal ramp runs clockwise down from the pit exit at the 1,505 m elevation in the southwest, switchbacking at the 1,450 m elevation, down to the pit bottom. Haul ramps are left behind in all pit wall sectors to access upper benches of future pit pushbacks. A geotechnical catch berm splits the north and east highwalls at the 1,805 m elevation.

South Pushback, P694a – This phase pushes out the southern portion of the previous pit phases, to the ultimate pit limits. The phase contains about three years' worth of mill feed. The top of the pit at the 2,250 masl elevation is accessed via highwall ramps left behind in P692. The main ramp runs clockwise from the pit exit at the 1,475 m elevation in the southwest of the pit to the pit phase bottom at 1,220 m elevation. Haul ramps are left behind in the eastern pit highwall to access upper benches of future pit pushbacks. A geotechnical catch berm splits the east highwall at the 1,475 m elevation.

Northeast Pushback, P694b – This phase pushes the highwall to the north and east ultimate pit limits. The phase contains about eleven years' worth of mill feed. The top of the pit at the 2,300 masl elevation is accessed via highwall ramps left behind in P693. The main ramp runs counter-clockwise from the pit exit at the 1,505 m elevation in the west of the pit, switchbacking at the 1,385 m and 1,255 m elevations, to pit phase bottoms at 1,250 m and 1,070 m elevations. Geotechnical catch berms splitting the north and east highwalls are left behind on the 1,280 m, 1,430 m, 1,535 m, 1,685 m, 1,835 m, 1,985 m, and 2,135 m elevations.

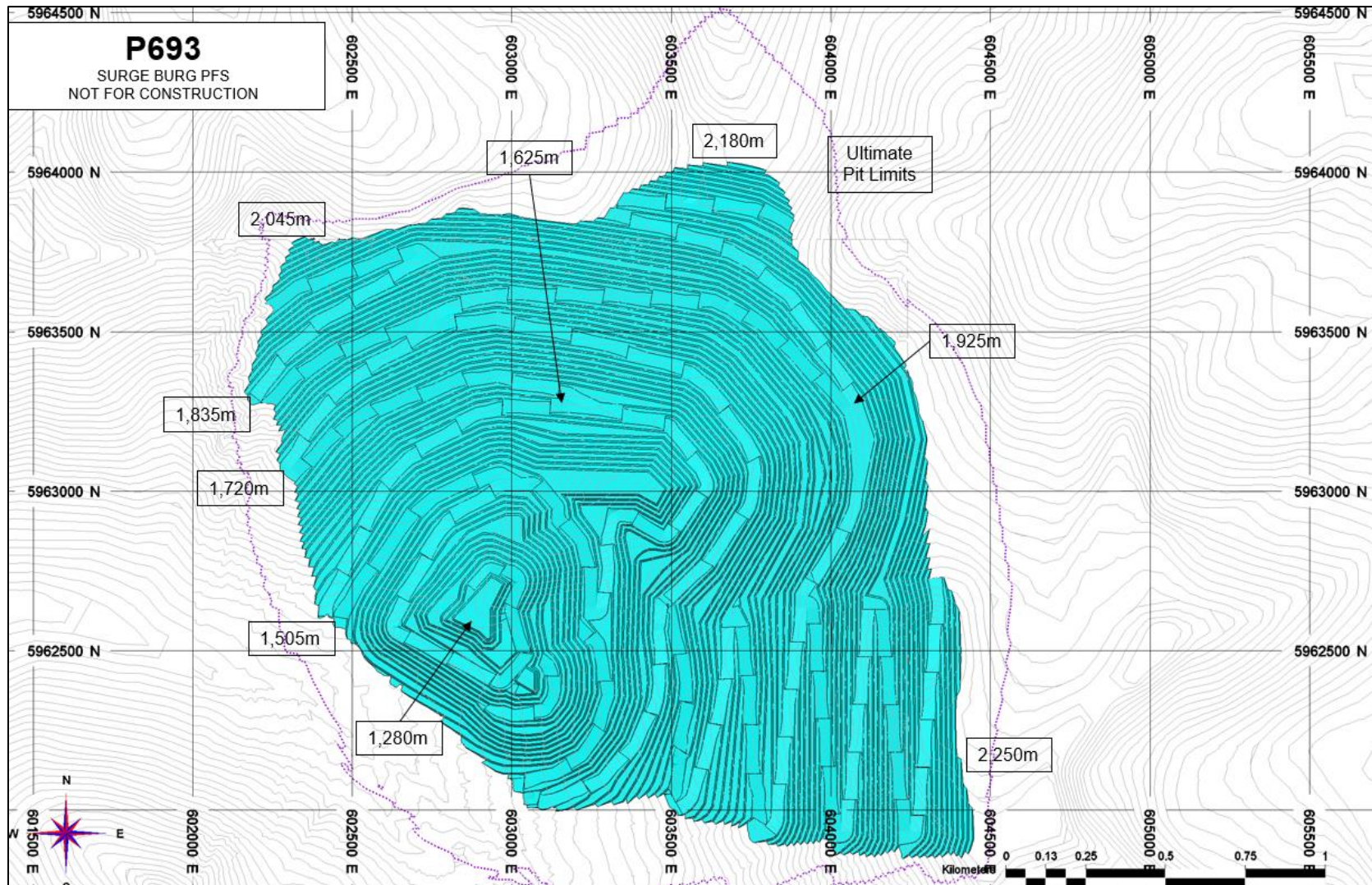
West Pushback, P695 – This phase pushes out the pit to the ultimate pit limits in the west. The phase contains about three years' worth of mill feed. The top of the pit at the 2,075 masl elevation is accessed via highwall ramps left behind in P693. The main ramp runs counter-clockwise from the pit exit at the 1,460 m elevation in the west of the pit, switchbacking at the 1,370 m and 1,220 m elevations, to the pit phase bottom at 1,070 m elevation. Geotechnical catch berms splitting the north highwall are left behind on the 1,490 m, 1,640 m, 1,790 m, and 1,940 m elevations.

Figure 16-3: Starter and East Pushback Pit Design, P691 and P692



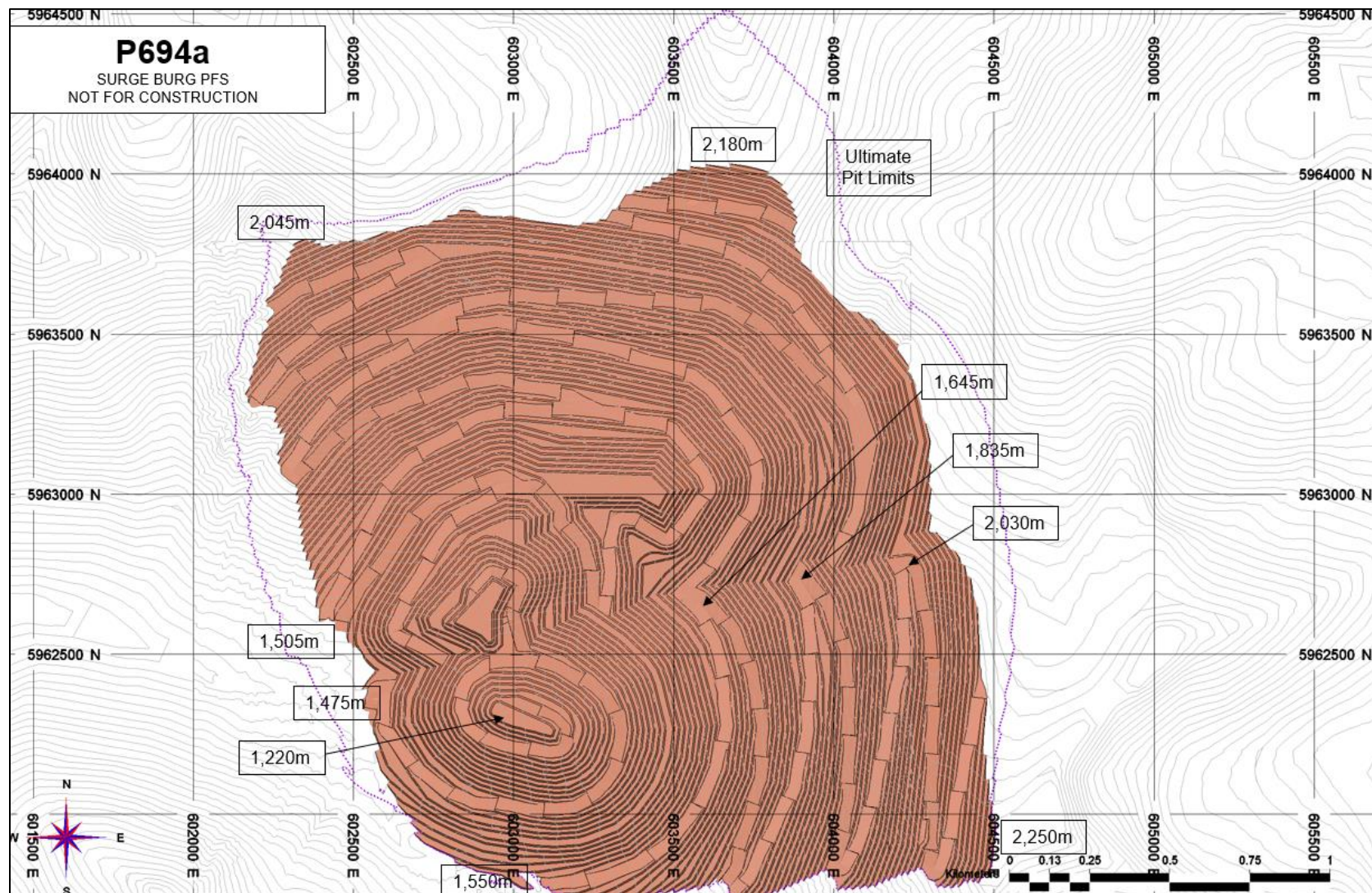
Source: MMTS, 2026

Figure 16-4: North Pushback, P693



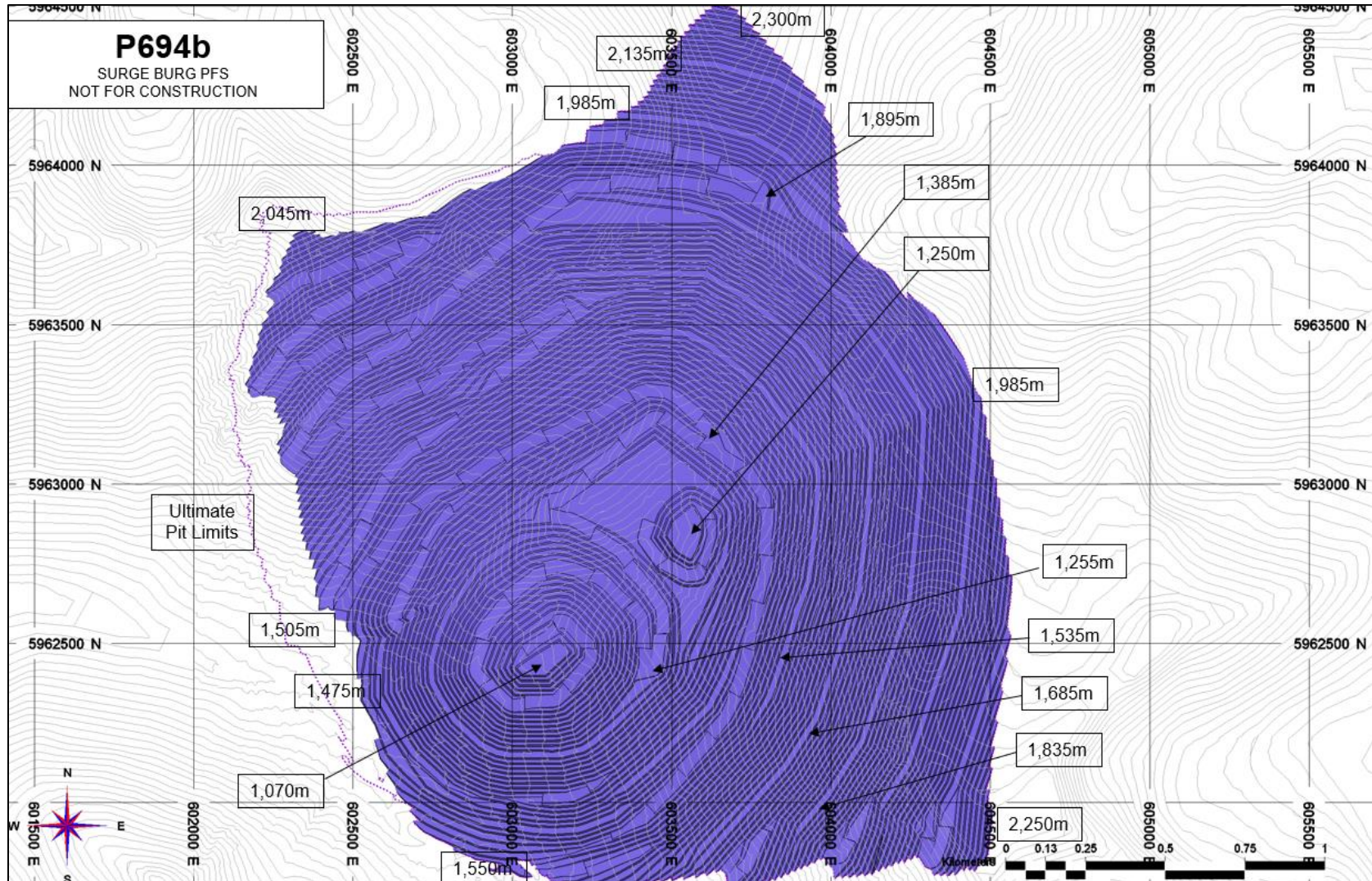
Source: MMTS, 2026

Figure 16-5: South Pushback, P694a



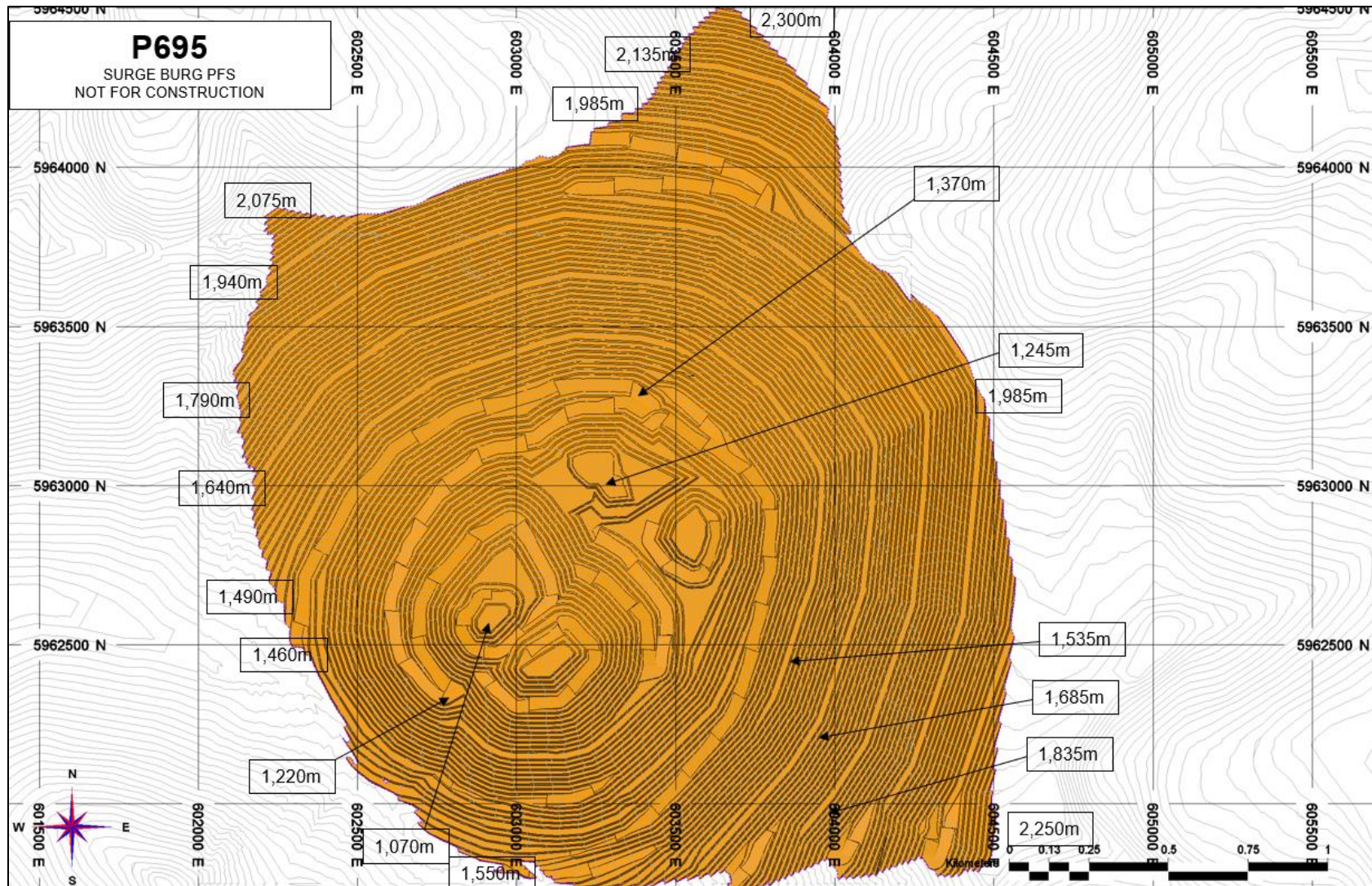
Source: MMTS, 2026

Figure 16-6: Northeast Pushback, P694b



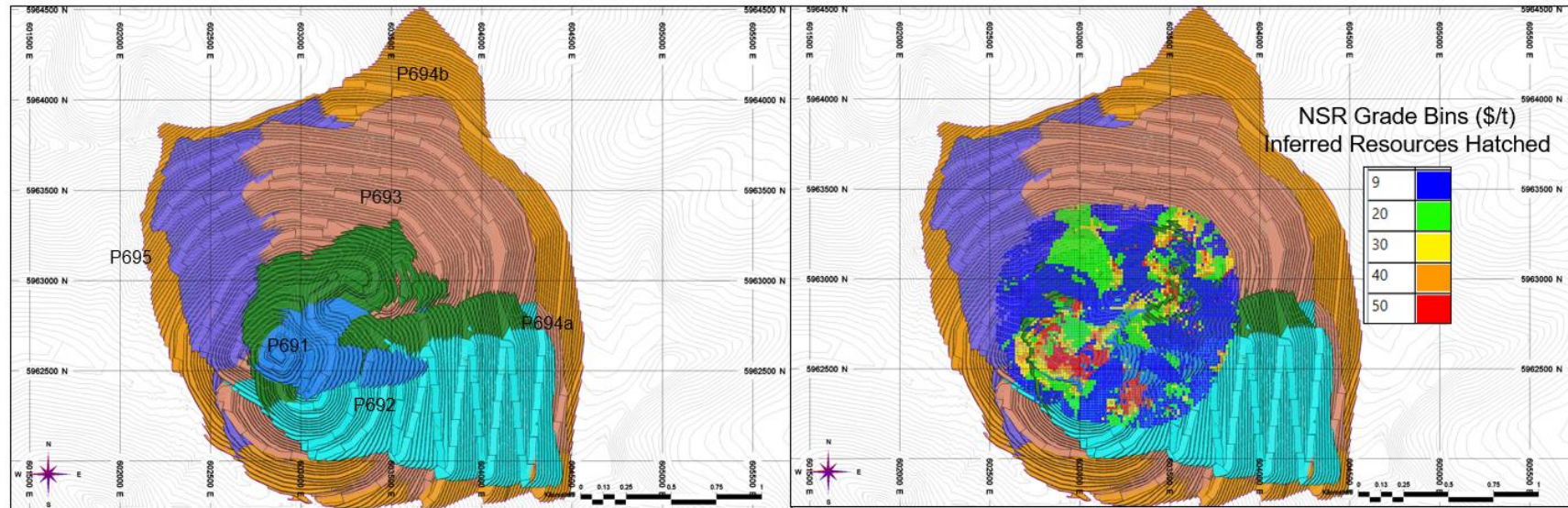
Source: MMTS, 2026

Figure 16-7: West Pushback, P695



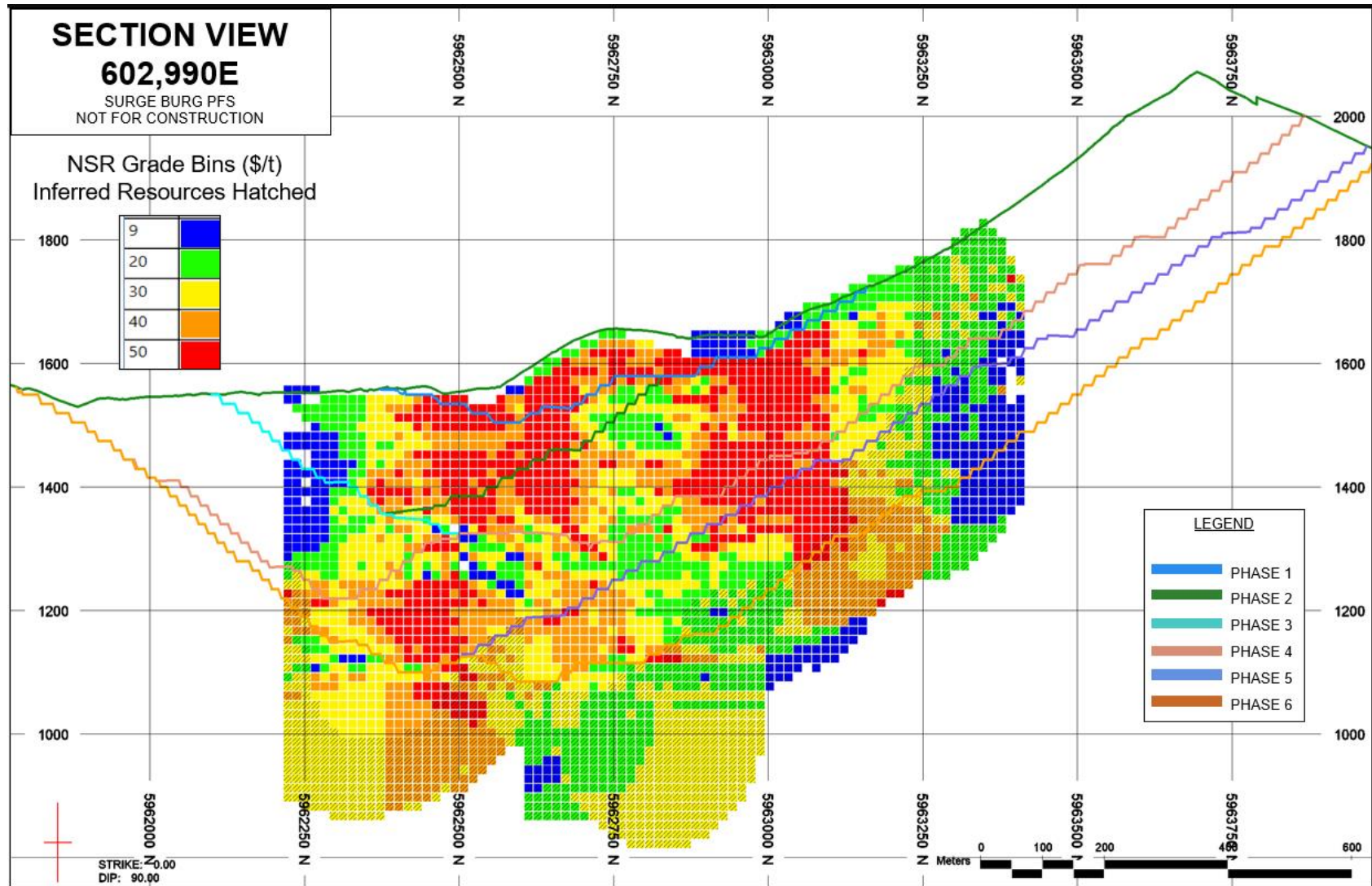
Source: MMTS, 2026

Figure 16-8: Nested Pit Phases



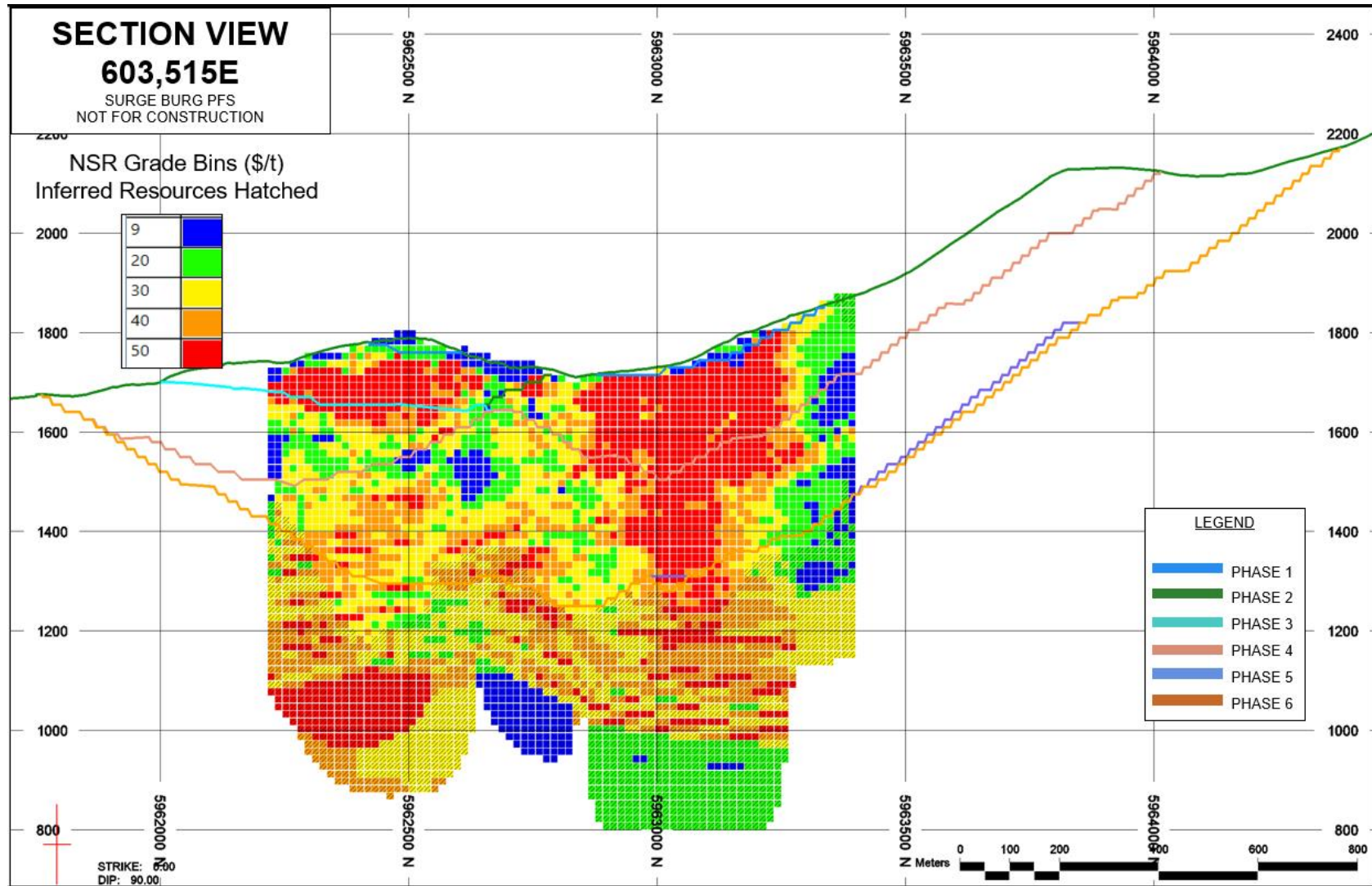
Source: MMTS, 2026

Figure 16-9: North-South Section, 602,990E Looking West



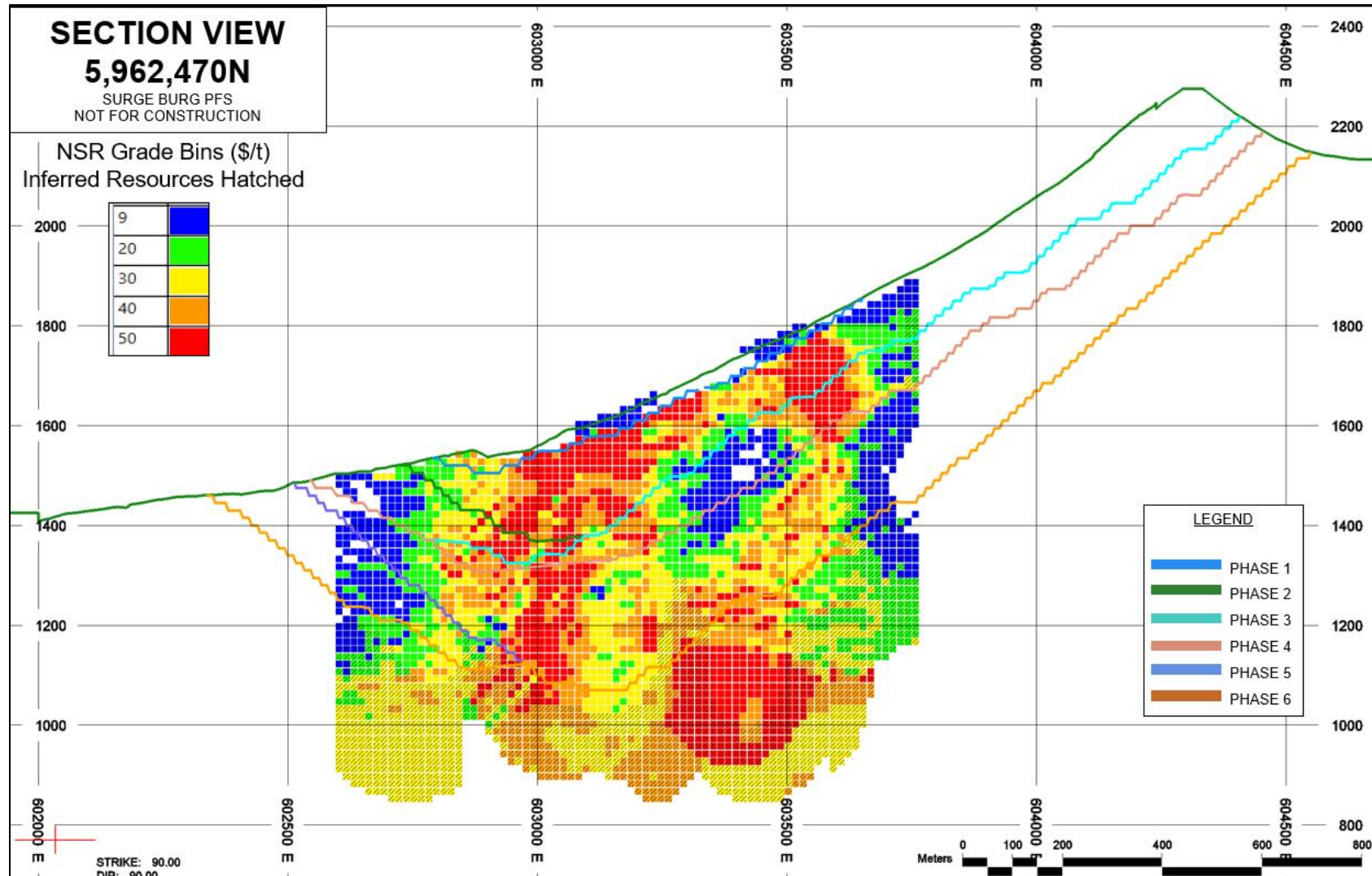
Source: MMTS, 2026

Figure 16-10: North-South Section, 603,515E Looking West



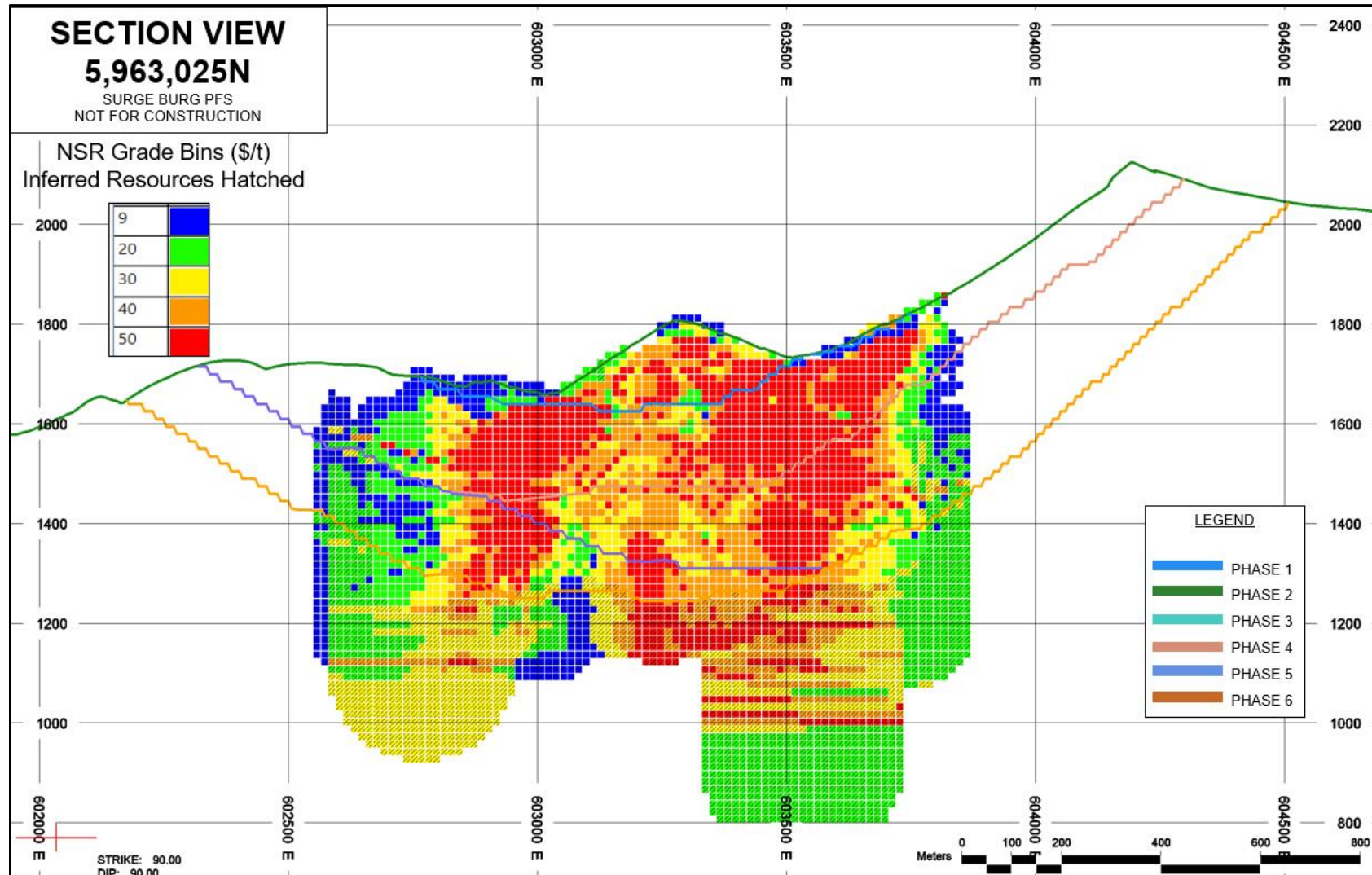
Source: MMTS, 2026

Figure 16-11: East-West Section, 5,962,470N Looking North



Source: MMTS, 2026

Figure 16-12: East-West Section, 5,963,025N Looking North



Source: MMTS, 2026

16.5 Ore storage facilities

When ore is mined from the pit, it will either be delivered to the crusher, the run-of-mine (ROM) stockpile located next to the crusher, or the low-grade ore stockpile (LGO SP).

The crusher and ROM stockpiles are located <500 m west of the pit limits.

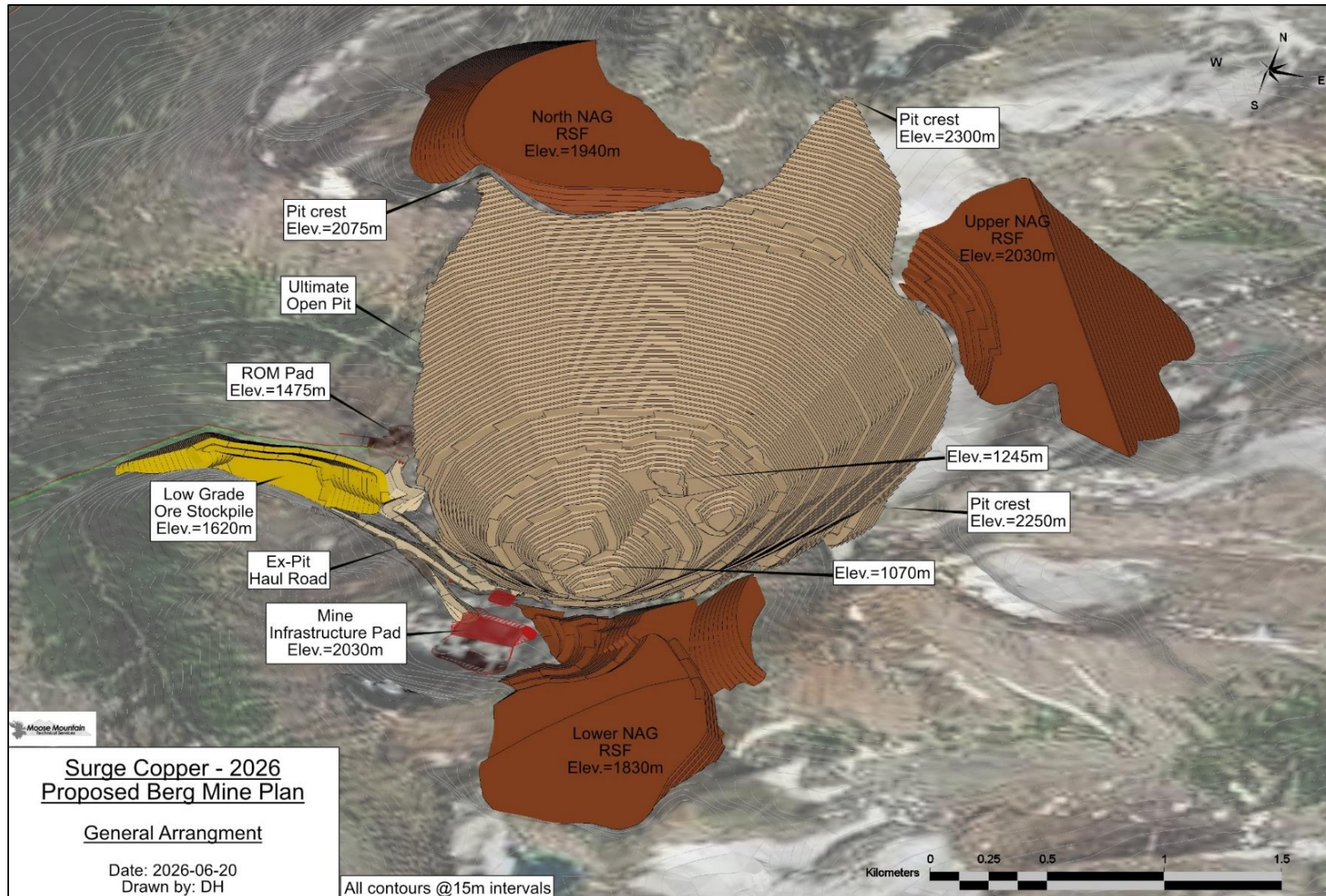
During the construction phase, prior to mill start-up, all ore mined in the pit will be stockpiled in an LGO SP located directly south of the ROM pad, shown in Figure 16-13. Most of this stockpile will be used to supplement mill feed requirements at initial mill start-up. The LGO SP is planned to be used throughout the rest of the mine life, with ore sent to and reclaimed from the pile over time. All stockpiled ore is planned to be rehandled back to the crusher by the final year of pit mining.

The foundation of the LGO SP will be prepared with spreading a thin layer of low-grade mineralized waste rock as a base. The pile is keyed into a hillside on the south and this foundation layer will be maintained up the hillside as the pile is raised. The facility assumes bottom-up construction and top-down reclamation, active piles slopes of 37-degrees and a storage density of 2.0 t/m³. At maximum capacity, 60 Mt over the life of mine, the pile carries a 1,620 m elevation crest and a maximum height of 300 m in the west. A 35-m wide haul road accessing each of the pile's lifts is incorporated in the north side of the pile and can be accessed from external haul roads at the top and bottom of the pile. This haul road pushes the overall pile slope out to 27 to 30-degrees across the pile face.

Preliminary stability analysis has been conducted for this facility and suggests a minimum factor of safety of 1.3 can be achieved with overall slope angles of 30-degrees. It has been assumed that all surface contact water with the LGO SP will be collected and managed throughout the life of the mine.

As this low-grade ore is planned to be sitting on surface and exposed to air and precipitation over several years, it is recommended that PAG and metal leaching tests be completed on this material. Testing the metallurgical effects of long-term weathering on this material is also recommended.

Figure 16-13: Mining General Arrangement



Source: MMTS, 2026

This delineation line is moved a further 50 m toward the pit highwalls, or outwards from the centre of the porphyry deposit, to make a more conservative estimate of the boundary and account for any variation in the in-situ rock transition. All mined materials within this 50 m altered boundary are categorized as PAG, and all material between the boundary and the pit highwall are categorized as NAG.

Overburden, defined above a modelled bedrock contact shape, also uses the same criteria for PAG or NAG. The mine plan waste management strategy does not distinguish between overburden and bedrock. All wasted resources within the open pit, all Inferred Class resources as well as some low-grade Measured and Indicated resources, are treated as PAG waste rock.

It is recommended that future field programs collect additional ABA sample data in the planned waste materials, as well as integrate results of longer timeline acid-base accounting test work, to better define expected PAG and NAG quantities.

16.6.2 Waste rock destinations

PAG waste rock will be sent to a dedicated waste ROM pad for crushing and conveyance to the TWMF for permanent storage. This waste ROM will be located directly adjacent to the ore ROM.

A portion of the NAG waste rock and overburden will also be sent to the waste ROM pad for crushing and conveyance to the TWMF to be used for dam construction. The mine plan is constrained to maximum annual quantity of PAG plus NAG waste rock sent to the waste ROM for crushing and conveying. Some NAG waste rock will also be used during the construction period to construct mine haul roads connecting the pit rim with the ROM pad, mine infrastructure pad, LGO SP, and the waste facilities. Three separate Waste RSF are planned for the remaining mined NAG waste rock.

16.6.3 NAG waste rock storage facilities

NAG overburden and waste rock are planned to be stored in one of three facilities located directly adjacent to the pit. The north NAG RSF and Upper NAG RSF are planned to store NAG waste mined from the upper benches of the pit and are located directly north and directly northwest of the open pit, respectively. The Lower NAG RSF, located directly south of the open pit, is planned to store all NAG waste rock mined from mid to lower benches of the open pit, generally anything below the 1,920 m bench elevation. The storage facilities are shown in Figure 16-13.

Design considerations for the Lower NAG RSF:

- 15-m lift heights
- 37-degree active slopes
- 8-m wide berms between lifts, flattening the slopes to 30-degrees
- 35-m wide haul roads on the west side of the pile to access all lifts, pushing the overall slope to under 24-degrees
- Storage density of 2.0 t/m³
- A crest elevation of 1,830 m, with a maximum facility height of 260 m
- Any NAG waste from the pit above the 1,800 m elevation will be placed as a wraparound dump at the pit elevation it comes out of. A higher crest elevation of 1,920 m on the northeast side of this facility is for these side slope constructed portions
- Storage capacity of 250 Mt.

Preliminary stability analysis has been conducted for this facility and suggests a minimum factor of safety of 1.3 can be achieved with overall slope angles of 30-degrees.

Design considerations for the North and Upper NAG RSF:

- Side slope construction, with material end dumped into facility from the pit exits
- 37-degree active slopes
- Storage density of 2.0 t/m³
- North RSF crest elevation of 1,940 m, with a maximum facility height of 390 m
- North RSF storage capacity of 265 Mt
- Upper RSF crest elevation of 2,030 m, with a maximum facility height of 430 m
- Upper RSF storage capacity of 340 Mt

The North and Upper NAG RSF are planned to partially sit on top of retreating glaciers. It is currently not possible to provide glacier ice deformation estimates in response to waste rock loading or adequate estimates of facility stability. It is expected that the waste rock piles will sink into the ice and move with it. These deformations may cause significant interruptions to operations and incur additional costs. RSFs which exhibit continued deformation (creep) are difficult to manage during project closure phases and may require significant effort to stabilize in the long term.

All RSF facilities have operational flexibility to expand their footprint and/or height, should future design iterations require expansion.

It is recommended to further evaluate foundation conditions for the North and Upper NAG RSF facilities. Design mitigation options for placing waste rock on the retreating glaciers will be required. Either the glacier ice will need to be excavated away, or a downslope shear key will need to be constructed. Site investigations will be required to better define either option as well as the potential impacts to the mine plan.

It is recommended to conduct site investigations for all planned storage facilities to further characterize the geotechnical hydrogeological foundation conditions. No rockfill underdrains have been included in the designs and costs at this stage, but, depending on the results of further site investigations, may be required.

16.7 Ex-pit haul roads

Mine haul roads external to the open pits are designed to haul ore and waste materials from the open pits to the ROM pad, mine infrastructure pad, LGO SP, and the Lower NAG RSF waste facility. Ex-pit haul road from the pit to the North and Upper NAG RSF waste facilities are incorporated into the piles themselves.

The mine haul roads are designed with the following key inputs:

- 42 m wide ex-pit haul roads that incorporate a dual-lane running width and berms on both edges of the haul road.
- Sized to handle 360 t payload rigid-frame haul trucks.
- 10% maximum grade.

The designed ex-pit haul roads are illustrated in Figure 16-13.

Haul road routes will be initially pioneered by dozers. The roads will be expanded into full width mine haul roads by means of end-dumping with suitable NAG waste rock from the pit or cut out of hillsides and filled back in with a NAG waste rock base and running surface.

16.8 Production schedule

Production requirements by period, mine operating considerations, product prices, recoveries, destination capacities, equipment performance, haul cycle times and operating costs are used to determine the optimal production schedule from the pit phase Mineral Reserves.

The production schedule is run using the following parameters:

- The Mineral Reserve estimate quantities are split by pit phase and bench;
- Annual periods are scheduled out over the life of mine:
 - Quarterly period detail is scheduled out for the pre-production and Years 1 and 2.
- An annual mill feed rate of 43.8 Mt (120 kt/d) is targeted.
- Target mill throughput rates ramp up in the first year of milling, as follows:
 - Year 1, Quarter 1 targets 3.6 Mt (33% nameplate);
 - Year 1, Quarter 2 targets 7.2 Mt (66% nameplate);
 - Year 1, Quarter 3 targets 9.6 Mt (88% nameplate);
 - Year 1, Quarter 4 targets 12.0 Mt (109% nameplate);
- Sustained 109% throughput through Year 4 of the project, then 100% from Year 5 to LOM.
 - Mill throughput design is based on ore hardness characteristics of the Hypogene ore material.
 - Years 1 to 4 mill feed is primarily made up of Supergene material with a relatively softer ore hardness and is estimated to have an increased mill throughput rate.
 - From Year 5 onwards, the mill feed is primarily made up of Hypogene material.
- 20 Mt of NAG waste rock mined in the pre-production for TWMPF dam construction needs.
 - 180 Mt of NAG waste rock required to expand the TWMPF dam over the LOM.
- Within a given phase, each bench is fully mined before progressing to the next bench;
- Pit phases are mined in sequence, where the second pit phase does not mine below the first pit phase;
- Pit phase vertical progression is limited to no more than 165 m in each year, 11 x 15 m benches:
 - Average annual vertical phase progression is 75 m, 5 x 15 m benches;
- Ore tonnes released in excess of the mill capacity are stockpiled;
- Low-grade ore is stockpiled and rehandled to the crusher before the end of mine life.
- Shovel and haul truck operating hour estimates are run as part of the mine schedule. Haul cycle times are simulated from all pit benches to all destinations. Total pit production is balanced on calculated hauler operating hour requirements. This strategy is used to avoid large spikes and dips in the number of haulers in the LOM schedule but leads to some variations in total tonnes mined in each period. Cycle time simulations should be refined in future engineering studies.

