Tailings Storage Facility (TSF) Design Update Report
Meliadine Gold Mine, Nunavut, Revision 01

PRESENTED TO

Agnico Eagle Mines Ltd.

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Tetra Tech Canada Inc.
14940 - 123 Avenue
Edmonton, AB T5V 1B4 CANADA
Tel 780.451.2121 Fax 780.454.5688

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EXECUTIVE SUMMARY

Agnico Eagle Mines Limited (Agnico Eagle) operates the Meliadine Gold Mine, located approximately 25 km north of Rankin Inlet. The current operation consists of mining the Tiriganiaq deposit with two open pits and an underground operation under the existing Nunavut Water Board (NWB) Type A Water Licence (2AM-MEL1631). The amended Type A Water Licence Amendment issued in 2024 allows Agnico Eagle to mine the Wesmeg, Wesmeg North, Pump, FZone, and Discovery deposits that were included in the 2014 Final Environmental Impact Statement and Nunavut Impact Review Board Project Certificate No.006.

The mine plan presented in the 2024 WLA indicates that approximately 31.4 million tonnes (Mt) of filtered tailings (or tailings) will be produced over the Life of Mine (LOM) through 2031. Of this total, approximately 28.1 Mt of the tailings placed on surface and the remaining 3.3 Mt used as underground cemented paste backfill. The existing Tailings Storage Facility (TSF) currently approved by the NWB in 2018 has a design storage capacity of 10.92 Mt. To accommodate the additional 17.2 Mt of tailings from future mining activities, Agnico Eagle proposes a TSF design update that includes raising the existing TSF and extending it to the northwest of its existing footprint.

Tetra Tech Canada Inc. was retained by Agnico Eagle to carry out the detailed design and to prepare a design report and Issued for Construction (IFC) Drawings for the TSF design update. The report and IFC drawings are intended to meet the requirements of Part D, Items 1 and 2 of the amended Type A Water Licence.

The TSF design update was undertaken through a systematic engineering process that integrated a review of previous design information, evaluation of operational performance of the existing TSF, and detailed engineering analyses to support the updated TSF design and to verify that the TSF continues to meet established design criteria and regulatory requirements.

Detailed engineering analyses included the following:

- Coupled thermal and seepage analyses were conducted to evaluate the long-term thermal condition of the TSF and its foundation under adopted design climate change scenario (CMIP6 SSP2-4.5). The results of the coupled thermal and seepage analyses were incorporated into the subsequent long-term creep deformation and slope stability analyses.
- Long-term creep deformation analyses were conducted to evaluate deformation induced by the secondary creep of the ice-rich SILT layer against the adopted displacement and strain-based design criteria over the 100-year analysis period. The results indicate that mitigation measures may be required, where the ice-rich SILT layer is present, to ensure long-term serviceability of the TSF after closure. The recommended mitigation measures include constructing a toe buttress and shear key along the toe of the existing TSF, as well as a toe buttress along the toe of the TSF extension with a shear key within the TSF extension's footprint. These mitigation measures are intended to serve as a long-term performance management requirement rather than immediate operational changes.
- Limit equilibrium slope stability analyses were conducted along six representative sections to evaluate the calculated factor of safety (FoS) against the established design criteria. The calculated FoS for the TSF design update meets or exceeds the adopted design criteria and Agnico Eagle's requirements for all loading scenarios.

A preliminary tailings placement plan was developed based on the projected tailings production schedule and the TSF design storage, and will be refined during operations. The current construction method and procedure established for the construction and operations of the existing TSF will continue to be applied to the TSF raise and extension. Various water management infrastructure components, including channels, berms, and collection ponds, are being constructed to manage runoff from the TSF.

A performance monitoring plan has also been developed, which includes installing ground temperature cables and inclinometers, and settlement plates. Satellite-based deformation monitoring technology (e.g., Interferometric Synthetic Aperture Radar, InSAR) is recommended for long-term performance monitoring of the TSF. Regular visual inspections by site engineers and annual inspection by a qualified Geotechnical Engineer will be conducted in accordance with the inspection procedures established for the current mine operations and the requirements of the Type A Water Licence.

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ACRONYMS & ABBREVIATIONS

Acronyms/Abbreviations	Definition
AEMP	Aquatic Effects Monitoring Program
Agnico Eagle	Agnico Eagle Mines Limited
ARD/ML	Acid Rock Drainage and Metal Leaching
CDA	Canadian Dam Association
CID	Consolidated Isotropically Drained
CIU	Consolidated Isotropically Undrained
CMIP6	Coupled Model Intercomparison Project Phase 6
CP	Collection Pond
DBM	Design Basis Memo
FEIS	Final Environmental Impact Statement
FoS	Factor of Safety
GTC	Ground Temperature Cable
H	Horizontal
IF	Iron Formation
IFC	Issued for Construction
km	Kilometers
LOM	Life of Mine
Lorax	Lorax Environmental Services
masl	Metres Above Sea Level
MDMER	Metal and Diamond Mining Effluent Regulations
MDSS	Monotonic Direct Simple Shear
Mt	Million Tonnes
NBCC	National Building Code of Canada
NIRB	Nunavut Impact Review Board
NP	Neutralization Potential
NPAG	Non-Potential Acid Generating
NU	Nunavut
NWB	Nunavut Water Board
Okane	Okane Consultants Inc.
PAG	Potential Acid Generating
PC	Project Certificate
PGA	Peak Ground Acceleration

Acronyms/Abbreviations	Definition
ppt	Parts Per Thousand
QA/QC	Quality Assurance/Quality Control
SSP2-4.5	Shared Socioeconomic Pathway Scenario
SWCC	Soil Water Characteristic Curve
TDB	Tailings Dewatering Building
Tetra Tech	Tetra Tech Canada Inc.
tpd	Tonnes Per Day
TSF	Tailings Storage Facility
The Meliadine Mine	Meliadine Gold Mine
V	Vertical
WMI	Water Management Infrastructure
WLA	Water Licence Amendment

LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Agnico Eagle Mines Limited and their agents. Tetra Tech Canada Inc. (Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Agnico Eagle Mines Ltd., or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this document is subject to the Limitations on Use of this Document attached in Appendix A.

1.0 INTRODUCTION

Agnico Eagle Mines Limited (Agnico Eagle) operates the Meliadine Gold Mine (the Meliadine Mine), located about 25 km north of Rankin Inlet, Nunavut (Figure 1). Commercial production started in May 2019 by processing ore extracted from the Tiriganiaq deposits through one underground mine (Tiriganiaq Underground Mine) and two open pits (Tiriganiaq Open Pit 1 and Tiriganiaq Open Pit 2) under the existing Nunavut Water Board (NWB) Type A Water Licence (2AM-MEL1631).

In January 2024, Agnico Eagle submitted a Water Licence Amendment (WLA) application to the NWB to support the completion of licensing components previously approved under the Nunavut Impact Review Board (NIRB) Project Certificate (PC) No. 006 issued in 2015. The 2024 WLA allows Agnico Eagle to mine other ore deposits, including Wesmeg, Wesmeg North, Pump, FZone, and Discovery, which were included in the 2014 Final Environmental Impact Statement (FEIS) and PC No.006. The amended Type A Water Licence was approved by the Minister of Northern Affairs on November 22, 2024.

The mine plan presented in the 2024 WLA indicates that approximately 31.4 million tonnes (Mt) of filtered tailings (tailings) will be produced over the Life of Mine (LOM) through 2031. Of this total, approximately 28.1 Mt (89%) of the tailings will be placed within the Tailings Storage Facility (TSF), and the remaining 3.3 Mt (11%) will be used as underground cemented paste backfill (Agnico Eagle 2024).

The TSF approved by the NWB in 2018 (referred to as the existing TSF in this report) has a design storage capacity of 10.92 Mt and is expected to reach full capacity in August 2026, based on the current ore processing rate of 6,500 tonnes per day (tpd). To accommodate the additional 17.2 Mt of tailings from future mining activities authorized under the amended Type A Water Licence, Agnico Eagle proposes to raise the existing TSF and extend it to the northwest of its current footprint. The proposed final footprint and maximum height of the TSF raise and extension are smaller (by approximately 27 ha) and lower (by approximately 9 m) than those assessed during the 2024 WLA.

Tetra Tech Canada Inc. (Tetra Tech) was retained by Agnico Eagle to perform detailed engineering design for the TSF update (raise and extension). The primary objective of the TSF design update at the Meliadine Mine is to provide sufficient storage capacity throughout the remaining LOM while maintaining regulatory compliance and providing a robust design to meet the long-term performance objectives and closure requirements.

This report outlines the updated TSF design, including the design basis, criteria, and engineering analysis results, as well as construction and operational procedures, monitoring plan, and the Issued for Construction (IFC) drawings. This report is also intended to meet the requirements outlined in Part D, Items 1 and 2 of the amended Type A Water Licence.

2.0 OVERALL SITE CONDITIONS

This section briefly summarizes the overall site conditions for the Meliadine Mine. More details are documented in the Design Basis Memo (DBM) (Tetra Tech 2026a), Appendix B of this report.

The Meliadine Mine lies within the Southern Arctic Climatic Region, characterized by long, cold winters and short, cool summers, with daylight ranging from 4 hours in winter to 20 hours in summer. Climate data from the nearby Rankin Inlet A station show that monthly mean temperatures are above 0°C from June to September and below freezing for the rest of the year, yielding a long-term mean annual air temperature of -9.8°C (1994 to 2023). The site receives 394 mm/year of precipitation, roughly half as snow and half as rainfall (Tetra Tech 2021a). The average

annual loss of snowpack to sublimation and snow redistribution is estimated to vary between 46% and 52% of the total precipitation for the winter period and occurs between October and May. Winds are consistently strong, driven by broad, flat regional topography, with prevailing north-northwest and northwest winds ranging from 19 km/h to 29 km/h, with an average of 22.3 km/h.

The Meliadine Mine is located at a topographic elevation of about 60 meters above sea level (masl) in a lake-rich, low-relief setting with glacial features, including drumlins and eskers. Lake elevations range from 51 masl to 74 masl, and most perched lakes are shallow (<2 m deep), with late-winter ice reaching thicknesses of 1.0 m to 2.3 m (Golder 2012a).

The Meliadine Mine lies within continuous permafrost, extending from depths of 285 m to 430 m, with an active layer ranging from 1 m to 3 m thick and ground temperatures between -5.9°C and -7.0°C at the zero-amplitude depth. The geothermal gradient ranges from 0.015°C/m to 0.02°C/m (WSP 2024a).

Groundwater occurs in shallow seasonal flow paths and in a deeper, isolated system within low-permeability bedrock (1×10^{-10} m/s to 6×10^{-9} m/s), with deep groundwater velocities of 0.2 m/year to 0.3 m/year (WSP 2024b). High salinity (~61,000 mg/L) below the permafrost creates a freezing-point depression of -3.3°C, forming a cryopeg at an estimated depth of 350 m to 375 m (Golder 2012a).

The Meliadine Mine site is in an area of low seismic risk and is classified as “Class C” based on the ground conditions. The estimated Peak Ground Acceleration (PGA) at the Meliadine Mine is 0.0498 g for a 2% in 50-year probability of exceedance (0.000404 per annum or 1 in 2,475 year return) using the 2020 National Building Code of Canada (NBCC) Seismic Hazard Tool.

3.0 EXISTING TSF DESCRIPTION

3.1 Design and Construction of the Existing TSF

The existing TSF at the Meliadine Mine is located on a shallow sloping, low-lying hill with a natural slope of approximately 1% to 2% to the west of the process plant and north of Lake B7. The detailed design of the existing TSF was completed by Tetra Tech in 2018 (Agnico Eagle 2018) and approved by the NWB on December 3, 2018. The design dimensions are approximately 870 m in length, 430 m in width, and 33 m in average height. The general site layout plan view is presented in Figure 2.

A two-cell placement system (i.e., Cell1 and Cell2) was incorporated into the design of the existing TSF to facilitate phased construction, progressive closure, and enhance freeze-back potential. The side slope of the TSF was designed with a gradient of 4 Horizontal (H):1 Vertical (V) for the lower portion (average height of 15 m) and 3H:1V for the upper portion (the remaining 18 m). The final top surface was designed with a 4% slope to promote lateral runoff during rainfall and freshet events. To manage erosion, reduce dust generation, and improve thermal performance, the design incorporated a 4.0 m to 4.5 m thick layer of waste rock on the side slopes to encapsulate the tailings. The closure cover on the top surface of the TSF consists of a 0.5 m layer of overburden till overlain by a 2.5 m capping layer of waste rock.

Construction of the existing TSF commenced in February 2019, with the first lift of filtered tailings placed in Cell1. Prior to placement, excess snow and/or ice were removed to ensure suitable ground conditions. Tailings placement followed the operational protocols established for the current mine operations, as well as a detailed monthly deposition plan that was initially developed during the detailed design phase and subsequently refined during operations.

Cell1 of the TSF reached its full design capacity in July 2024 with a top surface elevation of 98 m. Based on the as-built survey provided by Agnico Eagle on June 15, 2025, the constructed Cell1 has a side slope ranging from 3.6H:1V to 4.1H:1V below Elevation 80 m, and from 3.0H:1V to 3.4H:1V above Elevation 80 m, which are generally consistent with the design side slopes. Cell2 (located north of Cell1) began receiving tailings with the first placement of 2.6 m thick tailings in winter 2022/2023 and was at a maximum elevation of 83 m as of June 15, 2025. The total volume of tailings placed was approximately 5.3 Mm^3 as of June 2025, based on the as-built survey provided by Agnico Eagle.

Runoff water from the existing TSF is managed by a water management system surrounding the TSF. The system consists of two berms, three culverts, two channels, and two collection ponds designed to collect any seepage and runoff from the TSF. The water collected in the collection pond is regularly pumped to the site's main Collection Pond 1 (CP1), for treatment prior to discharge.

Fourteen multi-bead ground temperature cables (GTCs) have been installed at eight locations within the footprint of the existing TSF to monitor the thermal conditions of both the tailings and foundation soils.

3.2 Field Monitoring and Performance Observations

The construction and operation of the existing TSF at the Meliadine Mine involve coordination among multiple departments and management levels, including health and safety, process plant, mining, engineering, environment, contractors, and consultants. Field monitoring data collected between 2019 and 2025, along with regular inspections, indicate that the in situ conditions and performance of the existing TSF meet the design expectations.

Key field monitoring elements include moisture content, salinity, particle size distribution, maximum dry density, in situ bulk density, and ground temperatures. Findings from the field monitoring program are summarized as follows:

- The measured moisture content of the tailings indicates that the filter presses are performing as designed, consistently producing tailings with an average gravimetric moisture content slightly below the design value of 17.6%.
- Salinity test results show that the tailings salinity was higher than the design basis of 15 parts per thousand (ppt) during the first two years of operation. Since April 2021, the tailings salinity has been generally aligned with the design basis.
- Particle size distribution tests show that the tailings from the process plant are slightly coarser than initially assumed in the design. Despite changes in ore sources, the gradation has been consistent over six years of operation, with a fine content (less than 75 microns) generally between 70% and 85%.
- Results from the Standard Proctor tests show that the maximum dry densities measured after commercial production ranged between 1,696 kg/m^3 and 1,885 kg/m^3, averaging 1,783 kg/m^3, which is slightly lower than the design value of 1,800 kg/m^3 used in the initial design. Results from nuclear density testing on in situ compacted tailings indicate that field-placed tailings exceed the compaction target (i.e., 92% of the maximum dry density), with a few exceptions. The in situ densities from nuclear density testing ranged between 1,598 kg/m^3 and 2,006 kg/m^3, with about 90% of tests greater than 95% of the maximum dry density. The placed tailings are generally moist and easily trafficable after compaction. The in situ density test results indicate an effective compaction and field placement strategies.
- Ground temperature data collected between 2019 and 2025 indicate that the thermal conditions of the tailings and foundation soils are consistent with design expectations, with the lower portion of tailings and foundation soils being in a frozen state and the upper portion of tailings in a marginally frozen state or in the process of freeze-back.

Agnico Eagle performs routine visual inspections in accordance with the inspection protocols established for the current mine operations. The inspection is intended to identify potential hazards/risks, including deformations, seepage, slumping, and other signs of instability. Additionally, an annual inspection by a qualified Geotechnical Engineer is conducted to document the performance of the existing TSF. Findings from the routine and annual geotechnical inspections are evaluated as part of the annual external review process to assess the TSF performance.

Overall, the monitoring data and field observations indicate that the existing TSF has performed as expected. The tailings exhibit consistent material properties, including moisture content, salinity, particle size distribution, and compaction characteristics. Field density testing confirms that the placed tailings generally meet or exceed the specified compaction targets, while ground temperature monitoring indicates that the tailings are frozen or undergoing freeze-back. Routine inspections have not identified any significant deformation, seepage, or signs of instability. These observations demonstrate that the current construction and operational practices are effective and that the existing TSF is performing as intended.

4.0 SUMMARY OF DESIGN BASIS FOR THE TSF DESIGN UPDATE

4.1 Tailings Production Plan

The tailings production plan presented in Section 3.1 of the DBM was used for the TSF design update. The production schedule, annual quantities, and distribution of tailings presented in the DBM (Table 3-1) differ slightly from the mine plan presented in the Mine Waste Management Plan – Table 4.1 (Agnico Eagle 2024) due to minor adjustments to the production schedule and engineering optimization after the 2024 WLA application. However, the total tonnages of tailings production, tailings to be placed within the TSF, and tailings to be used for underground backfill remain unchanged.

4.2 Tailings Properties and Characteristics

4.2.1 Physical and Geotechnical Properties

A series of laboratory testing programs were conducted on the tailings samples collected from the pre-production batch mix in 2013 and 2014 to support the initial design of the existing TSF. Details of the laboratory test results were documented in technical memoranda (EBA 2013a; Tetra Tech EBA 2014a).

In 2022, an unfrozen water content test was conducted on tailings collected from the process plant to estimate the freezing point depression of the filtered tailings due to porewater salinity (Université Laval 2022).

A new laboratory test program was conducted in 2024/2025 on tailings collected from the current mill process to verify the design parameters adopted in the initial TSF design and to support the proposed TSF design update. The 2024/2025 test program included:

- Physical index tests and gradation analysis;
- Moisture-density relationships (standard proctor test);
- Shear strength tests through isotropically consolidated undrained triaxial compression tests (CIU), isotropically consolidated drained triaxial compression tests (CID), and monotonic direct simple shear tests (MDSS);

- Consolidation testing; and
- Determination of the soil water characteristic curve (SWCC).

The tested tailings samples for the 2024/2025 test program were prepared to achieve dry densities similar to those measured in the existing TSF. Details of the 2024/2025 test program, results, and behavioural interpretations are documented in a technical memorandum (Tetra Tech 2025a) and Section 3.2.1 of the DBM. The key results and findings from the 2024/2025 test program are summarized below:

- **Grain Size and Index Properties:** The tailings are predominantly silt-sized material consisting of 71% silt, 25.3% sand, and 3.7% clay-size particles and exhibit non-plastic and low compressibility with a compression index, C_c, of 0.05. The specific gravity of the tailings is 2.98.
- **Moisture-Density Relationships:** Standard Proctor tests indicate an average maximum dry density of 1,782.5 kg/m^3 with an average optimum gravimetric moisture content of 17.0%.
- **Shear Strength:** CIU tests yield an internal effective angle of friction (φ´) of 34.3° and an apparent cohesion (c) of 22.0 kPa, while CID tests indicate an internal effective angle of friction of (φ´) 34.4° and an apparent cohesion (c) of 49.7 kPa.
- **SWCC:** The tailings have a SWCC with an air entry value of 16 kPa, a residual suction of 800 kPa, and the saturated and residual gravimetric water contents of 24.6% and 1.7%, respectively.
- **Freezing Point Depression:** The results from the 2022 unfrozen water content test indicated a freezing point depression of approximately -1.82°C.
- **Behavioral Response:** Nine advanced testing results (i.e., CID, CIU, MDSS) show that seven samples initially exhibited contractive response at very small axial strains (~2%) and then transitioned to a dilative response by the end of the test (at approximately 15% axial strain). Two CID tested samples exhibited contractive response throughout the entire test duration. The strain-hardening response observed in the CID, CIU, and MDSS tests indicates that the filtered tailings samples exhibit ductile behaviour under the test conditions, with the calculated brittleness index, I_B equal to or close to zero.
- **Comparison with 2013/2014 Tests:** The tailings produced from current mine operations are slightly coarser with marginally higher specific gravity. Other tailings properties, including maximum dry density, optimum water content, shear strength, SWCC, and compression index, are generally consistent with the results obtained from the 2013 and 2014 test programs.

4.2.2 Geochemical Characteristics

Agnico Eagle conducted a geochemical characterization program in 2014 to support the FEIS (Golder 2014). In 2022, Lorax Environmental Services (Lorax) conducted another geochemical characterization program, undertaking a series of static and kinetic tests to supplement the 2014 study and to assess the acid rock drainage and metal leaching (ARD/ML) potential of the geologic materials expected to be mined at the Meliadine Mine. The key findings from the 2022 geochemical characterization program for the filtered tailings (Lorax 2022) are presented below:

- Tailings are expected to have a similar solid phase composition to the ore mill feed, and geochemical characterization of ore can be used to estimate metal enrichment and ARD potential of tailings. Ore tends to have greater ARD potential than waste rock due to its elevated sulphur content and the association with Au mineralization and the Iron Formation (IF) lithology. The ARD potential of ores is essentially limited to IF, with a total of 30% of the Meliadine ore being classified as Potential Acid Generating (PAG) or Uncertain.

- Paste pH is a primary indicator of the presence of existing buffering capacity or water-soluble acidity. When the paste pH values are less than 5.5, neutralization potential (NP) present is limited or non-existant. Higher paste pH values imply the presence of immediately available NP. Based on the Acid Base Accounting results from the laboratory test samples, the paste pH ranges from 8.0 to 8.2 for the tailings collected from the existing TSF in August 2021.
- Kinetic tests and seepage survey indicated that As and NH4 are the only parameters exceeding Metal and Diamond Mining Effluent Regulations (MDMER) guidelines, while a variety of Aquatic Effects Monitoring Program (AEMP) exceedances were observed for other parameters (As, B, Cd, Co, Cu, Pb, Mn, Ni, Se, Ag, Tl, U, and Zn) from the TSF seepage water quality survey.
- ARD/ML potential of the tailings is considered low due to material compaction and progressive covering that will limit the availability of oxygen and water for reaction.

4.3 Subsurface Geotechnical Conditions

4.3.1 Subsurface Geotechnical Conditions of Existing TSF

The existing TSF is located on a gentle hill with a natural slope of approximately 1% to 2%. Based on previous geotechnical drilling programs, nine boreholes were drilled within the existing TSF footprint, and five boreholes were drilled around the west and south perimeters of the existing TSF (SRK 2007; Golder 2010; Golder 2012a and 2012b; EBA 2013b; Tetra Tech EBA 2014b; and Tetra Tech 2025b). Figure 3 presents the locations of the boreholes. More details on the subsurface conditions within the existing TSF footprint and borehole logs are presented in Section 3.3.1 of the DBM, attached in Appendix B.

Generally, the subsurface beneath the existing TSF consists of a thin layer of organic material overlying silty SAND[1], ice-rich SILT, gravelly SILT and SAND, cobbles with traces of clay. Excess ice was observed at various depths in most of the boreholes. The thickness of the overburden within the existing TSF footprint ranges from approximately 0.13 m to 8.5 m.

4.3.2 Subsurface Geotechnical Conditions of the TSF Extension Footprint

A total of 20 boreholes were drilled within the TSF extension footprint, and 11 were drilled around the west and south perimeters of the TSF extension in the past 6 drilling programs (Golder 2010; Golder 2012a and 2012b; EBA 2013b; and Tetra Tech 2024 and 2025b). Figure 3 presents the locations of the boreholes drilled. More details on the subsurface conditions within the TSF extension footprint and borehole logs are presented in Section 3.3.2 of the DBM, attached in Appendix B.

Similar to the surface conditions at the existing TSF, the soil stratigraphy beneath the TSF extension area consists of a thin layer of organic material overlying SAND, ice-rich SILT, gravelly SILT and SAND, cobbles with traces of clay. Excess ice was observed at various depths in most of the boreholes. The thickness of the overburden within the TSF extension footprint ranges from approximately 2.0 m to 8.3 m.

[1] Where applicable, the soil description has been based on the following classification system.

Principal soil constituent shall be capitalized in the soil description. The soil constituents are described in the following manner and are listed in decreasing order of significance:

- >35% “and” (soil constituent in capital letters, e.g., …and SAND) (Note that the use of the qualifier “and” is not to be applied to SILT/CLAY Principal constituents, i.e., SILT and CLAY).
- 21% to 35% “y – adjective” (e.g., silty, clayey).
- 10% to 20% “some” (soil constituent, e.g., some sand).
- >0 to 10% “trace” (soil constituent, e.g., trace gravel).
- “occasional” use for noting presence of isolated occurrences.

4.3.3 Ice-rich Permafrost Distribution

Two testpit programs and a terrain and permafrost mapping study were conducted in 2025 to assess the presence and distribution of ice or ice-rich soils within the TSF footprint. Ice or ice-rich soils were identified in 17 of the 20 testpits, with the thickness ranging from 0.3 m to 0.8 m, and an average of approximately 0.45 m. The terrain and permafrost mapping study indicates that permafrost soils with more than 20% excess ice content by volume occupy approximately 44% of the TSF footprint (Tetra Tech 2025c). More details on the findings from the geotechnical drilling programs, testpit programs, and terrain and permafrost mapping study are documented in Section 3.3.3 of the DBM, attached in Appendix B.

4.4 Design Criteria

The design criteria for the TSF design update have been established to provide a robust design and ensure that the TSF meets long-term performance objectives and regulatory compliance.

The design criteria for the TSF design update include minimum factor of safety (FoS) against slope instability, design earthquake loading, thermal conditions, and deformation limits. The rationale for each design criterion is documented in Section 5 of the DBM, attached in Appendix B. The following subsections provide a summary of each established criterion.

4.4.1 Minimum Factor of Safety

The stability acceptance criteria for the TSF design update are established based on the recommendations and approaches presented in Hawley and Cunning (2017) – *Guidelines for Mine Waste Dump and Stockpile Design.* The guidelines recommend stability criteria based on the consequences of failure and the level of confidence in the design parameters.

In addition to the design guidelines recommended in Hawley and Cunning (2017), the selection of the FoS also considers other widely accepted tailings management practices in the mining industry including Dam Safety Guidelines by the Canadian Dam Association (CDA 2013), Technical Bulletin – Application of Dam Safety Guidelines to Mining Dams (CDA 2019), Tailings Dam Safety Bulletin No. 194 by the International Commission on Large Dams (2025), and Agnico Eagle's Corporate Management Standard (Agnico Eagle 2019).

The selection of the minimum acceptable FoS for the TSF design update considered the locations of failure, slope slip mechanisms, failure consequence, confidence levels on input parameters, key assumptions, proximity to nearby infrastructure, and site conditions. Table 4-1 presents the selected minimum FoS against slope instability under various loading conditions and potential failure scenario. The selected minimum FoS values presented in Table 4-1 meet or exceed these recommended in Agnico Eagle's Corporate Management Standard (Agnico Eagle 2019) and tailings management practices in the mining industry abovementioned.

Table 4-1: Stability Criteria for the TSF Design Update

Potential Failure Scenario and Conditions	Adopted Minimum Acceptable F	
	Static	Pseudo-Static [a]
Surficial, shallow slips (during construction)	1.3	-
Local deep-seated slips (during construction)	1.5	-
Long-term, global deep-seated slips for base cases (after construction)	1.5	1.1[b]
Long-term, global deep-seated slips for sensitivity cases with conservative assumptions (after construction)	1.4	1.1[b]

[a]: Pseudo-static loading was only considered for global deep-seated slip failure under long-term conditions (after construction).
[b]: If the calculated FoS under pseudo-static loading is significantly less than the minimum required FoS (1.1), a dynamic deformation numerical analysis will be conducted to estimate the deformation of TSF under seismic loading.

4.4.2 Design Earthquake

Earthquakes can trigger slope instability and cause intolerable settlement of the TSF if the earthquake magnitude exceeds certain thresholds. A maximum design earthquake with a 1 in 2,475 year return event (2% probability of occurrence in 50 years) was selected for both the operational phase and post-closure. The selected design earthquake for the TSF design update complies with the recommendation for a dam structure classified as High in the Dam Safety Guidelines (CDA 2013).

4.4.3 Thermal Criterion

No specific thermal criterion is required for the TSF to achieve its long-term performance objectives. The TSF design conducted in 2018 assumed that the physical slope stability of the TSF does not rely on the freeze-back of the tailings. The same assumption used in the initial design has been carried forward to the TSF design update. Measures to promote the freeze-back of the tailings (e.g., control of lift thickness and seasonal placement) have been implemented during the construction of the existing TSF at the Meliadine Mine and will continue to be implemented during the future raise and extension. These measures enhance the progression of tailings freeze-back and permafrost development within the TSF, providing additional benefits to both the physical and geochemical stability of the TSF.

4.4.4 Deformation Criteria

4.4.4.1 Creep Deformation Criteria

The stresses imposed by staged tailings placement and progressive increases in TSF height can induce secondary creep within the ice-rich SILT foundation layer. This time-dependent behaviour can lead to gradual settlement, lateral spreading, and shear strain accumulation over time. Therefore, deformation control becomes a serviceability-driven design requirement rather than relying solely on the FoS against slope instability.

The following performance-based acceptance thresholds for creep deformation were established based on a literature review, design experience from other mine sites in the Northwest Territories and Nunavut, observed field performance of structures on ice-rich foundations, the risk level of the TSF, and engineering judgment, considering that no formal technical guidelines defining deformation acceptance criteria currently exist.

- Vertical and horizontal displacement of the TSF should stay within 1% of the maximum TSF height over 100 years;

- Long-term creep rate should not exceed 5 mm/year over 0.5 m thick ice-rich SILT layer;
- Shear strain rate within the ice-rich SILT layer should remain below $1.0x10^{-6}$ s^{-1}; and
- Accumulated shear strain within the ice-rich SILT layer over 100 years should not exceed 30%.

Further details on the rationales, literature review, and published data on the creep behaviour of ice-rich soils are provided in Section 5.4 of the DBM and Section 4.2 in the Technical Memo for long-term creep deformation analyses (Tetra Tech 2026c), attached as Appendix D of this report.

4.4.4.2 Seismic Deformation Criterion

For seismic deformation, the guideline for Mine Waste Dump and Stockpile Design by Hawley and Cunning (2017) recommends defining the maximum allowable strain due to a seismic event based on the facility's failure consequence and the confidence level in the design. For the TSF design update, a maximum allowable strain of 0.75% due to the designed seismic event was established, reflecting the high consequence of failure and a moderate level of confidence in the design for the TSF at the Meliadine Mine.

4.5 Additional Key Design Considerations

In addition to the expected tailings production schedule, quantities, geotechnical and geochemical characteristics, design, criteria, and subsurface conditions, other key factors were considered during the TSF design update, including:

- **Closure Plan and Objectives:** The TSF design update considers and meets the following closure plan and objectives:
  - Implementing progressive closure during operation to reduce the dust generation and closure cost.
  - The physical stability of the TSF will be maintained under long-term climate change, static, and seismic conditions, with the deformations to remain below tolerable thresholds.
  - Limit dust concerns during active reclamation and in the long term.
  - The TSF will be compatible with wildlife and community uses and meet future land use targets after closure.
- **Site Climate Conditions:** The site-specific climate conditions (long and cold winter seasons) were utilized to promote the freeze-back of the tailings and encourage permafrost development in the TSF by defining the tailings placement area and schedule.
- **Environmental Obligations:** Minimise impacts on fish-bearing habitat by maintaining a suitable buffer distance from protected natural lakes, minimizing the overall footprint, and limiting surface dust generation.
- **Water Management:** Where feasible, clean natural runoff will be diverted away from the facility to avoid contact with, and flowing through, the TSF area. Contact water will be collected through various water management infrastructure (WMI), including ditches and collection ponds. The WMI will be maintained during operations to avoid potential negative impacts on the receiving environment.

5.0 TSF DESIGN UPDATE

5.1 Design Methodology

The TSF design update was undertaken through a systematic engineering process that integrated a review of previous design information, an evaluation of the operational performance of the existing TSF, and the incorporation of new site investigation and laboratory testing data. Anticipated operational conditions and constraints were also considered in the design update, including the mine production schedule, tailings characteristics, placement strategies, climatic conditions, and site-specific constraints such as foundation conditions and available footprint for the TSF extension. These factors were considered to ensure that the TSF design update remains practical, constructible, and compatible with ongoing operations.

Following the completion of the data review and assessment, an updated TSF design geometry was developed to meet the tailings storage requirements while maintaining compliance with operational requirements. Detailed engineering analyses were then conducted to support the updated TSF design and to verify that the TSF continues to meet established design criteria and regulatory requirements. These analyses included coupled seepage and thermal analyses, long-term creep deformation analyses, slope stability analyses, and other relevant evaluations. Updated subsurface conditions, newly collected material properties, operational assumptions, and loading conditions were incorporated into the analyses to reflect current understanding of the TSF. The engineering analyses workflow involves an iterative process, as illustrated in Figure 5.1. The results of these analyses were used to confirm the adequacy of the design and to support any recommended modifications or operational adjustments necessary to achieve the long-term performance objectives.

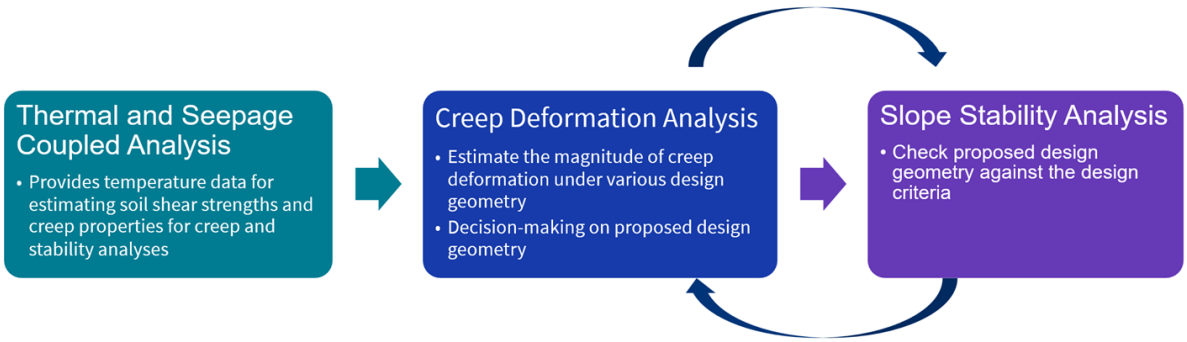

Figure 5.1: Engineering Analyses Workflow for the TSF Design Update

5.2 Design Concept and Geometry

The TSF design update was developed based on the observed performance of the existing TSF and the current as-built geometry. The raise was achieved by increasing the crest elevation, while maintaining the same design side slopes or adopting slightly flatter side slopes for the raise portion where required. The extension was achieved by extending the existing TSF to the northwest direction.

The final top elevation and overall side slopes for the updated TSF configuration were determined based on site-specific geometry constraints and results from slope stability and creep deformation analyses. The top surface slope of the TSF raise and extension was maintained consistent with the initial design, at 4%. The cover system on the

side slopes for the TSF raise design will be aligned with the current as-built conditions. The thickness of waste rock cover on the side slopes for the TSF raise may vary depending on the as-built conditions. The cover system on the side slopes for the TSF extension design is consistent with the cover design adopted for the initial TSF design and consists of a 4.0 m to 4.5 m thick waste rock layer on the side slopes.

The cover system on the top surface for the TSF raise and extension is consistent with the cover design adopted for the initial TSF design and consists of 0.5 m thick overburden till overlain by a 2.5 m thick waste rock layer.

Key design parameters for the TSF raise and extension are summarized in Table 5-1.

