



NI 43-101 Technical Report

**Valentine Gold Mine, Newfoundland and Labrador,
Canada**

Equinox Gold Corp.

Prepared by:

SLR Consulting (Canada) Ltd.

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1.0 Summary

1.1 Executive Summary

SLR Consulting (Canada) Ltd. (SLR) was retained by Equinox Gold Corp. (Equinox) to prepare a Technical Report on the Valentine Gold Mine (Valentine or the Project), located in central Newfoundland, Canada. The purpose of this Technical Report is to document and summarize the scientific and technical information for the current operations and planned future developments, as well as to document the Mineral Resources and Mineral Reserve estimates as at the effective date of the report, December 31, 2025 (the Effective Date). This Technical Report has been prepared in accordance with NI 43-101 Standards of Disclosure for Mineral Projects.

This Technical Report has been prepared for by the qualified persons (QPs) from SLR, Equinox, Moose Mountain Technical Services (MMTS), Terrane Geosciences Inc. (Terrane), and Lincoln Metallurgical Inc. (Lincoln). Equinox Gold Corp. (TSX: EQX; NYSE American: EQX) is a Canadian-based gold mining company with a diversified portfolio of long-life operations and growth projects across the Americas.

The 2025 Mineral Resource Estimate was prepared using Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (CIM (2014) definitions). The geological model reflects current understanding of lithological controls and QTP vein systems, and the supporting drill hole database is considered reliable following comprehensive QA/QC validation. Estimation methods, including grade capping, compositing, variography, dynamic anisotropy, and inverse-distance interpolation, produced a robust and unbiased block model with strong reconciliation with geological wireframes.

Open pit mining operations at the Valentine Gold Mine commenced in April 2025 using conventional drill-and-blast, truck-and-shovel mining methods. Ore and waste are mined from the Valentine deposits, with ore delivered to the primary crusher and process plant and waste placed in designated waste storage facilities. Following successful commissioning and ramp-up of the processing facilities, the operation achieved commercial production in November 2025.

Metallurgical test work confirms that ore from the Marathon, Leprechaun, and Berry deposits are amenable to conventional gravity and cyanidation flowsheet to extract gold to produce doré, with overall gold recoveries exceeding 90%. The Process Plant, with a nominal capacity of 2.5 million tonnes per annum (Mt/a), was commissioned in 2025 and achieved commercial production on November 18, 2025. Studies are underway to increase nominal throughput to 5 Mt/a through comminution and carbon-in-leach (CIL) circuit upgrades (the Phase 2 Plant Expansion).

Site infrastructure includes hydroelectric power supplied from the Star Lake generating station, a tailings management facility (TMF) designed in accordance with Canadian Dam Association (CDA) guidelines, and water management systems utilizing water reclaimed from the TMF and fresh water from Victoria Lake. Environmental management programs are in place to ensure compliance with federal and provincial approvals and include extensive monitoring and adaptive management plans addressing water quality, acid rock drainage and metal leaching (ARD/ML) potential, air quality, and ecological effects. The mine is expected to employ several hundred workers and represents a significant economic contributor to the region. Recommendations focus on continued exploration, improved resource definition, metallurgical optimization, tailings



management planning, and ongoing environmental monitoring to support long-term mine operations.

This report supersedes the previous technical report titled “Valentine Gold Project, NI 43-101 Technical Report and Feasibility Study,” dated November 30, 2022 (the 2022 Technical Report) [Marathon 2022]). All currency in this Technical Report is US dollars (US\$ or USD) unless otherwise noted.

1.1.1 Conclusions

1.1.1.1 Geology and Mineral Resources

- The 2025 Mineral Resource Estimate for the Valentine Gold Mine was completed in accordance with the CIM (2014) definitions, follows the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (CIM 2019), and meets all disclosure requirements under NI 43-101.
- The QP considers the drill hole database supporting the estimate to be reliable, with comprehensive validation of assays, surveys, geological logs, and QA/QC results having been completed.
- Geological and mineralization models accurately reflect current understanding of lithological controls, QTPV system geometries, and structural orientations across all deposits.
- Estimation methodology, including grade capping, 1 m compositing, variography, dynamic anisotropy, and ID³ interpolation, provides a robust and unbiased representation of gold mineralization at existing drill density.
- Block model validation (volume reconciliation, statistical checks, swath plots, quantile–quantile (Q–Q) analysis, and visual review show no material global or local bias, with volumes reconciling within 0.1% of wireframes.
- Mineral Resources were constrained within Whittle-optimized open-pit shells and underground stope shapes, demonstrating reasonable prospects for eventual economic extraction using appropriate economic assumptions.
- Resource classification appropriately reflects geological confidence, data density, and estimation performance, consistent with CIM (2014) definition.
- The Valentine Gold Mine deposits (Marathon, Leprechaun, Berry, Sprite, and Victory) form part of a district-scale mineralized corridor associated with the Valentine Lake Shear Zone, indicating potential for further exploration growth along strike and at depth, as well as along previously unrecognized second- and third-order structures.
- Exploration, drilling procedures, and QA/QC controls are considered consistent with industry best practices and sufficient for Mineral Resource estimation.
- The resulting 2025 Mineral Resource estimate provides a defensible basis for mine planning and Mineral Reserve estimation.

1.1.1.2 Mining and Mineral Reserves

- Proven and Probable Mineral Reserves have been converted from Measured and Indicated Mineral Resources at Leprechaun, Berry and Marathon. Inferred Mineral Resources are treated as waste.



- Factors that may affect the Mineral Reserve estimates include metal prices, changes in interpretations of mineralization geometry and continuity of mineralization 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 license conditions, and the ability to maintain the social license to operate.
- Open pit mine plans, mine production schedules, and mine capital and operating costs have been developed for the Mineral Reserves estimates at Leprechaun, Berry and Marathon.
- Pit layouts and mine operations are typical of other open pit gold operations in Canada, and the unit operations within the developed mine operating plan were based on site experience to date.
- The mine plan supports the cash flow model and financials.

1.1.1.3 Mineral Processing

- The process plant currently treats ore via a conventional comminution-gravity-cyanidation flowsheet and has been designed to nominally treat 2.5 Mt/a of ore. Run-of-mine (ROM) ore is processed via conventional primary crushing and two-stage grinding circuit followed by a gravity concentration circuit. Gravity circuit tailings are treated via cyanidation and a carbon-in-leach (CIL) circuit and associated gold recovery and carbon handling circuits to produce gold doré. CIL tailings are treated via a cyanide destruction process prior to storage in the tailings management facility (TMF).
- Plant construction was completed in Q3 2025, and the first gold pour was achieved on September 15, 2025. Commercial production, representing 80% nameplate capacity, was achieved on November 18th, 2025. Studies are underway to increase nominal plant throughput from 2.5 Mt/a to 5.0 Mt/a
- The development of the current process plant flowsheet was underpinned by comprehensive metallurgical test work programs completed during previous feasibility studies. Metallurgical test work programs were conducted on representative mineralized core samples from Leprechaun, Marathon and Berry deposits. Metallurgical test work results have demonstrated that mineralized samples from the various Valentine Gold deposits is free milling and amenable to conventional cyanidation.
- The current comminution circuit design (primary crushing-SAG-Ball milling) was based on extensive comminution test work. Ore competency is high. Ore hardness in terms of RWI and BWI is considered moderate. Ore abrasion is moderately high.
- The ore is amenable to recovery by gravity concentration and is supported by extended gravity recoverable gold (E-GRG) tests.
- The current leach-CIL circuit was based on cyanidation leaching test work. The nominal overall gold extraction (gravity recovery plus gravity tails leaching) that the plant was designed is 93%.
- The proposed plant expansion is based on previously completed metallurgical test work and is expected to treat a nominal 5 Mt/a ore and achieve an overall gold extraction of 93%.



1.1.1.4 Infrastructure

- Power to the mine is supplied by Newfoundland and Labrador's Star Lake hydroelectric generation station and is transmitted to the mine site via a transmission line. The current mine's power supply is 19.0 MW for peak demand. For the planned Phase 2 Process Plant Expansion, an additional 13.0 MW for peak demand is anticipated.
- The primary source of water to meet the Process Plant's water demand is the reclaimed water from the TMF tailings pond, and the secondary source is fresh water from NL Hydro's Victoria Lake reservoir.
- Water management is performed by collecting surface contact water runoff from facilities and containing the contact water within sedimentation ponds to minimize total suspended solids prior to controlled water release into the receiving environment.
- As with the other main infrastructure, the administration building, laboratory, truck wash, explosives storage and fuel station have been sized to support the mine and process operation. Construction of a permanent truck shop is underway. Installation of a permanent operations camp is underway and will phase out some of the accommodation in the construction camp.
- The TMF has been designed in accordance with CDA guidelines and the stability of the dams meets the target factors of safety required as per CDA. Tailings deposition plans have been developed to establish wide tailings beaches adjacent to the rockfill containment dams and to maintain the water pond against natural ground and away from the dams.
- A seepage and surface water runoff collection ditch is installed downstream of the TMF to collect any water into a collection sump where it is pumped back into the TMF reservoir.
- After pre-treatment of process water for dissolved metals and cyanide destruction, biological treatment of process water with a submerged attached growth reactor (SAGR) will reduce the overall ammonia concentration to non-toxic levels.
- With the increase of required tailings storage capacity beyond the current design capacity of the TMF, tailings deposition would transition into the Berry pit once the pit has been mined out.

1.1.1.5 Environment

- Compliance-based environmental management is in place for operations: Since achieving commercial operation in November 2025, Valentine's environmental programs are structured around compliance obligations under approvals stemming from the federal EIS/EA (released August 24, 2022) and provincial EA (released March 17, 2022), plus subsequent permit/authorization requirements and annual regulatory submissions; the site operates under a formal monitoring framework that spans operations through closure.
- Follow-up monitoring and adaptive management are extensive and formalized: The Project has developed 11 environmental follow-up monitoring plans (FMPs) plus 13 additional plans that define protection measures, compliance/effects monitoring, and contingency actions; the plans are "living documents" intended to be refined with permit amendments, monitoring changes, and evolving best practices, with contingency measures triggered if monitoring indicates deviations that may cause adverse effects.



- Acid Rock Drainage/Metal Leaching (ARD/ML) outcomes show low potential acid generating (PAG) overall at Marathon/Leprechaun, higher at Berry, and tailings non-PAG (but water-quality exceedances are expected): Estimated potentially acid-generating (PAG) waste rock is approximately 1.5% to 4% at Marathon and approximately 1.0% at Leprechaun, while Berry is approximately 11% PAG/uncertain (ABA-based; Quartz Monzonite (Q-MONZ) and Quartz-Tourmaline-Pyrite (QTP) units highest at approximately 19% to 20% PAG samples). Tailings composites are classified as non-PAG, and mixing of Marathon/Berry/Leprechaun ores is expected to keep tailings non-PAG; however, during operations, arsenic, copper, and total cyanide in TMF are expected to exceed Metal and Diamond Mining Effluent Regulations (MDMER) limits, and tailings management facility (TMF) pond discharge modelling predicts exceedances of multiple Canadian Water Quality Guidelines (CWQG) parameters—an assimilative capacity study indicates treated effluent meeting MDMER would fall below CWQG/background within approximately 300 m of the regulatory mixing zone. An operational ARD/ML sampling program is defined (e.g., waste rock: 1 per 9,000 t; ore: 1 per 9,000 t; tailings end-of-pipe: 1 per 48,000 t in years 1–3, then 1 per 77,000 t).
- Environmental monitoring results in 2025 were largely consistent with EA predictions, with specific noted exceptions/events: Ambient air monitoring in 2025 reported 24-hour Total Suspended Particulates (TSP) results below the Newfoundland and Labrador Ambient Air Quality Standards (NL AAQS) 120 µg/m³ at project sites, with one exceedance at the Victory exploration site (approximately 5 km northeast of the mine) attributed to access-road traffic. Noise monitoring in 2025 identified episodic exceedances (% highly annoyed / potential wildlife disturbance) during peak construction-related activities, and modelled operations were predicted to meet Health Canada criteria at receptors, with the accommodations camp noted as exceeding the nighttime 45 dBA target. Surface water did not discharge from Final Discharge Points in 2025 because water-management infrastructure is still under construction; one extreme rainfall event (approximately 100 mm/24 h) resulted in sediment discharges reported to Fisheries and Oceans Canada (DFO). A fish/fish-habitat sediment release in November 2025 resulted in a DFO cautionary letter (December 2025), and a later DFO inspection (December 2025) found the Project’s mitigation efforts satisfactory.
- Permitting/engagement and closure planning are advanced and active: The Project has socio-economic agreements with two Indigenous communities (Miawpukek First Nation [MFN] and Qalipu First Nation [QFN]) and uses joint Environmental Sub-Committees; an Environmental Technician from QFN is employed, and an MFN technician position was filled June through December 2025 and is being refilled. Two prior Notices of Project Change were approved: communications tower (January 2023) and Berry Pit and infrastructure (August 2023). A further Notice of Change submitted in June 2025 was released from further provincial assessment in October 2025, with a federal decision expected in March 2026. Closure planning is anchored by an approved Rehabilitation and Closure Plan update, including Berry (submitted October 29, 2024; approved November 26, 2024), assuming an 18-year mine life; closure financial assurance is based on an estimated \$94 million (C\$125.9 million) closure cost (excluding resale/scrap) and is being provided via scheduled annual payments.

1.1.1.6 Capital and Operating Costs

- Capital costs for the initial development have been spent, and the future spending is primarily for the Phase 2 Plant Expansion and for sustaining capital.



- The average total cash costs for the LOM are expected to be US\$1,580/oz.

1.1.2 Recommendations

The QPs offer the following recommendations by discipline:

1.1.2.1 Geology and Mineral Resources

- 1 Continue systematic exploration along strike of the VLSZ to extend open-pit limits and improve geological continuity between adjacent deposits.
- 2 Increase drilling density at depth to reduce sample spacing, enhance estimation confidence, and support potential expansion of underground resources.
- 3 Maintain ongoing evaluation of geological and resource models as additional production reconciliation data becomes available to improve model accuracy.
- 4 Increase acquisition of oriented core and televiewer data to validate structural interpretation of QTPV domains and identify localized variations where Set 2 or Set 3 vein orientations may dominate.
- 5 Evaluate alternative drilling orientations where existing drilling azimuths may not optimally intersect vein sets or structural controls.
- 6 Maintain rigorous QA/QC protocols, including standards, blanks, and check assays, to ensure the continued reliability of analytical data used for Mineral Resource estimation.
- 7 Increase drill density within high-grade zones where spacing remains wide to confirm grade distribution, continuity, and geometry of mineralized shoots.
- 8 Continue integrating exploration, structural studies, and geological mapping to refine mineralization domains used in resource modeling.
- 9 Evaluate new exploration targets identified through geophysics, till sampling, and structural interpretation, particularly outside the main shear zone trend.

1.1.2.2 Mining and Mineral Reserves

- 1 Conduct geotechnical monitoring and field data collection of the open pit walls throughout the life of the open pits.
- 2 Continue to implement the following programs to allow for confirmation of the design assumptions herein.
 - a) Ground Control Management Plan (GCMP).
 - b) Geotechnical mapping and regular inspection of benches. This should include tension crack mapping along the crest of the benches.
 - c) Geological and major structure mapping to inform and validate the geotechnical model (geology, rock mass, structure, and hydrogeology)
 - d) Monitor any potential large-scale movements of the open pit slopes (surface prisms or radar)
 - e) Bi-annual third-party inspections and slope stability audits.



- f) Implement a geomechanical testing program to confirm all pit slope design values. Compare and adjust recommended slope designs based on slope performance monitoring.
- g) Install additional piezometers to allow for on-going assessment of water levels relative to slope depressurization targets and slope design phreatic surface modelling.
- 3 Conduct geotechnical investigations specific to the Berry Pit to bring the geotechnical model and design to a construction level of confidence, to be completed in 2026.
- 4 Complete detailed geotechnical evaluation for the phases to determine if interim pit phases require design adjustments
- 5 Continue to focus and improve the grade control program to meet the mining loss and dilution parameters.
- 6 Continue to focus and improve mining productivity to meet or exceed the assumptions of this plan.
- 7 Pending favourable drilling and modelling results, develop a mine plan for the Frank Zone to advance it towards Mineral Reserve status.

1.1.2.3 Mineral Processing

- 1 For continued plant optimization, complete a metallurgical test work program to further understand the metallurgical response of various ore types and head grades via the existing plant flowsheet, i.e., Sample characterization: Head analyses including gold by fire assay and cyanidation test work: Standard bottle roll tests including to assess the effect of primary grind size
- 2 Finalize studies and advance engineering for the Phase 2 plant expansion to a capacity of 5 Mt/a.
- 3 Continue to investigate a gyratory crusher in place of a second jaw crusher to increase primary crushing capacity.

1.1.2.4 Infrastructure

- 1 Ensure annual dam safety reviews are performed by WSP's Engineer of Record (EoR) and/or Deputy EoR now that the TMF is operational.
- 2 Ensure formal monthly dam inspections are conducted by Valentine's Responsible Tailings Facility Engineer (RTFE). Monthly operational updates should be presented by the RTFE to Mine management to continually inform management of any risks associated with the TMF operation. WSP's EoR and Valentine's RTFE should perform an operational risk assessment specific to dam safety for each dam raise. The proposed budget for this work is estimated to be up to \$0.5 million annually.
- 3 Collect TMF operational performance data to validate or refine TMF design assumptions and construction planning, coordinated with the tailings deposition plan and water balance. Bathymetric surveys should initially be performed monthly to measure the actual slopes of the tailings beaches and the volume of the supernatant pond and also to estimate the in-situ tailings density; the frequency can be reduced once deposition parameters are confirmed. Tailings slurry densities and reclaim water volumes should also be collected along with relevant operations data (e.g., tailings tonnages) to support



the updates of the deposition plan and water balance so that future dam raise construction plans can be adjusted accordingly. The proposed budget for this work is estimated to be up to \$1.5 million annually.

- 4 To address the shortfall in tailings storage capacity in the current TMF design for the LOM, evaluate several concepts, including expanding the current TMF via additional dam raises, constructing a new TMF, and/or in-pit tailings deposition into the Berry Pit (once mined out). A multiple accounts analysis should be conducted to evaluate, score, and rank future tailings deposition alternatives based on economic, engineering, and social criteria. The proposed budget for this analysis is estimated to be less than \$0.5 million. Once a concept is selected, a geotechnical foundation investigation program should be planned and conducted to determine the suitability of the proposed alternative. The proposed budget for this program, including engineering and geotechnical laboratory testing, as well as the cost of constructing the preferred concept, will be determined once the preferred deposition concept is selected.
- 5 Improve road signage and enforce radio position call-outs on radio-controlled access road. Additional traffic lights should be added to control single-lane only areas of the mine access road. An additional second lane should be twinned on 13 single-lane bridges on the mine access road. The proposed budget for these reviews is estimated to be less than \$0.5 million.
- 6 Complete a power system and mine electrification optimization study as part of the Phase 2 Expansion with a focus on interim Phase 2 power before the substation upgrades are completed, considering local gensets, wind, solar, batteries, and other options. The proposed budget for this study is estimated to be less than \$0.5 million.

1.1.2.5 Environment

- 1 Continue to evaluate and advance optimization studies for the water management infrastructure during the initial years of operations to reduce the number of discharge points. This recommendation is supported by the fact that each discharge point is regulated under the federal Metal Mining and Diamond Effluent Regulations, as discussed in Section 20.1.7 of this report.
- 2 Ensure a robust performance monitoring evaluation is completed for the SAGR following commissioning, with a focus on ensuring that year-round operation is achievable, and if not, then mitigations can be developed.

1.1.2.6 Capital and Operating Costs

- 1 Update capital and operating cost estimates using operating performance data from the initial year of commercial production. As the Valentine Gold Mine transitions from construction to steady-state operations, actual operating data for mining productivity, processing throughput, reagent consumption, maintenance costs, and labour requirements should be collected and incorporated into future life-of-mine cost updates. This will allow refinement of operating cost assumptions and improved confidence in long-term economic projections.
- 2 Refine sustaining capital forecasts based on equipment performance and maintenance history. Sustaining capital assumptions for major mobile mining equipment, process plant components, and infrastructure should be reviewed periodically using actual maintenance and reliability data. This will allow optimization of equipment replacement



schedules and improve accuracy of long-term sustaining capital requirements in the life-of-mine financial model.

- 3 Continue evaluation of cost optimization opportunities associated with the Phase 2 plant expansion. As engineering and detailed design progress for the proposed throughput expansion, additional opportunities should be evaluated to optimize capital efficiency and operating costs, including comminution circuit configuration, energy consumption, reagent usage, and water management. Updated cost estimates should be developed as engineering advances to improve the accuracy of the expansion capital estimate and confirm operating cost assumptions at the higher throughput rate.

1.1.3 Risks

Tailings Management Facility

- Risks identified in relation to the TMF are reviewed for all phases of work, including design, permitting, construction, and operations. The TMF design is based on geotechnical drilling and hydrogeological fieldwork. Periodic bathymetric surveys of the supernatant pond and the tailings beaches will be performed to compare with the tailings deposition plan and to make adjustments to the future dam raise construction as required. A water balance has been developed for the TMF and is coupled with the tailings deposition plan to inform the timing of the TMF dam raises.
- An Independent Tailings Review Board (ITRB) was established to provide oversight during the lifecycle of the TMF and is an on-going process.
- A detailed Tailings Facility Construction Management Plan, including a QA/QC program, has been implemented for construction for current and future expansions of the TMF. An Operations, Maintenance and Surveillance (OMS) Manual, following the guidelines of the Mining Association of Canada, has been put in place for the TMF.

Mineral Resources

- Uncertainty associated with mineralization classified as Inferred Resources introduces a risk which should be mitigated with additional infill drilling in each pit.

1.2 Economic Analysis

SLR has reviewed Equinox's LOM cash flow model for the Project, considering gold as the final saleable product, and has prepared its own unlevered after-tax LOM cash flow model based on the information contained in this Technical Report to confirm the physical and economic parameters of the Project.

The base discount rate assumed in this Technical Report is 5%, in line with industry-standard practice for operating mines in Canada. Discounted present values of annual cash flows are summed to arrive at the Mine's net present value (NPV).

The economic analysis for the Project is based on a gold price of \$2,100 per ounce, which is consistent with the price assumption used for the estimation of Mineral Reserves in accordance with NI 43-101 guidelines. This price serves as the basis for the mine plan and is the primary case used to demonstrate economic viability.

At a gold price of \$2,100 per ounce, the Project generates an after-tax net present value of approximately \$446 million, confirming that the Mineral Reserves are economically supportable under conservative long-term pricing assumptions.



Additional cash flow analyses have been prepared to evaluate the Project's sensitivity to higher gold prices. These include a reference case using US\$4,500 per ounce (the Reference Case), reflecting below-market conditions at the time of analysis. On a pre-tax basis, the Reference Case undiscounted cash flow totals US\$6.8 billion over the mine life. The pre-tax NPV at a 5% discount rate is US\$4.9 billion. On an after-tax basis, the undiscounted cash flow totals US\$4.3 billion over the mine life. The after-tax NPV at a 5% discount rate is US\$3.1 billion. The internal rate of return (IRR) is not applicable as the Mine is an operating mine and does not have any initial capital to be recovered.

Figure 1-1 shows the cash flow, cumulative after-tax cash flow and cumulative discounted after tax cash flow forecast at a 5% discount rate:

Figure 1-1: Cash Flow Summary – Reference Case

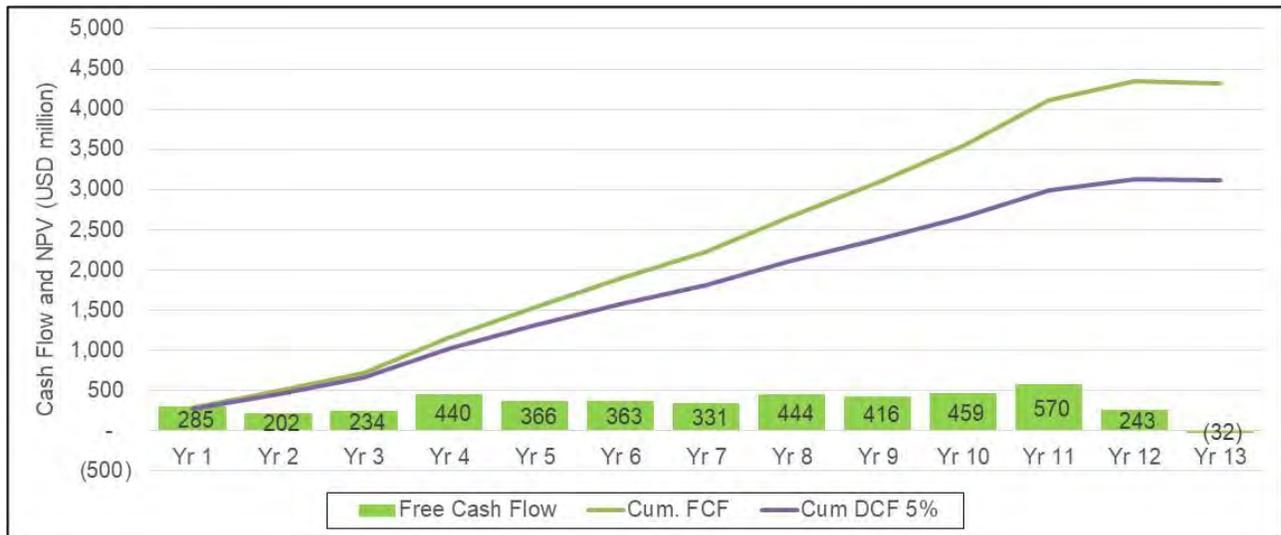


Table 1-1 shows the LOM total metrics and average unit costs for the Valentine mine as currently designed.



Table 1-1: Total Life of Mine Metrics – Reference Case

Item	LOM Total US\$ M	Avg. Annual US\$M/y	Avg. US\$/ t milled	Avg. US\$/ t mined	Avg. US\$/Oz Au recovered
Total Gross Revenue	11,528	961	223.88	16.94	4,478
Mining Cost	1,960	163	38.07	2.88	761
Process Cost	1,058	88	20.55	1.55	411
G & A Cost	700	58	13.59	1.03	272
Refining/Freight	4	0.3	0.07	0.01	1
Royalties	346	29	6.71	0.51	134
Total Operating Costs	4,067	339	78.99	5.98	1,580
Operating Margin (EBITDA)	7,460	622	144.89	10.96	2,898
Cash Taxes Payable	2,462	205	47.82	3.62	956
Working Capital	39	3	0.75	0.06	15
Operating Cash Flow	5,037	420	97.82	7.40	1,956
Development Capital	507	42	9.84	0.74	197
Sustaining Capital	126	11	2.45	0.19	49
Closure/Reclamation Capital	94	8	1.82	0.14	36
Total Capital	727	61	14.12	1.07	282
Pre-tax Free Cash Flow	6,772	564	131.52	9.95	2,630
Pre-tax NPV @ 5%	4,894	408	95.06	7.19	1,901
After-tax Free Cash Flow	4,310	359	83.71	6.33	1,674
After-tax NPV @ 5%	3,108	259	60.37	4.57	1,207

Note: M - million

1.3 Technical Summary

1.3.1 Property Description and Location

The Valentine Gold Mine Property, located in west-central Newfoundland on National Topographic System (NTS) sheets 12A/06 and 12A/07, is centered near Universal Transverse Mercator (UTM) 493399E and 5362396N (Zone 21N, NAD83). The 100% Equinox–owned property hosts five defined gold deposits: Leprechaun, Sprite, Berry, Marathon, and Victory, together with additional early-stage prospects distributed along a 32 kilometre northeast-trending mineralized corridor.

Access to the property is via existing roads, principally an 80 kilometre gravel road extending from the Town of Millertown. Millertown is reached by paved routes using the Trans-Canada Highway and the Buchans Highway. The Project lies between two major waterbodies: Valentine Lake to the west and Victoria Reservoir to the east. The local climate is classified as “temperate



maritime,” characterized by generally mild summers and cold winters. Climate data from the Buchans weather station indicate an average annual precipitation of approximately 1,100 millimetres, with slightly more than one-quarter occurring as snowfall, resulting in seasonal snow accumulations of about one metre or more.

1.3.2 Land Tenure

The Valentine Gold Mine Property comprises 30 contiguous mineral licenses totaling 313 km² (31,300 ha), all held 100% by Marathon Gold, a subsidiary of Equinox. These licenses are in good standing and subject to annual assessment and renewal obligations under the Mineral Act. Equinox holds a 2,129 ha surface lease covering current project infrastructure, and has secured an additional 452 ha of surface rights to support the Berry Pit expansion, for a total of approximately 2,629 ha. Together, the mineral licenses, surface lease, and compliance with annual assessment requirements provide secure and continuous tenure for exploration and development across the Valentine Gold Mine.

1.3.3 History

The Valentine Gold Mine Property has been explored by multiple operators since the 1960s, beginning with ASARCO Inc. and Hudson’s Bay Oil & Gas Co. whose work focused on base metals in keeping with significant volcanogenic massive sulphide (VMS)-style discoveries within the Dunnage Zone (e.g., Buchans and Duck Pond–Boundary). Gold was first recognized on the property by Abitibi Price Inc. in 1983, leading to BP Canada Inc.’s acquisition in 1985 and the initial identification of the Leprechaun and Victory (formerly Valentine East) gold prospects the following year.

In 1992, Noranda Inc. acquired the Project before forming a joint venture with Mountain Lake Resources Inc. in 1998. Between 1998 and 2007, Mountain Lake and Richmond Mines Inc. completed exploration and drilling programs along the 32-kilometre mineralized trend, including work at Leprechaun, Valentine East, and the Sprite (formerly Osprey) prospect. In 2009, an option and joint venture with Marathon PGM Corporation was entered, and in 2010, Marathon Gold Corp. was spun out and later acquired 100% ownership of the property in July 2012.

Calibre Mining Corp. (Calibre) acquired the property in 2024. In 2025, Equinox acquired Calibre, so that Valentine Gold Mine now resides within Equinox’s portfolio of mining projects. This transition underpins the move toward development and production as the Valentine Gold Mine advances. From 2010 onward, the property has been subject to systematic exploration, culminating in the discovery of the Marathon, Sprite, and Berry deposits, substantial expansion of Leprechaun and Victory, and identification of a series of additional early-stage prospects along the 32 kilometre Valentine Gold Mine structural corridor.

1.3.4 Geology and Mineralization

Gold mineralization at Valentine is hosted within a predominantly flat-lying stratigraphic sequence consisting of Rogerson Lake Conglomerate, Trondhjemite, Quartz Monzonite, Aphanitic Quartz Porphyry dykes, Mafic Dykes, Gabbro, and the Quartz-Tourmaline-Pyrite Vein (QTPV) system. Mineralization is structurally controlled and strongly associated with the QTPV vein set (Set 1), which forms the primary host of economic gold grades across all deposits.

Three-dimensional lithological and mineralization models were constructed using Leapfrog Geo, integrating drill hole lithology, structural measurements, oriented core, and televiewer data. Updated interpretations in 2025 improved the continuity of mineralized domains, refined the geometry of intrusive units, and reduced internal dilution within the QTPV domains.



1.3.5 Exploration Status

Since 2010, systematic exploration at the Valentine Gold Project has comprised diamond drilling, trenching, channel and grab sampling, detailed geological and structural mapping, and airborne and ground geophysical surveys (magnetics, VLF, IP, LiDAR, and limited seismic). These programs have delineated Mineral Resources at the Leprechaun, Berry, Marathon, Sprite, and Victory deposits and identified numerous additional targets, including Frank, Triangle, Banshee (previously Marathon South), Rainbow, Scott, Steve, Eastern Arm, Narrows, Victory SW/NE, Minotaur, South Quinn, and Western Peninsula. Current production is sourced from the Leprechaun, Berry, and Marathon pits, while exploration since the 2022 Technical Report has focused on district-scale growth rather than near-pit expansion. The most advanced growth target is the Frank Zone, located immediately southwest of Leprechaun, which extends over approximately 1.5 km and exhibits quartz-tourmaline-pyrite (QTP) veining and structural characteristics analogous to Leprechaun; 167 holes totaling approximately 50,770 m were drilled between 2023 and 2025 to support a potential initial resource by 2026. Property-wide airborne magnetics and VLF surveys completed in 2024 (3,263 line-km, with an effective 50 m line spacing when integrated with 2007 data) have defined cross-faults and additional structures subparallel to the Valentine Lake Shear Zone (VLSZ), highlighting the potential for additional mineralized zones proximal to the VLSZ. In addition, new targets, including Minotaur and South Quinn, represent the first mineralized zones identified away from the main VLSZ trend and confirm broader district potential.

Geological mapping (1:5,000 scale deposit maps), lithochemistry, petrography, and structural studies conducted from 2010 through 2024 confirm that mineralization is hosted within the hanging wall of the VLSZ in the Valentine Lake Intrusive Complex and is dominated by shallow southwest-dipping extensional QTP-Au veins (Set 1), with subordinate shear-parallel vein sets. Structural investigations by SRK (2014) and Terrane Geosciences (2020–2021), supported by televiewer analysis of oriented core, identified up to three vein sets at Leprechaun and Marathon and four at Berry, and established a five-phase deformation history with gold deposition linked to D3 shortening following D2 relaxation. Channel sampling (5,984 samples) and grab sampling (2,885 samples) have been instrumental in target generation, including initial delineation of the Marathon deposit and definition of high-priority areas at Frank and Eastern Arm. Till programs completed between 2022 and 2024 (a total of 885 samples) returned up to 711 gold grains over known deposits and anomalous counts (up to 313 grains) in underexplored areas, reinforcing target prioritization. Ground magnetics (2014–2017) demonstrated a spatial association between mineralization and magnetic lows associated with magnetite-destructive alteration, whereas the 2017 seismic survey did not yield sufficient structural resolution and is not being advanced.

Between 2010 and 2025, 2,360 diamond drill holes totaling approximately 543,196 m were completed, with drilling concentrated at Marathon (161,717 m in the resource database), Berry (128,641 m), Leprechaun (104,746 m), and Frank (59,076 m), in addition to regional targets. The 2025 program alone comprised 200 holes totaling 68,062 m, primarily at Frank and other greenfields targets. Advanced drilling at the principal deposits achieved spacings as tight as 25 m x 25 m, locally 10–15 m centers, supporting resource classification. Analytical data supporting the October 2025 Mineral Resource cut-off include 111,786 gold assays at Marathon, 74,893 at Leprechaun, and 91,000 at Berry, with assay coverage exceeding 92% of drilled length. QA/QC protocols include insertion of blanks and certified reference materials at rates up to 1 in 10 samples (since 2021), coarse and fine blank monitoring, metallic screen assays for samples greater than 300 ppb Au or containing visible gold, and umpire testing (5% in 2024), with overall failure rates low and issues investigated and rectified within the acQUIRE database. The Qualified Person concludes that exploration methodologies, drilling procedures,



and QA/QC controls are consistent with industry best practices and that the resulting geological and analytical datasets are reliable and suitable for Mineral Resource estimation.

1.3.6 Metallurgical Testing and Mineral Processing

Significant metallurgical test work has been completed on mineralized ore samples from the Leprechaun, Marathon and Berry deposits. Metallurgical test work was completed during various test work campaigns from 2010 to 2024 at various metallurgical laboratories. The overall objectives of the various test work programs were to define the metallurgical response of the main ore domains and deposits, generate sufficient metallurgical data to support a flowsheet and develop gold recoveries for project development and the ultimate design of the current process plant. The general scope of the test work campaigns included chemical and mineralogical analyses, comminution tests, gravity recovery, cyanide leaching, detoxification, carbon loading, oxygen uptake evaluations, and dewatering tests (including flocculant selection, static settling, and dynamic thickening tests).

Metallurgical test work also included flotation and leaching of flotation concentrate and tailings for the plant expansion as documented in previous NI 43-101 Technical Reports. Following trade off studies, the current plant expansion has reverted to expanding the existing comminution and gravity-leach-CIL circuits and not to implement a flotation circuit. Historical test work used for the initial plant design remains relevant for the plant expansion. However, it is recommended to conduct confirmatory variability test work for continued plant optimization.

Of the Leprechaun, Marathon and Berry samples tested, gold assays covered a range 0.3 to 6g/t Au. All samples had low silver grade (less than 1 g/t Ag), and low levels of base metals. Almost all the sulphur occurs as sulphides. All samples had low levels of graphitic and organic carbon indicating low potential of preg-robbing, below detection limit mercury of less than 0.3 g/t. Tellurium occurred in a few samples greater than the detection limit.

Leprechaun, Marathon and Berry have similar lithologies and other ore characteristics. Comminution data for Berry material showed that the abrasion index for the Berry samples is slightly higher than the average values for the Marathon and Leprechaun deposits, the rod mill work index was very similar to that of Marathon and Leprechaun material, and that the ball mill work index was slightly lower than that of Marathon and Leprechaun material. Material competency, as indicated by the average Axb values, are similar for all three deposits with Berry having a slightly higher value. All of these findings mean that Berry material is easier to grind than the other materials and that the current grinding circuit will be able to handle a mixture of all three materials.

In terms of gravity gold recovery Marathon gives low gravity recovery (~23% at 2 g/t head), Leprechaun has slightly higher gravity recovery (28% at 2 g/t) and Berry markedly higher recovery (40% at 2 g/t). However, an extended gravity recoverable gold (E-GRG) test on a composite of Berry material showed that gravity recovery was very similar to that of the other two deposits.

A series of metallurgical leach tests were initially performed on samples from Leprechaun and Marathon, and subsequent tests performed on samples from Berry with similar leaching conditions. Overall, gold extractions of greater than 93% were achieved.

All available data and gold extraction algorithms from the 2021 Feasibility Study and 2022 test work as documented in previous NI 43-101 Technical Reports are used for the current process plant operations. Gold extraction algorithms are represented in Table 1-2



Table 1-2: Regression Lines and Extraction Predictions – Excluding Soluble Losses

Data Set	Regression	Extraction Predicted at Stated Feed Grade, g/t Au				
		Gravity-Leach Circuit – Soluble Losses Excluded				
		0.5 g/t Au	1 g/t Au	2 g/t Au	3 g/t Au	4 g/t Au
Consolidated	$y = 0.2114x + 93.59$	93.7	93.8	94.0	94.2	94.4
Berry	$y = -0.0316x + 95.058$	95.0	95.0	95.0	95.0	94.9
Leprechaun	$y = 0.61x + 92.598$	92.9	93.2	93.8	94.4	95.0
Marathon	$y = -0.0666x + 93.36$	93.3	93.3	93.2	93.2	93.1
Sum of Individuals		93.8	93.8	93.8	94.2	94.4

Note: Gravity-leach is capped at 96% extraction.

1.3.7 Mineral Resources

The 2025 Mineral Resource Estimate updates the previous estimate issued on November 30, 2022, incorporating new drilling, refined geological models, updated mineralization domains, and revised estimation parameters. The effective date of the 2025 Mineral Resource estimate is December 31, 2025.

The 2025 Mineral Resource estimate was prepared by Ean Finch, P.Geo., Senior Resource Geologist, Equinox. Niel de Bruin, P.Geo., Vice President, Mineral Resources, Equinox, is the Qualified Person (QP) responsible for the Mineral Resource estimate. The QP has reviewed the geological interpretations, estimation methodology, and validation results and considers the Mineral Resource Estimate to be a reasonable representation of the gold mineralization at the current level of drilling and geological understanding.

The 2025 Mineral Resource estimate is based on 2,071 diamond drill holes totaling 445,108 m, of which 310,127 samples contain gold assays and verified for use in the MRE. All data underwent rigorous validation, including QA/QC review, survey checks, and verification of assay certificates. The QP considers the database to be reliable and appropriate for Mineral Resource estimation.

Key elements of the estimation methodology are listed:

- 1.0 m capped composites, confined to domain boundaries
- Updated variograms for QTPV and granitoid domains
- Dynamic anisotropy applied within QTPV domains to reflect local structural variations
- High-grade distance restrictions based on indicator variograms
- Inverse Distance Cubed (ID³) selected as the preferred interpolation method
- Block sizes of 3 m × 3 m × 3 m for QTPV domains and 6 m × 6 m × 3 m for other lithologies
- Bulk density assigned by lithological domain using 3,909 measurements

Open-pit Mineral Resources were constrained within a Whittle Lerchs–Grossman pit shell generated at US\$2,400/oz Au, using appropriate mining, processing, and G&A cost assumptions. A cut-off grade of 0.30 g/t Au was applied for reporting open-pit Mineral Resources.



Underground Mineral Resources were constrained within optimized stope shapes using a cut-off grade of 1.21 g/t Au, based on a gold price of US\$2,300/oz Au and underground mining cost assumptions.

The QP concludes that the reported Mineral Resources meet the CIM requirement for “reasonable prospects for eventual economic extraction”.

Consolidated Mineral Resources, exclusive of Mineral Reserves, are presented in Table 1-3.

Table 1-3: Consolidated Mineral Resource Estimate Exclusive of Mineral Reserves for the Valentine Gold Mine

Category	In-Pit			Underground			In-Pit & Underground		
	≥ 0.30 g/t Au			≥ 1.21 g/t Au			Tonnage (kt)	Gold Grade (g/t)	Contained Gold (koz)
	Tonnage (kt)	Gold Grade (g/t)	Contained Gold (koz)	Tonnage (kt)	Gold Grade (g/t)	Contained Gold (koz)			
Measured	6,379	1.15	236	49	4.32	7	6,428	1.18	243
Indicated	22,790	1.24	908	170	3.28	18	22,961	1.25	926
M+I	29,170	1.22	1,145	219	3.51	25	29,389	1.24	1,169
Inferred	31,272	1.07	1,077	717	2.23	51	31,989	1.10	1,128

Note:

1. The Mineral Resource estimate was completed in accordance with the CIM (2014) definitions and the CIM Best Practice Guidelines (2019).
2. The effective date of the Mineral Resource estimate is December 31, 2025.
3. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
4. Mineral Resources are presented in this table exclusive of Mineral Reserves.
5. Open pit resources are reported at a cut off grade of 0.30 g/t Au and are constrained within an optimized pit shell.
6. The optimized pit shell was generated using a gold price of \$2,400/oz Au and a USD/CAD exchange rate of 1.3, mining and processing costs of \$17.37/t, G&A costs of \$4.50/t, and refining and transportation cost of \$5.34/oz of recovered gold.
7. Underground mineral resources are reported within conceptual mineable stopes using a cut-off grade of 1.21g/t Au.
8. A long-term gold price of \$2,300/oz was used to determine the underground cut-off grade. Assumptions include mining & processing cost of \$79.80/t, refining and transportation cost of \$5.0/oz of recovered gold, and process sustaining capital cost of \$1.20/t. No G&A costs were applied.
9. Underground stope sizes were on average at a strike length of 5 m, a mining height of 3 m, and a stope width corresponding to the full extent of the modelled mineralized zone.
10. A process recovery of 95% and a royalty rate of 3.0% were applied
11. Totals may not sum due to rounding.

Key Factors Influencing the 2025 Mineral Resource estimate:

- Incorporation of new drilling, particularly at the Berry, Sprite, and Victory deposits.
- Optimization of mineralization domains, including improved treatment of internal waste and better control on domain extents outside QTPV units.
 - Updated lithological interpretations, including refinement of mafic dyke geometries at Marathon.
 - Re-interpretation of grade shells to better align with litho-structural controls and current mining performance.
- Increase on block size in QTPV domains and increase sample support



- Updated variogram parameters
- New capping thresholds were established based on statistical analysis.
- Reduction of extensive search ranges in Quartz monzonite and Trondhjemite domains to limit over-extrapolation.

The 2025 Mineral Resource estimate reflects significant improvements in geological modelling, domain interpretation, and estimation methodology across all five deposits. The updated estimate benefits from new drilling, refined structural controls, enhanced domain modelling, and improved treatment of high-grade outliers. The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

The QP considers the 2025 Mineral Resource estimate to be robust, well-supported by the available data, and suitable for use in mine planning, economic analysis, and future Mineral Reserve estimation.

1.3.8 Mineral Reserves

Proven and Probable Mineral Reserves have been converted from Measured and Indicated Mineral Resources at Leprechaun, Berry and Marathon, which are summarized in Table 1-4. Inferred Mineral Resources are not included in the Mineral Reserves and are sent to waste. Mineral Reserves are supported by feasibility engineering. Mineral Resources from the Victory and Sprite deposits, and any underground Mineral Resources, are not included in the Feasibility Study mine plan or Mineral Reserves.

Table 1-4: Summary of Mineral Reserves – Effective Date December 31, 2025

Mining Area	Reserve Class	Ore (kt)	Grade (g/t)	Contained Metal (koz)
Leprechaun	Proven	5,746	2.11	389
	Probable	8,500	1.75	478
	Leprechaun Total	14,245	1.89	867
Berry	Proven	4,521	2.07	301
	Probable	9,343	1.45	435
	Berry Total	13,864	1.65	736
Marathon	Proven	11,829	1.68	640
	Probable	9,988	1.43	459
	Marathon Total	21,817	1.57	1,098
Stockpiles as of December 31, 2025	Proven	-	-	-
	Probable	1,563	0.92	46
	Stockpile Total	1,563	0.92	46
Subtotal	Proven	22,095	1.87	1,330
	Probable	29,395	1.50	1,418
Total	Proven and Probable	51,490	1.66	2,748



Source: MMTS 2026.

Notes:

1. The Mineral Reserve estimates were prepared by Jeffrey Colden, P.Eng., reported using the CIM (2014) definitions, and have an effective date of December 31, 2025.
2. Mineral Reserves are mined tonnes and grade; the reference point is the mill feed at the primary crusher.
3. Mineral Reserves are reported at a cut-off grade of 0.45 g/t Au.
4. Cut-off grade assumes US\$2,100/oz Au at a currency exchange rate of US\$0.714 per C\$1.00; 99.8% payable gold; US\$5.00/oz off-site costs (refining and transport); and uses an 93.1% metallurgical recovery. The cut-off grade covers processing costs of C\$22.75/t, administrative (G&A) costs of C\$14.38/t, and a stockpile rehandle cost of C\$1.85/t.
5. Mining loss and dilution is based on diluting the Resource model to a 6 m x 6 m x 6 m, including additional mining losses estimated for the removal of isolated blocks (surrounded by waste) and low-grade (<0.55 g/t Au) blocks bounded by waste on three sides.
6. Numbers have been rounded as required by reporting guidelines and may not add.
7. The QP is not aware of any mining, metallurgical, infrastructure, permitting, or other relevant factors that could materially affect the Mineral Reserve estimate, unless outlined in this report.

Mill feed tonnes and gold grades are based on re-blocking the original 1.5 m x 1.5 m x 1.5 m model blocks to a selective mining unit (SMU) block size of 6 m x 6 m x 6 m. Further mining recovery parameters have been introduced, treating the following SMU blocks as waste: all isolated, mineralized blocks (blocks bounded by waste on all sides); and all blocks below 0.55 g/t gold grade that are bounded by waste on all but one side.

1.3.9 Mining Method

Mining is based on conventional open pit drill and blast, load and haul methods. Normal benches are 6 m in height. A “selective” method of mining will be employed in certain areas of the Marathon, Leprechaun, and Berry deposits to enhance grade control. Flitches that are 3 m in height will be mined by 12 m³ loaders in backhoe configuration. All of the ore is selectively mined, along with an equal amount of waste.

Ore will be hauled to a crusher 3.5 km southwest of the Marathon pit, 3.0 km northeast of the Leprechaun pit and 1.0 km south of the Berry pit. Ore will be crushed to feed the process plant, while waste rock will be deposited into waste rock storage facilities (WRSF) directly adjacent to the pits or used as rockfill to construct a Tailings Management Facility. Ultimate pit limits are split into phases or pushbacks to target higher economic margin material earlier in the mine life. The Leprechaun pit is split into three phases, the Berry pit into five phases, and the Marathon pit into four phases. Initial phases target higher gold grade mineralization and a lower strip ratio.

Cut-off grade optimization has been carried out on the mine production schedule. Ore grades are divided into four grade bins: high-grade ore has a grade equal to or larger than 1.5 g/t, high medium-grade ore has a grade equal to or larger than 1.00 g/t, but less than 1.50 g/t, medium-grade ore has a grade equal to or larger than 0.70 g/t, but less than 1.00 g/t, and low-grade ore has a grade equal to or larger than 0.45 g/t, but less than 0.70 g/t.

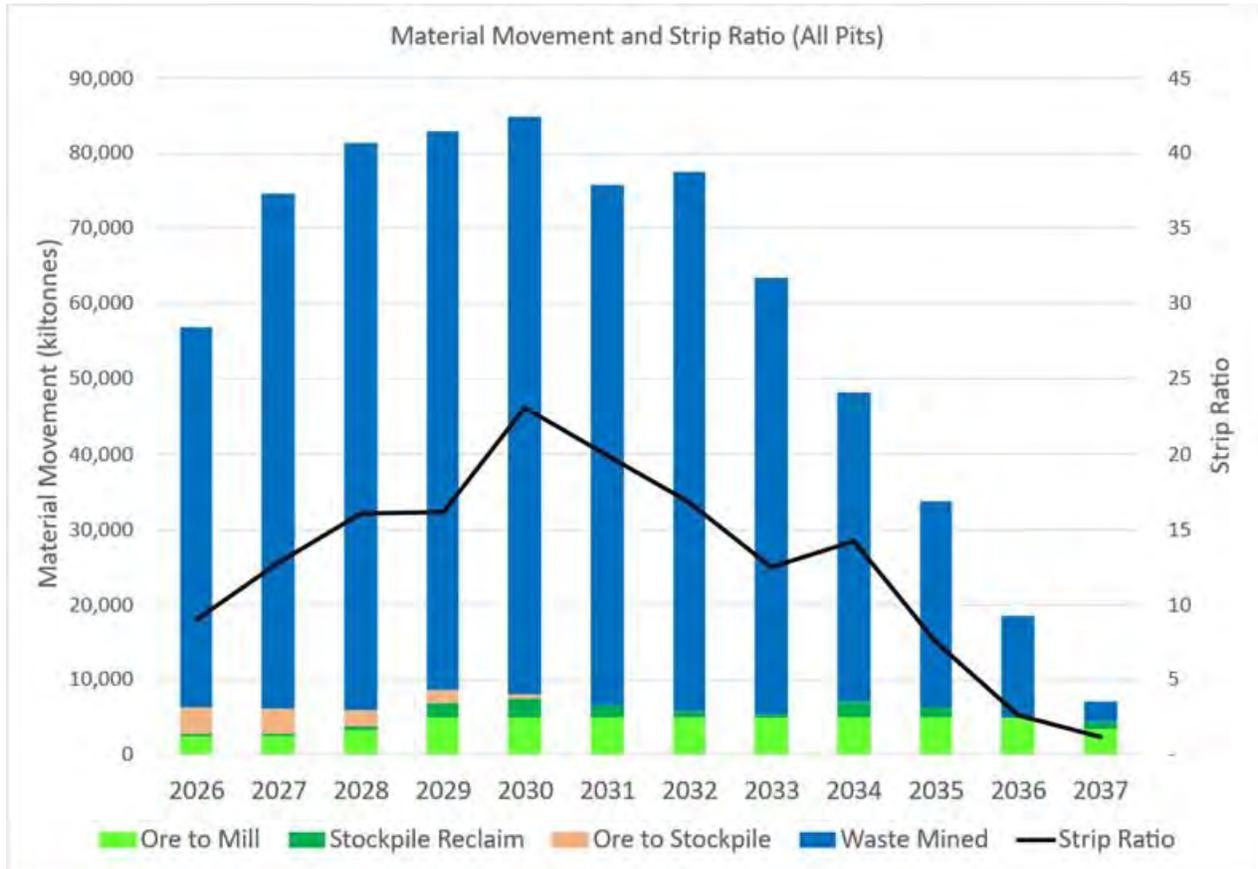
Stockpiled ore is reclaimed to the mill as needed to supplement mill feed. Higher grade ore is preferentially feed to the mill in most cases, so if higher grade ore is available in stockpile, it is reclaimed to the mill, and the lower grade ore is stockpiled. Once higher-grade ore is unavailable, either directly from the pits or from a stockpile, lower grade ore is sent directly to the crusher or reclaimed from the stockpile as needed to achieve target mill throughput.

Pit operations continue from 2026 to 2037. Stockpile reclaim operations will also complete in 2037.

Figure 1-2 summarizes the proposed ore and waste schedule for the 2026 Technical Report. The summarized mine schedule is shown in Figure 1-2. The site layout is shown in Figure 1-3.



Figure 1-2: Mine Production Schedule, Total Material Movement & Strip Ratio (All Pits)



Source: MMTS 2026.

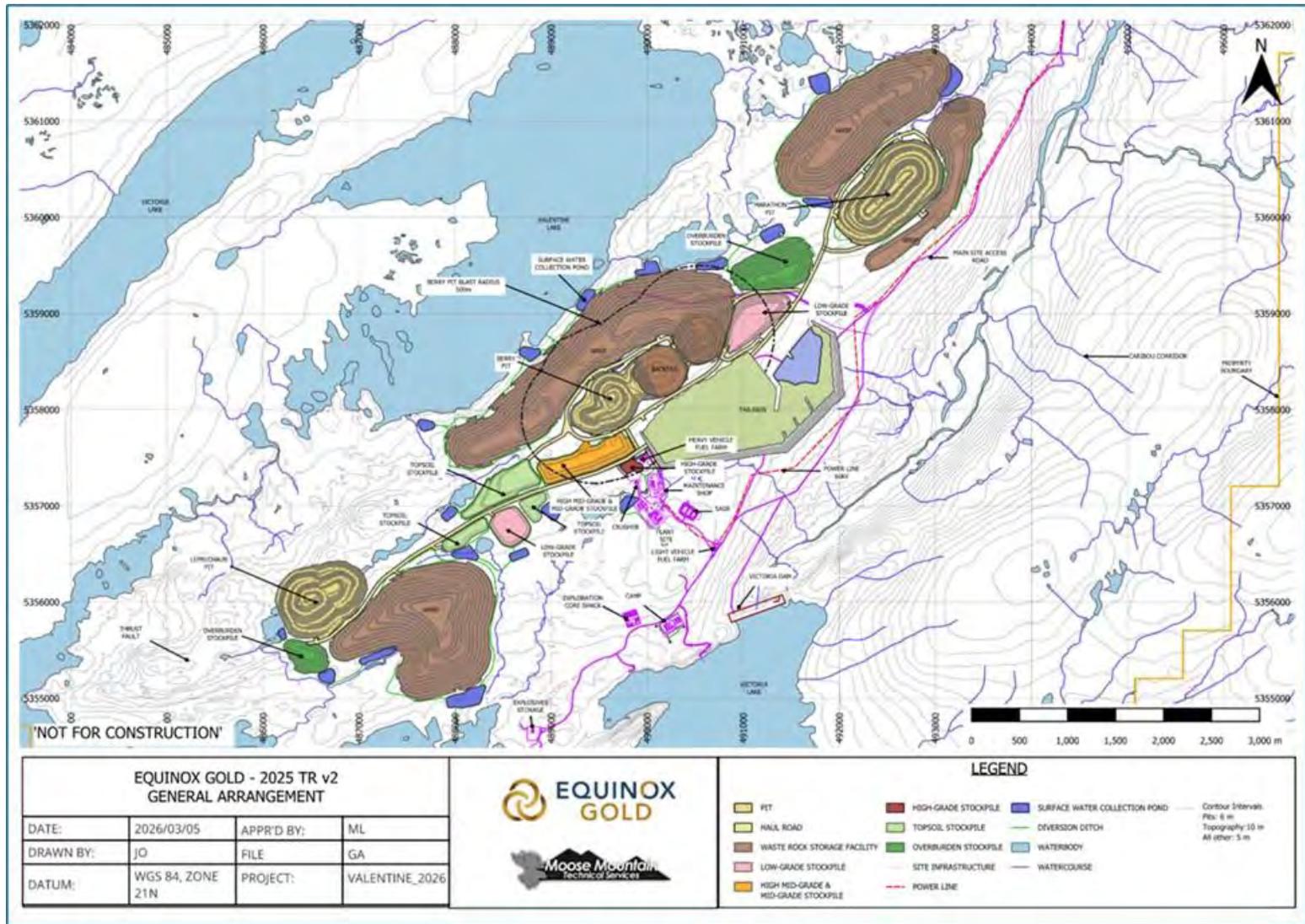


Table 1-5: Mine Production Schedule

Total Mine Production		LOM	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Mill Feed	kt	51,490	2,434	2,477	3,200	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	3,380
Mill Feed Grade, Au	g/t	1.66	2.62	2.87	2.22	1.67	1.50	1.34	1.36	1.60	1.39	1.48	1.78	1.24
Mill Feed Contained Metal	koz	2,748	205	229	229	268	242	216	219	258	223	238	287	134
Ore Mined from Pit	kt	49,926	5,599	5,372	4,695	4,591	3,323	3,489	4,253	4,645	2,880	3,606	5,042	2,431
Ore Grade from Pit, Au	g/t	1.68	1.70	1.79	1.60	1.57	1.79	1.56	1.48	1.68	1.93	1.81	1.77	1.50
Ore Mined to Stockpile	kt	11,300	3,529	3,246	2,147	1,593	742	0	0	0	0	0	42	0
Ore to Stockpile Grade, Au	g/t	0.91	1.06	1.00	0.76	0.73	0.66	0.00	0.00	0.00	0.00	0.00	0.58	0.00
Stockpile Reclaim to Mill	kt	12,863	364	351	652	2,002	2,419	1,511	747	355	2,120	1,394	0	949
Stockpile Grade to Mill, Au	g/t	0.91	1.73	2.13	1.89	1.14	0.86	0.84	0.65	0.65	0.65	0.62	0.00	0.57
Total Waste from Pit	kt	629,170	50,543	68,518	75,305	74,309	76,677	69,285	71,696	58,109	41,066	27,312	13,527	2,824
Total Mined from Pits	kt	679,097	56,142	73,889	80,000	78,900	80,000	72,775	75,949	62,754	43,946	30,919	18,568	5,255
Total Moved	kt	691,960	56,506	74,240	80,652	80,902	82,419	74,285	76,696	63,109	46,066	32,312	18,568	6,204
Source: MMTS 2026.														
Notes: 1. "Ore Mined from Pit" includes both ore to the mill directly and ore to stockpile.														



Figure 1-3: Overall Site Layout



Source: MMTS 2026.



1.3.10 Recovery Methods

The Process Plant currently treats ore via a conventional gravity and cyanidation flowsheet and has been designed to nominally treat 2.5 Mt/a of ore. Run-of-mine (ROM) ore is processed via conventional primary crushing, a two-stage grinding circuit, and a gravity concentration circuit. Gravity circuit tailings are treated via cyanidation and a carbon-in-leach (CIL) circuit and associated gold recovery and carbon handling circuits to produce gold doré. CIL tailings are treated via a cyanide destruction process prior to storage in the TMF.

Plant construction was completed in Q3 2025, and the first gold pour was achieved on September 15, 2025. Commercial production, representing 80% nameplate capacity, was achieved on November 18, 2025.

Studies are underway to increase nominal plant throughput from 2.5 Mt/a to 5 Mt/a, and proposed flowsheet changes are described below and in Section 17.

The current Process Plant consists of the following unit operations to nominally treat 2.5 Mt/a of ore:

- Primary crushing and associated material handling equipment
- Crushed ore stockpile and associated feed and reclaim systems
- Grinding circuit consisting of a semi-autogenous grinding (SAG) and ball mills, hydrocyclone classification and associated pumping and material handling systems to produce a nominal grind size of 80% passing (P_{80}) of 75 μ m
- Gravity concentration circuit with intensive leach reactor
- Pre-aeration, cyanide leaching, and carbon adsorption via a CIL circuit
- Carbon elution via Pressure Zadra circuit
- Carbon handling and regeneration
- Electrowinning and smelting to produce doré
- Cyanide destruction of CIL tailings using SO_2 / O_2 process
- Tailings pumping to the TMF
- Reagent mix and storage circuits
- Air and oxygen circuits
- Water systems (potable water, treated water, gland seal water and process water)

The proposed plant expansion to 5 Mt/a will consist of the following changes to the existing unit operations:

- Addition of a second jaw crusher circuit
- Addition of a secondary crushing circuit to reduce the ore feed size to the SAG mill
- Addition of a pebble crusher at the existing pebble recirculating system
- Addition of a second ball mill



- Addition of a pre-leach thickener circuit to increase the density of the slurry at the CIL circuit. The existing tailings thickener will be repurposed as a pre-leach thickener, and a new, larger tailings thickener will be installed.
- Reconfiguration of the pre-aeration (PA), leaching, and CIL tank train and addition of three CIL tanks
- Reagents: Installation of a sulphur burner system as a new source of SO₂ and conversion of the existing sodium metabisulphite system to a sodium hydroxide mix system
- Modification of the existing process water system

1.3.11 Project Infrastructure

The Project is accessed via a 80 km upgraded public gravel road connecting the mine site to Millertown, the paved Buchans Highway, and ultimately the Trans-Canada Highway. Electrical power is supplied by Newfoundland and Labrador Hydro from the 18.4 MW Star Lake hydroelectric station (part of the 604 MW Bay d'Espoir system) through a new 40 km, 66 kV transmission line. The existing electrical substation includes two transformers with 100% redundancy and supports a current peak demand of 19.0 MW. An additional 13.0 MW will be required for the planned Phase 2 process plant expansion, subject to confirmation through an NL Hydro system impact study; a second substation is planned to accommodate the increased load.

Process water is primarily reclaimed from the TMF, with supplementary fresh water sourced from Victoria Lake and distributed for process, potable, and firewater use. Site water management includes 21 planned sedimentation ponds with spillway capacity, decentralized treatment across operational complexes, and staged commissioning beginning in 2026. Infrastructure also includes a permanent process plant, maintenance and administration buildings, a laboratory, a fueling station, explosive storage, and camp facilities. The truck shop and fuel storage capacity are being expanded, and total camp accommodation will increase to approximately 765 personnel to support the Phase 2 expansion.

The Tailings Management Facility (TMF) has been designed and constructed under the Engineer of Record (WSP) with oversight from an Independent Tailings Review Board. The facility is a staged, downstream-raised, zoned rockfill forming a horseshoe-shaped, side-hill impoundment with a final maximum height of 45.5 m and crest length of approximately 3,000 m. The TMF is classified as “Very High” hazard potential under Canadian Dam Association guidelines and is designed for the Environmental Design Flood (100-year event) without discharge through the emergency spillway and for the Inflow Design Flood (Probable Maximum Flood), as well as the Maximum Credible Earthquake. The impoundment includes composite liner systems (LLDPE geomembrane with geosynthetic clay liner), engineered filter and transition zones, seepage collection systems, and geotechnical instrumentation. Tailings are thickened to approximately 65% solids, treated for cyanide destruction, and the process water is ultimately biologically treated using a submerged attached growth reactor (SAGR®) prior to discharge. The TMF is designed for 31.6 Mt of tailings; with projected life-of-mine deposition exceeding this capacity, in-pit tailings deposition in the mined-out Berry pit is planned to commence from approximately 2033.



1.3.12 Market Studies

Equinox Gold plans to sell gold doré from the Valentine Gold Mine into the global gold market, using internationally recognized refiners or bullion banks under standard industry terms, without conducting a formal marketing study. Sales are expected to occur on a spot-price basis, with customary transportation, insurance, refining, and settlement practices, with optional use of forward sales or hedging arrangements, if appropriate.

1.3.13 Environmental, Permitting, and Social Considerations

Valentine has been in commercial production since November 2025 and operates under provincial and federal approvals granted following completion of the Environmental Impact Statement and Environmental Assessment processes in 2022. A comprehensive compliance and effects-monitoring framework is in place, including 11 Follow-up Monitoring Plans and 13 supporting management plans covering groundwater, surface water, air quality, noise, ARD/ML management, fish and fish habitat, caribou, and other wildlife. The Project is subject to the Metal and Diamond Mining Effluent Regulations (MDMER) and maintains 19 Final Discharge Points, with commissioning of the surface water management system and SAGR treatment unit scheduled for 2026. Baseline studies confirm naturally low-alkalinity surface waters with elevated background metals in some locations; tailings are classified as non-potentially acid generating, while PAG waste rock comprises approximately 1 to 4 percent at Marathon, approximately one percent at Leprechaun, and approximately 11 percent at Berry, managed under an operational ARD/ML program. Groundwater is shallow and fresh with moderate buffering capacity, monitored through 51 wells (including real-time stations), while ambient air and acoustic monitoring demonstrate general compliance with regulatory criteria, with limited episodic exceedances during peak construction. Fisheries monitoring confirms the presence of salmonids and other freshwater species, with offsetting programs and tissue monitoring underway, and adaptive mitigation measures implemented in coordination with Fisheries and Oceans Canada and provincial regulators. Caribou and other Species at Risk are managed under dedicated protection and monitoring plans developed in consultation with provincial wildlife authorities.

The Project maintains all required provincial and federal permits, licenses, leases, and authorizations, including Fisheries Act authorizations, Certificates of Approval, water-use licenses, mining leases, and approved Development, Rehabilitation, and Closure Plans. A Notice of Project Change submitted in 2025 to support stockpile modifications, expanded fuel storage, camp expansion, and plant pad enlargement has been released provincially and is under federal review, while Phase 2 expansion will be addressed through the Project Change process. Waste management is conducted through licensed contractors with segregation, recycling, hazardous material containment, spill contingency planning, and regulated sewage treatment. Community and Indigenous engagement remain central to operations, with Community Cooperation Agreements in place locally and Socio-Economic Agreements executed with Miawpukek First Nation and Qalipu First Nation, supported by employment, procurement, training, and joint environmental sub-committees. The approved Rehabilitation and Closure Plan (updated 2024) provides for progressive reclamation, pit flooding, TMF decommissioning and passive treatment, revegetation, and post-closure monitoring over five to ten years. The estimated third-party closure liability is US\$94 million (C\$125.9 million), secured through staged financial assurance in accordance with the Newfoundland and Labrador Mining Act.



1.3.14 Capital and Operating Cost Estimates

The Valentine Gold Mine is an operating open pit gold mine with associated processing facilities, tailings management infrastructure, and site services. Commercial production was achieved on November 18, 2025. Capital and operating costs presented for the Project support the mining and processing of Mineral Reserves over the life of mine (LOM). Capital expenditures incurred prior to April 27, 2026, are considered sunk costs and are excluded from the economic evaluation. Remaining LOM capital requirements total approximately \$727 million and include growth capital associated primarily with the Phase 2 mill expansion and supporting infrastructure, sustaining capital required to maintain mining and processing equipment, and closure and reclamation costs.

Capital cost estimates were developed using inputs from Equinox Gold, DRA Global, Moose Mountain, and other third-party contributors, drawing on budget quotations, historical construction data from the existing plant, engineering quantities, and industry benchmarks. The estimate conforms to AACE International recommended practice 18R-97 and is consistent with a Class-4 level estimate, reflecting the level of engineering definition available for the Phase 2 expansion and related infrastructure. Capital costs include expenditures for mining fleet expansion and replacement, process plant expansion, tailings management facility raises and water management infrastructure, site infrastructure upgrades, construction Indirects, and owner's costs. Contingency allowances were applied to individual cost elements based on the level of definition and perceived risk.

Average life-of-mine on-site operating costs are estimated at \$72.21 per tonne of ore processed, equivalent to \$1,444 per ounce of gold produced. Mining, processing, and general and administrative (G&A) costs were estimated using operational data, budget forecasts, and first-principles equipment productivity assumptions. Mining costs incorporate equipment operating hours, labour, fuel, maintenance, and consumables, while processing costs include workforce, power, grinding media, reagents, and maintenance materials. The operation is expected to employ approximately 466 full-time personnel during steady-state operations, with most employees residing within Newfoundland, making the mine a significant regional employer and contributor to the provincial economy.

1.3.14.1 Mining Capital Cost

The initial mine equipment fleet has already been purchased; these costs are excluded from the mining costs in this study. Expansion and replacement fleet is purchased in the year it is required. Costs for expansions to dispatch/radios, spare parts inventory and GPS navigation are included.

Existing mine infrastructure and roads that were constructed before January 2026 have not been included in the mine costs. This includes the truck shop, warehouses, buildings, external haul roads, topsoil stripping, tools, survey systems, fuel/lube equipment, and rescue/safety supplies.

1.3.14.2 Mine Operating Cost

Owner run mine operations will include drilling, blasting, loading, hauling, and pit, haul road and pile maintenance functions. Mobile equipment maintenance operations will also be managed by the owner. Technical services functions will also be managed by the owner and will include geology, engineering and surveying. Mining operations will be based on 365 operating days per year (d/a) with two 12-hour shifts/day. An allowance of 12 days of no mine production has been built into the mine schedule to allow for adverse weather conditions.



The mining fleet will include diesel powered rotary drills with a 190 mm bit size for production drilling; down the hole (DTH) drills with 140-171 mm bit size for wall control drilling; 15.5 m³ bucket sized diesel powered face shovels, 12 m³ bucket sized diesel powered excavators, and 13.5 m³ bucket sized wheel loaders for production loading; 133-tonne and 90-tonne payload rigid-frame haul trucks for production hauling; plus ancillary and service equipment to support the mining operations. In-pit dewatering systems will be established for the pit. All surface water and precipitation in the pits will be handled by diesel powered pumps.

Maintenance on mine equipment will be performed in the field with major repairs to mobile equipment in the shops located near the plant facilities.

Annual mine operating costs per tonne LOM average is \$2.83/t mined.



2.0 Introduction

SLR Consulting (Canada) Ltd. (SLR) was retained by Equinox Gold Corp. (Equinox) to prepare an updated NI 43-101 Technical Report on the Valentine Gold Mine (Valentine or the Project), located in central Newfoundland and Labrador, Canada. This Technical Report has been prepared in accordance with the requirements of National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* (NI 43-101) and the associated Form 43-101F1. The purpose of this Technical Report is to document and summarize the scientific and technical information for the Project, including Mineral Resource and Mineral Reserve estimates, mine design and schedule, metallurgical test work and process design, infrastructure, environmental and permitting status, capital and operating cost estimates, and associated economic analysis as of the effective date of the report, December 31, 2025 (the Effective Date).

This Report has been prepared for Equinox Gold Corp. by the qualified persons (QPs) from SLR, Equinox, Moose Mountain Technical Services (MMTS), Terrane Geosciences Inc. (Terrane), and Lincoln Metallurgical Inc. (Lincoln), as listed in Table 2-1.

Equinox Gold Corp. (TSX: EQX; NYSE American: EQX) is a Canadian-based gold mining company with a diversified portfolio of long-life operations and growth projects across the Americas. The company’s recently commissioned Valentine Gold Mine has achieved commercial production in November 2025, marking a significant milestone in its strategic expansion of Canadian operations. At Valentine, the processing plant (the Process Plant) has commenced ramp-up, achieving throughput and recoveries that exceed commissioning-period expectations, and is projected to reach full nameplate capacity in 2026. The mine is expected to deliver between 150,000 and 200,000 ounces of gold in 2026 and align with Equinox’s disciplined objective of organic production growth, operational reliability, and responsible mining practices. The planned Phase 2 Expansion, which will increase plant throughput to 4.9 Mt/a, begins in 2026 and will be completed circa 2029.

This report supersedes the previous technical report titled “Valentine Gold Project, NI 43-101 Technical Report and Feasibility Study,” dated November 30, 2022.

Table 2-1: Qualified Persons and Responsibilities

QP, Designation, Title	Company	Responsible for Sections	Independence from Equinox	Date of Last Site Visit
Stuart Collins, P.E., Principal Mining Engineer	SLR	1.1, 1.1.1.6, 1.1.2.6, 1.3.1 to 1.3.3, 1.3.12, 1.3.14, 2 to 6, 19, 21, 24, 25.1.6, 26.6	Yes	January 21, 2026
Nicholas Capps, P.Geo., Director, Exploration	Equinox	1.3.4 to 1.3.5, 7 to 12, 23	No	December 8 to 12, 2025
Niel de Bruin, P. Geo., VP Mineral Resources	Equinox	1.1.1.1, 1.1.2.1, 1.1.3 (Resources), 1.3.7, 12, 14, 25.1.1, 25.2.1, 26.1	No	October 14 to 18, 2025
Neil Lincoln, P.Eng., Independent Metallurgical Consultant	Lincoln Metallurgical Inc	1.1.1.3, 1.1.2.3, 1.3.6, 1.3.10, 13, 17, 21, 25.1.3, 26.3	Yes	June 17 to 19, 2025



QP, Designation, Title	Company	Responsible for Sections	Independence from Equinox	Date of Last Site Visit
Jeffrey Colden, P.Eng. Lead Mining Engineer	MMTS	1.1.1.2, 1.1.2.2, 1.3.8, 1.3.9, 15, 16.0 to 16.1.2, 16.2 to 16.8, 16.8.2 to 16.9, 25.1.2, 26.2	No	September 7, 2024
Tony Gilman Principal Rock Mechanics Engineer	Terrane	16.1.3, 16.8.1	Yes	November 17 to 19, 2025
Kelly Boychuk, P.Eng. MBA SVP Mining Infrastructure	Equinox	1.1.1.4, 1.1.2.4, 1.1.3 (TMF), 1.3.11, 18, 25.1.4, 25.2.1, 26.4	No	September 8 to 10, 2025
Scott Davidson, P.Geo., Director, Environmental Permitting and Compliance	Equinox	1.1.1.5, 1.1.2.5, 1.3.13, 20, 25.1.5, 26.5	No	January 21, 2026
Grant A. Malensek, P.Eng., Technical Director, Mining Advisory	SLR	1.2, 22	Yes	None
All		27	Yes	

The QPs held discussions with the following personnel:

- Jamie Russell, Safety and Sustainability Manager, Valentine Gold Mine
- Hubert Schimann, General Manager – Operations, Valentine Gold Mine
- Mathew MacPhail, P.Eng., VP Growth and Business Planning, Equinox Gold Corp.
- Ean Finch, P. Geo., Senior Mineral Resource Geologist, Equinox Gold Corp.
- Marco Cavasin, Vice President Tax, Equinox Gold Corp.
- Bret McDermott, VP Business Planning, Equinox Gold Corp.
- Yang Li, Director Tax, Equinox Gold Corp.
- Victoria Smyth, Capital Projects Manager, Valentine Gold Mine
- Dylan Abbott, Project Geologist, Valentine Gold Mine
- Jon Remedios, Project Geologist, Valentine Gold Mine
- Jesse Wilson, Geoscience Analyst, Valentine Gold Mine
- Ashley Mendonca, Database Geologist, Valentine Gold Mine
- Eugene Gopalkista, P.Geo., Technical Services Manager, Valentine Gold Mine
- Paul Baker, P.Eng., Senior Mine Engineer, Valentine Gold Mine
- Phillip Gartner, Senior Mine Engineer, Valentine Gold Mine
- Adam Wall, P.Geo., Senior Mine Geologist, Valentine Gold Mine
- Alex Wilson, P.Geo., Senior Mine Geologist, Valentine Gold Mine



- Gary Kennell Environmental Superintendent, Valentine Gold Mine
- Scott Finlay Senior Environmental Advisor, Valentine Gold Mine
- Kyle Kuntz, Project Manager VGM Phase 2 Expansion, Equinox Gold Corp
- James Allen, Engineering Manager VGM Phase 2 Expansion, Equinox Gold Corp
- Gordon Lung, Project Controls Manager VGM Phase 2 Expansion, Equinox Gold Corp
- Marcello Locatelli, Project Manager VGM Phase 2 Expansion, DRA Global
- Jordan Zampini, Process Lead VGM Phase 2 Expansion, DRA Global

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

2.1 Site Visits

Kelly Boychuk's most recent site inspection took place from September 8 to 10, 2025. This included a site walk-over with the Engineer of Record, Deputy Engineer of Record and members of the Independent Tailings Review Board (ITRB) to observe construction of Stage 3 of the tailings management facility (TMF) and initial tailings deposition into the TMF, as well as observation of the site infrastructure.

Jeffrey Colden's most recent site inspection took place on September 7, 2024. The QP assessed the general topography of the Project, inspecting proposed open pit, stockpile, and haul road locations, and well as existing and proposed infrastructure.

Tony Gilman's most recent site visit was from November 17 to 19, 2025. He was onsite for a geotechnical performance review of the pit slopes at Marathon, Leprechaun, and Barry, and met with the VGM geotechnical and mine engineering team to discuss future planning and geotechnical aspects of the pit slopes.

Neil Lincoln's most recent site inspection took place from June 17 to 19, 2025. The QP inspected the process plant, permanent camp, main access road, and existing infrastructure.

Nic Capps' latest site visit occurred from December 8 to 12, 2025. During this visit, he reviewed current exploration methods, core from active drills, the drill rigs in operation, and discussed interpretation of the drilling results with geologists on site.

Niel de Bruin conducted a site visit from October 14 to 18, 2025. During the visit, the QP inspected drill core from the Leprechaun, Berry, Marathon, and Frank Zone deposits and verified core logging practices, database management procedures, resource modelling workflows, drill hole planning, program execution, and assay review. The QP also confirmed drill collar locations and observed active drilling operations. Additional field verification included examination of pit walls to compare exposed geology with the geological and resource models, as well as review of trench and outcrop exposures to confirm vein orientations, dyke geometries, and characteristic mineralization styles.

Scott Davidson's most recent site inspection took place on January 21, 2026. This included a site tour of the status of pit development, waste rock, and overburden dump construction, and the sediment ponds. The QP met with the environmental team to review 2025 performance data and the status of permitting projects.

Stuart Collins conducted a site visit on January 21, 2026. During the site visit, the QP observed that the mine, mill, and site infrastructure were in operation.



Rob Duinker, Principal, Financial Analysis and Communication for SLR, visited the site on January 21, 2026, on behalf of Grant A. Malensek. During the January 21, 2026, site visit, the mine, mill, and site infrastructure were observed in operation.



2.2 List of Abbreviations

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

2.2.1 Units of Measure

μ	Micron	kVA	kilovolt-amperes
μg	Microgram	kW	kilowatt
a	Annum	kWh	kilowatt-hour
A	Ampere	L	litre
bbbl	Barrels	lb	pound
Btu	British thermal units	L/s	litres per second
°C	degree Celsius	m	metre
C\$	Canadian dollars	M	mega (million); molar
cal	Calorie	m ²	square metre
cfm	cubic feet per minute	m ³	cubic metre
cm	Centimetre	MASL	metres above sea level
cm ²	square centimetre	m ³ /h	cubic metres per hour
d	Day	mi	mile
dia	Diameter	min	minute
dmt	dry metric tonne	μm	micrometre
dwt	dead-weight ton	mm	millimetre
°F	degree Fahrenheit	mph	miles per hour
ft	Foot	MVA	megavolt-amperes
ft ²	square foot	MW	megawatt
ft ³	cubic foot	MWh	megawatt-hour
ft/s	foot per second	oz	Troy ounce (31.1035g)
g	Gram	oz/st, opt	ounce per short ton
G	giga (billion)	ppb	part per billion
Gal	Imperial gallon	ppm	part per million
g/L	gram per litre	psia	pound per square inch absolute
Gpm	Imperial gallons per minute	psig	pound per square inch gauge
g/t	gram per tonne	RL	relative elevation
gr/ft ³	grain per cubic foot	s	second
gr/m ³	grain per cubic metre	st	short ton
ha	Hectare	stpa	short ton per year
hp	Horsepower	stpd	short ton per day
hr	Hour	t	metric tonne
Hz	Hertz	tpa	metric tonne per year
in.	Inch	tpd	metric tonne per day
in ²	square inch	US\$	United States dollar
J	Joule	USg	United States gallon
k	kilo (thousand)	USgpm	US gallon per minute
kcal	Kilocalorie	V	volt
kg	Kilogram	W	watt
km	Kilometre	wmt	wet metric tonne
km ²	square kilometre	wt%	weight percent
km/h	kilometre per hour	yd ³	cubic yard
kPa	Kilopascal	yr	year



2.2.2 Abbreviations

Abbreviation	Definition
AEP	Annual Exceedance Probability
Ai	Abrasion index
AQP	Aphanitic quartz porphyry dykes
ARD	acid rock drainage
ARO	Asset retirement obligation
BWi	Bond ball mill index
CCME	Canadian Council of Ministers of the Environment
CDA	Canadian Dam Association
CI	Crushing index
CIL	Carbon-in-leach
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CN	cyanide
CNG	Central Newfoundland Forest
CQA	Construction quality assurance
CRM	certified reference material
CWi	Bond crushing work index
CWQG	Canadian Water Quality Guidelines
DFO	Fisheries and Oceans Canada
DWT	Drop weight test
EA	environmental assessment
EDF	Environmental Design Flood
EGL	Effective grinding length
e-GRG	Extended gravity recoverable gold
EIS	environmental impact statement
EM	electromagnetic
EOR	Engineer of Record
Equinox	Equinox Gold Corp.
FAL	Protection of Aquatic Life (Freshwater)
FDP	final discharge point
FMP	follow-up monitoring plan
FMP	follow-up monitoring plan
FOS	factor of safety
GB	gabbro



HG	High-grade
HMG	High medium-grade
ICP	inductively coupled plasma
IDF	Inflow Design Flood
ILR	Intensive leach reactor
IP	induced polarization
ITRB	Independent Tailings Review Board
LAA	Local Assessment Area
LG	Low-grade
LOM	life of mine
MD	Mafic dypes
MDMER	<i>Metal and Diamond Mining Effluent Regulations</i>
MFN	Miawpukek First Nation
MG	Medium-grade
ML	Metal leaching
MOU	memorandum of understanding
NaOH	Sodium hydroxide
NL AAQS	Newfoundland and Labrador Ambient Air Quality Standards
NL Hydro	Newfoundland and Labrador Hydro
NLDECCC	Newfoundland and Labrador Department of Environment, Conservation and Climate Change
NLDFFA	Newfoundland and Labrador Department of Fisheries, Forestry and Agriculture
NLDFLR	Newfoundland and Labrador Department of Fisheries and Land Resources
NLDIET	Newfoundland and Labrador Department of Industry, Energy and Technology
NLDTCAR	Newfoundland and Labrador Department of Tourism, Culture, Arts and Recreation
NPI	net profit interest
NSR	net smelter return
OB	Overburden
OMS	Operation, Maintenance, and Surveillance
PAA	Protected Areas Association
PAG	potentially acid-generating
PoF	probability of failure
QA/QC	quality assurance / quality control
QEMSCAN	quantitative evaluation of minerals by scanning electron microscopy
QFN	Qalipu First Nation



QTP	quartz-tourmaline-pyrite
RAA	Regional Assessment Area
RC	reverse circulation
RCP	Rehabilitation and Closure Plan
ROM	Run-of-mine
RoW	right-of-way
RWi	Bond rod mill index
SAGR	Submerged attached growth reactor
SAR	Species at Risk
SEA	socio-economic agreement
SLR	SLR Consulting (Canada) Ltd.
SMBS	Sodium metabisulphite
SMU	Selective mining unit
SPI	SAG power index
TMF	tailings management facility
TOC	Total organic carbon
TRJ	Trondhjemite
TS	topsoil
TSP	Total Suspended Particulates
VLF	very low frequency
VLIC	Valentine Lake Intrusive Complex
VLSG	Victoria Lake Supergroup
VLSZ	Valentine Lake Shear Zone
VMS	volcanogenic massive sulphide
VSD	Variable speed drive
WRMD	Water Resources Management Division
WRSF	waste rock storage facility



3.0 Reliance on Other Experts

This Technical Report has been prepared by QPs from SLR, Equinox, MMTS, and Lincoln for Equinox. The information, conclusions, opinions, and estimates contained herein are based on:

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

Information related to legal, socio-economic, land title, or political issues has been provided by Equinox and includes, without limitation, the validity of mineral tenure, the status of environmental and other liabilities, and permitting to allow completion of annual assessment work. These matters were not independently verified by the QPs but appear to be reasonable representations that are suitable for inclusion in Section 4 of this report. The QP for Section 4 has not attempted to verify the legal status of the property; however, the Government of Newfoundland and Labrador, Department of Energy and Mines' online mineral claims staking system, Mineral Lands Administration Portal (MINLAP), was reviewed by the QP on December 1, 2025, and reports that the Equinox mineral claims are active and in good standing at the Effective Date.

SLR has relied on the Equinox Gold Corp. Tax team for guidance on applicable taxes, royalties, and other government levies or interests applicable to revenue or income from Valentine. The QPs have relied on Ms. Li, Director Tax, Mr. McDermott, VP Business Planning, and Mr. Cavisin, VP Tax, all of Equinox Gold Corp., for information on applicable taxes, royalties, and other government levies or interests applicable to revenue or income from the Project in sections 4 and 22, and associated disclosure in Section 1.

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



4.0 Property Description and Location

4.1 Location

The Valentine Gold Mine Property is in the west-central region of the Island of Newfoundland, Canada, and is covered by National Topographic System (NTS) map sheets 12A/06 and 12A/07 (Figure 4-1). The approximate center of the property is situated at UTM 493,399m Easting and 5,362,396m Northing, Zone 21N (NAD83), corresponding to a geographic coordinate of 48.41468° N latitude and 57.08921° W longitude.

The property is 100% owned by Equinox and hosts five defined gold deposits: Leprechaun, Sprite, Berry, Marathon, and Victory, along with several additional early-stage gold prospects. Collectively, these deposits and mineral occurrences extend over a 32-kilometre-long northeast-trending structural corridor known as the Valentine Gold Mine.

4.2 Land Tenure

The mineral land tenure system in Newfoundland and Labrador (NL) is administered by the Mineral Lands Division of the Department of Energy and Mines. Mineral licenses grant holders the exclusive right to explore for minerals on the lands described within each license. Licenses are registered through the Mineral Claims Recorder's Office and consist of 500 m x 500 m claim blocks arranged on a standardized provincial grid.

Mineral rights are acquired through online map staking using the Province's MIRIAD system. Each claim requires a fee of US\$48.51 (C\$65), consisting of a US\$11.19 (C\$15) staking fee and a \$US37.31 (C\$50) refundable security deposit. Licenses are issued for a five-year term and may be held indefinitely if annual assessment work is completed and renewal fees are paid. Minimum expenditures per claim escalate from Years 1 to 5 and then in five-year increments until year 30, after which a standard expenditure per claim block is maintained for the remaining duration of the license. Renewal fees are due in Years 5, 10, 15, and annually thereafter. Assessment reports must be submitted within 60 days of each anniversary date.

In Newfoundland and Labrador, mineral licences and mining leases are separate and mutually exclusive tenure types under the Mineral Act. Mineral licences grant the right to explore, while mining leases grant the right to mine and are issued only after regulatory approvals. Mineral licences are not converted into mining leases; rather, specific licence areas are replaced by mining leases upon approval, and the original licences are cancelled for those areas. At Valentine, mining leases cover the developed mine footprint, while the broader district-scale exploration ground remains held under mineral licences. Excess assessment work may be carried forward as credit for up to nine years for expenditures made in Years 1 through 20 and up to five years for expenditures in Years 21 onward. No excess expenditures may be carried forward past year 20. Mining leases require annual rental of US\$89.55/ha (C\$120/ha) and confer exclusive rights to develop and extract unalienated minerals, subject to environmental approval. A summary of the Valentine Mining Leases is presented in Table 4-1.

Table 4-1: Valentine Summary of Mining Leases

Lease/Claim Number	Lease Type	Size (ha)	Lease Holder	Expiry
246 (037735M)	Mining	115.845	Marathon Gold Corp.	June 12, 2042
247 (037732M)	Mining	89.740	Marathon Gold Corp.	June 12, 2042



Lease/Claim Number	Lease Type	Size (ha)	Lease Holder	Expiry
171	Surface	2129.55	Marathon Gold Corp.	June 12, 2042
250 (10943M)	Mining	24.520	Marathon Gold Corp.	April 9, 2044
251 (10899M)	Mining	116.885	Marathon Gold Corp.	April 9, 2044
177	Surface	451.858	Marathon Gold Corp.	April 9, 2044

Mineral licenses do not include surface rights. Surface leases are issued following release from the environmental assessment process and provide tenure for mine infrastructure and operations. Surface lease issuance requires consultation between the Minister of Natural Resources and the Minister responsible for the Lands Act.

The Valentine Gold Mine Property consists of 30 contiguous mineral licenses covering 313 km² (31,300 ha), all held 100% by Equinox and in good standing as of the Effective Date. Equinox holds a 2,129 ha surface lease and recently received an additional 452 ha of surface rights required for the Berry Pit and associated infrastructure. No known competing rights are expected to impede this expansion.

Table 4-2: Valentine Mineral License Summary

License	Issue Date	Work Report Year	Renewal Date	Number of Claims	Area (ha)	Expenditures Required (C\$)	Expenditure Due Date
018687M	3/29/2011	15	3/30/2026	6	150	\$6,644.36	3/29/2030
019444M	10/17/2011	14	10/19/2026	6	150	\$1,745.78	10/17/2030
036157M	6/22/2023	3	6/22/2028	4	100	\$1,335.44	6/22/2028
036158M	6/22/2023	3	6/22/2028	6	150	\$600.16	6/22/2029
036432M	8/31/2023	3	8/31/2028	4	100	\$1,143.73	8/31/2027
036435M	8/31/2023	3	8/31/2028	7	175	\$2,182.65	8/31/2027
036892M	12/17/2023	2	12/17/2028	27	675	\$4,059.64	12/17/2026
037044M	1/18/2024	2	1/18/2029	20	500	\$3,899.00	1/18/2028
037307M	2/15/2024	2	2/15/2029	1	25	\$150.36	2/15/2027
037731M	4/27/2004	22	4/27/2026	77	1925	\$38,679.76	4/27/2026
037732M	4/27/2004	22	4/27/2026	90	2250	\$180,000.00	4/27/2026
037734M	12/29/2011	15	12/29/2026	100	2500	\$200,000.00	12/29/2032
037735M	4/27/2004	22	4/27/2026	72	1800	\$50,775.16	4/27/2030
037736M	4/27/2004	22	4/27/2026	85	2125	\$164,429.83	4/27/2029
037737M	4/27/2004	22	4/27/2026	99	2475	\$57,995.24	4/27/2027
037738M	10/17/2011	14	10/19/2026	97	2425	\$108,637.44	10/17/2029
037739M	9/6/2007	19	9/6/2027	47	1175	\$94,000.00	9/6/2028
037742M	11/26/2009	16	11/26/2029	161	4025	\$322,000.00	11/26/2030
037743M	9/6/2007	19	9/6/2027	120	3000	\$240,000.00	9/6/2028
038031M	7/19/2024	2	7/19/2029	32	800	\$1,551.45	7/19/2029
038379M	10/9/2024	1	10/9/2029	6	150	\$1,000.00	10/9/2025



License	Issue Date	Work Report Year	Renewal Date	Number of Claims	Area (ha)	Expenditures Required (C\$)	Expenditure Due Date
038870M	3/13/2025	1	3/13/2030	15	375	\$3,000.00	3/13/2026
038874M	3/13/2025	1	3/13/2030	6	150	\$1,200.00	3/13/2026
038891M	3/13/2025	1	3/13/2030	34	850	\$6,800.00	3/13/2026
039088M	4/10/2025	1	4/10/2030	41	1025	\$8,200.00	4/10/2026
039091M	4/10/2025	1	4/10/2030	34	850	\$6,800.00	4/10/2026
039349M	6/26/2025	1	6/26/2030	21	525	\$4,200.00	6/26/2026
039355M	6/26/2025	1	6/26/2030	8	200	\$1,600.00	6/26/2026
039517M	8/21/2025	1	8/21/2030	15	375	\$3,000.00	8/21/2026
039836M	11/20/2025	1	11/20/2030	11	275	\$2,200.00	11/20/2026
Total			Total	1,252	31,300	\$1,517,830.00	

Source: Newfoundland-Labrador, Department of Energy and Mines, Mineral Lands Administration Portal, December 1, 2025

In Newfoundland, a “surface lease” for a mining project can only be obtained once the proposed project has been released from environmental assessment, which has occurred for the Project. The additional surface lease area required to encompass the Berry area is immediately adjacent to the existing Valentine Gold Mine surface lease, is now part of the overall plan, and has been incorporated into the existing mineral licenses held and maintained by Equinox.

Together, the mineral licenses, surface lease, and compliance with annual assessment requirements provide secure and continuous tenure for exploration and development across the Valentine Gold Mine. The land tenure is illustrated in Figure 4-2.

4.3 Royalties and Encumbrances

The Valentine Gold Mine (now 100% owned by Equinox following its merger with Calibre Mining Corp. [Calibre] and Calibre’s prior acquisition of Marathon Gold Corporation [Marathon Gold]) was previously subject to a 7.5% net profit interest (NPI) royalty covering the Leprechaun, Sprite and part of the Berry deposits, initially granted to the Reid Newfoundland Company Limited under early-20th-century railway development. On March 14, 2022, Marathon Gold cancelled that NPI by paying US\$373k (C\$500,000) in cash and issuing 1,341,607 common shares (valued at approximately C\$4.0 million) to Reid, plus an additional US\$2.239 million (C\$3 million) cash contingent on environmental approval.

Current royalty encumbrances include:

- A 2% net smelter return (NSR) royalty payable to Mr. Kevin Keats on gold recovered from mineral licence 016740M (for which no Mineral Resource estimate is available).
- A 3% NSR royalty payable to Franco-Nevada Corporation (FNV)
 - A 2% NSR royalty was sold by Marathon Gold in February 2019 to Franco-Nevada Corporation (FNV) covering the entire Valentine Gold Mine (precious and base metals). Marathon Gold retained an option to repurchase 0.5% of the NSR for US\$7 million until December 31, 2022.
 - Marathon Gold did purchase back the 0.5% NSR on January 25, 2023, from FNV, resulting in 1.5% being outstanding.



- On June 8, 2023, Marathon Gold sold an additional 1.5% NSR to FNV for US\$45 million, resulting in FNV holding an aggregate 3% NSR.

No other royalties, back-in rights, or material encumbrances are publicly disclosed beyond those presented.

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



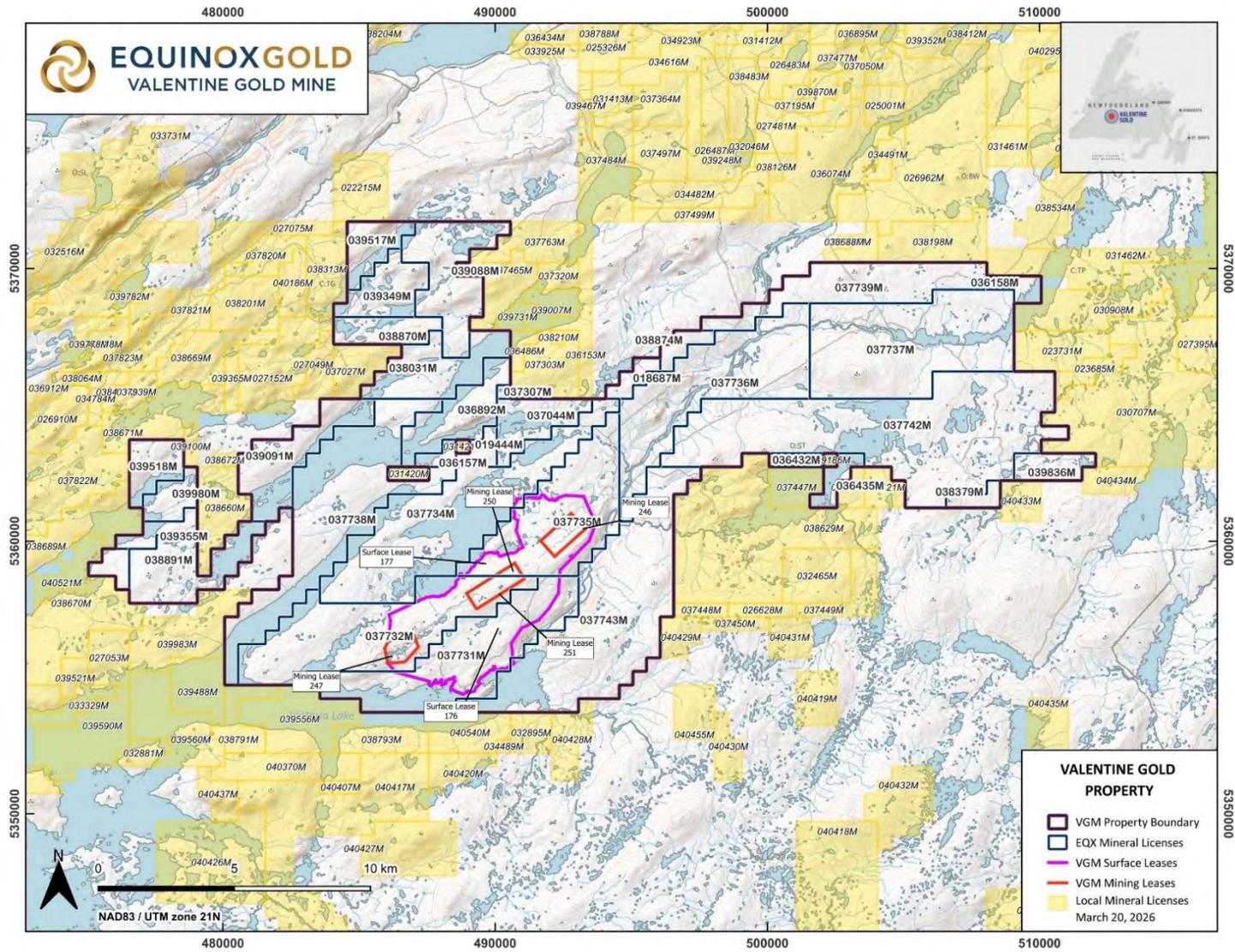
Figure 4-1: Location Map



Source: Equinox 2026.



Figure 4-2: Land Tenure Map



Source: Equinox 2026.



5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Valentine Gold Mine is accessible year-round via existing road infrastructure. A nominal 10 m wide, approximately 80 km long, maintained gravel access road connects the site to the Town of Millertown (Figure 4-1). The road does have several single-lane bridge crossings. From Millertown, the route continues via the Buchans Highway, which links directly to the Trans-Canada Highway, Newfoundland's primary east-to-west transportation corridor connecting all major population centres. This route also provides access to Equinox's regional office in Grand Falls–Windsor.

The total travel time from Grand Falls–Windsor to the Project site is approximately 4 hours by road. The nearest commercial airport is in Gander, which also serves as the primary hub for helicopter transport to the site; however, more flights are available from the Deer Lake Airport.

The Project achieved its first gold production in 2025; all primary access routes are now actively supporting construction, operations, and supply chain logistics.

5.2 Climate

Valentine is located within the temperate maritime climate zone of central Newfoundland, characterized by relatively mild summers, cold winters, and weather patterns strongly influenced by the North Atlantic Ocean. This climate produces a wide range of seasonal conditions that must be considered in mine planning, construction, and operations.

Historical records from the Buchans weather station, the closest long-term Environment Canada monitoring site, report an average annual precipitation of approximately 1,236 mm, of which a little more than one-quarter typically falls as snow. Snow accumulation can reach one metre or more, with persistent snow cover generally from late November through April. Freeze–thaw cycles are common during the shoulder seasons, influencing road maintenance requirements and water-management planning on site.

Seasonal temperatures are moderate by Canadian standards. Daily average temperatures range from -8.4°C to 16.3°C , with the lowest in February and the highest in July. Extreme daily maximum and minimum temperatures range between -33.5°C (February) and 33°C (July). These values are consistent with regional extremes in central Newfoundland and ensure appropriate sizing of mechanical systems, heat tracing, ventilation, and material-handling infrastructure.

Wind conditions in central Newfoundland are generally moderate year-round, with stronger gusts occurring during winter frontal systems. Fog and low cloud ceilings can occur during warmer months, particularly in the mornings, temporarily affecting aviation and helicopter access. Despite these variations, the regional climate enables year-round mining, construction, and haulage, provided that standard winter operating practices, such as snow removal, road sanding, and cold-weather equipment protocols, are adhered to.

5.3 Local Resources

Newfoundland and Labrador has a provincial population of approximately 520,000 residents, with more than half living on the Avalon Peninsula, including the provincial capital and largest



urban centre, St. John's. Central Newfoundland, where the Project is located, supports a well-established resource sector and provides a strong base of skilled labour, contractors, and support services.

The closest major regional service hub is Grand Falls–Windsor, located roughly four hours by road from the Project and functioning as the primary center for industrial suppliers, accommodations, equipment services, and workforce logistics. Several smaller communities situated between the Project site and Grand Falls–Windsor, including Millertown, Buchans, Buchans Junction, Badger, and Springdale, have long histories of mining and forestry and continue to provide essential labour, services, and contractor support to regional mining operations.

Mining is a mature and well-developed industry in Newfoundland and Labrador. The province hosts multiple ongoing and historic operations (iron ore, copper, zinc, nickel, industrial minerals), enabling a stable local workforce trained in mineral exploration, underground and open-pit mining, heavy equipment operation, trades, maintenance, and environmental management. Central Newfoundland communities host experienced mining contractors, drilling companies, earthworks contractors, fuel distributors, equipment repair shops, and camp services, all of which support the Project's operational needs.

Both the provincial government and local municipalities actively support programs designed to attract, train, diversify, and retain skilled mining personnel. Initiatives include partnerships with the College of the North Atlantic, workforce development agencies, and industry associations, ensuring a continuous supply of skilled tradespeople and technical workers for new and expanding mining projects.

Overall, the Project benefits from ready access to regional infrastructure, established mining communities, and a workforce with decades of industry experience, providing a solid foundation for operations and future growth at the Valentine Gold Mine.

5.4 Infrastructure

5.4.1 Site Infrastructure

5.4.1.1 Accommodation and Camp Facilities

The VGM now operates out of a 420-person permanent camp with additional construction camps totaling 742. The Phase 2 expansion project will require an additional 400 to 450 construction camp units.

5.4.1.2 Access Roads

The site is accessed via an 80 km upgraded gravel road from Millertown, designed for heavy-haul and construction traffic.

Internal gated access roads connect the camp to exploration sites, drilling areas, and construction zones.

Road upgrades include ditching, culvert installation, crushed rock surfacing, and the replacement of key structures, such as the Victoria River Bridge. Ongoing upgrades to the access road are planned by Equinox.



5.4.1.3 Power Supply and Utilities

Newfoundland and Labrador Hydro (NL Hydro) has designated its Star Lake hydroelectric facility, located approximately 20 km north of the Project, as the incoming grid power source.

Adequate raw-water supply is available for ongoing mining operations, subject to regulatory permitting.

5.4.1.4 Mine-Site Infrastructure

Major site installations include the processing plant, tailings management facility (TMF), waste rock storage areas, stockpiles, water management systems, workshops, and administrative buildings.

5.4.2 Powerline Infrastructure

The transmission line serving Valentine is designated TL271. TL271 is approximately 40 km long, extending from NL Hydro's Star Lake Terminal Station to the mine site. It is a 69 kV overhead wood-pole transmission system. The right-of-way (RoW) for the line is approximately 15 m to 25 m wide. The mine's current estimated peak power demand is approximately 19 MW. Grid power delivery commenced in late 2023 to support early works and operations.

5.4.3 Summary

The Project benefits from well-developed infrastructure supporting exploration, construction, and operational readiness. Camp facilities upgraded access roads, on-site utilities, and the 40 km TL271 grid powerline form the foundation for reliable and efficient operations. These infrastructure elements significantly reduce execution risk and provide a strong logistical framework for ongoing mining activities.

5.5 Physiography

Valentine is located within gently to moderately rolling upland terrain characteristic of central Newfoundland. The landscape is defined by a series of low hills and subdued ridgelines, with the Project situated at the southern end of Valentine Lake. The property contains numerous small ponds and wetlands typical of the region's glacially influenced physiography.

A prominent northeast-trending ridge extends across much of the property and forms a key topographic feature, locally dissected by shallow, ephemeral drainages. Elevations range from approximately 320 metres above sea level (masl) at Victoria Lake to about 480 masl along the higher ridgeline. The central plateau and the northwest portions of the ridge contain extensive areas of boggy and poorly drained ground, while other ridge segments support mixed spruce–fir forest interspersed with grassy clearings and glacial till surfaces.

Bedrock exposure is generally limited outside of natural erosional features, with most outcrops occurring along streambeds, stream banks, and intermittently along the ridge crest. Overburden thickness is typically shallow on ridge tops, enabling frequent exposure of bedrock in historical and recent exploration trenches. These conditions provide favourable access for geological mapping, trenching, and localized drilling across the property.



6.0 History

6.1 Prior Ownership

The Valentine Gold Mine was first recognized as a potential gold prospect by Abitibi Price Inc. (Abitibi) in 1983 before it was acquired by BP Canada Inc. (BP) in 1985. Noranda Inc. (Noranda) acquired the property from BP in 1992, prior to entering into a joint venture agreement with Mountain Lake Resources Inc. (Mountain Lake Resources) in 1998.

In 2002, Mountain Lake Resources earned a 50% interest in the property and retained an option to acquire a 100% interest by expending \$2.5 million on exploration within five years, and either paying \$1 million or issuing one million shares to Noranda. Noranda retained a 2% NSR royalty on base metal production and a 3% NSR royalty on precious metal production. A 7.5% NPI royalty was retained by Reid Newfoundland Company Inc. on Reid Lots 227 and 229.

In November 2003, Richmond Mines Inc. (Richmont) entered into an option agreement with Mountain Lake Resources, whereby Richmont had the option to acquire a 70% interest in the property by expending \$2.5 million in exploration by October 31, 2007. Richmont relinquished its role as operator in October 2007 to Mountain Lake Resources. In March 2008, Mountain Lake Resources acquired the remaining interest in the property from Noranda.

In February 2009, an agreement was reached between Richmont and Mountain Lake Resources in which Mountain Lake Resources had the option to acquire a 100% interest in the property. Subsequently, in December 2009, Mountain Lake Resources entered into an option and joint venture agreement with Marathon PGM Corporation (MAR), under which MAR was granted the option to earn a 50% interest in the property. MAR became the operator in 2010.

In November 2010, MAR was acquired by Stillwater Mining Company. The gold properties held by MAR, including the subject property, were amalgamated into a new company, Marathon Gold Corporation (Marathon Gold), which commenced trading in December 2010. In January 2011, Marathon Gold funded Mountain Lake Resources' commitments to Richmont under the February 2009 agreement. Marathon Gold later acquired a 100% interest in the property upon acquiring all outstanding shares in Mountain Lake Resources in July 2012.

In early 2024, Calibre Mining Corp. (Calibre) completed its acquisition of Marathon Gold, thereby assuming 100% ownership of the advanced-stage Valentine Gold Project in Newfoundland and Labrador. On June 17, 2025, Equinox acquired Calibre through a business combination, bringing Valentine into the Equinox portfolio alongside its broader Americas-focused operations. These sequential transactions consolidated ownership of the Project under a larger, multi-asset gold producer, providing enhanced financial capacity and operational depth to support construction, commissioning, and long-term development of the Project.

The ownership history of the Project is summarized in Table 6-1.



Table 6-1: Summary of Ownership History

Date	Operator
1960s	ASARCO Inc.
1970s to 1983	Hudson's Bay Oil and Gas Company
1983-1985	Abitibi Price Inc.
1985-1992	BP Canada Inc.
1992-1998	Noranda Inc.
1998-2003	Mountain Lake Resources Inc.
2003-2007	Richmont Mines Inc.
2007-2009	Mountain Lake Resources Inc.
2009-2010	Marathon PGM Corporation (MAR)
2010-2024	Marathon Gold Corporation
2024-2025	Calibre Mining Corp.
2025-Present	Equinox Gold Corp.

6.2 Exploration and Development History

The property has historically been explored by several companies since the 1960s. The region was originally explored for base metals exploration by ASARCO Inc. and Hudson's Bay Oil and Gas Company; this exploration was consistent with historically significant base metal discoveries in the Dunnage Zone (e.g., Buchan's and Duck Pond-Boundary Cu-Zn±Au past-producing deposits).

Between 1960 and 2010, the various historical operators completed a variety of soil sampling, surface stripping and channel sampling, ground and airborne geophysical surveys, and geological mapping (Murahwi 2017), which are summarized in Sections 6.2.1 to 6.2.5. In addition, the NL Department of Natural Resources, Mines and Energy Branches conducted 1:50,000-scale geological mapping from 1970 to 1983.

Drilling for gold mineralization was first conducted in the late 1980s by BP (see Table 6-2). This ultimately led to Richmont's initial Mineral Resource Estimate for the Leprechaun deposit in 2004 (Murahwi 2017).

Table 6-2: Summary of Historical Drill Holes Completed by Other Companies

Operator	Date	No. of Drill Collars	Metres
BP Canada Inc.	1986-1991	47	5,974
Mountain Lake	1998-1999	29	3,861
	2002	9	1,041
Richmont	2003-2004	24	6,965
	2005	8	1,746
	2007	8	2,280
Mountain Lake	2009	11	1,908
Totals		136	23,775



Since 2010, extensive exploration programs have been conducted across the Valentine property, including diamond drilling, trenching, channel sampling, mapping, prospecting, and aerial and ground-based geophysical surveys (including magnetics, VLF, induced polarization [IP], and seismic). These programs have been approached with the primary goal of discovering and increasing the gold resources at the Valentine Gold Project.

Mineral Resources have been estimated for five gold deposits: Leprechaun, Sprite, Berry, Marathon, and Victory. Other prospects have been identified at Frank, Rainbow, Steve, Scott, Triangle, Narrows, Victory SW, and Victory NE mineral occurrences (Figure 6-7). The Frank Zone is the current focus of advanced exploration programs and exhibits mineralization of a style and scale like that of the Leprechaun deposit. While no resource estimate has been completed at Frank, results are encouraging, and the Site offers a potential opportunity to extend the mine life. Gold mineralization has also been discovered in the Minotaur, South Quinn, and Victoria Bridge showings, as further discussed in Section 6.2.6.3. The Marathon, Berry, and Leprechaun deposits are currently being mined and milled.

Since the 2022 technical report on the Project (Marathon Gold 2022), minimal exploration has been conducted on the three active pits. The focus has remained on expanding the understanding of the overall property and discovering new deposits. The most successful exploration target to date has been the Frank Zone, which spans over 1.5 km and is located immediately southwest of the Leprechaun Pit. Other drilling proximal to the three operating pits has also returned encouraging visual results, with high-potential zones such as Triangle, Marathon South, Sprite, and Victory all being priority targets for further exploration and assessment.

In addition to recent drilling programs, property-wide aerial magnetics, aerial VLF, and till sampling were all completed during the 2024 exploration program. These surveys have been instrumental in defining additional targets for further exploration in areas offset from the VLSZ. The Minotaur and South Quinn showings, along with numerous unnamed prospective areas, have been highlighted as high-priority targets for future exploration programs. Minotaur and South Quinn represent the first instances of mineralization discovered on the Valentine property that are not directly associated with the VLSZ, demonstrating the district-scale potential of the property.

Results from Minotaur are still pending release, but early mapping and prospecting of the area on the far northwest of the Valentine property indicate a mix of felsic and mafic volcanics, mudstones, gabbros, and various other lithologies with significant deformation and quartz-sulphide veining across an approximately 2 km strike length.

A summary of ground exploration work completed by Marathon Gold and its successor, Calibre, since 2010 is described in Section 6.2.6. This information is summarized from Murahwi (2017), Dunsworth et al. (2017), Capps and Dunsworth (2019), Staples et al. (2021), and additional programs completed between 2020 and June 2025. The collective ground exploration work completed by Marathon Gold has formed the basis for understanding the geology at the property, and these data were considered during the construction of the 3D geological model and Mineral Resource estimations presented in this report; however, none of the groundwork assay data was used in the actual estimation processes. Rather, the assay file used in this report and the Mineral Resource estimations are restricted to the drill core analytical dataset; all drilling information is summarized in Section 10.0. The metallurgical test work is described in Section 13.0.



6.2.1 ASARCO Inc. and Hudson's Bay Oil and Gas (1960 to 1983)

Between 1960 and 1983, ASARCO and Hudson's Bay targeted base metal mineralization at the Valentine Gold Mine. Reconnaissance geological mapping and soil and stream sediment sampling completed by ASARCO resulted in the identification of a 1 m wide quartz-pyrite-chalcopyrite vein, which was tested with four short diamond drill holes (lengths not known), a 1 km² soil sampling, and a very low frequency electromagnetic (VLF-EM) survey. ASARCO determined that the vein pinched out 30 m below the surface. The vein is in the brook draining from Frozen Ear Pond, although exact coordinates are unknown. In 1966, an airborne EM magnetic survey was flown by Canadian Aero Mineral Surveys Ltd., but the results were not publicly reported.

Hudson's Bay commissioned an Aerodat airborne EM magnetic survey in 1980; however, the area that was surveyed and the survey results are not known. Follow-up work did not produce significant results.

6.2.2 Abitibi Price Inc. (1983 to 1985)

Abitibi completed a 400 m x 25 m spaced soil sampling survey targeting gold mineralization over the Valentine Lake Intrusion, southeast of Valentine Lake. The survey identified gold anomalies; however, Abitibi did not follow up on them. The results and locations of the Abitibi surveys are unknown.

6.2.3 BP Canada Inc. (1985 to 1992)

BP advanced the gold-in-soil anomalies identified by Abitibi through grab rock sampling and geological mapping over a 20 km strike length. A 13 km-long zone was prioritized and subjected to line cutting at 100 m spacing to allow further geological mapping, soil sampling, and VLF-EM and magnetic geophysical surveys.

BP identified gold prospects at the Leprechaun and Victory deposits (Victory was formerly known as Valentine East). A diamond drill hole program that drilled 47 drill holes totalling 5,974 m was completed at Leprechaun. Significant intercepts from this program included 23.1 m at 4.6 g/t gold and 9.6 m at 0.1 g/t gold (estimated true widths). Overall, the drilling identified gold mineralization over a strike length of 3 km. A small-scale induced polarization survey was conducted by BP at Leprechaun; however, the results and survey locations are unknown.

6.2.4 Noranda Inc. (1992 to 1998)

Noranda's exploration programs between 1992 and 1998 included a soil and till sampling program over the Quinn Lake area; line cutting, geological mapping, an airborne EM survey and resampling of historical drill core in the Long Lake area, as well as compilation of historical grab sampling and drill core data. The soil and till sampling programs defined a large area of gold and base metal anomalies proximal to Quinn Lake.

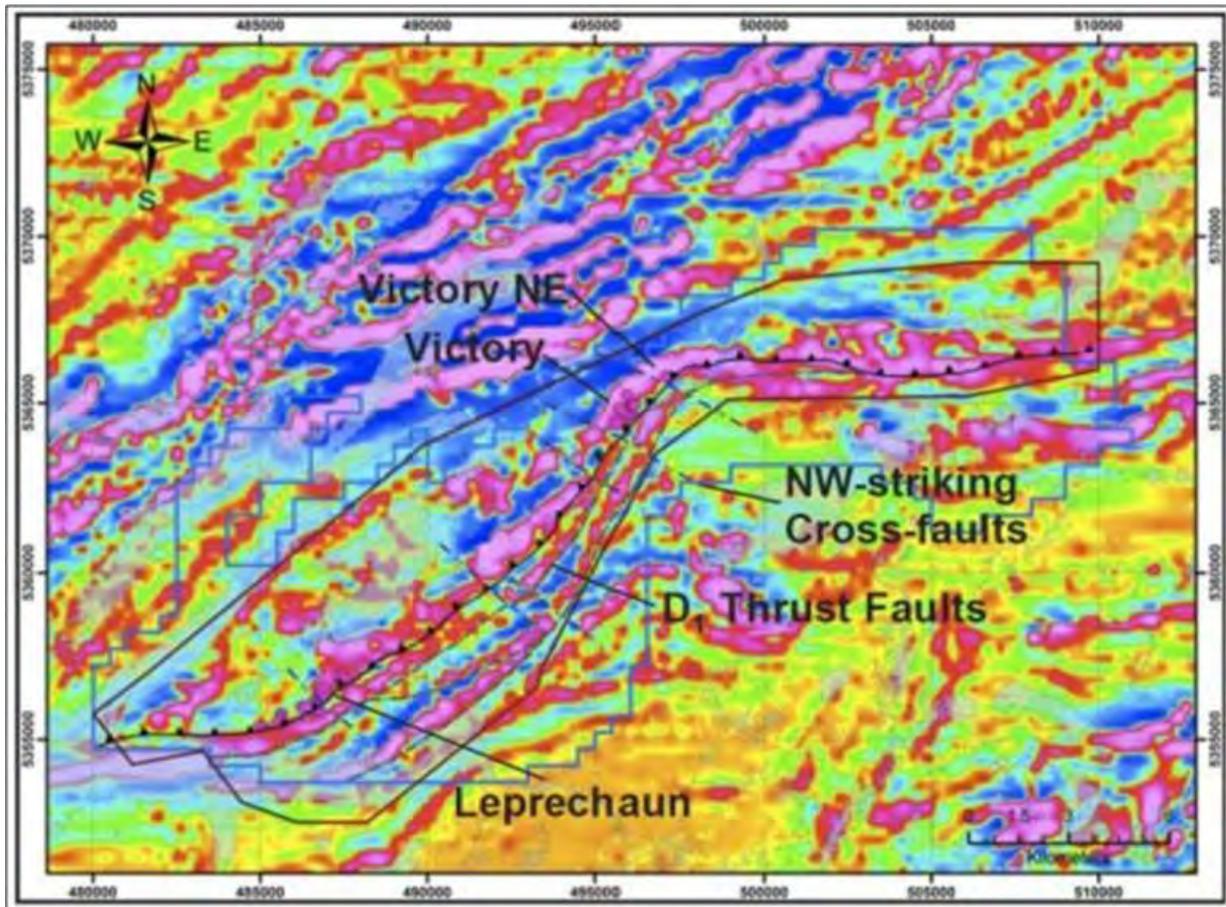
6.2.5 Mountain Lake Resources Inc. and Richmond (1998 to 2007)

Mountain Lake Resources and Richmond conducted several drill programs between 1998 and 2007, totalling 78 diamond drill holes for 15,676.5 m. The drilling was focused on the Leprechaun and Victory zones, as well as exploratory holes elsewhere along the 32 km long mineralized trend, including the Sprite prospect and along-strike extensions of the Leprechaun and Valentine Lake prospects. In December 2004, the drilling results were used to prepare an initial mineral resource estimate for Leprechaun.



Mountain Lake Resources conducted a helicopter-borne magnetic, radiometric, and VLF-EM survey over the entire project area in 2007. Interpretation of the magnetic data (Figure 6-1) has identified the large-scale structural features of the property, including the regional-scale Valentine Lake Shear Zone and late northwest-striking normal faults.

Figure 6-1: First Vertical Derivative Aeromagnetic Data for the Valentine Gold Mine Property



Source: SRK 2014.

6.2.6 2010 to June 2025

6.2.6.1 Exploration Drilling

Since 2010, Marathon and Calibre executed approximately 543,196 m of diamond drilling as part of their exploration programs.

In 2012, drilling activities continued within the Leprechaun Deposit, working to build out the previously defined Mineral Resource. Concurrent prospecting and trenching identified additional gold mineralization southwest of Leprechaun, subsequently designated as the Frank Zone, where 55 drill holes totaling 8,198.8 m were completed during the same year. The initial drilling program at Leprechaun was successful in defining additional mineralization along strike and to depths of over 300 m. This drill program at Leprechaun also served to build confidence in the



interpreted vein model of shallow, southwest-dipping extensional veins that host the bulk (+95%) of the gold in the deposit.

Further prospecting and trenching delineated additional mineralized trends northeast of Leprechaun, leading to the identification of the Sprite and Victory areas. Between 2011 and 2014, drilling campaigns in these zones comprised 76 holes totaling 10,023.2 m at Sprite and 36 holes totaling 4,459.4 m at Victory. Both Sprite and Victory have established resources but are not currently in the mine plan due to the small-scale nature of the deposits and the distance from Victory to the mill. While smaller-scale programs have been conducted over the past decade to expand mineralization in these areas, further drilling is required to fully define their potential and assess whether they can be added to the mine plan in the future.

The Marathon Deposit was initially discovered through surface prospecting and trenching, with the first drill hole collared in late 2014 on the discovery trench. Subsequent step-out drilling in 2014 and 2015 established the deposit's footprint, leading to a large drilling campaign in 2017. Between 2014 and 2019, a total of 482 diamond drill holes totaling 150,970.91 m were completed within the Marathon Deposit. Drilling at Marathon determined that the nature of the deposit differs from that of the Leprechaun or Berry deposits in several ways. First, the main mineralized corridor exists at an approximate angle of 20 degrees to the VLSZ, with the main zone being up to 250 m northwest of the contact on the northeast end of the deposit. Second, whereas Leprechaun and Berry have large mafic dykes constraining the mineralized corridor, drilling at Marathon identified a swarm of smaller (50 cm to 5 m thick) mafic dykes in a repeating sequence, roughly parallel to the VLSZ. This provides repeated competency contrasts between the dyke and granitoid boundaries, along which potential fluid pathways exist. As a result, the mineralized domain at Marathon is the largest and most diffuse of the deposits to date. In addition, drilling in the Marathon deposit was the first example of the utilisation of steep, northwest-oriented drill holes, which proved successful in defining the vertical continuity of the shallow, southwest-dipping extensional veins. With the success of this orientation in Marathon, steep northwest-oriented holes were also drilled in Leprechaun and Berry to test these stacked veins.

The Berry Deposit originated from a 2015 step-out program targeting Sprite extensions, which included seven initial drill holes on the far northwest edge of the deposit. These holes intersected minor mineralization with no follow-up conducted until late 2019. Most of the drilling at Berry occurred during 2020 and 2021, comprising 374 holes totaling 89,961.3 m. Berry was incorporated into the mine plan in 2025 as the most recent addition to the Project's resource base. Drilling at Berry defined mineralization over the longest strike-length of any of the three deposits, with a current pit length of approximately 1.8 km. Drilling at Berry defined a main zone of mineralization proximal to the VLSZ, bounded to the northwest by three large mafic dykes, which were offset from the VLSZ by approximately 20 degrees to the west. Drilling in Berry defined three ore shoots, with breaks in mineralization aligning with the intersections of the mafic dykes with the VLSZ.

In 2023, exploration resumed at the Frank Zone, located southwest of the Leprechaun Deposit. The Frank Zone is characterized by extensive, laterally continuous quartz vein systems exposed at the surface. Historical work at Frank included trenching and diamond drilling conducted between 2011 and 2012, totalling 8,306.8m over 67 holes. Exploration activities were subsequently deprioritized following positive initial drill results at Leprechaun and later by the discovery of the Marathon and Berry Deposits. No resource has been established at the Frank Zone to date, and it is not included in the current mine plan. The 2023 program marked the first comprehensive drilling campaign in the area since 2012. Between 2023 and 2025, Marathon Gold and Calibre Mining completed 167 drill holes totaling 50,770 m at the Frank Zone, with the



objective of confirming the potential to develop a mineral resource that could be added to the mine plan in the future. Highlights of the drilling are provided in Table 6-3.



Table 6-3: Summary of Best Gold Assay Highlights of Drilling Completed by Marathon Gold Corp at the Frank Zone

2011			2012			2024		
Drill Hole	Core Interval (m)	Gold Assay (g/t)	Drill Hole	Core Interval (m)	Gold Assay (g/t)	Drill Hole	Core Interval (m)	Gold Assay (g/t)
VL-11-366	3	5.44	VL-12-426	5	1.44	FZ-24-040	88	2.26
VL-11-374	1	2.09	VL-12-428	1	19.1	FZ-24-046	106	2.12
VL-11-376	1	13.3	VL-12-455	10	3.00	FZ-24-048	192	2.43
			VL-12-475	1	1.18	FZ-24-050	63	1.00
			VL-12-488	6	4.58	FZ-24-062	53	3.08
			VL-12-489	4	2.29	FZ-24-066	40	1.94
			VL-12-500	3	10.87			



6.2.6.2 Geological Mapping (2010 to June 2025)

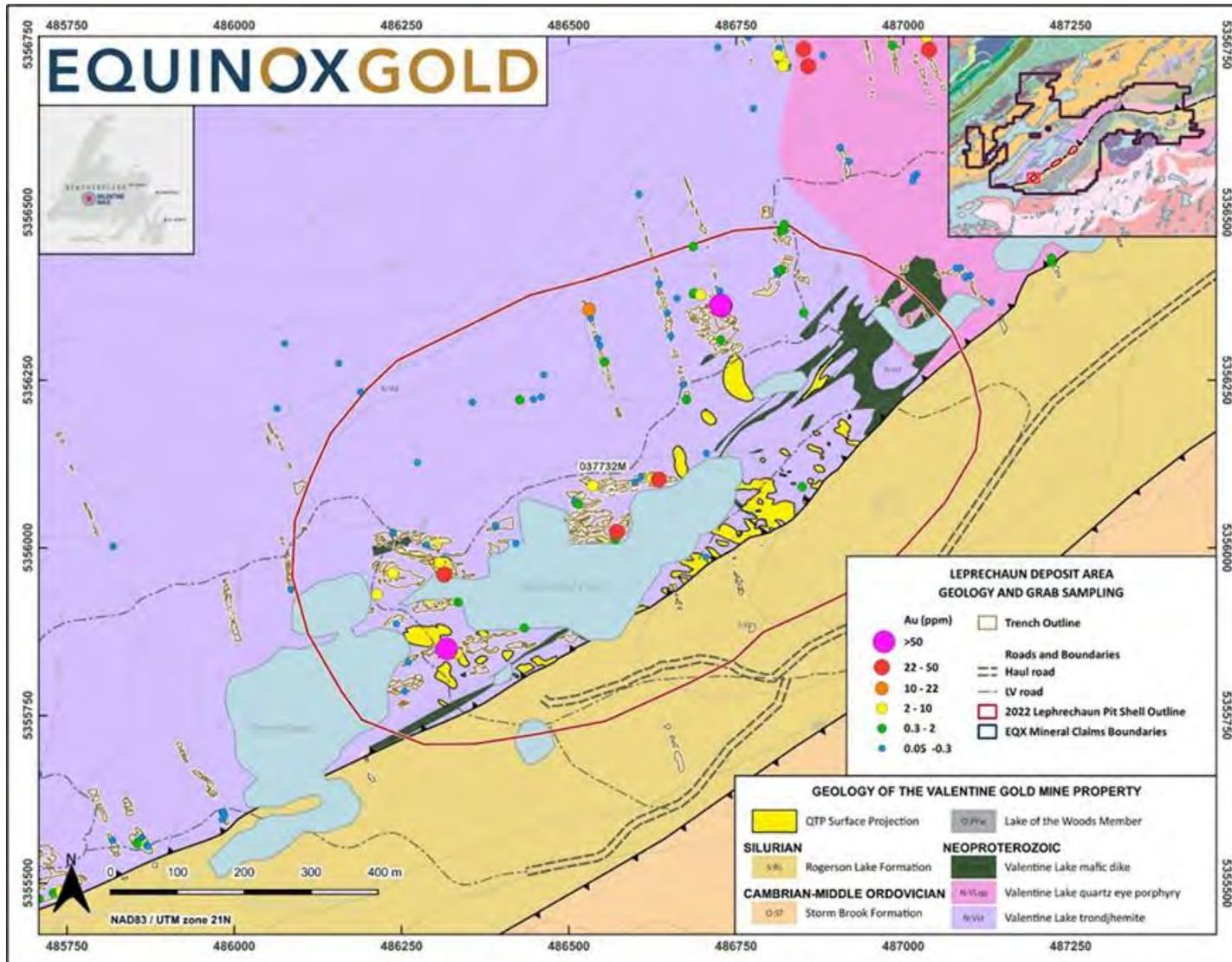
Detailed and regional geological mapping has routinely been conducted in areas of exposed outcrop and across excavated trenches. Selected rock exposures were channel- and/or grab-sampled for lithogeochemistry, petrography, and thin-section study. Thin sections and lithogeochemical samples were prepared and analyzed at Memorial University of Newfoundland. Results of the detailed mapping, lithogeochemistry, and petrographic studies were used to prepare 1:5000 scale detailed geological maps for each deposit area (Figure 6-2 to Figure 6-5).