The overall production schedule is included as Table 16-5. Years -3 to -1 are labelled as the pre-production construction period (Const.) and Years 1 to 28 are the operating period (Op.).

The mill feed production tonnage and grade forecast is illustrated in Figure 16-15; The projected material mined and waste to ore ratio is illustrated in Figure 16-16. The mining sequence through the various pit phases is illustrated in Figure 16-17.

16.8.1 Cut-off grade optimization

The mine production schedule utilizes the LGO SP to store lower-grade ore in the early years of the plan, increasing mill feed grades in these critical economic periods. As part of this optimization, 53 Mt of Measured and Indicated resources between \$9.25/t NSR and \$26/t NSR grade have also been wasted. Storage of this material in the LGO SP, instead of wasting it, would overflow the PFS mine plan LGO SP capacity. There's opportunity to further stockpile low-grade resources in the early years of the project to slightly improve discounted project economic. A more aggressive stockpiling strategy would require additional stockpile storage space, as well as a better understanding of the metallurgical performance of longer-term stored mineralization.

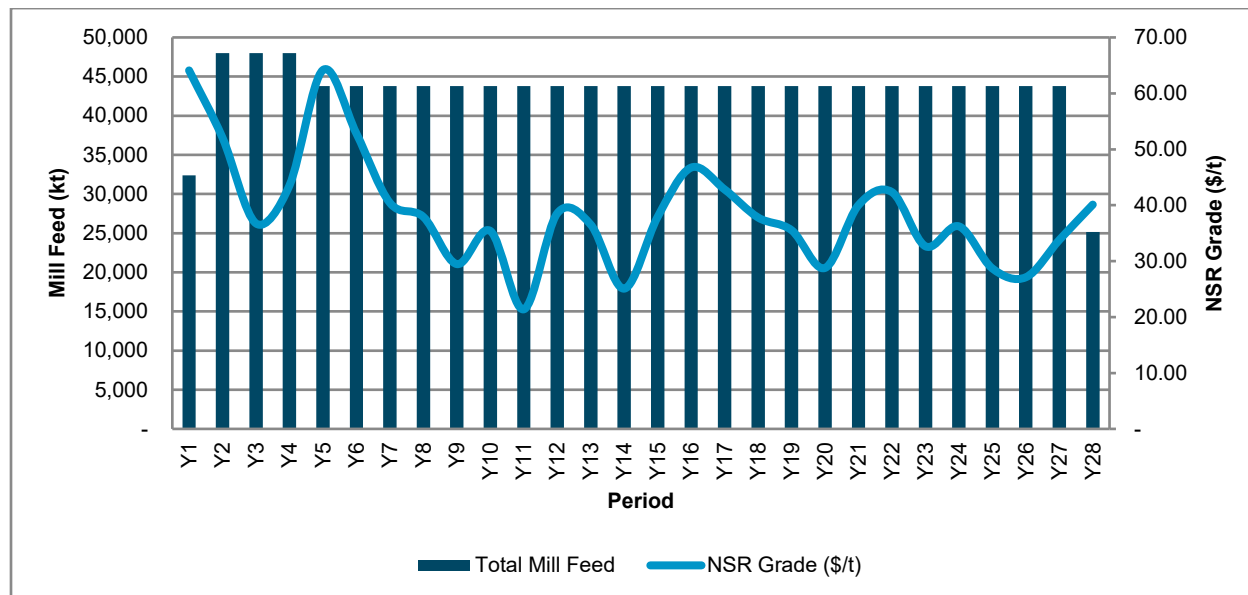
Table 16-5: Mine production schedule (Year -3 to Year 13)

Mine Production	Units	LOM	Construction	Operating	Y-3	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13
Mill Feed	Mt	1,209	0	1,209	0	0	0	32	48	48	48	44	44	44	44	44	44	44	44	44
NSR	\$/t	39	0	39	0	0	0	64	53	37	44	65	53	40	38	29	35	21	39	37
Cu	%	0.22	0.00	0.22	0.00	0.00	0.00	0.40	0.36	0.25	0.30	0.40	0.28	0.21	0.23	0.17	0.19	0.15	0.19	0.21
Mo	%	0.026	0	0.026	0	0	0	0.036	0.026	0.018	0.020	0.035	0.038	0.030	0.021	0.019	0.024	0.009	0.027	0.023
Ag	g/t	4.1	0.0	4.1	0.0	0.0	0.0	5.7	5.0	4.0	4.4	5.5	5.0	4.3	3.6	3.3	4.2	3.0	5.2	4.3
Au	g/t	0.02	0.00	0.02	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.04	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.02
Ore Mined from Pit	Mt	1,209	39	1,170	5	24	10	17	49	25	61	73	59	44	40	42	45	4	44	50
NSR	\$/t	39	53	38	50	51	58	54	50	37	38	48	43	40	39	30	35	34	38	34
Ore Mined Directly to Mill	Mt	977	0	977	0	0	0	9	32	23	48	44	44	44	40	42	44	4	44	44
NSR	\$/t	41	0	41	0	0	0	66	58	39	44	64	53	40	40	30	35	34	39	37
Ore Mined to LGO SP	Mt	232	39	193	5	24	10	8	17	1	13	30	16	0	0	0	1	0	1	7
NSR	\$/t	27	53	22	50	51	58	42	35	15	17	23	17	0	17	0	18	0	14	16
LGO SP Retrieval to Mill	Mt	232	0	232	0	0	0	24	16	25	0	0	0	0	4	2	0	40	0	0
NSR	\$/t	27	0	27	0	0	0	63	39	35	0	0	0	0	20	20	0	20	0	0
LGO SP Balance	Mt		38	0	5	29	38	21	23	1	14	44	60	60	56	54	56	16	17	24
NSR	\$/t		54	0	50	51	54	43	37	19	17	21	20	20	20	20	20	20	20	19
Waste Mined	Mt	2,409	304	2,105	58	106	140	100	84	108	89	127	121	137	138	145	123	126	123	86
Waste Ratio																				
(Waste/Ore Mined)		2.0	7.8	1.8	11.6	4.5	13.5	5.9	1.7	4.3	1.4	1.7	2.0	3.1	3.4	3.4	2.7	30.5	2.8	1.7
Cumulative Waste Ratio					11.6	5.7	7.8	7.2	4.7	4.6	3.6	3.1	2.9	2.9	3.0	3.0	3.0	3.2	3.2	3.0
Total Material Mined	Mt	3,618	343	3,274	63	130	150	117	133	132	150	200	180	180	179	187	168	130	168	136
Total Material Moved	Mt	3,850	343	3,506	63	130	150	141	149	157	150	200	180	180	183	189	168	170	168	136

Table 16-6: Mine production schedule (Year 14 to Year 28)

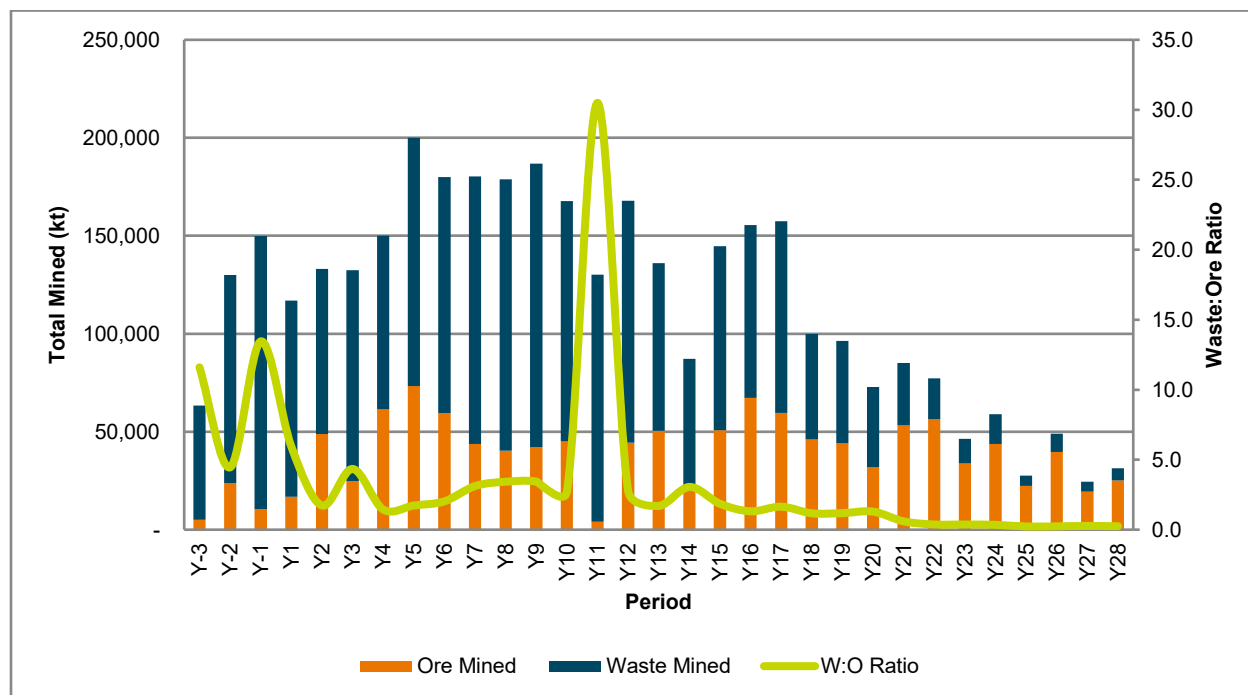
Mine Production	Units	LOM	Construction	Operating	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Y21	Y22	Y23	Y24	Y25	Y26	Y27	Y28
Mill Feed	Mt	1,209	0	1,209	44	44	44	44	44	44	44	44	44	44	44	44	44	44	25
NSR	\$/t	39	0	39	25	38	47	43	38	36	29	40	42	33	36	29	27	34	40
Cu	%	0.22	0.00	0.22	0.17	0.23	0.26	0.22	0.20	0.19	0.16	0.20	0.19	0.16	0.17	0.15	0.13	0.16	0.15
Mo	%	0.026	0	0.026	0.012	0.019	0.030	0.031	0.028	0.027	0.019	0.029	0.034	0.026	0.032	0.023	0.022	0.031	0.045
Ag	g/t	4.1	0.0	4.1	3.0	4.0	4.3	4.1	3.8	3.7	3.6	5.1	5.4	3.8	3.2	3.4	3.5	3.3	3.8
Au	g/t	0.02	0.00	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01
Ore Mined from Pit	Mt	1,209	39	1,170	21	51	67	60	46	44	32	53	56	34	44	22	40	19	25
NSR	\$/t	39	53	38	32	35	37	36	37	35	33	36	37	37	36	39	34	42	40
Ore Mined Directly to Mill	Mt	977	0	977	21	44	44	44	44	44	21	44	44	34	44	22	22	19	25
NSR	\$/t	41	0	41	32	38	47	43	38	36	41	40	42	37	36	39	36	42	40
Ore Mined to LGO SP	Mt	232	39	193	0	7	23	16	2	0	11	9	13	0	0	0	17	0	0
NSR	\$/t	27	53	22	15	16	18	18	18	16	19	18	19	11	16	52	31	0	0
LGO SP Retrieval to Mill	Mt	232	0	232	22	0	0	0	0	0	23	0	0	10	0	21	22	24	0
NSR	\$/t	27	0	27	19	0	0	0	0	0	18	0	0	18	18	18	18	28	0
LGO SP Balance	Mt		38	0	1	8	32	47	50	50	38	47	60	50	50	29	24	0	0
NSR	\$/t		54	0	19	17	18	18	18	18	18	18	18	18	18	18	28	0	0
Waste Mined	Mt	2,409	304	2,105	66	94	88	98	54	52	41	32	21	12	15	5	9	5	6
Waste Ratio																			
(Waste/Ore Mined)		2.0	7.8	1.8	3.1	1.9	1.3	1.6	1.2	1.2	1.3	0.6	0.4	0.4	0.3	0.2	0.2	0.3	0.2
Cumulative Waste Ratio					3.0	3.0	2.8	2.7	2.6	2.6	2.5	2.4	2.3	2.2	2.2	2.1	2.1	2.0	2.0
Total Material Mined	Mt	3,618	343	3,274	87	145	156	157	100	96	73	85	77	46	59	28	49	25	31
Total Material Moved	Mt	3,850	343	3,506	110	145	156	157	100	96	95	85	77	56	59	49	71	49	31

Figure 16-15: Planned Mill Feed Tonnes and Grade



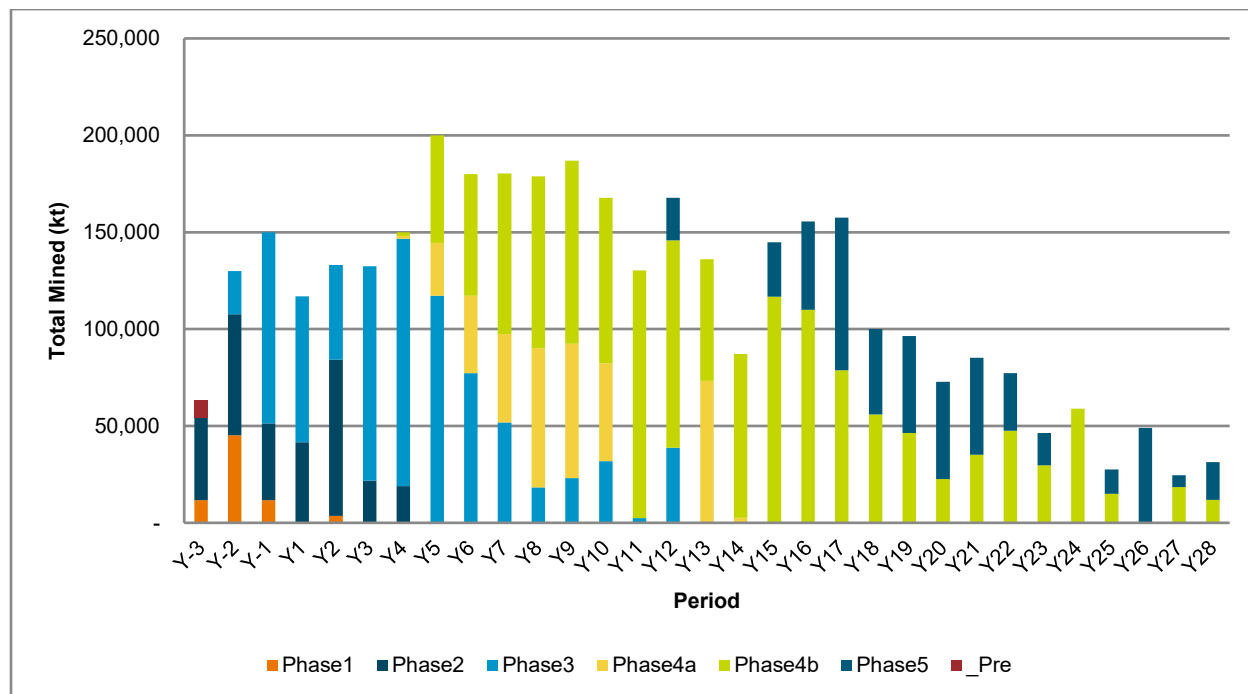
Source: MMTS, 2026

Figure 16-16: Planned Material Mined and Waste Mining Ratio



Source: MMTS, 2026

Figure 16-17: Planned Pit Phase Development Sequence



Source: MMTS, 2026

16.8.2 Mine sequence

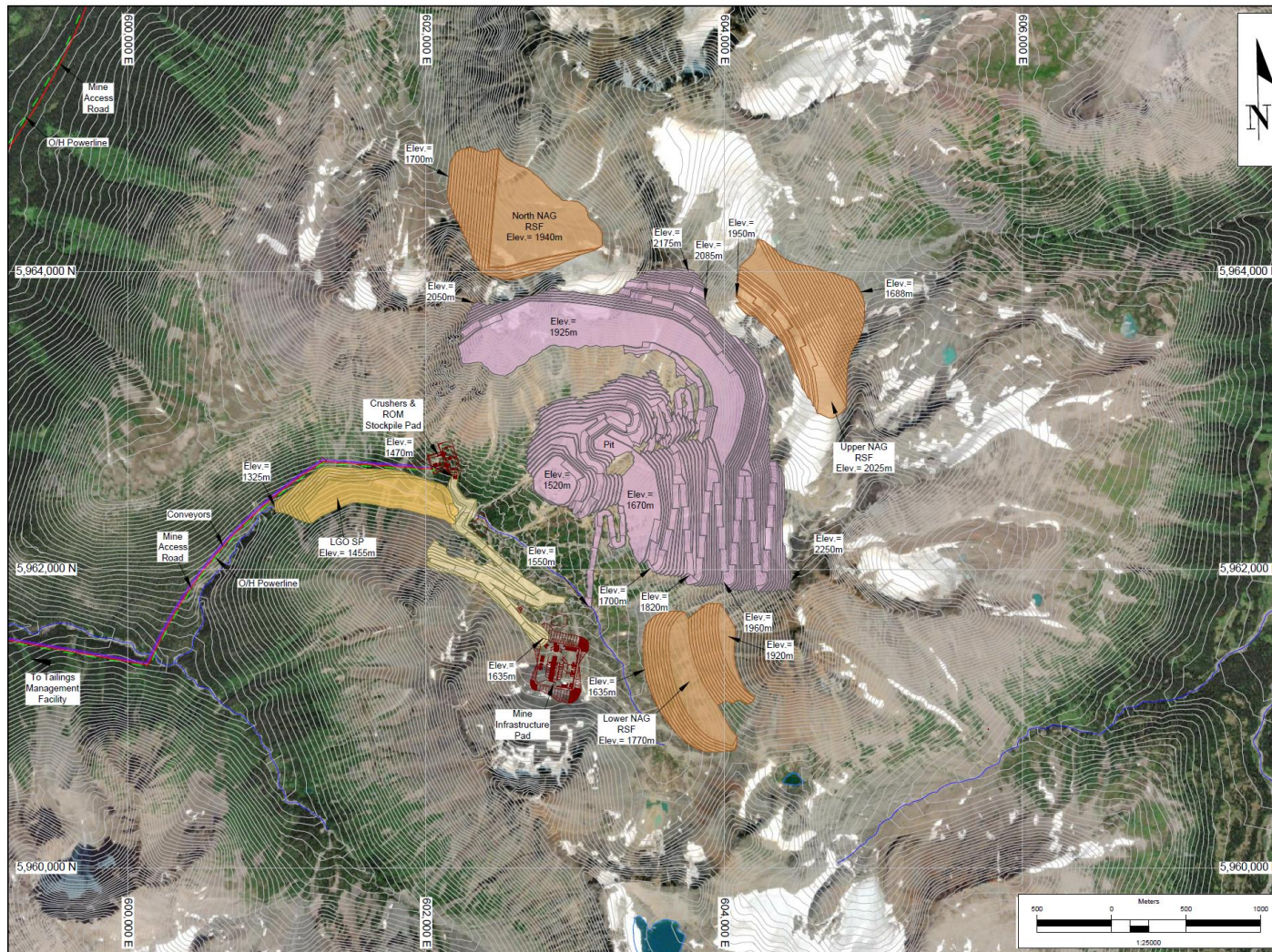
The pit operations will run for 31 years, including three full years of pre-production during the construction period. End-of-period (EOP) layouts for Year -1, Year 1, Year 3, Year 5, Year 10, Year 20, and end of mine life are illustrated in Figure 16-18 to Figure 16-24.

Figure 16-18: EOP Mine Operations, Y-1



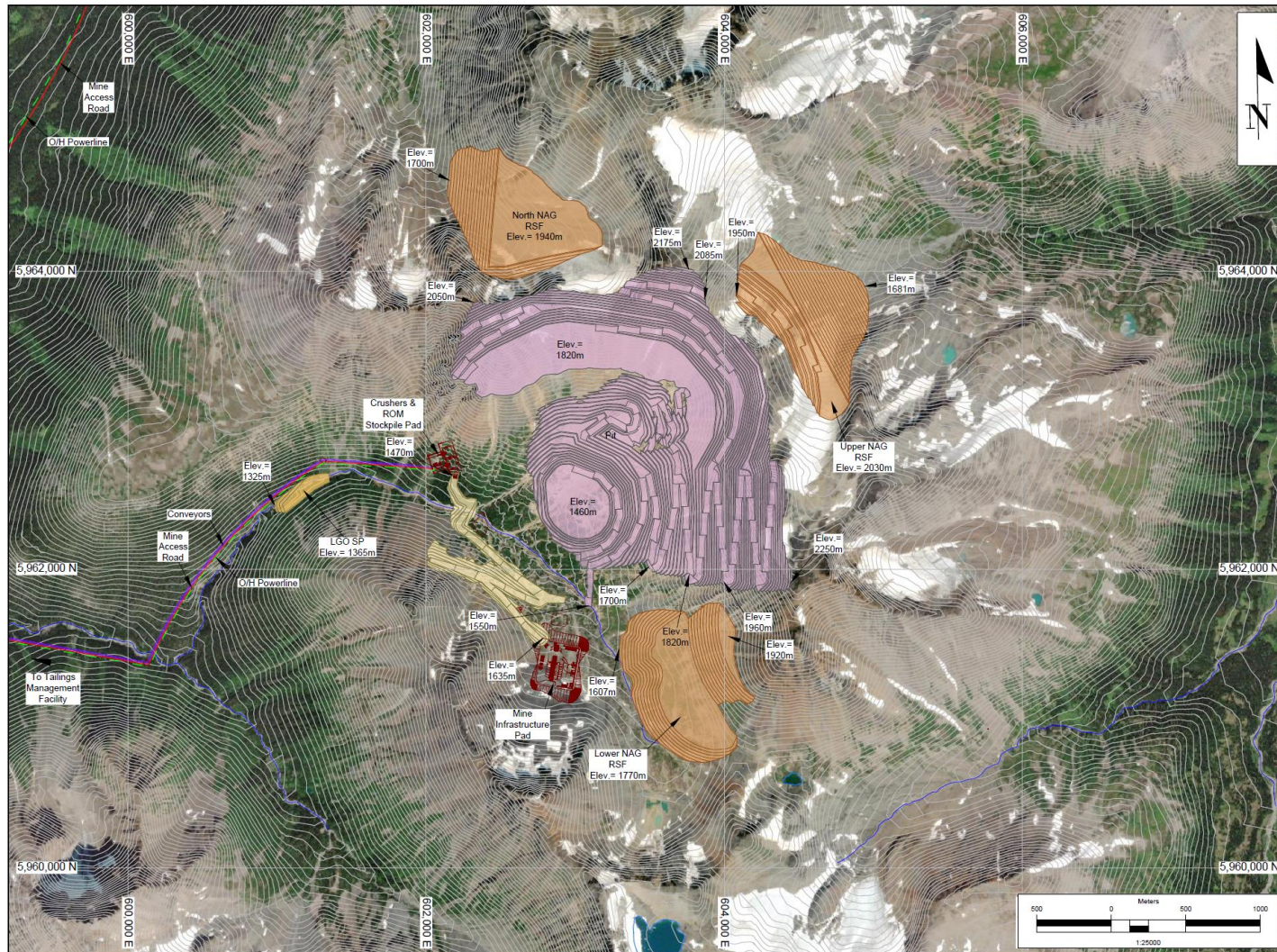
Source: MMTS, 2026

Figure 16-19: EOP Mine Operations, Y1



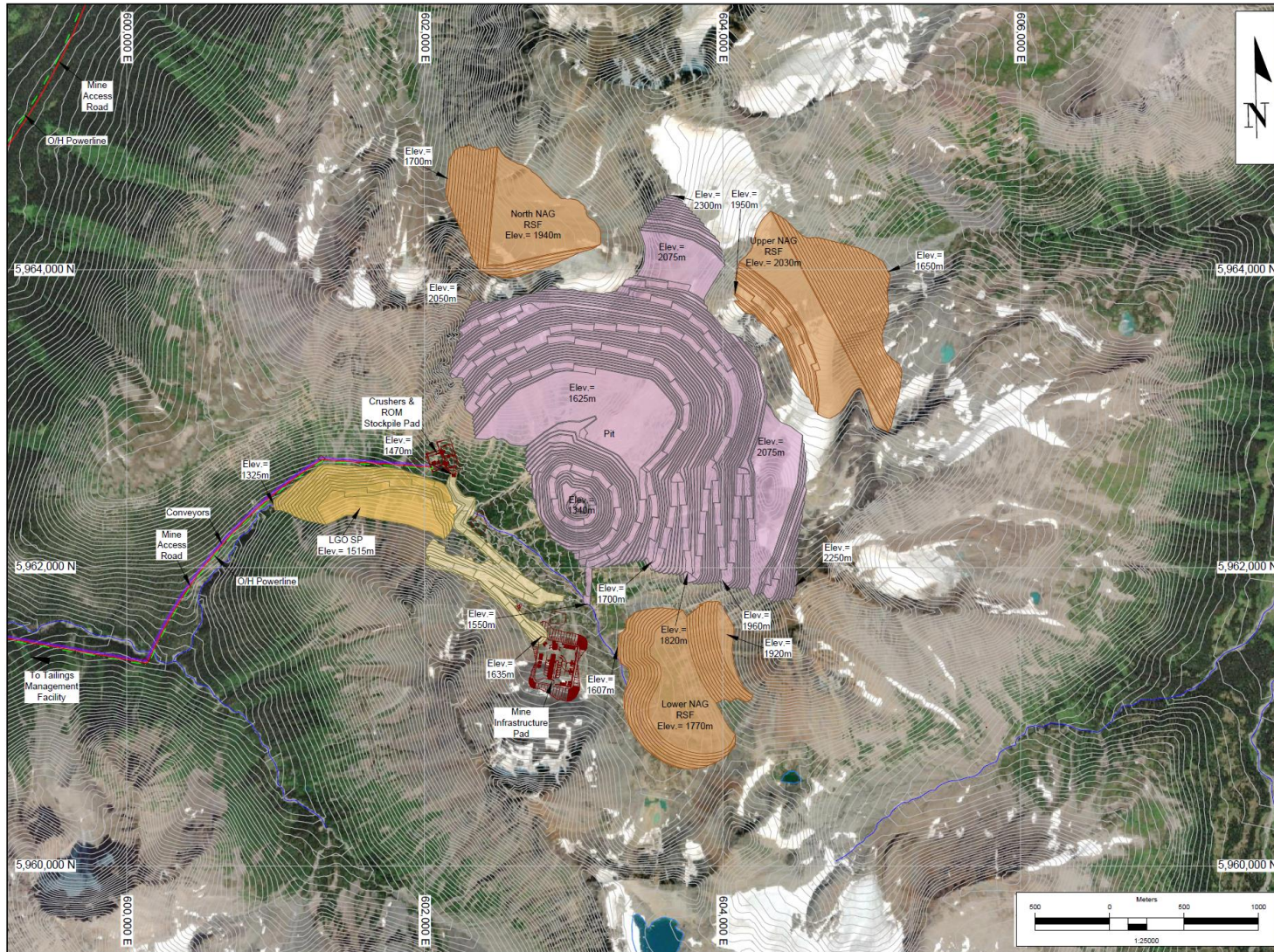
Source: MMTS, 2026

Figure 16-20: EOP Mine Operations, Y3



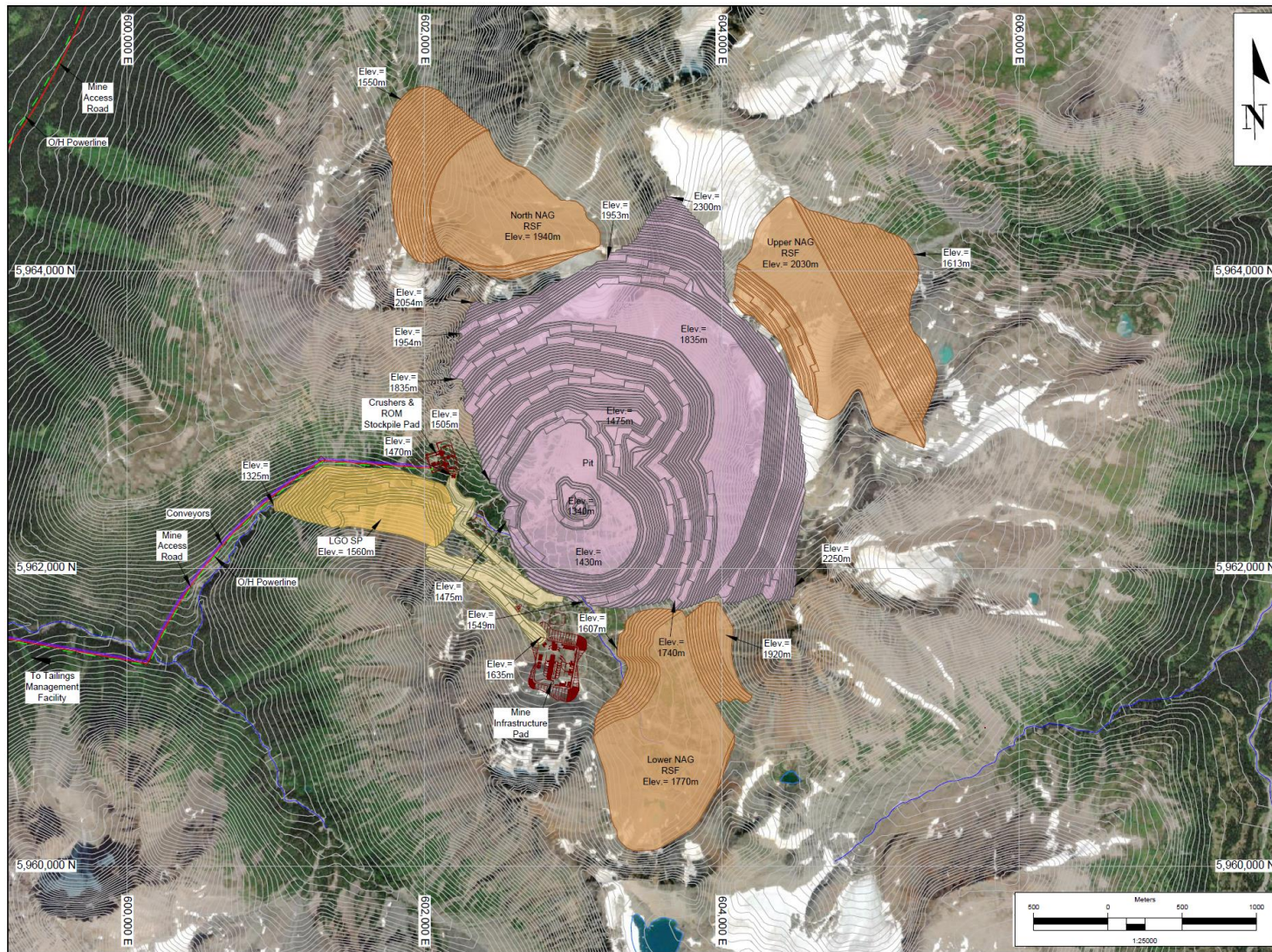
Source: MMTS, 2026

Figure 16-21: EOP Mine Operations, Y5



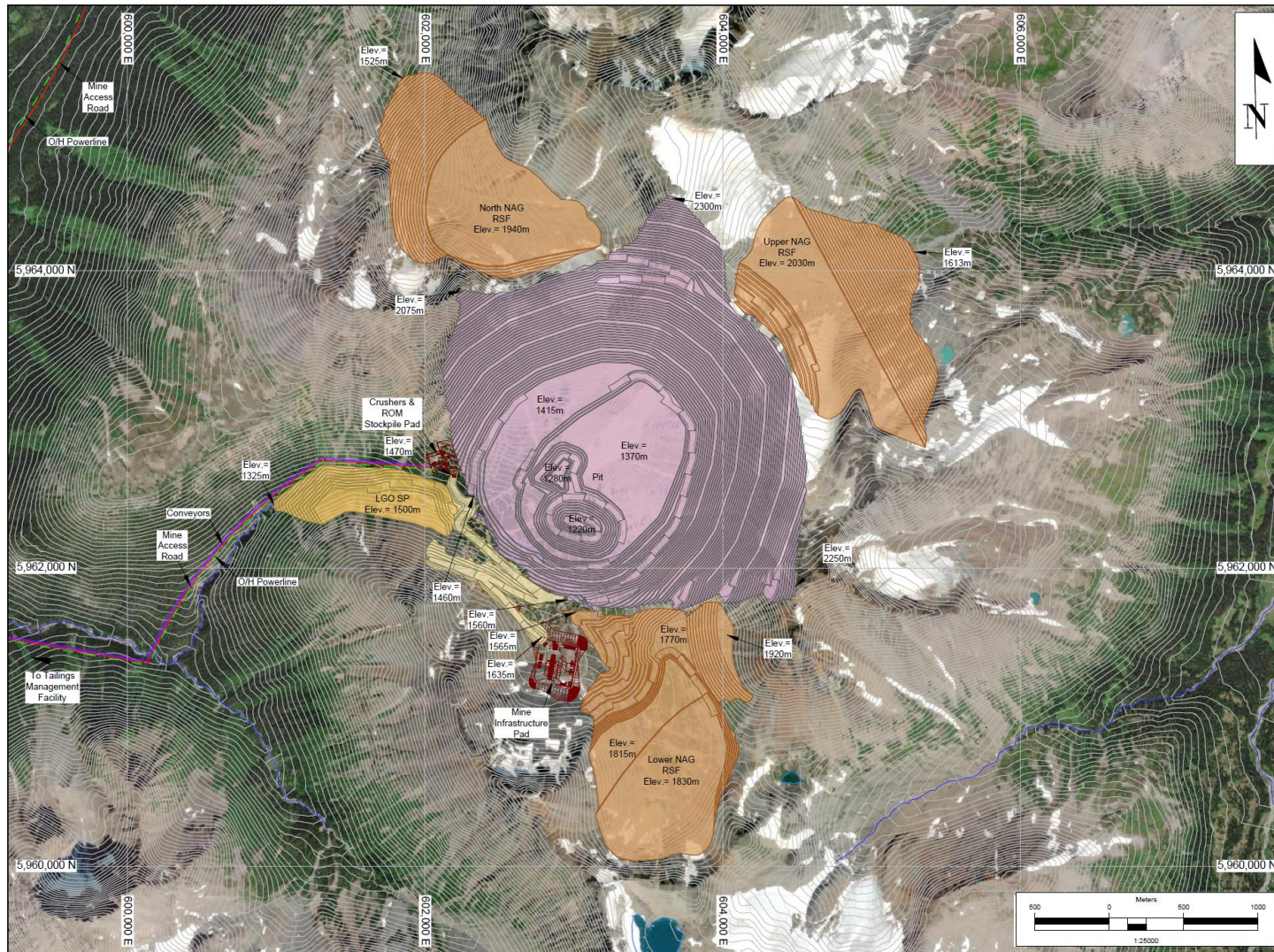
Source: MMTS, 2026

Figure 16-22: EOP Mine Operations, Y10



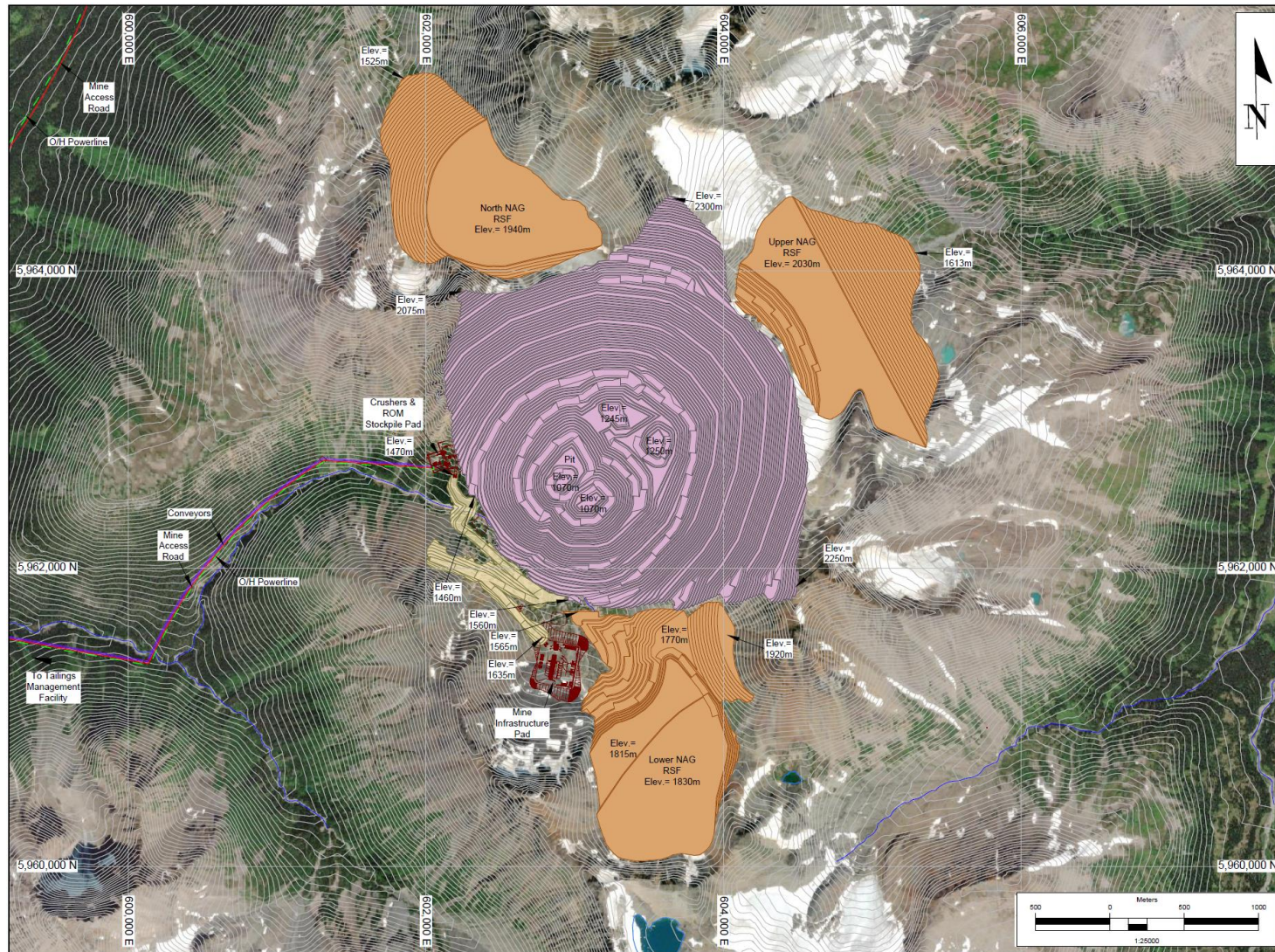
Source: MMTS, 2026

Figure 16-23: EOP Mine Operations, Y20



Source: MMTS, 2026

Figure 16-24: EOP Mine Operations, Y28



Source: MMTS, 2026

16.8.3 Mine Development Scenario Evaluation

A series of mine development concepts and schedule iterations have been prepared to support selection and optimization of the Project development plan. Early-stage evaluations considered a range of process-plant throughput rates and phased-development concepts, together with corresponding order-of-magnitude requirements for processing facilities, site infrastructure, and mine development.

Following a selection of a nominal process-plant throughput of 120,000 tonnes per day as the PFS design basis, additional mine plan and production schedule iterations have been prepared to evaluate pit-phase sequencing, stockpiling strategies, pre-stripping requirements, mining fleet acquisition and deployment, and the application of variable cut-off grades during different periods of mine development. The alternatives have been compared using physical, operational, and economic criteria over selected evaluation periods, including the initial five years, the initial ten years and the life of mine.

The mine production schedule selected as the PFS design case incorporates an owner-operated mining fleet acquired during the early years of the Project and sufficient advance waste stripping to support access to higher-value mill feed and increased metal production during the early operating period. Among the alternatives evaluated, the selected schedule provides the preferred overall balance of initial capital requirements, capital timing, early production, mine operating efficiency, execution considerations, and Project economics.

Other schedule iterations illustrate trade-offs between these evaluation criteria. For example, a slower ramp-up of mining activities and staged acquisition of the mining fleet could reduce or defer portions of the initial mining capital requirement and produce a smoother mine production profile but would also reduce early metal production and alter the timing of Project cash flows. These alternative scenarios have not been carried forward as the PFS design case and have not been developed to the same level of detail as the mine plan presented in this technical report.

The evaluations demonstrate potential flexibility in the timing of mine development, pre-stripping, and fleet deployment. Additional optimization of these matters may be undertaken during subsequent stages of engineering; however, the Mineral Reserve estimate, capital and operating cost estimates, and economic analysis presented in this technical report are based solely on the selected PFS mine plan.

16.9 Mine operations

The planned owner operated mining operations are to be typical of large-scale open-pit operations in similar terrain of British Columbia.

In situ rock will be drilled and blasted on 15 m benches to create suitable fragmentation for efficient loading and hauling of both ore and waste rock. No drilling or blasting is planned for the overburden materials, although there may be a requirement for minimal frost blasting in the winter months. Electric rotary drills are used for production drilling, with support from diesel-powered rotary drills. Tertiary diesel-powered down-the-hole (DTH) drills are also included for highwall geotechnical drilling, and for pre-shearing or buffer blasting on the pit walls to prevent overbreak of the wall and to maintain its overall stability and integrity. Pioneer drills will be utilized for developing cut roads and blasting on small benches at the tops of pit phases.

Alternate drill and blast patterns are planned for ore and waste, with target powder factors of 0.38 kg/t and 0.28 kg/t respectively. The higher powder factor in ore is planned to achieve better fragmentation for feed

into the primary crusher. The blasting activities are planned to fall under a contract service agreement with the explosive supplier. The supplier will provide the blasting materials and technology for the mine, including the blasting trucks. An explosive plant has not been scoped for this project, with the assumption that materials will be delivered to site from other nearby regional plants. The supplier is anticipated to store raw materials and mix explosive on site. Explosive storage is planned northeast of the process plant, off the site access road. A mixed emulsion type of explosive is assumed for blasting in both wet and dry conditions. The blasting crew loads the holes and performs the blasting operations. It is recommended to conduct drill penetration and blast fragmentation studies on the various Berg rock types as part of further project engineering.

Blasthole cuttings will be assayed on regular intervals, with results informing an operational grade control block model, which will influence short to medium range mine planning. Systems onboard the drills and shovels will allow for delineation of ore from waste at the face, based on the grade control plans from the technical services team.

Blasted ore and waste from the open pits will be loaded into haul trucks by electric cable shovels as the primary loading units. Diesel-powered hydraulic shovels are included in the fleet to load ore and to provide flexibility to the fleet. A wheel loader is also specified for rehandling material, loading overburden, pit clean up, road construction, snow removal, or as an alternative for loading trucks in the pit if periodic low shovel availability requires it. The wheel loader will also support ROM pad activities, as needed.

Ore and waste will be hauled out of the pit and to scheduled destinations with 360-tonne payload off-highway rigid-frame haul trucks.

Fuel and electricity will both be distributed into the open pit to power the mobile mine fleet.

Mine pit services will include:

- Haul road maintenance;
- Shovel face maintenance;
- Pit floor and ramp maintenance;
- Waste and ore facility pile maintenance;
- Mobile fuel and lube services;
- Electric cable support for shovels and drills;
- Ditching;
- Dewatering;
- Secondary blasting and rock breaking;
- Snow removal;
- Reclamation and environmental control;
- Lighting;
- Transporting personnel and operating supplies;
- Mine rescue.

Direct mining operations, mine equipment fleet ownership, mine fleet maintenance, and technical services are all planned and costed as owner-managed functions.

Mining operations are based on 365 operating days per year with two 12-hour shifts per day. An allowance of 10 days of no production is built into the mine schedule to allow for adverse weather conditions and unplanned shutdowns.

The number of hourly mine operations personnel, including hourly maintenance personnel, will peak at 460 persons. Due to the shift rotation, only one-quarter of full personnel complement will be on shift at a given time. Salaried personnel of 51 persons will be required for mine operations, including the mine and maintenance supervision, mine engineering, and geology departments.

16.9.1 Pit dewatering

Water inflows to the Berg open pit will include both groundwater and surface water runoff. The contributions from groundwater will progressively increase as the pit extends below the groundwater table. The contributions from surface water will be direct precipitation into the pit and runoff from the limited contributing catchments around the pit excavation. The inflows from direct precipitation will increase with increasing pit area in conjunction with groundwater inflows as the pit increases in depth.

A combination of in-pit and perimeter pumping wells will be used for slope depressurization and pit dewatering. Pumping wells will typically be installed to a nominal depth of 50 m below ground level.

The in-pit groundwater wells will target water removal from underground storage in higher permeability zones and groundwater inflow to the higher permeability zones from the surrounding lower permeability bedrock. Perimeter dewatering wells will be established as needed to lower and extend the cone of depression to provide the required depressurization for pit wall stability. 20 dewatering wells, spaced within and around the pit to achieve an adequate cone of depression to lower the groundwater level, have been planned.

The maximum groundwater dewatering rates are estimated to be 125 L/s as the open pit is expanded over the life of mine.

In-pit water from surface runoff will be directed via in-pit ditching and grading towards actively progressing in-pit sumps. Skid-mounted diesel dewatering pumps will transfer this water via in-pit piping to ex-pit collection ponds adjacent to the pit, where it will be managed as per the overall site water management plan.

16.10 Mine equipment

The mine equipment descriptions are based on typical fleet contingents utilized in other large-scale North American open-pit mine operations. It is expected that equipment specifications and fleet sizes will be reviewed and may be updated as further project engineering and optimization are completed.

Production drilling will be carried out with 305 mm (12") electric driven rotary drills, with support from 305 mm (12") diesel driven rotary drills. Highwall control and depressurization drilling will be carried out with 200 mm (8") down-the-hole (DTH) drills. Smaller tracked pioneer drills will be employed as needed throughout the mine life.

Electric cable shovels (49 m³ bucket) are proposed as the primary loading units to keep operating costs as low as possible. Hydraulic face shovels (36 m³ bucket) are proposed to support the cable shovels, based on their ability to minimize losses and dilution along waste and mineralization contact, and to navigate into tighter mining areas. A front-end wheel loader (25 m³ bucket) is proposed to provide additional loading flexibility, and to provide the ability to load the crusher when required.

Rigid-frame haulers (360 tonne payload) are proposed. While the current mining plan envisions a diesel-powered haul truck fleet, it is expected that at the time of a construction decision, sufficient electric alternatives will be available for purchase. Most of the life-of-mine (LOM) hauls are downhill loaded to the ROM pad, which is an ideal scenario for an electric powered fleet, either via trolley assistance, or battery combined with trolley assistance.

Graders will be used to maintain the haul routes for the haul trucks and other equipment within the pits and on all routes to the various waste storage locations and the crusher. Rigid-frame haul trucks outfitted with a water tank (170,000 L) are included for haul road maintenance. Track dozers (600 kW and 450 kW) are included to handle waste rock at the various waste storage locations and to support the in-pit activities, including cutting roadways to access the upper benches of the open pit. Wheel dozers (550 kW) will support maintenance at the shovel faces, and along the pit floors. Front-end wheel loaders with a cable reeler attachment will support electrical distribution to the drills and shovels. Hydraulic excavators (4.5 m³ and 3.0 m³ bucket) are included as pit support, grade control support, and pioneer mining support. Articulated haul trucks (40 t payload) are included as a support hauler for overburden, as well as accessing smaller pit mining areas such as pit bottoms of initial bench access when bench diving. Custom fuel/lube trucks are included for mobile fuel/lube support. Various small mobile equipment pieces are proposed to handle all other pit service and mobile equipment maintenance functions.

Mine fleet maintenance activities are generally performed in the maintenance facilities located on the mine infrastructure pad located <500 m southwest of the pit limits. Maintenance for the larger pieces of equipment, such as shovels and drills, is done in the field by a mobile maintenance crew.