Table 5-1: Key Parameters and Geometry for the TSF Design Update

General Parameters	Values
Tailings solid content to TSF	85% (by mass)
Gravimetric moisture content of tailings to TSF	17.6%
Maximum dry density from standard proctor test (kg/m^3)	1,782.5
Minimum target dry density of compacted tailings (95% of maximum dry density) (kg/m^3)	1,694
Assumed waste rock in place bulk density (kg/m^3)	1,880
Assumed overburden till in place bulk density (kg/m^3)	1,620
Reference average ground elevation (masl)	69
Design total storage capacity (Mm^3)	18.0
Required total storage capacity (Mm^3)	17.0
Geometry for TSF Raise	
Design side slope for the raise (above elevation 100 m)	3H:1V
Design slope of final tailings surface at crest	4%
Tailings elevation along edge of plateau (m)	115
Maximum tailings elevation at crest center (m)	117.5
Maximum TSF elevation at crest center (m)	120.5
Total footprint of existing TSF (m^2)	370,589
Geometry for TSF Extension	
Design side slope for the raise (below elevation 100 m)	4H:1V
Design side slope for the raise (above elevation 100 m)	3H:1V
Design slope of final tailings surface at crest	4%
Tailings elevation along edge of plateau (m)	115
Maximum tailings elevation at crest center (m)	117.5
Maximum TSF elevation at crest center (m)	120.5
Footprint of TSF extension (m^2)	420,633
Cover System	
Waste rock cover thickness (normal to the side slopes) on the side slopes for raise (m)	4.0 to 5.5*
Waste rock cover thickness (normal to the side slopes) on the side slopes for extension (m)	4.0 to 4.5
Overburden till cover thickness on top surface (m)	0.5
Waste rock (NPAG) cover thickness on top surface (m)	2.5

* Waste rock cover thickness on the side slopes for raise varies from 4.0 m to 5.5 m depending on the current as-built conditions.

The TSF raise and extension will be accessed via a haul road and access ramps. The design update includes extending the existing access ramps for the TSF raise and constructing three new access ramps for the TSF extension. A haul road along the east perimeter of the TSF is also proposed to connect the process plant and the TSF.

The access ramps are designed for dual-lane traffic to accommodate 70-tonne haul trucks (e.g., 775G-CAT), with a 17.1 m wide traffic surface, a maximum gradient of 10%. A safety berm with approximately 5 m wide at base and 1.7 m high will be constructed along the outer edge of the access ramp.

The haul road is designed for two-lane traffic to accommodate 70-tonne haul trucks, with a 17.1 m wide traffic surface and a gradient of 2% away from the TSF side to promote surface runoff. The height of the proposed haul road is approximately 1.5 m; as a result, a safety berm is not required.

5.3 Coupled Thermal-Seepage Analyses

The coupled thermal and seepage analyses were conducted using the TEMP/W and SEEP/W, packages of GeoStudio (SEQUENT 2024). A one-dimensional (1D) coupled thermal and seepage model was initially developed to calibrate the model against the measured in situ conditions, including ground temperature and moisture content. Following the model calibration, the 1D model was run over a 100-year period under the adopted climate change scenario to establish simplified hydraulic boundary conditions for subsequent two-dimensional (2D) modelling. A site-specific climate change database (2025 to 2125) for the Shared Socioeconomic Pathway (SSP) climate change scenario (SSP2-4.5) was developed by Okane Consultants Inc. (Okane) using available Coupled Model Intercomparison Project Phase 6 (CMIP6) climate model outputs. The site-specific CMIP6 SSP2-4.5 climate change dataset developed by Okane was incorporated in the TSF design update.

Following completion of the 1D analysis, a 2D coupled thermal and seepage model was developed along a representative cross-section. The 2D model incorporated the historical tailings placement sequence, the planned future tailings placement, and the placement of the closure cover system. Consistent with the 1D analysis, the 2D model was run for 100 years following closure cover placement to evaluate the long-term thermal and hydraulic performance under the adopted climate change scenario (CMIP6 SSP2-4.5).

Key findings from the coupled thermal and seepage analyses are summarized below. Other details regarding modelling methodology, input parameters, material properties, assumptions, and results are documented in the Technical Memo (Tetra Tech 2026b), attached in Appendix C of this report.

- Results from the coupled thermal and seepage analyses indicate that the existing tailings are generally in a frozen condition, while the newly placed tailings are marginally frozen at the time of closure cover placement. Following closure, both tailings temperature and the thickness of unfrozen tailings increase gradually over time in response to climate change conditions. Approximately 30 m of tailings on the top are predicted to have thawed, and the remaining approximately 25 m of tailings are predicted to remain frozen after 100 years.
- For the foundation soils, thermal impacts are most significant near the downstream toe, with influence progressively reduced toward the central portion of the TSF footprint. The thaw extent within the ice-rich SILT layer is generally stable from 2025 to 2058; after 2058, progressive thawing is predicted due to climate change and potentially seepage flow in the tailings, with a thawing rate of approximately 1 m/year in the horizontal direction. After 100 years, the ice-rich SILT layer from the TSF toe to 65 m inward is expected to thaw, while the remaining the ice-rich SILT layer (65 m from the toe to the center of the TSF) is expected to remain frozen.

The results (e.g., ground temperatures versus time, thaw extent within tailings and foundation soils, thawing rate) were incorporated into the subsequent creep deformation and slope stability analyses.

5.4 Deformation Analyses

5.4.1 Long-term Creep Deformation Analyses

The long-term creep deformation analyses for the TSF design update were performed using FLAC 8.0 (Fast Lagrangian Analysis of Continua), a commercial two-dimensional explicit finite-difference program for engineering mechanics computations (Itasca 2018). Two-dimensional stress-deformation (plane-strain) analyses were performed to evaluate the creep behaviour of the ice-rich SILT layer in the TSF foundation.

As the creep behaviour of frozen soils is strongly temperature-dependent, temperature-dependent creep parameters were assigned to the model element based on the predicted temperature distributions from the coupled thermal and seepage analyses. Two time intervals (i.e., 0 to 50 years and 50 to 100 years) were defined to represent the projected ground temperature changes associated with long-term climate change.

Two representative cross-sections with the proposed design geometry configuration (one for the TSF raise and one for the extension) were developed for the creep deformation analyses. A generalized foundation soil profile was developed to represent foundation conditions within the footprint of the TSF, based on the subsurface conditions described in Section 3.0 of the DBM, Appendix B of this report, for the creep deformation analyses. The generalized foundation soil profile consists of a 1.5 m thick layer of sand, a 0.5 m thick layer of ice-rich SILT and a 2.5 m thick layer of ice-poor soils over bedrock.

It should be noted that a continuous 0.5 m thick layer of ice-rich SILT beneath the TSF area was assumed in the analyses. However, findings from previous site investigations in the TSF area and a permafrost mapping study indicated that the ice-rich layer is likely discontinuous across the site and generally thinner than 0.5 m. Therefore, the assumption of a continuous 0.5 m thick ice-rich SILT layer represents a reasonably conservative modelling approach for evaluating long-term creep deformation of the TSF.

Three cases were evaluated for the long-term creep deformation of the ice-rich SILT layer against the adopted displacement and strain-based design criteria over the 100-year analysis period. These three cases include:

- Case 1 (Baseline Case with a Continuous ice-rich SILT Layer):
  - Case 1 represents the baseline scenario with the selected TSF geometry and a continuous 0.5 m thick ice-rich SILT layer in the foundation. Temperatures remain stable for the first ~50 years and gradually warm thereafter. Although partial thawing (the zone near the TSF toe) is expected around 2080 based on the coupled thermal and seepage analyses, the thawing zone is conservatively assumed to remain frozen at −1.0°C, providing an upper-bound estimation on long-term creep deformation.
- Case 2 (Sensitivity Case with Thawed SILT Layer):
  - Case 2 uses the same geometry and foundation conditions as Case 1 but assumes the portion of the ice-rich SILT expected to thaw becomes fully thawed from 2080 onward and behaves as SILT without showing creep behaviour.
- Case 3 (Sensitivity Case with Discontinuous ice-rich SILT Layer):
  - Case 3 assumes the ice-rich SILT layer is present only beneath the TSF footprint and absent outside it, while using the same temperature assumptions as Case 2. Case 3 provides a lower bound estimation on long-term creep deformation.

For each case, the predicted long-term horizontal and vertical crest displacements (ΔH and ΔV), normalized deformation ratios (ΔH/H and ΔV/H), shear strain rates, and cumulative shear strains within the ice-rich SILT layer

were compared against the established performance thresholds described in Section 4.4.4.1. Where exceedances were identified, mitigation measures were developed to ensure long-term serviceability of the TSF after closure. The proposed mitigation measures include the construction of a toe buttress and shear key along the toe of the existing TSF, and a toe buttress along the toe of the TSF extension with a shear key within the TSF extension footprint, where the ice-rich SILT layer is present.

Key findings from the long-term creep deformation analyses are summarized below. Other details regarding the modelling methodology, input parameters, material properties, assumptions, proposed mitigation measures, results, and recommendations are documented in the Technical Memo (Tetra Tech 2026c), attached as Appendix D of this report.

- The results from the long-term creep deformation analyses indicate that the baseline case without mitigation does not fully meet the adopted long-term serviceability design criteria. Although the slope stability assessment concludes that global stability can be maintained without mitigation (Section 5.5 of this report), the predicted normalized displacement and localized shear strain accumulation exceed the 1% deformation threshold and the associated shear strain limits (20% to 30%) over the 100-year analysis period.
- The cases which incorporate the proposed mitigation measures (i.e., a toe buttress and shear key), demonstrate compliance with both the displacement-based and strain-based thresholds, with predicted creep rates and accumulated shear strains remaining below the acceptable limits. The ice-rich SILT layer below the TSF is expected to deform in a secondary creep state and is expected to undergo ductile deformation in the long term based on the calculated shear strain rate.
- **The proposed mitigation measures are intended to serve as a long-term performance management requirement rather than immediate operational changes. The proposed mitigation measures can be implemented in stages aligned with future construction and closure objectives. Therefore, the implementation of the proposed mitigation does not affect current short-term operations or the immediate functionality of the TSF.**

5.4.2 Seismic Deformation Analyses

The earthquake-induced deformation of the TSF was assessed as an initial screening to determine whether an advanced dynamic stress-strain deformation analysis is required for the TSF design update. Permanent seismic deformation of the TSF slopes was estimated using the empirical Newmark sliding block model proposed by Bray and Travasarou (2007). This method estimates seismic slope displacements by relating the yield acceleration of the slope to earthquake magnitude and ground motion intensity parameters. The approach is widely used for the preliminary evaluation of seismic deformation potential of earth dams, embankments, and tailings storage facilities.

The critical slip surface governing seismic stability was first identified through pseudo-static limit equilibrium slope stability analyses. The yield acceleration (k_y), defined as the horizontal acceleration needed to reduce the FoS to unity, was then determined for the critical failure surface. The yield acceleration represents the threshold acceleration above which permanent displacement may occur during earthquake shaking.

The input parameters used in the Bray and Travasarou (2007) relationship to estimate the expected permanent displacement of the TSF slopes include:

- The yield acceleration, k_y=0.13 g;
- A initial fundamental period, T_s=0.21s, calculated based on the average TSF height of 50 m and an average tailings shear wave velocity of 600 m/s;
- Design earthquake magnitude, M_w=6.5; and

- 5%-damped spectral acceleration, $S_a(T)$ =0.1g, estimated from the 2020 NBCC Seismic Hazard Tool for a Class “C” site at Rankin Inlet.

Based on these parameters, the estimated permanent deformation of the TSF slopes for an earthquake magnitude of 6.5 M_w is approximately 1 cm, which is negligible relative to the scale of the TSF. Assuming a failure path length of 150 m (estimated from the slope stability analyses), this displacement corresponds to an equivalent shear strain of approximately 0.01%. This value is well below the recommended maximum allowable strain of 0.75% suggested by Hawley and Cunning (2017).

The predicted seismic deformation represents the cumulative sliding displacement that may occur along the critical slip surface during strong ground shaking. Based on the estimated seismic deformation using the Bray and Travasarou (2007) procedure, the seismic-induced deformation at the Meliadine TSF is expected to remain within acceptable limits and is not anticipated to compromise the TSF’s overall stability.

5.5 Slope Stability Analyses

Limit equilibrium analyses were performed using Slope/W in GeoStudio (Seequent 2024) to calculate the FoS against slope failure under various failure scenarios during construction and in the long-term post construction of the TSF. Six representative cross-section locations (three for the TSF raise and three for the TSF extension) were selected for slope stability assessment. The analyses considered both static and seismic loading conditions. The post-construction seismic loading was modelled as pseudo-static with a design horizontal peak acceleration representing the transient seismic accelerations that may be induced during the designed earthquake.

To consider the uncertainties and variability of the foundation conditions and material properties, a sensitivity check was also conducted at the selected critical cross-sections. The sensitivity check includes the following scenarios:

- Elevated water table in the TSF, assuming that the water table is located at the mid-height of the TSF.
- Excess pore-water pressure generation due to thawing of the ice-rich SILT, with a R_u of 0.15.
- Development of vertical cracking at the crest of the TSF.
- Undrained shear condition, using an undrained stress ratio, S_u/σ'_{vc} of 0.25.
- Fully thawed ice-rich SILT layer in the long term.

Table 5-2 presents the smallest calculated FoS at all cross sections for each loading condition and failure scenario, together with the calculated smallest FoS for a sensitivity check at the selected critical cross-sections. Other details regarding modelling methodology, design criteria, soil profiles, material properties, cases analyzed, and the calculated minimum FoS for each case are documented in the Technical Memo (Tetra Tech 2026d), attached as Appendix E of this report.

The results in Table 5-2 indicate that the calculated FoS for all assessed loading conditions and failure scenarios meets or exceeds the adopted stability criteria as outlined in Section 4.4.1.

Table 5-2: Summary of Slope Stability Analyses Results

Loading Condition and Failure Scenario		Required Minimum Factor of Safety	Calculated Minimum Factor of Safety
During construction	Shallow slip failure, static loading	1.3	2.2
	Local deep-seated slip failure, static loading	1.5	2.3
Long-term after construction	Global deep-seated slip failure, static loading	1.5	1.5
	Global deep-seated slip failure, pseudo-static loading	1.1	1.3
Long-term after construction, sensitivity case	Global deep-seated slip failure, static loading with water table at the mid-height of the TSF	1.4	1.4
	Global deep-seated slip failure, excess pore water pressure due to thawing ice-rich SILT (R_u=0.15)	1.4	1.4
	Global deep-seated slip failure, undrained condition in the thawed and fully saturated tailings (S_u/σ'_{vc}=0.25)	1.2	1.2
	Global deep-seated slip failure, static loading with 8 m tension crack with water	1.4	1.5
	Global deep-seated slip failure, fully thawed ice-rich SILT layer	1.5	1.9

The results of the coupled thermal-seepage analyses (Section 5.3) indicate that approximately 30 m of tailings at the top of the TSF are predicted to thaw, while the remaining approximately 20 m of tailings are expected to remain frozen after 100 years. However, the slope stability analyses assumed the tailings to be fully thawed, which is considered to be reasonably conservative. The presence of frozen tailings within the TSF after 100 years, together with the implementation of the proposed mitigation measures as described in Section 5.4 is expected to further increase the resilience of the TSF to slope instability and enhance its long-term performance.

6.0 PROPOSED MITIGATION MEASURES FOR LONG-TERM PERFORMANCE MANAGEMENT

Mitigation measures have been developed and proposed to address the potential for long-term deformation associated with the ice-rich SILT layer in the TSF foundation. The design of the mitigation measures is based on current understanding of subsurface conditions and the results of engineering analyses. The dimensions and locations of these measures will be further refined and optimized as additional information becomes available through further investigation programs, construction observations, instrumentation data, and performance monitoring. These mitigation measures are part of the long-term performance management strategy for the TSF and are not considered as a short-term construction requirement. Mitigation implementation will be staged to align with the tailings placement schedule and other operational requirements. The need for mitigation will be further confirmed based on monitoring data, observed facility performance, and updated engineering assessments.

For the TSF raise, a waste rock buttress approximately 15 m high and 25 m wide is proposed along the downstream toe. A shear key will be constructed beneath the buttress to increase foundation shear resistance and to reduce the potential for long-term deformation associated with the secondary creep of the ice-rich SILT layer. The proposed shear key is designed with side slopes of approximately 2H:1V and a base width varying between 6 m and 10 m depending on field conditions and will be excavated approximately 3 m into the foundation soils. The shear key for the TSF raise will be backfilled with tailings or selected overburden till to provide adequate strength and compatibility with the surrounding materials.

For the TSF extension, a waste rock buttress approximately 5 m high and 25 m wide is proposed along the toe, together with a shear key excavated approximately 3 m deep into the foundation soils. The proposed shear key is

designed with side slopes of approximately 2H:1V, an estimated base width of about 10 m, and is located approximately 100 m inward from the tailings toe. The shear key within the TSF extension footprint will be backfilled with a mixture of waste rock and tailings to provide adequate lateral resistance against displacement induced by the creep of the ice-rich SILT layer.

7.0 CONSTRUCTION METHODS AND PROCEDURES

7.1 Preconstruction of TSF Raise

It is understood that an approximately 0.5 m thick rockfill layer was placed on top of Cell1 of the existing TSF to control the generation of dust. Agnico Eagle is not planning to remove the entire rockfill layer for the TSF raise. Prior to the placement of the new tailings on top of the existing TSF, preconstruction activities will be conducted to ensure that rockfill along the perimeter of the tailings, within an approximately 10 m wide zone, is removed. In addition, the top 0.3 m of tailings within this zone will be re-excavated and recompacted to minimize the potential for formation of a weak or separated interface between the existing and new tailings. If the new tailings placement happens during winter, snow removal should be completed before placing the new tailings.

7.2 Preconstruction of TSF Extension

Limited pre-construction activities are required for the TSF extension prior to tailings placement, as the extension area is generally located on sloped high ground, and WMI is in place to manage runoff. Similar to the construction of the existing TSF, a bottom drainage layer is not considered necessary, and this design update assumes that the tailings will be placed directly on the original ground surface.

To reduce the potential impact of the tailings on foundation temperatures and promote their freeze-back, the initial lifts of the tailings within the extension area are planned to be placed during the winter season. Therefore, any snow and/or ice within the planned placement area should be removed from the ground surface prior to tailings placement. Efforts will also be made to avoid placement in areas of localized water accumulation, if any exist.

Similar to the rockfill cover placed on the top of tailings in Cell1 of the existing TSF, the north slope of Cell2 is covered with an approximately 0.5 m thick rockfill layer for dust suppression and erosion protection. During construction of the TSF extension, rockfill along the perimeter of the tailings within an approximately 10 m wide zone will be removed. The upper 0.3 m of tailings within this zone will be re-excavated and recompacted to minimum the potential for formation of a weak or separated interface between the existing and newly placed tailings.

Prior to the commencement of tailings placement in the TSF extension footprint, a topographical survey of the placement area will be completed to establish baseline elevations.

7.3 Operational Construction Procedure

A strict but practical operational procedure for the construction of TSF has been established and implemented during the construction of the existing TSF. The existing operational procedures established will be followed for the TSF raise and extension. A brief summary of the existing operational procedure is presented below.

Transport and Placement of Tailings

- After processing and dewatering, tailings will be conveyed to the Tailings Dewatering Building (TDB), which has a storage capacity of approximately 12,000 tonnes (two to three days of production) to accommodate temporary interruptions in haulage due to extreme weather conditions or equipment issues. During the caribou migration season, additional temporary storage adjacent to the TDB will be utilized.
- Tailings will be loaded using a CAT 988 loader into 40-ton haul trucks and transported to the designated placement areas. Tailings will be end-dumped within surveyed grade stakes. No placement will occur without survey grade stakes.
- Tailings will be spread and compacted immediately after dumping, particularly during winter, to prevent freezing prior to compaction and to reduce wind erosion. Material will be placed in lifts with a maximum thickness of 0.3 m using a CAT D6 bulldozer, with each lift sloped approximately 1% toward the perimeter berms to promote runoff. Placement will be uniform across the staked area to avoid localized thick deposits.
- Each lift will be compacted using a CAT CS356 10-ton vibratory drum roller to achieve a minimum dry density of 1,694 kg/m³. Based on previous operations, the required compaction is typically achieved with three passes (forward and backward is considered one pass) at heavy vibration, followed by one static roll.
- Every lift of tailings will be “stepped in”, forming a staircase-like structure around the outside perimeter to establish the design side slope. Exposed step-in slopes will be compacted to form a smooth slope that reduces erosion, promotes runoff, and decreases snow removal.

Transport and Placement of Waste Rock

- Waste rock used as progressive cover material will be sourced from underground or open pit operations and placed on the slopes after every three lifts of tailings.
- Waste rock will be transported and end-dumped at the designated locations along the slope areas. The material will then be pushed into place with a CAT D6 dozer.
- Compaction of the waste rock will be carried out using a CAT CS356 10-ton vibratory drum roller, typically with two full passes under heavy vibration.
- Final shaping of the exterior slope to achieve the design slope geometry will be completed using a CAT 330 excavator.

Additional information regarding the overall tailings placement plan is provided in Section 8.0.

7.4 Quality Assurance and Quality Control Program

A Quality Assurance/Quality Control (QA/QC) program is an essential part of the construction and operation of any structure, particularly a TSF in an arctic environment. It is intended to confirm that the performance of the foundation soils and placed tailings is consistent with the predictions made during design and provide an early warning of the development of potentially adverse trends or conditions.

A specific QA/QC program was developed based on the risks and associated criteria (i.e., tailings solid content, in situ densities etc.) required to evaluate performance during construction and operation of the existing TSF. The QA/QC program consists of both verification and general monitoring components.

The verification monitoring components typically include monitoring of tailings production rate, solid content, geotechnical testing of tailings properties, routine visual inspections for seepage, deformation, cracking, and other

signs of instability, as well as an annual survey. The general monitoring components include tracking of monthly quantities of tailings placed into the TSF, instrumentation monitoring, air quality monitoring, and annual geotechnical inspections to assess the TSF's overall performance.

The QA/QC program currently implemented on site will continue for the construction of the TSF raise and extension.

8.0 OVERALL TAILINGS PLACEMENT PLAN

The overall tailings placement plan for the TSF raise and extension will adhere to the current tailings placement practices, which aim to promote freeze-back of the tailings while limiting dust generation, controlling surface erosion, and reducing final closure costs. The preliminary tailings placement schedule and the average annual placement height in each cell are summarized in Tables 8.1 and 8-2, for the raise and extension, respectively. The actual placement schedule may vary depending on the production rates, the size of individual cells or sub-cells, and other operational considerations. The tailings placement plan will be further refined during mine operations.

The same placement strategies used during the construction of the existing TSF to promote freeze-back and permafrost development in the TSF will be implemented for the TSF raise and extension. These strategies include:

- Seasonal placement considerations: November to March generally experiences sub-zero air temperatures and snowfall, while April to October is a period of thawing/freezing conditions with rainfall. The initial lift of tailings over the original ground will be placed during winter conditions whenever feasible.
- Restricted annual tailings thickness: The total annual thickness placed in a cell will not exceed 12.0 m.

As discussed in Section 7.3, the placed tailings will be spread in thin lifts and compacted. This method is expected to reduce the potential for wind erosion and dust generation from the exposed surface. However, dust generation may still occur during tailings placement in active zones, particularly during winter months, due to freeze-drying of the surface. Additional measures to limit dust and control surface erosion will include:

- Placement of progressive closure cover over the final perimeter slopes as early as practical;
- The final closure cover over the top tailings surface of each cell will be placed immediately after each cell reaches capacity;
- Dust suppression during summer through water spraying and/or other approved chemical dust suppression when required; and
- During winter, reducing work areas and sealing completed surface through compaction.

Where necessary during summer operations, thin lifts of rockfill cover material may be placed to facilitate trucks' access to placement areas. These temporary rockfill layers will be covered with tailings.

Alternate zones for tailings placement within the TSF, particularly during periods when weather conditions make placement more complex (e.g., heavy rainfall) or when tailings are produced at less than optimum conditions, will be identified.

Table 8-1: Tailings Placement Schedule and Estimated Tailings Thickness for TSF Raise

Year	Mine Year	Accumulated Tailings Solids to be Placed above Existing TSF (t)	Estimated Average Thickness of Tailings Placed (Cell1 and Cell2), (m)	Estimated Average Elevation of Top Tailings (Cell1 and Cell2), (m)	Planned Tailings Placement Period
2026	8	173,550	1.0	101	September
		347,100	1.0	102	October
		520,650	1.0	103	November
		694,200	2.0	105	December
2027	9	-	-	-	January
		-	-	-	February
		-	-	-	March
		-	-	-	April
		867,750	1.0	106	May
		1,041,300	1.0	107	June
		1,214,850	1.0	108	July
		1,388,400	2.0	110	August
		1,561,950	1.0	111	September
		1,735,500	2.0	113	October
		1,909,050	2.0	115	November
		2,082,600	2.5	117.5	December

Note: The actual placement schedule and average thickness may vary depending on the production rates, the size of individual cells or sub-cells, and other operational considerations. Detailed monthly placement plan will be further refined during mine operations. No active tailings placement between January and April for the TSF raise, tailings will be placed to the TSF extension Cell1 during this period.

Table 8-2: Tailings Placement Schedule and Estimated Tailings Thickness for TSF Extension

Year	Mine Year	Tailings Solids to be Placed above Existing TSF (t)		Estimated Average Thickness of Tailings Placed in Each Cell, (m)		Planned Tailings Placement Period	
		Cell3	Cell4	Cell3	Cell4	Cell3	Cell4
2027	9	1,040,587	-	9.0	-	January to April	-
		-	-	-	-	May to December	-
2028	10	2,443,181	-	12.0	-	January to October	-
		-	488,636	-	6.0	-	November, December
2029	11	-	977,272	-	9.0	-	January to April
		1,954,545	-	10.0	-	May to December	-
2030	12	-	2,145,000	-	12.0	-	January to August
		786,818	-	7.0	-	September to December	-
2031	13	1,465,910	1,465,910	12.0	12.0	January to December	

Note: The actual placement schedule and average thickness may vary depending on the production rates, the size of individual cells or sub-cells, and other operational considerations. Detailed monthly placement plan will be further refined during mine operations.

9.0 PROGRESSIVE AND FINAL CLOSURE COVER

The progressive and closure cover of the existing TSF is designed to reduce dust generation and erosion potential, provide long-term physical stability, and be compatible with wildlife, thereby supporting future land uses. The cover system adopted for the existing TSF design consists of a 4.0 m to 4.5 m thick Non-potential Acid Generating (NPAG) waste rock layer on the side slopes, and a composite cover on the top surface comprising a 0.5 m thick overburden till layer overlain by a 2.5 m thick waste rock layer. The same cover design system was adopted for the TSF raise and extension.

The cover material on the side slopes will be placed progressively with the tailings to reduce final closure costs and minimize erosion during operations. The closure cover design may be revised or optimized as required, based on performance monitoring of the TSF during mine operations.

Cover materials placed on the side slope will:

- Consists of 600 mm minus NPAG waste rock with varying gradation;
- Be placed in controlled lifts of maximum 1.0 m thick, prior to compaction with a 10-ton vibratory roller; and
- Be laid in minimum thicknesses of 4.5 m over the lower toe of the final tailings side slopes and at least 4.0 m over the upper side slopes.

Final closure cover material will be placed when each cell reaches its designed crest elevation and is sloped at 4% to promote runoff flow and reduce the potential for water infiltration. In addition to a 2.5 m thick top capping of 600 mm minus waste rock, the final cover will incorporate selected overburden till placed and compacted over the top surface of the tailings. The till material is intended to reduce surface infiltration, improve freeze-back potential, and provide thermal and erosion protection. The overburden till material will meet the following specifications:

- The overburden till will be inorganic, sandy-silt or silty-sand, with a fines content between 20% and 60%, and a maximum particle size of 300 mm; and
- The till must be placed in an unfrozen condition and at a minimum thickness of 0.5 m.

Volumes of closure cover material distributed by year for the TSF raise and extension are provided in Table 9-1.

Table 9-1: Summary of Cover Material Quantities for TSF Raise and Extension

Year	Mine Year	Volume of Waste Rock to be Placed on Side Slope (m^3)	Volume of Waste Rock to be Placed on Final Top Surface (m^3)	Total Volume of Waste Rock Placed as Closure Cover (m^3)	Total Volume of Overburden to be Placed on Top Surface (m^3)
2026	7	80,128	-	80,128	-
2027	8	338,129	-	338,129	-
2028	9	352,716	213,728	566,444	42,746
2029	10	394,706	-	394,706	-
2030	11	419,900	-	419,900	-
3031	12	503,880	196,065	699,945	39,213
Total		**2,089,460**	**409,793**	**2,499,252**	**81,959**

Note: The actual material quantities and placement schedule may vary depending on tailings placement schedule, the size of individual cells or sub-cells, and other operational considerations.

10.0 WATER MANAGEMENT

The water management objectives for the TSF are aligned with the overall water management strategy for the Meliadine Mine, which aims to minimize potential impacts on the quantity and quality of surface water at the mine site and surrounding waterbodies.

The water management system for the existing TSF has been constructed and is currently in operation. The system consists of two berms, three culverts, two channels, and two collection ponds designed to collect any seepage and runoff from the TSF. Two catchment systems manage runoff from the existing TSF, with the management strategy for each watershed summarized as follows:

- CP1 Catchment (east side of watershed limit): Runoff and seepage from the TSF flow through Culverts1 and 18 to Channel1 and Culvert3 for final collection in CP1.
- CP3 Catchment (west side of watershed limit): Runoff and seepage from the TSF are collected in CP3, either directly or via Channel3. Water collected in CP3 is then pumped to partially drained natural pond H13, from where it flows through Channel1 and Culvert3 into CP1. Berm2 serves to divert natural surface runoff away from the existing TSF.

At the time of preparing this design report, the water management system for the TSF extension is under construction and is expected to be operational prior to the 2026 spring freshet. The infrastructure currently under construction includes two channels (Channel13 and Channel14), CP8, and an associated Thermal Berm. Similar to the existing TSF, two catchment systems will manage runoff from the TSF extension, with the management strategy summarized as follows:

- CP3/CP8 Catchment (west side of watershed limit): Runoff and seepage from the western part of the TSF extension will be collected in CP3 or CP8, via Channel13 or Channel14. Water collected in CP3 and CP8 will then be pumped to the partially drained natural pond H13, from where it will flow through Channel1 and Culvert3 into CP1.
- CP1 Catchment (east side of watershed limit): Runoff and seepage from the eastern part of the TSF extension is expected to flow naturally towards the partially drained pond H13, from where it will flow through Channel1 and Culvert3 into CP1. Depending on local topography, a small-scale WMI (e.g., ditch or culvert) may be required to direct runoff towards pond H13. The need for such small-scale infrastructure will be further evaluated and designed to meet the requirements of the Type A Water Licence.

Figure 4 illustrates the overall water flow and management plan associated with the TSF raise and extension. All WMI will remain in place until mine closure activities are completed and monitoring results demonstrate that the contact water quality from the TSF meets the applicable discharge criteria. Additional details on the TSF water management are provided in the Water Management Plan (Agnico Eagle 2025).

11.0 FAILURE MODES AND CONTROL MEASURES

The performance of the TSF in arctic and ice-rich environments may be influenced by permafrost conditions, seasonal freeze–thaw cycles, and potential changes in thermal condition due to long-term climate change. Although filtered tailings are placed at relatively low moisture contents and exhibit improved stability compared to conventional slurry tailings, several failure modes must still be considered where ice-rich soils or permafrost are present within the foundation. These failure modes are primarily associated with slope instability of tailings, foundation instability caused by thawing of ice-rich soils, and internal erosion or drainage-related issues within the TSF.

Potential failure mechanisms include slope instability of the TSF due to inadequate compaction, localized saturation from heavy rainfall or snowmelt, and internal erosion caused by meltwater migrating within the TSF. Additionally, thawing of ice-rich foundation soils may reduce shear strength, generate excess porewater pressure, and result in thaw settlement that could affect overall stability.

To address these risks, the TSF design update incorporates operational and engineering controls. A summary of the potential failure modes, associated mechanisms, and adopted control measures is provided in Table 11-1.

Table 11-1: Summary of Potential Failure Modes, Mechanisms, and Adopted Operational and Engineering Controls

Potential Failure Mode	Mechanism	Operational and Engineering Controls
Slope instability of tailings (shallow or deep-seated slip failure)	▪ Inadequate field compaction resulting in loose tailings and contractive behaviour.	▪ Tailings placement following the established strict but practical placement procedures, including regular density check and verification of in situ conditions.
	▪ Heavy rainfall or snowmelt may result in large areas of saturated tailings.	▪ Placement with a positive gradient to promote runoff and limit infiltration. ▪ Avoid or limit tailings placement during very wet conditions. ▪ Side slopes are protected with a thick waste-rock layer.
	▪ Internal erosion caused by meltwater from snow or ice layers within the TSF may lead to internal piping.	▪ Snow removal and maintenance of positive drainage to prevent ponding. ▪ Use of fine waste rock for slope covering to reduce the erosion potential. ▪ The tailings are compacted and exhibit a low permeability (give the number and the ratio of vertical vs horizontal hydraulic conductivity) which limits water infiltration and the potential for internal erosion.
	▪ Differential settlement caused by thawing of ice-rich foundation soils may result in cracking and potential instability. ▪ Excessive deformation caused by the creep of ice-rich foundation soils may lead to cracking on the slope and crest.	▪ Assessment of settlement caused by thawing ice-rich soils and consolidation of tailings. ▪ Incorporation of a robust design, including thick waste rock cover on the slopes and a crown-shaped cover at the top. ▪ Sensitivity stability analyses with deep cracks filled with water on the slope and crest of the TSF indicate that the calculated minimum FoS still meets the design criteria against slope failure.
	▪ Differential settlement due to the consolidation of tailings may also result in cracking and potential instability	▪ Tailings compaction to at least 95% of the maximum dry density with consistent field placement and compaction practices, QA/QC control, and in situ testing verification.

Table 11-1: Summary of Potential Failure Modes, Mechanisms, and Adopted Operational and Engineering Controls

Potential Failure Mode	Mechanism	Operational and Engineering Controls
Foundation instability (deep-seated slip within thawed or weakened foundation soils)	▪ Thawing of ice-rich silt or permafrost reduces its shear strength and may lead to excess porewater pressure buildup.	▪ Design considers climate change and potential long-term strength reductions of ice-rich soils, using long-term creep strength of ice-rich SILT for stability assessment with a minimum FoS of 1.5.
	▪ Steep slopes and increasing TSF height may induce shear failure within the ice-rich SILT layer.	▪ Incorporation of a gentle slope (e.g., 4H:1V and 3H:1V). ▪ Adoption of a toe buttress to provide lateral support where the ice-rich SILT layer is present.
	▪ Excessive thaw settlement of ice-rich soils may trigger instability.	▪ Most of the foundation is expected to remain frozen under the design climate change scenario. ▪ Potential thaw settlement is expected to be limited (in an order of cm). ▪ A thick waste rock layer on the side slopes to accommodate potential deformation.
Excessive long-term creep deformation leads to instability of the TSF	▪ Presence of ice-rich soils or ice may result in long-term creep deformation, affecting the geotechnical properties of the tailings and foundation (i.e., tensile crack or reduced lateral confinement causes a transition from compression to extension condition).	▪ Geotechnical drilling, testpits, laboratory testing, and permafrost mapping to characterize the extent of the ice-rich soils. ▪ Design considers a continuous ice-rich SILT layer with long-term creep strength parameters. ▪ Stability results show that the proposed geometry is stable without toe buttress and shear key so instability is not a credible failure mechanism, but a toe buttress and shear key will be incorporated where require to satisfy the long-term geotechnical performance criteria associated with creep deformation.
	▪ Permafrost warming may increase creep rates over time.	▪ Climate change was taken into account to evaluate the long-term creep rate. ▪ Monitoring system includes GTCs, Shape Accel Arrays (SAAs), and InSAR, supported by model calibration and trigger levels.