Several structural mapping studies have been conducted on the property, with the most reliable being a 2014 investigation conducted by SRK Consulting (Hrabi 2014) and a more recent 2020–2021 literature review, field mapping, televiwer data collection and analysis and lineament and structural analysis conducted by Terrane Geosciences Inc. (Kruse 2020) focusing on the Leprechaun, Berry, and Marathon deposits. The assessment included a review of previous structural literature, lineament analysis, and field-based structural mapping and analysis. These studies confirmed that the Valentine deposits are hosted within the hanging wall of the VLSZ, within the VLIC, are related to sinistral thrusting of the VLIC, and mineralization is dominantly hosted within southwest-dipping, extensional QTP veins. An additional visit by David Rhys in the summer of 2024 further supported this interpretation while suggesting potential for additional structural complexity, which may aid in targeting in the future. At both the property-wide and deposit scales, mineralization appears to be associated with dilation zones caused by flexures in the VLSZ, thereby increasing porosity for fluid deposition. Mapping across the NE-SW-oriented portion of the VLSZ suggests structural characteristics similar to those in the main deposit areas, supporting the prospectivity of the Frank Zone. Terrane (2021) established a revised kinematic model for the property and identified five phases of deformation. A penetrative ductile fabric associated with the initiation of the Valentine Lake Shear Zone and characterized by a strong S_1 foliation and L_1 stretching lineation is observed in both the Rogerson Lake Conglomerate and in the Valentine Lake Intrusive Complex, with a southwest strike and steep dip to the northwest, paralleling the larger structure. Gold mineralization is associated with veining within the VLIC during a D_3 phase of renewed crustal shortening following a period of regional D_2 relaxation. Overprinting fabrics include a late D_4 crenulation fabric and a D_5 brittle fault set (Kruse 2020). These observations are consistent with regional geotectonic and geochronological models being developed by Honsberger et al. (2019) and others within the Dunnage Zone of Central Newfoundland.

The 2020 field-based structural study (Kruse 2020) and a follow-up program of optical televiwer analysis of oriented drill core (Kruse and Bartsch 2021) identified up to three distinct mineralized QTP-Au vein sets at the Leprechaun and Marathon gold deposits and up to four QTP-Au vein sets at the Berry deposit. In both studies, QTP-Au veins developed within brittle extensional fractures dipping at a low angle to the SW (Set 1 veins) were identified as the dominant mineralization style at the property. The Set 1 veins represent the principal structural control on gold mineralization in the mineral resource models for the Leprechaun, Berry and Marathon deposits, consistent with previous interpretation. Recommendations for further refinement of vein set attitudes include additional televiwer measurements and manual modelling of mafic dykes within the deposit-scale geological models to highlight their importance in the localization of gold mineralization.



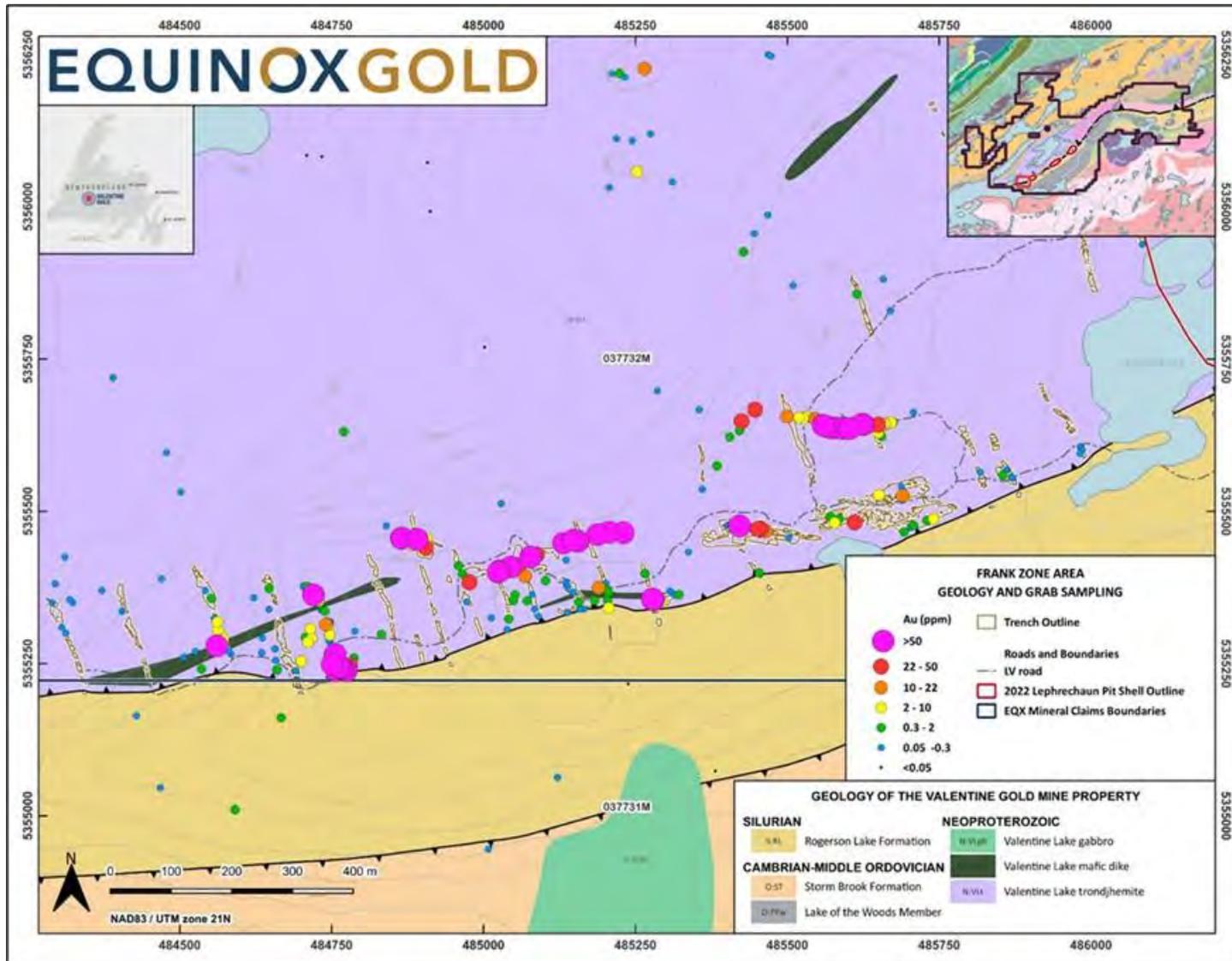
Figure 6-2: Geological Map of the Leprechaun Area



Source: Equinox 2025.



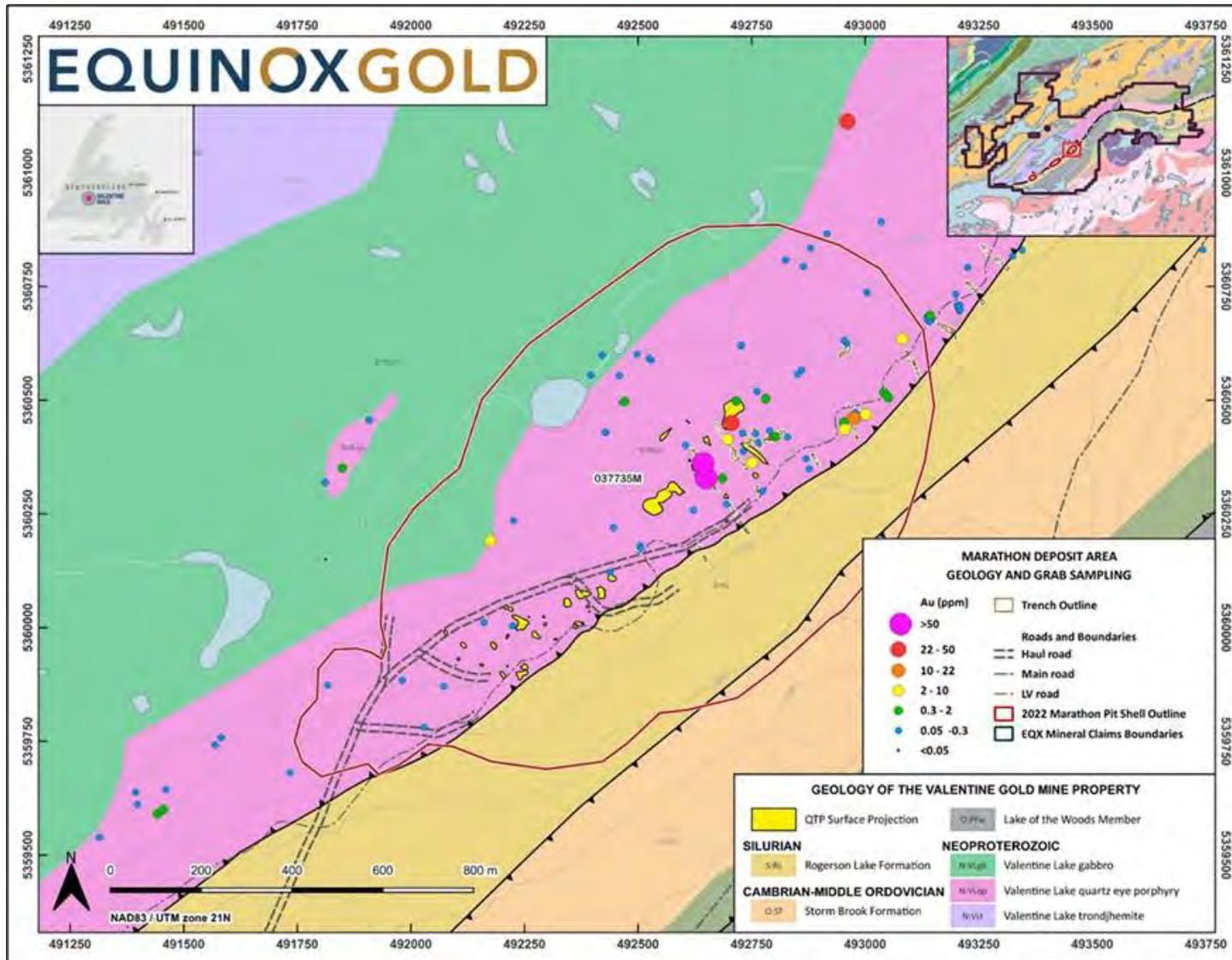
Figure 6-3: Geological Map of the Frank Zone



Source: Equinox 2025.



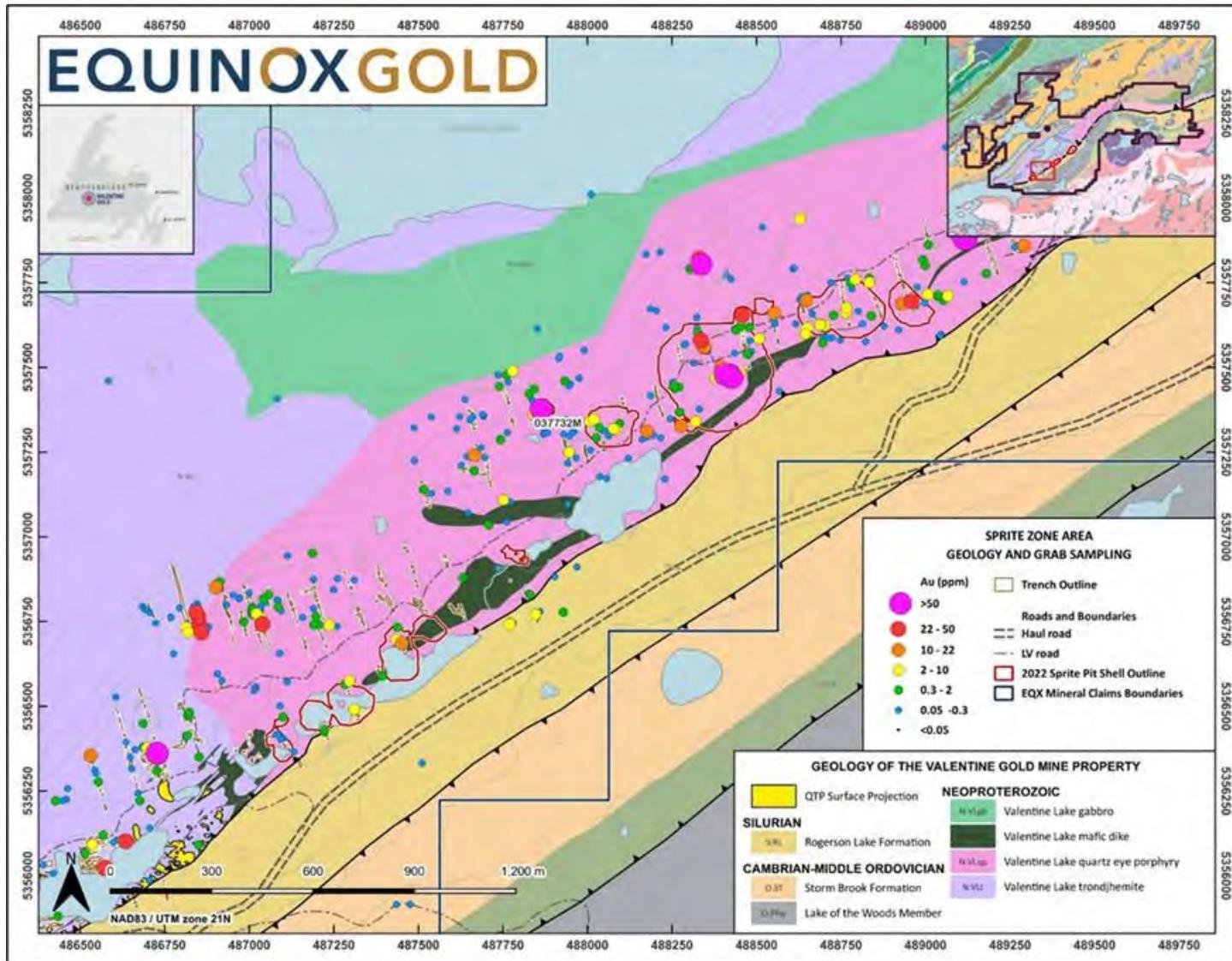
Figure 6-4: Geological Map of the Marathon Area



Source: Equinox 2025.



Figure 6-5: Geological Map of the Sprite Zone



Source: Equinox 2025.



6.2.6.3 Grab Rock Sampling (2010 to June 2025)

Since 2010, a total of 2,885 rock samples have been collected throughout the property. Grab samples were collected as rock chip samples from outcrop, subcrop, and float, with a target sample size of 0.5 kg to 2 kg. The grab samples were generally selected as representative, but some bias may be introduced, as they could represent a microcosm of a given sample location. Samples were submitted to Eastern Analytical Ltd. (Eastern Analytical) in Springdale, NL, for preparation and analysis by fire assay and inductively coupled plasma (ICP), as further discussed in Section 11.0.

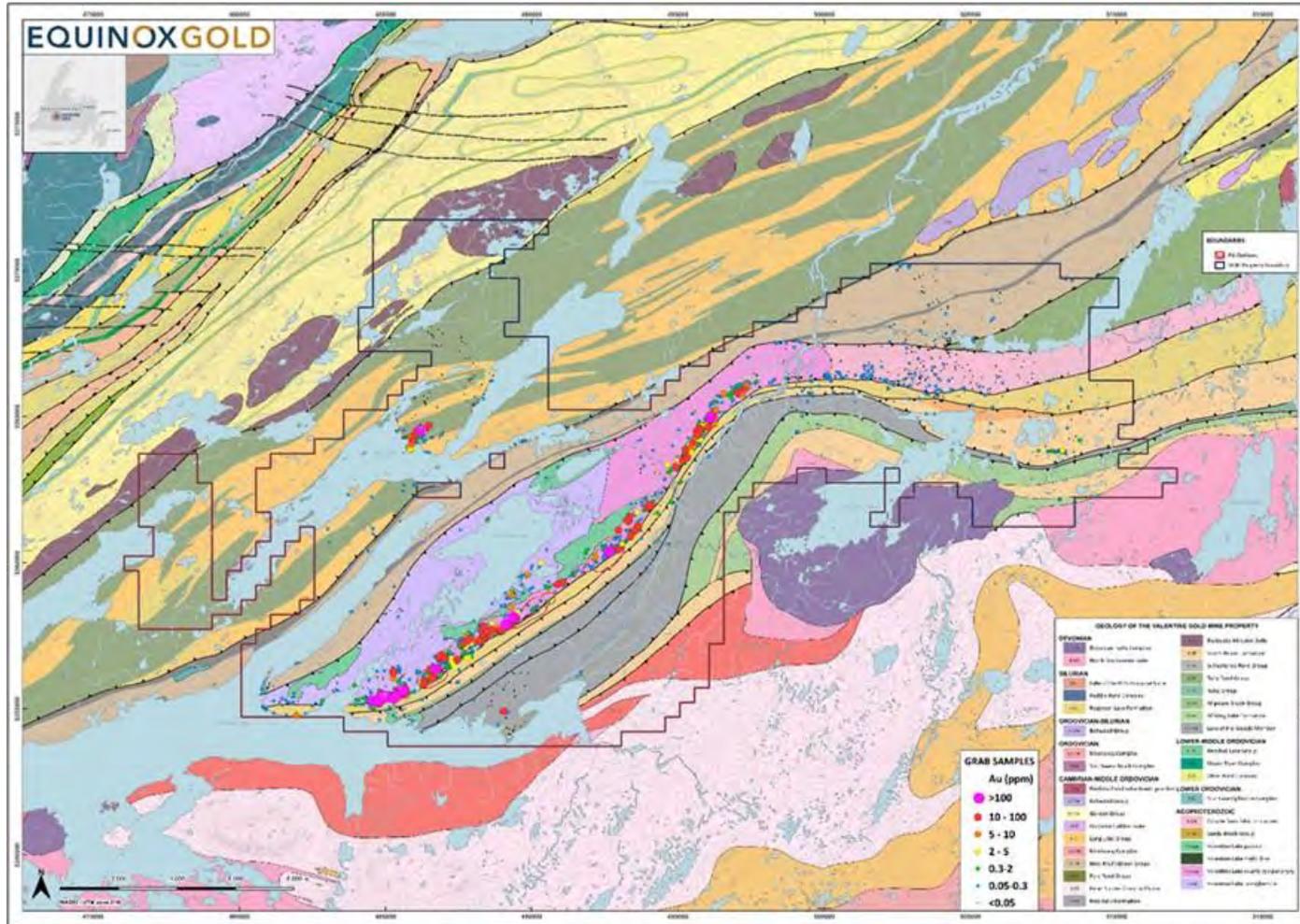
Rock chip sample analytical results have not been used as part of the assay database used in the mineral resource estimations presented in this report. However, grab samples are a useful exploration tool and, in conjunction with geological mapping, have assisted in prioritizing targets for follow-up exploration.

During the 2022 exploration program, a prospecting program was undertaken in the previously unexplored Eastern Arm of the property, which runs from the Victory deposit in the west to the property boundary in the east. This program included the collection of 60 soil and 60 till samples at 1 km line spacing and 200 m sample spacing, as well as a total of 225 grab rock samples (Figure 6-6). These grab samples uncovered quartz-tourmaline (QT) and QTP veining in both outcrop and float, indicating a new high-potential area for further exploration. Granitoid rocks, which appear similar to the Crippleback Granite, were discovered throughout the area, where past regional mapping had indicated mafic volcanics. This granitoid discovery further increases the potential for orogenic gold mineralization as it provides a competency contrast with the Rogerson Lake conglomerate to the south.

In 2023, 2024, and 2025, grab sampling programs concentrated on a range of areas outside of the main VLSZ trend. This included the Minotaur, Western Peninsula, South Quinn, Eastern Arm, and other unnamed prospects. These programs have identified mineralized veining in numerous areas, with significant follow-up required across the property.



Figure 6-6: Grab Sample Results from Valentine Sampling Program from 2010 to 2025 by Marathon Gold and Calibre Mining



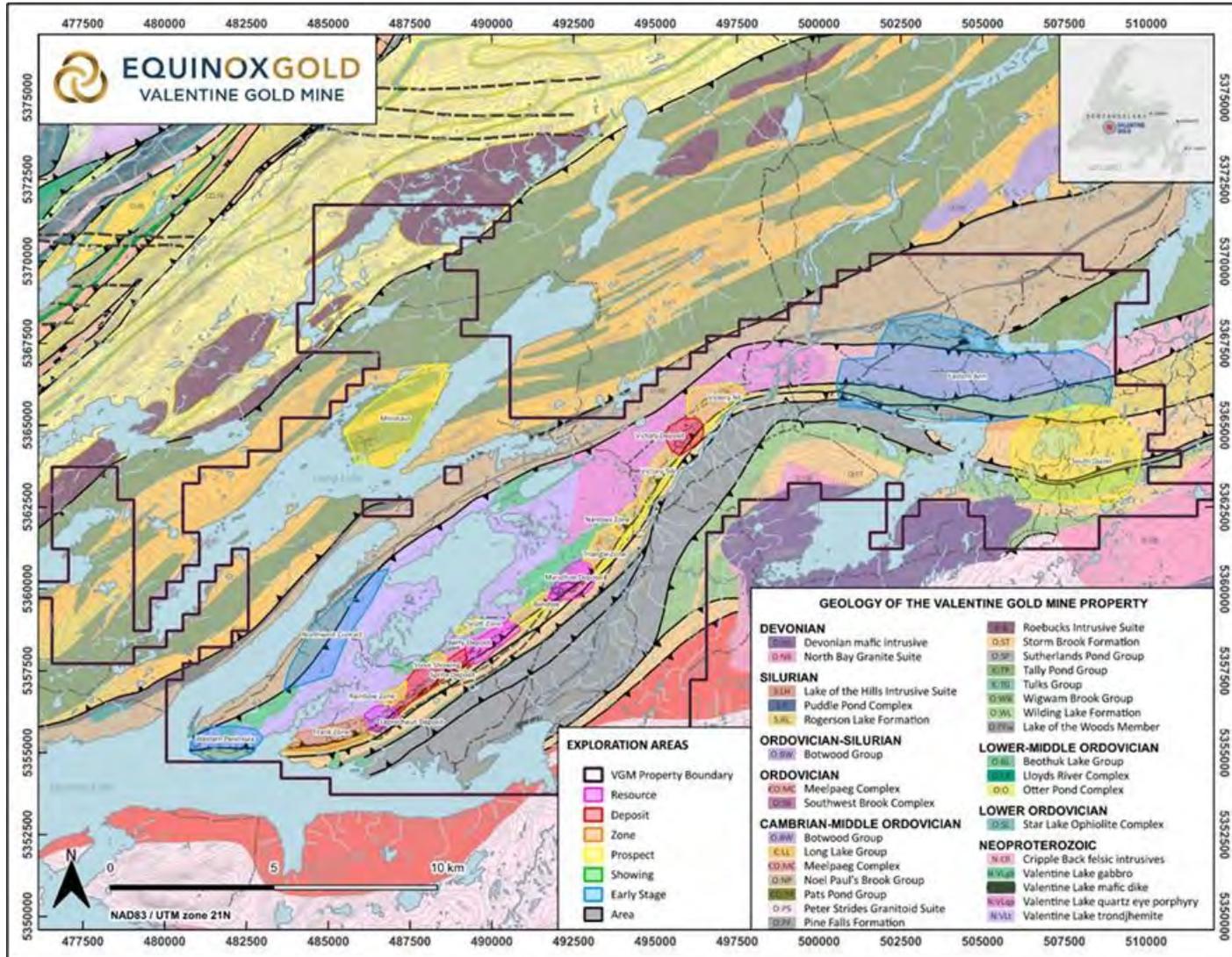
Source: Equinox 2025.



The Western Peninsula (Figure 6-7) is another area of interest on the property, immediately west of the Frank Zone. Work in the area commenced in 2022 and has been sporadic since, with a soil sampling program collecting 148 samples across the target area, a total of 66 grab samples and 15 till samples collected in 2023 and 2024, and 5 diamond drill holes for a total of 814 m drilled in 2025. Sporadic QT and QTP veining have been discovered in outcrop in numerous locations and grab samples have returned up to 5 g/t Au in float. Drill results to date have not returned any significant intervals, but have encountered the VLSZ, which appears to be significantly shallower at the Western Peninsula than in other areas of the project. This may allow for differing geometries of mineralization. Additional follow-up will be planned for future exploration programs. Lithologies appear consistent with the regionally mapped units, with granitoids to the north and conglomerate to the south of the mapped contact.



Figure 6-7: Location of Prospect Areas and Other Deposits



Source: Equinox 2026.



6.2.6.4 Till Indicator Mineralogy (2022 to June 2025)

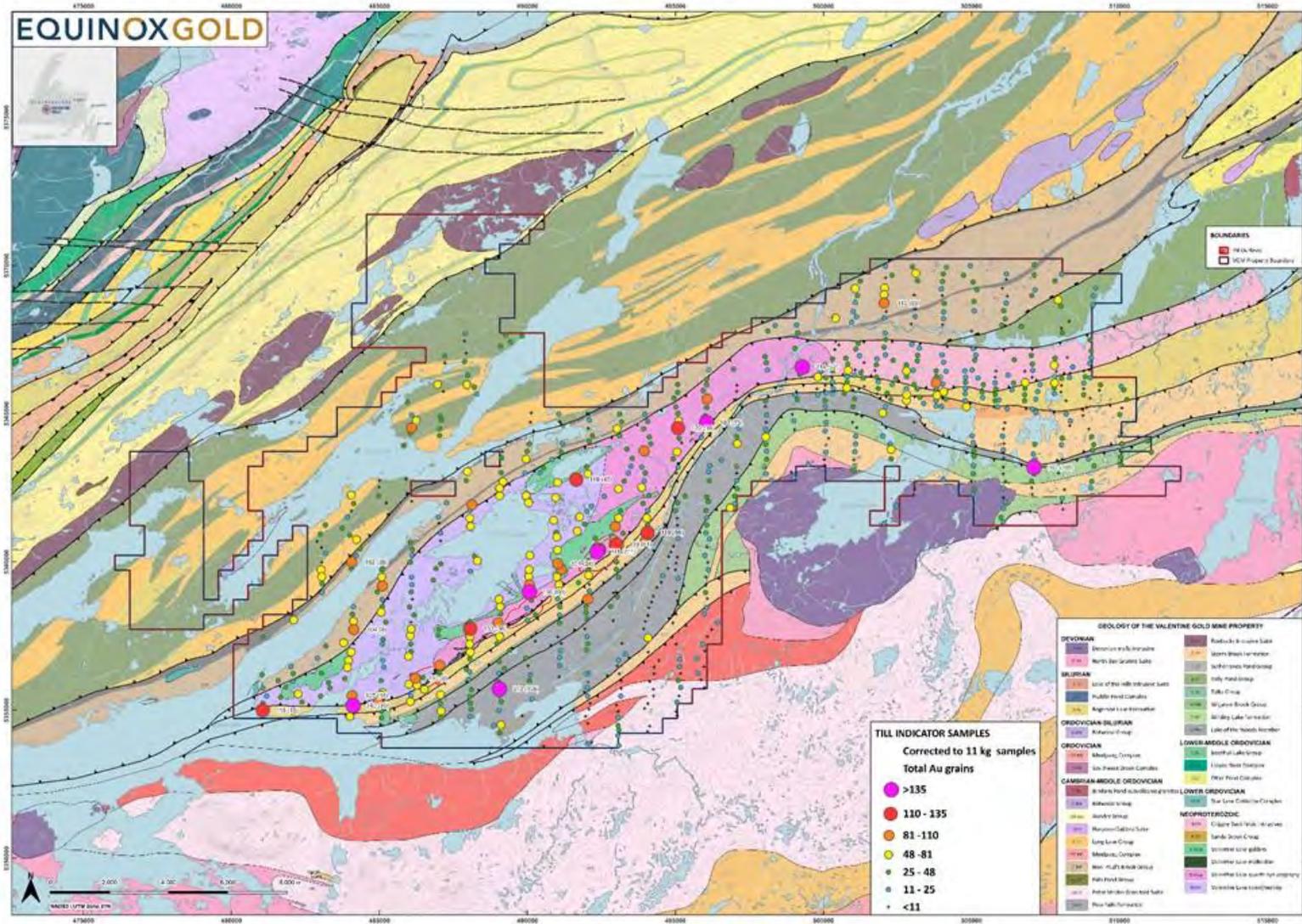
Till sampling programs were conducted between 2022 and 2024. In 2022, a preliminary survey was completed over the Rogerson Lake Conglomerate and VLIC contact with 62 samples at a 1 km line and 200 m sample spacing. Follow-up in 2023 consisted of infilling and expansion of the 2022 grid, during which an additional 22 samples were collected, as well as 9 samples collected over the Marathon and Leprechaun deposits to provide baseline data associated with known mineralization. A larger property-wide program was conducted in 2024, with a total of 801 samples collected at 1 km line spacing and 250 m sample spacing.

Till samples were collected from manually dug pits ranging in depth from 10 to 120 cm. Once the till horizon was reached, material was shoveled and sieved through a -4-mesh screen, yielding a total of 11 kg of sieved material. and additional 1 kg of screened rocks was then placed into the sample bag, for a total sample weight of 12 kg. Samples were processed and analysed by Overburden Drilling Management (ODM), where they were dried and mechanically separated, and gold grains were manually collected, optically counted, and assessed. Results from ODM are normalized and corrected to a standard 11 kg sample size to better reflect the gold grain count.

Results from the baseline survey of the Leprechaun and Marathon deposits showed that locally anomalous values associated with significant gold mineralization yielded 100 to 150 grains of Au. Comparable results and patterns are observable in the data collected during the 2024 program, with up to 711 grains of Au over areas of known mineralization and 313 grains of Au in areas where little or no mineralization has been discovered to date. (Figure 6-8).



Figure 6-8: Till Samples Collected Over Valentine Property, Total Au Grain Count, collected by Marathon Gold Corp.



6.2.6.5 Channel Rock Sampling (2010 to June 2025)

Across the property, a total of 5,984 channel rock samples were collected. The locations of the channel samples are shown on Figure 6-2 to Figure 6-5 above. Channel sample sites were typically stripped of vegetation and/or glacial surficial material using a backhoe and washed with water to clear debris and leave a clean surface. The channel location was then marked by the geologist and was typically oriented perpendicular to the strike of the mineralization. The channel was mechanically cut with a portable saw fitted with a diamond blade, creating a channel approximately 5 cm wide and 10 cm deep. Channel samples collected in 2024 were cut with a double-bladed Husqvarna rock saw, allowing only a single cut per channel.

The channel rock samples were taken at continuous intervals of between 1 and 2 m in length using a hammer and chisel. Samples were placed into plastic bags, tied, and labelled prior to dispatch for sample preparation and gold fire assay. The channel sample was logged like a drill hole, using the 'from' and 'to' meterage, with lithological and geological descriptions recorded in an Excel datasheet prior to 2019, then in the MX Deposit or the industry-standard relational database, acQuire.

The analytical results of the channel sampling have been used by Equinox and its predecessors to define drill targets and are considered representative of the mineralization with no evidence of bias. For example, the 2010 channel rock sampling results from Leprechaun and Sprite channel sampling were used to define drill targets in 2010 to 2011 (Figure 6-6). Channel sampling was also used to successfully identify significant mineralization at the Marathon deposit. Results from channel sampling, including 16.5 m at 5.79 g/t Au, 16.5 m at 2.53 g/t Au, and 9.0 m at 4.84 g/t Au, were used to define the initial drill targets that led to the discovery of the Marathon deposit.

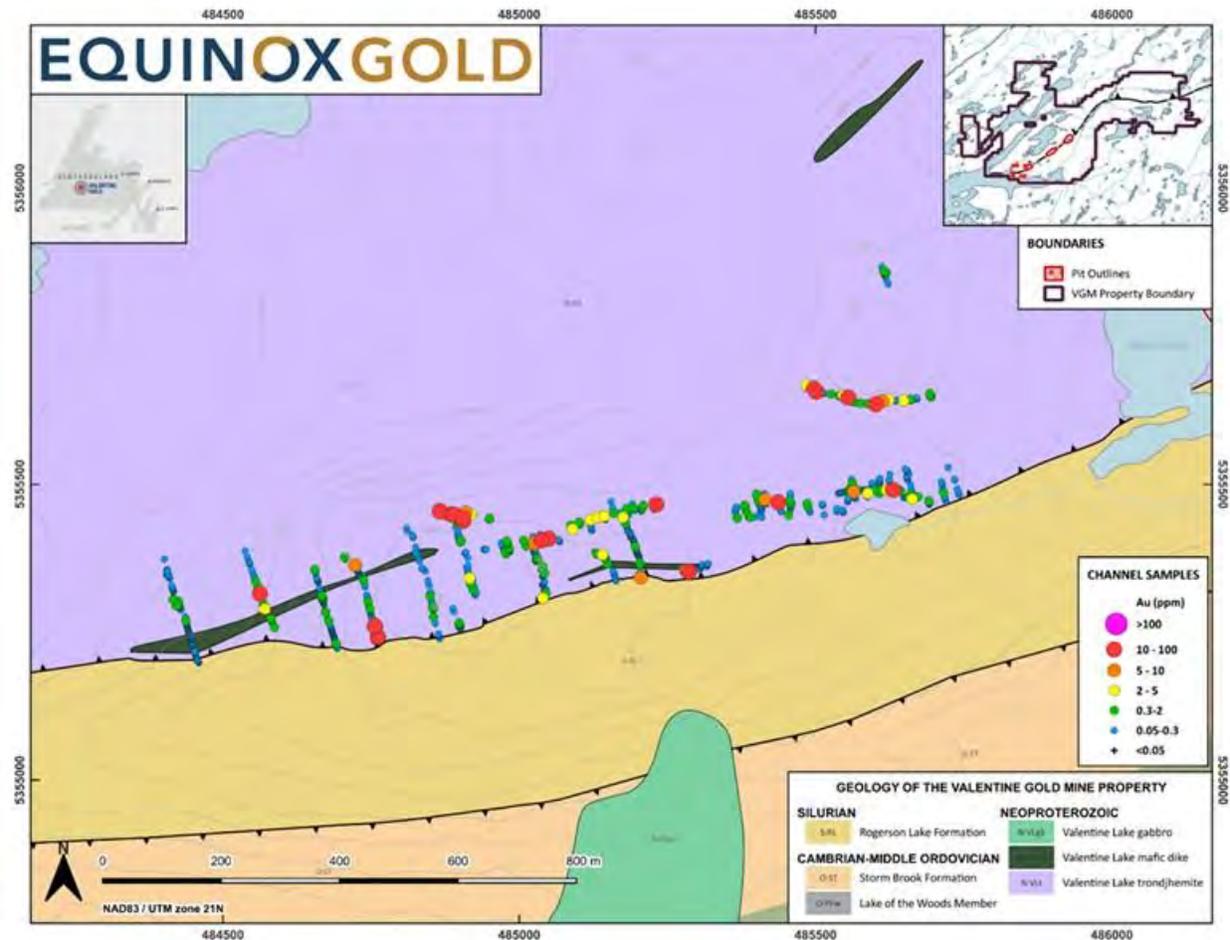
A trenching program in Eastern Arm in 2023 excavated a total of 14 trenches proximal to the contact between the VLIC and the Rogerson Lake Conglomerate. These trenches identified additional veining; however, the 44-channel samples collected during the program did not return significant gold values.

The South Quinn prospect, immediately south of the Eastern Arm, was originally identified in 2017. Follow-up prospecting and trench mapping were completed in 2023. While grab sampling during the 2022 and 2023 programs did not return significant gold values, a review of historical work conducted by Noranda from 1988 to 1991 highlighted channel sample results up to 11.7 g/t Au over 0.6 m from quartz veins and grab samples up to 30.8 g/t Au.

The channel rock sample data were not incorporated into the assay dataset used to prepare the Mineral Resource estimations presented in this Technical Report.



Figure 6-9: Example of Channel Sample Results from Frank Zone, collected by Marathon Gold Corp.



Source: Equinox 2025.

6.2.6.6 Geophysical Surveys

Equinox's predecessors conducted IP surveys at Leprechaun and Victory deposits, ground magnetic surveys along the length of the main mineralized trend, and a seismic survey at the Marathon deposit. In addition, a drone aerial magnetics survey was conducted along the main portion of the VLSZ, from the Frank Zone in the southwest to the Victory Deposit in the northeast. Further to this, a helicopter-supported aerial magnetics and VLF survey was conducted across the entire Valentine property in 2024. While Equinox has data from numerous geophysical surveys conducted by previous owners of the property, the 2024 survey is the most comprehensive and highest-resolution survey on the Project to date and has highlighted numerous areas of structural complexity that may host additional mineralization. As such, the 2024 survey results are the main focus of discussion below. IP surveys are not discussed here, as they proved to be of limited value to the Project's development.



Aerial Magnetic Survey

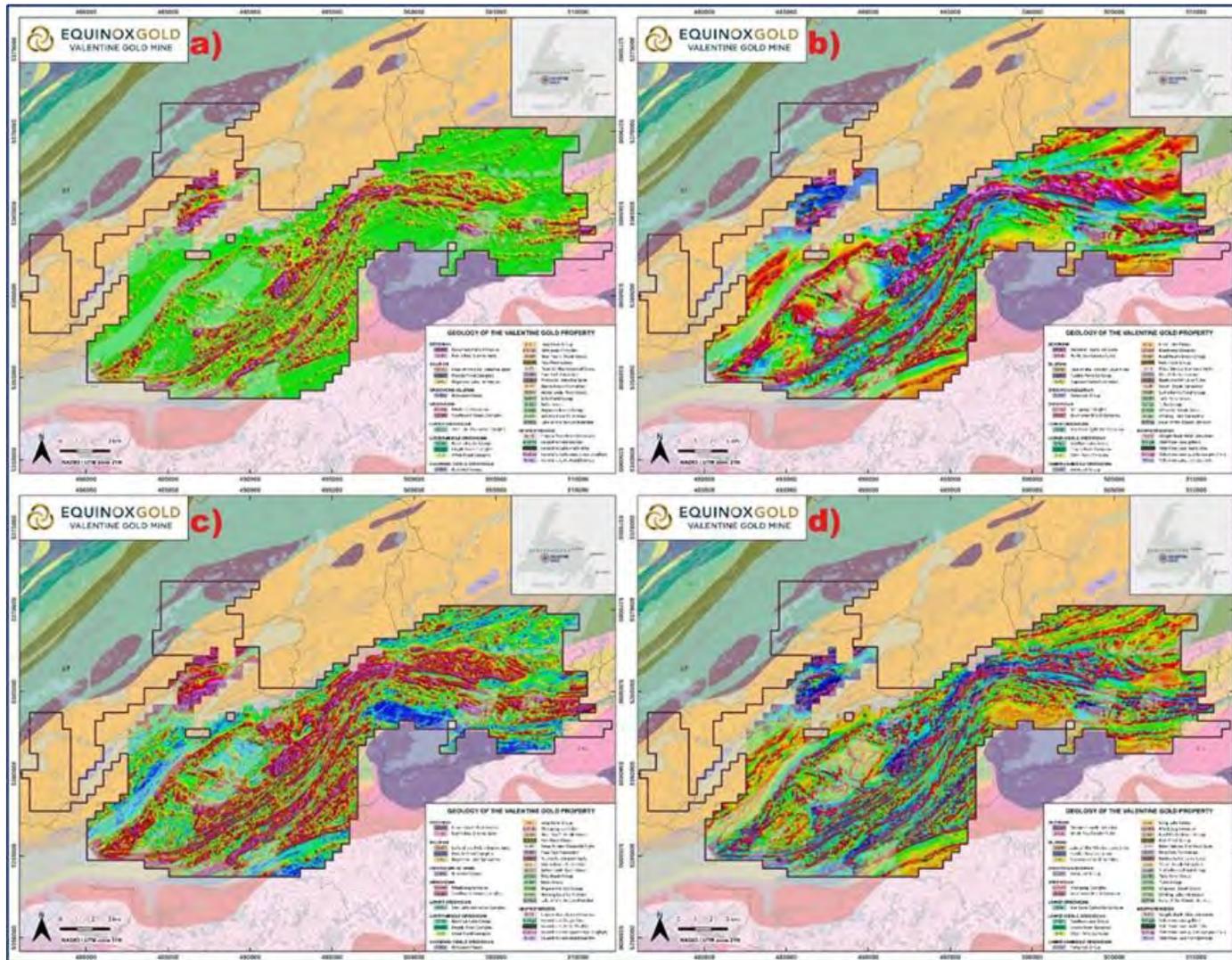
In 2007, Richmond Mines conducted a detailed, 1,766 line-kilometre, aeromagnetic and VLF survey, with line spacing of 100 m and tie-in lines at 1,000 m, across the entire project area (Figure 6-12). The results show that the property has a complex structural geological history, particularly at the Leprechaun, Marathon, Sprite, Victory, and Berry deposits. Distinct magnetic splays off the regional structural fabric at the Leprechaun and Sprite deposits are evident (Hrabi 2014) and represent high-potential exploration targets. Further, the detailed aeromagnetic data collected by Richmond indicate a potential zonation of the VLIC, with multiple intrusive phases inferred from the magnetic response (Hrabi 2014).

During the summer of 2021, Marathon Gold contracted RPM Aerial Services (RPM) to complete a 32 km², drone-mounted aeromagnetic survey of the project area (Figure 6-11). The survey was completed at 25 m line spacings with 1,449 line-km flown at an altitude of 23 m. This survey produced the highest-resolution magnetic data of the area flown to date, thanks to the close line spacing, drone capabilities allowing lower elevations, and the use of light detection and ranging (LiDAR) data to map elevations and flight plans. The survey covered the VLSZ from Frank Zone in the southwest to Victory Deposit in the northeast. The survey identified numerous magnetic highs, associated with mineralization-bounding mafic dykes in the Leprechaun and Berry Deposits and large gabbro bodies, as well as the trace of the VLSZ.

To follow up on these results, RPM was again contracted in 2024 to conduct property-wide airborne magnetics, VLF, and LiDAR surveys. The 2024 survey included 3,263 line-km of surveying, flown at an altitude of 40 m, with line spacings of 100 m, tie line spacing of 1,000 m, and line orientations of 140/320 degrees. The lines were planned to be offset from the 2007 survey by 50 m to incorporate both datasets into the interpretation and to provide a higher-resolution product. Once data collection was complete, the 2024 survey data were integrated with the 2007 aeromagnetic and VLF survey, yielding a final product with an effective line spacing of 50 m. These surveys highlighted an abundance of contacts subparallel and oblique to the VLSZ that approximated the mapped lithologies in the region. A number of potential cross-faults within the VLIC were shown in both the VLF and magnetics (Figure 6-10), which are interpreted as potential second-order faults that may serve as a conduit for mineralizing fluids into the VLSZ. These cross faults also abut the northwestern margin of the VLIC, which is hypothesized by Equinox to be a “mirror” of the VLSZ with a similar potential for mineralization.



Figure 6-10: 2024 Airborne Magnetics Survey Showing Interpreted Regional-Scale Cross Faults

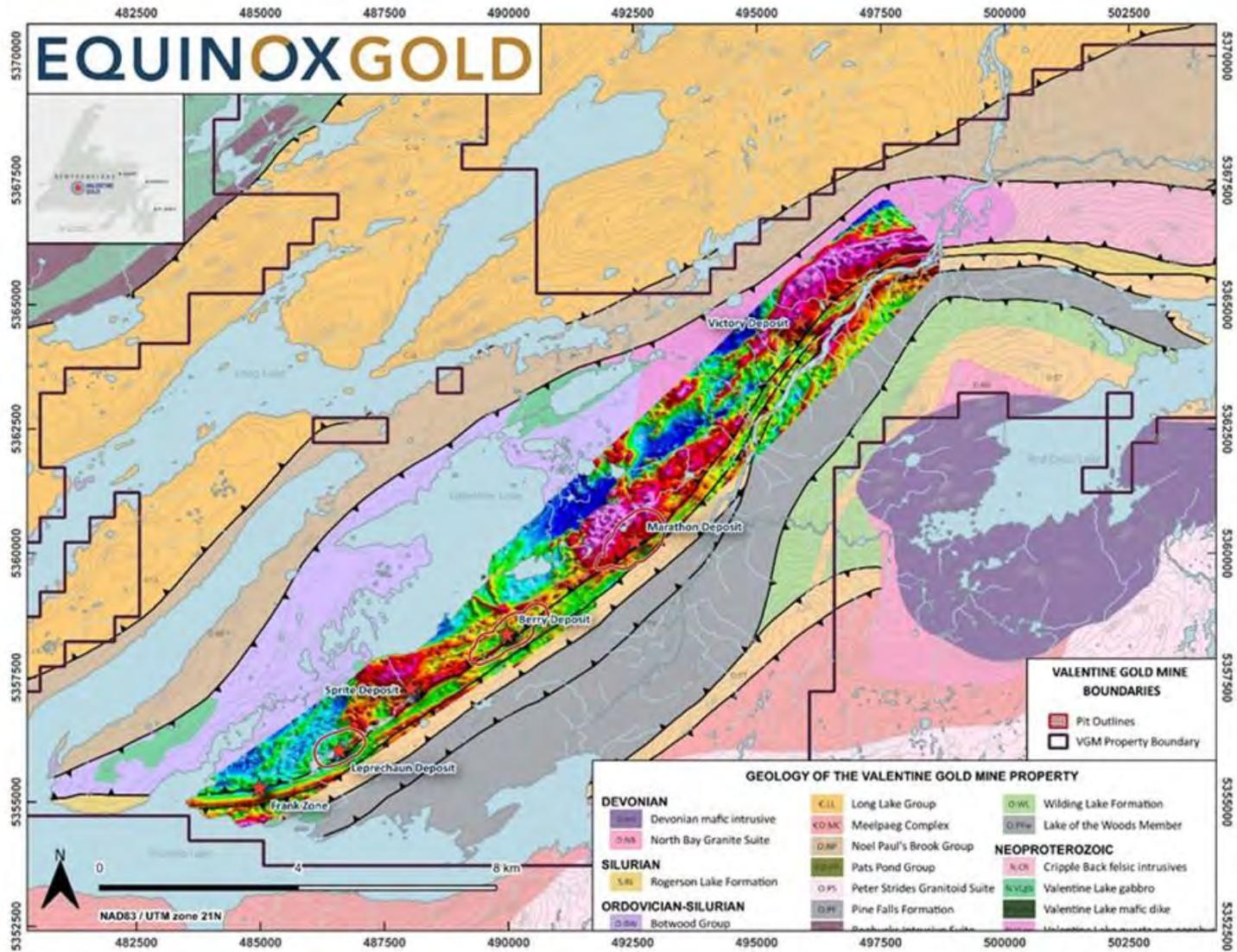


Source: Equinox 2026

Notes: a) Total Magnetic Intensity (TMI) Analytical Signal, b) TMI Reduced-To-Pole (RTP) Residual 5000 m, c) TMI RTP Total Horizontal Derivative, d) TMI 1st Vertical Derivative



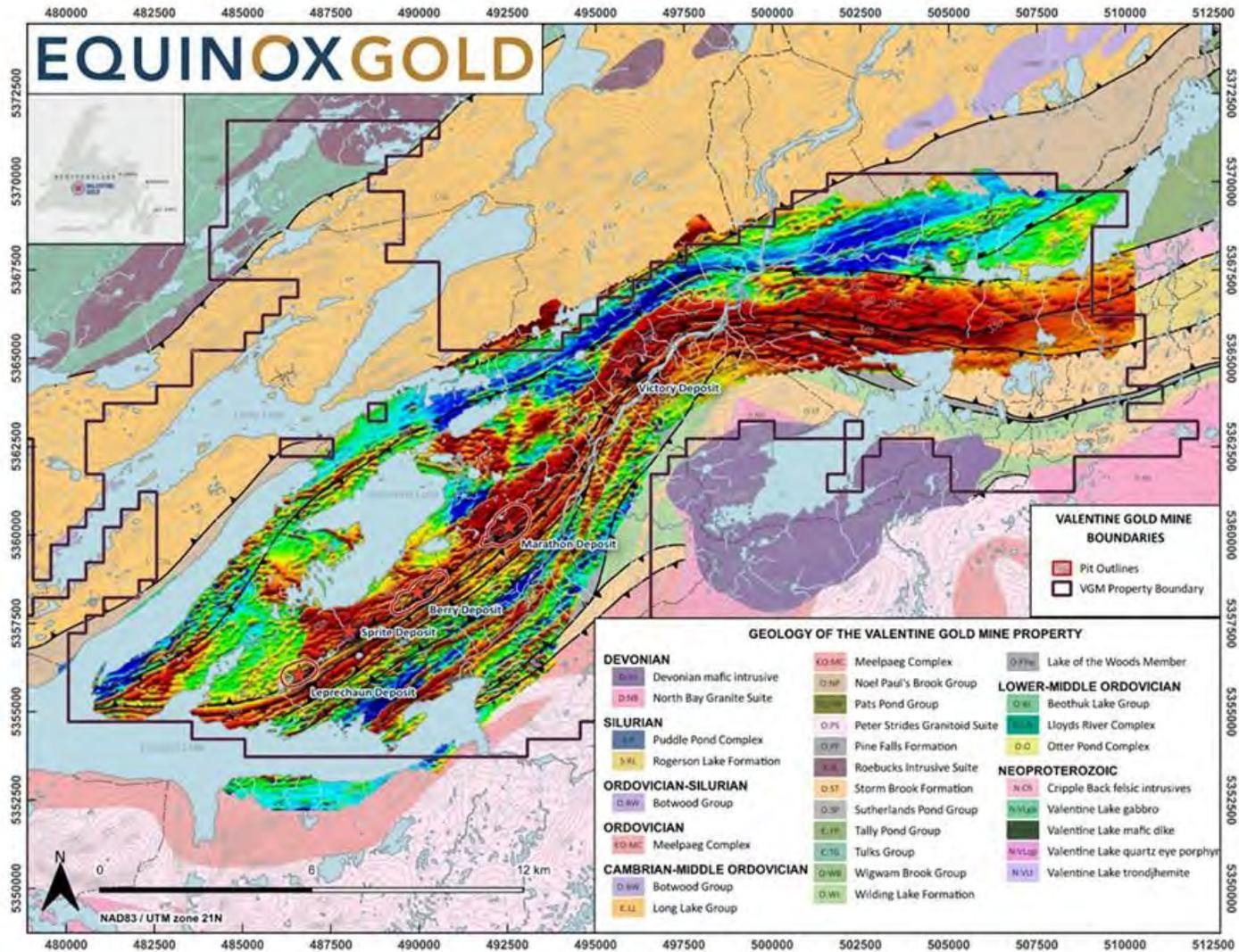
Figure 6-11: 2021 Airborne Magnetic Data Over Valentine Gold Mine Project Area



Source: Equinox 2025.



Figure 6-12: Richmond Mines (2007) Total Field Airborne Magnetic Data



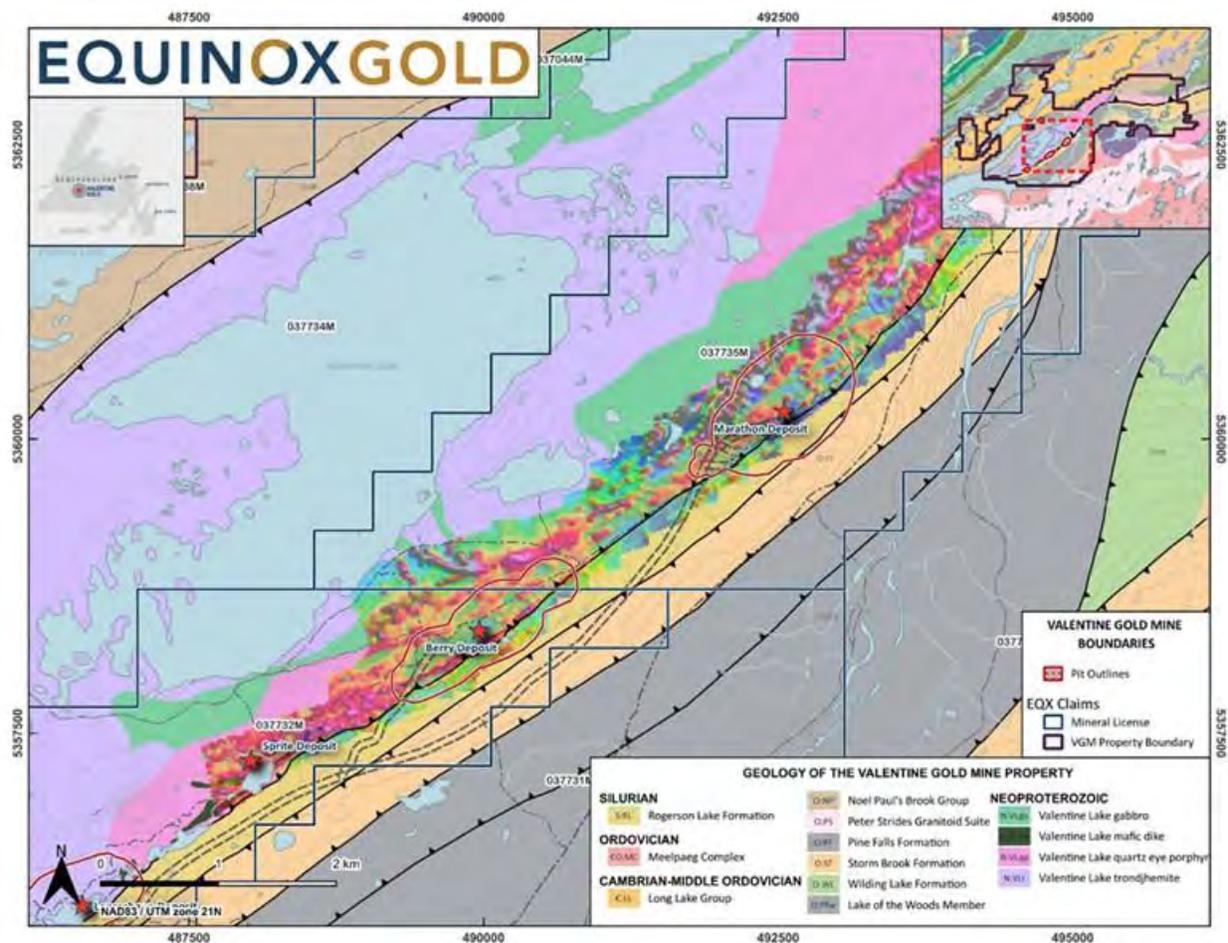
Source: Equinox 2025.



Ground Magnetic Surveys

Between 2014 and 2017, Marathon Gold conducted numerous ground magnetic geophysical surveys at the Sprite and Marathon deposits, using two Overhauser Magnetometers supplied by MTEC Geophysics Inc. The surveys were conducted using a 50 m line spacing and comprised 27 line-km at Sprite and 11.9 line-km at the Marathon deposit. The results indicate that mineralization at these deposits is spatially associated with low magnetic intensity, inferred to result from the magnetite destructive sericite quartz alteration associated with the QTP vein arrays. If this hypothesis is true, then the survey results show there are several areas of low magnetic intensity that may represent exploration targets between the Sprite and Marathon deposits (Figure 6-13).

Figure 6-13: Ground Magnetic Data over Sprite, Berry, and Marathon Deposits



Source: Equinox 2025.

VLF Data

The initial VLF-electromagnetic (VLF-EM) survey of the Valentine property was conducted by Richmond Mines in 2007, in concert with the aeromagnetic survey flown at the same time. This initial survey included 1,766 line-kilometres of aeromagnetic and VLF survey, with line spacing of 100 m and tie-in lines at 1,000 m, across the entire project area at the time. The survey was

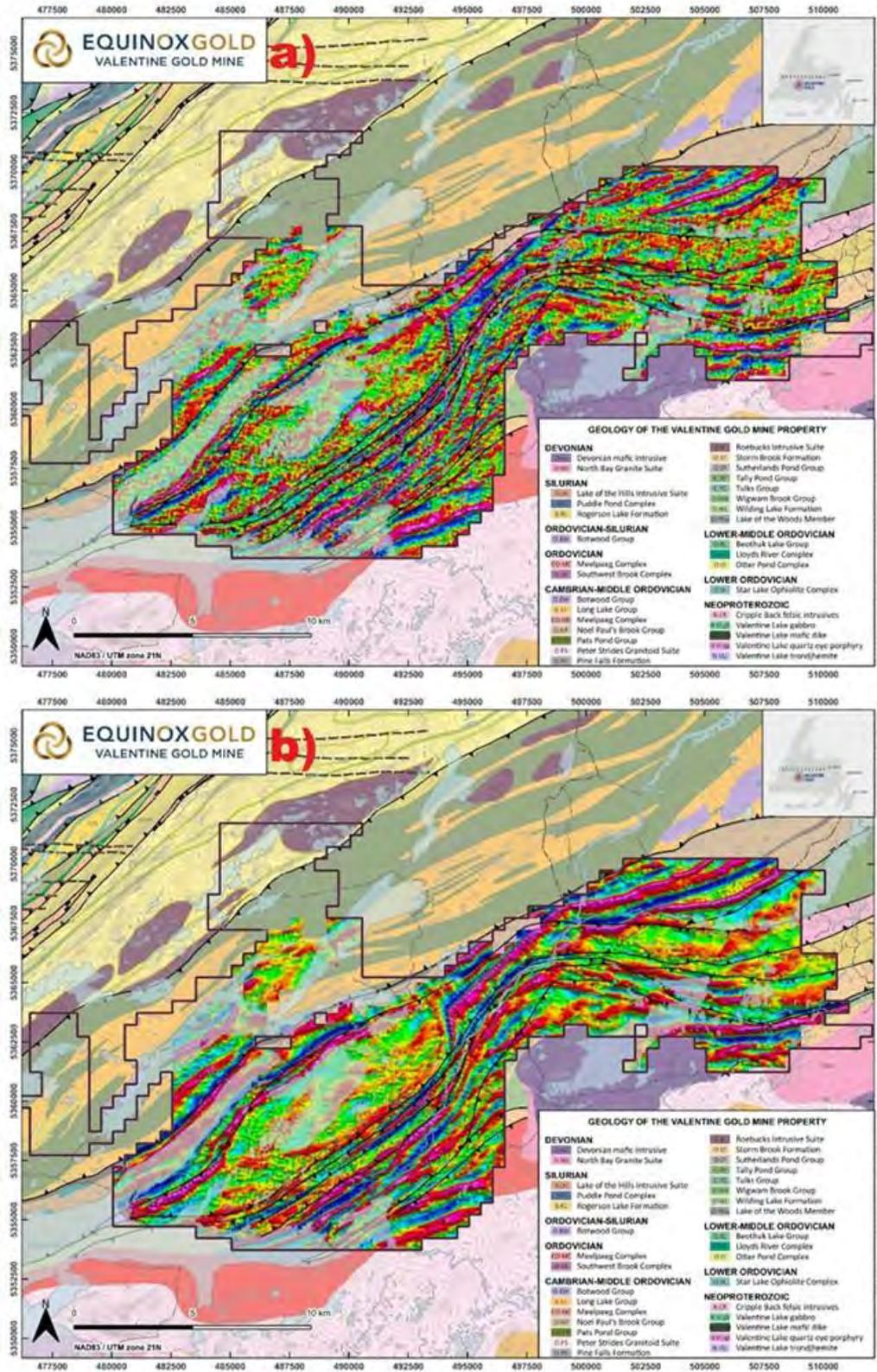


relatively low-resolution, and while it highlighted several areas of interest, it did not cover the entire current Valentine property.

Following this initial VLF survey, a property-scale aeromagnetic and VLF survey was conducted in 2024, which was flown in concert with the aeromagnetic. The 2024 survey included 3,263 line-km of surveying, flown at an altitude of 40 m, with line spacings of 100 m, tie line spacing of 1,000 m, and line orientations of 140/320 degrees. The lines were planned to be offset from the 2007 survey by 50 m to incorporate both datasets into the interpretation and to provide a higher-resolution product. Once data collection was complete, the 2024 survey data was integrated with the 2007 aeromagnetic and VLF survey, providing an effective 50m line spacing for the final product. The 2024 VLF survey outlined numerous features with signatures similar to those of the VLSZ, suggesting the potential for secondary and/or tertiary shear zones that may host additional mineralization. These features appear in a range of orientations but are dominantly parallel to sub-parallel to the VLSZ, running southwest-northeast. The Minotaur showing on the northwest of the property, as well as South Quinn on the eastern portion of the property, are associated with these shear-zone-like features, further concreting the connection between high VLF signatures and mineralized zones.



Figure 6-14: 2024 Airborne VLF Survey showing: a) In-Phase and b) Quadrature



Source: Equinox 2025.



Seismic Survey

Between February 25 and March 6, 2017, a seismic survey was carried out by Acoustic Zoom Inc. (AZI) of Paradise, NL, across a southwest-oriented 500 m wide by 2 km long zone at the property. The aim of the survey was to identify geological structures in the area, with an emphasis on quartz vein systems.

A total of 89 receiver lines were cut to approximately 500 m in length at 25 m spacing, with 44 source lines coincident with the receiver lines but at double the spacing. Glacier Exploration Surveys Ltd. of Calgary, Alberta, was subcontracted by AZI to complete the survey under AZI staff supervision. Due to insufficient frost depth, only 74% of the survey grid was covered by the seismic vibrator truck, which was escorted by an excavator across the wetter sections.

Unfortunately, the seismic survey failed to provide any substantial information on geologic structures within the survey area, including the VLSZ. It is believed that the survey failed to detect the VLSZ due to its steep nature. The inability to detect the veins and vein packages is likely due in part to the small-scale nature of the veins but also from the lack of physical property contrast between the quartz veins and quartz-rich granitoid. Consequently, no further emphasis is being placed on seismic methods for current or future exploration.

6.3 Historical Resource Estimates

Between 2012 and 2022, Marathon Gold published a series of mineral resource estimates as delineation drilling progressed along the Valentine Gold Mine. Leprechaun was the first deposit to achieve Mineral Resource status (2012), followed by Victory in 2013, and by both Marathon and Sprite in 2015. These early estimates formed the technical basis for advancing Project development but have since been superseded.

The final historical resource prepared prior to construction was completed by John T. Boyd Company (BOYD), with effective dates of November 20, 2020, for Leprechaun, Sprite, Marathon, and Victory, and April 15, 2021, for the Berry deposit. This estimate, prepared by Robert Farmer, P.Eng., utilized Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (CIM (2014) definitions) and reported global open-pit and underground Mineral Resources based on an open-pit shell, a gold price of US\$1,500/oz, and 6 m × 6 m × 6 m block modelling. These estimates were considered reasonable at the time but are treated as historical for the purposes of this Technical Report.

An updated resource estimate was subsequently completed under the supervision of Mr. Roy Eccles, P.Geol. (APEX Geoscience Ltd. [APEX]), with effective dates of June 15, 2022 (Leprechaun, Berry, Marathon) and November 20, 2020 (Sprite, Victory). This APEX estimates incorporated additional drilling, updated geological interpretations, revised metal prices (US\$1,800/oz gold), and updated open-pit and underground cut-off grades. These 2022 Mineral Resources were inclusive of Mineral Reserves and represented the final published resource prior to the current estimate.

All three of the above estimates are considered historical and are superseded by the 2025 Mineral Resource estimate presented in Section 14.0 of this report and the 2025 Mineral Reserve estimate presented in Section 15.0 of this Technical Report. The Qualified Person has not completed sufficient work to classify the historical estimates as current and therefore does not treat them as current Mineral Resources and Mineral Reserves in accordance with NI 43-101. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.



6.4 Past Production

Construction of the Valentine Gold Mine was completed in 2025, and commercial production was achieved on November 18, 2025. During December 2025, the first full month of commercial production, the process plant milled 197,928 tonnes, at an average head grade of 1.93 g/t, with an average metallurgical recovery of 92.1%. This resulted in 11,328 ounces of gold recovered. Gold poured of 9,944 ounces differed from recovered ounces, reflecting an increase in gold-in-circuit inventory at month-end.



7.0 Geological Setting and Mineralization

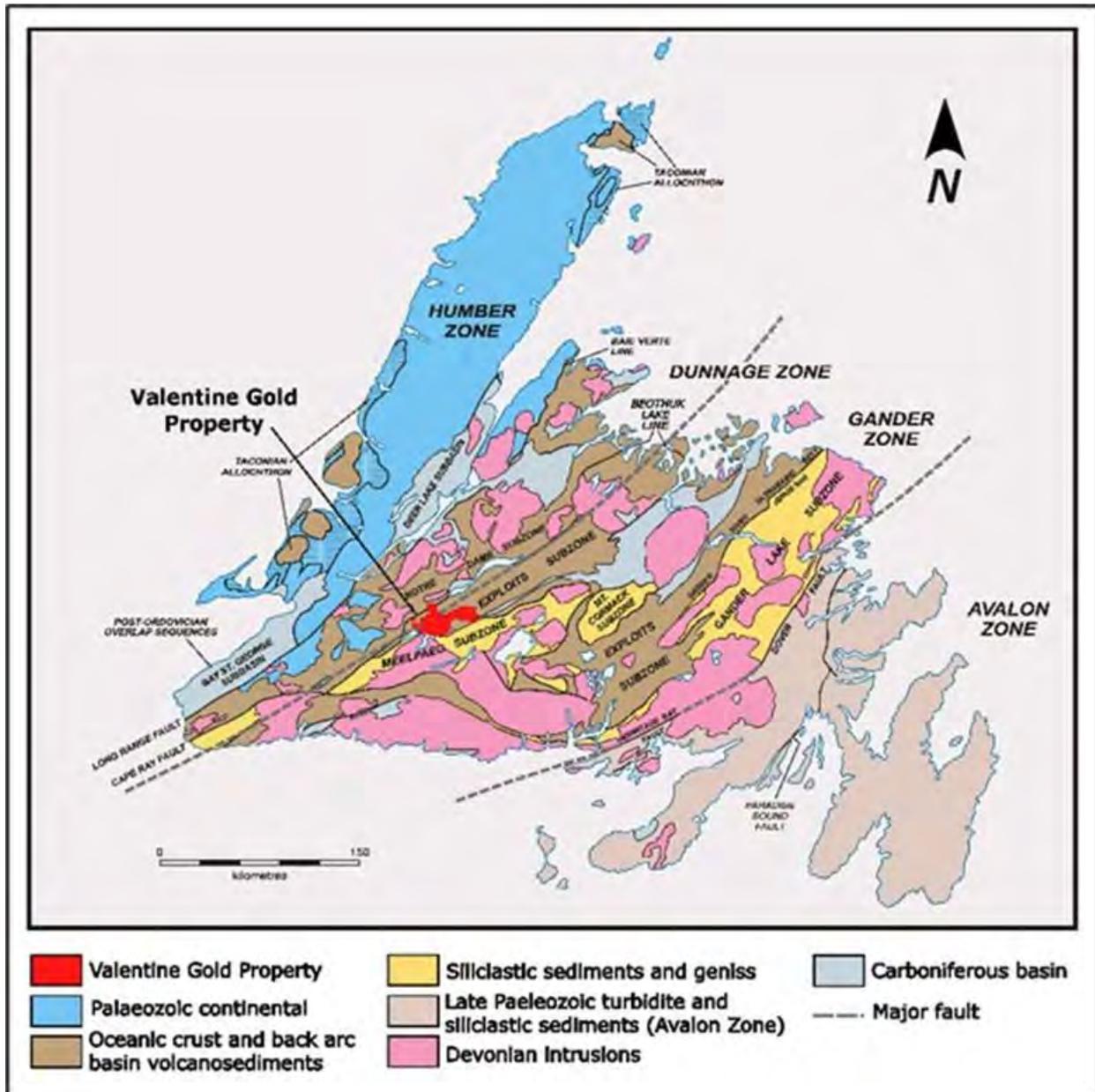
7.1 Regional Geology

The Valentine Gold Mine property is located within the Newfoundland Appalachian system, which displays typical southwest to northeast alignment and was formed during closure of the Iapetus Ocean in the Cambrian to Ordovician periods, resulting in the accretion of Laurentia and Gondwana (Piercey et al. 2014). The island of Newfoundland is divided into four major tectonostratigraphic zones that are juxtaposed by major regional sutures (Figure 7-1). The Humber Zone, located in the west, is comprised of Palaeozoic sedimentary rocks deposited on the Grenvillian basement of the eastern margins of the Laurentian continent. The Gander Zone in the east is comprised of Ordovician volcano-sedimentary sequences that formed proximal to the Gondwanan continental margin (Coleman-Sadd 1980; Blackwood 1982). The Avalon Zone, which lies east of the Dover-Hermitage Bay Fault, comprises Precambrian volcanic and sedimentary rocks (King et al. 1980).

Situated between these two continental margin terranes, the Dunnage Zone comprises a structurally controlled assemblage of ophiolitic and arc-to-back-arc volcanics, and volcanoclastic to epiclastic sedimentary rocks representing remnants of early to middle Palaeozoic oceanic terranes.



Figure 7-1: Major Tectonic Subdivisions of Newfoundland & Location of Valentine Gold Property



Source: Modified from Colman-Sadd, Hayes and Knight (2000) and Piercey et al. (2014).

Widespread magmatism and deformation characterize the Appalachian and pre-Appalachian tectonic evolution of the Newfoundland Orogeny. Formation of large-scale, gold-bearing hydrothermal alteration systems accompanied localized magmatism. This system hosts gold in both the late Proterozoic and Palaeozoic rocks, which are commonly associated with major crustal structures and range between epithermal, orogenic, sediment-hosted, and intrusive-related deposit types (e.g., Evans 1993; Tuach et al. 1988; Wardle 2005).

The Dunnage Zone, host to the Project, is further subdivided into two subzones by the Beothuk Lake Line, which represents the major crustal suture zone in this area of the Appalachian Orogen. The Notre Dame Subzone and the Exploits Subzone occur northwest and southeast of

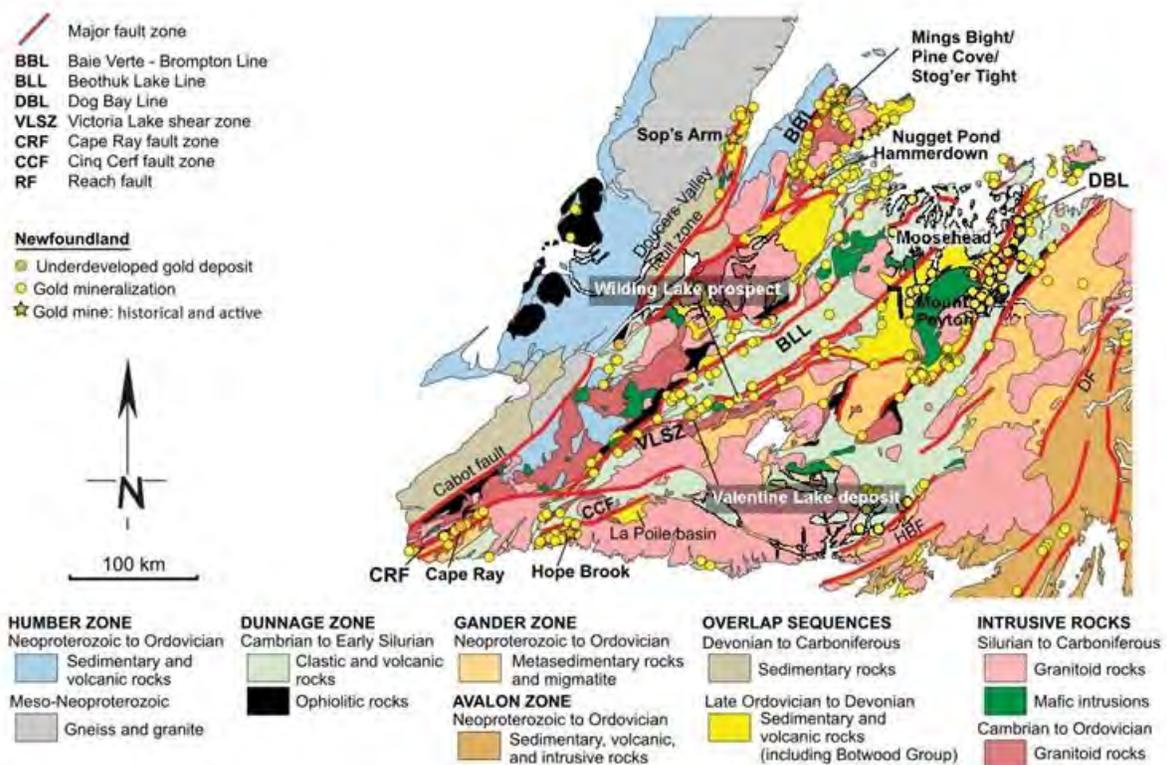


the Beothuk Lake Line, respectively, and are characterized by island arc volcano-sedimentary sequences and ophiolite lenses that formed during the Middle to Late Ordovician accretion of Cambro-Ordovician rocks associated with the Taconic and Penobscot orogenies.

Hence, these subzones preserve a complex and protracted record of orogenic accretion and tectonic assembly. The Dunnage Zone was subsequently deformed during the Silurian Salinic orogeny and intruded by Devonian granitoid plutons, mafic stocks, and dykes.

Gold mineralization within the Dunnage Zone occurred coincident with late syn- to post-Salinic orogenic events (Murahwi 2017) and is typically spatially related to major structural features and proximal to, or hosted within, intrusive bodies. The Dunnage Zone also hosts past-producing Buchans and Duck Pond copper-zinc volcanogenic massive sulphide (VMS) deposits and several other VMS occurrences (Figure 7-2).

Figure 7-2: Geology, Major Structures, and Gold Occurrences in the Central Newfoundland Gold Trend



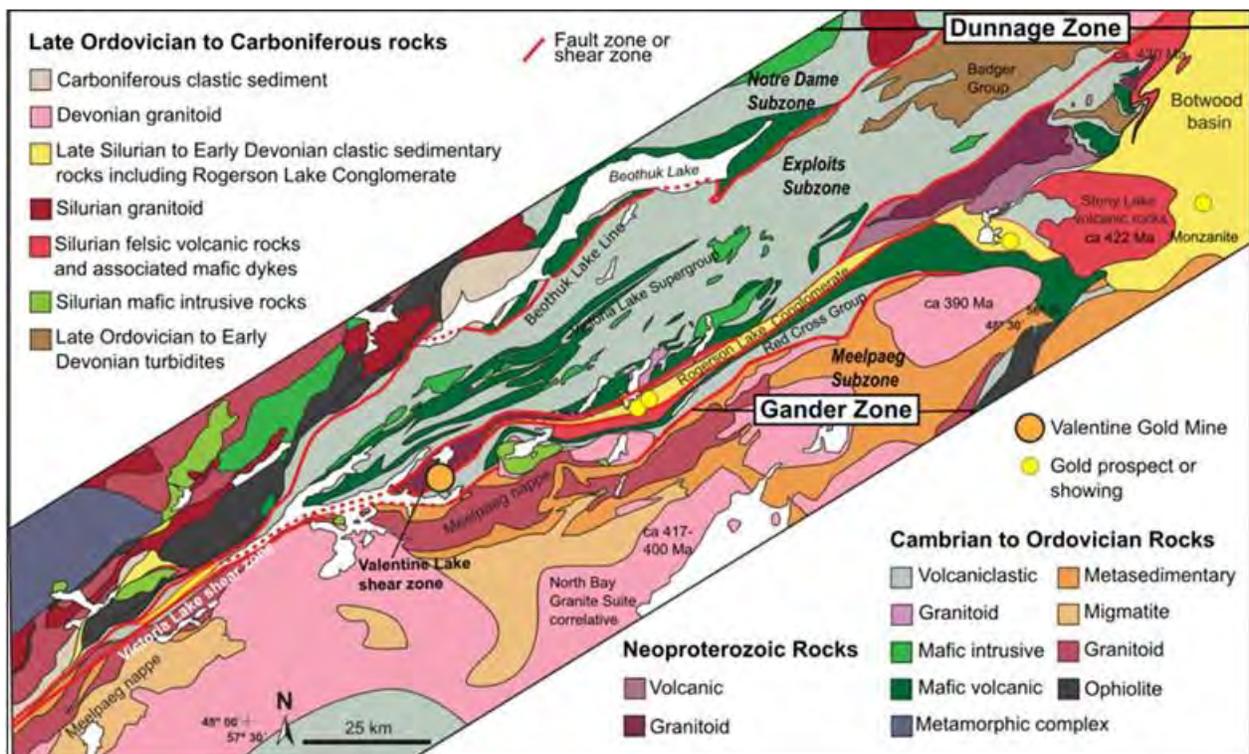
Source: Modified from Honsberger et al. 2019.



7.2 Local Geology

The Valentine property is located within the Victoria Lake Supergroup (VLSG), which constitutes part of the Exploits Subzone of the Dunnage Zone and is composed mainly of low-grade Cambro-Ordovician (513 to 462 Ma; e.g., Rogers et al. 2007) island arc and back arc volcanic, volcanoclastic, and epiclastic rocks of the Talley Pond volcanic assemblage (513±2 Ma; Dunning et al. 1991) and the Tulks Hill volcanic assemblage (498 +6/-4 Ma; Evans et al., 1990) (see Figure 7-3). These assemblages are volcanically dominant with one or more sequences of clastic sedimentary rocks. Localized younger Middle Ordovician sedimentary rocks are present (Evans and Kean 2002). These assemblages consist of rocks of varied age and geochemical properties representing various tectonic environments intruded by granodioritic to gabbroic intrusions, metamorphosed to lower greenschist facies, and subjected to heterogeneous regional deformation (Evans et al. 1990; Pollack et al. 2002).

Figure 7-3: Regional Geology of the Valentine Gold Property



Source: Modified from Honsberger et al. 2019

Large plutonic bodies on the south-southeast margin of the VLSG are significantly older than the volcanic rocks and include the Precambrian Valentine Lake and Crippleback Lake intrusive complexes.

The Victoria Lake Supergroup is divided into a northern and southern terrane, with the southern terrane bounded to the southeast by the Snowshoe Pond Granite and the northern terrane bounded to the northwest by the Middle Ordovician Harbour Round and Sutherlands Pond assemblages (Rogers and van Staal 2002) and is structurally complex.

The Valentine property occurs within the large multiphase, trondhjemite (566 Ma), quartz monzonite (573 Ma), and gabbroic Valentine Lake Intrusive Complex (VLIC) and forms the structural inlier within the Victoria Lake Supergroup volcano-sedimentary rocks (Layne et al,



2022). More specifically, the Valentine deposits occur proximal to the unconformable contact between two structural domains, the Neoproterozoic VLIC to the northwest and the Silurian Rogerson Lake Conglomerate to the southeast. These are in contact along a northeast-southwest lithotectonic boundary of the locally sheared and faulted Valentine Lake Shear Zone (VLSZ), which is documented as exhibiting sinistral reverse transpressive deformation that is correlated with the Salinic (450–423 Ma) Appalachian Orogenic event (van Staal et al. 2009).

The VLSZ has a kinematic history with multiple pulses of Appalachian orogenesis and exhibits a northwest to subvertical dip. At the Valentine property, the Precambrian VLIC forms a rigid inlier that correlates with a structural flexure point in which the overall trend of the VLSZ was deflected.

The VLIC predates the surrounding host volcanic and sedimentary rocks, which are similar in age to the Roti Bay Granodiorite at Hope Brook (Woods 2009), and comprises an elongate northeast-trending body of Upper Precambrian igneous rocks ranging from trondhjemitic (A specific type of felsic intrusive igneous rock) through to gabbroic and minor pyroxenitic compositions.

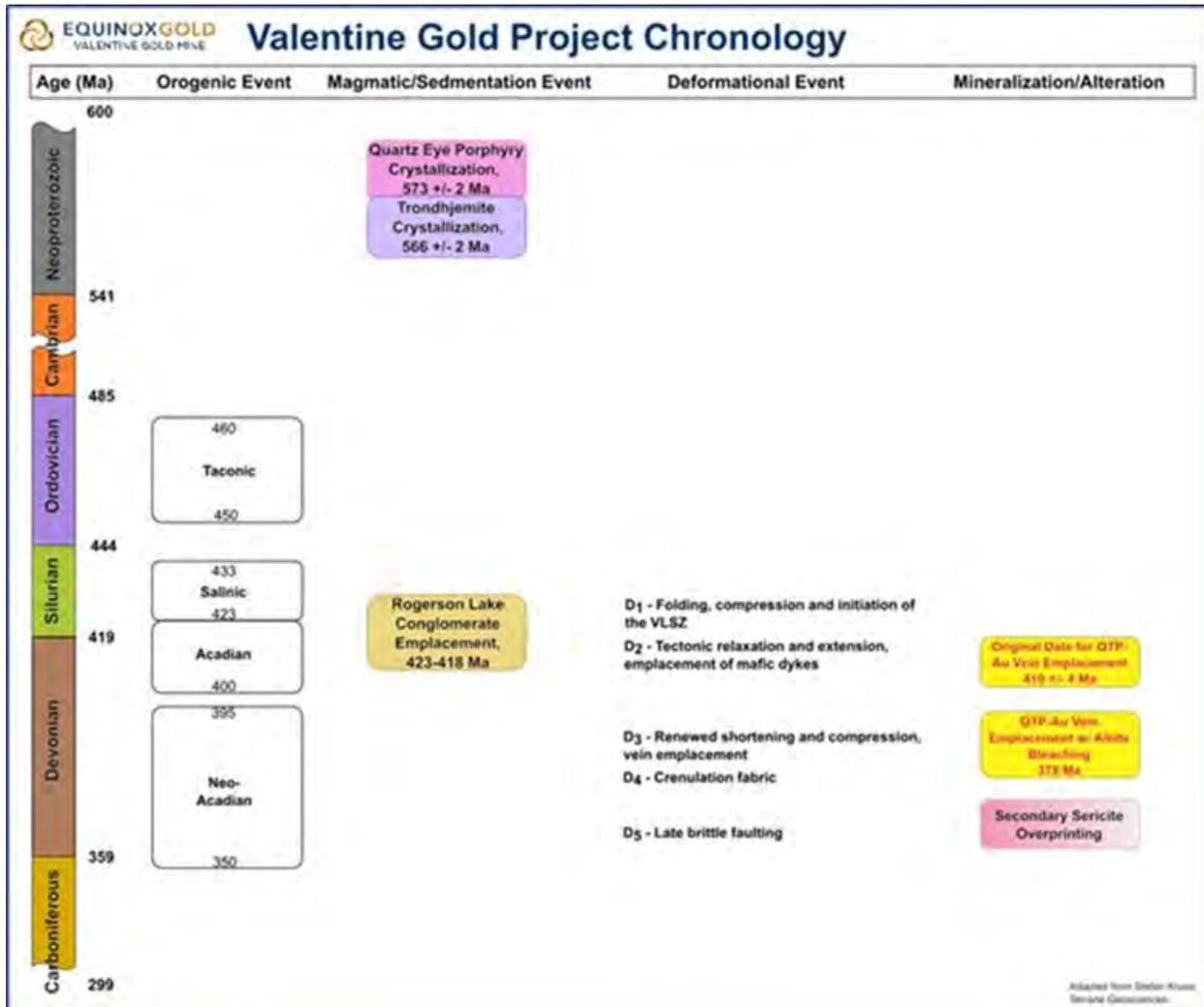
The Silurian Rogerson Lake Conglomerate forms a long, narrow, elongated belt that extends for approximately 160 km and lies along the southeast margin of the VLIC. Unsorted to locally sorted, pebble- to cobble-sized polymictic conglomerate characterizes the unit with layers of finer-grained sedimentary sequences.

Regional metamorphism in the Valentine Gold property area ranges from lower to upper greenschist facies, with the higher grades in the southern portion of the property. Deformation of the VLIC is ductile, transitioning to late-stage brittle deformation. Heterogeneous ductile deformation is characteristic of the Rogerson Lake Conglomerate.

Recent project-scale structural investigations by Kruse (2020) for Equinox, and more regionally by Honsberger et al. (2019) and others, have established a geotectonic chronology for the deformation within the project area, within which Kruse (2020) recognizes five phases of deformation (Figure 7-4).



Figure 7-4: Regional Geochronology of the Dunnage Zone and Valentine Property



Source: Modified from Kruse (2020) and incorporating Barbour (1990), Barrington et al. (2016), Dunning (2017), Honsberger et al. (2019), Sandeman et al. (2017) and van Staal et al. (2009).

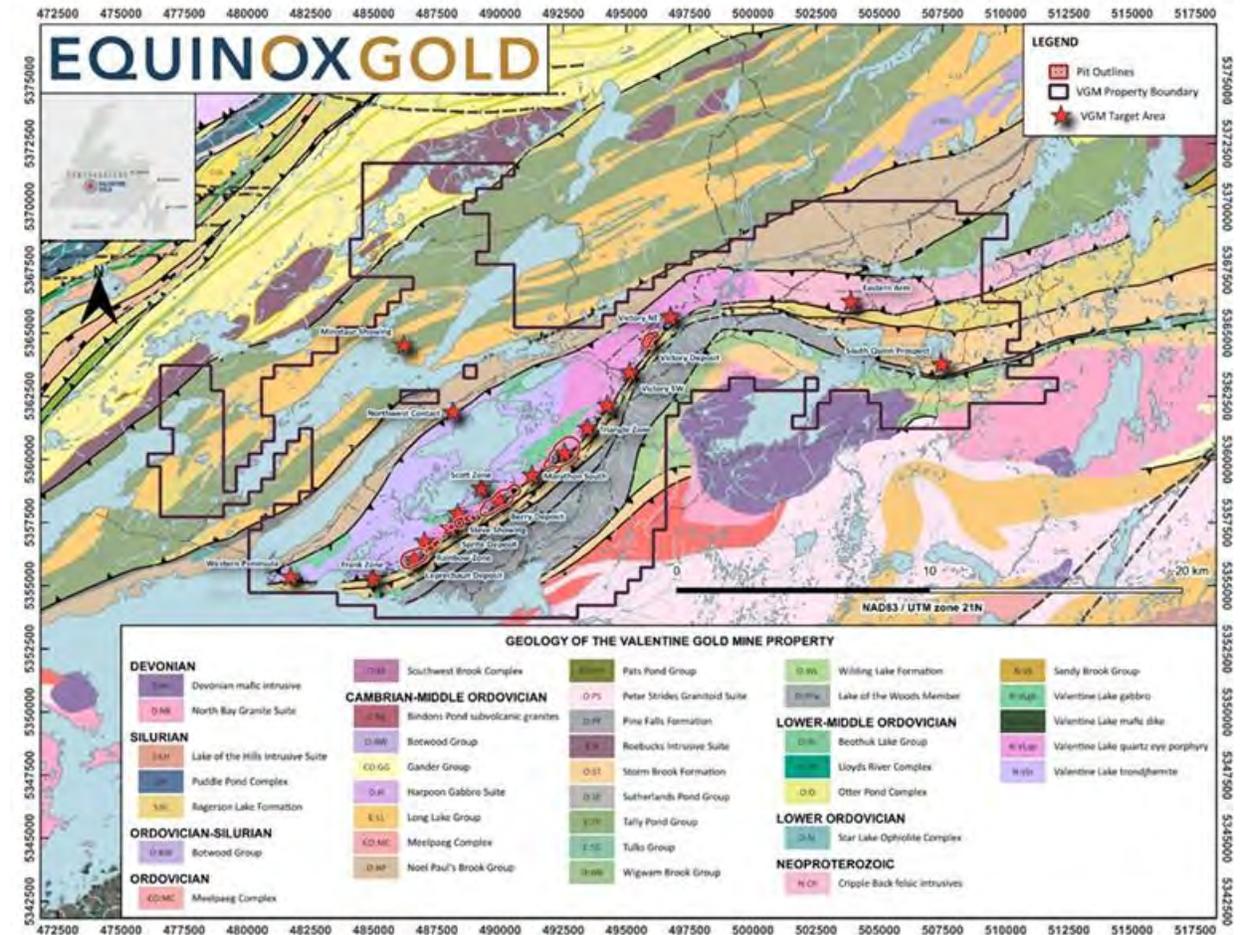
A penetrative ductile fabric associated with initiation of the VLSZ and characterized by a strong S_1 foliation and L_1 stretching lineation is observed in both the Rogerson Lake Conglomerate and in the VLIC, with a southwest strike and steep dip to the northwest, paralleling the larger structure. Gold mineralization is associated with mineralized veining within the VLIC during a D_3 phase of renewed crustal shortening following a period of regional D_2 relaxation. Overprinting fabrics include a late D_4 crenulation fabric and a D_5 brittle fault set (Kruse 2020)

7.3 Property Geology

The bedrock geology at the Valentine property is comprised of six major lithological units, including, from northwest to southeast: i) the northern terrane of the Victoria Lake Supergroup (bimodal volcanic rocks), ii) volcanogenic and siliciclastic sedimentary units, iii) the VLIC, iv) the Rogerson Lake Conglomerate, v) the southern terrane of the Victoria Lake Supergroup, including metasedimentary units and lesser gabbroic and mafic volcanic rocks, and vi) the Red Cross Lake intrusion (Figure 7-5).



Figure 7-5: Geology and Gold Showings of the Project



Source: Marathon Gold 2017

The VLSG outcropping along the northwest boundary of the Valentine property area consists mainly of low-grade Cambrio-Ordovician volcanic and sequences of clastic sedimentary rocks of the Tulks Hill assemblage. This assemblage represents two packages of bimodal volcanic and clastic sedimentary rocks referred to as the Long Lake volcanic belt and the Tulks sequence of banded to finely laminated siltstone, argillite, and tuffaceous siltstone with minor intercalated mafic tuff. The northwestern section of the Valentine property covers a portion of the Long Lake volcanic belt and is dominantly underlain by felsic and mafic volcanic rocks, which host the Minotaur showing. Further to the southeast, the Long Lake volcanic belt is underlain by a thick sequence of black graphitic shale, which separates the Long Lake volcanic belt from volcanoclastic sedimentary units of the Stanley Waters Formation.

The VLIC hosts all five of the current major gold deposits and numerous early-stage prospects and occurrences on the Valentine Gold property (Figure 7-5). The VLIC is an elongated northeast-southwest trending intrusion consisting dominantly of fine- to medium-grained trondhjemite and quartz monzonite with lesser aphanitic quartz porphyry, gabbro and minor pyroxenite units of the Upper Precambrian (Layne et al, in preparation). All intrusive rocks demonstrate varying degrees of sausseritization (hydrothermal alteration) of plagioclase and strong alteration of mafic minerals to chlorite and epidote. The eastern portion of the VLIC found



on the Valentine Gold property consists of coarse-grained granitoids similar to the Crippleback Granite.

Abundant mafic dyke systems on the scale of tens of centimeters to tens of meters thick cut the trondhjemite and quartz monzonite units on a northeast-southwest orientation and exhibit strong ductile deformation and boudinage. These mafic dykes are geochemical equivalent to the gabbroic intrusions found within the VLIC.

The Silurian Rogerson Lake Conglomerate forms a narrow linear unit extending NS-SW for 160 km through central Newfoundland, lies unconformably (overturned) on the southeast margin of the VLIC, and is interpreted to have infilled a foreland basin during thrusting and erosion of the VLIC (Kean 1977; Kean et al. 1982). An unsorted, pebble-to-cobble-sized, polymictic conglomerate with interbedded coarse sandstone dominates the unit. A high percentage of the clasts are trondhjemite, quartz monzonite, and mafic intrusive rocks of the VLIC. Also common are fine-grained foliated mafic, epidote-quartz, white and red chert, and black, fine-grained sedimentary clasts in a fine-grained, schistose matrix.

The conglomerate has undergone penetrative ductile deformation resulting in a strong NE striking and steep northwest dipping to sub-vertical S1 foliation, and most clasts showing strong elongation parallel to the regional penetrative L1 fabric and sinistral rotation.

The VLSG outcropping along the southeast boundary of the Valentine Gold property area consists of Ordovician-aged mixed sedimentary, gabbroic, and mafic volcanic sequence. These units have been strongly deformed, resulting in a complex intercalated, tightly folded, boudinaged, and sheared package of rocks. Sedimentary units are generally metamorphosed and argillaceous to sandy and/or tuffaceous rocks with minor metaconglomerate and represent the bulk of the sequence. The gabbroic units are generally medium-grained, strongly foliated gabbro, which grades into fine-grained schist. The gabbro and schist are interspersed with pillowed and massive basalt units.

The Red Cross Lake intrusion is bimodal, consisting of a mafic phase comprising well-layered peridotite and gabbro, and a medium- to coarse-grained granite phase.

The entire project area is overlain by glacial till surficial deposits with thicknesses of between 1 and 30 m, as well as deeper boggy areas and ponds, with only rare bedrock exposures along topographic highs, along lake shores, and in stream beds.

7.3.1 Structure

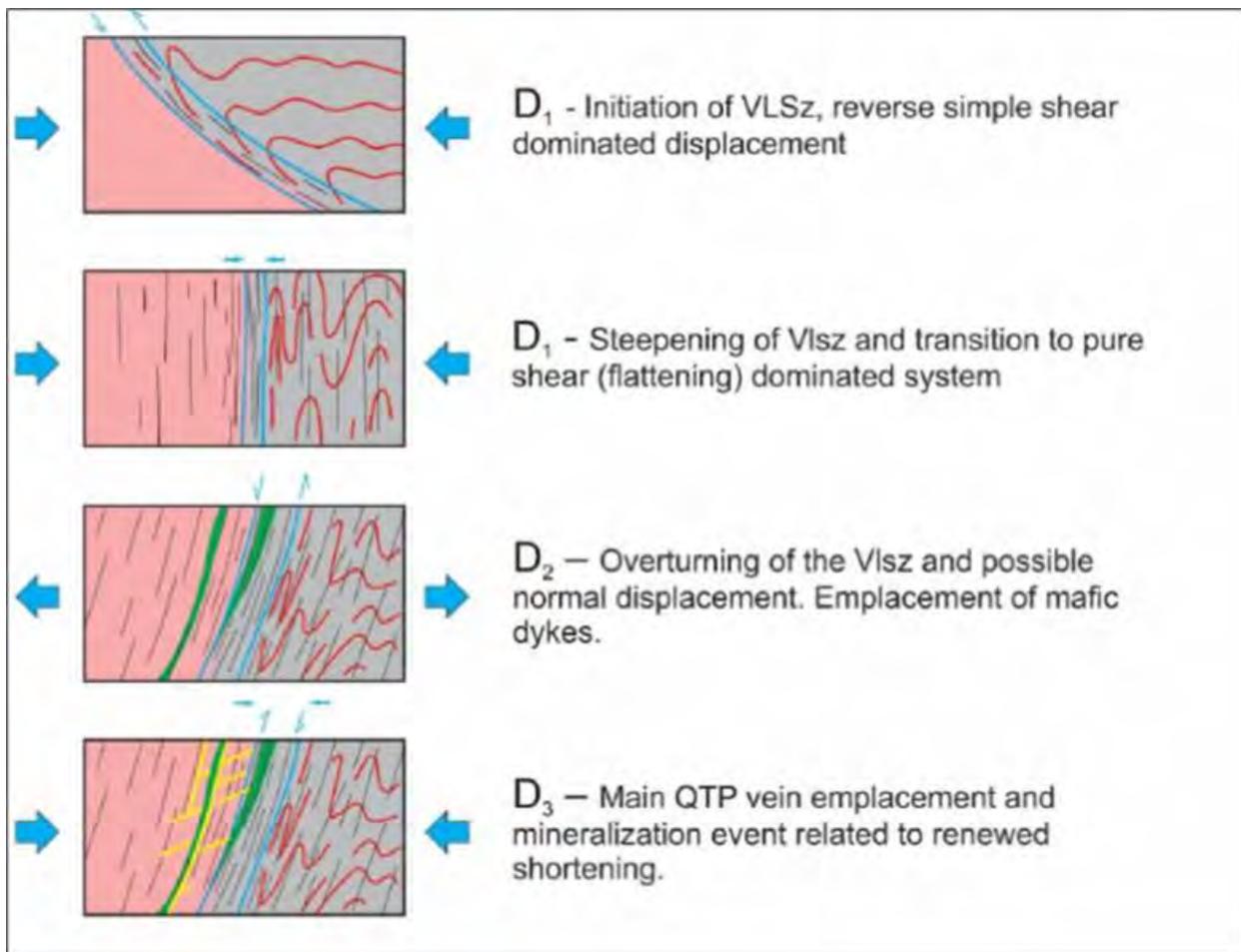
The Project is one of several structurally hosted gold deposits within the central Newfoundland Dunnage Zone that are associated with the Salinic Appalachian orogenic event. At the Valentine property, mineralization is associated with deformation across the VLSZ. This large-scale crustal structure is one of several, such as the Cape Ray Fault, the Dog Bay Line, and the Beothuk Lake Line, that are currently the target of broad exploration programs by several gold exploration companies across a large swath of central Newfoundland.

On a property scale, the Valentine gold deposits occur proximal to the VLSZ and the unconformable contact between two structural domains, the Neoproterozoic VLIC, and the Silurian Rogerson Lake Conglomerate. The VLIC is generally characterized by lower strain, brittle-ductile deformation, with the Rogerson Lake Conglomerate exhibiting more intense penetrative foliation, folding, and shearing. The contrast in competency between these two domains and the crustal-scale nature of the VLSZ provide an ideal environment for hydrothermal fluid flow and the development of gold mineralization within local deformational traps.



On behalf of Marathon Gold, Kruse (2020) developed a kinematic model and deformational history for the property that identified five phases of deformation (Figure 7-6). In this model, the Silurian Rogerson Lake Conglomerate is interpreted to have formed in a sedimentary basin bounded to the NW by a listric boundary fault. Onset of Salinic-aged crustal shortening reactivates the main boundary fault as a low-angle reverse thrust, which is rotated into a steep orientation during a transition to a pure shear-dominated flattening phase. This phase of crustal shortening is correlated with the S1 fabrics that dominate the property. The Rogerson Lake Conglomerate exhibits strongly developed S1 penetrative foliation, tight F1 isoclinal folds, and locally preserved S0 bedding (Kruse 2020). Flattened and stretched primary conglomerate clasts are indicative of a pure-shear regime. Within the intrusive rocks of the VLIC, S1 is manifested as a spaced fracture cleavage with localized zones of more intense shearing developing foliation in the S1 orientation.

Figure 7-6: Phases of Deformation shown by Northwest-Southeast Oriented Section



Notes: This schematic illustrates the kinematic evolution of the VLSZ along the boundary of the VLIS (pink) and Rogerson Lake Conglomerate LC (grey). The red lines represent the trace of bedding (S0), and the black lines represent the S1 foliation.

Source: Kruse 2020.

A period of relaxation during shortening and lithospheric extension (D2) is evidenced by the suite of mafic dykes intruding into the VLIC and locally within the Rogerson Lake Conglomerate. This extensional event is further evidenced by the late Silurian magmatism of the gold-mineralized Windsor Point Group in the Cape Ray deposit area, and the contemporaneous



Mount Peyton Intrusive suite (dated at 424-418 Ma; Sandeman et al. 2017). Accordingly, the D2 extensional event occurred before the Acadian Orogeny. At the Valentine property, two sets of mafic dykes are associated with this event: a WSW-SW striking main set parallel to the main S1 foliation and the VLSZ and dipping to the northwest. A second, subordinate set, oriented at a high angle to the first set in a “ladder rung” pattern, have shorter strike extent and are strongly folded. Larger (greater than 1m) dykes are commonly sheared at their contacts and undeformed internally. The dykes are rheologically weaker than the host granitoid rocks of the VLIC. These sheared mafic dyke contacts provide a fluid pathway for mineralized fluids, which travel up along the contacts before exploiting more open fractures in the granitoid. The pressure reduction as fluids enter these fractures enables vein formation and gold deposition.

Mineralization of quartz-tourmaline-pyrite-Au (QTP-Au) veins is associated with a renewed D3 shortening phase correlated with the late Acadian Orogeny. Geochronological studies suggest two mineralization emplacement events, with an earlier pulse at 410 Ma (Dunning 2017) and a later pulse at 384-378 Ma (Layne et al. 2022, Sandeman et al. 2022). These dates align with regional data suggesting two significant gold-mineralizing events across central Newfoundland: one in the late Silurian-early Devonian (approximately 420–410 Ma) and a later event in the middle-late Devonian (approximately 380–370 Ma) (Honsberger et al. 2022). Up to three separate QTP-Au vein sets – defined as a distinct zone of QTP-Au veining and mineralization – are recognized at the Marathon and Leprechaun deposit areas. Up to four separate QTP-Au vein sets occur at the Berry deposit. Previous descriptions of these QTP-Au vein sets (Robert and Poulsen. 2001) have described the first two as “extensional” and “shear” respectively, based on the orientation of the veins with respect to the S₁ foliation and in the parlance of the classic shear zone-hosted gold deposit model. All vein sets are observable in outcrop and drill core within the granitoid rocks of the VLIC, but the Set 1 extensional veins, dipping at a low angle to the SW, are the dominant set associated with the bulk of gold mineralization. These vein sets are described further in Section 7.3.2.

Finally, additional brittle-ductile-to-fully brittle fabrics and structures (D₄ and D₅) occurred post-mineralization and are associated with late Acadian to Neo-Acadian deformation. The first is a broad crenulation fabric, and the latter is a brittle fault set. Neither of these later deformational events impacts the deposit-scale development of gold mineralization, other than the potential for D₅ structures to locally create fault offsets in areas of D3 vein development.

7.3.2 Mineralization

Gold mineralization at the Valentine Gold property is developed within QTP-Au vein sets associated with D₃ extensional and shear deformation within granitoid rocks of the VLIC in contact with the Rogerson Lake conglomerate across the northeast-southwest-oriented VLSZ (Kruse 2020).

The QTP-Au veins are identified in prospecting samples, outcrop, trenching, and drilling at numerous locations along the 32 km strike extent of the VLIC and VLSZ within the Valentine Gold property. Significant QTP-Au veining occurs dominantly within the trondhjemite, quartz monzonite, and to a lesser degree, mafic dyke units along and proximal to the sheared contact with the Rogerson Lake Conglomerate. Minor amounts of gold-bearing QTP veining extend across the VLSZ contact and into the Rogerson Lake Conglomerate. Gold-bearing QTP veining is also exposed in the VLIC at 500 m and 1000 m from the VLIC-conglomerate contact at the Steve Zone and Scott Zones, respectively. All the gold occurrences share similar general mineralogical characteristics, with coarse gold mineralization occurring predominantly within quartz-tourmaline-pyrite veins and, to a lesser degree, in alteration selvages. Visible gold is common.



Individual QTP-Au veins range in thickness from a few millimetres and centimetres to metres, but are typically 2 cm to 30 cm thick. QTP-Au veins developed within brittle extensional fractures and as sigmoidal vein arrays, both dipping at a low angle to the SW (Set 1 veins), represent the dominant structural control on mineralization at the property and within the mineral resource models for each of the Marathon, Leprechaun, Sprite, Victory, and Berry deposits.

The gold mineralization at the Valentine Gold property occurs as structurally controlled, orogenic gold deposits consisting dominantly of an echelon stacked southwest-dipping extensional QTP-Au vein sets (Set 1) and lesser shear-parallel QTP-Au vein sets (Set 2) proximal to the VLSZ. Extensional QTP-Au veins often occur in sigmoidal vein arrays, which appear as horsetails terminating from the ends of shear parallel veins. The relationship between the S_1 and S_2 veins has been observed in outcrop and in pit walls (Figure 7-7, Figure 7-8). This style of mineralization occurs intermittently along the defined strike length of the main gold zone, in which a series of deposits and occurrences have been, and continue to be, discovered. Discoveries to date include the Marathon, Leprechaun, Sprite, Victory, and Berry gold deposits, and the Frank, Rainbow, Steve, Scott, Triangle, Victoria Bridge, Narrows, Victory SW, and Victory NE occurrences.

Figure 7-7: Outcrop at Frank Zone showing Relationship between SW-dipping S_1 Veins and NW-dipping S_2 Veins



Figure 7-8: Illustrated Figure of Outcrop at Frank Zone showing Relationship between SW-dipping S₁ Veins and NW-dipping S₂ Veins



At the deposit scale, a pervasively altered, intensely QTP veined core complex, which is referred to as the “Main Zone”, has been delineated at the Marathon, Leprechaun, and Berry deposits. Up to three vein sets have been defined via televiewer surveying and analysis at the Leprechaun and Marathon gold deposits, and up to four vein sets at the Berry deposit.

A schematic model of the QTP-Au vein sets and their geometrical relationship with mafic dykes is presented in Figure 7-9 and include the following:

- Set 1 QTP-Au veins occur as uniformly shallow southwest-dipping, en-echelon arrays orientated at high angle to the regional penetrative S₁ foliation and roughly perpendicular to the NE-dipping L₁ stretching lineation.
- Lesser Set 2 QTP-Au veins are steeply northwest-dipping to subvertical, parallel to the regional S₁ shear fabric, and commonly developed at contacts with mafic dykes or at localized zones of increased deformation.
- Rare Set 3 QTP-Au veins are steeply dipping with a NW-SE orientation orthogonal to the strike of the S₁ foliation (Kruse 2020).
- At the Berry deposit, a fourth vein set has been identified with a very low angle dip to the NNE (Kruse and Bartsch 2021).
- Each vein set is mineralized, with a strong dominance in frequency of occurrence and gold content exhibited by Set 1.

The Set 1 extensional and Set 2 shear-parallel QTP-Au veins are up to 3 m thick and have been traced in trenched outcrop exposures for over 280 m of continuous strike length; however, the



observed strike length of individual veins is typically in the range of tens of metres to tens of centimetres (Figure 7-10).

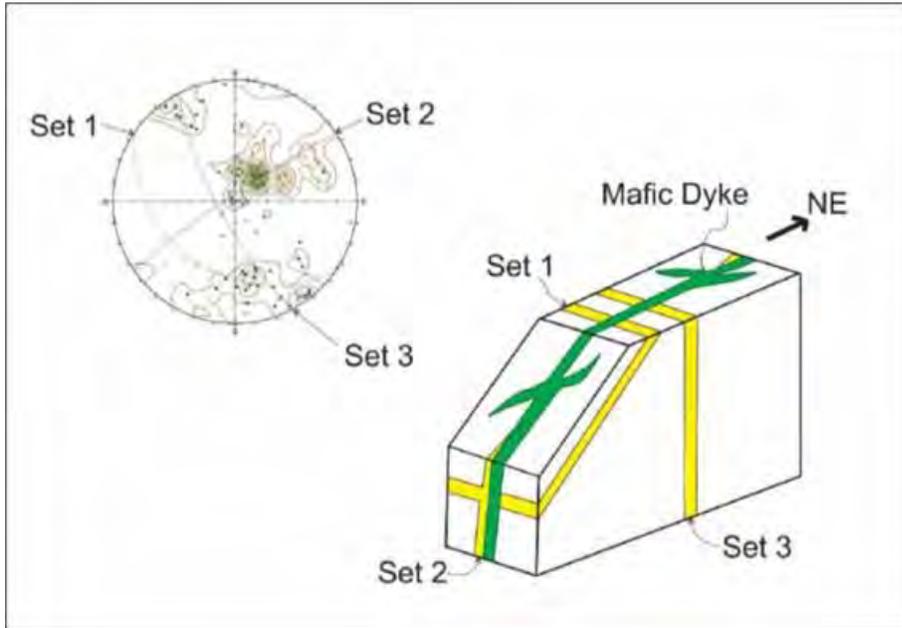
The visible gold in QTP veining occurs as grains, ranging in size from less than 0.1 mm to greater than 1-2 mm, hosted by quartz, tourmaline masses, within and along the margins of pyrite, within altered host rock, or within or associated with tellurides including calaverite, tellurobismuthite, petzite, and altaite. Highest gold grades are commonly associated with large (1 cm to 3 cm), euhedral, and occasionally subhedral pyrite in QTP veining. On weathered surfaces, the gold is observed in limonite patches derived from the weathering of pyrite (Barbour 1999). Other sporadically observed sulphides, in decreasing order of abundance, include chalcopyrite, pyrrhotite, sphalerite, and galena. These minerals form minor components to the overall mineralization.

In addition to the QTP-Au style of mineralization, mineralization has been discovered in several formations outside the VLIC. These new styles of mineralization include the South Quinn and Minotaur showings. These areas are new discoveries with minimal data collected to date, but initial indications suggest a similar fluid emplacement mechanism as found in the VLIC. In South Quinn, mineralization is characterized by quartz veins containing coarse-grained sulphides, in descending order of abundance: arsenopyrite, pyrite, chalcopyrite, sphalerite, and galena. The veins are larger, on the order of 30 cm to 90 cm or more, and generally appear to parallel the local foliation, which dips to the north.

In the Minotaur showing, mineralization appears to comprise quartz-carbonate veining on the order of 5 cm to 90 cm thick, with disseminated to locally coarse-grained sulphides including pyrite, chalcopyrite, galena, and local arsenopyrite. These veins are hosted within gabbros of the VLSG, which have been intensely altered by the mineralized hydrothermal fluids. The gabbros that host mineralization are generally moderately magnetic, with an increase in magnetism proximal to the mineralized zones, followed by a dramatic drop in magnetism within the alteration halos and veins themselves. This drop in magnetism is likely due to magnetite destruction as the Fe is altered to pyrite. Veins appear to be divided into two populations, with the most abundant vein set dipping moderately to the northeast and a secondary set dipping moderately to the northwest. Assays result from both grab sampling and drilling in the Minotaur area are pending release, and no indication of economic prospectivity has been suggested.



Figure 7-9: Schematic Illustration of the Geometrical Relationship between Mafic Dykes and Veins



Source: Kruse 2020.



Figure 7-10: Examples of Mineralization in Outcrop

A) Sheeted, Shallow Southwest-Dipping Quartz Tourmaline Pyrite Vein Array (Set 1), Marathon Deposit



B) Gold-Bearing Quartz-Tourmaline-Pyrite



C) Stockwork Quartz Tourmaline Pyrite Veins Hosted In Strongly Sericite-Silica Altered Quartz Porphyry, Marathon Deposit



D) Field Relationship Between Set 1 (Extensional) And Set 2 (Shear Parallel) Veins, Leprechaun Deposit



The relationship between high-grade gold mineralization and the location of the dykes supports the theory that the mafic dykes provide a rheologic contrast that (1) promotes brittle fracturing of the granitoid unit and therefore, acts as a controlling factor of mineralized fluid flow, and (2) incites the eventual emplacement of zones of gold enrichment.

The individual characteristics of mineralization at the Marathon, Leprechaun, and Berry deposits are described below. The information in the following sections is summarized from Murahwi (2017), Dunsworth et al. (2017), and Capps and Dunsworth (2019). Downhole surveys were conducted on all drill holes, and the azimuth and dip were measured at varying intervals to plot the drill holes in real space. Measurements were typically taken every 25 m for holes drilled before 2019 and every 2 to 5 m for holes drilled in 2019 or later. Consequently, the relationship



between the sample length and the true thickness of the mineralization is well documented, and all assay sample intervals are given as core length unless noted as true thickness.

7.4 Marathon Deposit

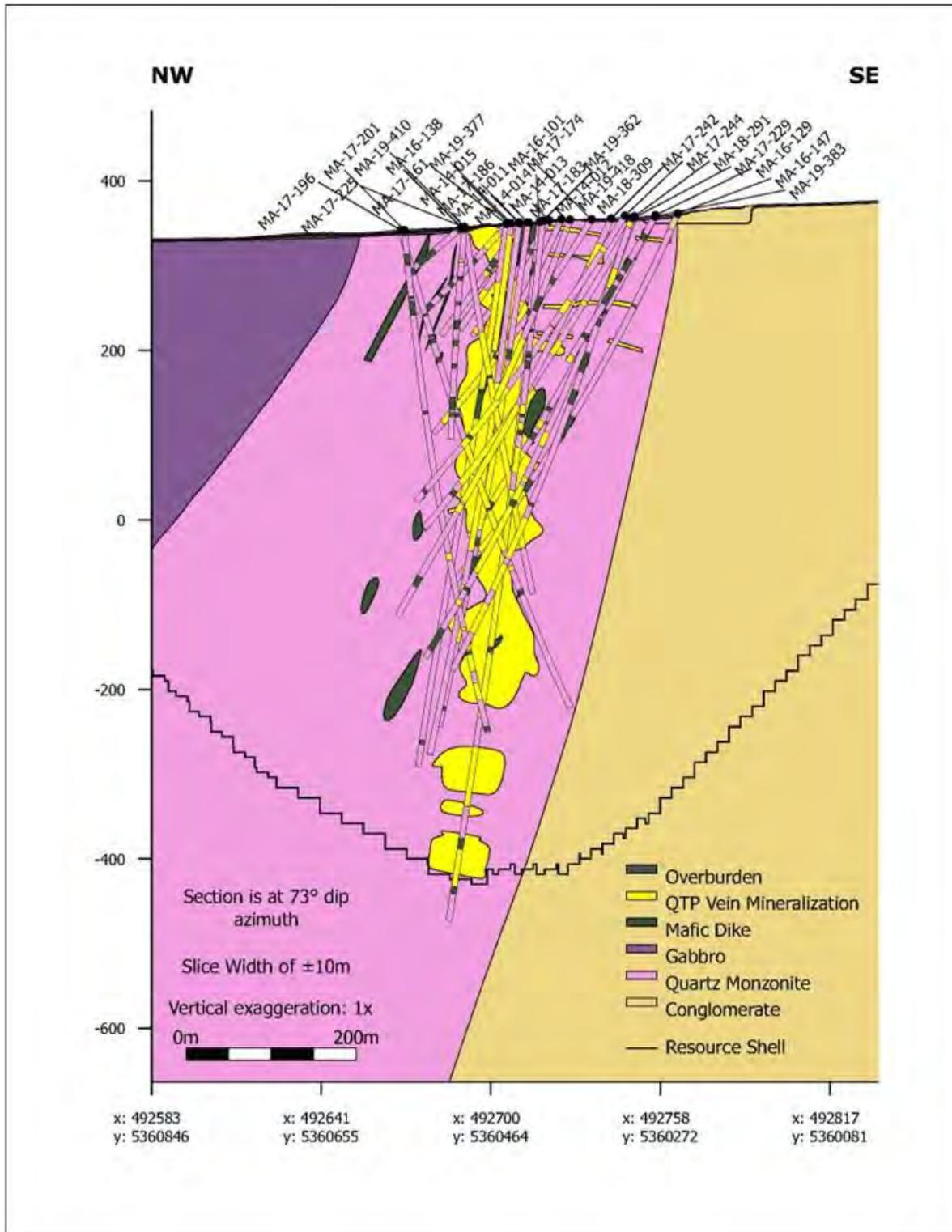
The Marathon deposit is located 6 km northeast of the Leprechaun deposit and consists dominantly of shallow, southwest-dipping en echelon stacked QTP gold veins that intrude dominantly quartz monzonite and lesser aphanitic quartz-porphyry and mafic dykes of the VLIC. Near the southwest end of the deposit, “main zone” mineralization occurs proximal to the VLSZ, but this main zone veers off the VLSZ by approximately 20 degrees moving to the north. At the northeast edge of the deposit, mineralization has migrated as much as 230 m away from the VLSZ.

The Main Zone of gold-bearing QTP veining forms a northeast-trending sub-vertical mineralized corridor of intense QTP gold veining that ranges between 50 m to 200 m in width, occurs over a strike length of more than 1.5 km, and has been observed in outcrop and drill-observed to a downhole depth of 1,000 m (Dunsworth et al. 2017; see Figure 7-11).

The Main Zone contains a lenticular series of shallow, southwest-dipping, gold-bearing QTP veining and is open at depth. Characteristic gold intervals from drill holes that penetrated downward at high angle through the shallow, southwest-dipping, en echelon stacked QTP-Au vein swarms of the Marathon deposit are presented in Table 7-1.



Figure 7-11: Section Showing Geology of the Marathon Deposit



Note: Elevation in 200 m Increments.
 Source: Equinox 2026.



Table 7-1: Selection of Significant Fire Assay Gold Intervals, Marathon Deposit

DDH	Section	Az	Dip	From	To	Core Length (m)	True Thickness (m)	Gold g/t (Uncut)	Gold g/t (Cut)
MA-19-442	16750	343	-87	168	220	52	49.4	2.17	
including				215	220	5	4.8	7.14	
MA-19-372	17220	345	-80	17	62	45	42.8	3.52	3.48
including				30	34	4	3.8	14.25	13.90
MA-18-303	17350	163	-85	100	249	149	141.6	1.54	
including				129	134	5	4.8	6.60	
including				185	191	6	5.7	6.35	
MA-18-295	17110	343	-79	437	496	59	56.1	7.97	4.13
including				489	494	5	4.8	57.74	22.11
MA-17-239	17260	343	-61	183	282	99	79.2	1.85	
included				183	189	6	4.8	10.42	
MA-17-220	17260	342	-82	6	227	221	210.0	1.32	
including				15	22	7	6.7	3.37	
including				140	150	10	9.5	3.18	
MA-17-218	17210	344	-82	4	213	209	198.6	1.36	
including				4	32	28	26.6	3.63	
MA-17-217	17230	340	-82	24	195	171	162.5	1.51	1.49
including				51	63	12	11.4	4.68	
MA-17-213	17160	334	-83	17	242	225	213.8	1.88	
including				17	42	25	23.8	3.38	
including				171	196	25	23.8	4.87	
MA-17-188	17190	343	-80	21	347	326	309.7	2.13	
including				78	139	61	58.0	3.36	
including				209	241	32	30.4	4.04	
including				317	339	22	20.9	3.18	
MA-17-186	17330	342	-82	195	386	191	181.5	1.61	
including				279	306	27	25.7	3.16	
MA-17-176	17330	343	-81	141	259	118	112.1	1.56	
including				204	226	22	20.9	3.58	
MA-17-162	17170	343	-82	35	160	125	118.75	2.12	
including				109	125	16	15.2	4.34	
				210	253	43	40.9	4.18	4.08
including				239	244	5	4.8	9.11	
MA-17-160	17270	343	-82	134	209	75	71.3	3.92	2.29
including				183	188	5	4.8	33.40	8.96
MA-17-159	17240	343	-82	88	138	50	47.5	3.43	2.30
including				131	138	7	6.7	15.36	7.24
				161	211	50	47.5	2.57	
including				161	173	12	11.4	6.10	

Note: Assays cut to 30 g/t Au as per press releases, Marathon resource capped to 55 g/t.



At present, the peripheries of the Marathon deposit mineralized zone are relatively poorly defined, with potential to extend the deposit both to the northeast and southwest. Exploration is planned to test the extent of the Main Zone to the northeast as it extends away from the VLSZ, as well as testing the continuity of mineralization between the Berry Deposit and the southwestern edge of the Marathon Deposit.

7.5 Leprechaun Deposit

The Leprechaun deposit consists of QTP gold-bearing extensional and lesser shear-parallel veins that intrude variably sheared and fractured trondhjemite, as well as sheared mafic dykes of the VLIC.

Mineralization at Leprechaun extends over a strike length of more than 900 m and has been identified at surface in outcrop and in drilling to depths of up to 400 m. The Leprechaun deposit differs from the Marathon deposit in the relatively tight concentration of mineralization in Main Zone type configurations of en-echelon stacked QTP-Au vein sets. These Main Zones range from 30 to 120 m wide, dip to the northwest, and are located proximal to the VLSZ contact within the VLIC trondhjemite. In the characteristic fashion, the dominant en-echelon stacked, southwest-dipping extensional QTP-Au (Set 1) veins occur at high angle or perpendicular to the penetrative regional L_1 stretching lineation, while the lesser shear parallel QTP-Au veins strike subparallel to slightly oblique to the VLSZ (Dunsworth 2011; Dunsworth et al. 2017; Lincoln et al. 2018a, 2018b). Set 1 extensional QTP-Au veins at Leprechaun appear to have a moderately steeper southwest dip than at Marathon (Kruse and Bartsch 2021).

The QTP-Au mineralization at Leprechaun has been modelled in three zones from west to east: Hanging Wall Zone, Main Zone and Footwall Zone (Lincoln et al. 2018; Figure 7-12). The Main Zone is open at depth and is constrained to the southeast by the VLSZ (Figure 7-13) with a gradational transition to the Hanging Wall to the northwest. A high-grade central core occurs within the Main Zone and is bounded by 10–20 m thick mafic dykes to the northwest and the Rogerson Lake Conglomerate to the southeast. This configuration defines a lenticular zone of dense quartz-tourmaline-pyrite (QTP) veining that remains open at depth.

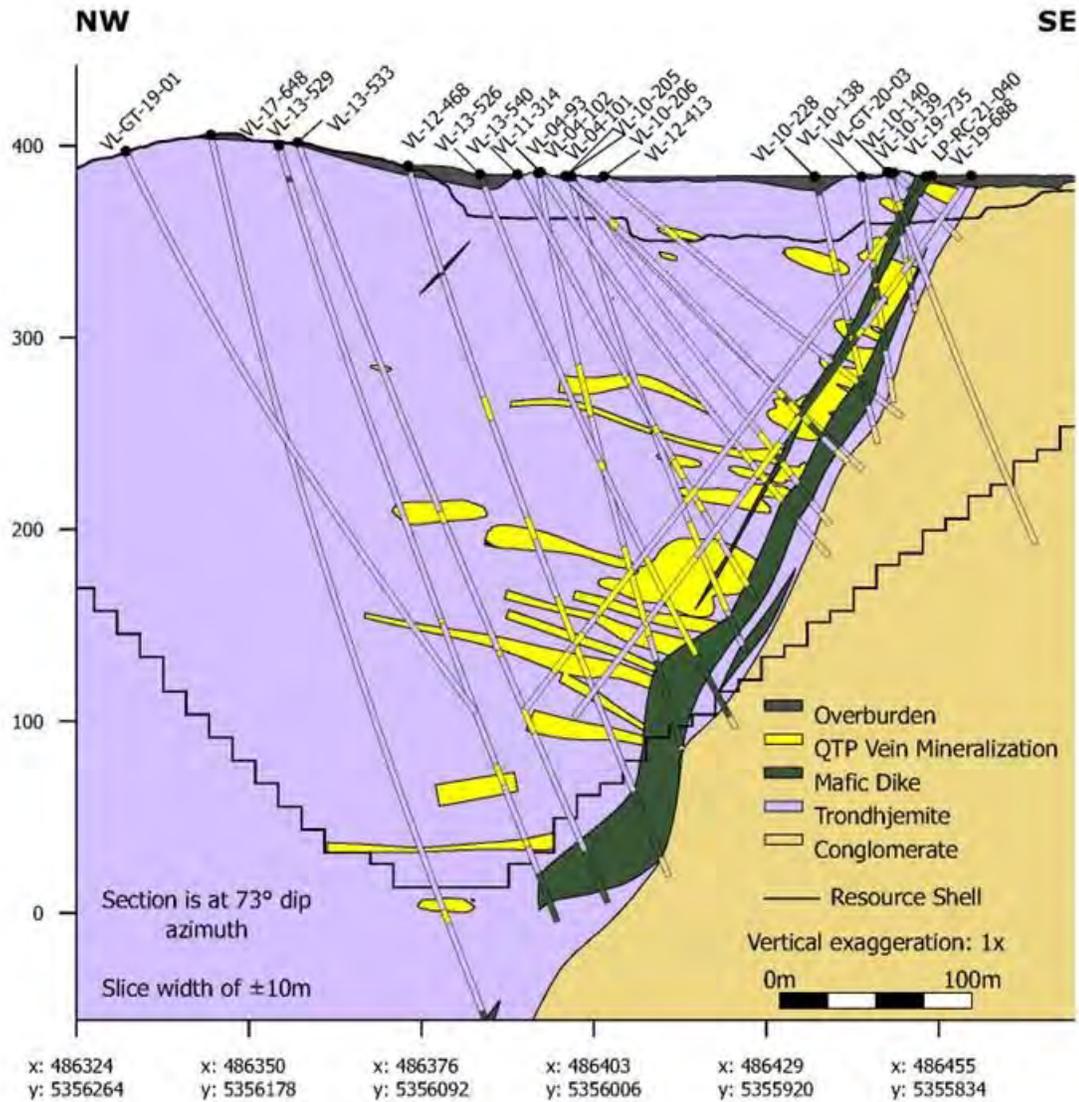
The Hanging Wall Zone occurs transitionally west of the Main Zone and consists of a series of variably shallow to moderately dipping, stacked, en-echelon extensional QTP tension gashes, with minor steeper-dipping QTP veins extending up to 350 m northwest into the hanging wall. The vein density and concentration of vein arrays increase toward the east, proximal to the Main Zone, and remain open to the northwest.

The Footwall Zone is a minor component of the Leprechaun deposit and comprises localized extensional and shear-parallel QTP veins that extend into the Rogerson Lake Conglomerate. Toward the southern part of the deposit, the Main Zone appears to peel slightly further away from the fault contact which spatially coincides with a marked increase in the volume of wide, discontinuous mafic dykes observed near the contact in this area. The gold-bearing mineralizing fluids appear to have used the mafic dyke contacts as fluid conduits and regularly breach and brecciate the margins of the dykes.

The QTP-Au mineralization at Leprechaun occurs as visible gold grains, up to 2 mm in size, occurring in quartz veins and along vein margins as well as within tourmaline masses and pyrite and in altered wall rock proximal to QTP-Au veins. A selection of significant gold intervals from drill holes that penetrated downward at high angle through the en-echelon stacked QTP-Au vein swarms of the Leprechaun deposit are presented in Table 7-2.