Estimated mine fleet requirements are summarized in Table 16-7 and Table 16-8.

Table 16-7: Primary mining fleet schedule

	Y-3	Y-2	Y-1	Y1-3	Y4-7	Y8-Y11	Y12-Y13	Y14 -Y17	Y18 -Y21	Y22 -Y28
Drilling										
Electric Rotary Drill										
305 mm (12") holes	-	3	3	3	5	5	4	4	2	1
Diesel Rotary Tracked Drill										
305 mm (12") holes	4	4	4	4	5	5	5	4	4	3
Diesel DTH Tracked Drill										
200 mm (8") holes	3	3	3	3	3	3	3	2	1	1
Loading										
Electric Cable Shovel										
49 m ³ bucket	-	2	2	2	3	3	3	3	2	2
Diesel Hydraulic Shovel										
36 m ³ bucket	2	3	3	3	3	3	3	3	3	3
Wheel Loader										
25 m ³ bucket	2	2	2	2	3	2	2	2	1	1
Hauling										
Rigid-Frame Haul Truck										
360 t payload	19	27	34	34	34	34	34	34	18	18
Articulated Haul Truck										
40 t payload	4	4	4	4	4	4	4	4	4	2
Haul Road Maintenance/ Stockpile Maintenance/ Construction Support										
Motor Grader										
5.4 m blade	3	3	4	4	4	4	4	4	4	4
Water/Gravel Truck										
170,000 L	2	3	3	3	3	3	3	3	2	2
Track Dozer										
650 kW	2	2	2	2	2	2	1	1	1	1
Track Dozer										
450 kW	2	2	2	3	3	3	3	3	2	2
Wheel Dozer										
550 kW	1	3	3	3	3	3	3	3	2	1

Table 16-8: Mining support equipment

Unit	Function	Maximum Units
Motor Grader (4.9 m blade)	Haul Road Maintenance, Bench Floor Maintenance, Snow Clearing	2
Wheel Loader (7 m ³)	Pit Maintenance, Shovel Support, Snow Clearing, Site Prep, Construction	3
Hydraulic Excavator (4.5 m ³)	Ore Cleaning, Prep for Ore Loading, Pit Support	1
Hydraulic Excavator (3 m ³)	Ditching, Construction Activities	2
Fuel and Lube Truck	Fuel/lube support of excavators, wheel loader, drills and support equipment	3
Shuttle Bus	Employee Transportation	4
Pickup Trucks	Staff Transportation	15
Light Plants (6 kW)	Pit Lighting	9
Water Pumps (150 m ³ /h)	Pit Sump Dewatering	6
On-highway Dump Truck	Utility Material Movement, Snow Clearing	2
Flatbed Picker Truck	Material Transport, Pump Crew Support	1
Emergency Response Vehicle	First Aid and Mine Rescue	1
Maintenance Trucks	Mobile Maintenance crew and tool transport	4
Mobile Crane (30 t capacity)	Mobile Maintenance material handling	1
Float Trailer (125 t capacity)	Equipment Transport	1
Forklift (15 t capacity)	Shop Material and Tire Handling	1
Scissor Lift	Maintenance Support	1
Mobile Manlift	Mobile Maintenance Support	1

17 Recovery methods

17.1 Overview

Based on the analysis of past metallurgical testing, discussed in Section 13, and Ausenco's process design expertise, a conventional copper-molybdenum flotation process was chosen as the most suitable for the deposit and project economics. The unit operations selected are typical for copper-molybdenum recovery and the proposed flowsheet uses standard processes and technologies.

The process beneficiates copper and molybdenum from both supergene and hypogene materials. Key process design parameters include:

Nominal throughput of 120,000 t/d or 43.8 Mt/a

Bulk rougher flotation to be conducted at a feed sizing of 80% passing 160 µm.

17.2 Process plant description

The process design is comprised of the following circuits:

- Two-stage crushing of ROM material
- A crushed ore covered longitudinal stockpile to provide buffer capacity ahead of the grinding circuit
- SAG milling with trommel screen and pebble recycle followed by ball milling with cyclone classification
- Copper and molybdenum bulk flotation with coarse and fine regrinding prior to cleaner flotation
- Copper - molybdenum separation flotation
- Thickening, filtration and loading of copper concentrate
- Thickening, filtration, drying and loading of molybdenum concentrate
- Tailings pumping and disposal to a tailings management facility.

17.2.1 Process design criteria

The design criteria developed for the copper/molybdenum flotation plant is presented in Table 17-1.

Table 17-1: Process design criteria

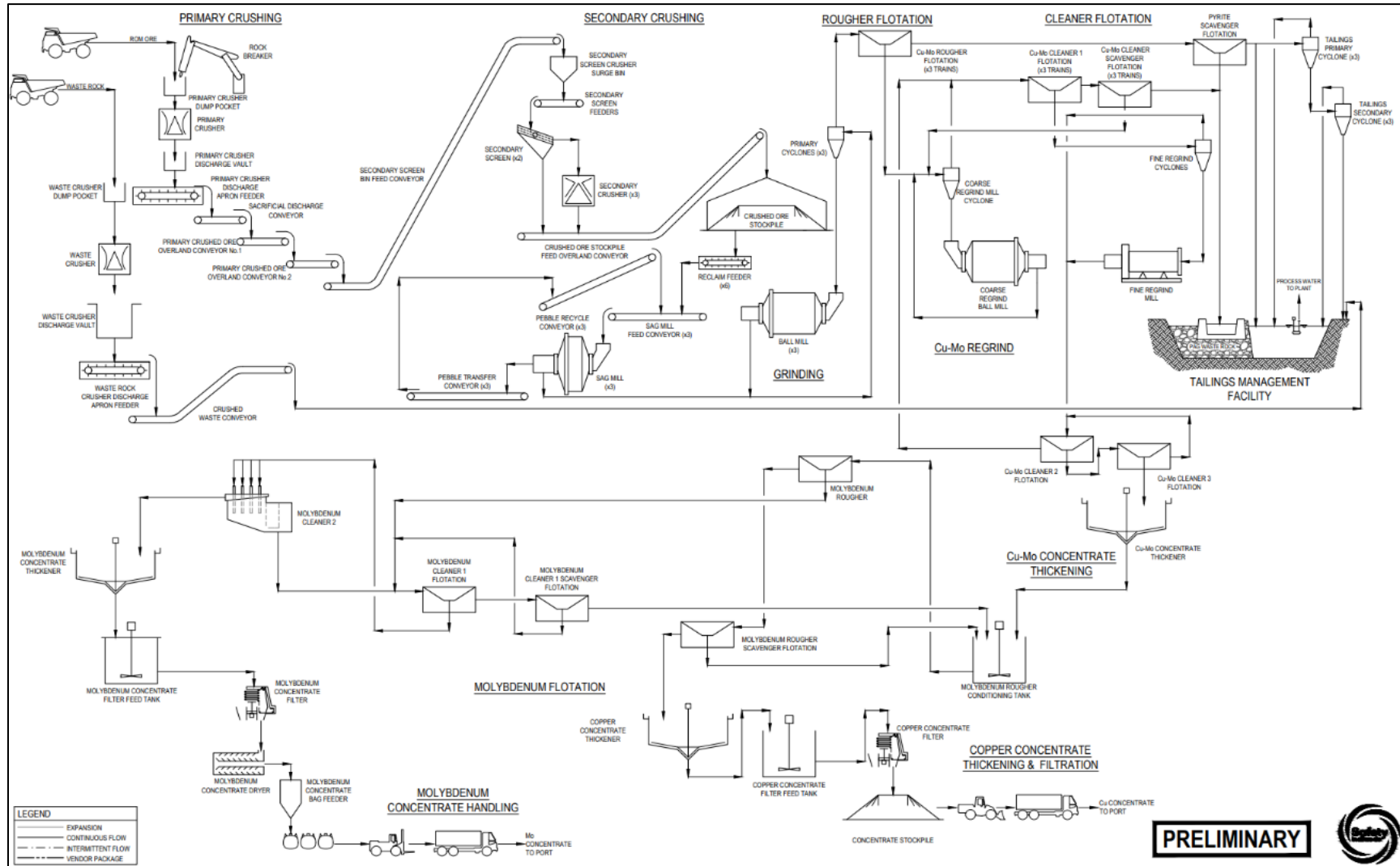
Description	Units	Value
Annual throughput	Mt/a	43.8
Daily throughput	kt/d	120
ROM head grade, copper – design	% Cu	0.33
ROM head grade, molybdenum – design	% Mo	0.034
Crushing and grinding circuit	-	2C-SAB
Crushing availability	%	75
Grinding and flotation availability	%	92
Concentrate filtration availability	%	85
Crushing plant capacity, for design (dry)	t/h	7,667
ROM feed size, F100	mm	1,000
Bond crushing work index, design	kWh/t	19.1

Description	Units	Value
Primary crushing product size, P ₈₀	mm	529
Secondary crushing feed size, F ₁₀₀	mm	425
Secondary crushing product size, P ₈₀	mm	166
Grinding circuit	-	3 operating lines
Grinding plant capacity, for design (dry)	t/h	5,435
JK Drop Weight Axb value – design	-	26.2
Bond rod mill work index – design	kWh/t	23.9
Bond ball mill work index – design	kWh/t	17.7
Bond abrasion index – design	g	0.16
Grinding circuit feed size, F ₈₀	mm	50
Grinding circuit product size, P ₈₀	µm	160
SAG Mill Specific Energy	kWh/t	9.6
Ball Mill specific energy	kWh/t	10.0
Copper-Moly rougher	-	3 operating lines, tank cells
Copper-Moly rougher residence time, design	min	20
Pyrite scavenger	-	3 operating line, tank cells
Pyrite scavenger residence time, design	min	12.5
Copper-Moly primary regrind	Type	Ball mill
Copper-Moly primary regrind circuit product size, P ₈₀	µm	40
Copper-Moly secondary regrind	Type	Fluidized stirred mill
Copper-Moly secondary regrind circuit product size, P ₈₀	µm	20
Copper-Moly bulk cleaner	# stages	3 cleaner stages; tank cells 1 cleaner scavenger stage, tank cell
Molybdenum rougher	-	1 operating line, tank cells
Molybdenum rougher residence time, design	min	17.5
Molybdenum rougher scavenger	-	1 operating line, tank cells
Molybdenum rougher scavenger residence time, design	min	15
Molybdenum bulk cleaner	# stages	2 cleaner stages; tank cell and pneumatic cell 1 cleaner scavenger stage tank cell
Final copper concentrate moisture	% w/w	8
Final copper concentrate grade	% Cu	30
Final molybdenum concentrate moisture	% w/w	5
Final molybdenum concentrate grade	% Mo	50

17.3 Plant design criteria

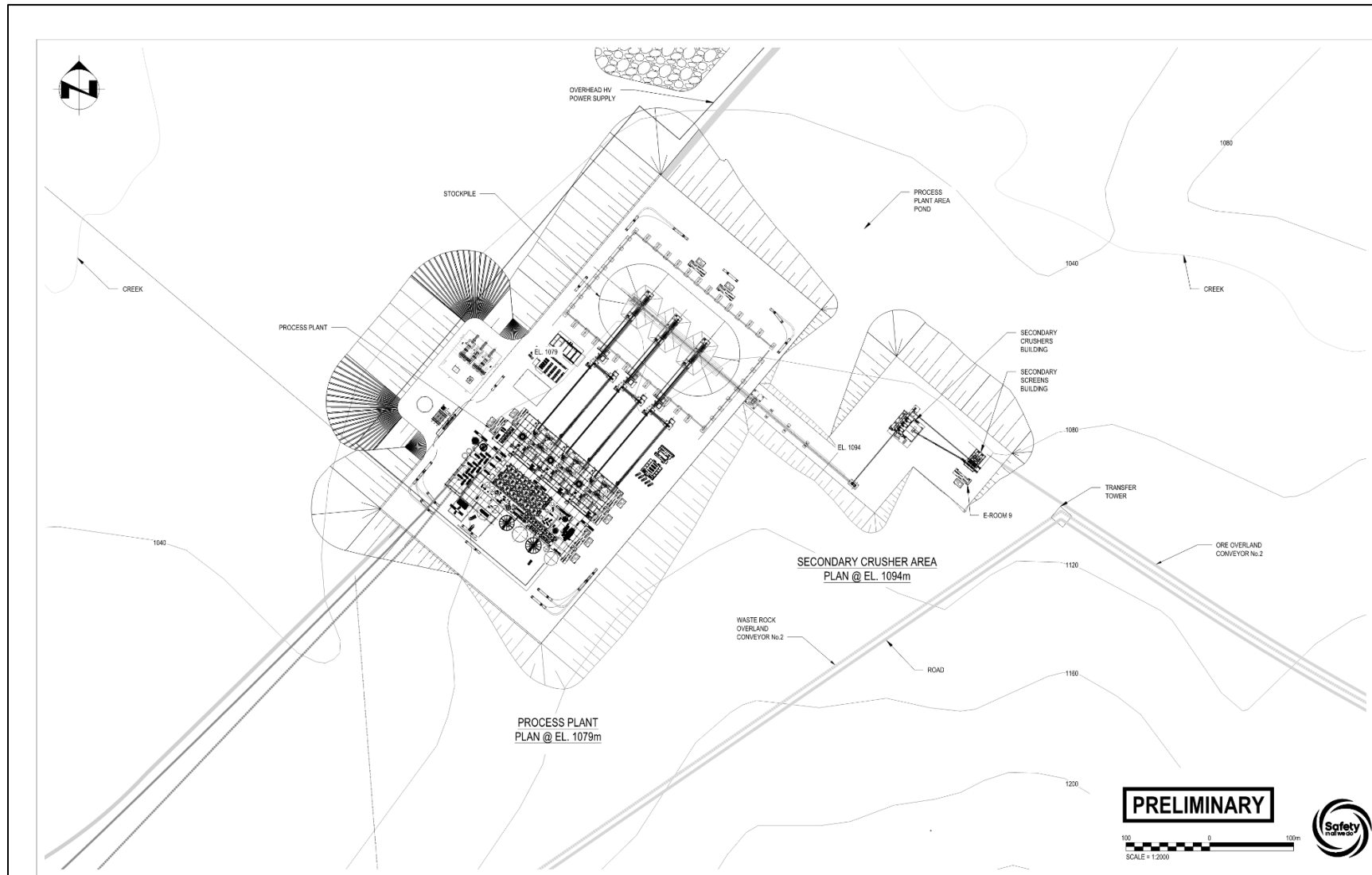
An overall process flow diagram (PFD) showing the unit operations in the process plant is presented in Figure 17-1.

Figure 17-1: Process flowsheet



Source: Ausenco, 2026

Figure 17-2: Process plant layout



Source: Ausenco, 2026

17.4 Plant design

The processing facilities are described in the following sections below.

17.4.1 Crushing circuit

Primary crushing is conducted near the pit boundary limits and reduces run-of-mine (ROM) feed material from 80 percent (F_{80}) passing 529 mm to a P_{80} of 153 mm. ROM material is dumped by haul truck into the primary crusher dump pocket which will feed the primary gyratory crusher. The crushing circuit is designed for an annual operating time of 6,570 h or 75% availability. The circuit is sized for a maximum throughput of 7,667 t/h from the outset of the Project.

The primary crushed material is directed into the primary crusher discharge vault and onto the primary crusher discharge apron feeder. The feeder delivers crushed material to a sacrificial discharge conveyor. A series of three overland conveyors transfers material to the secondary screen crusher surge bin. Secondary screen feeders draw from surge bin to feed two secondary screens and split the oversized material among three secondary cone crushers. Screen undersize and secondary crushed material discharge onto the stockpile feed conveyor which transfer crushed ore to the covered stockpile. Crushed material is distributed across the stockpile with a tripper conveyor. Three lines, each comprising of two reclaim feeders draw from the stockpile to feed each SAG mill feed conveyor.

The crushing, conveying and stockpile circuits include the following major equipment and facilities:

- ROM crusher dump pocket
- A rock breaker
- Primary gyratory crusher (1,200 kW)
- Primary crusher discharge apron feeder (3,048 mm pan width)
- Secondary screens – 2 (double deck)
- Secondary cone crushers – 3 (630 kW each)
- A crushed ore stockpile feed overland conveyor (1,800 mm belt width, three sections, 5.2 km total length)
- A covered feed stockpile (12-hour live capacity, 65,217 t)
- Reclaim feeders – 6 (914 mm belt width each).

17.4.2 Grinding circuit

The grinding circuit has three operating lines, each consisting of a SAG mill feed conveyor followed by a SAG mill and a ball mill in a closed-circuit with hydrocyclones. The circuit is sized based on SAG mill feed size of 80% passing (F_{80}) 50 mm and a ball mill product of 80% passing (P_{80}) 160 μ m. Each SAG mill discharges through a trommel screen, where oversize pebbles are recycled to the SAG mill via a pebble recycle conveyor. Trommel screen undersize discharges into the primary cyclone feed pump box. Water is added to the cyclone feed pump box to maintain an appropriate feed density prior to pumping to the cyclones.

The underflow from the primary cyclone cluster reports to the ball mill feed box along with sodium cyanide, lime, diesel and collector. Each ball mill discharges through a trommel, and the oversize is screened out and transferred to a scats bunker, whereas the trommel undersize discharges into the corresponding cyclone feed pump box.

The overflow from the primary cyclone cluster reports to the primary cyclone trash screen prior to advancing to the bulk copper-molybdenum flotation circuit.

Major equipment in this area includes:

- SAG mill feed conveyors – 3 (1,800 mm belt width, 215 m total length each)
- SAG mills – 3 (20 MW each)
- Ball mills – 3 (20 MW each)
- Primary cyclone clusters – 3 (10 operating and two standby cyclones each).

17.4.3 Bulk copper-molybdenum flotation

The copper-molybdenum bulk flotation has three operating lines consisting of rougher flotation cells, pyrite scavenger cells, coarse concentrate regrind circuit, fine concentrate regrind circuit, three-stage copper-moly cleaner flotation cells and copper-moly scavenger flotation cells.

The overflow from the primary cyclone cluster reports to the rougher cell feed box along with frother. Process water and flotation (low-pressure) air is added to each of the cells to maintain a desired pulp density in each cell and initiate bubble formation required for flotation.

The rougher concentrate is collected from each rougher cell and pumped to coarse regrinding, while the tailings are directed to the pyrite scavenger flotation circuit. Collector is added to the first pyrite scavenger cell in each operating line. The rougher tailings are scavenged in the pyrite flotation circuit to separate the higher-grade sulphur bearing material from the tailings for deposition in a separate section of the tailings storage facility.

Rougher flotation concentrate reports to the coarse regrind mill cyclone feed pump box and pumped to the coarse regrind cyclone cluster. Coarse regrind cyclone underflow reports to the coarse regrind ball mill feed box. Reground material is sent back to the cyclone feed pump box and cyclone overflow reports to the first copper-moly cleaner flotation cells. Tailings from the first cleaner stage reports to the cleaner scavenger stage. Concentrate from the first cleaner and scavenger stages reports to the fine regrind circuit prior to the second and third copper-moly cleaner stages. Third cleaner concentrate reports to the elevated copper-moly concentrate thickener. Cleaner scavenger tailings joins the pyrite rougher concentrate for separate tailings disposal.

Major equipment in this area includes:

- Copper-moly rougher flotation (3 trains of 4 tank cells each)
- Pyrite scavenger flotation (3 trains of 2 tank cells each)
- Coarse concentrate regrind mill (14.5 MW)
- First copper-moly cleaner flotation (4 tank cells)
- Copper-moly cleaner scavenger flotation (2 tank cells)
- Fine concentrate regrind mill (3 MW)
- Second copper-moly cleaner flotation (3 tank cells)
- Third copper-moly cleaner flotation (2 tank cells)
- Copper-moly concentrate thickener

17.4.4 Molybdenum flotation

The molybdenum flotation circuit consists of a conditioning tank, rougher flotation, scavenger flotation, two stages of cleaner and one stage of cleaner scavenger flotation.

The underflow from the copper-moly concentrate thickener is pumped to the molybdenum rougher conditioning tank where NaHS is added. After conditioning, the copper-moly concentrate is pumped to the rougher flotation. A nitrogen gas generation plant provides flotation gas for the copper-moly flotation circuit. The concentrate from rougher flotation is delivered to the first stage of molybdenum cleaner cells and the tailings advances to the rougher scavenger cells. The concentrate from rougher scavenger is recirculated to the rougher conditioning tank and the tailings reports to the copper concentrate thickener.

Tailings from the first cleaner stage reports to the cleaner scavenger stage. The concentrate from the cleaner scavenger stage will go back to the first cleaner stage and the tailings will return to the rougher conditioning tank. Concentrate from the first cleaner stage reports to the second cleaner stage. Second cleaner concentrate reports to the molybdenum concentrate thickener. The tailings from the second cleaner flotation is recirculated to the first cleaner feed.

Major equipment in this area includes:

- Molybdenum rougher flotation (3 tank cells)
- Molybdenum rougher scavenger flotation (2 tank cells each)
- First molybdenum cleaner flotation (3 tank cells)
- Molybdenum cleaner scavenger flotation (1 tank cells)
- Second molybdenum cleaner flotation (1 pneumatic cell).

17.4.5 Copper concentrate handling

Copper concentrate is thickened to 60% w/w solids in the high-rate copper concentrate thickener. Thickener overflow reports to the process water tank. Copper concentrate thickener underflow is pumped to the copper filter feed tank where the copper concentrate slurry passes through a concentrate filter to produce a filter cake with a moisture content of 8% w/w. Filtrate from the copper concentrate filter is pumped back to the copper concentrate thickener. Copper concentrate filter cake is discharged to a covered concentrate loadout stockpile. Copper concentrate is reclaimed by a front-end loader and loaded into containerized highway haulage trucks.

Major equipment in this area includes:

- Copper concentrate thickener
- Copper concentrate filter

17.4.6 Molybdenum concentrate handling

Molybdenum concentrate is thickened to 60% w/w solids in the high-rate molybdenum concentrate thickener. Thickener overflow reports to the process water tank. Molybdenum concentrate thickener underflow is pumped to the molybdenum filter feed tank where the molybdenum concentrate slurry passes through a concentrate filter to produce a filter cake with a moisture content of less than 15% w/w. Filtrate from the molybdenum concentrate filter is pumped back to the molybdenum concentrate thickener. Molybdenum concentrate filter cake reports to the molybdenum concentrate dryer to reduce the moisture content the filter cake to 5% w/w. Dried molybdenum concentrate reports to the molybdenum concentrate

storage bin. Molybdenum concentrate is withdrawn from the storage bin into a packing system. The molybdenum concentrate is bagged and transported by truck.

Major equipment in this area includes:

- Molybdenum concentrate thickener
- Molybdenum concentrate filter
- Molybdenum concentrate dryer.

17.4.7 Tailings handling

The tailings from each train of pyrite scavenger flotation cells reports to a separate tailings collection box. The sulphur depleted tailings in each collection box is pumped to a designated tailings primary cyclone cluster. The tailings primary cyclone overflow is sent directly to the tailings management facility. The underflow is pumped to the tailings secondary mobile cyclone cluster. The tailings secondary mobile cyclone overflow is sent to the tailings management facility. The cyclone underflow sand is used on the south dam to contribute to the dam growth and reinforcement. The pyrite scavenger concentrates and cleaner scavenger tails report to a high pyrite tailings pump box with dedicated pumps delivering the high sulphur tailings to a separate location at the tailings management facility.

Major equipment in this area includes:

- Tailings primary cyclone (3 clusters each comprising of 7 operating and 1 standby cyclones)
- Tailings secondary mobile cyclone (3 clusters each comprising of 8 operating and 2 standby cyclones)

17.4.8 Reagents handling and storage

Reagents used in the process plant and associated areas are described in the following sections. Details on handling and storage are given, along with the estimated yearly consumption for each item.

In general, each set of compatible reagent mixing and storage systems are located within containment areas to prevent spillage and contamination of the environment and unintended mixing with other reagents. Storage tanks are equipped with level indicators, instrumentation, and alarms to ensure spillage does not occur during normal operation. Appropriate ventilation, fire and safety protection, eyewash stations and Safety Data Sheets (SDS) are located throughout the facilities. Sumps and sump pumps are provided in the containment areas for spillage control. Table 17-2 shows the reagents used in the process plant.

Table 17-2: Reagents handling & storage

Reagent	Preparation Method	Used
Lime	Delivered by truck as powdered quicklime, stored in silo, slaked and dosed as a slurry	pH modifier
Potassium Amyl Xanthate (PAX)	Delivered in bulk bags to a mixing tank, diluted to 20% w/w solution, transferred to a storage tank and dosed into flotation	Collector
Methyl Isobutyl Carbinol (MIBC)	Delivered by bulk liquid, transferred into a storage tank and dosed neat into flotation	Frother
Fuel Oil (Diesel)	Delivered by bulk liquid, transferred into a storage tank and dosed into flotation	Mo Collector

Reagent	Preparation Method	Used
Sodium Cyanide	Delivered in bulk bags to a mixing tank, diluted to 30% w/w solution, transferred to a storage tank and dosed into primary grind and regrind	Sulphide depressant
Sulphuric Acid	Delivered in intermediate bulk containers and dosed at various points in molybdenum flotation	Cu-Mo conditioning
Sodium Hydrosulphide	Delivered by bulk liquid at 40% w/w concentration, transferred to a storage tank, diluted to 20% w/w solution and dosed at various points in molybdenum flotation	Copper depressant
BASF Magnaflocc 1011	Delivered in bulk bags to a hopper, diluted at 0.5% w/w and transferred to a mixing tank, diluted to 0.05% w/w, transferred to a storage tank and dosed to each thickener	Flocculant

17.5 Reagents consumables, energy, water and process materials requirements

17.5.1 Energy, water and process materials requirements

Plant services and utilities include air, water, and electricity for the plant and its associated areas. The descriptions of the various services are given below, along with estimated yearly consumption of each type of utility for the plant. The average consumption values over the life of mine are applied where applicable.

17.5.2 Reagents and consumables requirements

Table 17-3 summarizes the annual consumption of reagents and consumables required for operation of the process plant.

Table 17-3: Reagent and comminution consumables consumption

Reagent	Unit	Consumption
Primary Crusher Liners	Sets/a	2
Secondary Crusher Liners	Sets/a	15
Secondary Screen Deck panels	Sets/a	877
SAG Mill Media	t/a	12,515
SAG Mill Liners	Sets/a	6
Ball Mill Media	t/a	16,154
Ball Mill Liners	Sets/a	3
Cu-Mo Primary Regrind Mill Media	t/a	1,104
Cu-Mo Primary Regrind Mill Liners	Sets/a	1
Cu-Mo Secondary Regrind Mill Media	t/a	1,020
Cu-Mo Secondary Regrind Mill Liners	Sets/a	1
Copper Concentrate Filter Cloths	Sets/a	826
Molybdenum Concentrate Filter Cloths	Sets/a	210
Collector (PAX)	t/a	493
Frother (MIBC)	t/a	1,866

Reagent	Unit	Consumption
Fuel Oil (Diesel)	t/a	1,950
Quicklime	t/a	38,761
Sodium Cyanide	t/a	1,105
Sodium Hydrosulphide	t/a	730
Flocculant	t/a	181
Sulphuric Acid	t/a	16
Nitrogen Air	Nm ³ /h	7.74

17.5.3 Process and instrument high-pressure air

Plant air compressors supply air at 860 kPa to various processing plant equipment as needed. An air dryer is used to remove moisture before use in instrumentation. There are dedicated air compressors for concentrate filter, and blowers for the flotation cells. It is expected that a vendor supplied nitrogen plant will be installed to provide flotation gas to the molybdenum circuit.

17.5.4 Fresh water supply system

Fresh water is supplied by Nanika Lake to a fresh/fire water tank. This water is used for a variety of purposes requiring clean water with low dissolved solids and salt content:

- Gland water for pumps
- Reagent make-up
- Fire water used in the sprinkler and hydrant system.
- The total estimated amount of raw water used from the lake per year is 2.06 Mm³.

17.5.5 Process water supply system

Process water supply to the plant consists of recycled overflow streams from the bulk and concentrate thickeners, concentrate filters and reclaim from the tailings management facility. Process water is used for a variety of purposes including:

- Cooling water for mill motors and lubrication systems
- Pulp density control for various process plant unit operations
- Dewatering flocculant in-line mixing and spray water
- Dilution and froth water in the molybdenum circuit.
- The total amount of process water circulated around the plant is 115.51 Mm³/a, or 13,186 m³/h.

17.5.6 Fire water supply system

Fire water is sourced from the fresh/fire water tank. A pump skid with a dedicated electrical pump, a jockey pump, and a diesel-powered pump supplies emergency fire water distribution to the plant.

17.5.7 Projected process plant energy requirements

The total installed power for the process plant and estimated power consumption is given in Table 17-4. Further discussion on the operating costs and power consumption for each area of the process plant is given in Section 18.

Table 17-4: Process plant power requirements

Area	Installed Power (kW)	Consumption (MWh/a)
Waste Rock Crushing	16,988	77,423
Mine Pit Dewatering system	2,952	19,719
Crushing	13,975	50,743
Stockpile & Reclaim	1,482	8,154
Grinding	129,911	797,965
Cu-Mo Flotation & Re grind	55,253	359,717
Copper Thickener, Filtration & Loadout	451	2,873
Molybdenum Flotation	383	2,552
Molybdenum Thickener, Filtration, Drying & Loadout	150	862
Reagents	210	979
Tailings Cycloning	8,443	23,183
Site Services	5,723	28,852
Infrastructure Buildings	800	4,736
Permanent Camp	457	3,066
Total	237,179	1,380,825

18 Project infrastructure

18.1 Introduction

Infrastructure at the Berg Copper Project includes on-site infrastructure such as earthworks development, site facilities and buildings, on-site roads, water management systems, and site electrical power facilities. Off-site infrastructure includes site access roads, fresh water supply, power supply, piping, and tailings storage facility. The site infrastructure includes:

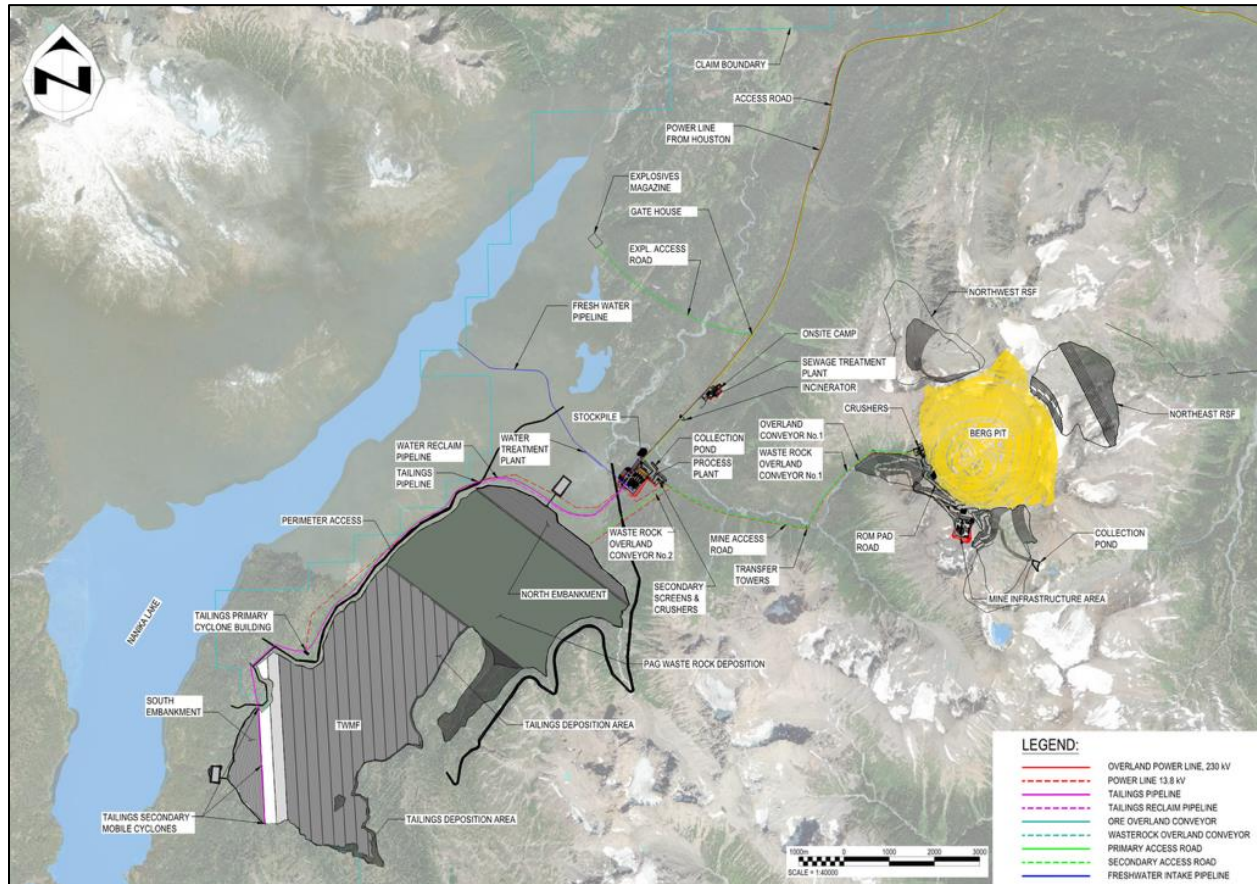
- Mine facilities, including mining administration offices, a mine fleet truck shop and wash bays, a mine workshop, metallurgical laboratory, a mobile equipment fueling station, and common facilities, including an entrance/exit gatehouse, a security/medical office. Overall site administration building, potable water and fire water distribution systems, compressed air, power generation and distribution facilities, communications area, and sanitation systems.
- A near pit ore and waste crushing facility with associated electrical infrastructure.
- Process facilities housed in the process plant, including grinding and classifications, flotation, regrinding, concentrate handling, thickening, dewatering and filtration, drying, reagent mixing and distribution, assay laboratory and process plant workshop and warehouse.
- Other infrastructure includes on-site camp, sewage treatment plant, water treatment plant, TWMF and WRSF.

The overall site layout was developed using the following criteria and factors:

- The facilities described above must be located on the Berg property to the greatest extent possible.
- The location of the process plant is downhill to the Berg open pit to reduce risks and lower operating costs.
- The location of the WRSF must be close to the open pit to reduce haul distance.
- The location of the primary ore and PAG waste crushing must be close to the Berg deposits to reduce haul distance.
- The TWMF should be located at a site that takes advantage of sloped natural terrain to adequately drain entrained water and reduce earthworks, concrete and structural development if possible.
- The arrangement of the administration buildings, mine workshops, processing plant and additional offices should be optimized for foot and vehicle traffic.

The Berg Copper Project layout is shown in Figure 18-1.

Figure 18-1: Overall site plan



Source: Ausenco, 2026

18.2 Off-site Infrastructure

18.2.1 Site access

The Berg Copper Project is located 85 km from the town of Houston, BC. Access to the site is via forest service roads, specifically the Morice Forest Service Road (FSR) and Sibola Forest Service Road. The Morice FSR currently serves as access for industrial use in the region including forestry, the Huckleberry Mine site and active construction of the Coastal Gaslink Pipeline. At the 100 km mark of the Morice FSR begins the Sibola FSR that leads to both Surge's current Sibola exploration camp and the Berg access road. It should be noted that the project is envisioned to access the Berg site via a new created road to the north and west of Mount Ney.

18.2.2 Water supply

Freshwater will be sourced from Nanika Lake. The water will be transported through pumps. A total of 4,200 m of overland pipeline will be installed from Nanika Lake to the process plant where freshwater tanks will be located. This water will be the source of potable water on site, used for the building facilities and process plant.

18.2.3 High voltage power supply

Total installed load of the project is 261 MW and permanent electrical power is provided by a transmission line and connects to the BC Hydro electrical grid. This assumes the right-of-way for transmission lines and estimated alignment and design. The 230-kV transmission line will connect to BC Hydro Telkwa substation at the site before being stepped down to 25 kV for distribution to different power requirements across the project site.

18.2.4 Logistics

The copper concentrate will be transported from the project site to Stewart, BC, where the concentrate will subsequently be transported by sea to clients. Molybdenum concentrate will be transported from the project site to one of several North American or Asian molybdenum smelter locations. Each of the transport options is envisioned to use a mix of truck and rail where possible.

18.3 On-site infrastructure

18.3.1 Site preparation

The infrastructure will be cleared, and the topsoil will be removed before construction. Drains, safety bunds and backfilling with granular material and aggregates for road construction are all elements of the initial site development.

Site civil work includes design for the following infrastructure:

- Roads for light vehicles and heavy equipment
- Access roads
- Topsoil and overburden stockpile area
- Mine facility platforms and process facility platforms
- ROM stockpile area
- TWMF area
- WRSF area
- Water management facilities, ditches, and drainage channels.

18.3.2 On-site roads

The project site has unpaved roads connecting the access road to the gatehouse. New roads will be constructed linking the guard house, the administration buildings, the process plant, the explosive storage buildings, the primary and waste crusher and the TWMF.

18.3.3 Fuel storage

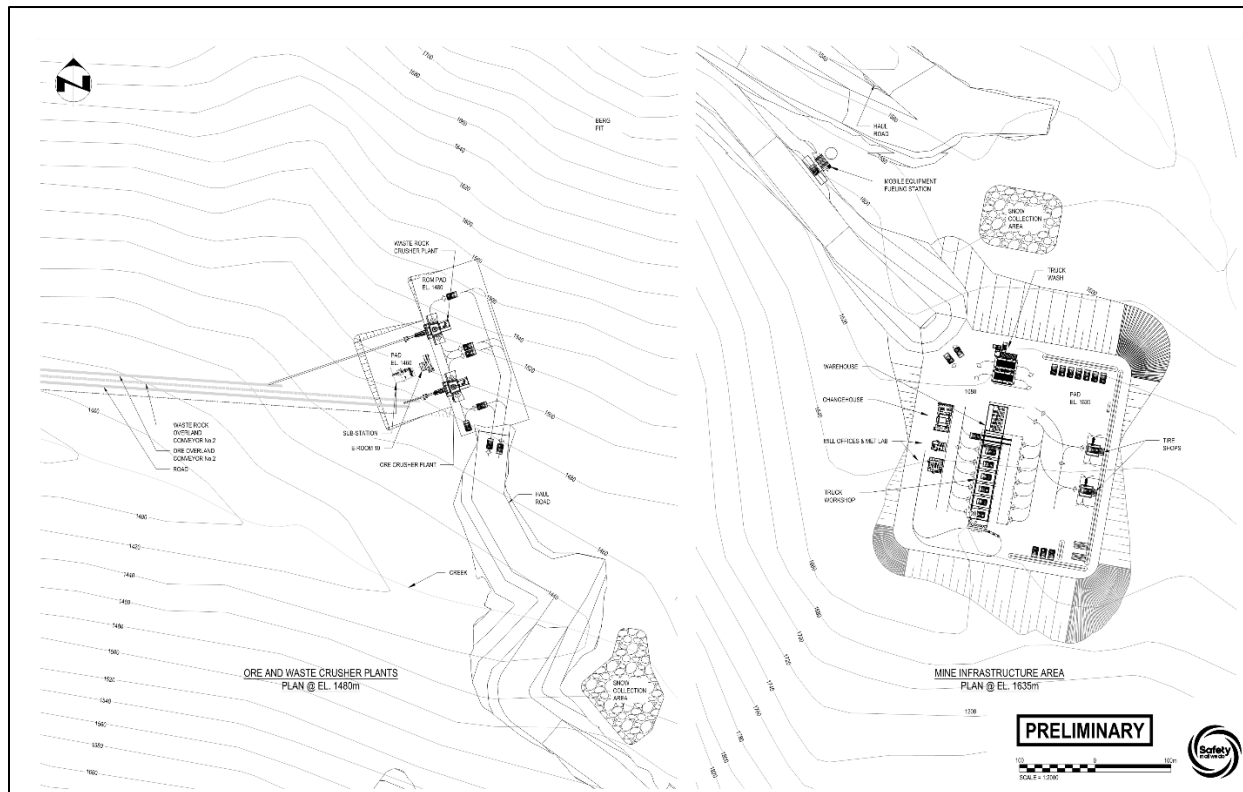
The diesel storage facility consists of three vertical storage tanks. Each tank will have 415,000 L of capacity, for a total storage capacity of 1,245,000 L.

18.3.4 Mining infrastructure

18.3.4.1 Truck shop/wash

The truck shop/wash is a pre-engineered building with a concrete floor, overhead crane, and overhead doors with fire protection and alarm systems. There will be a total of six maintenance bays. Two maintenance bays will be assigned to preventive maintenance, one will be for corrective maintenance, and the three bays will be multipurpose. Additionally, a two-welding bay and truck wash will be located at the front of the truck workshop building.

Figure 18-2: Mine infrastructure, ROM pad and primary crushers layout



Source: Ausenco, 2026

18.3.4.2 Mine offices

The mine dry offices are a modular building for open-pit operations. The building is equipped with fire protection and an alarm system.

18.3.5 Process plant infrastructure

18.3.5.1 Plant warehouse/shop

The plant warehouse/shop is a pre-engineered building with concrete floor, overhead doors, fire protection and alarm systems. This building will be used for general storage, to store equipment spares for the process plant, to maintain and store light vehicles assigned to the plant, and repair and maintain process plant equipment as necessary. This building is equipped with fire protection and an alarm system.

18.3.5.2 Process plant control room

The process plant control room is a modular office. This building is attached to the process plant and contains dual operator stations. This building is equipped with fire protection and an alarm system.

18.3.5.3 Assay laboratory

The assay laboratory is a one-story modular building comprised of storage area, office, scale room, AA room, wet lab, and met labs. This building is equipped with fire protection and an alarm system. The laboratory requires bottled nitrogen and hoods with ventilation.

18.3.5.4 Material handling

The material from the pit will be diverted to two main destinations depending on the grade and material type. A portion of the barren stripped NAG material will be crushed to less than 300 mm and conveyed to the TWMF for starter dam construction, the balance will be hauled to the waste rock storage facilities.

PAG waste material will be crushed to less than 300 mm and transported and placed in the TWMF via a 6.8 km waste overland conveyor.

The ore will be hauled to the primary crusher or low-grade stockpiles. Crushed material will be conveyed to the secondary crusher via 5.2 km of overland conveyor.

18.3.6 Other On-site infrastructures

Table 18-1 shows the list of buildings required on the mine site.

18.3.6.1 Gate house and truck scale

The gate house is a security trailer office with a lockable gate and communications to the main site. The truck scale is located adjacent to the main access road by the guard house.

18.3.6.2 Security/medical facilities

The security/medical facilities are a modular building located near the gate house. The security facilities include rooms for personnel screening during rotations in and out of site. The medical facilities consist of first aid and emergency response rooms for on-site treatment and headquarters for mine rescue team. These facilities are equipped with fire protection and an alarm system.

18.3.6.3 Main administration building

The main administration building is a modular, multiple level building comprised of a change/lunch facility, offices, meeting rooms, washrooms, desks, fire protection, and alarm systems. The offices will have space for relevant employees. There will be 20 processing plant offices and 21 general and administrative offices.

18.3.6.4 Accommodation

Permanent accommodations on site will be in a camp of 450 individual dormitories. The camp will be a modular building with multiple levels and will include a kitchen, dining area, and recreation room. There will be a boot and jacket room for personnel entering and leaving the accommodations. The camp will be built to accommodate workers for the construction phase of the project and will be converted thereafter for use by operational workers.

Table 18-1: Building list

Name of Building/ Structure	Building Construction Type	Floor Type	Foundation Type	Building Geometry				
				L (m)	W (m)	H at eave (m)	Area (m ²)	Volume (m ³)
Explosives Magazine	Modular	Steel Plate	Pedestal	TBD	TBD	TBD		
Mine Infrastructure (Admin Building)	Modular, 2- storey	Steel Plate	Pedestal	18.0	18.0	7.0	324.0	2,632.5
Mine Infrastructure (Truck Shop)	Pre-engineered	Concrete Slab	Raft	25.0	65.0	16.0	1,625.0	32,601.6
Mine Infrastructure (Change-House)	Modular	Steel Plate	Pedestal	18.0	15.0	3.0	270.0	1,063.1
Main Building: Grinding/ Copper Flotation/ Molybdenum Flotation/ Concentrate Filtration/ Tailings Storage/ Reagents/Plant Air	Stick-built/ steel frame structure	Concrete Slab	Raft	170.0	140.0	30.0	23,800.0	922,250.0
Primary Crushing (x2)	Stick-built/ steel frame structure	Concrete Slab	Raft	20.000	20.000	33.0	400.0	13,700.0
Waste Crusher	Stick-built/ steel frame structure	Concrete Slab	Raft	20.0	20.0	33.0	400.0	13,700.0
Secondary Crushing (x2)	Stick-built/ steel frame structure	Concrete Slab	Raft	33.0	24.0	25.0	792.0	20,988.0
Screening	Stick-built/ steel frame structure	Concrete Slab	Raft	24.0	15.0	25.0	360.0	9,337.5
Stockpile Feed Conveyor (Transfer Towers) (x4)	Stick-built/ steel frame structure	Concrete Slab	Raft	8.0	5.0	8.0	40.0	332.5
Stockpile Feed Conveyor (Transfer Towers) (x2)	Stick-built/ steel frame structure	Concrete Slab	Raft	5.0	5.0	8.0	25.0	207.8
Stockpile and Reclaim (cover)	Geodesic dome or fabric dome	None	Pedestals/ Grade Beams	215.0	127.0	50.0	27,305.0	1,581,983.4
Tailings Primary Cyclone Building	Stick-built/ steel frame structure	Concrete Slab	Raft	20.0	10.0	15.0	200.0	3,125.0
Gate House	Modular	Steel Plate	Pedestal	6.0	4.0	3.5	24.0	90.0
Plant Admin Building	Modular, 2-story	Steel Plate	Pedestal	18.0	18.0	7.0	324.0	2,632.5
Plant Warehouse/Workshop	Pre-engineered	Concrete Slab	Raft	15.0	36.0	6.4	540.0	4,671.0
Laboratory	Modular	Steel Plate	Pedestal					
Permanent Camp (300 people)	Modular, 2-storey	Steel Plate	Pedestal	162.0	40.0	6.0	6,480.0	38,880.0
E-rooms (x10)	Modular	Steel Plate	Pedestal	21.336	6.096	4.013	130.1	571.5
Substation Control Room	Modular	Steel Plate	Pedestal	9.906	7.529	4.013	74.6	334.4
Control Room	Modular	Steel Plate	Pedestal	6.096	4.267	4.013	26.0	111.3

18.3.7 Tailings and waste management facility (TWMF)

The design of the Tailings and Waste Management Facility (TWMF) for the co-placement of tailings and potentially acid-generating (PAG) waste was advanced and revised to align with the mine schedule in the PFS. Process tailings and PAG waste rock will be permanently stored in the TWMF, located near the process plant, leveraging natural topography to minimize dam fill material and overall footprint. PAG waste rock will be placed at the northeast end of the facility against the TWMF's northeast embankment, and the slurry tailings will be deposited at the southwest end of the facility, creating beaches towards the centre of the facility and against the southwest end of the PAG waste rock. Figure 11-3 shows the location of the TWMF with respect to the process plant.

The primary design objectives for the TWMF are to securely contain tailings and subaqueously deposit PAG waste rock to prevent acid rock drainage (ARD) and to protect regional groundwater and surface water during mine operations and over the long term (post-closure). The design of the TWMF and its associated water management facilities has taken into account the following:

- Staged development of the facility over the life of the project,
- Flexibility to accommodate operational variability in waste rock and tailings (plant shutdowns, deposit variability, and placement under variable climate conditions), and
- Control, collection, and removal of contract water from the facility during operations for reuse as process water to the maximum practical extent.