12.0 MONITORING AND INSPECTION

Performance monitoring is an integral part of the TSF operations in an arctic environment. Geotechnical instrumentation is required to monitor the behaviour of placed tailings and foundation soils throughout the operation and closure phases. The monitoring system is intended to provide the following information:

- Confirmation that the performance of the foundation soils and placed waste materials is consistent with the predictions made during the design studies, notably in terms of stability, deformation, seepage, and thermal analyses.
- Early warning of the development of potentially adverse trends such as seepage, deformation, and permafrost degradation.

Performance monitoring will be conducted using GTCs, inclinometers, and settlement plates. Vertical GTCs have been installed at eight locations within the existing TSF to a minimum depth of 10 m below the original ground surface to verify thermal conditions and confirm the assumptions adopted during the initial design. During the TSF

raise construction, the existing GTCs within the TSF footprint will be extended, and additional GTCs will be installed to monitor thermal conditions within the raise.

Within the TSF extension footprint, three vertical GTCs were installed to an approximate depth of 15 m below the original ground surface at Boreholes GT24-01, GT24-09, and GT25-09 during the 2024 and 2025 drilling programs. These GTCs will be extended and terminated at appropriate elevations. Additionally, eight new vertical GTCs with dataloggers are recommended at selected locations to a minimum depth of 10 m below the original ground surface.

As described in Section 5.4.1, horizontal displacement is expected over time due to secondary creep in the ice-rich SILT layer in the TSF foundation. Eight ShapeArray inclinometer systems are recommended for the TSF raise and extension to monitor the deformation and establish baseline data for calibration of the creep deformation models. The collected deformation data will also be used to evaluate compliance with the adopted deformation criteria for the TSF design update and to support optimization of the proposed mitigation measures. Prior to the closure cover placement on the top of the tailings, settlement plates will be installed to monitor the vertical deformation of the TSF.

As an enhancement to the abovementioned monitoring measures, satellite-based deformation monitoring (e.g., Interferometric Synthetic Aperture Radar, InSAR) is recommended to supplement long-term performance monitoring of the TSF. InSAR monitoring can provide wide-area spatial coverage and the capability to detect millimetre-scale ground deformation over time, allowing identification of subtle settlement or lateral movement trends across the TSF and surrounding areas. InSAR monitoring can also provide an independent dataset to complement conventional survey monitoring and geotechnical instrumentation, thereby improving the ability to detect early deformation trends and support ongoing evaluation of TSF performance. The need of satellite-based deformation monitoring technology will be further assessed based on monitoring data collected from other instrumentations and observed facility performance during operations.

The proposed instrumentation locations and details are shown on Drawings 65-684-230-008 and 65-684-230-009 in Appendix F. Additional instrumentation may be installed if required after review of monitoring data and operational performances.

Visual inspection can provide early warning of many conditions that can contribute to structural failures and incidents. Agnico Eagle will undertake a daily visual inspection of the TSF during active development and monthly inspections when placement activities cease on an interim/seasonal basis. Once construction of the TSF is complete, visual inspection of the completed portion will continue on a semi-annual basis until closure. The frequency of the inspection may vary depending on the construction activities and season but will be aligned with the inspection and monitoring protocols established by Agnico Eagle. Records of all inspections will be maintained, and any potential hazards/risks will be identified, including deformations, seepage, slumping, or any other signs of instability.

An annual inspection, in accordance with Part I, Items 13 and 14 of the amended Type A Water Licence will be conducted by a qualified Geotechnical Engineer to document the performance of the TSF. The annual geotechnical inspection report will be submitted to the NWB as per the Water Licence requirements.

13.0 CLOSURE

We trust this report your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.

2026-04-02

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Prepared by:
Hongwei Xia, Ph.D., P.Eng.
Principal Specialist/Senior Geotechnical Engineer,
Arctic Group
Direct Line: 587.460.3646
Hongwei.Xia@tetratech.com

2026-04-03

FILE: 704-ENG.EARC03140-34
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Reviewed by:
Fai Ndofor, M.Sc., P.Geo.
Principal Consultant/Senior Engineering Geologist
Arctic Group
Direct Line: 587.460.3486
Fai.Ndofor@tetratech.com

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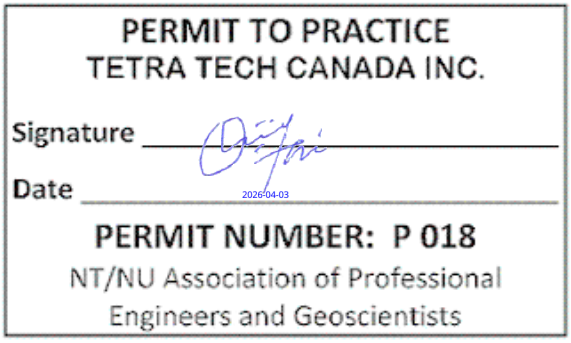

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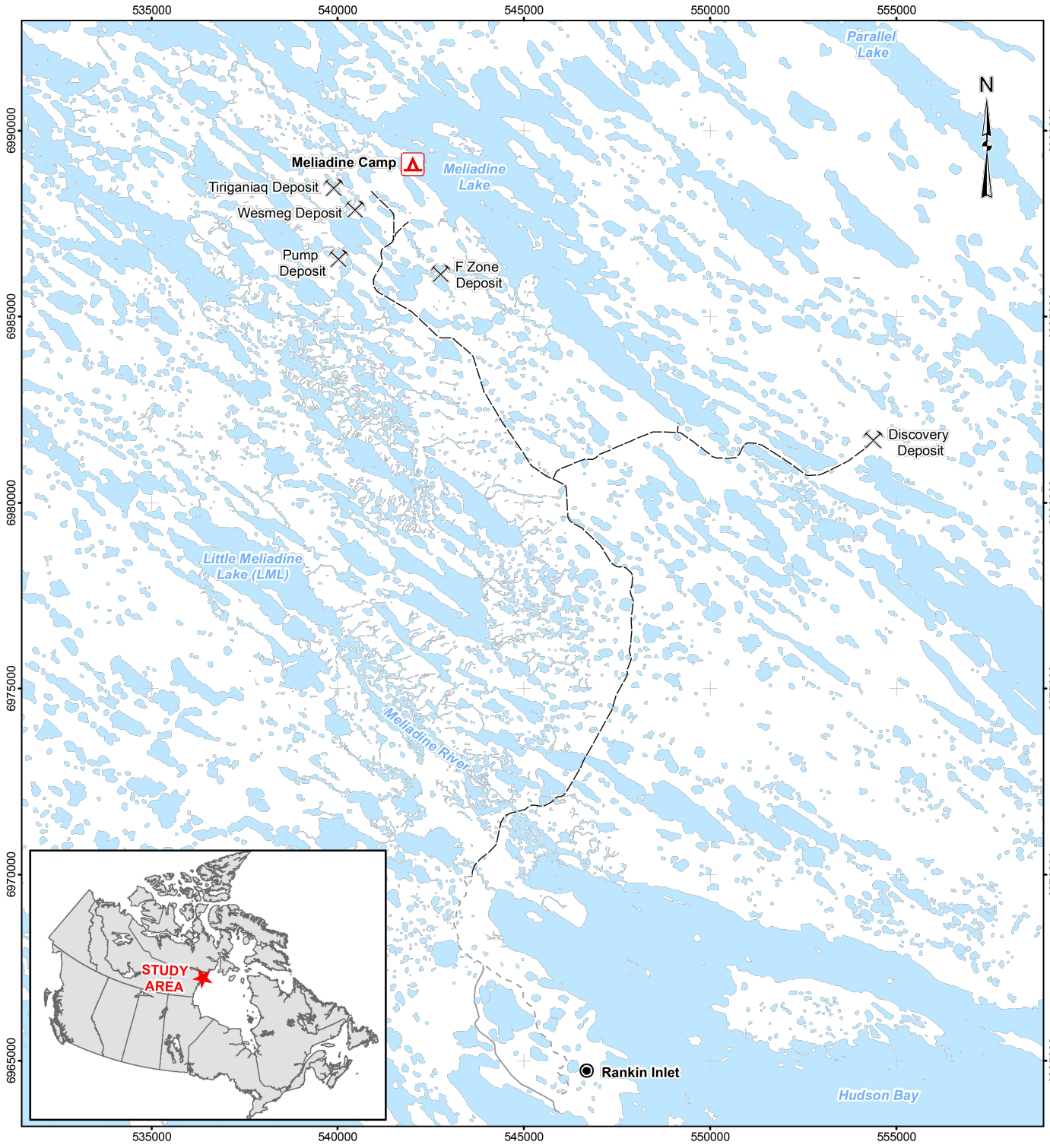
FIGURES

Figure 1 General Project Location Plan
Figure 2 Meliadine Mine General Site Layout
Figure 3 Borehole and Testpit Locations
Figure 4 Water Management and Water Flow TSF Raise and Extension



LEGEND

- Camp
- Proposed Mine Site
- All-weather Access Road (AWAR)
- Road - New
- Road - Existing
- Watercourse
- Waterbody

AGNICO EAGLE – MELIADINE DIVISION

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FIGURE 1 GENERAL PROJECT LOCATION PLAN

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NOTES:

1) WATER MANAGEMENT INFRASTRUCTURE (CHANNEL13, CHANNEL14, CP8, CP8 THERMAL BERM, B7NORTH THERMAL BERM) IS UNDER CONSTRUCTION AT THE TIME OF PREPARATION OF THIS REPORT.
2) THE CONSTRUCTION OF B7WEST THERMAL BERM IS SCHEDULE IN WINTER 2026/2027.

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TITRE / TITLE	# DWG

DESSINS EN RÉFÉRENCE/REFERENCE DRAWINGS

REV	DESCRIPTION	DATE	PAR BY
A	ISSUED FOR REVIEW	2026–03–06	FN

REVISIONS

DESSINÉ PAR / DRAWN BY	EL	DATE 2026–03–06
VÉRIFIÉ PAR / CHECKED BY	FN	2026–03–06
APPROUVÉ PAR / APPROVED BY	HX	2026–03–06
No. PROJET / PROJECT NO.	6515	
DATE	2026–03–06	

TITRE / TITLE

AGNICO EAGLE – MELIADINE GOLD MINE

GENERAL SITE LAYOUT

ÉCHELLE/SCALE	FICHIER/FILE	
1:10,000		
No. DESSIN/DRAWING NO.	REVISION	FEUILLE/SHT
Figure 2	A	1 / 1

AE–CART–ANSI B

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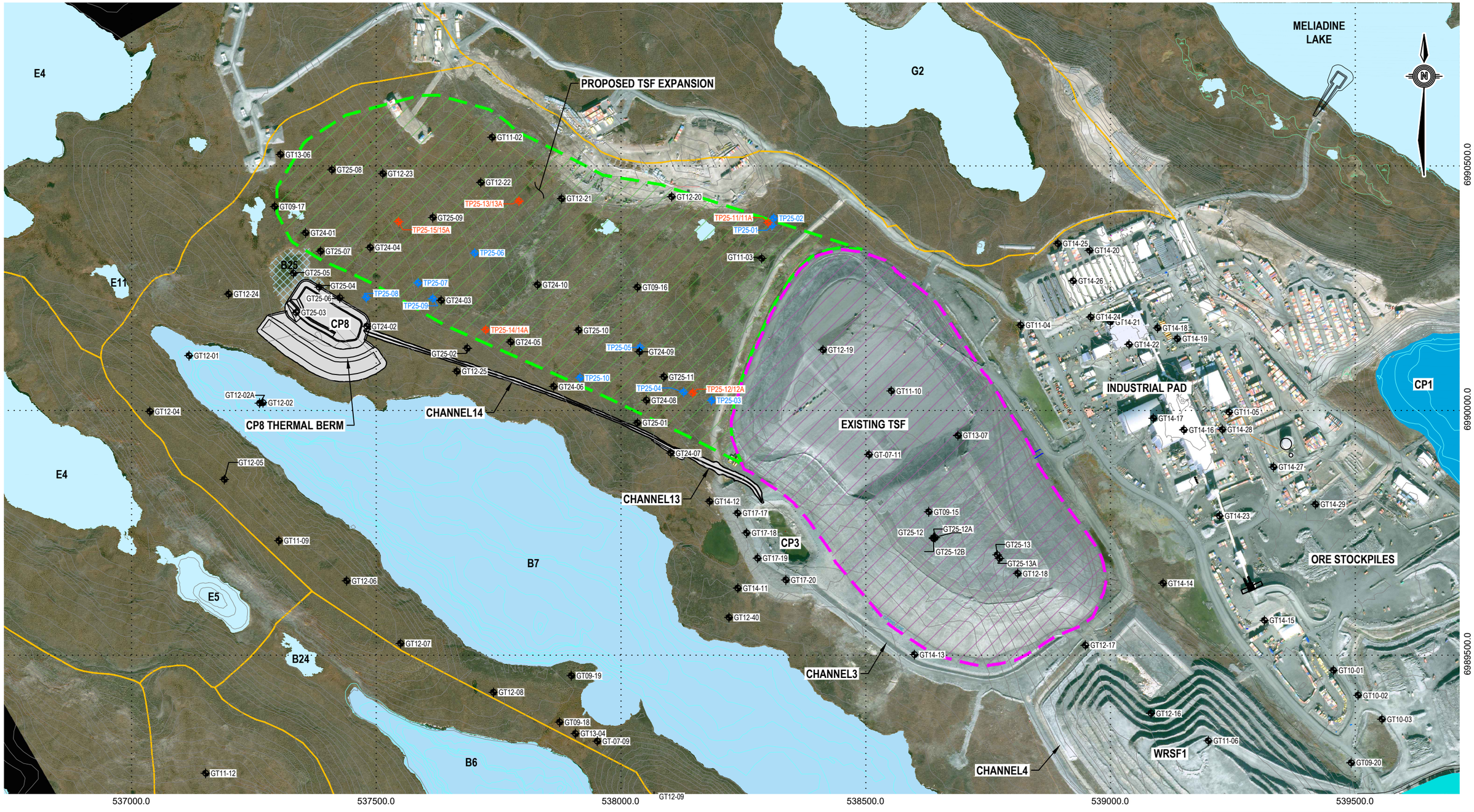


LEGEND:

- TESTPITS BY AGNICO EAGLE
- TESTPITS BY TETRA TECH
- BOREHOLE DRILLED
- CATCHMENT BOUNDARY

NOTE

SATELLITE IMAGE PROVIDED BY AGNICO EAGLE
TAKEN ON SEPTEMBER 22, 2025

0 250 m

Scale: 1: 7 500

STATUS
ISSUED FOR USE

CLIENT

AGNICO EAGLE

TETRA TECH

TAILINGS STORAGE FACILITY DESIGN UPDATE , MELIADINE GOLD MINE,NU

BOREHOLE AND TESTPIT LOCATIONS

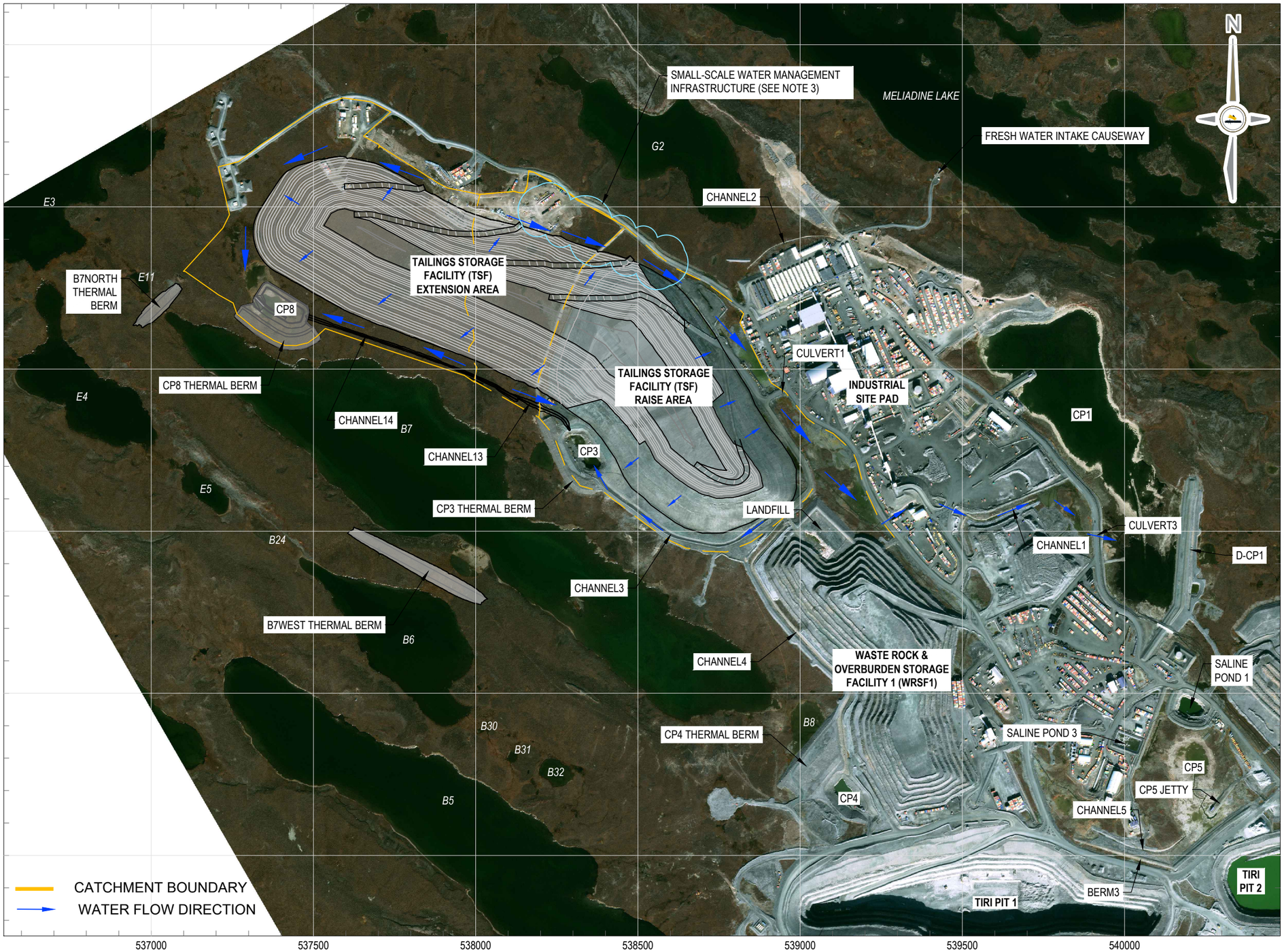
PROJECT NO.	DWN	CKD	REV
ENG.EARC03140-34	DS / DBD	HX	0
OFFICE: EDM	DATE: December 2025		

Figure 3

Q:\Edmonton\Engineering\E141\Projects_MELIADINE\ENG.EARC03140-34 TSF Raise Detailed Design\DBM\CAD files\As-Built Test Pit Locations For TSF Expansion IFR - for DBM_HX.dwg [FIGURE A1] December 16, 2025 - 1:28:17 pm [BY: DAS_DEBASHIS]

NO. DESSIN
DRAWING NO.

FORMAT ANSI B–11x17



NOTES:

1) WATER MANAGEMENT INFRASTRUCTURE (CHANNEL13, CHANNEL14, CP8, CP8 THERMAL BERM, B7NORTH THERMAL BERM) IS UNDER CONSTRUCTION AT THE TIME OF PREPARATION OF THIS REPORT.
2) THE CONSTRUCTION OF B7WEST THERMAL BERM IS SCHEDULE IN WINTER 2026/2027.
3) SMALL-SCALE WATER MANAGEMENT INFRASTRUCTURE MAY BE REQUIRED DEPENDING ON LOCAL GROUND CONDITION AND SITE LAYOUT. THE NEED FOR SMALL-SCALE WATER MANAGEMENT INFRASTRUCTURE WILL BE FURTHER DETERMINED AND DESIGNED DURING MINE OPERATIONS.

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A	ISSUED FOR USE	2026–03–26	FN

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APPROUVÉ PAR APPROVED BY	HX	2026–03–06
No. PROJET PROJECT NO.	6515	
DATE	2026–03–06	

TITRE / TITLE

AGNICO EAGLE – MELIADINE GOLD MINE

WATER MANAGEMENT AND WATER FLOW
TSF RAISE AND EXTENSION

ÉCHELLE/ SCALE	FICHIER FILE		
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Figure 4		A	1 / 1

AE–CART–ANSI B

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APPENDIX A

LIMITATIONS ON USE OF THIS DOCUMENT

LIMITATIONS ON USE OF THIS DOCUMENT

GEOTECHNICAL

1.1 USE OF DOCUMENT AND OWNERSHIP

This document pertains to a specific site, a specific development, and a specific scope of work. The document may include plans, drawings, profiles and other supporting documents that collectively constitute the document (the "Professional Document").

The Professional Document is intended for the sole use of TETRA TECH's Client (the "Client") as specifically identified in the TETRA TECH Services Agreement or other Contractual Agreement entered into with the Client (either of which is termed the "Contract" herein). TETRA TECH does not accept any responsibility for the accuracy of any of the data, analyses, recommendations or other contents of the Professional Document when it is used or relied upon by any party other than the Client, unless authorized in writing by TETRA TECH.

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1.2 ALTERNATIVE DOCUMENT FORMAT

Where TETRA TECH submits electronic file and/or hard copy versions of the Professional Document or any drawings or other project-related documents and deliverables (collectively termed TETRA TECH's "Instruments of Professional Service"), only the signed and/or sealed versions shall be considered final. The original signed and/or sealed electronic file and/or hard copy version archived by TETRA TECH shall be deemed to be the original. TETRA TECH will archive a protected digital copy of the original signed and/or sealed version for a period of 10 years.

Both electronic file and/or hard copy versions of TETRA TECH's Instruments of Professional Service shall not, under any circumstances, be altered by any party except TETRA TECH. TETRA TECH's Instruments of Professional Service will be used only and exactly as submitted by TETRA TECH.

Electronic files submitted by TETRA TECH have been prepared and submitted using specific software and hardware systems. TETRA TECH makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

1.3 STANDARD OF CARE

Services performed by TETRA TECH for the Professional Document have been conducted in accordance with the Contract, in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Professional judgment has been applied in developing the conclusions and/or recommendations provided in this Professional Document. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of the Professional Document.

If any error or omission is detected by the Client or an Authorized Party, the error or omission must be immediately brought to the attention of TETRA TECH.

1.4 DISCLOSURE OF INFORMATION BY CLIENT

The Client acknowledges that it has fully cooperated with TETRA TECH with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The Client further acknowledges that in order for TETRA TECH to properly provide the services contracted for in the Contract, TETRA TECH has relied upon the Client with respect to both the full disclosure and accuracy of any such information.

1.5 INFORMATION PROVIDED TO TETRA TECH BY OTHERS

During the performance of the work and the preparation of this Professional Document, TETRA TECH may have relied on information provided by third parties other than the Client.

While TETRA TECH endeavours to verify the accuracy of such information, TETRA TECH accepts no responsibility for the accuracy or the reliability of such information even where inaccurate or unreliable information impacts any recommendations, design or other deliverables and causes the Client or an Authorized Party loss or damage.

1.6 GENERAL LIMITATIONS OF DOCUMENT

This Professional Document is based solely on the conditions presented and the data available to TETRA TECH at the time the data were collected in the field or gathered from available databases.

The Client, and any Authorized Party, acknowledges that the Professional Document is based on limited data and that the conclusions, opinions, and recommendations contained in the Professional Document are the result of the application of professional judgment to such limited data.

The Professional Document is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site conditions present, or variation in assumed conditions which might form the basis of design or recommendations as outlined in this document, at or on the development proposed as of the date of the Professional Document requires a supplementary exploration, investigation, and assessment.

TETRA TECH is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the Client.

1.7 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, TETRA TECH has not been retained to explore, address or consider and has not explored, addressed or considered any environmental or regulatory issues associated with development on the subject site.

1.8 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

Classification and identification of soils and rocks are based upon commonly accepted systems, methods and standards employed in professional geotechnical practice. This report contains descriptions of the systems and methods used. Where deviations from the system or method prevail, they are specifically mentioned.

Classification and identification of geological units are judgmental in nature as to both type and condition. TETRA TECH does not warrant conditions represented herein as exact, but infers accuracy only to the extent that is common in practice.

Where subsurface conditions encountered during development are different from those described in this report, qualified geotechnical personnel should revisit the site and review recommendations in light of the actual conditions encountered.

1.9 LOGS OF TESTHOLES

The testhole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

1.10 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from logs of test holes and/or soil/rock exposures. Stratigraphy is known only at the locations of the test hole or exposure. Actual geology and stratigraphy between test holes and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historical environment. TETRA TECH does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional exploration and review may be necessary.

1.11 PROTECTION OF EXPOSED GROUND

Excavation and construction operations expose geological materials to climatic elements (freeze/thaw, wet/dry) and/or mechanical disturbance which can cause severe deterioration. Unless otherwise specifically indicated in this report, the walls and floors of excavations must be protected from the elements, particularly moisture, desiccation, frost action and construction traffic.

1.12 SUPPORT OF ADJACENT GROUND AND STRUCTURES

Unless otherwise specifically advised, support of ground and structures adjacent to the anticipated construction and preservation of adjacent ground and structures from the adverse impact of construction activity is required.

1.13 INFLUENCE OF CONSTRUCTION ACTIVITY

Construction activity can impact structural performance of adjacent buildings and other installations. The influence of all anticipated construction activities should be considered by the contractor, owner, architect and prime engineer in consultation with a geotechnical engineer when the final design and construction techniques, and construction sequence are known.

1.14 OBSERVATIONS DURING CONSTRUCTION

Because of the nature of geological deposits, the judgmental nature of geotechnical engineering, and the potential of adverse circumstances arising from construction activity, observations during site preparation, excavation and construction should be carried out by a geotechnical engineer. These observations may then serve as the basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein.

1.15 DRAINAGE SYSTEMS

Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function. Where temporary or permanent drainage systems are installed within or around a structure, these systems must protect the structure from loss of ground due to mechanisms such as internal erosion and must be designed so as to assure continued satisfactory performance of the drains. Specific design details regarding the geotechnical aspects of such systems (e.g. bedding material, surrounding soil, soil cover, geotextile type) should be reviewed by the geotechnical engineer to confirm the performance of the system is consistent with the conditions used in the geotechnical design.

1.16 DESIGN PARAMETERS

Bearing capacities for Limit States or Allowable Stress Design, strength/stiffness properties and similar geotechnical design parameters quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition used in this report. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions considered in this report in fact exist at the site.

1.17 SAMPLES

TETRA TECH will retain all soil and rock samples for 30 days after this report is issued. Further storage or transfer of samples can be made at the Client's expense upon written request, otherwise samples will be discarded.

1.18 APPLICABLE CODES, STANDARDS, GUIDELINES & BEST PRACTICE

This document has been prepared based on the applicable codes, standards, guidelines or best practice as identified in the report. Some mandated codes, standards and guidelines (such as ASTM, AASHTO Bridge Design/Construction Codes, Canadian Highway Bridge Design Code, National/Provincial Building Codes) are routinely updated and corrections made. TETRA TECH cannot predict nor be held liable for any such future changes, amendments, errors or omissions in these documents that may have a bearing on the assessment, design or analyses included in this report.

APPENDIX B

DESIGN BASIS MEMO

TETRA TECH

TECHNICAL MEMO

ISSUED FOR USE

To:	Justin Bieber, Agnico Eagle Marielle Limoges, Agnico Eagle	**Date:**	April 2, 2026
c:	Jawad Haloui, Agnico Eagle	**Memo No.:**	01
From:	Nigel Goldup, P.Eng., Tetra Tech Fai, Ndofor, P.Geo., Tetra Tech Hongwei Xia, P.Eng., Tetra Tech Linping Wu, P.Eng., Tetra Tech	**File:**	ENG.EARC03140-34
Subject:	Design Basis for the Tailings Storage Facility (TSF) Design Update (Raise and Extension), Meliadine Gold Mine, Nunavut, Revision 01 Agnico Eagle Document Number: 65-684-230-MEM-002		

1.0 INTRODUCTION

Agnico Eagle Mines Limited (Agnico Eagle) operates the Meliadine Gold Mine (the Meliadine Mine), located approximately 25 km north of Rankin Inlet, Nunavut. The current operation involves mining the Pump and Tiriganiaq deposits through five open pits and an underground operation under the existing Nunavut Water Board Type A Water Licence (2AM-MEL1631).

In January 2024, Agnico Eagle submitted a Water Licence Amendment application to support the completion of licensing components previously approved under Nunavut Impact Review Board Project Certificate (PC) No. 006. The 2024 Water Licence Amendment enables Agnico Eagle to mine other ore deposits, including the Wesmeg, Wesmeg North, Pump, FZone, and Discovery, which were included in the 2014 Final Environmental Impact Statement (FEIS) and PC No.006. The amended Type A Water Licence was approved by the Minister of Northern Affairs on November 22, 2024.

The currently approved Tailings Storage Facility (TSF) has a design capacity of 10.92 million tonnes (Mt) and is expected to reach full capacity in August 2026, based on the current ore processing rate of 6,500 tonnes per day (tpd). To support continued mining of other deposits, Agnico Eagle is planning to raise the existing TSF and extend it to the northwest of its existing footprint to accommodate additional filtered tailings that will be produced from the mining of other deposits. Tetra Tech Canada Inc. (Tetra Tech) was retained by Agnico Eagle to carry out detailed engineering design for the TSF raise and extension. A tailings geotechnical characterization study conducted in late 2024 and early 2025, included a laboratory testing program and geotechnical/geophysics investigation programs. The purpose of the geotechnical characterization study was to validate the original design parameters obtained through the test programs conducted on the tailings samples collected from the pre-production batch mix and to characterize the in situ geotechnical conditions of the placed filtered tailings in the existing TSF.

In alignment with the recommendations of the Mining Association of Canada's (MAC) "A Guide to the Management of Tailings Facilities – Third Edition" (MAC 2017) and Agnico Eagle's Corporate Standards (Agnico Eagle 2019), this Design Basis Memorandum (DBM) has been developed to document the site characterization, design basis, criteria, methodologies, key parameters, and assumptions for the detailed design of the TSF raise and extension. This DBM is a living document that will be updated as required to reflect changes in the design or mine operations. It will be attached as an appendix to the TSF design update report.

Tetra Tech Canada Inc.
14940 - 123 Avenue
Edmonton, AB T5V 1B4 CANADA
Tel 780.451.2121 Fax 780.454.5688

2.0 SITE CONDITIONS AND CHARACTERIZATION

2.1 Climate

The Meliadine Mine site is located within the Southern Arctic Climatic Region, where daylight reaches a minimum of 4 hours per day in winter and a maximum of 20 hours per day in summer. The nearest weather station is Rankin Inlet A (Station 2303401), located approximately 25 km south of the Meliadine Mine. The closest long-term regional evaporation station operated by Environment Canada is in Churchill, Manitoba. The monthly mean air temperature is typically above 0°C from June to September and below 0°C from October to May. July is typically the warmest month, and January the coldest. Winters are long and cold, while summers are short and cool. The mean annual temperature for the period of record, from 1994 to 2023, was -9.8°C, based on the measured air temperature data at Rankin Inlet.

The annual total precipitation at the Meliadine Mine under mean conditions is 394 mm/year, with approximately equal amounts falling as snow and rainfall (Tetra Tech 2021a). Average annual evaporation for small waterbodies in the Meliadine Mine is estimated to be 323 mm between June and September. The average annual loss of snowpack to sublimation and snow redistribution is estimated to vary between 46% and 52% of the total precipitation for the winter period and occurs between October and May (Golder 2013).

The region is known for its high winds, which are due in part to the broad, flat, and uninterrupted expanses that are offered to moving air masses. The wind generally blows from the northwest and north-northwest directions. The mean values for wind speed show that the north-northwest, together with northwest winds, have the highest speeds and tend to be the strongest. Mean monthly wind speeds are typically between 19 km/hour and 29 km/hour, with an average of 22.3 km/hour.

2.2 Topography and Lakes

The dominant terrain in the Meliadine Mine area consists of glacial landforms including, drumlins (glacial till), eskers (gravel and sand), and lakes. A series of low relief ridges composed of glacial deposits, oriented northwest-southeast, control the regional surface drainage patterns. The Meliadine Mine is located approximately 60 m above sea level (masl) in a low-lying topography with numerous lakes.

The surveyed lake surface elevations in the Meliadine Mine area range from about 51 masl at Meliadine Lake to about 74 masl for local small, perched lakes. Lakes formed by glaciofluvial processes or glacial processes are common throughout the Meliadine Mine area. Most of the perched lakes at the Meliadine Mine site are relatively shallow (less than 2 m water depth). Late winter ice thicknesses on freshwater lakes range from 1.0 m to 2.3 m with an average thickness of 1.7 m. Ice covers usually appear by the end of October and are completely formed in early November. The spring freshet typically begins in mid-June and is complete by early July (Golder 2012a).

2.3 Permafrost

The Meliadine Mine site is located within the Southern Arctic terrestrial eco-zone, which is one of the coldest and driest regions of Canada, in a zone of continuous permafrost. Continuous permafrost is expected to depths of between 285 m and 430 m based on ground temperature data from thermistors installed near the Tiriganiaq, FZone, and Discovery deposits (WSP 2024a). The measured ground temperature data indicate that the active layer ranges from 1.0 m to 3.0 m in areas of shallow soils and areas away from the influence of lakes. It is anticipated that the active layer adjacent to lakes or below a body of moving water, such as a stream, could be deeper. The typical

permafrost ground temperatures at the depths of zero annual amplitude (typically at depths below 18 m) are in the range of -5.9°C to -7.0°C in the areas away from lakes and streams. The geothermal gradient ranges from 0.015°C/m to 0.02°C/m (WSP 2024a).

2.4 Groundwater

In areas of continuous permafrost, there are generally two groundwater flow regimes: a shallow groundwater flow zone located in the active layer near the ground surface, and a deeper groundwater flow regime located beneath the base of the permafrost. From late spring to early autumn, when temperatures are above 0°C, the active layer thaws. Within the active layer, the water table is expected to be a subdued replica of topography and is expected to parallel the topographic surface. Groundwater in the active layer flows to local depressions and ponds that drain to larger lakes in the Meliadine Mine area.

The permafrost in the rock in the Meliadine Mine area is virtually impermeable to groundwater flow. The shallow groundwater flow regime, therefore, has little to no hydraulic connection with the deep groundwater regime. The latest hydrogeology modelling conducted in 2024 reported that the elevations of the larger lakes with taliks extending down to the deep groundwater regime (referred to as open taliks) provide the principal driving force for deep groundwater flow (WSP 2024b). Through thermal modelling, open-taliks were suggested to exist beneath Lake B4, Lake B5, Lake B7, Lake A6, Lake A8, Lake CH6, and Lake D4. Hydrogeological testing conducted at the Project site indicated that the bedrock is generally of low hydraulic conductivity, ranged from $1x10^{-10}$ m/s to $6x10^{-9}$ m/s (WSP 2024b). Groundwater velocities in the deep groundwater regime are very low and on the order of 0.2 m/year to 0.3 m/year.

To a lesser degree, groundwater beneath the permafrost is influenced by density differences due to the upward diffusion of deep-seated brines (density-driven flow). In the Canadian Shield, concentrations of Total Dissolved Solids (TDS) in groundwater increase with depth, primarily in response to upward diffusion of deep-seated brines. A “West Bay”-type well was installed in 2011 at the site near the proposed Tiriganiaq underground infrastructure to establish a baseline for deep groundwater quality. A second “West Bay”-type well was installed in 2020 near the Discovery deposit to collect more baseline data. The mean groundwater salinity below the permafrost has been estimated at approximately 61,000 mg/L. Salinity can induce a freezing point depression, creating a cryopeg in permafrost where water can remain unfrozen even when the temperature is below 0°C. The freezing point depression was calculated to be equivalent to -3.3°C (with salinity approximately 61,000 mg/L), suggesting the depth to the basal cryopeg is between about 350 m and 375 m below ground surface in the Meliadine Mine area (Golder 2012a).