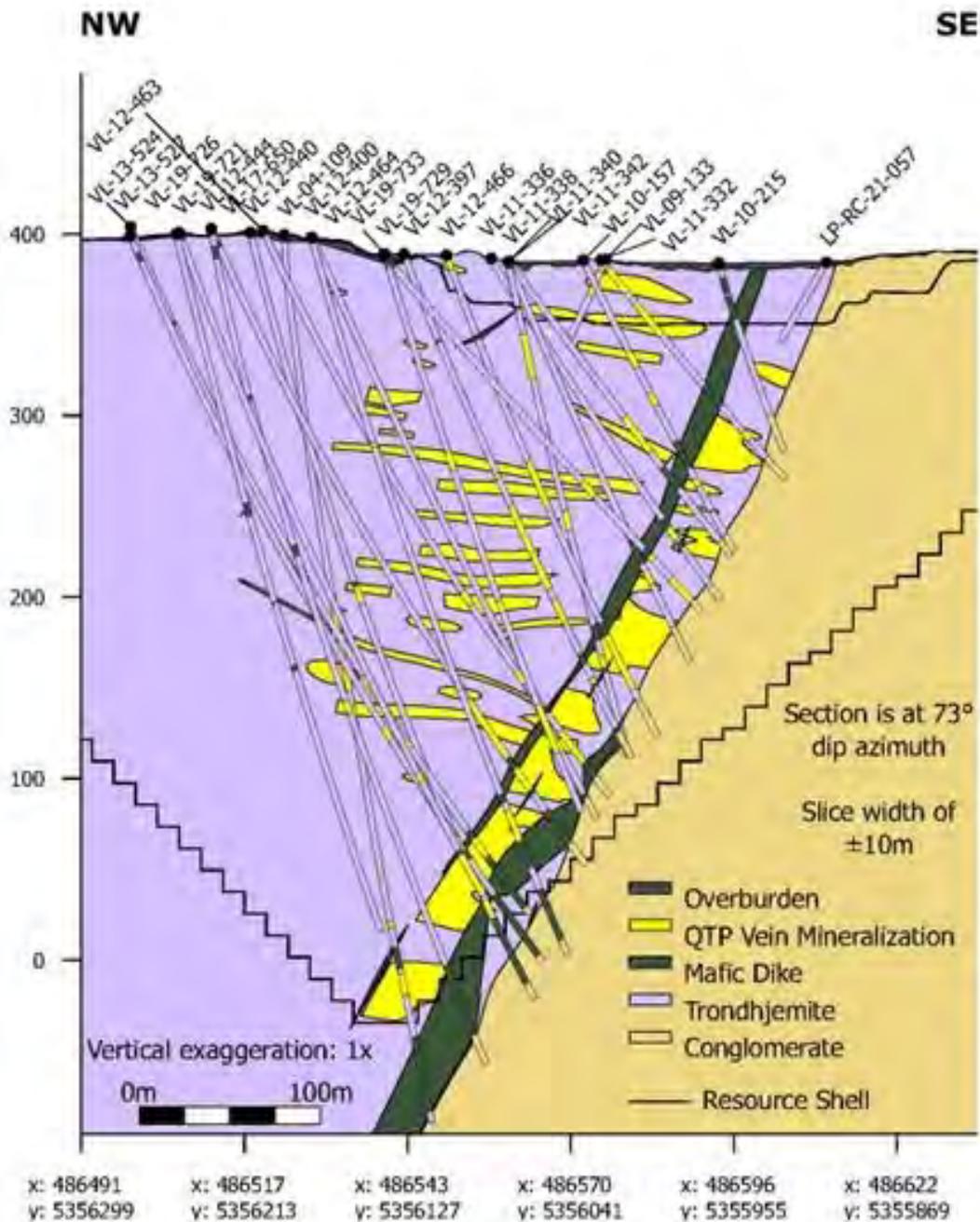
Figure 7-12: Section Showing Geology of the Leprechaun Deposit



Source: Equinox 2026.



Figure 7-13: Section showing the Geology and Mineralized Zones of Quartz-Tourmaline-Pyrite-Gold-Bearing Veins at the Leprechaun Deposit



Source: Equinox 2026.



Table 7-2: Selection of Significant Fire Assay Gold Intervals, Leprechaun Deposit

DDH	Section	Azimuth	Dip	From (m)	To (m)	Core Length (m)	Gold g/t (Uncut)	Gold g/t (Cut)
VL-10-165	10000	162.6	-45	164	173	9	13.40	
VL-10-225	10012	169	-80	64	91	19	6.53	
VL-10-226	10000	164.5	-80	78	103	17	6.94	
VL-10-226	10000	164.5	-80	90	103	13	11.81	
VL-11-246	10513	161	-72	79	146	37.5	3.75	
VL-11-261	10538	165	-48	167	183	12.8	9.68	
VL-11-288	10500	165	-75	155	237	65.6	2.09	
VL-11-306	9938	160	-54	196	210	13.3	16.15	
VL-11-352	10288	161	-45	136	165	26.1	13.95	
VL-12-401	10350	164	-75	176	206	30	3.93	
VL-12-403	10175	164	-57	210	232	22	7.23	
VL-12-407	10125	164	-62	289	304	15	9.19	
VL-12-408	10000	160	-42	153	172	19	13.81	
VL-12-416	9988	163	-30	52	60	8	15.80	
VL-12-465	10100	161	-63	328	341	13	13.20	
VL-12-504	10010	161	-71	314	321	7	45.58	
VL-13-523	10360	162	-81	261	264	3	52.73	
VL-13-526	9960	163	-70	228	264	36	4.26	
VL-13-537	10080	164	-63	268	271	3	39.55	
VL-17-653	10000	342	-58	102	283	181	3.42	3.17
VL-17-654	10000	340	-57	6	307	301	2.65	2.63
VL-17-655	10120	342	-59	280	431	151	2.34	
VL-17-656	10250	341	-55	69	76	7	19.01	
VL-17-656	10250	341	-55	3	36	33	3.72	
VL-19-679	10060	341	-61	8	14	6	25.78	8.69
VL-19-679	10060	341	-61	152	174	22	9.02	7.55
VL-19-679	10060	341	-61	189	211	22	11.83	8.95
VL-19-680	10080	344	-59	21	92	71	2.52	
VL-19-681	10100	344	-59	179	305	126	4.27	
VL-19-681	10100	344	-59	334	376	42	4.11	
VL-19-686	10040	344	-61	246	399	153	3.02	
VL-19-688	9960	342	-55	245	275	30	5.06	



DDH	Section	Azimuth	Dip	From (m)	To (m)	Core Length (m)	Gold g/t (Uncut)	Gold g/t (Cut)
VL-19-688	9960	342	-55	299	323	24	5.04	
VL-19-695	10020	343	-63	42	140	98	2.41	
VL-19-697	9940	344	-60	169	205	36	5.45	
VL-19-700	10190	344	-65	62	91	29	4.39	
VL-19-703	10280	342	-59	52	71	19	10.03	
VL-19-711	10350	345	-62	256	330	74	4.24	
VL-19-711	10350	345	-62	219	243	24	6.94	
VL-19-719	10350	343	-64	99	140	41	4.49	

Note: Assays cut to 30 g/t Au as per press releases, Leprechaun resource is capped at 54 g/t.

7.6 Berry Deposit

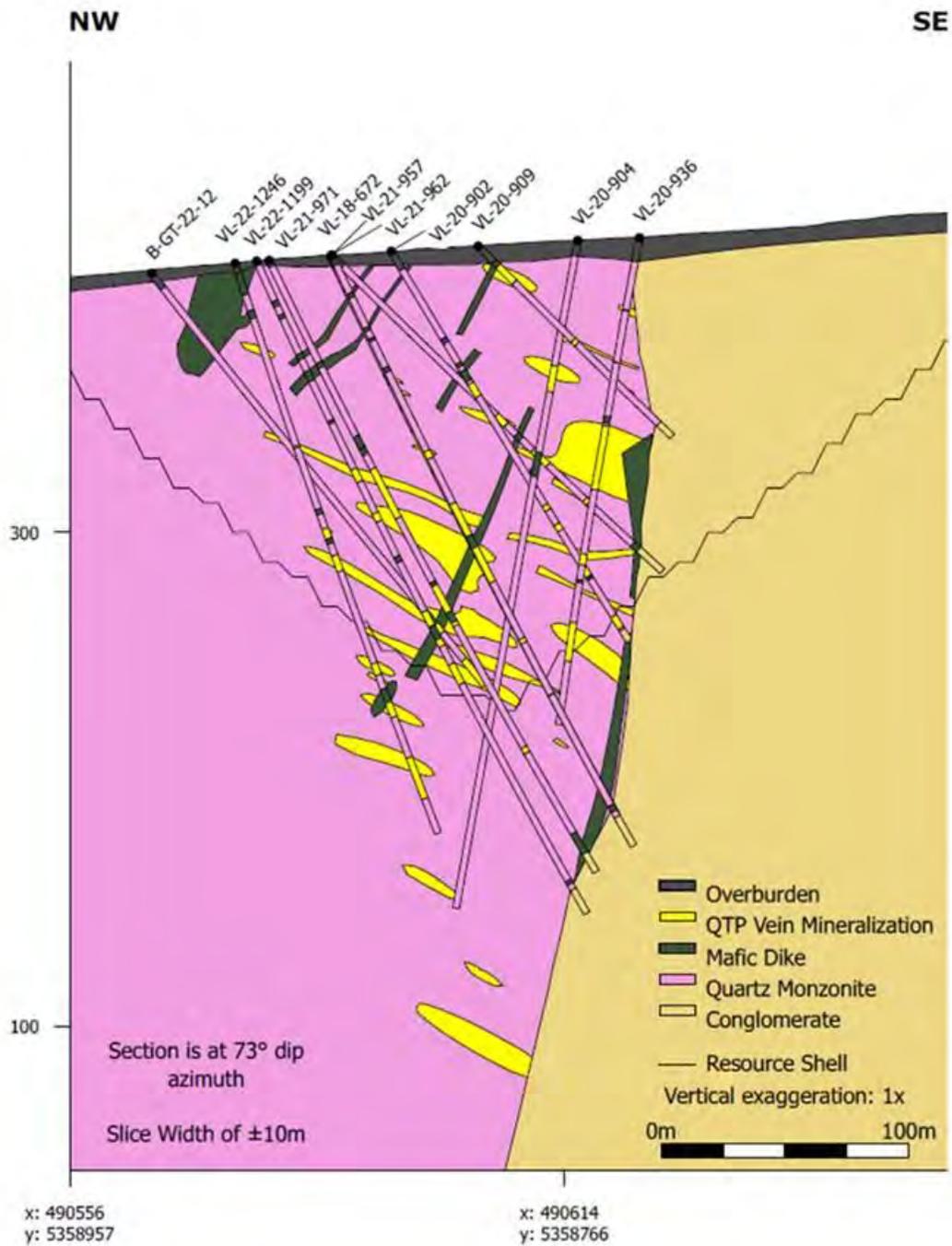
The Berry deposit is located approximately 3 km northeast of the Leprechaun deposit and 2 km southwest of the Marathon deposit and spans a strike length of 1.5 km. The deposit consists of dominantly shallowly southwest-dipping, en echelon, extensional QTP veining hosted in quartz monzonite and lesser mafic dykes and aphanitic quartz porphyry. The mineralized corridors are generally 20 m to 60 m wide and have been traced to depths of over 350 m. In localized zones, mineralization penetrates across the VLSZ and is found up to 20 m into the Rogerson Lake Conglomerate. Mineralization at the Berry deposit is found in tight QTP vein set packages bounded to the southeast by the VLSZ and the northwest by a series of mafic dykes oriented sub-parallel to the shear zone (Figure 7-14). This style and configuration of mineralization are reminiscent of the tightly concentrated mineralized QTP vein sets in the Leprechaun deposit.

The dominant vein orientation in the Berry deposit was found to be the extensional Set 1 veining dipping shallowly to the southwest, like that found in Leprechaun and Marathon deposits. In addition to the three vein sets found in Leprechaun and Marathon, Kruse (2020) documented a fourth orientation of mineralized veining at Berry that dips shallowly to the north-northeast. This QTP-Au vein set, referred to as “Set 3” of the four vein sets, is unique to Berry and appears to have a moderate (yet secondary) association with gold mineralization.

Drilling at the Berry deposit has defined multiple intervals of high-grade gold, with visible gold throughout up to 3 mm in size. A summary of the best results from the Berry deposit to date can be found in Table 7-3.



Figure 7-14: Section showing the Geology and Mineralized Zones of Quartz-Tourmaline-Pyrite-Gold-Bearing Veins at the Berry Deposit



Source: Marathon Gold 2022.



Table 7-3: Berry Zone Drilling Results

DDH	Section	Azimuth	Dip	From (m)	To (m)	Core Length (m)	True Thickness (m)	Gold g/t (Uncut)	Gold g/t (Cut)
VL-18-676	13410	163	-75	145	194	49	41.70	6.17	5.86
VL-19-776	14740	162	-46	9	14	5	3.50	10.43	
VL-19-778	13430	342	-80	183	189	6	5.70	9.74	
VL-19-779	13380	337	-80	85	96	11	10.50	5.54	
				50	63	13	12.40	3.82	
VL-19-780	14740	163	-45	121	131	10	7.00	7.25	
VL-19-786	13700	163	-44	165	187	22	15.40	7.6	6.97
VL-20-799	13500	343	-82	113	168	55	52.30	2.24	
VL-20-806	13730	163	-45	155	169	14	9.80	8.06	
VL-20-813	13380	163	-69	165	177	12	10.20	8.03	
VL-20-823	13690	343	-77	87	207	120	114.00	3.33	3.31
VL-20-824	13720	344	-80	19	23	4	3.80	51.52	8.18
				107	143	36	34.20	3.37	3.20
VL-20-835	13420	343	-83	166	213	47	44.65	2.96	2.41
VL-20-838	13650	345	-73	121	232	111	94.35	1.47	1.43
VL-20-839	13940	163	-45	12	21	9	6.30	14.39	7.69
VL-20-873	13740	343	-75	6.74	92	85.26	81.04	2.61	2.6
VL-20-876	14700	164	-45	87	109	22	15.40	4.91	3.85
VL-20-889	13580	342	-77	37	79	42	39.90	3.70	2.67
VL-20-907	13680	344	-76	97	104	7	6.65	18.16	6.69
VL-21-955	14840	163	-65	119	122	3	2.40	14.93	10.36
				232	254	22	17.60	6.57	5.45
VL-21-987	13710	342	-77	55	211	156	140.40	1.69	1.66
VL-21-973	13640	343	-78	149	194	45	40.50	1.84	1.79
VL-21-995	14150	336	-83	105	124	19	18.05	5.07	
VL-21-1010	13560	163	-57	28	49	21	16.80	5.59	4.33
				161	187	26	20.80	1.58	
VL-21-1027	13650	164	-70	30	52	22	18.70	3.04	
VL-21-1050	14200	343	-81	85	89	4	3.80	7.64	
VL-21-1072	14120	352	-74	108	130	22	19.80	2.25	
VL-21-1088	13770	350	-79	11	12	1	0.90	83.07	30
VL-21-1102	13650	346	-75	196	218	22	19.80	1.33	
VL-21-1150	14120	342	-75	162	183	21	18.90	7.17	4.58



7.7 Frank Zone

The Frank Deposit is located immediately southwest of the Leprechaun Deposit. It is characterized by predominantly shallow, southwest-dipping, en-echelon extensional QTP veining hosted within VLIC trondhjemite, with lesser contributions from mafic dykes. The mineralized corridor is generally 20 m to 50 m thick and has been traced to depths of approximately 750 m. Mineralization at the Frank Zone is constrained by the Rogerson Lake Conglomerate to the southeast and a series of thin, steeply dipping mafic dykes to the northwest, which are oriented parallel to subparallel to the shear zone fabric.

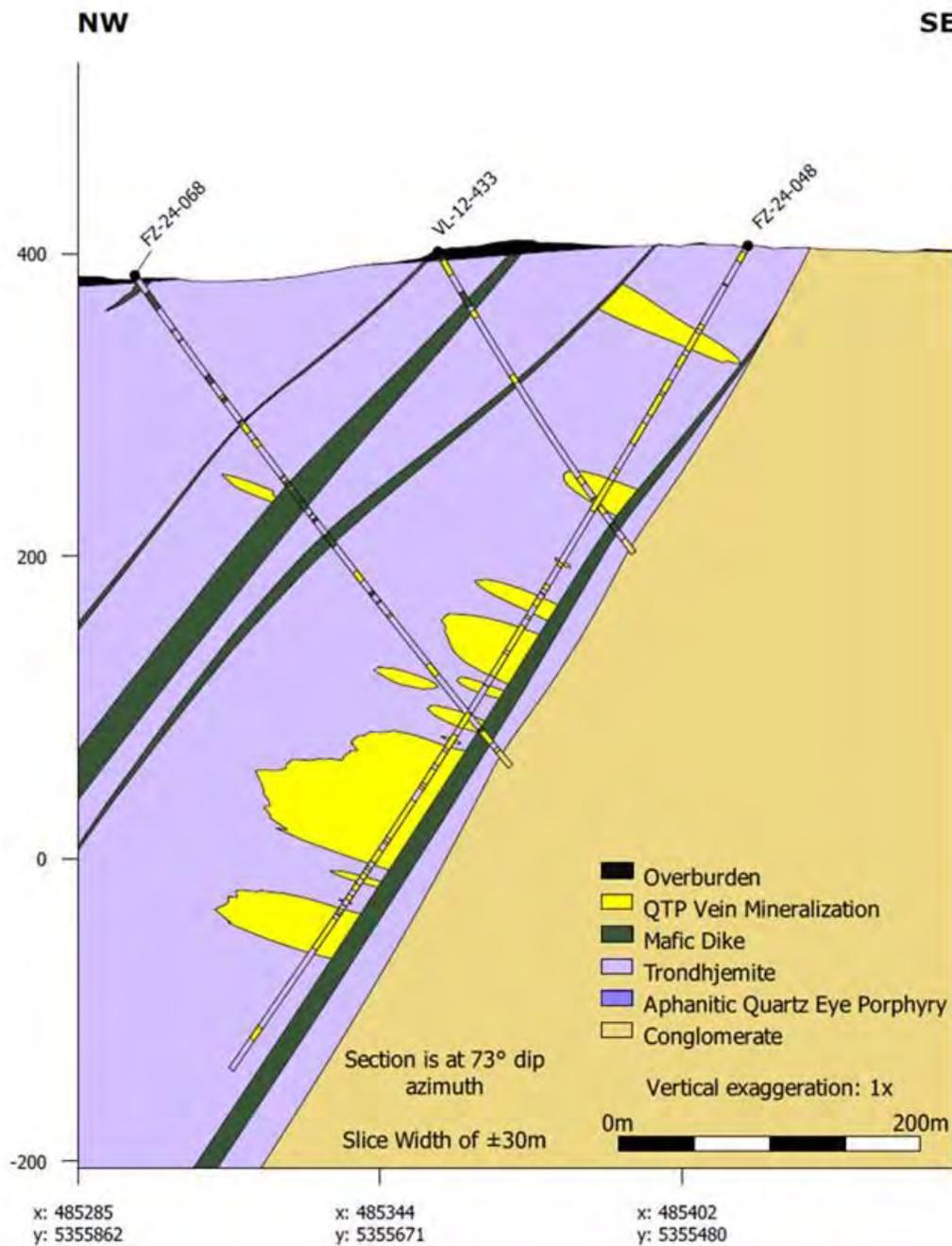
Consistent with regional structural settings, the dominant en-echelon, southwest-dipping extensional QTP-Au (Set 1) veins occur at high angles—or perpendicular—to the penetrative regional L1 stretching lineation. In contrast, the subordinate shear-parallel QTP-Au veins strike subparallel to, or slightly oblique to, the VLSZ (Dunsworth 2011; Dunsworth et al. 2017; Lincoln et al. 2018a, 2018b). Figure 7-15 shows the relationship between the mineralized corridor, the Rogerson Lake Conglomerate, and the mafic dykes in Frank Zone.

A major distinguishing feature of the Frank Zone, relative to other deposits along the VLSZ, is the presence of large shear-parallel veins exposed at surface. The Repeater Hill vein extends for approximately 300 m along strike and reaches widths of up to 2 m to 3 m locally. Frank is the only area exhibiting surface-exposed veining of comparable scale. In addition to the Repeater Hill vein, several other shear-parallel veins are exposed at surface; although smaller, they remain notably continuous relative to those observed elsewhere along the structure. Frank exists at a flexure in the VLSZ, rotating from NE-SW in the Leprechaun, Berry and Marathon deposits, to east-west in Frank. Concurrently, the dip of the fault zone shallows significantly at Frank.

At surface, these veins are predominantly composed of bull quartz but locally contain pyrite as well as minor polymetallic mineralization, including sphalerite, chalcopyrite, and galena. While not common, these minerals do occur intermittently within the vein system.



Figure 7-15: Section showing the Geology and Mineralized Zones of Quartz-Tourmaline-Pyrite Gold-Bearing Veins at the Frank Zone



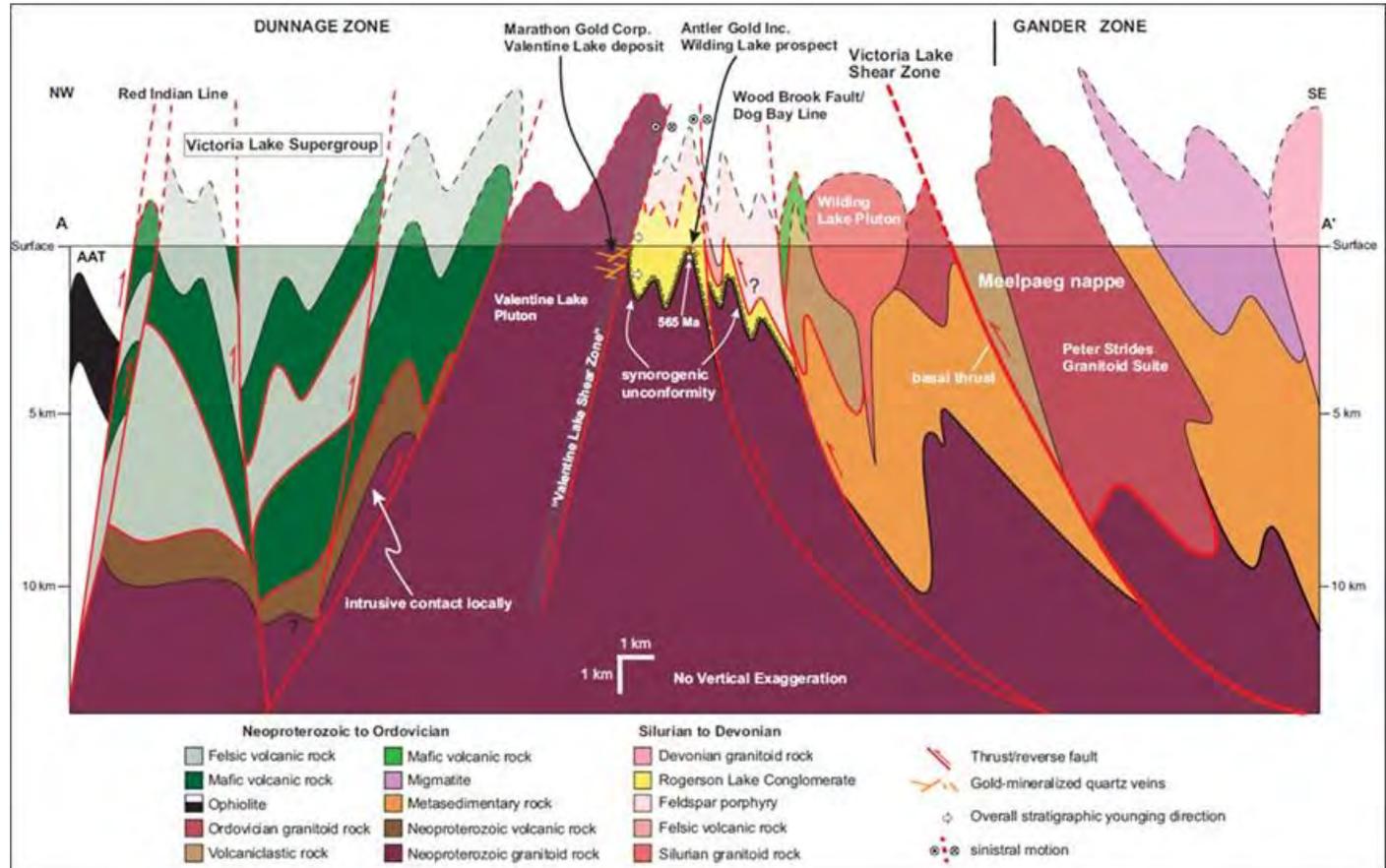
Source: Equinox 2025



8.0 Deposit Types

A schematic model for gold mineralization in central Newfoundland within the Dunnage Zone of the Newfoundland Appalachian system is shown in Figure 8-1. This figure also depicts the geological setting of the Valentine Gold Project.

Figure 8-1: Gold Mineralization in Central Newfoundland, Dunnage Zone



Source: Modified from Honsberger et al. 2019.

There are four principal types of gold mineralization found in Newfoundland: orogenic (or mesothermal); epithermal; sediment-hosted; and VMS-related gold (e.g., Swinden et al. 1991; Evans 1993; Evans and Wilson 1994; Evans 1996; Evans and Wilton 2000; Wardle 2005; Sandeman et al. 2010; Barrington et al. 2016). In central Newfoundland, numerous examples of mesozonal to epizonal, orogenic gold mineralizing systems appear to be spatially related to vein-hosted gold in association with crustal-scale fault zones and faults, late orogenic timing and possible wall rock alteration as manifested by extensive carbonate alteration (Tuach et al. 1988; Evans 1996, 1999; Groves et al. 2003; Wardle 2005). The ultimate genetic origin is uncertain; in some occurrences, gold mineralization may be intrusion-related and/or have textures suggestive of epithermal styles.

The gold mineralization at the Valentine property occurs as structurally controlled, orogenic gold deposits associated with Salinic-aged crustal shortening and deformation. Field-based and oriented drill core structural studies (Kruse 2020; Kruse and Bartsch 2021) have advanced the understanding of the structural model at the Valentine property. Gold mineralization occurs



within quartz-tourmaline-pyrite (QTP) vein sets formed during brittle-ductile deformation of granitoid rocks of the Neoproterozoic Valentine Lake Intrusive Complex (VLIC) near their contact with the Silurian Rogerson Lake Conglomerate. This contact coincides with the Valentine Lake Shear Zone (VLSZ), a major northeast–southwest-trending crustal-scale lithotectonic boundary. The VLIC and VLSZ together represent fundamental structural elements of the Dunnage Zone within the Newfoundland Appalachian system.

Development of an echelon stacked southwest dipping extensional vein sets (Set 1), with lesser shear parallel vein sets (Set 2) have been delineated at the Leprechaun, Sprite, Berry, Marathon, and Victory deposits, and at the Frank, Rainbow, Steve, Scott, Triangle, Narrows, Victory SW and Victory NE occurrences. This vein morphology and structural framework is commonly observed in shear zone hosted gold deposits where the shallow dipping extension veins are less laterally extensive, and the steeper fault-fill veins may display a large vertical extent. However, at the Valentine Gold property, the QTP-Au en echelon stacked, extensional Set 1 veins represent the dominant structurally controlled mineralization style.

The extensional Set 1 and shear-parallel Set 2 QTP-Au veins range from millimetre-scale to three metres thick but are typically 2 cm to 30 cm thick. Local veins have been traced in trenched outcrop exposure for over 280 m continuous strike length; however, the observed strike length of individual veins is typically in the range of tens of metres to tens of centimetres. At the Marathon deposit, where mineralization has been traced to at least 1,000 m below surface within an approximately 150 m wide mineralized corridor, individual southwest-dipping Set 1 extensional veins have been traced laterally in outcrop and trenches for locally over 100 m.

In addition, mineralization has been defined at the Minotaur, South Quinn and Victoria Bridge showings, all outside the main zone of mineralization along the VLSZ. Hydrothermal alteration and mineralization in these showings differ from the QTP-Au veining along the VLSZ in their chemistry and sulphide components, likely due to compositional differences in the host rocks with which the mineralizing fluids interact. These areas of mineralization may be part of the same mineralizing system as that found along the VLSZ, but also present different geometries, a result of differing strain reactivity in different lithologies.



9.0 Exploration

Since acquiring the Property, Equinox has conducted no exploration on the Property.



10.0 Drilling

Historical drilling at the Valentine property includes 136 drill holes (23,775 m) drilled by various companies prior to 2010. The historical drill information is summarized in Section 6.2. Historical drill holes utilized in the current Mineral Resource estimates pertain predominantly to the Leprechaun deposit, where 25 historical drill holes and 4,755 historical assays were utilized in the Mineral Resource estimate (5.2% and 6.7% of the total drill hole and assay files, respectively). The Marathon and Berry deposits do not utilize any historical drill holes or assays.

The most recent drill program completed in 2025 included 200 diamond drill holes for a total of 68,062 m. This drill program focused mainly on defining the Frank Zone, with 30,304.7 m of infill and step-out drilling completed, targeting an initial resource in Frank by the end of 2026. In addition, drilling targeted new areas, including Minotaur, Marathon Gabbro, Rainbow, Western Peninsula, Northwest Contact, Scott Showing, and various greenfield holes in unnamed areas across the project. Drilling was also completed in the Leprechaun, Berry, and Marathon Deposits to test the potential continuity of mineralization at depth.

Between 2010 and 2025, Equinox and its predecessors completed 2,360 diamond drill holes totaling 543,196 m across the Valentine property. Most of the drilling was completed at the principal deposits that form the basis of the Mineral Resource Estimate, including Marathon (154,843.8 m; 28.5%), Berry (126,226.3 m; 23.2%), and Leprechaun (95,598.3 m; 17.6%). Additional drilling was completed at the Frank target (59,076.8 m; 10.9%), Victory (22,273.2 m; 4.1%), and Sprite (21,498.9 m; 4.0%). Drill holes along the main VLSZ are generally oriented in two directions, with initial drill holes shallowly oriented towards 163 degrees, drilling across geological domains to test the location of mafic dykes and the contact with the Rogerson Lake Conglomerate. Additional drillholes are then drilled steeply to the northwest, at 343 degrees, drilling at high angle to the Set 1 veins and testing vertical continuity of mineralization. Sporadic drill holes have also been oriented at odd angles to the standard two orientations to test for additional vein sets and/or structures that have not previously been recognized.

Exploration drilling outside the main resource areas totals 63,678.5 m (11.7%) and includes targets such as Banshee (formerly Marathon South), Minotaur, Narrows, Triangle, Victory SW and Victory NE, Western Peninsula, and the Scott and Steve zones, as well as areas associated with proposed infrastructure including the Marathon, Leprechaun, and Berry waste rock storage facilities (WRSF) and the tailings management facility (TMF). A summary of drilling by target is provided in Table 10-1.

At the time of the Mineral Resource database cut-off, assays from several holes drilled in 2025 had not yet been received and verified and were therefore excluded from the Mineral Resource estimate.

The database includes drill hole information from historical and Equinox drill holes. The cut-off date for the assay database supporting the updated Mineral Resource estimates for the Leprechaun, Berry, and Marathon deposits is October 31, 2025. The current drill hole and assay files are summarized in Table 10-2.

A summary of the drill hole collar locations at the Marathon, Leprechaun, and Berry deposits is presented in Figure 10-1, Figure 10-2, and Figure 10-3, respectively. The updated 2025 drill hole and current assay files form the basis for the new resource estimates at the Leprechaun, Berry and Marathon deposits presented in Section 14.0.

A summary of the diamond drilling used at Valentine is discussed in the subsections that follow.



Table 10-1: Summary of Drilling by Target

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
BZ	# of DDHs	-	-	-	-	-	7	-	-	22	21	159	215	99	-	-	12	535
	Metres	-	-	-	-	-	716.00	-	-	4,973.50	4,197.63	31,739.80	58,221.50	20,901.23	-	-	5,476.67	126,226.33
EA	# of DDHs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	16
	Metres	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,410.00	-	3,410.00
FZ	# of DDHs	-	12	55	-	-	-	-	-	-	-	-	-	-	23	45	99	234
	Metres	-	108.00	8,198.80	-	-	-	-	-	-	-	-	-	-	3,904.00	16,561.30	30,304.70	59,076.80
LP	# of DDHs	96	124	72	22	-	-	2	23	-	69	-	-	-	-	13	4	425
	Metres	10,942.90	21,452.60	21,133.50	7,207.60	-	-	181.00	9,366.20	-	20,510.50	-	-	-	-	3,782.00	1,022.00	95,598.30
LWD	# of DDHs	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32
	Metres	-	307.00	-	-	-	-	-	-	-	-	4,194.70	-	-	-	-	-	4,501.70
MA	# of DDHs	-	-	-	-	25	41	76	105	82	141	-	-	-	-	3	4	477
	Metres	-	-	-	-	4,132.60	7,922.40	18,784.00	46,674.94	34,403.37	37,787.60	-	-	-	-	2,032.92	3,105.94	154,843.77
MAN	# of DDHs	-	-	-	-	-	12	-	-	-	-	14	-	-	-	4	-	30
	Metres	-	-	-	-	-	1,266.00	-	-	-	-	2,260.00	-	-	-	1,766.78	-	5,292.78
MAS	# of DDHs	-	-	-	-	-	-	3	-	3	1	24	-	-	-	-	-	31
	Metres	-	-	-	-	-	-	499.20	-	205.50	128.00	5,767.00	-	-	-	-	-	6,599.70
MT	# of DDHs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27
	Metres	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,614.65
MWD	# of DDHs	-	-	-	-	-	-	-	-	-	-	21	24	-	-	-	-	60
	Metres	-	-	-	-	-	-	-	-	-	-	2,937.00	3,744.00	-	-	-	-	9,834.00
SA	# of DDHs	-	-	-	-	11	-	1	16	-	-	-	-	-	-	-	-	42
	Metres	-	-	-	-	937.00	-	110.00	2,174.10	-	-	-	-	-	-	-	-	9,300.30
SZ	# of DDHs	-	8	1	13	54	2	-	-	-	24	-	16	-	-	12	3	133
	Metres	-	1,146.20	218.00	1,152.00	7,308.00	199.00	-	-	-	2,846.60	-	3,701.10	-	-	3,965.00	963.00	21,498.90
P-TMF	# of DDHs	-	-	-	-	-	-	-	-	-	-	49	-	-	-	-	-	49
	Metres	-	-	-	-	-	-	-	-	-	-	6,782.33	-	-	-	-	-	6,782.33
UN	# of DDHs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	17
	Metres	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,529.00	8,529.00
VGD	# of DDHs	-	6	-	20	10	4	7	-	13	-	-	28	18	-	5	-	111
	Metres	-	1,307.40	-	2,032.00	1,120.00	383.00	620.00	-	1,832.00	-	-	8,336.80	5,093.00	-	1,549.00	-	22,273.20
WP	# of DDHs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5
	Metres	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	814.00	814.00
Total DDH		96	152	128	55	100	66	89	144	120	256	297	283	117	23	98	200	2,224
Total metres		10,942.90	24,321.20	29,550.30	10,391.60	13,497.60	10,486.40	20,194.20	58,215.24	41,414.37	65,470.33	53,680.83	74,003.40	25,994.23	3,904.00	33,067.00	68,062.16	543,195.76
Historical DDH		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	136.00
Historical metres		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25,652.00
																	Total DDH	2,360
																	Total metres	568,847.76



Location Legend	
BP	Berry Deposit
EA	Eastern Arm & South Quinn
FZ	Frank Zone
LP	Leprechaun Deposit (incl Leprechaun South)
LWD	Leprechaun Waste Dump
MA	Marathon Deposit
MAN	Narrows and Triangle
MAS	Marathon South
MT	Minotaur
MWD	Marathon Waste Dump
SA	Sprite Area (Rainbow, Scott and Steve)
SZ	Sprite Deposit
P-TMF	Tailings Management Facility
UN	Undeclared Prospects
VGD	Victory Deposit (incl VNE and VSW)
WP	Western Peninsula

	Totals						
	Marathon	Leprechaun	Berry	Victory	Sprite	Frank	All others
Metres Drilled	154,843.77	95,598.30	126,226.33	22,273.20	21,498.90	59,076.80	63,678.46
% of Total Metreage	28.51%	17.60%	23.24%	4.10%	3.96%	10.88%	11.72%
# of DDH	477	425	535	111	133	234	309



Table 10-2: Summary of the Marathon, Leprechaun, and Berry Geological Databases used in the Updated Mineral Resource Estimations

Exploration Activity	Marathon	Leprechaun	Berry
Drill holes	716 drill holes totalling 161,717 m in total length drilled	498 drill holes totalling 104,746 m in total length drilled	580 drill holes totalling 128,641 m in total length drilled
Gold Assays	111,786 assays totalling 156,034 m of total assayed length (96.4% of the total length drilled)	74,893 assays totalling 101,403 m of total assayed length (96.8% of the total length drilled)	91,000 assays totalling 119,250 m of total assayed length (92.7% of the total length drilled)
Lithological Records	17,083 lithological records	8,792 lithological records	10,143 lithological records
Survey Records	25,749 downhole survey records	25,671 downhole survey records	28,889 downhole survey records
Visible Gold Records	1,460 visible gold records	1,285 visible gold records	609 visible gold records
QTPV Records	3,342 QTPV records	2,751 QTPV records	5,784 QTPV records

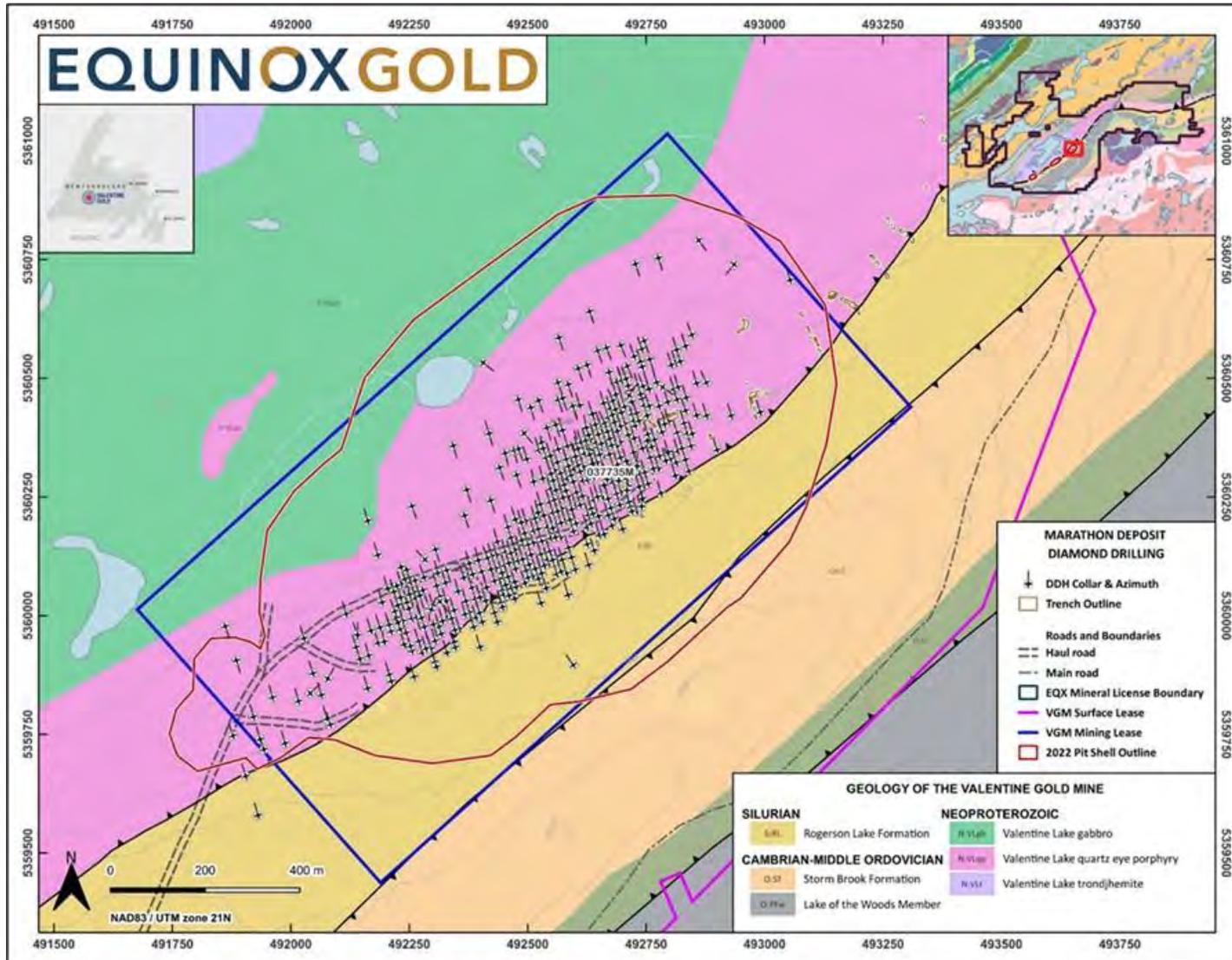
Notes:

QTPV = quartz-tourmaline-pyrite mineralized zones.

Records summarized above reflect drill hole data based on the Mineral Resource estimate selection cutoff of October 2025.



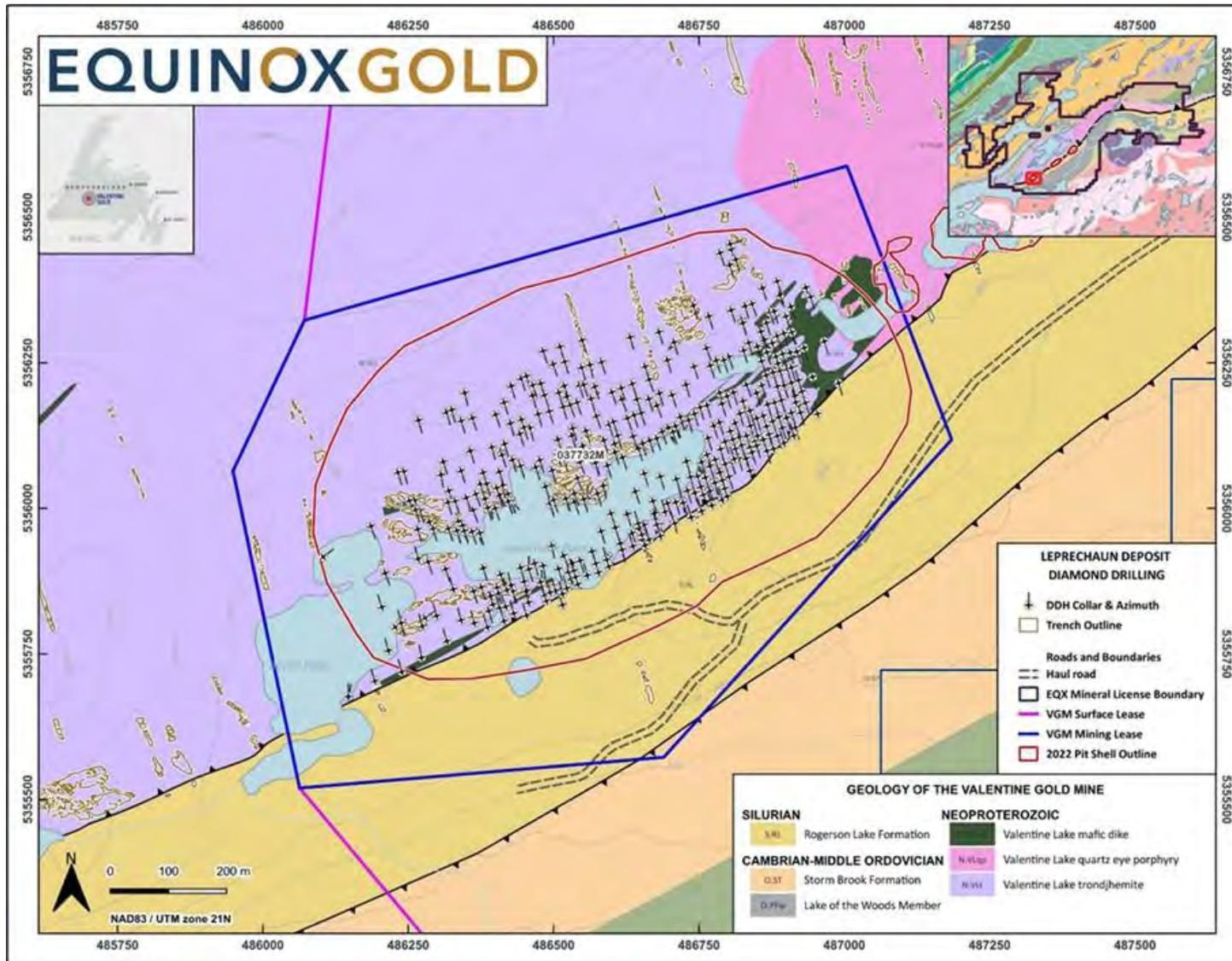
Figure 10-1: Diamond Drill Holes Completed by Equinox at the Marathon Deposit



Source: Equinox 2025.



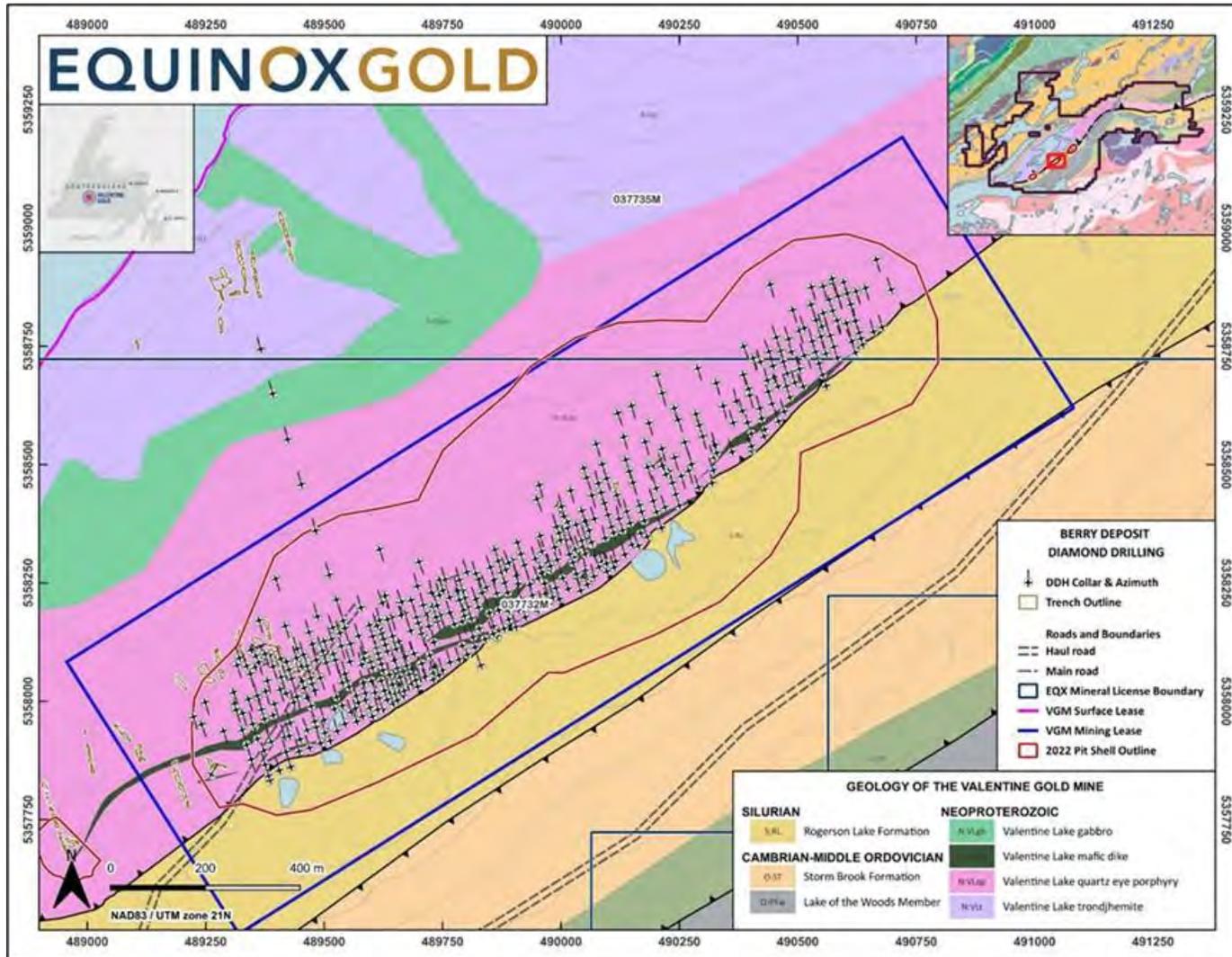
Figure 10-2: Diamond Drill Holes Completed by Equinox at the Leprechaun Deposit



Source: Equinox 2025.



Figure 10-3: Diamond Drill Holes Completed by Equinox at the Berry Deposit



Source: Equinox 2025.



10.1 Diamond Drilling Procedures

Diamond drilling was conducted by Springdale Forestry of Springdale, NL, between 2010 and 2011, and by RNR Drilling Ltd. (Rob's Grader Services) of Springdale from 2012 onward.

Since 2010, collars were positioned using a Trimble R8, R12i, or TopCon Hiper HR GPS unit and were aligned to the designated azimuth using a Reflex TN-14 gyroscopic compass or traditional compass and picket method for holes prior to 2017. The TN-14 unit uses a fibre-optic gyroscope to determine the rig's azimuth and dip. Upon completion of each drill hole, the GPS unit was used to record the final UTM coordinates of the collar location, spatially referenced to the NAD83 UTM coordinate system. All drill holes are subjected to downhole deviation surveys to accurately quantify the borehole trajectory. Equinox's predecessors historically employed a range of survey instruments supplied by Reflex (now formally Imdex), with equipment selection evolving as technological advancements advanced. Since 2024, the primary instrument utilized has been the Reflex Omni-42 gyroscopic survey tool. The Omni-42 incorporates dual north-seeking gyroscopes to determine azimuth and inclination at discrete intervals, typically spaced every 2 m to 5 m throughout the borehole profile. Consequently, the relationship between the sample length and the true thickness of the mineralization is well-documented, and all assay sample intervals are given as core length unless noted as true thickness.

Diamond drilling was conducted using wireline NQ-size double-tube barrels, typically producing 3 m runs of core, except in areas of poor recovery. Core splits are archived for future geological confirmation and QA/QC work. Drilling has been conducted as both inclined and sub-vertical holes to accommodate the variable dip of mineralized domains. Inclined holes were typically drilled at an inclination of 45° to 83° and were oriented either southeast or northwest to intercept the shallowly southeast-dipping QTP veins, the steeply northwest-dipping shear parallel QTP veins, and the steeply northwest-dipping contact between the VLIC and the Rogerson Lake Conglomerate.

Advanced exploration drilling has been conducted on nominal 100 m spaced lines with 30 m spaced holes, closing to 25 m x 25 m and up to 10 to 15 m drill centers at the Marathon, Leprechaun, and Berry deposits.

At the end of each run, the driller placed the drill core into core boxes marked with a box number. The driller inserted a block marked with the run depth in metres at the end of each run. The drill core was then transported to the core logging facility at the end of each 12-hour shift.

After completing the hole, collars were marked with a wooden pole bearing the hole number. Drill collar positions were surveyed after completion of the drill hole using either a Trimble or a Topcon GPS system. The Trimble is comprised of an R8 or R12i base station and a rover, and a handheld Geo XM, while the TopCon uses two Hiper HR units, both with base-station correction. These machines yielded an accuracy of less than 10 cm in collar locations and have been used to survey the locations of historic drill collars wherever they could be found.

At the core logging facility, each run was marked with an orientation line and geotechnically logged. The core was then photographed, geologically logged, and marked for sampling by the geologist prior to cutting in half with a core saw along the orientation line. In 2025 and for a portion of 2020, an ACT-III orientation tool was used to orient drill core, increasing confidence in vein, contact, and structural orientations. For the oriented core, additional steps were taken to ensure it was properly pieced together and oriented upon arrival at the core shack. An orientation line was placed on the core continuously across all properly oriented sections, with breaks where no orientation mark was recorded. In addition to standard geological logging, measurements were taken in these oriented holes to record the true orientations of veins,



contacts, and structural features. After sampling was complete, the core boxes containing half core were stacked and stored at the Valentine exploration camp. Logging and sampling procedures are described in Sections 10.2.1 and 10.2.2.

10.1.1 Logging

Marathon Gold geologists and field technicians conducted geotechnical logging, including recording core recovery, Rock Quality Designation (RQD), joint characteristics (such as natural breaks or planes of weakness), Initial Rock Strength (IRS), mineral infill, and weathering along joints.

Geological logging includes an initial summary log of the principal rock types and mineralized intervals, followed by a detailed geological log that describes a predetermined index of rock type, detailed lithology, alteration type and degree, mineralization, and structural observations. The geological log also contains the sample intervals and numbers.

10.1.2 Core Sampling

Since 2010, core cutting has been done with heavy-duty DeWalt 10" wet tile saws using very thin, continuous-rim diamond porcelain blades and aluminum oxide conditioning sticks. In 2023, the Dewalt saws were replaced with Husqvarna MS 250 saws, and in 2024, two Corewise Automatic core saws were installed. Drill core samples were taken from half-cut cores, except in rare zones of intense fracturing, where the core was split manually. Sample intervals were determined by the geologist based on changes in lithology, alteration, and fracture intensity, and were nominally taken at 1 m intervals in mineralized zones and 2 m intervals in barren zones up until 2023, after which all holes were sampled at 1 m intervals. Sample locations were noted on the geological drill log. One-half of the drill core was placed in a plastic sample bag, tagged with a unique sample number, tied, and batched for dispatch to the laboratory for preparation and analysis. Equinox Gold sampled the entire length of each hole excepting large zones of mafic dyke or conglomerate that contained no visible veining.

Specific gravity values have been systematically measured by site geologists using the Archimedes method, which measures the weight of a piece of core in air, the weight of the same piece of core in water, and then calculates the specific gravity using the formula:

$$\text{Specific Gravity} = W_{\text{air}} / (W_{\text{air}} - W_{\text{water}}), \text{ where } W \text{ represents weight.}$$

Samples were selected from half core and were chosen to represent the different lithologies, alteration types, and mineralized domains observed.

A detailed specific gravity program was initiated by Marathon Gold in the fall of 2021 that measures densities for all sample intervals and lithologies. The work included checks of all previous density measurements collected for the Leprechaun, Marathon and Berry deposits. Following this detailed specific gravity program, specific gravity samples have been collected regularly on all drill holes. Samples are collected every time there is a significant lithological, mineralogical, or alteration change, or every approximately 30m in consistent lithologies.

10.1.3 Sample Recovery

Diamond drill core recovery was routinely measured during core logging. Drill core recovery was excellent, averaging 95%. There is no evidence of bias or any relationship between core recovery and assayed gold grade.



10.1.4 Database

Until 2019, geotechnical and geological logging data, as well as sample chain-of-custody data, were entered directly into Microsoft Excel worksheets per hole and manually updated into a master worksheet by the Exploration Manager. From 2019 to 2021, Geologists recorded geological and geotechnical information directly into the cloud-based MX Deposit database, which was customized to capture all the same information found in the Excel workbooks. Following the introduction of the MX Deposit database, numerous deficiencies were identified, prompting the introduction of the acQuire database in 2021 to record and analyze all drill data collected on site. Templates for logging were developed with Acquire support staff, and all Marathon and historical data were migrated to Acquire.

Assay results were appended to the geological worksheets using the Excel VLOOKUP function, with the sample number serving as the unique reference. This minimized the risk of data transcription errors when receiving analytical results. When logging began using the MX deposit database and while using acQuire, assay certificates were automatically uploaded to the program, further reducing the potential for human error.



11.0 Sample Preparation, Analyses, and Security

11.1 Sample Preparation and Analysis

11.1.1 Introduction

This section includes a discussion of security, sample preparation, analytical techniques, and quality assurance/quality control (QA/QC) data from diamond drill core and reverse circulation (RC) chip samples collected by Equinox and its predecessors between January 1, 2010, and December 31, 2025. The majority (97%) of exploration samples collected by Equinox Gold were subsequently prepared and analyzed at Eastern Analytical, located in Springdale, NL. Eastern Analytical is ISO 17025 accredited and is independent of Marathon Gold, Calibre Mining, or Equinox Gold. In 2021, samples from the Victory Gold Deposit (VGD) and Marathon condemnation samples were sent to SGS in Lakefield, Ontario, for an accelerated return of results. SGS is ISO 17025 accredited and independent of Marathon Gold, Calibre Mining, or Equinox Gold. The analytical results are maintained by Equinox in an Acquire database, and the assay files used in the current Mineral Resource estimates are presented and discussed in Section 14.0.

Equinox established a QA/QC protocol to ensure the reliability and validation of the exploration data. These measures include written field procedures for drilling, surveying, sampling, and assaying; data management; and database integrity.

Analytical control measures involve internal and external laboratory controls implemented to monitor the precision and accuracy of the sampling, preparation, and assaying processes. They are also important for preventing sample mix-ups and for monitoring voluntary or inadvertent contamination of samples.

Assaying protocols involve duplicating and replicating assays and inserting certified reference material (CRM) and blank samples to monitor the reliability of the assay results throughout the sampling and assaying process. Check assaying is normally performed as an additional test of the reliability of assaying results. It generally involves re-assaying a set number of sample rejects and pulps at a secondary umpire laboratory. A summary of QA/QC submittals from the Project by year are presented in Table 11-1. For the 382,804 samples analyzed between 2010 and 2025, Equinox has inserted 14,462 sample blanks (3.8%) and 19,517 CRMs (5.1%).

11.1.2 Chain of Custody

Samples were transported by Equinox directly from the Valentine exploration camp to Eastern Analytical in sealed rice sacks by company vehicle until 2020, when RNR Drilling, the diamond-drilling contractor, was contracted to deliver the samples to the laboratory. The date of shipping, number of bags per batch, delivery driver, and other pertinent information are recorded in both acquire and a designated notebook. Starting in 2024, all material leaving the project site required a Material Shipping Notice approved by a manager, which was verified by the warehouse and security prior to leaving the site. Upon receipt of the Chain of Custody, laboratory personnel checked the seals on both the rice sacks and individual sample bags to ensure that sample integrity had been maintained during transport.



Table 11-1: Summary of Valentine 2010 to 2025 QA/QC Diamond Drill Hole Samples Submitted for Analyses

Year	Drill Holes	Total Samples	Blanks	CRMs	Field Duplicates	Coarse Rejects Duplicates	Pulp Duplicates	Umpire Duplicates
2010	96	8,907	254	356	-	-	-	-
2011	152	15,600	363	724	-	-	-	-
2012	128	15,363	423	834	-	-	-	-
2013	55	7,131	143	289	-	-	-	-
2014	100	8,425	191	377	-	-	-	-
2015	66	6,493	151	305	-	-	-	-
2016	89	11,259	189	451	-	-	-	-
2017	144	40,288	606	1,578	-	-	-	-
2018	120	27,116	411	1,058	-	-	-	-
2019	263	46,876	717	1,789	-	-	-	-
2020	319	22,713	546	1,151	-	-	-	-
2021	601	51,019	2,415	2,565	140	33	121	136
2021 (SGS)	41	6,880	385	360	-	-	-	-
2022	118	17,796	1,107	880	-	-	-	69
2023	23	3,862	164	153	-	-	-	-
2024	99	27,663	1,505	1,220	40	-	-	800
2025	200	67,409	3,962	3,958	-	-	-	-
Total	2,614	384,800	13,532	18,048				205

11.1.3 Sample Preparation and Data Management

Diamond drilling completed on the Project from 2010 to 2025 was entirely surficial and was operated by contractors.

Diamond drill core was placed in labelled, covered wooden core boxes at the drill site and transported by vehicle or helicopter to the exploration camp's core logging facility. The drill core is archived in well-maintained core racks at the exploration camp. Representative samples of the drill core are bagged and stored in a container at the exploration camp.

In 2020, Marathon Gold initiated migrating drill logging, sampling, and analytical data from Excel files to the acQuire database. The process involved setting up logging templates, building importers and exporters, setting up permissions, and performing data validation checks. The data were validated over several months, and any data that could not be verified was assigned a code indicating it is not valid for the Mineral Resource estimation process.

All Marathon Gold's drill core logging, sample information, and analytical results are maintained within an acQuire database. This includes lithology, RQD, alteration, structures, vein information, visible gold (VG), sample intervals, and insertions of CRM, blanks, coarse duplicates, and newly implemented umpire samples.



All drill core was cut on site by employees of Equinox and its predecessors, bagged, and transported directly by either Project staff or RNR Diamond Drilling, the drill contractor, to the Eastern Analytical laboratory for analyses.

At the laboratory, individual samples were prepared by drying, if necessary. The entire sample was crushed to a nominal minus 10 mesh (1.7 mm), riffle split to obtain a representative sample and pulverized to at least 95% minus 150 mesh (106 µm).

11.1.4 Analyses

Eastern Analytical analyzed each prepared sample for gold by fire assay. All samples that assayed greater than or equal to 300 ppb gold were subjected to a total pulp metallic sieve procedure. Samples within mineralized zones or containing visible gold less than 300 ppb were also reanalyzed using screen metallics. The analytical results were captured in an acquire database, which is programmed to utilize the screen metallic values over the standard fire assays if data is available.

Eastern Analytical also analyzed select samples by multi-element inductively coupled plasma atomic emission spectroscopy (ICP-AES; ICP-34 package).

The fire assay, total pulp metallic sieve, and ICP-34 analytical procedures are described in the text that follows.

11.1.4.1 Fire Assay

Eastern Analytical used a 30 g crucible for rock and core samples, and a 20 g crucible for soil samples. Samples are analyzed in batches of 24, including one sample blank and one internal standard. Eastern Analytical performed lead collection fire assay with atomic absorption finish. The minimum limit of detection is less than 5 ppb Au.

11.1.4.2 Total Pulp Metallic Sieve

Eastern Analytical describes their metallic sieve procedure as follows:

- The entire sample (original pulp is approximately 250 g) was crushed to 80% passing -10 mesh and pulverized to 95% passing -150 mesh, prior to being sieved through a 150-mesh screen. The +150-mesh fraction was fire-assayed as a single sample.
- The -150-mesh fraction was rolled and weighed, with a 30 g sub-sample submitted for fire assay. The fire assay results for the +150 and -150 mesh fractions were combined to produce a weighted-average gold assay for the sample.

11.1.4.3 Inductively Coupled Plasma-34

Eastern Analytical describes their ICP-34 procedure as follows:

- Each analytical sample comprised 200 mg of -150 mesh sample pulp, which was placed in a test tube with nitric and hydrochloric acid prior to being heated on a hot plate.
- Samples were then cooled to room temperature, topped to volume with de-ionized water, stirred to homogenize, and left to settle for one hour prior to analysis by multi-element (n=34 elements) ICP.
- Samples were prepared and analysed in batches of 40, including two duplicates, one blank, and one standard.



11.2 Quality Assurance and Quality Control

A QA/QC program has been implemented since the beginning of the exploration project in 2010, and protocols have been consistently monitored and improved to ensure high data confidence. QA/QC issues over the course of the Project include sample identification, analytical methods, and reporting; these issues have been identified and rectified in accordance with QA/QC protocols that have evolved alongside the Project.

Nepheline syenite sand, which is barren of gold, was used as the sample blank material until 2022 when Marathon Gold switched to a coarse blank using barren sections of drill core from the Valentine property. A variety of CRMs were incorporated throughout the Project's development and advancement, as summarized in Table 11-2.

Table 11-2: Summary of CRM Control Sample IDs used from 2010 to 2025

CRM	Cert. Date	Assay Technique	Finish	Expected Value (ppm)	2 SD (ppm)	Active Dates
GS-3F	20-Oct-2009	FA	2011	3.100	0.120	2010, 2011
GS-3H	04-Jan-2011	FA	2012	3.040	0.230	2011, 2012
GS-3J	17-Jun-2011	FA	2014	2.710	0.260	2012–2014
GS-3K	27-Apr-2012	FA	2015	3.190	0.260	2014, 2015
GS-3L	24-Jun-2013	FA	2017	3.180	0.220	2015–2017
GS-3Q	Jan, 2016	FA	2018	3.300	0.260	2017, 2018
GS-3T	08-Jan-2018	FA	2021	3.050	0.190	2018–2021
GS-3U	24-Jan-2020	FA	2022	3.290	0.260	2021, 2022
GS-5X	30-Mar-2020	FA	2024	5.040	0.330	2021–2024
GS-4N	25-Oct-2021	FA	2024	3.880	0.271	2024
GS-5Y	19-May-2022	FA	2024	5.210	0.310	2024
GS-8A	15-Jul-2009	FA	2012	8.250	0.600	2010–2012
GS-9A	11-Oct-2011	FA	2017	9.310	0.690	2012–2017
GS-9B	26-Apr-2016	FA	2024	9.020	0.750	2017–2024
GS-9D	25-Sep-2019	FA	2024	9.430	0.440	2024
GS-P5C	12-Aug-2014	FA	2019	0.571	0.048	2016–2019
GS-P5G	25-Sep-2018	FA	2021	0.562	0.054	2019–2021
GS-P5H	16-Nov-2020	FA	2024	0.497	0.056	2021–2024
GS-P2B	24-Oct-2021	FA	2024	0.433	0.220	2024
OREAS-231b	02-Dec-2024	FA	-	0.556	0.017	2024–2025
OREAS-240b	02-Dec-2024	FA	-	5.650	0.143	2025
OREAS-242	29-Jun-2023	FA	-	8.670	0.669	2025

Notes: FA – fire assay, SD – standard deviation

Until 2021, a blank, CRM, or coarse duplicate sample was inserted at a rate of 1 in every 20 samples, with the first control sample in each hole placed as the 10th sample. The blank and



CRM packets are placed in the core boxes by a geologist or geotechnician. In 2021, the QA/QC test sample insertion rate was increased to 1 in 10 (from 1 in 20), alternating between a blank and 1 of 3 CRMs. In addition, the on-site blank and CRM storage containers were placed in distinct and separate covered containers, each with a large, easily identifiable label to reduce the chances of CRM swaps. The geologist responsible for completing the sample tagging procedure prepared and placed the blank or CRM sample in the core box and wrote the CRM ID on the corresponding tag in the sample tag book. The insertion sequence was modified in 2024, after which the control samples were inserted at sample ID multiples of 10 (e.g., XXXXX10 = Blank, XXXXX20 = OREAS-231b).

For each QA/QC sample, control charts are generated in acQuire to monitor contamination, analytical precision, and the accuracy of the analytical process. Warning limits are set at ± 2 standard deviations (SD), and control limits are set at ± 3 SD. Control samples that report outside limits are internally reviewed. A first-pass review identifies potential internal errors (e.g., mislabelled sample ID). The failed QA/QC sample is also identified in the placement of mineralization and the sequence of calculated intercepts. Intercept values are never disclosed if a failed control sample falls within a mineralized zone or as outliers on the ends of the mineralized zone. Any suspect analytical results are always re-assayed before public release or use for Mineral Resource estimation. Two in sequence cautionary control samples that both fail high or fail low are treated as a failed control sample.

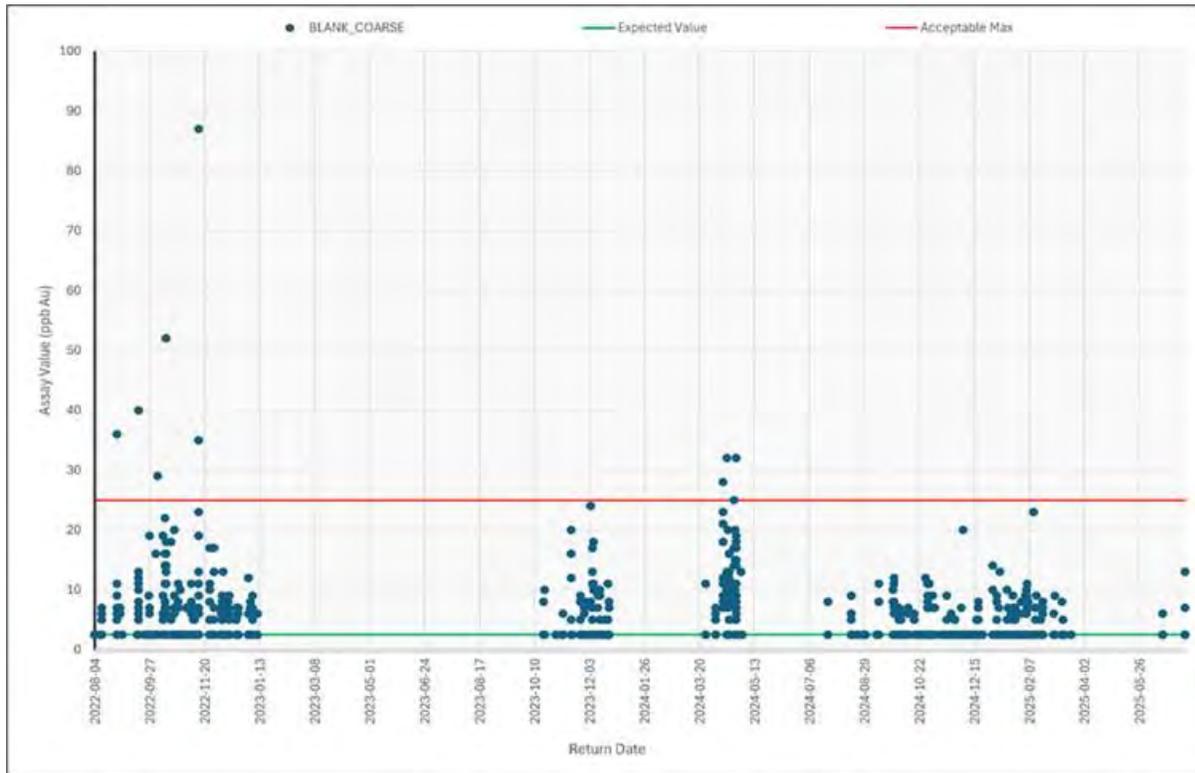
11.2.1 Sample Blanks

Sample blanks are used to assess contamination during sample preparation, laboratory preparation, and to identify sample numbering errors. Until 2022, the blank material used was a nepheline syenite sand (sourced from SME Sandblasting Sales and Services, Mount Pearl, Newfoundland). Beginning in 2022, coarse blank material was selected from condemnation holes identified as having no mineralization or returning below the detection limit. A total of 6,409 fine blank samples were submitted to Eastern Analytical between January 2010 to December 2021, and 385 fine blank samples were submitted to SGS in 2021; 6,738 coarse blank samples were submitted to Eastern Analytical from January 2022 to December 2025.

Failed blank sample material was investigated to determine if values were greater than three times the lower detection limit, failing at a 15-ppb gold value up until 2021, at which time coarse blank material began being used, and the limit was increased to 10 times the lower detection limit, failing at a gold value of 25 ppb. It was also considered a failed control check if there were consecutive warnings on the upper limits. The control chart for coarse blank material gold analyses is presented in Figure 11-1, which shows 0.21% of the blanks analyzed yielded greater than 25 ppm gold.



Figure 11-1: Control Chart of Coarse Blank Sample Material Au Assay Results, 2022–2025



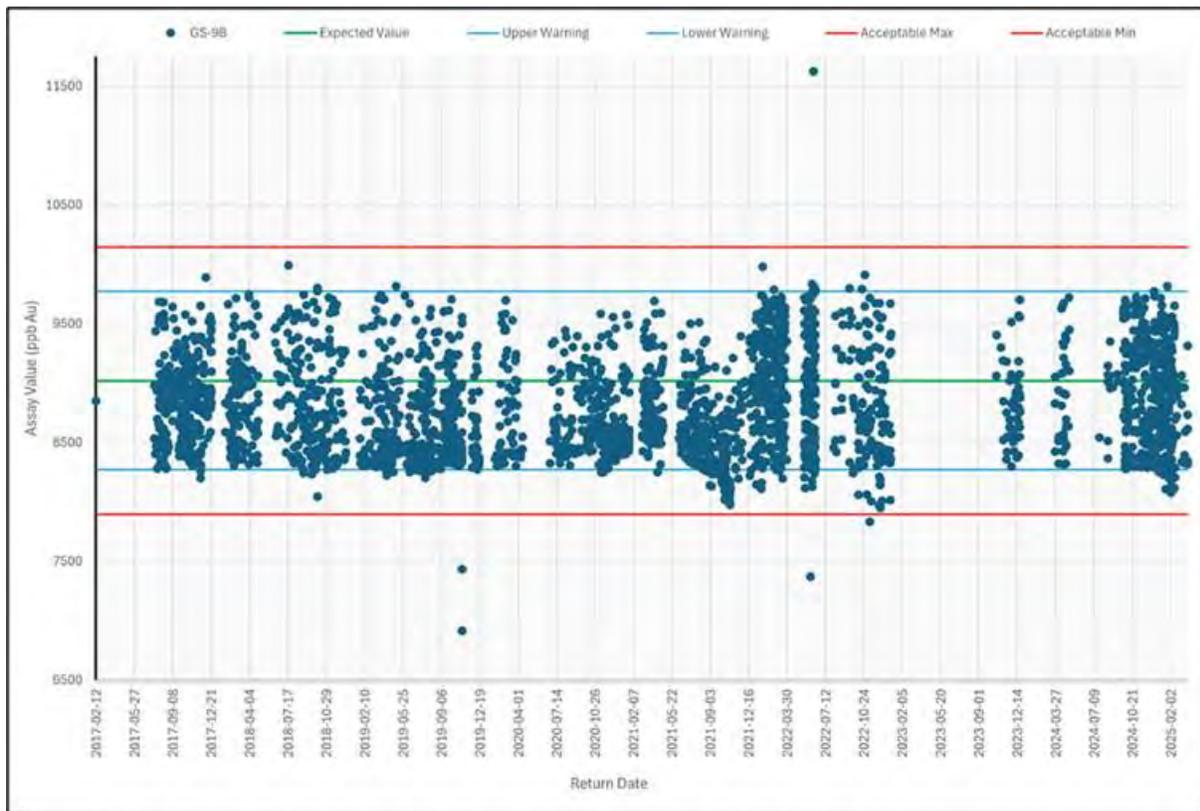
The QP concludes that the QA/QC sample blank analytical results indicate minimal sample contamination during the preparation of the Equinox samples.

11.2.2 Certified Reference Material (CRM)

Results from certified reference materials (standards) are used to identify problems with specific sample batches and biases associated with the primary assay laboratory. Marathon Gold sourced CRMs from CDN Resource Laboratories (CDN) in Langley, British Columbia. The technique used to assay the material, expected values, number of analyses, and standard deviation of the analytical variance for each CRM is listed in Table 11-2 above. A summary of CRM performance on the Project is listed in Table 11-3. A control chart of the 2017 to 2024 analytical results of the CRM standard GS-9B versus the CRM mean, 2SD, and 3SD is presented in Figure 11-2.



Figure 11-2: Control Chart for GS-9B from 2017 to 2024



CRM material was included in the sample stream at a rate of 1 in 20 from 2010 to 2020 and 1 in 10 from 2021 to 2025. Failure rates are defined as a gold value reporting more than 6SD from the expected value, or two consecutive gold values reporting more than two SD in the same direction from the expected value.

Most CRMs used since the start of the exploration program possess a low failure rate, with several exceptions. For example, GS-3F and GS-3J, used between 2010 and 2014, had failure rates of 7.5% and 6.7%, respectively. All failures returned a grade below the acceptable value. However, subsequent CRMs within a similar gold grade have a higher success rate. It is worth noting that these CRMs were amongst the least frequently submitted to Eastern Analytical for analysis. Additionally, a significant issue was noticed in late 2024 with the submission of GS-P2B. The assays returned from this CRM were significantly outside of the expected results, as shown in Figure 11-3. Laboratory submissions to Eastern Analytical, within 10 samples of each GS-P2B that originally returned greater than 2.5ppb, were rerun by Eastern Analytical with an OREAS CRM replacing the GS-P2B at the behest of Equinox. The exact cause of this inaccuracy was not determined. CDN Labs provided the opinion that the standard was performing as expected and that the analysing lab was experiencing a high bias and potential contamination. CDN Labs also offered to investigate the potential for a mix-up in the shipping, however they did not provide an update and, as Equinox was intending on switching to OREAS CRMs regardless of the outcome, this was not followed up on. The remaining samples in 2024 after this issue was identified were submitted with OREAS 231b in place of GS-P2B.



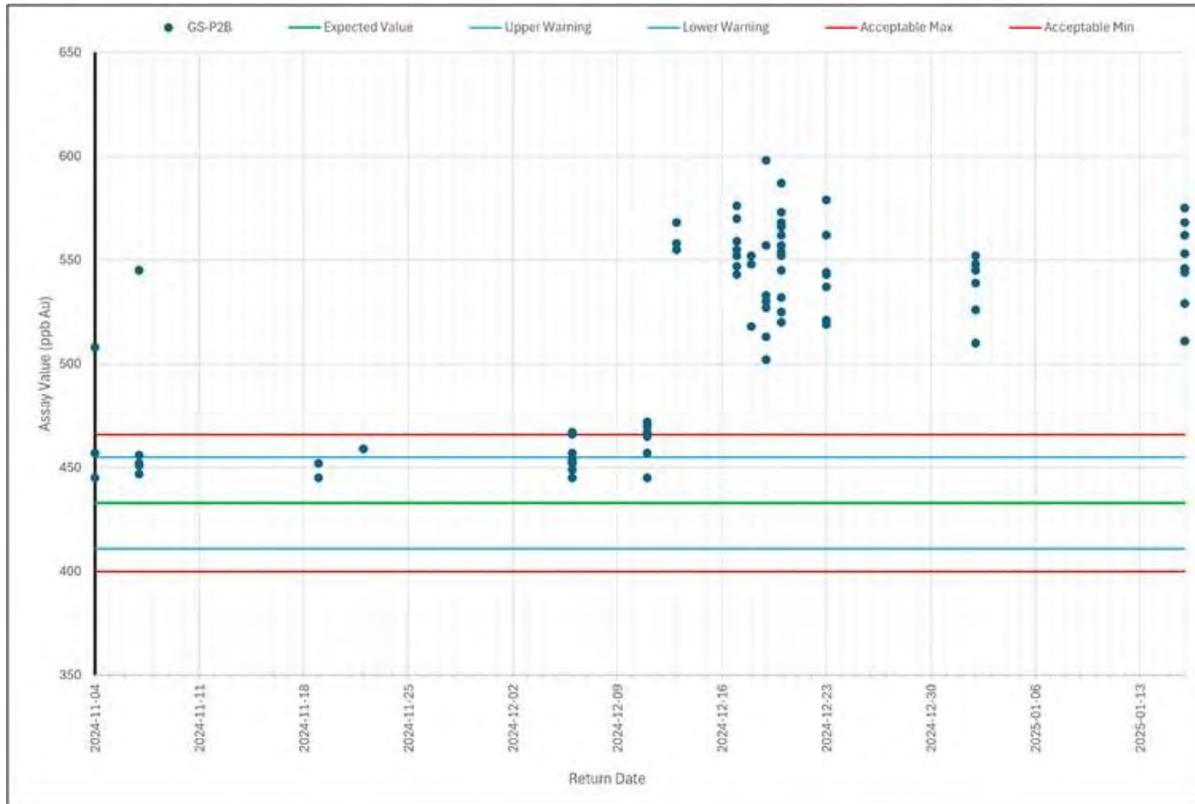
Table 11-3: Summary of 2010–2025 CRM Performance at Eastern Analytical

CRM	Expected Value (ppm)	Eastern Analytical	
		No. of Failures	No. of CRM samples
GS-3F	3.1	12	401
GS-3H	3.04	7	549
GS-3J	2.71	8	257
GS-3K	3.19	5	230
GS-3L	3.18	8	282
GS-3Q	3.3	11	855
GS-3T	3.05	8	1,277
GS-3U	3.29	5	594
GS-5X	5.04	0	263
GS-4N	3.88	1	181
GS-5Y	5.21	4	249
GS-8A	8.25	1	742
GS-9A	9.31	10	904
GS-9B	9.02	10	2,954
GS-9D	9.43	7	55
GS-P5C	0.571	3	1,286
GS-P5G	0.562	4	968
GS-P5H	0.497	6	1,133
GS-P2B	0.433	61	83*
OREAS-231b	0.556	23	1,305
OREAS-240b	5.650	7	1,090
OREAS-242	8.670	0	1,026
Total		178	13,478

* all samples replaced by OREAS-231b



Figure 11-3: Control Chart of Au Assay Results for CRM GS-P2B in 2024



A failed CRM standard sample is reviewed internally to determine whether the QA/QC sample is mislabeled. Occasionally, a blank or CRM has returned a value outside of the error limits but falls within a known value of another CRM or a blank. This is identified as an in-house error rather than a laboratory error. Between 2010 and 2025, Equinox assessed all CRM failures and identified 70 mislabeled CRM samples out of a total of 13,478 CRM sample inserts (or 0.5%). The misidentified CRM samples are flagged within the acQuire database. Accordingly, Equinox has reviewed its QA/QC CRM sample insert protocol and implemented changes to reduce the number of mislabeled CRM samples in future QA/QC work.

Until 2022, the CRMs used were purchased directly from CDN Resource Laboratories and divided into individual packets by Marathon Gold staff at the exploration camp (and at a site other than the core logging and sampling facility). In 2022, Marathon Gold switched to prepackaged CRMs from CDN Labs. In late 2024, the transition from CDN Labs CRMs to OREAS CRMs began; by the beginning of the 2025 drilling program, all inserted CRMs were from OREAS.

11.2.3 Duplicate and Umpire Sampling

Field duplicates were originally discussed in Murahwi (2017). During 2021, Marathon Gold reintroduced duplicate sample analyses into the QA/QC protocol.

In December 2021, a total of 140 identically sized, half-core duplicates were submitted to Eastern Analytical. The sample duplicates included 44, 46, and 50 sample duplicates from Leprechaun, Marathon, and Berry, respectively. The field duplicate samples were intended to assess the variability introduced by sampling the same interval and to evaluate field sample



preparation and analytical precision. The samples were bagged separately with separate sample numbers.

Table 11-4: General Statistics of the 2021 Field Duplicate Program

	Primary Sample	Duplicate Sample
Mean (g/t Au)	3.001	4.328
Mean (capped to 30 g/t Au)	2.958	3.129
Mean (0.0-2.0 g/t limited range)	0.656 (n=103)	0.653 (n=104)
Median (g/t Au)	0.767	0.750
Upper Quantile (g/t Au)	2.207	2.042
Coefficient of Variation	1.979	3.336
Min Value (g/t Au)	0.012	0.010
Max Value (g/t Au)	36.105	145.295
Total Number of Samples	140	140

Table 11-4 summarizes the results of the 2021 field duplicate sampling program. A significant difference was seen in the means of the primary and duplicate samples over the full range, however when the grade was capped to 30 g/t Au, the means showed a much closer agreement. These differences were attributed to the coarse and nuggety gold.

A limited coarse reject duplicate program as a part of the larger 2021 Marathon Gold duplicate program, summarized in Table 11-5. For this program, 33 RC samples for which there were FA data were selected to undergo screen metallic analysis as detailed in Marathon Gold’s 2021 QAQC (Wilson and Borysenko 2023). Agreement between primary and duplicate values were better at lower grade and increased in variance at higher grades.

Table 11-5: General Statistics of the 2021 Coarse Reject Duplicate Program

	Primary Sample	Duplicate Sample
Mean (g/t Au)	1.421	1.074
Mean (0.0-2.0 g/t Au limited range)	0.481 (n=27)	0.577 (n=29)
Median (g/t Au)	0.441	0.584
Upper Quantile (g/t Au)	1.307	1.375
Coefficient of Variation	1.660	1.580
Min Value (g/t Au)	0.021	0.024
Max Value (g/t Au)	9.478	8.930
Total Number of Samples	33	33

Same-lab (Eastern Analytical) and umpire (SGS) pulp duplicates were also analysed as a part of the 2021 duplicate program. The same-lab duplicates showed good replication across the grades, while the umpire duplicates showed a slightly higher grade in the primary value, though it was noted that the methodologies differed slightly between the labs, resulting in different sample weights being analysed.



Further discussion of the results of the 2021 duplicate program can be found in Marathon Gold's 2021 QAQC Report (Wilson and Borysenko, 2023).

A follow-up umpire duplicate program was conducted in 2022 to address the difference in sample weights between labs. Both labs processed 1000g of sample for screen metallics and the results show good alignment, with a slight bias toward Eastern at higher grade and toward SGS at lower grades. These differences were attributed to the nugget effect (Wilson 2025).

An ongoing field duplicate and umpire assaying program commenced in 2024, in which 5% of the total samples collected throughout the year were utilised for either field duplicate testing or umpire samples. A total of 800 samples were selected from the 2024 drilling program and split, with half tested at Eastern Analytical via fire assay and the other half tested at SGS via fire assay. The results of these umpire samples were within the expected margin of error for a coarse gold system and demonstrated no biases or issues with original samples run by Eastern Analytical

11.2.4 Sample Reanalyses

Equinox routinely analyzed QA/QC samples in real time against predefined acceptable limits. If the assay value falls outside of the control limits, the sample is reanalyzed.

Both the original and re-assayed analytical results are captured in the acQuire relational database, where the passing re-assay values are issued a priority validation number of "1". Values without a validation number of 1 are not permitted to be used in the Mineral Resource estimation process.

QA/QC failures are analyzed, reported, and rectified based on their sequential placement within the mineralization, number of failed QA/QC samples in a batch, number of failed QA/QC samples in sequence, values of failed results, and location of the drill hole.

11.3 Qualified Person Opinion

The QP has reviewed the sample preparation, analyses, and security and found no significant issues or inconsistencies to question the adequacy of the data. The QA/QC methods employed by Equinox, both historically and with additional protocols established in 2021, indicate that the analytical data have reasonable and acceptable levels of contamination, analytical precision, and accuracy. In the opinion of the QP, the geological and analytical data are sufficient for use within the resource modelling and estimations presented in this Technical Report.



12.0 Data Verification

12.1 Introduction

Exploration data supporting the Mineral Resource estimate (MRE) have undergone extensive verification by both external and internal QPs. Verification work includes site inspections, drill hole database audits, QA/QC reviews, and independent analytical test work.

Data verification prior to the 2022 Technical Report relied partly on work completed by APEX as an external QP, while verification post-2022 has been completed by internal QPs from Equinox. The following sections summarize the verification completed for the 2022 and 2025 Mineral Resource estimates.

12.2 Database Validation – 2022 Mineral Resource Estimate

Independent and internal verification programs were completed to assess the accuracy, completeness, and reliability of the exploration data supporting the 2022 Mineral Resource estimate. These programs included external site inspections by APEX, internal QP reviews, drill hole database audits, and independent analytical test work. No material issues were identified that would affect the validity of the data used for resource modelling, as verified by the QPs.

12.2.1 External Verification by APEX

APEX conducted site inspections in 2017, 2019, and 2022, with the most recent visit focused on the Berry deposit. Verification activities included:

- Reviewing drill core from five Berry drill holes and collecting nine independent samples for fire assay confirmation.
- Independently verifying drill collar locations using handheld GPS measurements.
- Inspecting active workings, outcrops, and drilling patterns.
- Confirming property location, tenure, and geological interpretations.

Across all external inspections, no significant errors or inconsistencies were identified. The independent analytical results confirmed the presence and tenor of gold mineralization and supported the geological interpretations used for resource modelling.

12.2.2 Drill Hole Database Verification

BOYD and APEX independently audited the drill hole database and confirmed the following:

- No missing, overlapping, or duplicate intervals.
- Assay values matched original laboratory certificates.
- Survey data, collar coordinates, and property boundary checks were consistent.
- The Acquire database incorporated robust data integrity controls, including:
 - Automated prevention of duplicate planned drill hole IDs.
 - Mandatory fields, interval validation rules, and restrictions on invalid entries.
 - Automated CRM insertion and structured assay approval workflows.



- Six-hour automated imports for downhole surveys and final collar coordinates, with automatic rejection of collar surveys deviating by more than 5 m from planned locations.
- Internal spot checks confirmed full adherence to these controls.

12.2.3 Independent Analytical Test Work

Across three site visits, APEX collected 19 independent samples from drill core and outcrop. Samples were analyzed at ALS Canada using PREP-31D and Au-AA26/Au-GRA22 methods. Results confirmed the presence and tenor of gold mineralization:

- Marathon deposit samples ranged from 780 ppb to 51,000 ppb Au.
- Frank Zone outcrop samples included a high-grade 251,000 ppb Au result.
- Berry deposit samples returned the highest values, up to 701,000 ppb Au.

These results corroborate lithological logging, mineralization styles, and assay tenor.

12.2.4 Qualified Person's Conclusion-2022 Mineral Resource Estimate

The QPs responsible for the previous 2022 Mineral Resource estimate concluded that the exploration data including drilling, lithological logs, and assay results were adequate, reliable, and appropriate for use in resource modelling and mineral resource estimation. No material issues were identified that would have adversely affected the 2022 Mineral Resource estimate.

For the 2025 Mineral Resource estimate, Niel de Bruin P.Geol. has reviewed the work completed by previous QPs and confirmed that the drill hole database remains validated, verified and suitable for use in the current MRE.

12.3 Database Validation – 2025 Mineral Resource Estimate

Database validation for the 2025 Mineral Resource estimate was completed by internal QPs, Nic Capps, P.Geol. and Niel de Bruin, P.Geol., to confirm ongoing site activity, geological interpretations, and the integrity of the drill hole database. Nic Capps, who has more than 15 years of continuous involvement with the Valentine Project, conducted ongoing verification through routine core logging, collar checks, and reviews of geological interpretation. Niel de Bruin is also the responsible QP for the 2025 Mineral Resource estimate.

12.3.1 Internal Qualified Persons Site Inspections

Formal site visits were completed by Niel de Bruin from October 14 to 18, 2025, and by Nic Capps from October 14 to 20, 2025. The inspections included:

- Core logging, database management, resource modelling, drill hole planning, program execution, and assay review.
- Review of QA/QC protocols described in Chapter 11.
- Verification of drill collar locations and review of active drilling.
- Inspection of drill core from the Leprechaun, Berry, Marathon, and Frank Zone deposits.
- Examination of pit walls to compare exposed geology with the geological and resource models.
- Review of trench and outcrop exposures to confirm vein orientations, dyke geometries, VLSZ orientation, and mineralization styles.



No discrepancies were identified in drill core, collar locations, geological interpretations, mineralization characteristics, resource models, or database records.

12.3.2 Database Validation

12.3.2.1 Acquire Validation and Integrity Tools

The Acquire database incorporates a comprehensive suite of validation rules, automated checks, and controlled workflows to ensure data accuracy, traceability, and compliance with industry best practices. QPs reviewed and confirmed the effectiveness of the following controls:

Planned collar files are uploaded to a designated server directory for controlled import. During import, the system automatically checks whether a planned drill hole ID already exists in the database. Any duplicate IDs, along with their associated planned collar surveys, are excluded from import to prevent unintended duplication.

The controlled editing of planned holes includes minor modifications to planned drill holes that may be made in the Acquire database by a restricted group of authorized geologists. All edits are fully auditable, with the database recording the username, date, and description of each modification.

Multiple data integrity checks are enforced during geological logging. Overlapping intervals are permitted only for alteration, density, structures, and veining. Mandatory fields must be completed before records can be saved, and conditional fields must be completed when supporting data is entered. Interval entries that extend beyond the end-of-hole depth are automatically rejected.

Sampling procedures restrict interval lengths to between 0.3 m and 1.5 m. Sample IDs are automatically incremented and constrained to a defined character format to reduce the risk of transcription errors. Certified Reference Materials (CRMs) are inserted at prescribed intervals and triggered automatically based on sample ID suffixes, minimizing the likelihood of missed QA/QC insertions.

A collar review table provides a real-time status summary for each drill hole, including confirmation of best-available collar coordinates, presence of downhole survey data, availability of final surveyed coordinates, and completion of RMR, lithology, and sampling to end-of-hole. A gap-finding tool scans all geological and sampling tables to identify missing intervals, which are reviewed and corrected promptly by the database geologist.

Downhole survey data are reviewed by geologists before being placed in the designated import folder. An automated importer runs every six hours to load approved surveys into the database.

Final surveyed collar coordinates are uploaded to a designated folder and automatically imported every 6 hours. A validation rule rejects any collar survey whose final coordinates differ from the planned collar location by more than 5 m. Rejected surveys are flagged for field verification and resurvey if required.

Fire assay certificates are imported as pending results, with an initial visual check to confirm that imported values match the certificate. All assay data require a geologist to review QA/QC performance in Arena prior to approval and release to database tables and exports. Accepted results are manually approved; rejected results are flagged. The same procedures apply to all re-assay and re-run certificates.

An independent review by Mr. Niel de Bruin was completed to compare original assay certificates with the database. No issues or concerns were identified.



These controls were found to be appropriate, consistently applied, and effective in maintaining database integrity.

12.4 Qualified Persons' Review and Conclusion on Database Verification

The QPs, Nic Capps and Niel de Bruin, reviewed the database validation procedures supporting the 2025 Mineral Resource estimate, including automated data-entry controls, manual verification checks, QA/QC workflows, and results from independent third-party reviews. Based on this assessment, the QPs conclude the following:

- The drill hole database is complete, internally consistent, and free of material errors.
- Validation procedures meet or exceed industry best practices for gold exploration and resource modelling.
- The database is fit for purpose and suitable for use in the 2025 Mineral Resource estimate.
- No deficiencies were identified that would materially impact the mineral resource estimates.

The QP responsible for the 2025 Mineral Resource estimate is of the opinion that database verification procedures implemented for the Project comply with industry standards and that the database is adequate and appropriate for Mineral Resource estimation. This conclusion is supported by both independent verification and extensive internal QP review.



13.0 Mineral Processing and Metallurgical Testing

Significant metallurgical test work has been completed on mineralized ore samples from the Leprechaun, Marathon and Berry deposits. Metallurgical test work was completed during various test work campaigns from 2010 to 2024 at various metallurgical laboratories. The overall objectives of the various test work programs were to define the metallurgical response of the main ore domains and deposits, generate sufficient metallurgical data to support a flowsheet and develop gold recoveries for project development and the ultimate design of the current process plant. The general scope of the test work campaigns included chemical and mineralogical analyses, comminution tests, gravity recovery, cyanide leaching, detoxification, carbon loading, oxygen uptake evaluations, and dewatering tests (including flocculant selection, static settling, and dynamic thickening tests).

Metallurgical test work also included flotation and leaching of flotation concentrate and tailings for the plant expansion as documented in previous NI 43-101 Technical Reports such as the 2022 Technical Report and Pre-feasibility Study on the Valentine Gold Project, dated April 21, 2020.

Following recent trade off studies, the current plant expansion has reverted to expanding the existing comminution and gravity-leach-CIL circuits and not to implement a flotation circuit. Historical test work used for the initial plant design remains relevant for the plant expansion. Relevant metallurgical test work related to the current flowsheet is summarized and discussed in this section.

Historical test work campaigns and reports are listed in Table 13-1 for reference.

Table 13-1: Historical Test Work

Year	Laboratory	Test Work Performed
2010	G&T Metallurgical Services KM2578	Preliminary flowsheet development – Marathon ore characterization; gravity and cyanide leach extraction; gravity, sulphide flotation and cyanide extraction; ore hardness
2012	G&T Metallurgical Services KM3028	Preliminary flowsheet development – Leprechaun ore characterization; gravity and cyanide leach extraction; gravity, sulphide flotation and cyanide extraction; ore hardness
2015	Thibault & Associates 6536 Phase I	Leprechaun master composite – gravity and grind size sensitivity; gravity leach and gravity-float-leach
2017	Thibault & Associates 6536 Phase II	Leprechaun and Marathon ore – grade and grind size variability; gravity-leach, gravity-float-leach, and heap leach
2019	SGS-Lakefield 16863	Comminution, gravity-flotation-regrind-leach, gravity-leach, heap leach, cyanide destruction, solid-liquid separation
2019	Outotec 324217	Solid-liquid separation – dynamic settling and filtration
2019	FLSmith Rev 4	Gravity recoverable gold modelling
2021	Base Metallurgical Laboratories BL639	Comminution, gravity-flotation-regrind-leach, gravity-leach, cyanide destruction, solid-liquid separation
2022	Base Metallurgical Laboratories BL1021	Comminution, gravity-flotation-regrind-leach, gravity-leach, cyanide destruction, solid-liquid separation



Year	Laboratory	Test Work Performed
2023	SGS-Lakefield 19047	Intensive cyanide leach of gravity concentrates, gravity-leach, cyanide destruction, oxygen uptake, carbon modelling
2023	Base Metallurgical Laboratories BL1020	Flotation of gravity tails, leaching of flotation concentrate and tails
2024	Base Metallurgical Laboratories BL1714	Pre-aeration, cyanide destruction

13.1 2019 Metallurgical Test Work Program

13.1.1 Sample Selection

Drill core consisting of half-split NQ core from the Marathon deposit was delivered to SGS Lakefield in September 2018. In October 2018, half-split NQ core from the Leprechaun deposit was delivered to SGS.

To test representative ore samples, zone composites were selected based on spatial zone, head grade, and lithology for the metallurgical test work campaign. Deposit composites were combined for metallurgical flowsheet development using a combination of zone composite samples, as presented in Table 13-2. Overall, composites (M-Dep and L-Dep) were produced from the remaining zone and deposit composites to generate a sample for the operation of a small-scale flotation pilot plant, which was then used for downstream testing.

Table 13-2: Sample Composition for Metallurgical Test Work

Composite	Resource	Name	Comprised	Tested for
Zone composites	Marathon	MZA, B, C,D,E	Select drill intervals by zone, grade & lithology	Chemical head analysis, comminution, pre-robbing evaluation
Zone composites	Leprechaun	LZA, B, C, D, E	Select drill intervals by zone, grade & lithology	Chemical head analysis, comminution, pre-robbing evaluation
Deposit composites	Marathon	MC1	50:50 MZA, B	Gravity-float-leach flowsheet development
Deposit composites	Marathon	MC2	MZC	Gravity-float-leach flowsheet development
Deposit composites	Marathon	MC3	50:50 MZD, E	Gravity-float-leach flowsheet development
Deposit composites	Leprechaun	LC1	54:32:14 LZA, LZB, LZC	Gravity-float-leach flowsheet development
Deposit composites	Leprechaun	LC2	15:43:42 LZC, LZD, LZE	Gravity-float-leach flowsheet development
Overall composite	Marathon	M-Dep	MZA-E, MC1, MC2, MC3	Flotation mini pilot plant run to generate sample for downstream testing
Overall composite	Leprechaun	L-Dep	LZA-E, LC1, LC2	Flotation mini pilot plant run to generate sample for downstream testing



13.1.2 Head Analysis

Zone composites were submitted to characterize the sample by a full suite of assays which included:

- Au by screen metallic
- Cu, As, Hg by direct assay
- Sulphur (total, sulphide sulphur S₂-)
- Carbon (C organic, C graphitic, CO₂)
- ICP scan for 18 elements

Key assays for the composites tested are shown in Table 13-3. Observations from the head assay results are listed:

- The samples tested had gold assays ranging from 1.98 g/t to 5.18 g/t.
- All samples had low (i.e., less than 0.8 g/t) silver grade.
- All samples assayed low levels of Cu, Zn, and Ni, which contribute to cyanide consumption.
- Almost all the sulphur occurs as sulphides.
- All samples had low levels of graphitic and organic carbon, indicating low potential of preg-robbing.
- All samples showed below detection limit (i.e., lower than 0.3 g/t) mercury.
- Tellurium occurred in a few samples greater than the detection limit.

Table 13-3: Summary of Head Assays

Element	Unit	MZA	MZB	MZC	MZD	MZE	LZA	LZB	LZC	LZD	LZE
Au	g/t	2.89	4.08	3.25	1.98	3.94	2.68	2.62	5.18	3.82	2.75
Ag	g/t	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Cu	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zn	g/t	16	13	15	14	11	26	44	44	35	26
Pb	g/t	<20	<20	<20	<20	<20	<40	<40	<40	<40	<40
Ni	g/t	11	<6	<6	<6	<6	<10	<10	<10	<10	<10
As	g/t	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Sb	g/t	<30	<30	<30	<30	<30	<10	<10	<10	<10	<10
Hg	g/t	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Cg	%	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C (org)	%	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
CO ₂	%	1.81	1.52	1.46	1.24	1.49	2.98	2.44	5.12	3.47	3.09
St	%	0.68	0.68	0.79	0.70	0.51	0.30	0.28	0.43	0.34	0.36
S ₂ -	%	0.68	0.60	0.74	0.64	0.47	0.28	0.25	0.37	0.34	0.33
Te	g/t	3	2	3	3	8	3	6	2	3	2



13.1.3 Mineralogy

Zone composites MZA-E and LZA-E were combined in equal parts to produce an MZ mineralogy composite and LZ mineralogy composite. Each mineralogy composite underwent QEMSCAN (quantitative evaluation of minerals by scanning electron microscopy) rapid mineral scan to identify the composition of minerals, as listed in Table 13-4.

Both composites are characterized by pyrite/marcasite sulphide mineralization. In both instances over 81% of the pyrite/marcasite mineral is free, with 10.5% liberated for MZ and 2.6% liberated for LZ. A complex association was observed at 4% to 7% in MZ and LZ, respectively, with minor contributions from quartz, feldspars, and micas.

The presence of tourmaline is consistent with the geological characterization of both Marathon and Leprechaun mineralization, where gold is commonly observed as interstitial grains within QTP veins.

Table 13-4: Mineral Proportions

Mineral Mass Percentage	MZ Composite	LZ Composite
Pyrite / marcasite	1.03	0.32
Chalcopyrite	0.01	-
Other sulphides	0.00	0.01
Quartz	44.3	22.9
Plagioclase	37.8	50.2
Sericite / muscovite	5.87	10.4
Chlorite	4.67	3.93
Clays	0.69	0.89
Tourmaline	0.69	1.86
Other silicates	0.18	0.50
Fe-oxides	0.41	0.09
Other oxides	0.37	-
Rutile	-	0.64
Calcite	3.36	5.04
Dolomite/ankerite	0.38	2.76
Apatite	0.05	0.39
Other	0.22	0.03
Total	100	100

13.1.4 Comminution

The objective of the comminution testing was to characterize the ore competency and hardness/grindability of ore from both deposits.

Testing of half-NQ crushed material comprised SAG power index (SPI), crushing index (CI), Bond crushing work index (CWi), Bond rod mill (RWi) and Bond ball mill (BWi) work index tests



and abrasion index (Ai). A single drop weight test (DWT) and a single SMC test were also performed.

Bond rod mill tests were conducted using a 1,180 µm closing screen size; Bond ball mill tests were conducted using a 106 µm closing screen size. Table 13-5 summarizes select results for the comminution tests.

Observations from the comminution testing are listed:

- Abrasion indices are considered moderately high and are similar across both deposits, ranging from 0.51 to 0.63.
- Leprechaun ore has a higher average Ci and CWi than Marathon samples.
- Ore hardness in terms of RWi and BWi is similar for both deposits and is considered moderate.
- Ore competency, as indicated by SPI, is considered high. The average SPI is similar for both deposits, with Leprechaun showing higher variability.
- Ore competency, as indicated by a single drop weight test, is considered moderate.

Table 13-5: Summary of Comminution Test Results

Sample ID	Grade (g/t)	Ai (g)	RWi (kWh/t)	BWi (kWh/t)	SPI (minutes)	Axb (SMC)
MZA	2.89	-	14.5	15.3	111.8	-
MZB	4.08	0.63	14.3	15.7	95.5	-
MZC	3.25	0.53	13.5	15.6	88.6	-
MZD	1.98	0.57	12.6	15.1	83.2	-
MZE	3.94	-	13.3	15.5	85.5	-
Sample 01	0.43	-	-	-	-	-
Sample 04	0.66	-	-	-	-	-
Sample 08	0.53	-	-	-	-	-
Sample 10	1.29	-	-	-	-	-
LZA	2.68	-	14.6	16.0	111.1	-
LZB	2.62	0.60	13.4	16.4	88.3	-
LZC	5.18	0.56	14.3	15.6	103.0	-
LZD	3.82	0.51	14.7	15.7	121.0	-
LZE	2.75	-	14.9	16.0	114.7	-
Sample 20	0.13	-	12.0	16.4	69.7	-
Sample 15	2.85	-	-	-	-	-
Sample 16	0.99	-	-	-	-	-
Sample 18	0.78	-	-	-	-	-
Sample 19	0.17	-	-	-	-	-
Sample 20	-	-	-	-	-	42.0



13.1.5 Gravity

Most metallurgical tests included gravity concentration as part of the process and flowsheet development. The procedure generally included grinding the ore to the target grind size, a single pass through a Knelson laboratory concentrator, and then upgrading to a low-mass gravity concentrate on a Mozley mineral separator. Mass recovery was targeted at 0.03% to 0.05% w/w to replicate plant practice. A summary of the batch gravity separation results is presented in Table 13-6.

Observations from batch gravity tests are listed:

- The ore is considered amenable to recovery by gravity concentration.
- No gravity recovery relationship with grind size was observed.
- The resultant mass pull was variable, ranging from 0.02% w/w to 0.17% w/w.
- The 2 kg samples proved more difficult to attain the target mass pull and were generally high.
- Gravity recovery ranged from 34% to 67%. Average gravity recovery was 51%. This was not weighted for mass pull, test mass, or grade.

Extended gravity recoverable gold (e-GRG) tests were conducted on Leprechaun and Marathon samples to determine the maximum gravity recoverable gold, as presented in Table 13-7.

Subsequent modelling of the e-GRG tests was conducted for sizing of the concentrator circuit, as per Table 13-8. Gravity circuit modelling considers grind size, cyclone classification, gravity concentration equipment, and mass feed rate to the concentrator. Higher gravity recoverable gold is predicted at the finer grind size.

Table 13-6: Batch Gravity Separation Results

Composite	Gravity Test	Conc Mass %	Au Gravity Rec%
MC1	G13	0.03	52
	G1	0.03	40
	G8	0.17	54
MC2	G14	0.04	45
	G2	0.03	52
MC3	G3	0.03	43
	G9	0.14	48
M-Dep	G10	0.16	50
	G17	0.02	34
	G6	0.07	54
LC1	G4	0.02	67
	G15	0.03	48
LC2	G5	0.03	55
LZD+LZD	G11	0.10	48



Composite	Gravity Test	Conc Mass %	Au Gravity Rec%
L-Dep	G18	0.03	53
	G12	0.07	49
	G20	0.09	54
	G21	0.08	57
	G7	0.06	63

Table 13-7: E-GRG Test Results

Sample	Feed Size, P ₈₀	% Au Distribution	Sample	Feed Size, P ₈₀	% Au Distribution
Marathon M-Dep	620	42.5	Leprechaun L-Dep	579	48.0
	232	14.8		214	20.6
	137	7.4		83	8.9
	Tail	35.3		Tail	21.8
E-GRG		64.7	E-GRG		77.5
Est. Plant Recovery		45.0	Est. Plant Recovery		54.0

Table 13-8: Gravity Circuit Modelling Results at P₈₀ 75 and 150 µm Grind

Sample ID	Grade (g/t)	Grind Size P ₈₀	E-GRG%	Modelled Gravity Rec%
Marathon	2.70	150	63	47
Marathon	2.70	75	73	49
Leprechaun	2.87	150	58	42
Leprechaun	2.87	75	72	56

13.1.6 Gravity-Leach Flowsheet Tests

A series of gravity tails cyanide leach tests at primary grind size P₈₀ of 68 to 81 µm was conducted with a dissolved oxygen level of 8 ppm (air sparging), pH 10.5, and without pre-aeration. Cyanide consumption ranged from 0.2 to 0.8 kg/t. Each test was conducted for 48 hours in the presence of carbon. The leach extraction was downgraded by 1% to account for plant losses, as shown in Table 13-9.

Table 13-9: Cyanide Leach Tests used for Gravity - Leach Flowsheet

Sample	Calc Head Grade Au (g/t)	Gravity Au Rec (%)	Gravity Tail Leach Au Extraction (%)	Total Extraction Au (%)
Marathon G8	1.12	54	77.7	89.8
Marathon G9	2.60	48	82.7	91.0
Marathon G10	1.24	50	80.3	90.3
Leprechaun G11	1.19	48	78.5	88.8



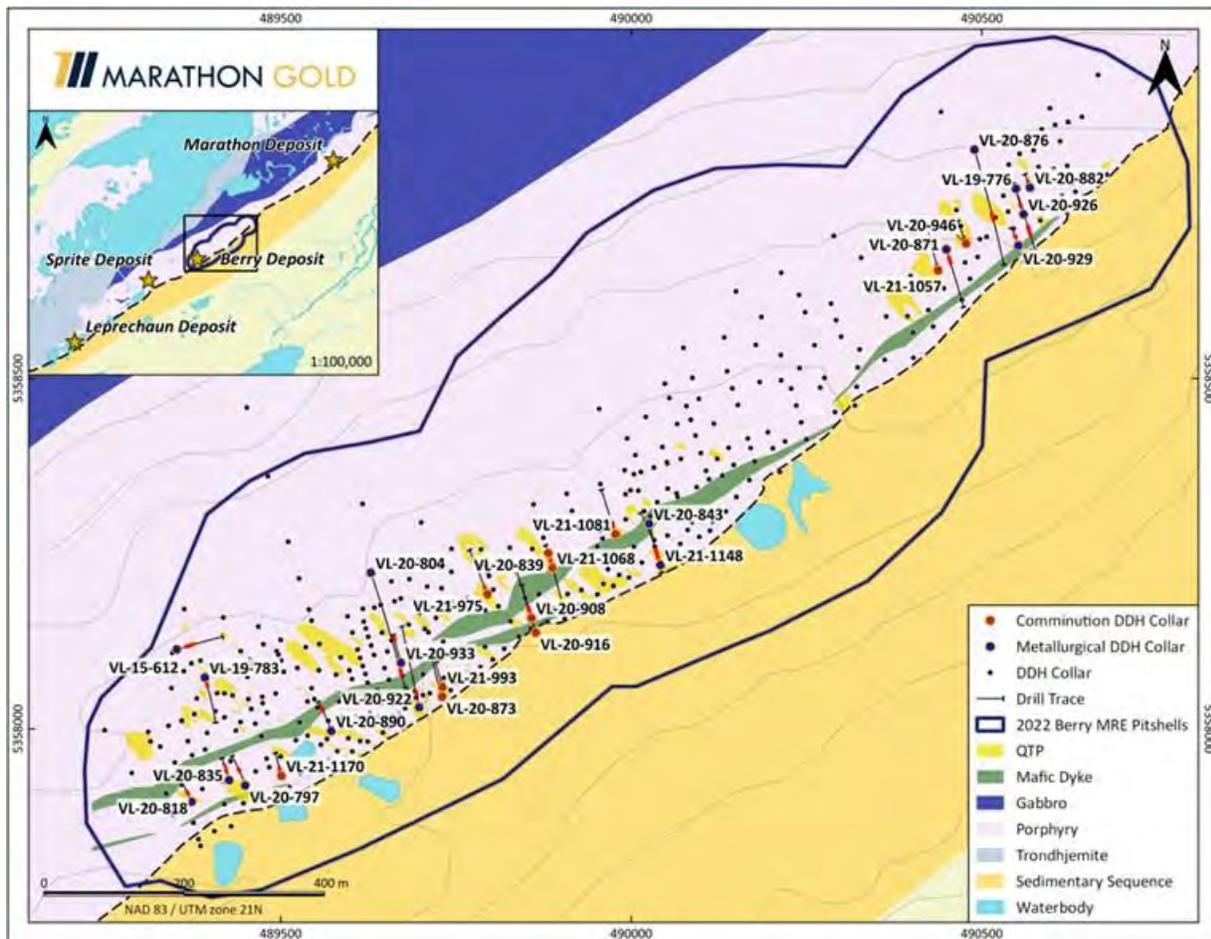
13.2 2022 Metallurgical Test Work Program

13.2.1 Sample Selection

Twenty-three Berry variability samples, consisting of half NQ core and eleven comminution samples, consisting of half HQ core, were retrieved from storage in Newfoundland and delivered to BaseMet in May 2022. The NQ material came from drilling campaigns in 2015, 2019, 2020, and 2022 and the HQ core from the 2020 and 2021 drilling campaigns.

The samples were selected to represent the Berry deposit geographically along the strike of the deposit. Selection criteria included the need to approximate the planned mine grade, a minimum 10 m interval, and samples within the indicated pit shell. Samples were kept separately to allow determination of variability. Drill hole locations are provided in Figure 13-1. An area of the Berry deposit with very limited quartz-tourmaline-pyrite (QTP) mineralization (yellow areas in Figure 13-1) was not sampled. Table 13-10 summarizes NQ core sample information and Table 13-11 summarizes HQ core sample data.

Figure 13-1: Berry Sample Locations



Source: Marathon Gold. 2022.

Table 13-10 summarizes NQ core sample information and Table 13-11 summarizes HQ core sample data.



Table 13-10: Samples Used for Metallurgical Test Work – NQ ½ Core

Sample ID	Hole ID	From (m)	To (m)	Mass (kg)
Var-1	VL-15-612	21	32	23.3
Var-2	VL-19-776	81	96	29.5
Var-3	VL-19-783	26	36	23.5
Var-4	VL-20-804	221	231	21.0
Var-5	VL-20-818	87	99	27.0
Var-6	VL-20-835	104	114	22.5
Var-7	VL-20-835	164	174	20.9
Var-8	VL-20-843	61	71	21.9
Var-9	VL-20-871	18	28	19.1
Var-10	VL-20-876	134	144	22.5
Var-11	VL-20-882	37	47	22.4
Var-12	VL-20-890	125	135	23.4
Var-13	VL-20-922	68	78	22.0
Var-14	VL-20-926	66	76	21.7
Var-15	VL-20-929	79	89	21.4
Var-16	VL-20-933	128	138	23.8
Var-17	VL-20-958	185	195	21.4
Var-18	VL-20-988	51	61	21.0
Var-19	VL-20-1072	11	21	21.7
Var-20	VL-20-1090	8	18	21.9
Var-21	VL-20-1110	130	142	23.3
Var-22	VL-21-1148	70	80	20.6
Var-23	VL-20-797	131	141	23.1

Table 13-11: Samples Used for Comminution Test Work – HQ Core

Sample ID	Hole ID	From (m)	To (m)	Mass (kg)
CCOM-1	VL-20-839	11	27	34.7
CCOM-2	VL-20-873	10	26	36.6
CCOM-3	VL-20-908	46	62	35.3
CCOM-4	VL-20-916	47	63	36.5
CCOM-5	VL-20-946	31	47	32.4
CCOM-6	VL-21-975	13	29	37.8
CCOM-7	VL-21-993	9	25	35.8



Sample ID	Hole ID	From (m)	To (m)	Mass (kg)
CCOM-8	VL-21-1057	16	32	42.0
CCOM-9	VL-21-1068	41	57	39.2
CCOM-10	VL-21-1081	57	73	35.8
CCOM-11	VL-21-1170	44	59	32.9

A 340 kg Berry composite sample was prepared by combining 10 kg sub-samples from each of the 23 variability samples and 11 comminution samples. This sample was processed through grinding, gravity separation, flotation, and cyanide leaching of the gravity and flotation concentrates and the flotation tailings. A portion of the flotation concentrate was sent to SGS Lakefield for fine grinding test work in a HIGmill. After processing through the proposed steps, the Berry composite tailings were used for cyanide destruction test work and thickening tests on the treated tailings. Flotation products were also tested for thickening properties.

13.2.2 Head Analysis

Berry metallurgical and comminution variability samples were submitted for the following suite of assays:

- Gold by direct fire assay on all samples and by screen metallic method (SM) at 106 µm on the metallurgical samples
- Silver and mercury by direct assay
- Sulphur (total (S), sulphate (SO₄), sulphide (SO₂))
- Carbon (total (C) and total organic carbon (TOC))
- ICP for minor metals.

Key assays for the samples tested are presented in Table 13-12, Table 13-13, and Table 13-14. Observations from the zone composite head assay results are provided below:

- The samples tested had gold assays ranging from 0.3 g/t to 6.3 g/t.
- All but one sample had silver grades of less than 1 g/t.
- Almost all sulphur occurs as sulphides.
- Total sulphur ranged from 0.1 to 1.6% and averaged 0.6%.
- All samples had low levels of total organic carbon (TOC).
- Mercury was measured in ppb (mg/t); all samples showed low levels (i.e., less than 5 µg/t (ppb)) of mercury.
- Tellurium (Te) occurred in all samples, ranging from 1 to 16 g/t.
- Arsenic (As), copper (Cu), and zinc (Zn) averaged 3 g/t, 26 g/t, and 38 g/t, respectively.



Table 13-12: Head Assays – Berry Metallurgical Sample

Sample	Assays								
	Au (g/t)	Au SM (g/t)	Ag (g/t)	S (%)	SO ₄ (%)	S ₂ - (%)	C (%)	TOC (%)	Hg (ppb)
Method	FAAS	FAAS	FAAS	LECO	GRAV	GRAV	LECO	LECO	CV
Var-1	1.68	1.74	0.9	1.45	0.01	1.44	0.4	0.01	<5
Var-2	7.74	6.10	0.2	0.5	0.01	0.49	0.78	<0.01	<5
Var-3	0.31	0.63	<0.1	0.87	0.02	0.85	0.28	0.01	<5
Var-4	2.59	1.08	<0.1	0.75	0.04	0.71	0.37	0.01	<5
Var-5	0.22	0.74	<0.1	0.17	0.02	0.15	0.57	0.01	<5
Var-6	1.30	1.84	<0.1	0.69	0.02	0.66	0.46	0.01	<5
Var-7	29.40	4.60	0.7	0.64	0.02	0.62	0.43	0.01	<5
Var-8	0.52	0.56	0.2	0.44	<0.01	0.46	0.33	0.01	<5
Var-9	1.98	3.20	1.1	0.88	0.01	0.87	0.3	0.01	<5
Var-10	4.13	3.14	0.3	1.18	0.01	1.17	0.38	0.01	<5
Var-11	0.58	0.62	0.2	0.72	<0.01	0.72	0.37	0.01	<5
Var-12	2.57	5.96	0.5	0.21	0.01	0.2	0.37	0.02	<5
Var-13	4.77	6.32	0.6	0.86	<0.01	0.86	0.56	<0.01	<5
Var-14	0.92	2.87	0.4	1.16	<0.01	1.16	0.44	<0.01	<5
Var-15	0.57	0.75	<0.1	0.49	0.01	0.48	0.41	<0.01	<5
Var-16	0.95	1.03	<0.1	0.23	0.01	0.22	0.44	0.01	<5
Var-17	2.14	1.50	<0.1	0.91	0.02	0.89	0.35	0.01	<5
Var-18	0.45	0.93	<0.1	1.15	0.01	1.14	0.5	0.01	<5
Var-19	0.45	1.51	<0.1	0.2	0.01	0.19	0.39	0.01	<5
Var-20	0.45	1.15	<0.1	0.74	0.02	0.72	0.4	<0.01	<5
Var-21	0.94	0.80	0.1	0.56	0.02	0.54	0.5	<0.01	<5
Var-22	1.90	1.06	<0.1	0.62	0.02	0.6	0.23	0.01	<5
Var-23	2.35	2.77	<0.1	0.4	<0.01	0.4	0.45	0.01	<5
Variability: Overall Statistics									
Minimum	0.22	0.56	0.1	0.17	0.01	0.15	0.23	<0.01	-
Average	2.99	2.21	0.47	0.69	0.02	0.68	0.42	0.01	-
Maximum	29.4	6.32	1.1	1.45	0.04	1.44	0.78	0.02	-
Notes: FAAS flame atomic absorption spectroscopy, LECO combustion analysis, GRAV fire assay gravimetric finish, CV cold vapor (mercury analysis), SM screen metallic, TOC total organic carbon									



Table 13-13: Head Assays – Berry Comminution Samples

Sample	Assays – Percent or g/t							
	Au (g/t)	Ag (g/t)	S (%)	SO ₄ (%)	S ₂ - (%)	C (%)	TOC (%)	Hg (ppb)
Method	FAAS	FAAS	LECO	GRAV	GRAV	LECO	LECO	CV
CCOM-1	5.49	0.6	1.06	0.01	1.05	0.53	0.02	<5
CCOM-2	1.90	0.1	0.57	0.02	0.55	0.5	0.02	<5
CCOM-3	0.27	<0.1	0.19	<0.01	0.19	0.58	0.12	<5
CCOM-4	0.44	<0.1	0.26	0.04	0.21	0.51	0.08	<5
CCOM-5	1.64	<0.1	0.33	0.01	0.32	0.39	0.01	<5
CCOM-6	1.05	0.1	0.25	0.01	0.24	0.53	0.19	<5
CCOM-7	1.90	<0.1	0.36	0.01	0.35	0.42	0.03	<5
CCOM-8	1.44	0.1	0.69	0.01	0.68	0.39	0.03	<5
CCOM-9	0.32	<0.1	0.65	0.01	0.64	0.6	0.01	<5
CCOM-10	1.38	0.2	0.95	<0.01	0.94	0.37	<0.01	<5
CCOM-11	0.50	<0.1	0.19	0.02	0.17	0.35	0.07	<5
Variability: Overall Statistics								
Minimum	0.27	0.1	0.19	0.01	0.17	0.35	<0.01	-
Average	1.48	0.3	0.5	0.01	0.48	0.46	0.057	-
Maximum	5.49	0.60	1.06	0.04	1.05	0.60	0.19	-
Notes: FAAS flame atomic absorption spectroscopy, LECO combustion analysis, GRAV fire assay gravimetric finish, CV cold vapor (mercury analysis), TOC total organic carbon								

Table 13-14: ICP Assays – Berry Samples

Analyte	Ag (ppm)	As (ppm)	Cd (ppm)	Cu (ppm)	Fe (%)	Ni (ppm)	S (%)	Te (ppm)	Zn (ppm)
Detection Limit	0.200	1.00	1	1	0.01	1.0	0.01	1.00	2
Analysis Method	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Var-1	1.3	3	2	40	2.65	7	1.57	6	231
Var-2	0.7	3	1	68	2.34	11	0.56	5	21
Var-3	0.2	2	1	20	1.94	3	0.93	2	34
Var-4	0.3	4	1	18	2.17	3	0.75	4	33
Var-5	0.2	2	1	34	2.21	2	0.13	5	30
Var-6	0.3	3	1	18	2.34	3	0.65	3	43
Var-7	0.7	3	1	16	1.89	5	0.67	9	21
Var-8	0.2	2	1	80	2.42	2	0.49	3	29
Var-9	1.0	2	1	7	2.50	2	0.90	7	22



Analyte	Ag (ppm)	As (ppm)	Cd (ppm)	Cu (ppm)	Fe (%)	Ni (ppm)	S (%)	Te (ppm)	Zn (ppm)
Var-10	0.2	2	< 1	7	2.05	2	1.30	5	20
Var-11	0.2	2	< 1	24	2.11	2	0.74	7	92
Var-12	0.5	2	< 1	60	1.91	2	0.21	9	17
Var-13	0.8	4	1	130	2.28	2	0.90	10	40
Var-14	0.4	2	1	26	2.61	2	1.15	5	52
Var-15	0.4	2	1	5	2.11	2	0.51	2	37
Var-16	< 0.2	2	1	15	2.32	2	0.23	2	22
Var-17	0.2	2	1	24	2.24	2	0.84	2	17
Var-18	0.2	5	1	26	3.26	2	1.19	2	66
Var-19	< 0.2	2	1	8	1.75	2	0.13	3	22
Var-20	0.3	2	1	12	1.95	3	0.57	2	22
Var-21	0.2	2	1	12	2.09	2	0.23	2	25
Var-22	< 0.2	1	1	14	1.61	2	0.44	2	14
Var-23	51.6	2	2	17	1.68	1	0.26	3	18
CCOM-1	1.0	5	< 1	15	2.74	51	0.87	16	39
CCOM-2	0.3	4	1	13	1.97	5	0.49	5	23
CCOM-3	0.3	5	1	16	2.65	4	0.20	1	68
CCOM-4	0.2	3	< 1	6	2.61	3	0.25	2	22
CCOM-5	0.2	3	< 1	11	2.28	3	0.33	3	31
CCOM-6	0.2	3	< 1	12	2.31	5	0.27	3	32
CCOM-7	0.2	4	1	33	2.26	4	0.33	2	27
CCOM-8	0.2	2	< 1	4	2.23	3	0.56	2	18
CCOM-9	0.2	6	1	20	2.87	3	0.58	3	36
CCOM-10	0.5	5	2	25	2.12	4	0.84	6	57
CCOM-11	0.3	1	1	38	2.06	7	0.22	4	16
Average	2.0	3	1	26	2.25	5	0.60	4	38
Min	0.2	1	1	4	1.61	1	0.13	1	14
Max	51.6	6	2	130	3.26	51	1.57	16	231

13.2.3 Comminution

BaseMet undertook comminution testing to determine the variability of the Berry material. Testing of HQ core comprised testing, RWi and BWi tests at two closing screen sizes, and Bond abrasion index Ai testing.

The Bond ball mill tests were conducted using a 106 µm screen targeting a P80 of 75 µm and a 212 µm screen targeting a P80 of 150 µm. The average P80 values attained were 82 µm and 158



µm, respectively. Table 13-15 summarizes the results of the comminution tests on the Berry samples along with averages for Marathon and Leprechaun.

Table 13-15: Summary of Comminution Test Results

Sample ID	Grade (g/t)	Relative Density	Ai (g)	RWi kWh/t	BWi P ₈₀₋₈₂ µm kWh/t	BWi P ₈₀₋₁₅₈ µm kWh/t	Axb (SMC)
CCOM-1	5.49	2.69	0.39	13.8	14.7	14.2	50.2
CCOM-2	1.90	2.60	0.41	12.3	14.7	12.8	54.9
CCOM-3	0.27	2.66	0.31	14.1	16.0	13.8	47.7
CCOM-4	0.44	2.68	0.41	13.5	15.6	14.2	47.4
CCOM-5	1.64	2.66	0.41	13.1	15.0	12.8	51.1
CCOM-6	1.05	2.70	0.43	12.9	15.6	15.4	46.9
CCOM-7	1.90	2.68	0.48	12.2	14.9	12.7	54.9
CCOM-8	1.44	2.67	0.48	12.0	14.8	13.2	58.9
CCOM-9	0.32	2.69	0.44	13.8	14.5	12.8	41.0
CCOM-10	1.38	2.67	0.50	12.2	15.0	12.2	52.2
CCOM-11	0.50	2.67	0.50	12.5	15.8	13.6	47.9
Berry Comminution Statistics							
Average	1.48	2.67	0.43	12.9	15.1	13.4	50.3
Standard Deviation	1.47	0.03	0.06	0.76	0.51	0.92	4.89
Minimum	0.27	2.60	0.31	12.0	14.5	12.2	41.0
25th Percentile	0.47	2.67	0.41	12.3	14.8	12.8	47.6
75th Percentile	1.77	2.69	0.48	13.7	15.6	14.0	53.6
Maximum	5.49	2.70	0.50	14.1	16.0	15.4	58.9
Average Marathon data	-	2.68	0.41	12.2	17.1	14.8	48.0
Average Leprechaun data	-	2.68	0.34	13.7	15.8	15.6	42.8

The results show the following:

- At 0.43 g, the abrasion index for the Berry samples is slightly higher than the average values for the Marathon and Leprechaun deposits. The variability of the Ai values at Berry was high (range from 0.3 to 0.5 g) as was also observed for the other two deposits.
- The average RWi for Berry material is very similar to that from the Marathon and Leprechaun deposits.
- The average BWi at a P₈₀ of approximately 75 µm (plant design criteria) for the Berry samples is slightly lower than that of Marathon and Leprechaun material. This means that a grinding circuit designed for a mixture of Marathon and Leprechaun, as described in the 2021 Feasibility Study, will be able to handle a mixture of all three materials.



- At a P_{80} of approximately 150 μm , the BWi for the Berry samples is significantly lower than that of Marathon and Leprechaun.
- The BWi at a finer grind is frequently higher than that at a coarser grind. All three materials show the expected trend with the BWi for the three materials increasing by about 10% as the grind is changed from a P_{80} of about approximately 150 μm to a P_{80} of approximately 75 μm .
- Material competency, as indicated by the average Axb values, is similar for all three deposits, with Berry having a slightly higher value, meaning that Berry material is easier to grind than the other materials. This is also evidenced by the other grinding parameters.
- The SMC data considered the Berry samples to be “soft” with SAG circuit specific energy (SCSE) values ranging from 8.3 to 9.7 kWh/t with an average of 8.9 kWh/t. This average can be compared with the average SCSE for Marathon material, estimated at 9.2 kWh/t, and that for Leprechaun, at 9.6 kWh/t, as reported in the earlier feasibility study.