The design criteria for the TWMF considered the following requirements for tailings slurry and PAG waste rock, while maintaining a long-term minimum 3 m water cover over the PAG waste rock to prevent acidification:

- Tailings slurry storage requirement: 1,263 Mt (871 Mm³)
- PAG waste rock storage requirement: 1,304 Mt (652 Mm³)
- Slurry tailings density: dry density of 1.45 t/m³
- Underflow tailings (sand) density: dry density of 1.65 t/m³
- Waste rock density: dry density of 2.0 t/m³
- Long-term subaqueous deposition of PAG waste rock (maintaining a minimum 3 m water cover)
- Limiting watershed disturbance to a single catchment basin
- Limiting impacts on wildlife and fisheries resources.

The TWMF includes the following embankments:

- Northeast embankment
- Southwest embankment

The northeast embankment will be entirely constructed from NAG waste rock, while the southwest embankment will be constructed from sand (overburden and tailings underflow, both assumed to be NAG). In addition, it is assumed that embankment construction using sand is possible for only seven (7) months of the year due to the cold climate. Whole tailings generated during the five (5) cold months of the year will be deposited in the TWMF as slurry.

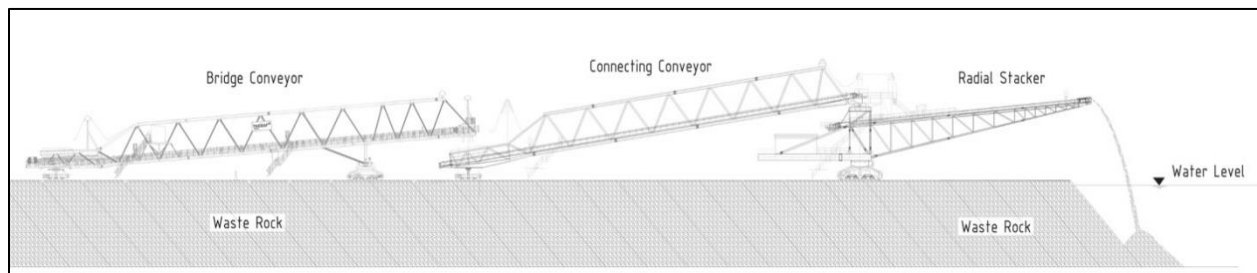
Tailings will be transported from the process plant to the TWMF via a pipeline and then discharged into the facility from the top of the southwest cyclone sand embankment and along the western perimeter access near the cyclone station.

The PAG waste rock will be transported from the open pit to the TWMF via five-segment overland conveyors connected by four transfer stations (Refer to Figure 11-3). At the base of the northeast embankment, a conveyor access road will be constructed up the face of the dam at a 10% grade. An extendable conveyor will be placed along the access to convey waste rock to the crest of the embankment raise.

This modular conveyor can be extended as the northeast tailings embankment height increases at each development stage along the embankment face. At the crest, material is then discharged onto a multi-module expandable conveyor, whose length can be adjusted by adding or removing sections. The final segment of the conveyor/stacking system consists of a bridge conveyor, a connecting conveyor and a fixed radial stacker (Refer to Figure 18-3). The system allows waste rock to be stacked using advancing stacking methodology and operates in a circular pattern, distributing waste material across a stacking radius of 150 metres. The waste rock will be stacked subaqueously until it reaches 2 meters above the surface, then advanced until the berm is completed (Refer to Figure 18-4). The stacking of the PAG waste rock will create berms to the southwest, perpendicular to the northeast embankment. The crest of the berm is 300 m wide and provides sufficient operating area for conveyors, dozers, and a dragline excavator.

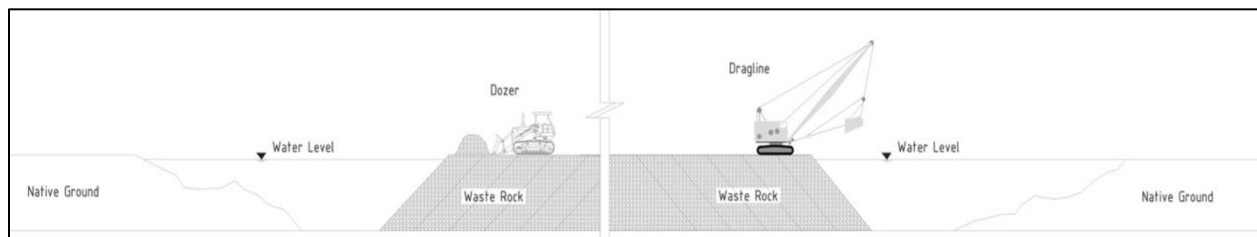
The heavy equipment will maintain a 40 m setback from the edge of the berm, while lighter equipment, such as dozers, can push materials directly over the edge of the berm. Once completed, the next berm will be constructed next to the completed berm. During construction of the next berm, dozers and dragline excavators will remove the upper 5 m of waste rock and place the excavated material on the flanks of the berm, subaqueously, to reduce the potential for the material to generate acid (Refer to Figure 18-4). The final height of the berm will be set to 3 m below the water surface during operations, within 4 to 6 months after completing the berm.

Figure 18-3: PAG waste rock radial stacker



Source: Ausenco, 2026

Figure 18-4: PAG waste rock deposition plan



Source: Ausenco, 2026

18.3.7.1 Hazard classification

The design requirements for the TWMF are based on the relevant federal and provincial guidelines for constructing mine tailings storage facilities in Canada. The following regulations and guidelines were used to determine the dam hazard classification and to establish suggested minimum target levels for certain design criteria, such as the inflow design flood (IDF) and earthquake design ground motion (EDGM). Tailings storage facilities are regulated in British Columbia by the Ministry of Energy & Mines under the Mines Act and the Health, Safety and Reclamation Code for Mines in British Columbia (HSRC). The HSRC includes requirements to use the CDA guidelines.

Based on the simplified dam breach analysis and the expected area of inundation downstream of the tailings and PAG waste rock storage facility, the consequence of a dam failure is “very high” for the TWMF, per Application of Dam Safety Guidelines to Mining Dams (CDA, 2019). Therefore, the facility was designed in accordance with the guidelines' recommended parameters.

To be conservative, the inflow design flood (IDF) used for the TWMF design during operations and post-closure is the probable maximum flood (PMF) for a “very high” dam classification. The spillway for the TWMF is designed to pass the PMF. The earthquake Design Ground Motion (EDGM) parameters have been determined for the TWMF using estimates from the Natural Resources Canada (NRCan) seismic hazard calculator and our professional experience in British Columbia.

To maintain a conservative approach, the design earthquake for the TWMF corresponds to the Maximum Credible Earthquake (MCE) for a “Very High” consequence classification under post-closure conditions, with a peak ground acceleration (PGA) of 0.131 g.

18.3.7.2 Facility design

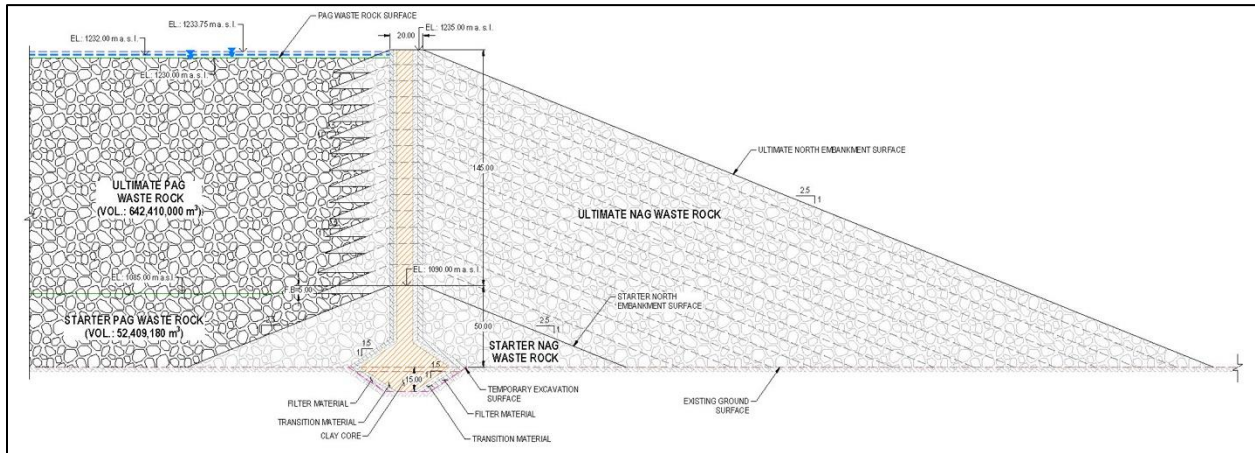
The TWMF footprint will be logged and cleared to facilitate foundation preparation and embankment construction. Both embankment foundation preparations will include removing soft overburden from topographic low points. Excavation is expected to be concentrated in these low-lying areas. A foundation drainage network will be constructed at the base of the embankments by selectively placing waste rock (northeast embankment) and sand (southwest embankment), along with dual-wall HDPE pipes and drainage gravel wrapped in non-woven geotextile fabric.

18.3.7.2.1 Northeast embankment

The starter north embankment will be constructed using non-acid-generating (NAG) waste rock during the pre-production period. Embankment raises will be carried out using the centerline method, in which the dam is raised vertically from the centerline of the starter embankment (Refer to Figure 18-5).

NAG waste rock will be transported to the TWMF via the PAG waste rock conveyor and placed in stockpiles for use as embankment construction materials. It will be loaded into haul trucks and transported to the northeast embankment, where it will be spread and compacted with dozers and compactors in 1 m lifts. The north embankment will be constructed with an overall 2.5:1 (H:V) exterior slope based on stability analyses. The embankment is designed with a central low-permeability core and multiple filter zones on each side, based on filter criteria. The construction will continue in the same manner until the end of the project.

Figure 18-5: Northeast embankment cross-section



Source: Ausenco, 2026

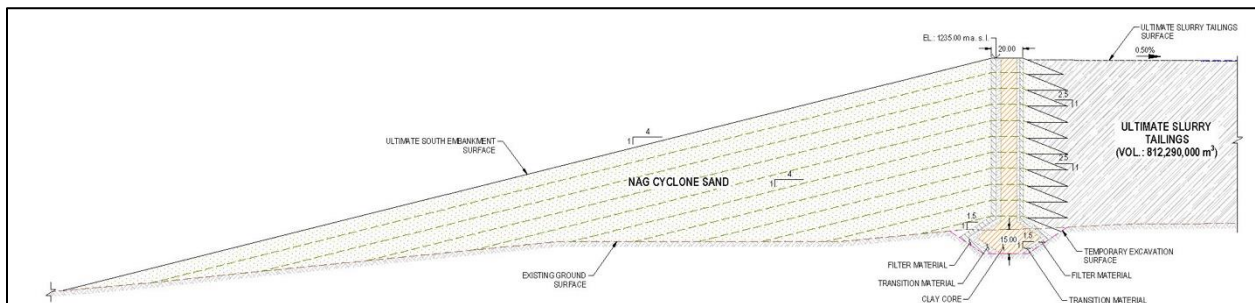
18.3.7.2.2 Southwest embankment

The south embankment will be constructed using underflow coarse tailings from the cyclone installed on the western side of the TWMF, employing the centreline raise methodology. A low-permeability core will be constructed along the centreline crest of the embankment using locally sourced borrow materials.

Tailings underflow will also be used in constructing the south embankment. The underflow will be conveyed by pipeline from the cyclopac to the embankment crests, where it will be discharged along the downstream slopes, spread, and compacted using dozers and compactors.

The South embankment will be constructed with a downstream slope of 4H:1V, based on stability analyses.

Figure 18-6: Southwest embankment cross-section



Source: Ausenco, 2026

18.3.7.3 Stability analysis

A cross-section through the highest portions of the embankments was selected as the critical section for analysis. Embankment stability was evaluated using the limit equilibrium modelling software SLOPE/W (GeoStudio, 2018). Analyses were conducted under both static and pseudo-static (seismic loading) conditions. The calculated factors of safety (FoS) exceed the minimum requirements specified in the CDA guidelines: 1.5 for static conditions and 1.0 for pseudo-static conditions.

The tailings embankments have been designed to accommodate potential dynamic deformation without releasing tailings during the Maximum Design Earthquake (MDE). The results of the stability analyses demonstrate compliance with and exceedance of the applicable CDA criteria for both static and pseudo-static conditions.

18.3.7.4 Instrumentation and monitoring

The stability of the TWMF will be monitored using vibrating-wire piezometers, inclinometers, and GPS/GNSS sensors strategically placed within the foundation and the embankments. The piezometers will monitor pore pressure within the foundation and embankment materials in this facility. The inclinometers will monitor the critical failure plane within the facility and the foundation, and the GPS/GNSS sensors will monitor any movement of the pile.

These instruments will be connected to a data logging and telemetry system for continuous, real-time, unattended monitoring. Additionally, water quality monitoring instrumentation will be installed to measure surface contact water flows at the water collection ponds.

18.3.7.5 Closure

The objective of closure for the TWMF is to ensure the long-term stability of its physical, geochemical, hydrological, and revegetation conditions. To achieve this, the closure strategy emphasizes a dry-cover system designed to minimize water infiltration and inhibit oxygen diffusion into the underlying waste materials, particularly the PAG waste rock. The cover system will support vegetation. The tailings and PAG waste rock will be covered with 1 m of NAG waste rock, 1 m of alluvium, and 30 cm of topsoil, along with a native grass cover to prevent erosion. The next phase, detailed design of the closure system, will be performed to determine whether a simple or complex cover system is required to protect downstream groundwater and surface water quality.

Additionally, there is a spillway on the northwest side, designed to convey the Probable Maximum Flood (PMF) and discharge into Nanika Lake.

18.3.8 Power and electrical

The high-voltage transmission from the grid will be connected by distribution line to a 230 kV/25 kV substation on site. The substation will distribute power to various areas of the project including the process plant, administration building and the mining areas. Four distribution lines will be constructed at the project site to provide stepped-down power to the site administration and process facilities, and the Berg pit. A 25-kV line will be stepped down to 4.16 kV before distribution to the process plant.

18.3.9 Surface water management

This section discusses site-wide water management, the design of water management structures, hydrology, and water balance. Major drainage paths within the study area were delineated through geographic information system (GIS) analysis of LiDAR elevation data with a 5 m contour resolution.

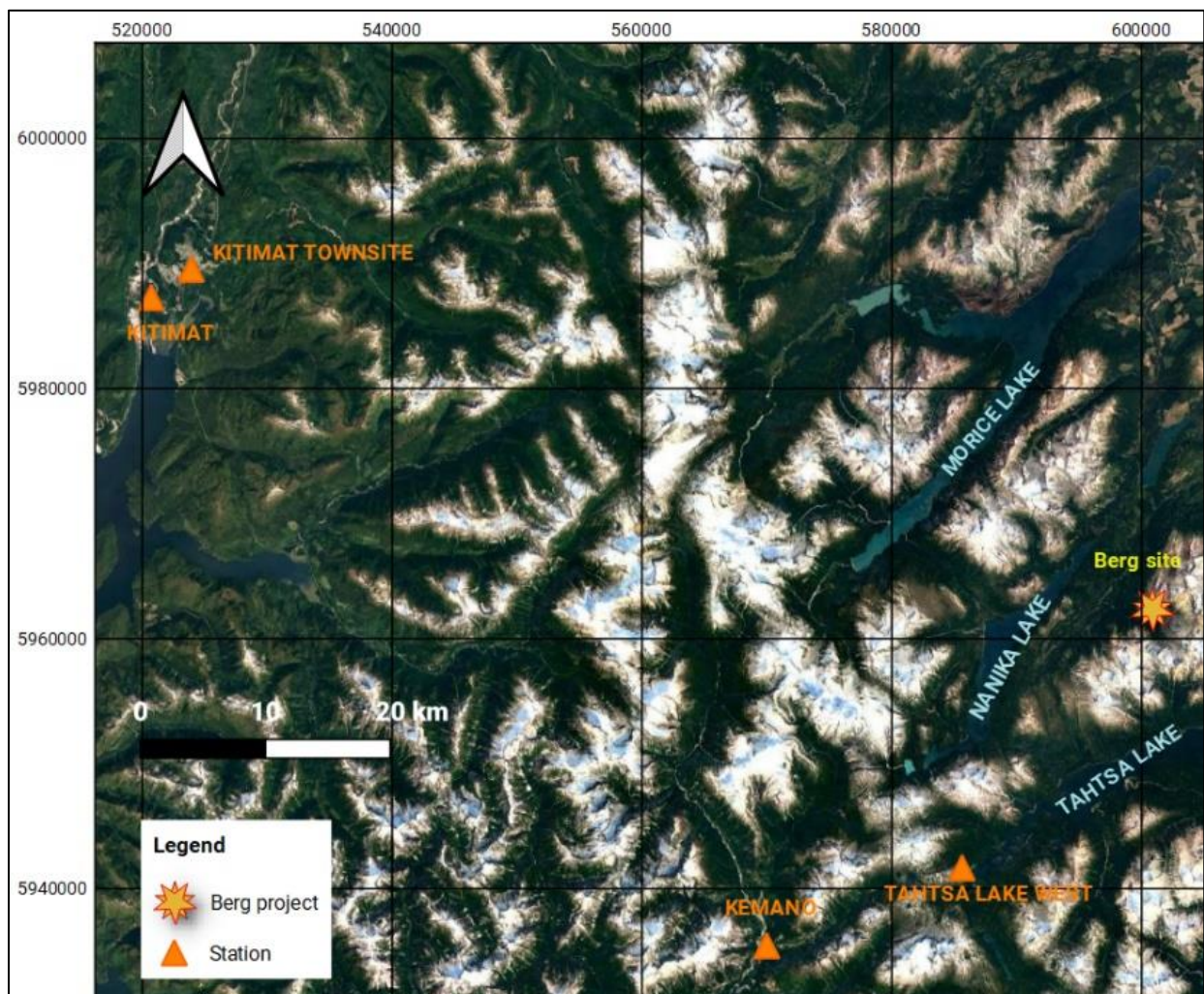
Refer to 18.3.7 for the TWMF surface water management.

18.3.9.1 Climate and hydrology

Based on the Köppen climate classification (1884), Berg Copper Project is located in subarctic climate (type "Dfc") and temperate zones, typically long, very cold freezing winters and short, cool summers. Total annual precipitation is 1,986.9 mm, of which 58% occurs in the between October to January.

The climate stations close to the Project site are Tahtsa Lake West, Kemano, Kitimat and Kitimat Townsite (see Figure 18-7). Table 18-1 shows a brief description of their geographical location relative to the site and their data history period. The climate normal data (1981-2010) for the Kemano station (Table 18-2) is chosen for water balance analysis. The extreme precipitation events for the Berg site were estimated based on the IDF curves from Kitimat station, optioned from Environment Canada. Table 18-3 summarizes storm events for the various return period.

Figure 18-7: Project location and nearby stations



Source: Ausenco, 2023

Table 18-2: Climate stations close to the Berg site

Station Name	Station ID	Distance to Site (km)	Elevation (masl)	Latitude	Longitude	Data Period
Tahtsa Lake West	1087950	25	862.6	53°37'00" N	127°42'00" W	1981 - 2000
Kemano	1064020	40	66.0	53°33'47" N	127°56'34" W	1951 - 2023
Kitimat	1064288	80	12.8	54°03'00" N	128°41'00" W	1979 - 1994
Kitimat Townsite	1064320	80	98.0	54°03'13" N	128°38'03" W	1954 - 2022

Table 18-3: Kemano station (1981-2010)

Month	Daily Temperature (°C)			Rainfall (mm)	Snowfall (cm)	Precipitation (mm)
	Average	Maximum	Minimum			
Jan	-1.5	1.1	-4	190.2	59.7	249.8
Feb	0.4	3.6	-3	136.3	34.3	170.6
Mar	3.3	7.6	-1.1	122.2	15.3	137.5
Apr	7.2	12.6	1.8	98.1	2.2	100.3
May	11.1	17.0	5.2	68.7	0.0	68.7
Jun	14.4	20.2	8.5	62.5	0.0	62.5
Jul	16.5	22.3	10.5	61.9	0.0	61.9
Aug	16.4	22.1	10.6	76.9	0.0	76.9
Sep	12.7	17.4	7.9	162.5	0.0	162.5
Oct	7.2	10.4	4	315.2	2.5	317.7
Nov	1.9	4.1	-0.4	257.6	35.5	293.1
Dec	-0.8	1.3	-3	219.6	65.8	285.4
Annual total	7.4	11.6	3.1	1,771.6	215.3	1,986.9

Table 18-4: Extreme storm events for Kitimat station (mm)

Return Period Duration	2-year	5-year	10-year	25-year	50-year	100-year
5 min	2.1	2.9	3.5	4.5	5.4	6.4
10 min	3.2	4.2	5.2	6.8	8.0	8.6
15 min	4.4	5.7	6.4	7.4	8.0	8.6
30 min	6.5	7.7	8.8	10.5	12.1	14.1
1 h	10.4	12.8	14.6	17.1	19.3	21.6
2 h	17.6	21.8	24.9	29.5	33.4	37.8
6 h	41.2	53.6	62.6	75.1	85.1	95.8
12 h	63.0	80.9	94.3	113.3	129.0	146.2
24 h	91.7	116.9	132.3	150.6	163.2	175.1

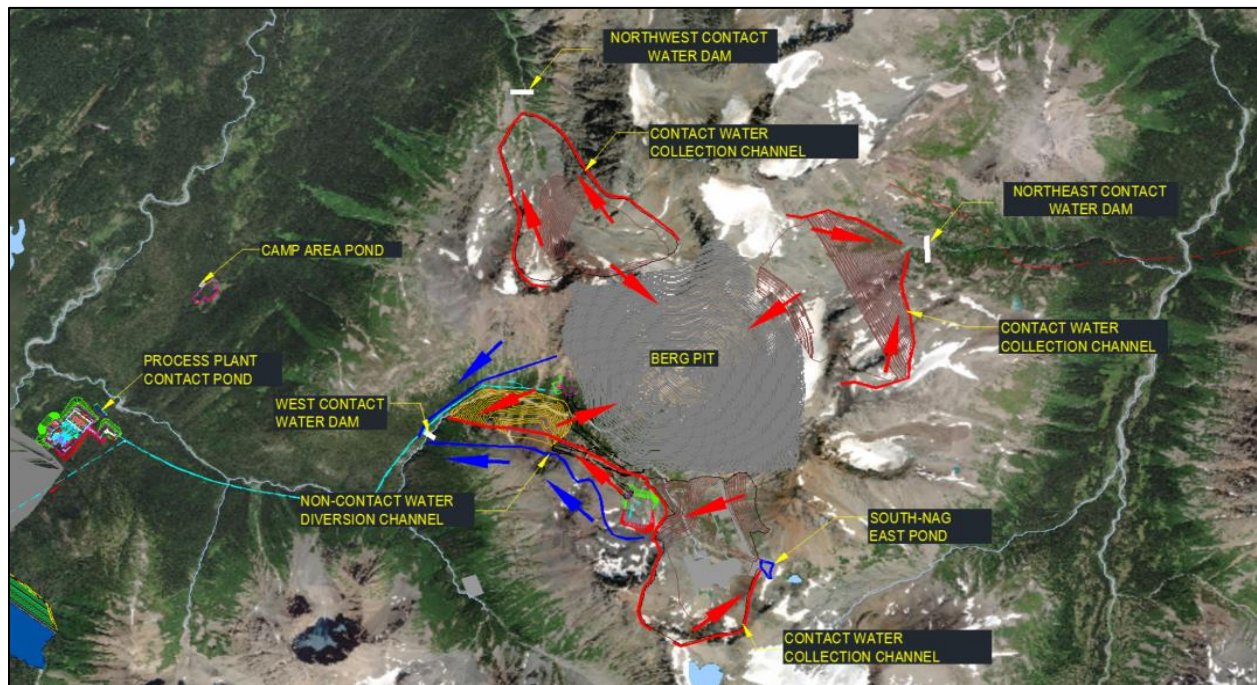
18.3.9.2 Water management structures

Water management requires consideration of the amounts of water (flows) between facilities and associated catchments areas. Surface water runoff that comes into contact with disturbed areas will need to be managed prior to being released to the surrounding environment. Contact water will be collected in a series

of ditches or as part of the grading plan (i.e. in the case of the process plant area and Camp area) and be conveyed to ponds or dams for storage. Stored contact water should be either treated and released to the environment or reused for process purposes. Due to topographical constraints, collection channels in the vicinity of the pit perimeter were not economically viable. Runoff from these areas will be directed into the pit and captured in the pits dewatering system. The general site-wide water management strategy is shown in Figure 18-8. Proposed water management structures for the Berg site comprise:

- **Contact water collection channels:** Runoff from disturbed areas will be collected in gravity ditches and conveyed to ponds or water collection dams. The channels will be located around the perimeter of stockpiles and other mining infrastructure, utilizing the existing topography to every extent possible.
- **Contact water collection ponds:** Ponds are situated in topographic low points to facilitate collection of contact water. Ponds will be constructed through a combination of excavation and berming as required based on topography. The collection ponds' design criteria were to store 1:100-year 24 h storm event with a minimum freeboard of 0.5 m. The stored contact water should be either treated and released to the environment or reused for process purposes. The design criterion for collection channels was the conveyance of 1:100-year peak flow without overflow.
- **Contact water collection dams:** Due to the steep topography of the site dams are proposed in select areas to capture and contain contact water. The dams will utilize the natural topography of the valleys adjacent to the stockpiles, where excavating a collection pond was deemed to be uneconomical. The height of the dams was set to store runoff from a 1:100-year, 24-hour storm event. The stored contact water should be either treated and released to the environment or reused for process purposes.
- **Non-contact diversion channel:** Two channels are proposed to divert non-contact water away from the site to reduce the amount of water that needs to be actively managed. These channels will utilize existing topography to every extent possible to reduce the excavation volumes required.

Figure 18-8: Site-wide water management strategy



Source: Ausenco, 2026

18.3.9.3 Rainfall – runoff modelling

To estimate design flows along the water management system, flood from the design event was routed along the alignments using the Rational method where the drainage areas were small and had uniform soil and cover characteristics with no significant flood storage. Based on BC MoTI (2019), for rural watersheds up to 10 km², the Rational method may be suitable for calculating design flow. The Rational method is a simplified procedure and is not applicable to a complex watershed with more drainage areas. The hydrologic modelling results were used to size the water management structures of the Berg site preliminarily.

Channels and ponds were sized using estimated peak flow rates and flood volumes from the Rational method and frequency analysis results. Channels were designed as trapezoidal channels with a 2H:1V side slopes with base widths range from 1 m to 6 m wide with a typical depth of under 1 m. Diversion berms are proposed on several of the diversion channel to reduce the overall excavation depth and to provide freeboard.

18.3.9.4 Site-wide water balance

A preliminary site-wide water balance analysis was performed for the Berg site and the results are summarized in this section.

In this analysis, a comparison between water requirements, and available water from the collection system was made to identify the site-wide water balance. The following water components were considered in this calculation:

- Surface runoff from precipitation on Berg pit, process plant, and camp area
- Evaporation from pond
- Process water requirement.

As shown in Table 18-5, there is a net annual water surplus of 1,210 m³/h for average climate scenarios.

Table 18-5: Site-wide water balance (m³/h) – average condition

Water Component (m ³ /h)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average Annual	Annual Volume (m ³)
Process Plant Make-up Water Demand	1,754	1,754	1,754	1,754	1,754	1,754	1,754	1,754	1,754	1,754	1,754	1,754	1,754	15,365,040
Pits														
Precipitation on Pits and Surrounding Area	1,498	1,189	1,823	816	541	509	488	606	1,323	2,502	2,385	1,730	1,284	11,257,582
Pit Dewatering (BGC; Base Case)	292	292	292	292	292	292	292	292	292	292	292	292	292	2,555,000
Contact Water from Net Precipitation and Evaporation														
Process Plant Area	28	22	33	14	9	9	8	10	23	46	44	32	23	203,435
Camp Area	6	5	7	3	2	2	2	2	5	10	10	7	5	44,462
RSF	900	714	1,093	487	321	302	289	360	790	1,501	1,432	1,039	769	6,742,292
Mine Infrastructure Area and Crusher Area	692	549	841	374	247	232	222	276	607	1,154	1,102	799	591	5,184,478
Deficits/Excess (-/+) Water														
(-/+) in Average Conditions	1,661	1,016	2,335	233	-342	-409	-453	-208	1,286	3,751	3,511	2,144	1,210	10,622,209

19 Market studies and contracts

19.1 Market studies

As part of the PFS, Surge Copper retained independent consultants to assess the marketability and value of the copper and molybdenum concentrates expected to be produced by the Project.

Deno Advisory GmbH ("Deno Advisory") prepared *Marketing Study for Copper Concentrate Production from Berg Project* (Deno Advisory, 2026). The study evaluated the projected quantity and quality of the Berg copper concentrate, potential markets and customers, concentrate transportation and export alternatives, indicative smelter and trader terms, and the resulting net smelter return assumptions.

Andrew Zemek, trading as Marketeye ("Marketeye"), prepared *Molybdenum Market Study & Price Forecast* (Marketeye, 2026). The study evaluated the global molybdenum market, mine supply and demand, available concentrate-roasting capacity, typical concentrate specifications and commercial terms, potential marketing alternatives for the Berg molybdenum concentrate, and long-term molybdenum price expectations.

The principal conclusions of these studies and the commercial assumptions used in the PFS are summarized in the following subsections.

19.1.1 Copper concentrate

19.1.1.1 Production and Product Characteristics

The PFS production schedule forecasts annual copper concentrate production generally ranging from approximately 0.2 Mt to 0.6 Mt, with the highest production occurring during the initial years of operation. The process plant is designed to produce a copper concentrate grading approximately 27% Cu and containing payable quantities of silver and gold.

Based on representative metallurgical testwork, Deno Advisory concluded that the Berg copper concentrate should be readily marketable to a broad range of global copper smelters. Positive commercial characteristics identified in the marketing study include copper, iron, and sulphur contents compatible with conventional autogenous copper smelting processes, low arsenic content, payable silver and gold content, and the proximity of British Columbia export ports to major Asian concentrate markets.

Metallurgical testwork identified some localized variability in minor and deleterious element concentrations. Given the limited contribution of the affected material to the PFS plant feed, together with dilution through plant throughput and the ability to blend concentrate during storage, this variability is not expected to materially affect overall concentrate marketability.

19.1.1.2 Market and Sales Strategy

Copper is a fundamental industrial metal that underpins modern economic activity and infrastructure. Its widespread use in electrical transmission and distribution, buildings, transportation, communications, and industrial equipment make it essential to both established economic activity and the expansion of lower-carbon energy systems, including renewable power generation, grid infrastructure, and electric vehicles. Copper concentrate produced from the Project is therefore expected to be sold into a large, established global market serving a broad range of end uses.

Copper concentrates are widely traded and may be sold directly by a mine to a smelter or through a concentrate trader. Deno Advisory identified smelters in China, Japan, South Korea, India and other markets as potential customers for the Berg concentrate.

The copper concentrate market was experiencing unusually tight supply conditions at the effective date of the marketing study as new smelting capacity was being commissioned both within and outside China. These conditions resulted in treatment and refining charges materially below historical levels. The PFS does not assume that the exceptionally favourable spot conditions existing at the effective date will continue throughout the mine life and instead uses representative longer-term commercial terms.

Deno Advisory evaluated a range of potential sales arrangements, including long-term benchmark-related smelter contracts, trader contracts, spot sales, and arrangements associated with project or export-credit-agency financing. Under one representative project financing strategy, approximately 70% of production would be sold under long-term benchmark-related contracts, with the remaining 30% sold under more flexible trader or spot arrangements. The eventual sales strategy will depend upon market conditions, project financing requirements, customer credit quality, destination economics and the relative value of commercial terms available when the Project approaches production.

The commercial assumptions used in the PFS are shown in Table 19-1 and Table 19-2. These assumptions represent indicative terms for economic modelling purposes and are not based upon and executed offer or offtake contract.

Table 19-1: Copper concentrate off-site charges

Item	Unit	Value
Freight and marketing charge	US\$/ wmt concentrate	146.00
Treatment charge	US\$/ t Cu concentrate	42.00
Refining charge for copper	US\$/ lb payable Cu	0.04
Refining charge for gold	US\$/ oz payable Au	4.50
Refining charge for silver	US\$/ oz payable Ag	0.45

Table 19-2: Copper concentrate payable metal assumptions

Item	Unit	Value
Cu min deduction	%	1.0%
Ag min deduction	g/t	30.0
Au min deduction	g/t	1.0
Cu payability	%	96.6%
Au payability 1g/t-2g/t	%	90.0%
Au payability 2g/t-3g/t	%	92.0%
Au payability 3g/t-5g/t	%	93.0%
Au payability 5g/t-7g/t	%	95.0%
Au payability 7g/t-10g/t	%	96.0%
Ag payability	%	90.0%

Transportation and Export

Deno Advisory evaluated potential concentrate export routes through Stewart, Prince Rupert, and Kitimat, British Columbia. Depending upon the selected terminal and customer, concentrate could be transported from the Project in bulk trucks, Rotainers® or conventional shipping containers.

Stewart is an established concentrate export location but may have comparatively higher transportation and handling costs and could require additional storage infrastructure. Prince Rupert and Kitimat may provide more cost-effective alternatives, although they have not historically handled copper concentrates to the same extent as Stewart. Rotainers® could provide flexibility by allowing concentrate to be stored and shipped through more than one port. Conventional containers could also be used for a portion of production delivered directly to suitable Asian customers.

Following accumulation of sufficient concentrate at the export terminal, bulk material could be loaded onto Handymax- or Supramax-class vessels for shipment to the customer's discharge port. The PFS freight and marketing allowance represents a reasonable economic modelling basis for inland transportation, handling, storage, ocean freight, and marketing costs. The final port, handling method, shipping arrangement, and customer destinations remain subject to further engineering, logistics studies, and commercial negotiations.

19.1.2 Molybdenum concentrate

19.1.2.1 Market and Processing Capacity

Molybdenum is primarily used as an alloying metal in steel, cast iron, and specialty alloys. Molybdenum-bearing steels are used where high strength, toughness, and corrosion or temperature resistance are required, including in the oil and gas, petrochemical, power generation, automotive, aerospace, and industrial equipment sectors.

Most molybdenum is produced as a by-product of copper mining. Global molybdenum mine production was estimated by Marketeye at approximately 666 million pounds in 2025. At the production rate evaluated in the PFS, Berg would produce approximately 21 million pounds of contained molybdenum annually and would be a significant western molybdenum by-product producer.

The product produced at the mine would be an unroasted molybdenite concentrate containing molybdenum principally as MoS_2 . Raw molybdenum concentrate must generally be roasted to produce technical molybdenum oxide before further downstream processing.

Marketeye identified approximately 41 molybdenum roasters globally. Total global roasting capacity was estimated at approximately 826 million pounds annually at the beginning of 2023, compared with global mine production of approximately 627 million pounds in that year. Approximately 41% of identified roasting capacity was located in China, 16% in North America, and 12% in Europe. Although not all capacity is immediately available to third-party producers, Marketeye concluded that the projected Berg production should be capable of finding one or more roasters.

Potential destinations include commercial roasters in the United States and Mexico, together with facilities in China, Japan, South Korea, and Vietnam. The available roster of counterparties and the relative attractiveness of each location may change materially before Project production begins.

19.1.2.2 Marketing and Commercial Terms

Metallurgical testwork completed for the PFS demonstrated high copper-molybdenum separation efficiency, and the chemistry of the molybdenum separation products supports the expectation that the Project can produce a saleable molybdenum concentrate meeting customary specifications for delivery to third-party roasters. No material product-quality constraint to marketability has been identified at the PFS

stage. Additional feasibility-level testwork will be undertaken to confirm variability, optimize separation circuit performance and refine the final commercial concentrate specification.

Potential marketing arrangements for the Berg molybdenum concentrate include direct sale to a third-party roaster, sale through an intermediate trader, or toll roasting followed by sale of the resulting technical molybdenum oxide. The ultimate sales strategy may involve a combination of these channels and will depend on prevailing commercial terms, available roasting capacity, and customer requirements. For purposes of the PFS economic analysis, the assumed roasting charges and payabilities provide a reasonable representation of the net commercial terms expected for the sale and processing of the molybdenum concentrate and are broadly consistent with a toll-roasting and oxide-sale arrangement. These assumptions are intended as an appropriate basis for economic evaluation and do not prescribe the Project's eventual marketing or contracting strategy.

The molybdenum concentrate assumptions used in the PFS are shown in Table 19-3.

Table 19-3: Molybdenum smelter terms and off-site costs

Item	Unit	Value
Freight and marketing charge	US\$/ wmt concentrate	166.00
Roasting charge	US\$/ lb Mo sold	0.89
Mo payability	%	99.0%

Marketeye indicated that typical molybdenum concentrate roasting charges are generally between US\$0.50/lb and US\$1.00/lb of contained molybdenum. The US\$0.89/lb assumption used in the PFS is consistent with the average treatment charge reported by a major Western molybdenum producer over the preceding six years.

19.2 Commodity price projections

Project economics were estimated based on long-term metal prices of US\$4.75/lb Cu, US\$20.00/lb Mo, US\$45.00/oz silver (Ag) and US\$3,500.00/oz gold (Au). These prices are in accordance with consensus market forecasts from various financial institutions and are consistent with historical prices for these commodities. Ausenco also considers the prices used in this study to be consistent with the range of prices being used for other project studies.

19.3 Contracts

No contracts for transportation or offtake of the concentrates are currently in place, but if they are negotiated, they are expected to be within the industry norms. Similarly, there are no contracts currently in place for supply of reagents, utilities, or other bulk commodities required to construct and operate the Project.

20 Environmental studies, permitting, and social or community impact

20.1 Introduction

This section provides an overview of the Berg Copper Project and summarizes the existing environmental, social, and physical baseline conditions relevant to Project development. It also outlines proposed baseline studies to support future environmental assessment and permitting, existing permits, and anticipated regulatory requirements, including management plans for water, environmental monitoring, and waste management. In addition, this section summarizes available socio-economic baseline information, the status of community consultation and engagement, and conceptual closure and reclamation planning. Recommendations are provided to support advancement of the Project through feasibility, environmental assessment, and permitting phases.

The Berg Copper Project is located in the Tahtsa Range of west-central British Columbia, within a 15 to 20 km wide belt of mountains forming part of the Hazelton Mountains along the eastern flank of the Kitimat Range. The region represents a transitional zone between the granitic Coast Mountains to the west and sedimentary and volcanic terrains of the Nechako Plateau to the east. The centre of the Berg property is located at 53°47'53" N latitude and 127°24'51" W longitude.

The Project consists of 91 unpatented mineral claims and one mining lease, covering an area of 34,798 ha. Surface rights are held by the Province of British Columbia. The project is located within the Wet'suwet'en Nation traditional territory as well as Cheslatta Carrier Nation asserted territory. The Wet'suwet'en people are subject to two forms of governance, both hereditary and elected. The hereditary chiefs are administratively supported by the Office of the Wet'suwet'en while the elected chiefs and councils engaged in this project discussion include Witset First Nation, Wet'suwet'en First Nation, Nee Tahi Buhn Indian Band, and the Skin Tyee First Nation.

Refer to Figure 20-1 for the site location and setting.

20.2 Environmental considerations

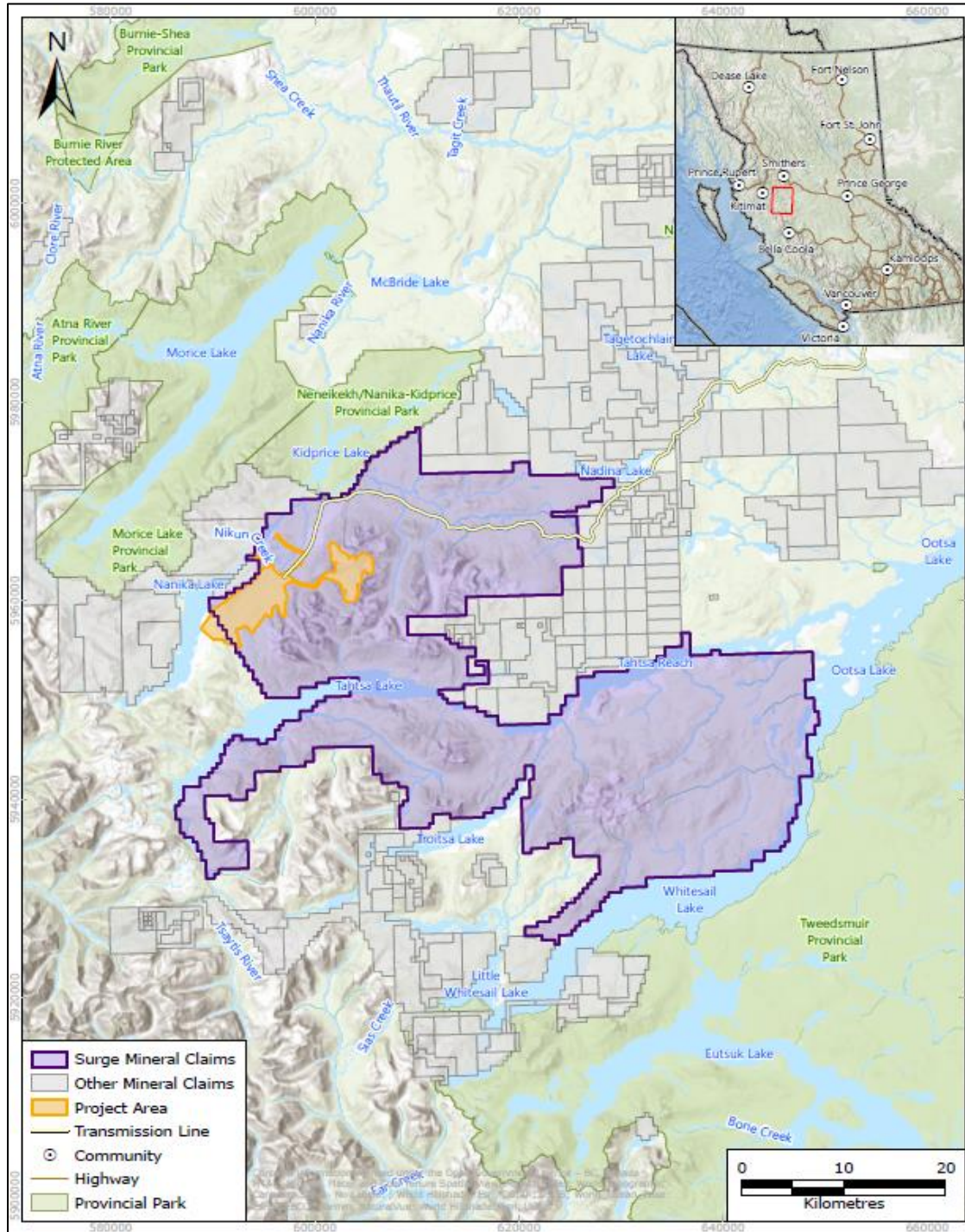
The deposit area sits above Berg Creek, which feeds into Bergeland Creek, which falls within the Morice River watershed that eventually flows to tidewater via the Skeena River near Prince Rupert. It is, part of the Bulkley River drainage basin, and is characterized by mountainous terrain, glacially influenced valleys, and alpine and subalpine ecosystems. Key hydrological features include Bergeland Creek, Ney River, and Berg Creek, a glacier-fed system originating near the deposit area.

Baseline environmental studies completed to date include hydrology, water quality, fisheries, meteorological monitoring and geochemistry. These studies support characterization of surface water systems, aquatic resources, and wildlife habitat, and inform Project design, including water management and sediment control infrastructure. The Project area provides potential habitat for a range of wildlife species, including suitable habitat for woodland caribou (Southern Mountain, Northern Group, Tweedsmuir local population unit), listed under Schedule 1 of the federal Species at Risk Act. Critical habitat for this population may occur within or near the Project area. An overview of completed baseline studies is provided in Table 20-1.

While historical baseline data are available, much of these data are old (>5 years) and updated studies are planned or in progress and will be required to support future feasibility design work as well as

environmental assessment and permitting in accordance with applicable provincial guidance. A summary of available environmental, social, and community studies completed to date, and factors potentially affecting the Project, is provided in the following sections.

Figure 20-1: Site location and setting



Source: ERM, 2026

The socio-environmental baseline studies available for review included studies completed as early as 1988 and included the valued components of surface water and meteorology, fish and fish habitat, wildlife, mine rock geochemistry, hydrogeological testing, and archaeology. The studies completed for the Project are listed as follows:

- **Surface Water and Meteorology**
 - Overview report (Norecol, 1988)
 - Water quality report (Norecol, 1989)
 - Water quality summary 2007 – 2011 (Rescan 2013)
 - Precipitation estimates for Berg mine site (AMEC, 2007)
 - 2012 hydrology and meteorology data report (Rescan 2013a)
 - 2013 Hydrology, Meteorology, and Water Quality Data Report (ERM, 2014)
 - 2014 meteorology, hydrology, and water quality report (ERM, 2015)
 - 2017 meteorology, hydrology, and water quality report (ERM, 2018)
 - 2024 Water Quality Data Report (Triton, 2025)
 - 2024 Hydrometric Field Report (NHC, 2024)
- **Aquatic Environment – Fish and Fish Habitat**
 - Reconnaissance (1:20,000) fish and fish habitat inventory of selected streams in the Nanika and Tahtsa watersheds (AMEC 2008)
 - 2024 Reconnaissance Fish and Fish Habitat Inventory (Triton, 2024)
 - 2025 Reconnaissance Fish and Fish Habitat Inventory (Triton, 2026)
- **Geochemistry**
 - ARD testing results, Berg deposit (AMEC, 2007)
 - Geochemistry Baseline Draft Report (Ausenco, 2026a)
 - Interim Memo on Waste Rock Humidity Cell Test Results to Week 20 (Ausenco, 2026b).
- **Geotechnical/Hydrogeology**
 - Geotechnical investigation data – Rev A (BCG, 2024)
 - Geotechnical Interpretive Report (Ausenco, 2026c)
- **Wildlife**
 - Preliminary Caribou Offsetting Support (ERM, 2024)
- **Archaeology**
 - Archaeology Overview Assessment (Ember Archaeology, 2025).

In addition to the studies listed above, Ausenco completed a desktop review of wildlife and wildlife habitat for the study area and surrounding region with the results being provided in Section 20.2.5.2 of this Report.

There have been no baseline studies completed to date on air quality, noise, greenhouse gases and climate change, and groundwater quality and quantity. Socio-economic information for the project was obtained through publicly available information with no specific reports completed to date.

Table 20-1 summarizes the types and years that baseline data collection and studies were completed.

Table 20-1: Baseline environmental and social studies completed for valued components

Valued Component	Field (F) or Desktop (D) Study	Years	Data Collected
Regional climate	D	2007; 2012–2017; 2024; 2026	Review of regional weather station data
Surface water quality	F	2007–2009; 2011; 2013–2017; 2024	Surface water quality in creeks, lakes, and rivers in the Project area
Hydrology	F, D	2007; 2012–2017; 2024; 2026	Baseline hydrometric monitoring across 20 stations and desktop preliminary water balance
Geochemistry	F, D	2007; 2025; 2026	Screening level study and drill program to support assessment of ML/ARD material and geochemistry modelling
Aquatic studies	F, D	2004; 2008; 2011; 2024	Desktop studies reviews and reconnaissance-level fish and fish habitat investigation
Geotechnical/Hydrogeology	F, D	2024; 2026	Preliminary hydrogeological work utilizing packer tests and vibrating wire piezometers
Wildlife studies	D	2024; 2026	Desktop review of wildlife habitat, species of conservation concern, and preliminary caribou offsetting considerations
Archaeology/ Cultural heritage	D	2025	Archaeological Overview Assessment, regional cultural heritage review, and review of Indigenous land use context
Socio-economic/ Indigenous context	D	2017; 2021 - 2022	Review of Indigenous land use, stewardship, cultural heritage, and regional socio-economic context information

20.2.1 Meteorology and hydrology

The Project is located within a subarctic (Köppen Dfc) climatic region characterized by mountainous terrain and strong orographic influences. Site-specific meteorological and hydrometric data have been collected intermittently within the Project area since 2007 through multiple baseline programs (ERM, 2014; ERM, 2015; ERM, 2018; Northwest Hydraulic Consultants Ltd., 2024).