2.5 Seismicity

The Meliadine Mine site is in an area of low seismic risk and is classified as “Class C” based on the ground conditions. The Peak Ground Acceleration (PGA) for a reference “Class C” site under various Annual Exceedance Probability (AEP) was estimated using the 2020 National Building Code of Canada Seismic Hazard Tool. The estimated PGA is 0.0285 g for a 5% in 50-year probability of exceedance (0.001 per annum or 1 in 1,000 year return) and 0.0498 g for a 2% in 50-year probability of exceedance (0.000404 per annum or 1 in 2,475 year return) for the Meliadine Mine site.

3.0 DESIGN BASIS

3.1 Tailings Production Schedule and Quantities

Tailings produced by the current mill are pressure filtered with a solids content of about 85% by weight, which is equivalent to a gravimetric moisture content of approximately 17.6%. Approximately 31.4 Mt of filtered tailings will be produced over the Life of Mine of 2031, of which about 28.1 Mt of the filtered tailings will be placed within the TSF and the remaining 3.3 Mt will be used for underground cemented paste backfill. The planned production schedule, quantities, and distribution of tailings by year are presented in Table 3-1. It is important to note that the mine plan is expected to change over the course of operations due to ongoing engagements, changes in market conditions, advanced exploration drilling, engineering optimization or other factors.

Table 3-1: Schedule, Quantities, and Distribution of Tailings by Year

Year	Tailings Solids from Mill (tonne)	Tailings Solids to be used as Underground Backfill (tonne)	Tailings Solid to be Placed in TSF (tonne)
2019*	976,706	113,892	862,814
2020*	1,393,722	301,469	1,092,253
2021*	1,714,892	351,037	1,363,855
2022*	1,756,971	445,558	1,311,413
2023*	1,918,143	487,637	1,430,506
2024*	1,966,236	423,493	1,542,743
2025**	3,097,045	165,227	2,931,818
2026**	3,097,045	165,227	2,931,818
2027**	3,097,045	165,227	2,931,818
2028**	3,097,045	165,227	2,931,818
2029**	3,097,045	165,227	2,931,818
2030**	3,097,045	165,227	2,931,818
2031**	3,097,045	165,227	2,931,818
Total (tonne)	**31,405,984**	**3,279,674**	**28,126,310**

Note: *: year-end total values from operation records. ** values provided by Agnico Eagle

3.2 Tailings Properties and Characteristics

3.2.1 Geotechnical Properties and Characteristics

A series of laboratory testing programs was conducted on the tailings samples collected from the pre-production batch mix in 2013 and 2014 to support the initial design of the TSF. The testing programs included physical index testing, gradation analysis, moisture-density relationships, shear strength via direct shear (DS) tests, consolidation tests, determination of the soil water characteristic curve (SWCC), thermal conductivities, and hydraulic conductivities. Details of the laboratory test results were documented in technical memoranda (EBA 2013a; Tetra Tech EBA 2014a). In 2022, an unfrozen water content test was conducted on the filtered tailings collected from the process plant to estimate the freezing point depression of the filtered tailings due to the porewater salinity (Université Laval 2022). The results from the unfrozen water content test indicated that the freezing point depression of the tested filtered tailings is approximately -1.82°C.

To further characterize the filtered tailings placed at the existing TSF and verify the design parameters obtained through the test programs conducted on the pre-production batch mix, a new laboratory test program was conducted in 2024/2025 on the filtered tailings collected from the mill process at that time. The 2024/2025 test program included physical index tests, gradation analysis, moisture-density relationships, shear strength tests through isotropically consolidated undrained triaxial compression tests (CIU), isotropically consolidated drained triaxial compression tests (CID), and monotonic direct simple shear tests (MDSS), consolidation tests, and determination of the SWCC. The details of the 2024/2025 test program are documented in a technical memorandum (Tetra Tech 2025a), and the key results and findings from the 2024/2025 test program are summarized below:

- The filtered tailings are predominantly silt-sized material consisting of 71% silt, 25.3% sand, and 3.7% clay-size particles and exhibits non-plastic and low compressibility with a compression index, C_c, of 0.05. The specific gravity of the filtered tailings is 2.98.

- The average maximum dry density obtained from the two Standard Proctor tests is 1,782.5 kg/m^3 with an average optimum gravimetric moisture content of 17.0%.

- Interpretation of the CIU tests indicates that the filtered tailings have an internal effective angle of friction (φ´) of 34.3° and a cohesion (c) of 22.0 kPa. The three test samples have similar initial dry densities (1,654 kg/m^3, 1,662 kg/m^3, and 1,664 kg/m^3) and were tested under different confining pressures (200 kPa, 400kPa, and 800 kPa, respectively). Despite these differences (i.e., density and confining pressure), the test samples exhibited similar behaviour as demonstrated by the stress-strain and stress path plots. All three test samples displayed stable strain hardening behaviour and exhibited contractive response at very small axial strains (less than 2%) and then transitioned to a dilative response to the end of the test (at 15% axial strain). This pattern is typical of dense granular materials approaching and surpassing the phase transformation point.

- Interpretation of the CID tests indicates that the filtered tailings have an internal effective angle of friction of (φ´) 34.4° and a cohesion (c) of 49.7 kPa. The volumetric strain responses differed among the three CID test samples. Two CID test samples (with initial dry density of 1,664 kg/m^3 and 1,668 kg/m^3 tested under confining pressure of 600 kPa and 1,200 kPa, respectively) exhibited contractive response throughout the entire test duration, up to 15% of axial strain. One sample (with initial dry density of 1,669 kg/m^3 tested under a confining pressure of 300 kPa) exhibited a different response compared to the other two that it was contractive up to approximately 4% axial strain and then transitioned to a dilative response until the end of the test.

- The results from the three MDSS tests under constant volume shearing conditions indicated that the filtered tailings behaviour varied by initial sample state and test conditions.

  - The filtered tailings sample with an initial dry density of 1,655 kg/m^3 (under a vertical stress of 100 kPa) exhibited a weak contractive behaviour (strain softening) at the beginning of the test and then transitioned to dilative behaviour (strong strain hardening) at approximately 1.5% of shear strain.

  - The filtered tailings samples from the other two MDSS tests (with initial dry density of 1,659 kg/m^3 and 1,667 kg/m^3, under vertical stress of 300 kPa and 600 kPa, respectively) displayed contractive behaviour with instability and weak strength loss occurred following a peak undrained yield strength until shear strain at approximately 15%, then followed by a weak dilative behavior (weak strain hardening) to the end of the tests (at 20% shear strain).

- The strain-hardening response observed in the CID, CIU, and MDSS tests indicates that the filtered tailings samples exhibit ductile behaviour under the test conditions, with the calculated brittleness index, I_B ($I_B = \frac{Peak\ shear\ strength - Residual\ shear\ strength}{Peak\ shear\ strength}$), is zero or close to zero.

- The filtered tailings have a SWCC with an air entry value (AEV) of 16 kPa, a residual suction (RS) of 800 kPa, and the saturated and residual gravimetric water contents are 24.6% and 1.7%, respectively.

Table 3-2 summarizes the key results from the 2013/2014 and 2024/2025 test programs on the tailings samples.

Table 3-2: Summary of Results from 2013/2014 and 2024/2025 Test Programs

Item	Tests on Pre-production Batch Mix Samples from 2013/2014	Tests on Filtered Tailings from the Current Mill Operations from 2024/2025
Particle size distribution	81% silt, 17% sand, and 2% clay size	71% silt, 25.3% sand, and 3.7% clay size
Specific gravity	2.80	2.98
Plasticity	Low plastic (plasticity index (PI) =3.0)	Non-plastic
Maximum dry density, (kg/m^3)	1,800	1,782 and 1,783, (average of 1,782.5)
Optimum moisture content (%)	14.7%	16.9% and 17.1% (average of 17%)
Shear strength parameters	Internal angle of friction (φ´) of 33.5° and a cohesion (c) of 9.9 kPa (DS)	Internal angle of friction (φ´) of 34.3° and a cohesion (c) of 22.0 kPa (CIU) Internal angle of friction (φ´) of 34.3° and a cohesion (c) of 49.7 kPa (CID)
Soil Water Characteristic Curve	Air entry value (AEV) =20 kPa Residual suction (RS) =900 kPa Saturated gravimetric moisture content = 22.7% Residual gravimetric moisture content = 2.9%	Air entry value (AEV) =16 kPa Residual suction (RS) =800 kPa Saturated gravimetric moisture content = 24.6% Residual gravimetric moisture content = 1.7%
Thermal conductivities	2.0 W/mK (frozen) and 2.88 W/mK (unfrozen)	No test conducted
Saturated hydraulic conductivity	2.91E-7 m/s at dry density of 1,700 kg/m^3	No test conducted
Coefficient of consolidation (C_v)	24.6 to 29.8 (m^2/year) under various pressures between 10 kPa and 1,600 kPa	132.5 to 208.1 (m^2/year) under various pressures between 5 kPa and 1,600 kPa
Compression Index (C_c)	0.064	0.05

3.2.2 In Situ Geotechnical Conditions of Placed Tailings

Geotechnical and geophysical site investigations were conducted in January/February 2025 to characterize the in situ geotechnical conditions of the placed filtered tailings (Tetra Tech 2025b). Two boreholes were drilled to collect the tailings core samples using triple tube coring techniques and Shelby tubes. The in situ dry densities of the frozen cores were estimated based on the physical measurements, bulk mass, and the determined moisture content of the core samples. Vertical Seismic Profile (VSP) surveys were conducted in two boreholes to measure the compression (V_P) and shear (V_S) wave velocities of the placed filtered tailings. Multivariable regression modelling was utilized to assess the relationship between geophysical, geotechnical, and laboratory data. The regression model considers temperature, moisture content, porewater salinity, Poisson's ratio, compression, and shear wave velocities as the model inputs.

During the Shelby tube sample extraction process, it was observed that some of the samples were coated with brine drilling fluid or had experienced deformation likely due to the drilling and sampling techniques and/or stress relief after the sampling. The estimated dry densities of these samples were lower than those of other representative samples; accordingly, the results of these non-representative samples are excluded from the assessment. The estimated dry densities of the representative samples versus elevation are presented in Figure 3-1. The measured water contents of the representative samples versus elevation are presented in Figure 3-2. More details on the geotechnical and geophysical site investigation programs can be found in Tetra Tech (2025b). The key findings from the 2025 geotechnical and geophysical site investigation programs are listed below:

- As shown in Figure 3-1, the dry densities of the filtered tailings varied with elevation and generally ranged from 1,607 kg/m^3 to 2,008 kg/m^3, with the majority of samples having dry densities higher than 95% of the maximum dry density (i.e.,1,693 kg/m^3). The dry densities derived from the geophysics modelling are generally aligned with the measured data from the core samples.
- As shown in Figure 3-2, the in situ moisture contents of the filtered tailings generally ranged from 14.5% to 26.1%, with most samples having moisture contents higher than the optimum moisture content of 17%.

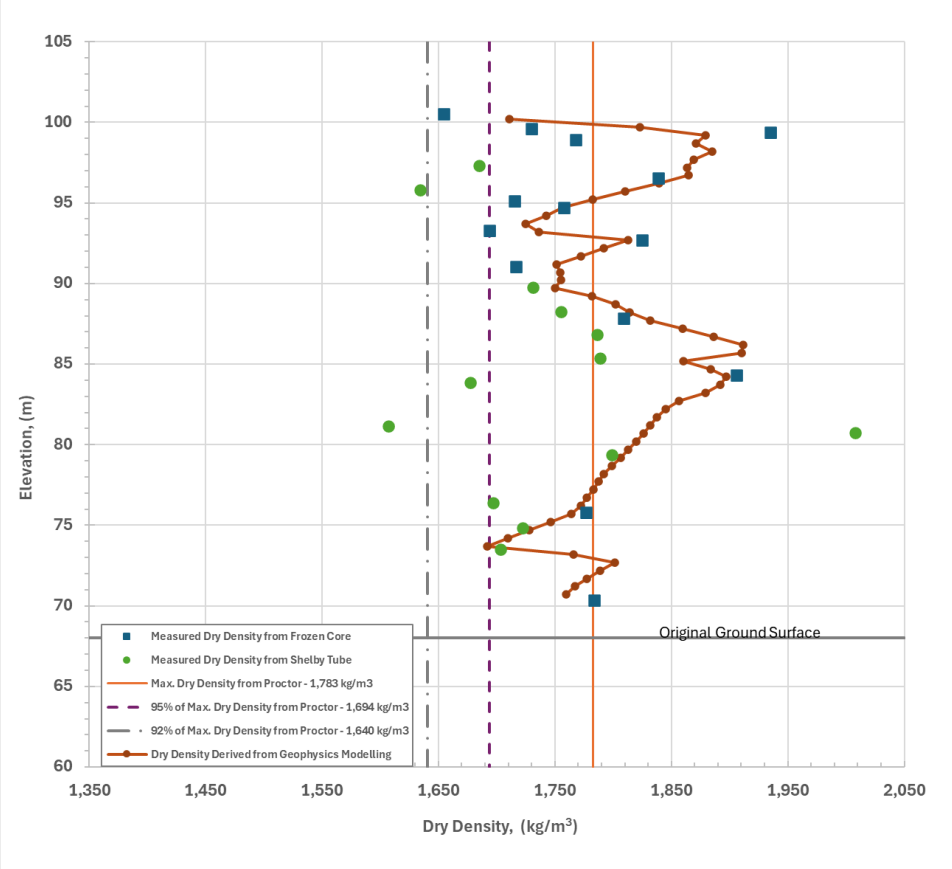

Figure 3-1: Dry Densities of Representative Tailings Samples at Different Elevations

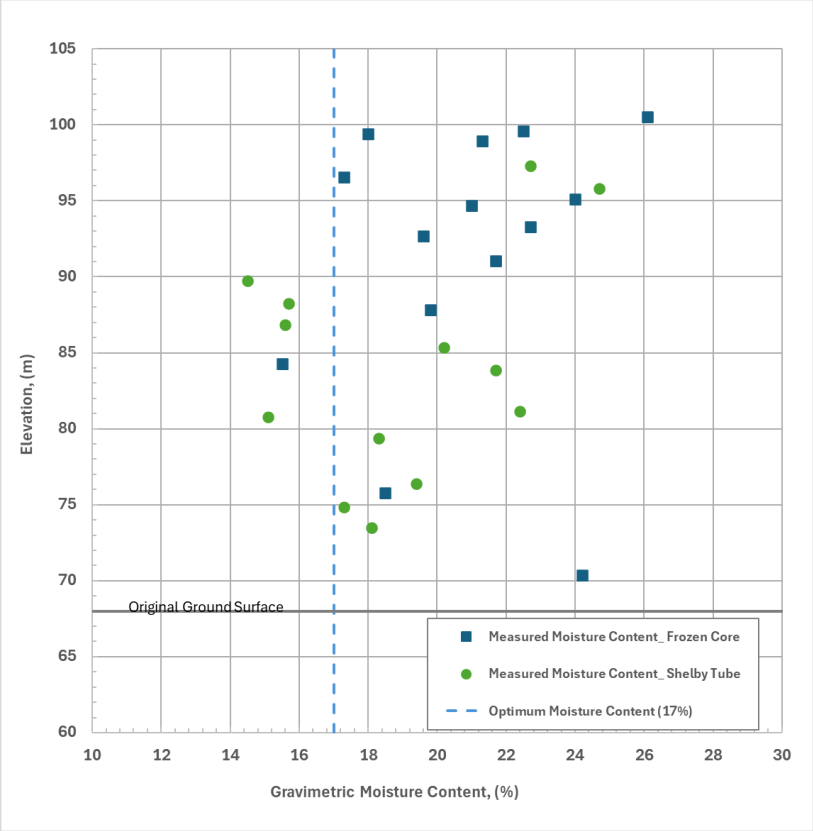

Figure 3-2: Water Contents of Representative Tailings Samples at Different Elevations

3.2.3 Tailings Geochemical Characteristics

Agnico Eagle conducted a geochemical characterization program in 2014 to support the FEIS (Golder 2014). In 2022, Lorax Environmental Services (Lorax) conducted another geochemical characterization program by undertaking a series of static and kinetic tests to supplement the 2014 study and to determine the acid rock drainage and metal leaching (ARD/ML) potential of the geologic materials expected to be mined at the Meliadine Mine. The key findings from the 2022 geochemical characterization program for the filtered tailings (Lorax 2022) are presented below:

- Tailings are expected to have a similar solid phase composition to the ore mill feed, and geochemical characterization of ore can be used to estimate metal enrichment and ARD potential of tailings. Ore tends to have greater ARD potential than waste rock due to its elevated sulphur content and the association with Au mineralization and the Iron Formation (IF) lithology. The ARD potential of ores is essentially limited to IF, with a total of 30% of the Meliadine ore being classified as PAG or Uncertain.

- Paste pH is a primary indicator of the presence of existing buffering capacity or water-soluble acidity. When the paste pH values are less than 5.5, neutralization potential (NP) present is limited or non-exist. Higher paste pH values imply the presence of immediately available NP. Based on the Acid Base Accounting results from the laboratory tests samples, the paste pH ranges from 8.0 to 8.2 for the tailings collected from the existing TSF in August 2021.

- Kinetic tests and seepage survey indicated that As and NH4 are the only parameters to exceed Metal and Diamond Mining Effluent Regulations (MDMER) guidelines, while a variety of Aquatic Effects Monitoring Program (AEMP) exceedances were observed for other parameters (As, B, Cd, Co, Cu, Pb, Mn, Ni, Se, Ag, Tl, U, and Zn) from the TSF seepage water quality survey.
- ARD/ML potential of the tailings is considered low due to material compaction and progressive covering that will limit the availability of oxygen and water for reaction.

3.3 Subsurface Geotechnical Conditions

3.3.1 Subsurface Geotechnical Conditions of Existing TSF

The existing TSF is located on a gentle hill with a natural slope of approximately 1% to 2%. Based on previous geotechnical drilling programs, nine boreholes were drilled within the existing TSF footprint, and five boreholes were drilled around the west and south perimeters of the existing TSF (SRK 2007; Golder 2010; Golder 2012a and 2012b; EBA 2013b, Tetra Tech EBA 2014b, and Tetra Tech 2025b). Figure A1 presents the locations of the boreholes. Table 3-3 summarizes the key geotechnical information of the overburden soils along with the bedrock depths. The borehole logs are attached in Appendix A, and other geotechnical information can be found in SRK (2007), Golder (2010, 2012a, and 2012b), EBA (2013b), Tetra Tech EBA (2014b), and Tetra Tech (2025b).

In general, the subsurface below the existing TSF consists of a thin layer of organic material overlying silty SAND[1], ice-rich SILT, gravelly SILT and SAND, cobbles with traces of clay. Excess ice was observed at various depths in most of the boreholes. The thickness of the overburden within the existing TSF footprint ranges from approximately 0.13 m to 8.5 m.

Table 3-3: Geotechnical Information of Overburden Soils and Bedrock Depth within and near the TSF Footprint

Borehole No.	Organic Layer Thickness (m)	Major Overburden Soil Type (soil type 1 | soil type 2 | ...)	Ground Ice Conditions	Bedrock Depth (m)
GT07-11*	0.2	SAND | ice-rich fine-grained materials | till	~1.25 m (from 0.75 m to 2.0 m) ice-rich fine-grained material with up to 75% ice	~5.5
GT09-15*	0.3	PEAT sandy | low recovery – GRAVEL; SAND silty; GRAVEL sandy	N/A	3.5
GT11-10*	0.75	PEAT silty | ICE and SILT | SILT gravelly sandy | SILT	Silt and Ice from 0.75 m to 2.5 m	6.3
GT12-18*	0.0	SAND gravelly silty | GRAVEL sandy silty | SILT gravelly sandy | BOULDERS | SILT and SAND gravelly	Vs from 1 m to 2 m	7.3
GT12-19*	0.0	SAND gravelly silty | SILT sandy | SAND silty	Vs to Vc, Vr from 2 m to 2.7 m	3.1

[1] Where applicable, the soil description has been based on the following classification system:
Principal soil constituent shall be capitalized in the soil description. The soil constituents are described in the following manner and are listed in decreasing order of significance:
- >35% "and" (soil constituent in capital letters, e.g., …and SAND) (Note that the use of the qualifier "and" is not to be applied to SILT/CLAY Principal constituents, i.e., SILT and CLAY)
- 21% to 35% "y – adjective" (e.g., silty, clayey)
- 10% to 20% "some" (soil constituent, e.g., some sand)
- >0 to 10% "trace" (soil constituent, e.g., trace gravel)
- "occasional" use for noting presence of isolated occurrences

Table 3-3: Geotechnical Information of Overburden Soils and Bedrock Depth within and near the TSF Footprint

Borehole No.	Organic Layer Thickness (m)	Major Overburden Soil Type (soil type 1 | soil type 2 | ...)	Ground Ice Conditions	Bedrock Depth (m)
GT13-07*	0.1	PEAT | BOULDERS | SAND and SILT	Nf	1.3
GT14-13*	0.1	PEAT | SAND silty gravelly | SAND and SILT	Up to 10% Vx, Vc, 5% from 1.8 m to 3.2 m	3.2
GT25-12*	0.0	GRAVEL | SAND	Ice Lens, Nbe, Nbn, Vr, Vs, Excess Ice Content 1% to 100% (ice lens)	2.65
GT25-13*	0.0	COBBLES | SILT	Nbn, Excess Ice Content 1% to 14%	0.13
GT12-17*	0.1	PEAT | SAND Silty | SAND | SILT | BOULDERS and COBBLES	Nf from 2.5 m to 3.65 m and from 7.2 m to 8.5 m	8.5
GT11-04**	0.2	PEAT | SAND | SILT and SAND	Vs, Nbe from 1.5 m to 5.3 m	5.3
GT17-17**	0.2	PEAT | SAND | COBBLES | SAND and GRAVEL | BOULDERS	Nbe and Nbn from 1.3 m to 3.0 m. 5 mm ice lens at 0.6 m	3.0
GT17-18**	0.3	PEAT | SAND silty | ICE and SAND | BOULDERS | SAND	Up to 90% Vr from 2.3 m to 2.5 m	4.94
GT17-19**	0.2	PEAT | SAND | GRAVEL sandy silty | BOULDERS and COBBLES	Nbn	1.80
GT17-20**	0.15	PEAT | BOULDERS | SAND | GRAVEL	Nbn	1.48

Note: *: Boreholes drilled within existing TSF footprint. **: Boreholes drilled around the perimeters of the existing TSF. N/A: Information not available due to no recovery of overburden during drilling.
"|" is the differentiator marker between different soil types.

3.3.2 Subsurface Geotechnical Conditions of the TSF Extension Footprint

From previous geotechnical drilling programs, a total of 20 boreholes were drilled within the TSF extension footprint, and 11 were drilled around the west and south perimeters of the TSF extension (Golder 2010; Golder 2012a and 2012b; EBA 2013b, and Tetra Tech 2024 and 2025b). Figure A1 presents the locations of the boreholes drilled. Table 3 summarizes the key geotechnical information of the overburden soils along with the bedrock depths. The borehole logs are attached in Appendix A, and other geotechnical information can be found in above-mentioned reports.

Like the surface conditions at the existing TSF, the soil stratigraphy beneath the TSF extension area consists of a thin layer of organic material overlying SAND, ice-rich SILT, gravelly SILT and SAND, cobbles with traces of clay. Excess ice was observed at various depths in most of the boreholes. The thickness of the overburden within the TSF extension footprint ranges from approximately 2.0 m to 8.3 m.

Table 3-4: Geotechnical Information of Overburden Soils and Bedrock Depth within and near the TSF Extension Footprint

Borehole No.	Organic Layer Thickness (m)	Major Overburden Soil Type	Ground Ice Conditions	Bedrock Depth (m)
GT11-03*	1.1	ICE and SILT	-	3.1
GT12-20*	0.07	SAND and GRAVEL | COBBLES | BOULDERS | SILT gravelly sandy | SAND silty and GRAVEL	Nf from 6.6 m to 8.3 m	8.3
GT12-21*	-	GRAVEL | SAND silty | and SILT sandy gravelly	-	6.24
GT09-16*	-	GRAVEL sandy| SILT and SAND | SAND silty | SAND and GRAVEL | and CLAY with SAND silty	ICE + Sand and Gravel from 1.37 m to 1.5 m	6.97
GT11-02*	0.4	SAND silty gravelly | SILT	Vs from 3 m to 3.7m and 5.4 m to 6.2 m, Vr from 3.7 m to 5.4 m, and 6.2 m to 7.1 m	7.1
GT12-22*	0.05	SAND silty | COBBLES	Vu from 1.3 m to 1.4m	3.67
GT12-23*	0.1	GRAVEL silty | GRAVEL	N/A	4.72
GT25-08*	0.50	PEAT | SAND and SILT | SAND and Gravel	Nbn, Nf, Vs, Excess Ice Content 5% to 23%	4.82
GT25-09*	0.16	PEAT | COBBLES | COBBLES and SAND | GRAVEL and SAND | GRAVEL | SAND	Nbn, Vr, Vs, Excess Ice Content 5% to 30%	5.28
GT09-17*	0.3	SILT and SAND | SAND and GRAVEL | SILT | and GRAVEL	Vr from 0.3 m to 1.2 m, Vx from 1.2 m to 1.65 m	2.78
GT24-01*	0.15	PEAT | CLAY | COBBLES | SAND	Nbe, Nbn, Vu, Excess Ice Content 24%	2.8
GT25-07*	0.53	PEAT and COBBLES | COBBLES | GRAVEL | SAND and GRAVEL	Nbn, Excess Ice Content 1% to 12% (from jar test)	3.78
GT24-04*	0.05	PEAT | SAND	Nbe, Vs, Excess Ice Content 3% to 5%	2.0
GT24-03*	0.20	PEAT | SAND and SILT | SILT and SAND	Nbe, Vs, Vc, Excess Ice Content 1% to 30%	5.0
GT24-10*	0.03	PEAT | GRAVEL and SAND | GRAVEL	Nbe, Vs, Vc, Vx, Excess Ice Content 1% to 20%	5.4
GT24-05*	0.10	PEAT | COBBLES | SAND and SILT | SAND | SILT	Nbn, Vs, Excess Ice Content 40% to 46%	4.0
GT25-10*	0.10	PEAT | GRAVEL | BOULDERS | SAND	Nbn, Vr, Vs, Excess Ice Content 1% to 20%	4.20
GT24-09*	0.04	PEAT | SAND | SAND and GRAVEL | ICE + SAND and GRAVEL | ICE + SAND and SILT	Nbe, Vx, Vc, ICE, Excess Ice Content 1% to 60%	5.5
GT25-11*	0.07	PEAT | GRAVEL | SAND and COBBLES | SAND	Nbn, Vr, Vs, Excess Ice Content 1% to 10%	3.48
GT24-08*	0.10	PEAT | COBBLES | SILT and SAND | SAND and GRAVEL silty	Nbn, Nbe, Vs, Vc, Excess Ice Content 13% to 45%	5.9

Table 3-4: Geotechnical Information of Overburden Soils and Bedrock Depth within and near the TSF Extension Footprint

Borehole No.	Organic Layer Thickness (m)	Major Overburden Soil Type	Ground Ice Conditions	Bedrock Depth (m)
GT24-07**	0.13	PEAT | GRAVEL and SAND | SAND | ICE + SAND | SILT and SAND	Nbn, Nbe, Vs, ICE, Excess Ice Content 1% to 60%	2.5
GT25-01**	0.10	PEAT | SAND	Nbn, Vc, Vr, Vx, Excess Ice Content 1% to 25%	2.85
GT24-06**	0.45	PEAT | SAND | GRAVEL | COBBLES and GRAVEL	Nbn, Nbe, Vx, Vc, Vs, Excess Ice Content 15% to 35%	3.95
GT12-25**	N/A	GRAVEL | BOULDERS | SAND silty | SILT and SAND | and GRAVEL silty	Nbn from 3.75 m to 4.75 m	4.75
GT25-02**	0.10	PEAT | GRAVEL | SAND and GRAVEL	Nbn and Vr	2.90
GT24-02**	0.10	PEAT | SAND | SILT and SAND | GRAVEL	Nbe, Vs, Vx, Vc, Excess Ice Content 1% to 40%	3.7
GT25-03**	N/A	SILT and COBBLES | SAND | GRAVEL and COBBLES	Nbn	3.85
GT25-04**	0.05	PEAT | SILT	Nbe, Vc, Vs, Vx Excess Ice Content 1% to 10%	3.20
GT25-05**	0.04	PEAT and COBBLES | SAND and SILT | GRAVEL | SAND and COBBLES | SILT	Nbn, Nf, Vr, Vs, Vx, Excess Ice Content 5% to 30%	3.50
GT25-06**	0.06	PEAT | SAND | SILT and SAND	Nbn, Vr, Vs, Excess Ice Content 20% to 40%	3.10
GT13-06**	0.05	PEAT | BOULDER | SAND and SILT | SAND | SILT | SAND and GRAVEL	Vs, Vx, Excess Ice Content 1% to 20%	3.6

Note: *: Boreholes drilled within TSF expansion footprint. **: Boreholes drilled around the west and south perimeters of the TSF extension.
N/A: information not available.

3.3.3 Ice-rich Permafrost Distribution

3.3.3.1 Testpit Program

To assess the presence and distribution of ice or ice-rich soils in the TSF foundation, a total of 20 testpits were excavated in September 2025 using an excavator. The testpits were excavated within the TSF extension footprint (10 completed by Tetra Tech, and 10 by Agnico Eagle). The locations of the testpits are shown in Figure A1. Table 3-5 and Table 3-6 summarize the findings from the testpits excavated. More details of testpit results can be found in the memo titled “2025 Meliadine Testpit Investigation and Terrain and Permafrost Extent Mapping” (Tetra Tech 2025c). Key observations from the 2025 testpit programs are summarized below:

- ***Ice* or *ice-rich soils*** were observed in most of the testpits. Eight out of the ten testpits excavated by Tetra Tech and nine of the ten testpits excavated by Agnico Eagle contained ice or ice-rich soils. A summary of the observed stratigraphy is presented as follows:
  - Agnico Eagle observed that the thickness of ice or ice-rich soils in the testpits excavated by Agnico Eagle ranged from 0.3 m to 0.8 m.

- Tetra Tech observed the following:
  - **Testpits with ice or ice-rich soils:** The overburden generally consisted of a 0.06 m to 0.15 m thick layer of black organic matter (peat), underlain by layers of Sand and SILT, Sandy SILT or Silty Sand, extending to depths of approximately 1.2 m to 1.4 m (corresponding to a thickness of about 1.1 m to 1.3 m) Below these materials, ice-rich SILT/sand or ice was found until the excavation was terminated due to refusal on strong frozen soils or boulders.
  - **Testpits without ice or ice-rich soils:** The overburden to the termination depths (approximately 1.6 m to 1.8 m) generally consisted of a 0.1 m thick layer of black organic matter (peat) underlain by a thin layer of SILT, and Sand and Gravel. The SILT layer varied in thickness up to 0.3 m, while the Sand and Gravel layer was 1.5 m thick.

Table 3-5: Summary of Subsurface Conditions for the Testpits Completed by Tetra Tech

Testpit ID	Organic Layer Thickness (m)	Major Overburden Soil Types	Ground Ice Conditions	Termination Depth (m)	Reason for Termination
TP25-01	0.10	SILT | ICE and SILT	ICE and Silt	1.7	Refusal on ice-rich soils and permafrost
TP25-02	0.10	SILT | ICE and SILT	ICE and Silt	1.6	
TP25-03	0.06	SAND | SILT | ICE & SAND | ICE and SILT	ICE and Sand, ICE and Silt	1.5	
TP25-04	0.15	SAND and SILT | ICE and SAND	ICE and Sand	1.4	
TP25-05	0.10	SAND | ICE and SAND	ICE and Sand	1.5	
TP25-06	0.10	SILT | SAND and GRAVEL	Ice-poor	1.8	No ice-rich soils observed
TP25-07	0.10	SAND | ICE and SAND	ICE and Sand	1.5	Refusal on ice-rich soils and permafrost
TP25-08	0.10	SAND and GRAVEL	Ice-poor	1.6	Refusal on a boulder
TP25-09	0.10	SAND | ICE and SAND	ICE and Sand	1.4	Refusal on ice-rich soils and permafrost
TP25-10	0.10	SAND | ICE and SAND	ICE and Sand	1.3	

Table 3-6: Summary of Subsurface Conditions for the Testpits Completed by Agnico Eagle

Testpit ID	Depth to Ice-rich Soil (m)	Ice-rich Soil Thickness (m)	Termination Depth (m)	Ice-rich Soil Observed?
TP25-11	1.4	N/A	1.5	Yes
TP25-12	1.3	0.4	1.5	Yes (East pit wall)
TP25-13	No ice-rich soils present	No ice-rich soils present	2.2	No
TP25-14	1.4	0.3	2.0	Yes (West pit wall)
TP25-15	1.7	N/A	2.2	Yes
TP25-11A	1.3	0.8	1.7	Yes, both pit walls (north and south)
TP25-12A	1.4	0.6	2.8	Yes, both pit walls (east and west)
TP25-13A	1.4	0.4	2.9	
TP25-14A	1.4	0.3	3.2	
TP25-15A	1.8	0.3	3.2	

N/A: information not available.

3.3.3.2 Terrain and Permafrost Mapping

Tetra Tech completed terrain and permafrost mapping of the existing TSF and the proposed TSF extension area, including the interpretation of satellite and aerial images and mapping of surficial geology, permafrost, and permafrost features. Based on the results from the permafrost mapping, it was estimated that:

- Permafrost with >20% by volume of excess ice occupies 44% of the TSF area;
- Permafrost with 10% to 20% by volume of excess ice covers 27% of the TSF area; and
- The balance of 29% is permafrost with <10% by volume of excess ice.

The permafrost mapping results are presented in Figure A2. More details of the terrain and permafrost mapping can be found in the memo titled “2025 Meliadine Testpit Investigation and Terrain and Permafrost Extent Mapping” (Tetra Tech 2025c).

3.4 Additional Key Design Considerations

In addition to the expected filtered tailings production schedule, quantities, geotechnical and geochemical characteristics, and subsurface conditions, other key factors will be considered during the design of the TSF raise and extension, including:

- **Closure Plan and Objectives:** The design of the TSF raise and extension will consider and meet the closure objectives stated in the Meliadine Interim Closure and Reclamation Plan – Update 2020 (SNC Lavalin 2022). The key closure plan and objectives are:
  - Implementing progressive closure during operation to reduce the dust mobilization and closure cost.
  - The physical stability of the TSF will be maintained under long-term climate change, static, and seismic conditions, with the deformations to remain below tolerable thresholds.
  - Limit dust concern during active reclamation and in the long-term.
  - The TSF will be compatible with wildlife and community uses and meet future land use targets after closure.

- **Site Climate Conditions:** The site-specific climate conditions (long and cold winter seasons) will be utilized to promote the freeze-back of the filtered tailings and encourage permafrost development in the facility.
- **Environmental Obligations:** To avoid impacts on fish-bearing habitat, a suitable buffer distance will be maintained from protected natural lakes.
- **Water Management:** Where feasible, clean natural runoff will be diverted away from the facility to avoid contact with, and flowing through, the TSF area. Contact water will be collected through various water management infrastructure (WMI) including ditches and collection ponds. The WMI will be maintained during operations to avoid potential negative impacts to the receiving environment.

4.0 TSF DESIGN CONCEPT AND KEY PARAMETERS

4.1 Initial Design and As-built of the TSF (as of April 4, 2025)

The currently approved TSF design incorporates a two-cell placement system (Cell1 and Cell2) to facilitate the phased construction, enhance freeze-back potential, and enable progressive closure. The side slope of the TSF was designed with a gradient of 4 Horizontal (H):1Vertical (V) for the lower portion (below Elevation 80.2 m, with an average height of 15 m) and 3H:1V for the upper portion (above Elevation 80.2 m, for the remaining 18 m) (Agnico Eagle 2018). The final top surface was designed with a 4% slope to promote lateral runoff during rainfall and freshet events. To manage erosion, reduce dust generation, and improve thermal performance, the side slopes of the filtered tailings are encapsulated with a layer of waste rock ranging from 4.0 m to 4.5 m thick. The current planned closure cover on the top surface of the TSF consists of a 0.5 m layer of overburden till overlain by a 2.5 m capping layer of waste rock.