13.2.4 Gravity Concentration

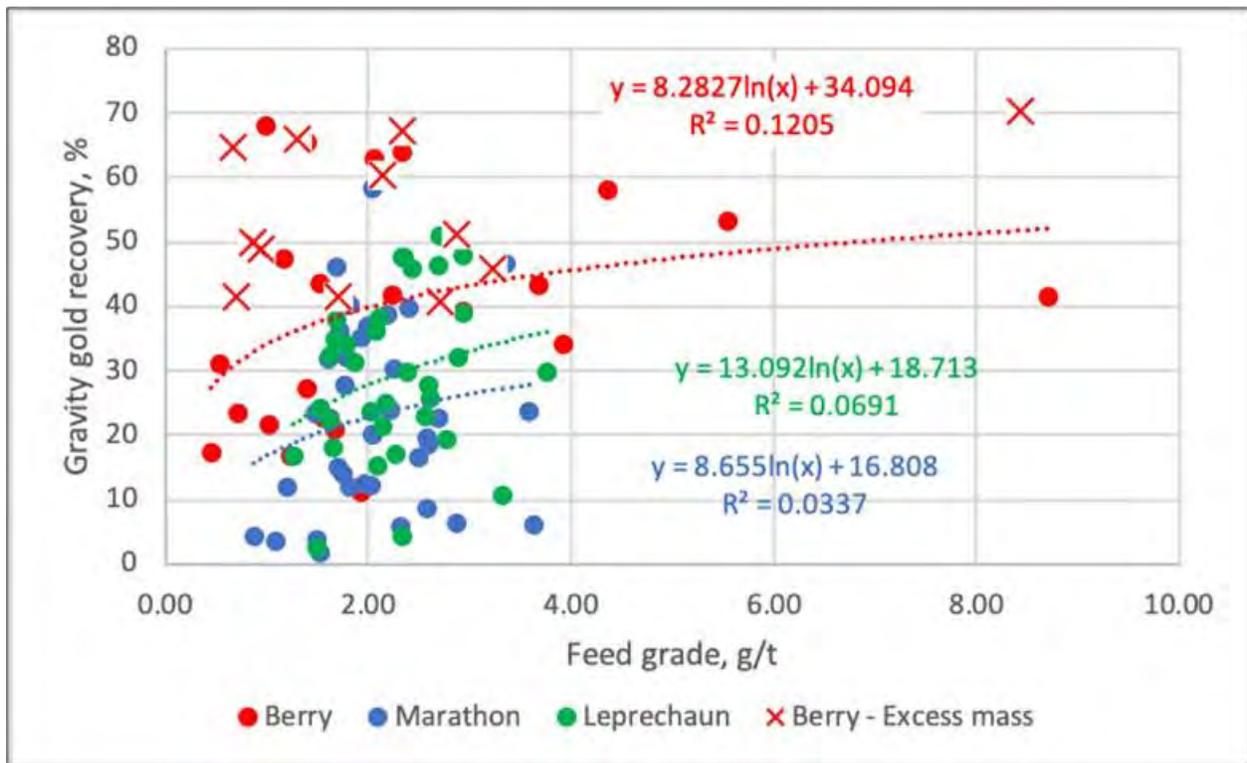
Due to the coarse gold content observed in drill core and the high gravity-recoverable gold observed in all earlier test work phases, all metallurgical tests on the Berry material included gravity concentration prior to downstream processing. The procedure generally included grinding the feed to the target grind size, a single pass through a Knelson laboratory concentrator, and then upgrading the concentrate to a low-mass concentrate on a Mozley mineral separator. Mass recovery was targeted at 0.03% to 0.05% to replicate plant practice. A summary of the batch gravity separation results for Berry samples at a grind P_{80} of 150 μm is provided in Table 13-16. The Berry data, with the Marathon and Leprechaun data presented in the 2021 Feasibility Study, are presented in Figure 13-2 below. Some of the gravity recovery tests on Berry had mass pull values greater than 0.1%; these are shown in Figure 13-3 but are not included in the regression line.

Observations from batch gravity tests are as follows:

- Gravity recovery is highly variable and typical of material with coarse gold.
- The relationship between gravity recovery and head grade is weak, although there is a definite trend.
- There seems to be a general trend in which Marathon gives low gravity recovery (approximately 23% at 2 g/t head), Leprechaun has slightly higher gravity recovery (28% at 2 g/t), and Berry has markedly higher recovery (40% at 2 g/t).



Figure 13-2: Batch Gravity Recovery vs. Calculated Head Grade



Source: BaseMet 2022.

Table 13-16: Batch Gravity Tests for Berry Variability Samples (Left); and Comminution and Bulk Samples (Right)

Variability Samples					Comminution and Bulk Samples				
Comp	Test	Feed Grade	Grav Conc		Comp	Test	Feed Grade	Grav Conc	
		Au (cal)	Mass (%)	Rec (%)			Au (cal)	Mass (%)	Rec (%)
Var-1	R01B	1.93	0.07	11.2	CCOM-1	CN25	8.44	0.18	70.4
Var-2	R02B	3.68	0.07	43.4	CCOM-2	CN26	3.23	0.19	45.9
Var-3	R03B	0.45	0.09	17.2	CCOM-3	CN27	0.70	0.09	41.5
Var-4	R04B	1.40	0.06	27.2	CCOM-4	CN28	2.34	0.14	67.3
Var-5	R05B	1.55	0.03	22.6	CCOM-5	CN29	1.71	0.18	41.4
Var-6	R06B	1.53	0.05	43.5	CCOM-6	CN30	0.67	0.12	64.7
Var-7	R07B	4.36	0.09	57.9	CCOM-7	CN31	2.13	0.14	60.4
Var-8	R08B	0.54	0.06	31.1	CCOM-8	CN32	1.29	0.19	65.9
Var-9	R09B	2.93	0.08	39.1	CCOM-9	CN33	0.86	0.23	49.8
Var-10	R10B	3.92	0.09	34.1	CCOM-10	CN34	2.70	0.36	40.6
Var-11	R11B	2.06	0.14	62.9	CCOM-11	CN35	0.94	0.12	48.8
Var-12	R12B	5.55	0.06	53.1					



Variability Samples					Comminution and Bulk Samples				
Comp	Test	Feed Grade	Grav Conc		Comp	Test	Feed Grade	Grav Conc	
		Au (cal)	Mass (%)	Rec (%)			Au (cal)	Mass (%)	Rec (%)
Var-13	R13B	8.71	0.09	41.5	Bulk	CN24	2.87	0.07	51.1
Var-14	R14B	1.76	0.12	40.9	Comminution and Bulk Samples: Statistics				
Var-15	R15B	1.17	0.09	47.4					
Var-16	R16B	1.39	0.06	65.5	Average		2.32	0.17	53.98
Var-17	R17B	1.67	0.07	20.9	Maximum		8.44	0.36	70.37
Var-18	R18B	2.33	0.08	63.9					
Var-19	R19B	0.99	0.04	68.1					
Var-20	R20B	1.02	0.06	21.6					
Var-21	R21B	1.23	0.06	16.7					
Var-22	R22B	0.71	0.05	23.3					
Var-23	R23B	2.25	0.05	41.8					
Variability: Statistics					All Berry Samples: Overall Statistics				
Minimum		0.45	0.03	11.15	Minimum		0.45	0.03	11.15
Average		2.31	0.07	38.90	Average		2.32	0.11	44.07
Maximum		8.71	0.14	68.06	Maximum		8.71	0.36	70.37
Notes: cal = calculated									

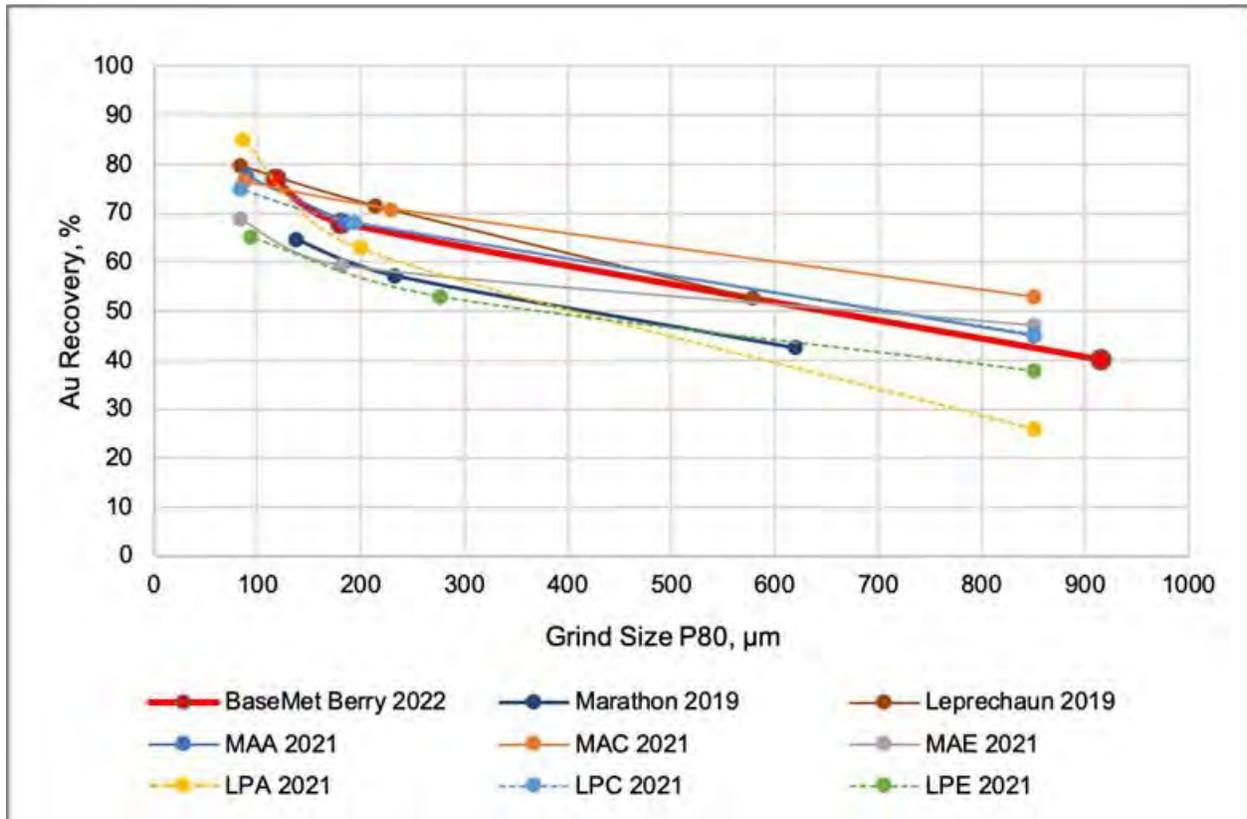
An e-GRG test was conducted on a Berry composite to determine the gravity recoverable gold at different grinds. The results of this test are compared with e-GRG tests conducted on composites by SGS in 2019 and tests on variability samples by BaseMet in 2021 in Figure 13-3.

The e-GRG result for Berry falls in the grouping of all other e-GRG tests done on material from the different deposit. It appears that there is no significant difference in the gravity concentration performance of Berry, Marathon, and Leprechaun materials, despite apparent differences observed in small-scale gravity separation tests.

Modelling based on the e-GRG tests was conducted by FLSmidth as reported in the 2021 Feasibility Study. Given the similarity of the E-GRG data for Berry with those for the other deposits, the circuit model has not been re-modelled, and the earlier results can be used. These are reproduced below in Table 13-17 from the 2021 report.



Figure 13-3: E-GRG Test Results – Berry 2022 and Marathon & Leprechaun Zone Data from 2019 and 2021



Source: BaseMet 2022.

Table 13-17: Gravity Circuit Modelling Results at P₈₀ 75 & 150 µm Grind

Sample	% of Mill Discharge	Target Grind Size P ₈₀ µm	e-GRG%	Modelled Gravity Recovery %
Marathon	23	75	66	49
Leprechaun	23	75	62	47
Marathon	28	150	66	46
Leprechaun	28	150	62	42

13.2.5 Gravity-Leach Flowsheet Tests

The Berry Variability samples, as well as the comminution samples, were subjected to gravity-leach tests to obtain an estimate of the response of the Berry material used in the 2021 Feasibility Study.

The leach conditions for the gravity-leach flowsheet are shown in Table 13-18.



Table 13-18: Gravity-Leach Design Conditions

Parameter	Value
Primary Grind	P ₈₀ 75 µm
Total Leach-CIL Time	32 h
Leach Density	43 wt% solids
pH	12
Dissolved Oxygen	20 ppm
Notes: CIL carbon-in-leach	

Due to a misunderstanding, the leach time for the gravity tailings tests was 48 h. Several tests were performed to measure the effect of the erroneous leach time, and it is concluded that the impact is not significant. These tests and the impact of the error are discussed later in this section. The results of the tests are presented in Table 13-19 and plotted in Figure 13-4 along with data provided for the Leprechaun-Marathon mixture in the 2021 Feasibility Study.

The results of the leach tests on Var-04 and Var-13 seemed unexpectedly low and so were repeated but the results were essentially the same. Averages of the duplicate tests are provided in Table 13-19. The specific overall extraction numbers were 83.9% and 84.5% for Var-04 and 89.3% and 90.7% for Var-13, indicating reasonable reproducibility.

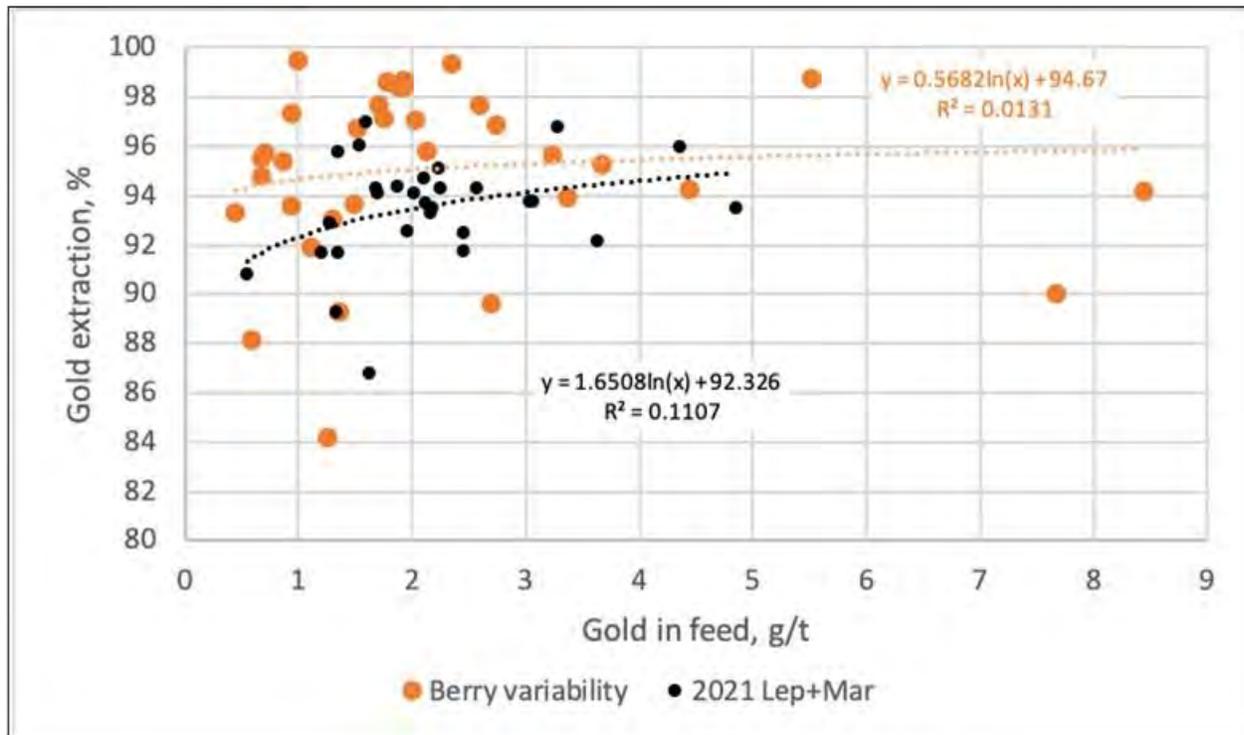
Table 13-19: Results of the Gravity-Leach Process on Berry Samples

Sample ID	Test ID	Head Grade			Recovery, %		Reagent Cons'n, kg/t	
		Au (Calc) g/t	C %	S %	Gravity	Overall, 48 h	NaCN	Ca(OH) ₂
Var-1	CN01C	1.89	0.40	1.45	11.3	98.4	0.90	2.26
Var-2	CN02C	3.37	0.78	0.50	46.9	93.9	0.62	2.23
Var-3	CN03C	0.45	0.28	0.87	17.1	93.3	0.87	2.22
Var-4	CN04C	1.26	0.37	0.75	29.6	84.2	0.93	2.02
Var-5	CN05C	0.94	0.57	0.17	36.9	97.4	0.67	2.09
Var-6	CN06C	1.53	0.46	0.69	43.1	96.7	0.90	2.52
Var-7	CN07C	4.44	0.43	0.64	56.4	94.3	1.14	2.42
Var-8	CN08C	0.67	0.33	0.44	24.5	94.8	1.04	1.82
Var-9	CN09C	2.73	0.30	0.88	42.4	96.9	0.94	2.01
Var-10	CN10C	3.67	0.38	1.18	36.0	95.2	1.10	1.58
Var-11	CN11C	1.79	0.37	0.72	71.5	98.6	1.05	1.48
Var-12	CN12C	5.52	0.37	0.21	53.2	98.7	0.95	1.53
Var-13	CN13C	7.67	0.56	0.86	47.0	90.0	0.96	1.73
Var-14	CN14C	1.75	0.44	1.16	40.6	97.1	1.12	1.89
Var-15	CN15C	1.49	0.41	0.49	37.8	93.6	1.13	1.41
Var-16	CN16C	1.93	0.44	0.23	47.5	98.7	1.18	1.52
Var-17	CN17C	1.92	0.35	0.91	18.0	98.4	1.00	1.85
Var-18	CN18C	2.60	0.50	1.15	56.5	97.7	1.20	1.95



Sample ID	Test ID	Head Grade			Recovery, %		Reagent Cons'n, kg/t	
		Au (Calc) g/t	C %	S %	Gravity	Overall, 48 h	NaCN	Ca(OH) ₂
Var-19	CN19C	1.00	0.39	0.20	67.3	99.5	1.07	1.55
Var-20	CN20C	1.11	0.40	0.74	19.5	91.9	1.20	1.52
Var-21	CN21C	1.36	0.50	0.56	15.5	89.3	0.89	1.33
Var-22	CN22C	0.59	0.23	0.62	28.2	88.2	1.13	1.66
Var-23	CN23C	2.04	0.45	0.40	46.0	97.1	1.07	1.57
CCOM-1	CN25	8.44	0.53	1.06	70.4	94.2	0.64	2.23
CCOM-2	CN26	3.23	0.50	0.57	45.9	95.7	0.80	1.69
CCOM-3	CN27	0.70	0.58	0.19	41.5	95.7	0.46	2.02
CCOM-4	CN28	2.34	0.51	0.26	67.3	99.4	0.62	2.08
CCOM-5	CN29	1.71	0.39	0.33	41.4	97.7	0.62	2.08
CCOM-6	CN30	0.67	0.53	0.25	64.7	95.5	0.48	2.20
CCOM-7	CN31	2.13	0.42	0.36	60.4	95.8	0.71	2.44
CCOM-8	CN32	1.29	0.39	0.69	65.9	93.0	0.60	2.35
CCOM-9	CN33	0.86	0.60	0.65	49.8	95.4	0.67	2.12
CCOM-10	CN34	2.70	0.37	0.95	40.6	89.6	0.69	2.06
CCOM-11	CN35	0.94	0.35	0.19	48.8	93.6	0.51	2.36
Averages		2.26	0.44	0.63	43.80	94.99	0.88	1.94

Figure 13-4: Extraction of Gold from Berry Samples Using Gravity-Leach Process



The grade-recovery data for the processing of Leprechaun and Marathon feed material, as provided in the 2021 Feasibility Study, has been included in Figure 13-5. Both data sets show a high level of scatter as can be expected given the nuggety nature of the gold mineralization and the presence of gold encapsulated in pyrite. A statistical analysis of the leach stage extraction data showed zero correlation between gold extraction and the ore analysis for total carbon, total organic carbon, sulphur, or tellurium and the leach stage gold content. Of particular importance is that Berry ore can be processed under the same conditions as Leprechaun and Marathon and deliver the same, or slightly higher, gold extraction.

The average NaCN consumption across 46 gravity-leach tests on Berry feed was 0.8 kg/t. This can be compared with the 0.27 kg/t reported in the 2021 Feasibility Study for Marathon and Leprechaun feed using data from BaseMet's BL639 project. The reason for the higher cyanide consumption in Berry material is unclear. Berry feed may indeed consume more cyanide or perhaps differences in test feed mass led to the higher cyanide consumption for the Berry tests (1 kg feed) compared to the 2021 Feasibility Study cyanidation tests (2 kg feed). There was no evident change in pH or other factors that might explain the higher cyanide demand.

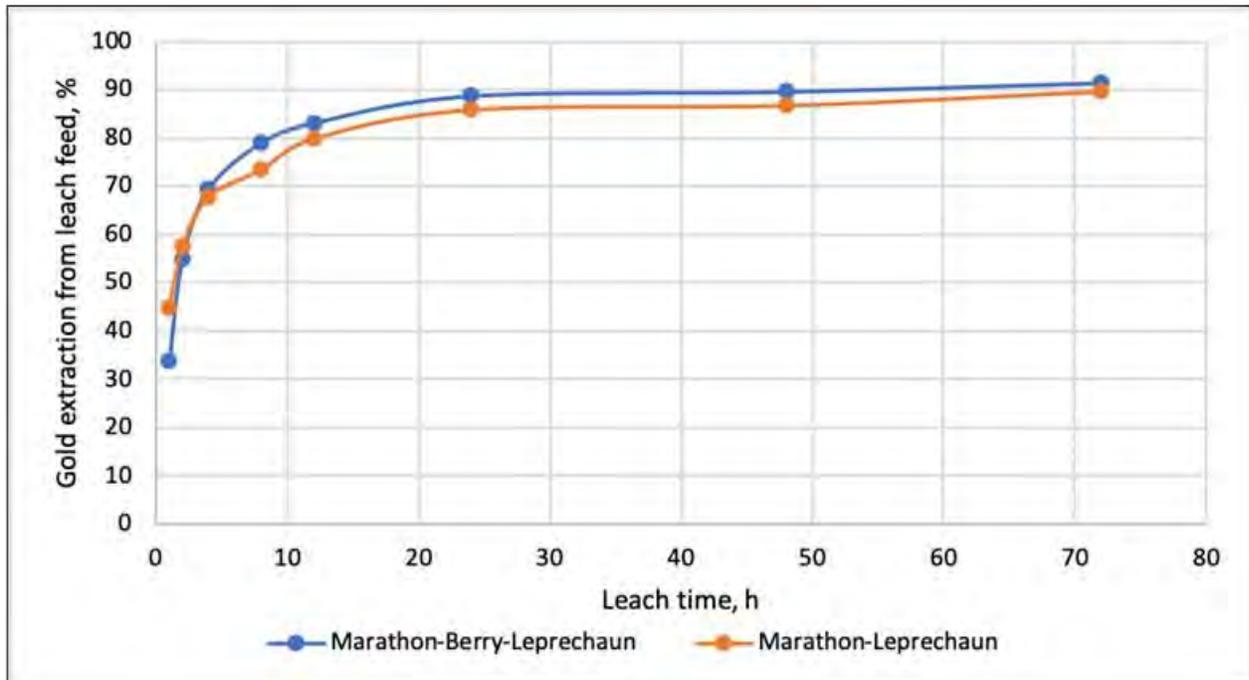
Lime consumption in treating Berry material through the gravity-leach system averaged 2.3 kg/t which is essentially the same as the 2.2 kg/t for Marathon and Leprechaun material as discussed in the 2021 Feasibility Study. As noted earlier, the Berry gravity tailings were leached for 48 h instead of the 32 h of the 2021 Feasibility Study. Several data sources have been used to determine the impact of the difference in leach times on overall gold recovery.

SGS performed two detailed kinetic leach tests on gravity tailings, one using a Marathon-Leprechaun blend and the other a Marathon-Berry-Leprechaun blend, as part of its project 19407-1. The results are presented in Figure 13-5 and demonstrate very little extraction taking place between 32 and 48 h.

Examination of the detailed data shows that for both kinetic tests, extending the leach time from 32 h to 48 h would increase extraction by 0.6%. Given that approximately 50% of the gold in the mill feed is recovered by gravity, only half of the gold recovery is due to the gravity tailings leach. The above data therefore suggests that the 48 h leach data might have overstated the overall gold extraction by 0.3%.



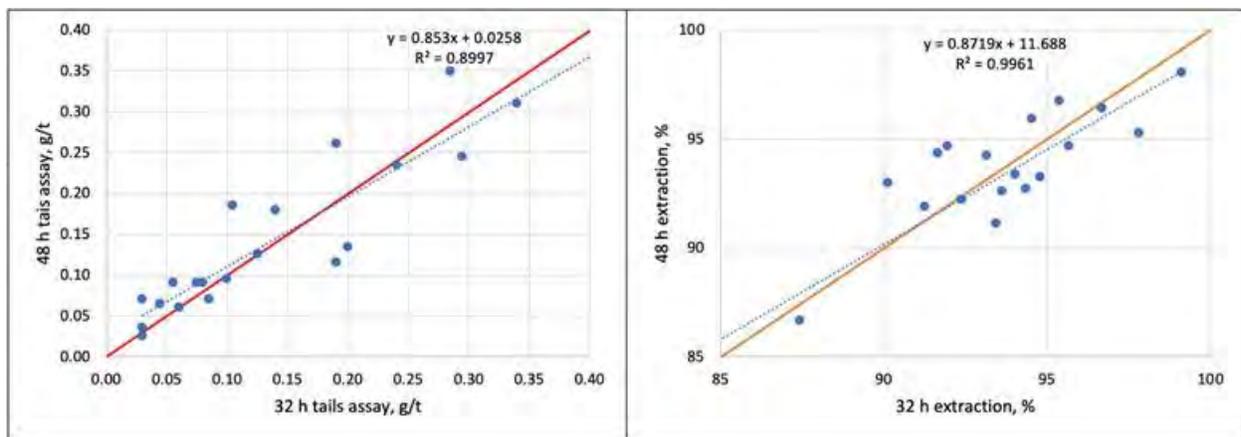
Figure 13-5: Kinetics of Gold Extraction from Gravity Tailings (SGS Project 19407-01)



After the error in leach time was detected, 21 pairs of gravity tailings leach tests were performed to determine the impact of the longer leach time on gold extraction. The test covered samples from all three deposits and a range from 0.4 to 4 g/t. The results are presented in Figure 13-6.

The data is evident in Figure 13-6 strongly indicate that, on average, there is no significant difference in overall gold extraction in moving from a 32-hour to 48-hour leach residence time.

Figure 13-6: Impact of Gravity Tailings Leach Time on Tailings Assay and Overall Gold Extraction



13.2.6 Gold Recovery

All available data from the 2021 Feasibility Study and 2022 test work described above are plotted in Figure 13-7 to derive a gold extraction relationship with gold feed grade. Gold extraction algorithms are provided in Table 13-20.



Figure 13-7: Grade Extraction for Gravity-Leach Flowsheet

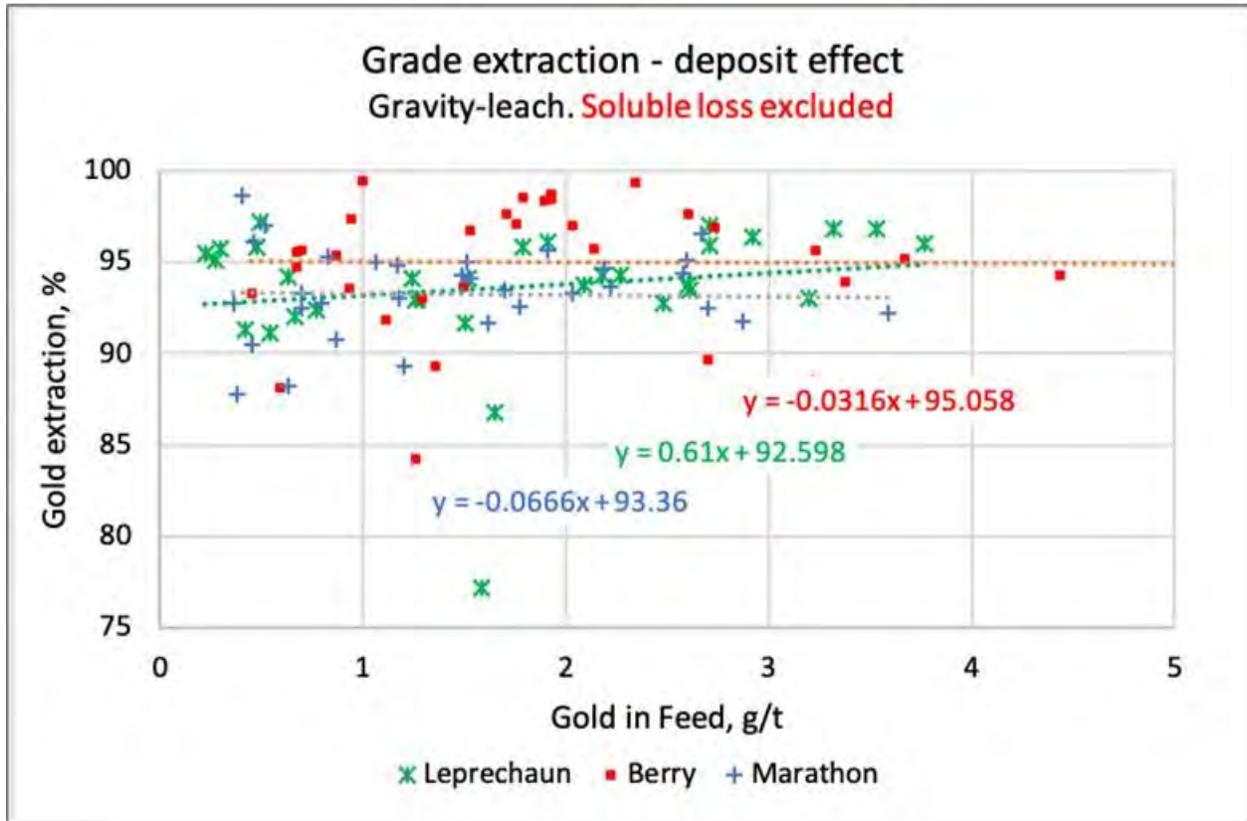


Table 13-20: Regression Lines and Extraction Predictions – Excluding Soluble Losses

Data Set	Regression	Extraction Predicted at Stated Feed Grade, g/t Au				
		Gravity-Leach Circuit – Soluble Losses Excluded				
		0.5 g/t Au	1 g/t Au	2 g/t Au	3 g/t Au	4 g/t Au
Consolidated	$y = 0.2114x + 93.59$	93.7	93.8	94.0	94.2	94.4
Berry	$y = -0.0316x + 95.058$	95.0	95.0	95.0	95.0	94.9
Leprechaun	$y = 0.61x + 92.598$	92.9	93.2	93.8	94.4	95.0
Marathon	$y = -0.0666x + 93.36$	93.3	93.3	93.2	93.2	93.1
Sum of Individuals		93.8	93.8	93.8	94.2	94.4

Note: Gravity-leach is capped at 96% extraction.

13.3 Recommendations

For continued plant optimization, it is recommended to complete a metallurgical test work program to further understand the metallurgical response of various ore types and head grades via the existing plant flowsheet, i.e., sample characterization (head analyses including gold by fire assay) and cyanidation test work (standard bottle roll tests including assessment of the effect of primary grind size).



14.0 Mineral Resource Estimates

The Mineral Resource estimate for the Valentine Gold Mine has an effective date of December 31, 2025, and represents an update to the previous estimate issued on November 30, 2022. The 2025 Mineral Resource estimate covers the Leprechaun, Berry, Marathon, Victory, and Sprite deposits. Mineral Reserves are reported for the Leprechaun, Berry, and Marathon deposits, while only Mineral Resources are reported for Victory and Sprite.

The resource block models were prepared by Ean Finch, P.Ge., Senior Resource Geologist, Equinox. Niel de Bruin, P.Ge., Vice President, Mineral Resources, is the Qualified Person (QP) responsible for the Mineral Resource estimate. The QP has reviewed the models, parameters, and reporting methodology and accepts responsibility for the Mineral Resource statement.

The Mineral Resource estimate was prepared in accordance with the CIM (2014) definitions. The QP considers the estimate to be a reasonable representation of the global Mineral Resources for each deposit at the current level of geological knowledge and drill hole spacing. Mineral Resources are classified into Inferred, Indicated, and Measured categories based on increasing levels of geological confidence, consistent with CIM (2014) definitions.

The Mineral Resource estimate includes Inferred Mineral Resources, which are considered too speculative geologically to support economic analysis or conversion to Mineral Reserves. The QP is of the opinion that a significant portion of the Inferred Mineral Resources may be upgraded to the Indicated category with additional drilling.

14.1 Resource Database

Diamond drill core provides the primary dataset for the Mineral Resource estimate. No grade control drilling was included; however, reverse circulation (RC) drilling from the 2021 program was incorporated where appropriate.

14.1.1 Database Validation

All data imported into the Acquire database underwent extensive validation. Assay certificates, geological logs, survey records, and QA/QC results, including CRMS, were reviewed. Any identified discrepancies were corrected prior to use. Drill holes meeting all validation criteria were flagged to be used in the Mineral Resource estimate Table 14-1. The flagged database was exported from Acquire and included the following fields:

- Collar coordinates
- downhole surveys
- assays
- lithology
- alteration
- structural measurements
- geotechnical data

The cut-off date for drill hole data was October 1, 2025, except for the Victory deposit, which used data up to September 11, 2025. A summary of number of validated drill holes and total drilling meters for each deposit is provided in Table 14-1.



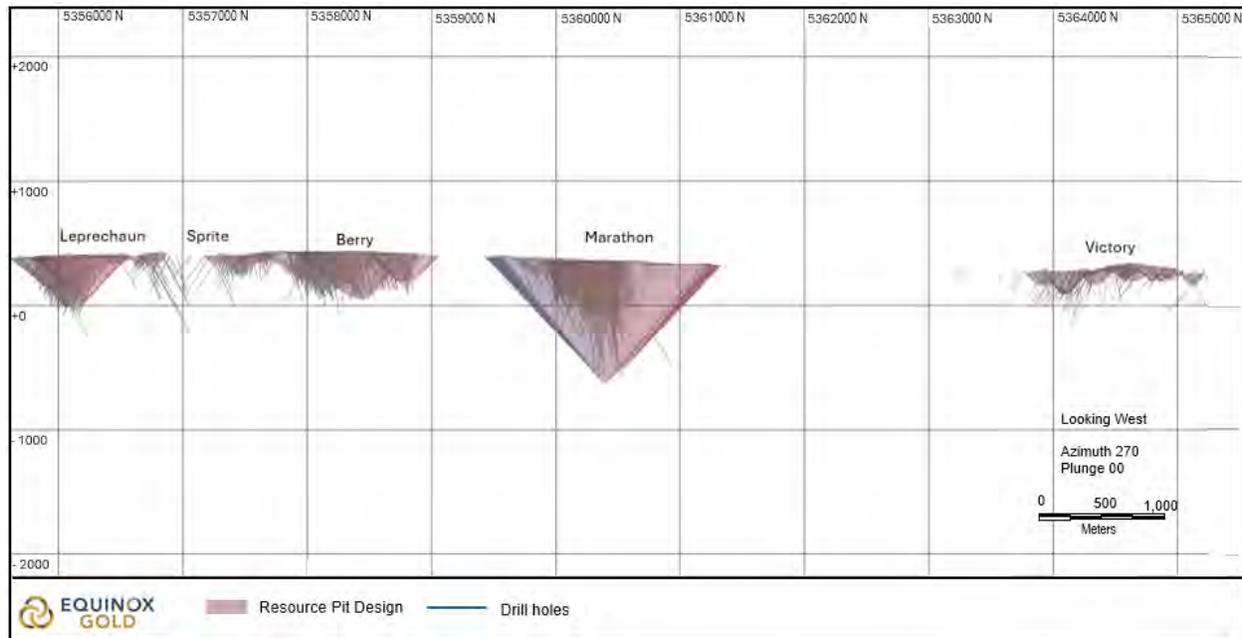
Table 14-1: Number of Drill Holes and Drill Metres with Close-Out Dates Per Deposit

Deposit	Drill Hole Count	Total Metres (m)	Assays Close-out Date	Date Assays Received
Leprechaun	498	104,746	October 1, 2025	September 10, 2025
Sprite	155	26,258	October 1, 2025	June 11, 2025
Berry	580	128,641	October 1, 2025	May 23, 2025
Marathon	716	161,717	October 1, 2025	September 20, 2025
Victory	122	23,746	September 11, 2025	March 21, 2025
Total	2,071	445,108		

A total of 2,071 diamond drill holes, representing 445,108 m of drilling were validated for use in the MRE. Drill hole data was imported into Leapfrog Geo via ODBC and verified to ensure accurate and completed data transfer. A three-dimensional (3D) geological model of the principal lithologies was constructed, and mineralized domains were interpreted for each deposit based on lithology, structural controls, and assay continuity.

Figure 14-1 presents a long-section view of the MRE drill holes and resource pit shells for each deposit with Figure 14-2 showing the same information in plan view.

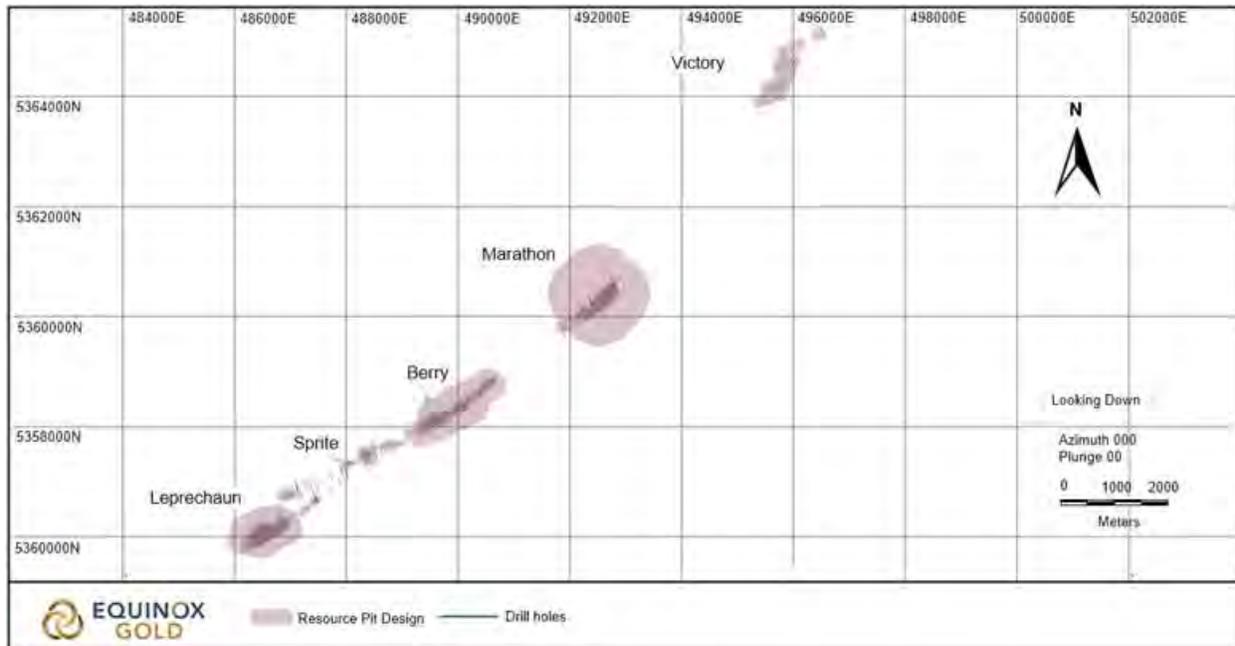
Figure 14-1: Vertical Section Longitudinal View of Drill Holes in the Valentine Gold Mine



Source: Equinox 2026.



Figure 14-2: Plan View of Drill Holes in the Valentine Gold Mine



Source: Equinox 2026.

14.1.2 Drill Hole Spacing

Drill hole spacing varies across the Marathon, Leprechaun, Berry, Sprite, and Victory deposits, reflecting differences in geological complexity, drilling depth, and historical exploration focus. In the Marathon deposit, drill coverage typically ranges from 15 m to 20 m in the upper and central portions of the ore body, increasing to approximately 50 m at depth, where drilling density decreases. The Leprechaun and Berry deposits exhibit average drill spacings of 20 m to 30 m, with local increases to 50 m or more in deeper areas. The relatively tight drill spacing in these three deposits supports the classification of Measured and Indicated Mineral Resources and, where engineering studies support it, the conversion to Proven and Probable Mineral Reserves.

In contrast, drill coverage in the Sprite and Victory deposits is more widely spaced, generally exceeding 30 m near the surface and increasing to more than 50 m at depth. This broader spacing reflects the earlier-stage nature of drilling in these areas and results in a lower confidence level, which is appropriate for Indicated and Inferred Mineral Resource classification.

Overall, the drill hole spacing is sufficient to support current geological interpretations, wireframe construction, and grade interpolation strategies. The density of drilling in the Marathon, Leprechaun, and Berry deposits enables reliable modelling of mineralized domains, grade continuity, and local geological controls, providing a reasonable level of confidence in the resulting Mineral Resource estimate. In areas with wider spacing, the classification appropriately reflects the increased uncertainty in grade continuity and geometry.

The following criteria were applied during database preparation:

- Samples outside the block model extents were excluded.
- Metallic Screen and LeachWELL assays were prioritized over Fire Assay results.
- Unsourced intervals and negative assay values were set to zero.



- Assays below the detection limit were assigned half the laboratory lower detection limit (LDL).
- Drilling extending beyond model extents but lacking economic potential was not assigned to a domain.

Table 14-2: Number of Assays and Total Assay Length for the Deposits Used in the Mineral Resource Estimate

Deposit	No. of Assays	Length of Assays(m)
Leprechaun	74,892	101,400
Sprite	18, 163	24,027
Berry	89,219	116,150
Marathon	111,783	156,029
Victory	16,068	21,546
Total	310,127	419,161

The QP reviewed all database validation procedures and concluded that the dataset is reliable and appropriate for Mineral Resource estimation.

14.2 Lithology Modelling

Mineralization at the Project is hosted within a predominantly flat-lying stratigraphic sequence comprising seven principal lithological units:

- 1 Rogerson Lake Conglomerate and associated sediments (CG)
- 2 Trondhemite (TRJ)
- 3 Quartz Monzonite (Q-Monz)
- 4 Aphanitic Quartz Porphyry dykes (AQP; commonly referred to as felsic dykes)
- 5 Quartz-Tourmaline-Pyrite Veins (QTPV)
- 6 Mafic Dykes (MD)
- 7 Gabbro (GB)

Three-dimensional lithological models were constructed for each deposit using Seequent Leapfrog Geo, integrating drill hole lithology, structural measurements, and oriented core data. A standardized modelling workflow was applied across all five deposits to ensure consistency in interpretation, wireframing, and subsequent domain construction. These lithological models form the foundational framework for defining mineralized domains.

Although the overall lithological assemblage is consistent across the property, subtle variations occur between deposits. Notably, QTPV mineralization is predominantly hosted within Trondhemite at Leprechaun, whereas in the Berry, Marathon, Sprite, and Victory deposits, QTPV mineralization is more commonly associated with Quartz Monzonite.

14.3 Mineralization Modelling

Gold mineralization at Valentine is primarily associated with the QTPV domains, with mafic dykes locally intruding both the TRJ and QTPV units. Mineralization was interpreted and



modelled within the six principal lithologies and an overburden domain using Leapfrog Geo. Domain construction incorporated lithological contacts, structural controls, and assay continuity to ensure that the geometry and orientation of mineralized zones are geologically reasonable.

Structural data played a central role in defining the orientation of QTPV domains. Televiewer surveys, oriented core measurements, and surface mapping were used to characterize the dominant QTP vein set (Set 1), which governs the geometry of the mineralized system. Figure 14.3 illustrates the structural measurements from Set 1 veins, displayed as red disks, and their relationship to the QTPV domain in yellow.

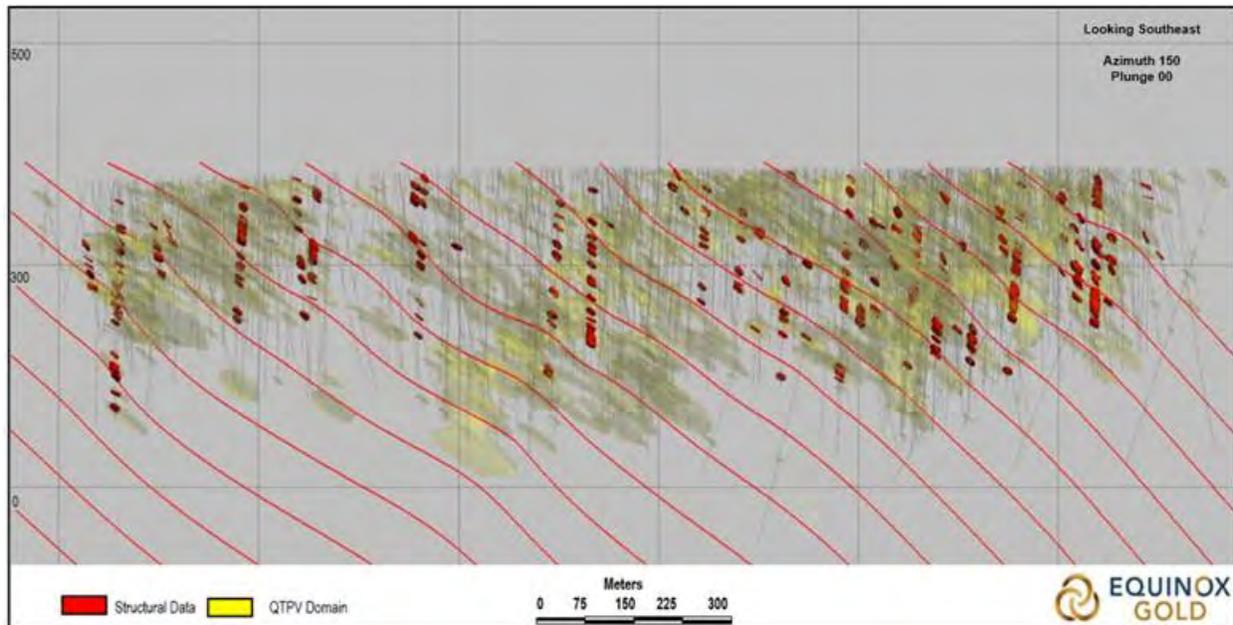
14.3.1 Modelling Methodology

The 2025 Mineral Resource estimate mineralization domains were updated using the following workflow:

- Mineralization domains were constructed using Leapfrog Geo's Vein System Tool and Implicit Intrusion Tool, which provided implicit controls on domain geometry. Manual refinements were applied where necessary to ensure geological validity.
- Interval composites were generated using the Economic Composite Tool to support domain interpretation.
- Domain modelling focused on the primary QTP vein set (Set 1) for each deposit, as this set represents the dominant mineralized structure.
- Secondary (Set 2) and tertiary (Set 3) QTP vein sets were not explicitly modelled due to their limited volumetric significance and their tendency to be obscured by the more pervasive Set 1 veins.
- Structural measurements were filtered in stereonet to isolate Set 1 data, which was then used to guide interpolation and domain orientation.
- Directional control during implicit modelling was achieved using Televiewer data, oriented core, and surface structural mapping. These data were used to generate structural interpolation surfaces that informed local block search orientations, ensuring that variations in strike and dip were accurately captured.
- For domains modelled with the Vein System Tool, a mid-surface plane was generated for each wireframe to define block-specific search orientations.
- Volumes smaller than 1,000 m³ were excluded from the final QTPV domain. Assays within these small volumes were instead estimated within the host lithological domain to avoid introducing geologically insignificant slivers.



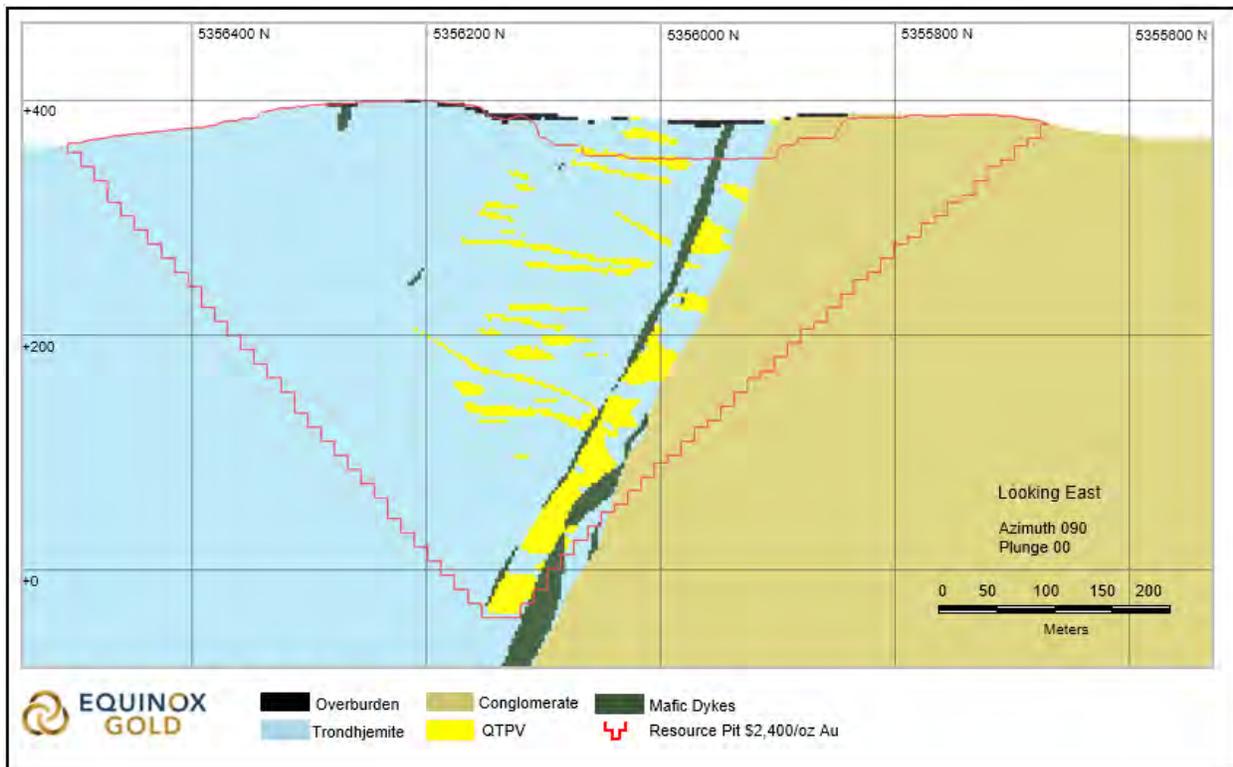
Figure 14-3: Berry Deposit QTPV Domains and Set 1 Vein Structural Model



Note: Structural measurements from Set 1 veins are displayed as red disks. Source: Equinox 2026.

Figure 14-4 through Figure 14-8 illustrate the lithological and mineralization domains for the Leprechaun, Sprite, Berry, Marathon, and Victory deposits, respectively.

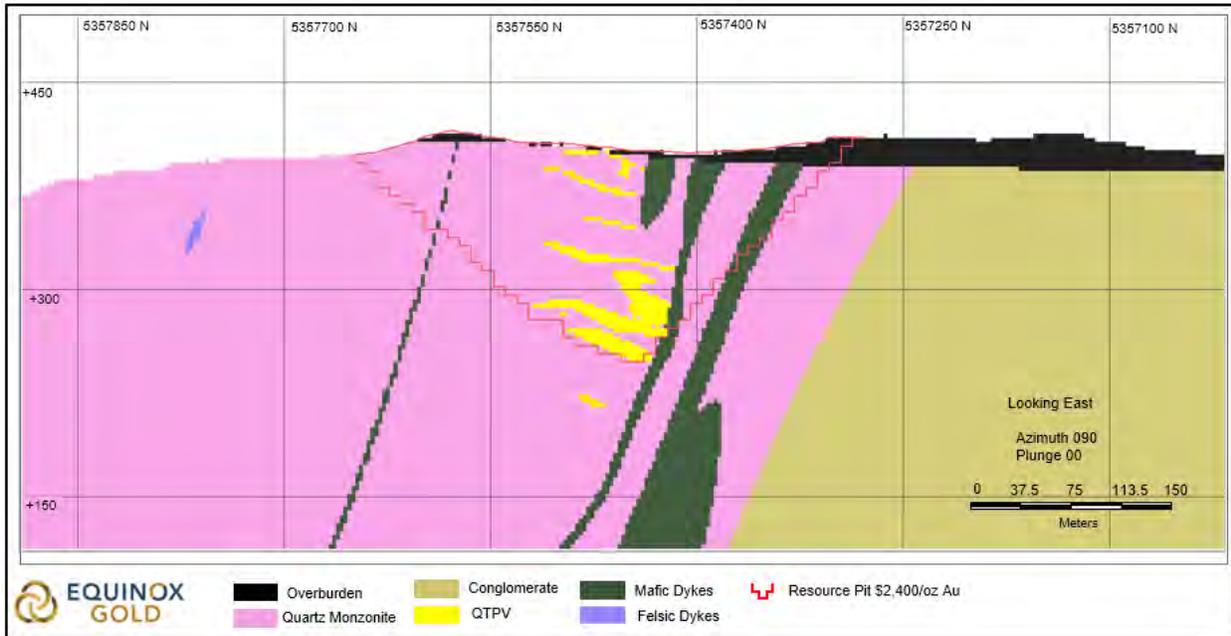
Figure 14-4: Vertical Section of the Leprechaun Deposit with Resource Pit Shell



Source: Equinox 2026.

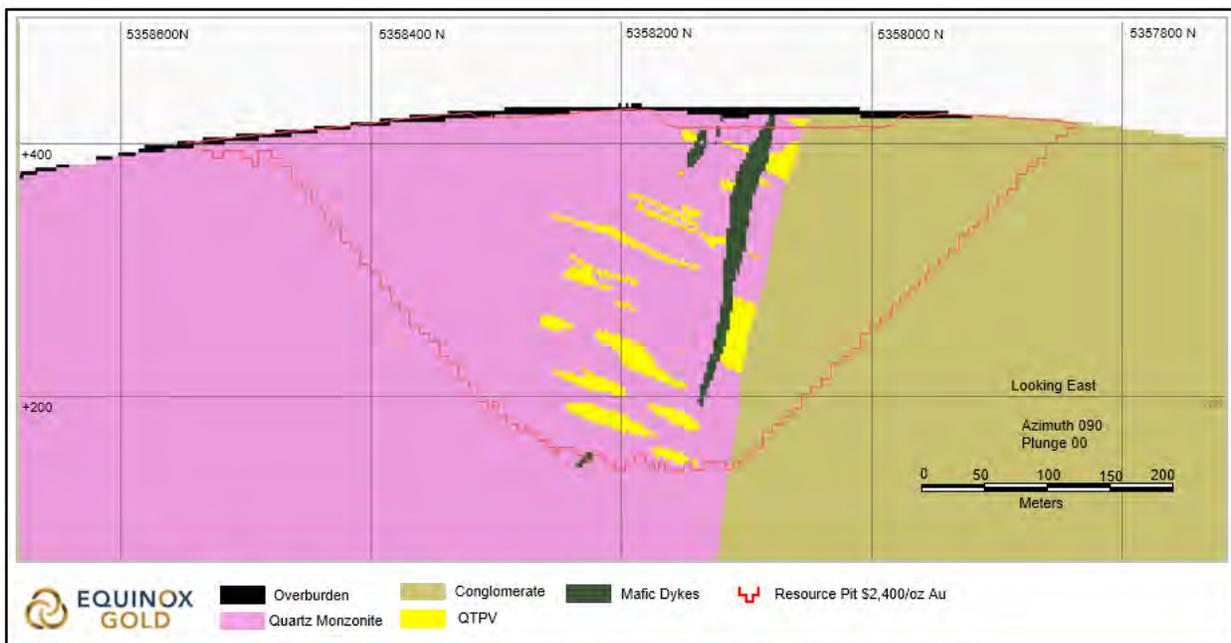


Figure 14-5: Vertical Section of the Sprite Deposit with Resource Pit Shell



Source: Equinox 2026.

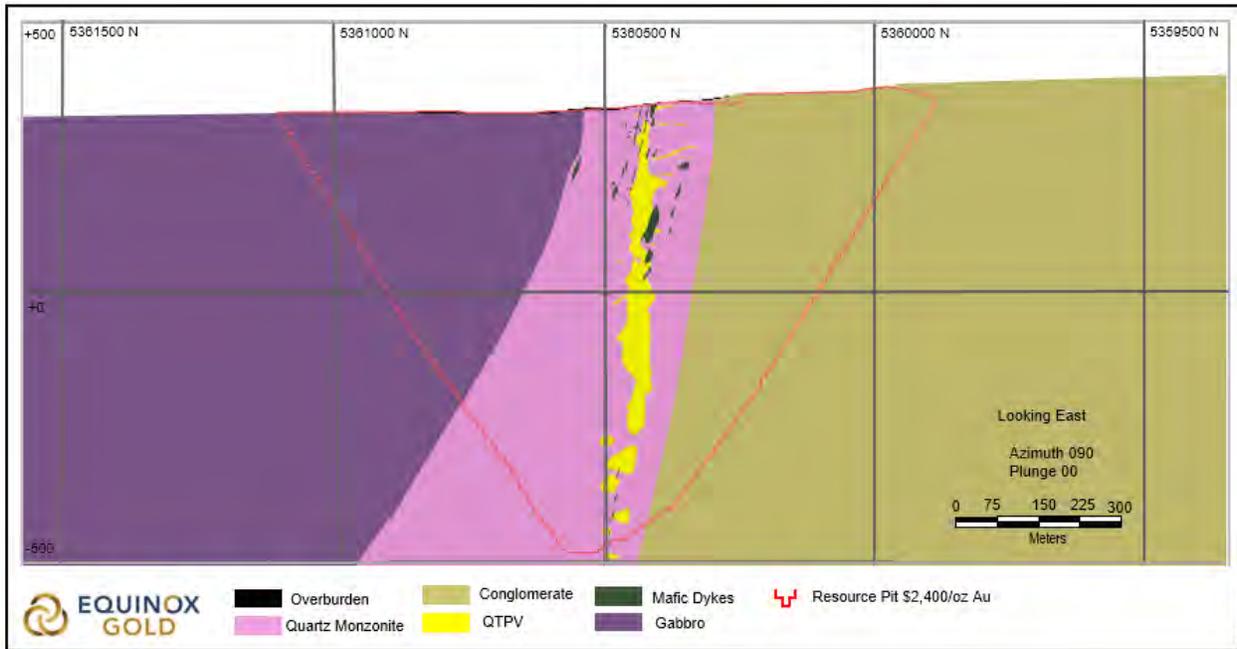
Figure 14-6: Vertical Section of the Berry Deposit with Resource Pit Shell



Source: Equinox 2026.

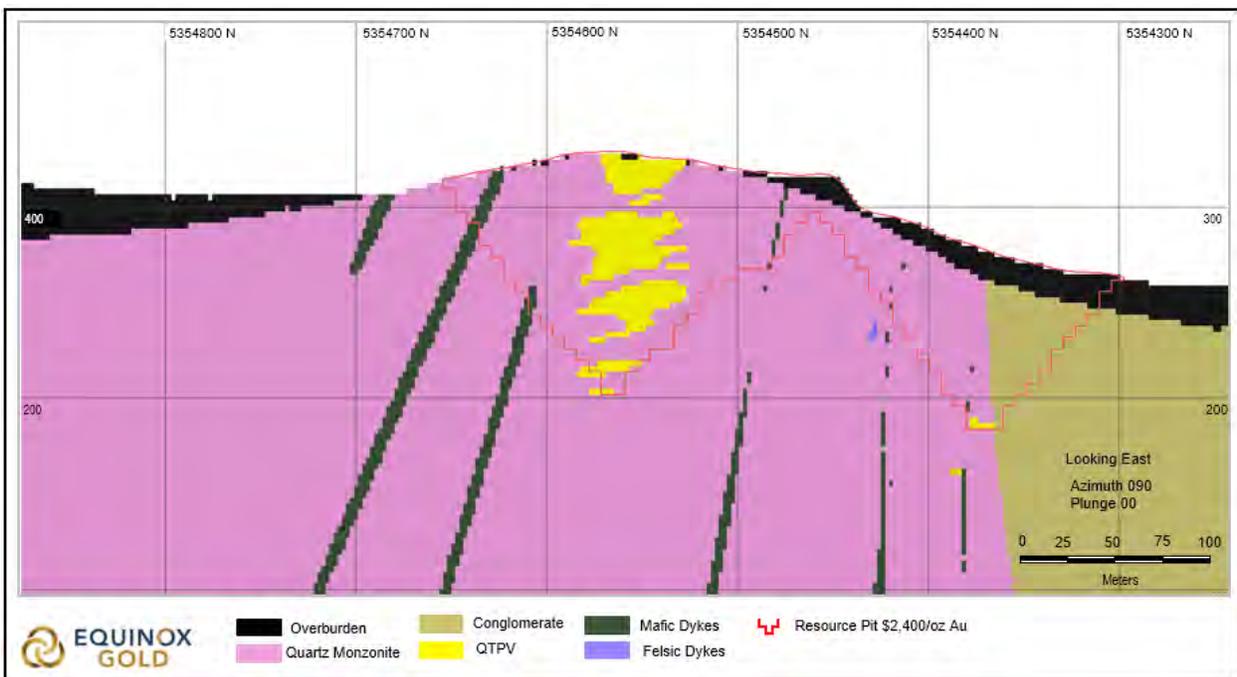


Figure 14-7: Vertical Section of the Marathon Deposit with Resource Pit Shell



Source: Equinox 2026.

Figure 14-8: Vertical Section of the Victory Deposit with Resource Pit Shell



Source: Equinox 2026.



14.4 Bulk Density

A total of 3,909 measurements were used in the bulk density analysis across all lithological units. No measurements were taken for the overburden, and a bulk density of 1.50/tm³ was assigned. The values per sample are derived from weighing the diamond core in air and submerged in water and applying the formula below:

$$\text{Bulk Density } (\rho_b) = \text{Weight in Air} / (\text{Weight in Air} - \text{Weight in Water})$$

Average density values per domain are calculated from all data, with the top and bottom 2.5% of measurements removed to eliminate outlier values. Density is then assigned to blocks based on their flagged domains. The bulk density value per lithological unit for each domain is listed in Table 14-3.



Table 14-3: Valentine Bulk Density Values per Domain and Lithological Unit

Deposits	Domains	No. of Samples	Bulk Density (t/m ³)
Leprechaun	MD	91	2.84
	QTPV	65	2.66
	CG	33	2.79
	TRJ	217	2.69
	OVB	-	1.50
Sprite	MD	195	2.81
	QTPV	38	2.69
	CG	37	2.78
	Q-Monz	323	2.69
	AQP	68	2.71
	OVB	-	1.50
Berry	MD	323	2.79
	QTPV	63	2.69
	CG	49	2.74
	Q-Monz	1203	2.69
	OVB	-	1.50
Marathon	MD	109	2.81
	QTPV	57	2.68
	CG	37	2.75
	Q-Monz	198	2.69
	GB	136	2.96
	OVB	-	1.50
Victory	MD	195	2.82
	QTPV	38	2.68
	CG	37	2.78
	Q-Monz	323	2.68
	AQP	68	2.70
	OVB	-	1.50

Note: OVB overburden, CG Rogerson Lake Conglomerate and associated sediments, TRJ trondhjemite, AQP aphanitic quartz porphyry dykes, Q-Monz quartz monzonite, QTPV quartz-tourmaline-pyrite veins, MD mafic dykes, GB gabbro

14.5 Grade Capping of Outlier Samples

High-grade outlier assays have the potential to disproportionately influence block-grade estimates if not appropriately constrained. To manage this risk, gold assays were evaluated prior to compositing using a suite of statistical tools, including histograms, log-probability plots, and cumulative probability plots for each QTPV domain and are presented in Figure 14-9 to Figure 14-13. A summary of the descriptive statistics for the raw assays prior to capping for the QTPV and other domains are presented in Table 14-4.



Table 14-4: Summary Statistics for the Uncapped Raw Assays Per Domain and Lithological Units

Deposit	Item	All	QTPV	MD	CG	TRJ	Q-MONZ	AQP	GB
Leprechaun	No. Samples	74,874	15,195	4,707	2,312	52,660	-	-	-
	Minimum	0.002	0.002	0.002	0.002	0.002	-	-	-
	Maximum	375.78	375.78	18.97	15.46	98.60	-	-	-
	Mean	0.54	2.33	0.07	0.11	0.07	-	-	-
	SD	3.93	8.26	0.60	0.71	0.98	-	-	-
	CV	7.33	3.55	8.56	6.59	12.51	-	-	-
Sprite	No. Samples	18,140	1,271	2,931	204	-	12,407	1,324	-
	Minimum	0.002	0.002	0.002	0.002	-	0.002	0.002	-
	Maximum	108.97	108.97	8.42	8.13	-	14.29	2.95	-
	Mean	0.13	1.38	0.03	0.08	-	0.05	0.02	-
	SD	1.38	4.94	0.20	0.62	-	0.28	0.12	-
	CV	10.34	3.59	6.99	7.74	-	6.22	7.38	-
Berry	No. Samples	89,159	17,194	6,646	1,091	-	64,228	-	-
	Minimum	0.002	0.002	0.002	0.002	-	0.002	-	-
	Maximum	490.61	490.61	77.16	6.42	-	50.44	-	-
	Mean	0.46	2.01	0.08	0.02	-	0.08	-	-
	SD	3.79	8.30	1.22	0.22	-	0.74	-	-
	CV	8.33	4.13	14.67	10.06	-	8.79	-	-
Marathon	No. Samples	111,743	29,865	6,598	326	-	74,684	-	270
	Minimum	0.002	0.002	0.002	0.002	-	0.002	-	0.002
	Maximum	1313.71	1313.71	19.41	4.91	-	76.12	-	0.13
	Mean	0.50	1.67	0.08	0.06	-	0.08	-	0.01
	SD	6.55	12.55	0.64	0.32	-	0.69	-	0.01
	CV	13.03	7.49	8.53	5.42	-	8.91	-	1.57
Victory	No. Samples	16,063	1,690	1,218	213	-	12,720	222	-
	Minimum	0.002	0.002	0.002	0.002	-	0.002	0.002	-
	Maximum	46.88	46.88	7.72	2.93	-	36.70	0.59	-
	Mean	0.17	1.20	0.04	0.03	-	0.06	0.01	-
	SD	1.17	3.19	0.32	0.25	-	0.45	0.05	-
	CV	6.73	2.66	7.54	7.69	-	8.28	3.79	-
Notes:									
Assays reported using a 0.001 g/t Au cut-off and does not include assays that are not assigned to a domain for Mineral Resource estimate.									
CV Coefficient of Variation, SD standard deviation									

Multiple potential capping thresholds were tested for each domain. For each candidate cap, the impact on mean grade, the number of samples affected, and the distribution of capped values



was assessed. Final capping thresholds were selected to balance the need to limit the influence of extreme values while preserving the natural grade distribution of the mineralized system. The final capped assay values are summarized in Table 14-5.

Figure 14-9: Leprechaun QTPV Grade Capping Plots

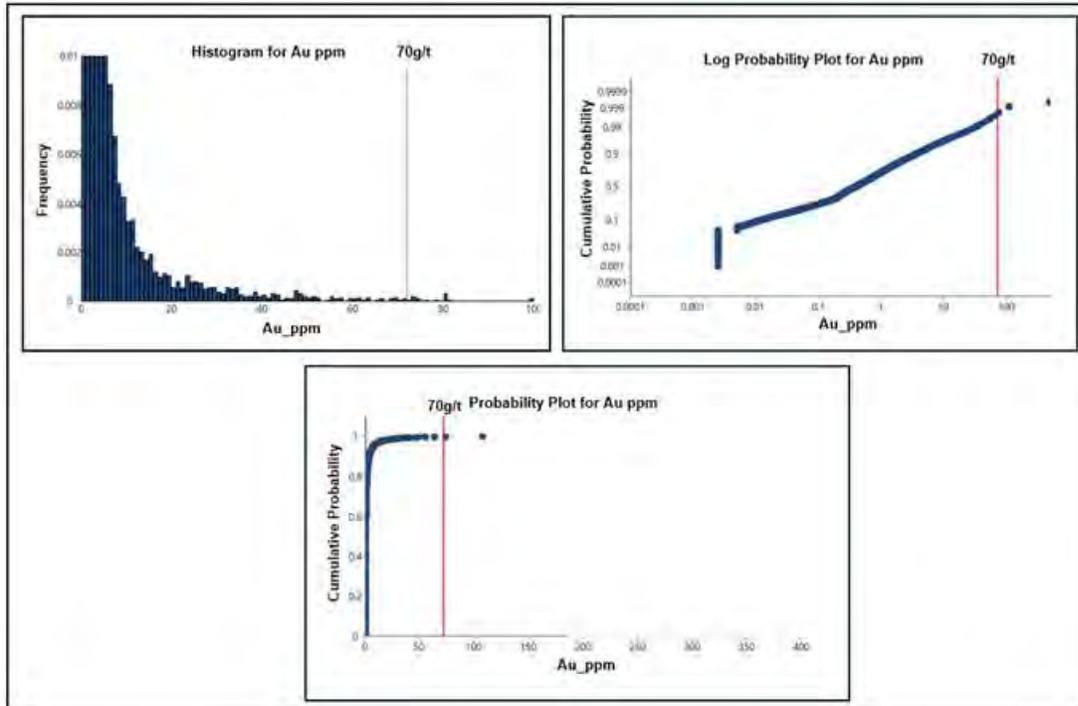


Figure 14-10: Sprite QTPV Grade Capping Plots

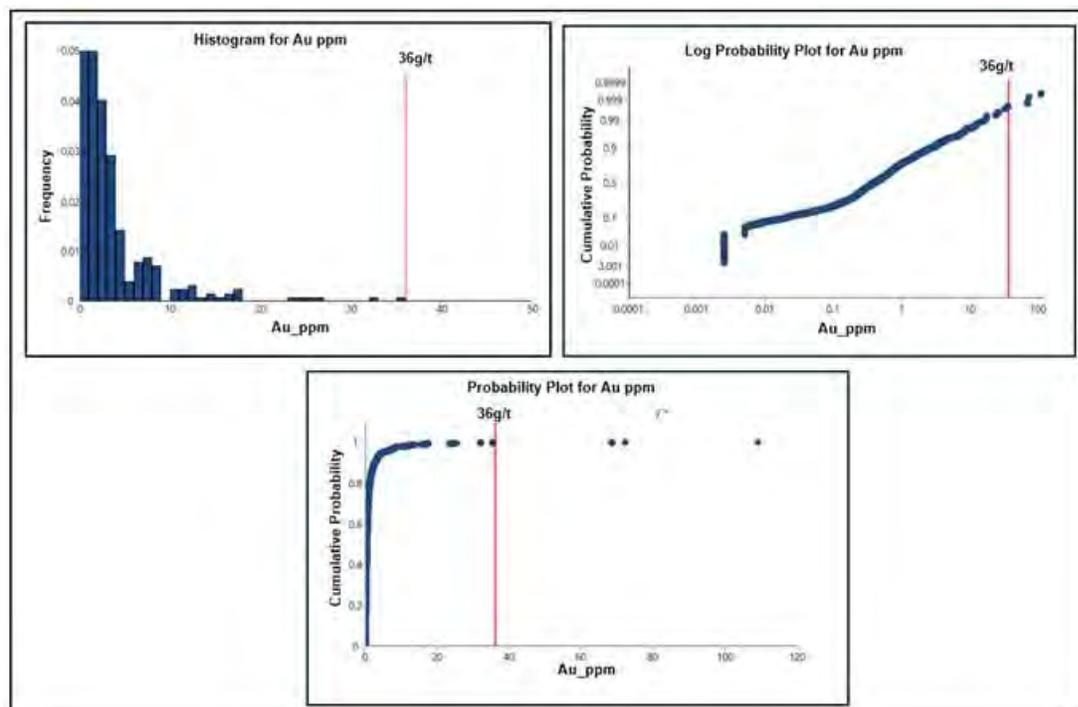


Figure 14-11: Berry QTPV Grade Capping Plots

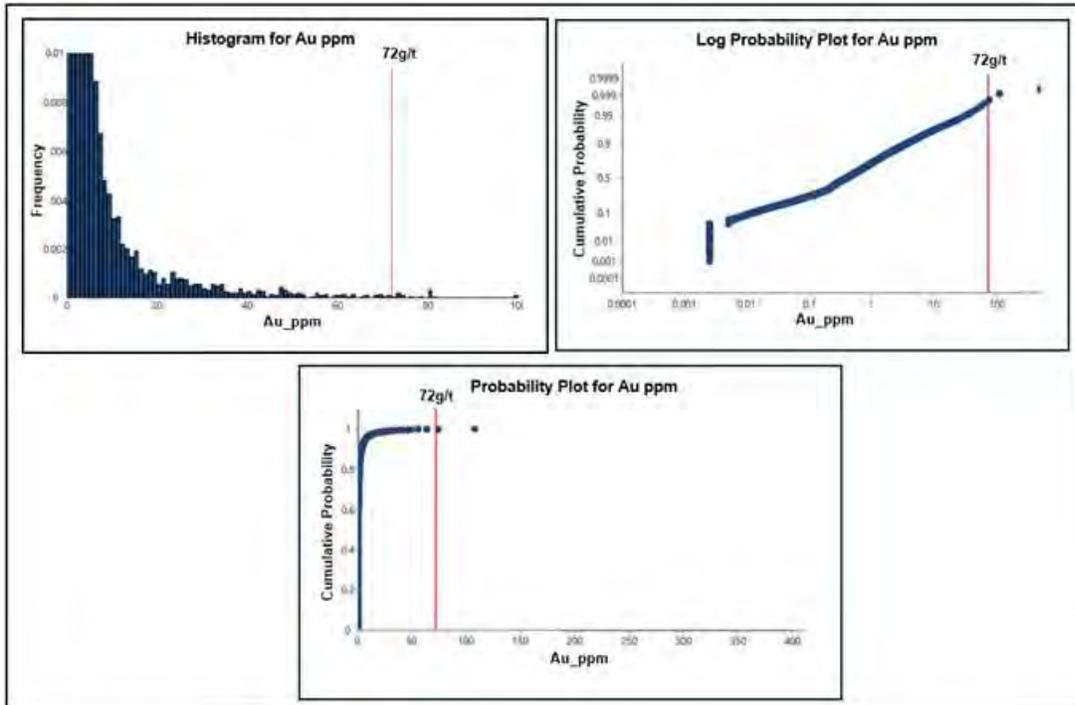


Figure 14-12: Marathon QTPV Grade Capping Plots

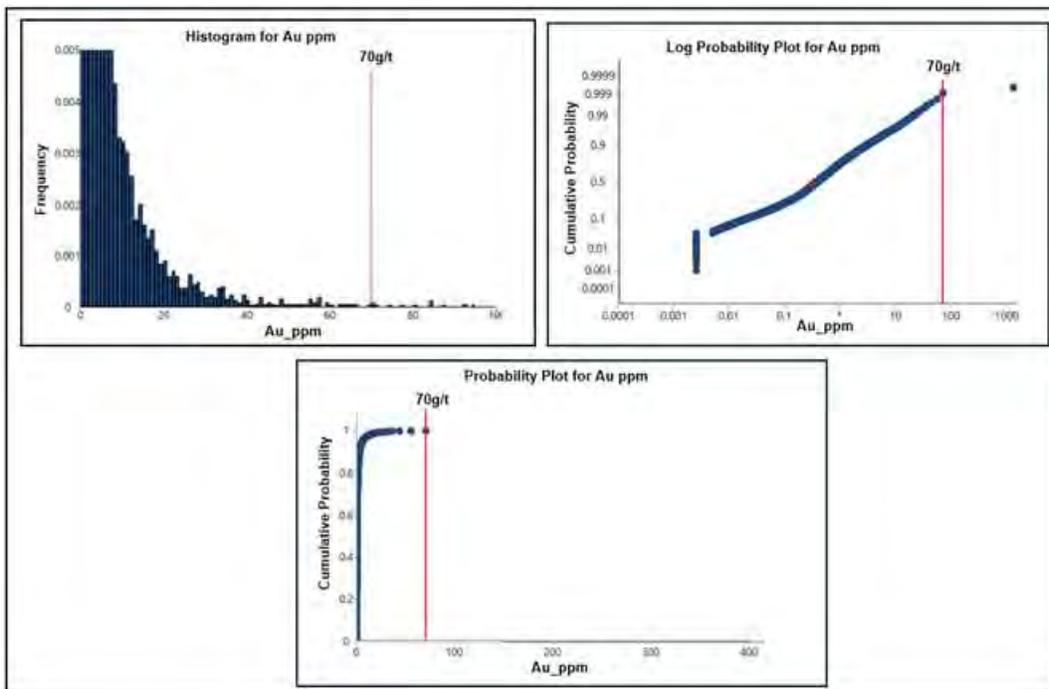


Figure 14-13: Victory QTPV Grade Capping Plots

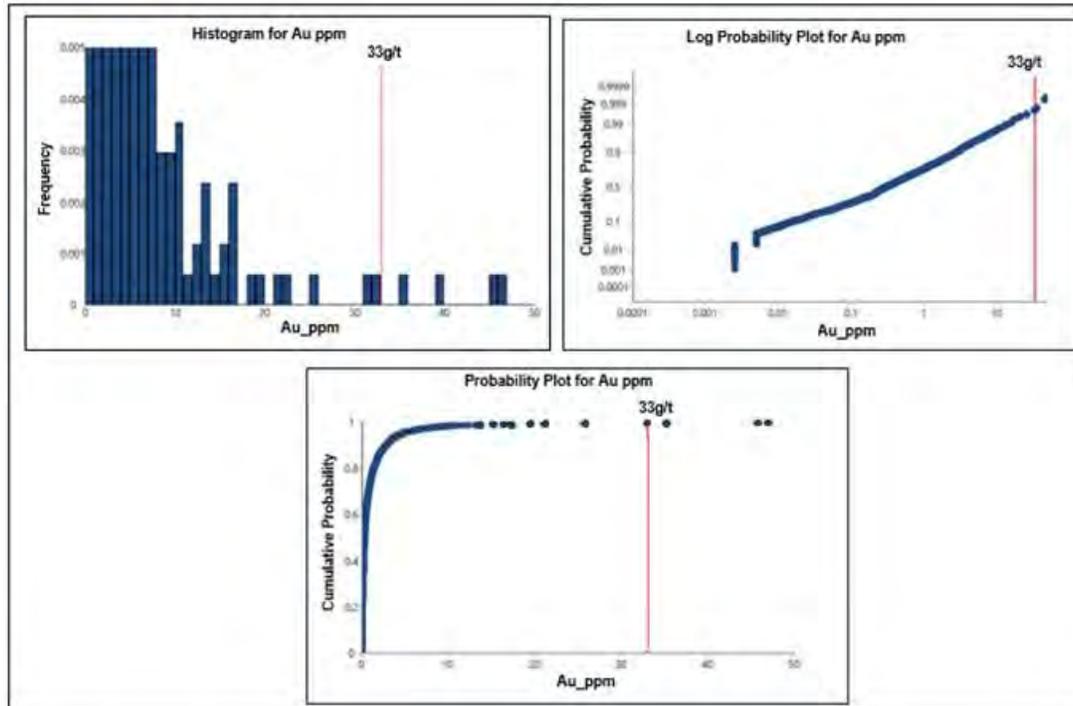


Table 14-5: Descriptive Statistics of QTPV Assay Top Cut Values for Each Deposit

Deposit	No. of Assays	Capping Levels (g/t) Au	No. of Assays Capped	Mean (g/t) Au	Standard Deviation	Coefficient of Variation (CV)	Metal Loss (%)
Leprechaun	15,195	70	36	2.23	6.53	2.94	4.39
Sprite	1,271	36	3	1.27	3.27	2.58	8.08
Berry	17,194	72	38	1.91	6.14	3.22	5.30
Marathon	29,885	70	32	1.53	4.67	3.06	8.95
Victory	1,690	33	4	1.18	2.93	2.49	1.73

14.6 Composites

Sample-length statistics were evaluated following grade capping to determine an appropriate composite length for estimation. Assay interval lengths were evaluated in 0.5 m increments to assess the distribution of sample support within the dataset. The review indicates that most samples containing elevated gold grades were collected at lengths of 1.0 m or less and assays were composited to 1 m intervals. Summary statistics for the resulting 1.0 m capped composites within the QTPV domain are presented in Table 14-6. Several compositing rules were also applied to ensure that the resulting dataset preserved the geological controls on mineralization while maintaining appropriate grade support:

- Unsampled intervals were assigned a value of 0.00 g/t Au for compositing purposes.
- All intervals within lithological or mineralized domains were included in the compositing process.



- Composites were confined to domain boundaries; no external dilution was introduced.
- Internal dilution was retained by including unmineralized or low-grade material within the domain boundaries.
- Composites shorter than 0.5 m were merged with the preceding interval within the same domain.
- Samples outside geological domains were excluded from compositing.
- Composites shorter than 0.5 m or not assigned to a domain were removed from the estimation dataset.

Comparison of the coefficient of variation (CV) for capped assays (Table 14-5) with the CV for the 1.0 m composites in Table 14-6, supports the selection of a 1.0 m composite length, with only minor variance observed between the datasets. This composite length provides consistent sample support for estimation, reduces variability, and does not introduce bias.

Table 14-6: Summary Statistics for the Capped 1.0 m Composites for QTPV Domain

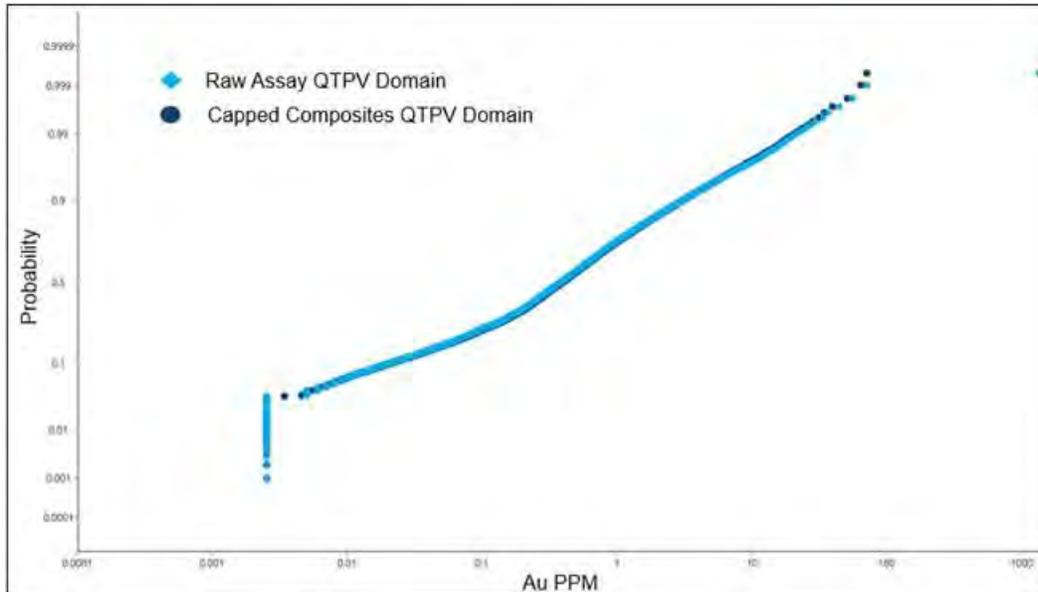
Domain	No. of Composites	Minimum (g/t Au)	Maximum (g/t Au)	Mean (g/t Au)	CV
Leprechaun	15,947	0.002	70.00	2.01	2.90
Sprite	1,485	0.002	36.00	1.27	2.49
Berry	17,718	0.002	72.00	1.87	3.20
Marathon	31,691	0.002	70.00	1.50	2.95
Victory	1,787	0.002	33.00	1.15	2.41

Comparison of assay and composite means also shows only minor variance, confirming that the selected composite length does not materially alter the grade distribution.

To further evaluate potential support-size bias, log-probability plots comparing the distributions of assays and composites were generated for each mineralized domain. An example for the Marathon deposit is shown in Figure 14-14, which demonstrates that the compositing process does not introduce measurable bias in the grade distribution.



Figure 14-14: Log Probability Plot Comparing the QTPV Assays and Composites in Marathon Domain



14.6.1 High-Yield Distance Capping of Composites

To limit the spatial influence of extreme grades and reduce the risk of over-estimation, composite samples exceeding a defined threshold grade were restricted from contributing to estimates beyond a specified distance. Threshold values were selected through review of log-probability plots, with Figure 14-15 illustrating the representative histogram and probability plots used for the Marathon deposit.

Restriction distances were determined using both quantitative and qualitative approaches. Indicator variograms were generated in Vulcan to assess the spatial continuity of high-grade indicators, and these results were supplemented by visual inspection of the spatial distribution of high-grade composites. A representative indicator variogram for the Marathon deposit, using a 40 g/t Au indicator threshold, is shown in Figure 14-16. The final high-grade restriction parameters applied across all deposits, covering the QTPV, Trondhjemite/Quartz Monzonite, and other lithology-based mineralized domains, are summarized in Table 14-7. These parameters were selected to ensure that high-grade samples contribute appropriately within their demonstrated ranges of continuity and do not unduly influence estimates at distances unsupported by the data.



Figure 14-15: Marathon QTPV High Yield Capping Plots

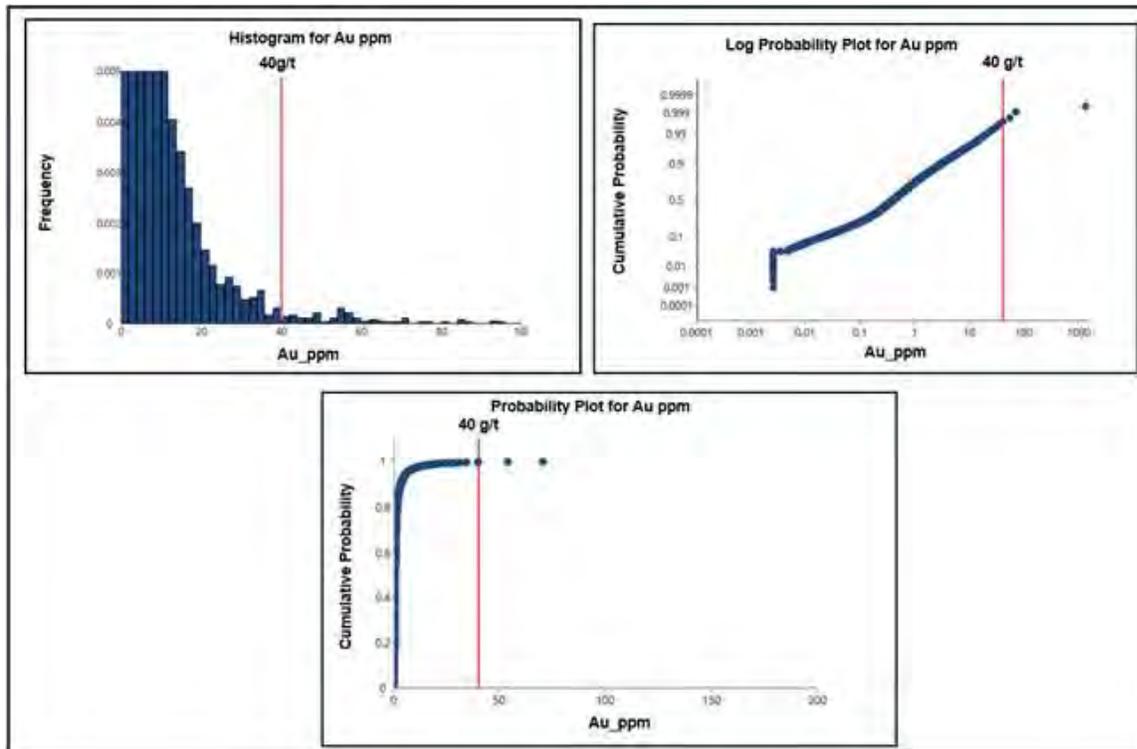


Figure 14-16: Indicator Variogram for Marathon Deposit

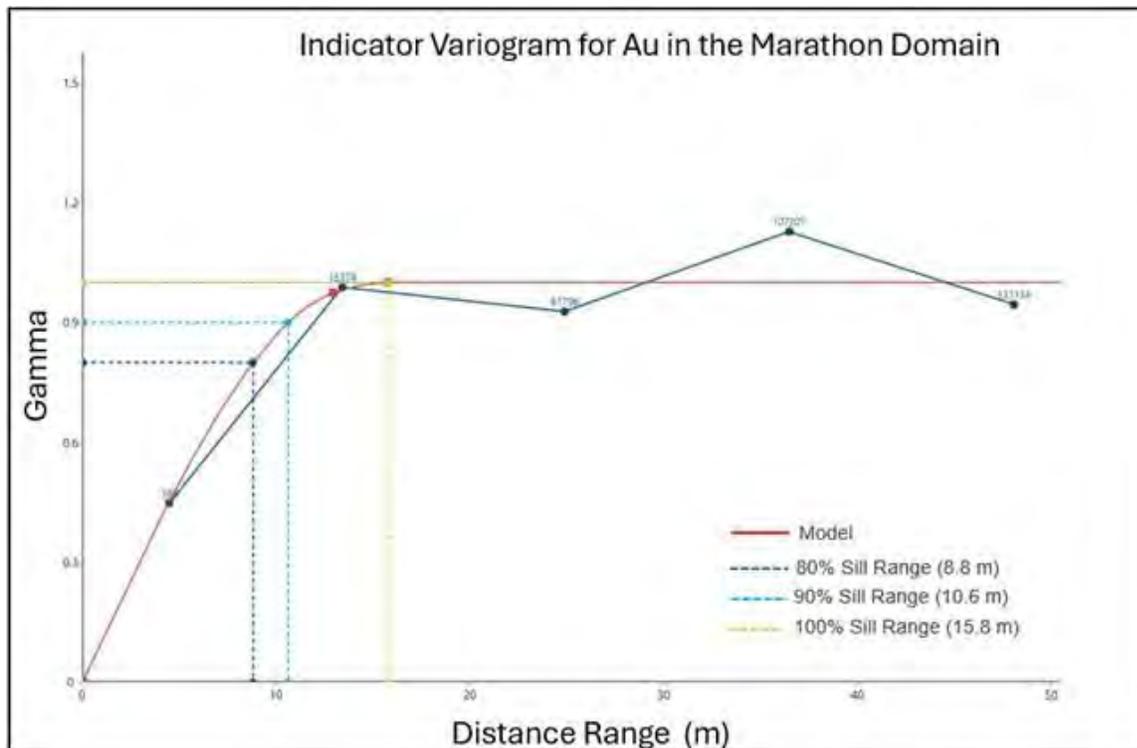


Table 14-7: High Yield Limit Parameters and Statistics

Domain	Item	Leprechaun	Sprite	Berry	Marathon	Victory
QTPV Domain	High Yield Grade (g/t Au)	55.0	17.0	50.0	40.0	14.0
	Bearing (degrees)	215	225	220	225	225
	Plunge (degrees)	-30	-25	-30	-20	-20
	Dip (degrees)	0	10	0	0	-10
	Range Major (m)	12	15	12	16	17
	Range Semi-major (m)	12	13	12	16	17
	Range Minor (m)	6	6	6	4	4
Trondhjemite and Quartz Monzonite Domain	High Yield Grade (g/t Au)	8.0	6.0	7.0	12.0	9.0
	Bearing (degrees)	215	225	220	225	225
	Plunge (degrees)	-30	-30	-30	-20	-20
	Dip (degrees)	0	10	0	0	-10
	Range Major (m)	12	12	12	12	15
	Range Semi-major (m)	12	12	12	12	15
	Range Minor (m)	6	6	6	6	4
Other Lithological Domains	High Yield Grade (g/t Au)	5.0	5.0	5.0	5.0	5.0
	Bearing (degrees)	215	225	220	225	225
	Plunge (degrees)	-30	-30	-30	-20	-20
	Dip (degrees)	0	10	0	0	-10
	Range Major (m)	12	12	12	12	10
	Range Semi-major (m)	12	12	12	12	10
	Range Minor (m)	6	6	6	6	4

14.7 Variography and Search Ellipsoids

14.7.1 Variography

Variograms were updated for the 2025 Mineral Resource estimate to evaluate the spatial continuity of gold mineralization and to guide the selection of search ellipsoids, ranges, and orientations for grade interpolation. Variogram development and application followed a structured workflow, summarized as follows:

- The bearing, plunge, and dip assigned to QTPV blocks were reviewed to establish the principal directions for variogram modelling. These orientations were derived from stereonet analysis of the dominant mineralized vein set (Set 1), which informed the implicit QTPV wireframes.
- Experimental variograms were generated for each deposit using Vulcan. Vertical sections and drill hole data were examined to confirm that the modelled grade continuity and mineralization geometry were consistent with observed geological trends. The



principal directions of continuity identified in the variograms aligned with the structural and lithological controls on mineralization.

- Variograms were produced for the QTPV and granitoid domains across all deposits, as these units represent the primary hosts of gold mineralization. Figure 14-17 illustrates a representative set of relative variograms for the Berry Deposit. The resulting variogram models and parameters are summarized in Table 14-8 for the QTPV domains and Table 14-9 for the remaining lithological domains.
- Search ellipsoid ranges for all domains were established based on the modelled variogram ranges. For non-QTPV domains, half-range distances were applied to reflect the more limited volumes and continuity of mineralization within these lithologies. All domains other than the QTPV and Trondhjemite/Quartz Monzonite units were estimated using a short-range, single-pass search to ensure that all blocks proximal to drill data received an estimate without over-extending continuity. Final search ellipsoid dimensions and orientations are provided in Section 14.8 discussing grade estimation.

This approach ensured that the search strategy is fully supported by geostatistical analysis, reflects geological controls on mineralization, and adheres to best practices.

Figure 14-17: Example of Variogram for the QTPV Domain in Berry deposit

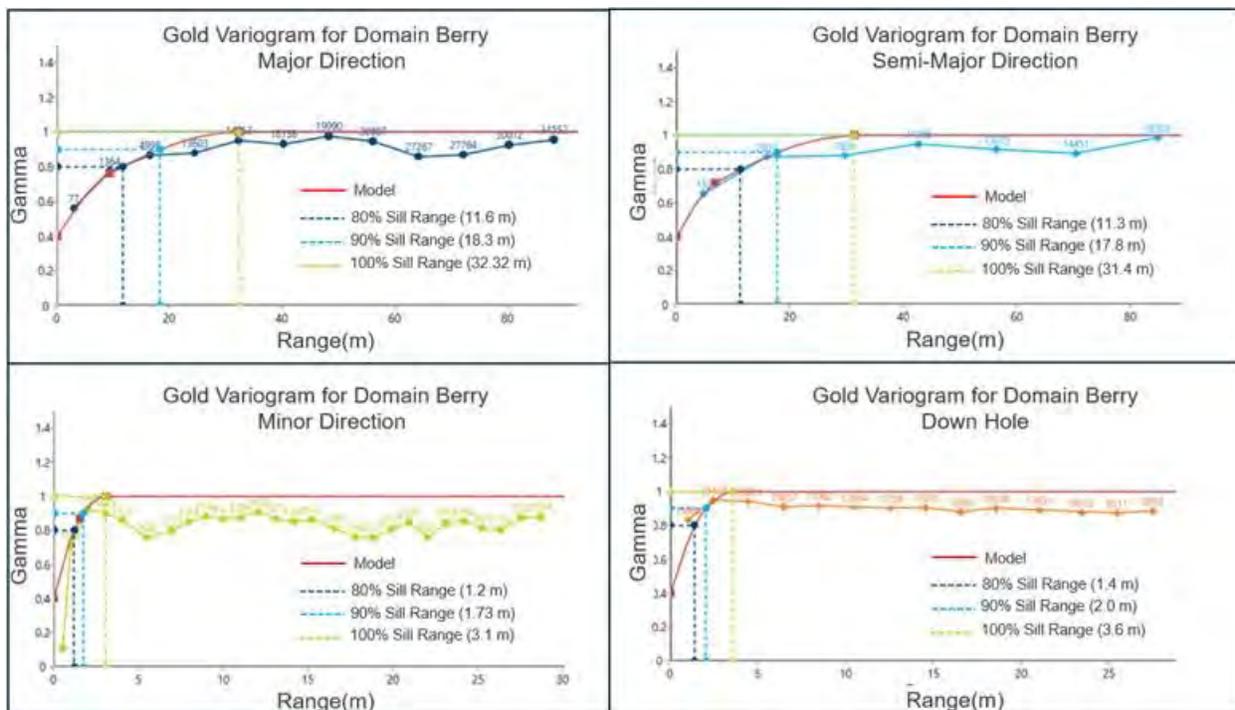


Table 14-8: Variogram Parameters for the QTP Veins for Each Deposit

Parameter	Leprechaun	Sprite	Berry	Marathon	Victory
Bearing (Deg.)	215	225	220	225	225
Plunge (Deg.)	-25	-25	-30	-20	-20
Dip (Deg.)	10	10	10	0	-10



Parameter	Leprechaun	Sprite	Berry	Marathon	Victory
Major Range (m)	33	33	32	29	42
Major 80% Sill Range (m)	13	15	12	12	18
Semi-major Range (m)	29	28	31	30	42
Semi-major 80% Sill Range (m)	11	13	11	13	18
Minor Range (m)	3	2	3	2.5	3

Table 14-9: Variogram Parameters for Qtz-Monzonite and Trondhjemite Lithological Units Per Deposit

Item	Leprechaun	Sprite	Berry	Marathon	Victory
Bearing (Degrees)	215	225	220	225	225
Plunge (Degrees)	-30	-25	-30	-20	-20
Dip (Degrees)	10	10	10	0	-10
Major Range (m)	25	35	23	26	35
Major 80% Sill Range (m)	10	16	11	10	15
Semi-major Range (m)	20	32	22	23	34
Semi-major 80% Sill Range (m)	7	15	11	10	15
Minor Range (m)	3.5	3	6	8	5
Minor 80% Sill Range (m)	1	1.5	3	3.5	2
Nugget	0.4	0.3	0.3	0.4	0.3

14.7.2 Block Model Information

Table 14-10 summarizes the block model extents for the different domains in the X-, Y, and Z-direction, the rotation parameters applied, and the parent and sub-cell block sizes used in the model. Block size selection was guided by the geometry of the mineralized domains, drill hole spacing, and the need to accurately represent lithological boundaries.

Within the QTPV domains, a parent block size of 3 m (X) × 3 m (Y) × 3 m (Z) was adopted, with sub-cells of 1.5 m in all directions. This finer block size was required to appropriately capture the narrow, structurally controlled geometry of the QTPV mineralization and to improve volumetric accuracy along complex domain contacts

For all domains outside the QTPV units, parent blocks of 6 m (X) × 6 m (Y) × 3 m (Z) were used, supported by sub-cells of 1.5 m in each direction. These block dimensions reflect the broader, constrained geometries of the granitoid and other lithological domains, while maintaining sufficient resolution for accurate volume representation and estimation.

Table 14-10: Block Model Properties for Deposits at Valentine

Deposit	Variable	X-Direction	Y-Direction	Z-Direction
Leprechaun	Origin Coordinates (m)	486,128.23	5,355,341.41	-100.00
	Offset Minimum (m)	-	-	-



Deposit	Variable	X-Direction	Y-Direction	Z-Direction
	Offset Maximum (m)	1,344	1,080	552
	Child Block Size (m)	1.5	1.5	1.5
	Parent Block Size QTPV	3.0	3.0	3.0
	Parent Block Size Non QTPV	6.0	6.0	3.0
	Regularised Block Size (m)	3.0	3.0	3.0
	Bearing/Dip/Plunge (degree)	73.0	-	-
Sprite	Origin Coordinates (m)	495,631.00	5,363,598.00	- 200.00
	Offset Minimum (m)	-	-	-
	Offset Maximum (m)	1,902	1,098	570
	Child Block Size (m)	1.5	1.5	1.5
	Parent Block Size QTPV	3.0	3.0	3.0
	Parent Block Size Non QTPV	6.0	6.0	6.3
	Regularised Block Size (m)	3.0	3.0	3.0
	Bearing/Dip/Plunge (degree)	45.0	-	-
Berry	Origin Coordinates (m)	489,192.179	5,357,646.441	0.00
	Offset Minimum (m)	-120.00	-180.00	-
	Offset Maximum (m)	1,932	996	498
	Child Block Size (m)	1.5	1.5	1.5
	Parent Block Size QTPV	3.0	3.0	3.0
	Parent Block Size Non QTPV	6.0	6.0	3.0
	Regularised Block Size (m)	3.0	3.0	3.0
	Bearing/Dip/Plunge (degree)	73.0	-	-
Marathon	Origin Coordinates (m)	492,119.311	5,358,937.879	-700.00
	Offset Minimum (m)	-	-	-
	Offset Maximum (m)	2,064	1,308	1152
	Child Block Size (m)	1.5	1.5	1.5
	Parent Block Size QTPV	3.0	3.0	3.0
	Parent Block Size Non QTPV	6.0	6.0	3.0
	Regularised Block Size (m)	3.0	3.0	3.0
	Bearing/Dip/Plunge (degree)	45.0	-	-
Victory	Origin Coordinates (m)	495,631.00	5,363,598.00	-200.00
	Offset Minimum (m)	-	-	-
	Offset Maximum (m)	1,902	1,098	570
	Child Block Size (m)	1.5	1.5	1.5



Deposit	Variable	X-Direction	Y-Direction	Z-Direction
	Parent Block Size QTPV	3.0	3.0	3.0
	Parent Block Size Non QTPV	6.0	6.0	3.0
	Regularised Block Size (m)	3.0	3.0	3.0
	Bearing/Dip/Plunge (degree)	45.0	-	-

14.8 Grade Estimation

14.8.1 Search Ellipsoid Ranges

Search ellipsoid distances and orientations for each deposit were derived from the variogram models, supported by lithological and structural interpretations. The resulting parameters for all domains are summarized in Table 14-11 to Table 14-15. Within the QTPV domains, dynamic anisotropy was applied during estimation to locally orient the search ellipsoid according to the geometry of the domain solids. This approach allows the search neighbourhood to follow the variable dip and plunge of the mineralized vein system and provides a more geologically realistic interpolation.

For domains outside the QTPV units, fixed search orientations and ranges were used, based directly on the modelled variogram parameters. At the Leprechaun deposit, additional variography and modified search parameters were applied to the conglomerate domain to account for a secondary, parallel shear-vein set (Set 2) that influences grade continuity.

Search ranges for non-QTPV domains were set at approximately half of the QTPV variogram ranges to reflect the smaller volumes and more limited continuity of mineralization within these lithologies. Grades outside the QTPV solids were estimated within each lithological domain using a single-pass search to ensure all mineralization proximal to drill data was captured without over-extending continuity.

The full search ellipsoid parameters for each deposit are presented in the following tables:

- Table 14-11 Leprechaun Deposit
- Table 14-12 Sprite Deposit
- Table 14-13 Berry Deposit
- Table 14-14 Marathon Deposit
- Table 14-15 Victory Deposit

Table 14-11: Search Ellipsoid Parameters for Leprechaun Deposit

Estimation Pass	Pass 1	Pass 2	Pass 3	Pass 4		
Domain	QTPV			TRJ	CG	MD
Bearing (Degrees)	D.A.	D.A.	D.A.	215	320	215
Plunge (Plunge of the Azimuth in Degrees)	D.A.	D.A.	D.A.	-30	-65	-30
Dip (Degrees)	D.A.	D.A.	D.A.	10	0	10
Major (m)	30	45	90	50	25	12
Semi-Major (m)	30	45	90	40	20	12



Estimation Pass	Pass 1	Pass 2	Pass 3	Pass 4		
Minor (m)	6	9	12	6	6	6
Minimum Number of Composites	7	4	1	1	1	1
Maximum Number of Composites	15	15	10	10	10	10
Maximum Composites per Drill Hole	3	3	3	3	3	3

Table 14-12: Search Ellipsoid Parameters for Sprite Deposit

Estimation Pass	Pass 1	Pass 2	Pass 3	Pass 4	
Domain	QTPV			Q-Monz	CG, MD, AQP
Bearing (Degrees)	D.A.	D.A.	D.A.	225	225
Plunge (Plunge of the Azimuth in Degrees)	D.A.	D.A.	D.A.	-25	-25
Dip (Degrees)	D.A.	D.A.	D.A.	10	10
Major (m)	35	70	105	35	20
Semi-Major (m)	30	60	90	30	15
Minor (m)	6	6	9	6	6
Minimum Number of Composites	5	5	1	1	1
Maximum Number of Composites	15	15	10	9	6
Maximum Composites per Drill Hole	3	3	3	3	3

Table 14-13: Search Ellipsoid Parameters for Berry Deposit

Estimation Pass	Pass 1	Pass 2	Pass 3	Pass 4	
Domain	QTPV			Q-Monz	CG, MD
Bearing (Degrees)	D.A.	D.A.	D.A.	220	220
Plunge (Plunge of the Azimuth in Degrees)	D.A.	D.A.	D.A.	-30	-30
Dip (Degrees)	D.A.	D.A.	D.A.	10	10
Major (m)	30	45	90	45	15
Semi-Major (m)	30	45	90	45	15
Minor (m)	6	9	12	6	6
Minimum Number of Composites	7	5	1	1	1
Maximum Number of Composites	15	15	10	10	10
Maximum Composites per Drill Hole	3	3	3	3	3



Table 14-14: Search Ellipsoid Parameters for Marathon Deposit

Estimation Pass	Pass 1	Pass 2	Pass 3	Pass 4	
Domain	QTPV			Q-Monz	CG, MD,GB
Bearing (Degrees)	D.A.	D.A.	D.A.	225	225
Plunge (Plunge of the Azimuth in Degrees)	D.A.	D.A.	D.A.	-20	-20
Dip (Degrees)	D.A.	D.A.	D.A.	10	10
Major (m)	30	45	90	50	15
Semi-Major (m)	30	45	90	50	15
Minor (m)	6	9	12	6	6
Domain	QTPV	QTPV	QTPV	Q-Monz	CG, MD,GB
Minimum Number of Composites	7	5	1	1	1
Maximum Number of Composites	15	15	10	10	10
Maximum Composites per Drill Hole	3	3	3	3	3

Table 14-15: Search Ellipsoid Parameters for Victory Deposit

Estimation Pass	Pass 1	Pass 2	Pass 3	Pass 4	
Domain	QTPV	QTPV	QTPV	Q-Monz	CG, MD, AQP
Bearing (Degrees)	D.A.	D.A.	D.A.	225	225
Plunge (Plunge of the Azimuth in Degrees)	D.A.	D.A.	D.A.	-20	-20
Dip (Degrees)	D.A.	D.A.	D.A.	10	10
Major (m)	40	80	120	35	20
Semi-Major (m)	40	80	120	35	20
Minor (m)	6	9	9	6	6
Minimum No. of Composites	5	5	1	1	1
Maximum No. of Composites	15	15	10	10	10
Maximum Composites per Drill Hole	3	3	3	3	3

14.8.2 Block Grade Interpolation

Gold grades were interpolated into each mineralized domain using capped composited assay data.

Multiple interpolation methods were evaluated to assess grade continuity and test the sensitivity of the estimates. For the Leprechaun, Berry, and Marathon deposits, interpolation runs included:

- Inverse Distance cubed (ID³)
- Ordinary Kriging (OK)



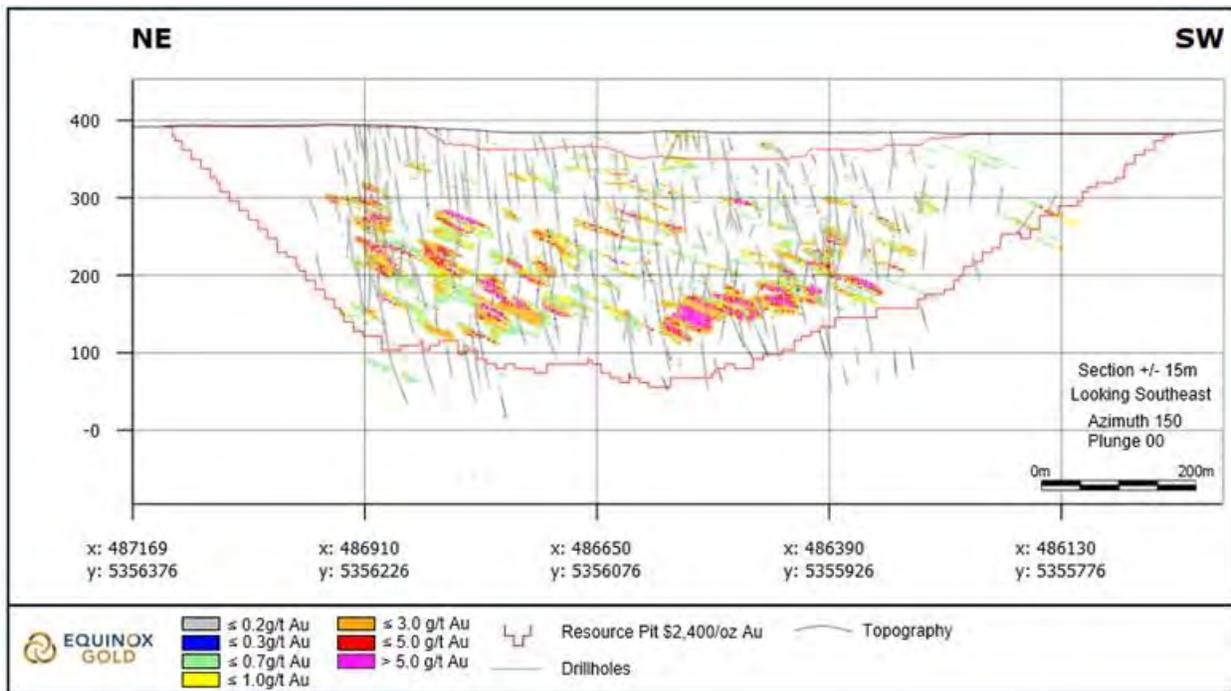
- ID³ without capping
- Nearest Neighbour (NN)

At the Victory and Sprite deposits, OK was not applied due to limited data density and insufficient variogram support. In these cases, Inverse Distance squared (ID²) was used as the kriging alternative.

Following visual review, statistical comparison, and reconciliation with informing composites, the capped ID³ estimate was selected as the preferred method for the final Mineral Resource model. The NN model was retained as a validation tool to assess local bias and smoothing, while the uncapped ID³ model was used to evaluate the influence of capping thresholds on the interpolated grades. Figure 14-18 through Figure 14-22 illustrate representative vertical sections showing the resulting block-grade distributions above 0.3 g/t Au.

Three estimation passes were completed within the QTPV domains to support resource classification. Only composites and blocks flagged to the same domain were used during interpolation to maintain geological consistency.

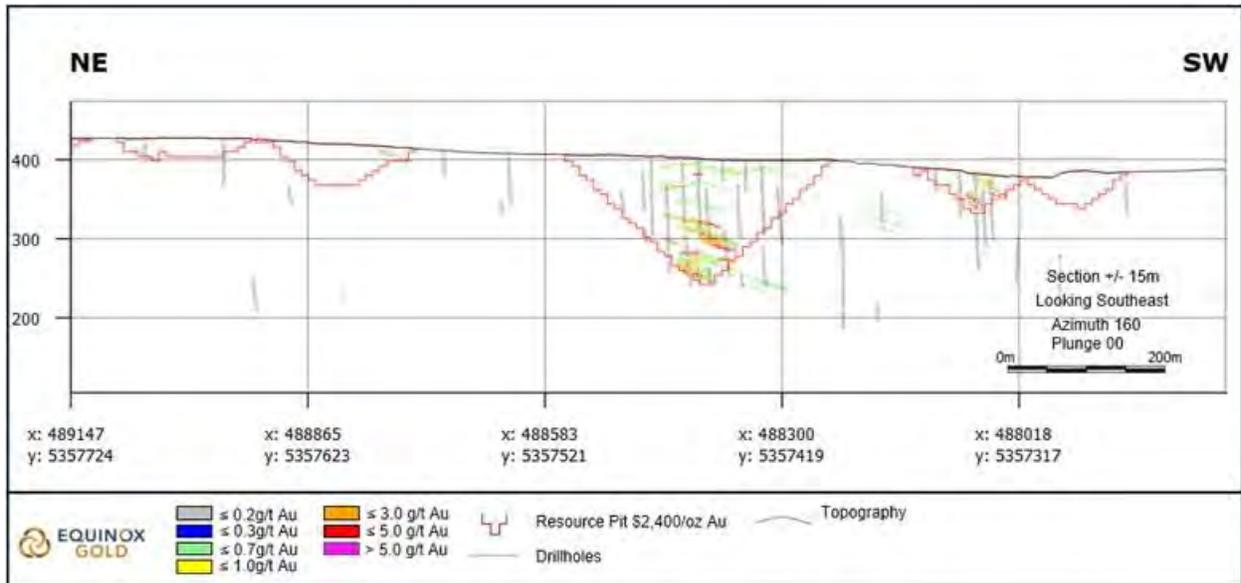
Figure 14-18: Vertical Section of Leprechaun Deposit Showing Estimated Block Grades



Source: Equinox 2026.

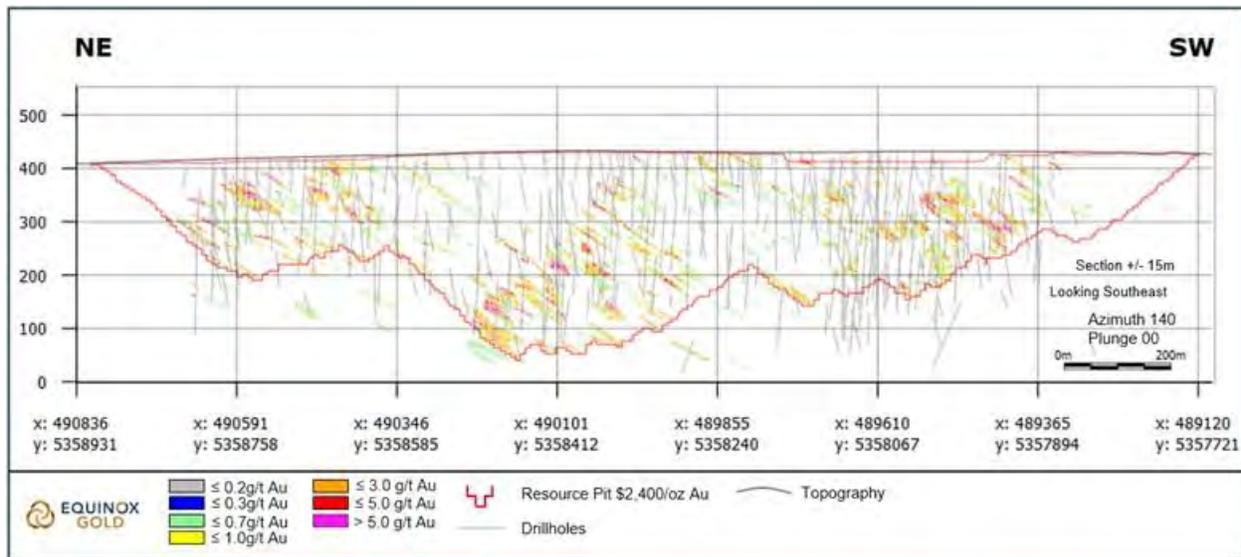


Figure 14-19: Vertical section of Sprite Deposit Showing Estimated Block Grades,



Source: Equinox 2026.

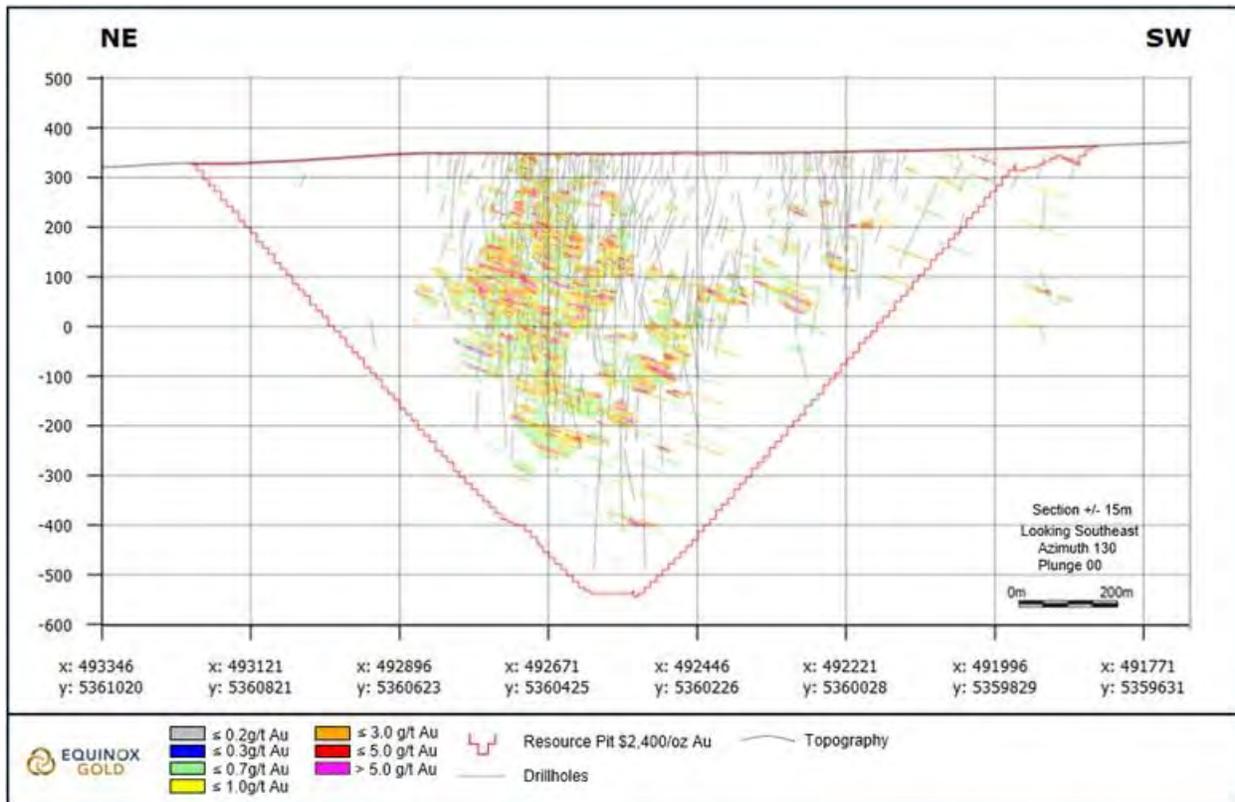
Figure 14-20: Vertical section of Berry Deposit Showing Estimated Block Grade



Source: Equinox 2026.

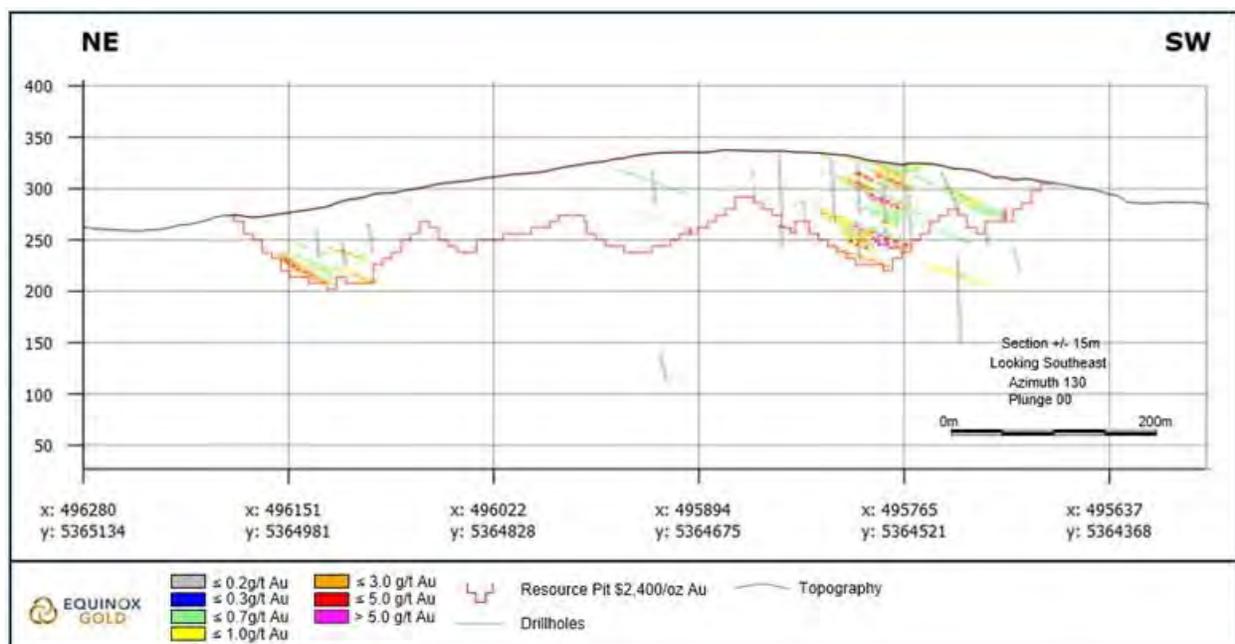


Figure 14-21: Vertical section of Marathon Deposit Showing Estimated Block Grades



Source: Equinox 2026.

Figure 14-22: Vertical section of Victory Deposit Showing Estimated Block Grades



Source: Equinox 2026.



14.9 Block Model Validations

The completed block model was subjected to a comprehensive validation program to confirm that the estimation results are reasonable, internally consistent, and representative of both the informing composites and the interpreted mineralization trends. Multiple complementary checks were undertaken to ensure that the model provides a robust and unbiased representation of the underlying data. The validation workflow included:

Volume reconciliation to confirm that block model volumes for all mineralized and waste domains accurately reflect the input wireframes.

- Global metal comparisons across estimation methods and domains to ensure that the model does not introduce unintended global bias relative to the informing composites.
- Assessment of grade-capping impacts through comparison of capped and uncapped ID³ estimates, evaluating the influence of high-grade restrictions on both local block grades and global metal content.
- Quantile–Quantile (Q–Q) analysis to compare the distribution of composite grades with estimated block grades and identify any systematic over- or under-estimation across the grade spectrum.
- Swath plot analysis in the X, Y, and Z directions, comparing composites, Nearest Neighbour (NN) estimates, and ID³ estimates to evaluate spatial bias, smoothing, and the degree to which the model honours the spatial variability of the data.
- Detailed visual review of cross-sections and longitudinal sections to confirm that estimated grades reflect drill hole composites, respect domain boundaries, and do not exhibit grade leakage or over-extrapolation.
- Statistical comparisons of raw assays, composite data, and block grades for each estimation method to evaluate the effects of compositing, capping, and interpolation on the grade distribution.

14.9.1 Volume Validation

A comparison of the input wireframe volumes and the corresponding sub-blocked model volumes for all mineralized domains and the external waste domain shows excellent agreement. The mineralized volumes reconcile within an absolute difference of 0.1%, confirming that the block model accurately captures the geometry of the interpreted domains with Table 14-16 summarizing the validation for each deposit.

Table 14-16: Summary of the Volume Variance between Wireframes and Block Model

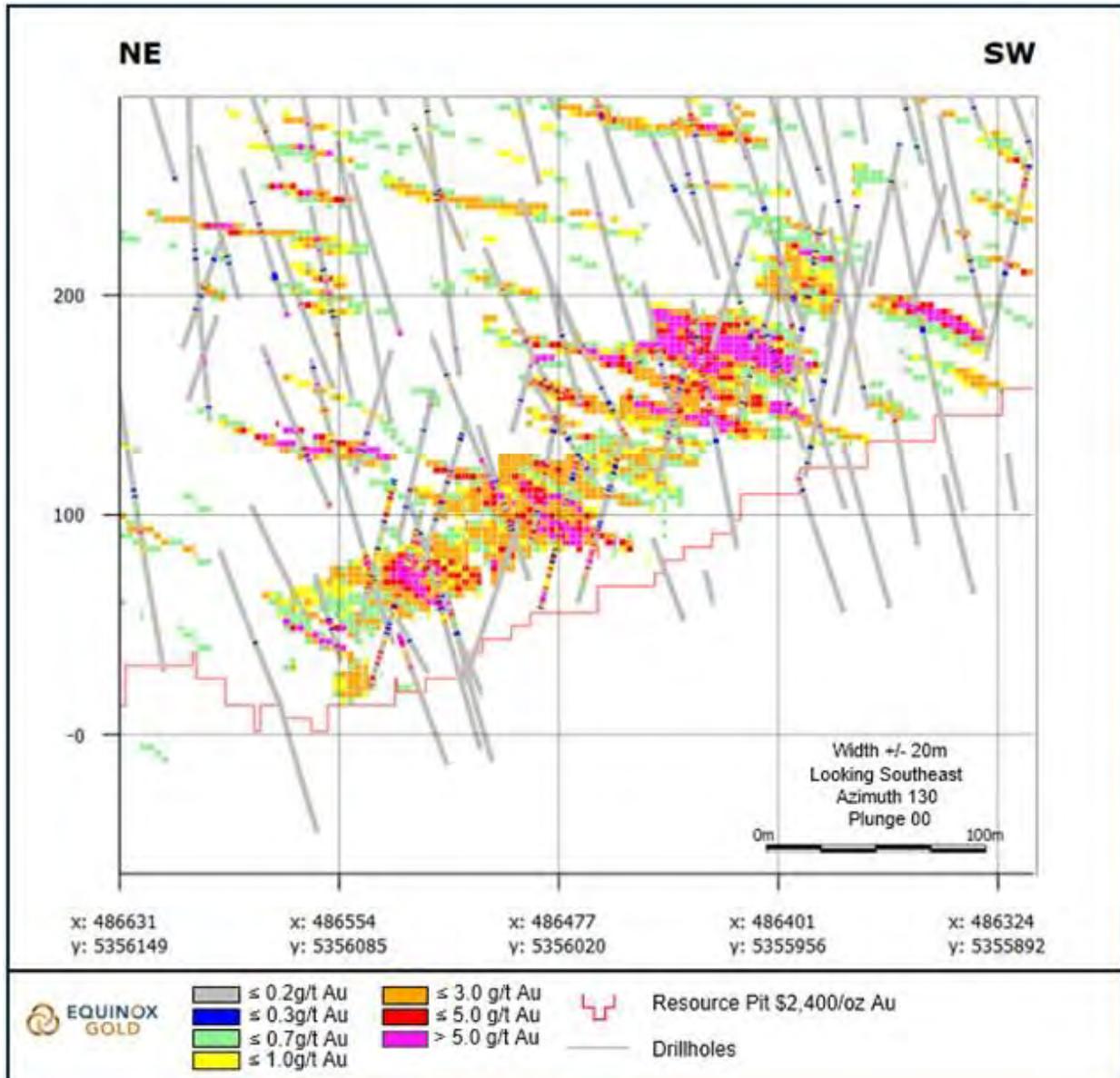
Deposit	Volume WF	Volume Blocks	Difference
Leprechaun	8,682,149	8,682,937	-0.01%
Sprite	1,198,338	1,198,618	-0.02%
Berry	9,417,500	9,415,997	0.02%
Marathon	17,089,678	17,090,298	-0.004%
Victory	2,465,099	2,465,174	-0.003%
All	38,852,764	38,853,024	-0.001%



14.9.2 Visual Validation — Composite Grades vs. Block Grades

Estimated block grades were visually reviewed to ensure that search parameters, anisotropy orientations, and domain boundaries were correctly honoured. Cross-sections demonstrate that estimated grades closely reflect the informing drill hole composites, with no evidence of material grade leakage between adjacent domains. No excessive extrapolation of grade was observed. Representative vertical sections are provided in Figure 14-23 to Figure 14-27.