Regional climate normals from the nearby, low-elevation, Kemano station indicate average annual precipitation approaching 2,000 mm; however, site-specific precipitation at the Project varies substantially with elevation, topography, and snow accumulation patterns. A substantial proportion of precipitation occurs as snowfall, accounting for 60% to 70% of total annual precipitation. Site-specific precipitation measurements are broadly consistent with regional estimates, although variability exists due to elevation differences, local topographic effects, and inter-annual climatic variability.

The Project is located within the regional watershed of the Morice in which the upper Nanika River watershed, is located. The regional watershed ultimately drains into the Skeena River drainage. The principal local watersheds associated with the proposed Project infrastructure are Bergeland Creek (84.1 km²) and the Ney River watershed (51.7 km²), with most proposed mine infrastructure located within the Bergeland Creek watershed. Portions of the existing access route and exploration camp area are located within the upper Nadina River watershed, part of the regional Fraser River drainage.

Historical hydrometric and meteorological monitoring programs have been conducted intermittently in the Project area since 2007, with data collected during multiple programs in 2011, 2013, 2014, 2015, and 2017 (e.g., ERM, 2014; ERM, 2015; ERM, 2018). While these datasets provide useful baseline information on climatic conditions, snowpack, and general hydrological behaviour, data collection has been episodic and is characterized by gaps in temporal coverage, variable station operation, and limited long-term continuity.

In 2024 and 2025, a reconnaissance-level hydrometric field programs were completed to re-establish baseline monitoring and assess the condition and suitability of previously installed stations. This work included verification of historical station locations, identification of new monitoring sites, and collection of discharge measurements to support future development of stage-discharge relationships (Northwest Hydraulic Consultants Ltd., 2024). The assessment identified that several historical monitoring locations had been affected by channel instability and avulsion processes, limiting their suitability for continued monitoring. As a result, alternative monitoring locations were identified to support development of a revised hydrometric network.

20.2.2 Surface water quality

Surface water quality within the Project area has been characterized through a combination of historical baseline programs conducted between 2007 and 2017 (ERM, 2014; ERM, 2015; ERM, 2018) and by more recent sampling completed in September 2024 (Triton, 2025). Available data encompass 19 monitoring locations across Berg Creek, Bergeland Creek and tributaries, the Ney River, and an unnamed tributary of Tahtsa Lake (Figure 20-3).

The 2024 baseline program included sampling at ten locations representing upstream reference conditions, areas influenced by the Berg deposit, and downstream receiving environments. Analytical parameters included general water quality indicators, major ions, nutrients, total suspended solids, total dissolved solids, and dissolved and total metals (Triton, 2025).

Surface waters within the Project area are generally characterized by neutral to slightly alkaline pH, ranging from 7.3 to 8.7 during 2024 sampling (Triton, 2025). Water hardness varies spatially from soft to moderately hard conditions, with elevated hardness, conductivity, alkalinity, sulphate, and dissolved metal concentrations observed in Berg Creek and associated tributaries influenced by mineralized bedrock near the Berg deposit. Elevated concentrations of aluminum, calcium, magnesium, iron, and zinc were identified in these areas, with concentrations generally decreasing downstream within the Bergeland Creek watershed. Nutrient concentrations were generally low across the Project area, with most parameters below detection limits, indicating limited anthropogenic nutrient inputs.

Historical and recent datasets indicate temporal variability in water quality conditions associated with seasonal runoff, streamflow conditions, suspended sediment transport, and natural geochemical influences within the mineralized watershed. Nutrient concentrations were generally low across the Project area, with most parameters below detection limits (Triton, 2025).

Figure 20-2: Hydrology and water quality data collection sites



Sources: Triton, 2025

20.2.3 Hydrogeology

No dedicated hydrogeological investigations have been completed for the Project. Available information is limited to regional geological understanding, surface water studies, and observations from recent geotechnical investigations completed by BGC (2024) in the vicinity of the proposed open pit and by Ausenco (2026c) which focused mainly on the footprint of the proposed tailings and waste management facility (TWMF). The Ausenco study advanced seven boreholes within the footprint of the TWMF, and a total of four boreholes at the locations of other proposed site infrastructures (low-grade stockpile, primary crusher, and old process plant).

The Project area is characterized by mountainous terrain with steep slopes and incised drainages. Surficial materials include glacial till, fluvial and colluvial deposits, organic soils, and fractured bedrock. Groundwater is interpreted to occur primarily within fractured bedrock and localized permeable unconsolidated deposits. Limited groundwater observations were recorded during geotechnical drilling completed in 2025. Groundwater was encountered in one borehole at 0.3 m below ground surface, while groundwater was not observed in other boreholes (Ausenco, 2026).

In the BGC geotechnical study (2024), the preliminary hydraulic conductivity results from 17 packer test results in bedrock within or near the proposed open pit suggest the central tendency of hydraulic conductivities are in the range of 1×10^{-7} to 1×10^{-6} m/s. Two tests indicate low hydraulic conductivity rock ($< 1 \times 10^{-8}$ m/s); two tests indicate high hydraulic conductivity rock ($> 1 \times 10^{-5}$ m/s).

The Ausenco geotechnical study (2026) focused on-site infrastructure, mainly the on the proposed TWMF. The results from a total of 14 packer tests in bedrock indicated generally low hydraulic conductivities ranging from 4×10^{-9} to 2×10^{-7} m/s with a geometric mean of 1×10^{-8} m/s. Three vibrating wire piezometers were installed in 2025 within the proposed TWMF area to support groundwater monitoring; however, monitoring data are not yet available at the time of this report.

20.2.4 Fish and fish habitat

Fish and fish habitat within the Project area have been characterized using historical studies and a reconnaissance-level fish and fish habitat inventory completed during the 2024 and 2025 field seasons by Triton Environmental Consultants Ltd. (Triton, 2024; Triton, 2026). The reconnaissance studies were primarily intended to determine broad-scale fish distributions within watersheds that could potentially be affected by the development of the proposed Berg Copper Project. The study area included Bergeland Creek, Ney River, and associated tributaries within the Morice River watershed. The study area and watersheds that were assessed are shown in Figure 20-3.

Key waterbodies within or near the Project area include Bergeland Creek, Ney River, Nanika Lake and River, Kidprice Lake, and Tatlsa Lake, which form part of the broader Skeena River drainage system. It should be noted that the access road and electrical power supply cross into the Nadina watershed.

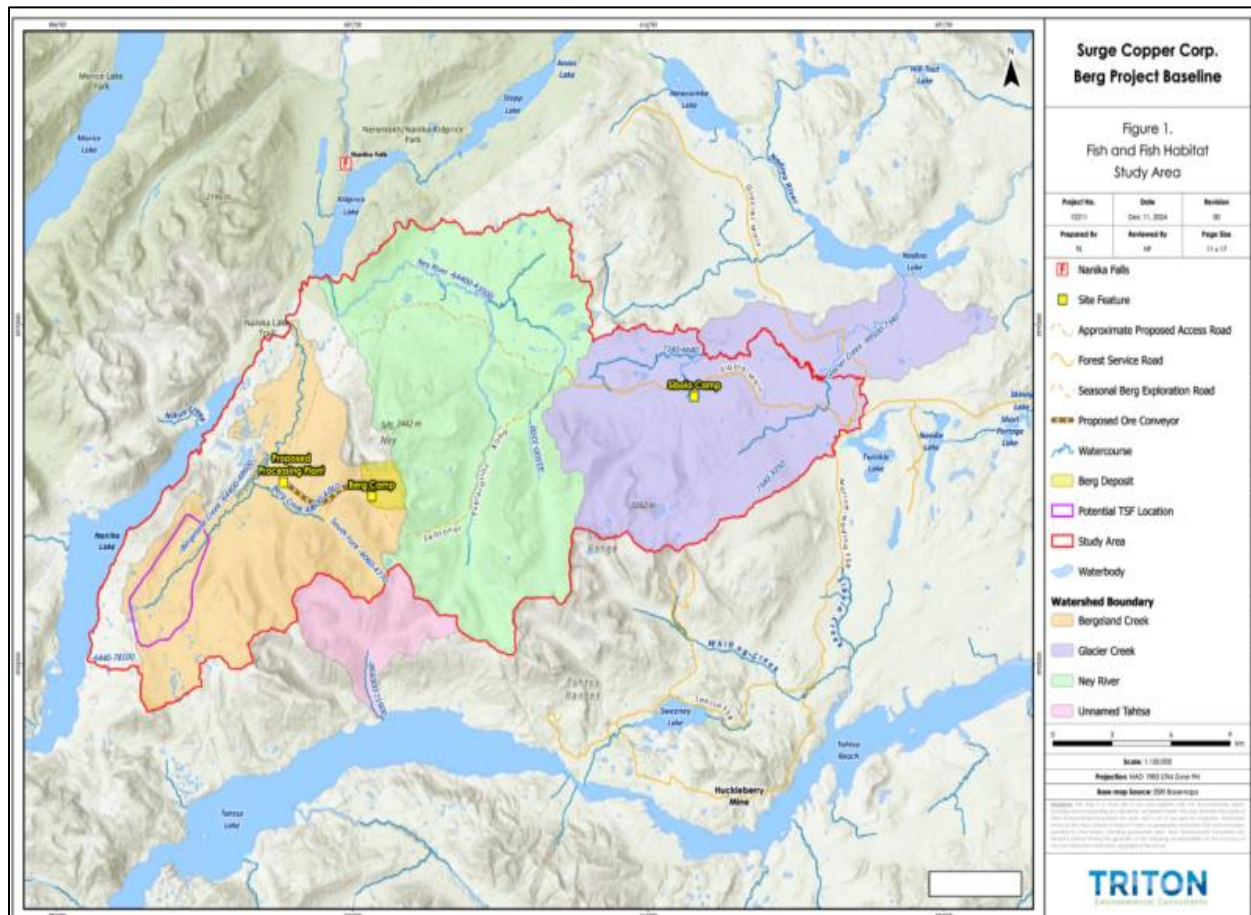
Occurrence categories identified in Table 20-2 are defined as follows: "Confirmed (2024)" indicates species observed during the 2024 reconnaissance field program; "Regional, not confirmed" indicates species documented in historical or regional datasets but not confirmed within the Project study area during recent surveys.

The 2024 reconnaissance survey confirmed the presence of Dolly Varden, Rainbow Trout, Longnose Sucker, and Lake Chub within portions of the study area. Dolly Varden were the most common observed species and were documented primarily within lower elevation stream reaches and tributaries. Rainbow Trout were documented primarily within lacustrine habitats.

Fish distribution within the Bergeland Creek watershed is strongly influenced by natural barriers to fish passage, including waterfalls, steep gradient channels, and seasonal dewatered reaches. No fish were observed upstream of confirmed natural barriers within upper portions of Berg Creek, and portions of the upper watershed have historically been identified as non-fish-bearing.

Fish habitat within the Project area is spatially variable and generally associated with lower-gradient stream reaches and lake environments. Upper watershed areas are characterized by steep, confined channels with limited habitat availability and lower observed fish density.

Figure 20-3: Fish and fish habitat study area



Source: Triton, 2026

Table 20-2: Fish species documented or potentially present in the study area

Waterbody/System	Common Name	Scientific Name	Occurrence
Bergeland Creek/ Tributaries	Dolly Varden	<i>Salvelinus malma</i>	Confirmed (2024)
	Rainbow Trout	<i>Oncorhynchus mykiss</i>	Confirmed (2024, lacustrine)
	Longnose Sucker	<i>Catostomus catostomus</i>	Confirmed (2024, headwaters)
	Lake Chub	<i>Couesius plumbeus</i>	Confirmed (2024)
Nanika Lake/River	Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	Regional, not confirmed
	Coho Salmon	<i>Oncorhynchus kisutch</i>	Regional, not confirmed
	Pink Salmon	<i>Oncorhynchus nerka</i>	Regional, not confirmed
	Bull Trout	<i>Salvelinus confluentus</i>	Regional, not confirmed
	Mountain Whitefish	<i>Prosopium williamsoni</i>	Regional, not confirmed
	Sculpin spp.	<i>Cottus spp.</i>	Regional, not confirmed

Source: Triton, 2025; Triton, 2026

20.2.5 Soils, vegetation and wildlife

20.2.5.1 Soils and vegetation

Soils and vegetation within the Project area have been characterized using available environmental information, regional ecological mapping, desktop ecological reviews, and the 2025 geotechnical investigation program Ausenco, 2026.

Surficial materials within the Project area generally comprise glacial till, colluvial deposits, fluvial deposits, organic soils, and localized peat overlying bedrock. Soil distribution varies with topography, drainage conditions, and glacial depositional processes. Organic-rich and poorly drained soils commonly occur in low-lying areas and adjacent to drainage features (Ausenco, 2026). Terrain stability and erosion potential vary across the Project area and are influenced by steep slopes, localized drainage features, surficial material composition, and climatic conditions.

Topsoil represents the uppermost soil horizon and was encountered at several borehole locations. It typically consists of organic-rich silty material with clay and rootlets and exhibits very soft to stiff consistency under moist to wet conditions. Thickness generally ranges from 0.1 m to 1.5 m, although it is locally absent in some areas. Peat deposits were observed at select locations and consist of organic material with minor silt and fine sand, typically soft, compressible, and moisture rich.

Vegetation within the Project area reflects the regional biogeoclimatic setting of west-central British Columbia and varies with elevation and site conditions. The Project area spans alpine, subalpine, and montane forest environments consistent with regional biogeoclimatic ecosystem classification mapping for the Morice region. Higher elevation areas are characterized by alpine and subalpine vegetation communities, including dwarf shrubs, grasses, sedges, and lichens, with sparse or absent tree cover. Mid- to high-elevation areas support subalpine coniferous forest dominated by subalpine fir (*Abies lasiocarpa*) and Engelmann spruce (*Picea engelmannii*), while lower elevations support mixed coniferous forest communities including mountain hemlock (*Tsuga mertensiana*), amabilis fir (*Abies amabilis*), and western hemlock (*Tsuga heterophylla*) (Government of British Columbia, 2026b).

Desktop ecological reviews identified several vegetation communities and ecosystems of potential conservation concern within the broader Project area, including whitebark pine (*Pinus albicaulis*), wetlands, and old growth forest areas (Government of British Columbia, 2026). Legal Old Growth Management Areas (“OGMAs”) occur outside of the project footprint, both north and south of any anticipated Project impacts or facilities. Portions of the broader regional landscape overlap mapped mountain pine beetle salvage areas (Government of British Columbia, 2026). The Project area is also located near several protected areas, including Morice Lake and Nanika-Kidprice Provincial Park.

20.2.5.2 Wildlife and wildlife habitat

Wildlife baseline information for the Project was compiled from publicly available provincial and federal databases, previous environmental studies, and technical reports prepared for the Berg Copper Project and surrounding region. Key sources include the BC Species and Ecosystems Explorer, Wildlife Habitat Areas and Ungulate Winter Range mapping, the Species at Risk Public Registry, and prior technical assessments (ERM, 2024). These sources were used to characterize wildlife communities and identify species of conservation concern with potential to occur within the Project area.

The Project area supports a range of wildlife typical of interior British Columbia montane and subalpine ecosystems, including forested uplands, alpine terrain, and riparian habitats. Large mammal species with the potential to occur in the Project area include grizzly bear (*Ursus arctos*), black bear (*Ursus americanus*), moose (*Alces alces*), and mountain goat (*Oreamnos americanus*) (AMEC, 2007). The Project area overlaps with provincially designated Ungulate Winter Range for mountain goat and a proposed Wildlife Habitat Area for grizzly bear. These species are considered important from both ecological and regulatory perspectives due to their sensitivity to disturbance and habitat requirements.

The Project is located within the range of the Tweedsmuir local population unit of Southern Mountain Caribou (Northern Group), which is listed as Threatened under the Species at Risk Act (BC Caribou Recovery Program, 2025). Available information indicates that the Project footprint is largely situated within mapped caribou habitat, including areas classified as high-elevation winter range and matrix habitat. Regional collar data indicate periodic caribou use within and adjacent to the Project area between 2016 and 2024 (ERM, 2024). Modelled assessments indicate the potential for interaction with caribou critical habitat within and adjacent to the Project area; however, the spatial and temporal extent of use within the immediate Project footprint remains uncertain and would require confirmation through additional field studies. Based on current information, Project development may result in both direct and indirect disturbance to caribou habitat and may require mitigation and/or habitat offsetting in accordance with applicable regulatory requirements. ERM (2024) completed a preliminary caribou habitat planning assessment to support evaluation of potential Project interactions with caribou habitat and inform future regulatory planning considerations.

Several bat species have potential to occur in the Project area, including little brown myotis (*Myotis lucifugus*) and northern myotis (*Myotis septentrionalis*), both of which are federally listed as Endangered, as well as Yuma myotis (*Myotis yumanensis*) and long-legged myotis (*Myotis volans*). Suitable roosting and foraging habitat may be present within forested and riparian environments.

Bird species typical of interior forest and alpine environments are present, with historical observations including American robin (*Turdus migratorius*), Clark’s nutcracker (*Nucifraga columbiana*), Canada jay (*Perisoreus canadensis*), spotted sandpiper (*Actitis macularius*), and dark-eyed junco (*Junco hyemalis*). Several bird species of conservation concern have potential to occur, including American goshawk (*Accipiter gentilis atricapillus*), olive-sided flycatcher (*Contopus cooperi*), western screech-owl (*Megascops kennicottii*), barn swallow (*Hirundo rustica*), common nighthawk (*Chordeiles minor*), evening grosbeak

(*Coccothraustes vespertinus*), and marbled murrelet (*Brachyramphus marmoratus*). All migratory birds and active nests are protected under the Migratory Birds Convention Act.

Amphibians may occur in suitable wetland and riparian habitats within the Project area, including western toad (*Anaxyrus boreas*), which is provincially blue-listed and federally listed as Special Concern. Reptiles are expected to be limited due to climatic conditions, although garter snakes (*Thamnophis spp.*) may occur.

A number of federally and provincially listed species have potential to occur within the Project area based on habitat suitability and regional occurrence data. These include caribou, several bat species, and multiple bird species of conservation concern. A summary of selected wildlife species of conservation concern with potential to occur in the Project area is provided in Table 20-3.

Table 20-3: Federal and provincial listed species with the potential to occur in the project area

Common Name	Scientific Name	BC List	SARA Status	COSEWIC	Potential to Occur*
Amphibians					
Coastal Tailed Frog	<i>Ascaphus truei</i>	Yellow	Special Concern	Special Concern	Low
Western Toad	<i>Anaxyrus boreas</i>	Yellow	Special Concern	Special Concern	Moderate
Birds					
American Bittern	<i>Botaurus lentiginosus</i>	Blue	-	-	Low
American Golden-Plover	<i>Pluvialis dominica</i>	Blue	-	-	Low
American Goshawk, atricapillus subspecies	<i>Astur atricapillus atricapillus</i>	Blue	-	Not at Risk	High
American White Pelican	<i>Pelecanus erythrorhynchos</i>	Red	-	Not at Risk	Low
Band-tailed Pigeon	<i>Patagioenas fasciata</i>	Blue	Special Concern	Special Concern	Low
Barn Swallow	<i>Hirundo rustica</i>	Yellow	Threatened	Special Concern	Moderate
Black Scoter	<i>Melanitta americana</i>	Blue	-	-	Low
Black Swift	<i>Cypseloides niger</i>	Blue	Endangered	Endangered	Moderate
California Gull	<i>Larus californicus</i>	Red	-	-	Low
Caspian Tern	<i>Hydroprogne caspia</i>	Blue	-	Not at Risk	Low
Common Nighthawk	<i>Chordeiles minor</i>	Blue	Special Concern	Special Concern	High
Double-crested Cormorant	<i>Nannopterum auritum</i>	Blue	-	Not at Risk	Low to Moderate
Eared Grebe	<i>Podiceps nigricollis</i>	Blue	-	-	Low
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Yellow	Special Concern	Special Concern	Moderate to High
Great Blue Heron, herodias subspecies	<i>Ardea herodias herodias</i>	Blue	-	-	Low
Gyr Falcon	<i>Falco rusticolus</i>	Blue	-	Not at Risk	Low
Long-billed Curlew	<i>Numenius americanus</i>	Yellow	Special Concern	Threatened	Low
Long-tailed Duck	<i>Clangula hyemalis</i>	Blue	-	-	Low

Common Name	Scientific Name	BC List	SARA Status	COSEWIC	Potential to Occur*
Marbled Murrelet	<i>Brachyramphus marmoratus</i>	Blue	Threatened	Threatened	Low
Northern Pygmy-Owl, <i>swarthi</i> subspecies	<i>Glaucidium gnoma swarthi</i>	Blue	-	-	High
Northern Saw-whet Owl, <i>brooksi</i> subspecies	<i>Aegolius acadicus brooksi</i>	Blue	Threatened	Threatened	High
Olive-sided Flycatcher	<i>Contopus cooperi</i>	Yellow	Special Concern	Special Concern	High
Peregrine Falcon, <i>anatum</i> subspecies	<i>Falco peregrinus anatum</i>	Red	-	Not at Risk	Low
Pine Grosbeak, <i>carlottae</i> subspecies	<i>Pinicola enucleator carlottae</i>	Blue	-	-	High
Red-necked Phalarope	<i>Phalaropus lobatus</i>	Blue	Special Concern	Special Concern	Low
Rough-legged Hawk	<i>Buteo lagopus</i>	Blue	-	Not at Risk	Low
Rusty Blackbird	<i>Euphagus carolinus</i>	Blue	Special Concern	Special Concern	Moderate
Short-eared Owl	<i>Asio flammeus</i>	Blue	Special Concern	Threatened	Low
Steller's Jay, <i>carlottae</i> subspecies	<i>Cyanocitta stelleri carlottae</i>	Blue	-	-	High
Surf Scoter	<i>Melanitta perspicillata</i>	Blue	-	-	Low
Swainson's Hawk	<i>Buteo swainsoni</i>	Red	-	-	Low
Western Grebe	<i>Aechmophorus occidentalis</i>	Red	Special Concern	Special Concern	Low
Western Screech-Owl, <i>kennicottii</i> subspecies	<i>Megascops kennicottii kennicottii</i>	Blue	Threatened	Threatened	Low
White-tailed Ptarmigan, <i>saxatilis</i> subspecies	<i>Lagopus leucura saxatilis</i>	Blue	-	-	High
Mammals					
Caribou (Southern Mountain, Northern Group Population)	<i>Rangifer tarandus pop. 1</i>	Red	Threatened	Endangered	High
Ermine, <i>anguinae</i> subspecies	<i>Mustela richardsonii anguinae</i>	Blue	-	-	Moderate
Fisher	<i>Pekania pennanti</i>	No Status	-	-	Moderate
Grizzly Bear	<i>Ursus arctos</i>	Blue	Special Concern	Special Concern	Moderate to High
Hoary Bat	<i>Lasiurus cinereus</i>	Blue	-	Endangered	Moderate
Little Brown Myotis	<i>Myotis lucifugus</i>	Blue	Endangered	Endangered	High
Mountain Goat	<i>Oreamnos americanus</i>	Blue	-	-	High
Northern Myotis	<i>Myotis septentrionalis</i>	Blue	Endangered	Endangered	Low
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	Yellow	-	Endangered	Moderate
Wolverine	<i>Gulo gulo</i>	Blue	Special Concern	Special Concern	Moderate
Yuma Myotis	<i>Myotis yumanensis</i>	Blue	-	-	Moderate

Source: Ausenco (2026)

It is noted that species listings derived from database searches represent potential occurrence only and do not confirm site-specific presence. Additional baseline studies would be required to verify species presence, habitat use, and potential interactions with Project components.

Exploration activities completed to date have been conducted under a Project-specific Wildlife Management Plan intended to reduce potential interactions with wildlife and wildlife habitat.

20.2.6 Geochemistry and mine rock management

A screening level geochemistry assessment was carried out by AMEC in 2007. In 2025, Surge Copper initiated a geochemistry program to further assess the metal leaching and acid rock drainage (ML/ARD) risk from mined rock and tailings culminating in two related reports (Ausenco, 2026a; 2026b). The main surface infrastructure and facilities considered in the assessment included: the open-pit mine; tailings and waste management facility (TWMF) for storage of slurry tailings and potentially acid-generating (PAG) waste rock (subaqueous storage); a non-potentially acid-generating rock storage facility (NAG RSF); temporary ore stockpile(s); and other mine infrastructure (i.e., plant site pad, mine roads, buildings etc.). The life of mine is currently estimated at 31 years.

The Berg deposit consists of two main intrusive bodies: a north-trending, elongate body of quartz diorite that intrudes the contact between Hazelton Group and Skeena Group east of the mineralized area, and the Berg Stock. The two main mineralized zones comprise a northeast zone that contains primary (hypogene) and some supergene mineralization, and a south zone with supergene mineralization. Mineralization is centered on the Berg stock and adjacent fractured, hornfelsed andesite and quartz diorite. Metal zoning at Berg consists of three annular zones including a pyrite halo that extends up to 700 m to the south of the central stock.

In 2007, forty-five drill core samples (waste rock) and ten surface water samples were collected as part of Amec's ARD/ML characterization program. In 2025 Surge Copper collected 47 rock samples comprising 42 drill core and five surface bedrock samples. Eight samples of metallurgical tailings were also submitted for laboratory testing. Laboratory testing included a range of static tests and kinetic humidity cell tests.

The results of the 2007 test program indicated most waste rock samples were classified as PAG. There was naturally occurring ARD identified at the project site in surface waters. The most current results from the Ausenco (2026a) test program indicated pyrite as the dominant sulphide mineral in waste rock and tailings with calcite and iron-containing carbonates also present. It was determined by Ausenco (2026a) that a proportion of the silicates will have some capacity to neutralize acidity. The majority of sulphide minerals are likely reactive to oxidation when exposed to air and water based on observed exposed surface areas and grain size considerations. Waste rock units showed variable sulphide content which was relatively elevated in andesite and quartz diorite intrusive samples (up to 7%wt.). Surface samples all showed negligible sulphur content and were classified as NAG. Most quartz diorite intrusive samples and all andesite samples were classified as PAG, with the total sulphur concentration being the primary control on ARD risk. The ML risk from unoxidized PAG waste rock samples was low but will likely be significant if the material undergoes oxidation.

Four PAG sample humidity cells were initiated in January 2026. The first 20 weeks (out of 40 weeks) of results indicated stable circum-neutral pH conditions and low ML, although a number of metals did exceed stringent water quality requirements (Ausenco, 2026b). The humidity cells will continue to run for another 20 weeks.

Samples from several different tailings streams were submitted for testing. The majority of samples were predicted to be PAG with total sulphur content up to around 9%wt. The ML risk from unoxidized PAG tailings samples was low but will be significant if the material undergoes oxidation.

It is likely that a proportion of PAG rock will turn acidic prior to mine closure when exposed for prolonged periods to oxygen. If so, then the proposed storage of PAG waste rock subaqueously during operations within the TWMF is considered to be a reasonable approach to minimize the ARD risk. It is currently proposed that the PAG slurry tailings will be disposed in two areas in the TWMF on either side of the subaqueous stored PAG waste rock. If tailings are PAG and are stored subaerially then mitigation may be required during operations to prevent the exposed beaches from turning acidic. At closure flooded PAG rock may be drained, and a suitable cover installed to minimize the ARD risk.

Conclusions from the latest geochemistry baseline dataset for waste rock as follows:

- Waste rock units can generally be described as having low to moderate capacity to neutralize acidity.
- A proportion of waste rock from the mineralized zone in the pit will likely be PAG with the primary sulphide mineral present being pyrite.
- The parameter that most influences the ARD risk is the total sulphur concentration. It is therefore anticipated that there will be a transition from PAG to NAG waste rock as mining advances away from the mineralized zone outwards.
- Calcite is present in waste rock and can provide a reactive source for acid neutralization, while silicate minerals will provide limited longer-term acid neutralization capacity after carbonates are depleted.
- The exploration drilling programs focused on the mineralized zones (higher sulphur and PAG) hence, the current sample set was restricted to four environmental drill holes that may not be representative of waste rock as a whole.
- The current estimated total waste rock production is 2,000 Mt over a 31-year LOM. This represents a significant volume of rock compared to many open-pit operations. Additional and representative waste rock samples will need to be collected to fully assess ARD/ML risk and to meet regulatory expectations and to define a suitable sulphur cut-off for segregating PAG rock from NAG rock.
- Naturally occurring ARD is prevalent at the project site. Red Creek, which drains the north end of the deposit had abundant iron staining on the creek bed. Pump Creek, which drains the south end of the deposit had abundant aluminum precipitates on the creek bed.

Conclusions from the latest geochemistry baseline dataset for tailings as follows:

- A number of the tailings streams were classified as PAG with elevated sulphur content. Further information is required regarding the origin of these samples and how representative they are of future mill flowsheets.
- A low ML risk was observed for unoxidized tailings. The ML risk from oxidized tailings is expected to be significant.

20.2.7 Socio-economic and cultural baseline studies and community engagement

20.2.7.1 Land use and cultural heritage

The project is located within the Wet'suwet'en Nation traditional territory as well as Cheslatta Carrier Nation asserted territory. The Wet'suwet'en people are subject to two forms of governance, both hereditary and elected. The hereditary chiefs are administratively supported by the Office of the Wet'suwet'en while the

elected chiefs and councils engaged in this project discussion include Witset First Nation, Wet'suwet'en First Nation, Nee Tahi Buhn Indian Band, and the Skin Tyee First Nation.

The region is characterized by resource-based land uses, including mineral exploration, forestry, and recreation, alongside Indigenous land use associated with subsistence, cultural practices, and governance systems (Telkwa Coal Limited, 2022). Available regional land use and cultural context information was supplemented using publicly available sources, including the Telkwa Coal Project Environmental Assessment Certificate Application and the Natural Resource Stewardship Monitoring and Assessment Report for the Wet'suwet'en Hereditary Territory (Telkwa Coal Limited, 2022) (MFLNRORD & OW, 2017).

Traditional land use for the area includes hunting, fishing, trapping, plant harvesting, and travel along established routes. Fish, particularly salmon, are a key resource, along with wildlife such as moose, bear, and waterfowl, and plant species including berries and medicinal plants (MFLNRORD & OW, 2017). These practices are supported by traditional ecological knowledge and remain integral to cultural continuity and land stewardship.

Cultural heritage values in the region include both tangible and intangible elements, including traditional use sites, trails, cabins, culturally modified trees, archaeological resources, and areas of cultural and spiritual importance (MFLNRORD & OW, 2017).

While these sources provide regional context, site-specific land use patterns within the Berg Copper Project area may vary and will be further informed through ongoing engagement and baseline studies. Potential project interactions include potential disturbance of areas used for traditional activities, effects on wildlife and fish habitat, and disturbance of archaeological resources.

20.2.7.1.1 Archaeology

Available archaeological information includes an Archaeological Overview Assessment (AOA) completed for the Surge Copper mineral claims, which involved a desktop review of archaeological records and predictive modelling of archaeological potential within the Project area (Ember Archaeology, 2025). Results of the AOA indicate that the majority of the Project area is characterized by low to very low archaeological potential, with higher potential primarily associated with watercourses and localized areas in the eastern and northeastern portions of the claims. Several previously recorded archaeological sites are located in proximity to the Project area, including sites associated with watercourses and travel corridors; however, no archaeological sites have been identified within much of the central and western portions of the claims (Ember Archaeology, 2025).

The AOA concludes that no further archaeological work is required for exploration activities, provided that a chance find procedure is implemented. However, the potential for previously unidentified archaeological resources remains, particularly in areas of elevated potential. As such, further archaeological assessment and permitting under applicable provincial legislation will be required as the Project advances to the next stages of mine development.

As the Project advances and ground-disturbing activities increase, Archaeological Impact Assessments (AIAs) will be required within areas of moderate to high archaeological potential, including proposed infrastructure corridors, access routes, and watercourse crossings. These studies are field-based investigations used to confirm the presence or absence of archaeological resources and assess potential impacts. In British Columbia, archaeological sites are protected under the Heritage Conservation Act, which prohibits the alteration or disturbance of such sites without a permit. Depending on the results of the AIA, permits under Sections 12 and/or 14 of the HCA may be required to conduct further investigations or to authorize impacts to archaeological resources.

20.2.7.2 Community engagement

Community engagement activities for the Berg Copper Project have been conducted since 2013 and have included a range of communication methods such as in-person meetings, site visits, field tours, correspondence, and virtual meetings. Engagement has been undertaken to provide project updates, support understanding of exploration and development activities, and to facilitate ongoing dialogue on economic and employment opportunities with interested parties.

Early-stage engagement (2013 to 2015) focused on introducing the Project through site visits, field tours, and initial meetings, including activities associated with exploration access and collaboration opportunities. Following this initial period, engagement occurred on a more intermittent basis, with records indicating periodic interactions through meetings and correspondence. Engagement activity has increased notably from 2022 to present, reflecting renewed project advancement, including exploration activities, infrastructure planning, and participation in funding and development initiatives. Recent engagement has included a combination of virtual meetings, email correspondence, and in-person discussions, supporting continued information sharing and stakeholder/rightsholder interaction.

The Company maintains a centralized record of engagement activities, documenting the date, type of communication, participants, and key discussion topics. Topics discussed have generally included exploration updates and project planning, permitting and technical information, and infrastructure considerations such as power supply and access. Engagement has also addressed agreement development and renewals, economic participation opportunities including employment and contracting, and coordination of meetings and follow-up activities. In addition, engagement has included broader community-focused discussions such as capacity building, cultural awareness, and participation in community events.

20.2.7.3 Consultation policy requirements

Both the BC Environmental Assessment Act (BCEAA) and the federal Impact Assessment Act (IAA) contain provisions for consultation with First Nations and the public as a component of the EA process.

20.2.7.4 First Nations

The Berg Copper Project is located within the traditional territories of several Indigenous groups in north-central British Columbia. Engagement activities to date have primarily involved the Office of the Wet'suwet'en Skin Tyee Nation, Cheslatta Carrier Nation, Wet'suwet'en First Nation (WFN), and Nee Tahi Buhn First Nation. More recently Surge has become aware of the need and interest in engaging with Witset First Nation and establishing regular dialogue with this group.

Engagement with Skin Tyee Nation has been ongoing since 2013 and has included the establishment of formal agreements to support communication and cooperation. A Cooperation Protocol Agreement was executed in 2014, followed by subsequent engagement and renewal discussions to support continued dialogue and project-related activities. The Company continues to seek renewed agreements with this group that are reflective of the scope and level of engagement on the more advanced project development topics.

Cheslatta Carrier Nation has a long-standing relationship with the Project, with engagement records indicating regular interaction over an extended period. This includes a Letter of Understanding executed in 2013 between Cheslatta Carrier Nation and Gold Reach Resources Ltd. and Ootsa Ventures Ltd., both predecessor entities associated with the Project. This supported ongoing communication, exploration activities, and consideration of economic participation opportunities. Cheslatta Carrier Nation has also

undertaken community-based land use planning, with a Land Use Plan completed in 2020 that identifies priorities for land use, development, and cultural values within its territory (Ransom, A., 2021).

Engagement with Wet'suwet'en Nation via the administrative support of the Office of the Wet'suwet'en (OW) has increased in recent years, particularly from 2022 onward. A Communication and Engagement Agreement was executed in 2024 to support structured engagement activities. Engagement is informed by Wet'suwet'en governance structures and protocols for natural resource development, including guidance from the Office of the Wet'suwet'en regarding communication and consideration of Wet'suwet'en title, rights, and interests. Additional agreements have been established with affiliated economic development entities to facilitate collaboration on potential business and economic development opportunities related to the Project.

Engagement with Wet'suwet'en First Nation (elected Chief and Council) has been predominantly through the YLP (Yinkah Dene Limited Partnership) the economic arm of WFN. Procurement, contracting and employment opportunities through the earlier exploration focused work was the target of those discussions.

Engagement efforts with Nee Tahi Buhn First Nation have been initiated; however, interactions to date have been limited, with the Company continuing to seek opportunities to establish regular communication and engagement with leadership and community representatives.

Overall, engagement with First Nations has included a combination of meetings, site visits, information sharing, and discussions related to exploration activities, project planning, and opportunities for participation and employment. Formal agreements in place support communication, coordination, and the exploration of economic and capacity-related opportunities, while ongoing capacity and resourcing discussions are focused on advancing relationships and capacity to support future project development and the upcoming regulatory pathway.

20.2.7.5 Government

Engagement with government agencies in relation to the Berg Copper Project has begun and is primarily associated with early-stage preparatory and early-stage awareness discussion prior to moving into the regulatory process. Available records indicate participation in industry forums and meetings with provincial representatives, including discussions related to exploration activities and land use considerations, as well as increased engagement related to the environmental assessment process both provincially and federally. Engagement with both levels of government continues to increase as the Project advances into permitting and regulatory review.

20.2.7.6 Public and stakeholders

Engagement with the public and other stakeholders has included participation in community events, presentations, and meetings with local organizations and interest groups. Available records indicate that this has included presentations at regional conferences and discussions with local government representatives, recreation groups, and community members. Topics discussed have included exploration activities, project planning, potential economic opportunities, and access-related considerations. Engagement has also addressed community interests related to land use and recreational activities.

20.3 Permitting

This section summarizes the existing permits in place for the project and the federal and provincial legislation and associated permits, licences and approvals that will apply or potentially will apply to the construction and operations of the project, as currently proposed.

Canada's environmental assessment and mine permitting framework is currently undergoing significant modernization, driven by recent federal and provincial initiatives focused on improving regulatory efficiency for critical mineral projects (Government of Canada, 2025) (Impact Assessment Agency of Canada, 2026). Following amendments to the federal Impact Assessment Act in 2024, Canada and British Columbia have introduced coordinated permitting initiatives intended to streamline environmental review processes, reduce duplication between jurisdictions, and accelerate decision-making timelines for projects considered strategically important to the critical minerals supply chain (Government of Canada, 2025). Recent federal policy direction has emphasized a "one project, one review" approach, with stated objectives to complete federal impact assessments and permitting decisions for designated major projects within two years where feasible (Impact Assessment Agency of Canada, 2026). These initiatives are intended to improve coordination between federal and provincial regulators while maintaining requirements related to environmental protection and Indigenous consultation. As regulatory reforms continue to evolve, future phases of the Berg Copper Project may be subject to updated assessment procedures, revised permitting pathways, or modified regulatory timelines.

20.3.1 Critical minerals designation

The Berg Copper Project has been identified as a priority project under the Province of British Columbia's Critical Minerals strategy, with support from the BC Critical Minerals Office (Government of British Columbia, 2026). This designation is intended to enhance inter-agency coordination, improve regulatory efficiency, and may support coordinated regulatory review and provincial engagement.

Notwithstanding this designation, the Project remains subject to all applicable provincial and federal regulatory requirements, including the British Columbia Environmental Assessment Act and other permitting legislation. The designation does not alter the substantive requirements for environmental assessment, Indigenous consultation, or permitting approvals, but may facilitate more coordinated and timely regulatory review processes.

20.3.2 Existing permits

A Multi-Year Area-Based (MYAB) permit (MX-1-836; originally issued on November 24, 2010) was amended on June 16, 2025, and expires on March 31, 2030. The permit authorizes exploration activities within the Berg Copper Project area, including use of existing camps, drilling, geophysical surveys, and construction and modification of exploration access.

The permit includes standard environmental protection and operational conditions, including requirements for erosion and sediment control, protection of watercourses and fish habitat, invasive species management, and progressive reclamation. The exploration permit also takes into account environmental management plans that have been developed in conjunction with the province for active management of the surrounding environment. Exploration activities are seasonally restricted by the province, with activities generally limited to the period between July 16 and October 31, and additional restrictions prohibiting activities above 1,200 masl between November 1 and July 15. Ongoing reporting, monitoring, and reclamation obligations are required under the permit, and all activities must be conducted in accordance with the approved Mine Plan and Reclamation Program.

20.3.3 Environmental approvals

Major mining projects in BC are subject to an Environmental Assessment (EA) and review prior to certification and issuance of permits to authorize construction and operations. The EA process is a means of addressing the potential for adverse environmental, social, economic, health, and heritage effects or the potential adverse effects on Indigenous interests or rights prior to project approval.

At the provincial level, proposed mining developments that exceed any of the thresholds specified in the Reviewable Projects Regulation (BC Reg. 370/2002) are required under the BCEAA to obtain an EA Certificate (EAC) before the issuance of any permits to construct and operate. The project will require a BC provincial EAC.

Provincial and federal environmental assessment processes include consultation with Indigenous Nations whose asserted or established rights may be affected by the Project. Ongoing engagement and consultation activities will form part of future permitting and regulatory review processes.

At the federal level, proposed mining developments that exceed any of the thresholds specified in the Regulations Designating Physical Activities (SOR/2012-147) are required under the Impact Assessment Act (IAA) to obtain a federal decision statement before the issuance of any permits to construct or operate. The project may require a federal decision statement.

When a project falls under both provincial and federal environmental assessment responsibility, there is an agreement in place between BC and Canada which enables the two governments to carry out a single, cooperative environmental assessment while retaining their respective decision-making powers. Provincial and federal ministers make independent decisions on whether to issue an EAC from a single report.

Surge Copper has not yet filed a federal or provincial EA application. Once an application is filed, the BC Environmental Assessment Office (EAO) and Impact Assessment Agency of Canada (IAAC) will issue their decision for the Project. Once the Project has the provincial EAC and a federal decision statement, Surge Copper can apply for the necessary statutory permits and authorizations to commence project construction.

20.3.4 Climate action legislation

British Columbia's industrial emissions framework includes the Output Based Pricing System (OBPS), which aligns with Canada's broader greenhouse gas emissions reduction policies and applies to certain industrial facilities exceeding specified emissions thresholds. Depending on final project design and operational emissions, the Berg Copper Project may be subject to provincial greenhouse gas reporting requirements and carbon pricing compliance obligations. Carbon pricing under the federal framework is scheduled to increase from C\$95/t CO₂e (2025) to C\$170/t CO₂e through 2030 and may influence future operating costs.

The Project design contemplates the use of electrified mining technologies, including conveyor systems and battery-electric equipment, and is expected to leverage British Columbia's low-carbon electricity grid. These design considerations may contribute to reduced greenhouse gas emissions and air contaminant releases relative to conventional diesel-based mining operations. Final design details will be confirmed in subsequent engineering stages and may influence the Project's greenhouse gas emissions profile and regulatory obligations.

20.3.5 Anticipated provincial and federal approvals and authorizations

Table 20-4 presents a preliminary list of the key provincial and federal authorizations, licences, and permits that will be required to develop the project.

Table 20-4: Preliminary list of provincial and federal authorizations likely required for the Berg Copper Project

Legislation	Issuing Agency	Authorization	Purpose
Provincial			
<i>BC Environmental Assessment Act</i>	BC Environmental Assessment Office (BC EAO)	BC Environmental Assessment Certificate	Minimize or avoid adverse environmental, heritage, health, social, and economic effects and incorporate environmental factors and Indigenous and stakeholder consultation into decision making.
<i>Mines Act</i>	BC Ministry of Energy, Mines and Critical Minerals (MCM)	Mines Act Permit	Authorizes development including construction, operation, and security.
<i>Mineral Tenure Act</i>	MCM	Mineral Claim Acquisition	Subsurface rights to minerals in a defined unit, up to 10,000 tonnes per year per unit.
	MCM	Mining Lease changes	Conversion of mineral claim to a mining lease is necessary before production can exceed above limits
<i>Environmental Management Act (EMA)</i>	BC Ministry of Environment and Climate Change Strategy (ENV)	EMA Effluent Permit	Authorizes discharge of liquid effluent to the environment.
		EMA Air Permit	Authorizes discharge of airborne emissions to the environment.
		Solid Waste Discharge Permit	Authorizes disposal of inert, solid waste into engineered landfill
<i>EMA Hazardous Waste Regulation</i>	ENV	Hazardous Waste Regulation	Authorizes temporary storage of hazardous waste.
<i>Drinking Water Protection Act</i>	Northern Health Authority	Camp operating permit	Issues a camp operation permit for sewage disposal, drinking water supply, and food handling.
<i>Public Health Act</i>			
<i>Municipal Wastewater Regulation</i>			
<i>Forest Act and Forest and Range Practices Act</i>	Ministry of Forests (FOR)	Occupant Licence to Cut (OLTC)	Authorizes cutting and removal of trees of merchantable size.
		Road Use Permit	Authorizes use of a Forest Service Road.
		Special Use Permit	Authorizes the construction of and use of a new road. Authorizes occupation of Crown Land.
<i>Heritage Conservation Act</i>	FOR	Heritage Inspection Permit S 12.2	Authorizes investigation through an archaeological impact assessment or mitigation of impacts to sites (should any be identified) through systematic

Legislation	Issuing Agency	Authorization	Purpose
			data recovery after an impact assessment has been completed.
		Site Alteration Permit (SAP) as needed S 12.4	Authorizes alteration or removal of site (should any be identified and impacted by the Project).
<i>Land Act</i>	FOR	Licence of Occupation	Authorizes occupation of Crown Land including temporary borrow and gravel pits, construction staging areas, and for remote areas where precise tenure boundaries are not required.
<i>Water Sustainability Act</i>	FOR	Change Approval S11	Changes in and about a stream are carried out under change approvals and notifications. These approvals authorize work in and around streams.
		New Water Licence S10	Water licences allow licensees to divert, store, and use specific quantities of water for one or more water use purposes. A water licence may also authorize works related to the diversion and use of the water.
<i>Wildlife Act</i>	Ministry of Water Land and Resource Stewardship (WLRS)	Authorization Permits for general wildlife (relocation)	If work occurs within identified wildlife areas. A blanket permit applies across the entire project.
Federal			
<i>Impact Assessment Act (IAA)</i>	Impact Assessment Agency of Canada (IAAC)	Federal Decision Statement	Minimize or avoid adverse environmental, heritage, health, social, and economic effects and incorporate environmental factors and Indigenous and stakeholder consultation into decision making.
<i>Fisheries Act</i>	Fisheries and Oceans Canada (DFO)	Section 35 Authorization	Where works may cause the harmful alteration, disruption, or destruction of fish habitat.
		Scientific Licence	Licence required to harvest fish for experimental, scientific, educational, or public display purposes.
<i>Metal and Diamond Mining Effluent Regulations, SOR/2002-222</i>	Environment and Climate Change Canada (ECCC)	Authorization to deposit an effluent that contains a deleterious substance	Applies to mines that exceed an effluent flow rate of 50 m ³ per day, based on effluent deposited from all the final discharge points of the mine.,
		Schedule 2 Amendment	Deposit of a deleterious substance in any water frequented by fish.
<i>Migratory Birds Convention Act</i>	ECCC	Damage or Danger Permit	May require a permit if the Project is shown to affect nesting habitats used

Legislation	Issuing Agency	Authorization	Purpose
			by migratory birds or if activities occur during the nesting season (e.g., clearing of vegetation, disturbance to nests)
<i>Species at Risk Act (SARA)</i>	ECCC	Species at Risk Permit	Permits may be required if the Project has the potential to affect a species listed on Schedule 1 of the Act, including any part of its critical habitat, or the residences of its individuals.
<i>Nuclear Safety and Control Act</i>	ECCC	Licence	A licence is required for possession of instruments containing radioactive material, such as nuclear density gauges (portable and fixed).
<i>Radiocommunication Act</i>	ECCC	Licence	A licence is required for use of radio equipment on site.
<i>Transportation of Dangerous Goods Act</i>	ECCC	Permit	Transportation and handling of dangerous goods as described by the regulation.
<i>Explosives Act</i>	Natural Resources Canada	Manufacturing/ Storage Licence	Explosives authorizations are required during construction and operations. Authorization is required to manufacture and operate an explosives storage facility. Licences are required by either the company or blasting contractor.
<i>Canadian Navigable Waters Act</i>	Transport Canada	Permit	May require authorization(s) if the Project activities include works built in, on, over, under, through, or across any navigable water that may interfere with navigation.