Cell1 of the TSF reached its full design capacity in July 2024 with a top surface elevation of 98 m. Based on the as-built survey provided by Agnico Eagle on April 4, 2025, the constructed Cell1 has a side slope ranging from 3.6H:1V to 4.1H:1V below Elevation 80 m, and from 3.0H:1V to 3.4H:1V above Elevation 80 m. Cell2 is currently receiving tailings and was at a top elevation of 83 m as of March 22, 2025, with an overall slope range of 3.6H:1V to 4.4H:1V. The total volume of tailings placed was approximately 5.08 Mm^3 as of April 2025 based on the as-built survey provided by Agnico Eagle.

Table 4-1 summarizes the key parameters for the design and as-built TSF.

Table 4-1: Key Parameters for the Initial Design and As-Built TSF (as of April 2025)

Parameters	Values
Initial Design Parameters	
Filtered tailings solid content to TSF	85% (by mass)
Gravimetric moisture content of filtered tailings to TSF	17.6%
Maximum dry density from standard proctor test (kg/m^3)	1,800
Minimum target dry density of compacted filtered tailings (kg/m^3) (corresponding to 92% of maximum dry density)	1,650
Average height of filtered tailings over original ground surface (m)	33
Design side slope (below elevation 80.2 m, average 15 m high)	4H:1V
Design side slope (above elevation 80.2 m, the remaining 18 m)	3H:1V
Design slope of final tailings surface at crest	4%
Waste rock cover thickness (normal to the side slope) on the side slopes (m)	4.0 to 4.5
Overburden cover thickness on top surface (m)	0.5
Waste rock cover thickness on top surface (m)	2.5
Total design footprint of TSF (m^2)	329,373
As-built TSF as of April 2025	
As-built top elevation at Cell1 (m)	98
As-built side slopes at Cell1 (between Elevations 65 m and 80 m)	3.6H:1V to 4.1H:1V
As-built side slopes at Cell1 (between Elevations 80 and 98 m)	3.0H:1V to 3.4H:1V
As-built top elevation at Cell2 (m)	83
As-built overall side slopes at Cell2	3.6H:1V to 4.4H:1V
Waste rock cover thickness (normal to the side slope) on the side slopes (m)	4.0 to 5.5
Total as-built footprint of TSF (m^2)	370,589

4.2 Design Concept and Key Parameters for the Proposed TSF Raise and Extension

The design concept of the proposed TSF raise and extension at the Meliadine Mine is based on the performance of the existing TSF and the current as-built geometry. The raise will be achieved by increasing the crest elevation, while maintaining the same design side slopes or a flatter side slope for the raise portion. The extension will be accomplished by extending the existing TSF in the northwest direction.

The final top elevation and overall side slopes for the TSF raise and extension will be based on the site-specific geometry constraints and the results of slope stability and creep deformation analyses. The top surface slope of the TSF raise and extension will be maintained consistent with the initial design, with a slope of 4%.

The cover system adopted for the initial TSF design consists of a 4.0 m to 4.5 m thick waste rock layer on the side slopes, and a composite cover on the top surface comprising a 0.5 m thick overburden till overlain by a 2.5 m thick waste rock layer. The same cover design system will be adopted for the TSF raise and extension. The thickness of waste rock cover on the side slopes for the TSF raise may vary depending on the as-built conditions.

Key design parameters for the TSF raise and extension are summarized in Table 4-2.

Table 4-2: Key Parameters for the Design of the TSF Raise and Extension

Parameters	Values
Filtered tailings solid content to TSF	85% (by mass)
Gravimetric moisture content of filtered tailings to TSF	17.6%
Maximum dry density from standard proctor test (kg/m^3)	1,782.5
Minimum target dry density of compacted filtered tailings (95% of maximum dry density) (kg/m^3)	1,694
Design side slope for the raise	3H:1V or Flatter*
Design side slope for the extension (below elevation 100 m)	4H:1V*
Design side slope for the extension (above elevation 100 m)	3H:1V or Flatter *
Design slope of final filtered tailings surface at crest	4%
Waste rock cover thickness (normal to the side slopes) on the side slopes for raise (m)	4.0 to 5.5**
Waste rock cover thickness (normal to the side slopes) on the side slopes for extension (m)	4.0 to 4.5
Overburden cover thickness on top surface (m)	0.5
Waste rock cover thickness on top surface (m)	2.5

* The side slopes for the TSF raise and extension to be verified by slope stability and deformation analyses to confirm the calculated factor of safety (FoS) and estimated deformation meet the design criteria.

** Waste rock cover thickness on the side slopes for raise varies between 4.0 m to 5.5 m depending on the current as-built conditions.

5.0 DESIGN CRITERIA

5.1 Minimum Factor of Safety

The British Columbia Mine Waste Rock Pile Research Committee published the first stability acceptance criteria developed specifically for mine waste rock dumps in 1991 – Mined Rock and Overburden Piles, Investigation and Design Manual, Interim Guidelines, May 1991 prepared by Piteau Associates Engineering Ltd. (PAE 1991) The interim guidelines provide the minimum recommended FoS based on the combined consideration of the potential scale of instability (shallow failure versus overall, deep-seated failure), design basis (short-term versus long-term), confidence (shear strength parameters and analysis method), and the consequence of instability.

The latest design guideline published by Hawley and Cunning (2017) – *Guidelines for Mine Waste Dump and Stockpile Design* provides guidelines for assigning stability criteria and FoS for various mine waste pile configurations and site conditions. The suggested stability acceptance criteria are based on the failure consequence and confidence level of the foundation conditions, waste material properties, piezometric pressures, fill slope angles, fill height, and precipitation.

The guidelines presented by Hawley and Cunning (2017) are considered as an update and improvement to the previous interim design acceptability criteria proposed by PAE (1991); however, unlike the PAE (1991) guidelines, Hawley and Cunning (2017) do not explicitly consider the potential scale of instability and design basis, instead, these aspects are implicitly grouped into the “Consequence” category which considers both the impact of the potential instability (often related to the scale or size and mechanism of instability) and the service life of the structure. The stability acceptance criteria suggested by Hawley and Cunning (2017) is presented in Table 5-1.

Table 5-1: Suggested Stability Acceptance Criteria by Hawley and Cunning (2017)

Consequence[1]	Confidence[2]	Minimum FoS for Static Analysis	Minimum FoS for Pseudo-Static Analysis
Low	Low	1.3-1.4	1.05-1.1
	Moderate	1.2-1.3	1.0-1.05
	High	1.1-1.2	1.0
Moderate	Low	1.4-1.5	1.1-1.15
	Moderate	1.3-1.4	1.05-1.1
	High	1.2-1.3	1.0-1.05
High	Low	>1.5	1.15
	Moderate	1.4-1.5	1.1-1.15
	High	1.3-1.4	1.05-1.1

1. **Consequence of Failure:**

   Low – waste dumps and stockpiles with overall fill slopes less than 25° and less than 100 m high, and repose angle slopes less than 50 m high. No critical infrastructure or unrestricted access within the potential runout shadow. Limited potential for environmental impact. Long-term (more than 5 years) exposure for sites subject to very low to low (less than 350 mm) annual precipitation; medium-term (1 to 5 years) exposure for sites subject to moderate (350 mm to 1,000 mm) annual precipitation; short-term (less than 1 year) exposure for sites subject to high (1,000 mm to 2,000 mm) annual precipitation; dry season construction/operation only for sites subject to very high (more than 2,000 mm) annual precipitation or intensive rainy season(s).

   Moderate – waste dumps with overall fill slopes less than 30° and less than 250 m high or repose angle slopes less than 100 m high. No critical infrastructure or unrestricted access, or robust containment/mitigative measures to protect critical infrastructure and access within potential runout shadow. Potential for moderate environmental impact, but manageable. Long-term (more than 5 years) exposure for sites subject to moderate (350 mm to 1,000 mm) annual precipitation; medium-term (1 to 5 years) exposure for sites subject to high (1,000 mm to 2,000 mm) annual precipitation; short-term (less than 1 year) exposure for sites subject to very high (more than 2,000 mm) annual precipitation or intensive rainy season(s).

   High – waste dumps with overall fill slopes more than 30° and more than 250 m high, or with repose angle slopes more than 200 m high. Critical infrastructure or unrestricted access within a potential runout shadow with limited runout mitigation/containment measures. Potential for high environmental impact that would be difficult to manage. Long-term exposure (more than 5 years) for sites subject to high (1,000 mm to 2,000 mm) annual precipitation; medium-term (1 to 5 years) exposure for sites subject to very high (more than 2,000 mm) annual precipitation or intensive rainy season(s).

2. **Confidence Level:**

   Low – limited confidence in foundation conditions, waste material properties, piezometric pressures, analysis technique, or potential instability mechanism(s). Poorly defined or optimistic input parameters; high data variability. For proposed structures, investigations at the conceptual level with limited supporting data. For existing structures, poorly documented or unknown construction and operational history, lack of monitoring records, and unknown or poor historical performance.

   Moderate – moderate confidence in foundation conditions, waste material properties, piezometric pressures, analysis technique, or potential failure mechanism(s). Input parameters adequately defined; moderate data variability. For proposed structures, investigations at the pre-feasibility study level with adequate supporting data. For existing structures, reasonably complete construction documentation and monitoring records; fair historical performance.

   High – high confidence in foundation conditions, waste material properties, piezometric pressures, analysis technique, and instability mechanism(s). Well-defined, conservative input parameters; low data variability. For proposed structures, investigations at the feasibility study level with comprehensive supporting data. For existing structures, well-documented construction and monitoring records; and good historical performance."

In 2019, Agnico Eagle issued an internal corporate management standard (Agnico Eagle 2019) to set the minimum requirements and criteria for the TSF, WMI, and Rock Storage Facilities (RSF), to be designed, constructed, operated, decommissioned, and closed in such a manner as:

- The safety of employees and the community are protected;
- Negative environmental and socioeconomic impacts are minimized; and
- Long-term costs and liabilities are minimized while meeting financial objectives.

The recommended minimum FoS required by Agnico Eagle for the TSF, WMI, and RSF are presented in Table 5-2.

Table 5-2: Minimum FoS Recommended by Agnico Eagle for the TSF, WMI, and RSF

Loading Conditions	Minimum FoS [(a)]
During or at end of construction, under static loading	1.3
Operations and Closure, under long term static loading	1.5
Pseudo-static loading	1.0
Post-earthquake	1.2

[(a):] Alternative FoS or return periods could be used if they are based on a risk-based approach, e.g., a lower return period or lower FoS could be acceptable if there is an agreement between the different key internal stakeholders, including the Independent Reviewers and the Accountable Executive Officer on the level of risks for the transient period the company is willing to accept.

The stability acceptance criteria for the TSF design update design of the TSF raise and extension are established based on the recommendations and approaches presented in Hawley and Cunning (2017) by considering the consequences of failure and confidence level of the TSF. The selection of the minimum acceptable FoS for the design of the TSF raise and extension considered the locations of failure, slope slip mechanisms, failure consequence, confidence levels on input parameters, key assumptions, proximity to nearby infrastructure, and site conditions.

Three types of slope slip failure were considered in selecting the stability acceptance criteria including:

- **Surficial, shallow slip failure:** A shallow failure involving the side slopes of the TSF with a failure depth not exceeding 5 m.
- **Local deep-seated slip failure:** A slip failure occurring within the side slopes of the TSF without extending into the foundation soils, with a failure depth of up to 15 m.
- **Global deep-seated slip failure:** A large-scale slip failure extending through the tailings and potentially into the foundation soils, with a failure depth typically greater than 15 m. The runout associated with the failure may impact adjacent mining infrastructure, water management systems, or the surrounding watershed

Table 5-3 lists the key considerations, consequence and confidence classifications, and adopted stability criteria for the TSF design update as per Hawley and Cunning (2017). The selected FoS in Table 5-3 meets or exceeds the FoS recommended in Agnico Eagle's Corporate Management Standard (Agnico Eagle 2019) and widely accepted tailings management practices in the mining industry, such as those presented in Dam Safety Guidelines by Canadian Dam Association (CDA 2013), Technical Bulletin – Application of Dam Safety Guidelines to Mining Dams (CDA 2019), and Tailings Dam Safety Bulletin No. 194 by International Commission on Large Dams (2025).

Table 5-3: Stability Criteria for the Design of the TSF Raise and Extension

Potential Failure Mechanism and Conditions	Consequence of Failure	Confidence Level	Recommended FoS		Adopted FoS	
			Static	Pseudo-Static	Static	Pseudo-Static [a]
Surficial, shallow slips (during construction)	Low	High	1.1 - 1.2	1.0	1.3	-
Local deep-seated slips (during construction)	High	Moderate	1.4 - 1.5	1.05 - 1.1	1.5	-
Long-term, global deep-seated slips for base cases (after construction)	High	Moderate	1.4 - 1.5	1.1 -1.15	1.5	1.1[b]
Long-term, global deep-seated slips for sensitivity cases with conservative assumptions (after construction)	High	Moderate	1.4 - 1.5	1.1 - 1.15	1.4	1.1[b]

[a]: Pseudo-static loading was only considered for global deep-seated slip failure under long-term conditions (after construction).
[b]: If the calculated FoS under pseudo-static loading is significantly less than the minimum required FoS (1.1), a dynamic deformation numerical analysis will be conducted to estimate the deformation of TSF under seismic loading.

The consequences of failure and confidence levels in Table 5-3 are assigned based on the following rationales for each failure mechanism:

- **Surficial, shallow slip failure:** The consequence failure is rated **Low**, as a surficial shallow slip failure will involve a limited volume of the placed filtered tailings, with no critical infrastructure within the potential runout zone. Such a failure is not expected to impact mill operations and have limited potential for environmental impact. The confidence level is rated **High**, supported by the implementation of good filtered tailings placement protocols on site, as well as the use of reasonably conservative strength parameters assumed for the waste rock cover material and filtered tailings in the analysis.

- **Local deep-seated slip failure:** The consequence of failure is rated **High**, as the potential runout of the local deep-seated slip failure is likely to reach the downstream critical infrastructure (e.g., CP3 and industrial site pad). The failure could be mitigated, and it may temporarily impact mill operations and filtered tailings placement in short-term (days to a few weeks). The failure could also result in a moderate environmental impact. The confidence level is rated **Moderate**, supported by a moderate level understanding of the foundation conditions based on the number of boreholes drilled, filtered tailings geotechnical characteristics evaluated through the laboratory testing programs, construction quality control and quality assurance, reasonable conservative input parameters adopted, and analysis techniques applied.

- **Global deep-seated slip failure:** The consequence of failure is rated **High**, as the potential runout of a global deep-seated slip failure is expected to reach the downstream critical infrastructure (e.g., CP3 and industrial site pad), such a failure would also result in long-term impacts on mill operations and filtered tailings placement (weeks to months or longer), and could cause significant environmental impacts. For example, a global deep-seated failure could cause the filtered tailings slide to the adjacent industrial site pad on the east side and/or into fish-bearing lakes (e.g., Lake B7) on the west side, potentially resulting in loss of life and/or significant loss or deterioration of habitat. The confidence level is rated **Moderate**, supported by the same rationale applied to the local deep-seated slip failure.

For the global deep-seated slip failure mechanism under long-term static loading conditions, the adopted FoS was selected either from the upper bound or lower bound values listed in the guidelines by considering the conservatism of the assumptions adopted for the analyses. The upper bound value of the suggested FoS (1.5) was selected for the global deep-seated failure for base cases, and the lower bound value (1.4) was selected for the global deep-seated failure for sensitivity cases with conservative assumptions.

5.2 Design Earthquake

The Meliadine Mine is situated in an area of low seismic risk. Site-specific probabilistic or deterministic seismic hazard studies have not been conducted. A 1 in 2,475 year return earthquake (with a horizontal PGA of 0.0498 g estimated from the 2020 National Building Code of Canada seismic hazard website (http://www.earthquakescanada.nrcan.gc.ca/hazard-alea/interpolat/calc-en.php) will be considered for the analyses under seismic (pseudo-static) loading conditions for the design of the TSF raise and extension.

5.3 Thermal Criterion

The initial TSF design assumed that the physical slope stability of TSF does not rely on the freeze-back of the filtered tailings. Accordingly, the filtered tailings were assumed to be in an unfrozen condition under the long-term designed climate change scenario. However, measures to promote the freeze-back of the filtered tailings have been implemented during the construction of the TSF at the Meliadine Mine. The potential freeze-back of the filtered tailings or permafrost development within the TSF would provide additional benefits to both the physical and geochemical stability of the TSF.

For the design of the TSF raise and extension, the same design basis and consideration adopted for the initial design will be applied, more specifically, the placed tailings are assumed to be in an unfrozen condition under the long-term climate change conditions, and the physical stability of the TSF does not rely on the freeze-back of the filtered tailings.

5.4 Deformation Criterion

Based on thermal evaluation conducted during the design of the existing TSF, the ice-rich soil layer in the foundation is expected to remain in a frozen condition over the long-term (i.e.,100 years after closure). It is recognized that ice-rich soils exhibit visco-elastic behaviour and are subject to time-dependent deformation (creep) under sustained shear stress. The magnitude of the creep-induced deformations depends on various factors, including stress state, temperature, ice-rich layer thickness, and porewater salinity. To ensure the long-term integrity and serviceability of the TSF, a creep deformation acceptance criterion is established based on a maximum allowable vertical and horizontal deformation equal to 1% of the average height of the TSF. This is considered as a reasonably conservative threshold beyond which progressive shear deformation and cracking may occur, particularly in the presence of ice-rich soils in the foundation. Maintaining creep-induced displacements within 1% of the average height ensures that stress redistribution within the TSF and foundation remains stable, and the risk of progressive failure is minimized. This criterion will provide a benchmark for evaluating long-term performance of the TSF.

In terms of seismic performance, the guidelines for Mine Waste Dump and Stockpile Design by Hawley and Cunning (2017) recommend defining the maximum allowable strain due to a seismic event based on the classification of failure consequence of the facility and the confidence level in the design. For the TSF at the Meliadine Mine (classified as having a high failure consequence and moderate level of confidence as described in Section 5.1), the recommended maximum allowable strain due to a seismic event is 0.75%. The strain in the guidelines is defined as the ratio of cumulative displacement along a defined failure path due to a seismic event to the length of the failure path, expressed as a percentage. Accordingly, the maximum allowable displacement due to a seismic event for the TSF at the Meliadine Mine will be determined by applying the 0.75% strain limit to the failure path lengths identified through slope stability analyses.

6.0 DESIGN METHODOLOGY

6.1 General

The filtered tailings at the Meliadine Mine are expected to be placed in unsaturated conditions, with an initial degree of saturation of approximately 75%. The degree of tailings saturation is anticipated to increase over time due to water infiltration from rainfall and snowmelt during both operation and after closure. Given the different behaviours of the saturated and unsaturated filtered tailings, a seepage analysis was undertaken to estimate the phreatic surface, which delineates the boundary between the saturated and unsaturated filtered tailings.

Ice-rich (ice content greater than 30% by volume or bulk density less than 1,700 kg/m^3) frozen soils were observed in most of the boreholes drilled within the TSF footprint as described in Section 3.3. The long-term stability of the TSF is governed by the long-term shear strength of the ice-rich foundation materials. The ice-rich materials behave as cohesive materials under long-term conditions, with the material's cohesion being temperature dependent – the colder the soil, the higher its long-term cohesion. Therefore, estimating the permafrost temperatures of ice-rich materials under the designed long-term climate change scenarios is required to determine their long-term shear strength parameters.

Ice-rich materials behave as visco-elastic media under loading and exhibit time dependent deformation (creep) under sustained shear. The magnitude of the creep-induced deformations is mainly dependent on the stress state, temperature, thickness, and porewater salinity of the ice-rich layer. For the design of the TSF raise and extension, the creep-induced deformations need to be estimated to assess the integrity of the TSF over the design life (e.g., 100 years).

The following design methodology will be adopted for the engineering analyses. First, coupled thermal and seepage analyses will be performed to characterize the thermal regime of the foundation and to estimate the phreatic surface within the TSF. Subsequently, limit equilibrium slope stability analyses and creep deformation analyses will be carried out using the results of the coupled thermal and seepage analyses.

6.2 Coupled Thermal and Seepage Analyses

6.2.1 General

Coupled thermal and seepage analyses will be conducted using the TEMP/W and SEEP/W packages of GeoStudio (SEQUENT 2024). These tools enable the simulation of convective thermal and water transfer processes, with the added option to reduce the hydraulic conductivity of saturated-unsaturated materials when the soil freezes based on the Clapeyron thermodynamic equilibrium equation

For the design of the TSF raise and extension, a one-dimensional (1D) coupled thermal and seepage model will be developed first, using the tailings deposition history to:

- Calibrate the coupled model against the measured ground temperature data collected from the ground temperature cables (GTCs) installed within the TSF footprint; and
- Establish initial conditions and simplified boundary conditions (e.g., water flux at the top surface) for the subsequent two-dimensional (2D) models.

Following the 1D model calibration, a 2D coupled thermal and seepage analysis will be carried out at one representative section of the TSF to simulate the construction sequence during mine operation and estimate the long-term thermal and hydraulic conditions of TSF. The representative section will be chosen at the existing TSF. It is Tetra Tech's opinion that the selected section at the existing TSF is representative of conditions at the TSF extension, given the comparable ground conditions and permafrost regimes. Although there are some differences, for example, local geometry, tailings deposition timing, and rate, these variations primarily influence short-term construction response rather than long-term performance. Climate change will be included in the assessment of the long-term conditions of the TSF.

6.2.2 Inputs for Coupled Thermal and Seepage Analyses

6.2.2.1 Mean Climate Data

Climatic data required for the coupled thermal and seepage analyses include air temperature, precipitation, relative humidity (RH), wind speed, solar radiation, and snow cover thickness. Table 6-1 summarizes the mean climate data to be used for the coupled thermal and seepage analyses.

Table 6-1: Mean Climate Data for the Coupled Thermal and Seepage Analyses

Month	Average Monthly Air Temperature (°C) [a]	Monthly Wind Speed (km/h) [b]	Monthly Average Snow Cover (m) [c]	Daily Solar Radiation (W/m^2) [d]	Max. RH (%) [e]	Min RH (%) [e]	Mean Precipitation (mm) [f]
January	-29.6	24.1	0.28	9.1	76.7	70.6	16.9
February	-30.0	24.0	0.31	38.7	73.0	68.1	16.8
March	-24.5	23.7	0.36	119.5	78.3	70.7	21.9
April	-15.5	23.0	0.35	206.4	85.7	74.0	29.0
May	-5.1	22.9	0.19	259.7	92.5	74.3	29.1
June	4.9	20.2	0.03	252.0	91.5	61.7	31.1
July	11.2	19.4	0.00	226.4	92.7	57.4	45.2
August	10.3	21.0	0.00	160.8	93.7	62.0	57.9
September	4.6	23.9	0.00	124.9	95.8	75.9	52.8
October	-3.5	26.1	0.04	41.3	94.5	78.3	56.8
November	-15.9	25.0	0.14	14.4	87.4	78.0	38.8
December	-23.8	24.2	0.24	3.7	82.2	75.5	24.0
Average	**-9.8**	**23.1**	-	-	-	-	-

Notes:
[a] Based on measured monthly air temperatures at Rankin Inlet station (1994-2023).
[b] Based on measured wind speed data at Rankin Inlet station (1991-2020 Climate Normals).
[c] Based on measured snow cover data at Rankin Inlet station (1983-2012).
[d] Based on measured solar radiation data at Baker Lake station (1951-1980).
[e] Based on measured relative humidity data at Rankin Inlet station (2019-2024)
[f] Based on the Rankin Inlet Design Storm and Precipitation Frequency Quantiles Update (Tetra Tech 2021a).

6.2.2.2 Climate Change Projection

The historical air temperature record at Rankin Inlet indicates that clear long-term warming trend. Consistent with current state-of-practice, this observed warming supports the inclusion of climate change in the coupled thermal and seepage analyses for the design of the TSF raise and extension.

In 2021, the Government of Canada released updated climate change projections based on the Coupled Model Intercomparison Project Phase 6 (CMIP6), available through the Canadian Climate Data and Scenarios (CCDS) platform (https://climate-scenarios.canada.ca/?page=main). These CMIP6 climate change projections were used in the latest Intergovernmental Panel on Climate Change (IPCC) Assessment Report (AR6). The CCDS platform provides projected seasonal and annual climate changes for each Canadian province or territory, based on a suite of Shared Socioeconomic Pathway (SSP) scenarios that reflect different future greenhouse gas emission and radiative forcing levels, including SSP1-2.6, SSP2-4.5, SSP3-7.0, SSP4-6.0, and SSP5-8.5.

Okane conducted a climate change assessment for the Meliadine Mine using the available CMIP6 climate models' outputs and developed a site-specific climate database for the SSP2-4.5 scenario. Figure 6- presents the historical mean annual air temperatures recorded at Rankin Inlet (from 1982 to 2024), projected mean annual air temperatures for Nunavut from Environment and Climate Change Canada, and the site-specific projections developed by Okane for the Meliadine Mine.

Figure 6- indicates that the CMIP6 SSP2-4.5 projections from Environment and Climate Change Canada are slightly warmer than the warming trend observed at Rankin Inlet and are considered to represent a reasonable climate change scenario for design. The projections developed by Okane are slightly lower than that of the CMIP6 SSP2-4.5 projection from Environment and Climate Change Canada. Based on the direction provided by Agnico Eagle, the CMIP6 SSP2-4.5 climate dataset developed by Okane will be used for the design of TSF raise and extension.

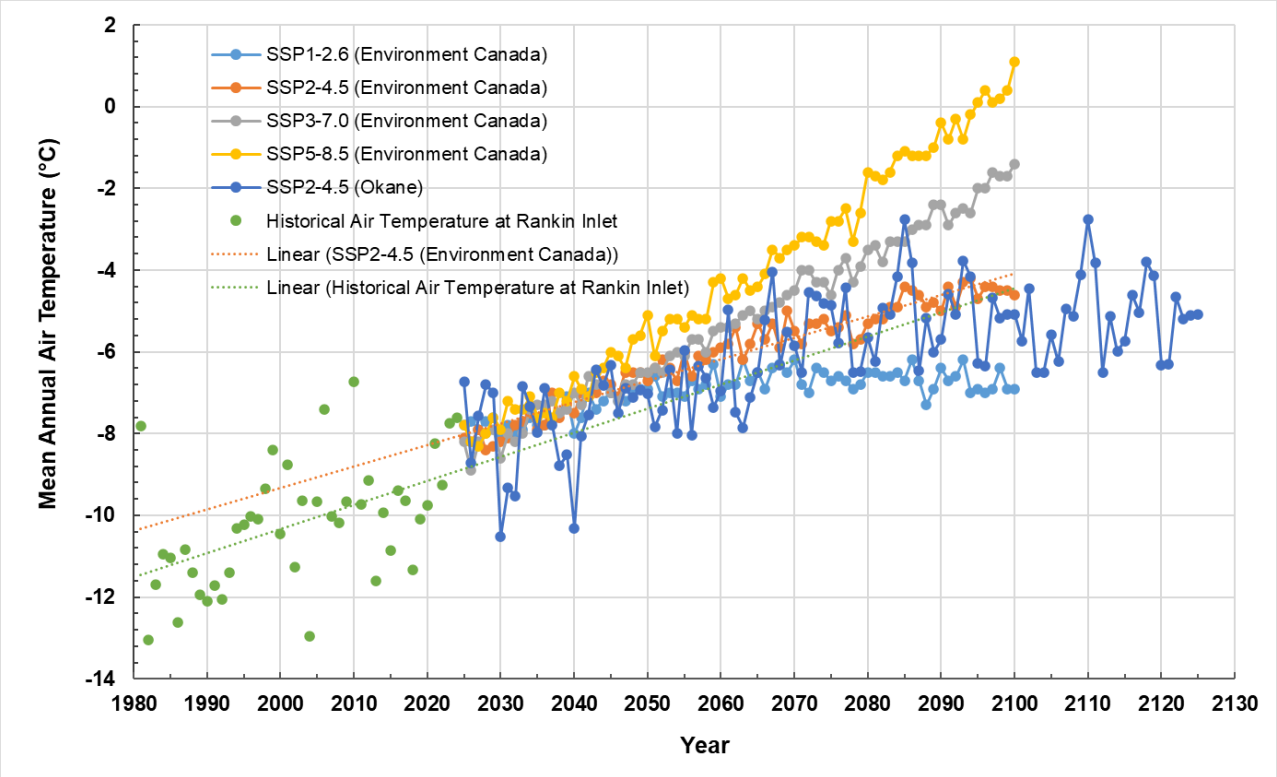

Figure 6-1: Historical Air Temperature at Rankin Inlet and Climate Change Projections

6.2.2.3 Soil Profile

A representative cross-section within the existing TSF footprint will be selected for the coupled thermal and seepage analyses (see Section G in Figure A3). The section will be selected based on the following considerations:

- At the selected section, there is a GTC installed at the center of the TSF, which is expected to minimize boundary effects from the slope surfaces of the existing TSF for the 1D model.
- Ice-rich soils were observed in the foundation of the selected section based on the subsurface conditions described in Section 3.3 of this memo.

The thickness of ice-rich SILT is typically less than 0.8 m based on available testpit results and borehole logs. In the coupled thermal and seepage analysis, a thickness of 1 m will be adopted for the ice-rich SILT, which is on the conservative side. Therefore, a generalized TSF foundation soil profile consisting of 1.5 m SAND and SILT, 1 m ice-rich SILT, 2.5 m ice-poor SILT overlying bedrock will be used for the coupled thermal and seepage analyses.

6.2.2.4 Thermal Properties

To model the coupled effects of heat and water transfer within the TSF, the foundation soils, filtered tailings, and the closure cover materials will be modelled using the coupled convective thermal model recommended by TEMP/W. The coupled convective thermal model in TEMP/W requires three key relationships, including:

1. Thermal conductivity versus volumetric water content;
2. Volumetric heat capacity versus volumetric water content; and
3. Unfrozen water content versus temperature.

Various input parameters are required to derive the above three relationships for saturated and unsaturated foundation soils, filtered tailings, and cover materials. The input parameters for the foundation soils were estimated based on available geotechnical information collected from the previous drilling programs and experiences with similar soils. The input parameters for the filtered tailings were obtained from the 2024/2025 laboratory testing program (Tetra Tech 2025a), while the input parameters for cover materials were obtained from the study conducted by Okane (Okane 2022) to support the 2024 Water License Amendment (WLA) application for the Meliadine Mine. The pore-water salinity of foundation soils ranges from 4 parts per thousand (ppt) to 12 ppt with an average of 7 ppt (EBA 2013b). the following porewater salinity will be used for the design:

- 15 ppt for the filtered tailings;
- 7 ppt for the foundation soils;
- 2 ppt for the waste rock cover material;
- 5 ppt for the overburden cover material; and
- 0 ppt for bedrock.

Table 6-2 summarizes the input parameters to derive the abovementioned three relationships.

Table 6-2: Input Parameters to Derive Convective Model for Tailings and Cover Materials

Material	Specific Gravity	Void Ratio	Dry Density (kg/m^3)	Saturated Volumetric Water Content (%)	Salinity (ppt)
Tailings	2.98	0.71	1,740	41.2	15
Overburden Cover	2.70	0.58	1,700	37.0	5
Waste Rock Cover	2.70	0.35	2,000	26.0	2
SAND and SILT	2.70	0.65	1,640	17.0	7
Ice-rich SILT	2.70	1.16	1,250	37.5	7
Ice-poor SILT	2.70	0.80	1,500	30.0	7
Bedrock	2.70	0.04	2,600	5.0	0

Thermal Conductivity Function Verses Volumetric Water Content

Various empirical or semi-empirical methods have been developed for estimating the thermal conductivity of soils (both saturated and unsaturated). The thermal conductivity function versus volumetric water content of the filtered tailings and cover materials were derived based on the empirical equations developed by Johansen (1975) as per the recommendation in TEMP/W. Accordingly, the developed relationships between thermal conductivity and volumetric water content for the filtered tailings and cover materials are presented in Figure 6-2. Figur presents the developed relationships for the foundation soils and bedrock.

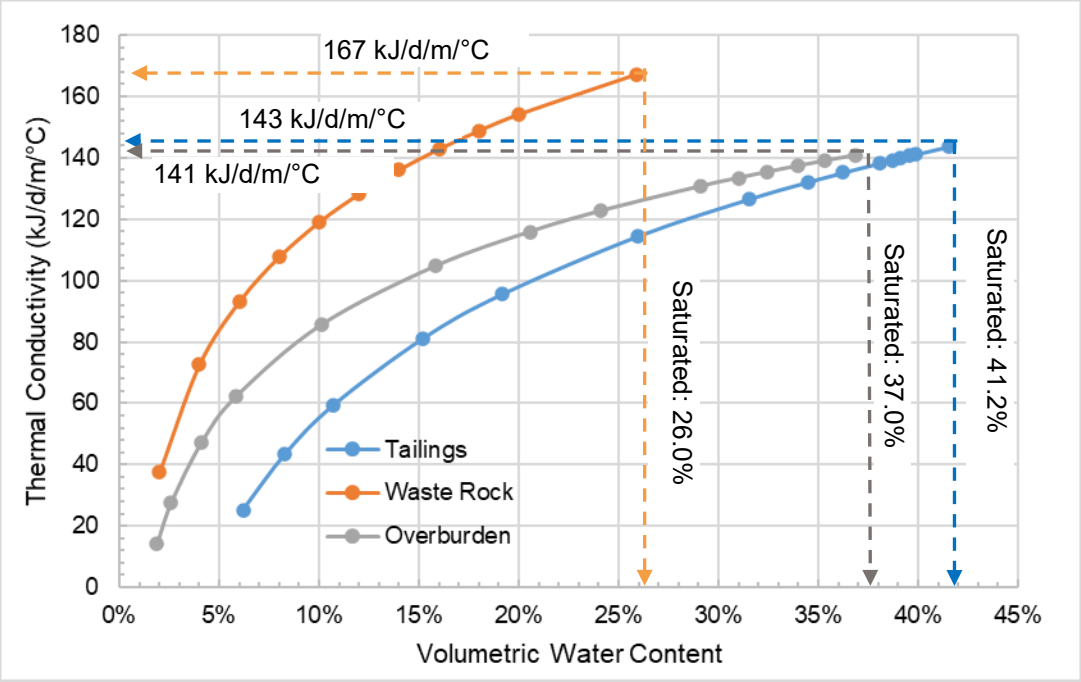

Figure 6-2: Relationship Between Thermal Conductivity and Volumetric Water Content for the Filtered Tailings and Cover Materials

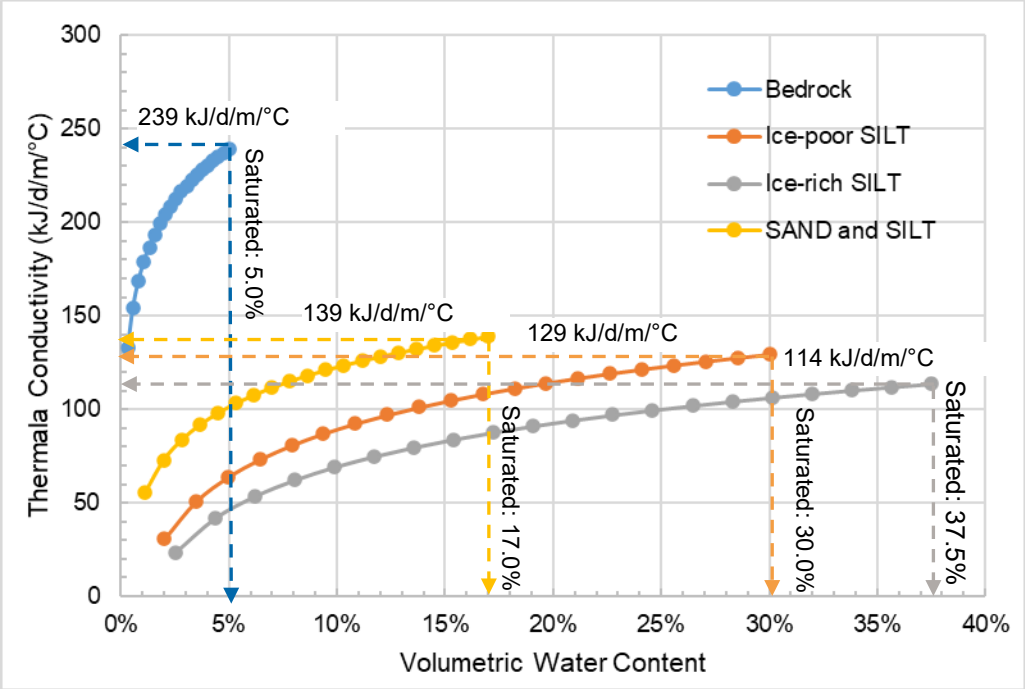

Figure 6-3: Relationship Between Thermal Conductivity and Volumetric Water Content for the Foundation Soils and Bedrock

Volumetric Heat Capacity Versus Volumetric Water Content

In addition to thermal conductivity, heat capacities of the filtered tailings and cover materials are also expected to vary with water content. The volumetric heat capacity at a certain water content can be approximated by the sum of specific heat capacities of its constituents (i.e., soil particles, water, and ice). The heat capacity of the filtered tailings will be estimated using the equation developed by Johnston et al. (1981) as per the recommendation in TEMP/W. Accordingly, the developed relationships between heat capacity and volumetric water content for the filtered tailings and cover materials are presented in Figure 6-4. Figur presents the developed relationships for the foundation soils and bedrock.