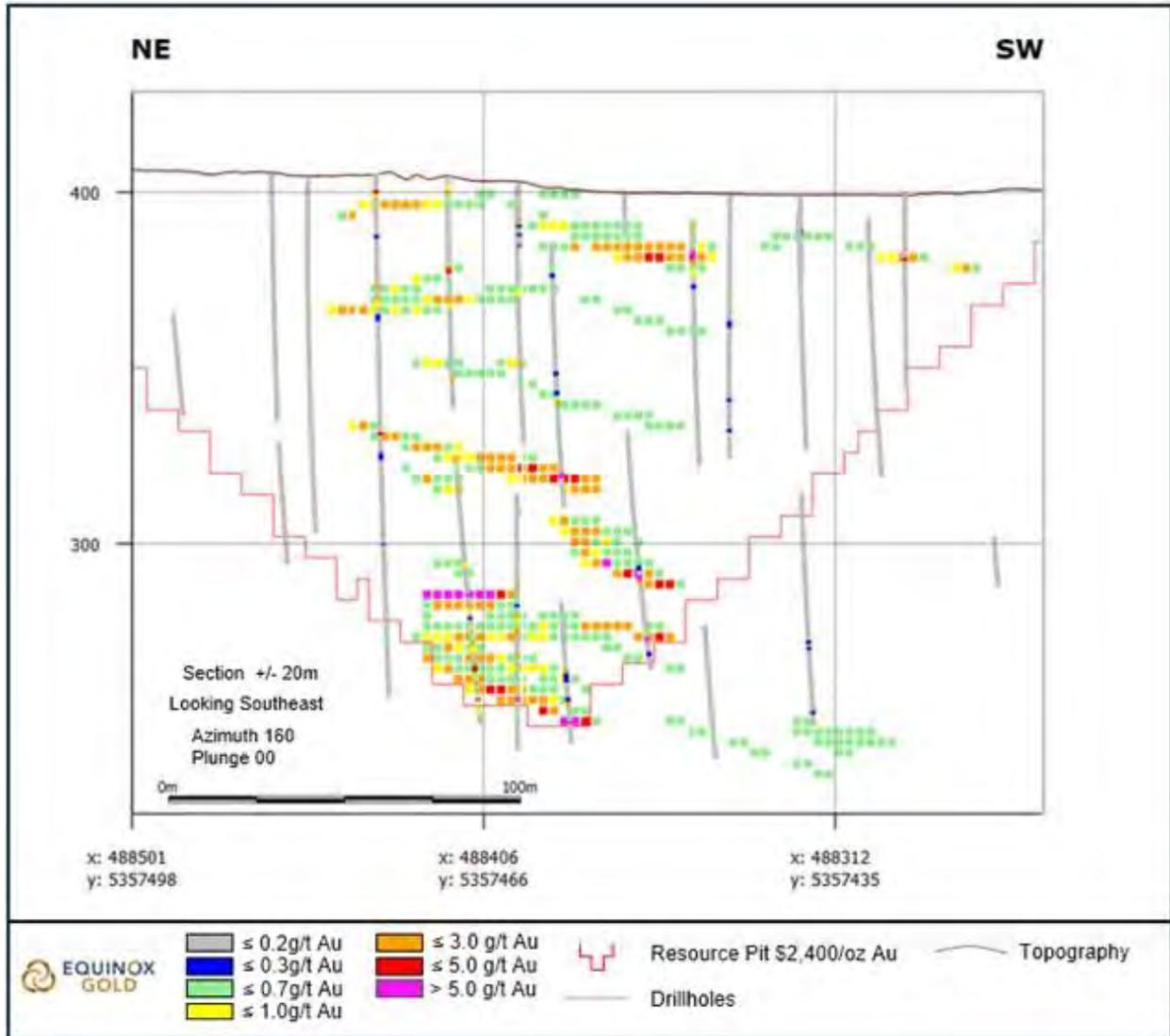
Figure 14-23: Validation Section of Leprechaun Deposit at 20 m width Showing Estimated Block Grade, Drill Holes, and 2025 Pit Design



Source: Equinox 2026.



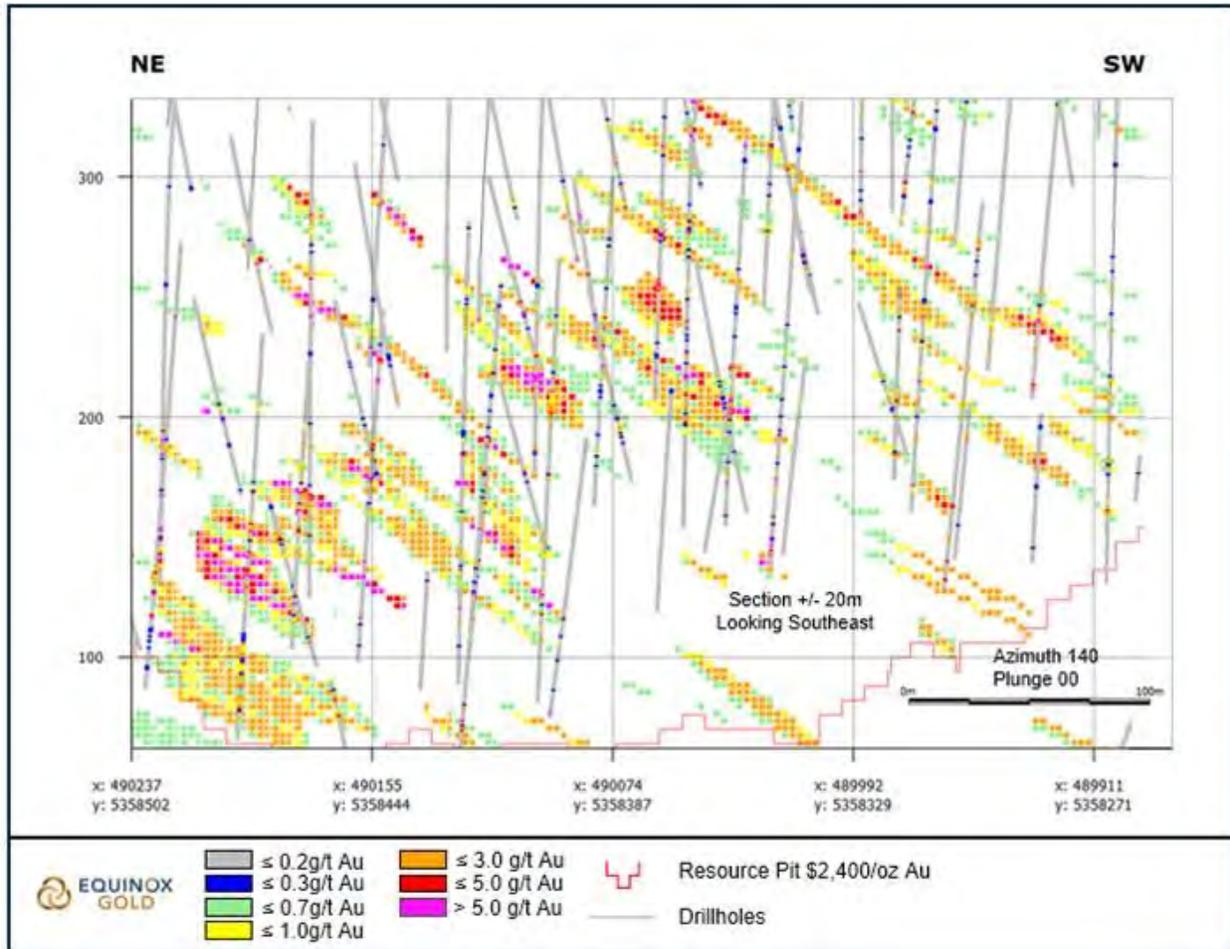
Figure 14-24: Validation Section of Sprite Deposit at 20 m width Showing Estimated Block Grade, Drill Holes, and 2025 Pit Design



Source: Equinox 2026.



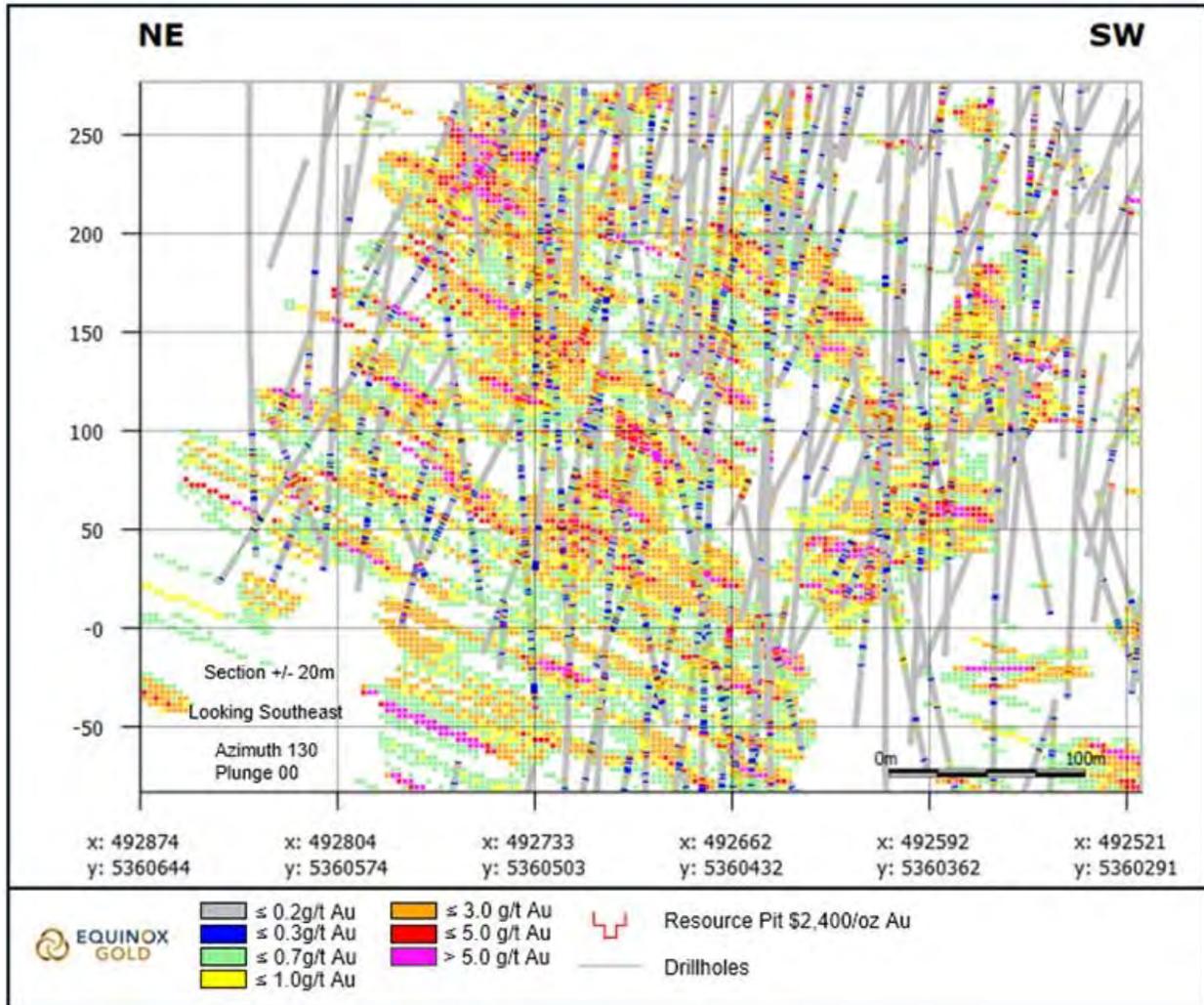
Figure 14-25: Validation Section of Berry Deposit at 20 m width Showing Estimated Block Grade, Drill Holes, and 2025 Pit Design



Source: Equinox 2026.



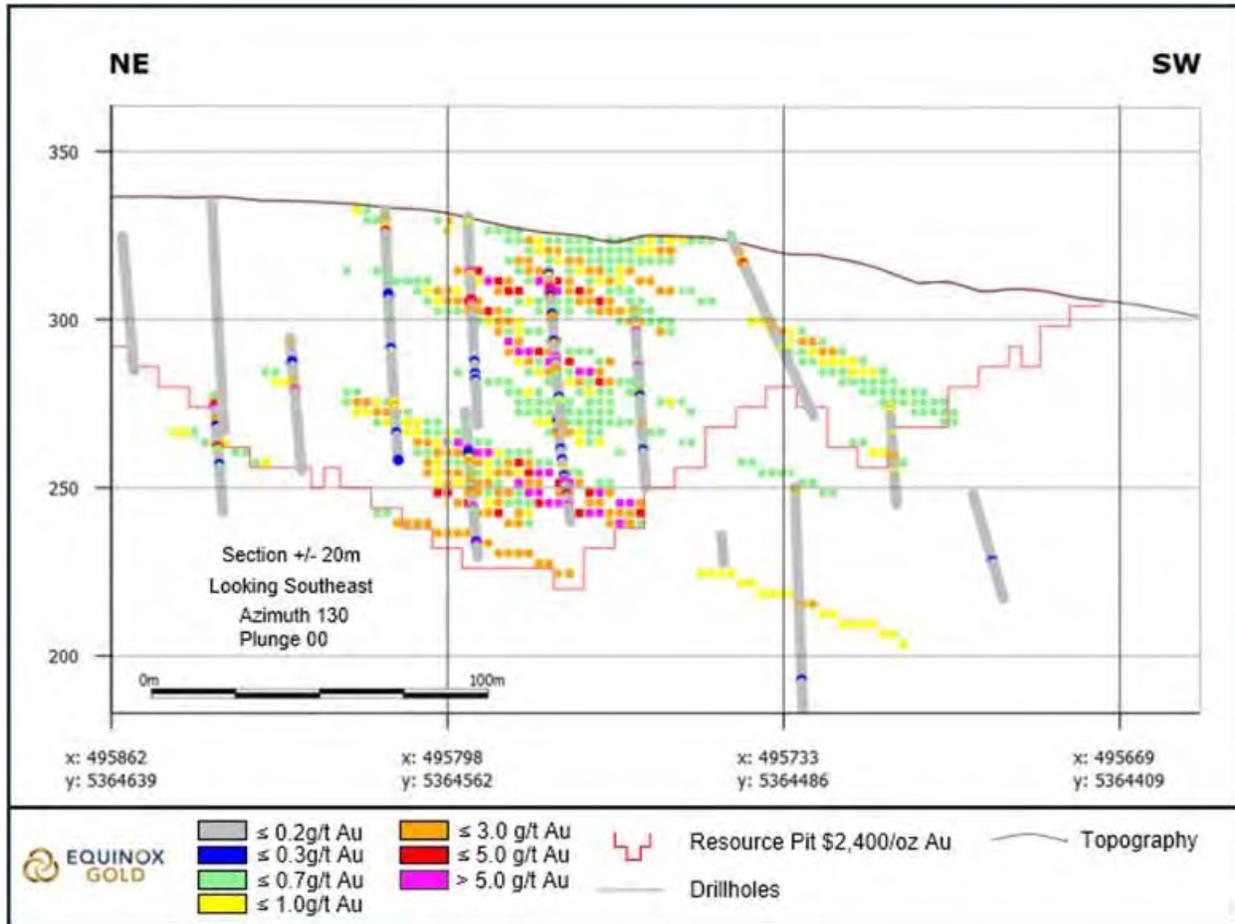
Figure 14-26: Validation Section of Marathon Deposit at 20 m width Showing Estimated Block Grade, Drill Holes, and 2025 Pit Design



Source: Equinox 2026.



Figure 14-27: Validation Section of Victory Deposit at 20 m width Showing Estimated Block Grade, Drill Holes, and 2025 Pit Design



Source: Equinox 2026.

14.9.3 Statistical Validation of Interpolation Methods

Validation results for each deposit area are presented in the subsections that follow and include domain-specific observations. Statistical summary comparison of global grade statistics for the raw assays, capped composites, and block estimates generated, using the ID³ (uncapped and capped) and nearest neighbour (NN) estimators is provided in Table 14-16. The statistics presented in Table 14-16 were derived from the subcell block model prior to regularization, ensuring that the comparisons reflect the direct interpolation results without smoothing introduced by block averaging. These comparisons provide a quantitative basis for assessing the behaviour of the interpolation methods relative to the input data and confirm that the selected ID³ estimator produces global grade statistics that remain consistent with the composite dataset while appropriately moderating extreme values.



Table 14-17: Summary Statistics of Global Metal Content for Different Models at the Valentine Gold Mine

Domain	Variable	Raw Assay	Capped Composites	ID ³ Uncapped	ID ³	NN
Leprechaun	Number of Samples/Blocks	15,195	15,947	565,181	565,181	565,181
	Minimum (g/t Au)	0.002	0.002	0.003	0.003	0.003
	Maximum (g/t Au)	375.78	70.00	98.18	65.77	70.00
	Average (g/t Au)	2.33	2.01	1.91	1.75	1.73
	SD (g/t Au)	8.26	6.07	3.26	2.70	4.91
	CV	3.55	2.90	1.70	1.54	2.83
Sprite	Number of Samples	1,271	1,485	89,388	89,388	89,388
	Minimum (g/t Au)	0.002	0.002	0.004	0.004	0.000
	Maximum (g/t Au)	108.97	36.00	55.88	27.92	36.00
	Average (g/t Au)	1.38	1.27	1.36	1.12	1.11
	SD (g/t Au)	4.94	3.12	2.94	1.68	2.54
	CV	3.59	2.49	2.17	1.51	2.29
Berry	Number of Samples	17,194	17,718	719,122	719,122	719,122
	Minimum (g/t Au)	0.002	0.002	0.001	0.001	0.000
	Maximum (g/t Au)	490.61	72.00	220.44	58.20	72.00
	Average (g/t Au)	2.01	1.87	1.91	1.57	1.61
	SD (g/t Au)	8.31	5.96	5.99	2.52	4.76
	CV	4.13	3.20	3.14	1.60	2.96
Marathon	Number of Samples	29,865	31,691	860,105	860,105	860,105
	Minimum (g/t Au)	0.002	0.002	0.002	0.002	0.002
	Maximum (g/t Au)	1313.71	70.00	569.93	60.88	70.00
	Average (g/t Au)	1.68	1.50	1.57	1.36	1.35
	SD (g/t Au)	12.55	4.42	5.25	2.14	4.02
	CV	7.49	2.95	3.35	1.58	2.96
Victory	Number of Samples	1,690	1,787	154,993	154,993	154,993
	Minimum (g/t Au)	0.002	0.002	0.002	0.002	0.002
	Maximum (g/t Au)	46.88	33.00	30.92	22.64	33.00
	Average (g/t Au)	1.20	1.15	1.21	1.10	1.08
	SD (g/t Au)	3.19	2.78	1.63	1.28	2.21
	CV	2.65	2.41	1.35	1.17	2.05



14.9.4 Statistical Validation — Swath Plots

Figure 14-28 to Figure 14-32 present swath plots used to evaluate the behaviour of the interpolation across the model extents. The close alignment between composite and block-grade trends indicates that the interpolation is performing as intended, with no material spatial bias introduced. These plots confirm that the model honours the underlying grade distribution and the spatial continuity observed in the drill hole data.

Figure 14-28: Swath Plots for Leprechaun at the Valentine Mine

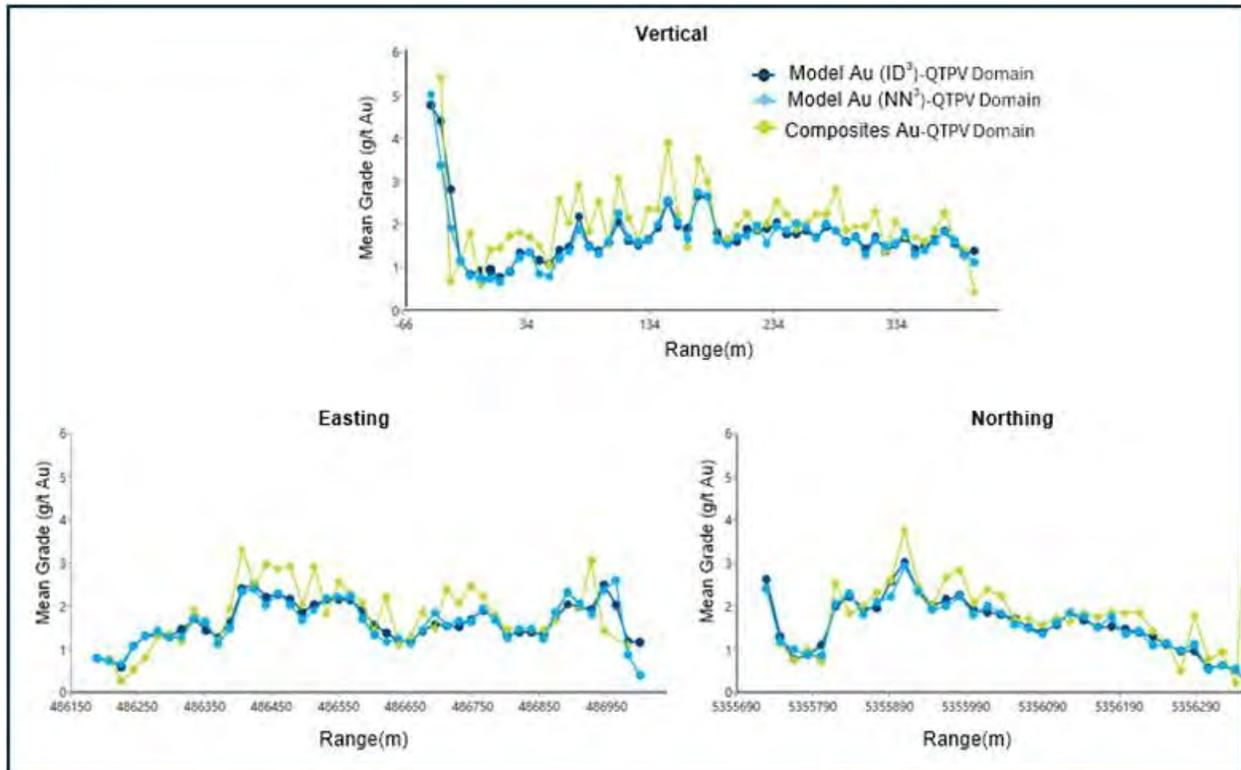


Figure 14-29: Swath Plots for Sprite Deposit at the Valentine Mine

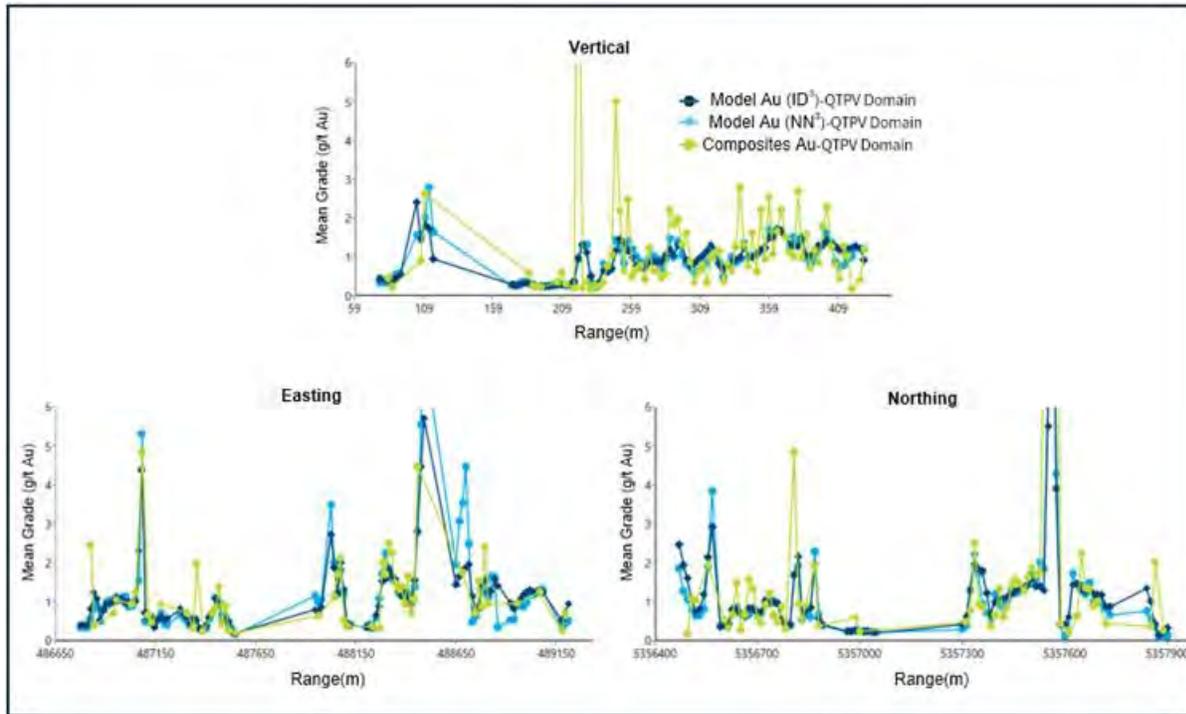


Figure 14-30: Swath Plots for Berry Deposit at the Valentine Mine

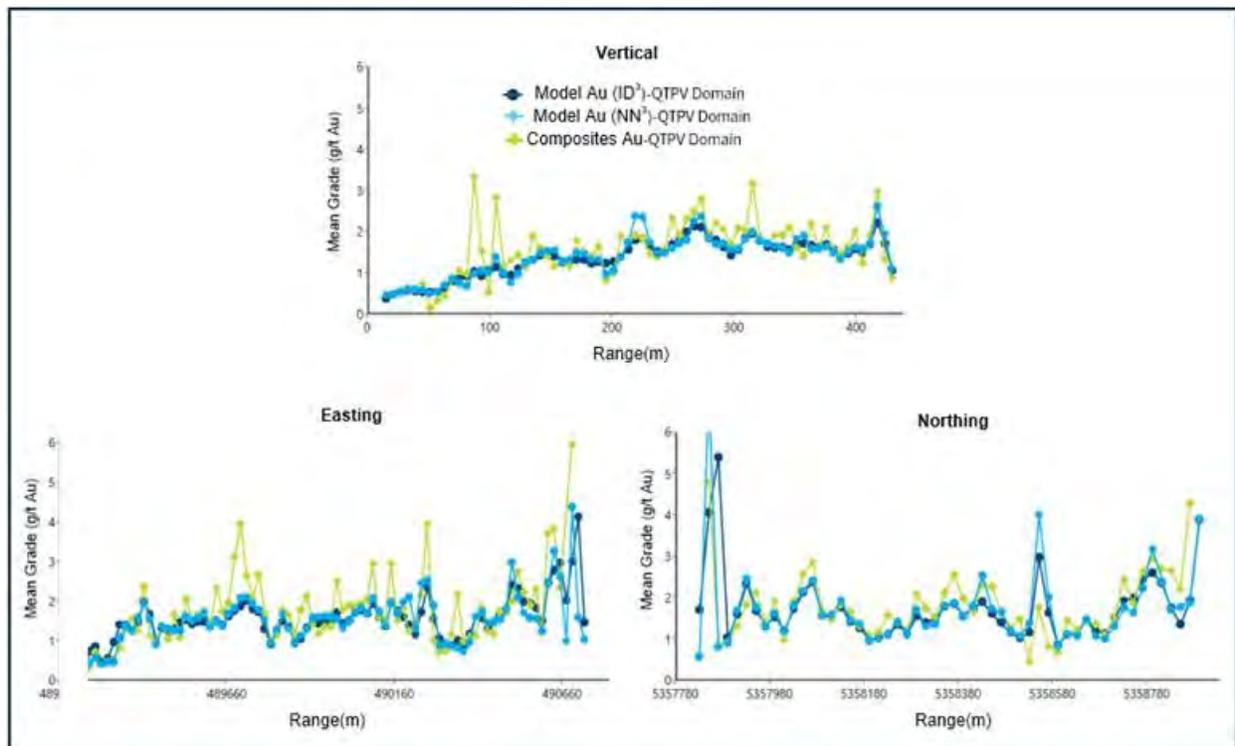


Figure 14-31: Swath Plots for Marathon Deposit at the Valentine Mine

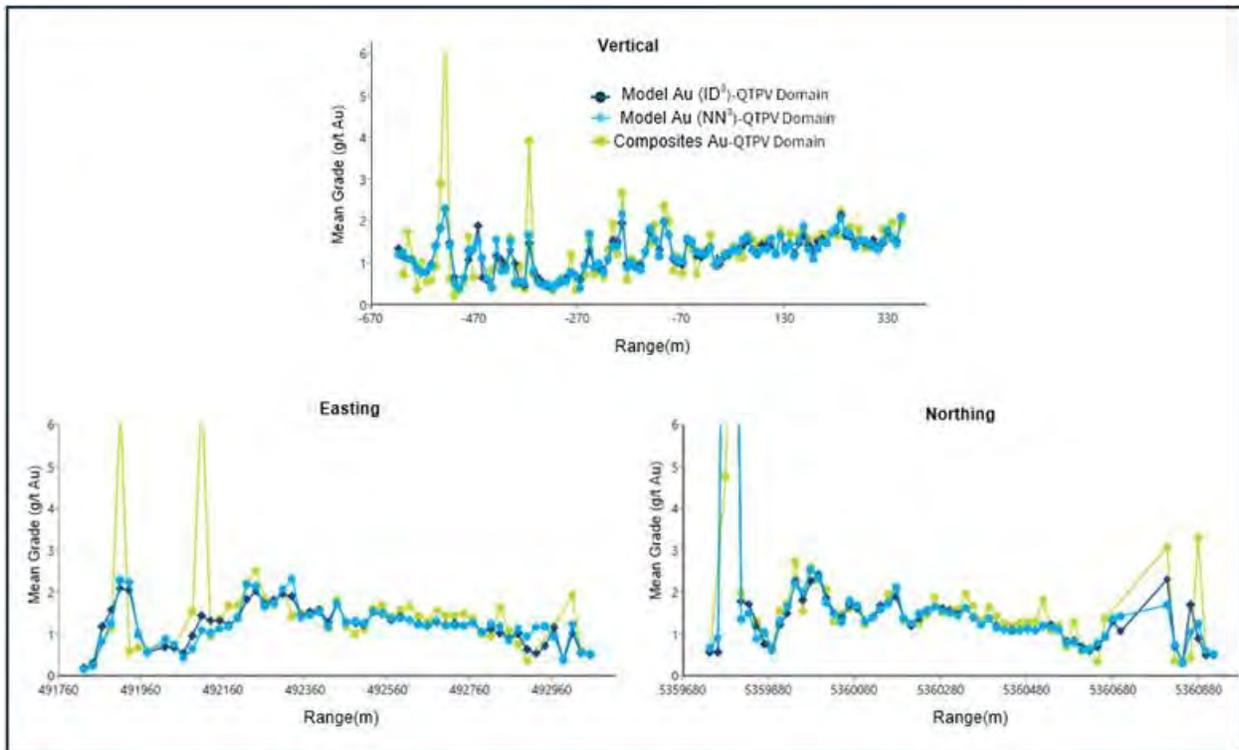
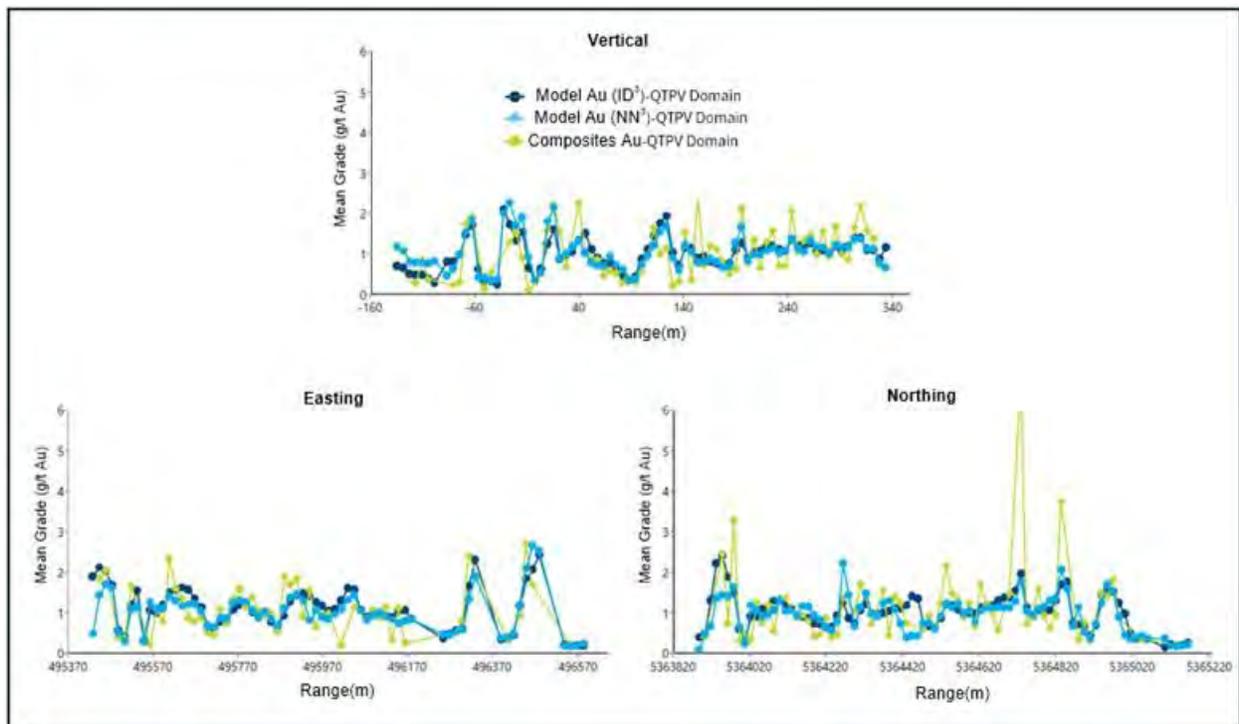


Figure 14-32: Swath Plots for Victory Deposit at the Valentine Mine



14.9.5 Grade Smoothing and Conditional Bias Validations

Figure 14-33 to Figure 14-37 presents the Q–Q plots comparing composite grades to estimated block grades. The quantile relationships demonstrate that the interpolation reproduces the overall grade distribution, with minor over-estimation at lower grades and slight under-estimation at higher grades. These patterns are consistent with expected smoothing effects inherent in block models and are considered acceptable for the scale and purpose of the estimate.

Figure 14-33: Q–Q plots Comparing Composite Dataset with Block Model Values for Leprechaun Deposit

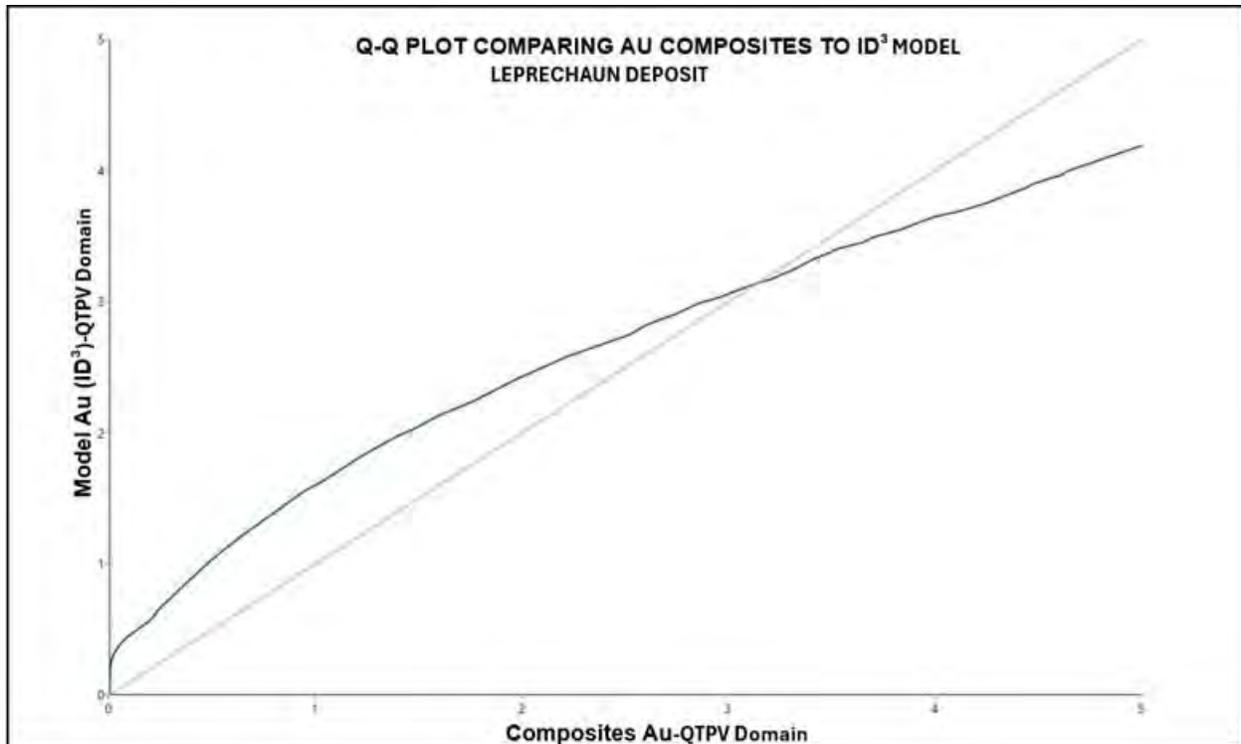


Figure 14-34: Q–Q Plots Comparing Composite Dataset with Block Model Values for Sprite Deposit

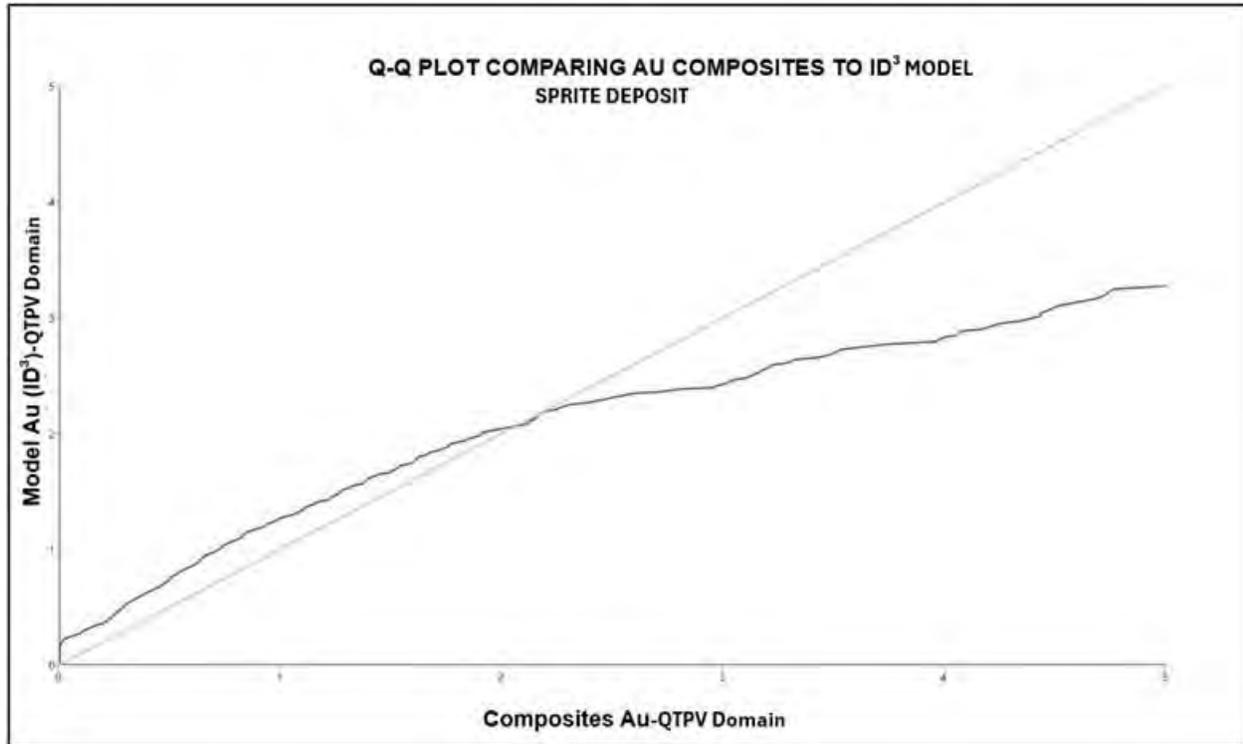


Figure 14-35: Q–Q Plots Comparing Composite Dataset with Block Model Values for Berry Deposit

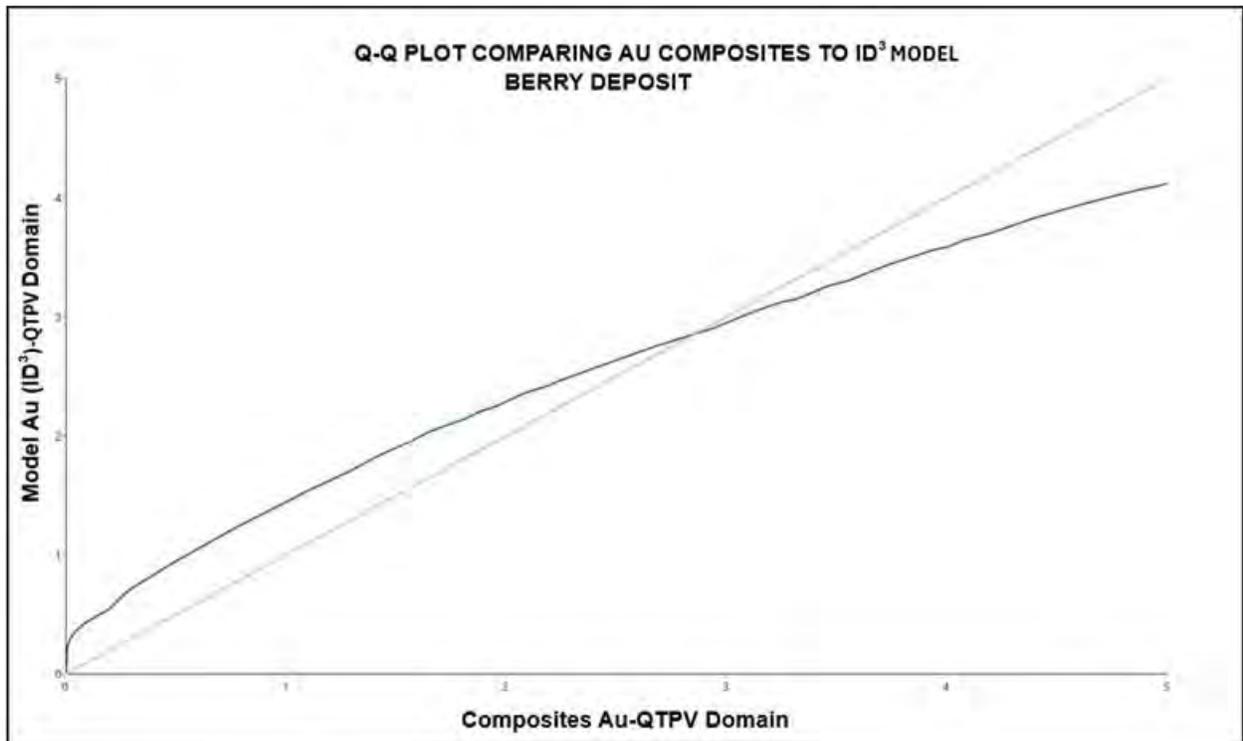


Figure 14-36: Q–Q Plots Comparing Composite Dataset with Block Model Values for Marathon Deposit

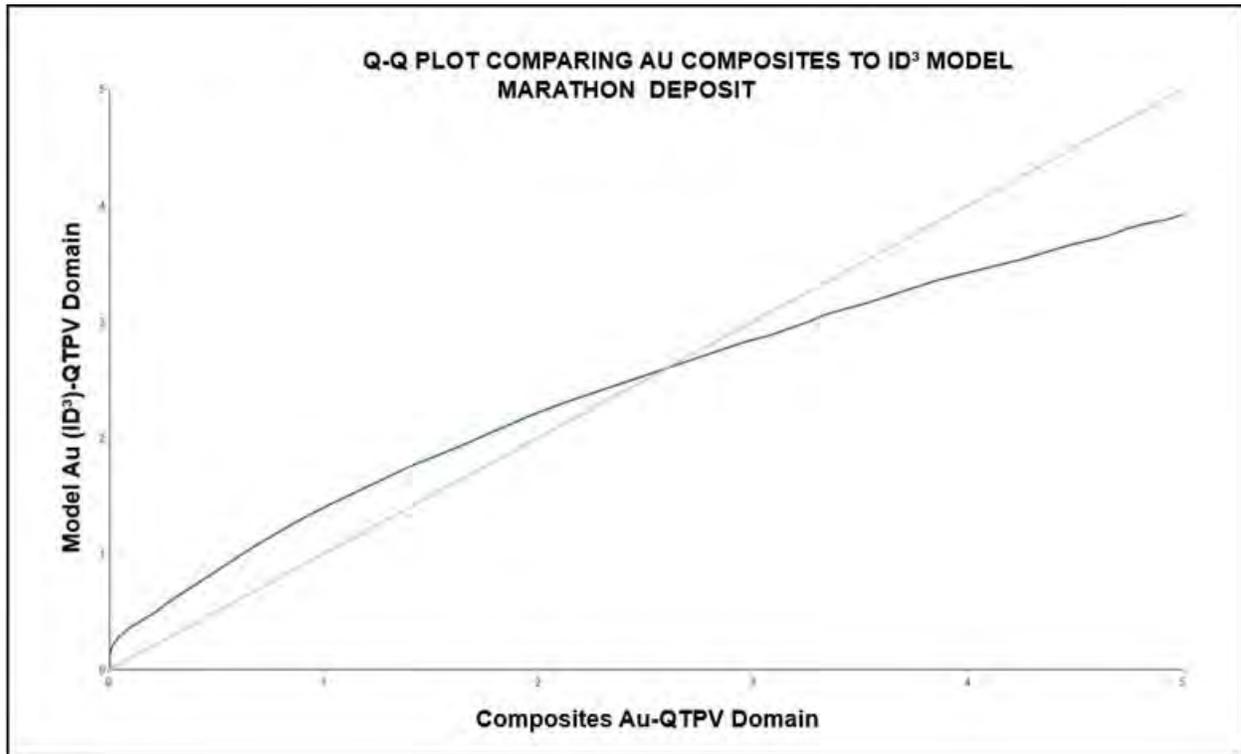
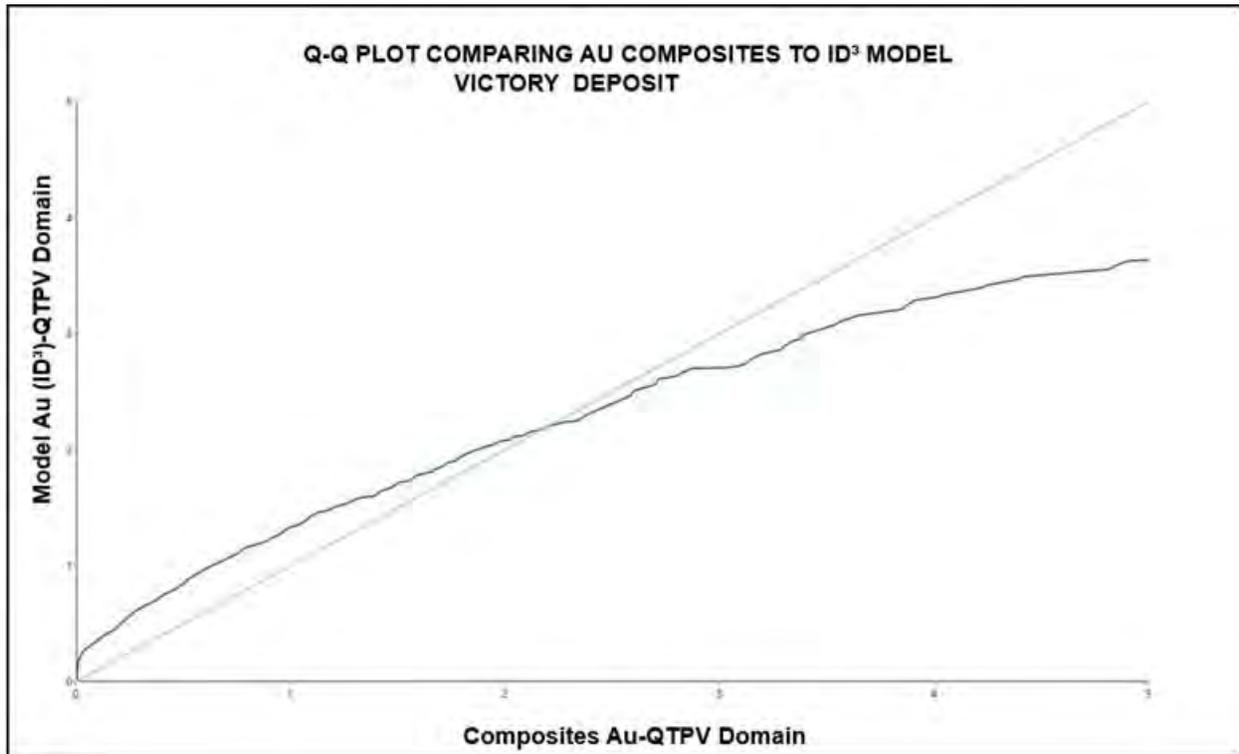


Figure 14-37: Q–Q Plots Comparing Composite Dataset with Block Model Values for Victory Deposit



14.9.6 Reconciliation of Production Data versus Mineral Resource estimate model

Reconciliation against actual mining and processing data is not yet available, as the operation remains in the early stages of ramp-up. Commercial mining and plant operations commenced only last year, and the limited production history does not yet provide a representative dataset for meaningful comparison. Reconciliation will be completed once sufficient operational data has been collected to support a reliable assessment of model performance.

14.9.7 Conclusion on Block Model Validation

The validation program confirms that the block model provides a reliable representation of the deposit’s mineralization. Volumes reconcile within 0.1% of the interpreted wireframes. Visual and statistical comparisons demonstrate that the model accurately reflects composite gold grades, with no significant global or local bias. The selected ID³ estimator performs consistently across domains, and the model is considered suitable for use in Mineral Resource reporting.

14.10 Mineral Resource

14.10.1 Mineral Resource Classification

Mineral Resource classification for the 2025 Mineral Resource estimate uses the CIM (2014) definitions. Classification reflects the level of confidence in the geological interpretation, the quality and density of the supporting data, and the reliability of the estimation methodology. As per CIM guidance, Inferred Mineral Resources are considered too speculative geologically to



support mine planning or economic analysis and cannot be assumed to convert to Indicated or Measured categories with additional drilling.

Classification for all deposits was based primarily on the estimation pass, supported by the distance to the nearest informing composite and the local drill hole density. Classification shapes were reviewed visually and validated statistically to ensure consistency with CIM expectations. The classification criteria applied to each deposit are summarized in Table 14-18.

Table 14-18: Mineral Resource Classification Parameters

Category	Item	Leprechaun	Sprite	Berry	Marathon	Victory
Estimation Pass	Measured	1	N.A.	1	1	N.A.
	Indicated	1 or 2				
	Inferred	1,2 and 3				
Domain	Measured	Implicit QTPV Domain Only	N.A.	Implicit QTPV Domain Only	Implicit QTPV Domain Only	N.A.
	Indicated	QTPV Only	Implicit QTPV Domain Only	QTPV Only	QTPV Only	Implicit QTPV Domain Only
	Inferred	All Domains				
No. of Minimum Composite	Measured	7	N.A.	7	7	N.A.
	Indicated	4	5	5	4	5
	Inferred	1	1	1	1	1
Max Distance to Composite	Measured	12	N.A.	12	12	N.A.
	Indicated	30	30	30	30	30
	Inferred	60	60	60	60	60
No of Minimum Drill Holes	Measured	3	N.A.	3	3	N.A.
	Indicated	2	2	2	2	2
	Inferred	1	1	1	1	1

14.10.2 Valentine Gold Mine Mineral Resources Reasonable Prospects for Eventual Economic Extraction

The 2025 Mineral Resource estimate for the Valentine Gold Mine demonstrates reasonable prospects for eventual economic extraction (REEE) by open-pit and underground mining methods. A Whittle pit optimization was completed on the 3 m × 3 m × 3 m block model, and the resulting economic shell was used to constrain the open-pit Mineral Resources. Block sizes were adjusted (regularized) due to data size during the creation of the pit shell to the following:

- 9 m (X) x 9 m (Y) x 9 m (Z) for the Sprite, Berry and Victory deposits
- 12 m (X) x 12 m (Y) x 6 m (Z) for Leprechaun and Marathon deposits

The economic parameters and cut-off grade (COG) criteria used to define the pit shell and underground stopes are summarized in Table 14-19. The pit shell was generated using the Lerchs–Grossman algorithm at a gold price of US\$2,400/oz, and a reporting cut-off grade of



0.30 g/t Au was applied for open-pit Mineral Resources. An overall pit slope of 45° was assumed.

Portions of the block model located outside the open-pit shell but meeting the criteria for underground extraction were evaluated using a cut-off grade of 1.21 g/t Au. Conceptual underground stope shapes were generated to demonstrate reasonable prospects for eventual economic extraction by underground methods.

Table 14-19: Input Parameters Used for the Pit Optimization and Underground Mineable Shapes

Parameter	Unit	Pit Mining	Underground
Gold Price	US\$/oz	2,400	2,300
Exchange Rate	USD/CAD	1.00:1.31	1.00:1.31
Royalty Rate	%	3.0	3.0
Gold Process Recovery	%	95	95
Mining & Process Costs	\$/t	17.37	79.80
Incremental Bench Cost	\$/6m Bench	0.011	Not Applicable
G&A Costs	\$/t	4.50	Not Applicable
Total Ore Processing Cost	\$/t	20.40	81.78
Refining and Transportation Cost	\$/oz rec.	5.34	5.00
Cut-off Grade	g/t	0.30	1.21

Topographic surfaces as of December 31, 2025, were used to flag blocks above and below the surface. Overburden volumes were also identified to ensure correct density assignment for blocks intersecting the topographic and bedrock surfaces during pit optimization.

Mineral Resources are reported exclusive of Mineral Reserves. Mineral Resource results inclusive of reserves are provided for completeness and comparison reasons. Consolidated Mineral Resources exclusive of Mineral Reserves are presented in Table 14-20, inclusive Mineral Resources are presented in Table 14-21.



Table 14-20: Consolidated Mineral Resource Estimate, Exclusive of Mineral Reserves – Effective Date December 31, 2025

Category	In-Pit			Underground			In-Pit & Underground		
	≥ 0.30 g/t Au			≥ 1.21 g/t Au					
	Tonnage (kt)	Gold Grade (g/t)	Contained Gold (koz)	Tonnage (kt)	Gold Grade (g/t)	Contained Gold (koz)	Tonnage (kt)	Gold Grade (g/t)	Contained Gold (koz)
Measured	6,379	1.15	236	49	4.32	7	6,428	1.18	243
Indicated	22,790	1.24	908	170	3.28	18	22,961	1.25	926
M+I	29,170	1.22	1,145	219	3.51	25	29,389	1.24	1,169
Inferred	31,272	1.07	1,077	717	2.23	51	31,989	1.10	1,128

Note:

1. The Mineral Resource estimate was completed in accordance with the CIM (2014) definitions and the CIM Best Practice Guidelines (2019).
2. The effective date of the Mineral Resource estimate is December 31, 2025.
3. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
4. Mineral Resources are presented in this table exclusive of Mineral Reserves.
5. Open pit resources are reported at a cut off grade of 0.30 g/t Au and are constrained within an optimized pit shell.
6. The optimized pit shell was generated using a gold price of \$2,400/oz Au and a USD/CAD exchange rate of 1.31. The optimization incorporated mining and processing costs of \$17.37/t, G&A costs of \$4.50/t, and refining and transportation cost of \$5.34/oz of recovered gold.
7. Underground mineral resources are reported within conceptual mineable stopes using a cut-off grade of 1.21g/t Au.
8. A long-term gold price of \$2,300/oz was used to determine the underground cut-off grade. Assumptions include mining & processing cost of \$79.80/t, refining and transportation cost of \$5.0/oz of recovered gold, and process sustaining capital cost of \$1.20/t. No G&A costs were applied.
9. Underground stope sizes were on average at a strike length of 5 m, a mining height of 3 m, and a stope width corresponding to the full extent of the modelled mineralized zone.
10. A process recovery of 95% and a royalty rate of 3.0% were applied.
11. Totals may not sum due to rounding.



Table 14-21: Consolidated Mineral Resource Estimate, Inclusive of Mineral Reserves – Effective Date December 31, 2025

Mining Area	Category	Tonnage (kt)	Gold Grade (g/t)	Contained Gold (koz)
In-Pit ≥0.30g/t	Measured	26,977	1.8	1,585
	Indicated	48,318	1.5	2,299
	M + I	75,295	1.6	3,884
	Inferred	31,272	1.1	1,077
Underground ≥ 1.20 g/t Au	Measured	49	4.3	7
	Indicated	170	3.3	18
	M + I	219	3.5	25
	Inferred	717	2.2	51
Stockpiles	Indicated	1,563	0.9	46
	M + I	1,563	0.9	46
Total	Measured	27,026	1.8	1,592
	Indicated	50,051	1.5	2,363
	M + I	77,077	1.6	3,955
	Inferred	31,989	1.1	1,128

Note:

- The Mineral Resource estimate was completed in accordance with the CIM (2014) definitions and the CIM Best Practice Guidelines (2019).
- The effective date of the Mineral Resource estimate is December 31, 2025.
- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- Mineral Resources are presented in this table inclusive of Mineral Reserves and include probable stockpile material.
- Open pit resources are reported at a cut off grade of 0.30 g/t Au and are constrained within an optimized pit shell.
- The optimized pit shell was generated using a gold price of \$2,400/oz Au and a USD/CAD exchange rate of 1.31. The optimization incorporated mining and processing costs of \$17.37/t, G&A costs of \$4.50/t, and refining and transportation cost of \$5.34/oz of recovered gold.
- Underground mineral resources are reported within conceptual mineable stopes using a cut-off grade of 1.21g/t Au.
- A long-term gold price of \$2,300/oz was used to determine the underground cut-off grade. Assumptions include mining & processing cost of \$79.80/t, refining and transportation cost of \$5.0/oz of recovered gold, and process sustaining capital cost of \$1.20/t. No G&A costs were applied.
- Underground stope sizes were on average at a strike length of 5 m, a mining height of 3 m, and a stope width corresponding to the full extent of the modelled mineralized zone.
- A process recovery of 95% and a royalty rate of 3.0% were applied.
- Totals may not sum due to rounding.

Table 14-22 and Table 14-23 summarize the Mineral Resources exclusively and inclusively of Mineral Reserves for the different deposits at the Project.



Table 14-22: Mineral Resource Estimate by Deposit, Exclusive of Reserves – Effective Date December 31, 2025

Category	Open Pit			Underground		
	≥ 0.30 g/t Au			≥ 1.21 g/t Au		
	Tonnage (kt)	Gold Grade (g/t)	Contained Gold (koz)	Tonnage (kt)	Gold Grade (g/t)	Contained Gold (koz)
Leprechaun						
Measured	910	1.4	42	0	0.0	0.0
Indicated	3,983	1.3	163	2	1.2	0.1
M+I	4,893	1.3	205	2	1.2	0.1
Inferred	5,610	1.1	195	27	1.1	2.1
Sprite						
Measured	0	0.0	0	0	0.0	0.0
Indicated	1,217	1.2	47	58	2.0	3.8
M+I	1,217	1.2	47	58	2.0	3.8
Inferred	1,524	1.0	50	99	1.7	4.7
Berry						
Measured	1,651	1.2	61	46	4.4	6.5
Indicated	6,246	1.1	229	87	4.5	12.5
M+I	7,897	1.1	290	133	4.4	19.0
Inferred	6,731	1.0	216	101	2.6	8.4
Marathon						
Measured	3,818	1.1	133	3	3.1	0.3
Indicated	9,679	1.3	401	3	3.1	0.3
M+I	13,497	1.2	534	6	3.1	0.6
Inferred	13,977	1.1	477	129	2.7	11.3
Victory						
Measured	0	0.0	0	0	0.0	0.0
Indicated	1,665	1.2	67	19	2.0	1.2
M+I	1,665	1.2	67	19	2.0	1.2
Inferred	3,430	1.3	139	361	2.2	25.0
Notes: See table notes in Table 14-20.						



Table 14-23: Mineral Resource Estimate by Deposit, Inclusive of Mineral Reserves – Effective Date December 31, 2025

Category	Open Pit			Underground		
	≥ 0.30 g/t Au			≥ 1.21 g/t Au		
	Tonnage (kt)	Gold Grade (g/t)	Contained Gold (koz)	Tonnage (kt)	Gold Grade (g/t)	Contained Gold (koz)
Leprechaun						
Measured	5,724	2.3	415	0	0.0	0.0
Indicated	12,079	1.7	665	2	1.2	0.1
M+I	17,803	1.9	1,080	2	1.2	0.1
Inferred	5,610	1.1	195	27	2.5	2.1
Sprite						
Measured	0	0.0	0	0	0.0	0.0
Indicated	1,217	1.2	47	58	2.0	3.8
M+I	1,217	1.2	47	58	2.0	3.8
Inferred	1,524	1.0	50	99	1.7	4.7
Berry						
Measured	6,013	2.0	380	46	4.4	6.5
Indicated	14,615	1.4	660	87	4.5	12.5
M+I	20,628	1.6	1,040	133	4.4	19.0
Inferred	6,731	1.0	216	101	2.6	8.4
Marathon						
Measured	15,240	1.6	790	3	3.1	0.3
Indicated	18,742	1.4	860	3	3.1	0.3
M+I	33,982	1.5	1,650	6	3.1	0.6
Inferred	13,977	1.1	477	129	2.7	11.3
Victory						
Measured	0	0.0	0	0	0.0	0.0
Indicated	1,665	1.2	67	19	2.0	1.2
M+I	1,665	1.2	67	19	2.0	1.2
Inferred	3,430	1.3	139	361	2.2	25.0
Stockpile Material mined from the Open pit						
Indicated	1,563	0.92	46			
M+I	1,563	0.92	46			
Notes: See table notes in Table 14-21.						



14.10.3 Key Factors Influencing the 2025 Mineral Resource Estimate

Key updates incorporated into the 2025 Mineral Resource Estimate include the following:

- Incorporation of new drilling, particularly at the Berry, Sprite, and Victory deposits
- Optimization of mineralization domains, including improved treatment of internal waste and better control of domain extents outside QTPV units
- Updated lithological interpretations, including refinement of mafic dyke geometries at Marathon
- Re-interpretation of grade shells to better align with litho-structural controls and current mining performance
- Increase on block size in QTPV domains and increase sample support
- Updated variogram parameters
- New capping thresholds were established based on statistical analysis
- Reduction of extensive search ranges in Quartz monzonite and Trondhjemite domains to limit over-extrapolation

14.11 QP Conclusion

The Qualified Person has reviewed the geological interpretations, domain modelling, data validation procedures, estimation parameters, and validation results presented in this section and is satisfied that the 2025 Mineral Resource Estimate for the Valentine Gold Mine has been prepared in accordance with the CIM (2014) definitions and is suitable for public disclosure under NI 43-101. The drill hole database is considered reliable, the geological models appropriately reflect the current understanding of the deposit, and the estimation methodology, including capping, compositing, variography, search strategy, and interpolation, provides a reasonable and unbiased representation of the gold mineralization at the current level of drilling density.

The block model validations, including volume reconciliation, statistical comparisons, swath plots, Q–Q analyses, and detailed visual reviews, demonstrate that the model honours both the informing data and the interpreted geological controls. No material global or local biases were identified, and the Mineral Resource classification appropriately reflects the confidence supported by data density, geological continuity, and estimation performance. The QP is also not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

Based on the work completed and the validation results obtained, the QP concludes that the 2025 Mineral Resource estimate provides a robust and defensible basis for mine planning, economic analysis, and future Mineral Reserve estimation, subject to the recommendations outlined above.



15.0 Mineral Reserve Estimates

15.1 Introduction

The Mineral Reserves for the Valentine Gold Mine are a subset of the Measured and Indicated Mineral Resources described in Section 14.0 and are supported by feasibility-level engineering and early results from mine construction described in subsequent sections of this report, including the mine engineering summarized in Section 16.0. Mineral Reserves are contained within designed open pits. The Mineral Reserves were then run through a production schedule, in Hexagon MinePlan, which has been fed through a project financial model using capital and operating cost estimates that demonstrated the economic viability of the estimate. Measured and Indicated Mineral Resources within this engineered production plan are converted to Proven and Probable Mineral Reserves, respectively.

Table 15-1: Summary of Mineral Reserves – Effective Date December 31, 2025

Mining Area	Reserve Class	Ore (kt)	Grade (g/t)	Contained Metal (koz)
Leprechaun	Proven	5,746	2.11	389
	Probable	8,500	1.75	478
	Leprechaun Total	14,245	1.89	867
Berry	Proven	4,521	2.07	301
	Probable	9,343	1.45	435
	Berry Total	13,864	1.65	736
Marathon	Proven	11,829	1.68	640
	Probable	9,988	1.43	459
	Marathon Total	21,817	1.57	1,098
Stockpiles as of December 31, 2025	Proven	-	-	-
	Probable	1,563	0.92	46
	Stockpile Total	1,563	0.92	46
Subtotal	Proven	22,095	1.87	1,330
	Probable	29,395	1.50	1,418
Total	Proven and Probable	51,490	1.66	2,748

Source: MMTS 2026.

Notes:

1. The Mineral Reserve estimates were prepared by Jeffrey Colden, P.Eng., reported using the CIM (2014) definitions, and have an effective date of December 31, 2025.
2. Mineral Reserves are mined tonnes and grade; the reference point is the mill feed at the primary crusher.
3. Mineral Reserves are reported at a cut-off grade of 0.45 g/t Au.
4. Cut-off grade assumes US\$2,100/oz Au at a currency exchange rate of US\$0.714 per C\$1.00; 99.8% payable gold; US\$5.00/oz off-site costs (refining and transport); and uses a 93.1% metallurgical recovery. The cut-off grade covers processing costs of C\$22.75/t, administrative (G&A) costs of C\$14.38/t, and a stockpile rehandle cost of C\$1.85/t.



5. Mining loss and dilution is based on diluting the Resource model to a 6 m x 6 m x 6 m model and including additional mining losses estimated for the removal of isolated blocks (surrounded by waste) and low-grade (<0.55 g/t Au) blocks bounded by waste on three sides.
6. Numbers have been rounded as required by reporting guidelines and may not add.
7. The QP is not aware of any mining, metallurgical, infrastructure, permitting, or other relevant factors that could materially affect the Mineral Reserve estimate, unless outlined in this report.

15.2 Mineral Reserves Statement

Proven and Probable Mineral Reserves have been converted from Measured and Indicated Mineral Resources, in a feasibility-level mine plan, and are summarized in Table 15-1, with a cut-off grade of 0.45 g/t using a gold price of US\$2,100/oz. Inferred Mineral Resources are not included in the Mineral Reserves and are sent to waste. Mineral Resources from the Victory and Sprite deposits, and any underground Mineral Resources, have not been included in the Feasibility Study mine plan or Mineral Reserves.

Mineral Reserves have been estimated using the CIM 2019 Best Practices Guidelines (CIM 2019) and are classified using the CIM (2014) definitions. Mill feed tonnes and gold grades are based on re-blocking the original 1.5 m x 1.5 m x 1.5 m model blocks to a selective mining unit (SMU) block size of 6 m x 6 m x 6 m. Further mining recovery parameters have been introduced, treating the following SMU blocks as waste: all isolated, mineralized blocks (blocks bounded by waste on all sides); and all blocks below 0.55 g/t gold grade that are bounded by waste on all but one side. In total, loss and dilution results in an increase of 17% of ore tonnes and a decrease of 15% to gold grade across all three models, when compared to the subcell model.

The recovery formula used in the estimation of Mineral Reserves is:

$$\text{Process recovery} = 1.16\% \times \text{in situ gold grade} + 92.55\%, \text{ capped at } 96.5\%$$

The Mineral Reserves for all pit phases are shown in Table 15-2.

15.3 Factors that May Affect the Mineral Reserve Estimates

The Mineral Reserve estimates 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 estimates:

- Metal prices
- Interpretations of mineralization and continuity of mineralization zones
- Geotechnical and hydrogeological assumptions
- Ability of the operation to meet the targeted annual production rate, mining dilution, and mining recovery
- Operating cost assumptions
- Mill throughput and recoveries
- Ability to meet and maintain permitting and environmental license conditions, as well as the ability to maintain the social license to operate.



Table 15-2: Proven & Probable Mineral Reserves within Designed Pits

Pit	Phase	Proven			Probable			Ore		
		Tonnage (kt)	Grade (g/t)	Contained Metal (koz)	Tonnage (kt)	Grade (g/t)	Contained Metal (koz)	Tonnage (kt)	Grade (g/t)	Contained Metal (koz)
Leprechaun	L631	2,147	2.11	146	964	1.71	53	3,110	1.99	199
	L632	2,137	1.76	121	3,564	1.64	188	5,701	1.68	309
	L633	1,462	2.60	122	3,972	1.86	237	5,434	2.06	359
Berry	B631	1,814	2.27	132	1,780	1.60	92	3,594	1.94	224
	B632	179	2.11	12	748	1.35	32	928	1.50	45
	B633	1,315	1.82	77	2,920	1.32	124	4,235	1.48	201
	B634	245	2.64	21	1,859	1.52	91	2,104	1.65	112
	B635	968	1.90	59	2,035	1.47	96	3,003	1.61	155
Marathon	M631	3,656	1.77	208	1,704	1.50	82	5,360	1.68	290
	M632	1,244	1.62	65	1,352	1.46	64	2,596	1.54	128
	M633	2,772	1.59	142	1,744	1.43	80	4,516	1.53	222
	M634	4,156	1.68	225	5,188	1.40	233	9,345	1.53	458
Stockpiles				1,563	0.92	46	1,563	0.92	46	
Total		22,095	1.87	1,330	29,395	1.50	1,418	51,490	1.66	2,748

Notes:

1. The mineral reserve estimates were prepared by Jeffrey Colden, P.Eng., reported using the CIM (2014) definitions, and have an effective date of December 31, 2025.
2. Mineral Reserves are mined tonnes and grade; the reference point is the mill feed at the primary crusher.
3. Mineral Reserves are reported at a cut-off grade of 0.45 g/t Au.
4. Cut-off grade assumes US\$2,100/oz Au at a currency exchange rate of US\$0.714 per C\$1.00; 99.8% payable gold; \$5.00 USD/oz off-site costs (refining and transport); and uses an 93.1% metallurgical recovery. The cut-off grade covers processing costs of C\$22.75/t, administrative (G&A) costs of C\$14.38/t, and a stockpile rehandle cost of C\$1.85/t.
5. Mining loss and dilution is based on diluting the Resource model to a 6 m x 6 m x 6 m, including additional mining losses estimated for the removal of isolated blocks (surrounded by waste) and low-grade (<0.55 g/t Au) blocks bounded by waste on three sides.
6. Numbers have been rounded as required by reporting guidelines and may not add.
7. The QP is not aware of any mining, metallurgical, infrastructure, permitting, or other relevant factors that could materially affect the Mineral Reserve estimate, unless outlined in this report.



16.0 Mining Methods

The Mineral Reserves stated in Section 15.0 are supported by the open pit mine planning summarized in this section.

Open pit mine designs, mine production schedules, mobile fleet productivities and mine capital and operating cost estimates have been developed for the Leprechaun, Berry, and Marathon deposits at a feasibility engineering by MMTS.

16.1 Key Design Criteria

The following mine planning design inputs were used:

- Topography is based on a survey of the region and updated to the October 2025 Month-end survey in Marathon pit and the December 2025 Month-end survey in Berry and Leprechaun pits.
- Re-blocked 6 m x 6 m x 6 m resource block model.
- Inferred Mineral Resources are treated as waste rock with no economic value.
- A grade-dependent gold process recovery is used for the pit optimization and cut-off grade estimations.
- Process recovery = 1.16% x in situ gold grade + 92.55%, capped at 96.5%.
- A break-even economic cut-off grade of 0.45 g/t Au is used.
- Stockpiles and haul roads are planned to minimize wetland, waterbody, and watercourse disturbance.

16.1.1 Ore Loss and Dilution

The initial subcell models are based on a 1.5 m x 1.5 m x 1.5 m block size. For mine planning and Mineral Reserve estimation, these blocks have been combined to a selective mining unit (SMU) size of 6 m x 6 m x 6 m, which accounts for planned open pit mine operating conditions. This re-blocking to 6 m SMU blocks introduces 20.4% dilution and 1.6% loss to the Leprechaun model, 20.4% dilution and 3.0% loss to the Berry model, and 16.3% dilution and 0.9% loss to the Marathon model, when measured at a 0.45 g/t gold cut-off grade, included in the Mineral Resources.

Further mining recovery parameters have been introduced, removing from the Mineral Reserves the following:

- all isolated mineralized blocks (blocks bounded by waste on all sides)
- all blocks below 0.55 g/t gold grade that are bounded by waste on all but one side

These additional parameters result in a total loss and dilution of 17% of ore tonnes and -15% to gold grade across all three models, when compared to the subcell model.

This approach to calculating dilution and loss is considered appropriate for the current mine plan, as the calculated 6 m re-blocked mill feed gold grades will be representative of the diluted run-of-mine material that the operator will be able to achieve when pursuing the throughputs targeted in this mine plan. With October 2025 month-end data ore movement to date, this methodology was reconciled with 6% additional material and -4% gold ounce losses. While



understanding that the mill data was not available to be incorporated into this analysis and with expected operational performance improvements as the mine moves into production, the QP considers the methodology to be validated in the field.

16.1.2 Bulk Mining and Selective Mining

A “selective” method of mining will be employed in certain areas of the Marathon, Leprechaun, and Berry deposits to enhance grade control. Flitch mining of the ore is planned due to the lack of vertical continuity of the ore body. The flitches will be mined like mini-benches, on a blast-by-blast basis. The following assumptions are made for the selective mining process:

- 6 m bench height
- 3 m flitches
- 12 m³ loader in a backhoe configuration

Based on current experience in the field, the amount of selective mining is assumed to be all of ore, along with an equal amount of waste in each period. The total amount of selective mining is limited by the total amount of material mined in each period. Quantities of bulk and selectively mined material are tracked through the mine production schedule and equipment fleet plans for the Project. For mine fleet planning and costing, all ore, and an equal amount of waste, to a maximum of the total material in the period are handled via planned selective mining methods.

16.1.3 Pit Slopes

The pit slope criteria are based on 2021 to 2023 geotechnical reports by Terrane Geoscience Inc. (Terrane 2021, 2022, 2023). Field data collection consisted of detailed geotechnical drillhole logging, oriented core logging, index strength tests, packer testing, geomechanical laboratory sample collection, and optical/acoustic televiewer surveying. Geomechanical lab testing included unconfined compressive strength, triaxial compressive strength, direct shear, and brazilian tensile testing.

Geotechnical models of the Marathon, Leprechaun and Berry deposit areas were compiled and consist of geological models, structural models (fabrics and major structures), rock mass models, and hydrogeological models.

Feasibility-level slope design takes into consideration an analysis of the overall slope stability of a pit wall (i.e., all the benches, berms, and ramps from the pit floor to the surface), inter-ramp slope stability and the bench design (i.e., bench width, bench face angle, and bench height). The overall slope angle, inter-ramp angle, and the bench face angles are then designed based on acceptance criterion for probability of failure (PoF) and factor of safety (FOS).

Pit designs are configured on initial 6 m bench heights, with 8.1 m wide berms placed every three benches, or triple benching. Bench face angles, and subsequent inter-ramp angles, are varied based on prescribed geotechnical design sectors.

The design sectors, bench face angles, and inter-ramp slopes presented in the tables below were designed by Terrane utilising the pit shells presented in the 2022 Valentine Gold Project NI 43-101 report (Marathon Gold 2022). A review of the updated pit shells, presented in this report, for the Marathon, Leprechaun, and Berry pits, was completed by Terrane in 2026 to ensure compliance with all pit slope design recommendations. A geotechnical analysis of the intermediate pit phases was not completed by Terrane as part of this report.

Bench face and inter-ramp slopes in the defined design sectors are listed in Table 16-1 for Leprechaun, Table 16-2 for Berry, and Table 16-3 for Marathon. Defined geotechnical design



sectors are illustrated in Figure 16-1 for Leprechaun, Figure 16-2 for Berry, and Figure 16-3 for Marathon.

Table 16-1: Leprechaun Bench Face Inter-Ramp Angle Inputs

Domain	Design Sector Figure 16-1	Bench Face Angle (°)	Inter-Ramp Angle (°)	Overall Slope* (°)
Overburden	All	25	25	25
South	5	62	46	39
Southeast	4	70	51	41
NW and End Walls	1 to 3, 6 to 7	80	58	46

*Overall slope angles are inputs for pit optimizations only.

Table 16-2: Berry Bench Face Inter-Ramp Angle Inputs

Domain	Design Sector (Figure 16-2)	Bench Face Angle (°)	Inter- Ramp Angle (°)	Overall Slope* (°)
Overburden	All	25	25	25
South	SW-C-1, SW-1-5, C-C-1, C-I-3, C-I-4, NE-C-1, NE-I-3, NE-1-4	72	52	40
North	SW-I-1, SW-I-2, SW-I-3, SW-I-4, C-I-1, C-I-2, NE- I-1, NE-I-2	80	58	45
East	C-C-2, NE-C-2	76	55	43

*Overall slope angles are inputs for pit optimizations only.

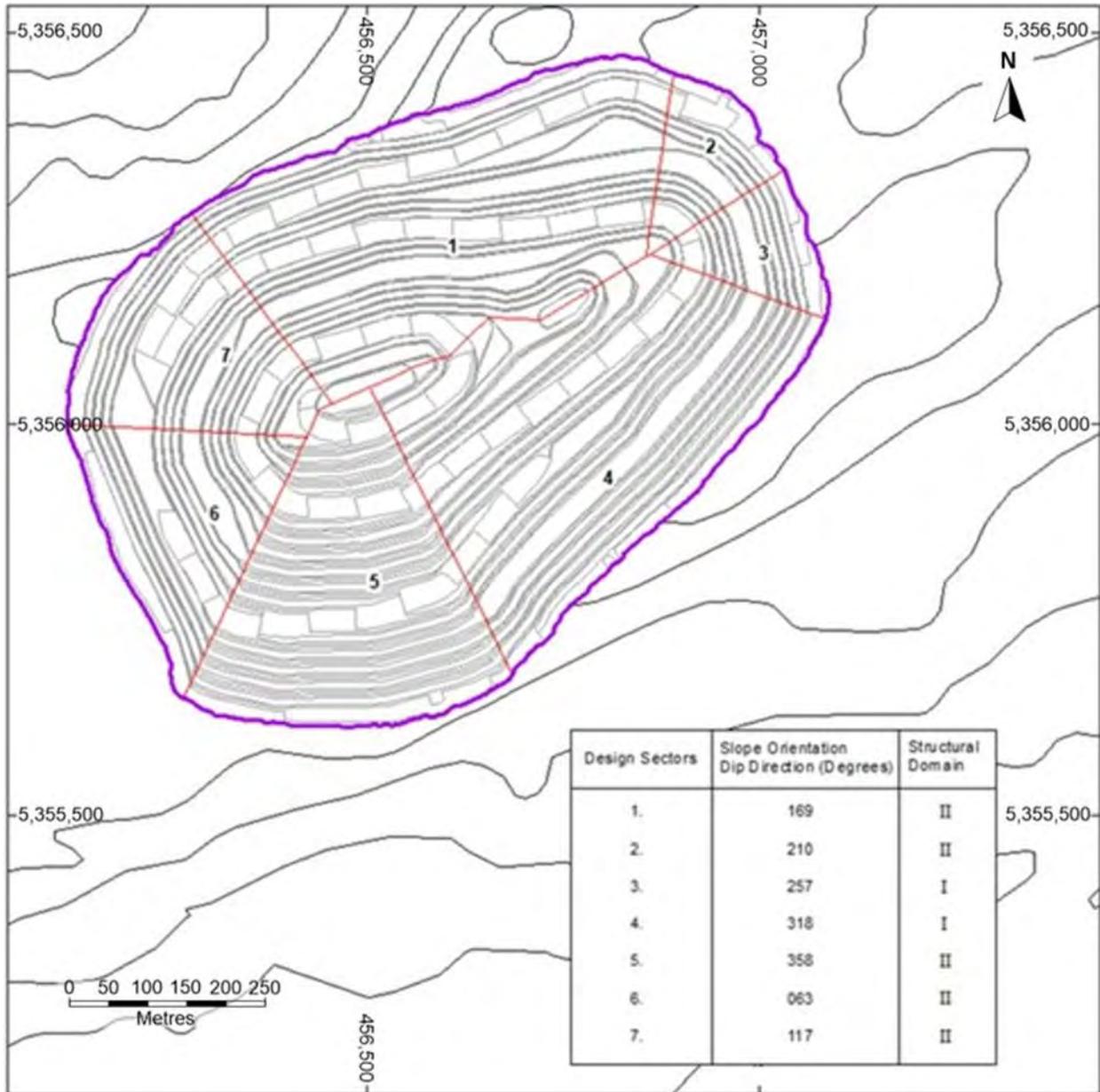
Table 16-3: Marathon Bench Face & Inter-Ramp Angle Inputs

Domain	Design Sector (Figure 16-3)	Bench Face Angle (°)	Inter-Ramp Angle (°)	Overall Slope* (°)
Overburden	All	25	25	25
Southeast	6	77	56	46
NW, NE and SW	1 to 5, 7 to 9	80	58	47.5

*Overall slope angles are inputs for pit optimizations only.



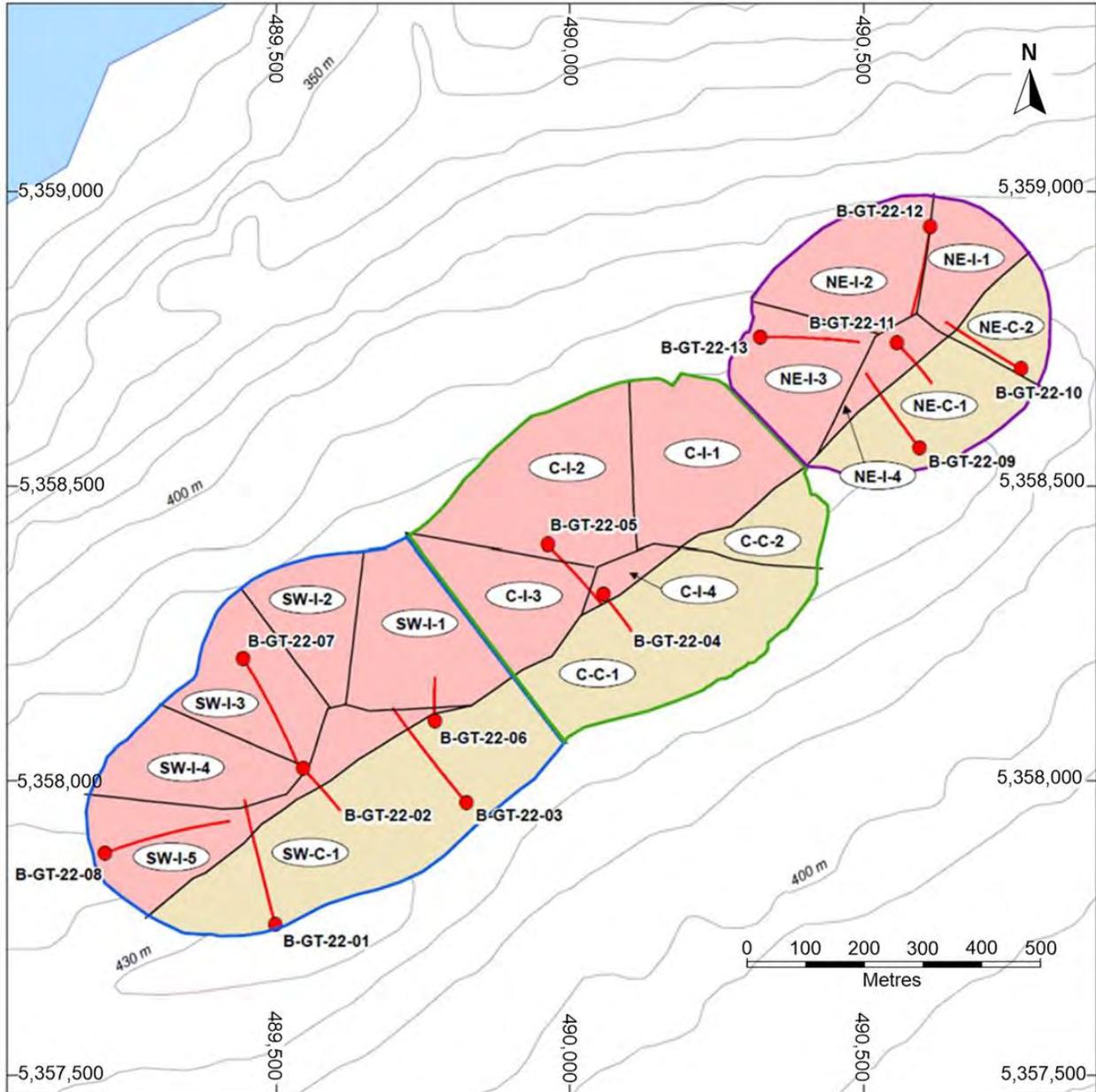
Figure 16-1: Pit Slope Design Sectors - Leprechaun



Source: Terrane 2022.



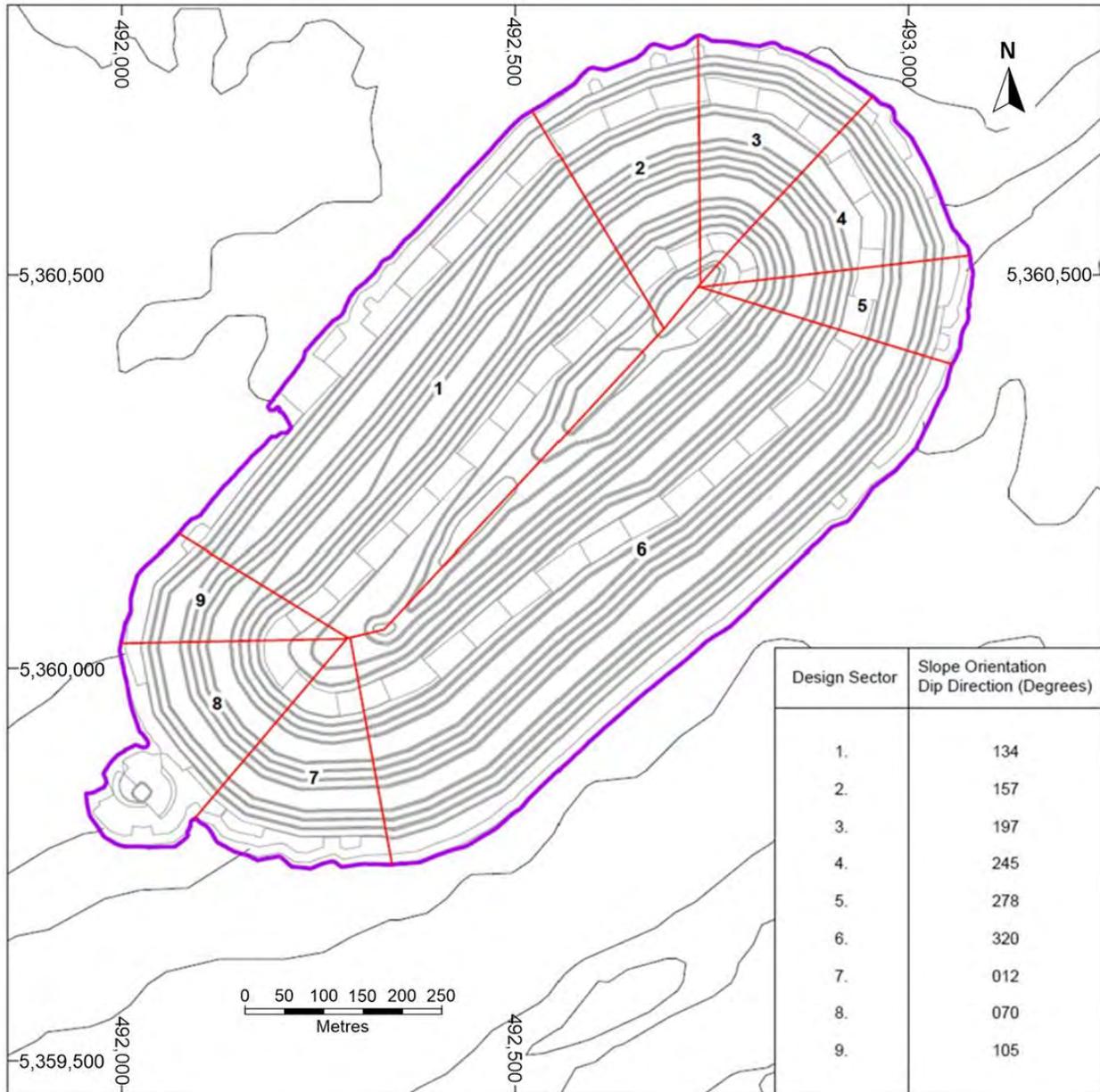
Figure 16-2: Pit Slope Design Sectors – Berry



Source: Terrane 2023.



Figure 16-3: Pit Slope Design Sectors – Marathon



Source: Terrane 2021.

In-pit haul roads and geotechnical berms (25 m wide) are added to the pit designs and flatten the overall slopes. Wherever in-pit ramps are not present, geotechnical berms are placed at 90 m vertical spacing for Marathon and Leprechaun and 108 m vertical spacing for Berry.

A 12 m wide berm is left at the bedrock contact with overburden. Groundwater flow is estimated to be higher along this bedrock contact. This berm is added to catch potential sloughing from the overburden above, control surface water and allow sufficient room for water management features to be constructed and maintained.



Designs assume that controlled blasting (pre-split and/or trim blasting), slope dewatering and slope depressurization, routine bench face maintenance, geotechnical slope monitoring, and on-going data collection will be completed throughout the life of the mine.

16.2 Pit Optimization

The economic pit limits are determined using the Pseudoflow algorithm. This algorithm uses the ore grades and specific gravity (SG) for each block of the re-blocked mine planning 3D block model and evaluates the costs and revenues of the blocks within potential pit shells. The algorithm 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 resources to strip ratio and high-grade/low-grade areas of the deposit. In this study, the various cases or pit shells are generated by varying the input gold price and comparing the resultant waste and mill feed tonnages and gold grades for each pit shell.

The generated pit shells are evaluated by using the design gold price input while keeping inputs for costs, metallurgical recoveries, and pit slopes constant, which determines where incremental pit shells produce marginal or negative economic returns. This reduction in economic returns is due to increasing strip ratios, decreasing gold grades, and increased mining total cost associated with the larger or deeper pit shells.

The economic margins from the expanded cases are evaluated on a relative basis to provide payback on capital and produce a return for the project. At some point, further expansion does not provide significant added value. A pit limit can then be chosen that has suitable 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 16-4. The UCFs for each case are compared to reinforce the selected point at which increased pit expansions do not increase the project value, and to confirm that the designed pits that the operations are currently using are still economically justifiable. 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.



Table 16-4: Price and Operating Cost Inputs into Pseudoflow Shell Runs

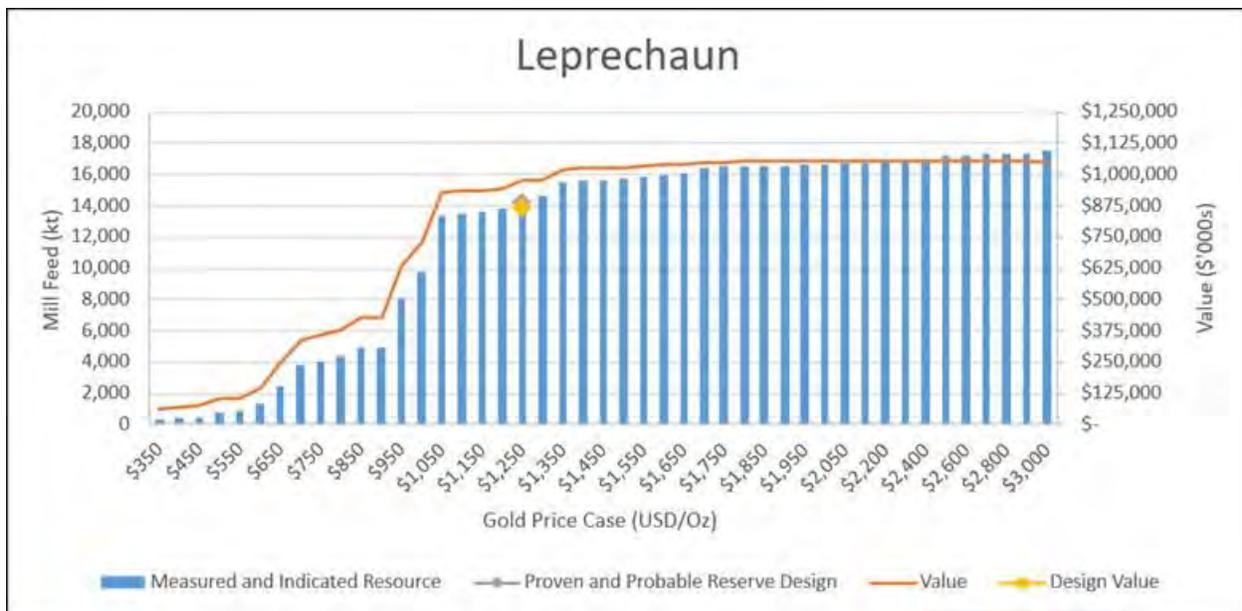
Item	Unit
Gold Price	US\$2,100/oz
Foreign Exchange (USD:CAD)	0.7 : 1.0
Payable Gold	99.8%
Off-Site Costs	US\$5/oz Au (refining and doré transport)
Royalties	3%
Pit Rim Mining Cost Pit Rim 386 m in Leprechaun Pit Rim 350 m in Berry Pit Rim 420 m in Marathon	US\$2.35/t for mining ore and waste
Incremental Haulage Cost	US\$0.0105/t for mining ore and waste
Processing Cost	US\$15.93/t milled
General / Administration Cost	US\$10.07/t milled
Stockpile Rehandling Cost	US\$1.30/t milled

Source: MMTS 2026.

16.2.1 Optimization Results

Figure 16-4, Figure 16-5, and Figure 16-6 show the contents of the generated Pseudoflow pit shells for each pit, with the pit design mill feed tonnes and value shown as points. The pit design is matched to the selected gold price case by matching the shell with the closest mill feed. The final pits have 4.5% less mill feed and 4.5% more waste than the selected economic shells.

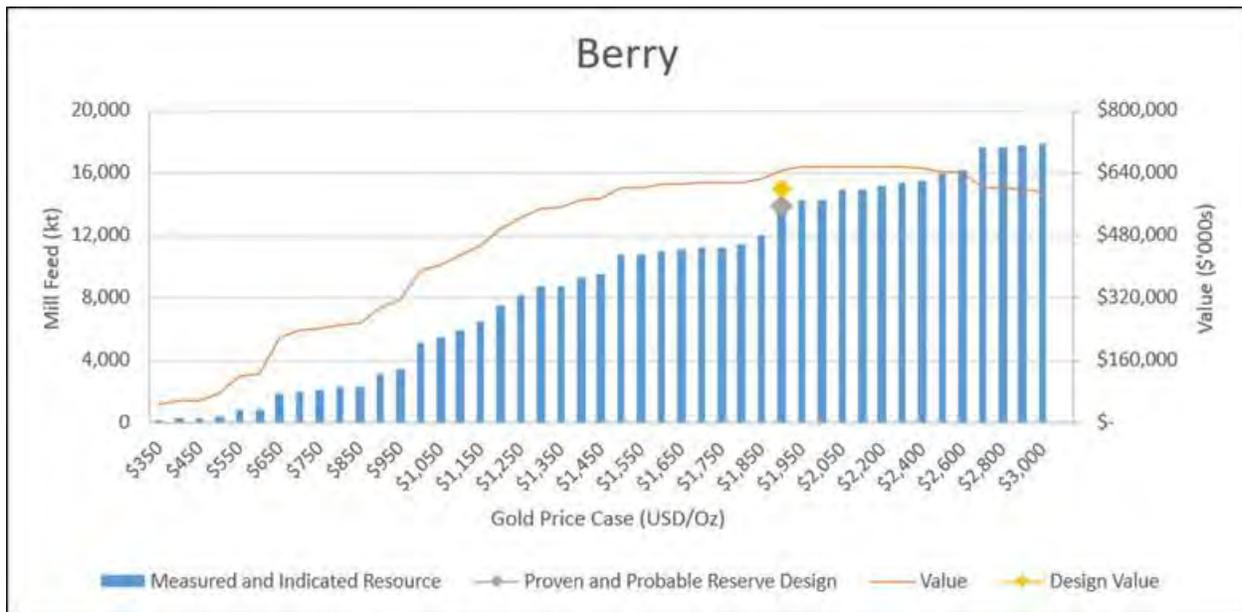
Figure 16-4: Leprechaun Pseudoflow Pit Shell Resource Contents by Case



Source: MMTS 2026.

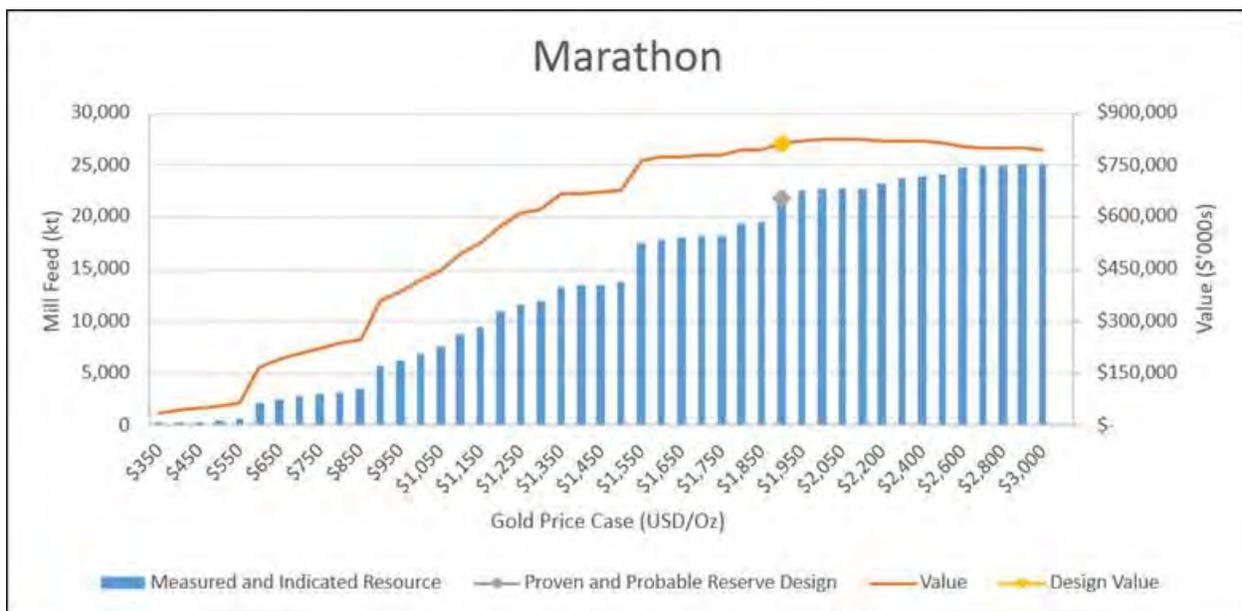


Figure 16-5: Berry Pseudoflow Pit Shell Resource Contents by Case



Source: MMTS 2026.

Figure 16-6: Marathon Pseudoflow Pit Shell Resource Contents by Case



Source: MMTS 2026.

16.3 Pit Designs

Pits are designed based on Pseudoflow pit shells, incorporating in-pit haul roads, geotechnical berms, and minimum mining widths that are needed to make the pit safely mineable. The contents for each designed pit phase are presented graphically in Figure 16-7.

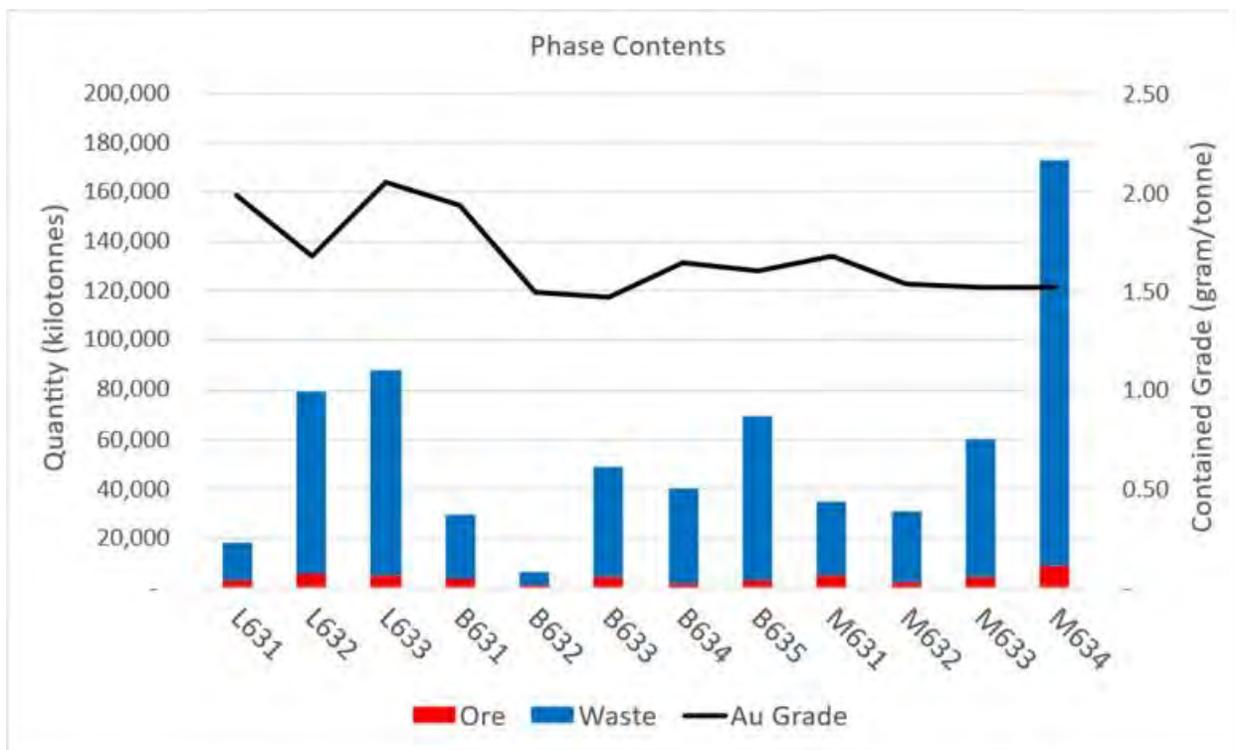


The 12 m wide berm at the base of the overburden contact discussed in Section 16.1.3 is omitted from these pit designs, as the modelled overburden thickness is typically shallow at the edge of the pit.

16.3.1 In-Pit Haul Roads

Two-way haul roads of 28 m width are sized to handle 133-tonne rigid frame haul trucks. Haul road grades are limited to a maximum of 10%. Access ramps are not designed for the last 12 vertical metres of the pit bottom, on the assumption that the bottom ramp segment will be removed using some form of retreat mining. Above this, the bottom two ramped benches of the pit use one-way haul roads of 19 m width (single lane for 90-tonne rigid frame trucks) and maximum 12% grade since bench volumes and traffic flow are reduced.

Figure 16-7: Designed Phase Pit Contents (All Deposits)



Source: MMTS 2026.

16.3.2 Pit Phases

Ultimate pit limits are generally split up into phases or pushbacks to target higher economic margin material earlier in the mine life. The QP used a minimum pushback distance of 60 m to maintain productive headings. The Leprechaun pit is split into three phases with the higher-grade, lower-strip-ratio Phase 1 mined ahead of the two pushbacks. The Berry pit is split into five phases. The Marathon pit is split into four phases.

16.3.3 Leprechaun Pit Designs

The phased Leprechaun pit designs are shown in Figure 16-8 to Figure 16-10. Sections through the deposit showing gold grades are illustrated in Figure 16-11 and Figure 16-14.

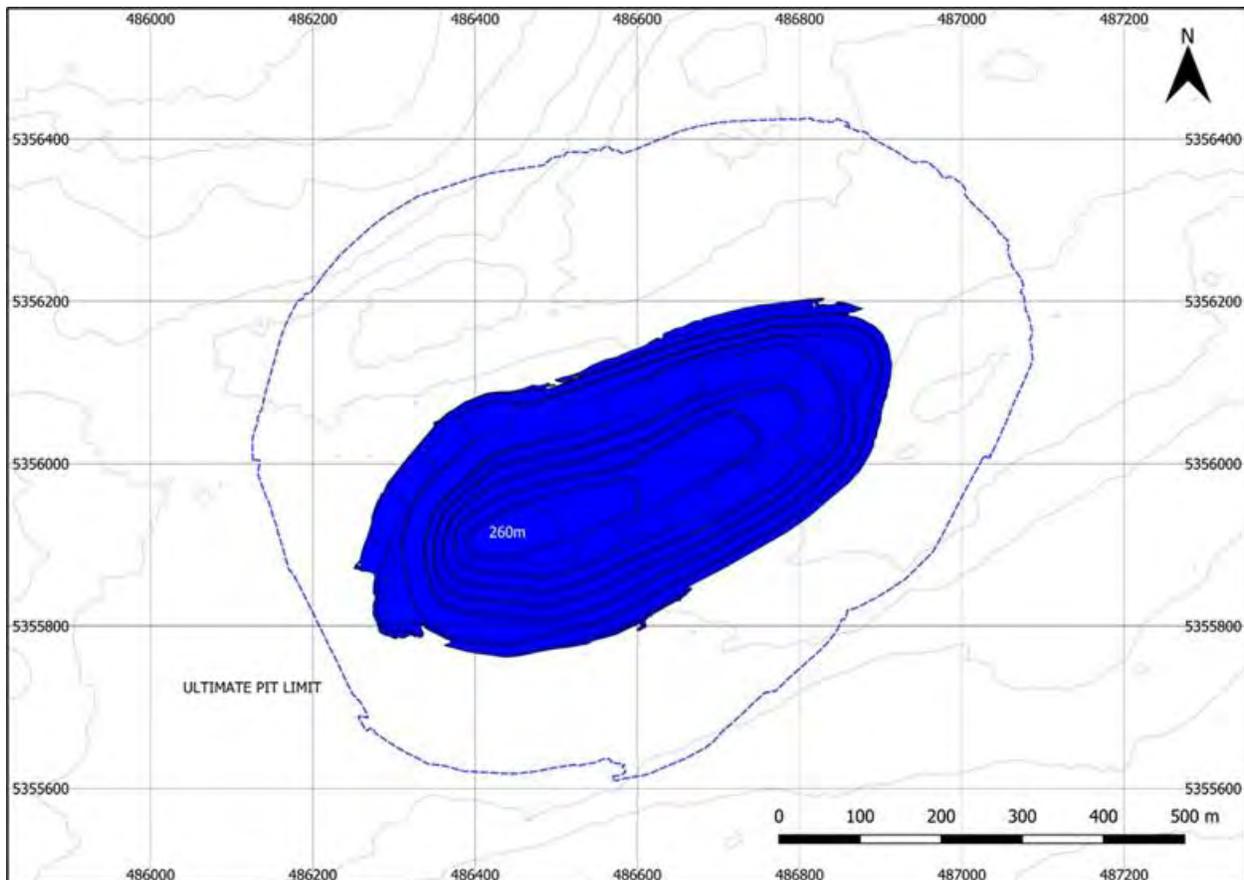


Leprechaun Phase 1, L631 – This phase targets the high-grade, low-strip-ratio central portion of the deposit. This phase contains about 15 months’ worth of mill feed, at pre-expansion mill throughput. This phase is in progress as of the end of 2025 and continues mining from the active bench at the 368 m elevation, down to the pit bottom at the 260 m elevation. The main ramp runs clockwise down from the pit exit in the southwest. A geotechnical berm is left on the west side at 350 m.

Leprechaun Phase 2, L632 – This phase targets deeper, higher-strip-ratio mineralization below Phase 1, pushing out in the north to southeast directions. This phase mines from the pit exit at the 380 m elevation, down to the pit bottom at the 146 m elevation. The ramp for Phase 2 starts from the Phase 1 ramp at 362 m, proceeds clockwise down to a switchback at 248 m, then finishes in a counterclockwise direction to the pit bottom. Geotechnical berms are left behind at multiple elevations.

Leprechaun Phase 3, L633 – This phase is the final phase and pushes out in the west and south directions, targeting the remaining deep mineralization. This phase mines from the pit exit at the 380 m elevation, down to the pit bottom at the 80 m elevation. The main ramp starts counterclockwise down from the pit exit in the south of the pit switchbacks at the 350 and 230 m elevation and finishes counterclockwise to the bottom of the pit. Geotechnical berms are left behind at various elevations.

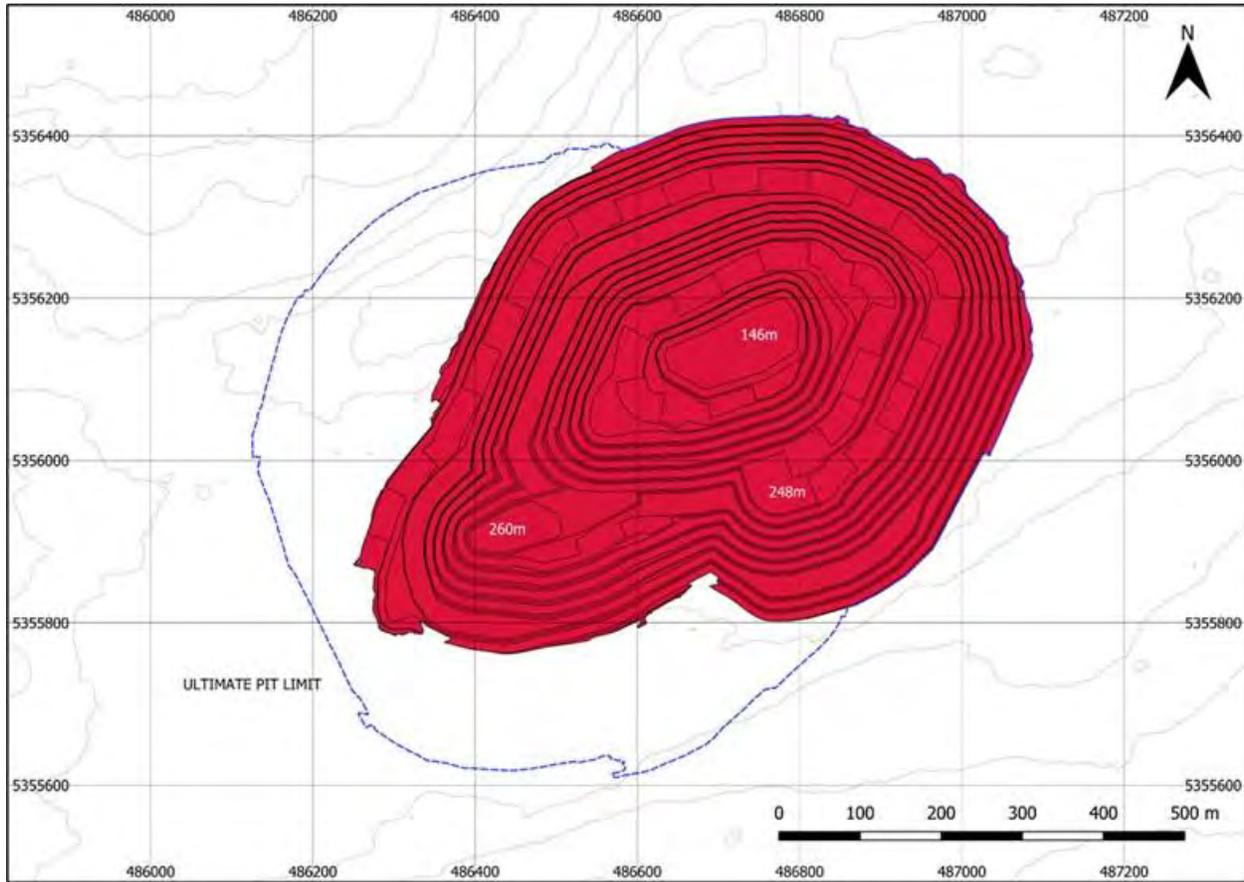
Figure 16-8: Leprechaun Phase 1 Pit, L631



Source: MMTS 2026.



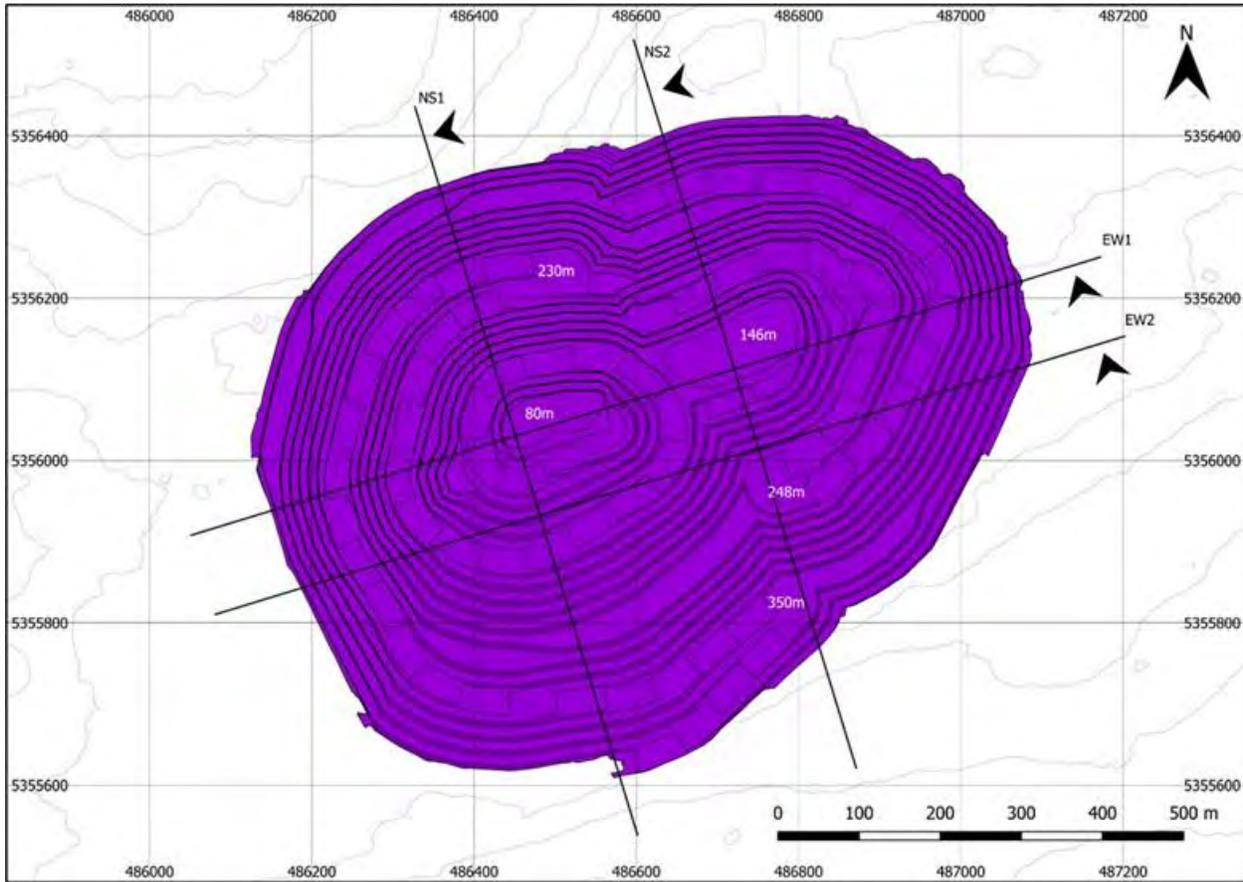
Figure 16-9: Leprechaun Phase 2 Pit, L632



Source: MMTS 2026.



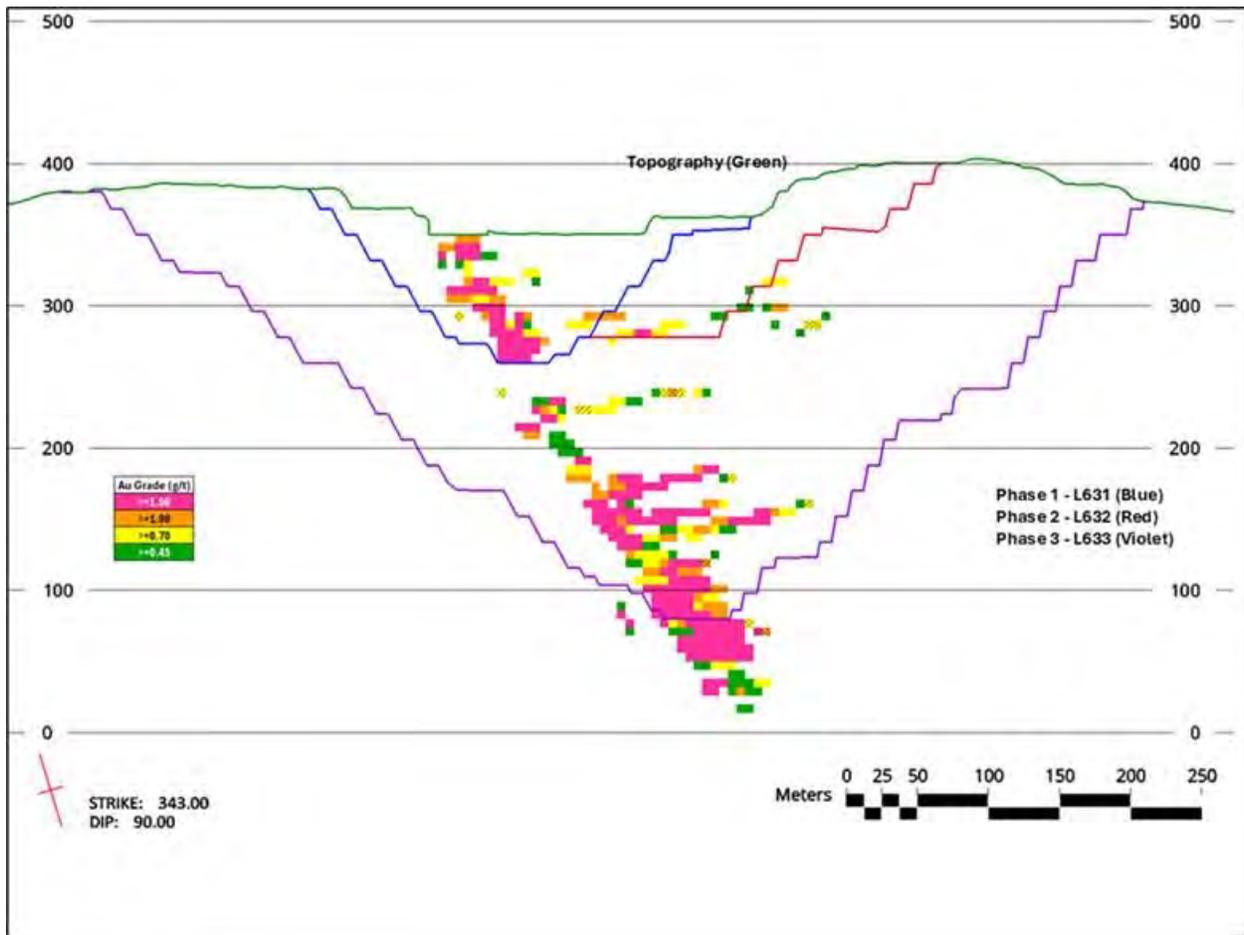
Figure 16-10: Leprechaun Phase 3 Pit, L633



Source: MMTS 2026.



Figure 16-11: Leprechaun Pit Designs, North-South Section 1

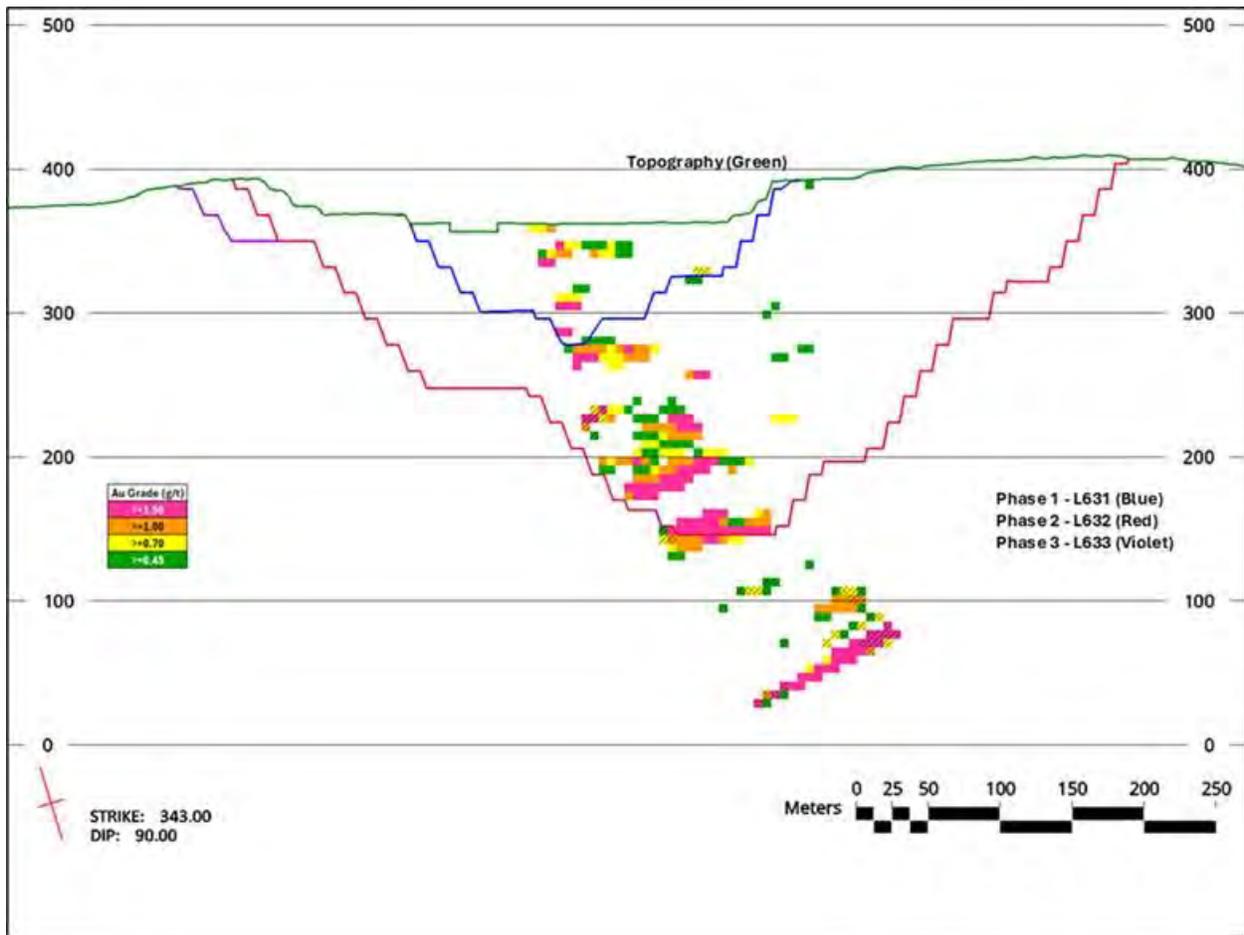


Source: MMTS 2026.

Note: NS1 as shown in Figure 16-10.



Figure 16-12: Leprechaun Pit Designs, North-South Section 2

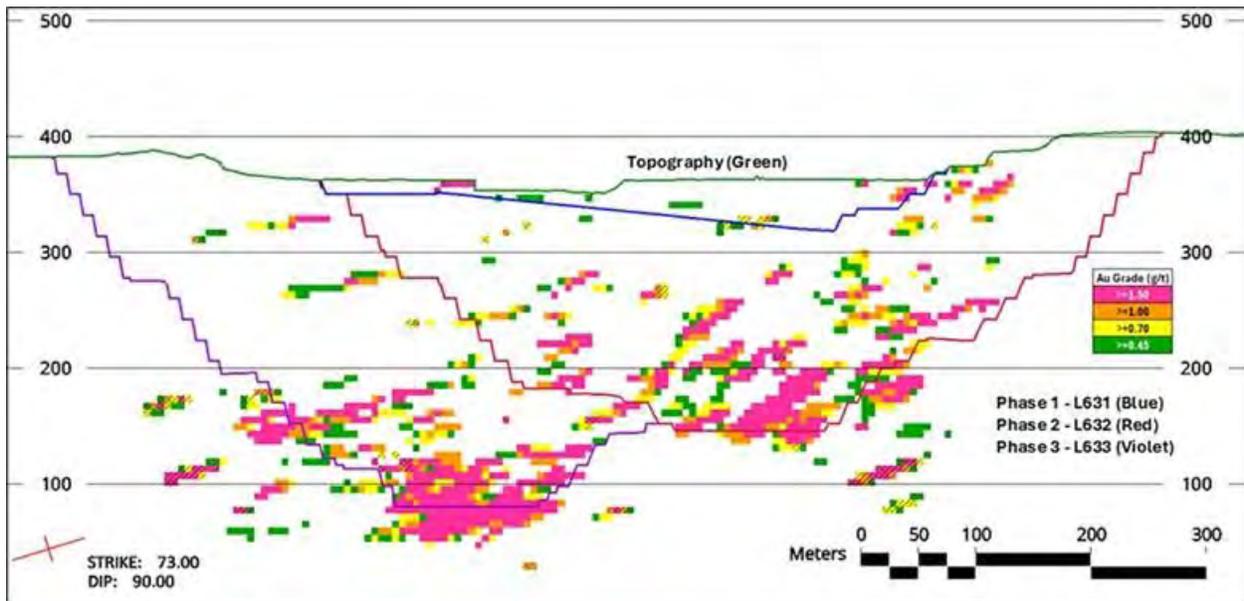


Source: MMTS 2026.

Note: NS2 as shown in Figure 16-10.