20.3.5.1 Anticipated major provincial authorizations

The major BC provincial authorizations anticipated for the project include the following:

- *Mines Act*

All mines in BC must hold a permit issued by the Chief Permitting Officer (CPO), under the Mines Act and in accordance with Part 10 of the Health, Safety and Reclamation Code for Mines in British Columbia. Permitting under the Mines Act is applicable for all on-site mining activities and considers detailed designs for all project components and phases of mine life, including construction, operation, reclamation, and closure. An amendment application must be made if a proponent wishes to change any component of their Mines Act Permit unless the changes meet the criteria of a deemed authorization or a departure from approval.

- *Environmental Management Act (EMA) Effluent and Air Emissions permits*

The Environmental Management Act is the primary legislation that enables the BC to regulate the introduction of waste to the receiving environment. The Waste Discharge Regulation of EMA prescribes those discharges of wastes from mining activities to the environment require authorization under the EMA.

An EMA permit to authorize the ongoing discharge of waste for a mining project is required for:

- Effluent discharges (e.g., tailings pond supernatant, mine-influenced runoff, and sewage)
- Air emissions (e.g., refuse incinerator emissions, emissions from large power-generating plants, emissions from milling processes, etc.)
- Solid wastes (e.g., mill tailings, water treatment plant sludge, municipal and industrial refuse, etc.)
- An EMA permit will set the terms and conditions for the waste discharge, with the goal of ensuring the protection of human health and the environment. The terms and conditions of an EMA permit may include limiting the quantity and quality of waste contaminants and monitoring the discharge and the receiving environment.
- *Joint Mines Act/Environmental Management Act Application*
 - Development of the Berg Copper Project requires permits under the Mines Act and Environmental Management Act to authorize mining activities and associated discharges. These permits are administered by the Ministry of Mining and Critical Minerals, Ministry of Environment and Parks, and the Ministry of Environment and Climate Change Strategy.
 - For projects requiring multiple authorizations, provincial processes may provide for coordinated review; however, the Project remains subject to all applicable regulatory requirements and approval processes.

20.3.5.2 Anticipated major federal authorizations

- Fisheries Act

In effect since June 2019, Canada's modernized Fisheries Act, RSC 1985, c. F-14 provides protection for all fish and fish habitats. Where works may cause the harmful alteration, disruption, or destruction of fish habitat, authorization from Fisheries and Oceans Canada (DFO) under Section 35 of the Fisheries Act may be required. A Fisheries Authorization and Fish Habitat Compensation Plan may be required if the proposed mine infrastructure associated with a proposed project will impact fish-bearing water.

Mining projects in BC may also require authorizations from ECCC under Section 36 of the Fisheries Act, which prohibits the deposition of deleterious substances into water frequented by fish. If the deposition of a deleterious substance into waters frequented by fish is due to the proposed establishment of a tailings impoundment area or other mine waste storage facility, an authorization from ECCC, in the form of a Schedule 2 (SOR/2002-222) amendment to the MDMER under Section 36 of the Fisheries Act, may be required.

The project as envisioned in this report will require a Fisheries Act Authorization and Fish Habitat Compensation Plan. A Schedule 2 amendment to the MDMER will also be required subject to further fish and fish habitat surveys required for areas where mine waste will be stored (waste rock, tailings, ore, and untreated contact water/mine effluent).

20.3.6 Regulatory considerations for mine closure

Under the BC Mines Act, anyone who engages in mining exploration work or mining operations determined by regulation must submit a reclamation plan. A conceptual reclamation and closure plan and a closure security estimate will need to be developed to support the submission of an EA report to the province or to the federal agency. Exploration-stage reclamation security has been posted under the existing Mines Act Permit. Additional reclamation and closure security requirements would be expected for future mine development phases.

20.4 Environmental management

20.4.1 Water and waste management

20.4.1.1 Water management

The Berg Copper Project includes proposed water management and mine waste storage infrastructure intended to support mining and processing activities while minimizing potential effects on downstream water resources and aquatic habitat. Freshwater supply for the Project is proposed from Nanika Lake via an overland pipeline to the process plant and associated facilities.

The Project design includes diversion channels, collection channels, and contact water ponds to manage surface runoff and contact water generated from the open pit, process plant, camp, and associated infrastructure areas. Diversion structures are intended to reduce the amount of non-contact runoff entering operational areas, while collection systems are designed to retain and manage contact water prior to reuse or discharge. Preliminary designs have been developed using regional hydrologic data and estimated peak flow conditions, as outlined in Section 18 of this Report.

Excess contact water and process water will be stored in collection ponds and tested prior to discharge to the receiving environment and treated if required to meet applicable regulatory and permit requirements. Final discharge points (FDPs) where effluent will be discharged to the receiving environment and monitored for compliance to federal and provincial effluent criteria are currently being determined with two candidate locations currently under consideration (Nanika Lake and unnamed stream and lakes north and east of the proposed treatment plant, respectively). FDP locations will be determined based on a review of environmental and practical considerations, as well as taking into consideration First Nation and regulators' concerns.

A preliminary site-wide water balance was completed to support mine planning and infrastructure design. The analysis considered surface runoff, process water requirements, evaporation, and pond storage requirements, and details can be found in Section 18 of this report. At the time of reporting, groundwater inflows and pit dewatering requirements had not yet been fully incorporated into the model and are expected to be refined during subsequent engineering phases.

20.4.1.2 Waste and materials management

Mine waste management planning includes conceptual designs for tailings storage, potentially acid-generating (PAG) and non-acid-generating (NAG) waste rock storage, and associated water management infrastructure (also presented in Section 18 of this Report). The proposed Tailings and Waste Management Facility (TWMF) is intended to provide secure confinement of tailings and PAG waste rock while limiting potential effects on groundwater and surface water resources. PAG waste rock is proposed to be deposited subaqueously within the facility to reduce the potential for acid rock drainage generation.

The conceptual TWMF design incorporates staged embankment construction and water cover requirements for PAG waste rock management. Preliminary design objectives include supporting water quality protection and minimizing potential effects on surrounding aquatic and terrestrial environments. The waste and water management infrastructure remains at a conceptual design level and will be further refined through detailed engineering, environmental assessment, and permitting processes.

As outlined in Section 18, the diesel storage facility will consist of three vertical storage tanks. Each tank will have 415,000 L of capacity, for a total storage capacity of 1,245,000 L. Tanks will be designed and maintained in accordance with applicable legislation with the appropriate liners and containment to manage spills. Fuel will be delivered by tanker trucks to site and transferred to day tanks via pipelines and mobile fuel trucks.

Detailed description of the process plant and conceptual layout are presented in Sections 17 and 18. The process plant will require the use of reagents. Section 17.4.8 provides a list of reagents and their mixing and storage systems which will be located within secure containment to prevent spillage, release to the environment and unintended mixing with other reagents. Cyanide will be used in the process, and Surge will adopt and follow the International Cyanide Management Code for the transport, storage and use of cyanide.

In addition to the process plant the mine complex will consist of a truck shop, administration offices, adjoining warehouses, potable water and wastewater treatment, and waste management facilities. Waste management facilities that should be considered would consist of the following:

- Waste processing and storage areas for managing both hazardous and non-hazardous wastes.
- Recycling and filtering waste oil for the purpose of burning in waste oil heaters.
- Dual-chamber incinerator for disposal of food waste and packaging, other non-hazardous combustible waste, such as paper, cardboard and wood. Incinerator to meet applicable regulatory standards for stack emissions.
- Non-hazardous landfill for the disposal of bulky non-hazardous and non-food related inert waste such as wood, plastics, and metals.
- Land farm and contaminated snow storage facility for treatment of contaminated soil and snow from occasional spills of hydrocarbons.
- Packaging and manifesting of hazardous and hydrocarbon wastes for shipment off-site via truck backhaul to accredited recycling and disposal facilities located in BC.

20.4.2 Environmental management and monitoring plans

As the project progresses through the PFS and EA/permitting stages, several environmental management and monitoring plans will be required to guide the development and operation of the project and mitigate and limit environmental impacts. These plans will be complementary to the engineered designs that will be required for the storage of tailings, waste rock, ore, and conveyance/storage (refer to Section 18 of this report). A preliminary list of the plans that will need to be developed is provided below.

- | | |
|--|--|
| • Environmental Management System | • Mine Site Traffic Control Plan |
| • Surface Erosion Prevention and Sediment Control Plan | • Fuel Management and Spill Control Plan |
| • Soil Management Plan | • Combustible Dust Management Plan |
| • Construction Environmental Management Plan | • Air Quality Dust Management Plan |
| • ML/ARD Management Plan | • Waste (Refuse and Emissions) Management Plan |
| • Mine Site Water Management Plan | • Reclamation and Closure Plan |
| • Discharge Management Plan | • Occupational Health and Safety Plan |
| • Vegetation Management Plan | • Aquatic Effects Monitoring Plan |
| • Invasive Plant Management Plan | • Chemicals and Materials Storage, Transfer, and Handling Plan |
| • Wildlife Management Plan | • Mine Emergency Response Plan |
| • Archaeological Management and Impact Mitigation Plan | • Hazardous Materials Management Plan |
| • Community Effects Monitoring and Management Plan | • Stakeholder and Indigenous Nations Communication Plan |

20.5 Other potential environmental concerns

There are two provincial parks within 30 km downstream of the project including:

- The Nineikexh/Nanika-Kidprice Park 16 km north of the Project site. This park covers 17,006 ha and provides important habitat for wildlife that live in and around the park. Lower elevations in the park are moderate value habitat for grizzly bears in late spring, summer, and fall. Caribou have also been observed in the park. The fishery values include populations of rainbow and cutthroat trout, mountain whitefish, Dolly Varden char, the blue-listed bull trout, Chinook and sockeye salmon (present in downstream lakes), Rainbow and cutthroat trout, mountain whitefish, Dolly Varden char and the blue-listed bull trout. Nanika Falls is a barrier to upstream fish passage. Rainbow trout and Dolly Varden char occur above the falls in Anzac, Stepp, and Kidprice lakes.
- The Morice Lake Park is located 22 km northwest of the Project site. This park covers 52,430 ha and provides important habitat for grizzly bears, mountain goats, moose, deer, and caribou. It is also at the headwaters of an important salmon and steelhead river.

20.6 Conceptual mine closure and reclamation plan

Under the BC Mines Act, anyone who engages in mining exploration work or mining operations determined by regulation must submit a reclamation plan. A conceptual reclamation and closure plan and a closure security estimate will need to be developed to support the submission of an EA report to the province or to the federal agency. The reclamation security will need to be posted to BC government prior to the commencement of construction. A mining company in British Columbia does not always need to provide the full closure bond for all costs upfront. The bond may be set and adjusted according to a phased approach, reflecting the stage and risk of mining operations. However, the company must comply with the Chief Inspector of Mine's requirements and ensure sufficient financial security is available for eventual reclamation. The estimated closure and reclamation costs are discussed in Section 21.2.11.

The development of a mine closure and reclamation are currently in development but as the plan develops it will adopt the following objectives to ensure the long-term stability and health of the environment and communities affected by mining activities:

- Apply the principles of pollution prevention and continuous improvement to minimize ecosystem impacts and facilitate biodiversity conservation.
- Use energy resources, raw materials and natural resources efficiently and effectively.
- Engage with governments, employees, local communities and the public to create a shared understanding of closure and reclamation issues and take their views into consideration in making decisions.
- Where practicable, undertake reclamation of affected areas in an ongoing and progressive manner to reduce the environmental risk once the mine ceases operation.
- Provide for the reclamation of affected sites and areas to a stable and safe condition and restore altered water courses to near their original alignment and cross-section. Where practical, affected areas will be returned to a state compatible with the original undisturbed area.
- Strive to minimize the long-term requirement for active effluent treatment with the aim to meet applicable water quality objectives utilizing passive treatment technologies
- Reduce the need for long-term monitoring and maintenance by designing for closure and instituting progressive reclamation, when possible.

- Provide for mine closure using the current available proven technologies in a manner consistent with sustainable development/best practices.

The above objectives are subject to revision based on ongoing engagement with government, First Nations and local communities as well as ongoing technological improvements.

The current conceptual closure and reclamation plan for the Project includes two phases: an active closure phase that will involve reclamation and removal of site infrastructure and a longer-term inactive post-closure phase that will involve long-term environmental monitoring as follows:

- Passive flooding of the open pit by means of surface inflows from reconstituted drainages and meteoric inputs. The period required for pit flooding and formation of a pit lake is yet to be determined.
- The ore stockpile will be reclaimed, once depleted.
- The surface infrastructure on the site will be decommissioned and removed from the site upon completion of mining. Process buildings, camp facilities, pipelines, conveyor systems, and equipment will be removed from site and may be appropriately landfilled in an approved facility.
- Concrete slabs and footings will be broken and placed appropriately to meet project closure and reclamation objectives.
- Explosives, explosives magazines, fuel, and storage facilities will be removed from the site.
- Waste rock stockpiles (NAG) will be re-contoured for geotechnical stability, capped with a graded earthfill/rockfill cover to facilitate runoff and minimize infiltration, and revegetated.
- Compacted surfaces including laydowns, civil pads, and non-site access roads will be decompacted, re-contoured, capped with a graded earthfill/rockfill cover to facilitate runoff and minimize infiltration, and revegetated.
- Appropriate cover application (e.g. rock, soil, geomembranes) for all exposed mine rock that is PAG including remaining low-grade or waste rock stockpiles, and other areas.
- The TWMF's embankments will be revegetated to establish an erosion resistant surface.
- The tailings beach will be capped with soil and revegetated.
- Water treatment will be continued until the TWMF and other mine site contact water quality meets applicable discharge criteria. Once TWMF and other mine contact water quality meets discharge criteria, active water treatment will cease, diversions will be decommissioned, and the TWMF and other water management infrastructure will be allowed to discharge naturally via a closure spillway(s). Passive water treatment technologies will be considered as a means of meeting applicable discharge criteria.
- For mine roads, Surge Copper will remove all culverts and install cross-ditches for drainage. The mine site access road will not be deactivated as it will be required for access for ongoing reclamation activities (as required) and ongoing monitoring through post-closure.
- Post-closure monitoring of the reclaimed and closed facilities will continue for an unspecified period until such time as mine contact water meets applicable criteria and the site is geotechnically stable.

Closure planning will include dialogue with Indigenous groups and stakeholders to determine post-mining land use objectives and necessary investigations required to achieve and monitor those objectives.

21 Capital and operating costs

21.1 Introduction

The capital and operating cost estimates presented in this PFS provide substantiated costs that can be used to assess the preliminary economics of the Berg Copper Project. The estimates are based on an open-pit mining operation as well as the construction of a process plant, tailings storage facility and infrastructure as well as owner's costs and provisions. The processing plant nameplate capacity is 120,000 t/d (43.8 Mt/a), with a life of mine of 28 years.

All capital and operational cost estimates are presented in Canadian dollars (C\$), with exchange rate variations factored in. An exchange rate of 0.73 (C\$/US\$) has been applied as necessary.

21.2 Capital cost estimate

21.2.1 Capital cost summary

The capital cost estimate conforms to Class 4 guidelines of the Association for the Advancement of Cost Engineering International (AACE International), with an estimated accuracy of +25%. The capital cost estimate was developed in Q2 2026 Canadian dollars based on vendor's quotes, Ausenco's in-house database of projects and advanced studies as well as experience from similar operations.

The total initial capital cost for the Berg Copper Project is C\$4,678 million, and the LOM sustaining cost is C\$1,729 million. The capital cost summary is presented below in Table 21-1. Table 21-2 provides a summary of the same capital costs for the Project, categorized by the work breakdown structure (WBS) of the capital cost estimate.

Table 21-1: Capital cost summary as shown in the press release

Capital category	Initial capital (C\$M)
Pre-stripping	806
Mining Fleet	679
Site Development & Mine Infrastructure	204
Subtotal	1,690
Crushing & Materials Handling	261
Process plant	817
Tailings & Water Management	449
Power, Roads & Site Infrastructure	353
Subtotal	1,881
Total Directs	3,571
Indirects	432
Owner's Costs	101
Contingency	574
Total	4,678

Note: Values shown in the press release are rounded to zero decimal places.

Table 21-2: Capital cost summary by WBS

WBS description	Initial capital (C\$M)	Sustaining capital cost (C\$M) LOM	Total cost (C\$M)
Mining and waste rock handling	1,689.8	916.4	2,606.0
Process plant	1,078.7	-	1,078.7
Tailings facilities	449.0	629.2	1,078.2
On-Site infrastructure	223.2	26.4	249.6
Off-Site infrastructure	129.8	-	129.8
Total Directs	3,570.3	1,572.0	5,142.3
Indirects	188.7	16.0	204.7
EPCM services	243.3	-	243.3
Owner's cost	101.4	-	101.4
Total Indirects	533.6	16.0	549.6
Contingency	574.1	140.6	714.7
Project Total	4,677.8	1,728.6	6,406.6

Note: Totals may not sum due to rounding.

The capital cost for the project is split into initial capital and sustaining capital costs. The initial capital is any project development cost incurred during the pre-production years. Sustaining capital is the capital incurred to support production from the project.

21.2.2 Basis of capital cost estimate

The data for the estimates has been derived from a variety of sources, including the following:

- Mining schedule
- Conceptual engineering design by Ausenco and MMTS
- Major mechanical equipment costs are based on vendor quotations, first principles, and Ausenco's database of historical projects
- Material take-offs (MTOs) for earthworks, concrete, structural steel, Off-plot pipes and platework. Electrical, instrumentation, and in-plant piping were factored by benchmarking against similar projects with equivalent technologies and unit operation
- Topographical information considered
- Engineering design at a PFS level
- Cost escalation to 2026 when historical pricing is considered
- A growth and contingency allowance were included.

21.2.3 Area 1000 – mine capital costs

21.2.3.1 Mine capital costs

Mine capital costs are derived from vendor quotations and operational data collected at other Canadian open-pit mining operations, applied to the owner operated Berg 2026 PFS mine plan.

Pre-production mine operating costs, that is, all mine operating costs incurred before mill start-up, have been capitalized and are included in the capital cost estimate. These costs include drill and blast, load and haul, support and General Mine Expense (GME) costs.

The capital costs of mine equipment fleet purchases as well as fleet expansion and replacement purchases, for units retired after their useful life, are applied in the year the unit is required to execute the mine plan.

Mine Operations site development costs have been capitalized including:

- Clearing and grubbing
- Stockpile preparation
- Geotechnical depressurization drilling
- Crush rock production
- Haul road construction.

The following mine operations infrastructure items have also been capitalized:

- Open-pit electrification
- Explosives pad preparation
- Site GPS and wireless data networks
- Fleet machine onboard HPGPS and wireless data receiving
- Fleet management and mine dispatch system
- Mine survey gear and supplies
- Geology, grade control, and mine planning software licenses
- Maintenance tooling and supplies
- Mine rescue gear
- Mine communications systems (handheld and machine onboard)
- Pit and stockpile geotechnical instrumentation
- Piping for open-pit dewatering
- Mine fleet spare parts.

The mining area capital cost estimate is included as Table 21-3. Contingency has been estimated for each item and included separately in the overall project capital cost estimate.

Table 21-3: Mining capital cost estimate

Mining Capital Cost	Initial Capital (C\$M)	Sustaining Capital (C\$M)
Site Development	\$33.7	\$96.5
Open-Pit Pre-Production	\$806.4	-
Mobile Fleet	\$679.3	\$808.6
Mine Operations Infrastructure	\$23.8	\$11.3
Indirects	\$8.7	\$16.0
Total Mine Capital Costs	\$1,551.8	\$932.6

The contingency allowance for the mining initial capital expenditure (capex) is estimated at \$89.3 million and has been included in the overall contingency totals for financial modelling.

21.2.3.2 Additional facilities

The mine additional facilities costs include the mine infrastructure and services costs and waste rock handling costs. The mine infrastructure and services costs are comprised of the mine administration building, truck shop and explosives magazine. The waste rock handling costs comprise of waste rock conveying equipment and bulk material quantities. Table 21-4 shows the mine additional facilities cost.

Table 21-4: Mine additional facilities

WBS	WBS description	Initial capital (C\$M)
1500	Mine Utilities and Services	0.5
1600	Mine Site Facilities	31.0
1400	PAG Waste Rock handling	115.1
Total mine additional facilities cost		146.6

Note: Totals may not sum due to rounding.

21.2.4 Area 2000 – process capital costs

The definition of process equipment requirements was based on process flowsheets and process design criteria, as defined in Section 17. All major equipment was sized based on the process design criteria to derive a mechanical equipment list. Mechanical scopes of work were developed, and major equipment were sent for budgetary pricing to equipment suppliers. For mechanical equipment costs, 83% of the value was sourced from budgetary quotes; the remainder was sourced by benchmarking against other recent flotation concentrator mining projects and studies.

In support of the major installation construction contracts, engineering for the process plant was completed to a PFS-level of definition. Bulk material quantities were derived for earthworks and priced from other benchmark projects. All other quantities for electrical and instrumentation, concrete, steel, piping, cable, and platework were factored and priced.

Process plant costs are summarized in Table 21-5 and described in the following sections. Direct costs include all contractors' direct and indirect labour, permanent equipment, materials, freight, and mobile equipment associated with the physical construction of the areas.

Table 21-5: Process plant capital costs

WBS	WBS description	Initial capital (C\$M)
2100	Crushing	195.2
2200	Stockpile & reclaim	66.3
2300	Grinding	529.0
2400	Copper & Molybdenum Flotation	243.1
2500	Copper Thickener, Filtration & Loadout	22.9
2600	Molybdenum Flotation	5.5
2700	Molybdenum Thickener, Filtration & Loadout	4.0
2800	Reagents	12.7
2900	Process Utilities & Services	0.1
Total initial process plant cost		1,078.7

Note: Totals may not sum due to rounding.

21.2.5 Area 3000 – tailings facility

The breakdown of the tailings facilities capital cost is presented below in Table 21-6. These facilities include tailings handling and tailings storage facility.

Table 21-6: Additional facilities cost

WBS	WBS description	Initial capital (C\$M)
3100	Tailings Handling	217.5
3200	Tailings Waste Management Facility	150.2
3400	Waste Rock Storage	79.3
3500	Tailing water management	2.0
Total tailings facility cost		449.0

Note: Totals may not sum due to rounding.

21.2.6 Area 4000 – on-site infrastructure capital costs

In support of the major installation construction contracts, engineering for the project was completed to a PFS-level of definition. Bulk material quantities were derived for earthworks including the entire project site, process plant, TWMF and water management structures, and priced from other benchmark projects. The power requirements for the project were estimated based on the electrical equipment list developed for the process plant, power demand for the mining operations and allowances for other site requirements such as pit dewatering, lighting, etc.; the cost of the substation and cable routing was estimated based on benchmarked North American projects.

The buildings required for the operation were sized and costed based on benchmark projects with similar weather and snow conditions located in Canada.

The breakdown of the on-site infrastructure capital costs is shown in Table 21-7.

The on-site infrastructure covers the cost of the site earthworks, site-wide electrical distribution, fuel storage, sewers, and various infrastructure buildings.

Table 21-7: On-site infrastructure capital costs

WBS	WBS description	Initial capital (C\$M)
4100	Bulk earthworks	84.5
4200	On-site power distribution	32.3
4300	Infrastructure buildings	55.5
4400	Site services	35.6
4500	Mobile equipment	15.3
Total initial on-site infrastructure cost		223.2

Note: Totals may not sum due to rounding.

21.2.7 Area 5000 – off-site infrastructure capital costs

The breakdown of the costs for the off-site infrastructure planned for the project is shown in Table 21-8.

The off-site infrastructure costs include building the main access road, high voltage power supply, and avalanche management structures.

Table 21-8: Initial off-site infrastructure capital costs

WBS	WBS description	Initial capital (C\$M)
5100	Main access road	4.2
5200	Power supply	84.0
5300	Avalanche management	41.6
Total initial off-site infrastructure cost		129.8

Note: Totals may not sum due to rounding.

21.2.8 Area 6000–9000 – indirect capital costs

Indirect capital costs are calculated as a percentage of the direct costs. The indirect capital costs are summarized in Table 21-9 and include the following:

- Temporary construction facilities and services
- Messing and catering during construction
- Vendor reps and assistance
- Equipment Spares
- First fills and initial charges
- Project delivery.

Provision costs include contingency.

A summary of the indirect capital costs is presented in Table 21-9 below, excluding the mining indirect cost which is addressed in section 21.2.3.

Table 21-9: Indirect capital costs summary

WBS	WBS description	Initial capital (C\$M)
6100	Field indirects	50.7
6200	Messing and catering during construction	55.0
6300	Miscellaneous Distributable Cost	22.0
6400	Vendor reps and assistance	17.2
6500	Equipment spares	20.6
6600	First fills and initial charges	10.3
6700	Non-manual off-site accommodation costs	4.0
Total Project Indirects		179.9
7100	Engineering & Procurement	111.5
7200	Construction & Project Management	131.8
Total Project Delivery		243.3
8000	Owner's costs	101.4
Total Indirects, Project Delivery, Owner's Costs (excl. mining Indirect)		524.5
9000	Contingency (excl. mining)	484.8
Total		1,009.4

Note: Totals may not sum due to rounding.

The owner's costs are estimated as 5% of total direct costs and are calculated to be C\$101.4 million owner's costs include such things as project staffing and miscellaneous expenses, pre-production labour, head office project management, head office finance, legal costs, insurance and bonds, licences, and fees.

21.2.9 Sustaining capital

21.2.9.1 Overview

The life-of-mine sustaining capital cost for the Project is estimated at C\$1,728.6 million. This includes C\$916.4 million in mining sustaining capital to support ongoing mine operations, as well as C\$812.2 million related to tailings and site-wide sustaining investments. The latter comprises C\$629.2 million for tailings facility expansions, C\$26.4 million for on-site infrastructure upgrades and replacements, C\$16.0 million in indirect costs, and C\$140.6 million in contingency.

21.2.9.2 Mining

Sustaining cost estimates include expansion of the mine are site development items described in Section 21.2.3.1, expansion of the mine mobile fleet, replacement of retired mine mobile fleet, and expansion of the mine operations infrastructure items described in Section 21.2.3.1.

Table 21-10 summarizes the Mining Sustaining Cost estimates for the Berg PFS Project.

Table 21-10: Mining sustaining capital costs

WBS description	Sustaining capital (C\$M)
Site Development	96.5
Mining Fleet	808.6
Mine operation infrastructure	11.3
Total mining sustaining capital	916.4

Note: Totals may not sum due to rounding.

21.2.9.3 Additional process facilities

The sustaining cost under additional process facilities includes the tailings storage facility expansion cost. The total estimated LOM sustaining cost of tailings storage facility is C\$629.2 million.

21.2.10 Closure and reclamation planning

The closure cost for the project is estimated at C\$235.7 million, including C\$127.4 million for tailing facility closure cost and C\$108.3 million for closure cost of the process plant and infrastructure.

21.3 Operating cost estimate

The costs considered on-site operating costs are those related to mining, processing, tailings handling, and general and administrative activities.

A summary of the operating costs is presented below in Table 21-11.

The unit operating cost is C\$15.00/t processed, including an annual G&A cost of C\$39.2 million.

Table 21-11: Operating cost summary

Cost area	Annual costs (C\$M)	C\$/t processing
Mining	296.1	6.86
Process	304.7	7.00
G&A	39.2	0.90
TWME	10.6	0.24
Total	650.5	15.00

21.3.1 Basis of estimate

Key assumptions were made to estimate the operating costs for the Project:

- Cost estimates are based on Q2 2026.
- Costs are expressed in Canadian Dollars (C\$).
- Where applicable, an exchange rate of US\$0.73 per C\$1.00 was used.
- Power cost of C\$0.065 per kilowatt-hour (kWh) was assumed.
- A diesel cost of C\$1.35 per litre was assumed based on the trailing 15-month average rack price and estimated supplier delivery, storage, and bulk discount charges.

- A throughput of 120,000 t/d or 43.8 Mt/a was used for the processing plant.
- Plant crusher availability is assumed to be 75%, while the availability for the grinding and flotation is assumed to be 92% and the availability for the filtration is assumed to be 80%.
- ROM and concentrate grades, and recoveries are based on metallurgical testwork results described in Section 13.
- Material and equipment are purchased as new.
- Reagent consumption rates are based on metallurgical testwork results and in-house benchmarks.
- Grinding media consumption rates are based on mineral material characteristics as described in Section 13.

21.3.2 Mine operating costs

The mine operating cost estimates are based on owner-managed operations, maintenance and technical services departments, and have been built up from first principles. Mine operating cost estimates consist of the following components:

- Equipment operating cost – the activities of drilling, blasting, loading, hauling, mining support, and equipment maintenance. Equipment operating costs are based on the total annual operating hours calculated from the assumed equipment productivities and the cost per SMU hour to operate the equipment; which includes quoted cost and consumption rates for such inputs as fuel, lubes, electricity, explosives, tires, undercarriage, GET (ground engaging tools), drill bits, rods, and strings, machine parts, machine major components, labour rates, and operating and maintenance labour ratios.
- Equipment Performance – equipment and labour productivity inputs are estimated for the specific mine equipment fleet and rationalized to existing Canadian open-pit mine operations. Drilling, loading, and hauling equipment hours are calculated based on the capacities and parameters of the specified equipment fleet. The largest component of the estimated mine operating costs is for the hauling function, and simulated hauler cycle times from source pit benches to planned destinations are utilized to inform hauler productivities. The production tonnes and primary fleet hours also provide the basis for blasting consumables and support fleet requirements.
- Salary and hourly personnel – mine department salary staff and general mining labour; maintenance and operator labour costs are included as part of the equipment operating costs, so distributed into the direct mining functions (drill, load, haul, etc.). Salaried labour costs are distributed under GME. During peak production, the mine is expected to employ 51 salaried personnel and 460 hourly personnel. Labour rates for planned hourly and salaried personnel, including burdens, have been benchmarked to nearby operations.
- General mine expense (GME) costs – tools, equipment, and services necessary to support mine operations. Includes items such as mine planning software, geotechnical instrumentation for pit and dumps, mine dispatch overheads, technical consultants, maintenance outside services, and office costs and overheads for mine operations, mine maintenance and technical services departments.

The total estimated mine operating cost is C\$8,291 million to mine 3,274 Mt of material, and move 3,506 Mt of material, including stockpile rehandle. The total unit mining cost for the operating period is \$2.53/t mined or \$6.86/t processed, Table 21-12. With capitalized pre-production included, the total LOM mining unit operating costs are \$2.51/t.

Table 21-12: Mine operating cost estimate

Cost area	C\$/t mined	C\$/t processed	Total C\$M
Drilling	0.21	0.57	684
Blasting	0.47	1.27	1,539
Loading	0.29	0.77	935
Hauling	1.18	3.20	3,872
Support	0.23	0.64	769
Unallocated Labour	0.02	0.05	61
Subtotal – Direct Costs	2.40	6.50	7,860
Mine Operations GME	0.06	0.17	203
Mine Maintenance GME	0.03	0.08	102
Mine Engineering GME	0.04	0.10	125
Subtotals – GME Costs	0.13	0.36	431
Total Mine Operating Costs	2.53	6.86	8,291

Note: Totals may not sum due to rounding.

21.3.3 Process operating costs

The process operating cost estimate is based on a 120,000 t/d mill consisting of crushing, grinding, copper & molybdenum flotation and regrind, concentrate dewatering and tailings handling. The operating cost estimates are summarized below in Table 21-13.

Table 21-13: Process plant operating cost summary

Cost area	Annual costs (C\$M)	C\$/t processed	LOM C\$M
Power	87.0	1.99	2,412
Reagents	47.9	1.10	1,328
Consumables	90.5	2.09	2,521
Maintenance	19.8	0.46	551
Labour	32.1	0.74	894
Mobile Equipment	1.6	0.04	43
Lab Services	1.8	0.04	50
Water	23.9	0.55	659
Total	304.7	7.00	8,457

Note: Totals may not sum due to rounding.

21.3.3.1 Reagents and consumables

Reagents, grinding media, and various consumables are required to process the ore from the Berg deposits. The consumption rates of each of the consumable items are based on the metallurgical testwork outlined in Section 13, flowsheets and mass balance calculations. The prices for reagents and consumables are based

on budgetary quotations and Ausenco's internal database. The total costs of the reagents used are shown below in Table 21-14. The total cost of the consumables used are shown in Table 21-15.

Table 21-14: Reagents cost summary

Cost area	Annual costs (C\$M)
Diesel	3.1
Lime	20.7
MIBC	6.4
NaCN	4.2
NaHS	0.1
PAX	12.1
Flocculant	0.9
Sulphuric Acid	0.4
Total	47.9

Note: Totals may not sum due to rounding.

Table 21-15: Consumables cost summary

Cost area	Annual costs (C\$M)
SAG mill media	24.4
Ball mill media	27.8
Cu-Mo primary regrind mill media	1.9
Cu-Mo secondary regrind mill media	4.2
Primary crusher liners	1.6
Secondary crusher liners	1.6
SAG mill liners	19.7
Secondary screen deck panels	2.2
Ball mill liners	5.1
Cu-Mo primary regrind mill liners	1.3
Cu-Mo secondary regrind mill liners	0.5
Moly concentrate filter cloths	0.0
Copper concentrate filter cloths	0.3
Total	90.5

21.3.3.2 Maintenance consumables

Annual maintenance consumable costs were calculated based on a total installed mechanical capital cost by area using a weighted average factor from 3% to 5%. Annual maintenance costs are summarized in Table 21-16. The total maintenance consumable operating cost is C\$19.8 M/a or C\$0.46/t of plant feed.

Table 21-16: Maintenance Cost Summary

Cost area	Annual costs (C\$M)
Waster Rock Crushing	2.0
Crushing	2.4
Stockpile and Reclaim	0.4
Grinding	8.8
Cu-Mo Flotation	2.5
Copper Thickener, Filtration & Loadout	0.1
Molybdenum Flotation	0.1
Molybdenum Thickener, Filtration & Loadout	0.1
Reagents	0.2
Tailings Cycloning	2.3
Site Services	1.0
Total	19.8

21.3.3.3 Power

The project energy consumption is estimated to be 1,381 GWh per year. Electricity will be provided to site at a unit cost of C\$0.065/kWh based on similar operation. The total power operating cost is C\$89.8M/a or C\$2.08/t of plant feed.

Table 21-17: Power Cost Summary

Cost area	Annual costs (C\$M)	C\$/t
Waste Rock Crushing	5.0	0.12
Mine Pit Dewatering System	1.3	0.03
Crushing	3.3	0.08
Stockpile and Reclaim	0.5	0.01
Grinding	51.9	1.20
Cu-Mo Flotation	23.4	0.54
Copper Thickener, Filtration & Loadout	0.2	0.00
Molybdenum Flotation	0.2	0.00
Molybdenum Thickener, Filtration & Loadout	0.1	0.00
Reagents	0.1	0.00
Tailings Cycloning	1.5	0.03
Site Services	1.9	0.04
Infrastructure Buildings	0.3	0.01
Permanent Camp	0.2	0.00
Total	89.8	2.08

21.3.3.4 Labour

Labour includes all processing and maintenance labour costs.

Processing production labour was developed using benchmarks from similar project and includes operation departments such as metallurgy, mill operations, maintenance, and the assay lab.

Each position was defined and classified as salary and wages. Costs included taxes and benefits. The annual cost is C\$15.9 M/a for process operations labour and C\$12.0 M/a for process maintenance labour. The total labour operating cost is C\$32.4 M/a or C\$0.75/t of mill feed. The labour force for plant operations and plant maintenance was estimated at 233 people. The estimate was based on providing a labour force to support continuous operations at 24 hours a day, 365 days per year.

Table 21-18: Processing summary of personnel

Area	Average annual personnel	C\$/a	C\$/t
Mill Operations	112	15.9	0.37
Mill Maintenance	74	12.0	0.28
Technical Services	47	4.5	0.10
Total	233	32.4	0.75

21.3.4 General and administrative operating costs

General and administrative (G&A) costs are expenses not directly related to production and include expenses the cover site administration and overhead costs.

G&A costs were developed using Ausenco's in-house data on existing Canadian operations. A summary is presented in Table 21-19. The costs were estimated based on the following items:

- Human resources (including recruiting, training and community relations)
- Infrastructure power (HVAC and administrative buildings)
- Site administration, maintenance, and security (including office equipment, garbage disposal)
- Assets operation (including non-operation-related vehicles)
- Health and safety (including personal protective equipment, hospital service cost)
- Environmental (including sampling, and tailings management facility monitoring costs)
- IT and telecommunications (including hardware and support services)
- Contract services (including insurance, sanitation, licence fees and legal fees).

The total annual G&A cost was estimated at C\$39.2 M/a during production or C\$0.90/t plant feed.

Table 21-19: G&A cost summary

G&A expenses	Annual costs (C\$M)	\$/t milled
Travel and Camp	11.0	0.25
Labour	16.8	0.38
Other	11.6	0.27
Total	39.2	0.90

Note: Totals may not sum due to rounding.

Annual G&A labour costs are summarized in Table 21-20.

Table 21-20: G&A labour cost summary

Area	Annual average personnel	Annual costs (C\$M)
G&A management	2	0.4
Human resources	9	1.0
Site administration	11	1.9
Site logistics and maintenance	34	4.1
Site security	18	2.1
Health and safety	10	1.5
Community engagement	3	0.5
Information technology	7	0.9
Environmental support	17	2.3
Sanitation	18	2.1
Total	129	16.8

Note: Totals may not sum due to rounding.

21.3.5 Tailing and waste management facility

The operating costs for the Tailings and Waste Management Facility (TWMF) comprise the maintenance, fuel, labour, and power requirements for the CAT D9 dozer and CAT 8200 dragline. These mobile equipment units are utilized for the handling and distribution of PAG waste rock deposited by the mobile conveyor system and radial stackers. Operating costs associated with the mobile conveyors and radial stackers are accounted for within the process plant operating cost estimate, as they are included in the mechanical equipment list.

Table 21-21: Tailings and waste management facility operating cost

Area	Annual costs (C\$M)	\$/t milled
TWMF	10.6	0.24

22 Economic analysis

22.1 Forward-looking information

The results of the economic analyses discussed in this section represent forward-looking information as defined under Canadian securities law. The results depend on inputs that are subject to known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here. Information that is forward-looking includes the following:

- mineral reserve and resource estimates;
- assumed commodity prices and exchange rates;
- the proposed mine production plan;
- projected mining and process recovery rates;
- assumptions as to mining dilution and ability to mine in areas previously exploited using mining methods as envisaged;
- the timing and amount of estimated future production;
- sustaining costs and proposed operating costs;
- assumptions as to closure costs and closure requirements; and
- assumptions as to environmental, permitting, and social risks.

Additional risks to the forward-looking information include:

- changes to costs of production from what is assumed;
- unrecognized environmental risks;
- unanticipated reclamation expenses;
- unexpected variations in quantity of ore, grade, or recovery rates;
- accidents, labour disputes and other risks of the mining industry;
- geotechnical or hydrogeological considerations during mining being different from what was assumed;
- failure of mining methods to operate as anticipated;
- failure of plant, equipment, or processes to operate as anticipated;
- changes to assumptions as to the availability of electrical power, and the power rates used in the operating cost estimates and financial analysis;
- ability to maintain the social licence to operate;
- changes to interest rates; and
- changes to tax rates.

22.2 Methodologies used

The Project economic model was used iteratively during the PFS to assist in evaluating mine development and production-schedule alternatives, as described in Section 16. The alternatives involved tradeoffs among initial capital requirements, capital timing, early metal production, and the resulting timing of cash flows.

The economic analysis presented in this section relates solely to the selected PFS design case and does not represent an economic analysis of the preliminary or comparative mine-plan iterations.

The Project has been evaluated using a discounted cash flow (DCF) analysis based on an 8% discount rate. Cash inflows consist of annual revenue projections. Cash outflows consist of capital expenditures, including pre-production costs; operating costs; taxes; and royalties. These are subtracted from the inflows to arrive at the annual cash flow projections. Cash flows are taken to occur at the mid-point of each period. It must be noted that tax calculations involve complex variables that can only be accurately determined during operations and, as such, the actual post-tax results may differ from those estimated. A sensitivity analysis was performed to assess the impact of variations in metals price, discount rate, head grade, recovery, total operating cost, exchange rate, and initial capital costs.

The capital and operating cost estimates developed specifically for this project are presented in Section 21 of this report in Q2 2026 Canadian dollars. The economic analysis has been run on a constant dollar basis with no inflation.

22.3 Financial model parameters

22.3.1 Assumptions

The economic analysis was performed assuming a copper price of US\$4.75/lb, molybdenum price of US\$20.00/lb, silver price of US\$45.00/oz and gold price of US\$3,500/oz; these metal prices were based on consensus analyst estimates. The forecasts used are meant to reflect the average metals price expectation over the life of the project. No price inflation or escalation factors were considered. Commodity prices can be volatile, and there is the potential for deviation from the forecast.

The economic analysis also used the following assumptions:

- construction period of 3 years;
- total mine life of 27.7 years;
- cost estimates in constant Q2 2026 Canadian dollars with no inflation or escalation factors considered;
- results based on 100% ownership with a 1% net smelter return (NSR) royalty;
- capital cost funded with 100% equity;
- all cash flows discounted to start of construction period using middle of period discounting convention;
- all metal products are sold in the same year they are produced;
- project revenue is derived from the sale of copper concentrate and molybdenum concentrate; and
- no contractual arrangements for refining currently exist.

22.3.2 Taxes

The Project has been evaluated on a post-tax basis to provide an approximate value of the potential economics. The tax model was compiled by independent tax consultant Wentworth Taylor and calculations are based on the tax regime as of the date of the PFS technical report. It has been assumed that at the time of construction and production the Federal Clean Technology Manufacturing (CTM) Investment Tax Credit (ITC) will be available and applicable for use. At the effective date of this report, the Project is assumed to be subject to the Income Tax and Mineral Tax applicable in British Columbia, Canada, resulting in estimated total payments of \$8,302.3 million over the life of mine.

22.3.3 Working capital

An estimate of working capital has been incorporated into the economic analysis based on the assumptions presented in Table 22-1.

Table 22-1: Estimate of working capital

Item	Time
Accounts Receivable	30 days
Inventories	45 days
Accounts Payable	60 days

22.3.4 Royalties

Based on the agreements in place, a private net smelter return (NSR) royalty of 1% applies to the project.

The total royalty costs were estimated to be \$502.7 million over the life of mine.

22.3.5 Closure costs and salvage value

Closure costs and salvage value are applied at the end of the life of mine. Closure costs were estimated to be \$235.7 million, and salvage value was estimated to be \$179.1 million, which was factored as 15% of waste rock handling and process plant initial capital.

22.3.6 Off-site costs

Off-site costs and payabilities were determined using industry benchmarks and standard industry practices with input from Deno Advisory, Marketeye and Surge Copper. Details on the off-site charges are found in Section 19 of this report.

Total off-site charges over the life of mine are \$3,434.5 million.

Table 22-2: Off-site costs

Payability	Units	Value
Average annual Cu	%	96.3%
Average annual Mo	%	99.0%
Average annual Ag	%	90.0%
Average annual Au	%	90.1%
Off-site Charges		
Transport		
Cu Concentrate	US\$ /wmt	146
Mo Concentrate	US\$ /wmt	166
Treatment		
Cu Concentrate	US\$ /dmt	42
Refining		
Cu	US\$ /lb	0.04
Mo	US\$ /lb	0.89
Ag	US\$ /oz	0.45
Au	US\$ /oz	4.50

22.4 Economic analysis

The economic analysis was performed assuming an 8% discount rate. The pre-tax NPV discounted at 8% is \$6,611 million; the internal rate of return IRR is 23.8%, and payback period is 3.2 years. On a post-tax basis, the NPV discounted at 8% is \$4,592 million; the IRR is 23.8%, and the payback period is 2.9 years. A summary of project economics is shown in Table 22-3. The analysis was done on an annual cashflow basis; the cashflow output is shown graphically in Figure 22-1 and with detail in Table 22-4.

Table 22-3: Economic analysis summary

Item	Units	Total/Avg
Macro Economic Inputs		
Foreign exchange rate	CAD:USD	0.73
Discount Rate	%	8.0%
Copper price	US\$ /lbs	4.75
Molybdenum price	US\$ /lbs	20.00
Silver price	US\$/oz	45.00
Gold price	US\$/oz	3,500.00
Production		
Mine life	yrs	27.7
Total Resource mined	Mt	1,209
LOM Cu grade	%	0.22%
LOM Mo grade	%	0.03%
LOM Ag grade	g/t	4.11
LOM Au grade	g/t	0.02
Total waste mined	Mt	2,409
Strip ratio	waste:ore	1.99
Average annual mined resource	Kt/a	43,699
Ore processed	Mt	1,209
Cu recovery	%	84.1%
Mo recovery	%	87.7%
Ag recovery	%	55.5%
Au recovery	%	52.0%
Total recovered Cu	MIbs	4,875
Total recovered Mo	MIbs	602
Total recovered Ag	koz	88,641
Total recovered Au	koz	439
Total recovered Cu Eq	MIbs	8,575
Average annual recovered Cu	MIbs/a	176
Average annual recovered Mo	MIbs/a	22
Average annual recovered Ag	koz/a	3,204
Average annual recovered Au	koz/a	16
Average annual recovered Cu Eq	MIbs/a	308
Average annual realized Cu payability	%	96.3%

Item	Units	Total/Avg
Average annual realized Mo payability	%	99.0%
Average annual realized Ag payability	%	90.0%
Average annual realized Au payability	%	90.1%
Total payable Cu	MIbs	4,695
Total payable Mo	MIbs	596
Total payable Ag	koz	79,776
Total payable Au	koz	396
Total payable Cu Eq	MIbs	8,253
Average annual payable Cu	MIbs/a	170
Average annual payable Mo	MIbs/a	22
Average annual payable Ag	koz/a	2,884
Average annual payable Au	koz/a	14
Average annual payable Cu Eq	MIbs/a	297
Revenue/Costs		
Total revenue	C\$ M	53,700.0
Average annual revenue	C\$ M/a	1,930.8
EBITDA	C\$ M	31,632.4
Average annual EBITDA	C\$ M/a	1,143.4
Total on-site operating costs (mining, process, g&a)	C\$ M	18,130.5
Annual average on-site operating costs	C\$ M	654.0
Mining unit cost	C\$ /t mined	2.53
Mining unit cost	C\$ /t processed	6.86
Process unit cost	C\$ /t processed	7.00
TMWF unit cost	C\$ /t processed	0.24
G&A unit cost	C\$ /t processed	0.90
"Total off-site operating costs (transport, treatment & refining)"	C\$ M	3,434.5
Annual average off-site operating costs	C\$ M	123.6
Royalties	C\$ M	502.7
Annual average royalties	C\$ M	18.1
Cash Costs		
C1 cost – by-product basis ⁽¹⁾	US\$ /lb Cu	(0.17)
C3 cost – by-product basis ⁽²⁾	US\$ /lb Cu	0.10
C1 cost – co-product basis ⁽³⁾	US\$ /lb CuEq	1.95
C3 cost – co-product basis ⁽⁴⁾	US\$ /lb CuEq	2.10
Capital Costs		
Initial capital cost – Mining	C\$ M	1,690
Initial capital cost – Ausenco (non-mining)	C\$ M	2,988
Initial capital cost	C\$ M	4,678
Annual average initial capital costs	C\$ M	1,559
Sustaining capital cost	C\$ M	1,729
Annual average sustaining capital costs	C\$ M	62

Item	Units	Total/Avg
Closure capital cost	C\$ M	236
Salvage value	C\$ M	(179)
Capital, pre-production and closure costs	C\$ M	6,463
Pre-Tax Economics		
NPV (8%)	C\$ M	6,611
IRR	%	23.76%
Payback	yr	3.2
NPV/initial capital	-	1.4
Free cash flow	C\$ M	25,169
Average annual free cash flow	C\$ M	1,071
Post-Tax Economics		
NPV (8%)	C\$ M	4,592
IRR	%	23.79%
Payback	y	2.9
NPV/initial capital	-	1.0
Cash taxes	C\$ M	8,302
Average annual cash taxes	C\$ M	336
Free cash flow	C\$ M	16,867
Average annual free cash flow	C\$ M	735

1. C1 cost is the sum of mine, mill and G&A costs, off-site costs and royalties less by-product credits.
2. C3 cost is the C1 costs plus sustaining capex.
3. C1 cost is the sum of mine, mill and G&A costs, off-site costs and royalties.
4. C3 cost is the C1 costs plus sustaining capex.
5. $\text{Cu equivalent} = \text{Cu mass} + (\text{Mo mass} * (\text{Mo price} / \text{Cu price})) + (\text{Ag mass} * (\text{Ag price} / 1000 / \text{Cu price})) + (\text{Au mass} * (\text{Au price} / 1000 / \text{Cu price}))$.