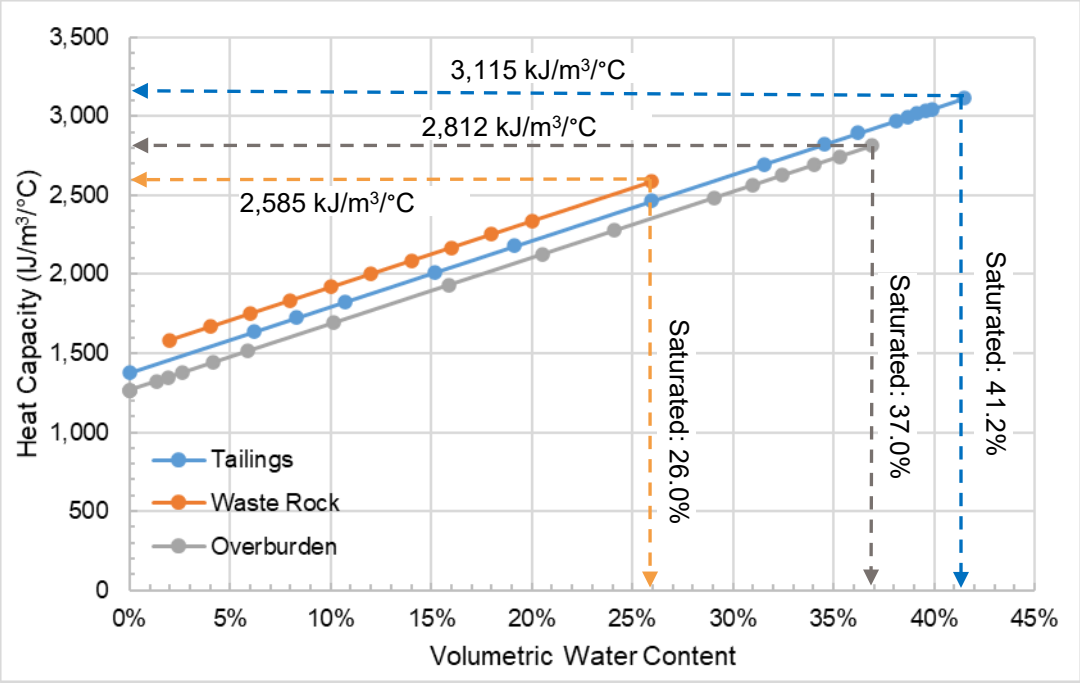

Figure 6-4: Relationship Between Heat Capacity and Volumetric Water Content for Tailings and Cover Materials

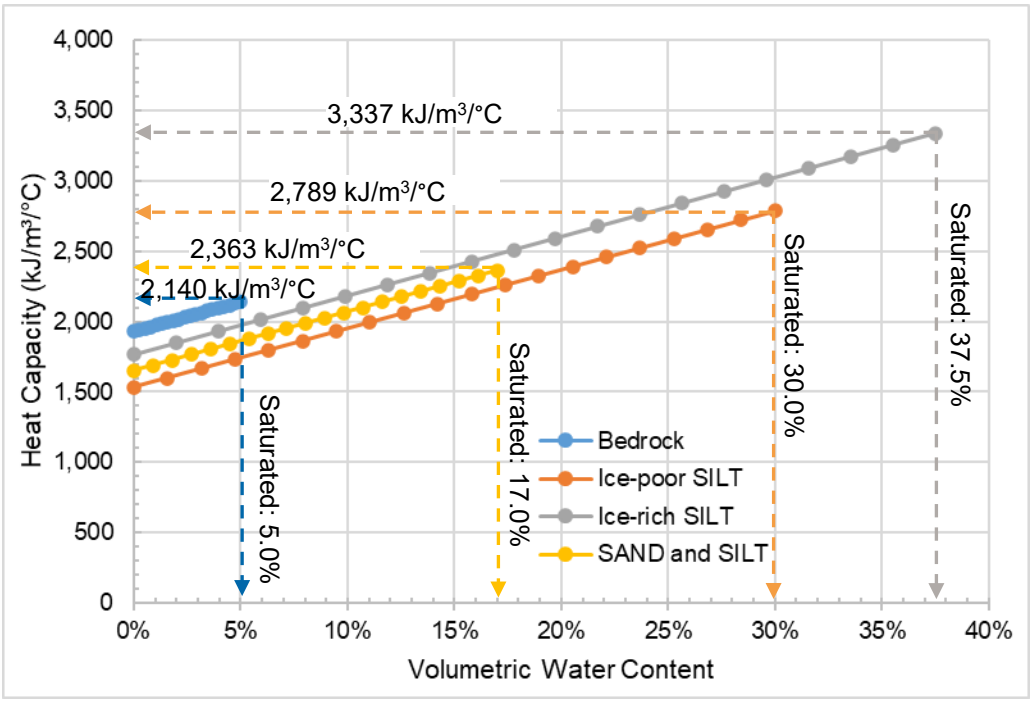

Figure 6-5: Relationship Between Heat Capacity and Volumetric Water Content for Foundation Soils and Bedrock

Unfrozen Water Content versus Temperature

Porewater salinity in the foundation soils and filtered tailings can induce freezing point depression. An unfrozen water content test on the filtered tailings at the Meliadine Mine, completed by the University of Laval in December 2022, indicated that the freezing point of the filtered tailings was approximately at -1.82°C. The unfrozen water content curve obtained from the laboratory test will be used for the coupled thermal and seepage modelling. The unfrozen water content curves for cover materials, foundation soils and bedrock were derived based on the sea ice model developed by Ono (1966). Accordingly, the derived relationships between the normalized unfrozen porewater fraction and temperatures for the cover materials and filtered tailings are presented in Figure 6-6. Figure presents the developed relationships between the normalized unfrozen porewater fraction and temperatures for the foundation soils and bedrock.

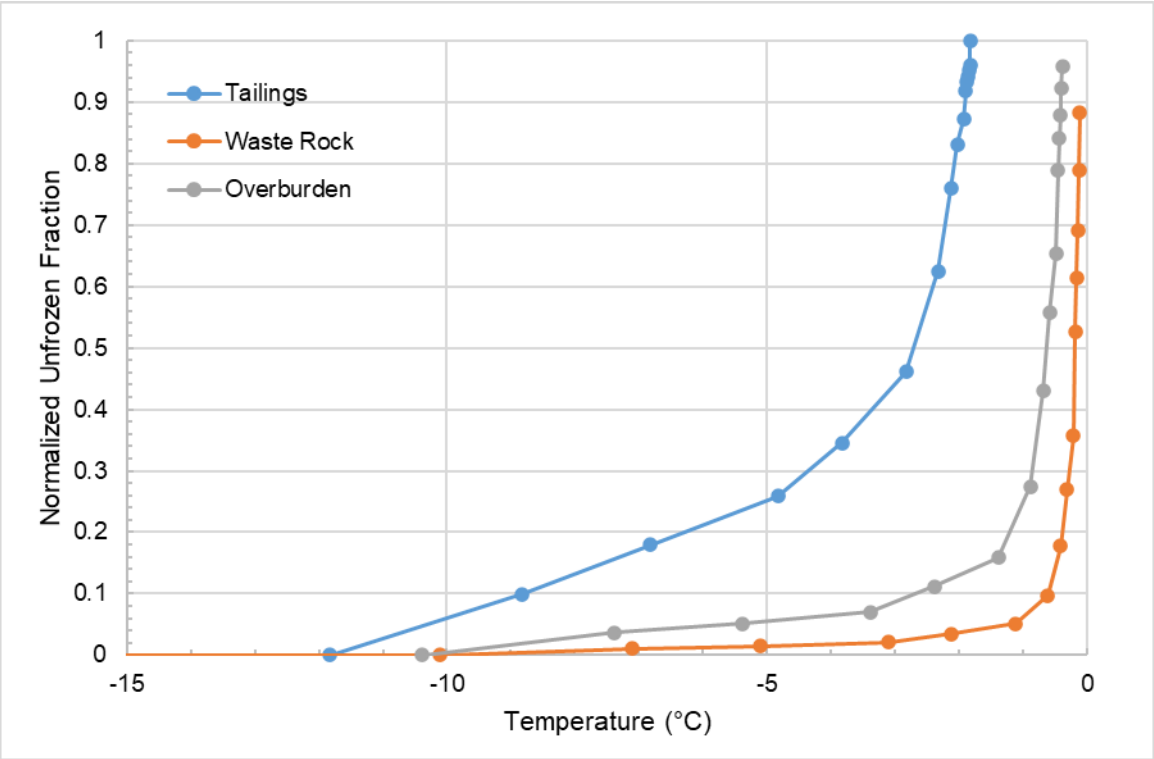

Figure 6-6: Relationship Between Temperature and Unfrozen Water Fraction for Tailings and Cover Materials

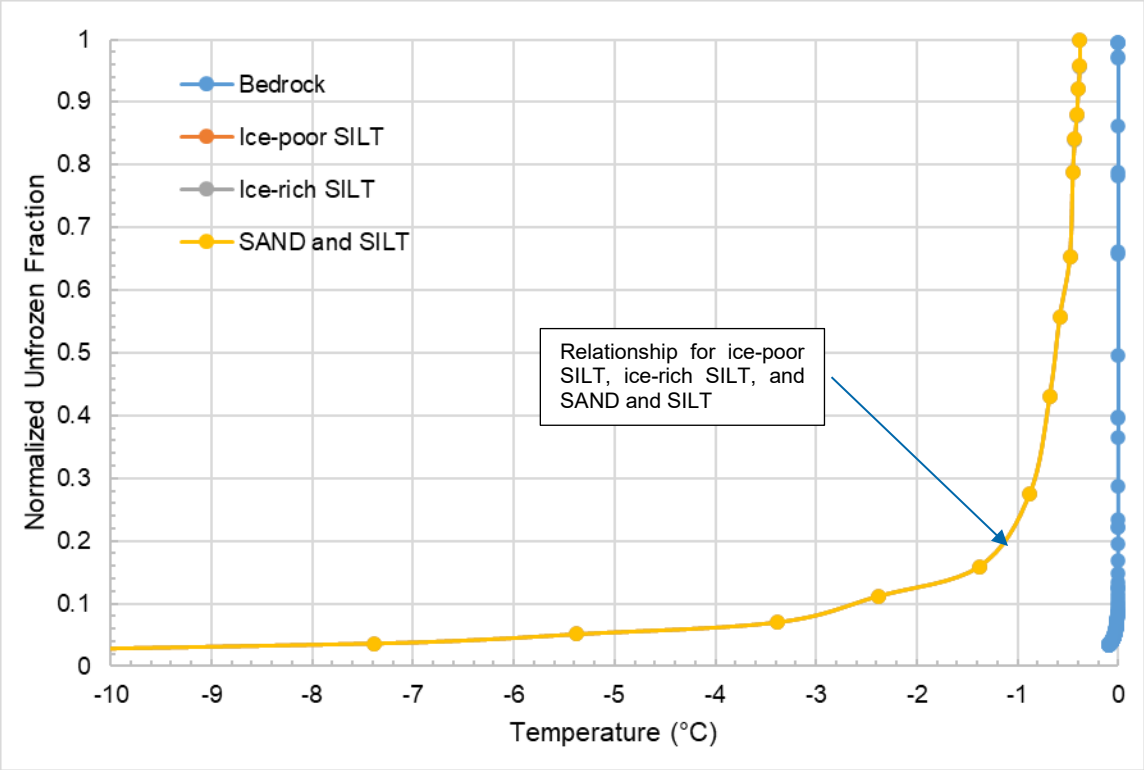

Figure 6-7: Relationship Between Temperature and Unfrozen Water Fraction for Foundation Soils and Bedrock

6.2.2.5 Hydraulic Properties

For the saturated and unsaturated materials, SEEP/W requires two relationships as the model inputs to model the water movement, including volumetric water content versus suction (i.e., SWCC) and hydraulic conductivity versus suction. The saturated hydraulic conductivity of the filtered tailings was estimated to be 2.9E-07 m/sec (at a dry density of 1,700 kg/m^3) based on laboratory test results conducted in 2014. The SWCCs for the filtered tailings will be based on the laboratory tests conducted in 2025 (Tetra Tech 2025a), which included both drying and wetting curves. The near-surface layer of the placed tailings is expected to undergo wetting and drying cycles. Given SEEP/W does not have the capacity to directly incorporate both drying and wetting curves in the model, Tetra Tech adopted the averaged drying and wetting curves in the coupled thermal and seepage modelling (Figure 6-8).

The hydraulic properties of the closure cover materials were previously developed by Okane (2022) based on available material testing and drill sampling to support the Meliadine TSF seepage modelling. These established hydraulic functions for the closure cover materials will be adopted for the design of the TSF raise and extension. Figure and Figure present the SWCCs and hydraulic conductivity functions for the tailings and closure cover materials, respectively.

The SWCCs of foundation soils will be developed using sample functions in SEEP/W for different soil types (i.e., SILT, and SAND and SILT). Based on the laboratory test results from the previous geotechnical site investigation programs at Meliadine (EBA 2013, Tetra Tech EBA 2016, Tetra Tech 2021b), the hydraulic conductivity ranges from 1.7e-7 m/sec to 2e-6 m/sec for saturated SAND and SILT, and 4e-7 m/sec to 5e-7 m/sec for saturated SILT. In the couple thermal and seepage analyses, the saturated hydraulic conductivity of 5e-7 m/sec will be adopted for SILT, and 2e-6 m/sec for SAND and SILT. It should be noted that the hydraulic conductivity for SILT presented in Figure is estimated based on unfrozen SILT; hydraulic conductivity for frozen SILT used in the

coupled thermal and seepage model will be estimated in GeoStudio by applying a reduction factor based on its built-in Clapeyron thermodynamic equilibrium equation (SEQUENT 2024). Hydraulic properties of bedrock were previously developed by Okane to support the 2024 WLA application (Okane 2022). Figure and Figure present the SWCCs and hydraulic conductivity functions for the foundation soils and bedrock, respectively.

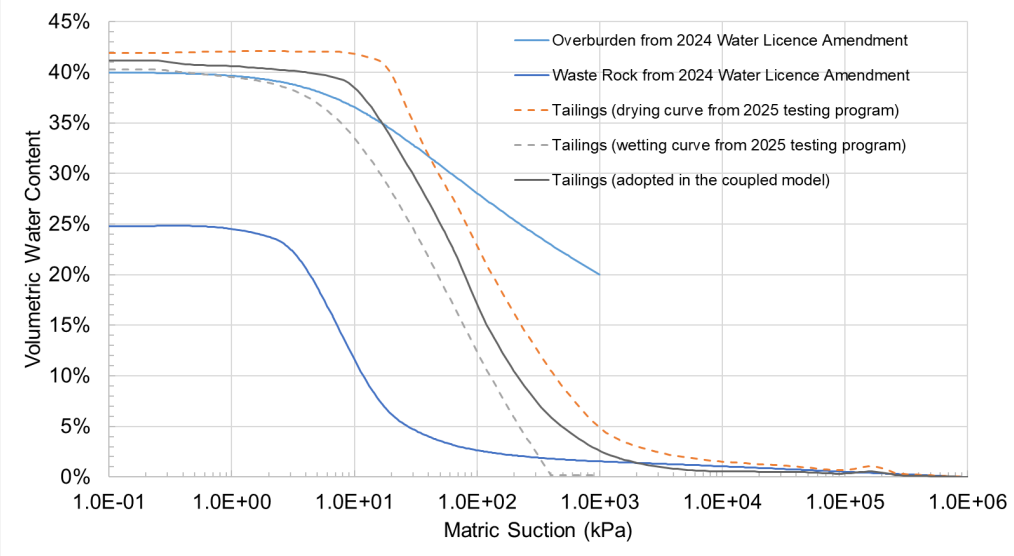

Figure 6-8: The Soil Water Characteristic Curves for Tailings and Cover Materials

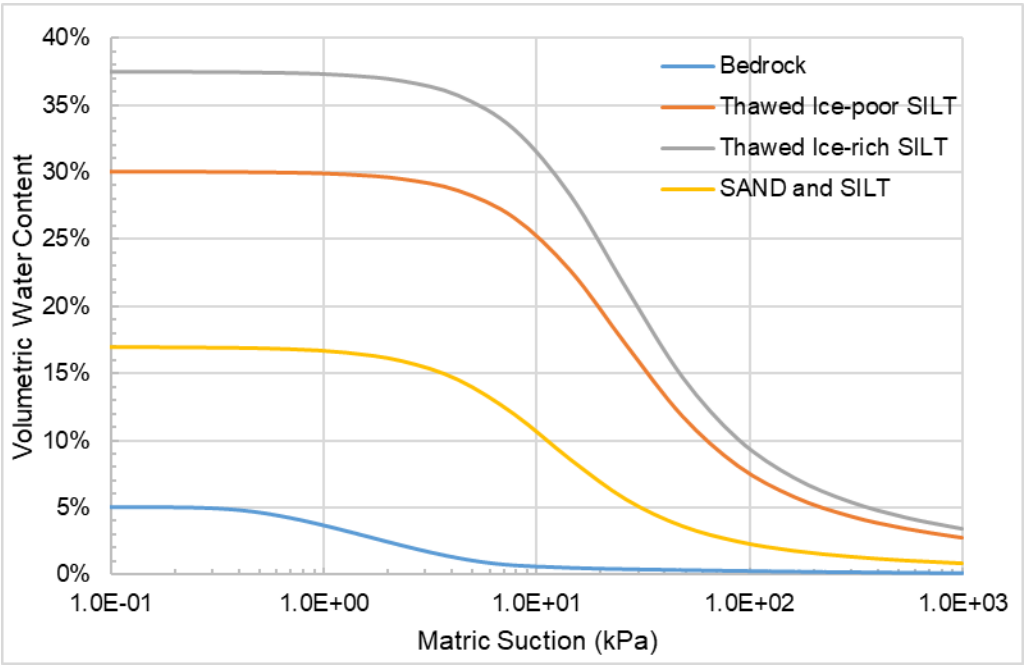

Figure 6-9: The Soil Water Characteristic Curves for Foundation Soils and Bedrock

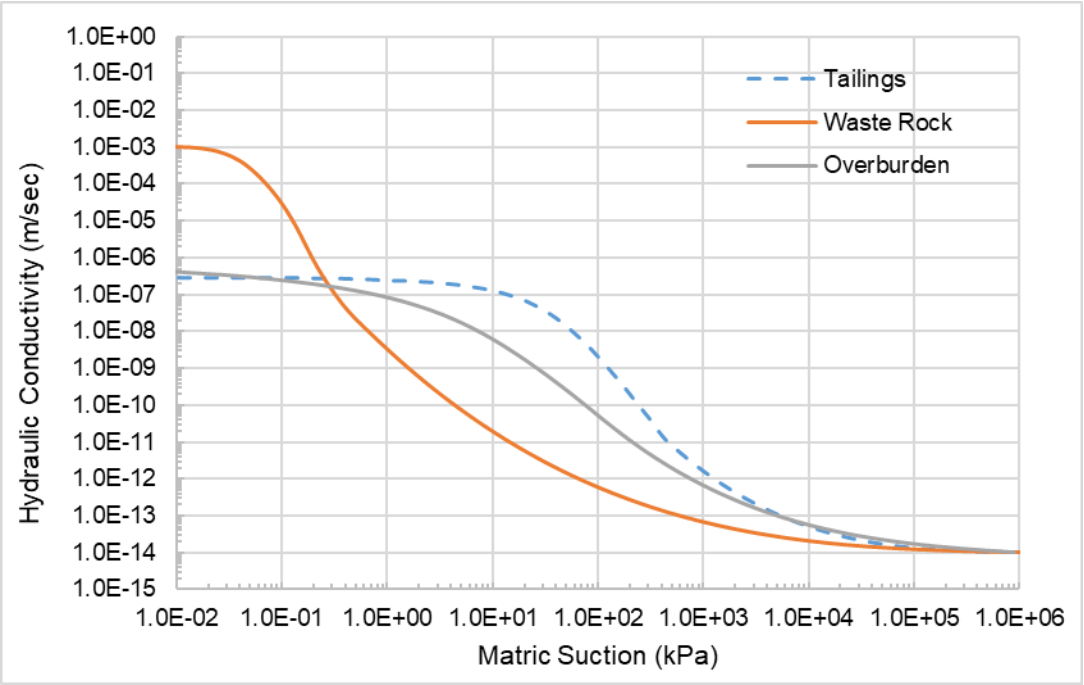

Figure 6-10: Relationship between Hydraulic Conductivity and Suction for Tailings and Cover Materials

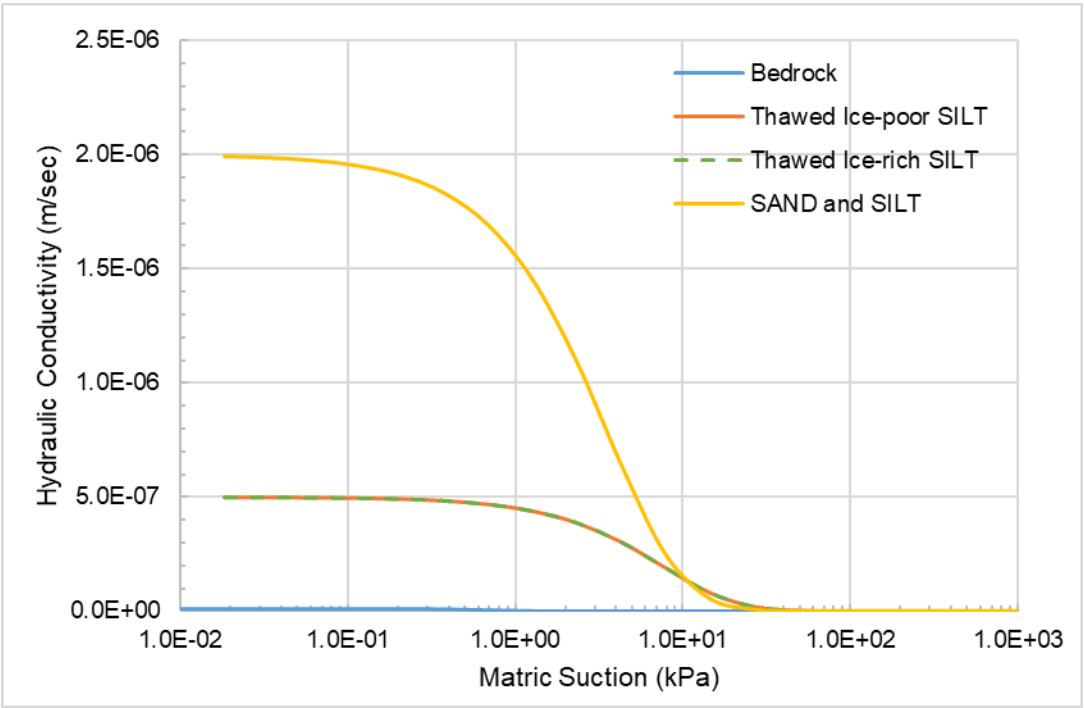

Figure 6-11: Relationship between Hydraulic Conductivity and Suction for Foundation Soils and Bedrock

6.2.3 Material Placement Schedule and Initial Temperature

The material placement schedule for the coupled thermal and seepage analyses will be developed based on the tailings production plan presented in Table 3-1. The filtered tailings conveyed to the temporary storage building is approximately at 20°C. A varied initial tailings temperature at placement ranging from 15°C to 20°C, depending on seasons, was used in the previous thermal modelling conducted by Okane (2022). The model results indicated that the initial tailings temperatures have a negligible impact on the long-term thermal conditions of the TSF. To simplify the modelling process, a constant tailings temperature of 15.0°C will be adopted in the coupled thermal and seepage analyses.

6.2.4 Model Boundary Conditions

6.2.4.1 Thermal Boundary Conditions

For both the 1D and 2D models, a ground surface energy balance boundary built into TEMP/W will be applied to the exposed tailings, closure cover, and natural ground surface if applicable. During the active tailings and cover placement period, a snow reduction factor, to be determined through model calibration, will be applied to the TSF top and slope surfaces to account for reduced snow accumulation caused by construction activities and potential snow drifting. After completion of cover placement, full mean snow cover will be applied to the TSF surfaces, which is a reasonably conservative assumption because thicker snow cover insulates ground from winter heat loss and results in warmer thermal conditions in the TSF. The natural ground surface in the 2D model will be assigned full mean snow cover during and after construction. A geothermal gradient of 0.017°C/m at depth will be applied at the base of both models.

6.2.4.2 Hydraulic Boundary Conditions

The hydraulic boundary conditions applied to the TSF top surface in the 1D model includes a climate boundary with snow removal during the operation period, and no snow removal (i.e., full mean snow cover) after closure cover placement.

For the 2D model, a simplified flux boundary condition obtained from the 1D model results will be applied on the TSF surfaces to simulate the water infiltration into the TSF due to precipitation. A seepage face will be assigned at the lower section of the slope in the 2D model allow water seepage from the TSF.

A unit hydraulic gradient boundary will be assigned at the base of both 1D and 2D models. This boundary condition assumes that water movement is controlled by gravity, which results in a unit hydraulic gradient.

6.3 Slope Stability Analysis

6.3.1 General

Slope stability analysis will be conducted along six typical sections (Sections A to F in Figure A3) to validate and refine the preliminary design geometry. Cases to be analyzed in the slope stability analysis include:

- Stability under static loading during construction.
- Stability under static loading after construction (long-term conditions).
- Stability under seismic (pseudo-static) loading after construction.

- Other parametric sensitivity cases (e.g., undrained condition in TSF, thawing in the ice-rich SILT layer, and thickness of ice-rich SILT layer).

Of the six selected cross-sections, three sections (A to C) are for the existing TSF raise and the remaining three sections (D to F) are for the TSF extension. Table 6-3 presents the rationale for the selected sections for slope stability analysis.

Table 6-3: Summary of Rationale for the Selection of Sections for Slope Stability Analysis

Selected Sections	Comments
Section A (Existing TSF)	This section represents the west side of the existing TSF and the proposed raise, where ice-rich soils create less favorable foundation conditions. Slope instability in this area poses a risk of tailings release into CP3 or Lake B7.
Section B (Existing TSF)	This section represents the south side of the existing TSF and the proposed raise. Slope instability in this area could lead to release tailings.
Section C (Existing TSF)	This section represents the east side of the existing TSF and the proposed raise, where ice-rich soils create less favorable foundation conditions. Slope instability in this area poses a risk of tailings release to the industrial pad.
Section D (TSF Extension)	This section represents the east side of the proposed TSF extension, where ice-rich soils create less favorable foundation conditions. Slope instability in this area poses a risk of tailings release to outside receiving environment.
Section E (TSF Extension)	This section represents the north side of the proposed TSF extension, where ice-rich soils create less favorable foundation conditions. Slope instability in this area poses a risk of tailings release to outside receiving environment.
Section F (TSF Extension)	This section represents the west side of the proposed TSF extension, where ice-rich soils create less favorable foundation conditions. Slope instability in this area poses a risk of tailings release to Lake B7.

6.3.2 Methodology

Two-dimensional limit equilibrium analyses will be conducted to calculate the FoS against slope failure during construction and in the long-term post construction of the TSF. The estimated phreatic surface in the TSF derived from the coupled thermal and seepage analyses will be incorporated into the slope stability analyses. The analyses will consider both static and seismic loading conditions. Potential post-construction seismic loading will be modelled as pseudo-static with a design horizontal peak acceleration representing the transient seismic accelerations that may be induced during the designed earthquake. The pseudo-static analysis will serve as an initial screening tool to determine if an advanced seismic deformation analysis will be needed. All analyses will be conducted using the 2D, limit equilibrium software, Slope/W of GeoStudio 2024 (Seequent 2024). The widely accepted Morgenstern-Price method, with a half-sine interslice force assumption, will be adopted in analyses.

6.3.3 Foundation Conditions and Soil Profile

The overall geotechnical subsurface conditions underlying the TSF area are summarized in Section 3.3. It is expected that the thin organic layer is compressed under loads from the TSF placed above, and its shear strength parameters would be close to that of the underlying overburden soils. It is assumed that some of the localized organic materials within the TSF footprint have been removed during the snow-removal process prior to tailings placement or have been compressed by the placed tailings. Therefore, any local presence of the organic layer will not be specifically modelled and will be represented by the equivalent underlying soils in the stability analyses.

The available borehole logs and testpit data indicate that the thickness of ice-rich SILT layer varies by location, generally ranging from 0.1 m to 0.8 m, with an average thickness of less than 0.5 m. The thickness of ice-rich SILT

layer adopted for the slope stability analyses varies by cross-section. For sections where the observed thickness is less than 0.5 m (i.e., Sections A, B, and E), a thickness of 0.5 m was assumed. For sections where the observed thickness exceeds 0.5 (i.e., Sections C, D, and F), a thickness of 0.8 m was adopted for the analyses.

Soil Profile Along Section A

Four boreholes (GT07-11, GT17-18, GT17-19, and GT17-20) were drilled near Section A. Based on the borehole logs, subsurface condition at Section A, a generally consists of a thin organic layer overlying a SAND layer, an ice-rich till (sand or silt) layer, a GRAVEL layer, and bedrock. Accordingly, the stability analyses along Section A will be based on the foundation soils comprising a 0.5 m thick layer of SAND, a 0.3 m thick layer of ice-rich SILT, and a 0.5 m thick layer of GRAVEL over bedrock.

Soil Profile Along Section B

Three boreholes (GT12-17, GT12-18, and GT25-13) were drilled near Section B. Based on the borehole logs, subsurface condition at Section B generally consists of a thin organic layer overlying a silty SAND layer, a GRAVEL layer, a SILT layer, a SILT and SAND layer, and bedrock. Accordingly, the stability analyses along Section B will be based on the foundation soils comprising a 0.5 m thick layer of silty SAND, a 1.5 m thick layer of GRAVEL, a 1.5 m thick layer of SILT, a 2 m layer of thick SILT and SAND, over bedrock.

Soil Profile Along Section C

Two boreholes (GT11-10 and GT11-04) were drilled near Section C. Based on the borehole logs, subsurface condition at Section C generally consists of a layer of organic materials overlying an ice-rich SILT layer, an ice-poor SILT layer, and bedrock. Accordingly, the stability analyses along Section C will be based on the foundation soils comprising a 0.5 m thick layer of SILT, 1 m thick layer of SAND, 0.8 m thick layer of ice-rich SILT, and a 3.5 m thick layer of ice-poor SILT over bedrock.

Soil Profile Along Section D

One borehole was drilled (i.e., GT11-03) and three testpits were excavated (i.e., TP25-01, TP25-02, and TP25-11/11A) near Section D. Based on the borehole logs and testpit logs, subsurface condition at Section D generally consists of a layer of ice-poor SILT overlying ice-rich SILT and bedrock. Accordingly, the stability analyses along Section D will be based on the foundation soil comprising a 1 m thick layer of ice-poor SILT, a 0.8 m thick layer of ice-rich SILT over bedrock.

Soil Profile Along Section E

Five boreholes were drilled (i.e., GT09-17, GT13-06, GT25-08, GT12-23, and GT25-09) and one testpits were excavated (i.e., TP25-15/15A) near Section E. Based on the borehole logs and testpit logs, subsurface condition at Section E generally consists of a layer of SAND and SILT overlying ice-rich SILT, SAND and GRAVEL, and bedrock. Accordingly, the stability analyses along Section E will be based on the foundation soil comprising a 0.5 m thick layer of SAND and SILT, a 0.5 m thick layer of ice-rich SILT, a 2 m thick layer of SAND and GRAVEL over bedrock.

Soil Profile Along Section F

Four boreholes were drilled (i.e., GT24-07, GT24-08, GT25-01, and GT25-11) and three testpits were excavated (i.e., TP25-12/12A, TP25-03, and TP25-04) near Section F. Based on the borehole logs and testpit logs, subsurface condition at Section G generally consists of a layer of ice poor SILT overlying ice-rich SILT, SAND and GRAVEL, and bedrock. Accordingly, the stability analyses along Section G will be based on the foundation soil comprising a

1 m thick layer of ice poor SILT, a 0.8 m thick layer of ice-rich SILT, a 1.5 m thick layer of SAND and GRAVEL over bedrock.

6.3.4 Material Properties

The comparison of shear strength parameters of the tailings based on the tests conducted on the pre-production batch mix (in 2013/2014) and tailings collected from the current mill operations (in 2024/2025) is presented in Table 3-2. Based on the test results on the tailings from the current mill operation, the shear strength of the tailings was determined to be c´=22.0 kPa, and Φ'= 34.3° (CIU tests) and c´=49.7 kPa, and Φ'= 34.4° (CID tests). For the design of the TSF raise and extension, the shear strength parameter of the tailings will be based on an effective frictional angle of 34° and zero cohesion.

The material properties of the foundation soils to be used in the stability analyses were estimated based on available testing results at the Meliadine Mine, literature review, experience on similar materials, and engineering judgement. A series of soil strength tests have been conducted through laboratory DS and consolidated-undrained triaxial tests on various thawed and reconstituted samples collected from past drilling programs at different locations of the Meliadine Mine for other infrastructure designs (EBA 2013b; Tetra Tech 2021b; Tetra Tech 2024). Figure presents the inferred peak and residual internal angles of friction measured from the laboratory tests on various soil types.