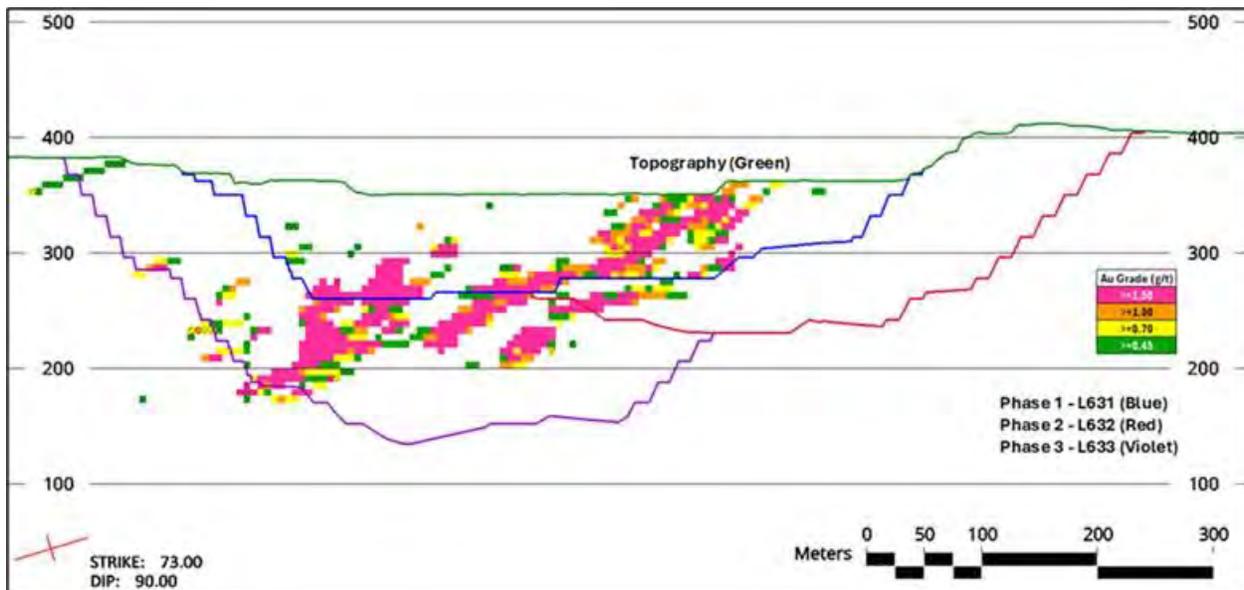
Figure 16-13: Leprechaun Pit Designs, East-West Section 1



Source: MMTS 2026.

Note: EW1 as shown in Figure 16-10.

Figure 16-14: Leprechaun Pit Designs, East-West Section 2



Source: MMTS 2026.

Note: EW2 as shown in Figure 16-10.

16.3.4 Berry Pit Designs

The phased Berry pit designs are shown in Figure 16-15 to Figure 16-19. Sections through the deposit showing gold grades are illustrated in Figure 16-20 to Figure 16-27.

The Berry Pit consists of three connected lobes in a line, following the trend of the deposit roughly southwest to northeast.



Berry Phase 1, B621 – This phase targets the low-strip-ratio portions of the deposit in the southwest lobe. This phase contains about 18 months' worth of mill feed at pre-expansion mill throughput. The phase mines from the pit exit at the 430 m elevation, down to the primary Phase 1 bottom at the 252 m elevation. The phase ramp exit is at the northeast corner and continues counterclockwise down. There is a small extension to the northeast that will be mined to a separate bottom at 366 m elevation.

Berry Phase 2, B622 – This phase targets the low-strip-ratio portions of the deposit in the northeast lobe. This phase contains about five months' worth of mill feed at pre-expansion mill throughput. The pit mines from the pit exit at the 415 m elevation, down to the phase bottom at the 330 m elevation. The main ramp starts on the east side of the phase and runs clockwise down to the phase bottom.

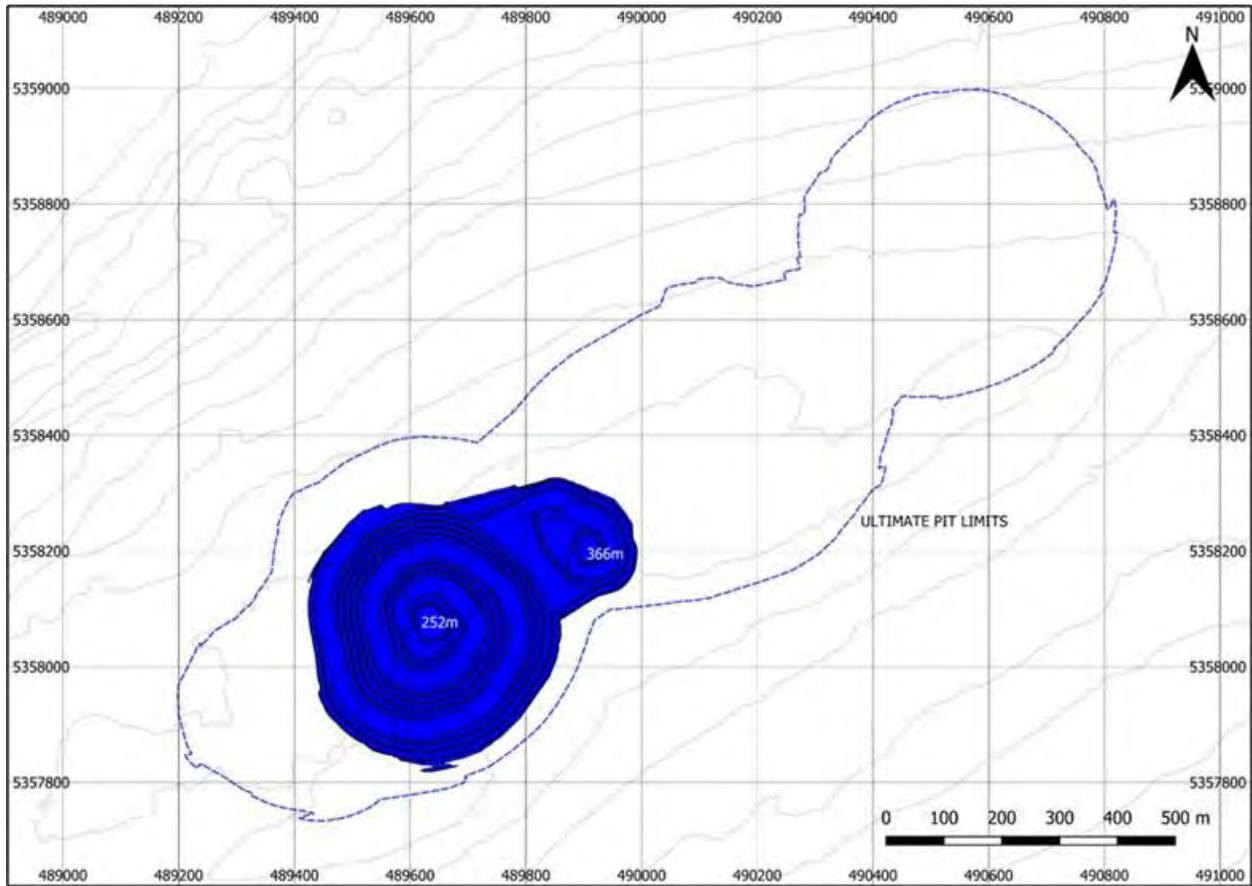
Berry Phase 3, B623 – This phase targets the higher-strip-ratio portions of the deposit in the southwest lobe. It pushes out from Phase 1 in all directions, except where the Phase 1 extension already mined to 366 m. The phase mines from the pit exit at the 425 m elevation, down to the primary phase bottom at the 204 m elevation. The phase ramp exit is at the northwest corner and continues counterclockwise down. A geotechnical berm is left at 378 m.

Berry Phase 4, B624 – This phase targets the higher-strip-ratio portions of the deposit in the northeast lobe. It pushes out from Phase 3 in all directions. The phase mines from the pit exit at the 420 m elevation, down to the phase bottom at the 210 m elevation. The phase ramp exit is at the west side and continues counterclockwise down.

Berry Phase 5, B625 – This phase is the final phase targeting the remaining higher strip ratio mineralization in between the southwest (B621/623) and northeast (B622/624) lobes. This phase mines the area in between the previous phases, resulting in a single continuous Berry pit. Saddles are left at 354 m between this phase and Phases 1/3, and at 396 m between Phases 2/4. Once 414 m bench in Phase 5 is mined out, Phase 2/4 will use the same pit exit as Phase 5. This phase mines from the pit exit at the 420 m elevation, down to the pit bottom at the 198 m elevation. The ramp runs clockwise down from the pit exit. A geotechnical berm is left at 378 m.



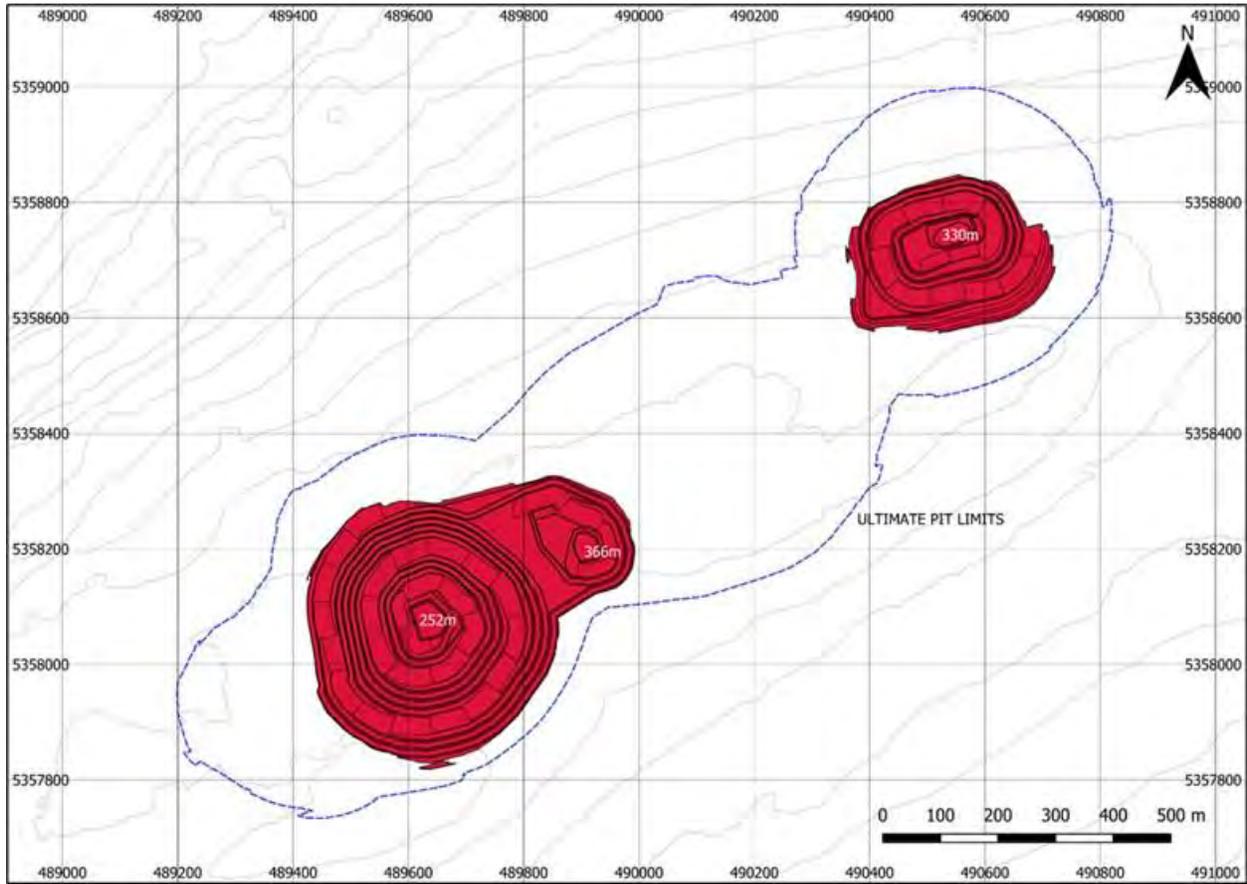
Figure 16-15: Berry Phase 1 Pit, B631



Source: MMTS 2026.



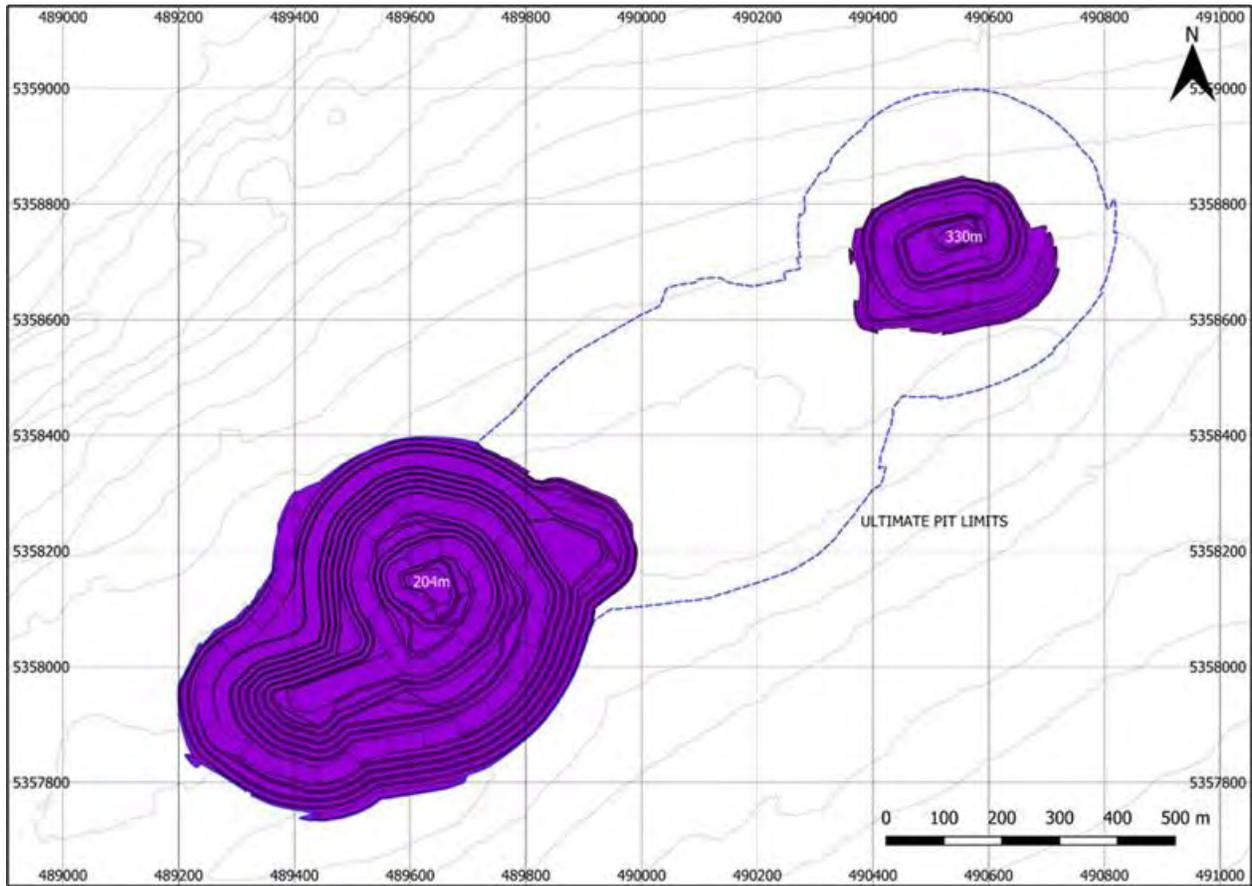
Figure 16-16: Berry Phase 2 Pit, B632



Source: MMTS 2026.



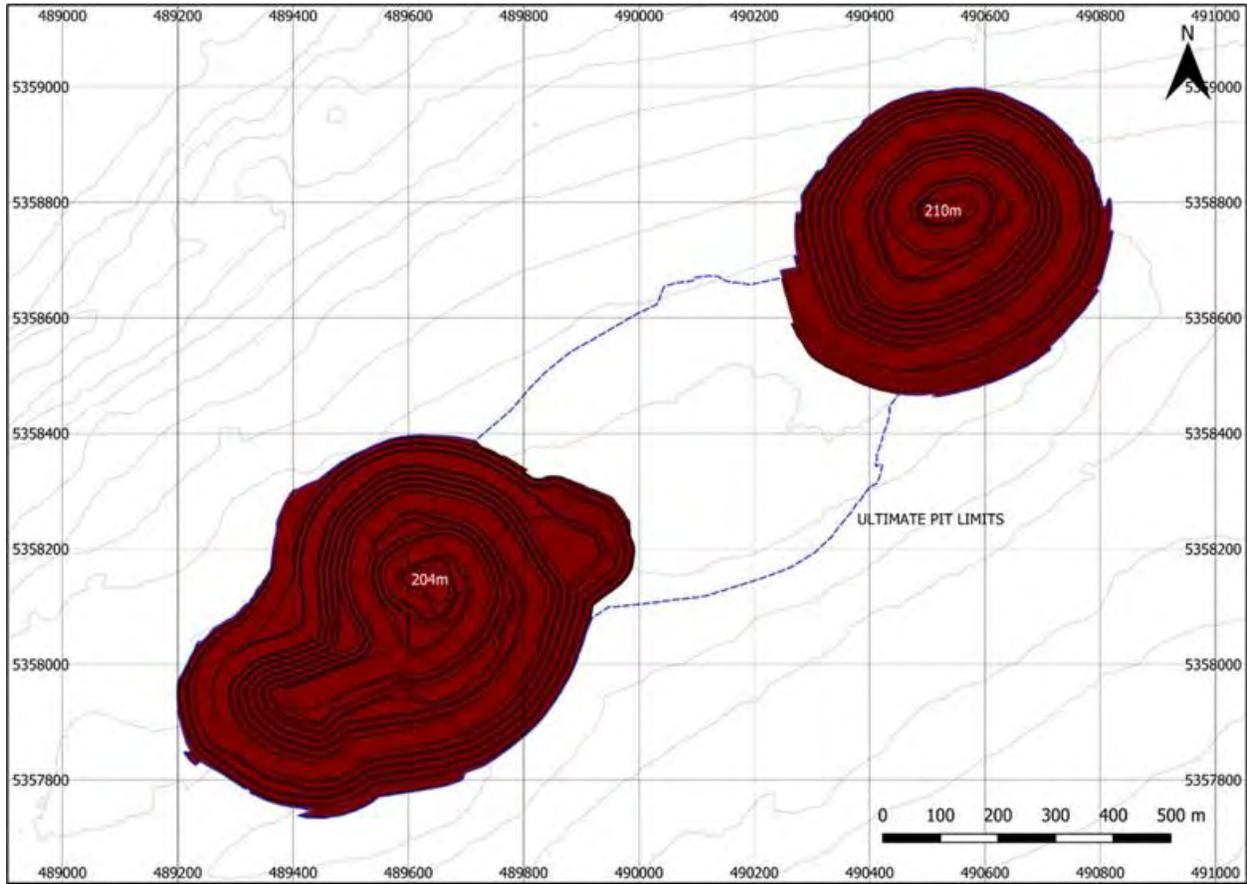
Figure 16-17: Berry Phase 3 Pit, B633



Source: MMTS 2026.



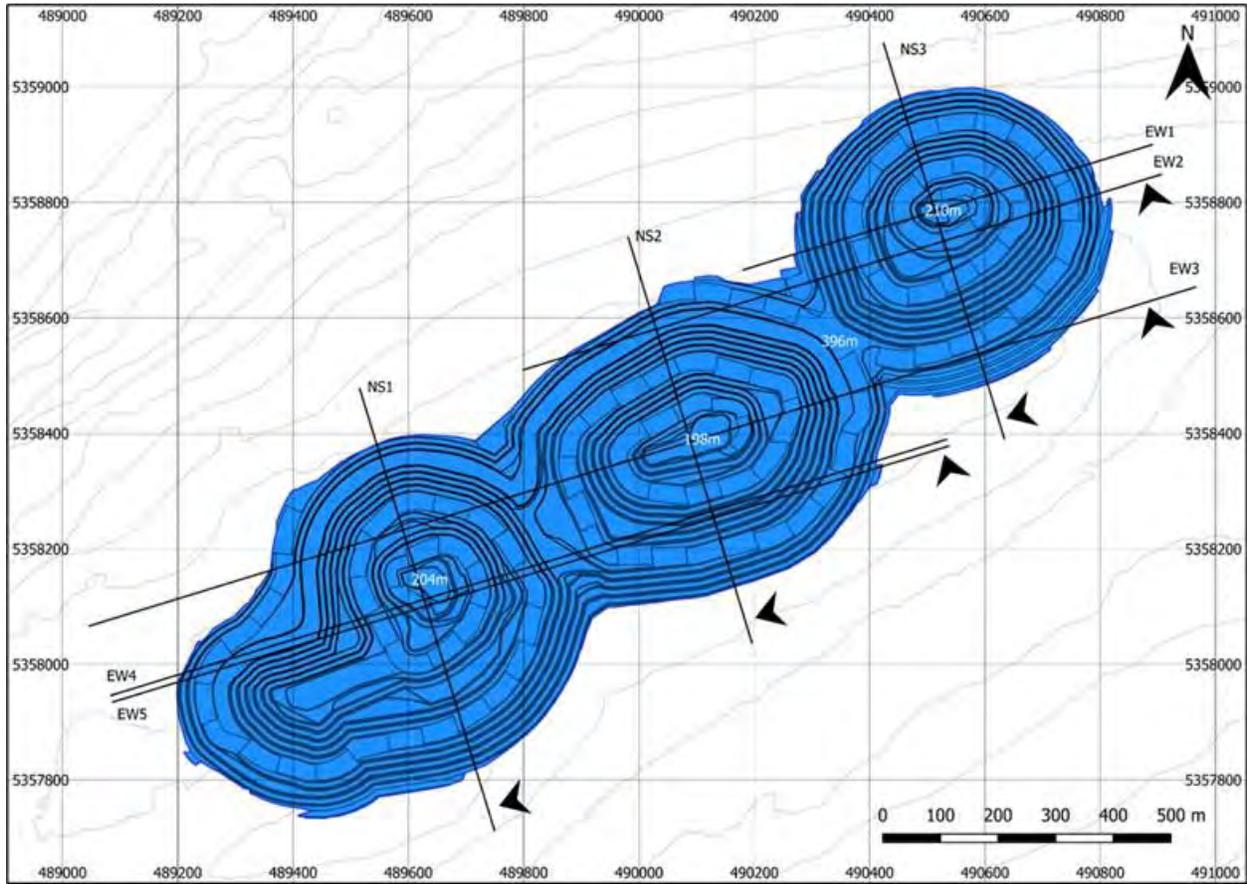
Figure 16-18: Berry Phase 4 Pit, B634



Source: MMTS 2026.



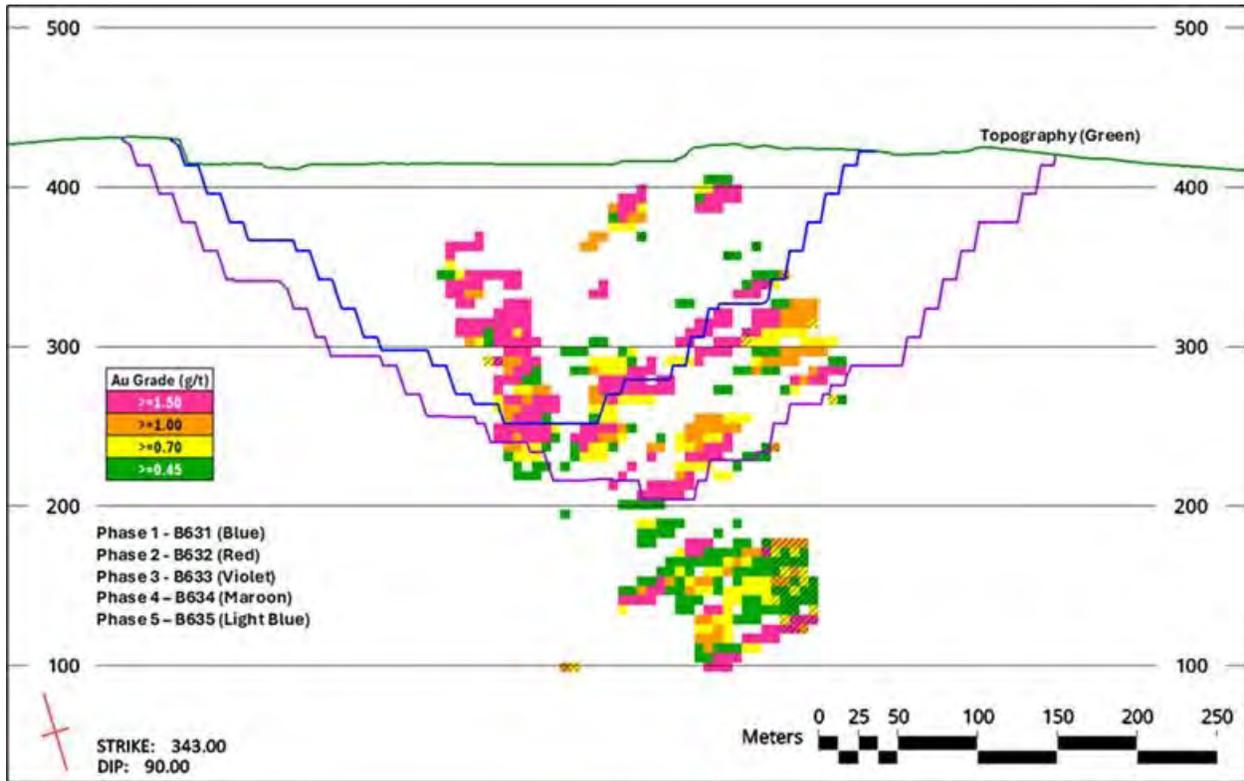
Figure 16-19: Berry Phase 5 Pit, B635



Source: MMTS 2026.



Figure 16-20: Berry Pit Designs, North-South Section 1

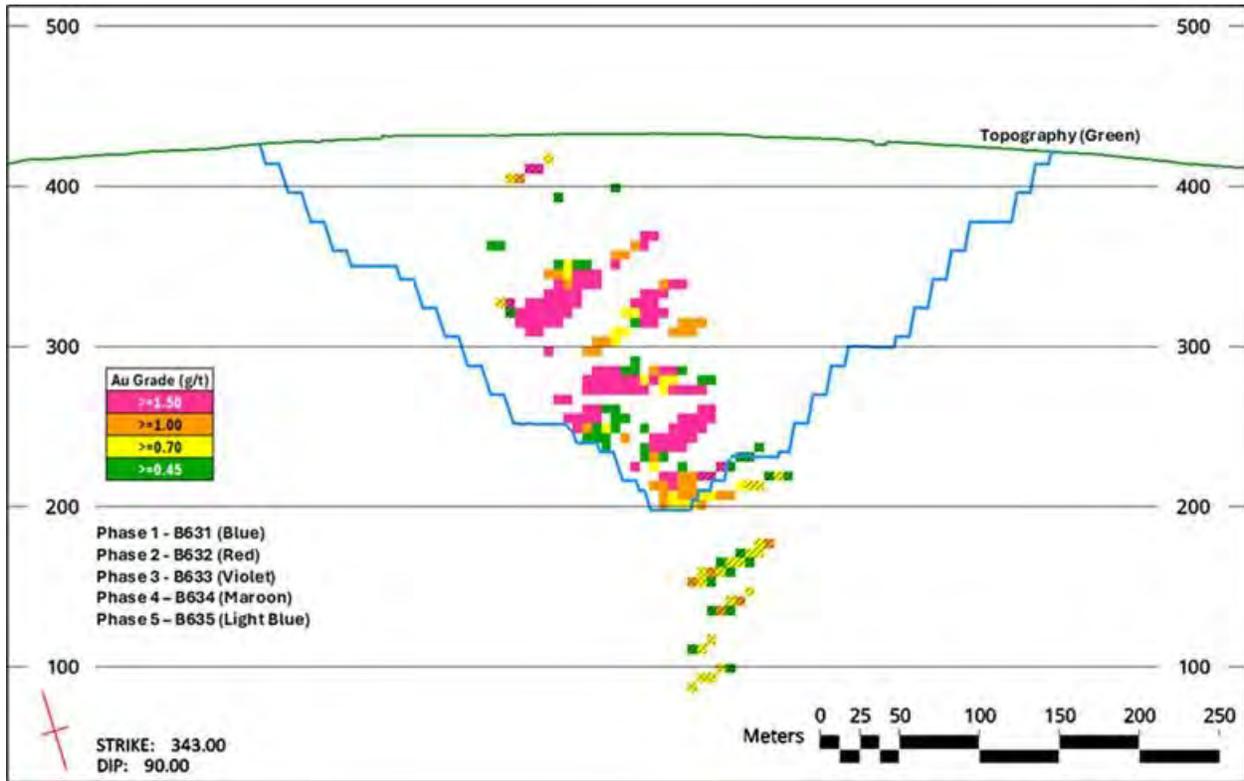


Source: MMTS 2026.

Note: NS1 as shown in Figure 16-19.



Figure 16-21: Berry Pit Designs, North-South Section 2

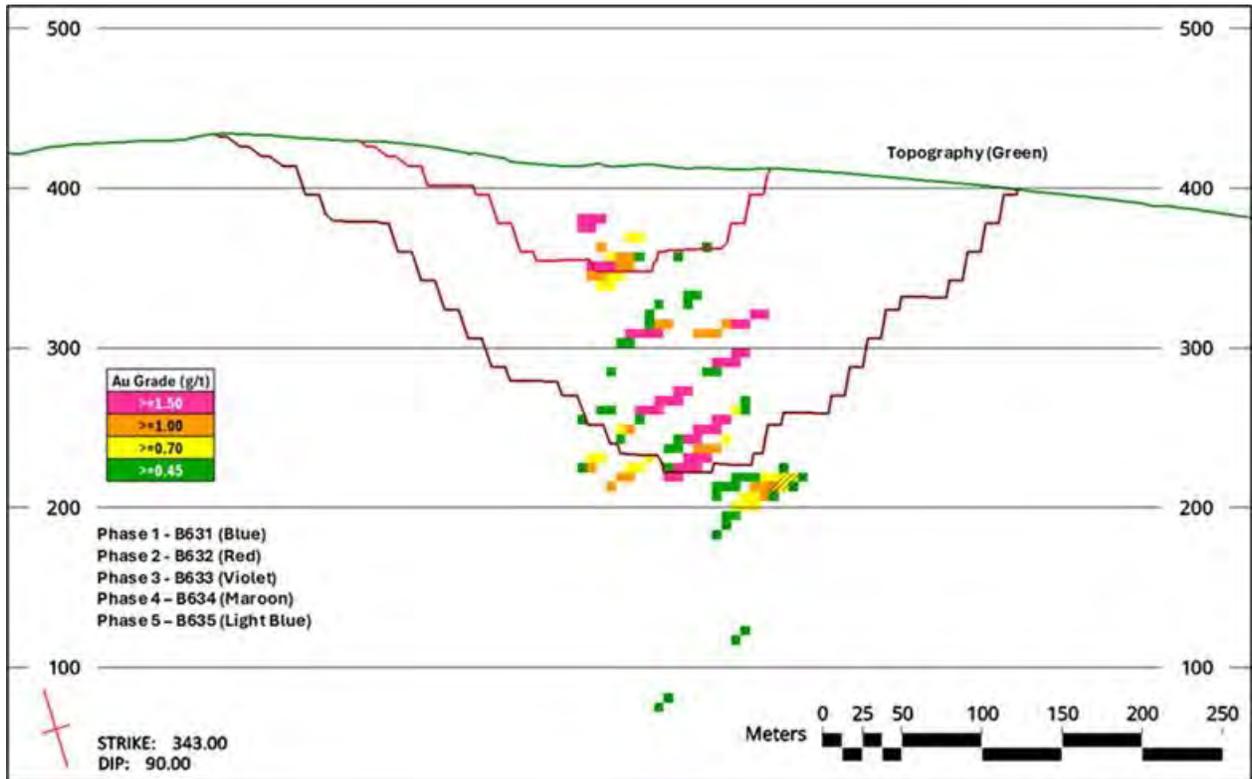


Source: MMTS 2026.

Note: NS2 as shown in Figure 16-19.



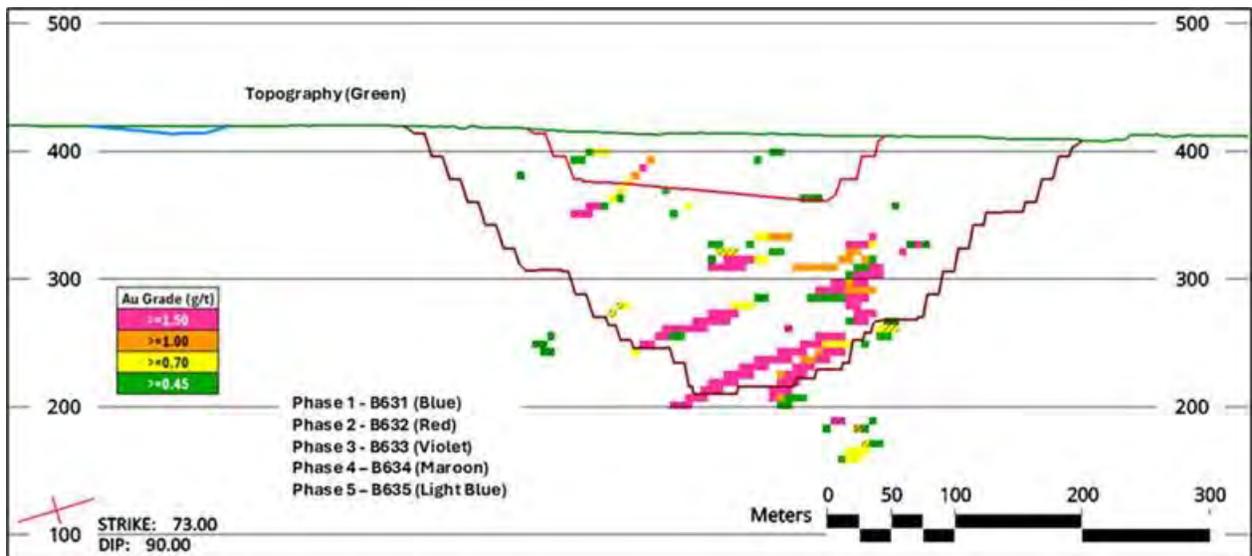
Figure 16-22: Berry Pit Designs, North-South Section 3



Source: MMTS 2026.

Note: NS3 as shown in Figure 16-19.

Figure 16-23: Berry Pit Designs, East-West Section 1

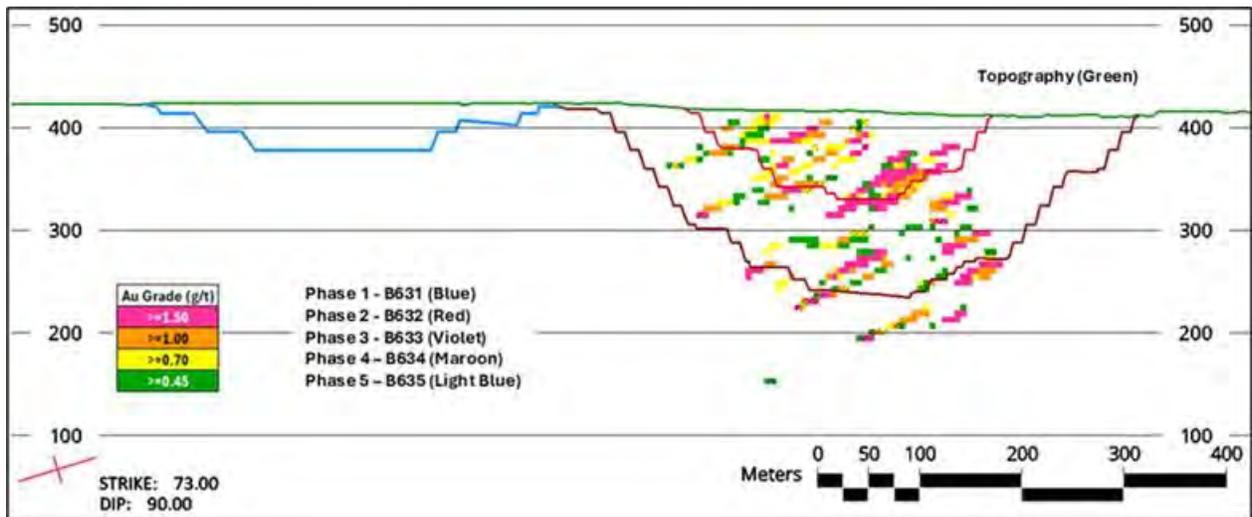


Source: MMTS 2026.

Note: EW1 as shown in Figure 16-19.



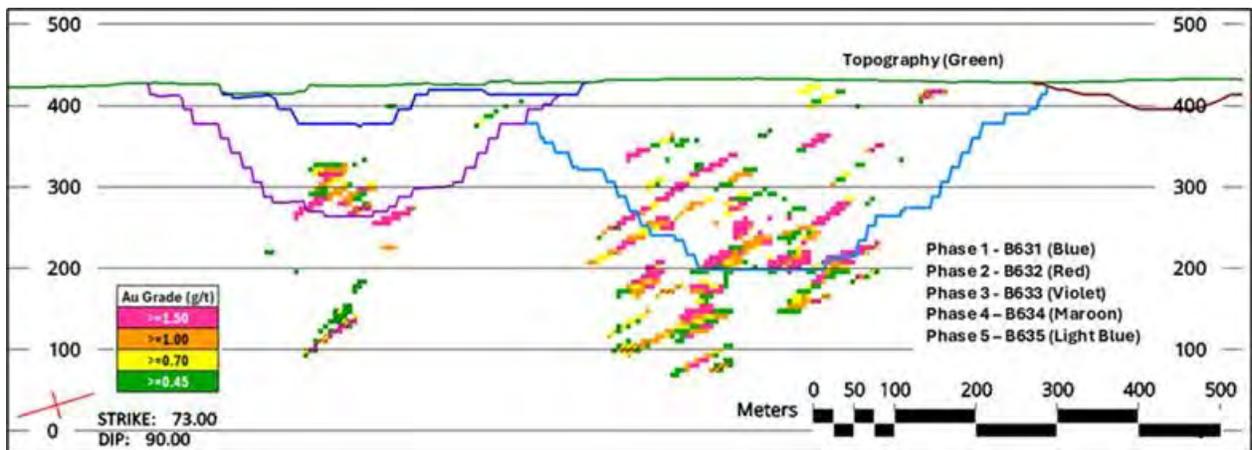
Figure 16-24: Berry Pit Designs, East-West Section 2



Source: MMTS 2026.

Note: EW2 as shown in Figure 16-19.

Figure 16-25: Berry Pit Designs, East-West Section 3

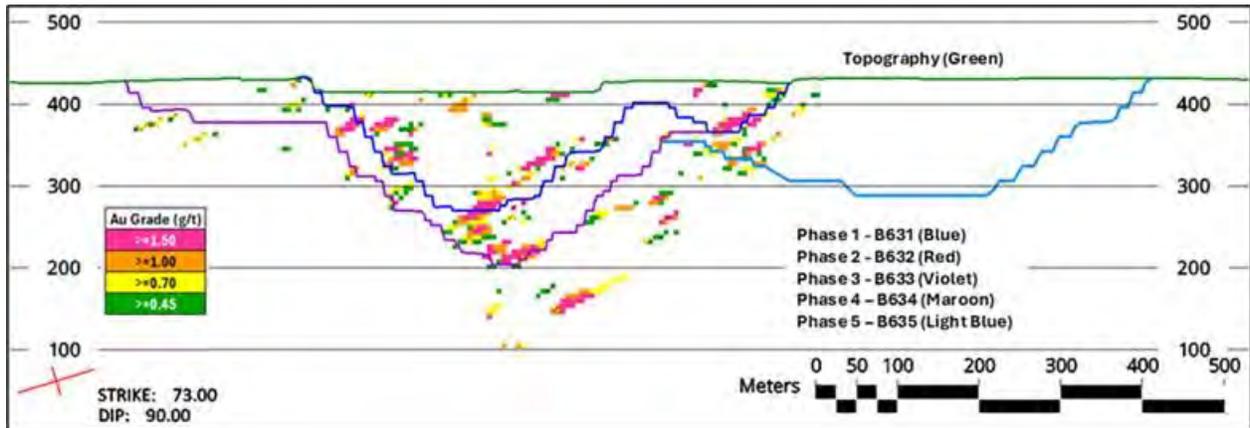


Source: MMTS 2026.

Note: EW3 as shown in Figure 16-19.



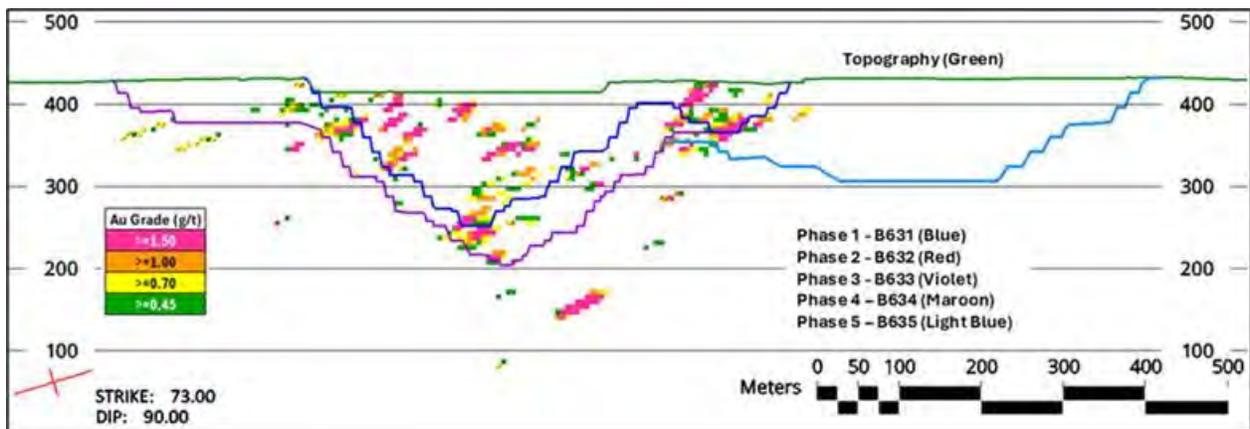
Figure 16-26: Berry Pit Designs, East-West Section 4



Source: MMTS 2026.

Note: EW4 as shown in Figure 16-19.

Figure 16-27: Berry Pit Designs, East-West Section 5



Source: MMTS 2026.

Note: EW5 as shown in Figure 16-19

16.3.5 Marathon Pit Designs

The phased Marathon pit designs are discussed below and shown in Figure 16-28 to Figure 16-31. Sections through the deposit showing gold grades are illustrated in Figure 16-32 and Figure 16-36.

Marathon Phase 1, M631 – This phase targets the high-grade, low-strip-ratio northeastern portion of the deposit. This phase contains about two years' worth of mill feed at pre-expansion mill throughput. It mines from the pit exit at the 340 m elevation, down to the phase bottom at the 170 m elevation. The main ramp runs counterclockwise down from the pit exit in the north.

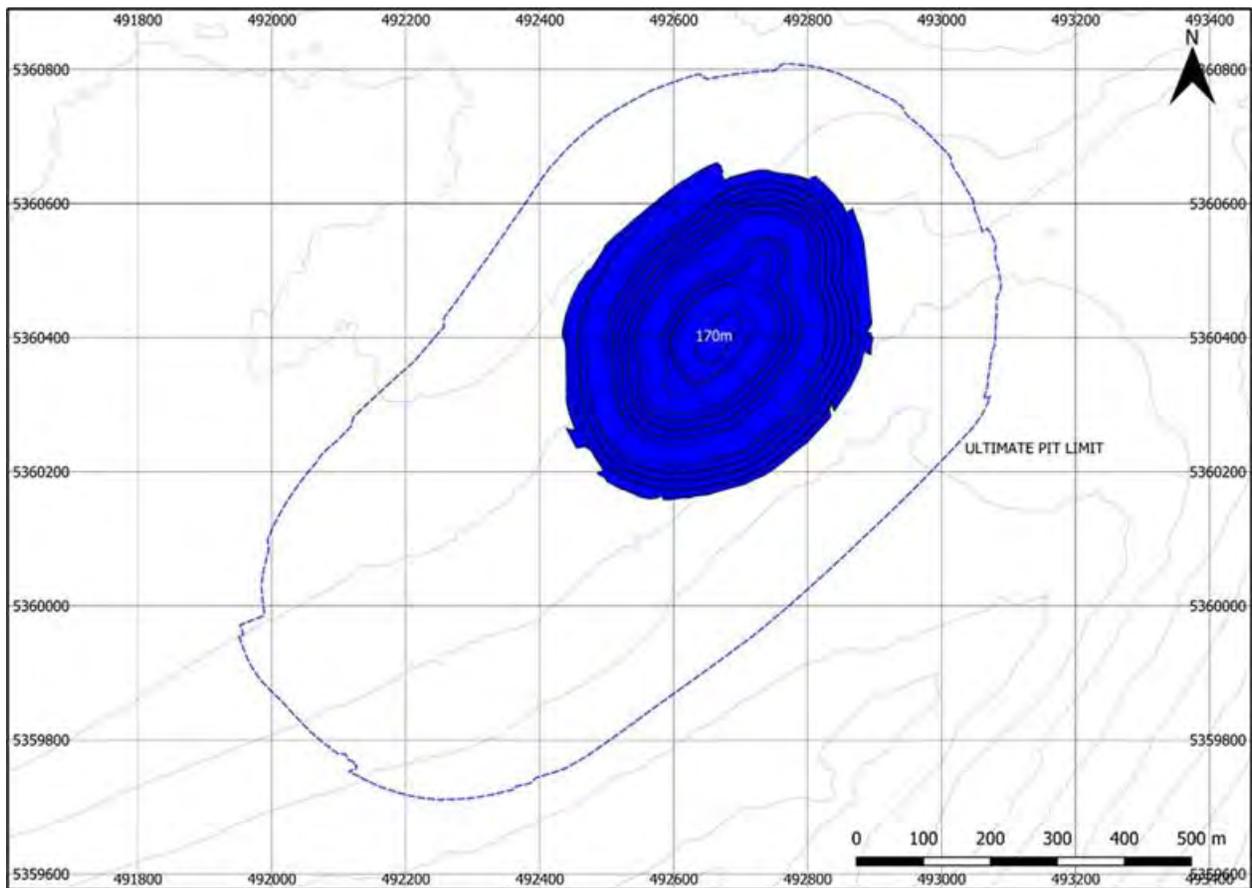
Marathon Phase 2, M632 – This phase targets the southwestern portion of shallower, lower strip ratio mineralization, expanding the pit to the southwest. This phase mines from the pit exit at the 345 m elevation, down to the two pit bottoms, both at the 206 m elevation. The main ramp runs counterclockwise from the pit exit in the north of the pit, with a small clockwise section between switchbacks at 308 and 278 m. A saddle is left between Phase 1 and Phase 2 at 296 m. A geotechnical berm is left at 314 m elevation.



Marathon Phase 3, M633 – This phase targets higher strip ratio mineralization below Phase 1. It pushes out around Phase 1 in all directions, and then mines down to the phase bottom of 104 m. This phase mines from the pit exit at the 370 m elevation. The main ramp runs counterclockwise down from the pit exit in the south of the pit. A saddle is left between Phase 2 and Phase 3 at about 236 m elevation. A geotechnical berm is left at 242 m elevation.

Marathon Phase 4, M634 – This phase targets higher strip ratio mineralization below the previous phases, and it pushes out in all directions. This phase mines from the pit exit at the 350 m elevation, down to the pit bottom at the 2 m elevation. The main ramp runs clockwise down from the pit exit in the west of the pit. Geotechnical berms are left behind at various elevations.

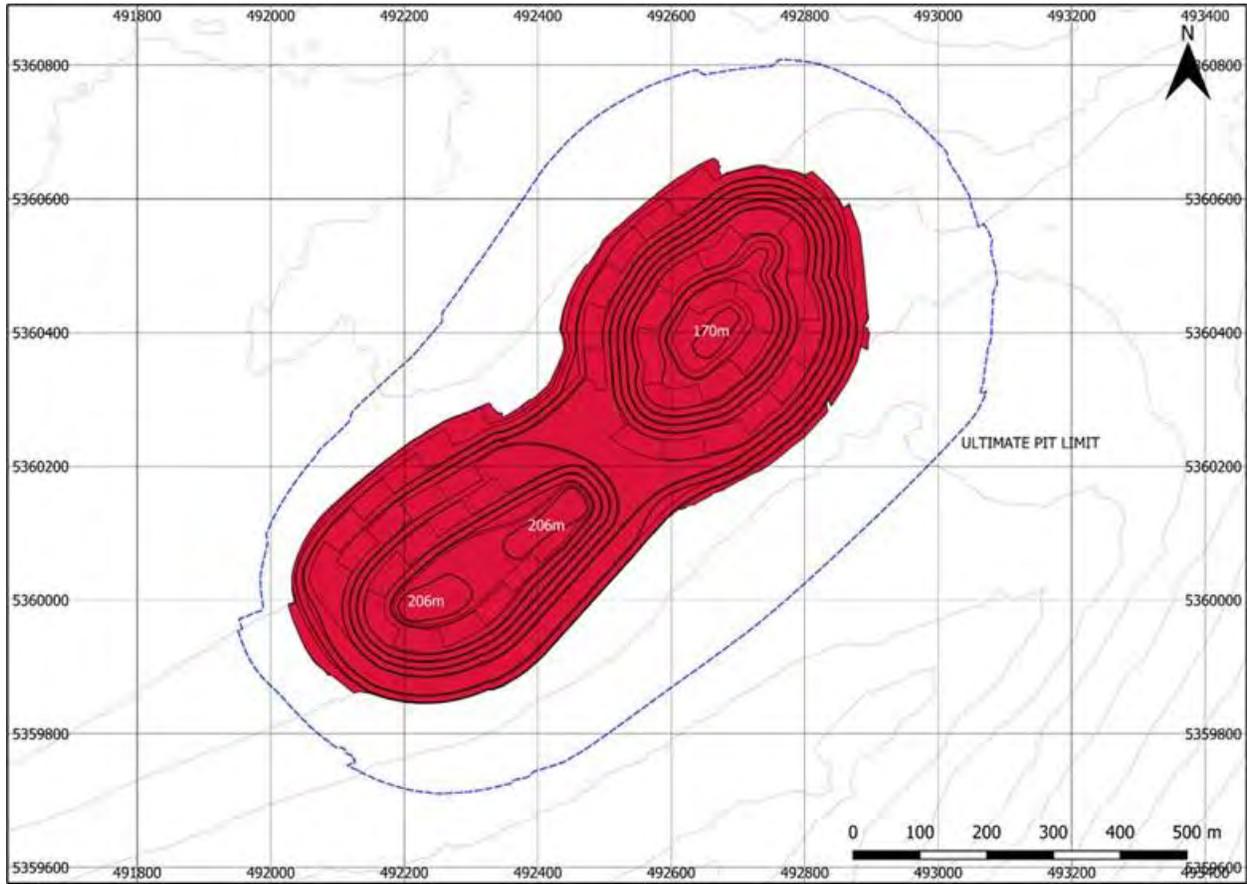
Figure 16-28: Marathon Phase 1 Pit, M631



Source: MMTS 2026.



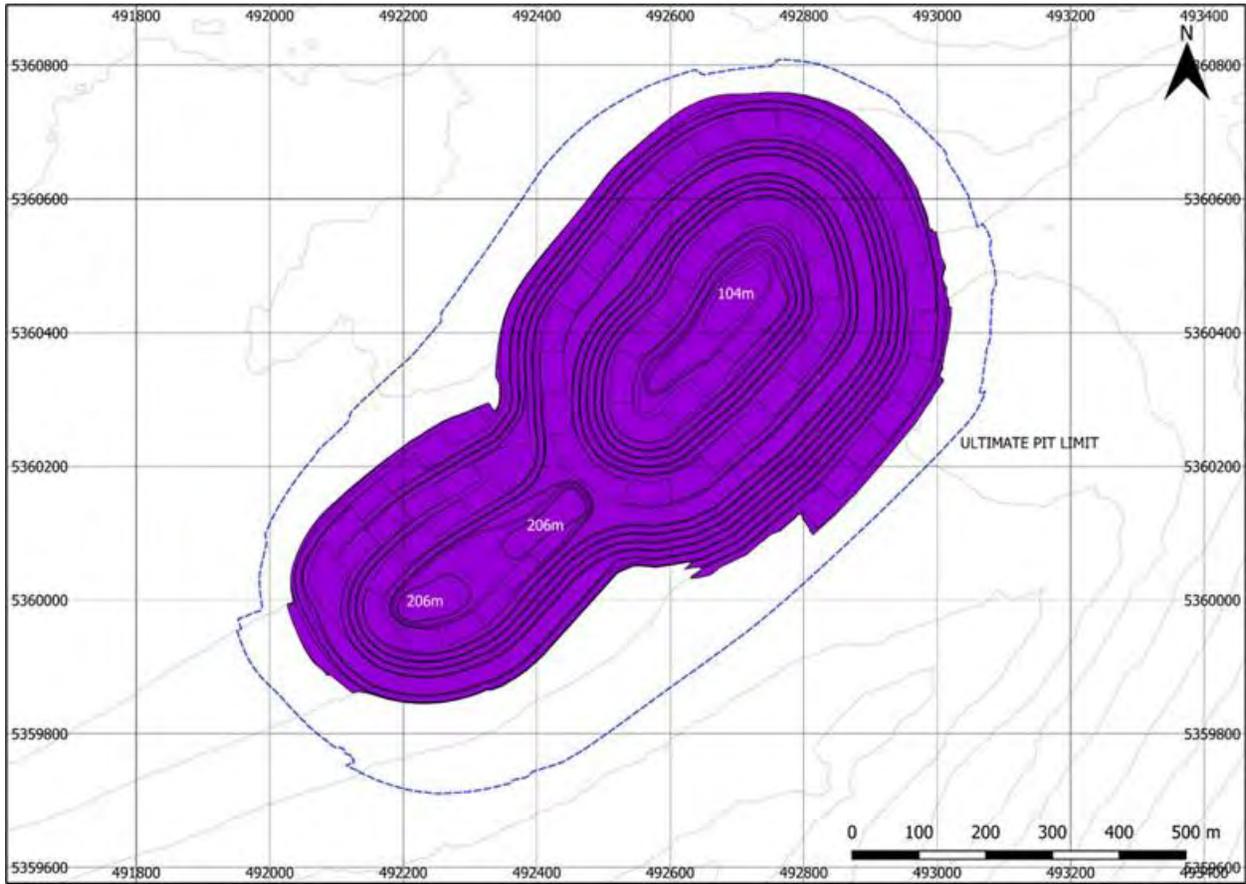
Figure 16-29: Marathon Phase 2 Pit, M632



Source: MMTS 2026.



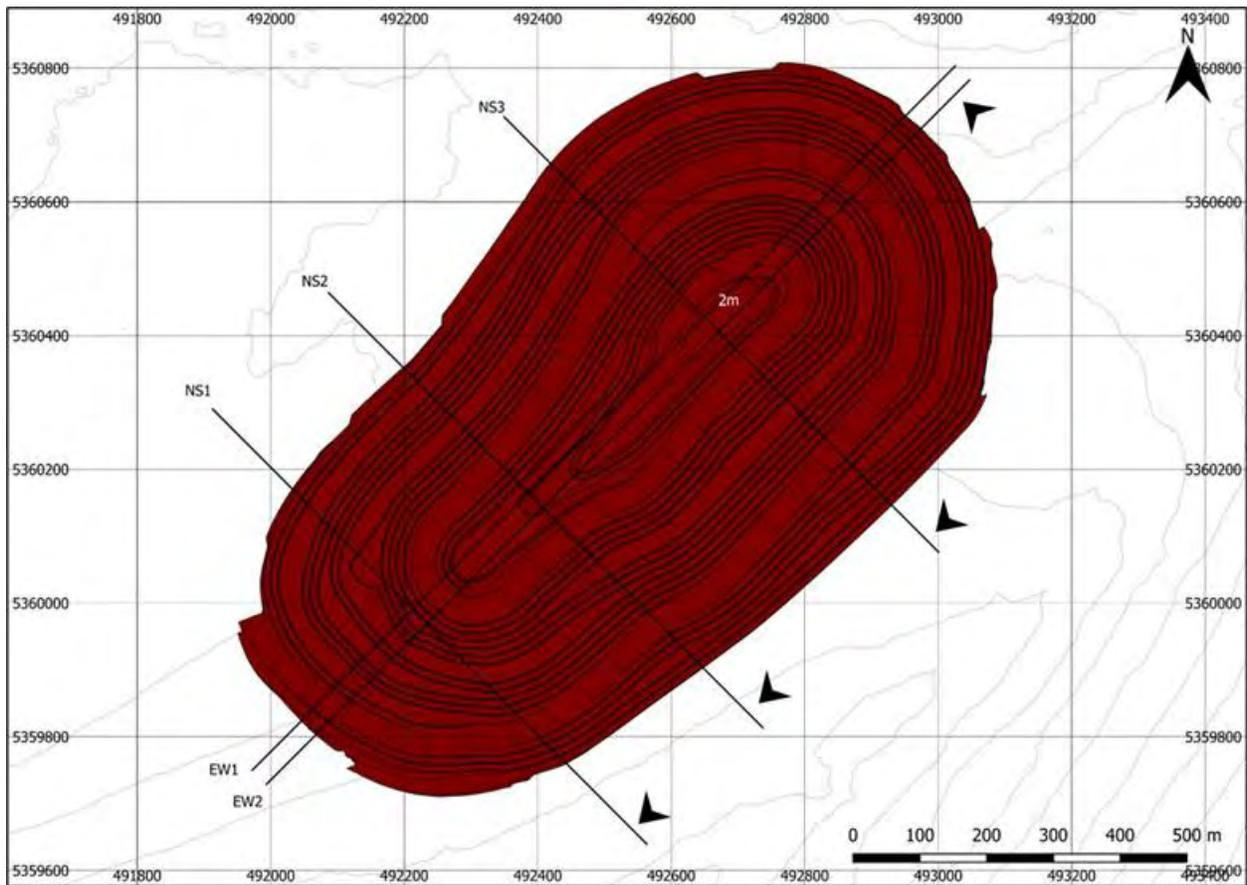
Figure 16-30: Marathon Phase 3 Pit, M633



Source: MMTS 2026.

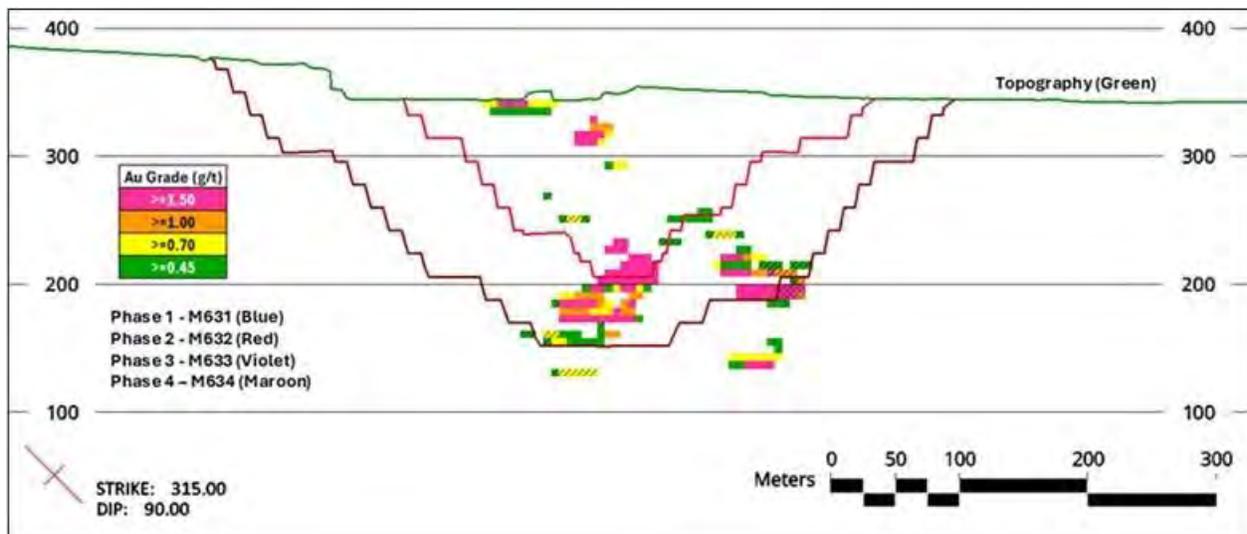


Figure 16-31: Marathon Phase 4 Pit, M634



Source: MMTS 2026.

Figure 16-32: Marathon Pit Designs, North-South Section 1

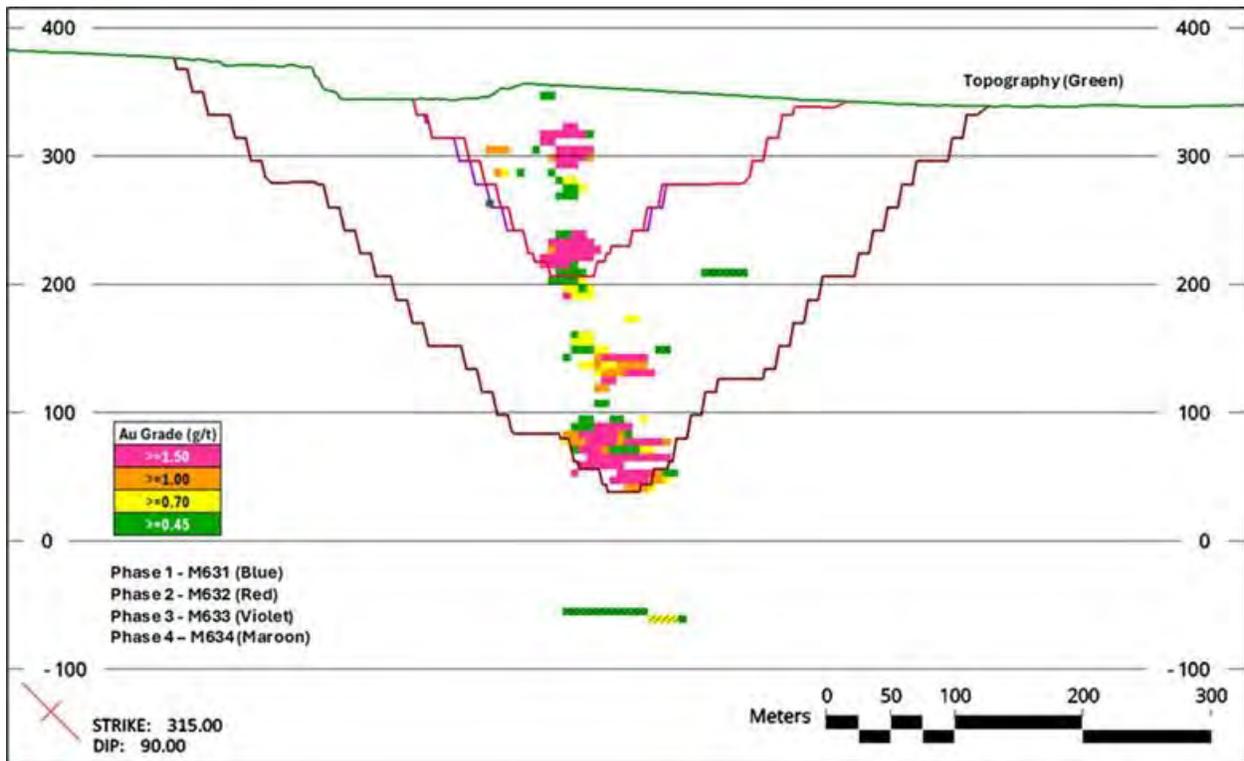


Source: MMTS 2026.

Note: NS1 as shown in Figure 16-31.



Figure 16-33: Marathon Pit Designs, North-South Section 2

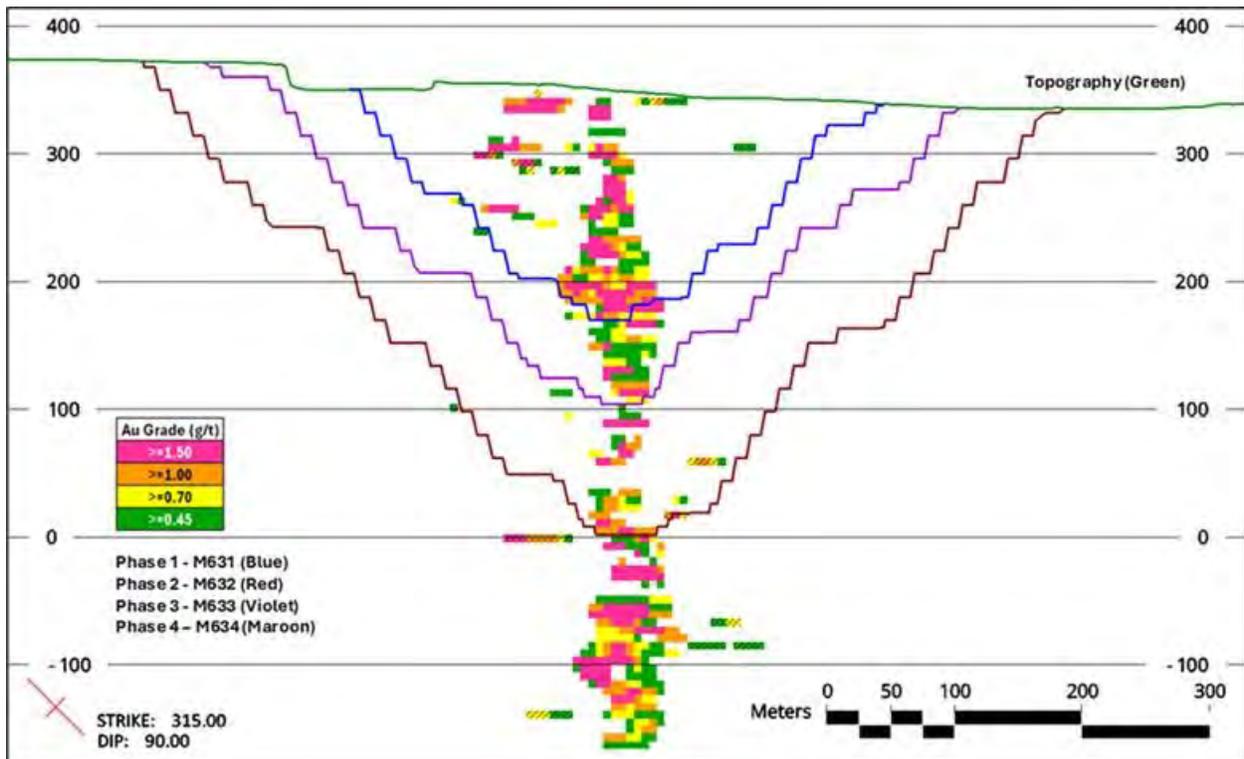


Source: MMTS 2026.

Note: NS2 as shown in Figure 16-31.



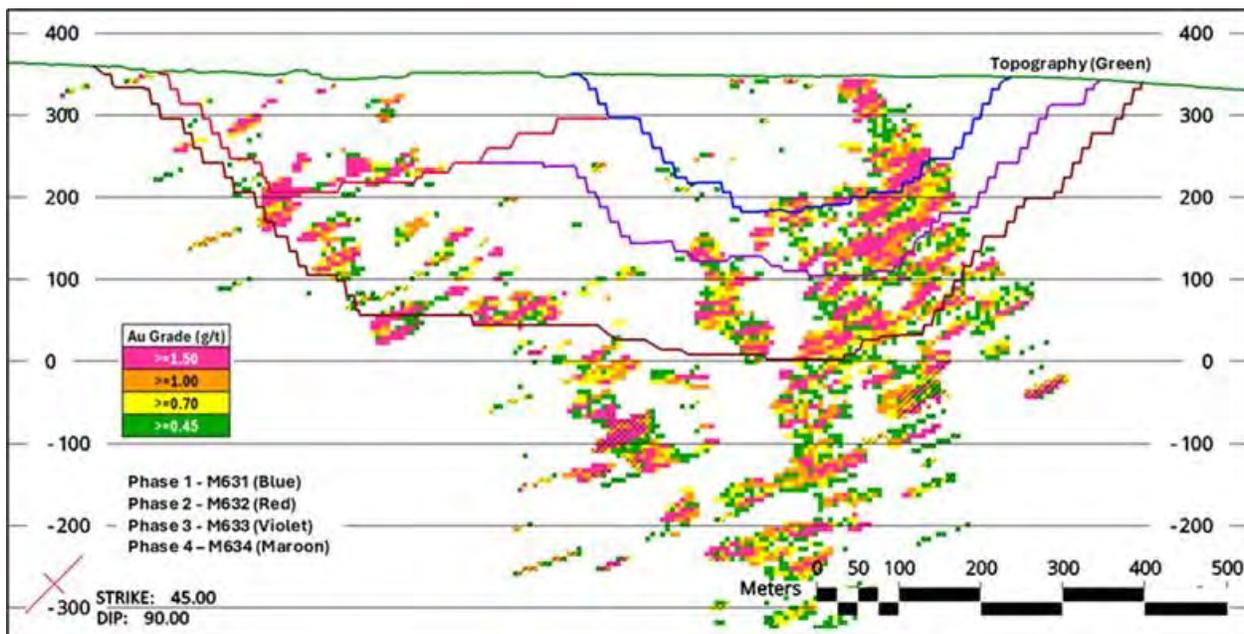
Figure 16-34: Marathon Pit Designs, North-South Section 3



Source: MMTS 2026.

Note: NS3 as shown in Figure 16-31.

Figure 16-35: Marathon Pit Designs, East-West Section 1

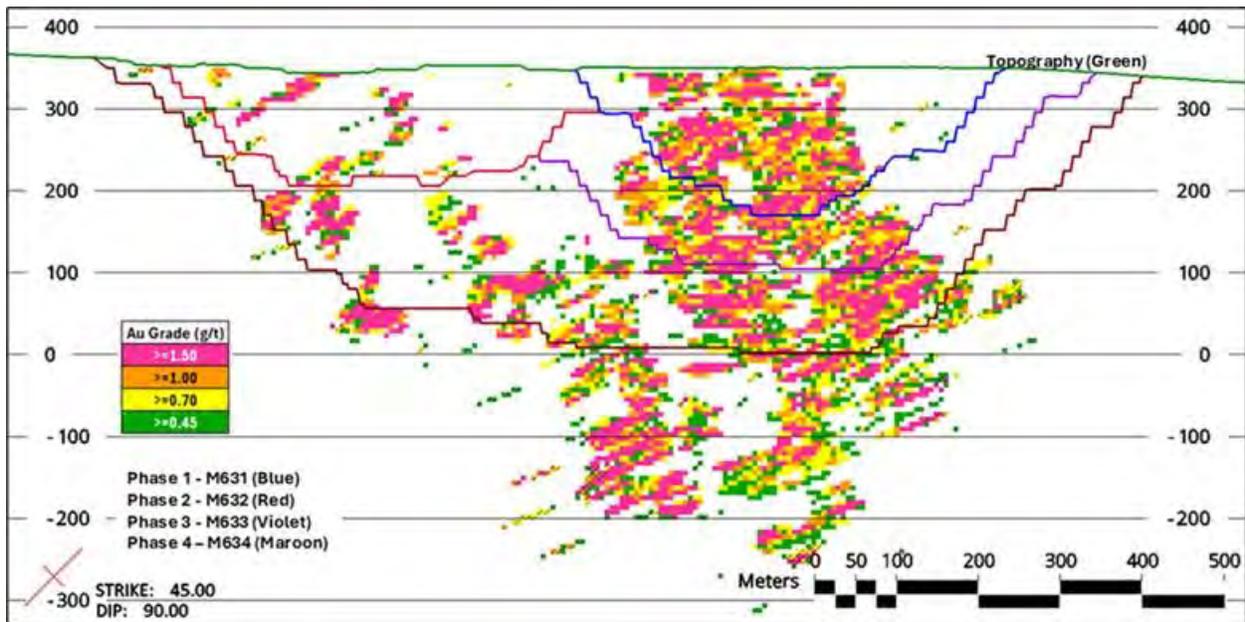


Source: MMTS 2026.

Note: EW1 as shown in Figure 16-31.



Figure 16-36: Marathon Pit Designs, East-West Section 2



Source: MMTS 2026.

Note: EW1 as shown in Figure 16-31.

16.4 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 scheduled destinations. The mine haul roads are designed with the following key inputs:

- 35 m wide ex-pit haul roads that incorporate a dual-lane running width and shoulder barriers on both edges of the haul road
- sized to handle 133-tonne rigid frame haul trucks
- 10% maximum grade.

The ex-pit haul roads are shown in the project layout drawing (Figure 16-37).

16.5 Ore Storage Facilities

Cut-off grade optimization has been carried out on the mine production schedule. Ore grades are divided into four grade bins:

- 1 High-grade (HG) ore has a grade equal to or larger than 1.5 g/t
- 2 High medium-grade (HMG) ore has a grade equal to or larger than 1.00 g/t, but less than 1.50 g/t
- 3 Medium-grade (MG) ore has a grade equal to or larger than 0.70 g/t, but less than 1.00 g/t
- 4 Low-grade (LG) ore has a grade equal to or larger than 0.45 g/t, but less than 0.70 g/t



When ore is mined from the pit, it will either be delivered to the crusher or the ore stockpiles. The crusher, the ROM stockpile for HG ore, and additional stockpiles for HMG and MG ore are located 3.5 km southwest of the Marathon pit limits, 3.0 km northeast of the Leprechaun pit limits and 1.0 km south of the Berry pit limits. Stockpiles for LG ore are stored between the pit and the mill.

The capacity of ore stockpiles is larger than the scheduled maximum ore stockpile balance. This accounts for realizing Inferred material that is not currently scheduled as ore, finding additional mill feed during RC drilling, and unplanned mill downtime. Specifically:

- HG ore does not stay in stockpile for long, as it is the priority mill feed, so the ROM HG stockpile is not designed with excess capacity.
- The combined HMG and MG stockpile is 85% larger than the scheduled maximum inventory.
- The Berry & Marathon and Leprechaun LG stockpiles are 168% and 190% larger than scheduled maximum inventory, respectively.
- At the Effective Date, stockpiles already existed for all grade bins. The actual inventories from December Month-end, 2025, are used in the schedule as a starting balance defined by a total tonnage and average grade.
- Stockpiled ore is reclaimed to the mill as needed to supplement mill feed. Higher-grade ore is preferentially fed to the mill in most cases, so if higher grade ore is available in stockpile, it is reclaimed to the mill, and the lower grade ore is stockpiled. Once higher-grade ore is unavailable, either directly from the pits or from a stockpile, lower-grade ore is sent directly to the crusher or reclaimed from the stockpile as needed to achieve target mill throughput.

The ore stockpiles are shown in the project layout drawing Figure 16-37.

16.6 Waste Storage Facilities and Stockpiles

Waste rock and overburden (OB) /topsoil (TS) storage facilities are planned at each site for waste materials from the open pit. In general, design considerations assumed the following:

- bottom-up construction
- 10 m lift heights for overburden/topsoil
- 15 m lift heights for waste rock
- 34° active slopes of overburden/topsoil lifts
- berm allowances push slopes out to 15° overall on overburden/topsoil piles
- 37° active slopes on waste rock lifts
- berm allowances push slopes out to 20° overall on waste rock piles, allowing for later reclamation
- minimize disturbance to existing waterbodies and watercourses.

The capacity and scheduled placement to each facility is shown in Table 16-5.



Table 16-5: Waste Facility Capacity and Scheduled Placement

Facility	LOM Material Scheduled (kt)	Capacity (kt)	LOM Scheduled / Capacity
Leprechaun WRSF	184,977	208,531	88.7%
Berry WRSF	238,161	242,210	98.3%
Marathon North WRSF	153,337	153,523	99.9%
Marathon South WRSF	30,073	30,073	100.0%
Leprechaun OB	908	3,171	28.6%
Marathon-Berry OB	7,329	12,277	59.7%
Leprechaun TS	48	601	8.0%
Berry TS	199	1,778	11.2%
Marathon TS	187	409	45.8%
Source: MMTS 2026.			



Test work suggests that some of the waste rock from all three deposits is potentially acid generating. The estimated proportion of waste rock with acid generating potential (including rock classified as either PAG or uncertain) is up to 4.0% from the Marathon pit, 1.0% from the Leprechaun pit, and 11% from the Berry pits. As mining progresses, waste rock and overburden are tested for acid potential. The overburden sample rate is one sample per 50 kt, and the rock sample rate is one sample per 9,000 kt. Identified potentially acid generating materials will be placed within the WRSFs, encapsulated by non-acid producing waste rock. The operational details of this are described in the Valentine Gold Mine Acid Rock Drainage and Metal Leaching (ARD/ML) Management Plan.

Waste rock from the Leprechaun pit will be stored directly southeast of the pit limits and built up to a crest elevation of 520 m. Topsoil from the pit will be stored in a pile 1.0 km northeast of the pit limits and overburden will be stored in a pile directly south of the pit limits to a crest elevation of 395 m.

Waste rock from the Berry pit will be stored directly north of the pit limits and built up to a crest elevation of 475 m, as well as backfilled into the mined out northeast lobe of the Berry pit with some overflow going to the Leprechaun WRSF. Topsoil from the pit will be stored in a pile 1.0 km southwest of the pit limits and overburden will be stored in a pile 1.5 km northeast of the pit limits. Overburden from Marathon and Berry are stored in the same facility, building up to a crest elevation of 420 m.

Waste rock from the Marathon pit will be stored in two piles directly northwest and southeast of the pit limits, as well as backfilled into mined out lobes of the Berry pit. The north pile is built up to a crest elevation of 445 m, the south pile is built up to a crest elevation of 405 m, and the Berry backfill is designed up to a crest elevation of 505 m above the northeast lobe of Berry pit, and 424 m in the central lobe. Topsoil from the pit will be stored in a pile 4.0 km southwest of the pit limits and overburden will be stored a pile 1.0 km southwest of the pit limits.

The waste rock, overburden, and topsoil storage facilities are shown in Figure 16-37.

16.7 Production Schedule

16.7.1 Overview

Production requirements by scheduled period, mine operating considerations, product prices, recoveries, destination capacities, haul cycle times, equipment performance and operating costs are used to determine the production schedule from the pit phase Mineral Reserves. The Mine plan supports a mill throughput of 5 Mt/a, after expansion, from an open pit, truck and shovel operation.

The production schedule is based on the following parameters:

- The Mineral Reserve estimate quantities are split by phase and bench.
- Monthly periods are scheduled for 2026 and 2027, followed by scheduling on quarterly periods from 2028 to 2030; the remaining operations are scheduled on annual periods.
- Production at the Marathon deposit is planned to be shut down for four to six weeks in April and four weeks in November for the caribou migration through the mine operations area. The Leprechaun and Berry deposits are assumed to be unaffected.
- Within a given phase, each bench is fully mined before progressing to the next bench.



- Pit phases are mined in sequence, where the later overlapping phase does not mine below the earlier phase.
- Pit phase vertical progression is limited to no more than 48 m in each year; average annual phase progression is 6 benches, or 36 m.
- Ore tonnes released in excess of the mill capacity are stockpiled. At the start of the schedule, there is an existing stockpile with a total of 1,563 kt at 0.92 g/t.

The open pit mine production schedule showing production tonnages and grade forecasts is included as Table 16-6 and shown graphically as Figure 16-38; Figure 16-39 provides an illustration of the projected material mined and strip ratio. This is illustrated for each individual deposit in Figure 16-40 to Figure 16-45.

16.7.2 Mining Sequence

Pit operations continue from 2026 to 2037. Stockpile reclaim operations will also complete in 2037. LOM activities are summarized in Table 16-7.

The final layout plans for Leprechaun, Berry, and Marathon are illustrated in Figure 16-46, Figure 16-47, and Figure 16-48 respectively. End-of-period drawings representing the end of 2026, 2027, 2028, 2029, 2030 and 2037 are shown for Leprechaun, Berry, and Marathon in Figure 16-49 to Figure 16-66. The LOM production schedule includes mining of approximately 679 Mt of material, at an average LOM strip ratio of approximately 12.6:1, and milling of approximately 51.5 Mt of ore.



Table 16-6: Mine Production Schedule

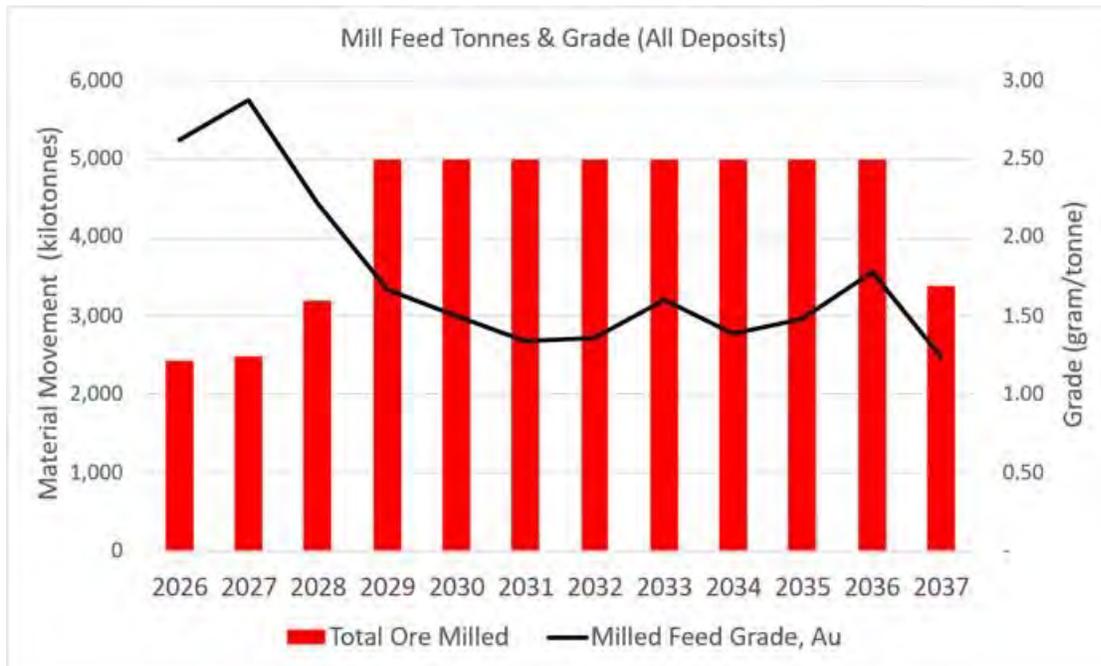
Total Mine Production		LOM	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Mill Feed	kt	51,490	2,434	2,477	3,200	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	3,380
Mill Feed Grade, Au	g/t	1.66	2.62	2.87	2.22	1.67	1.50	1.34	1.36	1.60	1.39	1.48	1.78	1.24
Mill Feed Contained Metal	koz	2,748	205	229	229	268	242	216	219	258	223	238	287	134
Ore Mined from Pit	kt	49,926	5,599	5,372	4,695	4,591	3,323	3,489	4,253	4,645	2,880	3,606	5,042	2,431
Ore Grade from Pit, Au	g/t	1.68	1.70	1.79	1.60	1.57	1.79	1.56	1.48	1.68	1.93	1.81	1.77	1.50
Ore Mined to Stockpile	kt	11,300	3,529	3,246	2,147	1,593	742	0	0	0	0	0	42	0
Ore to Stockpile Grade, Au	g/t	0.91	1.06	1.00	0.76	0.73	0.66	0.00	0.00	0.00	0.00	0.00	0.58	0.00
Stockpile Reclaim to Mill	kt	12,863	364	351	652	2,002	2,419	1,511	747	355	2,120	1,394	0	949
Stockpile Grade to Mill, Au	g/t	0.91	1.73	2.13	1.89	1.14	0.86	0.84	0.65	0.65	0.65	0.62	0.00	0.57
Total Waste from Pit	kt	629,170	50,543	68,518	75,305	74,309	76,677	69,285	71,696	58,109	41,066	27,312	13,527	2,824
Total Mined from Pits	kt	679,097	56,142	73,889	80,000	78,900	80,000	72,775	75,949	62,754	43,946	30,919	18,568	5,255
Total Moved	kt	691,960	56,506	74,240	80,652	80,902	82,419	74,285	76,696	63,109	46,066	32,312	18,568	6,204
Leprechaun														
Ore Mined from Pit	kt	14,245	1,905	1,207	57	209	754	1,464	1,472	2,031	1,685	1,498	1,518	446
Ore Grade from Pit, Au	g/t	1.89	1.62	2.56	1.18	1.87	1.63	1.61	1.48	1.60	2.13	2.39	2.06	2.25
Waste Tonnes from Pit	kt	171,040	12,583	4,603	9,274	17,139	32,880	15,771	28,258	23,372	14,655	8,400	3,647	460
Berry														
Ore Mined from Pit	kt	13,864	2,339	1,714	2,008	2,794	2,383	1,284	835	506	0	0	0	0
Ore Grade from Pit, Au	g/t	1.65	1.76	1.70	1.49	1.47	1.86	1.52	1.64	2.02	0.00	0.00	0.00	0.00
Waste Tonnes from Pit	kt	181,229	22,870	33,970	46,555	41,235	17,804	11,888	5,754	1,154	0	0	0	0
Marathon														
Ore Mined from Pit	kt	21,817	1,355	2,451	2,630	1,588	186	741	1,947	2,107	1,195	2,109	3,524	1,985
Ore Grade from Pit, Au	g/t	1.57	1.69	1.47	1.70	1.71	1.49	1.53	1.42	1.67	1.65	1.41	1.65	1.33



Total Mine Production		LOM	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Waste Tonnes from Pit	kt	276,901	15,090	29,945	19,477	15,935	25,993	41,626	37,684	33,583	26,412	18,912	9,880	2,364
High-Grade Stockpile Balance														
Quantity	kt		401	357	0	0	0	0	0	0	0	0	0	0
Grade	g/t		2.44	2.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
High Medium-Grade Stockpile Balance														
Quantity	kt		1,234	2,202	2,090	89	0	0	0	0	0	0	0	0
Grade	g/t		1.14	1.15	1.14	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medium-Grade Stockpile Balance														
Quantity	kt		1,404	2,275	3,245	3,841	1,511	0	0	0	0	0	0	0
Grade	g/t		0.84	0.85	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Low-Grade Stockpile Balance														
Quantity	kt		1,690	2,790	3,784	4,781	5,523	5,523	4,776	4,421	2,301	907	949	0
Grade	g/t		0.59	0.61	0.62	0.63	0.63	0.63	0.63	0.63	0.60	0.57	0.57	0.00
Source: MMTS 2026.														
Notes:														
1. "Ore Mined from Pit" includes both ore to the mill directly and ore to stockpile.														

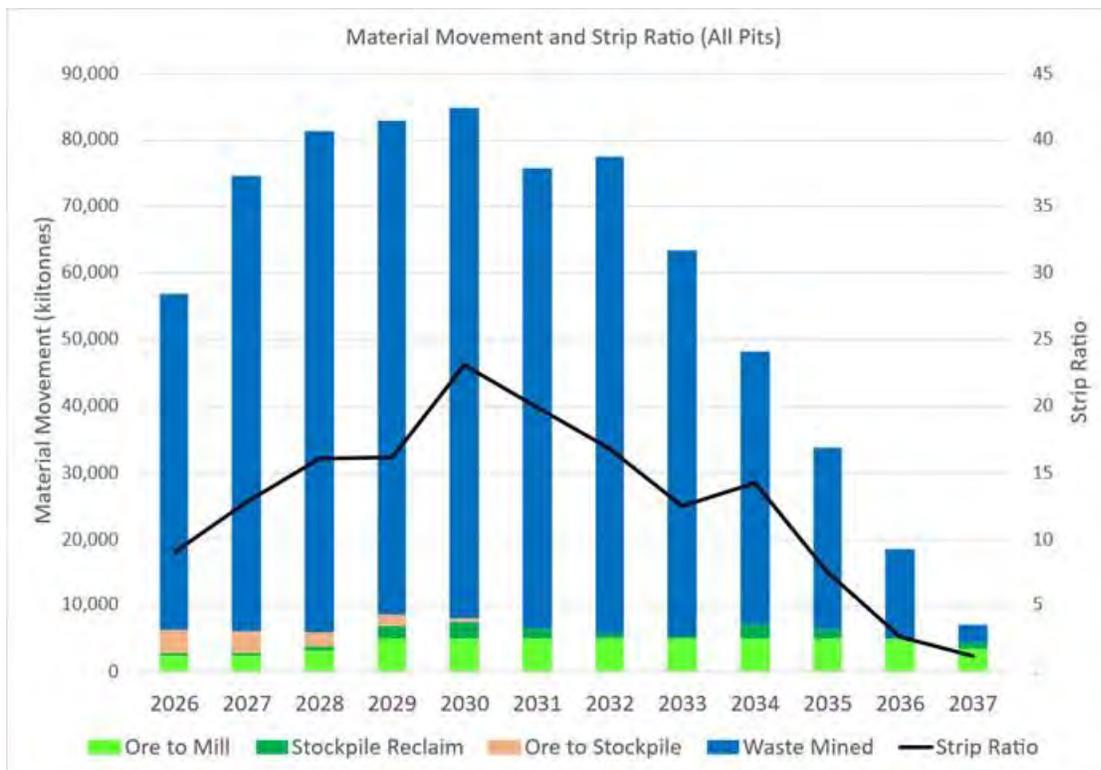


Figure 16-38: Production Schedule, Mill Feed Tonnes & Grade (All Pits)



Source: MMTS 2026.

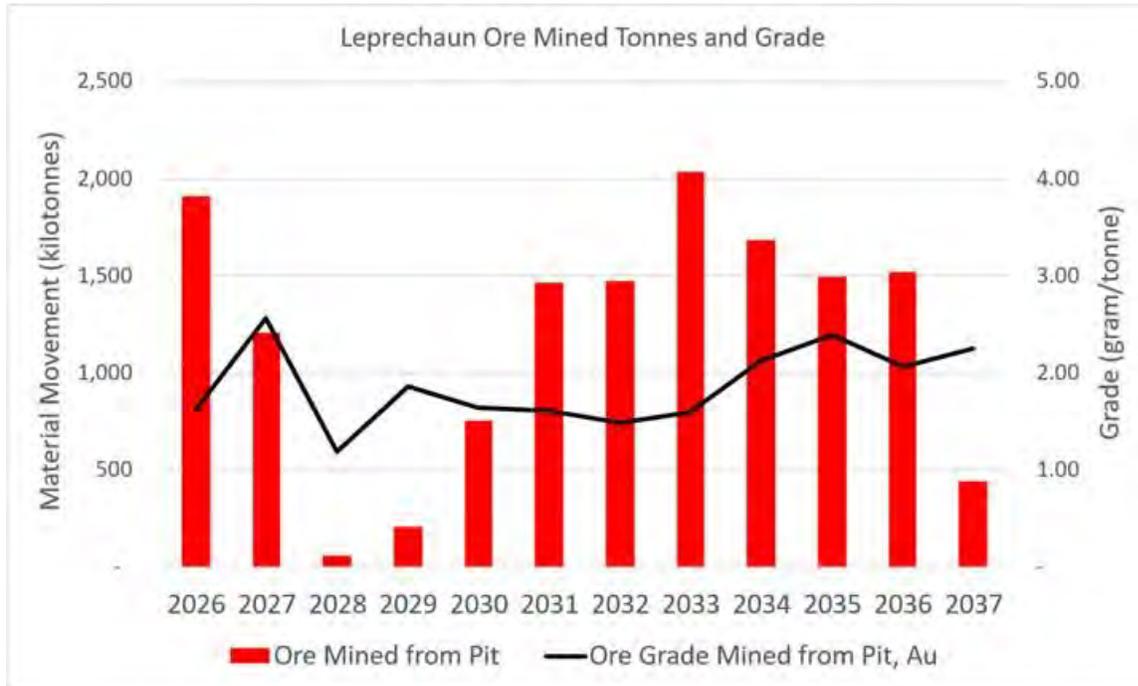
Figure 16-39: Mine Production Schedule, Total Material Movement & Strip Ratio (All Pits)



Source: MMTS 2026.

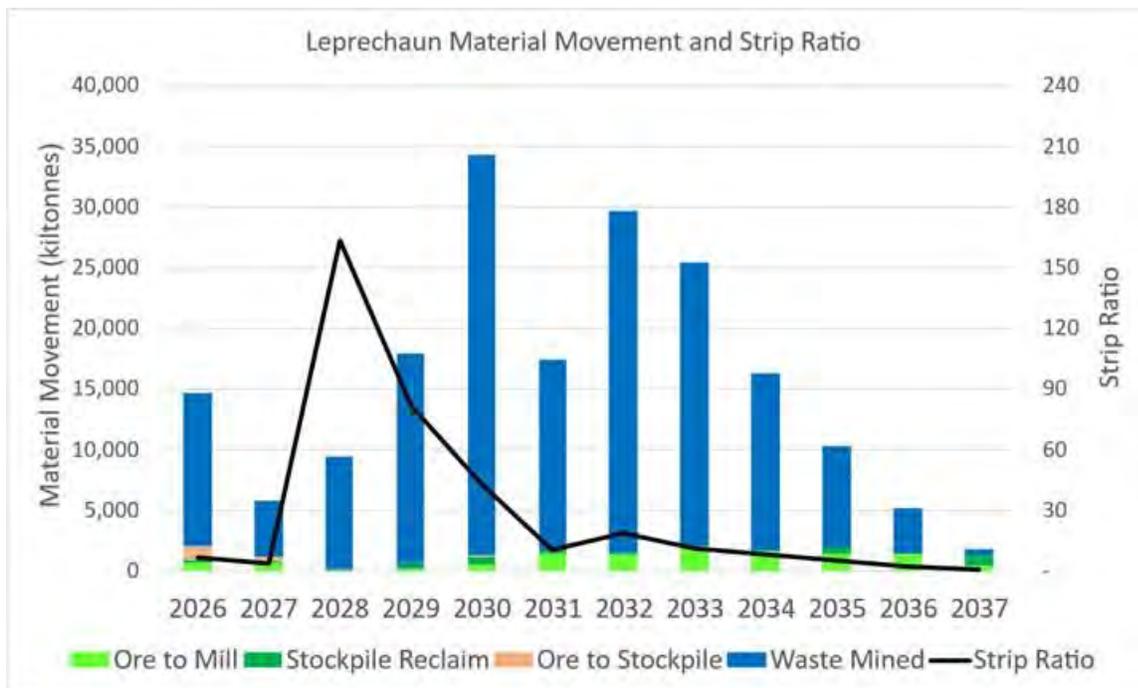


Figure 16-40: Leprechaun Production Schedule, Ore Mined Tonnes & Grade



Source: MMTS 2026.

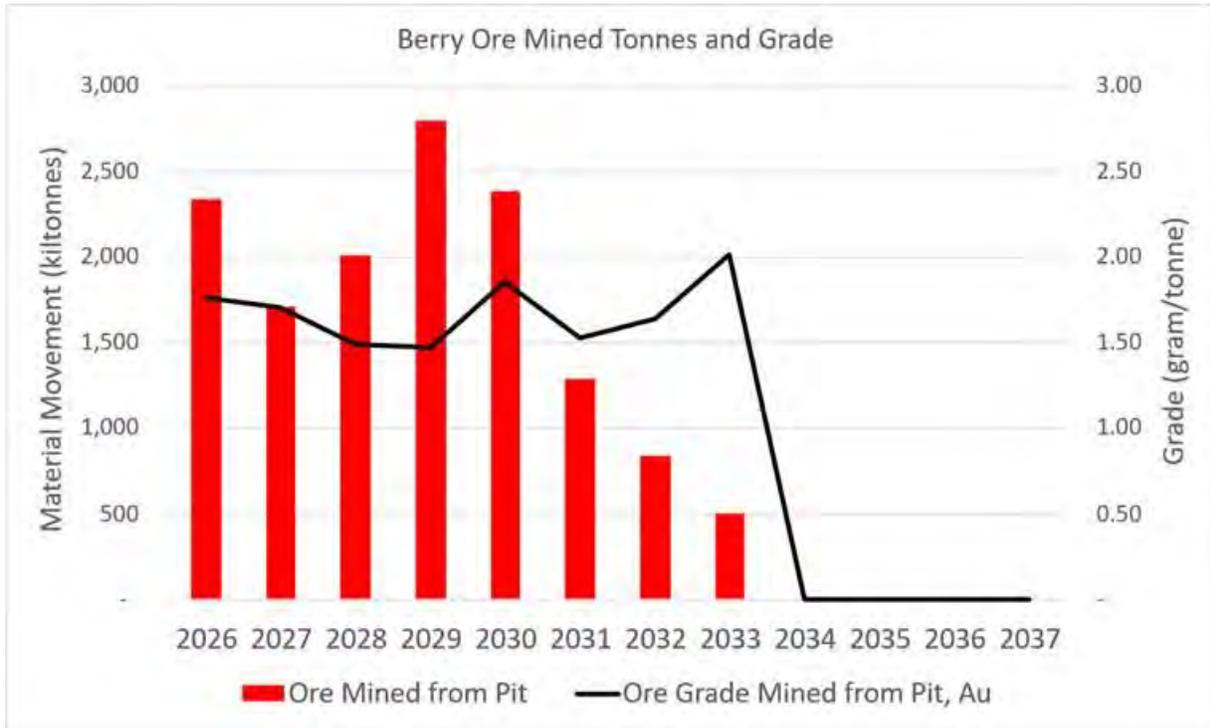
Figure 16-41: Leprechaun Mine Production Schedule, Total Material Movement & Strip Ratio



Source: MMTS 2026.

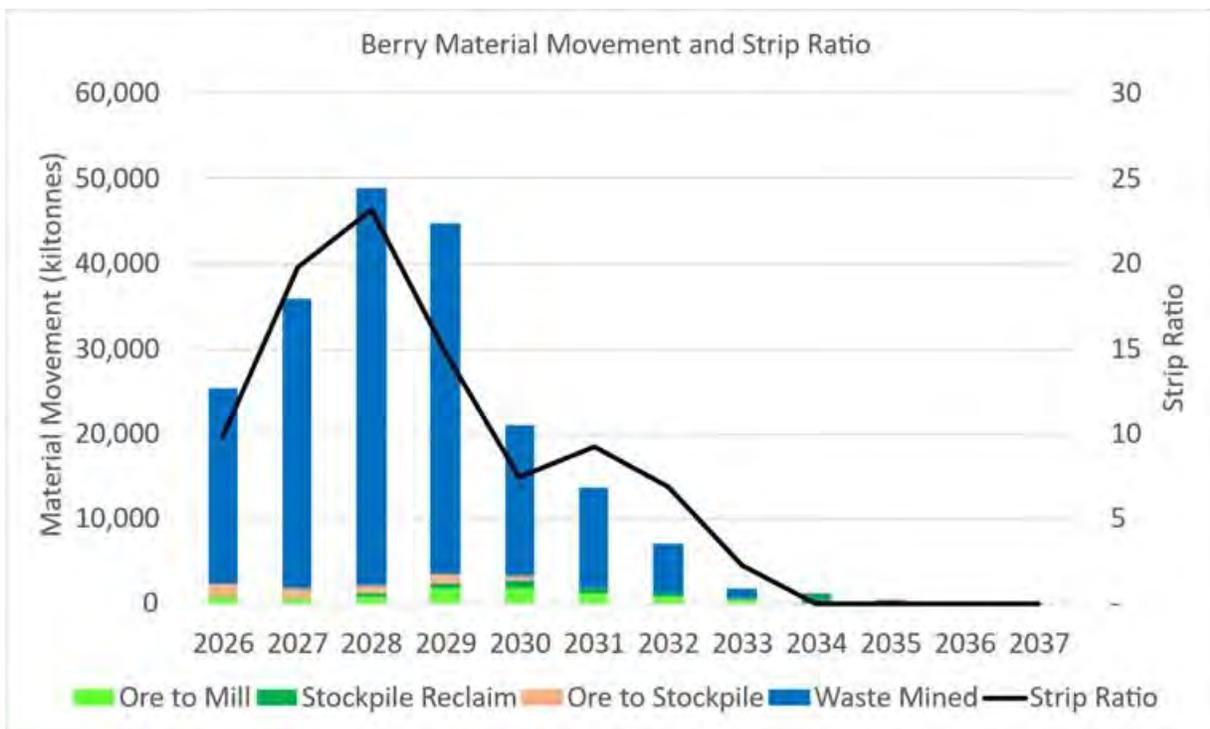


Figure 16-42: Berry Production Schedule, Ore Mined Tonnes & Grade



Source: MMTS 2026.

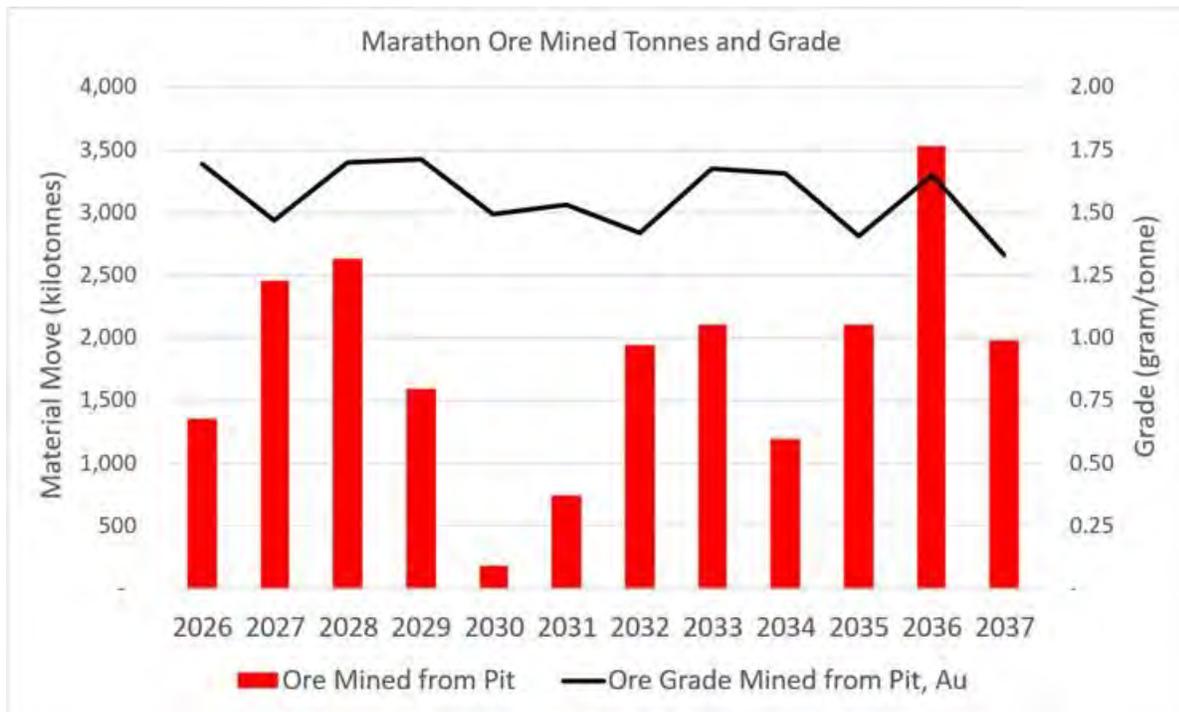
Figure 16-43: Berry Mine Production Schedule, Total Material Movement & Strip Ratio



Source: MMTS 2026.



Figure 16-44: Marathon Production Schedule, Ore Mined Tonnes & Grade



Source: MMTS 2026.

Figure 16-45: Marathon Mine Production Schedule, Total Material Movement & Strip Ratio



Source: MMTS 2026.



Table 16-7: Annual Mine Operations

Year	Activity
2026	Remaining tree clearing, grubbing, and topsoil removal will be completed for all pit phases and dump footprints. Leprechaun Phase 1 mining continues. Berry Phase 1 and 2 mining continue. Phase 3 mining starts. Marathon Phase 1 continues. Phase 2 mining starts.
2027	Leprechaun Phase 1 mining completed. Phase 2 mining starts. Berry Phase 2 mining completed. Phase 1 and 3 mining continue. Phase 4 and 5 mining starts. Marathon Phase 1 and 2 mining continues. Phase 3 mining starts.
2028	Leprechaun Phase 2 mining continues. Berry Phase 1, 3, 4 and 5 mining continues. Marathon Phase 1, 2 and 3 mining continues.
2029	Leprechaun Phase 2 mining continues. Phase 3 mining starts. Berry Phase 1 mining completed. Phase 3, 4 and 5 mining continues. Marathon Phase 1 and 2 completed. Phase 3 mining continues. Phase 4 mining starts.
2030	Leprechaun Phase 2 and 3 mining continue. Berry Phase 3, 4 and 5 mining continue. Marathon Phase 3 and 4 pit mining continue.
2031 to 2037	Leprechaun Phase 2 mining completed in 2033. Phase 3 mining completed in 2037. Berry Phase 3 mining completed in 2031 and the empty pit is available for tailings placement. Phase 4 mining completed in 2031 and backfill of waste into this empty pit starts immediately. Phase 5 mining completed in 2033 and waste backfill from Marathon Phase 4 into the empty pit starts immediately. Completion of Phase 5 also makes the empty pit available for tailings placement. Marathon Phase 3 mining completed in 2033. Phase 4 mining completed in 2037.

Source: MMTS 2026.