Table 22-4: Project Cash flow on an annualized basis

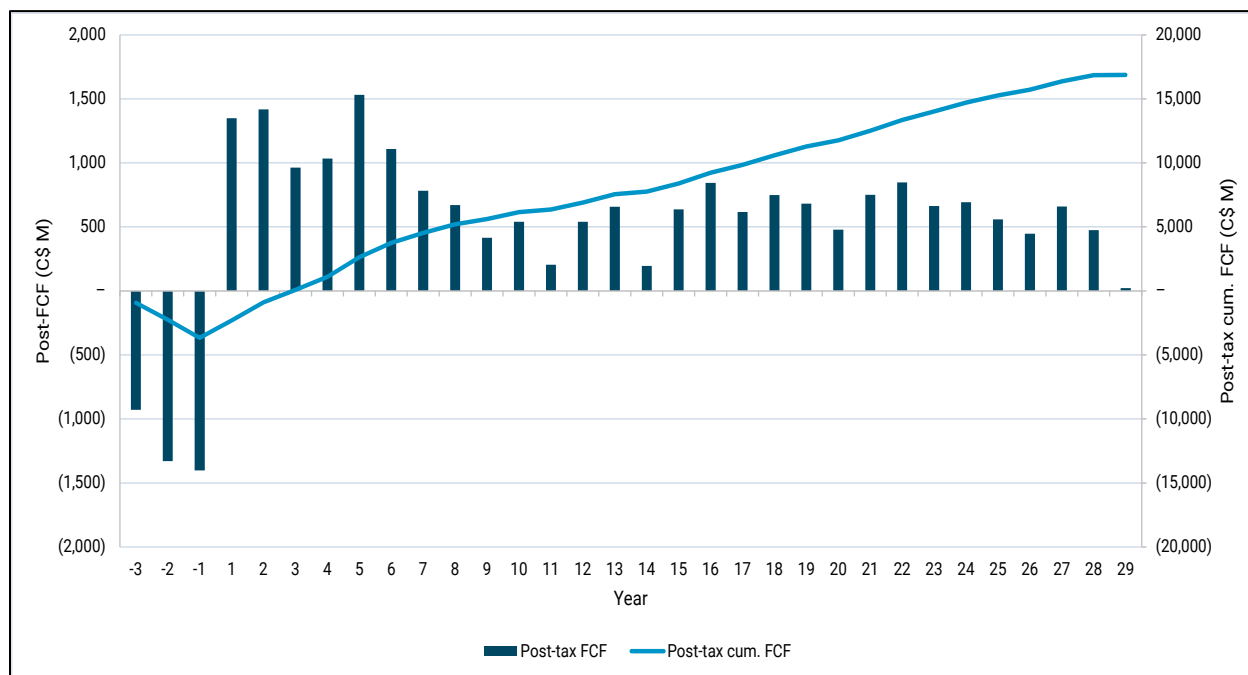
Macro Assumptions	Units	Total/ Avg.	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Copper Price	US\$/lb	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	
Molybdenum Price	US\$/lb	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	
Silver Price	US\$/oz	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	
Gold Price	US\$/oz	3,500.00	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	
Exchange rate	CAD:USD	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	
Cashflow Summary																																		
Gross revenue	C\$ M	53,700.0	–	–	–	2,387.4	2,894.4	2,024.0	2,425.1	3,251.0	2,648.3	2,026.8	1,910.9	1,487.7	1,784.7	1,076.4	1,934.0	1,843.1	1,274.2	1,917.1	2,348.0	2,147.2	1,894.8	1,780.7	1,449.3	1,998.5	2,109.2	1,633.6	1,814.1	1,441.6	1,358.3	1,692.3	1,147.2	–
Total opex	C\$ M	(18,130.5)	–	–	–	(615.8)	(743.6)	(755.4)	(791.1)	(794.7)	(790.6)	(742.5)	(722.0)	(760.5)	(682.3)	(756.6)	(759.7)	(655.9)	(607.4)	(682.8)	(765.7)	(751.4)	(567.8)	(577.3)	(556.1)	(571.4)	(583.5)	(516.0)	(554.6)	(483.2)	(553.0)	(463.4)	(326.2)	–
Off-site costs	C\$ M	(3,434.5)	–	–	–	(156.8)	(192.8)	(133.4)	(161.6)	(215.0)	(167.8)	(126.4)	(125.4)	(96.0)	(112.7)	(69.6)	(118.9)	(118.6)	(83.3)	(125.9)	(152.3)	(137.0)	(120.7)	(113.2)	(91.9)	(123.8)	(128.3)	(101.5)	(114.1)	(90.0)	(83.3)	(105.3)	(68.7)	–
Royalties	C\$ M	(502.7)	–	–	–	(22.3)	(27.0)	(18.9)	(22.6)	(30.4)	(24.8)	(19.0)	(17.9)	(13.9)	(16.7)	(10.1)	(18.2)	(17.2)	(11.9)	(17.9)	(22.0)	(20.1)	(17.7)	(16.7)	(13.6)	(18.7)	(19.8)	(15.3)	(17.0)	(13.5)	(12.8)	(15.9)	(10.8)	–
EBITDA	C\$ M	31,632	–	–	–	1,592	1,931	1,116	1,450	2,211	1,665	1,139	1,046	617	973	240	1,037	1,051	572	1,091	1,408	1,239	1,189	1,074	788	1,285	1,378	1,001	1,128	855	709	1,108	742	–
Initial capex	C\$ M	(4,677.9)	(1,183.2)	(1,694.4)	(1,800.3)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sustaining capex	C\$ M	(1,728.6)	–	–	–	(18.0)	(71.7)	(37.2)	(86.1)	(66.4)	(65.7)	(40.0)	(44.9)	(46.8)	(87.3)	(35.4)	(78.9)	(35.4)	(261.9)	(40.1)	(46.4)	(233.9)	(53.1)	(37.5)	(77.0)	(46.9)	(40.4)	(26.4)	(27.3)	(25.2)	(26.4)	(24.5)	(47.7)	–
Closure costs	C\$ M	(235.7)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	(235.7)
Salvage value	C\$ M	179.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	179.1
Increase/(decrease) in working capital during production	C\$ M	(0.0)	–	–	–	(133.6)	(65.9)	69.6	(30.3)	(65.5)	47.4	47.4	8.6	35.2	(26.9)	59.5	(68.3)	3.2	43.3	(48.0)	(30.9)	15.3	12.5	9.5	25.5	(43.2)	(8.4)	35.2	(12.7)	26.7	9.4	(30.2)	37.7	78.1
Unlevered pre-tax free cash flow	C\$ M	25,169	(1,183)	(1,694)	(1,800)	1,441	1,793	1,149	1,333	2,079	1,647	1,146	1,009	606	859	264	890	1,019	353	1,002	1,331	1,020	1,148	1,046	736	1,195	1,329	1,010	1,088	856	692	1,053	732	21
Tax paid	C\$ M	(8,302.3)	254.7	365.2	398.3	(91.4)	(374.8)	(185.9)	(299.7)	(547.3)	(538.5)	(364.9)	(339.8)	(189.8)	(319.6)	(59.7)	(349.6)	(360.8)	(158.5)	(366.3)	(486.3)	(402.9)	(399.4)	(363.5)	(257.7)	(444.2)	(481.3)	(347.4)	(396.3)	(298.2)	(246.3)	(393.3)	(257.0)	–
Unlevered post-tax free cash flow	C\$ M	16,867	(929)	(1,329)	(1,402)	1,349	1,419	963	1,034	1,532	1,108	781	670	416	539	205	540	658	194	636	844	617	749	682	478	750	847	662	692	558	446	660	475	21
Production Summary																																		
Total Open-Pit Material Mined	Mt	1,209	5	24	10	17	49	25	61	73	59	44	40	42	45	4	44	50	21	51	67	60	46	44	32	53	56	34	44	22	40	19	25	–
Total Waste Mined	Mt	2,409	58	106	140	100	84	108	89	127	121	137	138	145	123	126	123	86	66	94	88	98	54	52	41	32	21	12	15	5	9	5	6	–
Strip ratio	waste:ore	2.0	11.6	4.5	13.5	5.9	1.7	4.3	1.4	1.7	2.0	3.1	3.4	3.4	2.7	30.5	2.8	1.7	3.1	1.9	1.3	1.6	1.2	1.2	1.3	0.6	0.4	0.4	0.3	0.2	0.2	0.3	0.2	–
Project Life	yrs	27.6	–	–	–	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	–	
Ore processed	Mt	1,209	–	–	–	32	48	48	48	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	25	–	
Cu grade	%	0.22%	–	–	–	0.40%	0.36%	0.25%	0.30%	0.40%	0.28%	0.21%	0.23%	0.17%	0.19%	0.15%	0.19%	0.21%	0.17%	0.23%	0.26%	0.22%	0.20%	0.19%	0.16%	0.20%	0.19%	0.16%	0.17%	0.15%	0.13%	0.16%	0.15%	–
Mo grade	%	0.026%	–	–	–	0.036%	0.026%	0.018%	0.019%	0.035%	0.038%	0.030%	0.021%	0.019%	0.024%	0.009%	0.027%	0.023%	0.012%	0.019%	0.030%	0.031%	0.028%	0.027%	0.019%	0.029%	0.034%	0.026%	0.032%	0.023%	0.022%	0.031%	0.045%	–
Ag grade	g/t	4.11	–	–	–	5.65	5.02	4.03	4.37	5.46	4.96	4.35	3.61	3.25	4.20	2.96	5.18	4.30	2.96	3.95	4.33	4.10	3.80	3.66	3.60	5.08	5.36	3.83	3.19	3.38	3.50	3.31	3.78	–
Au grade	g/t	0.022	–	–	–	0.035	0.028	0.025	0.031	0.038	0.030	0.024	0.025	0.019	0.020	0.022	0.020	0.020	0.022	0.026	0.026	0.021	0.018	0.017	0.017	0.018	0.018	0.015	0.014	0.015	0.015	0.013	0.011	–
Cu recovery	%	84.17%	–	–	–	82.70%	80.64%	78.93%	82.33%	85.57%	86.44%	85.25%	84.80%	83.24%	85.23%	77.76%	86.53%	83.94%	81.42%	86.01%	86.91%	86.29%	85.76%	85.14%	83.57%	86.04%	86.07%	84.78%	85.67%	83.50%				

Macro Assumptions	Units	Total/ Avg.	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Dry Mo Concentrate Produced	kt	546	–	–	–	20	21	14	15	27	30	23	16	14	18	6	21	18	9	15	23	25	22	21	15	23	27	20	25	18	17	24	20	–
Wet Mo Concentrate Produced	kt	575	–	–	–	21	22	14	16	28	31	25	17	15	19	6	22	19	9	16	24	26	23	22	16	24	28	21	26	19	18	25	21	–
Payable Cu	MLbs	4,695	–	–	–	228	293	205	252	316	221	163	183	134	152	110	156	165	127	187	212	179	157	147	124	159	155	126	136	113	102	123	67	–
Payable Mo	MLbs	596	–	–	–	22	22	15	17	29	32	25	18	16	20	6	23	19	10	16	25	27	24	23	16	25	29	22	27	19	19	26	22	–
Payable Ag	koz	79,776	–	–	–	3,499	4,427	3,249	3,602	4,404	3,771	3,107	2,561	2,059	2,887	1,845	3,787	2,763	1,814	2,748	3,142	2,889	2,604	2,440	2,237	3,621	3,849	2,518	2,142	2,080	2,115	2,171	1,447	–
Payable Au	koz	396	–	–	–	17	21	18	23	25	19	16	17	12	13	15	13	13	15	17	17	14	12	11	11	12	12	10	9	10	10	9	4	–
Payable CuEq	MLbs	8,252	–	–	–	367	445	311	373	500	407	311	294	229	274	165	297	283	196	295	361	330	291	274	223	307	324	251	279	222	209	260	176	–
Revenue Summary																																		
Cu gross revenue	C\$ M	30,548.8	–	–	–	1,486.3	1,909.1	1,330.8	1,637.0	2,057.4	1,438.9	1,061.6	1,189.8	873.2	990.4	719.0	1,011.9	1,074.4	826.6	1,217.1	1,376.4	1,167.6	1,024.7	954.7	808.2	1,036.7	1,010.8	821.7	886.3	737.0	661.4	802.1	437.7	–
Mo gross revenue	C\$ M	16,334.3	–	–	–	604.6	614.0	406.2	457.8	802.1	883.7	697.8	483.3	428.3	552.4	171.5	625.2	533.8	263.2	447.4	695.0	734.9	652.8	623.3	450.7	681.0	805.4	607.8	751.3	527.5	518.7	714.7	599.9	–
Ag gross revenue	C\$ M	4,917.7	–	–	–	215.7	272.9	200.3	222.1	271.5	232.4	191.5	157.8	126.9	178.0	113.7	233.4	170.3	111.8	169.4	193.7	178.1	160.5	150.4	137.9	223.2	237.3	155.2	132.1	128.2	130.4	133.9	89.2	–
Au gross revenue	C\$ M	1,899.2	–	–	–	80.9	98.4	86.7	108.2	120.0	93.2	75.9	79.9	59.2	63.9	72.2	63.4	64.6	72.7	83.1	82.9	66.6	56.8	52.3	52.6	57.6	55.8	48.9	44.4	48.9	47.8	41.7	20.5	–
Gross revenue	C\$ M	53,700	–	–	–	2,387	2,894	2,024	2,425	3,251	2,648	2,027	1,911	1,488	1,785	1,076	1,934	1,843	1,274	1,917	2,348	2,147	1,895	1,781	1,449	1,999	2,109	1,634	1,814	1,442	1,358	1,692	1,147	–
Cu off-site costs	C\$ M	2,521.9	–	–	–	122.7	157.6	109.9	135.1	169.8	118.8	87.6	98.2	72.1	81.8	59.4	83.5	88.7	68.2	100.5	113.6	96.4	84.6	78.8	66.7	85.6	83.4	67.8	73.2	60.8	54.6	66.2	36.1	–
Mo off-site costs	C\$ M	860.9	–	–	–	31.9	32.4	21.4	24.1	42.3	46.6	36.8	25.5	22.6	29.1	9.0	33.0	28.1	13.9	23.6	36.6	38.7	34.4	32.8	23.8	35.9	42.4	32.0	39.6	27.8	27.3	37.7	31.6	–
Ag off-site costs	C\$ M	49.2	–	–	–	2.2	2.7	2.0	2.2	2.7	2.3	1.9	1.6	1.3	1.8	1.1	2.3	1.7	1.1	1.7	1.9	1.8	1.6	1.5	1.4	2.2	2.4	1.6	1.3	1.3	1.3	1.3	0.9	–
Au off-site costs	C\$ M	2.44	–	–	–	0.10	0.13	0.11	0.14	0.15	0.12	0.10	0.10	0.08	0.08	0.09	0.08	0.08	0.09	0.11	0.11	0.09	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.03	–
Cu net revenue	C\$ M	28,026.9	–	–	–	1,363.6	1,751.5	1,221.0	1,501.9	1,887.5	1,320.1	974.0	1,091.6	801.1	908.7	659.6	928.4	985.7	758.4	1,116.7	1,262.8	1,071.2	940.1	875.9	741.5	951.1	927.3	753.9	813.1	676.1	606.8	735.8	401.6	–
Mo net revenue	C\$ M	15,473.4	–	–	–	572.7	581.6	384.8	433.7	759.9	837.2	661.1	457.8	405.8	523.3	162.4	592.3	505.7	249.3	423.9	658.4	696.2	618.4	590.4	426.9	645.1	762.9	575.8	711.7	499.7	491.4	677.0	568.3	–
Ag net revenue	C\$ M	4,868.6	–	–	–	213.5	270.2	198.3	219.8	268.8	230.1	189.6	156.3	125.6	176.2	112.6	231.1	168.6	110.7	167.7	191.8	176.3	158.9	148.9	136.5	221.0	234.9	153.6	130.7	126.9	129.0	132.5	88.3	–
Au net revenue	C\$ M	1,896.7	–	–	–	80.8	98.3	86.6	108.1	119.9	93.1	75.8	79.8	59.2	63.8	72.1	63.3	64.5	72.6	83.0	82.8	66.5	56.7	52.3	52.5	57.5	55.7	48.8	44.4	48.9	47.8	41.6	20.4	–
Net revenue	C\$ M	50,266	–	–	–	2,231	2,702	1,891	2,263	3,036	2,480	1,900	1,786	1,392	1,672	1,007	1,815	1,725	1,191	1,791	2,196	2,010	1,774	1,667	1,357	1,875	1,981	1,532	1,700	1,352	1,275	1,587	1,079	–
Royalty	C\$ M	502.7	–	–	–	22.3	27.0	18.9	22.6	30.4	24.8	19.0	17.9	13.9	16.7	10.1	18.2	17.2	11.9	17.9	22.0	20.1	17.7	16.7	13.6	18.7	19.8	15.3	17.0	13.5	12.8	15.9	10.8	–
OPEX Summary																																		
Mine operating costs	C\$ M	8,290.9	–	–	–	334.6	368.8	373.2	408.8	432.2	429.4	385.6	363.9	403.5	325.6	396.9	402.6	299.4	249.4	326.8	408.4	394.7	211.0	222.1	201.0	216.6	229.2	161.5	199.8	128.4	198.2	109.8	109.3	–
Mill operating costs	C\$ M	8,456.9	–	–	–	235.1	330.2	329.5	328.4	308.3	307.3	306.1	306.5	306.1	306.0	308.7	305.9	305.8	307.0	305.8	305.8	305.8	305.8	305.8	305.8	305.8	305.8	305.8	305.8	305.8	305.8	305.8	190.2	–
G&A operating costs	C\$ M	1,087.3	–	–	–	42.4	40.9	41.7	42.8	43.1	42.7	39.7	40.5	39.9	39.6	39.9	40.1	39.7	40.0	39.1	40.4	39.9	39.9	38.2	38.1	37.8	37.3	37.6	38.0	37.9	37.9	36.7	15.7	–
Total operating costs	C\$ M	18,130	–	–	–	616	744	755	791	795	791	743	722	761	682	757	760	656	607	683	766	751	568	577	556	571	583	516	555	483	553	463	326	–
Mine operating costs	C\$/t mined	2.53	–	–	–	2.86	2.77	2.82	2.73	2.16	2.39	2.14	2.04	2.16	1.94	3.05	2.40	2.20	2.86	2.26	2.63	2.51	2.11	2.30	2.76	2.55	2.97	3.49	3.39	4.66	4.04	4.47	3.49	–
Mine operating costs	C\$/t processed	6.86	–	–	–	10.33	7.68	7.77	8.52	9.87	9.80	8.80	8.31	9.21	7.43	9.06	9.19	6.83	5.69	7.46	9.32	9.01	4.82	5.07	4.59	4.95	5.23	3.69	4.56	2.93	4.52	2.51	4.35	–
Mill operating costs	C\$/t processed	7.00	–	–	–	7.26	6.88	6.86	6.84	7.04	7.02	6.99	7.00	6.99	6.99	7.05	6.98	6.98	7.01	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98				

Macro Assumptions	Units	Total/ Avg.	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
CAPEX Summary																																		
Initial capex	C\$ M	4,678	1,183	1,694	1,800	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mining	C\$ M	1,689.8	705.1	553.2	431.6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Process plant	C\$ M	1,078.7	6.6	614.9	457.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Additional process facilities	C\$ M	449.0	110.3	189.6	149.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
On-site infrastructure	C\$ M	223.2	85.0	72.2	66.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Off-site infrastructure	C\$ M	129.8	129.8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total project preliminaries	C\$ M	188.6	45.0	82.1	61.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total project delivery	C\$ M	243.3	55.5	107.1	80.7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Owner's cost	C\$ M	101.4	23.1	44.6	33.6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total provisions	C\$ M	574.1	22.7	30.7	520.7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sustaining capex	C\$ M	1,729	–	–	–	18	72	37	86	66	66	40	45	47	87	35	79	35	262	40	46	234	53	37	77	47	40	26	27	25	26	24	48	–
Mining	C\$ M	948.4	–	–	–	18.0	18.1	15.0	63.9	44.1	21.1	14.4	19.3	21.2	61.7	9.8	50.6	7.1	233.6	11.8	18.1	202.9	22.1	6.4	45.9	15.9	16.5	2.6	3.6	1.4	2.7	0.7	0.2	–
Additional process facilities	C\$ M	629.2	–	–	–	–	18.7	18.7	18.7	18.7	37.5	21.5	21.5	21.5	21.5	21.5	23.8	23.8	23.8	23.8	23.8	26.1	26.1	26.1	26.1	26.1	20.1	20.0	20.0	20.0	20.0	20.0	39.9	–
On-site infrastructure	C\$ M	26.4	–	–	–	–	26.4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total provisions	C\$ M	124.6	–	–	–	–	8.6	3.5	3.5	3.6	7.1	4.1	4.1	4.1	4.1	4.1	4.5	4.5	4.5	4.5	4.5	5.0	5.0	5.0	5.0	5.0	3.8	3.8	3.8	3.8	3.8	3.8	7.6	–
Closure capex	C\$ M	235.7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	235.7
Salvage value	C\$ M	(179.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	(179.1)

1. C1 cost is the sum of mine, mill and G&A costs, off-site costs and royalties less by-product credits
2. C3 cost is the C1 costs plus sustaining capex
3. C1 cost is the sum of mine, mill and G&A costs, off-site costs and royalties
4. C3 cost is the C1 costs plus sustaining capex
5. Cu equivalent = Cu mass + (Mo mass * (Mo price / Cu price)) + (Ag mass * (Ag price / 1000 / Cu price)) + (Au mass * (Au price / 1000 / Cu price))

Figure 22-1: LOM Post-tax free cash flow



Source: Ausenco, 2026

22.4.1 Sensitivity analysis

A sensitivity analysis was conducted on the base case pre-tax and post-tax NPV and internal rate of return of the project, using the following variables: commodity prices, discount rates, operating costs, initial capital costs, metal recovery, head grade and exchange rate. Table 22-5 and Table 22-6 present the Project's sensitivities to the variables on $\pm 20\%$ basis. Considering market spot values of metal prices at the time of this report, a further sensitivity analysis was conducted on the base case post-tax NPV and IRR of the project using a $\pm 60\%$ basis. The results of this analysis are presented in Table 22-7 and Table 22-8.

As shown in Figure 22-2 and Figure 22-3, the sensitivity analysis revealed that the project is most sensitive to changes in foreign exchange rate, commodity price, head grade and recovery; it is less sensitive to total operating cost, and initial capital cost.

Table 22-5: Pre-tax sensitivity summary

Pre-Tax Sensitivity to Metal Price (C\$M)													
Pre-Tax NPV Sensitivity to Discount Rate (C\$M)								Pre-Tax IRR Sensitivity to Discount Rate					
Commodity Price							Commodity Price						
Discount Rate		(20%)	(10%)	–	10%	20%	Discount Rate		(20.0%)	(10.0%)	–	10.0%	20.0%
	3.00%	7,970	11,394	14,818	18,243	21,667		3.0%	15.5%	19.8%	23.8%	27.5%	31.0%
	5.00%	5,345	7,993	10,642	13,290	15,938		5.0%	15.5%	19.8%	23.8%	27.5%	31.0%
	8.00%	2,837	4,724	6,611	8,497	10,384		8.0%	15.5%	19.8%	23.8%	27.5%	31.0%
	10.00%	1,746	3,291	4,836	6,382	7,927		10.0%	15.5%	19.8%	23.8%	27.5%	31.0%
	12.00%	945	2,233	3,521	4,809	6,097		12.0%	15.5%	19.8%	23.8%	27.5%	31.0%
Pre-Tax NPV Sensitivity to Opex (C\$M)								Pre-Tax IRR Sensitivity to Opex					
Commodity Price							Commodity Price						
Opex		(20.0%)	(10.0%)	–	10.0%	20.0%	Opex		(20.0%)	(10.0%)	–	10.0%	20.0%
	(20.0%)	4,103	5,990	7,876	9,763	11,650		(20.0%)	18.3%	22.3%	26.1%	29.6%	33.0%
	(10.0%)	3,470	5,357	7,244	9,130	11,017		(10.0%)	16.9%	21.1%	24.9%	28.6%	32.0%
	–	2,837	4,724	6,611	8,497	10,384		–	15.5%	19.8%	23.8%	27.5%	31.0%
	10.0%	2,204	4,091	5,978	7,864	9,751		10.0%	13.9%	18.4%	22.5%	26.3%	29.9%
	20.0%	1,571	3,458	5,345	7,231	9,118		20.0%	12.4%	17.0%	21.3%	25.2%	28.8%
Pre-Tax NPV Sensitivity to Initial Capex (C\$M)								Pre-Tax IRR Sensitivity to Initial Capex					
Commodity Price							Commodity Price						
Initial Capex		(20.0%)	(10.0%)	–	10.0%	20.0%	Initial Capex		(20.0%)	(10.0%)	–	10.0%	20.0%
	(20.0%)	3,660	5,547	7,434	9,321	11,208		(20.0%)	19.7%	24.7%	29.3%	33.5%	37.5%
	(10.0%)	3,249	5,135	7,022	8,909	10,796		(10.0%)	17.4%	22.0%	26.3%	30.2%	33.9%
	–	2,837	4,724	6,611	8,497	10,384		–	15.5%	19.8%	23.8%	27.5%	31.0%
	10.0%	2,425	4,312	6,199	8,086	9,973		10.0%	13.9%	17.9%	21.6%	25.1%	28.4%
	20.0%	2,013	3,900	5,787	7,674	9,561		20.0%	12.5%	16.3%	19.8%	23.1%	26.3%
Pre-Tax NPV Sensitivity to Recovery Mill (C\$M)								Pre-Tax IRR Sensitivity to Recovery Mill					
Commodity Price							Commodity Price						
Recovery Mill		(20.0%)	(10.0%)	–	10.0%	20.0%	Recovery Mill		(20.0%)	(10.0%)	–	10.0%	20.0%
	(20.0%)	67	1,577	3,087	4,597	6,107		(20.0%)	8.2%	12.3%	16.1%	19.5%	22.7%
	(10.0%)	1,452	3,150	4,849	6,547	8,246		(10.0%)	12.0%	16.2%	20.1%	23.6%	27.0%
	–	2,837	4,724	6,611	8,497	10,384		–	15.5%	19.8%	23.8%	27.5%	31.0%
	10.0%	4,222	6,297	8,372	10,448	12,523		10.0%	18.7%	23.1%	27.2%	31.1%	34.7%
	20.0%	5,169	7,373	9,577	11,781	13,985		20.0%	20.9%	25.5%	29.7%	33.7%	37.4%
Pre-Tax NPV Sensitivity to Head Grade (C\$M)								Pre-Tax IRR Sensitivity to Head Grade					
Commodity Price							Commodity Price						
Head Grade		(20.0%)	(10.0%)	–	10.0%	20.0%	Head Grade		(20.0%)	(10.0%)	–	10.0%	20.0%
	(20.0%)	63	1,572	3,082	4,591	6,101		(20.0%)	8.2%	12.3%	16.0%	19.5%	22.7%
	(10.0%)	1,450	3,148	4,846	6,544	8,243		(10.0%)	12.0%	16.2%	20.0%	23.6%	27.0%
	–	2,837	4,724	6,611	8,497	10,384		–	15.5%	19.8%	23.8%	27.5%	31.0%
	10.0%	4,224	6,299	8,375	10,450	12,526		10.0%	18.7%	23.1%	27.2%	31.1%	34.7%
	20.0%	5,611	7,875	10,139	12,404	14,668		20.0%	21.7%	26.3%	30.5%	34.5%	38.2%
Pre-Tax NPV Sensitivity to FX Rate (C\$M)								Pre-Tax IRR Sensitivity to FX Rate					
Commodity Price							Commodity Price						
FX Rate		(20.0%)	(10.0%)	–	10.0%	20.0%	FX Rate		(20.0%)	(10.0%)	–	10.0%	20.0%
	(20.0%)	6,304	8,663	11,021	13,380	15,739		(20.0%)	23.1%	27.8%	32.1%	36.1%	39.9%
	(10.0%)	4,378	6,474	8,571	10,667	12,764		(10.0%)	19.0%	23.5%	27.6%	31.5%	35.1%
	–	2,837	4,724	6,611	8,497	10,384		–	15.5%	19.8%	23.8%	27.5%	31.0%
	10.0%	1,576	3,291	5,007	6,722	8,437		10.0%	12.3%	16.5%	20.4%	24.0%	27.4%
	20.0%	525	2,097	3,670	5,242	6,815		20.0%	9.5%	13.6%	17.4%	20.9%	24.2%

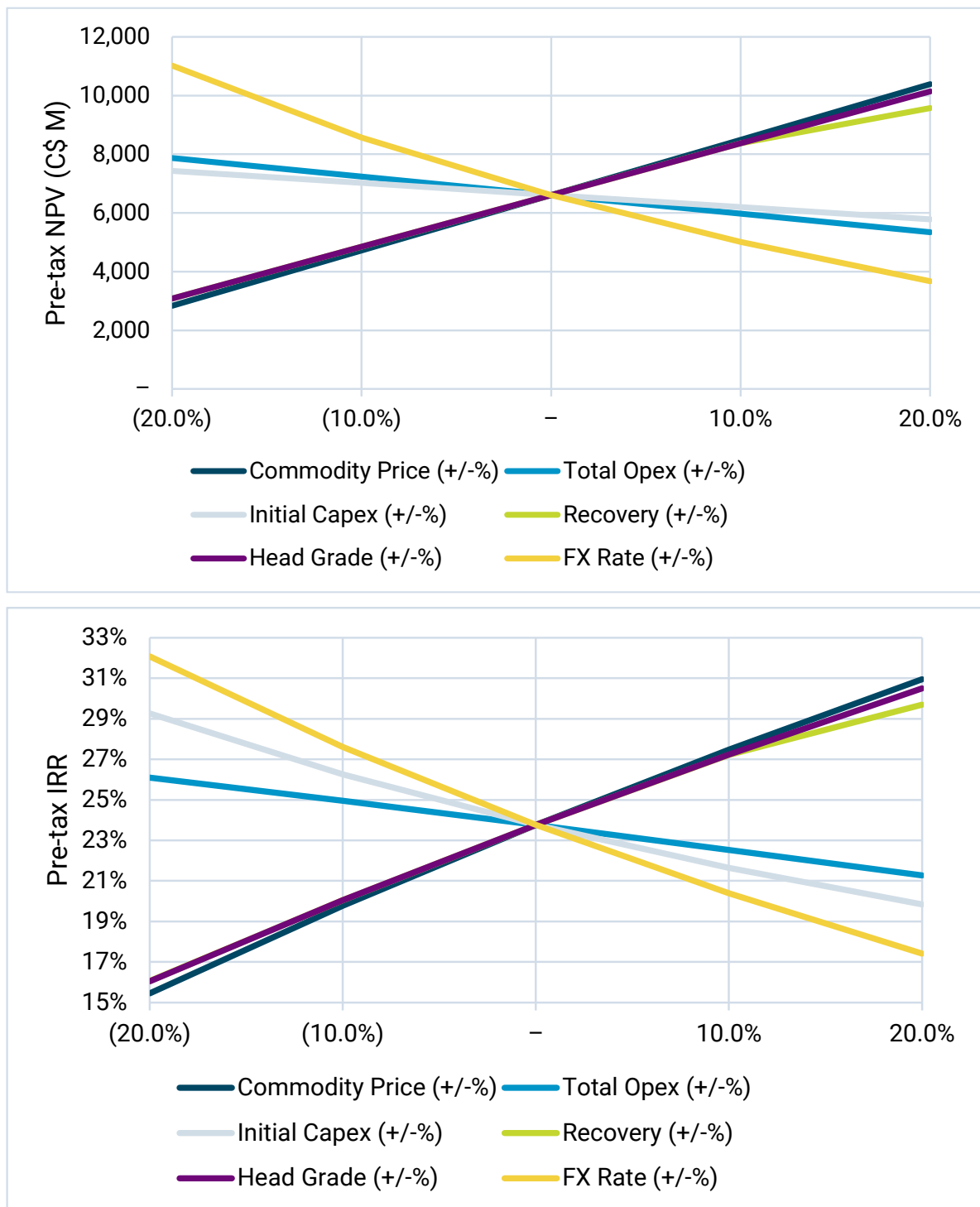
Table 22-6: Post-tax sensitivity summary

Post-Tax Sensitivity to Metal Price (C\$M)													
Post-Tax NPV Sensitivity to Discount Rate (C\$M)							Post-Tax IRR Sensitivity to Discount Rate						
Commodity Price							Commodity Price						
Discount Rate		(20%)	(10%)	–	10%	20%	Discount Rate		(20.0%)	(10.0%)	–	10.0%	20.0%
	3.00%	5,742	7,902	10,065	12,230	14,395		3.0%	16.3%	20.2%	23.8%	27.1%	30.2%
	5.00%	3,939	5,619	7,295	8,970	10,646		5.0%	16.3%	20.2%	23.8%	27.1%	30.2%
	8.00%	2,186	3,394	4,592	5,788	6,984		8.0%	16.3%	20.2%	23.8%	27.1%	30.2%
	10.00%	1,408	2,404	3,388	4,369	5,351		10.0%	16.3%	20.2%	23.8%	27.1%	30.2%
	12.00%	827	1,663	2,486	3,306	4,126		12.0%	16.3%	20.2%	23.8%	27.1%	30.2%
Post-Tax NPV Sensitivity to Opex (C\$M)							Post-Tax IRR Sensitivity to Opex						
Commodity Price							Commodity Price						
Opex		(20.0%)	(10.0%)	–	10.0%	20.0%	Opex		(20.0%)	(10.0%)	–	10.0%	20.0%
	(20.0%)	2,999	4,200	5,397	6,593	7,788		(20.0%)	18.9%	22.5%	25.9%	29.0%	32.0%
	(10.0%)	2,594	3,797	4,995	6,191	7,386		(10.0%)	17.6%	21.4%	24.8%	28.1%	31.1%
	–	2,186	3,394	4,592	5,788	6,984		–	16.3%	20.2%	23.8%	27.1%	30.2%
	10.0%	1,776	2,989	4,189	5,386	6,582		10.0%	14.9%	19.0%	22.7%	26.1%	29.2%
	20.0%	1,364	2,582	3,786	4,984	6,180		20.0%	13.4%	17.7%	21.6%	25.0%	28.3%
Post-Tax NPV Sensitivity to Initial Capex (C\$M)							Post-Tax IRR Sensitivity To Initial Capex						
Commodity Price							Commodity Price						
Initial Capex		(20.0%)	(10.0%)	–	10.0%	20.0%	Initial Capex		(20.0%)	(10.0%)	–	10.0%	20.0%
	(20.0%)	2,633	3,832	5,028	6,223	7,418		(20.0%)	20.1%	24.6%	28.7%	32.4%	35.9%
	(10.0%)	2,411	3,613	4,810	6,006	7,201		(10.0%)	18.0%	22.2%	26.0%	29.5%	32.8%
	–	2,186	3,394	4,592	5,788	6,984		–	16.3%	20.2%	23.8%	27.1%	30.2%
	10.0%	1,958	3,172	4,373	5,570	6,766		10.0%	14.8%	18.5%	21.9%	25.0%	27.9%
	20.0%	1,728	2,948	4,153	5,352	6,549		20.0%	13.5%	17.1%	20.3%	23.2%	26.0%
Post-Tax NPV Sensitivity to Recovery Mill (C\$M)							Post-Tax IRR Sensitivity to Recovery Mill						
Commodity Price							Commodity Price						
Recovery Mill		(20.0%)	(10.0%)	–	10.0%	20.0%	Recovery Mill		(20.0%)	(10.0%)	–	10.0%	20.0%
	(20.0%)	349	1,370	2,347	3,314	4,273		(20.0%)	9.4%	13.4%	16.8%	20.0%	22.9%
	(10.0%)	1,288	2,388	3,474	4,552	5,629		(10.0%)	13.1%	17.0%	20.5%	23.7%	26.7%
	–	2,186	3,394	4,592	5,788	6,984		–	16.3%	20.2%	23.8%	27.1%	30.2%
	10.0%	3,074	4,393	5,709	7,024	8,338		10.0%	19.2%	23.2%	26.9%	30.3%	33.5%
	20.0%	3,677	5,076	6,473	7,869	9,264		20.0%	21.2%	25.3%	29.1%	32.6%	35.9%
Post-Tax NPV Sensitivity to Head Grade (C\$M)							Post-Tax IRR Sensitivity to Head Grade						
Commodity Price							Commodity Price						
Head Grade		(20.0%)	(10.0%)	–	10.0%	20.0%	Head Grade		(20.0%)	(10.0%)	–	10.0%	20.0%
	(20.0%)	346	1,367	2,344	3,310	4,269		(20.0%)	9.4%	13.3%	16.8%	20.0%	22.9%
	(10.0%)	1,287	2,386	3,472	4,550	5,627		(10.0%)	13.0%	17.0%	20.5%	23.7%	26.7%
	–	2,186	3,394	4,592	5,788	6,984		–	16.3%	20.2%	23.8%	27.1%	30.2%
	10.0%	3,075	4,394	5,710	7,026	8,340		10.0%	19.2%	23.2%	26.9%	30.3%	33.5%
	20.0%	3,957	5,393	6,829	8,263	9,696		20.0%	21.9%	26.0%	29.8%	33.3%	36.6%
Pre-Tax NPV Sensitivity to FX Rate (C\$M)							Pre-Tax IRR Sensitivity to FX Rate						
Commodity Price							Commodity Price						
FX Rate		(20.0%)	(10.0%)	–	10.0%	20.0%	FX Rate		(20.0%)	(10.0%)	–	10.0%	20.0%
	(20.0%)	4,397	5,893	7,387	8,881	10,373		(20.0%)	23.2%	27.4%	31.2%	34.7%	38.1%
	(10.0%)	3,173	4,506	5,835	7,164	8,491		(10.0%)	19.5%	23.5%	27.2%	30.6%	33.8%
	–	2,186	3,394	4,592	5,788	6,984		–	16.3%	20.2%	23.8%	27.1%	30.2%
	10.0%	1,369	2,478	3,574	4,663	5,750		10.0%	13.4%	17.3%	20.8%	24.0%	27.0%
	20.0%	674	1,708	2,721	3,724	4,722		20.0%	10.7%	14.6%	18.1%	21.2%	24.2%

Table 22-7: Post-Tax NPV8% & IRR Sensitivity to Copper and Molybdenum Prices as presented in the press release

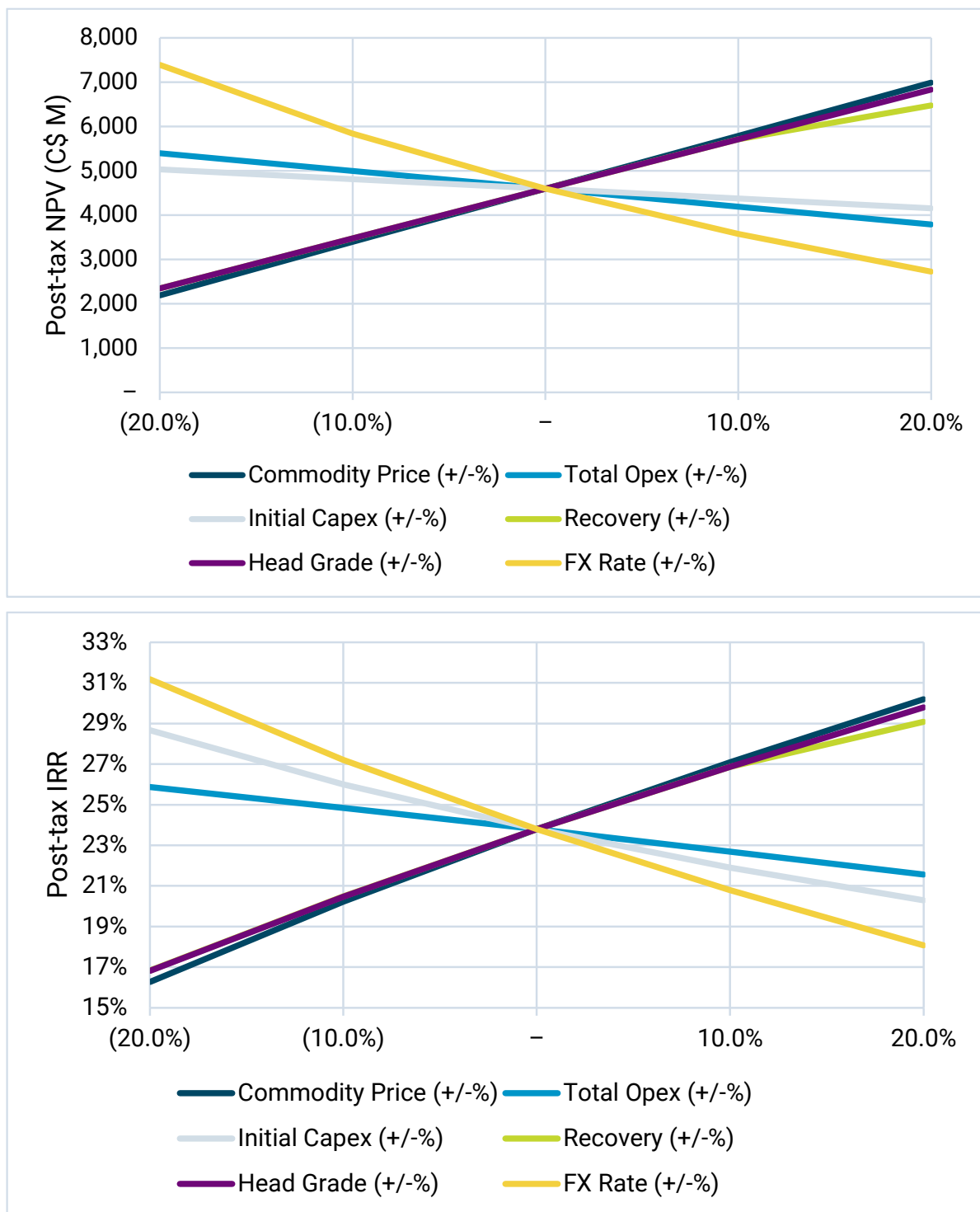
Post-Tax NPV8% & IRR Sensitivity to Copper and Molybdenum Prices																				
Copper Price										Copper Price										
Molybdenum Price			\$1.90	\$2.85	\$3.80	\$4.75	\$5.70	\$6.65	\$7.60	Molybdenum Price			\$1.90	\$2.85	\$3.80	\$4.75	\$5.70	\$6.65	\$7.60	
			(60%)	(40%)	(20%)	-	20%	40%	60%					(60%)	(40%)	(20%)	-	20%	40%	60%
	\$8.00	(60%)	(\$2,371)	(\$429)	\$1,167	\$2,626	\$4,062	\$5,493	\$6,922		\$8.00	(60%)	(4%)	6%	13%	18%	23%	27%	31%	
	\$12.00	(40%)	(\$1,414)	\$326	\$1,836	\$3,284	\$4,716	\$6,146	\$7,575		\$12.00	(40%)	2%	9%	15%	20%	25%	29%	33%	
	\$16.00	(20%)	(\$589)	\$1,033	\$2,499	\$3,938	\$5,369	\$6,799	\$8,228		\$16.00	(20%)	6%	12%	17%	22%	26%	30%	34%	
	\$20.00	-	\$173	\$1,706	\$3,158	\$4,592	\$6,023	\$7,452	\$8,881		\$20.00	-	9%	14%	19%	24%	28%	32%	35%	
	\$24.00	20%	\$891	\$2,370	\$3,814	\$5,246	\$6,676	\$8,105	\$9,533		\$24.00	20%	11%	16%	21%	25%	29%	33%	37%	
	\$28.00	40%	\$1,574	\$3,030	\$4,468	\$5,899	\$7,329	\$8,758	\$10,185		\$28.00	40%	14%	18%	23%	27%	31%	34%	38%	
\$32.00	60%	\$2,241	\$3,688	\$5,122	\$6,552	\$7,982	\$9,410	\$10,838	\$32.00	60%	16%	20%	25%	29%	32%	36%	39%			

Figure 22-2: Pre-tax sensitivity summary



Note: Commodity price and recovery overlap. Source: Ausenco, 2026

Figure 22-3: Post-tax sensitivity summary



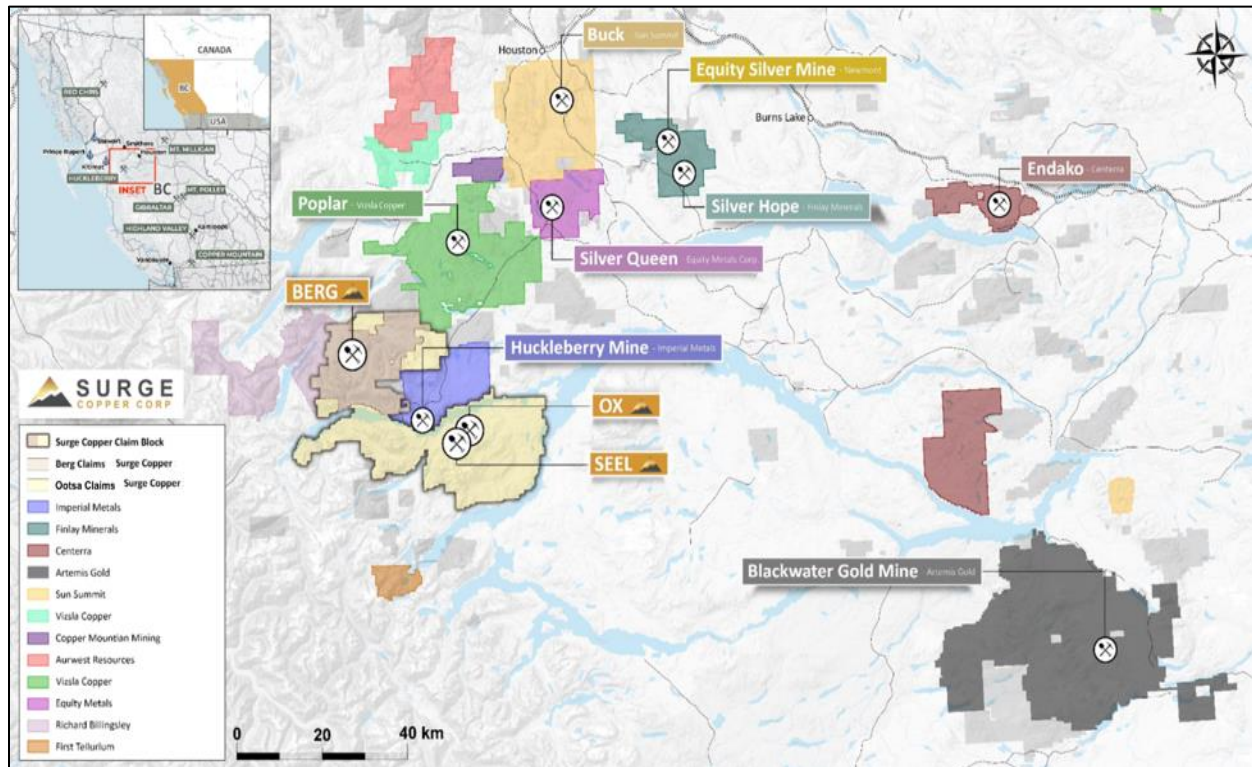
Note: Commodity price and recovery overlap. Source: Ausenco, 2026

23 Adjacent properties

There are several other junior exploration companies that are active in the area specifically accessed by the Morice FSR. These include Equity Metals Corp. with the Silver Queen deposit, Vizsla Copper with the Poplar Deposit and recent Thira discovery directly to the northeast of the Berg Copper Project and Sun Summit Metals with the Buck Project to the northeast of Berg nearer to Houston, BC, as illustrated in Figure 23-1. The mineralization on these properties is not necessarily indicative of the mineralization style at the Berg Copper Project. The QP has not verified the information, and the information is not necessarily indicative of the mineralization on the property that is the subject of the technical report.