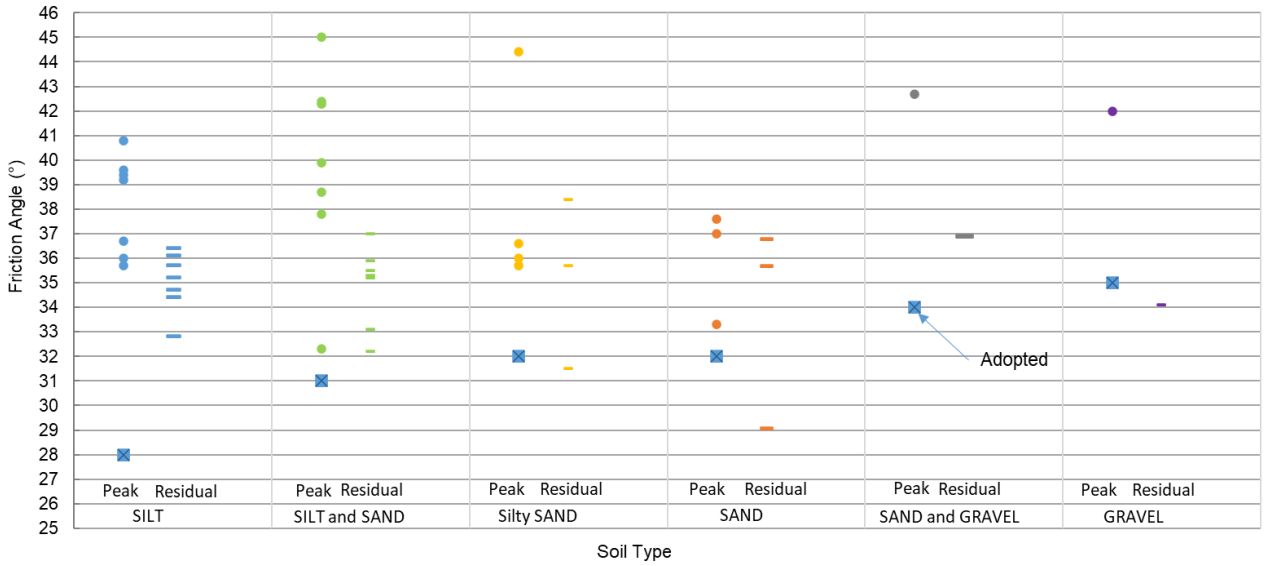

Figure 6-12: Inferred Angle of Friction on Various Soils from Laboratory Tests

Table 6-4: Internal Friction Angle for Soils from Testing Results and Published References

Soil Type	Values of Laboratory Testing for Soil Samples from Meliadine	Typical Values based on Literature Review [1]	Values to be Adopted in Slope Stability Analyses
SILT	35-41° (peak) 33-37° (residual)	27-30° (loose) 30-35° (dense)	28°
SILT and SAND	32-45° (peak) 32-37° (residual)	/	31°
Silty SAND	35-45° (peak) 31-39° (residual)	27-33° (loose) 30-35° (dense)	32°
SAND	33-38° (peak) 29-37° (residual)	27-34° (loose) 34-46° (dense)	32°
SAND and GRAVEL	43° (peak) 37° (residual)	33-50°	34°
GRAVEL	42° (peak) 34° (residual)	35-50°	35°

Note:
1: values are based literature (Bowles & Guo 1996, Terzaghi 1996, Harr 1966).
/: values are not provided.

On the basis of laboratory data presented graphically in Figure, the range of the strength values have been summarized in Table 6-4 along with typical values from published references (Bowles & Guo 1996, Terzaghi 1996, Harr 1966). This information has been utilized to determine the strength values of different soils for the slope stability analyses accordingly, and presented in the last column of Table 6-4 and copied to the material property table (Table 6-5).

An important factor in the slope stability assessment is the strength of the ice-rich SILT in the foundation. The frozen ice-rich soils are expected to behave as frictional materials under short-term loading conditions (i.e., during construction or during pseudo-static analysis) and as cohesive materials under long-term loading conditions. Accordingly, the angle of internal friction of 28° for thawed SILT will be used for ice-rich SILT under short-term loading conditions. The long-term cohesion of the frozen ice-rich SILT will be estimated based on the predicted temperatures from the thermal analysis, the publication by Weaver and Morgenstern (1981), and porewater salinity.

The overburden cover material is expected to behave as a frictional material in both short-term and long-term loading conditions. The friction angle of 28° will be adopted for the overburden cover material based on Tetra Tech's experience with similar materials at the Meliadine Mine and other northern mine sites.

The bedrock within the TSF footprint is a competent greywacke with depths ranging from approximately 0.13 m to 8.5 m. The strength of the bedrock is much greater than that of the overburden, and therefore, it will not control the stability. For modelling purposes, the bedrock will be assumed to be impenetrable.

Table 6-5 summarizes material properties to be used for the tailings and foundation materials in the stability analyses.

Table 6-5: Material Properties for the TSF Stability Analyses

Material	Effective Angle of Internal Friction, ø	Cohesion c	Bulk Density	Comments
	(º)	(kPa)	(kg/m^3)	
Waste Rock Cover	42	0	2,040	Based on Tetra Tech's experience with similar materials at the Meliadine Mine (WRSFs design) and other northern mine sites.
Overburden Cover	28	0	1,960	Based on Tetra Tech's experience with similar materials at the Meliadine Mine (WRSFs design) and other northern mine sites.
Tailings	34	0	1,900	The laboratory test results in 2025 indicated that the effective internal angle of friction ranged from 34.3° to 34.4° and cohesion ranged from 22.0 kPa to 49.7 kPa for tailings from the current mill operation. In this study, an internal friction angle of 34° is adopted for the tailings.
GRAVEL (Ice poor or thawed)	35	0	2,000	Ice-poor GRAVEL will behave as a frictional material in both short-term and long-term loading conditions. The friction angle of 35° will be adopted for GRAVEL based on Tetra Tech's experience with gravels at the Meliadine Mine (WRSFs design) and other northern mining projects.
SAND and GRAVEL	34	0	2,000	A residual internal angle of friction of 37° was measured from one SAND and GRAVEL sample. In slope stability analysis, a lower value of 34° will be adopted based on Tetra Tech's experience with similar materials at the Meliadine Mine (WRSFs design) and other northern mine sites.
SAND (Ice-poor or Thawed)	32	0	1,800	The laboratory test results indicated that the residual internal angle of friction ranges from 29° to 37° for SAND. In the slope stability analysis, an internal friction angle of 32° will be adopted for SAND.
Silty SAND	32	0	1,800	The residual internal angle of friction ranges from 31° to 38° for silty SAND. In the slope stability analysis, a value of 32° will be adopted. This value also falls in the suggested typical range of 27° to 34° for silty SAND (Carter and Bentley 1991; Obrzud and Truty 2010).
SAND and SILT (Ice-poor or Thawed)	31	0	1,800	The laboratory test results indicated that the residual internal angle of friction ranges from 32° to 37° for SILT and SAND. These values from the laboratory tests are on the high side based on the literature review (Bowles & Guo 1996, Terzaghi 1996, Harr 1966) and Tetra Tech's experience with similar materials at the Meliadine Mine (WRSFs design) and other northern mine sites. In the slope stability analysis, an internal friction angle of 31° will be adopted for SAND and SILT.

Table 6-5: Material Properties for the TSF Stability Analyses

Material	Effective Angle of Internal Friction, ø	Cohesion c	Bulk Density	Comments
	(º)	(kPa)	(kg/m^3)	
Thawed SILT	28	0	1,700	The internal friction angles from laboratory tests (32° to 36°) are on the high side for SILT side based on the literature review (Bowles & Guo 1996, Terzaghi 1996, Harr 1966) and Tetra Tech's experience with similar materials at the Meliadine Mine (WRSFs design) and other northern mine sites. In the slope stability analysis, an internal friction angle of 28° for SILT will be adopted, which is the same as that adopted in the existing TSF design and WRSFs detailed designs.
Ice-rich SILT	0	Temperature dependent	1,600	To be determined based on the predicted temperatures from the thermal analysis and the publication by Weaver and Morgenstern (1981) and then adjusted for the impact of porewater salinity on freezing point depression.
Thawing Ice-rich SILT	28	0	1,600	The same properties as thawed SILT above.
Ice-poor SILT	28	0	1,700	Similar behavior as thawed SILT in the long-term. The same shear strength will be adopted as thawed SILT.

7.0 LIQUEFACTION POTENTIAL

The liquefaction potential (under both static and cyclic loading) of the tailings and foundation overburden soils for the TSF is considered as low risk due to the following:

- Based on the findings from the 2025 site investigation programs and the latest laboratory testing program on the tailings, the in situ tailings at the TSF are expected to have a dilative behaviour, and susceptibility to static liquefaction under undrained shear conditions is unlikely;
- The Meliadine Mine site is in an area of low seismic risk;
- The foundation overburden soils are expected to be frozen, except for a small zone of seasonal unfrozen soils in the active layer close to the toe of the TSF; and
- If the foundation soils are thawed in the long term under the climate change scenario with higher emissions, the thawing rate is expected to be very slow with no excess pore-water pressure generated.

Based on the abovementioned, liquefaction induced failure of the TSF is not considered a credible failure mechanism. Accordingly, liquefaction assessment will not be conducted for the design of the TSF raise and extension.

8.0 DEFORMATION OF THE TSF AND ITS FOUNDATION

Settlement within the TSF is expected due to tailings consolidation after placement. During construction, the settlement of the tailings will be compensated by the sequential placement of additional lifts. Post closure settlement of the tailings will be estimated using results from the consolidation tests.

As described in Section 3.3, ice-rich materials were encountered in most of the boreholes drilled within the TSF footprint. These materials typically behave as visco-elastic media under loading and exhibit time dependent deformation (creep) under sustained shear. During the 2014 feasibility level design, a creep deformation analysis was conducted using FLAC 8.0 to evaluate the potential for creep displacement of the ice-rich material in the TSF foundation. FLAC 8.0 is a commercial two-dimensional explicit finite-difference program for engineering applications. The analyses were based on a continuous 1 m thick layer of ice-rich SILT being present beneath the entire TSF footprint with the predicted long-term ice-rich soil temperatures from the thermal analysis. The magnitude of the creep-induced deformations is mainly dependent on the state of stress, temperature, thickness, and porewater salinity of the ice-rich layer. For the design of the TSF raise and extension, the creep deformation model will be updated to incorporate the new proposed geometry, different subsurface ground conditions observed from the drilling and testpit programs, and results from the coupled thermal and seepage model.

In addition to static deformation, earthquake-induced displacement of the TSF will be assessed based on the simplified procedure proposed by Bray and Travasarou (2007). The widely accepted approach provides a preliminary estimate of seismic-induced deformation by accounting for both design geometry and seismic loading conditions. This simplified procedure will serve as an initial screening tool to determine whether more advanced dynamic stress-strain modelling is required for the design of the TSF raise and extension.

9.0 TSF PERFORMANCE MONITORING

Performance monitoring is an integral part of the operation of critical infrastructure at the Meliadine Mine. Geotechnical instrumentation is required to monitor the behavior of the placed filtered tailings and the underlying foundation during operation of the TSF. The instrumentation is intended to provide the following information:

- Verification that the performance of the foundation soils and placed filtered tailings are consistent with the predictions made during the design studies, notably in terms of stability, deformation, and thermal analyses.
- Early warning of the development of potentially adverse trends such as deformation and permafrost degradation.

Performance monitoring will be through GTCs and ShapeArray inclinometers. GTCs have been installed at eight locations in the placed tailings. These existing GTCs will be extended, where applicable and terminated at the side/top surfaces of the TSF. Additional GTCs will be installed within the TSF extension footprint.

ShapeArray inclinometers will be installed at the top surface of the current as-built TSF and around the toe of the as-built TSF prior to the raise construction to monitor the potential slope movements. Following placement of the closure cover, ShapeArray inclinometers will be installed on the crest of the TSF raise. For the TSF extension, ShapeArray inclinometers will be installed during the construction of the TSF where feasible. The locations and numbers of the ShapeArray inclinometers will be defined and documented in the detailed design report and drawings.

Regular visual inspection will be conducted during the construction phase. The frequency of the visual inspection will depend on the material placement activities and construction phases. An annual geotechnical inspection will be conducted by a qualified Geotechnical Engineer as per the conditions in the Type A Water Licence (2AM-MEL1631).

10.0 CLOSURE

We trust this memo meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.

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ENG.EARC03140-34

Prepared by:
Linping Wu, Ph.D., P.Eng.
Geotechnical Engineer, Arctic Group
Direct Line: 780.932.6983
Linping.Wu@tetratech.com

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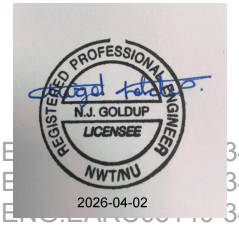
ENG.EARC03140-34
ENG.EARC03140-34

Prepared by:
Hongwei Xia, Ph.D., P.Eng.
Principal Specialist/Senior Geotechnical Engineer, Arctic Group
Direct Line: 587.460.3646
Hongwei.Xia@tetratech.com

ENG.EARC03140-34
ENG.EARC03140-34
ENG.EARC03140-34

Reviewed by:
Fai Ndofor, M.Sc., P.Geo.
Principal Consultant, Arctic Group
Direct Line: 587.460.3486
Fai.Ndofor@tetratech.com



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Reviewed by:
Nigel Goldup, M.Sc., P.Eng.
VP Circumpolar Development / Senior Geotechnical Engineer, Arctic Group
Direct Line: 587.460.3515
Nigel.Goldup@tetratech.com

/jf/kla

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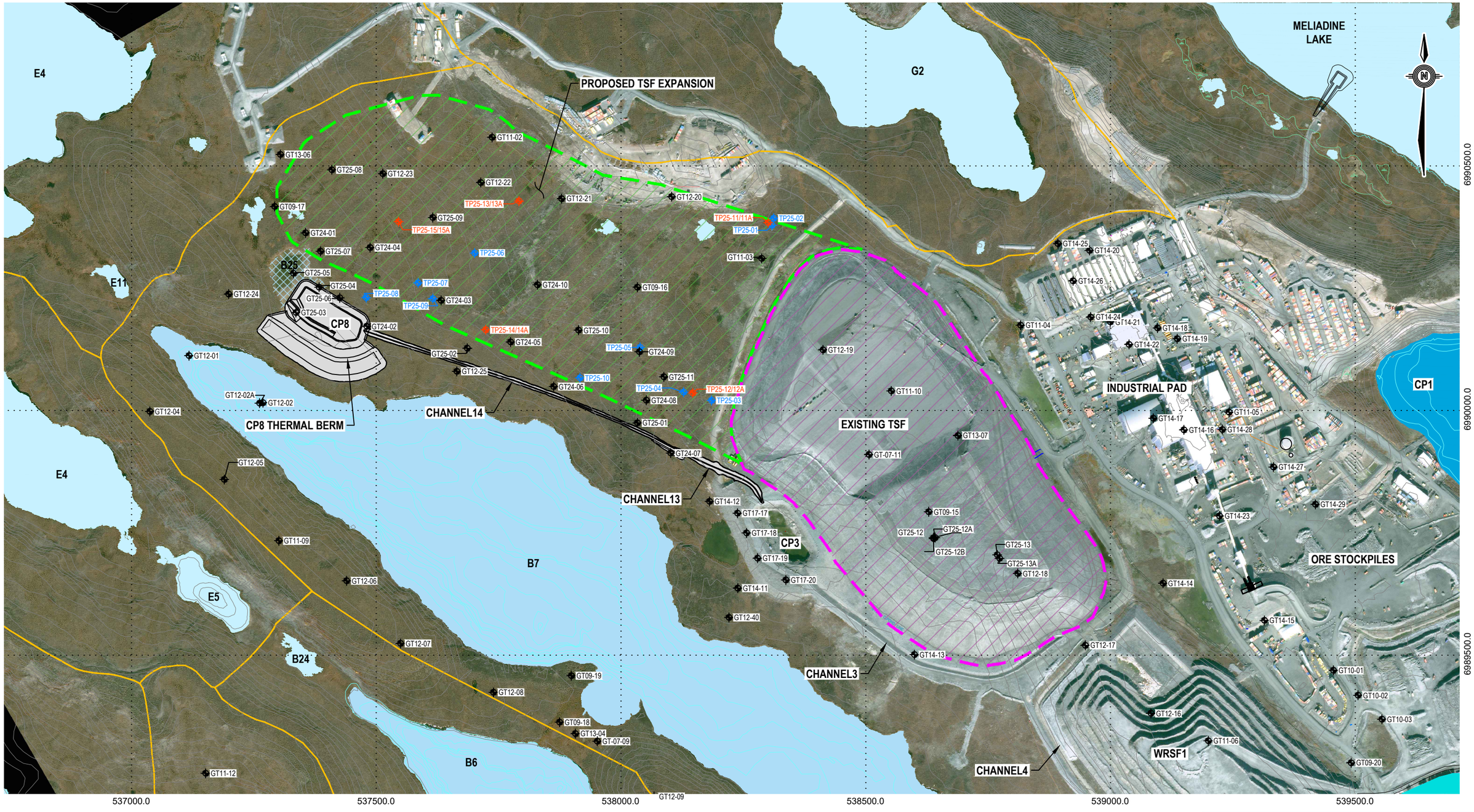
FIGURES

Figure A1 Borehole and Testpit Locations
Figure A2 TSF Permafrost Extent and Ground Ice Content
Figure A3 Typical Section Locations for Slope Stability Analysis



LEGEND:

- TESTPITS BY AGNICO EAGLE
- TESTPITS BY TETRA TECH
- BOREHOLE DRILLED
- CATCHMENT BOUNDARY

NOTE

SATELLITE IMAGE PROVIDED BY AGNICO EAGLE
TAKEN ON SEPTEMBER 22, 2025

0 250 m

Scale: 1: 7 500

STATUS
ISSUED FOR USE

CLIENT

AGNICO EAGLE

TETRA TECH

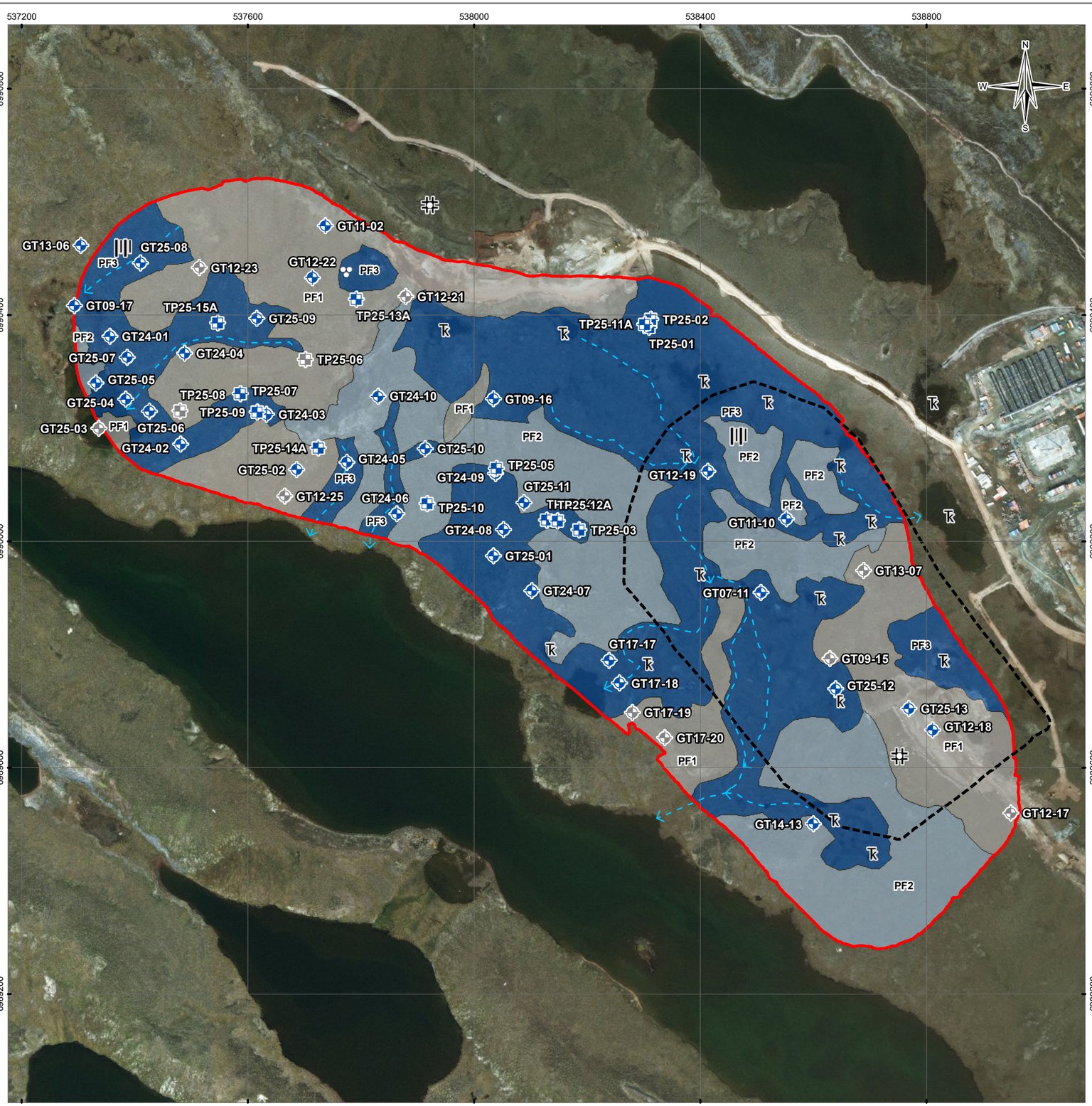
TAILINGS STORAGE FACILITY DESIGN UPDATE , MELIADINE GOLD MINE,NU

BOREHOLE AND TESTPIT LOCATIONS

PROJECT NO.	DWN	CKD	REV
ENG.EARC03140-34	DS / DBD	HX	0
OFFICE: EDM	DATE: December 2025		

Figure A1

Q:\Edmonton\Engineering\E141\Projects_MELIADINE\ENG.EARC03140-34 TSF Raise Detailed Design\DBM\CAD files\As-Built Test Pit Locations For TSF Expansion IFR - for DBM_HX.dwg [FIGURE A1] December 16, 2025 - 1:28:17 pm (BY: DAS_DEBASHIS)



LEGEND

- Borehole with Excess Ice
- Testpit with Excess Ice
- Borehole with No Excess Ice
- Testpit with No Excess Ice
- Study Area
- Existing TSF Footprint
- Flow direction

Non-sorted Circles: patterned ground form that is equidimensional in several directions, usually defined by a border of vegetation, formed by cycles of freezing and thawing with fine-grained soils at their core

Patterned Ground, Undifferentiated Polygons: Polygons and circles resulting from thermal contraction and cracking of ground and subsequent freezing/thawing

Patterned Ground, Undifferentiated Soil Stripes: slope induced features developed by the freezing/thawing action of the active layer sorting rocky soils into stripes and clusters

Thermokarst Terrain: areas where the thawing of ice-rich permafrost or the melting of excess ice has caused localized ground subsidence; depressions may be filled with water

PERMAFROST EXTENT AND GROUND ICE CONTENT

PF1 **Predominantly Ice-rich Permafrost with Negligible to Low Excess Ice Content (<10% by Volume of Excess Ice):**
Predominantly ice-rich ground with excess ice content generally less than 10% by volume of visible ice. May include patches of greater excess ice content (PF2, PF3) or permafrost-free ground.

PF2 **Predominantly Ice-Rich Permafrost with Medium Excess Ice Content (10%-20% by Volume of Excess Ice):**
Predominantly ice-rich ground with excess ice content ranging between 10% and 20% by volume of visible ice. May include patches of greater excess ice content (PF3), less excess ice content (PF1) or permafrost-free ground (PF0).

PF3 **Predominantly Ice-Rich Permafrost with High to Very High Excess Ice Content (>20% by Volume of Excess Ice):**
Predominantly ice-rich ground with excess ice content exceeding 20% by volume of visible ice. May include patches of lesser excess ice content (PF2), ice-poor permafrost (PF1), or permafrost-free ground.

STATUS
ISSUED FOR USE

NOTES
Base data source: Imagery provided by ESRI; Wayback (2018)

TERRAIN AND PERMAFROST EXTENT MAPPING FOR TSF DESIGN UPDATE MELIADINE GOLD PROJECT, NU

TSF Permafrost Extent and Ground Ice Content

PROJECTION	DATUM	CLIENT
UTM Zone 15	NAD83	AGNICO EAGLE

Scale: 1:7,500
150 75 0 150
Metres

TETRA TECH

FILE NO. EARC03140-51_FigureA2_Permafrost.mxd

OFFICE	DWN	CKD	APVD	REV
Tt-EDM	MRB	SL	EP	0

DATE March 26, 2026
PROJECT NO. ENG.EARC03140-51

Figure A2

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537000.0 537500.0 538000.0 538500.0 539000.0 539500.0

6990500.0 6990000.0 6989500.0

PROPOSED TSF EXPANSION

MELIADINE LAKE

E4 E5 E11 B24 B25 B7 B6 G2

PF1 PF2 PF3

CP8 CP8 THERMAL BERM CP1 CP3

CHANNEL14 CHANNEL13 CHANNEL3 CHANNEL4

EXISTING TSF

INDUSTRIAL PAD ORE STOCKPILES WRSF1

GT11-02 GT13-06 GT25-08 GT12-23 GT12-22 GT12-21 GT12-20 GT09-17 GT25-09 GT24-01 GT25-07 GT24-04 GT25-05 GT25-04 GT25-06 GT12-24 GT25-03 GT24-02 GT12-01 GT25-02 GT12-25 GT24-10 GT09-16 GT25-10 GT24-05 GT24-09 GT25-11 GT24-08 GT25-01 GT24-07 GT12-19 GT11-10 GT13-07 GT07-11 GT09-15 GT25-12 GT25-12A GT25-12B GT25-13 GT25-13A GT12-18 GT14-11 GT17-20 GT17-19 GT17-18 GT17-17 GT14-12 GT12-40 GT14-13 GT12-17 GT11-03 GT11-04 GT14-25 GT14-20 GT14-26 GT14-24 GT14-21 GT14-18 GT14-19 GT14-22 GT11-05 GT14-17 GT14-16 GT14-28 GT14-27 GT14-29 GT14-23 GT14-14 GT14-15 GT10-01 GT10-02 GT10-03 GT12-16 GT11-06 GT09-20 GT12-02A GT12-02 GT12-04 GT12-05 GT11-09 GT12-06 GT12-07 GT09-19 GT12-08 GT09-18 GT13-04 GT07-09 GT11-12

TP25-13/13A TP25-15/15A TP25-06 TP25-07 TP25-08 TP25-09 TP25-14/14A TP25-10 TP25-05 TP25-04 TP25-12/12A TP25-03 TP25-11/11A TP25-02 TP25-01

A B C D E F

N

LEGEND:

- TESTPITS BY AGNICO EAGLE
- TESTPITS BY TETRA TECH
- BOREHOLE DRILLED
- CATCHMENT BOUNDARY

NOTE

SATELLITE IMAGE PROVIDED BY AGNICO EAGLE TAKEN ON SEPTEMBER 22, 2025

0 250 m

Scale: 1: 7 500

PERMAFROST EXTENT AND GROUND ICE CONTENT:

PF1 **Predominantly Ice-rich Permafrost with Negligible to Low Excess Ice Content (<10% by Volume of Excess Ice):**
Predominantly ice-rich ground with excess ice content generally less than 10% by volume of visible ice. May include patches of greater excess ice content (PF2, PF3) or permafrost-free ground.

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Predominantly ice-rich ground with excess ice content exceeding 20% by volume of visible ice. May include patches of lesser excess ice content (PF2), ice-poor permafrost (PF1), or permafrost-free ground.

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

TAILING STORAGE FACILITY DESIGN UPDATE , MELIADINE GOLD MINE, NU

TYPICAL SECTION LOCATIONS FOR SLOPE STABILITY ANALYSIS

PROJECT NO.	DWN	CKD	REV
ENG.EARC03140-34	DS / DBD	HX	0
OFFICE: EDM	DATE: December 2025		

Figure A3

Q:\Edmonton\Engineering\E141\Projects_MELIADINE\ENG.EARC03140-34 TSF Raise Detailed Design\DBM\CAD files\As-Built Test Pit Locations For TSF Expansion IFR - for DBM_Fig A3.dwg [FIGURE A3] March 26, 2026 - 9:04:19 am (BY: XIA, HONGWEI)

APPENDIX A

BOREHOLE LOGS

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-20

SHEET 1 OF 2
DATUM: Ground Surface

LOCATION: TSF Dike
N: ~6990437 E: ~538104 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.

DRILLING DATE: 7/31/2012
DRILLING CONTRACTOR: Boart Longyear

DEPTH SCALE METRES	DRILLING RIG	DRILLING METHOD	DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES BLOWS/0.3m	RUN No.	RECOVERY %	ICE DESCRIPTION	GRADATION % GRAVEL	GRADATION % SAND	GRADATION % FINES	SHEAR STRENGTH Cu, kPa (nat V. + Q - ● / rem V. ⊕ U - ○) / WATER CONTENT % (Wp W Wi; field est. - ◎ / lab - ○ / ice est. - ○)	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
0	LF-70 (HQ3)	Diamond Drilling	Ground Surface														
			(PT) PEAT, spongy, black, moist, fibrous contains rootlets		0.07				1								
1			**(SW/GW)** SAND and GRAVEL, coarse to fine sand, coarse to fine and subrounded gravel, brown, contains cobbles (diameter ~100 mm), moist to wet														
			COBBLES, diameters about ~100 mm, ~200 mm, ~250 mm		1.25				2								
2									3								
			(SW/GW) SAND and GRAVEL, coarse to fine sand, coarse to fine and subrounded gravel, grey, contains cobbles (diameter ~100 mm), wet		2.15				4								
3																	
			BOULDERS, diameters about ~1300 mm and 1000 mm		3.65				5								
4																	
5									6								
6			at 6 m a brown silt layer about 200 mm thick between boulders														
			(ML) gravelly sandy SILT, angular and coarse sand, grey, heterogenous, non-cohesive, frozen at 6.9 m a 350 mm boulder		6.60	1	SC		7		Nf	19	32	49	○		
7			**(SM/GP)** SILTY SAND and GRAVEL, subrounded gravel, beige, heterogenous, contains cobbles, non-cohesive, frozen		7.50				8								
8																	
			Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.		8.30												
9																	
10																	

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AS/FA
CHECKED: DRAFT

File:O:\ACTIVE_2011\1428\11-1428-0011_AEMMEL\ADMIN\ETAILING\53\200_2012 DRILLING PROGRAM\GINT\MASTERFILE 14\AUG2012\MASTER_FILE_22AUGUST2012.GPJ Output Form:BC_BOREHOLE (SONIC) (AUTO) Template:BC REGION TEMPLATE BETA 2.GDT Library:BC REGION LIBRARY.GLB fascencio 9/27/12

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-20

SHEET 2 OF 2
DATUM: Ground Surface

LOCATION: TSF Dike
N: ~6990437 E: ~538104 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.
INCLINATION: -90° AZIMUTH: n/a

DRILLING DATE: 7/31/2012
DRILLING CONTRACTOR: Boart Longyear

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1)	INDICES: WEATHERING / ALTERATION (W2 W3 W4 2 3 4)	RECOVERY: TOTAL CORE %	RECOVERY: RQD %	FRACTURE FREQ. PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (degrees) 0-30 30-60 60-90	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	JCon	Jr	Ja	Fault/Breccia/Gouge	Soil Cover / Bedrock Cover	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Cont'd from Record of Borehole.																	
9	LF-70 (HQ3) Diamond Drilling	Fresh, thickly foliated, grey, fine grained, non-porous, strong, GREYWACKE or SILTSTONE, presence of quartz veining		8.30	8								FOL,PL,Ro,ST						
													FOL,UN,Ro,CC,Si, <1mm						8.90
																			9.11
													FOL,UN,Ro,CC,Si, <1mm						9.33
													FOL,UN,Ro,ST						9.54
10													FOL,PL,Ro,ST						
					9								FOL,UN,Ro,ST						
													FOL,UN,Ro,ST						
													FOL,UN,Ro,CC,Si, <1mm						
11													FOL,UN,Ro,ST						
		End of Drillhole.		11.00															
12																			
13																			
14																			
15																			
16																			
17																			
18																			

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AS/FA
CHECKED: DRAFT

File: O:\ACTIVE_2011\1428\11-1428-0011_AEMMELIA\DMET\ALIKGS\3200_2012 DRILLING PROGRAM\GINTMASTERFILE 14AUG2012MASTER_FILE_22AUGUST2012.GPJ Output Form: BC_DRILLHOLE (MINING STD) Template: BC REGION TEMPLATE BETA 2.GDT Library: BC REGION LIBRARY.GLB Isacando 9/25/12

PROJECT No.: 11-1428-0011

LOCATION: TSF Dike

N: ~6990433 E: ~537879 UTM Zone: 15

Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.

RECORD OF BOREHOLE: GT12-21

DRILLING DATE: 6/19/2012

DRILLING CONTRACTOR: Boart Longyear

SHEET 1 OF 2

DATUM: Ground Surface

DEPTH SCALE METRES	DRILLING RIG	DRILLING METHOD	SOIL PROFILE: DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: BLOWS/0.3m	RUN: RUN No.	RUN: RECOVERY %	ICE DESCRIPTION	GRADATION %: GRAVEL	GRADATION %: SAND	GRADATION %: FINES	SHEAR STRENGTH Cu, kPa (nat V. + Q - ●, rem V. ⊕ U - ○) / WATER CONTENT % (Wp, W, Wl; field est. - ◎, lab - ○, ice est. - ◇)	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
0			Ground Surface														
	LF-70 (HQ3)	Diamond Drilling	**(GW)** GRAVEL, coarse and angular to subangular gravel, some sand, trace silt, dark brown to black		0.00				1								
2.5			**(GW)** GRAVEL, coarse and angular to subangular, some sand, trace silt, grey		2.50				2								
4			**(SM)** gravelly SILTY SAND, fine to coarse and angular to subangular gravel, non-cohesive, grey		4.00	1	SC		3			31	39	30	○		
5			**(ML)** sandy gravelly SILT, grey		5.50	2	SC		4			34	20	46	○	NP	
6			Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.		6.24												
7																	
8																	
9																	
10																	

DEPTH SCALE

1 : 50

Golder Associates

LOGGED: CH

CHECKED: DRAFT

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PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-21

SHEET 2 OF 2
DATUM: Ground Surface

LOCATION: TSF Dike
N: ~6990433 E: ~537879 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.
INCLINATION: -90° AZIMUTH: n/a

DRILLING DATE: 6/19/2012
DRILLING CONTRACTOR: Boart Longyear

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1)	INDICES: WEATHERING / ALTERATION (W2 W3 W4 3 4)	RECOVERY: TOTAL CORE %	RECOVERY: RQD %	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (degrees)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Cont'd from Record of Borehole.																	
7	LF-70 (HQ3) Diamond Drilling	Fresh, thickly foliated, grey, fine grained, faintly porous, strong, GREYWACKE or SILTSTONE, presence of calcite veins		6.24	4								JN,PL,Ro,-,-, >5mm	0					
													JN,PL,Ro,-,-, <1mm	20					
					5								JN,PL,Ro,IN,Ca, 1mm	6					
													JN,PL,Ro,IN,Ca, 3mm	6					
													JN,PL,Ro,-,-, 3mm	6					
													JN,PL,Ro,IN,Ca, 1mm	6					
													FR,IR,Ro,-,-, <1mm	20					
8													JN,IR,Ro,IN,Ca, 4mm	6					
													JN,UN,Ro,IN,Ca, 3mm	6					
													JN,PL,Ro,-,-, <1mm	20				8.99	
					6								JN,IR,Ro,IN,Qz, 35mm	0					
													FR,IR,Ro,-,-, 4mm	6					
9													JN,PL,Ro,IN,Ca, <1mm	25					
													JN,PL,Ro,IN,Ca, <1mm	6					
													JN,PL,Ro,IN,Ca, <1mm	6					
													JN,PL,Ro,IN,Ca, <1mm	6					
													JN,PL,Ro,IN,Ca, <1mm	6					
													JN,PL,Ro,IN,Ca, <1mm	6					
													JN,PL,Ro,IN,Ca, <1mm	6					
													JN,IR,Ro,IN,Qz/Su, 2mm	6					
													JN,ST,Ro,-,-, 2mm	6					
10													JN,PL,Ro,IN,Ca, <1mm	6					
													JN,IR,Ro,-,-, <1mm	20					
		End of Drillhole.		10.00															
11																			
12																			
13																			
14																			
15																			
16																			

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: CH
CHECKED: DRAFT

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PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-22

SHEET 1 OF 2
DATUM: Ground Surface

LOCATION: TSF Dike
N: ~6990466 E: ~537714 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.