Figure 16-46: Leprechaun Layout Plan

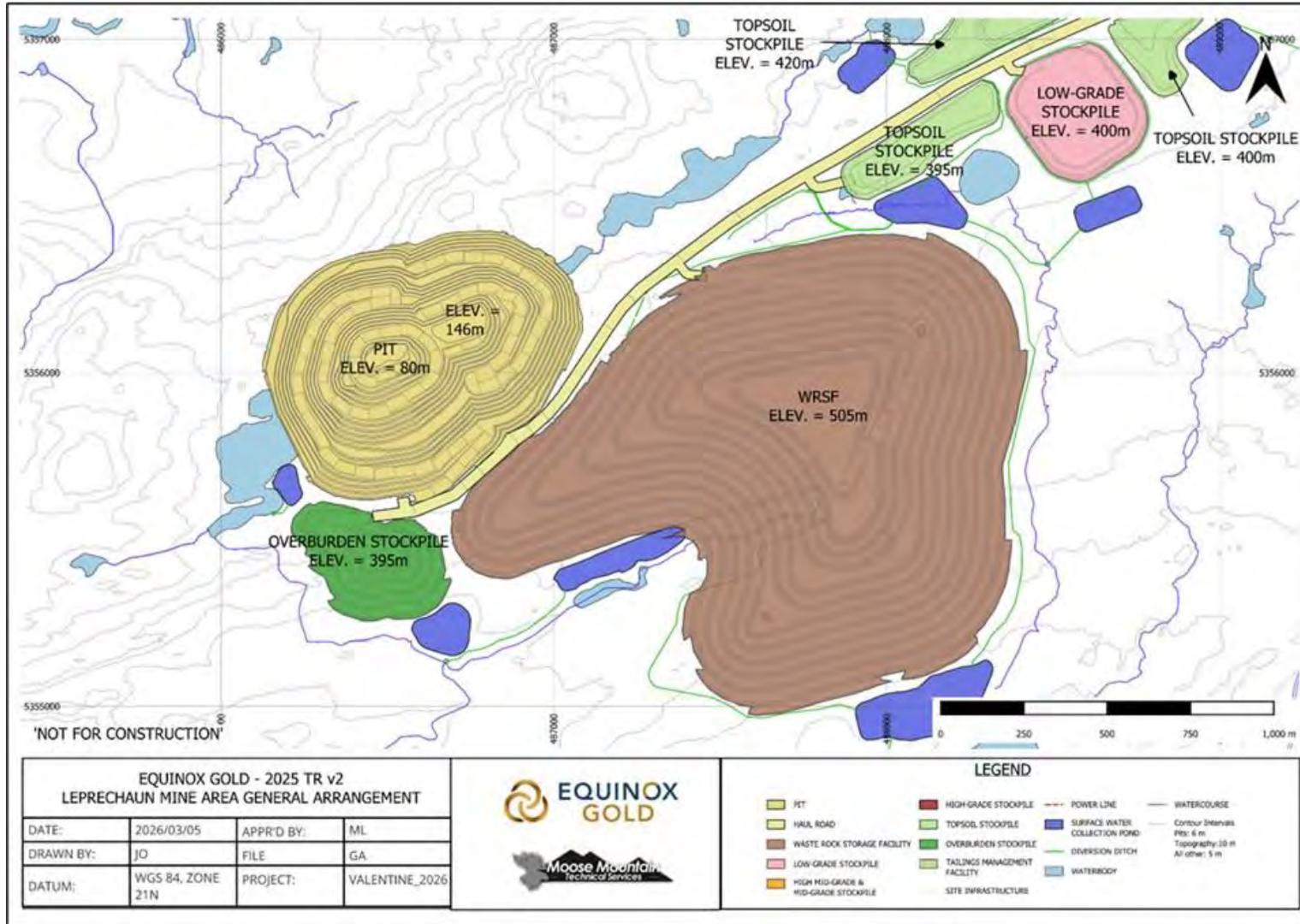


Figure 16-47: Berry Layout Plan

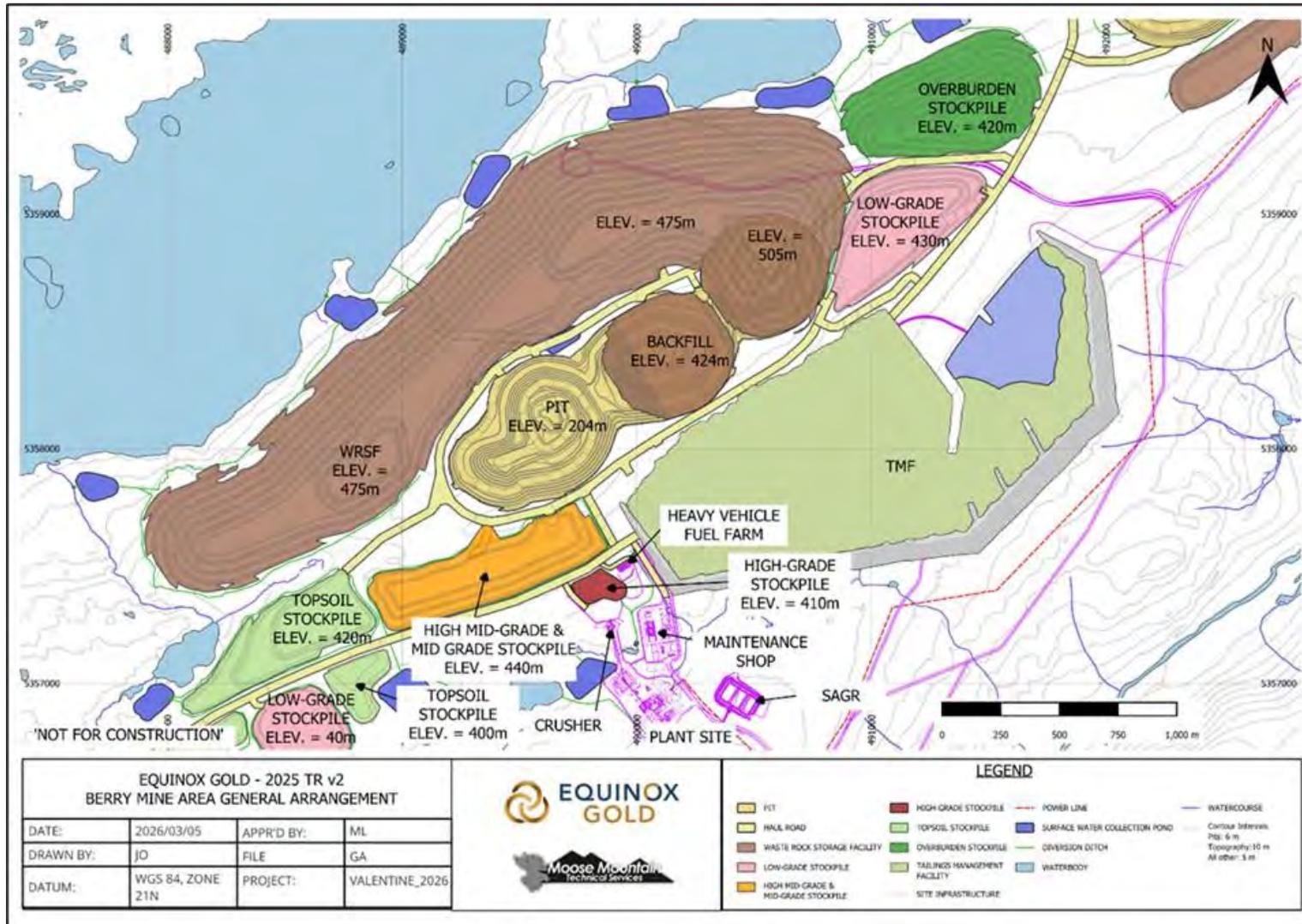


Figure 16-48: Marathon Layout Plan

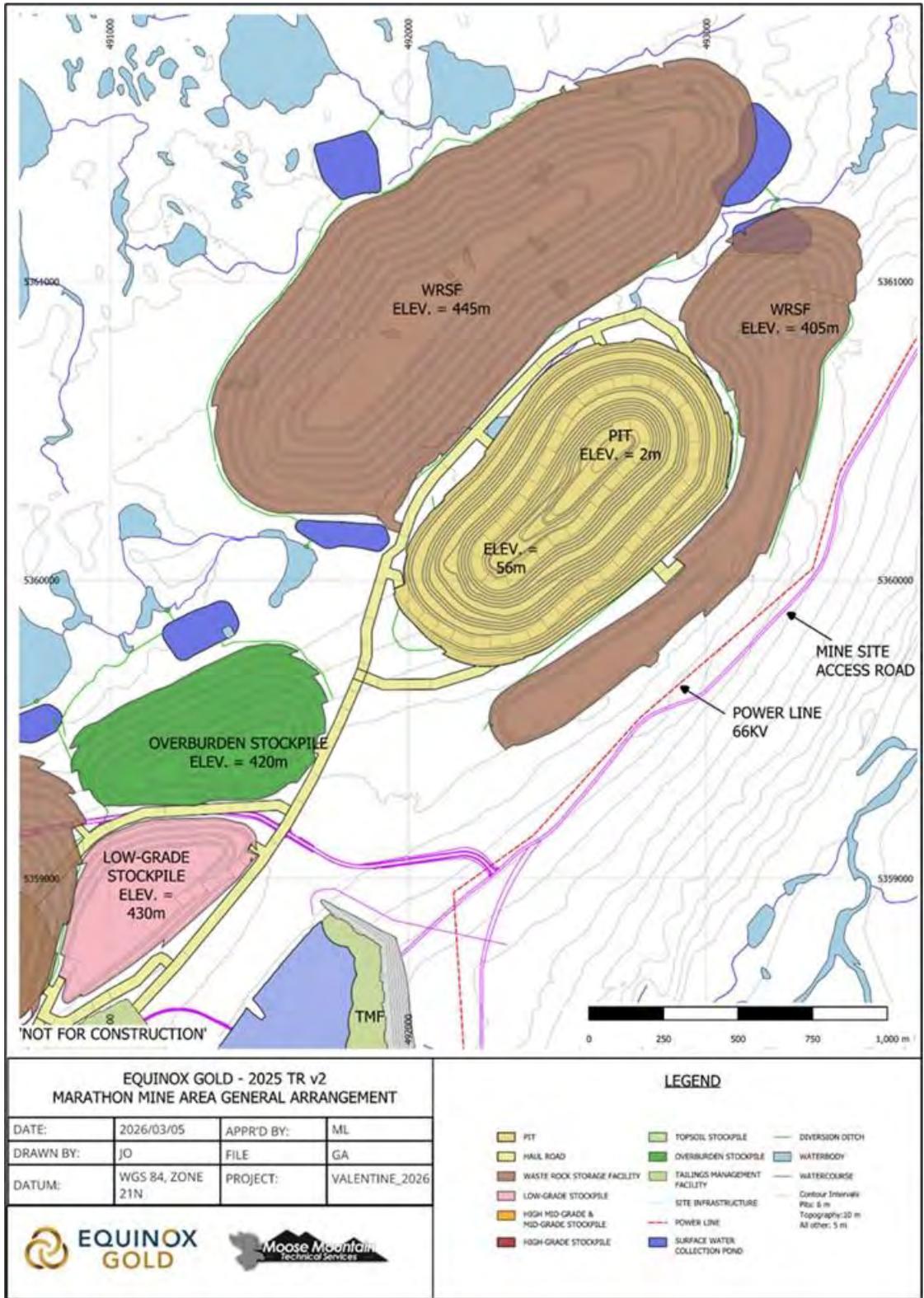


Figure 16-49: Leprechaun End of Period – 2026

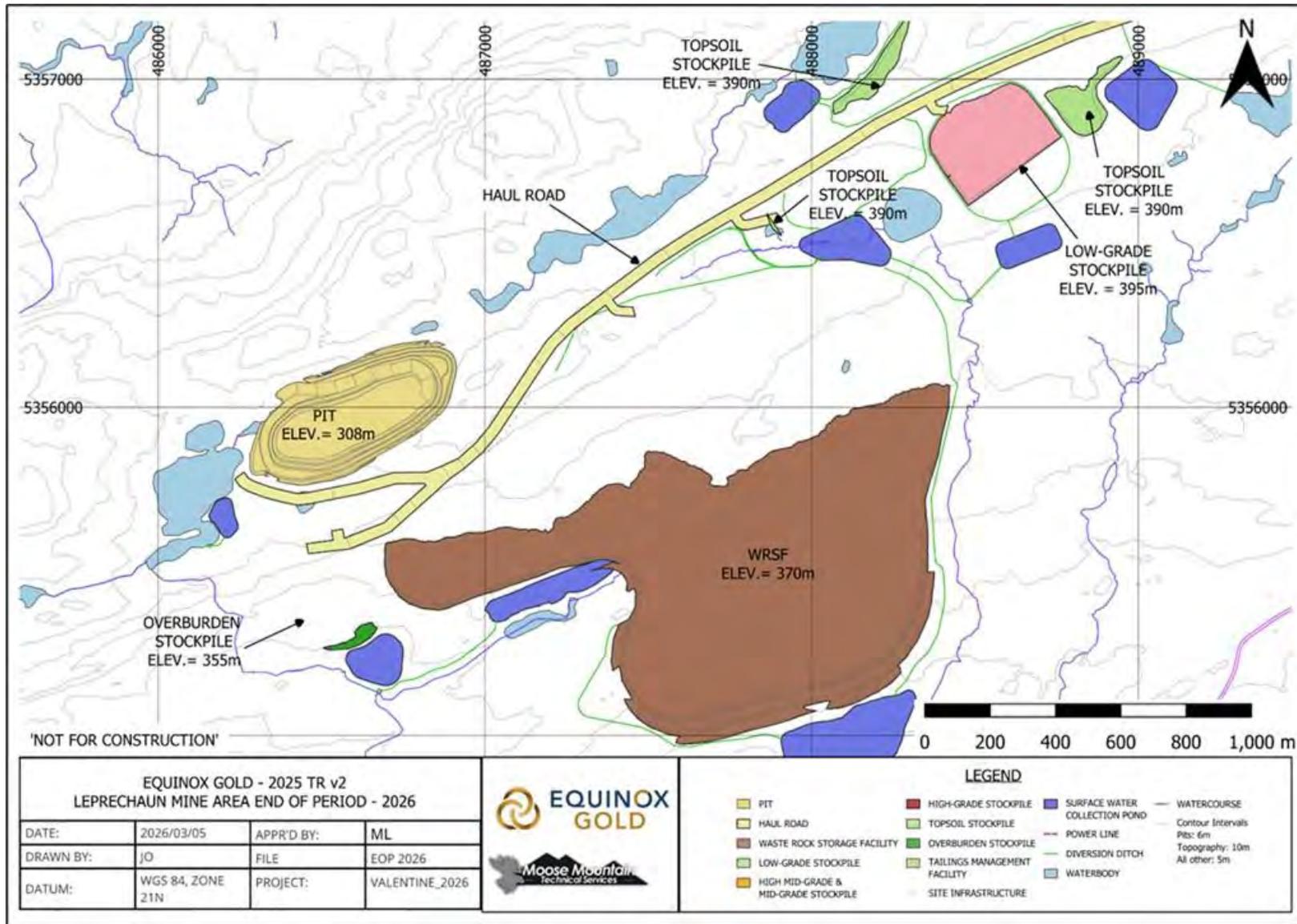


Figure 16-50: Leprechaun End of Period – 2027

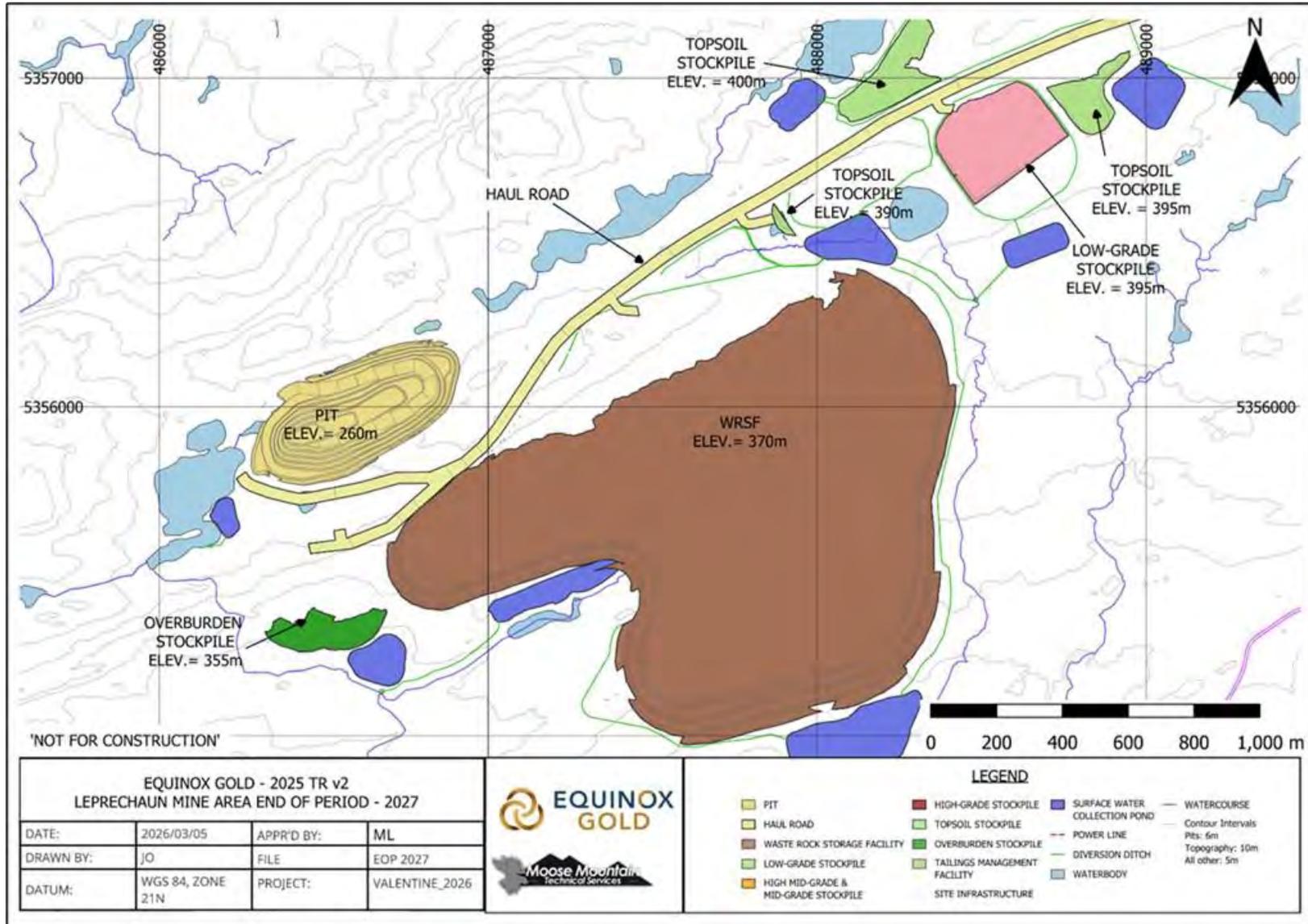


Figure 16-51: Leprechaun End of Period – 2028

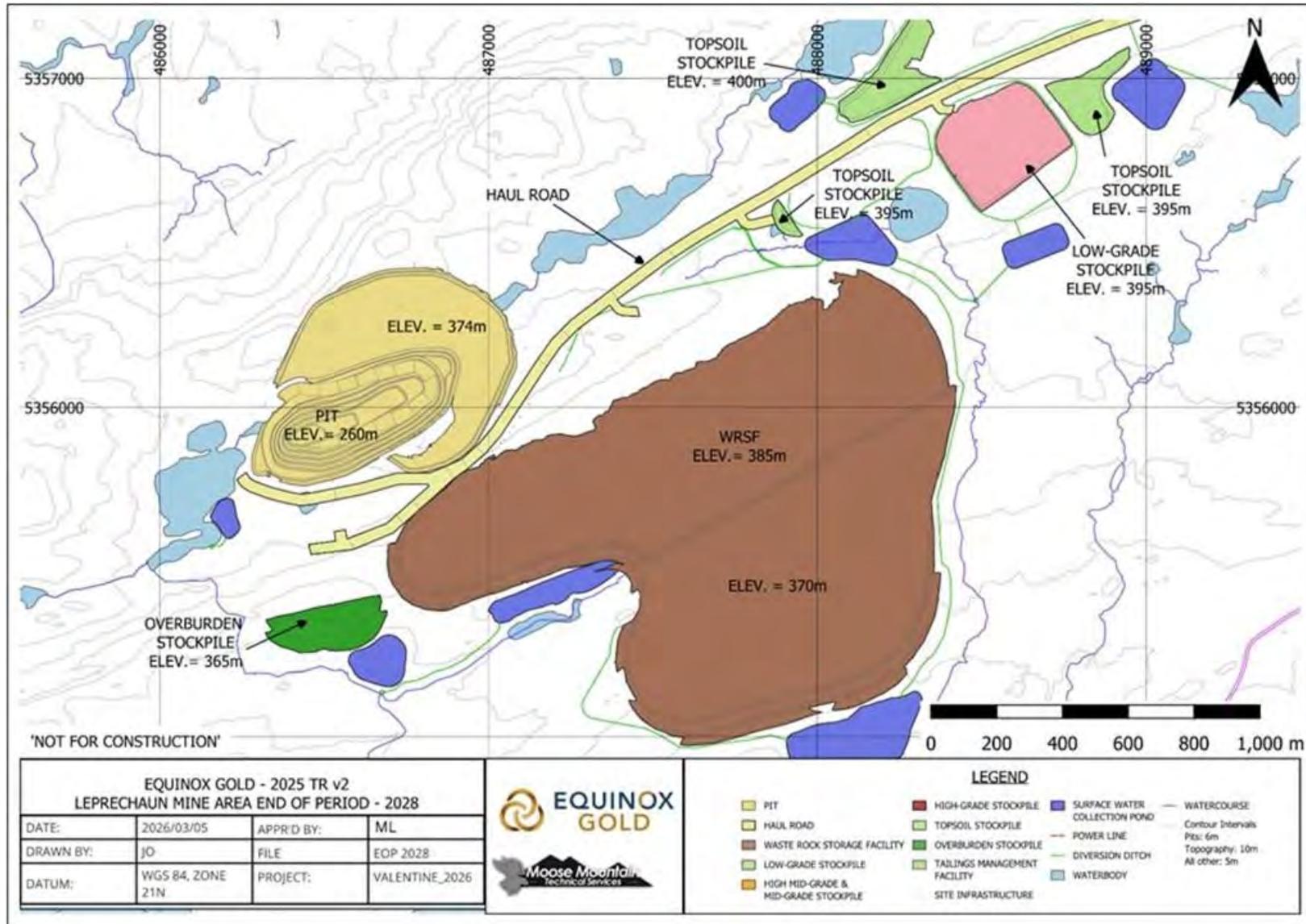


Figure 16-52: Leprechaun End of Period – 2029

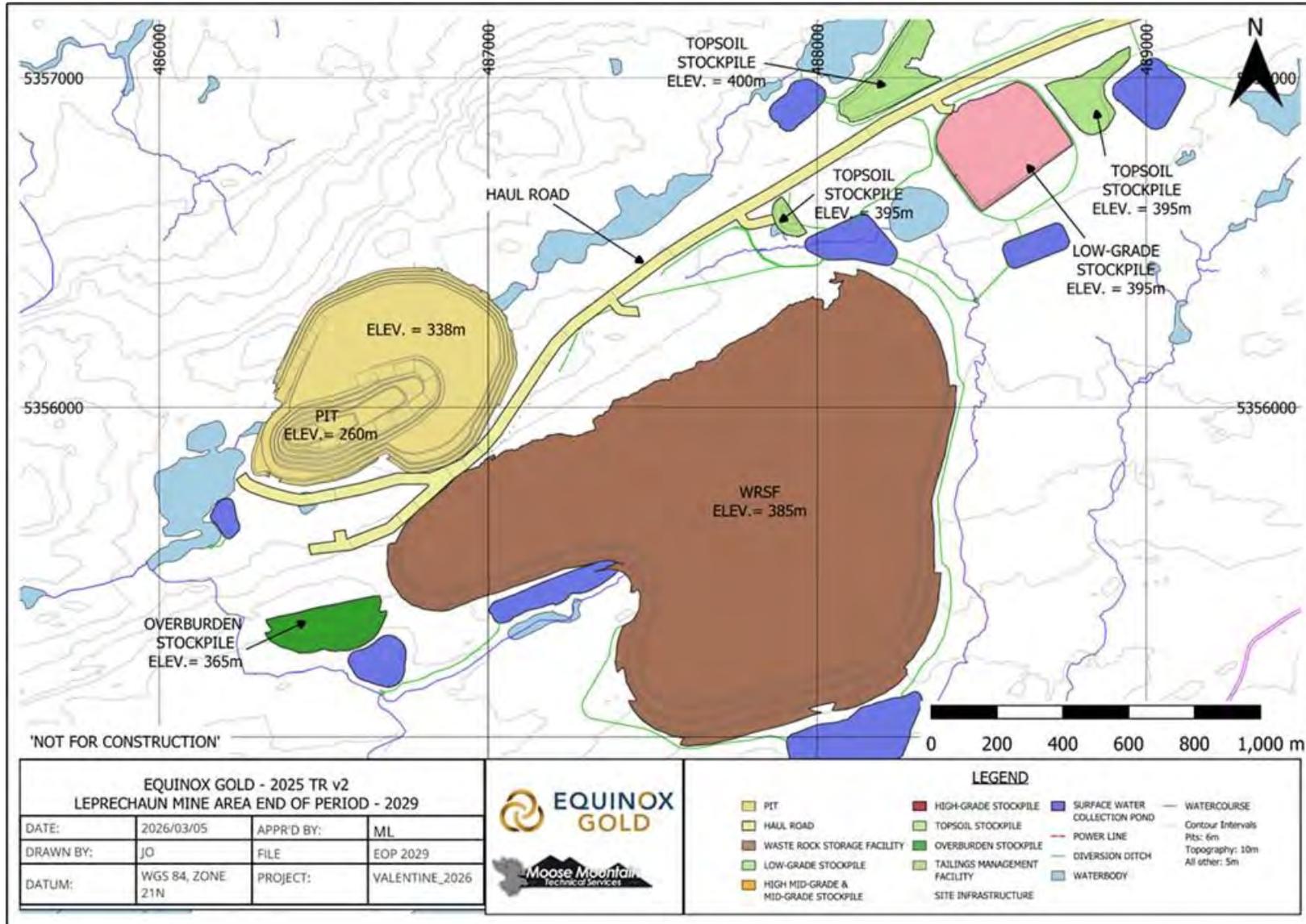


Figure 16-53: Leprechaun End of Period – 2030

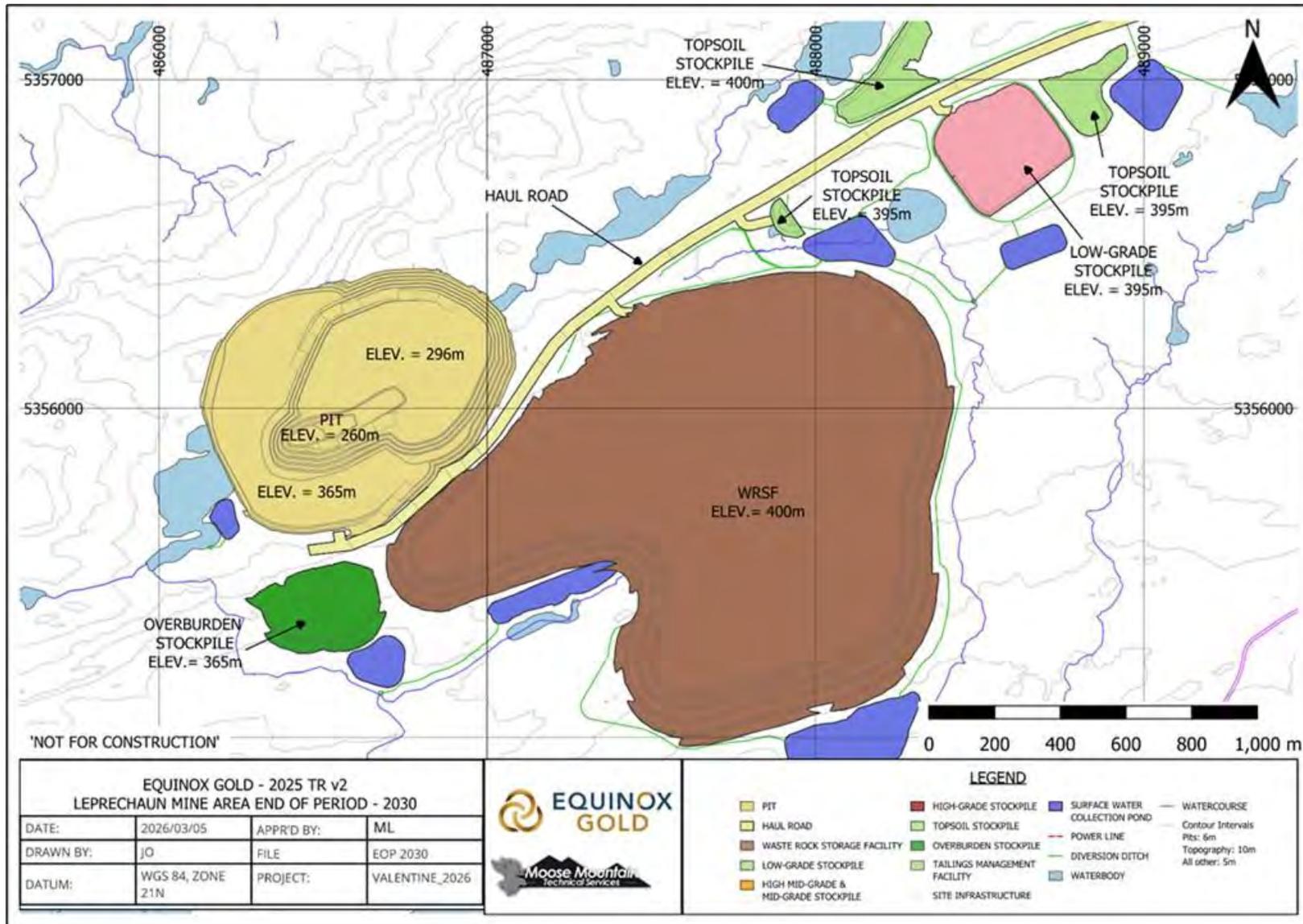


Figure 16-54: Leprechaun End of Period – 2037

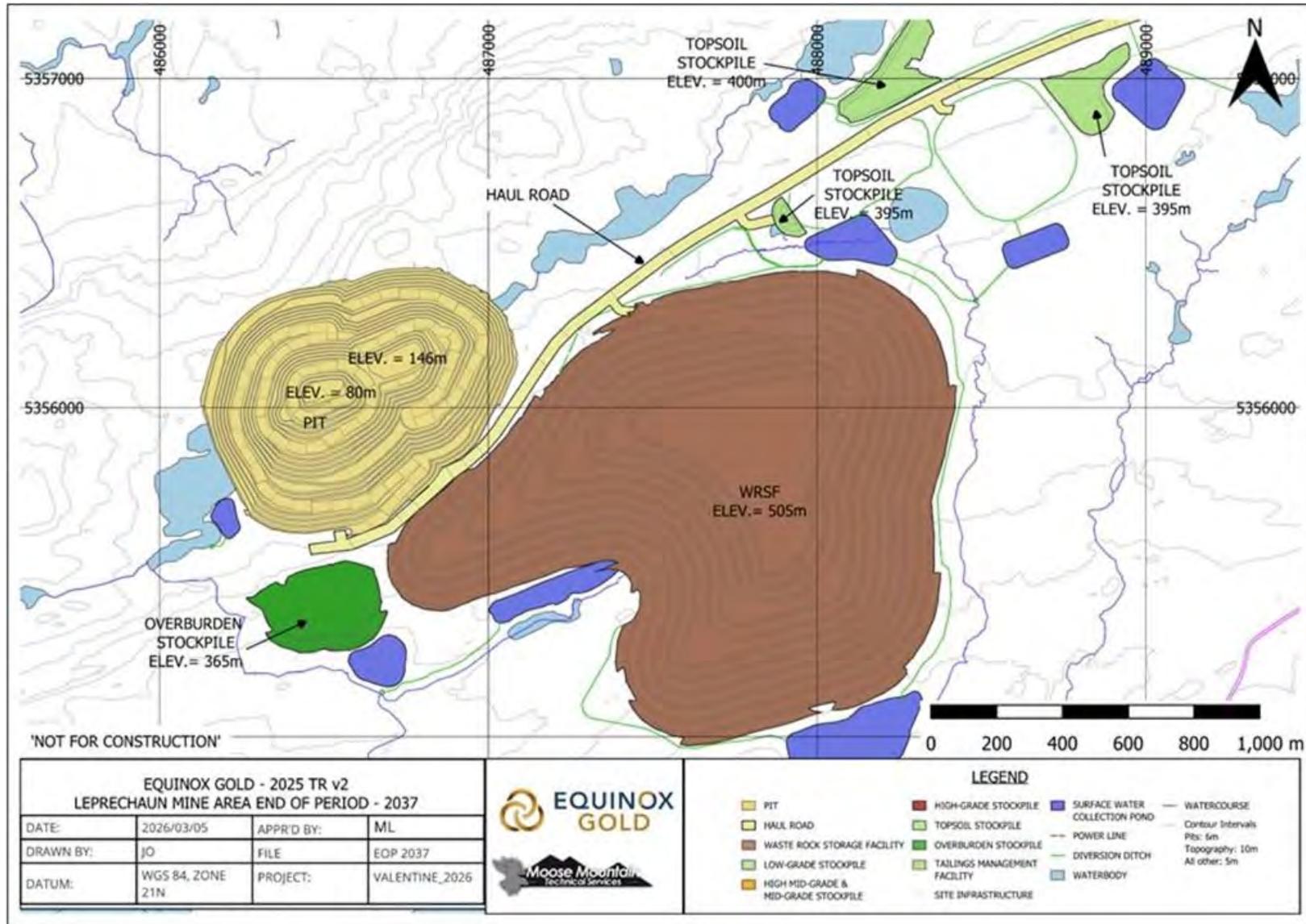


Figure 16-55: Berry End of Period – 2026

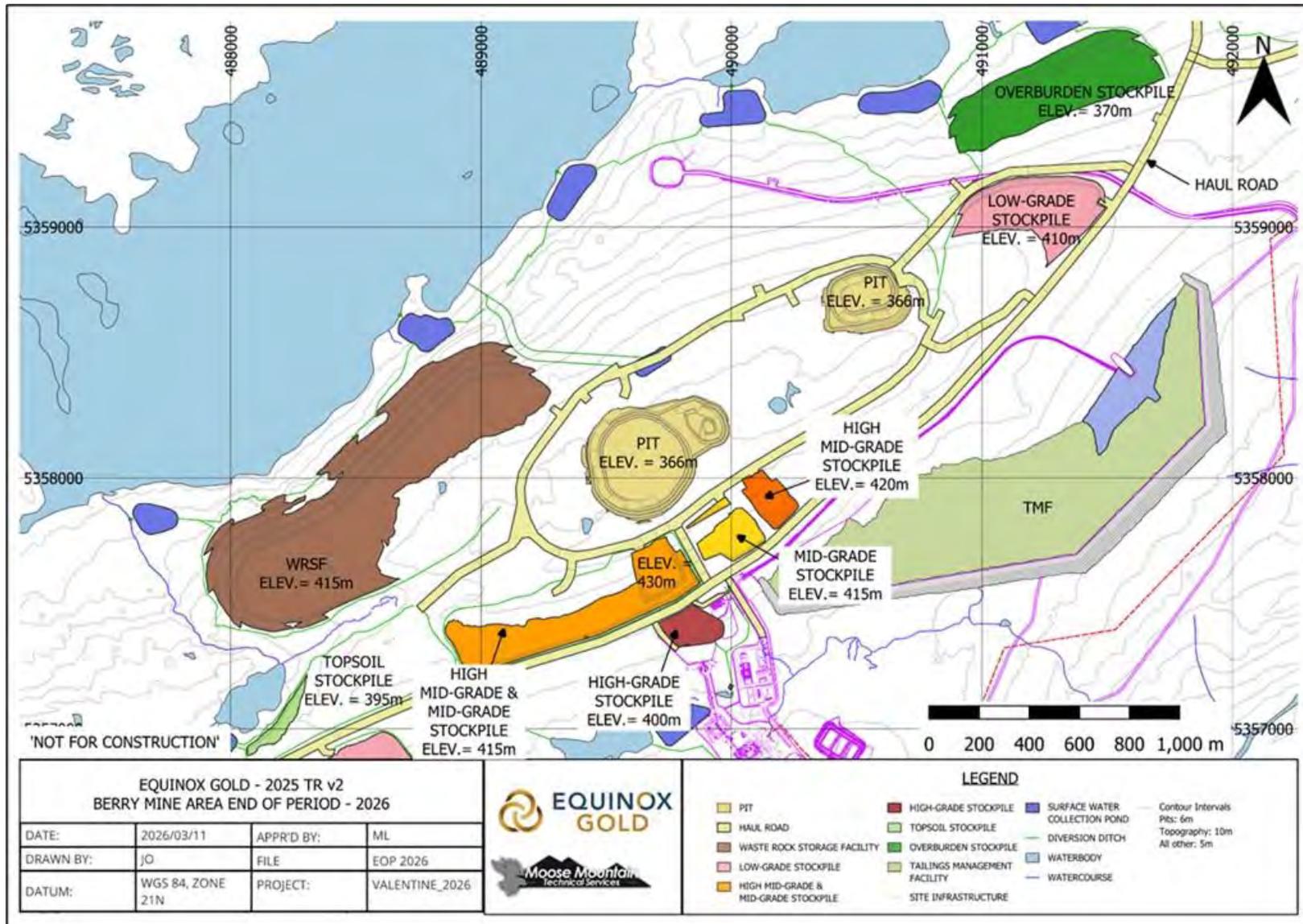


Figure 16-56: Berry End of Period – 2027

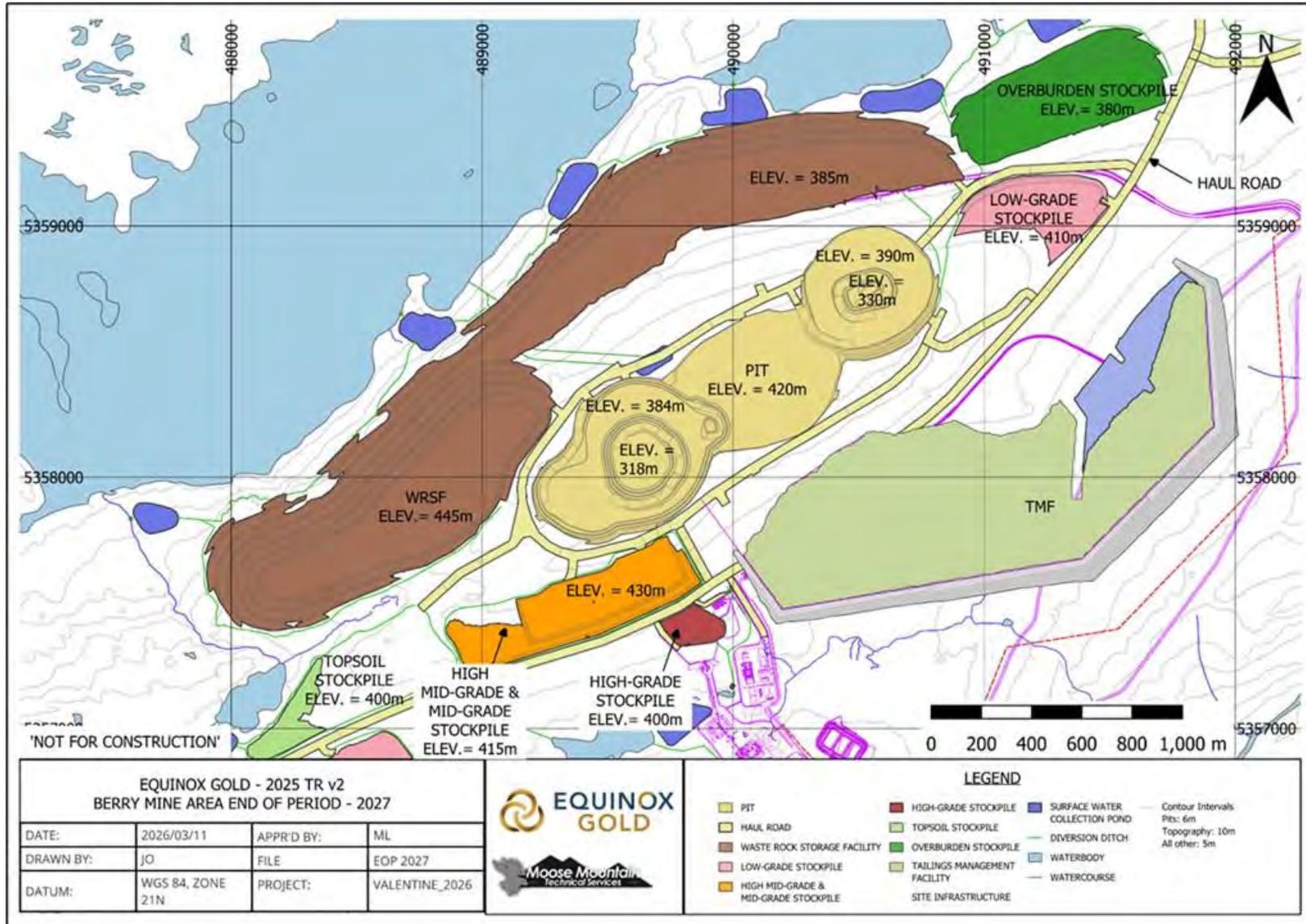


Figure 16-57: Berry End of Period – 2028

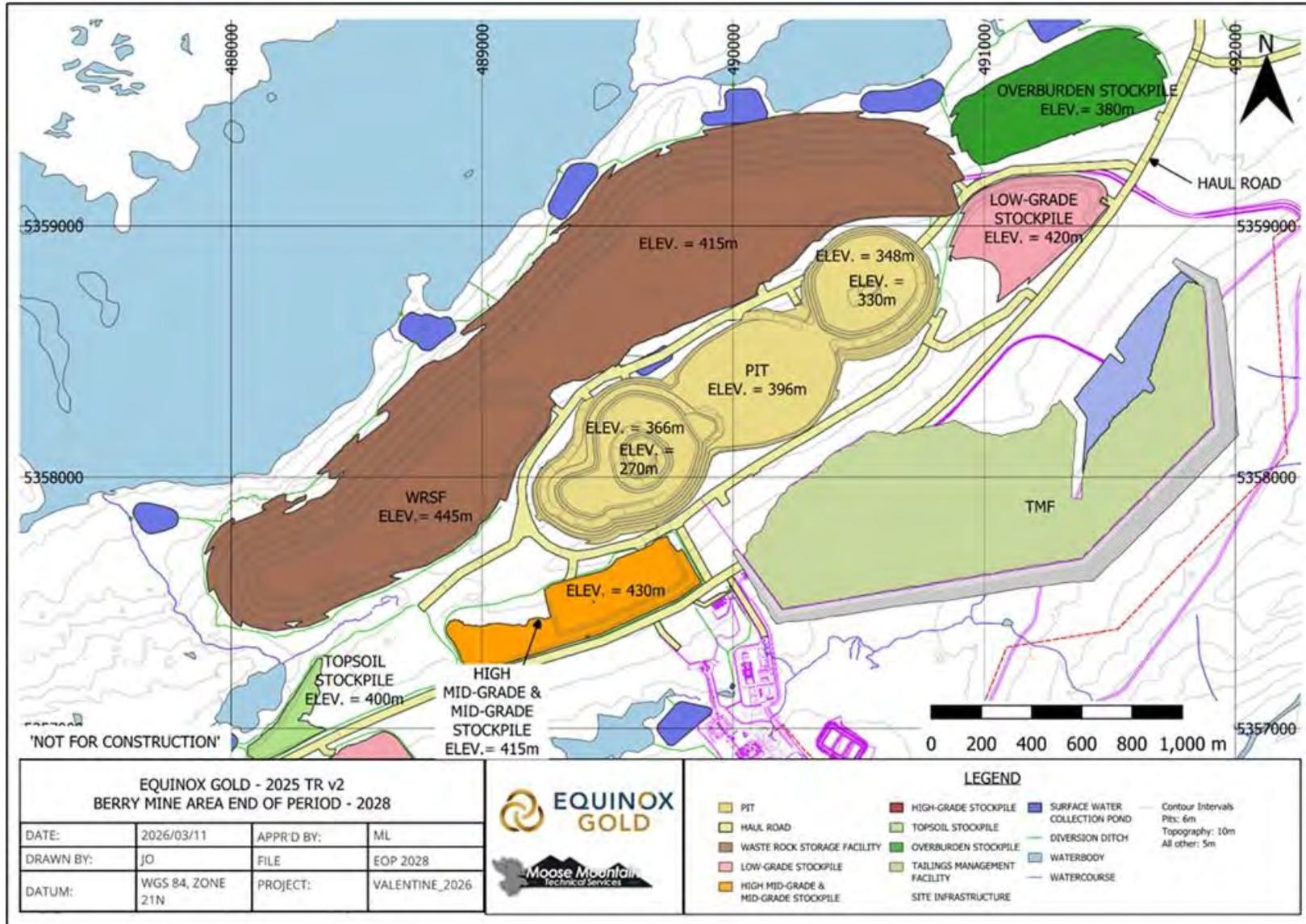


Figure 16-58: Berry End of Period – 2029

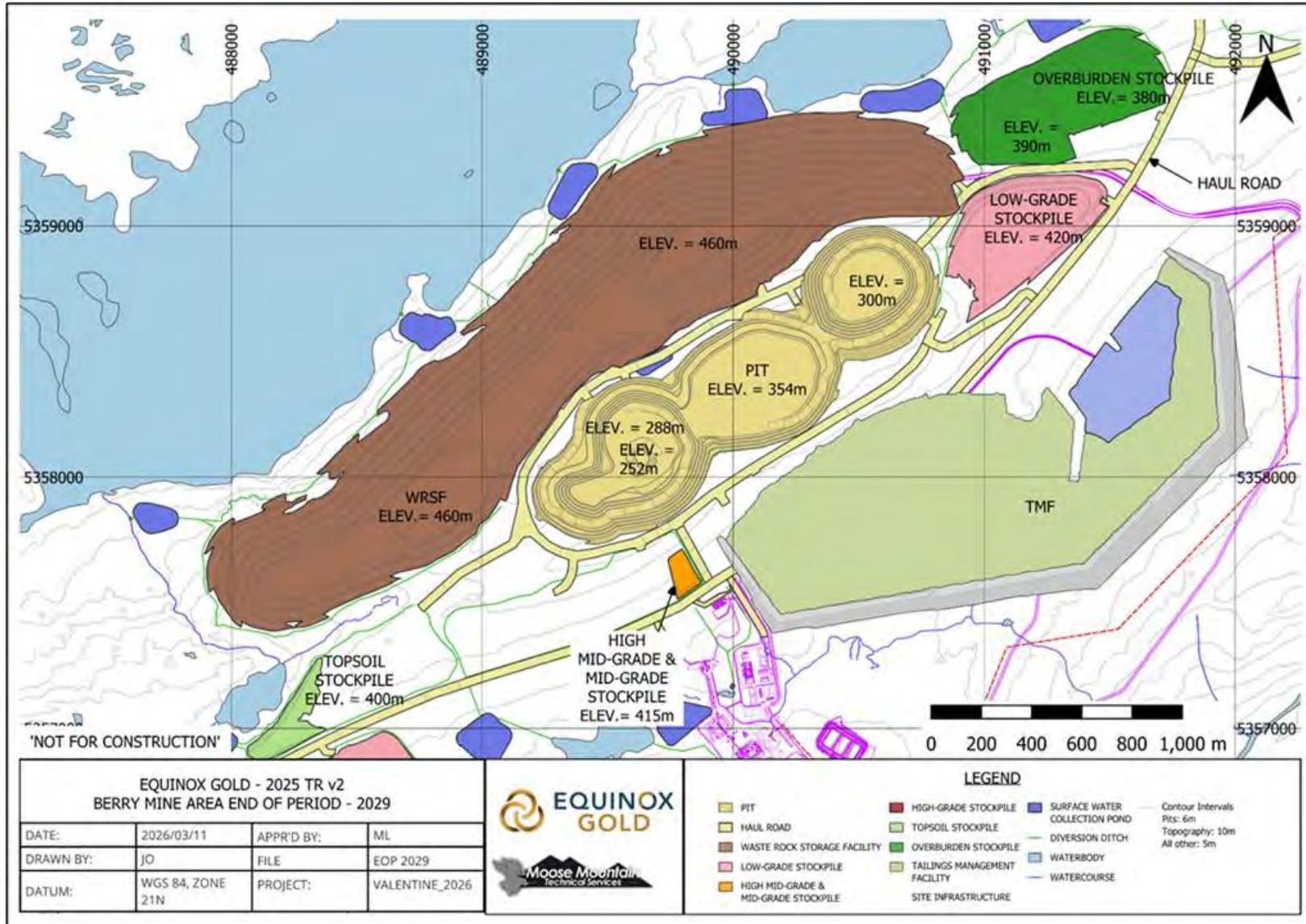


Figure 16-59: Berry End of Period – 2030

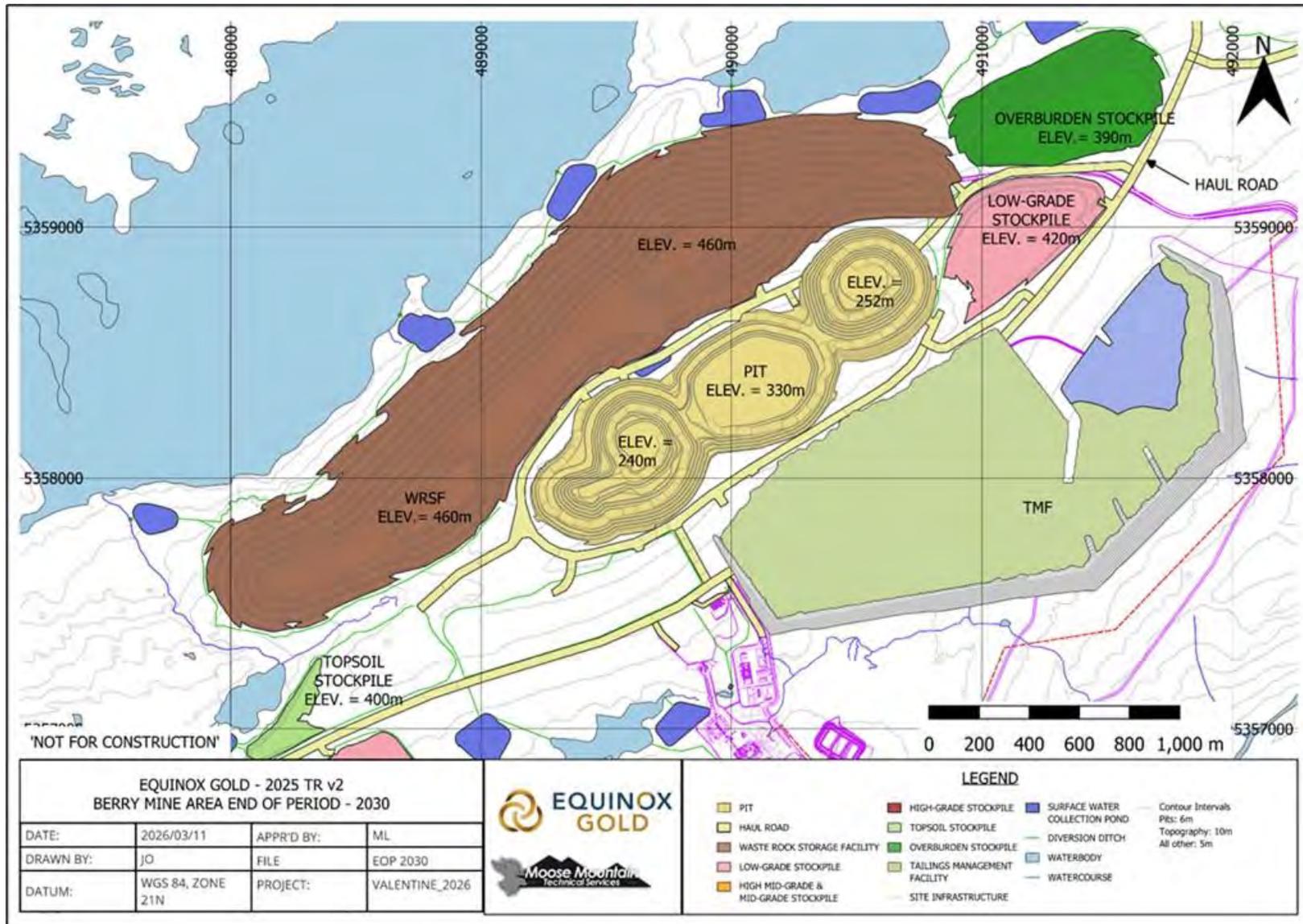


Figure 16-60: Berry End of Period – 2037

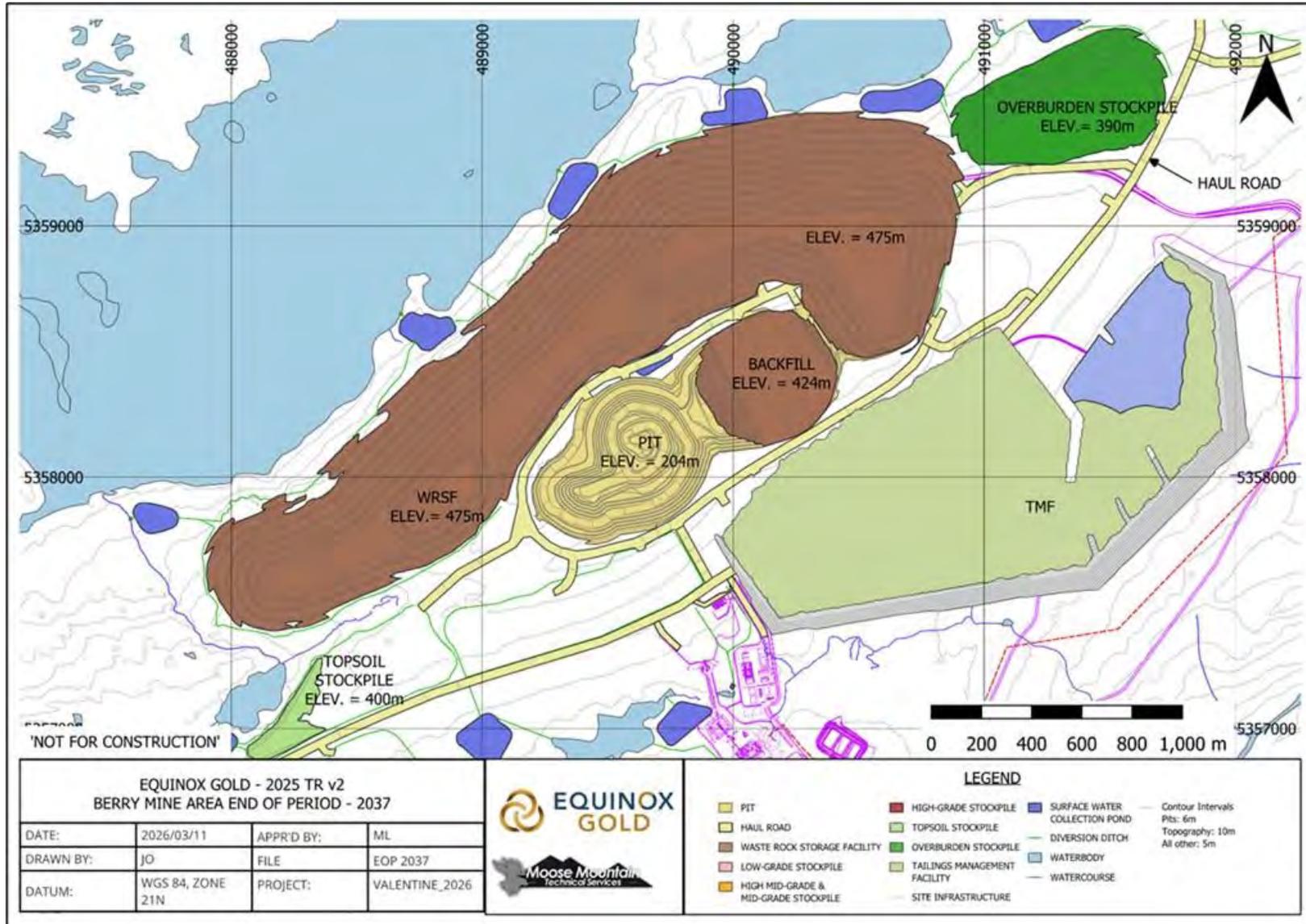


Figure 16-61: Marathon End of Period – 2026

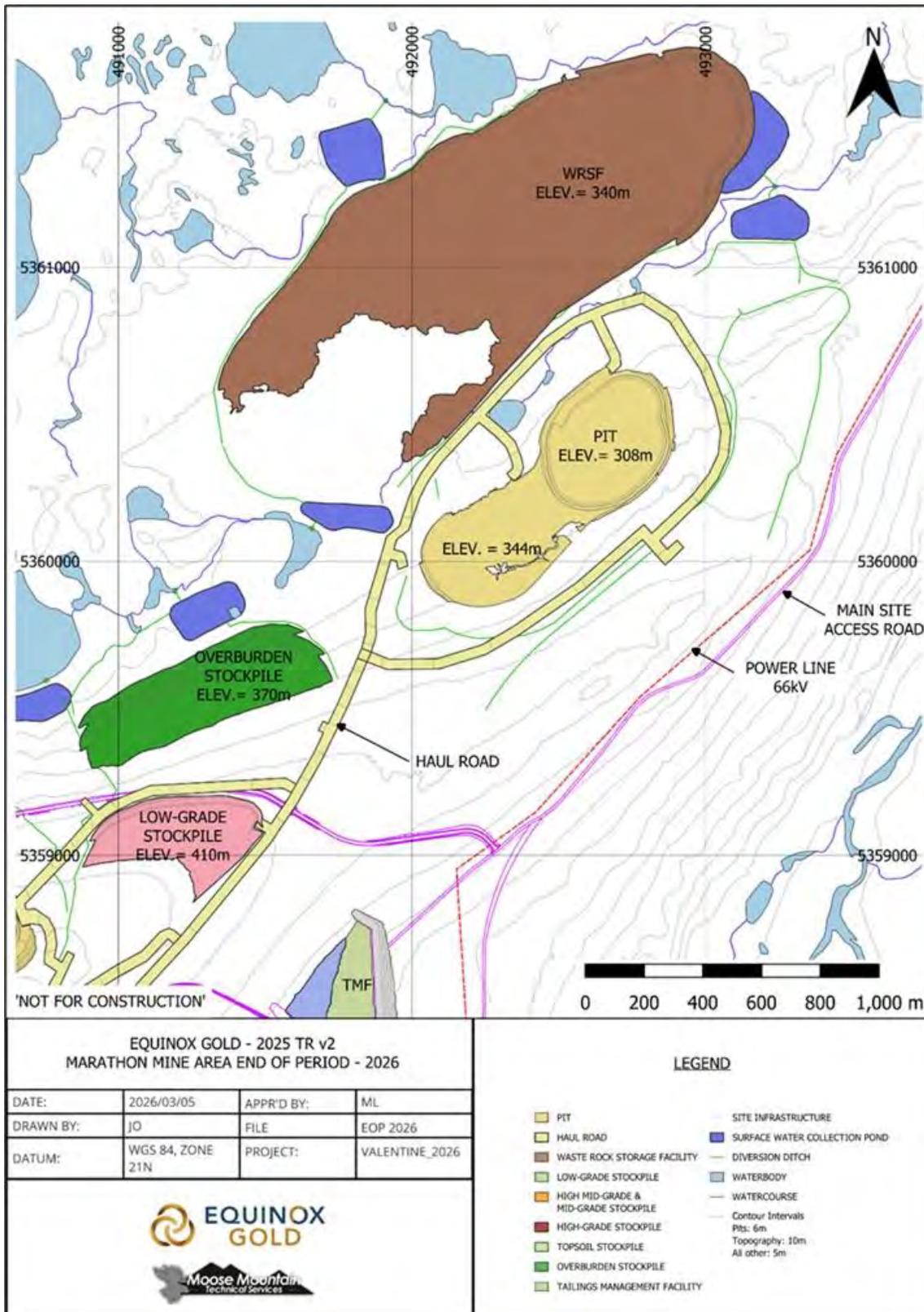


Figure 16-62: Marathon End of Period – 2027

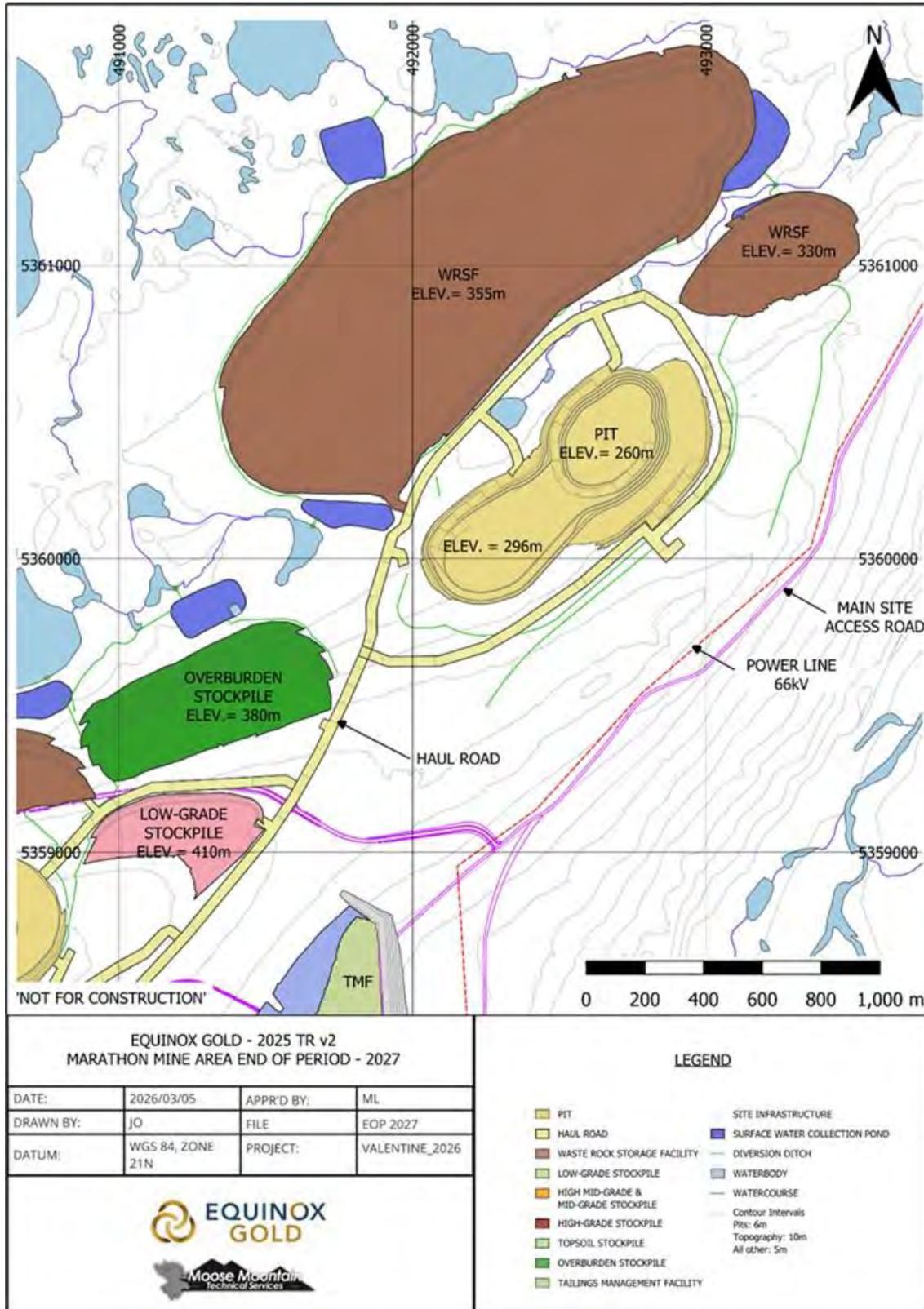


Figure 16-63: Marathon End of Period – 2028

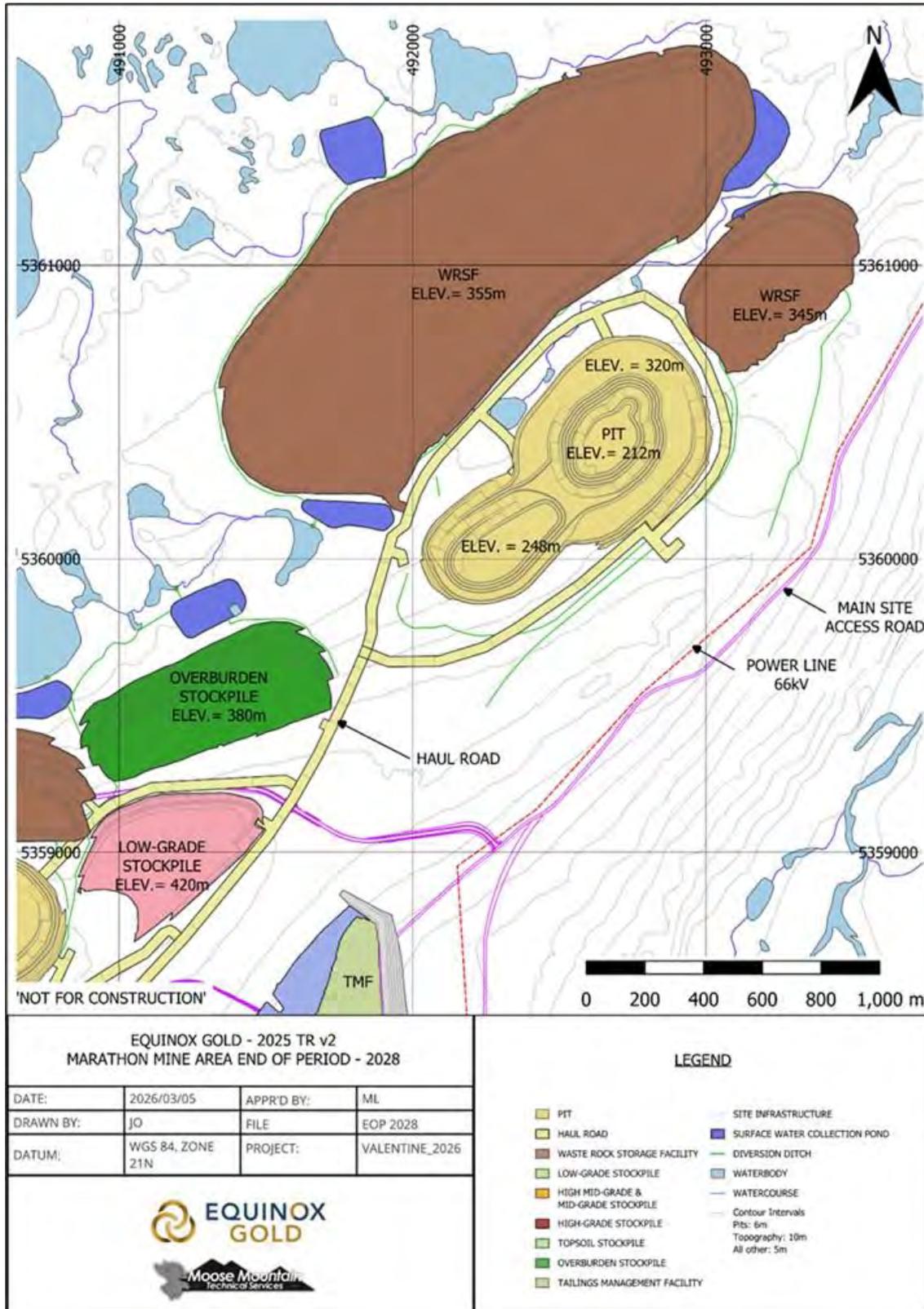


Figure 16-64: Marathon End of Period – 2029

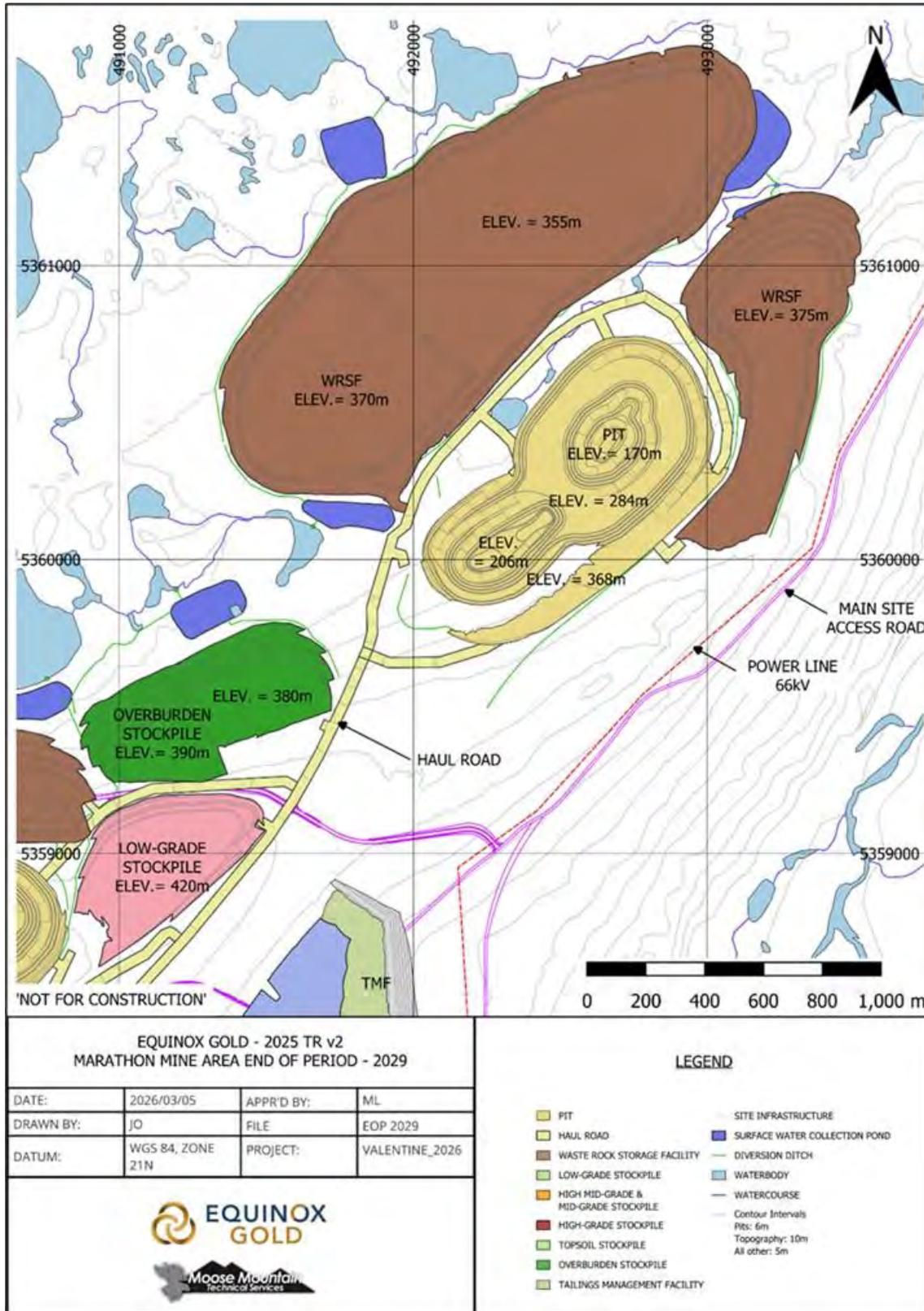


Figure 16-65: Marathon End of Period – 2030

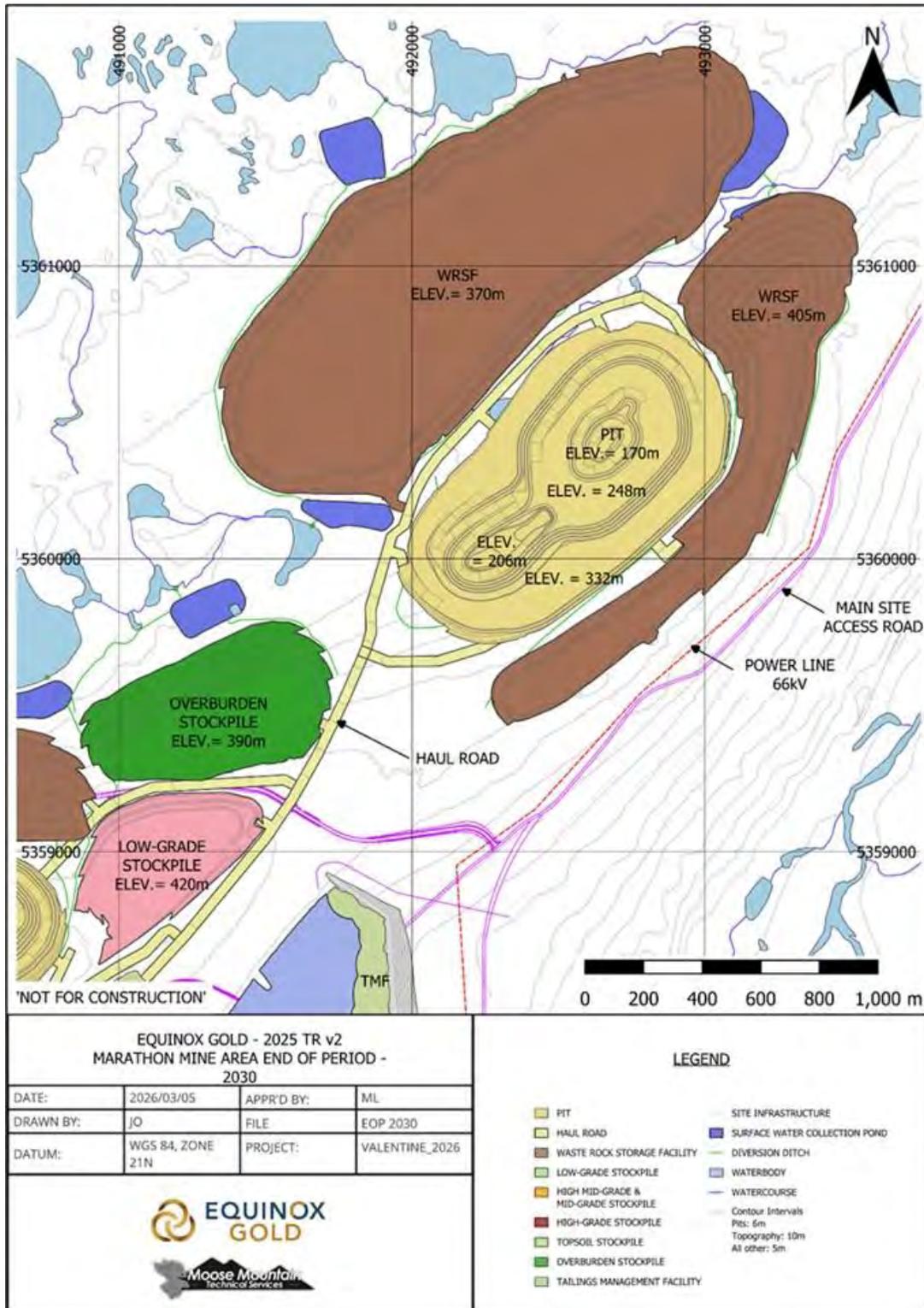
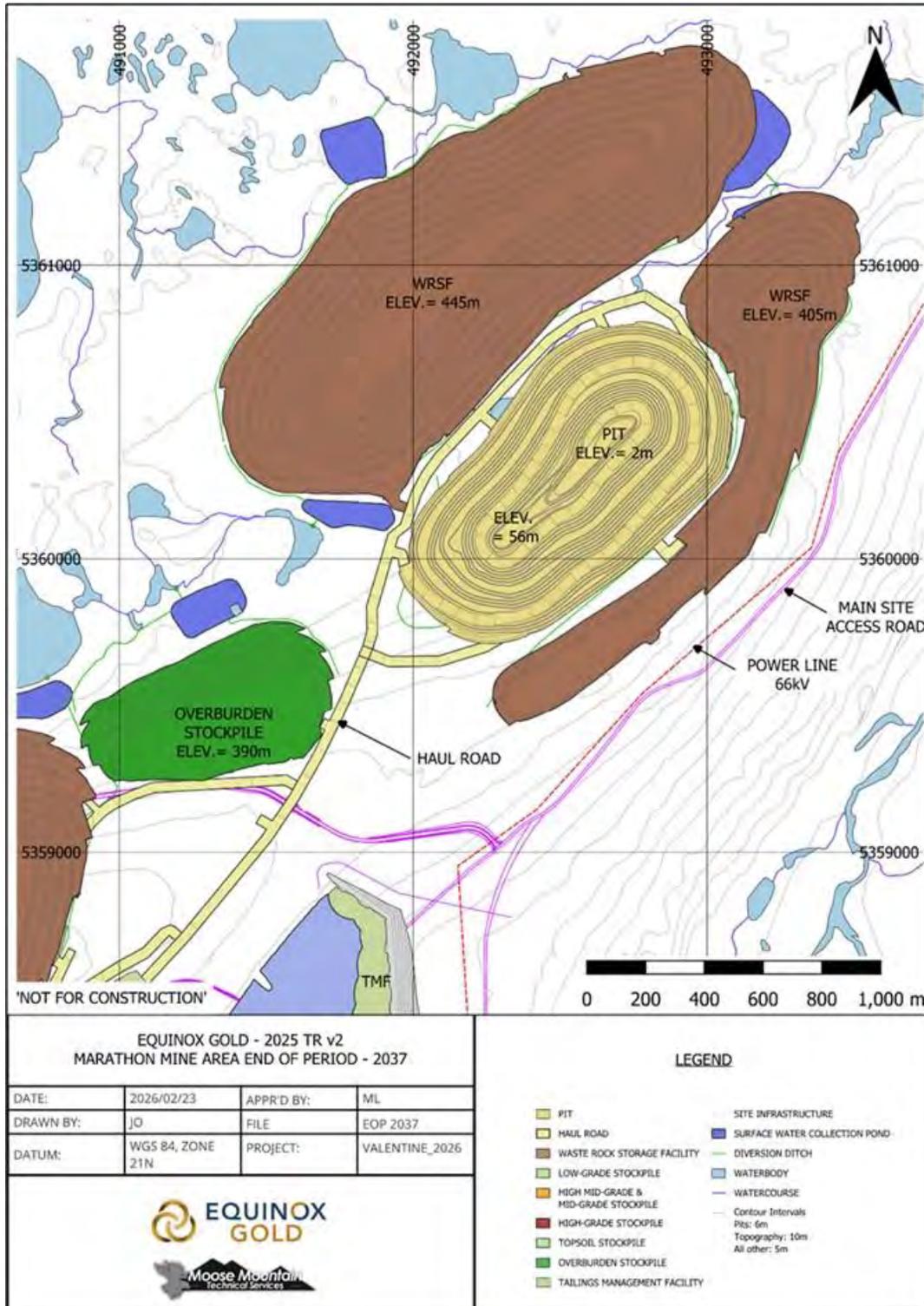


Figure 16-66: Marathon End of Period – 2037



16.8 Operations

Planned mining operations are typical of similar open pit precious metal operations in flat terrain.

Grade control drilling/sampling/assaying and blasthole sampling/assaying is carried out to better delineate the ore/waste contacts in upcoming benches. An ore control system is planned to provide field control for the loading equipment to selectively mine ore-grade material separately from the waste.

In situ rock is drilled and blasted to create suitable fragmentation for efficient loading and hauling of both ore and waste rock. Drilling and blasting is planned on 12 m benches in ore and waste, as initial site results show better gold recovery compared to the 6 m selective blasts planned in the last FS. A powder factor of 0.34 kg/t in ore and waste is specified. Pre-shear drilling is completed for 18 m triple-benches to form the highwall each phase and pit. With 18 m triple bench walls and 12 m production blasts, every third bench will have a 6 m trim blast.

Emulsion and explosives are produced off-site and trucked to storage facilities on site for use in the operation.

Topsoil and overburden material will not require blasting.

Loading of ore and waste will be completed with hydraulic mining shovels, excavators and front-end wheel loaders on 6 or 12m benches.

Ore and waste materials will be hauled out of the pit to scheduled destinations with off-highway rigid-frame haul trucks.

Mine pit services include the following:

- haul road maintenance
- pit floor and ramp maintenance
- stockpile maintenance
- ditching
- dewatering
- mobile fleet fuel and lube support
- topsoil excavation
- secondary blasting and rock breaking
- snow removal
- reclamation and environmental control
- lighting
- transporting personnel and operating supplies
- mine safety and rescue.

Direct mining operations, mine equipment fleet ownership, mine fleet maintenance, and technical services are all planned as owner-managed functions. RC drilling is planned to be completed with a contractor.



Mining operations are based on 365 operating days per year with two 12-hour shifts per day. An allowance of 12 days of no production has been built into the mine schedule to allow for adverse weather conditions.

The number of hourly mine operations personnel, including maintenance staff, peaks at 513 persons. Due to the shift rotation, only one-quarter of full personnel will be on shift at a given time. Salaried personnel of approximately 78 persons will be required for mine operations, including the mine and maintenance supervision and mine technical services departments.

16.8.1 Open Pit Dewatering

The Valentine open pits will be dewatered with conventional dewatering equipment (i.e., pit bottom submersible pumps). Daily pit inflow rates have been estimated based on direct precipitation over the pit areas and groundwater inflow rates via host rock hydraulic conductivity (Terrane 2021, 2023 and Gemtec 2022a, 2022b, 2024).

Field hydraulic conductivity analysis included packer testing in deep geotechnical drillholes, installation of vibrating wire piezometers, hydraulic response (slug) testing in monitoring wells, and short-term constant rate testing in exploration drill holes. Pumping test programs for Marathon, Leprechaun, and Berry pits have also been completed (Gemtec 2022a, 2024). Results of these programs defined a generally low permeability (i.e., 10^{-7}) rock mass and a trend of decreasing hydraulic conductivity with depth. No major variations in lithology versus hydraulic conductivity were observed.

Based on the final pit shells presented in this technical report, an updated estimate for the average and maximum daily inflows were calculated. These inflows are based on the previous estimates for groundwater inflow (negligible difference from the previous feasibility study) and an estimate for direct precipitation captured within the surface area of the updated pit shells (M634, L633, and B635).

Estimates for pit hydrogeology suggest inflow from direct precipitation and groundwater to average approximately 5,742 m³/d for Marathon, 3,155 m³/d for Leprechaun, and 5,166 m³/d for Berry. These estimates are based on hydraulic conductivity from packer testing and average annual rainfall totals. For this technical report, dewatering operations have been planned based on these amounts.

Hydraulic conductivity values developed from pumping tests at each pit suggests the hydraulic conductivity of the rock mass could be an order of magnitude higher than observed in the packer testing. While this presents a risk of increased groundwater flow to the overall volume of water associated with the pits, it is relatively low (~20% of the total) compared to the volume of water from direct precipitation. Field operations through early development will allow future planning to better understand and mitigate this risk from an operational perspective.

Maximum daily inflows associated with a 1:100-year design storm are estimated to be 143,378 m³/d for Marathon, 106,628 m³/d for Leprechaun, and 153,708 m³/d for Berry, with direct precipitation making up the largest portion of overall inflow (greater than 80%) in all pits. It should be noted, utilizing the hydraulic conductivity from the pumping tests (Gemtec 2022a, 2024) would result in a slight increase (<3%) to these maximum daily flow amounts.

It is possible that inflow rates higher than those estimated herein may occur as the radius of influence reaches out to various surface water features within and surrounding the pit footprints. This will potentially result in these water bodies becoming additional sources of hydraulic recharge. In particular, the nearby water bodies of Valentine Lake, Victoria Lake, and Victoria River are potentially within the radius of influence for the proposed open pits. Depending on the



hydraulic connectivity (e.g. faults, fractures) of these surface water bodies with the final open pit shell, it is possible that these could provide sources of recharge and result in higher pit inflow rates than those currently estimated.

It is anticipated that depressurization of the pits by way of natural seepage will have a direct effect on the pore pressure developed behind the pit walls and allow this pressure to dissipate passively. At present, no additional active depressurization designs have been planned.

Pit water will be pumped from in-pit sumps to collection ponds adjacent to the pits, where it will be managed as per the overall site water management plan (see Section 18.0 for details).

16.8.2 Planned Grade Control Measures

The aim of grade control is to accurately model ore/waste boundaries and the goal of selective mining along the ore/waste boundary is to minimize mining dilution.

An ore control system is planned to provide field control for the loading equipment to selectively mine ore grade material separately from the waste. The ore control system will consist of the following:

- RC bench drilling targets multiple benches across ore and waste boundaries. In areas with modelled ore, drilling is on a 9 m x 9 m grid, in geological domains of potential ore, drilling is on a 18 m x 18 m grid, and in geological domains without potential ore, no drilling is completed.
- Sampling of RC drillholes for gold grades on tightly spaced intervals
- Sample Analysis is done via PhotonAssay, with appropriate QA/QC protocols in place
- In-situ Grade Control models are created from RC results
- Post-blast models are created using OrePro3D, where appropriate dig lines are created, delineating ore and waste
- Dig limits in guidance systems (MS4M) on excavators
- Field mark-up of dig limits by the technical services department
- Reconciliation of planned versus mined gold grade

16.9 Mining Equipment

Equipment already exists on site. As the fleet expands, models that match the existing fleet have been included, with sufficient units to execute the production requirements of the mine plan. Productivities of existing fleet inform productivities assumed in the mine plan.

Grade control drilling will be carried out by contractor hydraulic RC drills.

Production drilling will be carried out with 190 mm (7½") diesel rotary drills ore and waste. A 140 mm (5½") diesel down-the-hole (DTH) drill will be used for pre-shear. Another DTH drill with a 171 mm (6¾") size bit will be used for trim holes.

This LOM plan assumes the same equipment that is already purchased by Equinox. This mining equipment will be sufficient to handle the quantities in the production schedules with some expansions as the production increases. A larger hydraulic front shovel configuration (15.5 m³ bucket) is planned to handle large bulk headings planned over the mine life. Smaller hydraulic excavators (12.0 m³ bucket) are proposed based on their ability to minimize losses and dilution



for the ore control operations. Front-end wheel loaders (13.5 m³ bucket) are proposed based on their ability to move around to various pits to support the excavators and shovels, and their ability to load the crusher when required.

Rigid frame haulers (133-tonne and 90-tonne payload) are proposed for their flexibility in use on the smaller pit benches, and to make sure the fleet size is large enough to support three pits being mined concurrently.

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. Articulated trucks (40-tonne payload) that are outfitted with a water tank and gravel body are included for haul road maintenance. Track dozers (447 kW and 325 kW) are included to handle waste rock, ore and overburden, at the various stockpile locations. Wheel dozer (600 kW and 370 kW) is included for shovel face, pit floor and haul road maintenance. Front-end wheel loaders (430kW, 240 kW and 130kW) and hydraulic excavators (4.0 m³ and 3.0 m³ and 2.0 m³ bucket) are included as pit support, and gravel loading. The smaller excavators will also be useful for supporting ore control activities. Custom articulated 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 near the plant site.

Primary mining equipment estimates are shown in Table 16-8. A list of estimated support units is shown in Table 16-9.



Table 16-8: Primary Mining Fleet Schedule

Unit	Purchased (pre-2026)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Drilling													
Diesel Rotary Tracked Drill – 190 mm (7½") Holes	3	8	9	9	9	9	9	9	9	7	7	4	2
Diesel DTH Tracked Drill – 190 or 144 mm (7½ or 5½ ") Holes	4	4	4	4	4	4	4	4	2	2	2	2	2
Loading													
Hydraulic Excavator – 15.5 m³ Bucket	2	2	2	2	2	2	2	2	2	2	2	2	1
Hydraulic Excavator – 12.0 m³ Bucket	3	4	4	4	4	4	4	4	4	4	2	2	1
Wheel Loader – 13.5 m³ Bucket	2	2	2	2	2	2	2	2	2	2	2	2	2
Hauling													
Rigid Frame Haul Truck – 133 t Payload	13	15	22	22	26	32	32	32	32	25	25	12	12
Rigid Frame Haul Truck – 90 t Payload	5	11	11	11	11	11	11	11	11	11	11	11	11
Source: MMTS 2026.													

Table 16-9: Support Equipment Schedule

Equipment	Function	Purchased (pre-2026)	Maximum Number
Road Maintenance			
Motor Grader, 4.9 m blade, 216 kW	Haul Road Maintenance	3	5
Water/Gravel Truck, 40 t Articulated	Water/Gravel Haul Roads	2	4
Stockpile Maintenance			
Track Dozer, 447 kW	Stockpile Maintenance	3	3
Primary Pit Support			
Track Dozer, 325 kW	Pit support, shovel support, snow clearing	2	2
Wheel Loader, 6.0 m³ bucket, 430 kW	Pit support, shovel support, snow clearing	1	2



Equipment	Function	Purchased (pre-2026)	Maximum Number
Hydraulic Excavator, 4.0 m ³ bucket, 360 kW	Pit Support and Back Up Loading	3	3
Wheel Dozer, 600 kW	Shovel Support	0	1
Wheel Dozer, 370 kW	Shovel Support	2	2
Secondary Pit Support			
Transit Van Crew Shuttle	Employee Transport	4	6
Light Plants	Pit Lighting	12	18
On Highway Dump Truck	Utility Material Movement	2	2
Flatbed Picker Truck	Construction Support	1	2
Emergency Response Vehicle	Safety and First Aid	1	1
Wheel Loader - 2m ³ Bucket, 130 kW	Construction Support	1	1
Hydraulic Excavator, 2.0 m ³ bucket, 220 kW	Construction and Reclamation Support	1	1
Hydraulic Excavator, 3.0 m ³ bucket, 340 kW	Pit, Construction, and Reclamation Support	1	1
Wheel Loader - 4.5 m ³ Bucket, 240 kW	Site Support	2	2
Fuel Lube Truck, 30 t Articulated	Fuel Lube Support	2	3
Maintenance			
2-Ton Pickup Maintenance Trucks	Mobile Maintenance Crew and Tool Transport	2	4
Mobile 36 t Crane	Mobile Maintenance Material Handling	1	1
150-ton trailer float	Material and Equipment Transport	1	1
Forklift and Tire Handler	Shop Material and Tire Handling	1	2
Mobile Steam Cleaner	Cleaning for Mobile Maintenance	1	2
Scissor Lift	Maintenance Support	1	1
Mobile Manlift	Maintenance Support	1	1
300-ton Shovel Float	Equipment Transport	1	1
Source: MMTS 2026.			



17.0 Recovery Methods

17.1 Overview

The Process Plant currently treats ore via a conventional gravity and cyanidation flowsheet and has been designed to nominally treat 2.5 Mt/a of ore. Run-of-mine (ROM) ore is processed via conventional primary crushing, a two-stage grinding circuit, and a gravity concentration circuit. Gravity circuit tailings are treated via cyanidation and a carbon-in-leach (CIL) circuit and associated gold recovery and carbon handling circuits to produce gold doré. CIL tailings are treated via a cyanide destruction process prior to storage in the TMF.

Plant construction was completed in Q3 2025, and the first gold pour was achieved on September 15, 2025. Commercial production, representing 80% nameplate capacity, was achieved on November 18, 2025.

Studies are underway to increase nominal plant throughput from 2.5 Mt/a to 5 Mt/a, and proposed flowsheet changes are described in this section.

A simplified process flowsheet of the Process Plant is provided in Figure 17-1. The current Process Plant consists of the following unit operations to nominally treat 2.5 Mt/a of ore:

- Primary crushing and associated material handling equipment
- Crushed ore stockpile and associated feed and reclaim systems
- Grinding circuit consisting of a semi-autogenous grinding (SAG) and ball mills, hydrocyclone classification and associated pumping and material handling systems to produce a nominal grind size of 80% passing (P_{80}) of 75 μ m
- Gravity concentration circuit with intensive leach reactor
- Pre-aeration, cyanide leaching, and carbon adsorption via a CIL circuit
- Carbon elution via Pressure Zadra circuit
- Carbon handling and regeneration
- Electrowinning and smelting to produce doré
- Cyanide destruction of CIL tailings using SO_2 / O_2 process
- Tailings pumping to the TMF
- Reagent mix and storage circuits
- Air and oxygen circuits
- Water systems (potable water, treated water, gland seal water and process water)

The proposed plant expansion to 5 Mt/a will consist of the following changes to the existing unit operations:

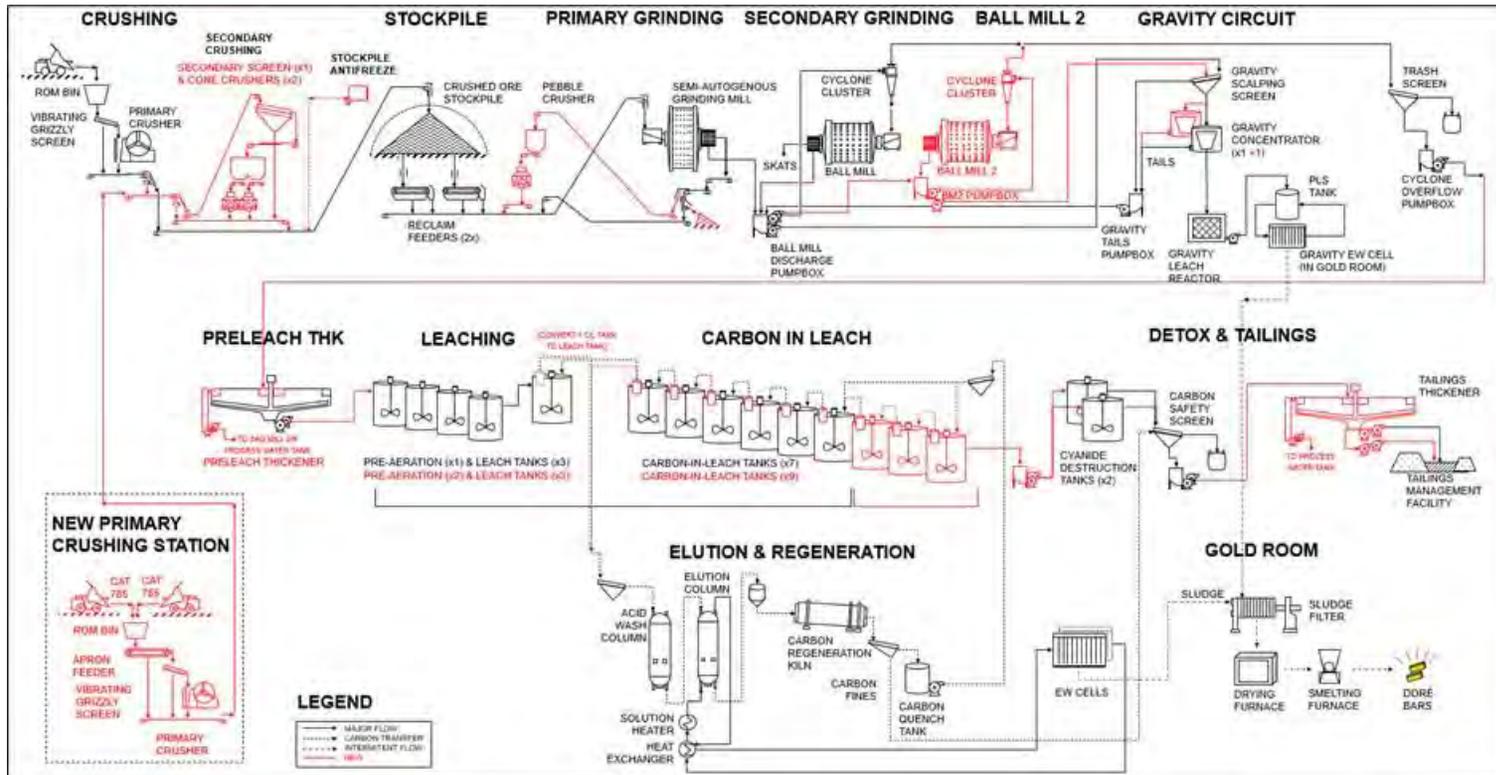
- Addition of a second jaw crusher circuit
- Addition of a secondary crushing circuit to reduce the ore feed size to the SAG mill
- Addition of a pebble crusher at the existing pebble recirculating system
- Addition of a second ball mill



- Addition of a pre-leach thickener circuit to increase the density of the slurry at the CIL circuit. The existing tailings thickener will be repurposed as a pre-leach thickener, and a new, larger tailings thickener will be installed.
- Reconfiguration of the pre-aeration (PA), leaching, and CIL tank train and addition of three CIL tanks
- Reagents: Installation of a sulphur burner system as a new source of SO₂ and conversion of the existing sodium metabisulphite system to a sodium hydroxide mix system
- Modification of the existing process water system



Figure 17-1: Process Flow Sheet



Source: DRA (2026)



17.2 Plant Design Criteria

Key process design criteria for the existing process plant and proposed plant expansion are listed in Table 17-1.

Table 17-1: Key Process Design Criteria

Design Parameter	Units	Existing Plant	Plant Expansion
Nominal Plant Throughput at 92% Availability	Mt/a	2.5	4.9
Nominal Plant Throughput at 94% Availability	Mt/a	2.6	5.0
Design Plant Throughput	Mt/a	3	5.4
Gold Head Grade (design)	g/t Au	2.76	1.68
Crushing Plant Availability (design)	%	75	75
Mill Availability (design)	%	92	92
Bond Crusher Work Index (CWi)	kWh/t	16.5	16.5
Bond Rod Mill Work Index (BWi)	kWh/t	13.9	13.9
Bond Ball Mill Work Index (BWi)	kWh/t	16	16
JK Axb Parameter – (75 th percentile)	Axb	41.5	41.5
Bond Abrasion Index (Ai)	g	0.41	0.41
Ore Specific Gravity	t/m ³	2.68	2.68
Feed Size to SAG Mill (P ₈₀)	mm	120	45 (nominal) 35 (design)
Primary Grind Size (P ₈₀)	µm	75	75
Pre-Aeration + Leach Residence Time	h	12	12
CIL Residence Time	h	24	24
Gravity Recovery	% Au	45	45
Leach Extraction	% Au	87	87
Overall Nominal Recovery	% Au	93	93
Leach Operating Density	% w/w	42.5	50
CIL Carbon Concentration	g/L	12-16	12-16
Tonnes of Carbon per Elution Column	t	1 x 7.0	1 x 7.0
Detox Residence Time	min	60	60
Detox WAD Cyanide Discharge Target	mg/L CN _{WAD}	<2.0	<2.0
Final Tails Thickener Underflow Density	% w/w	65	65
Notes: WAD weak acid dissociable CN cyanide			



17.3 Process Description

17.3.1 Primary Crushing

Ore is hauled from the mine or stockpiles and directly tipped into the ROM hopper. Provision is made for blending and re-handling on the ROM pad and then dumping into the ROM hopper. A static grizzly is provided at the ROM hopper, and a fixed rock breaker is utilized to break oversize rocks.

Ore is withdrawn from the ROM hopper by a vibrating grizzly, with an aperture of 127 mm, that feeds a C130 jaw crusher. The circuit has been designed for 75% availability and produces an ore size (P_{80}) of 120 mm. Crushed ore from the jaw crusher discharges onto the sacrificial conveyor along with the undersize from the vibrating grizzly. A belt magnet at the sacrificial conveyor discharge recovers any trash metal. The sacrificial conveyor feeds crushed ore to the stockpile feed conveyor that conveys ore to the crushed ore stockpile. The stockpile feed conveyor is fitted with a weightometer to monitor the primary crusher throughput.

Plant Expansion

For the plant expansion, it is proposed to install a second primary crushing station as follows.

- Ore will be directly tipped into a new ROM hopper with dual dumping capability. Ore will be withdrawn from the ROM bin by a new variable-speed apron feeder directly to a new vibrating grizzly with an aperture of 150 mm.
- Oversized material from the vibrating grizzly will report directly to a new C130 jaw crusher, which will operate in open circuit.
- A new rock breaker will be installed to assist in breaking down oversize material retained above the jaw crusher, as opposed to the ROM bin opening.
- Crushed ore from the new jaw crusher, the apron feeder dribble, and undersize from the new vibrating grizzly will report to a new sacrificial conveyor. The new primary crushing station will produce an ore size of P_{80} of 120 mm. A new belt magnet at the sacrificial conveyor discharge will recover any trash metal. The sacrificial conveyor will feed crushed material to the secondary crushing circuit.

After the new primary crushing station is installed, the existing primary crushing station will be upgraded to improve material handling equipment and chutes. The aperture of the existing vibrating grizzly will be increased to 150 mm. The existing sacrificial conveyor discharge will be modified, and an additional conveyor will be installed to allow the crushed product to be sent to the secondary crushing circuit. Both primary crushing circuits will operate in parallel, and either jaw crusher will have the capacity to crush 5 Mt/a ore.

17.3.2 Secondary Crushing (Plant Expansion)

A new secondary crushing circuit is proposed for the plant expansion to produce a finer SAG mill feed with a P_{80} of 45 mm. Crushed ore from the primary crushing circuits will be conveyed to a new double-deck scalping screen. Screen oversize will feed two new HP450e cone crushers in parallel. A surge bin and belt feeder will be installed ahead of each cone crusher. Screen undersized and crushed product from the two cone crushers will discharge to two new conveyors in series. The conveyors will discharge crushed ore onto the existing stockpile feed conveyor and the existing stockpile.



Both cone crushers will operate at the nominal throughput. Bypass chutes have been included to allow secondary crushing to be bypassed as needed.

17.3.3 Crushed Ore Stockpile

Crushed material from the current primary crushing circuit is conveyed to a covered stockpile that provides approximately 19 hours of live storage at 2.5 Mt/a. Given that the milling operation is designed for an annual operating time of 8,059 hours (92% availability), this will result in excess crushed material when the primary crusher is operational. The excess crushed material will allow routine crusher maintenance to be carried out without interrupting the mill feed.

The mill feed stockpile is equipped with apron feeders to regulate feed into the SAG mill. Crushed material is drawn from the stockpile by two apron feeders and discharges onto the SAG mill feed conveyor to feed the grinding circuit. Pebble lime is added to the SAG mill feed conveyor via a screw conveyor to control pH during leaching. SAG mill pebble production is recycled via a series of conveyors back to the SAG mill feed conveyor.

Plant Expansion

For the plant expansion, no changes to the stockpile are anticipated. Stockpile residence time will be reduced to approximately 7.5 hours of live storage; however, this is not expected to impact milling operations during crusher maintenance, as two primary crushers are provided, and the stockpile contains a total of 33 hours of storage.

17.3.4 Grinding

Reclaimed crushed ore from the stockpile is conveyed to a 7.92 m diameter by 4.27 m effective grinding length (EGL) SAG mill with a 4,800 kW motor equipped with a variable speed drive (VSD) to control the speed of the SAG mill. A belt scale on the SAG feed conveyor monitors the feed rate. Process water is added to the SAG mill to maintain a 70% slurry discharge density by weight. SAG mill discharge passes through the trommel screen to remove grinding media scats and a small number of pebbles. The SAG trommel screen undersize reports to the cyclone feed pump box, combining with ball mill discharge and gravity concentrator circuit tails. SAG trommel screen oversize is conveyed back to the SAG mill feed conveyor. A belt magnet removes grinding media scats from the pebbles.

Slurry from the cyclone feed pump box is pumped to a hydrocyclone cluster of 17 (8 operating / 9 spare) 381 mm diameter cyclones for size classification. Water is added to the cyclone feed pump box to achieve the desired density before pumping to the cyclones. The cyclone overflow, at a final target product P_{80} of 75 μm , flows via gravity to the trash screen prior to the leach circuit. The hydrocyclone cluster has been designed for a 350% circulating load.

Cyclone underflow feeds a 5.5 m diameter by 8.84 m EGL ball mill with a 4,800 kW fixed speed motor. Slurry overflows from the ball mill to a trommel screen, attached to the ball mill discharge end. Trommel undersize discharges into the cyclone feed pump box.

A smaller pump pumps slurry from the cyclone feed pump box to the gravity concentration circuit for coarse gold recovery.

Plant Expansion

For the plant expansion, the existing SAG mill liners will be upgraded, and the SAG mill grate port open area will be increased by at least 11%. Pebble recirculating load will be reduced from



approximately 28% to 15%. A HP450e pebble cone crusher will be installed within the pebble recirculating system.

A second ball mill with a second cyclone cluster of seventeen 381 mm diameter cyclones will be installed and operated in parallel with the existing ball mill. The second ball mill will have the same dimensions and motor size as the existing ball mill. The existing standby cyclone feed pump will be repurposed to pump 50% of the slurry to the second ball mill pumpbox. New pumps (duty/standby) will be installed and feed the second cyclone cluster, and a third smaller pump will feed the existing gravity concentration circuit. Cyclone underflow from the new cyclone cluster will gravitate back to the new ball mill, and cyclone overflow will flow via gravity to the existing trash screen.

17.3.5 Gravity Gold Recovery

The gravity circuit comprises one centrifugal concentrator complete with a feed scalping screen. Feed to the circuit is directed from the cyclone feed pump box via a dedicated pump to the scalping screen. Gravity scalping screen oversize at +2 mm reports to the gravity tails pumpbox, from where the gravity tails pump directs the material back to feed the ball mill.

Scalping screen undersize is fed to the centrifugal concentrator. The gravity concentrate is batch processed in the CS3000 intensive cyanidation unit. The gravity concentrate is leached to dissolve gold in a leach solution that includes sodium cyanide, caustic solution, and a leach accelerant. After the leach cycle is complete, the pregnant solution is pumped to the electrowinning circuit. The tails from the intensive leach reactor circuit report to the gravity tails pump box, and from there are returned to the grinding circuit.

Plant Expansion

For the plant expansion, a second centrifugal concentrator will be installed. Layout was provided during initial plant construction to facilitate the installation of a second unit. Feed from the second ball mill cyclone feed pumpbox will be pumped to the existing scalping screen.

17.3.6 Pre-Aeration, Leach and Adsorption Circuit

Cyclone overflow from the existing ball mill cyclones is fed via gravity to the trash screen. Screen underflow flows into a pump box via a metallurgical sampler and is then pumped to the pre-aeration tank.

The pre-aeration, leach, and adsorption circuit consists of one agitated pre-aeration tank, two agitated leach tanks, followed by eight agitated CIL tanks in series, located outdoors in dedicated bunded areas serviced by sump pumps. The pre-aeration, leach, and CIL tanks provide a total circuit residence time of 36 hours at a pulp density of 42.5% w/w at the nominal slurry flow rate.

Oxygen and air are sparged in all tanks to maintain adequate dissolved oxygen levels for leaching. Sodium cyanide is added to the leach circuit to dissolve the gold, and hydrated lime slurry is stage-added to maintain circuit alkalinity at a pH of 10.5 to 11, preventing the creation of hydrogen cyanide gas. The inter-tank screen in each CIL tank retains the carbon while transferring the slurry by gravity to the downstream tank. This counter-current process is repeated until the loaded carbon reaches the first CIL tank. Tailings from the last CIL tank gravitate to the cyanide detoxification tank.

Fresh/regenerated carbon from the carbon regeneration circuit is returned to the last tank of the CIL circuit and is advanced counter-currently to the slurry flow by pumping slurry and carbon.



Recessed impeller pumps are used to transfer slurry between the CIL tanks and from the first tank to the loaded carbon screen mounted above the acid wash column in the elution circuit.

Plant Expansion

For the plant expansion, the existing tailings thickener will be repurposed as a preleach thickener to increase slurry density to 50% slurry density by weight, and three additional tanks will be installed to maintain a total residence time of 36 hours across preaeration, leach, and CIL. The tanks will be reconfigured to consist of two agitated pre-aeration tanks, three agitated leach tanks, and nine agitated CIL tanks in series. The existing inter-tank screens will be replaced with larger screens in the CIL tanks. The CIL discharge will gravitate to a new pump box and pumps, which will transfer the slurry to the cyanide destruction system. With the pre-leach thickener added to the flowsheet, trash screen underflow will be pumped to the thickener. Thickener underflow will be pumped to the first pre-aeration tank, and thickener overflow will be pumped to the SAG mill or process water tank.

17.3.7 Cyanide Destruction

The cyanide destruction circuit consists of one mechanically agitated tank, providing a retention time of one hour. The conventional SO_2 / O_2 process is used for cyanide destruction. The cyanide destruction circuit treats CIL tailings, process spills from various contained areas, and process bleed streams: cold cyanide barren solution effluent, acid wash effluent, and area sump pump discharge.

Oxygen is sparged into the cyanide destruction tank; lime slurry is added to maintain a pH of 8.5; and copper sulphate is added as a catalyst. Sodium metabisulphite (SMBS) is dosed into the system as a source of SO_2 . The circuit is designed to reduce weak acid dissociable (WAD) cyanide in solution to less than 2 mg/L.

From the detoxification tank, the tailings report to the carbon safety screen and metallurgical sampler. Screen undersize is pumped to the tailings thickener, while screen oversize (recovered carbon) is collected in fine carbon bulk bags for potential return to the CIL circuit.

Plant Expansion

For the plant expansion, the currently installed second mechanically agitated tank will be connected, and a sulphur burner system will be installed as an alternative SO_2 source.

17.3.8 Tailings Thickening

Detoxified tailings are thickened before discharge to the TMF. The overflow of the tailings thickener is reused as process water in the plant. A flocculant is added to the thickener feed to improve the settling rate of the material. The underflow at 65% slurry density by weight is pumped to the TMF for final deposition, with decant water from the TMF returned for use as process water.

Plant Expansion

For the plant expansion, the existing tailings thickener will be repurposed as a preleach thickener, and a new high-rate thickener and associated flocculant system will be installed to continue to provide 65% slurry density by weight to the TMF.



17.3.9 Acid Wash and Elution

Loaded carbon from the CIL circuit is pumped, screened, and transferred to the acid wash column where it is treated with a weak hydrochloric acid to remove inorganic foulants such as calcium, magnesium, and sodium salts, as well as fine mineral particles trapped on the carbon like silica.

Entrained water is drained from the column, and the column is refilled from the bottom up with the hydrochloric acid solution. Once the column is filled with acid, it is left to soak, after which the spent acid is rinsed from the carbon and discarded to the cyanide destruction tank. The acid-washed carbon is then hydraulically transferred to the elution column for gold stripping.

The gold stripping (elution) circuit uses the conventional pressure Zadra process. The elution sequence commences with the injection of a set volume of water into the bottom of the 7 t elution column, along with the simultaneous injection of cyanide and sodium hydroxide solution to achieve a weak NaOH (2.0% w/w) and weak sodium cyanide (NaCN) (0.2% w/w) solution. Once the prescribed volume has been added, the pre-soak period commences. During the pre-soak, the caustic/cyanide solution is circulated through the column and the elution heater until a temperature of 95°C is achieved.

Upon completion of the pre-soak period, additional water is pumped through the trim heat exchanger and elution heater, then through the elution column to the pregnant eluate tank at a rate of twice the effective column volume per hour. At this stage, the temperature of the strip solution passing through the column is increased to 140/150°C at a pressure of 350/500 kPaG (kiloPascal gauge), and the gold is stripped off the loaded carbon.

When stripping is complete, the strip solution flows up and out of the top of the column, passing through the heat exchanger via the elution discharge strainers and to the pregnant solution tank.

Upon completion of the cool-down sequence, the carbon is hydraulically transferred to the carbon regeneration kiln feed hopper via a dewatering screen.

For the plant expansion, no additional modifications are required.

17.3.10 Carbon Regeneration

Carbon is reactivated in an electric rotary kiln. Dewatered stripped carbon from the elution circuit is held in a 7 t kiln feed hopper. A screw feeder meters the carbon into the reactivation kiln, where it is heated to 750°C in an atmosphere of superheated steam to restore the activity of the carbon and remove any organic foulants.

Carbon discharging from the kiln is quenched in water and screened on a carbon sizing screen located on top of the CIL tanks to remove undersized carbon fragments. The undersized fine carbon gravitates to the carbon safety screen, while the carbon screen oversize is directed to the CIL circuit.

As carbon is lost by attrition, new carbon is added to the circuit using the carbon quench tank. The new carbon is then transferred along with the regenerated carbon to feed the carbon sizing screen.

No significant changes are anticipated to the carbon regeneration circuit for the plant expansion.

17.3.11 Electrowinning and Gold Room

Gold is recovered from the pregnant solution by electrowinning and is smelted to produce doré bars. The pregnant solution is pumped through two electrowinning cells with stainless steel mesh



cathodes. Gold is deposited on the cathodes, and the resulting barren solution is pumped to the leach circuit. One additional electrowinning cell is dedicated to processing pregnant solution from the intensive cyanidation unit.

The gold-rich sludge is washed off the steel cathodes in the electrowinning cells using high-pressure spray water and gravitates to the sludge hopper. The sludge is filtered, dried, mixed with fluxes, and smelted in an electrical induction furnace and cast into gold doré bars. The electrowinning and smelting process takes place within a secure and supervised gold room equipped with access control, intruder detection, and closed-circuit television equipment. The bars are cleaned and weighed prior to storage.

No significant changes are anticipated to the electrowinning circuit and gold room for the plant expansion.

17.4 Reagents

Each set of compatible reagent mixing and storage systems is located within curbed containment areas to prevent incompatible reagents from mixing. Storage tanks are equipped with level indicators, instrumentation, and alarms to prevent spills during normal operation. Appropriate ventilation, fire and safety protection, eyewash stations, and Safety Data Sheet (SDS) stations are located throughout the facilities. Sumps and sump pumps are provided for spillage control.

No significant changes are anticipated for the existing reagent systems, except to implement a sulphur burner system as a new source of SO₂ and to convert the existing sodium metabisulphite system to a sodium hydroxide mix system as described below. Reagent usage will increase due to higher plant throughput.

The following reagent systems are currently used for the process:

- Pebble lime
- Hydrated lime
- Sodium cyanide
- Hydrochloric acid
- Copper sulphate pentahydrate
- Sodium metabisulphite
- Sodium hydroxide
- Flocculant
- Activated carbon
- Anti-scalant
- Smelting fluxes
- Sulphamic acid

17.4.1 Pebble Lime

Pebble lime is delivered in bulk and is pneumatically conveyed from the tanker to the pebble lime silo located adjacent to the ore stockpile. Pebble lime is extracted from the lime silo and fed onto the SAG mill feed conveyor in a solid form for pH control in leaching as required.



17.4.2 Hydrated Lime

Hydrated lime is delivered in bulk bags, which are lifted using a frame and hoist into the hydrated lime bag breaker on top of the mixing/storage tank. The solid reagent is discharged into the tank and is slurried in process water to achieve the required dosing concentration. The slurried hydrated lime is pumped through a ring main with distribution points in leaching/CIL and cyanide destruction. An extraction fan is provided over the lime bag breaker/mixing tank to remove reagent dust that may be generated during reagent addition/mixing.

17.4.3 Sodium Cyanide

Sodium cyanide is delivered to site in secured boxes containing the reagent bulk bags. Bags are lifted using a frame and hoist into the sodium cyanide bag breaker on top of the tank. The solid reagent discharges into the tank and is dissolved in water to achieve the required dosing concentration. A sodium cyanide dust collector is located at the top of the mixing tank to collect reagent dust and return it to the mixing tank. The sodium cyanide dust collector is assisted by the sodium cyanide dust fan. After the mixing period is complete, cyanide solution is transferred to the cyanide storage tank using a transfer pump. Sodium cyanide is delivered to the leach circuit, intensive leach reactor and elution circuit with dedicated dosing pumps. An extraction fan is provided over the sodium cyanide bag breaker/mixing tank to remove reagent dust that may be generated during reagent addition/mixing.

17.4.4 Sodium Metabisulphite (SMBS)

SMBS is delivered as solid flakes in bulk bags and stored in the warehouse. Process water is added to the agitated SMBS mixing tank. Bags are lifted using a frame and hoist into the SMBS bag breaker on top of the tank. The solid reagent is added to the tank and dissolved in water to achieve the required concentration. An SMBS dust collector is located at the top of the mixing tank to capture reagent dust and return it to the mixing tank. The SMBS dust collector is assisted by the SMBS exhaust fan.

After the mixing period is complete, SMBS solution is transferred to the SMBS storage tank using the SMBS transfer pump. SMBS is delivered to the cyanide destruction circuit using the SMBS dosing pump. An extraction fan is provided over the SMBS mixing tank to remove SO₂ gas that may be generated during mixing. The SMBS mixing area is ventilated using the SMBS area roof fan.

Plant Expansion

For the plant expansion, SMBS will be replaced with a sulphur burner system as a source of SO₂ for cyanide destruction. Solid sulphur prills will be supplied to the site and melted in a tank. Liquid sulphur and process air will be delivered to a refractory-lined atomizing sulphur burner, where combustion generates SO₂ gas, which will be cooled prior to being sparged into the cyanide destruction tanks.

17.4.5 Sodium Hydroxide (NaOH)

Sodium hydroxide (caustic soda) is delivered in totes as a 50% w/w solution and stored adjacent to the elution circuit until required. Dosing pumps automatically deliver the reagent to the required locations—gravity concentrate intensive leach reactor (ILR), elution circuit, electrowinning, and cyanide solution mixing—to ensure the dosing requirements are met.



For the plant expansion, the existing SMBS makeup and storage circuit will be repurposed to prepare solid NaOH. Solid NaOH pearls will be delivered in bulk bags and will be mixed with water to the appropriate solution strength.

17.4.6 Hydrochloric Acid (HCl)

Hydrochloric acid is delivered in totes as a solution and stored adjacent to the elution circuit until required. Hydrochloric acid with 32% strength is mixed with raw water (inline) to achieve the required 3% w/v concentration. Hydrochloric acid is delivered to the acid wash circuit using the hydrochloric acid dosing pump.

17.4.7 Flocculant

Powdered flocculant is delivered to site in bulk bags and stored in the warehouse. A self-contained mixing and dosing system is installed, including a flocculant storage hopper, a flocculant blower, flocculant wet jet mixer, flocculant mixing tank (agitated), and flocculant dosing pump. Powdered flocculant is loaded into the flocculant storage hopper using the flocculant hoist. The dry flocculant powder is transferred to the flocculant hopper, and from the hopper it is pneumatically transferred into the wet jet mixer, where it is contacted with fresh water.

A flocculant solution at 0.50% w/v is agitated in the flocculant mixing tank for a preset period. After a pre-set time, the flocculant is transferred to the flocculant storage tank using the flocculant transfer pump. Flocculant is dosed to the tailings thickener using variable speed helical rotor style pump. Flocculant is further diluted just prior to the addition point.

For the plant expansion, a second flocculant system will be provided for the new tailings thickener.

17.4.8 Activated Carbon

Activated carbon is delivered in solid granular form in bulk bags. When required, fresh carbon is introduced into the carbon quench tank or directly into the final CIL tank.

17.4.9 Anti-Scalant

Anti-scalant is delivered as a solution in 1 m³ totes and stored in the warehouse until required. Anti-scalant is dosed without dilution. Positive displacement-style dosing pumps deliver the anti-scalant to the strip solution tank as needed.

17.4.10 Gold Room Smelting Fluxes

Borax, silica sand, sodium nitrate, and soda ash are delivered as solid crystals/pellets in bags or plastic containers and stored in the warehouse until required.

17.4.11 Sulphamic Acid

Sulphamic acid is delivered in 25 kg poly bags. The solution is prepared and dosed at a concentration of 10% w/w using a peristaltic pump. Sulphamic acid is used to descale calcium carbonate precipitates that form in the heating and heat recovery system, which is part of the elution system.



17.5 Services and Utilities

17.5.1 Oxygen

Oxygen is injected into leach, CIL, and cyanide destruction tanks. Oxygen is produced in a vacuum swing adsorption (VSA) plant at site to meet requirements. This system is provided as a rental. For the plant expansion, additional VSA rental units will be provided for the increased throughput.

17.5.2 Process / Instrument Air

Low-pressure air blower supplies the required air to the pre-aeration tank and the back end of the CIL tank train. For the plant expansion, low-pressure air will be supplied to the converted pre-aeration tanks.

High-pressure air is produced by compressors to meet plant requirements. The high-pressure air supply is dried and used to satisfy both plant air and instrument air demand. Dried air is distributed via the air receivers located throughout the plant.

For the plant expansion, a small compressor will be installed in the secondary crushing circuit for dust collection pulsation air requirements.

17.5.3 Water Supply

Details of the water supply into the Process Plant are described in Section 18.3.

17.5.4 Fresh Water Supply System

Fresh water is supplied from Victoria Lake to the fresh/firewater tank. Fresh water is used for all purposes requiring clean water with low dissolved solids and low salt content.

Fresh water is stored in the fresh/firewater tank for use in process applications and as fire water for use in the sprinkler and hydrant system, and cooling water for mill motors and mill lubrication systems (closed loop).

17.5.5 Process Water Supply System

Overflow from the tailings thickener and TMF decant water meet the main process water requirements. Fresh water provides any additional make-up water requirements.

For the plant expansion, overflow from the pre-leach thickener (repurposed tailings thickener) and new tailings thickener, and TMF decant water will meet plant process water requirements. The existing system will be modified to include a filtration circuit to produce treated TMF decant water for the gravity circuit, reagents and sulphur burner.

17.5.6 Gland Water

One low-pressure and one high-pressure gland water pumps supply gland water to all slurry pump applications in the plant. Gland water is sourced from the process water system. For the plant expansion, redundant pumps will be installed.



17.6 Plant Consumption

17.6.1 Energy

The power demand for the Process Plant, along with the rest of the Project, is provided by grid power from NL Hydro and is discussed in Section 18.

Plant site power demand is summarized in Table 17-2.

Table 17-2: Plant Operating Load

Power	Existing Plant	Plant Expansion
Grid Power	8.1 MW	19.4 MW

17.6.2 Reagents and Consumables

Reagents and consumables usage are summarized in Table 17-3

Table 17-3: Reagents and Consumables Consumption

Item	Form	Unit	Existing Plant (2.5 Mt/a)	Plant Expansion (5 Mt/a)
Activated Carbon	Coconut shell, grade 6 x 12 mesh	g/t feed	40	40
Copper Sulphate	Blue crystal, pentahydrate, 99.5% minimum purity	kg/t feed	0.15	0.10
Flocculant	Powder, 97.5% minimum purity	g/t feed	30	60 (30 per thickener)
Hydrochloric Acid	Liquid, 33% w/w	m ³ /strip	1.2	1.2
Pebble Lime	Granules, 90% minimum available CaO	kg/t feed	2.6–5.0	2.6–5.0
Hydrated Lime	Powder, 90% minimum available CaO	kg/t feed	0.5–1.0	0.5–1.0
Sodium Cyanide	Powder, 98% minimum purity	kg/t feed	0.75–1.50	0.75–1.50
Sodium Hydroxide	Liquid, 50% w/w	kg/t feed	0.15	-
	Granules, 100% NaOH	kg/t feed	-	0.075
SMBS	Powder, 97.5% minimum purity	kg/t feed	1.16–1.46	-
Sulphur	Granules/prills, 99.5% minimum purity	kg/t feed	-	0.25–0.32
Oxygen	Produced onsite	kg/t feed	1.6	1.6
Anti-scalant	Liquid	kg/t feed	0.015	0.015
Sulphamic Acid	Powder	g/t feed	5	5
SAG Mill Media	125 mm balls	kg/t feed	0.74	0.74
Ball Mill Media	50 mm to 75 mm balls	kg/t feed	0.87	0.87



18.0 Project Infrastructure

18.1 Access Roads

Access to the mine site is via an existing 80 km public gravel road, which was upgraded during project construction. The gravel road leads to the Town of Millertown and to the paved Buchans Highway, which connects to the Trans-Canada Highway.

Personnel assemble near Millertown and bus to site for their shift rotations on site.

Sections of the road between the site and Millertown are single-lane only, including 13 single-lane only bridges. Mine personnel vehicle operators driving on the access road must be equipped with a radio and use a specific radio frequency monitored by mine security to call out their position and direction (inbound or outbound) on this road.

18.2 Power

Power to the mine is supplied by Newfoundland Labrador Hydro (NL Hydro). NL Hydro's Star Lake 18.4 MW hydroelectric generation station, which is located approximately 20 km northwest of the mine site, is part of NL Hydro's 604 MW Bay d'Espoir generating system. The generating station supplies power to the mine site via a new 40 km-long, 66 kV transmission line. The supplied power is stepped down to 6.6 kV for distribution within the mine site. The mine's electrical substation has two transformers with 100% capacity redundancy.

The mine's current peak power supply is 19.0 MW. For the planned Process Plant expansion, an additional 13.0 MW for peak demand is anticipated. Onsite diesel gensets are expected to provide this power on a temporary basis while NL Hydro performs an electrical system impact study to confirm the additional power availability and completes the interconnections or upgrades required at its Star Lake station. At the mine site, a second electrical substation is anticipated to be constructed to support the additional power load for the process plant expansion.

18.3 Water

Administrative Water Services

The primary source of water to meet the Process Plant's water demand is the reclaimed water from the TMF tailings pond, and the secondary source is fresh water from NL Hydro's Victoria Lake reservoir. Fresh water sourced from Victoria Lake is stored in a fresh/firewater tank, from which it is distributed to the Process Plant, the potable water treatment system, and to the firewater system.

A sewage treatment plant and septic field are operational at the site to treat all sewage generated from the camp facilities. All sewage from operational areas at the site is currently trucked to an off-site facility for treatment and disposal. A potable water plant supplies the camp facilities, utilizing freshwater from the Victoria Lake reservoir.

Surface Water Management

Water management involves collecting surface-contact water runoff from facilities and containing it in sedimentation ponds to minimize total suspended solids prior to controlled release into the receiving environment. There are 21 ponds planned to be built for water collection and sediment management. The ponds are sized for storm events up to 1:100. Annual Exceedance Probability (AEP) with spring snowmelt and to accommodate climate



change by providing flood relief up to the 1:200 AEP in the spillway. The water quality design storm event is based on a minimum of 24 hours of residency time prior to release.

Based on ongoing development of operational areas and water management needs, a total of six ponds are at or nearing completion, and, as such, the surface water management system is considered under construction by regulators, with no discharge to the receiving environment. It is expected that portions of the water management system will be commissioned in 2026 and that active discharge to the receiving environment will commence. The Mine has commissioned an external study to optimize the overall water management system and identify options to reduce the number of ponds.

The mine site is subdivided into several complexes for water management: Marathon, Berry, Leprechaun, and the Process Plant and TMF. Water management in these complexes functions independently, with decentralized water treatment in each. The water management components include sedimentation ponds, dams, drainage ditches, and pumps to collect and contain surface water runoff from stockpiles (waste and ore) and pits. The Mine is currently evaluating the needs for the use of flocculants, and/or coagulants as part of the sediment management infrastructure for its overburden stockpiles. Water discharge from these complexes is into various ponds and/or tributaries, and ultimately into Victoria Lake and/or Valentine Lake. For the TMF, water will be routed to a water treatment plant followed by a submerged attached growth reactor (SAGR) unit prior to discharge into Victoria Lake. For the Process Plant area, water is collected in a sedimentation pond and discharged to a nearby tributary.

18.4 Process and Mining Buildings

Building infrastructure includes the Process Plant, plant maintenance shops and storage, plant administration, laboratory, mine dry, truck shop and storage, truck wash, explosives storage, fuel station, and security. Construction of a permanent two-bay truck shop and storage building is currently in progress to replace the temporary facility used for construction, and three additional bays are planned for 2027; a further expansion of two additional bays is anticipated to support the Phase 2 mine plan. The current fuel farm can store 950,000 litres, and this capacity will expand to 1,800,000 litres to support the Phase 2 mine plan expansion. The existing mine dry will be expanded to support the Phase 2 mine plan to accommodate the headcount increase of approximately 50%.

18.5 Accommodation Camp

The permanent and construction camps are located within the mine site and can currently accommodate up to 650 people in total. Construction of a new 200-person camp for operations has begun and is expected to be completed by the end of Q1 2026. The new camp will phase out some of the accommodation in the construction camp, and the total capacity for camp accommodation will be 765 people. As part of the Phase 2 expansion, an additional camp with capacity for 400 people will be built, bringing total accommodation capacity to 1,165.

18.6 Tailings

WSP (and its predecessor company Golder Associates) has performed specialized geotechnical and hydrologic engineering services for the design of the TMF, including design of the tailings dam and ancillary hydraulic structures and tailings deposition planning. Since 2019, WSP has been responsible for the ongoing design and, since 2023, for construction quality assurance (CQA) and Engineer of Record (EOR) services during the staged construction of the TMF.



An Independent Tailings Review Board (ITRB) was formed in 2022 and has been involved on an annual basis to provide oversight during the lifecycle of the TMF. The ITRB's oversight of the TMF is an ongoing process. The purpose of the ITRB is to review and advise on the design, construction, operation, performance, and closure planning for the TMF. Recommendations from the ITRB have been incorporated into the TMF design.

Geotechnical Subsurface Investigations

GEMTEC Consulting Engineers and Scientists (GEMTEC) has conducted geotechnical and hydrogeological foundation investigations from 2019 to 2020 and 2021. These programs have included excavating numerous test pits and drilling numerous boreholes. Soil samples collected from test pits and boreholes were tested in a geotechnical laboratory. In situ hydraulic conductivity testing of foundation soils was performed. Piezometers/monitoring wells were installed in the boreholes at various depths to facilitate groundwater monitoring and testing. The groundwater table is very shallow and is typically no deeper than 1 m below ground surface.

Due to a lack of availability and/or sufficient quantities on site, sand and gravel materials for the TMF bedding and filter zones are produced from crushing and screening waste rock sourced from mining operations, and geosynthetic liners are used for low-permeability applications.

Design Criteria

The TMF is currently designed to receive approximately 31.6 million tonnes (Mt) of milled tailings at an average dry density of 1.42 t/m³. The tailings are thickened to a target 65% solids content (by mass). A cyanide destruction system is used to process all tailings water before it is sent to the TMF.

In accordance with the Canadian Dam Association (CDA) Dam Safety Guidelines, the TMF dams have been classified as having a 'Very High' hazard potential. This classification is based on the potential environmental impacts and population at risk in the event of a catastrophic failure. The TMF was designed to meet the minimum allowable factors of safety for static and pseudo-static loading conditions recommended by CDA.

Dam design criteria include storage for the Environmental Design Flood (EDF), defined as a 100-year return hydrologic event (7-day rain event or 30-day spring freshet rain-on-snow) applied to the highest normal operating pond level and with no discharge through the emergency spillway. A trapezoidal-shaped emergency spillway is currently being installed to safely pass the Inflow Design Flood (IDF), which is a routed Probable Maximum Flood (PMF) with a 24-hour duration. Based on the hazard classification, the TMF dams are designed for seismic events with return periods of 1:2,475 to 1:10,000 (Maximum Credible Earthquake) during the TMF's operational period.

Dam Design

Tailings impoundment is provided by the construction of perimeter zoned dams that form a horseshoe-shaped side-hill facility that is contained by natural ground on the northwest side. The dam is raised in stages, with a final maximum height of 45.5 m and a final crest length of approximately 3,000 m. The dams are constructed primarily using waste rock from open pit stripping and mining operations.

The cross-section design for the TMF dams consists of a geosynthetic low-density polyethylene (LLDPE) plastic liner covering the upstream slope, with an underlying geotextile, sand filter/bedding, and sand/gravel transition layers that are designed to ensure filter compatibility and prevent internal erosion and piping into the adjacent downstream rockfill dam shell. The



geosynthetic liner protects the upstream dam slope from surface-water erosion caused by waves or runoff until tailings beaches are established along the slope. A blanket filter, which comprises the same sand filter/bedding and sand/gravel transition layers, was constructed between the foundation soil and the rockfill embankment and along the upstream toe of the central dam to protect against potential vertical seepage forces from within the dam's foundation and also to reduce the risk associated with internal erosion and piping.

The geosynthetic LLDPE liner extends 100 m upstream of the dam toe into the reservoir to reduce the foundation seepage rate, reduce the critical hydraulic gradient at the toe of the dam, and cut off any potential permeable zones of bedrock outcrops and/or sandier overburden materials which may be present within the reservoir and adjacent to the dam. A geosynthetic clay liner (GCL) is installed beneath the geomembrane liner in the reservoir to provide a low-permeability layer that protects the liner from potential puncture damage.

A seepage and runoff collection ditch is installed downstream of the dams to collect any water and convey it to a collection sump, where it is pumped back into the TMF reservoir.

A SAGR (submerged attached growth reactor) unit will be constructed to replace the polishing pond from the feasibility study for the TMF and the Process Plant. After pre-treatment of process water for dissolved metals and cyanide destruction, biological treatment of process water contained in the TMF with SAGR will reduce the overall ammonia concentration to non-toxic levels via nitrifying bacteria and aeration. Excess biomass created as a byproduct of ammonia detoxification will be aerobically digested within the SAGR. Water discharged from the SAGR is predicted to be low in suspended solids, metals, thiocyanate, cyanate, ammonia, and bacteria.

The TMF dams are constructed in stages. Construction of the TMF starter dams (Stage 1) and the subsequent initial dam raises (Stage 2) were built in 2023 and 2024, respectively. Construction of the next dam raise (Stage 3) is ongoing and will be completed in 2026, with a minimum crest elevation of 381 m and a planned ultimate minimum crest elevation of 392 m. The TMF dams will be periodically raised using downstream construction methodology, and the geomembrane liner, internal bedding, and filter zones will be extended with each expansion of the rockfill dams. An emergency spillway and discharge channel are being built as part of Stage 3 construction.

Figure 18-1 shows the general arrangement of the TMF with Stages 1 and 2 completed and Stage 3 construction underway. Tailings deposition has recently been initiated in the reservoir.



Figure 18-1: Completed TMF for Tailings Deposition (October 2025)



An Operations, Maintenance and Surveillance (OMS) Manual, in accordance with the Mining Association of Canada's guidelines, has been put in place for the TMF. Geotechnical instrumentation has been installed to monitor the performance of the TMF dams, including vibrating-wire piezometers to measure pore-water pressure within the dams and foundations. Instrumentation data is reviewed by WSP.

Tailings Characteristics

Tailings geochemistry indicates that the ore is considered non-potentially acid generating (NPAG) and therefore is not expected to generate acid rock drainage (ARD).

Tailings Deposition Plan

Tailings deposition into the TMF began in August 2025. Tailings are deposited as a thickened slurry from the dam crests and from the natural high ground on the northwest side of the reservoir to produce a wide, exposed beach. The beach will displace the tailings supernatant pond away from the dams and towards natural ground along the eastern side of the reservoir and the emergency spillway, enhancing long-term dam stability. A barge-mounted pump system draws water from the supernatant pond and returns it to the processing plant.

A water balance has been developed for the TMF and is coupled with the tailings deposition plan to inform the timing of TMF dam raises. The water balance and tailings deposition plan are intended to be updated through the operational life of the TMF based on operational and performance data.

Storage Capacity

The TMF is designed to store 31.6 Mt of tailings. A total of 0.7 Mt of tailings has been deposited to year-end 2025, and an additional 51.0 Mt of tailings will be delivered to the TMF over the remaining LOM. The TMF is anticipated to be filled by 2033 based on the current and expansion process plant capacity, and there will be a shortfall of approximately 20.1 Mt of tailings storage. For additional storage capacity, tailings may subsequently be deposited into the mined-out Berry open pit in 2033 and for the remainder of the mine life. Engineering studies to support the



in-pit deposition plan will be performed to design the required tailings distribution and reclaim piping system and associated pumping systems, as well as the tailings deposition and water reclaim plans.



19.0 Market Studies and Contracts

Equinox has not completed any formal marketing studies on the gold production expected from the mining and processing of gold ore from the Valentine Gold Mine into doré bars. Gold production is sold on the spot market. Terms and conditions included in sales contracts are typical of similar contracts for the sale of doré worldwide. Gold is bought and sold on many world markets, and it is not difficult to obtain a market price at any time. The gold market is very liquid, with numerous active buyers and sellers.

Equinox contracts out the transportation, security, insurance, and refining of doré gold bars. Equinox has contractual rates with Asahi Refining for the refining costs associated with doré gold bars produced at the Valentine Gold Mine, which are included in the costs reflected in this technical report. Equinox may enter contracts for the forward sale of gold or similar contracts under terms and conditions that are typical of and consistent with industry practices in Canada and worldwide.

Overview of Material Contracts

In accordance with NI 43-101, this section summarizes the contracts considered material to the development and operation of the Project. For purposes of this Technical Report, the QP has defined “material” contracts as agreements with a total contract value exceeding approximately US\$10 million over their term, or agreements otherwise essential to ongoing operations.

The following categories of contracts are currently in place and considered material to operations:

- Fuel supply agreements
- Cyanide supply agreements
- Grinding media supply agreements
- Explosives supply agreements

These agreements are structured as multi-year supply contracts supporting ongoing mining and processing operations. The QP understands that no other contracts meeting the above materiality threshold are presently under negotiation.

Development and Operating Contracts

The current material agreements primarily cover consumables and operational inputs required for mining and processing activities. At the effective date of this report:

- No material mining, concentrating, smelting, refining, transportation, handling, sales, hedging, or forward sales contracts were identified beyond the supply agreements noted above.
- The Issuer has confirmed that no material contracts, as defined herein, are currently under negotiation.

Commercial Terms and Industry Norms

The Issuer has advised that the terms, rates, and charges under the above-noted agreements are consistent with industry norms for comparable operations. Based on discussions with management and review of operating cost assumptions used in this Technical Report, the Qualified Person is not aware of any contract terms that would be considered outside normal



commercial practice for similar operations. Specific pricing, rates, and commercial terms are confidential and have not been disclosed in this report.



20.0 Environmental Studies, Permitting, and Social or Community Impact

Valentine has been in commercial operation since November 2025 with environmental programs and studies focused on compliance obligations required under the various permits, licenses, and authorizations in force since the completion of the federal environmental impact statement and provincial environmental assessment (EIS/EA) processes, or that have been obtained in the period since the completion of the EIS/EA.

Consultation with stakeholders (e.g., community members, agencies, interested parties) and Indigenous communities is an integral part of the Project. Active participation through consultation helps to achieve an open and transparent process, build trust, enhance awareness of the Project, and strengthen the quality of results. Consultation occurred throughout mine planning, permitting, and mine construction, and Valentine is committed to maintaining stakeholder relationships through operations and into closure. Socio-economic agreements (SEAs) have been established with two Indigenous communities. Social and community considerations are described in Section 20.4.

20.1 Site Environmental Conditions and Monitoring Programs

Environmental conditions and studies described in this section are summarized based on information documented in EIS/EA baseline reports and annual regulatory submissions required under the various permits and EIS/EA conditions. The Project Area footprint is shown in Figure 20-1.

A monitoring framework for both compliance and effects monitoring has been established for the Project and applies to all phases of development, operations, and closure. A series of 11 environmental follow-up monitoring plans (FMPs) and 13 other plans have been developed for the Project, which outline environmental protection measures that Valentine, the contractor, and subcontractors must implement and adhere to avoid or reduce potential adverse effects. These plans outline adaptive management and contingency measures to respond to incidents of environmental non-compliance or other potential adverse effects arising from the Project's operations. Contingency measures specific to each FMP are implemented if regular environmental and compliance monitoring programs detect deviations from standard operating conditions that result in, or may lead to, adverse environmental effects.

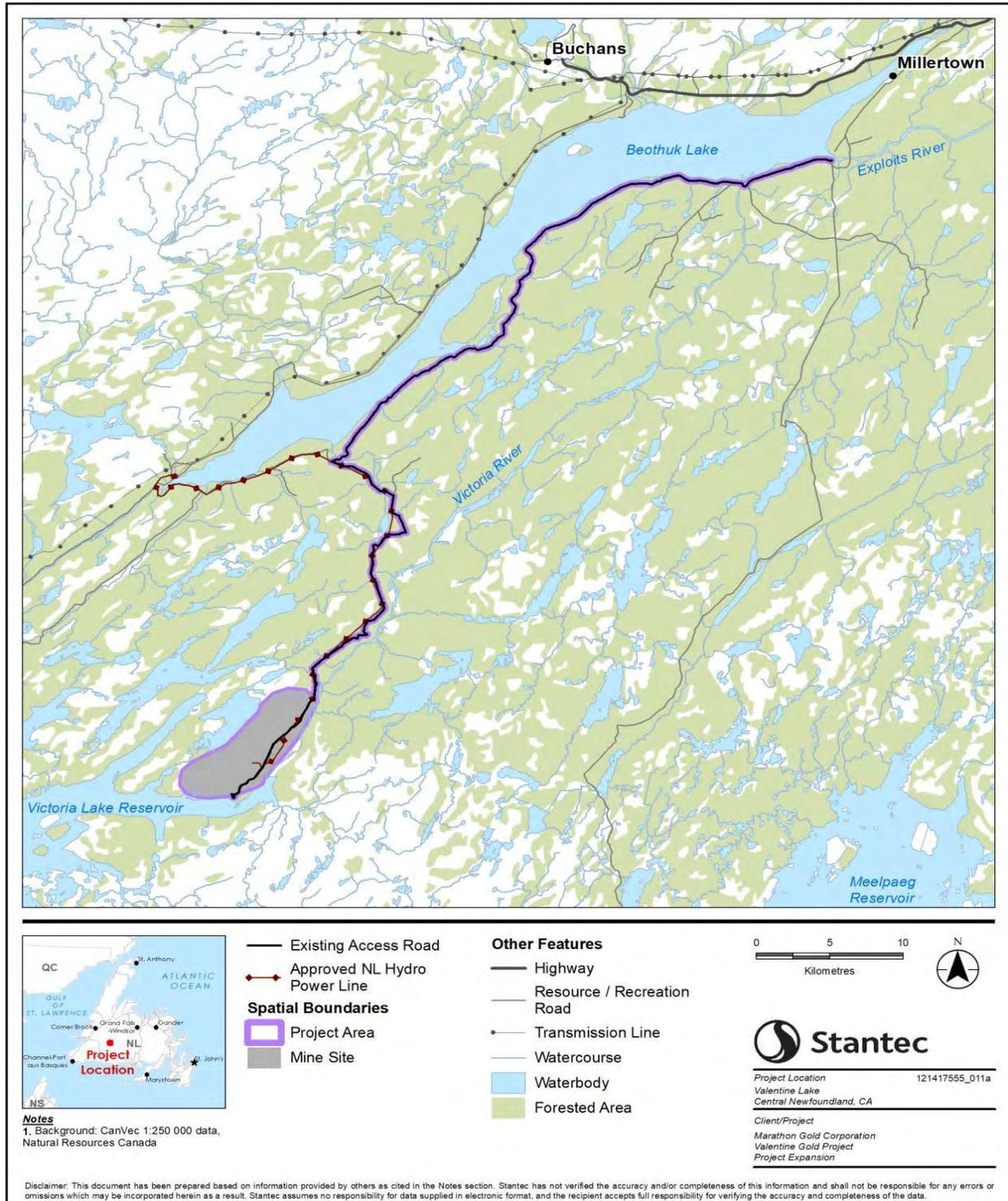
These FMPs are living documents and require refinement following permit amendments, monitor program modification, changes in company policies and procedures, and the evolution of industry best-management practices. Program plans are iterative by nature, and the monitoring activities associated with the Project will inform adaptive management, a process for continuously improving environmental management practices.

20.1.1 Physiography

Valentine is located within the Red Indian Lake Subregion of the Central Newfoundland Forest (CNF) Ecoregion (Newfoundland and Labrador Department of Fisheries and Land Resources [NLDFLR] 2019a). This ecoregion typically consists of rolling hills, dense forest, and organic deposits occurring in valleys and basins (Protected Areas Association [PAA] 2008).



Figure 20-1: Project Area Geology and Geomorphology



Source: Equinox 2026.



Terrain (i.e., topography and landforms) varies and includes boggy areas, thin to thick glacial till layers, and bedrock outcrops. Scattered wetlands, specifically patterned fens and bogs are common in the project area and vicinity.

20.1.2 Geology

The Valentine Gold Mine Property is underlain by five major lithological units including, from northwest to southeast, the Victoria Lake Supergroup (bimodal volcanic rocks, volcanogenic and siliciclastic sedimentary units), the VLIC, the Rogerson Lake Conglomerate, the Victoria Lake Supergroup metasedimentary units and lesser gabbroic and mafic volcanic rocks and the Red Cross lake intrusion.

The Victoria Lake Supergroup outcropping along the northwest boundary of the Valentine Gold Mine Property area consists mainly of low-grade Cambrio-Ordovician volcanics and sequences of clastic sedimentary rocks of the Tulks Hill assemblage. This assemblage represents two packages of bimodal volcanic and clastic sedimentary rocks referred to as the Long Lake volcanic belt and the Tulks sequence of banded to finely laminated siltstone, argillite, and tuffaceous siltstone with minor intercalated mafic tuff. License 020482M covers a portion of the Long Lake volcanic belt and is dominantly underlain by felsic and mafic volcanic rocks. In this area, the Long Lake volcanic belt is underlain by a thick sequence of black graphitic shale, which separates the Long Lake volcanic belt from volcanoclastic sedimentary units of the Stanley Waters Formation.

The entire Project area is overlain by glacial till between 1 and 5 m thick, as well as deeper boggy areas and ponds, with only rare bedrock exposures along the ridge and in stream beds.

20.1.3 Acid Rock Drainage/Metal Leaching Potential

A comprehensive geochemical testing program was completed as part of the environmental assessment process to characterize waste rock, ore, overburden, and tailings associated with the Project. This section presents the characterization results for waste rock and tailings materials.

Waste Rock

In the Marathon deposit, the overall percentage of potentially acid-generating (PAG) waste rock is estimated to be between 1.5% and 4% using the acid rock drainage (ARD) block model and sample-count methods, respectively. Sediments are classified as non-PAG rock regardless of method used. The geological and ARD block models provide the following percentages of PAG rock tonnages in modelled lithologies:

- quartz zones of non-ore QTP veins (7.4% to 15%)
- Quartz Porphyry varieties (1.9% to 4.7%)
- gabbro (0.2% to 2.6%)
- mafic dykes (0.4% to 0.9%)

PAG QTP veins, Quartz Eye Porphyry (QE-POR), and gabbro are not expected to generate acidity within 31, 45, and 4.7 years of exposure, respectively. These estimates of ARD onset are based on neutralization potential (NP) depletion times in humidity cell tests (HCTs) containing PAG rock from the respective lithologies.

In the Leprechaun deposit, the overall estimated percentage of PAG (and uncertain) waste rock is 1.0% of the total rock tonnage. PAG rock is only associated with quartz zones of non-ore QTP



veins in Sediment (SQTP) and in Trondhjemite / Granodiorite (QZ-TQTP), while all samples of pure trondhjemite/granodiorite and sediments are non-PAG. Samples of mafic dykes, even with non-ore QTP veins, are all non-PAG.

In the Berry deposit, the overall estimated percentage of PAG (and uncertain) waste rock is 11% based on 263 acid-based accounting (ABA) test results for the Berry deposit waste rock. All waste rock units in the Berry deposit returned PAG samples; however, the QE-POR and QTP units have the highest percentages, at 19% and 20%, respectively.

Tailings

Composite samples of tailings from Marathon, Berry, and Leprechaun deposits are classified as non-PAG and are not expected to generate ARD. Sensitivity analysis of tailings chemistry indicates that, because of mixing of Marathon, Berry, and Leprechaun ores, tailings are not expected to be PAG.

During operation, concentrations of arsenic (As), copper (Cu), and total cyanide (CN(T)) in the TMF will likely exceed the *Metal and Diamond Mining Effluent Regulations* (MDMER) limits. Seepage from the TMF is predicted to exceed MDMER limits for copper in post-closure. The water quality model results confirm exceedances of Canadian Water Quality Guidelines (CWQG) for Al, Ag, As, F, Fe, Cd, Cl, CN_{WAD} (a surrogate for CN_{Free}), Cr, Hg, Mn, Mo, P, Pb, un-ionized ammonia, total ammonia, NH₃+NH₄, nitrite, and Se, Tl, U, Zn, in discharge from the TMF pond. An assimilative capacity study indicates that TMF pond effluent, treated to meet all parameters and discharge limits, would also be below the CWQG thresholds or background concentrations within 300 m of the regulatory mixing zone.

Operational Characterization and Management

An operational sampling program has been developed as part of the ARD/ML Management Plan with the sampling frequency shown in Table 20-1. The operational characterization program is at an acceptable frequency and will provide valuable information for materials management at the Project. The ARD/ML Plan also outlines the process for management of PAG materials placed into the waste stockpiles.

Table 20-1: Operational ARD/ML Characterization Program

Material Type	Estimated Tonnage	Sampling Frequency
Overburden	11.7 Mt	1 per 50,000 t
Waste/Construction Rock	317 Mt	1 per 9,000 t
Ore	47.1 Mt	1 per 9,000 t
Tailings (End of Pipe)	47 Mt	1 per 48,000 t (Year 1 to 3) 1 per 77,000 t (Year 4 to 9/10)
Tailings (beaches)	To be determined at closure	1 per 10,000 m ²

20.1.4 Atmospheric Environment

Existing meteorology and climate in the Project Area are characterized by using climate and wind data from representative meteorological stations, with sufficient data availability, located nearest to the Project. Daily average temperatures range between -8.4°C to 16.3°C, with the lowest average temperatures occurring in February and the highest occurring in July. Extreme



daily maximum and minimum temperatures range between -33.5°C (February) to 33°C (July). Annual average precipitation is 1,236 mm, with 359 cm of snow and 877 mm of rain and average monthly precipitation totals range between 86 mm (April) and 123 mm (December). Prevailing winds are from the southwest and northeast with highest winds occurring most frequently from the southwest and lowest wind speeds most frequently from the north and northeast.