The Huckleberry Mine, owned by Imperial Metals, is an open-pit copper-molybdenum mine located 22 km to the southeast of Berg. The mine had production capacity of 20,000 t/d. The mine commenced operations in 1997 and ceased operations in August 2016 and has since been on care and maintenance. Much of the mining equipment and the process plants remain on site (Imperial Metals, 2017). The mine geology and deposit style is similar to the Berg deposit. The QP has been unable to verify the information and that the information is not necessarily indicative of the mineralization on the property that is the subject of the Technical Report.

Figure 23-1: Regional district claims



Source: Surge Copper, 2026

24 Other relevant data and information

This section is not relevant to this report.

25 Interpretation and conclusions

25.1 Introduction

The QPs note the following interpretations and conclusions in their respective areas of expertise, based on the review of data available for this report.

25.2 Mineral tenure, surface rights, royalties and agreements

- The mineral tenure held and optioned is valid and sufficient to support the Mineral Resources.
- Surface rights will be required from the Crown before operations.
- Royalties are payable to third parties.
- It must be noted that some project infrastructure is located on ground not owned by Surge Copper. This ground will need to be consolidated in order for the project to proceed as envisioned in this report.
- To the extent known there are no other significant factors and risks that may affect Access, title or the right or ability to perform work on the property.

25.3 Geology and mineralization

The Berg deposit is an example of a porphyry Cu-Mo deposit. Mineralization is related to hydrothermal activity associated with the intrusive granitic bodies of the Berg Stock and consists of porphyry style mineralization with minor late polymetallic veins. Such mineralization is extensive throughout the region, and similar examples of both vein and porphyry systems have been mined within several kilometres of the Property boundary,

25.4 Sampling and data verification

The quantity and quality of the lithological, collar and downhole survey data collected in the drill programs are sufficient to support Mineral Resource estimation.

Surge Copper has been drilling on the Property since 2021.

The sample security, sample preparation and analytical procedures during the exploration programs by Surge followed accepted industry practice appropriate for the stage of mineral exploration undertaken.

Data verification has been conducted by the QP, and no material issues have been identified by those programs.

25.5 Exploration and drilling

The historic drilling has been verified with QA/QC methods and/or comparisons to more recent drilling. In the opinion of the QP drilling to date is of sufficient quality and spacing to support the classification of the resource defined in this report.

There are several additional exploration targets within the Project that warrant further exploration and drilling, as detailed in this report and expanded on in the recommendations of Section 26.

25.6 Mineral processing and metallurgical testwork

A significant amount of metallurgical testing has been completed on samples that appear to be representative of the deposit. The samples tested include composites of supergene, transition and hypogene mineralization and variability samples providing spatial coverage across these mineralization types. A limited amount of testing was conducted on oxide or "Cap" material; however, this represents a very small portion of the deposit.

The samples were determined to be quite competent with respect to impact breakage in a SAG mill and hard with respect to attrition grinding in a ball mill.

The flowsheet conditions applied and metallurgical performance achieved in these test programs were typical of copper porphyry deposits. Ratios of pyrite to copper sulphides in the feed samples averaged 6:1 and process conditions to achieve selective froth flotation were effectively applied. Primary grind sizes of 160 μm P₈₀ were applied to transition and hypogene materials, while a finer primary grind size of 115 μm P₈₀ was applied to supergene materials as they required less grinding energy.

Copper and molybdenum open circuit recoveries from hypogene variability samples averaged 86.2 and 88.6%, respectively, to bulk concentrates grading 26.9% Cu and 2.5% Mo. Locked cycle testing on a composite of these samples measured 90.7% Cu and 93% Mo recovery to a bulk concentrate grading 29.7% Cu and 3.2% Mo. Locked cycle testing on supergene and transition composites returned average recoveries of 84.3% and 89.9% for copper and molybdenum, respectively, to bulk concentrates averaging 24.6% Cu and 1.6% Mo.

Cu-Mo separation testing was conducted through open circuit cleaner tests on bulk concentrates from each lithology. Supergene and hypogene materials performed well, generating molybdenum concentrates grading 50% Mo at circuit molybdenum recoveries of 95%. The transition composite was more challenging, averaging 76% molybdenum circuit recovery to concentrate grading 47% Mo from two tests. It is expected that optimization testing could improve these results.

Minor element contents measured on both copper and molybdenum concentrates generated from each lithology. These results indicate that hypogene and supergene concentrates would not be affected by penalty element levels. The transition copper concentrate however contained elevated levels of antimony, cadmium, lead and zinc that could attract penalties. It is expected that concentrate blending would mitigate any concentrate quality issues. Silver levels of 300 g/t in the copper concentrates are likely of economic interest, and a portion of the 1.5 g/t gold contents will likely be payable. The molybdenum concentrates contained 94 ppm rhenium on average, which may provide supplemental revenue.

25.7 Mineral Resource Estimate

The Mineral Resource Estimate includes combined Measured & Indicated resource of 1.4 billion tonnes grading 0.21% copper, 0.03% Mo, 4.0 g/t Ag, and 0.02 g/t Au, containing 6.5 billion pounds of copper, 791 Mlbs Mo, 181 Moz Ag, and 963 koz of Au, plus an additional 1.0 billion tonnes of material in the Inferred category.

Mineral resources that are not Mineral Reserves do not have demonstrated economic viability.

25.8 Mineral Reserve Estimate

Proven and Probable Mineral Reserves have been modified from Measured and Indicated Mineral Resources. Inferred Mineral Resources have been set to waste. The Mineral Reserves are supported by the 2026 Pre-Feasibility Study Mine Plan and classified in accordance with the 2014 CIM Definition Standards.

Berg Proven and Probable Mineral Reserves total 1,209 Mt at 0.22% Cu, 0.026% Mo, 4.1 g/t Ag, and 0.02 g/t Au.

Changes in the following factors and assumptions may affect the Mineral Reserve estimate: metal prices and exchange rate, interpretations of mineralisation geometry and continuity of mineralisation zones, geotechnical and hydrogeological assumptions, ability of the mining operation to meet the annual production rate, operating cost assumptions, process plant and mining recoveries, the ability to meet and maintain permitting and environmental licence conditions, and the ability to maintain the social licence to operate.

25.9 Mine plan

The mining operations will use large-scale drill, blast, load, and haul open-pit mining methods and equipment. A reasonable open pit mine plan, mine production schedule and mine capital and operating costs have been developed for Mineral Reserves at Berg.

Open-pit mining operations are anticipated to run for 31 years, including three years of pre-production mining during the construction period. An annual mill feed rate of 43.8 Mt is targeted, with an increased 48.0 Mt targeted for the first four years of operation. Low-grade ore is stockpiled and rehandled to the crusher throughout the mine life.

Pit layouts and planned mine operations are typical of other large-scale open-pit porphyry operations in British Columbia, and the unit operations within the developed mine operating plan are proven to be effective for these other operations.

The mine plan supports the cash flow model and financials developed for the Pre-Feasibility Study.

25.10 Recovery methods

The recovery methods required for processing ore are supported by historical and recent testwork as well as financial evaluations and includes a copper-molybdenum concentrator. The process flowsheet designs were based on testwork results and industry standard practices and developed to optimize recovery while minimizing capital expenditure and life-of-mine operating costs.

The concentrator is designed to process on average, 120,000 t/d (43.8 Mt/a) of ore. Mined materials are crushed, conveyed, ground, and processed by bulk rougher flotation. Bulk rougher flotation concentrate is then reground and upgraded by bulk cleaner flotation. Rougher tailings are directed to the pyrite scavenger flotation circuit to reduce sulphur content. The resulting de-sulphurized tailings are then classified using hydrocyclones to produce sand for tailings dam construction. Pyrite scavenger concentrate is combined with copper-molybdenum cleaner scavenger tailings, and the combined stream is transported separately for subaqueous deposition at a dedicated location within the tailings management facility.

The bulk cleaner concentrate is further processed in the copper-molybdenum separation circuit. Molybdenum rougher flotation tailings or copper concentrate is thickened, filtered and loaded onto weighed trucks for transport. Regrinding, along with two stages of cleaning and significant circulating loads

are proposed to upgrade the molybdenum rougher concentrate prior to shipment. The comminution and recovery process are widely used in industry with no significant elements of technological innovation.

25.11 Infrastructure

The Berg Copper Project includes on-site infrastructure such as civil, structural and earthworks development, site facilities and buildings, on-site roads, water management systems, and site electrical power facilities. Off-site infrastructure includes site access roads, fresh water supply, power supply and concentrate transportation.

The site infrastructure will include:

- Mine facilities, including mining administration offices, a mine fleet truck shop and wash bays, and a mine workshop.
- Common facilities including an entrance/exit gatehouse, a security/medical office, overall site administration building, potable water and fire water distribution systems, compressed air, incinerator, power generation and distribution facilities, diesel reception and combustion plants, communications area and sanitation systems.
- Process facilities housed in the processing plant, including crushing, grinding and classification, flotation, product regrind, concentrate handling, thickening, dewatering and filtration, reagent mixing and distribution, assay laboratory and process plant workshop and warehouse.
- Over Land conveyors to move ore and PAG waste rocks from the pit to the process plant and TWMF. Mobile conveyors and radial stackers inside the TWMF for distribution of PAG waste materials.
- Other infrastructure includes avalanche risk management structures, the on-site man-camp, TWMF and WRSF, which have been designed in accordance with provincial and national guidelines.

The Berg Copper Project is located 85 km from the town of Houston, BC. Access to the site is via forest service roads, specifically the Morice Forest Service Road (FSR) and Sibola Forest Service Road. The Morice FSR currently serves as access for industrial use in the region including forestry, the Huckleberry Mine site and maintenance of the Coastal Gaslink Pipeline. At the 100-km mark of the Morice FSR begins the Sibola FSR that leads to both Surge's current Sibola exploration camp and the Berg access road. It should be noted that the project is envisioned to access the Berg site via a newly created road to the north and west of Mount Ney.

A 230-kV transmission line will connect to an on-site substation before being stepped down to 25-kV for distribution to different power requirements across the site.

Fresh water will be sourced from Nanika Lake and pumped to the process plant where a freshwater tank will be located.

The overall site layout was developed using the following criteria and factors:

- The facilities described above must be located on the Berg property to the greatest extent possible.
- The location of the process plant is at a lower elevation to the Berg open pit to reduce risks and lower operating costs.
- The location of the NAG RSF must be close to the Berg open pit to reduce haul distance.
- The location of the primary ore and potentially acid-generating (PAG) waste crushing must be close to the Berg open pit to reduce haul distance.

- The TWMF should be located at a site that takes advantage of sloped natural terrain to adequately drain entrained water and reduce earthworks, concrete, and structural development if possible.
- The arrangement of the administration buildings, mine workshops, processing plant and additional offices should be optimized for foot and vehicle traffic.

25.12 Markets and contracts

Surge has engaged with marketing and contract experts to inform the assumptions and estimates in this PFS. Deno Advisory and Marketeye have provided information regarding copper concentrate sales and molybdenum concentrate sales respectively.

Copper concentrate produced by the Berg Copper Project is estimated to be of high quality and is represented by the treatment charges, payabilities and deductions as presented in Section 19 resulting in an average payability over the life of mine of 96.3%.

Molybdenum concentrate is estimated to be within required specifications for sale to various potential roasters on a global basis with a payability of 99% as presented in Section 19.

Project economics were estimated based on long-term metal prices of US\$4.75/lb Cu, US\$20.00/lb Mo, US\$45.00/oz silver (Ag) and US\$3,500.00/oz gold (Au) which was established by Surge Copper with reference to consensus forecasts from various financial institutions.

No contracts for transportation or offtake of the concentrates are currently in place, but if they are negotiated, they are expected to be within the industry norms. Similarly, there are no contracts currently in place for supply of reagents, utilities, or other bulk commodities required to construct and operate the Project.

25.13 Environmental, permitting and social considerations

Baseline environmental studies completed to date include hydrology, water quality, fisheries, meteorological monitoring and geochemistry. Several limited field and screening environmental baseline studies and reports were completed between 2007 and 2017, and since these studies are old (>5 years) and largely reconnaissance in nature, updated studies are planned or in progress and will be required to support future feasibility design work as well as environmental assessment and permitting in accordance with applicable provincial and federal guidance. These studies will support characterization of surface water systems, aquatic resources, and wildlife habitat, and help to inform Project design, including water management and sediment control infrastructure by identifying potential environmental constraints and opportunities related to the proposed development of the Project. The Project area provides habitat for a range of wildlife species, including woodland caribou (Northern Group, Tweedsmuir local population unit), listed under Schedule 1 of the federal Species at Risk Act. Critical habitat for this population may occur within or near the Project area. In some areas where site infrastructure is planned an Archaeological Overview Assessment indicated elevated potential for encountering archaeological resources.

There have been insufficient or no baseline studies completed to date on air quality, noise, greenhouse gases and climate change. The 2026 field programs are focussed on building out groundwater quality and quantity, vegetation, and wildlife baselines. Ongoing and expanded baseline studies will be required to support the project through feasibility, and environmental assessment/permitting stages of the project. The results of baseline studies will be used to minimize impact of the project on valued components and to optimize the location and operation of project infrastructure. Baseline study recommendations for the

purpose of advancing the project to the feasibility design stage, EA, and permitting are provided in Section 26.6.

In terms of water management, the main consideration for the project is the location of the tailings facility in Bergeland Creek and the potential loss of fish habitat. The project as envisioned in this report may require a Fisheries Act Authorization and Fish Habitat Compensation Plan. A Schedule 2 amendment to the MDMER may also be required subject to further fish and fish habitat surveys required for areas where mine waste will be stored.

As additional baseline data is collected and community engagement efforts proceed, changes to project infrastructure design (and estimated costs) may be required at the PFS level due to the following:

- Fish and fish habitat characteristics for the areas of proposed project disturbance as related to future permitting requirements and risks.
- Refined understanding of hydrological and hydrogeological conditions as related to water balance.
- The quality of mine contact water based on geochemical characterization and predictions.
- Refined understanding of vegetation/ecosystem and wildlife/wildlife habitat.
- Traditional land use activities undertaken by Wet'suwet'en, Cheslatta Carrier Nation, and other First Nations near the project area.
- Locations of archaeological sites and those of cultural importance to First Nations.

25.14 Capital and operating cost estimates

25.14.1 Capital cost estimate

The capital and operational cost estimates provided in this PFS offer expenses that can be utilized to evaluate the Berg Copper Project's preliminary economics. The calculations are based on the open-pit mining operation, the development of a processing plant, infrastructure, tailings storage facility and management facility, and owner's expenses and provisions.

The capital cost estimate conforms to Class 4 guidelines of the Association for the Advancement of Cost Engineering International (AACE International), with an estimated accuracy of $\pm 25\%$ accuracy. The capital cost estimate was developed in Q2 2026 Canadian dollars based on vendor's quotes, Ausenco's in-house database of projects and advanced studies as well as experience from similar operations.

The total initial capital cost for the Berg Copper Project is C\$4,678 million, and the LOM sustaining cost is C\$1,730 million. The capital costs are summarized in Section 21.

25.14.2 Operating cost estimate

The operating cost estimate was developed in Q2 2026 using vendor information, data from projects, studies, and previous operations from Ausenco's internal database.

The costs considered on-site operating costs are those related to mining, processing, tailings handling, and general and administrative activities (G&A).

The unit operating cost is C\$15.00/t milled. Annual G&A cost are estimated at C\$39.2 million. A summary of the operating costs is presented in Table 21-11.

25.15 Economic analysis

The economic analysis was performed assuming an 8% discount rate. On a pre-tax basis the NPV discounted at 8% is C\$6,611 million; the IRR is 23.8%, and payback period is 3.2 years. On a post-tax basis, the NPV discounted at 8% is C\$4,592 million; the IRR is 23.8%, and the payback period is 2.9 years.

25.16 Risks and opportunities

25.16.1 Risks

25.16.1.1 Metallurgical testing

The flotation circuit includes a pyrite scavenger stage in order to produce tailings that meet a sufficient quality for cyclone sand dam construction in terms of having a low ARD potential. A limited amount of laboratory testing has been conducted to demonstrate this sulphur recovery performance, and a single ARD analysis has been completed on the resulting tailings sand fraction. The pyrite recovery circuit may require optimization to achieve a sand product with consistent NAG properties.

Molybdenum recovery across the Cu-Mo separation circuit has not yet been demonstrated in closed-circuit. Additional testing is required to confirm the closed-circuit metallurgical performance and optimize the transition material performance.

Oxide or "Cap" material requires further testing to confirm metallurgical performance, particularly at mine plan feed grades, as only a single sample has been tested to date.

25.16.1.2 Mineral Resource Estimate

The Mineral Resource Estimate includes Inferred material (39% of the total CuEq lbs), which has less confidence than the Measured + Indicated material. The risk can be reduced by drilling to decrease the drill spacing and move this material into the Measured + Indicated categories, as described in Section 26.

25.16.1.3 Mineral Reserve and mining methods

The project is at a pre-feasibility level of engineering. Further field work, lab work and modelling are required to advance the engineering to the next stage of feasibility. It can be anticipated that further field drilling and advancement of the project engineering will materially alter the existing mine plan, reducing the plan's risk and identifying and exploiting the potential opportunities that arise.

Risks to the estimated Mineral Reserve quantities, metal grades, associated waste rock quantities, and estimated costs in this technical report include changes to the following factors and assumptions:

- Metal prices.
 - Decreases in metal prices may increase the economic cut-off grade, or reduce the size of the open pit, with either outcome reducing the size of the resource base to include into the mine plan.
- Interpretations of mineralization geometry and grade continuity in mineralization zones.
 - Decreases in the resource base could significantly alter the mine plan.
- Geotechnical and hydrogeological assumptions.
 - Further geotechnical study may show a required shallowing of pit slope angles, which likely would in turn increase the overall LOM stripping ratio to access the Mineral Reserve.

- Further hydrogeological study may identify a more onerous (costly) pit water management and slope depressurization solution.
- Further site investigation on the planned foundations for the LGO SP, North, Upper, and Lower NAG rock storage facilities may identify the needs to significantly alter these planned structures, which could materially increase the capital and operating costs associated with this mine plan.
- Geochemical assumptions for mined ore and waste materials.
 - Risks exists that the low-grade stockpiling plans will not meet end of mine life metallurgical and environmental parameters to be considered as mill feed.
 - Further geochemical characterization, specifically in the open-pit waste overburden and bedrock, may identify a more onerous (costly) PAG management solution.
- Avalanche risk assumptions.
 - The ability to develop and maintain access to upper elevations of the open pit is critical to achieving the mine plan.
- Mine operation and process plant production rates and recoveries.
 - Reduced selectivity with the mining fleet, reduced mining or mill processing recoveries, or increased mining dilution would result in an increased cost of achieving the planned metal production.

25.16.1.4 Recovery methods

An inherent risk exists that the metallurgical samples tested may not adequately capture the variability of the mineralized material, and there may be some mineralized zones that do not achieve the metallurgical performance of the designed circuit.

Concentrate dewatering characteristics have not been demonstrated with laboratory testing. The concentrate dewatering circuit design was based on benchmark settling and filtration rate values and may not be sufficient.

25.16.1.5 Infrastructure

Risks related to the site infrastructure include the following:

- Overland Conveyors consist of multiple sections and transfer towers. If any section and the first section stop suddenly, the previous conveyor sections need to stop immediately to avoid overflow and damage to the transfer towers. More study in this area is needed in future studies to assess the risks and consider proper mitigation mechanism.
- After the completion of the infrastructure field geotechnical program, a number of facilities moved, and the TWMF northeast embankment moved to an increase in waste materials. Therefore, the closest field program test pits and boreholes were utilized to determine foundation conditions. The next phase required an updated field and laboratory program to determine foundation conditions below infrastructure to determine if the foundation conditions are similar or have the potential to affect the designs of these facilities. This could require modifications to the design of these facilities that might increase the capital, sustaining capital, and operating costs.
- Trafficability for mechanical equipment on the PAG waste rock section of the TWMF has been assumed. In the next phase, a detailed trafficability study needs to be performed to determine whether setbacks from the edges of the berms under construction may limit the ability of mobile equipment. This could affect the development of subaqueous deposition operations for PAG waste rock.

- It was assumed that the PAG waste rock would take several months before it began generating acid and metal leaching. However, if future geochemical studies suggest that the time before generating acid is shorter, a different deposition technology may need to be utilized and could increase capital, sustaining capital, and operating costs.
- There is limited hydrological and geotechnical information for the water management infrastructure, particularly for the collection dam. The next phase required an updated field and laboratory program to determine foundation conditions below infrastructure to determine if the foundation conditions are similar or have the potential to affect the designs of these facilities.
- The study assumes that the required electrical power will be available from BC Hydro. While the capital cost estimate includes the necessary expansion of the Telkwa Substation and construction of the associated transmission line infrastructure, the availability of sufficient power capacity has not yet been confirmed by BC Hydro. Confirmation of power availability and any associated requirements should be obtained through engagement with BC Hydro during subsequent project phases.

25.16.1.6 Commodity prices

The ability of mining companies to fund the advancement of their projects through exploration and development is influenced by commodity prices. Variations in the commodity prices may lead to reduced or elevated revenues compared to those projected in this study.

25.16.1.7 Environmental, permitting, and social

Project risks related to socio-environmental considerations and permitting that may affect project costs, permitting schedule and outcomes are as follows:

- Lack of seasonal and multi-year social or -environmental studies for various aspects of the Project and consequential delays to receiving timely approvals.
- Potential for ARD/ML from PAG waste rock and ore.
- Presence of fish-bearing watercourses and downstream aquatic habitat within the Berg Creek and Nanika watershed systems.
- Proposed location of the TWMF near Nanika Lake and local drainage features, with associated sensitivity related to seepage management, water quality protection, embankment stability, and long-term closure performance.
- Reliance on conceptual site-wide water management infrastructure, including diversion systems, contact water collection ponds, and the proposed TWMF.
- Limited hydrogeological characterization and preliminary understanding of groundwater conditions and seepage pathways.
- Long-term water quality and seepage management considerations associated with PAG waste rock and tailings storage.
- Presence of wildlife habitat and species of conservation concern, including Northern Mountain Caribou, grizzly bear, and migratory bird species.
- Potential interaction with mature forest ecosystems, which may influence future environmental assessment, land disturbance planning, and community engagement activities.
- Project location within the traditional territories of multiple Indigenous Nations and associated consultation and engagement requirements.

- Requirement for multiple provincial and federal permits, approvals, and environmental assessment processes prior to mine development.
- Long-term reclamation, closure, and post-closure water management obligations associated with mine waste storage and disturbed areas.

Implementation of recommendations presented in Section 26.6 will help to quantify and address the risks outlined, above.

25.16.2 Opportunities

25.16.2.1 Exploration and drilling

The Berg property contains multiple other exploration targets with porphyry copper deposit characteristics that have potential to provide additional mill feed to a future mining operation, including but not limited to: Bergette, Sibola and Sylvia deposits as detailed in Section 9. These targets have seen considerable exploration work by Surge Copper and previous operators. Some targets are being advanced in preparation for drill testing, and some targets are more advanced and have been drill tested and remain open for further testing. Targets that have been drill tested and show promising results include but are not limited to; Bergette where hole BRG22-02 encountered 0.22% copper and 0.012% molybdenum over 176 m, Sylvia where historic drill hole S-8 intersected 0.33% copper and 0.02% molybdenum over 63 m, and Sibola where hole SIB22-01 intersected 312 g/t silver over 3 m and another interval of 0.10 g/t gold over 52 m. Additional study and exploration work is warranted across the highly prospective claim block to fully evaluate the potential for additional mill feed.

25.16.2.2 Metallurgical testing

Coarse particle flotation could be investigated further as a means to reduce primary grinding energy. As well, the effective sulphur recovery of this processing technique may assist in achieving NAG quality sand for dam construction.

25.16.2.3 Mineral Resource Estimate

The opportunity to increase confidence in the resource estimate includes upgrading of the Inferred material within the open pit by infill drilling to increase the drill spacing and upgrade to Measured or Indicated as outlined in Section 26 of this report.

25.16.2.4 Mineral Reserves and mining methods

The project is at a pre-feasibility level of engineering. Further field work, lab work and modelling are required to advance the engineering to the next stage of feasibility. It can be anticipated that further field drilling and advancement of the project engineering will materially alter the existing mine plan, reducing the plan's risk and identifying and exploiting the potential opportunities that arise.

Opportunities to the estimated Mineral Reserve quantities, metal grades, associated waste rock quantities, and estimated costs in this technical report include changes to the following factors and assumptions:

- Metal prices
 - Increases in metal prices may decrease the economic cut-off grade, or increase the size of the open pit, with either outcome increasing the size of the resource base to include into the mine plan.
- Interpretations of mineralization geometry and grade continuity in mineralization zones.
 - Increases in the resource base could materially alter the mine plan.
- Geotechnical and hydrogeological assumptions

- further geotechnical study may show a potential to increase pit slope angles, which likely would in turn decrease the overall LOM stripping ratio to access the resource, specifically in the early stages of the project.
- further hydrogeological study may identify a less onerous (costly) pit water management and slope depressurization solution.
- Geochemical assumptions for mined ore and waste materials.
 - Further geochemical characterization, specifically in the open-pit waste overburden and bedrock, may identify a less onerous (costly) PAG management solution.
- Mine operation and process plant production rates and recoveries.
 - Increased selectivity with the mining fleet, increased mining or mill processing recoveries, or decreased mining dilution would result in decreased costs of achieving the planned PFS metal production.
 - Further planned electrification of the open-pit mine fleet, specifically using trolley or battery systems for the haulers, may have a positive impact on costs associated with planned metal production.
- Mine sequencing.
 - Several areas of high economic margin material exist relatively close to surface within the planned open pit, and additional engineering may exploit the opportunity to increase early production in these areas and enhance economics of the overall project.
 - Several cut-off grade optimization solutions should be tested on the LOM mine plan, as increased low-grade stockpiling, or even treating additional low-grade resources as waste, can enhance the economics of the overall project.

25.16.2.5 Recovery methods

The grinding circuit is designed for the 75th percentile of comminution data, measured in hypogene materials. Aside from the higher throughput for initial years when supergene material is dominant, there may also be periods past year 4 in which higher throughputs could be realized, based on variances in the hypogene hardness characteristics. Additional geo-metallurgical characterization is required to identify this opportunity and include it in the production plan.

Similar to the throughput variance above, there may be periods later in the mine life in which lower copper and molybdenum recoveries at coarser primary grind sizes and higher throughputs provide better economic outcomes. Additional metallurgical testing at coarser primary sizes on suitable variability samples is required to evaluate this opportunity.

Thickening the combined pyrite scavenger concentrate and cleaner circuit tailings prior to pumping to the TMWF may provide improved economics given the reduction in pumping power. Confirmation of settling characteristics of these streams and flocculant dosages through laboratory testing are required to investigate this opportunity.

25.16.2.6 Infrastructure

The following opportunities have been identified:

- Opportunity to conduct a more robust geochemical analysis to define the NAG/PAG split. This study can help reduce the PAG crushing and handling costs as well as the tailings handling and storage costs.
- Using regenerative conveyors to add power to the overall system and reducing the overall power consumption required from the BC Hydro provincial grid.

- Additional routing options for power connection may be available that could provide less capital expense and/or increased reliability in power supply, Additional routing options should be investigated as part of the next phase of study.
- Opportunity to conduct a PAG waste rock deposition study to evaluate other options for placing the PAG waste rock subaqueously without using dozers and draglines.
- If the future geochemical test program demonstrates that the PAG waste rock takes much longer to begin generating acid and leaching metals, another subaqueous deposition technology could be used, which could reduce capital, sustaining capital, and operating costs.

25.16.2.7 Environmental, permitting, and social

Opportunities related to social-environmental studies and permitting are as follows:

- Building on current information, identify baseline critical paths and expedite the execution of well-informed, technologically advanced environmental, socio-economic, and cultural baseline studies to support the Project through feasibility design stage as well as meeting EA and permitting requirements.
- Continue to intensely engage with identified Indigenous Nations and nearby communities regarding project design and status and to maximize local hiring opportunities and seek opportunities to extend and improve cooperation agreements and benefits to local First Nations and communities.
- Strong cooperation between First Nations, regulatory agencies and project proponents have recently been seen to have great success. Specifically in BC there have been recent efforts for Indigenous led assessment that ensure the respective communities are well informed throughout the permitting process. Should such an opportunity be possible with respective First Nations it could be considered an opportunity to bolster the partnership between all groups while at the same time reducing risks for permitting delays.
- There are opportunities to work closely with ongoing geological and geotechnical drilling program teams to efficiently collect required geochemical samples and establish a hydrogeological monitoring and testing program that will be required for future feasibility and permitting phases of the Project.
- A strong environmental baseline and focus on the use of low impact and sustainable technologies will aid the permitting process as showing lesser overall impacts to the environment. Through the EA process having a well-developed Tailings Alternatives Assessment backed by a robust dataset for environmental baseline may allow for a fast-track process in any Schedule 2 amendment needed for mine construction.
- The use of low-carbon initiatives and green technology as it becomes available will lessen overall impact on the environment and reduce carbon footprint for the life of the project. Such technologies, while potentially not currently on the market, should be evaluated as they become available and the project progresses.
- Leverage the critical metals (mainly copper and molybdenum) that are contained within the resource to align with Canada's recent strategy to ensure strong supply of materials needed to advance the current electrical transportation and energy transition goals. As the transition to more renewable energy systems progresses, and societies look to electrify more aspects of the economy, including the increased adoption of electric vehicles, Canada and other partner countries will increasingly rely on critical metals that the Berg Copper Project will be able to supply. As opportunities are presented by regulatory or administrative bodies the Berg Copper Project should look to take advantage of any of these programs.

26 Recommendations

26.1 Introduction

The Berg Copper Project shows positive economics, as demonstrated by the results presented in this technical report. It is recommended that the project be advanced through to feasibility study. The following sections detail the recommended future work for the project. The estimated costs for the recommended work program are summarized in Table 26-1.

Table 26-1: Recommendations cost summary

Program component	Estimated total cost (C\$M)
Exploration and mineral resource	6.1
Mine planning	6.1
Metallurgical testing and process recovery	0.8
Infrastructure	2.7
Socio-environmental studies, Environmental Assessment and permitting	28.3
Total	44.0

26.2 Exploration and mineral resource

26.2.1 Exploration and drilling

The Berg mine pit currently contains Inferred material that has been treated as waste for the purposes of this study. Future studies could benefit from the conversion of this material into the measured and indicated categories for inclusion in potential future reserves. It would be recommended to efficiently use drilling by targeting zones for conversion drilling and it is estimated that a portion of the inferred resources could be converted with 4,900 metres of drilling at a cost of \$1,700,000.

Additionally, directly below the current open pit design shapes and inclusive of the overall resource as outlined in this report, there are additional inferred resources that could be converted from inferred to the measured and indicated categories. Conversion of these resources for inclusion in reserves could have the direct benefit of extending the mine life of the Berg Copper Project. It is estimated that 12,600 metres at a cost of \$4,400,000 would convert a portion of the resources below the open pit and potentially extend the mine life of the Berg Copper Project.

The Berg property contains multiple other exploration targets with porphyry copper deposit characteristics that have potential to provide additional mill feed to a future mining operation, including but not limited to: Bergette, Sibola and Sylvia prospects as detailed in Section 9. Additional study and exploration work is warranted across the highly prospective claim block to fully evaluate the potential for additional mill feed.

The Berg property contains multiple other exploration targets with porphyry copper deposit characteristics that have potential to provide additional mill feed to a future mining operation, including but not limited to: Bergette, Sibola and Sylvia prospects as detailed in Section 9. Additional study and exploration work is warranted across the highly prospective claim block to fully evaluate the potential for additional mill feed.

26.2.2 Mineral resource

MMTS notes that Surge Copper has not achieved suitable insertion rates for blind standards during their drilling campaigns starting in 2021 and recommends increasing the frequency of CRM insertions to approximately 5% of total core samples in future programs.

The 2022 core re-sampling program did not include a suitable amount of blind QA/QC sample insertions to assess analytical data accuracy and precision independently from lab-internal QA/QC data and protocols. Only the blank insertion rate at approximately 5% to control contamination is sufficient (CRM rate is 1.2% and no field or other duplicates were done).

The 2022 Au pulp re-assaying program also did not include an appropriate amount of QA/QC samples, specifically blind certified reference material to control accuracy of results and pulp blanks to control contamination at the analytical stage.

No check-assaying was performed in 2021, and the umpire assays data for 2025 was not available in time for this report.

26.3 Mineral Reserves and mining

The following recommendations are made with regard to advancing the mine engineering of the Berg Copper Project to a Feasibility Study, with estimated budget for each recommended program included:

- Updated topographic survey of all planned operational areas (C\$100,000).
- Targeted open-pit geotechnical drilling using acoustic or optical televiewer and triple tube core barrels. (C\$1,600,000).
 - Target the upper slopes of the proposed pit; target potential major fault structures in the south and east dipping walls; target blind zones from previous drilling, including potential structures dipping steeply to the southwest and northeast in the Andesite and QDR domains, and structures dipping steeply to the north in the Stock domain.
 - Laboratory testing for intact rock strength (unconfined compressive strength tests, triaxial compressive strength tests, point load tests, and indirect tensile strength tests) and for discontinuity strength (direct shear tests).
 - Install additional standpipe piezometers and vibrating wire piezometers with dataloggers in more locations, within and outside the proposed pit, to better physically characterize the groundwater flow in and around the proposed pit. Shallow instrumentation in the supergene rocks will allow for characterization of the water table and its response to short-term and seasonal events. Deeper instrumentation in the hypogene will allow for characterization of artesian pressures and vertical hydraulic gradients.
 - Long-term pumping tests are recommended to characterize bedrock hydrogeology and groundwater flow. Additional packer testing should be conducted to expand the data set.
- Geotechnical analysis supporting further refined open-pit designs (C\$600,000).
 - Conduct a comprehensive stability analysis including defined bench stacks and geotechnical catch benches, pseudo-static conditions, and major structures on the PFS open-pit design.
 - Build updated structures model and perform kinematic analysis and limit equilibrium modeling.
 - Characterize the D1, D2 and D3 sets within the Andesite geotechnical domain to better inform limit equilibrium modelling results.

- Characterize the gypsum within the Hypogene geotechnical domains.
- Avalanche hazards at the crest of the pit or from snow build-up on benches of the pit may also need to be considered at the next stage of study. Modifications to the pit slope configurations may be required to limit the likelihood of avalanches reaching haul roads or working levels, and to provide access for snow removal. Remote avalanche controls systems may be required to manage avalanche hazards.
- Geotechnical and hydrogeological site investigations for the planned LGO SP and North, Upper, and Lower NAG rock storage facilities to characterize foundation conditions, support continued environmental monitoring and consultation and evaluate alternative NAG rock storage configurations with the objective of minimizing environmental impacts (C\$1,400,000).
- Drill penetration and blast fragmentation studies, testing properties in all lithologies, as well as within mineralized areas and within waste rock (C\$100,000).
- Run a trade-off study to investigate the merits of implementing a trolley assist or battery system for the haul truck fleet (C\$200,000).
- Undertake a bulk sample or a tightly spaced grade control drill program on an areas of the planned year 1 mill feed, to demonstrate the robustness of the block model metal grade estimates. Bulk sample produced metal, or grade control drilling assays, should be compared to block model estimated metal and differences should be incorporated into further detailed mine planning (C\$1,300,000).
- Condemnation drilling should be carried out for the footprints identified for waste rock storage and the mine infrastructure pad (C\$500,000).
- Further refine existing design work to a feasibility level of engineering, including open pits, stockpiles, ex-pit haul roads, explosives storage facilities, and fleet maintenance facilities (C\$300,000).

These field programs and studies are estimated to cost C\$6,100,000.

26.4 Metallurgical testing and process recovery

Considering the body of previous metallurgical testwork completed on the Berg Copper Project it is recommended that several areas of further refinement would benefit the testwork database to proceed into a feasibility and Final Investment decision. It is anticipated that these tests could require an additional 3,500 kg of feed material.

The recommended areas are as follows:

- Complete additional testwork to evaluate staged regrind for the purposes of reduced energy consumption in the cleaner phases of flotation. This work would be done in conjunction with additional follow-up test on coarse particle flotation for the optimization of flow sheet design (C\$180,000).
- Evaluate the regrind energy requirements with a specific focus on Hypogene material due to its harder ore characteristics and large proportion of processed material (C\$70,000).
- Additional hypogene variability testing with a specific focus on matching mine plan ratio of S:Cu in feed samples (C\$50,000).
- Additional oxide material variability sampling to confirm recoveries of this material in early years of mine plan (C\$50,000).
- Bulk concentrate generation on supergene and hypogene composites for optimization of the Cu-Mo separation circuit and confirmation of closed-circuit performance (C\$100,000).

- Characterization of solid/liquid separation for copper concentrates evaluating both Supergene and Hypogene concentrates (C\$100,000).
- Complete additional optimization and confirmation of sulphur flotation performance, generating cyclone sands for geochemical and ARD purposes (C\$50,000).
- Characterization of tailings streams for de-watering and thickening including sample generation for geotechnical characterization of cyclone sands (C\$130,000).
- Develop a geological model highlighting the comminution characteristics across various phases of the mine plan in order to maximize throughput tonnage over the life of the mine (C\$50,000).
- Evaluate the effect of long-term weathering on metallurgical performance of low-grade stockpiled materials (C\$20,000).

In total, the proposed testwork programs are expected to cost C\$800,000.

26.5 Infrastructure

26.5.1 Site geotechnical field and laboratory program

The geotechnical field and laboratory investigation completed in 2025 was sufficient for the PFS level of study but will require additional data to support additional design details and feasibility-level studies. In addition, during PFS design iterations some of the infrastructure was moved after the field program results to locations with limited field data and design work for the TWMF embankments were revised to account for additional volume to locations with limited geotechnical investigation data. Currently no geotechnical program was performed for the access road and potential borrow sources. Therefore, an additional geotechnical field and laboratory program needs to be completed to determine whether the foundation conditions are aligned with the assumed conditions and how they might potentially affect the design of infrastructure and the access road. Additional field investigations are recommended to bolster interpolated data collected in 2025 at locations of known TMWF embankments with additional holes that coincide efficiently with ground water collection that is recommended in Section 25.5.4. Additional data collection should also include seismic geophysical lines in conjunction drilled holes to extend geotechnical extents generally along the centerlines of potential embankments and infrastructure. The program would include field investigations of drilling and geophysics, laboratory program, factual report, and interpretative report.

The estimated cost of the geotechnical field and laboratory program is C\$1,700,000.

26.5.2 Site seismic hazard assessment

For the PFS, the National Building Code of Canada Seismic Hazard tool was utilized to determine peak ground acceleration for specific seismic event return periods. For the next phase, a site-specific seismic hazard assessment will be conducted, and the seismic parameters used in the stability analysis and design of infrastructure will be updated accordingly.

The estimated cost of the geotechnical field and laboratory program is C\$80,000.

26.5.3 Tailings and waste management facility

The following activities are recommended to bring the design and analysis of the TWMF to an FS level of detail:

- Continue refining the TWMF design, including evaluating seepage control measures, water management infrastructure, surface inflow to TWMF for subaqueous deposition of PAG waste rock, embankment design, and long-term closure performance.
- Review and update the water balance and surface water and sediment management, including new information gathered in Section 26.5.4 for meteorological and hydrological studies for the TWMF.
- Update geotechnical parameters for tailings, waste rock, construction material, and foundation conditions for the field and laboratory program performed in Section 26.5.1.
- Review and update dam break analysis and TWMF hazard classification.
- Review and update the stability and deformation models based on the updated information above.
- Perform a liquefaction assessment, considering updated information on material properties for the tailings and the northeast embankment foundation of the TWMF.
- Review and update the seepage model and seepage control measures for the TWMF based on the proposed geotechnical field and laboratory programs.
- Optimize the tailings and PAG waste rock handling and deposition strategy, including material handling equipment.
- Develop FS-level design for the TWMF.
- Develop cost estimates (i.e., capital, sustaining capital, and operating costs) for earthworks, construction of the TWMF and associated seepage and surface water management structure.

The estimated cost for the recommended work is C\$510,000.

26.5.4 Water management

As design parameters advance towards feasibility-level studies it will be required to support overall water balance and water management across the full site including pit, TWMF, and processing and infrastructure areas. Many of these baseline investigations will overlap with Environmental studies as described in Section 26.6. These areas include the investigation of surface water hydrology and flow quantities in watersheds directly and indirectly affected by project components. Flow measurements should be taken to confirm an overall water quantity model of stream flows of individual tributaries. This data will additionally be used for specific areas of water management structures and diversion channels controlling surface flow.

In addition, areas as described in Section 26.6 for recommended ground water quantity testing will add to overall model confidence on calculations of overall water balance in order to estimate sufficient water quantity in order to maintain water cover on TWMF facilities and overall requirements for process plant and water discharge.

The suggested water management should include oversight and analysis by technical consultants and are estimated to have a total cost (exclusive of items listed in Section 26.6) of C\$400,000.

26.6 Environmental, permitting and social

Based on the environmental baseline information, conceptual mine planning, and permitting considerations reviewed for the Project, the following activities are recommended to support future engineering, environmental assessment, and permitting phases. The estimated expenditures provided below will take the Project through feasibility design stage, as well as multi-year seasonal baseline studies over the next two to three years and advance the Project through the environmental assessment and permitting processes. The estimated costs provided below are inclusive of field support and laboratory costs.

26.6.1 Data review and permitting roadmap

A comprehensive review and data gap analysis should be undertaken by an experienced mining environmental and permitting expert of all pertinent baseline socio-environmental data available from existing reports, public sources, and other regional projects to identify useful data that can be used to support EA and permitting applications for the Project. This information could then be used as a basis for developing a permitting roadmap that will identify gaps related to baseline field studies and modelling requirements that will be critical paths for supporting feasibility design and for establishing permitting timelines.

The estimated cost for the comprehensive data review is C\$30,000.

26.6.2 Water Resources

- Ongoing development and implementation of a multi-year seasonal surface water sampling, and testing plan, focusing on areas that will be potentially affected by mine infrastructure based on current infrastructure plans (refer to Section 18). The hydrological monitoring network to measure surface water flows should be developed and enhanced by means of the strategic installation of hydrological stations equipped with data loggers. Surface water and sediment quality samples should be collected to establish reference areas, baseline conditions in the receiving environment, and source terms for a future water quality model.
- Advance multi-year and seasonal hydrogeological monitoring and testing program that includes establishing a groundwater monitoring network, hydrogeological testing (e.g., pump tests), and seepage characterization. The completion of these studies will support refinement of the site-wide water balance, pit dewatering assessments, contact water management planning, and understanding of seasonal variability and downstream receiving environments. A 3D numerical hydrogeological model should be developed that corresponds to existing conditions as well as provide predictions related to groundwater quantity (e.g., water table drawdown), and quality during operations and closure phases.
- Consideration should be given to installing a professional grade meteorological station(s) at the Project site to monitor weather conditions.
- Surface, groundwater, and meteorological baseline and monitoring data will support the refinement of an integrated quantitative and qualitative predictive model and overall water balance model for the site including anticipated water inflow estimates for the open pit and predicted water usage for processing and other uses.

The estimated cost for the water resources studies is C\$2,600,000.

26.6.3 Geochemistry and mine rock management

- Consideration should be given to expanding the waste rock sample set to allow focus on factors such as sample proximity to future pit walls, influence of hypogene (sulphide, oxide and leached cap) and supergene alteration on ML/ARD risk, sampling the different rock units in proportion to expected waste rock tonnages, etc. This may require drilling in areas not covered currently by existing drill holes and core samples.
- To facilitate the next round of ML/ARD sampling it would be beneficial to devise a simplified waste rock unit classification that encompasses the main lithologies/ alteration into groupings with expected comparable mineralogical/geochemical properties.
- Total sulphur (ICP-MS/ICP-OES/XRF) should be added to the exploration sample analytical suite, with selected samples submitted for duplicate Leco furnace total sulphur (and carbon) analysis for comparison. Total sulphur/carbon can be used as proxies for neutralization potential ratio (NPR) and carbonate neutralization potential Ratio (CaNP) to assess the ARD risk and reactive carbonate content, respectively.
- Submission of tailings samples for mineralogy, elemental analysis, NAG pH plus leachate analysis.
- If flooded waste rock or tailings is a management practice that is likely to be adopted beyond the PFS stage, then carrying out leach column tests on waste rock and tailings samples would be beneficial for assessing potential impacts to the water cover water quality during operations. These data would serve as data inputs into future water quality predictive work.
- If slurry tailings may be stored subaerially then consideration should be given to submitting tailings samples for humidity cell testing, as well as column testing to assess tailings seepage water quality.
- Consideration should be given to using a desulphurization circuit in the mill to generate an NAG tailings stream and a smaller volume of PAG tailings.
- Submission of ore samples for static and kinetic testing for the purpose of evaluating leachate chemistry from temporary ore stockpiles and ore present in the pit walls.
- Consideration should be given for implementing larger-scale barrel leach tests for waste rock samples to provide leachate chemistry data under Project-like climatic conditions.
- Based on the above recommendations, provide periodic updates of geochemical source terms (to be used for the purpose of water quality modeling) and waste segregation strategies for PAG and non-PAG materials to inform materials management practices for construction, operation and long-term closure planning.
- The estimated cost for the geochemistry studies, inclusive of drilling costs for drill holes to be advanced for these studies is C\$4,000,000. This is inclusive of field costs related to drilling for the purpose of recovering sufficiently representative waste rock samples.

26.6.4 Aquatics and wildlife and mine rock management

- Complete seasonal fisheries, aquatic habitat sampling/monitoring assessments for areas of proposed Project infrastructure disturbance and downstream, as well as at locations suitable for reference locations. It will be important to identify waters frequented by fish potentially impacted by the Project. Identify fish-bearing waterbodies and watercourses and where there is potential for a direct and indirect loss of fish habitat or harmful alteration, disruption, or destruction.

- Continue wildlife and species-at-risk investigations, including habitat characterization and seasonal use assessments for species of conservation concern such as Northern Group of the Southern Mountain Caribou and grizzly bear.

The estimated cost for the aquatics and wildlife studies is C\$5,700,000.

26.6.5 Socio-economic, cultural baseline studies and community engagement

- Building on the results of past engagement efforts, the following activities are recommended for community engagement and the collection of socio-economic and cultural information:
- Continue archaeological and cultural heritage investigations in areas of elevated archaeological potential prior to future disturbance activities, including implementation of a Chance Find Procedure for construction activities.
- Continue engagement and consultation activities with Indigenous Nations, regulators, and local stakeholders as Project planning, environmental assessment, and permitting activities advance. Past and present land use practices and resource use by local First Nations communities in and around the site are of particular interest.
- Continue to ensure sufficient capacity is available for communities to understand the Berg Copper Project, the permitting and assessment processes, technical aspects of the project such as mining and processing, and the potential effects of the project as it develops.
- Working closely with the Indigenous Nations and local communities, efforts should continue to be made to hire and retain local staff and to utilize Indigenous-owned businesses to support ongoing exploration and future development activities. First Nation environmental monitors and technicians should be used to support drilling programs and environmental baseline programs.
- Complete a comprehensive socio-economic study for the project that incorporates both secondary information (e.g., available reports and studies) and primary information sources (e.g., in-person interviews with community members).

The estimated cost for socio-economic, cultural baseline studies and community engagement efforts is C\$1,000,000.

26.6.6 Permitting processes

- Refine and execute permitting activities for the Project including: completion of an environmental assessment; environmental management and monitoring plan development; provincial and federal permitting applications and requirements; closure and reclamation planning, including long-term water management, reclamation objectives, post-closure monitoring considerations, and closure approaches for PAG waste rock, tailings, and disturbed areas.
- The estimated costs for the permitting process for the site is C\$15,000,000,

The total estimated total cost for the recommendations related to baseline studies, community and permitting is C\$28,300,000.

27 References

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