As there is limited development in the vicinity of the Project, there are few outside sources of air contaminants from human activity in the area. Given the nearest sources of air emissions are well outside the Project Area (private quarries), it is unlikely that air contaminant releases from these sources would contribute in a substantive way to reduce air quality at the Project.

Air quality impacts from operations at the Project are related to fugitive dust from roads, material extraction, stockpiles, loading/unloading operations fuel combustion and the from processing plant. During the decommissioning, rehabilitation and closure phase of the Project, air contaminant releases will be similar to, or less than, those during construction and operation. An air quality transport and dispersion model provides the link between the air contaminant releases and changes to ambient concentrations. Continuous, real-time, air quality monitoring at the Project includes meteorological monitoring (wind speed and wind direction) and ambient air monitoring for total suspended particles (TSP), particulate matter (10 µm diameter) PM₁₀, and PM_{2.5} concentrations during the operation of the Project. In addition to continuous particulate monitoring, periodic integrated sampling for trace metals is proposed during the first three years of operation.

Results from the ambient air monitoring program are reported monthly to the Newfoundland and Labrador Department of Environment, Conservation and Climate Change (NLDECCC) as required under the Certificate of Approval issued by the NLDECCC. The 2025 ambient air sampling program was conducted at the Project to measure ambient concentrations of TSP, metals, and mercury representative of conditions during the Project's construction phase. The daily 24-hour averages for all samples on the Project were below the threshold limit in the NL ambient air quality standard (AAQS) of 120 µg/m³. One sample taken at the Victory exploration site 5 km northeast of the Mine and 85 m from the Mine access road exceeded the NL AAQS limit with the exceedance being attributed to access road traffic.

20.1.5 Acoustic Environment

Valentine is in a remote area with limited human activity, and no substantive anthropogenic noise sources within 50 km. The mine site is located approximately 49 km southwest of the Town of Buchans and 60 km southwest of the Town of Millertown. Within the Local Assessment Area (LAA) and the Regional Assessment Area (RAA), during the baseline there were approximately 36 dwellings (one inactive outfitter, one existing accommodations camp (Exploration), one proposed accommodations camp, and 33 cabins), which represent the nearest sensitive receptors to the Project.

The results of the acoustic modelling conducted in support of the EIS, as well as updated modelling for the inclusion of Berry Pit to the Project, demonstrated compliance of the proposed facility with Health Canada's annoyance criteria (i.e., percent highly annoyed [%HA]) at each of the noise sensitive receptors within the LAA/RAA. With respect to sleep disturbance, sound pressure levels at receptors beyond the mine site boundary were not predicted to exceed the sleep disturbance threshold of 45 dBA recommended by Health Canada (2017) during operations. However, the nighttime sound pressure levels were greater than the nighttime target of 45 dBA at the accommodations camp.



During construction and operation, sources of noise include the operation of heavy mobile equipment and vehicles for tree clearing and grubbing, earthworks and material handling at the Project, as well as other vehicle traffic at the site and along the access road (e.g., materials transport, rotation changes, etc.), which also generate sound emissions. Other sources of noise emissions include blasting, rock breaking, crushing, and processing.

Through the Noise Follow-up Monitoring Program, ambient sound levels are monitored and assessed relative to existing regulatory criteria and guidelines. These noise monitoring results will guide the implementation of adaptive management for noise emissions and be used to validate the acoustic modelling conducted to support the EIS. Where necessary, and to the extent feasible, mitigation measures will be implemented to reduce noise levels from the Project activities. Monitoring during 2025 was conducted quarterly, with exceedances of the %HA and potential wildlife disturbances linked to the period of peak construction activities and activities such as snow clearing. The exceedances were episodic and not sustained.

20.1.6 Groundwater

The prominent topographic ridge that underlies the Project is inferred to act as a regional flow divide for both surface water drainage and groundwater flow and defines an area of groundwater recharge. Overall, the direction of shallow groundwater flow is expected to follow topography and surface runoff, and discharge into the low-lying surface waterbodies that border the property.

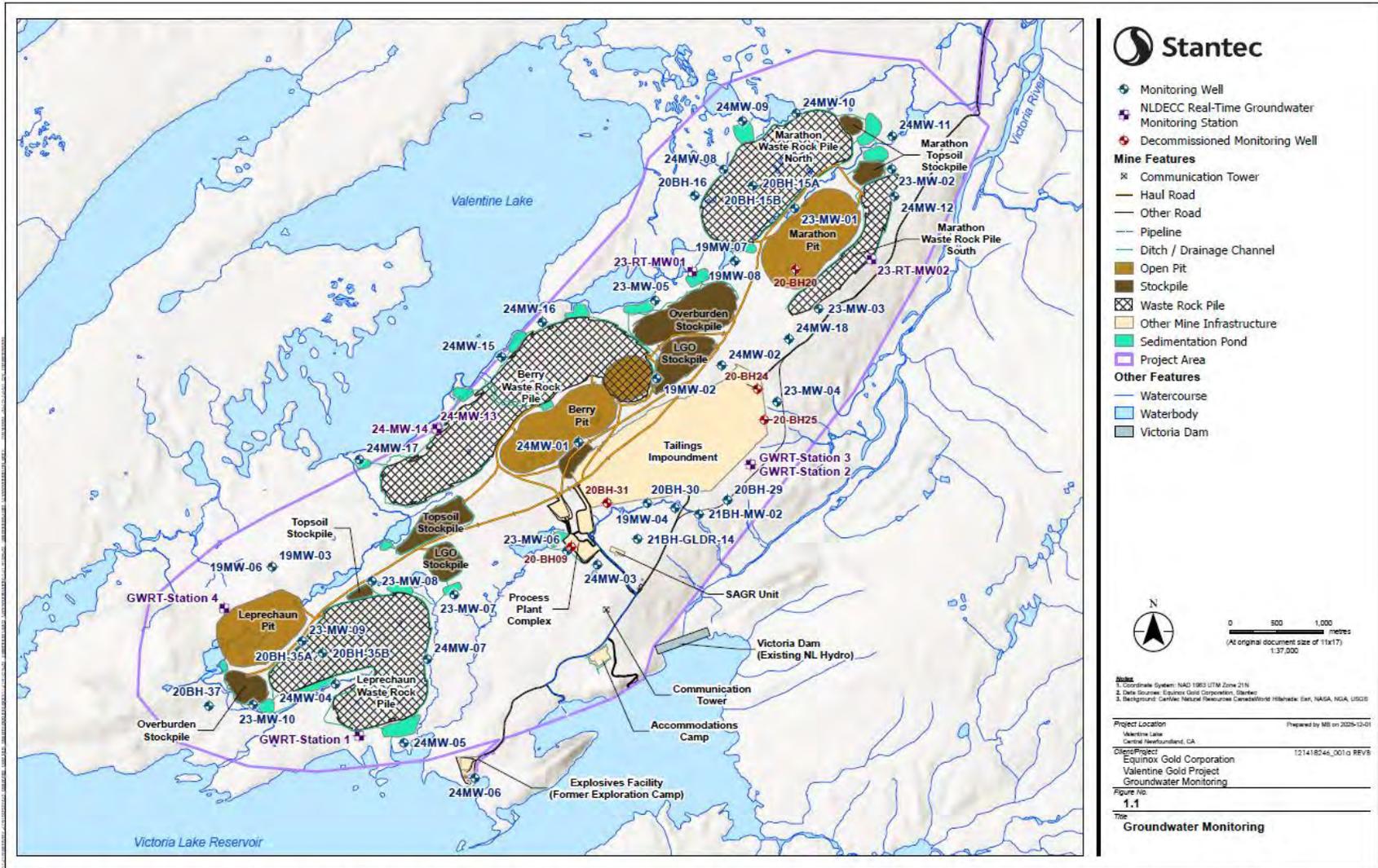
Locally, groundwater flow from the Marathon deposit is expected to travel southeast towards the Victoria River and northwest towards Valentine Lake, which flows into Victoria River northeast of the Project, and ultimately discharges into the Exploits River, approximately 100 km to the north. Groundwater flow from the Leprechaun deposit is expected to primarily travel south-southeast towards Victoria Lake Reservoir, with a lesser component flowing north towards Valentine Lake. Shallow groundwater flow, from the Berry deposit, is to the northwest towards Valentine Lake. Groundwater elevations vary across the site and generally reflect the topographic relief of the area, with higher groundwater elevations occurring in boreholes / wells located at higher topographic elevations. Overall, groundwater levels in the Project Area are shallow, with horizontal hydraulic gradients ranging from 1% to 17%.

Baseline water quality testing to date (Stantec 2020, 2023) indicates a calcium-sodium-bicarbonate-chloride-sulphate type groundwater that is characterized as clear (colour overall less than 15 True Colour Units [TCU]), slightly hard to hard (20.9 mg/L to 122 mg/L as Calcium Carbonate [CaCO_3]), slightly alkaline with moderate acid buffering potential, and low conductivity, indicating fresh conditions. Langelier Saturation Index values for groundwater samples indicate groundwater is neither strongly corrosive nor scale-forming with respect to solid CaCO_3 . Metals parameters were generally low except for iron and manganese.

A groundwater FMP (the Groundwater Follow-Up Monitoring Plan [GWFMP]) was developed for the Project and includes monitoring of groundwater levels and quality. As per the GWFMP, and as required under the Certificate of Approval issued by the NLDECCC, the current monitoring network (Figure 20-2) includes 51 monitoring wells and the sampling program consists of four monitoring events per year, not less than 30 days apart, for manual water level measurements and water quality sample collection. Samples are analyzed for a standard suite of parameters including general chemistry, cyanide, and metals. The groundwater monitoring network established in the GWFMP is intended to maintain a network sufficient to assess effects to water quantity and quality if a threshold is exceeded and to assess the effectiveness of subsequent adaptive mitigation measures.



Figure 20-2: Groundwater Monitoring



Source: Stantec 2025.



In addition to the Valentine sampling program, as a condition of the provincial EA release for the Project, 8 of the 51 monitor wells report near-real-time groundwater data and form part of the provincial real-time monitoring network. These real-time monitoring stations are installed and maintained by the NLDECCC-Water Resources Management Division (WRMD) under a memorandum of understanding (MOU) with Valentine.

Groundwater level monitoring in 2025 showed that levels were lower than normal, but this was attributed to the dry summer experienced at the site. Results from groundwater quality monitoring completed in 2025 aligned with the predictions made during the environmental assessment process.

20.1.7 Surface Water

As previously stated, the Project is subject to the federal MDMER and, as such, is required to monitor final discharge points (FDP) for both water quantity and water quality in addition to completing an environmental effects assessment program during operations. Valentine has currently identified 19 FDP for the site. An additional FDP is in the process of being added based on a federal Notice of Project Change approval that is under review by the Impact Assessment Agency of Canada (IAAC). The surface water management infrastructure network is still under construction as discussed in Section 18.0, with six sediment ponds nearing completion. These ponds will be commissioned and brought into operation during 2026, at which time the FDP monitoring requirements under the MDMER will come into force. Construction of the remaining water management infrastructure will proceed in line with ongoing site development activities.

Hydrology

The Project is centered on a topographic ridge that divides the drainage between the Valentine Lake watershed to the west and the Victoria Lake Reservoir and Victoria River watersheds to the south and east, respectively. A series of large waterbodies form the Exploits and Bay d'Espoir watersheds, which are two of the largest watersheds on the Island of Newfoundland and are substantially altered and controlled by hydroelectric developments. Victoria Lake historically drained north to the Victoria River to Beothuk Lake (formerly referred to as Red Indian Lake) and then further downstream to the Exploits River. The construction of a series of dams and connecting channels associated with the Bay d'Espoir Hydroelectric facility diverted Victoria Lake from the Victoria River toward the hydroelectric facility to the east.

As a condition of the provincial EA release for the Project, six real time water quality monitoring (RTWQM) stations are installed and maintained by the NLDECCC-WRMD under a MOU with Valentine. Three of these stations are at or adjacent to the Project with the other three part of the greater water watershed assessment.

Surface water quantity at the Project is managed according to the Surface Water Follow-up Monitoring Program (SWFMP) and includes water level and flow monitoring at 13 watercourses at the Project (three of which are part of the RTWQM).

Water Quality

Regional water quality parameters reported at the Environment and Climate Change Canada (ECCC 2020) managed sites between 2003 and 2019 includes metals, nutrients, and physical parameters. Total alkalinity (as CaCO₃) ranges from below the detection limit from 1.22 mg/L to 11 mg/L. Low alkalinity values suggest limited acid-buffering capacity in streams. Parameters were generally below the applicable Canadian Council of Ministers of the Environment (CCME)



Canadian Water Quality Guidelines for the Protection of Aquatic Life (Freshwater) (CWQG-FAL; CCME 2010, 2019, 2020), with at least one reported exceedance of the maximum value for aluminum, cadmium, copper, iron and lead reported at ECCC station NF02YO0107, and aluminum and selenium at station NF02YN0001.

Surface water quality was monitored at 26 locations at the mine site between 2011 and 2019. The laboratory results indicated that pH ranged from 4.61 to 7.78 with a mean value of 6.94. A total of 18 of 26 water quality monitoring stations had pH values below the CWQG-FAL lower limit of 6.5. Local water quality was found to be similar to regional water quality in that both were found to have low alkalinity, and therefore limited acid buffering potential. Aluminum, cadmium, copper, iron and lead were also detected above the CWQG-FAL guidelines at both the regional and local water quality monitoring locations. These results indicate that metals are found in naturally elevated levels both in local and regional surface water. Local water quality monitoring revealed consistent seasonal concentration trends, and water quality in larger lakes such as Victoria Lake Reservoir and Valentine Lake was more dilute and lower in constituent concentrations than was observed in tributary watercourses, ponds, and wetlands.

The SWFMP was developed for the Project to confirm compliance with regulatory requirements, support predictions of effects of the Project on water quality, identify changes in drainage patterns and surface water flow, and determine if additional mitigation or response measures are required. As per the SWFMP, and as required under the Certificate of Approval issued by the NLDECCC, the current surface water monitoring network includes 25 designated sampling locations. Samples are collected at least 30 days apart during four monitoring events annually. Samples are analyzed for a standard suite of parameters, including general chemistry and metals, and annual reporting includes analysis of all monitoring data to determine trends and comparison to effluent limits. The surface water monitoring network established in the SWFMP is intended to maintain a network sufficient to assess effects on water quantity if a threshold is exceeded and to assess the effectiveness of subsequent adaptive mitigation measures. In addition to the Valentine surface water sampling program, three of the 25 surface water monitoring locations at the Project form part of the provincial RTWQM network.

It is important to note that the Mine did not discharge water from the Final Discharge Points as the surface water management infrastructure is still under construction and will be commissioned in 2026. Monitoring results from 2025 for surface water quality was consistent with the results presented in the environmental assessment. There was one extreme rain event where 100mm of precipitation occurred in a 24-hour period which results in some sediment discharges which were reported to the Department of Fisheries and Oceans.

Valentine is planning to commission the submerged attached growth reactor (SAGR®) during the summer of 2026. There are only a few of these units currently operating in Canada, and as such, the performance of this unit may require time to optimize.

20.1.8 Fish and Fish Habitat

Fish species identified in the vicinity of the Project include salmonids (Atlantic salmon / ouananiche [*Salmo salar*], Arctic char [*Salvelinus alpinus*], and brook trout [*Salvelinus fontinalis*]) and threespine stickleback (*Gasterosteus aculeatus*).

Victoria Lake Reservoir is not accessible to sea-run Atlantic salmon. Atlantic salmon in the LAA are primarily landlocked (i.e., ouananiche) due to numerous dams within the upper Exploits River and White Bear watersheds.

Ouananiche, Arctic char, brook trout, and threespine stickleback were confirmed present in large lakes within the RAA, including Victoria Lake Reservoir, Valentine Lake, and Beothuk



Lake. Brook trout and threespine sticklebacks were commonly observed in most ponds and streams at the Project, except where natural barriers to fish passage were present. Ouananiche were found mainly in lakes and large ponds (e.g., Victoria Lake Reservoir, Valentine Lake, Beothuk Lake), their connecting streams, and the Victoria River. Arctic char were only found in large deep lakes, including Victoria Lake Reservoir, Valentine Lake, and Beothuk Lake. All life stages of each fish species are present in the vicinity of the Project.

There are no aquatic Species at Risk (SAR) known to be present in the Project Area. Although not confirmed as present during baseline surveys, there is potential for American eel (*Anguilla rostrata*), listed as Threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC 2012), to occur in the general region of the Project. American eel has the potential to occur within the RAA and LAA on the south side of Beothuk Lake along the Project access road; however, it is not known to occur in Victoria Lake Reservoir or Valentine Lake.

The Project has developed a Fish and Fish Habitat Follow-up Monitoring Plan (FFHFMP). The intent of the FFHFMP is to verify the accuracy of the EIS / EA predictions and to assess the effectiveness of mitigation measures for planned and routine Project activities as they relate to fish and fish habitat.

In 2025, monitoring under the FFHFMP focused on construction monitoring, offset monitoring, and the Spring Littoral Index Netting Program (SLIN). A sediment release in November 2025 was reported under the Construction Monitoring program, and a Cautionary Letter outlining agreed-upon mitigation measures was issued to Valentine in December 2025. An inspection by Fisheries and Oceans Canada (DFO) later in December found satisfaction with the Project's efforts to implement the mitigation measure. Offsetting programs have primarily focused on removing submerged pulpwood in the Victoria River system to improve salmonid habitat. The offsetting program is a multi-year effort conducted by Victoria Outfitters. The SLIN program evaluates trends in the concentrations of arsenic and selenium in fish tissues across a number of species present in the Project area. The data collected in 2025 was the second year of baseline data, which will be used in future years to assess potential changes to fish biodiversity and abundance at Valentine Lake Reservoir and Valentine Lake. The next SLIN survey will be conducted in 2028.

20.1.9 Caribou

The Project Area overlaps woodland caribou range in central Newfoundland, and the NL Department of Fisheries, Forestry and Agriculture (NLDFFA)-Wildlife Division identified the Buchans, Gaff Topsails, Grey River, and La Poile herds as having the potential to interact with the Project Area, LAA, and RAA (Government of NL 2020). An assessment of Project effects on caribou was provided in the EIS; this assessment considered Project effects on caribou, including change in habitat, change in movement, and change in mortality. As a result, and in consultation with the NLDFFA- Wildlife Division, a Caribou Protection and Environmental Effects Monitoring Plan (CPEEMP) was developed and outlines mitigation measures aimed at reducing the risk of adverse effects on caribou. The CPEEMP also describes follow-up and monitoring activities that will be undertaken to verify EA/EIS effects predictions and mitigation effectiveness.

The CPEEMP is one of the most important management plans at the Project, and personnel work closely with the NLDFFA – Wildlife Division to ensure that the mitigations are effective. As a result of the close collaboration the Project has been able to adapt its operating procedures during the spring and fall migrations to reduce impacts on operations at the Marathon Pit and waste rock stockpile.



20.1.10 Other Wildlife

The Project is in the Beothuk Lake Subregion of the Central Newfoundland Forest Ecoregion, characterized by a mainly coniferous boreal forest, domed bogs, and a rolling landscape, with elevations in the Project Area ranging from approximately 320 to 430 masl.

Field studies on wildlife in the Project Area and surrounding areas between 2013 and 2018 included a winter wildlife survey (Stantec 2014), American marten hair snagging surveys (Stantec 2018), and an Ecological Land Classification (ELC) (Stantec 2015). Wildlife species confirmed in the Project Area include caribou (*Rangifer tarandus*), moose (*Alces alces*), black bear (*Ursus americanus*), Canada lynx (*Lynx canadensis*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), American marten, ermine (*Mustela erminea*), muskrat (*Ondatra zibethicus*), river otter (*Lutra canadensis*), southern red-backed vole (*Myodes rutilus*), meadow vole (*Microtus pennsylvanicus*), snowshoe hare (*Lepus americanus*) and American red squirrel (*Tamiasciurus hudsonicus*). Baseline surveys for bats completed in 2021 (Stantec 2022) and 2023 (Stantec 2024) confirmed northern myotis (*Myotis septentrionalis*) and little brown myotis (*Myotis lucifugus*), two resident bat species, in the survey area, as well as one migratory species: silver-haired bat (*Lasionycteris noctivagans*).

Of the species confirmed in the Project Area during the baseline investigations, four species are SAR listed under Schedule 1 of the Canadian *Species at Risk Act* (SARA): American marten (Threatened), little brown myotis (Endangered), northern myotis (Endangered), and caribou (Special Concern)¹. Silver-haired bat was also recently (May 2023) assessed as Endangered by the COSEWIC but is not yet listed under SARA.

The Project Area and LAA overlap with 6.3 km² and 41.8 km², respectively, of provincially proposed critical habitat for American marten.

Valentine has developed the Other Wildlife Follow-up Monitoring Program (OWFMP) to verify predictions and address commitments made in the EIS/EA and as part of the regulatory review process. The document describes follow-up and monitoring activities for the construction, operation, and decommissioning/closure phases of the Project, in accordance with regulatory requirements and Project approvals and authorizations. For the OWFMP, other wildlife, as defined in the EIS, includes large mammals (except caribou), furbearers, and small mammals; separate Plans have been developed specific to avifauna and caribou.

20.1.11 Heritage Resources

Architectural and Historical Resources

The *Historic Resources Act* is administered by the Provincial Archaeology Office (PAO) of the Newfoundland and Labrador Department of Tourism, Culture, Arts and Recreation (NLDTCAR). Historic resources are typically broken down into four broad categories: archaeological sites and materials (e.g., remains of campsites and/or stone tools pre-dating 1960); cultural/spiritual sites (e.g., Indigenous and non-Indigenous burial sites and other sacred places); paleontological sites and materials (fossils); and architectural resources (e.g., historical buildings and properties).

There are no known archaeological resources within the Project Area.

¹ A separate monitoring plan has been developed specific to caribou.



20.2 Environmental Approvals

20.2.1 Environmental Assessment

An EIS was submitted to the IAAC and the EA Division of the NLDECC for the Project in 2020. The Project was released, with conditions, from the provincial and federal EA processes on March 17, 2022, and August 24, 2022, respectively.

Following the original Project approval, the Project has submitted two Notices of Project Change to the original Project, which were subsequently approved by both federal and provincial agencies. These change submissions included the construction, operation, and decommissioning of a communications tower in January 2023 and the addition of the Berry Pit and infrastructure modifications in August 2023.

In June 2025, a further Notice of Change was submitted to IAAC and the NLDECCC – EA Division, proposing project changes to support further engineering refinements and improvements. These changes include the modification and separation of the originally planned high-grade ore (HGO) stockpile, increased fuel storage, expansion of the accommodations camp, and an increase in the process plant footprint to accommodate increased production. The NLDECCC released the Project from further assessment in October 2025, and a decision by the federal Minister is expected in March 2026.

20.2.2 Permits and Approvals

Various regulatory approvals, permits, and authorizations have been required for Project construction and operations. A comprehensive list of active permits and approvals for the current operation of the Valentine is provided in Table 20-2.

Table 20-2: Environmental Approvals, Authorizations, and Permits for the Project

Environmental Permit, Approval or Authorization Activity	Issuing / Approval Agency
Provincial	
Release from Provincial EA Process	NL Department of Environment, Conservation and Climate Change (NLDECCC) – Minister
Approval of Environmental Protection Plan	
Certificate of Approval for Construction and Operation (Industrial Processing Works)	
Approval of Environmental Contingency Plan / Emergency Spill Response	
Permit to Construct a Non-Domestic Well	NLDECCC – Water Resources Management Division
Permit to Alter a Body of Water	
Culvert Installation	
Fording / Bridge Repair or Replacement	
Water Intake	
Stream Modification or Diversion	
Other Works Within 15 metres (m) of a Body of Water	
Water Use Licenses	



Environmental Permit, Approval or Authorization Activity	Issuing / Approval Agency
Permit to Construct a Potable Water System	
Permit to Occupy Crown Land	NL Department of Fisheries, Forestry and Agriculture (NLDFFA) – Lands Division
Permit to Control Nuisance Animals	NLDFFA – Wildlife Division
Operating Permit to Carry out an Industrial Operation During Forest Fire Season on Crown Land	NLDFFA – Forestry and Agrifoods Agency
Permit to Cut Crown Timber	
Permit to Burn	
Surface and Mining Leases	NL Department of Industry, Energy and Technology – Mineral Development and Mineral Lands Division
Development Plan	
Rehabilitation and Closure Plan	
Financial Assurance Schedule	
Mill License	
Blasters Safety Certificate	Department of Digital Government and Service NL – Government Service Centre
Approval for Storage and Handling of Gasoline and Associated Products	
Fuel Storage Tank Registration	
Approval for Used Oil Storage Tank System (Oil / Water Separator)	
Certificate of Approval for a Waste Management System	
Certificate of Approval for a Sewage / Septic System	
National Building Code – Fire, Life Safety and Building Safety	
Buildings Accessibility Registration and Permit	
Food Establishment License	
Federal	
Federal Decision Statement	Impact Assessment Agency of Canada (IAAC)
Fisheries Act Authorization	Fisheries and Oceans Canada (DFO)
License to Store, Manufacture, or Handle Explosives (Magazine License)	Natural Resources Canada (NRCAN)

The Project currently has one Notice of Project Change, which is being assessed by IAAC. This project change is currently in the Public Consultation phase of the assessment process. The proposed changes to the Project are listed:

- Ore stockpile changes: Splitting and expanding the high-grade ore stockpile into four separate stockpiles (two high-medium grade and two medium grade)
- Additional water management infrastructure, including perimeter ditches and a sedimentation pond with a final discharge point (BR-FDP-07) into pond L2



- Fuel storage expansion: Increasing diesel fuel storage capacity from 450,000 L to 950,000 L with enhanced safety measures such as double-contained tanks and oil-water separators
- Camp expansion: Adding up to 250 rooms for two to four years, expanded parking, and temporary facilities to accommodate additional personnel during overlapping construction and operations phases
- Laydown areas: Expanding laydown areas for materials and equipment storage
- Process plant pad: Expanding the process plant pad to improve access and operational efficiency

The Phase 2 expansion of the Project does not trigger the Designated Project thresholds, which are based on increases in the total area of disturbance and plant throughput, and as such would be assessed by IAAC through the Project Change process.

Licenses and permits required for Phase 2 include the following:

- IAAC Project Change Approval
- Development Plan and Rehabilitation and Closure Plan
- Mill License for an increase to 5.8 Mt/a from 4 Mt/a
- Certificate of Approval from NLDECC
- Fire and Life Safety/National Building Code of Canada for additional structures

20.3 Waste and Waste Management

Valentine utilizes a fully licensed Waste Management Contractor (WMC) and is responsible for the collection of domestic waste, construction waste, hazardous materials, and, at times, sewage removal across all areas of the Project Site, in accordance with all Federal and Provincial waste transportation and disposal regulatory requirements.

- Non-Hazardous
 - To aid in segregation at the source, several waste disposal containers (i.e., roll off bins) are available at various locations and labelled with the appropriate waste stream (e.g., Food Waste, Wood Waste, Metal Waste, Recyclable Containers, etc.).
 - Waste that may attract animals (i.e., food) is stored in covered, wildlife-proof containers.
 - Solid waste materials are considered, prior to disposal, for reuse, resale, or recycling.
 - Waste is transported from the site to be recycled, reused, or disposed of in licensed/approved facilities, in accordance with local statutory requirements. Non-reusable and non-recyclable wastes are sent to the provincial waste management facility in Norris Arm, and reuse/recycling materials are sent to the nearest approved management facility for each material type.
- Hazardous
 - Approval must be sought from the Environment Superintendent prior to any outdoor storage of hazardous materials. Any outdoor storage will have specific requirements for design, construction, management, monitoring, and maintenance (e.g., in an



- established, graded designated area with sufficient and appropriate secondary containment or an impervious liner, routine clearing of bermed areas, disposal of accumulated precipitation to an oil-water separator).
- Waste oils, lubricants, and other used oil and glycol are retained in tanks or closed containers with applicable secondary containment at the Mine Maintenance Facility and disposed of in compliance with the *Used Oil and Glycol Control Regulations* by the WMC.
 - Contractors are responsible for proper storage, handling and disposal of their own hazardous waste, in compliance with all applicable legislation and conditions of authorization.
 - All necessary precautions are taken to prevent and reduce the spillage, misplacement, or loss of fuels and other hazardous materials. In the event of a spill on land or in the freshwater environment, Valentine has a contingency plan that outlines the proper containment, cleanup, disposal, and reporting requirements.
 - Any soil contaminated by small leaks of oil or grease from equipment is disposed of according to the *Environmental Protection Act* and disposed of offsite by the WMC at a licensed waste management facility.
 - Sewage effluent is treated and monitored in accordance with the *NL Environmental Control Water and Sewage Regulations* prior to discharge to the environment. Sludge generated as a by-product of the treatment of sewage is disposed off-site by the WMC.

20.4 Social and Community Considerations

20.4.1 Labour, Economy, and Community Services

Valentine is in a rural region on the island of Newfoundland and not within the boundaries of a municipality. The closest communities are the Town of Millertown, the Town of Buchans, and the Local Service District of Buchans Junction. These nearby communities, along with Badger, Grand Falls-Windsor, and Bishop's Falls, have been shaped primarily by natural resource-based industries, including mining, forestry, and hydroelectric developments.

Exploration in the Buchans area began in the early part of the 20th century, and production of base metals (e.g., copper, zinc, and lead) began in 1926. A base metal mine established near Buchans contributed substantially to the provincial economy until closure in 1984 (Wardle 2004). The region saw an economic resurgence with continued exploration and the discovery of the Duck Pond base metal deposit in 1987. Duck Pond Operations began commercial production in 2007, employing more than 270 people in the local Buchans-Millertown region (Canadian Mining Journal Editor 2013). Duck Pond, the only recently active mine in the area, ceased operation in July 2015 (Teck 2016). Some limited employment and procurement opportunities associated with the Duck Pond operation remain through the three-phase decommissioning process. There are currently no operating mines in the region, although mineral exploration has continued, and there are many mineral licenses surrounding the project area.

Forestry and logging were important economic drivers in central Newfoundland from the early 20th century until the early 21st century. The industry was primarily in support of the pulp and paper industry, which was greatly reduced following the closure of Abitibi-Consolidated Inc.'s mill in Grand Falls-Windsor in 2009.



In 2016, the main industries providing employment to the region's residents were health care and social assistance, retail trade, and construction (Statistics Canada 2017).

As part of the NL Benefits Agreement with the province of Newfoundland and Labrador, Valentine has implemented a hiring strategy focused on hiring at the local and regional levels. Valentine will increase employment within the region, supporting population growth and directly benefiting the economy.

Community Cooperation Agreements (CCAs) have been established with the local communities to form a mechanism to provide benefits for both Valentine and the community where mutually advantageous opportunities exist.

20.4.2 Indigenous Engagement

Valentine consults regularly with the two Indigenous communities identified through the EA processes:

- Miawpukek First Nation (MFN)
- Qalipu First Nation (QFN)

Consultation with Indigenous groups and stakeholders (e.g., community members, agencies, interested parties) is key to the success of the Project. As such, Valentine has undertaken active participation through meetings, public open houses, attendance at Annual General Meetings, and other events.

In addition, socio-economic agreements (SEAs) have been implemented with both Indigenous groups, and the Project's Indigenous Relations team meets regularly with local Indigenous communities to discuss employment, training, and procurement opportunities. Through the SEAs, Valentine provides funding and support for several initiatives, including cultural investment, scholarship opportunities, and research funding.

In addition, joint Environmental Sub-Committees provide a forum for timely review, consultation, and comment on Project Approvals, FMPs, and other environmental areas or concerns as required. An Environmental Technician from QFN is actively employed at the Project, and an Environmental Technician from MFN was employed at the Project from June 2025 to December 2025. Valentine is currently trying to fill this MFN vacancy.

20.5 Closure, Decommissioning, and Reclamation

A Rehabilitation and Closure Plan (RCP) for the original 2-Pit Project (i.e., Marathon Pit and the Leprechaun Pit) was submitted to the Newfoundland and Labrador Department of Industry, Energy and Technology (NLDIET) on April 14, 2023. Prior to final approval of the initial RCP, the Valentine RCP was updated to include the development of a third deposit resource (i.e., Berry Pit). An updated RCP, including the addition of Berry Pit, was submitted to the NLDIET on October 29, 2024, and Valentine subsequently received approval on November 26, 2024.

The overall objective of the RCP is to ensure physical and chemical stability of the site, and the RCP includes details on closure, including progressive rehabilitation, rehabilitation measures, monitoring, and expected post-closure site conditions. The RCP and associated closure cost estimate assume closure activities following the end of the 18-year mine life.

Topsoil will be salvaged as required from all disturbed areas and stockpiled in designated areas. The topsoil thickness of 0.30 m is estimated to determine expected excavation volumes. Overburden from the pit areas will also be salvaged and stockpiled. These materials will be utilized during progressive reclamation and at final closure.



Closure rehabilitation activities will be carried out at the Project site once it is no longer economical to mine or once resources have been exhausted. In general, the closure activities that will be completed for the site include, though are not limited to, the following, and will be conducted in accordance with applicable regulations and legislation in effect at the actual time of closure:

- Removing hazardous chemicals, reagents, and similar materials for resale or disposal at an approved facility as per provincial and federal regulations.
- Disconnecting, draining, cleaning, disassembling and, where feasible, selling equipment for re-use to a licensed scrap dealer; if this is not achievable, equipment will be removed from site for disposal.
- Dismantling and removing site buildings and surface infrastructure for re-use, disposal or recycling at approved facilities.
- Demolishing concrete foundations to a minimum of 0.3 m below the surface grade and covering areas with natural overburden materials to promote re-vegetation; demolished concrete will be used as fill material for re-grading or removed from site for disposal in an appropriate facility.
- Removing and rehabilitating fuel and explosive storage and dispensing facilities; this will include an Environmental Site Assessment (ESA).
- Breaching water management ponds to allow drainage to the surrounding areas for natural filtration – prior to release to the environment, water quality testing will be completed on the pond waters; these features will subsequently be graded and contoured to re-establish drainage patterns and revegetated as required.
- Decommissioning any wells on site (including groundwater monitoring wells and potable drinking water wells), in compliance with the Guidelines for Sealing Groundwater Wells (Government of NL 1997). This will not take place until after any ESA and subsequent remediation work is completed.
- Re-establishing pre-mining site drainage patterns to the extent feasible.
- Grading and/or scarifying disturbed areas, including roads, covering these with overburden and organic materials, where required, and seeding to promote natural revegetation.

Upon closure, in-pit equipment will be removed, and the open pit(s) will be allowed to fill with surface water runoff, precipitation, and groundwater seepage. In addition to natural infill, the dewatering pumps and infrastructure will be utilized to draw water from Valentine Lake and the Victoria Lake Reservoir to provide accelerated flooding of the Leprechaun and Marathon pits, reducing the overall flooding time to approximately 9.9 years. Berms and signage will be constructed along the crest and across any access roads or ramps, barricading access to the open pit(s).

Waste Rock Storage Facilities will be sloped and benched in accordance with the closure design as they are developed, creating overall safe slopes for final closure of three horizontal to one vertical (3H:1V), incorporating interim benching. The WRSFs will also be progressively rehabilitated by placing overburden/organic materials on slope faces and organics on bench and plateau surfaces, followed by subsequent seeding. The ditching and sedimentation ponds constructed to manage the runoff from these piles during operations will be left in place following closure until the runoff water quality is suitable for direct release, at which point the



ditching and pond infrastructure will be removed and regraded to return drainage patterns as close to natural as possible.

Once the TMF reaches maximum capacity, active tailings deposition will commence in the mined-out Berry open pit. The TMF will continue to be used for storage of water for reclaim to the mill, while the exposed tailings surface and dams can be progressively closed. Water will continue to be treated before release until water quality monitoring demonstrates that water collected in the pond is acceptable for direct release to the environment. Once water quality objectives are met, the TMF pond will be removed by lowering the spillway elevation. At that time, the pump barge will be decommissioned. The pond will then be completely drained and infilled with regraded material from the tailings surface and with material excavated from lowering the dam. A drainage swale will allow natural drainage from the west side of the TMF to the east side, where the swale will connect to the ultimate spillway for runoff discharge, and the remaining area will be covered with overburden, topsoil, and revegetated.

The SAGR unit rock beds, piping infrastructure, and blower systems will be removed, and the disturbed footprint will be rehabilitated. The southern Berry Pit will be flooded and provided with a permanent passive discharge channel.

During the closure phase, contact seepage from the WRSFs and the TMF that is not expected to be adequately treated via natural attenuation at local receivers to background or Canadian Council of Ministers of the Environment (CCME) CWQG-FAL quality is planned to be treated by passive treatment systems. Two options identified as feasible passive treatment options to manage site water post closure are conversion of the WRSF and TMF seepage collection ditches into anaerobic permeable reactive barriers (PRBs) and conversion of the WRSF and TMF seepage collection ditches into French drains with an anaerobic PRB to passively intercept and convey site water to anaerobic vertical flow engineered wetlands. The Project will continue to evaluate these options through the Operations Phase as more data becomes available.

The schedule for the post-closure monitoring program will be developed prior to final mine closure and will be integrated with the operational monitoring program and adapted for the requirements of the rehabilitation and post-closure periods. Based on the current mine development and operational plans and the availability of progressive rehabilitation work for monitoring over the LOM prior to full closure, it is anticipated that a five- to ten-year post closure monitoring program will be sufficient to determine the effectiveness of the rehabilitation program, beginning at varying times depending on the Project component.

20.5.1 Financial Assurance

As referenced in the *Mining Act*, the lessee shall provide financial assurance as part of the rehabilitation and Closure Plan. The full closure cost of the Project is estimated at US\$94 (C\$126 million) and includes third-party engineering and project management costs. Estimated closure costs do not include equipment resale or scrap values and assume that all material will be disposed of as waste. Some equipment may have residual resale value; leading up to mine closure and decommissioning, Valentine will evaluate options to identify the potential for recycling and reuse of materials resulting from demolition of site infrastructure. Valentine is currently providing the required financial assurance in scheduled annual payments based on the stages of mine development that would require rehabilitation.



21.0 Capital and Operating Costs

Commercial production at the Valentine Gold Mine was achieved on November 18, 2025. Capital expenditures incurred prior to December 31, 2025, are considered sunk costs and are excluded from the economic evaluation. Remaining life-of-mine (LoM) capital costs relate primarily to the Phase 2 process plant expansion, supporting infrastructure, sustaining capital required to maintain mining and processing equipment throughout the operating life, and closure and reclamation activities.

The capital and operating cost estimates described in this section were used as the basis for the economic analysis supporting the Mineral Reserve estimate presented in Section 15 of this Technical Report. The capital and operating costs presented in this section serve as the basis for the financial model described in Section 22. Minor adjustments related to the timing of expenditures and tax treatment are incorporated within the financial model.

Unless otherwise stated, all costs are presented in constant Q1 2026 US dollars.

The cost estimates supporting the development of Mineral Reserves were prepared using current operating experience at Valentine, vendor budgetary quotations, engineering quantities, budget forecasts, historical construction costs from the initial project build, and benchmarks from comparable operations. In accordance with AACE International Recommended Practice 18R-97 (AACEi), the capital and operating cost estimates are considered to be generally consistent with a Class 4 estimate, with an expected accuracy range of approximately -25% to +25%, which is appropriate for a pre-feasibility study (PFS) level evaluation under NI 43-101.

21.1 Capital Cost Summary

Life-of-mine capital costs for the Project are estimated at approximately \$727 million, including \$94 million for reclamation and closure, as summarized in Table 21-1.

Table 21-1: Life-of-Mine Capital Cost Estimate

Description	LOM Total (US\$ million)
Growth and Phase 2 Combined Capital	397
Owners / Indirects / Contingency (Growth Capital)	109
Sustaining Capital	126
Reclamation / Closure Capital	94
Total	727

Growth capital expenditures commence in 2026 and are primarily associated with the Phase 2 process plant expansion and related infrastructure upgrades.

The Phase 2 Initial capital program totals approximately US\$414 million and is scheduled between 2026 and 2028, with final commissioning activities occurring in early 2029. The difference between the total Phase 2 capital and the scheduled plant and infrastructure expenditures reflects mining fleet growth capital associated with the expansion, as shown in Table 21-2.



Table 21-2: Phase 2 Capital Costs

Capital Category	Cost (US\$ millions)
Mining Growth Capital (Phase 2 Expansion)	64
Process Plant Expansion (Phase 2)	133
Infrastructure	71
Contingency and Owner's Reserve	73
EPCM / Owners / Indirect Cost - Phase 2 Only	73
Total Phase 2 Initial Capital	414

The process plant expansion represents the largest component of the Phase 2 initial capital program, accounting for approximately 50 percent of total growth capital. Infrastructure development represents approximately 21 percent of the total and includes balance-of-plant facilities and electrical infrastructure upgrades associated with the Star Lake substation and Newfoundland and Labrador Hydro electrical supply.

21.1.1 Estimate Accuracy

The Phase 2 Expansion initial capital cost estimate is classified as an AACE International Class 4 estimate, appropriate for a pre-feasibility study (PFS) level of engineering definition. The expected accuracy range for this estimate is approximately -25% to +25%.

This estimate classification is consistent with the requirements of NI 43-101 for cost estimates supporting Mineral Reserve economic analysis.

21.1.2 Basis of Estimate

The Phase 2 Expansion capital estimate was developed using inputs from Equinox, DRA Global, Moose Mountain, and other third-party contributors. Cost inputs were derived from the following:

- Vendor budget quotations
- Engineering material take-offs
- Historical construction costs from the existing process plant
- Industry benchmarks and internal cost databases

The estimate assumes execution using an Owner's Integrated Management Team (OMT) approach, consisting of the owner's team supported by specialist engineering consultants. The same estimating methodology was applied to sustaining capital expenditures. The capital cost estimate excludes government taxes and duties, which are incorporated separately in the financial model where applicable.

Mine capital costs were developed from purchase contracts, vendor budgetary quotations, and operating data from comparable Canadian open-pit mining operations.

Costs associated with the expansion of the mining fleet required for the Phase 2 Expansion are classified as growth capital, while equipment replacement expenditures during operations are treated as sustaining capital.

Capitalized mine development costs include the following:



- Clearing and grubbing
- Topsoil removal and stockpiling
- Haul road construction
- Production of crushed rock for construction and operations
- Installation of pit dewatering infrastructure

Additional capitalized items include the following:

- Pit electrification infrastructure
- Fleet GPS navigation systems
- Wireless communications networks
- Fleet management and dispatch systems
- Survey equipment and mine planning software
- Geotechnical instrumentation
- Mine communications systems
- Maintenance tooling and safety equipment

21.1.3 Currency

All capital and operating costs are presented in Q1 2026 US dollars. An exchange rate of US\$1.00 = C\$1.34 was applied in the preparation of the estimate. No escalation beyond the Q1 2026 base date has been included.

21.2 Process Plant Phase 2 Initial Capital Schedule

The Phase 2 (2026–2028) initial capital cost schedule for the process plant, and infrastructure, is presented in Table 21-3.

Table 21-3: Process Plant and Infrastructure Phase 2 Initial Capital Schedule

Area	Total (US\$ million)	2026 (US\$ million)	2027 (US\$ million)	2028 (US\$ million)
Process Plant (incl. Contingency)	247.4	43.7	108.2	95.5
Infrastructure (incl. Contingency)	85.2	28.4	43.8	13.0
Owner's Reserve	17.2	-	-	17.2
Total Phase 2 Capital (Incl. Contingency)	349.8	72.1	152	125.7

The annual capital distribution reflects engineering completion and procurement activities in 2026, peak construction and equipment installation in 2027 and 2028.



21.3 Process Plant Phase 2 Initial Capital

The process plant expansion capital totals approximately US\$247 million and includes construction materials, major process equipment, and project support costs such as construction management and engineering, and contingency. A breakdown of the process plant Phase 2 capital cost is shown in Table 21-4.

Table 21-4: Process Plant Phase 2 Initial Capital Breakdown

Category	Cost US\$ million
Construction and Materials	81
Major Equipment	51
Support (Construction Management, Engineering, Spares)	73
Contingency	42
Total Process Plant (Incl. Contingency)	247

Construction and material costs include civil works, structural steel, mechanical installation, electrical systems, piping, instrumentation, and related plant construction activities. Major equipment costs represent the procurement and delivery of mechanical and electrical equipment required for the process plant expansion.

21.4 Infrastructure Initial Capital

Infrastructure initial capital totals approximately US\$85.1 million and includes balance-of-plant facilities and electrical power infrastructure upgrades required to support the expanded processing capacity. Table 21-5 presents a breakdown of the major components of the Phase 2 infrastructure capital cost.

Table 21-5: Infrastructure Phase 2 Initial Capital Breakdown

Infrastructure Component	Cost US\$ million
Balance of Plant Facilities (incl. Contingency)	76
Star Lake Substation and Electrical Upgrades (incl. Contingency)	9
Total Infrastructure (incl. Contingency)	85

Balance-of-plant facilities include camp construction, fuel storage facilities, maintenance shop infrastructure, and other site support facilities. Electrical infrastructure costs are associated primarily with upgrades to the Star Lake substation and the Newfoundland and Labrador Hydro power supply.

21.5 Process Plant Contingency and Owner’s Reserve

A contingency and management reserve allowance of approximately US\$73 million has been applied to the Phase 2 capital estimate to account for uncertainties within the defined scope. The contingency is consistent with the expected accuracy range of an AACE Class 4 capital estimate.



An overall contingency of approximately 20% has been applied to direct process plant capital costs, consistent with an AACE Class 4 estimate. Contingency is intended to address uncertainties within the defined project scope and does not include allowances for:

- Scope changes
- Escalation
- Exchange rate fluctuations

21.6 Reclamation and Closure

The closure cost estimate is based on the current Development, Rehabilitation and Closure Plan and includes activities associated with decommissioning and reclamation of the mine, process plant, Tailings Management Facility, water management infrastructure, and other site facilities. Major closure cost components include demolition of the process plant and major infrastructure, regrading and reclamation of disturbed areas, closure of stockpiles and mine facilities, TMF closure works, revegetation, and post-closure monitoring and maintenance. The economic model also includes \$94 million for mine reclamation and closure, based on the updated retirement obligation (ARO) estimate and the LOM reclamation schedule as of January 2026. This total includes approximately \$6 million allocated for demolition of the process plant and associated infrastructure.

Closure and reclamation expenditures are distributed through the life of the mine and into the post-operating period in accordance with the planned sequence of site decommissioning and reclamation activities. In the Project cash flow model, closure costs continue beyond the operating mine life through 2041.

21.7 Operating Cost

The average LOM site operating cost is estimated at approximately US\$72.21 per tonne milled, equivalent to approximately US\$1,444 per ounce of gold produced. Including refining, freight, and royalties, the average LOM total operating cost is estimated at approximately US\$78.99 per tonne milled. On a gold sales basis, average LOM total cash cost is estimated at approximately US\$1,580 per ounce, and average LOM all-in sustaining cost (AISC) is estimated at approximately US\$1,665 per ounce. A summary of the life of mine unit costs is presented in Table 21-6.

Table 21-6: LOM Average Unit Operating Costs

Metric	Value
Open Pit Mining	\$2.89/t mined
Mining (Ore Basis)	\$38.07/t milled
Processing	\$20.55/t milled
General & Administrative	\$13.59/t milled
Average Site Operating Cost	\$72.21/t milled
Total Operating Cost	\$78.99/t milled
Total Cash Cost	\$1,580/oz Au
All-in Sustaining Cost (AISC)	\$1,665/oz Au



Mining costs were estimated using historical operational data, equipment productivity models, and budget forecasts.

Hourly equipment costs include labour, fuel, lubricants, maintenance parts, tires, and ground-engaging tools. The mine operates 365 days per year, 24 hours per day, using two 12-hour shifts per day on a one-week-on / one-week-off drive-in/drive-out rotation. An allowance of 12 non-production days per year is incorporated into the mine schedule to account for adverse weather and holidays. A diesel price of US\$1.01/L was used in the estimate, based on an Equinox forecast.

Processing costs include the following:

- workforce
- electrical power
- grinding media
- reagents
- maintenance materials
- laboratory operations

General and administrative costs were estimated using historical operating budgets and projected staffing levels.

21.8 Operating Cost Estimate Methodology

Operating costs were estimated using operating data from the Valentine Gold Mine, equipment productivity estimates derived from the mine production schedule, vendor cost information, and benchmarking against similar Canadian open pit gold mining operations.

Operating costs include mining, processing, general and administrative costs, refining and freight charges, and royalty obligations. These costs were incorporated into the life-of-mine financial model used to support the economic analysis and Mineral Reserve estimate. Unless otherwise stated, all capital and operating costs are expressed in Q1 2026 constant US dollars (US\$), and unit costs are presented on a metric tonne basis.

21.9 Workforce

The Valentine Gold Mine workforce is organized into three primary operating groups:

- Mining operations
- Process plant operations
- General and administrative services

The current operations workforce by department is presented in Table 21-7; approximately 90% of the workforce resides in Newfoundland and Labrador.

Table 21-7: Operations Workforce

Department	Employees
Mine Operations	198
Mine Maintenance	89



Department	Employees
Process Plant	48
Support Services	104
Technical Services	15
Geology	12
Total	466

The peak workforce, including construction personnel associated with the Phase 2 expansion, is estimated to reach approximately 955 employees.



22.0 Economic Analysis

The economic analysis contained in this Technical Report is based on the Valentine Mine Mineral Reserves as of January 1, 2026, economic assumptions, and capital and operating costs provided by Equinox finance and technical teams and reviewed by SLR. All costs are expressed in 2025 US dollars (based on an exchange rate of CAD 1.34: USD 1), and unit costs are based on metric tonnes. Unless otherwise indicated, all costs in this section are expressed in US Dollars without allowance for escalation, currency fluctuation, or interest.

The economic analysis for the Project is based on a gold price of \$2,100 per ounce, which is consistent with the price assumption used for the estimation of Mineral Reserves in accordance with NI 43-101 guidelines. This price serves as the basis for the mine plan and is the primary case used to demonstrate economic viability.

At a gold price of \$2,100 per ounce, the Project generates an after-tax net present value of approximately \$446 million, confirming that the Mineral Reserves are economically supportable under conservative long-term pricing assumptions.

Additional cash flow analyses have been prepared to evaluate the Project's sensitivity to higher gold prices. These include a reference case using \$4,500 per ounce (the Reference Case), reflecting below-market conditions at the time of analysis, and an upside sensitivity case of \$6,300 per ounce. At \$4,500 per ounce, the Project generates materially higher economic returns, and at \$6,300 per ounce, the Project generates a pre-tax net present value of approximately \$5.1 billion. These results indicate that the Project remains economically viable under the Mineral Reserve price assumption, and it is sensitive to increases in the gold price.

SLR has generated an after-tax cash flow for the reference case using the LOM production schedule and capital and operating cost estimates as presented in Section 16.0 and 21.0, respectively, which is summarized in Table 22-3. A summary of the key criteria is provided below.

22.1 Economic Criteria – Reference Case

22.1.1 Revenue

- Mine life: 12 years, from 2026 to 2037.
- Life of Mine production plan as summarized in section 16.7.
- 5 Mt/a ore milled (approximately 11,890 tpd) at an average mill grade of 1.66 g/t Au (ROM, crushed, and stockpile mine plan).
- Mine life averages 215,000 ounces per year of gold recovered from the mine plan, with LOM milled ore recovery averaging 94%. Total 2.58 Moz recovered over LOM operation (2026 through 2037).
- The summary of the physicals in the financial model is listed in Table 22-1.
- Gold price used averages US\$4,500 per ounce of gold between 2026 and 2037.
- Gold at refinery 99.5% payable.
- Net Smelter Return includes doré refining, transport, and insurance costs.
- Revenue is recognized at the time of gold production.



- Non-cash inventory adjustments are not included in the SLR cash flow model.

Table 22-1: Valentine Production Physicals Summary

Physicals	Value
Total Ore Milled (kt)	51,490
Max Process Rate (tpd)	11,890
Au Head Grade (g/t)	1.66
Contained Au (koz)	2,748
Average Recovery, Au	94%
Recovered Au (koz)	2,575
Avg Annual Au Prod - LOM (koz / yr)	215

The model revenue forecast is shown in Figure 22-1 below:

Figure 22-1: Revenue Forecast



22.1.2 Costs

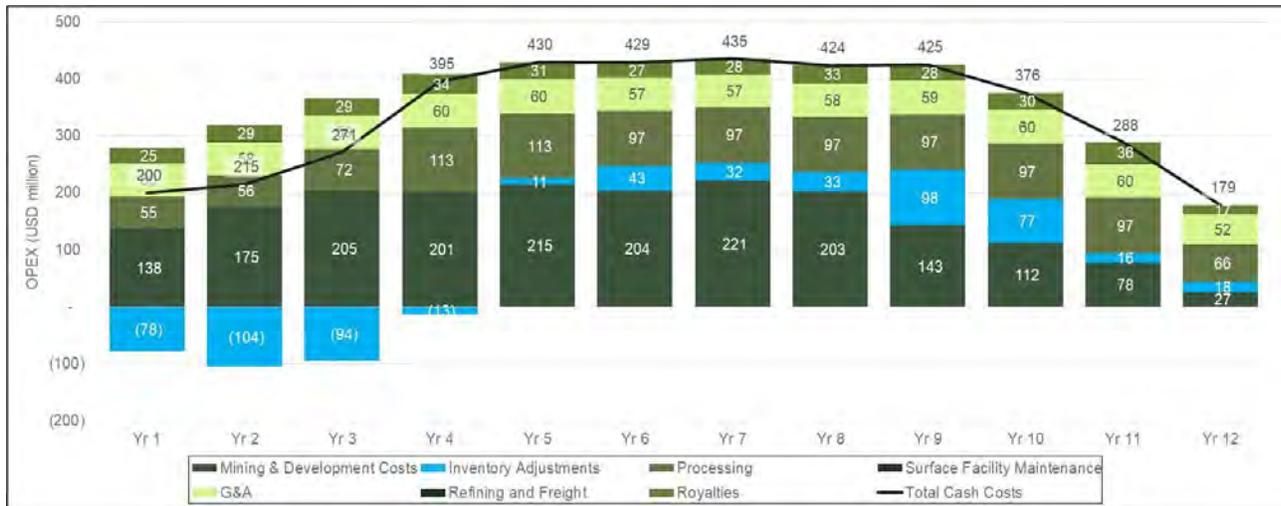
- Growth and development capital costs total US\$505 million
- Mine life sustaining capital totals US\$126 million
- Final reclamation costs total US\$94 million
- Average LOM operating cost is US\$72.21 per tonne milled
 - Open pit operating costs of US\$2.89 per tonne mined (US\$38.07 per tonne milled)
 - Processing operating costs of US\$20.55 per tonne milled



- Site services and general and administrative (G&A) costs of US\$13.59 per tonne milled
- As the planned mining rate exceeds the planned milling rate in Phase 1, the mine costs of the inventory were considered in the model, and mining costs are expensed when the gold is recovered.

The operating cost forecast is shown in Figure 22-2 below.

Figure 22-2: Operating Cost Forecast



22.1.3 Taxation and Royalties

22.1.3.1 Federal and Provincial Tax Summary

The federal and provincial income taxes were considered in the financial model based on input from the Equinox tax team and are summarized in Table 22-2.

Table 22-2: Valentine Federal and Provincial Tax Summary

Tax	LOM Total (US\$ million)
Newfoundland Mining Tax	933
Income Tax	1,511
Royalties	346
Total Taxes and Royalties	2,790

22.1.3.2 Royalties

Valentine is subject to a variety of NSR royalty payments, payable to various parties under the terms of the leases, as described in Section 4.0. Per Equinox’s finance team’s analysis, a weighted-average rate of 3% was used for cash flow modelling.



22.2 Cash Flow Analysis – Reference Case

SLR has reviewed the Equinox’s Valentine LOM cash flow model, considering gold as the final saleable product, and has prepared its own unlevered after-tax LOM cash flow model based on the information contained in this Technical Report to confirm the physical and economic parameters of the Property.

The Mine, as currently designed, has variations in the mining and processing amounts over its planned 12-year life. These variations are shown in Figure 22-3 through Figure 22-5.

Figure 22-3: Mine Production Profile by Material Movement

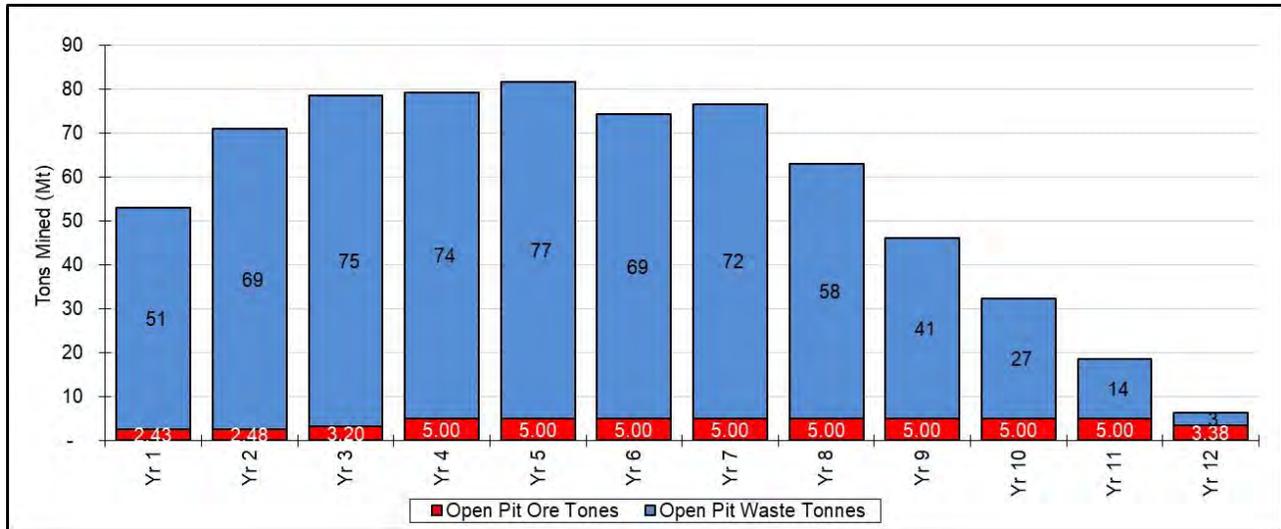


Figure 22-4: Gold Production Profile

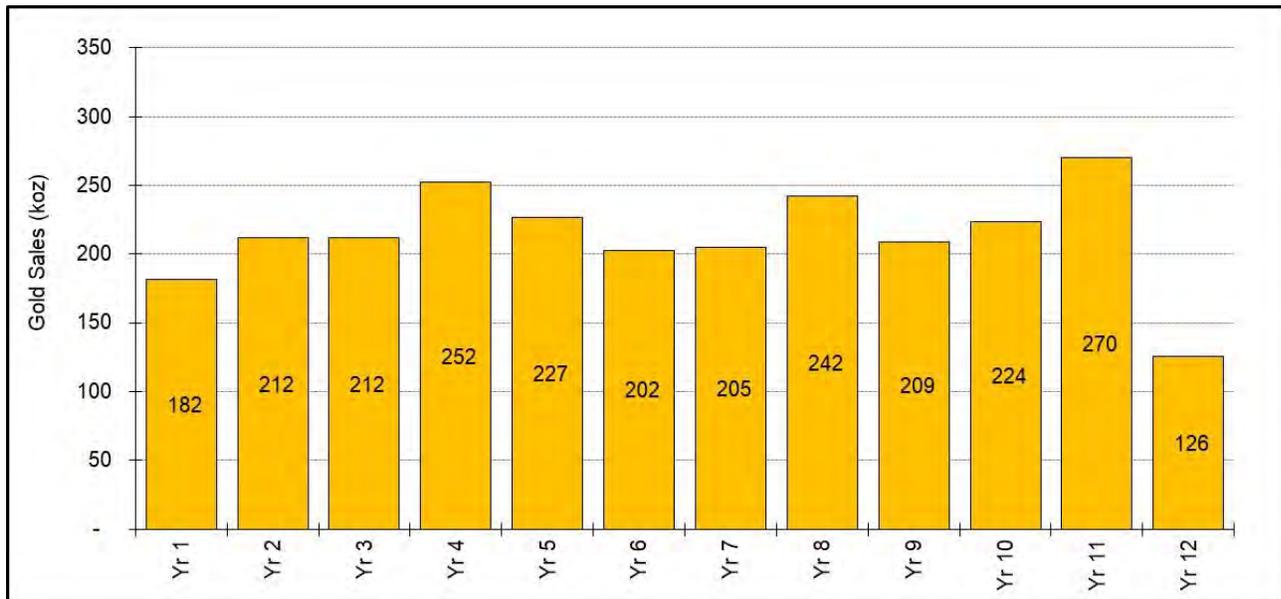
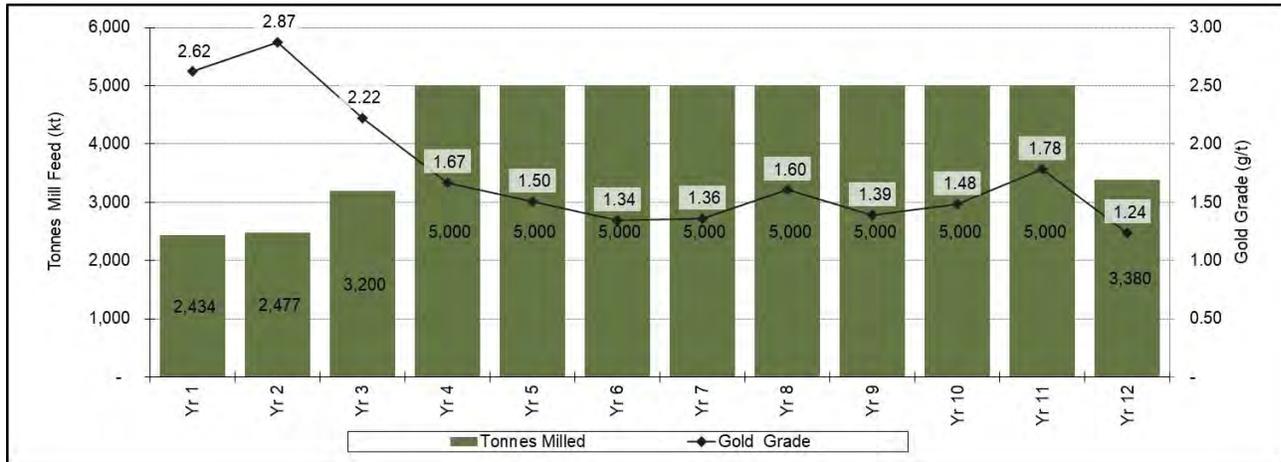


Figure 22-5: Annual Processing Gold Production and Head Grade Profile



The economic analysis prepared by SLR assumes a base discount date of January 1, 2026.

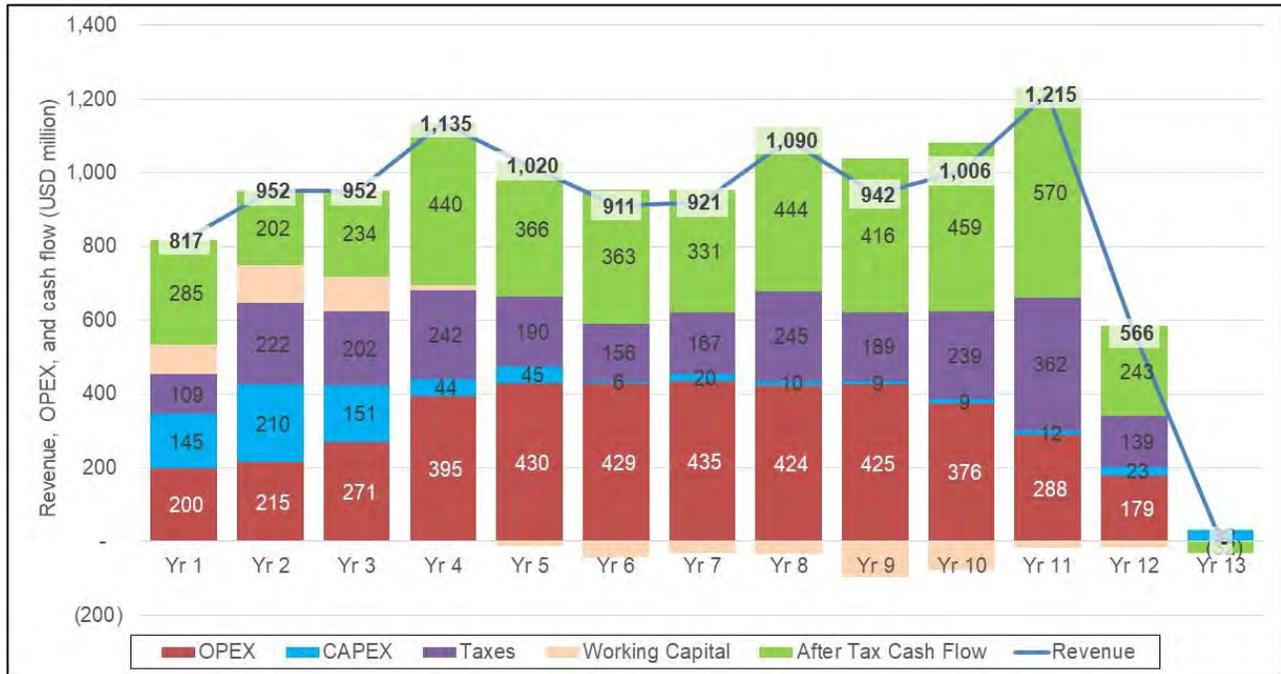
The base discount rate assumed in this economic analysis is 5%, in line with industry-standard practice for operating mines in the US. Discounted present values of annual cash flows are summed to arrive at the Mine’s net present value (NPV).

To support the disclosure of Mineral Reserves, the economic analysis demonstrates that Valentine’s Mineral Reserves are economically viable at a US\$4,500/oz gold price. On a pre-tax basis, the undiscounted cash flow totals US\$6.8 billion over the mine life. The pre-tax net NPV at a 5% discount rate is US\$4.9 billion. On an after-tax basis, the undiscounted cash flow totals US\$4.3 billion over the mine life. The after-tax NPV at a 5% discount rate is US\$3.1 billion. The internal rate of return (IRR) is not applicable, as the Mine is an operating mine and does not have any initial capital to recover.

The forecast project revenues, costs, and cash flows by year are summarized in Figure 22-6.



Figure 22-6: Revenue, Cost and Cash Flow Forecast – Reference Case



The after-tax free cash flow profile and gold payable metal per year are presented in Figure 22-7.

Figure 22-7: Project After-Tax Metrics Summary – Reference Case

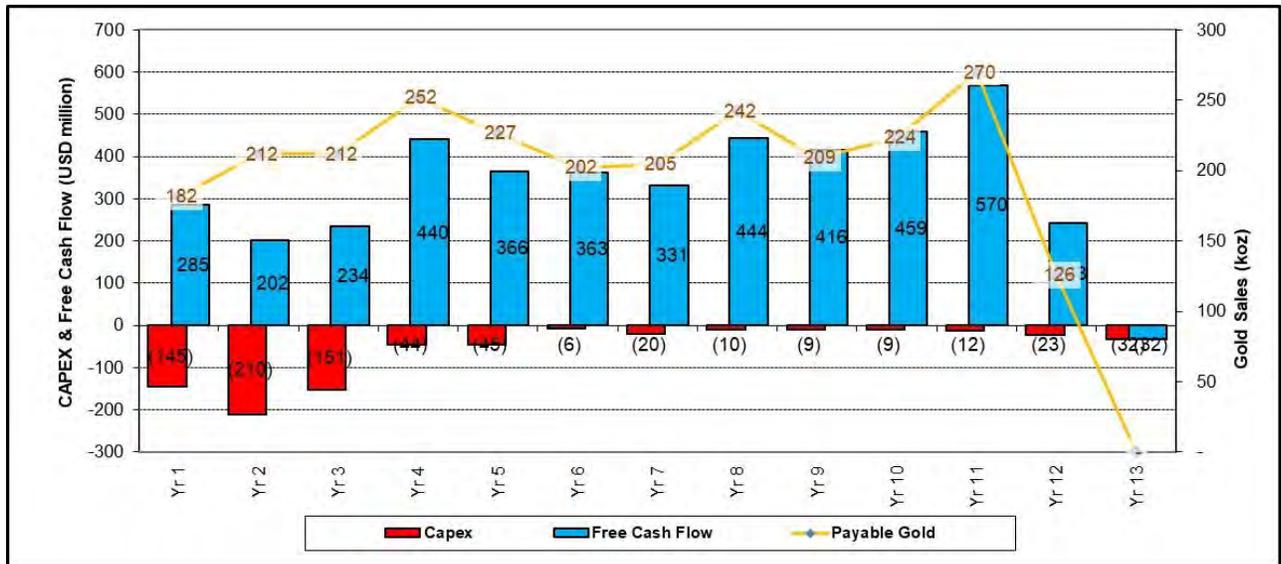


Figure 22-8 illustrates the cash flow, cumulative after-tax cash flow, and cumulative discounted after-tax cash flow forecast:



Figure 22-8: Cash Flow Summary – Reference Case

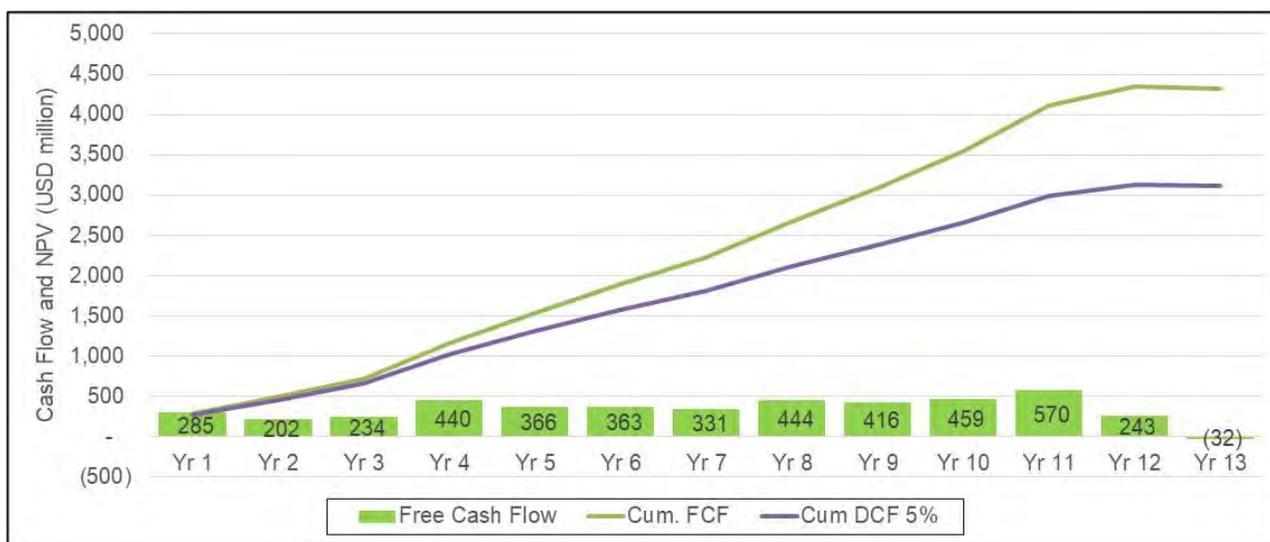


Table 22-3 summarizes the LOM total, average annual, per tonne and per ounce cash flow metrics for the Valentine Gold Mine.

Table 22-3: Total Life of Mine Metrics – Reference Case

Item	LOM Total (US\$ million)	Avg. Annual US\$/y	Avg. US\$/t milled	Avg. US\$/t mined	Avg. US\$/oz Au Recovered
Total Gross Revenue	11,528	961	223.88	16.94	4,478
Mining Cost	1,960	163	38.07	2.88	761
Process Cost	1,058	88	20.55	1.55	411
G & A Cost	700	58	13.59	1.03	272
Refining/Freight	4	0.3	0.07	0.01	1
Royalties	346	29	6.71	0.51	134
Total Cash Costs	4,067	339	78.99	5.98	1,580
Operating Margin (EBITDA¹)	7,460	622	144.89	10.96	2,898
Cash Taxes Payable	2,462	205	47.82	3.62	956
Working Capital	39	3	0.75	0.06	15
Operating Cash Flow	5,037	420	97.82	7.40	1,956
Development Capital	507	42	9.84	0.74	197
Sustaining Capital	126	11	2.45	0.19	49
Closure/Reclamation Capital	94	8	1.82	0.14	36
Total Capital	727	61	14.12	1.07	282
Pre-tax Free Cash Flow	6,772	564	131.52	9.95	2,630
Pre-tax NPV _{5%}	4,894	408	95.06	7.19	1,901
After-tax Free Cash Flow	4,310	359	83.71	6.33	1,674
After-tax NPV_{5%}	3,108	259	60.37	4.57	1,207

¹ EBITDA earnings before income tax, depreciation and amortization



The average annual gold sales over the 12 years of operation are 215 koz at an average all-in sustaining cost (AISC) of US\$1,665/oz Au. Table 22-4 shows the AISC build-up.

Table 22-4: All-in Sustaining Costs Composition

Item	Total LOM (US\$ million)	Unit Cost (US\$/oz Au)
Mining	1,960	761
Process	1,058	411
Site G&A	700	272
Subtotal Site Costs	3,718	1,444
Refining/Freight	4	1
Mining Royalties	346	134
Total Cash Costs	4,067	1,580
Sustaining Capital Cost	126	49
Closure/Reclamation Costs	94	36
Total Sustaining Costs	220	86
Total All-in Sustaining Costs	4,287	1,665
Note: Closure/Reclamation costs for AISC are based on Closure/Reclamation Cash Spend. Numbers may not add due to rounding.		

22.3 Sensitivity Analysis

Potential economic risks were examined by running cash flow sensitivities to changes in the following variables

- Gold price
- Gold recovery
- Head grade
- Operating costs
- Capital costs
- Discount rate

After-tax NPV sensitivities relative to the Reference Case have been calculated for -40% to +40% for changes to head grade, recovery (to +5%), gold price, exchange rate (CAD:USD), operating costs and capital costs, as shown in Table 22-5 and Figure 22-9.

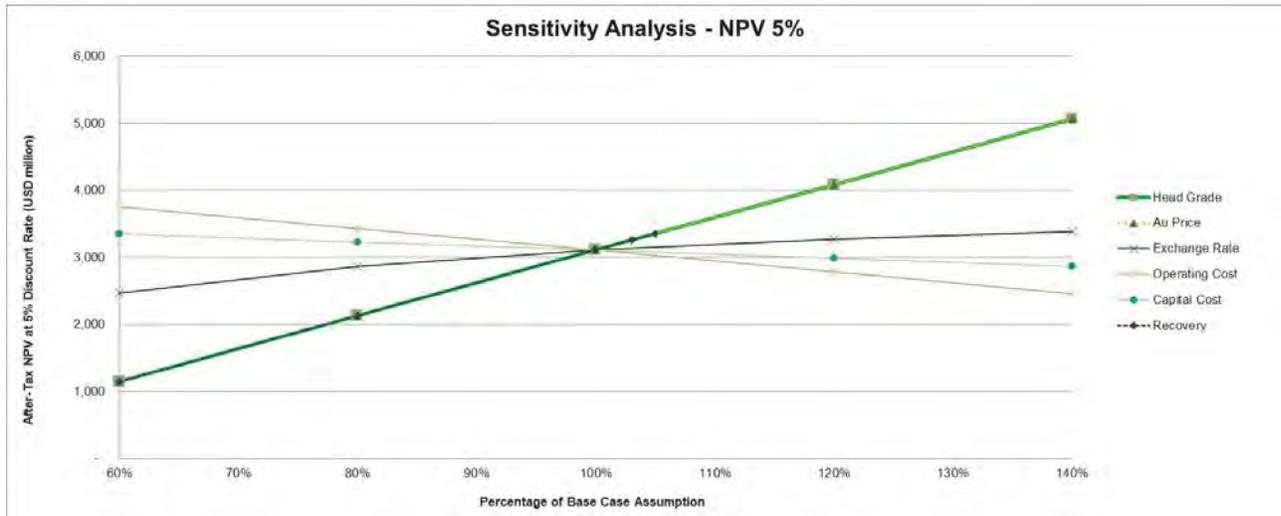


Table 22-5: After-Tax Sensitivity Analyses

Factor Change	Head Grade (g/t)	NPV at 5% (US\$ million)
0.60	1.00	1,152
0.80	1.33	2,130
1.00	1.66	3,108
1.20	1.99	4,086
1.40	2.32	5,064
Factor Change	Recovery (%)	NPV at 5% (US\$ million)
0.60	56%	1,152
0.80	75%	2,130
1.00	94%	3,108
1.03	97%	3,255
1.05	99%	3,353
Factor Change	Au Price (US\$/oz)	NPV at 5% (US\$ million)
0.47	\$2,100	446
0.80	\$3,600	2,130
1.00	\$4,500	3,108
1.20	\$5,400	4,086
1.40	\$6,300	5,064
Factor Change	Exchange Rate (CAD:US\$)	NPV at 5% (US\$ million)
0.60	0.80	2,471
0.80	1.07	2,869
1.00	1.34	3,108
1.20	1.61	3,268
1.40	1.88	3,381
Factor Change	Operating Cost (US\$ million)	NPV at 5% (US\$ million)
0.60	\$2,231	3,754
0.80	\$2,974	3,431
1.00	\$3,718	3,108
1.20	\$4,462	2,785
1.40	\$5,205	2,463
Factor Change	Capital Cost (US\$ million)	NPV at 5% (US\$ million)
0.60	\$436	3,352
0.80	\$581	3,230
1.00	\$727	3,108
1.20	\$872	2,986
1.40	\$1,018	2,864



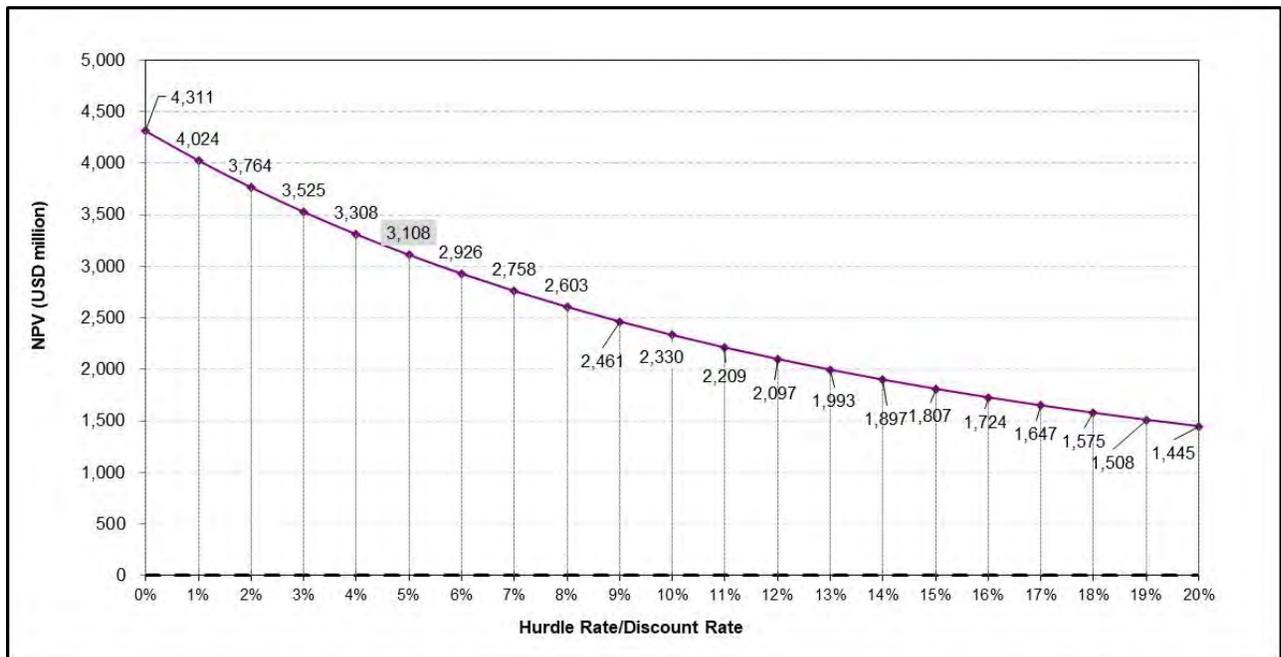
Figure 22-9: After-Tax Sensitivity Analysis



The sensitivity analysis at Valentine shows that the after-tax NPV at a 5% base discount rate is most sensitive to metal prices, then head grades, and metallurgical recoveries, followed by operating costs and capital costs.

A sensitivity analysis of discount rates is presented in Figure 22-10

Figure 22-10: After-Tax Discount Rate Sensitivity Analysis



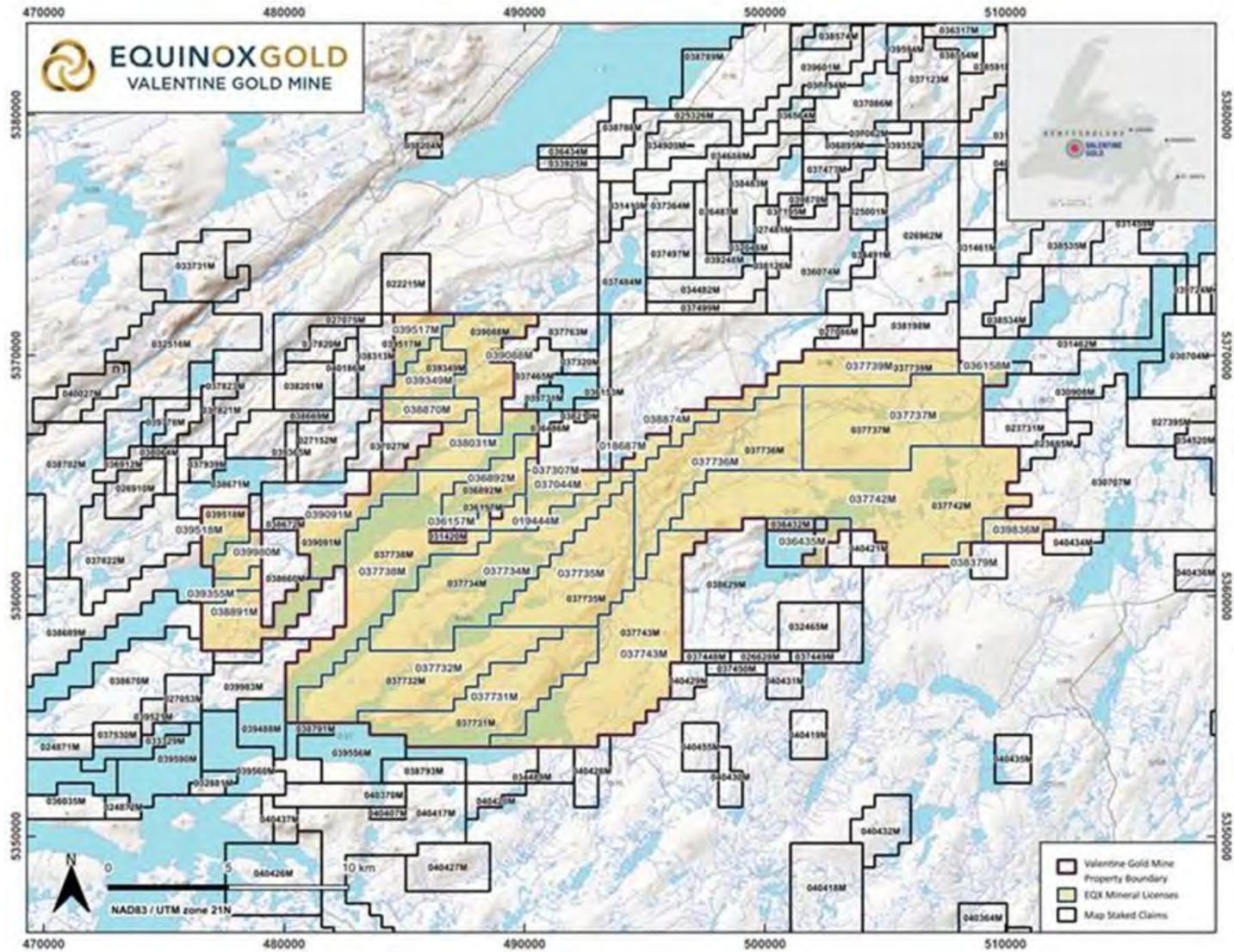
23.0 Adjacent Properties

The Valentine Gold Project is located within the central Newfoundland gold belt, which consists of numerous sedimentary, volcanic, volcanoclastic, metasedimentary and metavolcanic rocks, as well as intrusives ranging from felsic to mafic in composition. Numerous gold and base metal occurrences are found throughout the belt, with the dominant gold deposit type being orogenic, structurally controlled gold, and the major source of base metals coming from VMS-style deposits such as the Duck Pond and Buchans historical mines. Gold deposits on the Valentine Property are associated with the Valentine Lake Shear Zone, a crustal-scale zone of deformation which bisects the island of Newfoundland. Gold showings occur along this deformation zone and are generally associated with quartz veining and hydrothermal alteration within volcanic and intrusive, and to a lesser degree, sedimentary rocks of various formations. Adjacent mineral exploration licenses have been staked in geographical association with the VLSZ and target mineralization signatures similar to those found on the Valentine Project. Specifically, around the Valentine Project, the bulk of accessible (non-water) land has been staked by various junior exploration companies and individuals (Figure 23-1).

Gold occurrences and showings in surrounding licenses are relatively poorly advanced and no known gold mineral resource estimates completed on adjacent properties to the best of the QP's knowledge. Work completed on adjacent licenses includes prospecting, geological mapping, geophysical surveys, soil and till sampling, and diamond drilling. Figure 23-1 shows the surrounding mineral licenses as depicted by the Newfoundland and Labrador Government's Geoscience Atlas, which is automatically updated on a daily basis. The deposits defined at Valentine are the largest and most advanced in the area. Mineralization on adjacent properties is not necessarily indicative of potential on Equinox's mineral licenses, and the QP has not reviewed the accuracy of the information reported for adjacent properties.



Figure 23-1: Map of EQX Staked Mineral Licenses and Surrounding Licenses Owned by Other Entities



Source: Equinox 2026.



24.0 Other Relevant Data and Information

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



25.0 Interpretation and Conclusions

25.1 Conclusions

25.1.1 Geology and Mineral Resources

- The 2025 Mineral Resource Estimate for the Valentine Gold Mine was completed in accordance with the CIM (2014) definitions, follows the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (CIM 2019), and meets all disclosure requirements under NI 43-101.
- The QP considers the drill hole database supporting the estimate to be reliable, with comprehensive validation of assays, surveys, geological logs, and QA/QC results having been completed.
- Geological and mineralization models accurately reflect current understanding of lithological controls, QTPV system geometries, and structural orientations across all deposits.
- Estimation methodology, including grade capping, 1 m compositing, variography, dynamic anisotropy, and ID³ interpolation, provides a robust and unbiased representation of gold mineralization at existing drill density.
- Block model validation (volume reconciliation, statistical checks, swath plots, quantile–quantile (Q–Q) analysis, and visual review show no material global or local bias, with volumes reconciling within 0.1% of wireframes.
- Mineral Resources were constrained within Whittle-optimized open-pit shells and underground stope shapes, demonstrating reasonable prospects for eventual economic extraction using appropriate economic assumptions.
- Resource classification appropriately reflects geological confidence, data density, and estimation performance, consistent with CIM (2014) definition.
- The Valentine Gold Mine deposits (Marathon, Leprechaun, Berry, Sprite, and Victory) form part of a district-scale mineralized corridor associated with the Valentine Lake Shear Zone, indicating potential for further exploration growth along strike and at depth, as well as along previously unrecognized second- and third-order structures.
- Exploration, drilling procedures, and QA/QC controls are considered consistent with industry best practices and sufficient for Mineral Resource estimation.
- The resulting 2025 Mineral Resource estimate provides a defensible basis for mine planning and Mineral Reserve estimation.

25.1.2 Mining and Mineral Reserves

- Proven and Probable Mineral Reserves have been converted from Measured and Indicated Mineral Resources at Leprechaun, Berry and Marathon. Inferred Mineral Resources are treated as waste.
- Factors that may affect the Mineral Reserve estimates include metal prices, changes in interpretations of mineralization geometry and continuity of mineralization 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 license conditions, and the ability to maintain the social license to operate.

- Open pit mine plans, mine production schedules, and mine capital and operating costs have been developed for the Mineral Reserves estimates at Leprechaun, Berry and Marathon.
- Pit layouts and mine operations are typical of other open pit gold operations in Canada, and the unit operations within the developed mine operating plan were based on site experience to date.
- The mine plan supports the cash flow model and financials.

25.1.3 Mineral Processing

- The process plant currently treats ore via a conventional comminution-gravity-cyanidation flowsheet and has been designed to nominally treat 2.5 Mt/a of ore. Run-of-mine (ROM) ore is processed via conventional primary crushing and two-stage grinding circuit followed by a gravity concentration circuit. Gravity circuit tailings are treated via cyanidation and a carbon-in-leach (CIL) circuit and associated gold recovery and carbon handling circuits to produce gold doré. CIL tailings are treated via a cyanide destruction process prior to storage in the tailings management facility (TMF).
- Plant construction was completed in Q3 2025, and the first gold pour was achieved on September 15, 2025. Commercial production, representing 80% nameplate capacity, was achieved on November 18th, 2025. Studies are underway to increase nominal plant throughput from 2.5 Mt/a to 5.0 Mt/a
- The development of the current process plant flowsheet was underpinned by comprehensive metallurgical test work programs completed during previous feasibility studies. Metallurgical test work programs were conducted on representative mineralized core samples from Leprechaun, Marathon and Berry deposits. Metallurgical test work results have demonstrated that mineralized samples from the various Valentine Gold deposits is free milling and amenable to conventional cyanidation.
- The current comminution circuit design (primary crushing-SAG-Ball milling) was based on extensive comminution test work. Ore competency is high. Ore hardness in terms of RWI and BWI is considered moderate. Ore abrasion is moderately high.
- The ore is amenable to recovery by gravity concentration and is supported by extended gravity recoverable gold (E-GRG) tests.
- The current leach-CIL circuit was based on cyanidation leaching test work. The nominal overall gold extraction (gravity recovery plus gravity tails leaching) that the plant was designed is 93%.
- The proposed plant expansion is based on previously completed metallurgical test work and is expected to treat a nominal 5 Mt/a ore and achieve an overall gold extraction of 93%.

25.1.4 Infrastructure

- Power to the mine is supplied by Newfoundland and Labrador's Star Lake hydroelectric generation station and is transmitted to the mine site via a transmission line. The current



mine's power supply is 19.0 MW for peak demand. For the planned Phase 2 Plant Expansion, an additional 13.0 MW for peak demand is anticipated.

- The primary source of water to meet the Process Plant's water demand is the reclaimed water from the TMF tailings pond, and the secondary source is fresh water from NL Hydro's Victoria Lake reservoir.
- Water management is performed by collecting surface contact water runoff from facilities and containing the contact water within sedimentation ponds to minimize total suspended solids prior to controlled water release into the receiving environment.
- As with the other main infrastructure, the administration building, laboratory, truck wash, explosives storage and fuel station have been sized to support the mine and process operation. Construction of a permanent truck shop is underway. Installation of a permanent operations camp is underway and will phase out some of the accommodation in the construction camp.
- The TMF has been designed in accordance with CDA guidelines and the stability of the dams meets the target factors of safety required as per CDA. Tailings deposition plans have been developed to establish wide tailings beaches adjacent to the rockfill containment dams and to maintain the water pond against natural ground and away from the dams.
- A seepage and surface water runoff collection ditch is installed downstream of the TMF to collect any water into a collection sump where it is pumped back into the TMF reservoir.
- After pre-treatment of process water for dissolved metals and cyanide destruction, biological treatment of process water with a submerged attached growth reactor (SAGR) will reduce the overall ammonia concentration to non-toxic levels.
- With the increase of required tailings storage capacity beyond the current design capacity of the TMF, tailings deposition would transition into the Berry pit once the pit has been mined out.

25.1.5 Environment

- Compliance-based environmental management is in place for operations: Since achieving commercial operation in November 2025, Valentine's environmental programs are structured around compliance obligations under approvals stemming from the federal EIS/EA (released August 24, 2022) and provincial EA (released March 17, 2022), plus subsequent permit/authorization requirements and annual regulatory submissions; the site operates under a formal monitoring framework that spans operations through closure.
- Follow-up monitoring and adaptive management are extensive and formalized: The Project has developed 11 environmental follow-up monitoring plans (FMPs) plus 13 additional plans that define protection measures, compliance/effects monitoring, and contingency actions; the plans are "living documents" intended to be refined with permit amendments, monitoring changes, and evolving best practices, with contingency measures triggered if monitoring indicates deviations that may cause adverse effects.
- Acid Rock Drainage/Metal Leaching (ARD/ML) outcomes show low potential acid generating (PAG) overall at Marathon/Leprechaun, higher at Berry, and tailings non-PAG (but water-quality exceedances are expected): Estimated potentially acid-



generating (PAG) waste rock is approximately 1.5% to 4% at Marathon and approximately 1.0% at Leprechaun, while Berry is approximately 11% PAG/uncertain (ABA-based; Quartz Monzonite (Q-MONZ) and Quartz-Tourmaline-Pyrite (QTP) units highest at approximately 19% to 20% PAG samples). Tailings composites are classified as non-PAG, and mixing of Marathon/Berry/Leprechaun ores is expected to keep tailings non-PAG; however, during operations, arsenic, copper, and total cyanide in TMF are expected to exceed Metal and Diamond Mining Effluent Regulations (MDMER) limits, and tailings management facility (TMF) pond discharge modelling predicts exceedances of multiple Canadian Water Quality Guidelines (CWQG) parameters—an assimilative capacity study indicates treated effluent meeting MDMER would fall below CWQG/background within approximately 300 m of the regulatory mixing zone. An operational ARD/ML sampling program is defined (e.g., waste rock: 1 per 9,000 t; ore: 1 per 9,000 t; tailings end-of-pipe: 1 per 48,000 t in years 1–3, then 1 per 77,000 t).

- Environmental monitoring results in 2025 were largely consistent with EA predictions, with specific noted exceptions/events: Ambient air monitoring in 2025 reported 24-hour Total Suspended Particulates (TSP) results below the Newfoundland and Labrador Ambient Air Quality Standards (NL AAQS) 120 µg/m³ at project sites, with one exceedance at the Victory exploration site (approximately 5 km northeast of the mine) attributed to access-road traffic. Noise monitoring in 2025 identified episodic exceedances (% highly annoyed / potential wildlife disturbance) during peak construction-related activities, and modelled operations were predicted to meet Health Canada criteria at receptors, with the accommodations camp noted as exceeding the nighttime 45 dBA target. Surface water did not discharge from Final Discharge Points in 2025 because water-management infrastructure is still under construction; one extreme rainfall event (approximately 100 mm/24 h) resulted in sediment discharges reported to Fisheries and Oceans Canada (DFO). A fish/fish-habitat sediment release in November 2025 resulted in a DFO cautionary letter (December 2025), and a later DFO inspection (December 2025) found the Project's mitigation efforts satisfactory.
- Permitting/engagement and closure planning are advanced and active: The Project has socio-economic agreements with two Indigenous communities (Miawpukek First Nation [MFN] and Qalipu First Nation [QFN]) and uses joint Environmental Sub-Committees; an Environmental Technician from QFN is employed, and an MFN technician position was filled June through December 2025 and is being refilled. Two prior Notices of Project Change were approved: communications tower (January 2023) and Berry Pit and infrastructure (August 2023). A further Notice of Change submitted in June 2025 was released from further provincial assessment in October 2025, with a federal decision expected in March 2026. Closure planning is anchored by an approved Rehabilitation and Closure Plan update, including Berry (submitted October 29, 2024; approved November 26, 2024), assuming an 18-year mine life; closure financial assurance is based on an estimated \$94 million (C\$125.9 million) closure cost (excluding resale/scrap) and is being provided via scheduled annual payments.

25.1.6 Capital and Operating Costs

- Capital costs for the initial development have been spent, and the future spending is primarily for the Phase 2 Plant Expansion and for sustaining capital.
- The average total cash costs for the LOM are expected to be US\$1,580/oz.



25.2 Risks

The following is a discussion of the key risks for the Mine with summaries of the related controls and risk mitigation strategies.

25.2.1 Infrastructure

Risks identified in relation to the TMF are reviewed for all phases of work including design, permitting, construction, and operations. The TMF design is based on geotechnical drilling and hydrogeological fieldwork. Periodic bathymetric surveys of the supernatant pond and the tailings beaches will be performed to compare to the tailings deposition plan and to make adjustments to the future dam raise construction as required. A water balance has been developed for the TMF and is coupled with the tailings deposition plan to inform the timing of the TMF dam raises.

An Independent Tailings Review Board (ITRB) was established to provide oversight during the lifecycle of the TMF and is an on-going process.

A detailed Tailings Facility Construction Management Plan, including a QA/QC program, has been implemented for construction for current and future expansions of the TMF. An Operations Management and Surveillance (OMS) Manual following the guidelines of the Mining Association of Canada has been put in place for the TMF.

25.2.2 Mineral Resources

Uncertainty associated with mineralization classified as Inferred Resources introduces a risk which should be mitigated with additional infill drilling in each pit.



26.0 Recommendations

The QPs offer the following recommendations by discipline.

26.1 Geology and Mineral Resources

- 1 Continue systematic exploration along strike of the VLSZ to extend open-pit limits and improve geological continuity between adjacent deposits.
- 2 Increase drilling density at depth to reduce sample spacing, enhance estimation confidence, and support potential expansion of underground resources.
- 3 Maintain ongoing evaluation of geological and resource models as additional production reconciliation data becomes available to improve model accuracy.
- 4 Increase acquisition of oriented core and televiewer data to validate structural interpretation of QTPV domains and identify localized variations where Set 2 or Set 3 vein orientations may dominate.
- 5 Evaluate alternative drilling orientations where existing drilling azimuths may not optimally intersect vein sets or structural controls.
- 6 Maintain rigorous QA/QC protocols, including standards, blanks, and check assays, to ensure the continued reliability of analytical data used for Mineral Resource estimation.
- 7 Increase drill density within high-grade zones where spacing remains wide to confirm grade distribution, continuity, and geometry of mineralized shoots.
- 8 Continue integrating exploration, structural studies, and geological mapping to refine mineralization domains used in resource modeling.
- 9 Evaluate new exploration targets identified through geophysics, till sampling, and structural interpretation, particularly outside the main shear zone trend.

26.2 Mining and Mineral Reserves

- 1 Conduct geotechnical monitoring and field data collection of the open pit walls throughout the life of the open pits.
- 2 Continue to implement the following programs to allow for confirmation of the design assumptions herein.
 - a) Ground Control Management Plan (GCMP).
 - b) Geotechnical mapping and regular inspection of benches. This should include tension crack mapping along the crest of the benches.
 - c) Geological and major structure mapping to inform and validate the geotechnical model (geology, rock mass, structure, and hydrogeology).
 - d) Monitor any potential large-scale movements of the open pit slopes (surface prisms or radar).
 - e) Bi-annual third-party inspections and slope stability audits.
 - f) Implement a geomechanical testing program to confirm all pit slope design values. Compare and adjust recommended slope designs based on slope performance monitoring.



- g) Install additional piezometers to allow for on-going assessment of water levels relative to slope depressurization targets and slope design phreatic surface modelling.
- 3 Conduct geotechnical investigations specific to the Berry Pit to bring the geotechnical model and design to a construction level of confidence, to be completed in 2026.
- 4 Complete detailed geotechnical evaluation for the phases to determine if interim pit phases require design adjustments
- 5 Continue to focus and improve the grade control program to meet the mining loss and dilution parameters.
- 6 Continue to focus and improve mining productivity to meet or exceed the assumptions of this plan.
- 7 Pending favourable drilling and modelling results, develop a mine plan for the Frank Zone to advance it towards Mineral Reserve status.

26.3 Mineral Processing

- 1 For continued plant optimization, complete a metallurgical test work program to further understand the metallurgical response of various ore types and head grades via the existing plant flowsheet, i.e., Sample characterization: Head analyses including gold by fire assay and cyanidation test work: Standard bottle roll tests including to assess the effect of primary grind size.
- 2 Finalize studies and advance engineering for the plant expansion to achieve 5 Mt/a.
- 3 Continue to investigate a gyratory crusher in place of a second jaw crusher to increase primary crushing capacity.

26.4 Infrastructure

26.4.1 Tailings Management

- 1 Ensure annual dam safety reviews are performed by WSP's Engineer of Record (EoR) and/or Deputy EoR now that the TMF is operational.
- 2 Ensure formal monthly dam inspections are conducted by Valentine's Responsible Tailings Facility Engineer (RTFE). Monthly operational updates should be presented by the RTFE to Mine management to continually inform management of any risks associated with the TMF operation. WSP's EoR and Valentine's RTFE should perform an operational risk assessment specific to dam safety for each dam raise. The proposed budget for this work is estimated to be up to \$0.5 million annually.
- 3 Collect TMF operational performance data to validate or refine TMF design assumptions and construction planning, coordinated with the tailings deposition plan and water balance. Bathymetric surveys should initially be performed monthly to measure the actual slopes of the tailings beaches and the volume of the supernatant pond and also to estimate the in-situ tailings density; the frequency can be reduced once deposition parameters are confirmed. Tailings slurry densities and reclaim water volumes should also be collected along with relevant operations data (e.g., tailings tonnages) to support the updates of the deposition plan and water balance so that future dam raise construction plans can be adjusted accordingly. The proposed budget for this work is estimated to be up to \$1.5 million annually.



- 4 To address the shortfall in tailings storage capacity in the current TMF design for the LOM, evaluate several concepts, including expanding the current TMF via additional dam raises, constructing a new TMF, and/or in-pit tailings deposition into the Berry Pit (once mined out). A multiple accounts analysis should be conducted to evaluate, score, and rank future tailings deposition alternatives based on economic, engineering, and social criteria. The proposed budget for this analysis is estimated to be less than \$0.5 million. Once a concept is selected, a geotechnical foundation investigation program should be planned and conducted to determine the suitability of the proposed alternative. The proposed budget for this program, including engineering and geotechnical laboratory testing, as well as the cost of constructing the preferred concept, will be determined once the preferred deposition concept is selected.

26.4.2 Roads and Vehicle Control

- 1 Improve road signage and enforce radio position call-outs on radio-controlled access road. Additional traffic lights should be added to control single-lane only areas of the mine access road. An additional second lane should be twinned on 13 single-lane bridges on the mine access road. The proposed budget for these reviews is estimated to be less than \$0.5 million.

26.4.3 Power Optimization Study

- 1 Complete a power system and mine electrification optimization study as part of the Phase 2 Expansion with a focus on interim Phase 2 power before the substation upgrades are completed, considering local gensets, wind, solar, batteries, and other options. The proposed budget for this study is estimated to be less than \$0.5 million.

26.5 Environment

- 1 Continue to evaluate and advance optimization studies for the water management infrastructure during the initial years of operations to reduce the number of discharge points. This recommendation is supported by the fact that each discharge point is regulated under the federal Metal Mining and Diamond Effluent Regulations, as discussed in Section 20.1.7 of this report.
- 2 Ensure a robust performance monitoring evaluation is completed for the SAGR following commissioning, with a focus on ensuring that year-round operation is achievable, and if not, then mitigations can be developed.

26.6 Capital and Operating Costs

- 1 Update capital and operating cost estimates using operating performance data from the initial year of commercial production. As the Valentine Gold Mine transitions from construction to steady-state operations, actual operating data for mining productivity, processing throughput, reagent consumption, maintenance costs, and labour requirements should be collected and incorporated into future life-of-mine cost updates. This will allow refinement of operating cost assumptions and improved confidence in long-term economic projections.
- 2 Refine sustaining capital forecasts based on equipment performance and maintenance history. Sustaining capital assumptions for major mobile mining equipment, process plant components, and infrastructure should be reviewed periodically using actual maintenance and reliability data. This will allow optimization of equipment replacement



schedules and improve accuracy of long-term sustaining capital requirements in the life-of-mine financial model.

- 3 Continue evaluation of cost optimization opportunities associated with the Phase 2 Plant Expansion. As engineering and detailed design progress for the proposed throughput expansion, additional opportunities should be evaluated to optimize capital efficiency and operating costs, including comminution circuit configuration, energy consumption, reagent usage, and water management. Updated cost estimates should be developed as engineering advances to improve the accuracy of the expansion capital estimate and confirm operating cost assumptions at the higher throughput rate.



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28.0 Date and Signature Date

This report titled “NI 43-101 Technical Report for the Valentine Gold Mine, Newfoundland and Labrador, Canada” with an effective date of December 31, 2025 was prepared and signed by the following authors:

(Signed & Sealed) Kelly Boychuk

Dated at Vancouver, BC
March 30, 2026

Kelly Boychuk, P.Eng., MBA

(Signed & Sealed) Nicholas Capps

Dated at Grand Falls-Windsor, NL
March 30, 2026

Nicholas Capps, P.Geo.

(Signed & Sealed) Jeffrey Colden

Dated at Fernie, BC
March 30, 2026

Jeffrey Colden, P.Eng.

(Signed & Sealed) Stuart Collins

Dated at Lakewood, CO
March 30, 2026

Stuart Collins, P.E.

(Signed & Sealed) Scott Davidson

Dated at Vancouver, BC
March 30, 2026

Scott Davidson, M.Sc., P.Geo.

(Signed & Sealed) Niel de Bruin

Dated at Vancouver, BC
March 30, 2026

Niel de Bruin, P.Geo.



(Signed & Sealed) *Tony Gilman*

Dated at Halifax, NS
March 30, 2026

Tony Gilman, M.Sc., P.Eng.

(Signed & Sealed) *Neil Lincoln*

Dated at Ottawa, ON
March 30, 2026

Neil Lincoln, P.Eng.

(Signed & Sealed) *Grant A. Malensek*

Dated at Lakewood, CO
March 30, 2026

Grant A. Malensek



29.0 Certificate of Qualified Person

29.1 Kelly Boychuk

I, Kelly Boychuk, P.Eng. MBA, as an author of this report entitled “NI 43-101 Technical Report, Valentine Gold Mine, Newfoundland and Labrador, Canada” with an effective date of December 31, 2025 prepared for Equinox Gold Corp., do hereby certify that:

1. I am currently employed as SVP of Mining Infrastructure with Equinox Gold Corp. with an office at 700 West Pender Street, Suite 1501, Vancouver, BC V6C 1G8.
2. This certificate applies to the technical report titled Technical Report on the Valentine Gold Mine, Newfoundland and Labrador, with an effective date of December 31, 2025, (the “Technical Report”) prepared for Equinox Gold Corp. (the “Issuer”).
3. I am a graduate of the University of British Columbia with both a Bachelor of Applied Science (Geological Engineering) and a Master of Business Administration. I am a registered member in good standing with Engineers and Geoscientists British Columbia (License # 20272). I have worked as a Geotechnical Engineer for a total of 35 years and primarily in the mining industry.
4. I have read the definition of “qualified person” set out in National Instrument 43-101 (NI 43 101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43 101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
5. I last visited the Valentine Gold Mine on September 8, 9 and 10, 2025.
6. I am responsible for sections 1.1.1.4, 1.1.2.4, 1.1.3 (TMF), 1.3.11, 18, 25.1.4, 25.2.1, 26.4, and associated disclosure in Section 27 of the Technical Report.
7. I am not independent of the Issuer.
8. I have had prior involvement with the property that is the subject of the Technical Report; I participated in the annual site visit with the Independent Tailings Review Board and the Engineer of Record in September 2025 as well as with the kick-off meeting for the multiple accounts analysis for additional tailings management facilities.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. As of the effective date of the Technical Report and the date of this certificate, to the best of my knowledge, information and belief, this Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 30th day of March, 2026,

/s/ Kelly Boychuk

Kelly Boychuk, P.Eng., MBA



29.2 Nicholas Capps

I, Nicholas Capps, B.Sc., P.Geo., as an author of this report entitled “NI 43-101 Technical Report, Valentine Gold Mine, Newfoundland and Labrador, Canada” with an effective date of December 31, 2025 prepared for Equinox Gold Corp., do hereby certify that:

1. I am employed as the VP Exploration, Newfoundland, for Equinox Gold – Valentine Gold Mine, 7 Queensway, Grand Falls-Windsor, NL, A2B 1K9.
2. I graduated with a B.Sc. (Honours) in Earth Sciences from Memorial University, located in St. John’s, Newfoundland, in 2011.
3. I am and have been registered as a Professional Geologist with the Newfoundland and Labrador Professional Engineers and Geoscientists (“PEGNL”; Membership Number 09329) since 2016. I have practiced my profession as a geologist for 14 years since graduating in 2011 and have worked in all aspects of gold exploration, focused on orogenic gold on the island of Newfoundland.
4. 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 reason of my education, affiliation with a professional association and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purpose of NI 43-101 and those sections of the Technical Report that I am responsible for.
5. My most recent site visit to the Valentine Gold Mine took place on December 8 to 12, 2025.
6. I am responsible for sections 1.3.4 to 1.3.5, 7 to 12, 23, and associated disclosure in Section 27 of the Technical Report.
7. I am not independent of Equinox Gold as independence is defined in Section 1.5 of NI 43-101. I am an employee of Equinox Gold.
8. I have had previous involvement with the Project; since 2011, I have worked as a logging geologist, project geologist, exploration manager and Director of Exploration on the Valentine Gold Mine and surrounding property, with responsibilities including planning, budgeting and executing greenfield and brownfield exploration programs.
9. 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.
10. As of the effective date of the Technical Report, and to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all relevant scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated this 30th day of March, 2026,

/s/ Nicholas Capps

Nicholas Capps, B.Sc., P.Geo.



29.3 Jeffrey Colden

I, Jeffrey Colden, P.Eng., as an author of this report entitled "NI 43-101 Technical Report, Valentine Gold Mine, Newfoundland and Labrador, Canada" with an effective date of December 31, 2025 prepared for Equinox Gold Corp., do hereby certify that:

1. I am a Lead Engineer with Moose Mountain Technical Services, with a business address of #210 1510 2nd Street North, Cranbrook, BC, V1C 3L2.
2. I am a graduate of Queen's University at Kingston in 2007 with a Bachelor of Applied Science in Mechanical Engineering and in 2008 with a Master of Engineering in Mining Engineering.
3. I am a member in good standing as a Professional Engineers and Geoscientists Newfoundland and Labrador (# 12293). I have worked as a mining engineer/geologist for a total of 17 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - I have experience in open-pit precious metal operations, and in support of studies and Mineral Reserve Estimates.
 - I have experience in costing open-pit mining operations.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I visited the Valentine Gold Mine most recently on September 7, 2024.
6. I am responsible for sections 1.1.1.2, 1.1.2.2, 1.3.8, 1.3.9, 15, 16.0 to 16.1.2, 16.2 to 16.8, 16.8.2 to 16.9, 25.1.2, 26.2 and associated disclosure in Section 27 of the Technical Report.
7. I am not independent of Equinox Gold as independence is set out in Section 1.5 of NI 43-101.
8. I have been involved with the Valentine Gold Mine in support of the Valentine Gold Project NI 43-101 Technical Report and Feasibility Study dated November 2022 and have been seconded to support the construction of the mine since March 2024.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections in the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 30th day of March, 2026,

/s/ Jeffrey Colden

Jeffrey Colden, P.Eng.



29.4 Stuart Collins

I, Stuart Collins, P.E., as an author of this report entitled “NI 43-101 Technical Report, Valentine Gold Mine, Newfoundland and Labrador, Canada” with an effective date of December 31, 2025 prepared for Equinox Gold Corp., do hereby certify that:

1. I am Principal Mining Engineer with SLR International Corporation, of Suite 100, 1658 Cole Boulevard, Lakewood, CO, USA 80401.
2. I am a graduate of South Dakota School of Mines and Technology, Rapid City, South Dakota, USA, in 1985 with a Bachelor of Science degree in Mining Engineering.
3. I am a Registered Professional Engineer in the state of Colorado (Reg.# 29455). I have been a member of the Society for Mining, Metallurgy, and Exploration (SME) since 1985, and a Registered Member (Reg.# 612514) since September 2006. I have worked as a mining engineer for a total of 36 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Review and report as a consultant on numerous exploration, development, and production mining projects around the world for due diligence and regulatory requirements.
 - Mine engineering, mine management, mine operations and mine financial analyses involving copper, gold, silver, nickel, cobalt, uranium, coal, and base metals, located in the USA, Canada, Mexico, Costa Rica, Argentina, Brazil, Peru, Papua New Guinea, Australia, Mauritania, Liberia, and Turkey.
 - Senior positions with consulting and engineering firms and public mining companies.
 - Engineering Manager for a number of mining-related companies.
 - Business Development for a small, privately owned mining company in Colorado, USA.
 - Operations supervisor at a large gold mine in Nevada, USA.
 - Involvement with the development and operation of a small underground gold mine in Arizona, USA.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I visited the Valentine Gold Mine on January 21, 2026.
6. I am responsible for sections 1.1, 1.1.1.6, 1.1.2.6, 1.3.1 to 1.3.3, 1.3.12, 1.3.14, 2 to 6, 19, 21, 24, 25.1.6, 26.6, and associated disclosure in Section 27 of the Technical Report.
7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections in the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 30th day of March, 2026,

/s/ Stuart E. Collins

Stuart E. Collins, P.E.



29.5 Scott Davidson

I, Scott Davidson, M.Sc., P.Geo., as an author of this report entitled “NI 43-101 Technical Report, Valentine Gold Mine, Newfoundland and Labrador, Canada” with an effective date of December 31, 2025 prepared for Equinox Gold Corp., do hereby certify that:

1. I am employed as the Director Environmental Permitting & Compliance for Equinox Gold – Unit 1501 700 West Pender Street, Vancouver, BC, V6C 1G8.
2. I graduated with a M.Sc. in Geomorphology from the University of British Columbia, located in Vancouver, British Columbia, in 1998.
3. I am and have been registered as a Professional Geoscientist with Engineers and Geoscientists British Columbia (“EGBC”; Membership Number 23774) since 1998. I have practiced my profession as an environmental professional for 27 years since graduating in 1998 and have worked in the Mining Industry for over 25 years focused on environmental management involving permitting, operational integration, environmental compliance, management systems, mine closure, geochemistry, water quality and hydrology.
4. 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 reason of my education, affiliation with a professional association and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purpose of NI 43-101 and those sections of the Technical Report that I am responsible for.
5. My most recent site visit to the Valentine Gold Mine took place on January 21, 2026.
6. I am responsible for sections 1.1.1.5, 1.1.2.5, 1.3.13, 20, 25.1.5, 26.5, and associated disclosure in Section 27 of the Technical Report.
7. I am not independent of Equinox Gold as independence is defined in Section 1.5 of NI 43-101. I am an employee of Equinox Gold.
8. I have been involved with the Project since June 2025, engaging with mine environmental personnel on matters related to permitting and environmental performance
9. I have read NI 43-101 and the section of the Technical Report for which I am responsible have been prepared in compliance with that Instrument.
10. As of the effective date of the Technical Report, and to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all relevant scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated this 30th day of March, 2026,

/s/ Scott Davidson

Scott Davidson, M.Sc., P.Geo.



29.6 Niel de Bruin

I, Niel de Bruin, P.Geo., as an author of this report entitled “NI 43-101 Technical Report, Valentine Gold Mine, Newfoundland and Labrador, Canada” with an effective date of December 31, 2025 prepared for Equinox Gold Corp., do hereby certify that:

1. I am currently employed as Vice President of Mineral Resources – Canada, U.S., Nicaragua and Mexico with Equinox Gold Corp., with an office at 700 W Pender St #1501, Vancouver, BC V6C 1G8.
2. I am a graduate of the University of Free State with a Master of Science degree in Mineral Resource Management.
3. I am a registered member in good standing with Professional Geoscientists Ontario (License #2449). I have worked as a Geologist for a total of 27 years and have relevant experience in open pit and underground mining of gold, mineral resource estimation, exploration management, QA/QC programs and grade control.
4. I have read the definition of “qualified person” set out in National Instrument 43-101 (NI 43 101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43 101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
5. I last visited the Valentine Gold Mine on October 14 to 18, 2025.
6. I am responsible for sections 1.1.1.1, 1.1.2.1, 1.1.3 (Resources), 1.3.7, 12, 14, 25.1.1, 25.2.1, 26.1 and associated disclosure in Section 27 of the Technical Report.
7. I am not independent of Equinox Gold as independence is defined in Section 1.5 of NI 43-101. I am an employee of Equinox Gold.
8. I have been involved with the Project since June 2025. My responsibilities included the detailed review and validation of the Mineral Resource models for the Leprechaun, Sprite, Berry, Marathon, and Victory deposits. This work comprised iterative model evaluations, verification of geological and estimation methodologies, and regular technical meetings with the Senior Resource Geologist to discuss model updates, underlying assumptions, and data quality considerations. As part of my due diligence and to support my conclusions, I also conducted a site visit to review key geological exposures, drilling locations, and mineralized zones, and to confirm the nature and continuity of mineralization underlying the resource models.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. As of the effective date of the Technical Report and the date of this certificate, 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 the Technical Report not misleading.

Dated this 30th day of March, 2026,

/s/ Niel de Bruin

Niel de Bruin, P.Geo.



29.7 Neil Lincoln

I, Neil Lincoln, P.Eng., as an author of this report entitled “NI 43-101 Technical Report, Valentine Gold Mine, Newfoundland and Labrador, Canada” with an effective date of December 31, 2025 prepared for Equinox Gold Corp., do hereby certify that:

1. I am an Independent Metallurgical Consultant located at 1565 Lords Manor Lane, Ottawa, Ontario, K4M 1K3, Canada.
2. I graduated from the University of the Witwatersrand, South Africa, in 1994 with a Bachelor of Science in Metallurgy and Materials Engineering (Minerals Process Engineering) degree.
3. I am a professional engineer in good standing with the Professional Engineers and Geoscientists Newfoundland and Labrador (PEGNL) in Canada (no. 08053). I have practiced my profession in the mining industry continuously since graduation. I have over 30 years experience as a metallurgist and study manager. I have sufficient relevant experience having worked on numerous projects ranging from scoping studies, prefeasibility and feasibility studies to project implementation related to mineral processing plants. My mineral processing commodity and unit operations experience includes precious metals, base metals and industrial minerals covering metallurgical test work to process plant design. As a result of my experience and qualifications, I am a Qualified Person as defined in NI 43 101. Select recent gold projects include:
 - Oko West Gold Project (Feasibility Study) for G Mining Ventures, Guyana
 - Tocantinzinho Gold Project (Feasibility Study/Detailed Design) for G Mining Ventures, Brazil
 - Cerro Blanco Gold Project (Feasibility Study) for Bluestone Resources, Guatemala
 - Island Gold Phase 3 Expansion (Detailed Design) for Alamos Gold, Ontario, Canada
 - Fruta del Norte Phase 2 Expansion (Detailed Design) for Lundin Gold, Ecuador
4. I have read the definition of “qualified person” set out in the National Instrument 43 101 (“NI 43 101”) and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements to be a qualified person for the purposes of NI 43 101.
5. I have participated in the preparation of the Technical Report and am responsible for the following sections and sub-sections: 1.1.1.3, 1.1.2.3, 1.3.6, 1.3.10, 13, 17, 21, 25.1.3, 26.3, and associated disclosure in Section 27.
6. I visited the Valentine Gold Mine Process Plant from June 17 to 19, 2025.
7. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections and sub-sections of the Technical Report listed in item 6 above contain all scientific and technical information that is required to be disclosed to make these sections and sub-sections of the Technical Report not misleading.
8. I have read NI 43 101 and believe that the sections and sub-sections of the Technical Report listed in item 6 above have been prepared in accordance with NI 43 101.
9. I have read and understand NI 43-101, and I am considered independent of the issuer as defined in section 1.5 of NI 43 101.
10. I was previously involved with the Preliminary Economic Assessment for the Project in 2018; I have been involved with the current Project since 2024.

Dated this 30th day of March, 2026,

/s/ Neil Lincoln

Neil Lincoln, P.Eng.



29.8 Tony Gilman

I, Tony Gilman, M.Sc., P.Eng., as an author of this report entitled “NI 43-101 Technical Report, Valentine Gold Mine, Newfoundland and Labrador, Canada” with an effective date of December 31, 2025 prepared for Equinox Gold Corp., do hereby certify that:

1. I am a Principal Rock Mechanics Engineer with Terrane Geoscience Inc., with a business address of 2089 Maitland Street, Halifax, NS, B3K 2Z8.
2. I am a graduate of University of New Brunswick at Fredericton in 2000 with a Bachelor of Science in Geological Engineering and a graduate of The Pennsylvania State University at State College in 2006 with a Master of Science in Structural Geology.
3. I am a member in good standing as a Professional Engineers and Geoscientists Newfoundland and Labrador (# 05261). I have worked as a rock mechanics engineer/ for a total of 25 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - I have experience in open-pit precious metal geotechnical pit slope design, and in support of studies, developing and operating mines.
 - I have experience in mine dewatering estimation and slope depressurization for open pit mines.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I visited the Valentine Gold Mine most recently from November 17 to 19, 2025.
6. I am responsible for Sections 16.1.3 and 16.8.1 of the Technical Report.
7. I am independent of Equinox Gold as independence is set out in Section 1.5 of NI 43-101.
8. I have been involved with the Valentine Gold Mine in support of the Valentine Gold Project NI 43-101 Technical Report and Feasibility Study dated November 2022 and have been retained to support the construction of the mine since March 2024 in aspects related to open pit slope geotechnical design.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections in the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 30th day of March, 2026,

/s/ Tony L Gilman

Tony Gilman, M.Sc., P.Eng.



29.9 Grant A. Malensek

I, Grant A. Malensek, M.Eng., P.Eng., as an author of this report entitled "NI 43-101 Technical Report, Valentine Gold Mine, Newfoundland and Labrador, Canada" with an effective date of December 31, 2025 prepared for Equinox Gold Corp., do hereby certify that:

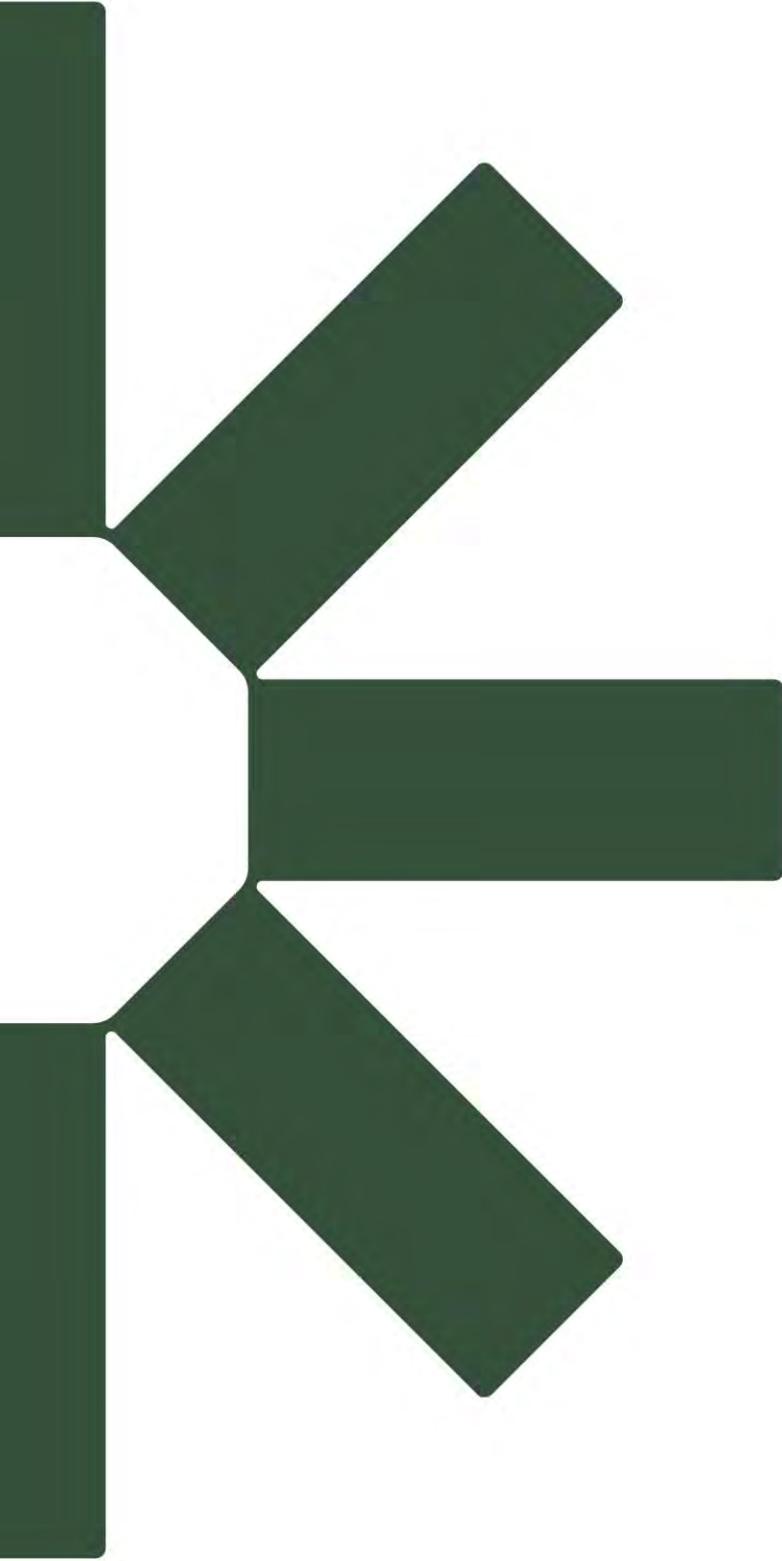
1. I am Technical Director – US Mining Advisory, and Senior Principal Mining Engineer with SLR International Corporation, of Suite 100, 1658 Cole Boulevard, Lakewood, CO, USA 80401.
2. I am a graduate of the University of British Columbia, Canada, in 1987 with a Bachelor of Science degree in Geological Sciences and Colorado School of Mines, USA in 1997 with a Master of Engineering degree in Geological Engineering.
3. I am registered as a Professional Engineer/Geoscientist in the Province of British Columbia (Reg.# 23905). I have worked as a mining professional for a total of 27 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Feasibility, prefeasibility, and scoping studies
 - Fatal flaw, due diligence, and Independent Engineer reviews for equity and project financings.
 - Financial and technical-economic modelling, analysis, budgeting, and forecasting.
 - Property and project valuations.
 - Capital cost estimates and reviews.
 - Mine strategy reviews.
 - Options analysis and project evaluations in connection with mergers and acquisitions.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I have not visited the Valentine Gold Mine.
6. I am responsible for sections 1.2 and 22, and associated disclosure in Section 27 of the Technical Report.
7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections in the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 30th day of March, 2026,

/s/ Grant A. Malensek

Grant A. Malensek, P.Eng.





Making Sustainability Happen