DRILLING DATE: 6/18/2012
DRILLING CONTRACTOR: Boart Longyear

DEPTH SCALE METRES	DRILLING RIG	DRILLING METHOD	SOIL PROFILE: DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: BLOWS/0.3m	RUN: RUN No.	RUN: RECOVERY %	ICE DESCRIPTION	GRADATION %: GRAVEL	GRADATION %: SAND	GRADATION %: FINES	SHEAR STRENGTH Cu, kPa (nat V. +, rem V. ⊕; Q - ●, U - ○) / WATER CONTENT % (Wp, W, Wl; field est. - ◎, lab - ○, ice est. - ○)	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
0	LF-70 (HQ3)	Diamond Drilling	Ground Surface														
			(PT) PEAT, fibrous, dark brown		0.05												
			(SM) gravelly SILTY SAND, angular to subangular gravel, brown to grey, contains cobbles and boulders						1								
1						1	SC				Vu	33	35	32	○		
2						2	SC					32	34	34	○		
									2								
3			COBBLES,		2.75												
									3								
					3.67												
4			Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.														
5																	
6																	
7																	
8																	
9																	
10																	

DEPTH SCALE
1 : 50

LOGGED: CA/CH
CHECKED: DRAFT

Golder Associates

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PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-22

SHEET 2 OF 2
DATUM: Ground Surface

LOCATION: TSF Dike
N: ~6990466 E: ~537714 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.
INCLINATION: -90° AZIMUTH: n/a

DRILLING DATE: 6/18/2012
DRILLING CONTRACTOR: Boart Longyear

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1)	INDICES: WEATHERING / ALTERATION (W2 W3 W4 / 2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20)	RECOVERY: RQD % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (degrees) (90 60 30)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge (Broken Core)	Lost Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Cont'd from Record of Borehole.																	
4	LF-70 (HQ3) Diamond Drilling	Fresh, thickly foliated, grey, fine grained, faintly porous, strong, GREYWACKE or SILTSTONE, presence of calcite veins		3.67	3								JN,PL,Ro,IN,Qz, 4mm	6					
													JN,PL,SM,-,-, 1mm	6					
													JN,PL,SM,-,-, 2mm	6					
													FR,IR,Ro,-,-, <1mm	25					
5					4								JN,CU,Ro,IN,Qz, 3mm	6					
													JN,PL,Ro,DC,Qz, 3mm	6					5.01
																			5.30
6													JN,PL,Ro,DC,Qz, 2mm	6					
													JN,PL,Ro,DC,Qz/Su, 2mm	6					
													FR,IR,Ro,-,-, <1mm	25					
					5								JN,CU,Ro,-,-, 1mm	6					
													JN,PL,Ro,CC,Qz, <1mm	12					
7													JN,PL,Ro,CC,Qz, <1mm	12					6.75
																			7.29
													FR,IR,Ro,IN,Si, 3mm	6					
													JN,PL,Ro,DC,Qz, <1mm	12					
		End of Drillhole.		7.50															
8																			
9																			
10																			
11																			
12																			
13																			

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: CA/CH
CHECKED: DRAFT

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PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-23

SHEET 1 OF 2
DATUM: Ground Surface

LOCATION: TSF Dike
N: ~6990484 E: ~537514 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.

DRILLING DATE: 6/17/2012
DRILLING CONTRACTOR: Boart Longyear

DEPTH SCALE METRES	DRILLING RIG	DRILLING METHOD	DESCRIPTION	STRATA PLOT	ELEV. DEPTH (m)	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES BLOWS/0.3m	RUN No.	RUN RECOVERY %	ICE DESCRIPTION	GRADATION % GRAVEL	GRADATION % SAND	GRADATION % FINES	SHEAR STRENGTH Cu, kPa (nat V. +, rem V. ⊕, Q - ●, U - ○) / WATER CONTENT % (Wp, W, Wl; field est. - ⊛, lab - ○, ice est. - ○)	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
0	LF-70 (HQ3)	Diamond Drilling	Ground Surface														
			(PT) PEAT,														
			(GM) silty GRAVEL, fine to coarse and subangular to subrounded gravel, non-cohesive, brown, contains cobbles		0.10				1								
1																	
2			No recovery		2.25				2								
3			(GW) GRAVEL, fine to coarse and subangular to subrounded gravel, some silt, contains cobbles and boulders		3.00				3								
4									4								
			Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.		4.72												
5																	
6																	
7																	
8																	
9																	
10																	

SHEAR STRENGTH Cu, kPa: 20, 40, 60, 80
WATER CONTENT %: 10, 20, 30, 40
RUN RECOVERY %: 80, 60, 40, 20

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: CH
CHECKED: DRAFT

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PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-23

SHEET 2 OF 2
DATUM: Ground Surface

LOCATION: TSF Dike
N: ~6990484 E: ~537514 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.
INCLINATION: -90° AZIMUTH: n/a

DRILLING DATE: 6/17/2012
DRILLING CONTRACTOR: Boart Longyear

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (m)	RUN No.	INDICES: ROCK STRENGTH / WEATHERING / ALTERATION	RECOVERY: TOTAL CORE %	RECOVERY: RQD %	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (degrees)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	J con	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Cont'd from Record of Borehole.																
5	LF-70 (HQ3) Diamond Drilling	Fresh, thickly foliated, grey, fine grained, faintly porous, strong GREYWACKE or SILTSTONE, presence of calcite veins		4.72	4	R5 R4 R3 R2 R1 / W1 W2 W3 W4 / A1 A2 A3 A4						FR,PL,Ro,-,- 2mm FR,PL,Ro,-,- 3mm JN,PL,Ro,IN,Qz, 4mm JN,ST,Ro,-,- <1mm JN,PL,Ro,IN,Qz/Su, 4mm JN,PL,Ro,-,- <1mm	6 6 6 20 6 20					
6					5							JN,PL,Ro,-,- 2mm JN,PL,Ro,-,- <1mm JN,PL,Ro,IN,Qz, 2mm JN,PL,Ro,IN,Qz, <1mm FR,CU,Ro,-,- 6mm FR,IR,Ro,-,- <1mm	6 20 6 6 0 20				6.20	
7												JN,ST,Ro,-,- <1mm	20				7.06	
8					6							JN,PL,Ro,-,- <1mm JN,PL,SM,IN,Qz, 3mm FR,IR,Ro,-,- 2mm JN,PL,Ro,IN,Qz, 2mm FR,CU,Ro,-,- 3mm JN,PL,Ro,-,- <1mm JN,CU,Ro,-,- 1mm JN,PL,Ro,-,- 1mm	20 6 6 6 6 20 6 6					
9		End of Drillhole.		9.00								JN,ST,Ro,-,- 1mm FR,IR,Ro,-,- 3mm JN,PL,Ro,IN,Qz, 1mm FR,UN,Ro,-,- 1mm JN,ST,Ro,-,- <1mm	6 6 6 6 20					
10																		
11																		
12																		
13																		
14																		

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: CH
CHECKED:

DRAFT

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PROJECT No.: 09-1426-0015

RECORD OF BOREHOLE: GT09-16

SHEET 1 OF 3
DATUM: Geodetic

LOCATION: Meliadine Gold Project, Nunavut
N: 6990252 E: 538034 UTM NAD83 Zone: 15N
Survey Provided by: Comaplex Minerals Corp., Dated August 24, 2009

DRILLING DATE: September 3, 2009
DRILLING CONTRACTOR: Boart Longyear

SAMPLER HAMMER, 64kg; DROP, 762mm

DEPTH SCALE METRES	BORING RECORD	DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	SAMPLES: TYPE (mm) / TYPE	SAMPLES: BLOWS/0.3m	CORE: RUN No.	CORE: RECOVERY %	GRADATION %: GRAVEL	GRADATION %: SAND	GRADATION %: FINES	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Ground Surface		71.81										TW09-08
0		No recovery		0.00 / 71.56	1	DO	13	1						
		Loose, black, sandy GRAVEL, little organics.		0.30	7A	DO	6	7A						
		Loose, brown, gravelly SILT and SAND, trace clay.		71.11	2B	DO	8	2B		27	38	35	MH	
1		Compact, brown grey, angular, sandy GRAVEL, trace silt.		0.70 / 70.66	3	DO	24	3						
		Dense, brown grey black, angular GRAVEL, some sand.			4A	DO	36	4A						Node 1
					4B	DO	36	4B						
					4C	DO	36	4C						
		Dense, wet, brown, silty SAND, trace clay.		1.44	5	DO	10	5						Node 2
2		Frozen, grey, silty SAND and GRAVEL. @ 1.37m refusal. [ICE + SAND and GRAVEL, hard, grey clear ice]												Node 3
		No recovery. @ 1.44m refusal.						5B						
		GRAVEL (mechancially broken and sub angular) and COBBLES (80mm, 84mm, 125mm). Granite, metavolcanics and greywacke. @ 1.9m driller reports loss of water pressure.		68.87										Node 4
3		Dense, moist, grey black, angular GRAVEL, little sand becoming sandy gravel with depth.		2.94 / 68.56	6	DO	74	6						Node 5
		Frozen, grey, silty CLAY with SAND, trace gravel, trace clay. (TILL)		3.25 / 68.34	7A	DO	50	7A						
				3.47	7B	DO	50	7B		4	47	49	MH	Node 6
4								8						
		GRAVEL (sub angular and mechancially broken) and COBBLES (84mm, 135mm, 163mm, 253mm). Greywacke, sandstone.												
5								9						Node 7
				65.90										
6		Broken Bedrock.		5.91				10						
				64.84										
7		Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.		6.97										
8														
9														
10														

HYDRAULIC CONDUCTIVITY, k, cm/s: 10^{-6} 10^{-5} 10^{-4} 10^{-3}
WATER CONTENT PERCENT: Wp — W — Wl; 10 20 30 40

Boart Longyear LF 70 PW

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AE/SG
CHECKED: AE/CJC

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PROJECT No.: 09-1426-0015

RECORD OF DRILLHOLE: GT09-16

SHEET 2 OF 3
DATUM: Geodetic

LOCATION: Meliadine Gold Project, Nunavut
N: 6990252 E: 538034 UTM NAD83 Zone: 15N
Survey Provided by: Comaplex Minerals Corp., Dated August 24, 2009

DRILLING DATE: September 3, 2009
DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	ROCK STRENGTH INDEX (R5 R4 R3 R2 R1)	WEATHERING INDEX (W1 W2 W3 W4)	RECOVERY: TOTAL CORE % (80 60 40 20)	RECOVERY: R.Q.D. % (80 60 40 20)	FRACTURE FREQ. PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (degrees) (0-30 30-60 60-90)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Broken Core	Lost Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Cont'd from Record of Borehole.		64.84																TW09-08
7	Boart Longyear LF 70 HQ3 Diamond core with water			6.97									JN,-,-,ST							
													FR,IR,RO,SA,0.1mm	20	3	2				
													JN,ST,RO,DC,0.1mm	20	3	2				
					1					4	6		FOL,CU,RO	20	3	1				
8																				
													FOL,PL,RO,ST	20	1.5	1				
					2					4	12		JN,PL,RO,DC,Ca,0.1mm	20	1.5	2				
9													JN,PL,RO,ST	20	1.5	1				
													JN,PL,RO,ST	20	1.5	1				
													JN,PL,RO,ST	20	1.5	1				
10													FOL,PL,RO,ST	20	1.5	1				
		Slightly sericitized, foliated, dark grey, fine to medium grained, faintly porous, strong to medium strong GREYWACKE. Few 1mm to 3mm thick calcite veinlets and 1mm to 2cm thick quartz veins. 2 foliation orientations visible.			3					6	12		JN,PL,RO,ST	20	1.5	1				
													FR,CU,RO,ST	20	3	1				
11													JN,PL,RO,DC,Pyr; Ca,0.1mm	20	1.5	2				
													JN,PL,RO,DC,Pyr; Fe; Ca,0.1mm	20	3	2				
													JN,UN,Ro,DC,Py; Fe; Ca,0.1mm							
					4					7	12									
12													JN,PL,RO,DC,Ca,1mm	12	1.5	2				
													FOL,PL,SM,ST	12	1	1				
													FOL,PL,SM,ST	12	1	1				
													FOL,PL,SM,ST	12	1	1				
													JN,PL,RO,DC,Ca,0.1mm	20	1.5	2				
													JN,PL,RO,ST,Ca	20	1.5	1				
													FR,PL,RO	20	1.5	1				
13													JN,PL,SM,DC,Ca,0.1mm	12	1	2				
													JN,PL,RO,DC,Ca,0.1mm	20	1.5	2				
					5					3	6		FOL,PL,RO,ST	20	1.5	1				
14																				
				57.35																
				14.46									VN,PL,RO,CC,Ca; Sa,2mm	6	1	3				
													JN,CU,RO,ST	20	3	1				
15					6					6	12		JN,PL,RO,ST	20	1.5	1				
		Slightly sericitized, foliated, dark grey, fine to medium grained, faintly porous, medium strong to strong GREYWACKE. Randomly oriented calcite veinlets. 2 foliation orientations visible. Foliation is less visible in medium grained core.											FOL,PL,SM,DC,Ca,0.1mm	12	1	2				
													JN,IR,RO,DC,Ca,0.1mm	20	3	2				
													JN,ST,RO,ST,Pyr,0.1mm	20	3	1				
16													JN,PL,RO,DC,Ca,1mm	12	1.5	2				
					7					5	12		JN,PL,RO,DC,Ca; Pyr,1mm	12	1.5	2				
													JN,PL,RO,ST,Pyr	20	1.5	1				
													JN,PL,RO,ST,Pyr	20	1.5	1				
													JN,PL,RO,DC,Ch,0.1mm	20	1.5	3				

Node 8

Node 9

CONTINUED NEXT PAGE

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AE/SG
CHECKED: AE/CJC

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PROJECT No.: 09-1426-0015

RECORD OF DRILLHOLE: GT09-16

SHEET 3 OF 3
DATUM: Geodetic

LOCATION: Meliadine Gold Project, Nunavut
N: 6990252 E: 538034 UTM NAD83 Zone: 15N
Survey Provided by: Comaplex Minerals Corp., Dated August 24, 2009

DRILLING DATE: September 3, 2009
DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	ROCK STRENGTH INDEX (R5 R4 R3 R2 R1)	WEATHERING INDEX (W1 W2 W3 W4)	RECOVERY TOTAL CORE % (80 60 40 20)	RECOVERY R.Q.D. % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (degrees) 0-30 30-60 60-90	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core	Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.																		TW09-08
17	Boart Longyear LF 70 HQ3 Diamond core with water	Slightly sericitized, foliated, dark grey, fine to medium grained, faintly porous, medium strong to strong GREYWACKE. Randomly oriented calcite veinlets. 2 foliation orientations visible. Foliation is less visible in medium grained core. *(continued)*									12		JN,PL,VR,DC,Ca;	20	1.5	2				
													Pyr,0.1mm	20	1.5	2				
													JN,PL,RO,DC,Ca,0.1mm							
													JN,PL,RO,DC,Ca,0.1mm	20	1.5	2				
18					8					5	12		JN,PL,SM,DC,Ca,0.1mm	12	1	2				
													JN,PL,RO,ST	20	1.5	1				
													FOL,PL,RO	20	1.5	1				
19					9					4	12		JN,CU,RO,DC,Ca	20	3	2				
													FR,PL,RO,ST	20	1.5	1				
20													JN,IR,RO,ST	20	3	1				
													FLT,PL,SM,IN,Gv,10mm	0	1	5			20.13 20.42	
													FR,PL,RO	20	1.5	1				Node 10
21					10					2	6										
				50.08																	
22		End of Drillhole.		21.73																	
23																					
24																					
25																					
26																					

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AE/SG
CHECKED: AE/CJC

File:O:\ACTIVE_2009\1426\09-1426-0015_COMAPLEX_ENGINEERING_MELIADINE\GINT\09-1426-0015 (3200_6000) UPDATED.GPJ Output Form:DRILLHOLE (CUSTOM 5) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB KCapes 17/2/10

PROJECT No.: 09-1426-0015

RECORD OF BOREHOLE: GT09-17

SHEET 1 OF 3
DATUM: Geodetic

LOCATION: Meliadine Gold Project, Nunavut
N: 6990429 E: 537283 UTM NAD83 Zone: 15N
Survey Provided by: Comaplex Minerals Corp., Dated August 30, 2009

DRILLING DATE: September 4, 2009
DRILLING CONTRACTOR: Boart Longyear

SAMPLER HAMMER, 64kg; DROP, 762mm

DEPTH SCALE METRES	BORING RECORD	SOIL PROFILE: DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	TYPE (mm) / TYPE	BLOWS/0.3m	CORE: RUN No.	RECOVERY %	GRADATION %: GRAVEL	SAND	FINES	HYDRAULIC CONDUCTIVITY, k, cm/s / WATER CONTENT PERCENT	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Ground Surface		63.96											TW09-07
0	Boart Longyear LF 70 PW	Loose, moist black brown FIBROUS PEAT, some sand, some gravel.		0.00 63.66	1A	DO	50	1a							
		Frozen, grey SILT and SAND, little gravel. [Vr, two ice inclusions > 2.5cm]		0.30 63.11	1B 2A	DO DO	50 85	1b 2a<<		8	57	35		MH	
1		Frozen, grey, sub angular SAND and GRAVEL, some silt. [Vr]		0.85 62.76	2B	DO	85	2b<							Node 1
		Frozen, grey, sandy SILT, some gravel, shells. [Vx]		1.20 62.31	3	DO	66	3<<							Node 2
		Very dense, grey, angular GRAVEL, some sand, little silt. (TILL) @ 1.85m refusal.		62.11	4	DO	10	4							Node 3
2		No recovery.		1.85 61.61				4B							Node 4
		Angular GRAVEL. (TILL) @ 2.46m refusal. Gravel possibly cave material from above.		61.50 2.46	5	DO	10	5							
		Broken Bedrock. Greywacke.		61.18 2.78				6							
3		Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.													
4															
5															
6															
7															
8															
9															
10															

HYDRAULIC CONDUCTIVITY, k, cm/s: 10^{-6} 10^{-5} 10^{-4} 10^{-3}
WATER CONTENT PERCENT: Wp — W — Wl; 10 20 30 40
ADDITIONAL LAB. TESTING: 103, 105, 77

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AE/SG
CHECKED: AE/CJC

File:O:\ACTIVE_2009\1426\09-1426-0015_COMAPLEX_ENGINEERING_MELIADINE\GINT\09-1426-0015 (3200_6000) UPDATED.GPJ Output Form:BOREHOLE CUSTOM 3 (AUTO) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB KCapes 17/2/10

PROJECT No.: 09-1426-0015

RECORD OF DRILLHOLE: GT09-17

SHEET 2 OF 3
DATUM: Geodetic

LOCATION: Meliadine Gold Project, Nunavut
N: 6990429 E: 537283 UTM NAD83 Zone: 15N
Survey Provided by: Comaplex Minerals Corp., Dated August 30, 2009

DRILLING DATE: September 4, 2009
DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION: TW09-07

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	ROCK STRENGTH INDEX	WEATHERING INDEX	RECOVERY: TOTAL CORE %	RECOVERY: R.Q.D. %	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (degrees)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core	Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Cont'd from Record of Borehole.		61.18																
3				2.78							2									Node 5
		Broken Bedrock.			2					1	2		FR,PL,RO	20	1.5	1				Node 6
				60.00																
4				3.96																
		Fresh, thickly foliated, dark grey, fine to medium grained, strong GREYWACKE.			3					4	6		JN,PL,RO,ST,Ca	20	1.5	1				
5													JN,PL,RO,ST,Fe	20	1.5	1				
													BC,PL,RO,IN,Br,30mm	0	1.5	5		5.39 5.27		
				58.50									JN,PL,RO,ST,Fe	20	1.5	1				Node 7
				5.46									JN,ST,RO,DC,M,0.1mm	12	3	2				
6													JN,PL,RO,ST	20	1.5	1				
					4					4	12		JN,PL,RO,ST	20	1.5	1				
													JN,PL,RO,DC,Ca,0.1mm	20	1.5	2				
7		Fresh, thickly foliated, dark grey, fine to medium grained, slightly porous, strong GREYWACKE.											OR,UN,RO,DC,M; Fe,1mm	12	3	3				
													JN,CU,RO,DC,M,0.1mm	20	3	2				
													JN,CU,RO,DC,M,0.1mm	20	3	2				
													JN,CU,RO,DC,M,0.1mm	20	3	2				
					5					7	12		JN,PL,RO,DC,M,0.1mm	20	1.5	2				
													JN,UN,VR,DC,M,0.1mm	20	3	2				
8													JN,PL,RO,DC,M,0.1mm	20	1.5	2				
													JN,CU,SM,DC,M,0.1mm	20	2	2				
				55.50																
				8.46									JN,PL,SM,ST	12	1	1				
													JN,UN,RO,DC,Ca: Pyr,0.1mm	20	3	2				
9		Slightly sericitized, thickly foliated, dark grey, medium to coarse grained, medium strong GREYWACKE.											JN,PL,RO,DC,M;	20	1.5	2				
													Pyr,0.1mm	20	1.5	2				
					6					6	12		JN,PL,RO,DC,M; Pyr,0.1mm	20	1.5	2				
													JN,PL,RO,DC,Ca: Fe,0.1mm	20	1.5	2				
													JN,PL,RO,DC,Ca: Fe,0.1mm							
				54.00																
10				9.96																
		Slightly sericitized, thickly foliated, dark grey, medium to coarse grained, medium strong GREYWACKE.			7					3	12		JN,PL,RO,DC,Ca: Fe,0.1mm	20	1.5	2				Node 8
11													JN,PL,RO,ST,Pyr	20	1.5	1				
				52.50									BC,PL,RO,IN,Br,40mm	0	1.5	5		11.46 11.42		
				11.46																
12		Fresh, thickly foliated, fine to coarse grained, strong GREYWACKE.			8					1	3		JN,PL,SM,DC,M: Pyr,0.1mm	12	1	2				
		CONTINUED NEXT PAGE																		

Boart Longyear LF 70
HQ3 Diamond core with water

DEPTH SCALE
1 : 50

LOGGED: AE/SG
CHECKED: AE/CJC

Golder Associates

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PROJECT No.: 09-1426-0015

RECORD OF DRILLHOLE: GT09-17

SHEET 3 OF 3
DATUM: Geodetic

LOCATION: Meliadine Gold Project, Nunavut
N: 6990429 E: 537283 UTM NAD83 Zone: 15N
Survey Provided by: Comaplex Minerals Corp., Dated August 30, 2009

DRILLING DATE: September 4, 2009
DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION: TW09-07

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	ROCK STRENGTH INDEX (R5 R4 R3 R2 R1)	WEATHERING INDEX (W1 W2 W3 W4)	RECOVERY: TOTAL CORE % (80 60 40 20)	RECOVERY: R.Q.D. % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (degrees) (0-30 30-60 60-90)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core	Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
13											3									
14					9					0	2									
15					10					1	6									Node 9
16	Boart Longyear LF 70	Fresh, thickly foliated, fine to coarse grained, strong GREYWACKE. *(continued)*										0-30	FR,PL,RO,ST	20	1.5	1				
17	HQ3 Diamond core with water				11					3	12	0-30	JN,ST,RO,ST	20	3	1				
												0-30	JN,PL,RO,ST	20	1.5	1				
												30-60	JN,PL,RO,ST	20	1.5	1				
18					12					2	12									
												30-60	BC,PL,RO,IN,Br,10mm	0	1.5	5				18.34 18.33
												0-30	JN,PL,RO,ST,Ca	20	1.5	1				
19					13					0	2									
20				43.50																Node 10
		End of Drillhole.		20.46																
21																				
22																				

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AE/SG
CHECKED: AE/CJC

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PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-25

SHEET 1 OF 3
DATUM: Ground Surface

LOCATION: B7 lake, TSF Dike
N: ~6990080 E: ~537665 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only

DRILLING DATE: 7/25/2012
DRILLING CONTRACTOR: Boart Longyear

DEPTH SCALE METRES	DRILLING RIG / DRILLING METHOD	SOIL PROFILE: DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: BLOWS/0.3m	RUN No.	RUN: RECOVERY %	ICE DESCRIPTION	GRADATION %: GRAVEL	GRADATION %: SAND	GRADATION %: FINES	SHEAR STRENGTH Cu, kPa / WATER CONTENT %	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Ground Surface		0.00												Casing 1.0 m above ground surface
0	LF-70 (HQ3) Diamond Drilling	**(GW)** sandy GRAVEL, some silt, coarse to fine sand, coarse to fine and subrounded to rounded gravel, brown, contains shells and cobbles about 130 mm to 300 mm, moist			1	SC		1								RST Datalogger 2415
1																1
2				1+2 Combined							65	24	11			2
																3
																4
																5
3		BOULDERS,		2.83												6
		(SM/GW) SILTY SAND and GRAVEL, coarse to fine sand, coarse to fine and subrounded to rounded gravel, brown, contains shells and cobbles about 130 mm to 300 mm, moist to frozen		3.30	2	SC		2								
4		**(ML/SP)** gravelly SILT and SAND, coarse to medium and subrounded to subangular gravel, grey, frozen, contains cobbles about 100 mm, non-cohesive		3.75	3	SC				Nbn	26	36	38			
		(GM) sandy SILTY GRAVEL, coarse to medium and subangular gravel, grey, frozen		4.30	4	SC		3			55	24	21			
5		Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.		4.75												
6																
7																
8																
9																
10																

SHEAR STRENGTH Cu, kPa: nat V. + Q - ● rem V. ⊕ U - ○; 20 40 60 80
WATER CONTENT %: Wp — W — Wl; 10 20 30 40; field est. - ⊛ lab - ○ ice est. - ○

DEPTH SCALE
1 : 50

LOGGED: AS/FA
CHECKED: DRAFT

Golder Associates

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PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-25

SHEET 2 OF 3
DATUM: Ground Surface

LOCATION: B7 lake, TSF Dike
N: ~6990080 E: ~537665 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.
INCLINATION: -90° AZIMUTH: n/a

DRILLING DATE: 6/25/2012
DRILLING CONTRACTOR: Boart Longyear

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	INDICES: ROCK STRENGTH R5 R4 R3 R2 R1	INDICES: WEATHERING W2 W3 W4 ALTERATION A1 A2 A3 A4	RECOVERY: TOTAL CORE %	RECOVERY: RQD %	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP vs CORE AXIS (degrees) 0-15 15-30 30-50 50-90	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core	Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Cont'd from Record of Borehole.																		
5	LF-70 (HQ3) Diamond Drilling	Fresh, non-porous, thickly foliated, strong, grey, fine grained, GREYWACKE or SILTSTONE, with calicte veining		4.75	3								FOL,PL,Ro,ST FOL,PL,Ro,ST FOL,ST,Ro,ST FOL,PL,Ro,ST							7
6					4								FOL,PL,Ro,ST FOL,PL,Ro,ST FOL,PL,Ro,ST							
7		Silt seam from 7.1 m to 7.17 m											FOL,ST,Ro,ST FOL,PL,Ro,DC,Si, <1 mm FOL,PL,Ro,DC,Si, <1 mm FLT,PL,Ro,IN,Si, 170 mm							
8					5								FOL,PL,Ro,DC,Ca, <1 mm FOL,PL,Ro,DC,Ca, <1 mm FOL,PL,Ro,DC,Ca, <1 mm FOL,PL,Ro,DC,Ca, <1 mm FOL,PL,Ro,DC,Ca, <1 mm FOL,PL,Ro,DC,Ca, <1 mm FOL,PL,Ro,DC,Ca, <1 mm							
9					6								FOL,PL,Ro,DC,Ca, <1 mm FOL,PL,Ro,-							
10													FOL,PL,Ro,DC,Ca, <1 mm FOL,PL,Ro,DC,Ca, <1 mm							8
11					7								JN,UN,Ro,-,-, <1 mm JN,UN,Ro,ST,Si, <1 mm							
12					8								JN,UN,Ro,-,-, <1 mm JN,UN,Ro,-,-, <1 mm							
13																				
14					9								VN,PL,Ro,CC,Qz, <1 mm							

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DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AS/FA
CHECKED: DRAFT

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PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-25

SHEET 3 OF 3
DATUM: Ground Surface

LOCATION: B7 lake, TSF Dike
N: ~6990080 E: ~537665 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.
INCLINATION: -90° AZIMUTH: n/a

DRILLING DATE: 6/25/2012
DRILLING CONTRACTOR: Boart Longyear

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	INDICES: ROCK STRENGTH	INDICES: WEATHERING / ALTERATION	RECOVERY: TOTAL CORE %	RECOVERY: RQD %	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: CORE AXIS (degrees)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
15	LF-70 (HQ3) Diamond Drilling	Fresh, non-porous, thickly foliated, strong, grey, fine grained, GREYWACKE or SILTSTONE, with calicte veining *(continued)*			10	R5 R4 R3 R2 R1	W1 W2 W3 W4 / ALT	80 60 40 20	80 60 40 20			0-30 30-60 60-90	JN,UN,Ro,-,-, <1 mm						9
16																			
17					11								JN,UN,Ro,-,-, <1 mm VN,UN,Ro,ST,Qz, <1 mm						
18					12														
19																			
20					13								JN,UN,Ro,-,-, <1 mm VN,UN,Ro,-,Qz, <1 mm						10
21													VN,UN,Ro,-,Qz, <1 mm VN,UN,Ro,-,Qz, <1 mm VN,UN,Ro,-,Qz, <1 mm VN,UN,Ro,-,Qz, <1 mm						
					14								VN,UN,Ro,-,Qz, <1 mm						
22		End of Drillhole.		21.90									VN,UN,Ro,-,Qz, <1 mm						
23																			
24																			

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AS/FA
CHECKED: DRAFT

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2013 MARCH GEOTECHNICAL SITE INVEST.	AGNICO-EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
MELIADINE GOLD PROJECT	DRILL: DIAMOND DRILL	E14103023-01.003-GT13-06
NUNAVUT	6990523.311N; 537304.555E; Zone 15	ELEVATION: 65.2 m

SAMPLE TYPE: HQ CORE | NQ CORE | CORE | NO RECOVERY | DISTURBED

BACKFILL TYPE: BENTONITE | PEA GRAVEL | SLOUGH | GROUT | DRILL CUTTINGS | SAND

Depth (m)	LITHOLOGICAL DESCRIPTION	GROUND ICE DESCRIPTION	SAMPLE TYPE	SAMPLE/RUN #	MOISTURE CONTENT (%)	Elevation (m)
0	PEAT - fibrous, dark brownish black, rootlets	Vs 1-2%, 1 mm thick lenses				65.0
	BOULDER			1S	15.4	
	SAND AND SILT - trace of fine to medium, angular gravel, trace of organics, fine to coarse grained sand, brownish grey			R1		
1	SAND - some silt to silty, some fine to medium, angular gravel, some organics, fine to coarse grained sand, boulder fragments throughout			2S	10.8	
				3S	5.8	64.0
	SILT - sandy, some fine to medium gravel, fine to coarse grained sand	Vx ~20%		4S	37.1	
				R2		
2	SAND AND GRAVEL - silty, fine to medium grained sand, fine to coarse, angular gravel, brownish grey, boulders disseminated throughout			5S	9.4	
	SILT - sandy, some fine to medium, angular gravel, fine to medium grained, sand, grey, boulders throughout					63.0
	- Specific gravity = 2.690	Vx ~5%				
3	BOULDER			R3		
	SAND - some fine to medium, subangular to angular gravel, trace to some silt, fine to coarse grained sand, grey					62.0
	BOULDERS - sandy silt in the fractures					
4	GREYWACKE - strong, greenish grey, fine grained, calcite veins, JSN:3, W:2					
	- at 3.82 m, subvertical joint, undulating, smooth, moderate weathering			R4		61.0
	- at 3.94, 4.78 and 5.00 m, subvertical joints, planar, smooth, silt infill					
5	- at 4.42 m, horizontal joint, undulating, rough, slightly weathered, calcite infill					60.0
	- at 4.59 m, subvertical joint, undulating, rough, silt and sand infill					
	- at 4.83 m, subhorizontal joint, planar, smooth, slightly weathered, silt infill			R5		
6	- at 4.92 m, subvertical joint, undulating, smooth to rough, silt infill					59.0
	- at 5.14 m, subvertical joint, planar, rough to smooth, slightly weathered					
	- at 5.38, 5.95 and 5.98 m, subvertical joints, undulating, smooth, slightly weathered					
7	- at 5.44 m, subhorizontal joint, planar, rough, moderate weathering			R6		58.0
	- at 5.74 m, subvertical joint, undulating, smooth					
	- at 5.87 and 6.34 m, subvertical joints, planar, smooth, slightly weathered					
8	- at 6.58 m, W:3					57.0
	- at 6.67 m, subvertical joint, planar, smooth, moderate weathering					
	- at 6.74 m, subvertical joint, undulating, smooth, moderate weathering					
9	- at 6.79, 7.05 and 7.83 m, subvertical joint, planar, smooth, slightly weathered					56.0
	- at 7.70 m, subvertical joint, undulating, rough, slightly weathered, silt infill					
	- at 7.76 m, vertical joint, undulating, rough, slightly weathered, silt infill					
10	END OF BOREHOLE (8.08 metres)					

SALINITY (ppt) 5 10 15 20

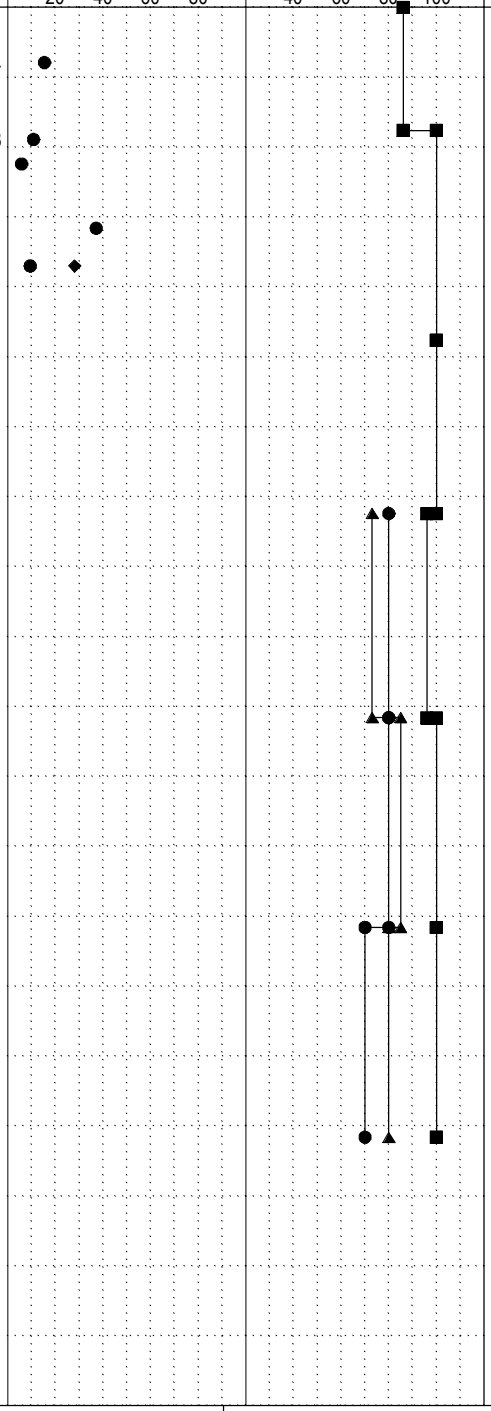
BULK DENSITY (kg/m^3) 1400 1800 2200 2600

PLASTIC M.C. LIQUID 20 40 60 80

FRACTURE FREQUENCY 2 4 6 8

RQD (%) 40 60 80 100

RECOVERY (%) 40 60 80 100



LOGGED BY: JMS	COMPLETION DEPTH: 8.08 m
REVIEWED BY: VER	COMPLETE: 13/03/19
DRAWING NO:	Page 1 of 1

eba A TETRA TECH COMPANY

PROJECT No.: 11-1428-0011

LOCATION: TSF DYKE B7
N: 6990558 E: 537737 UTM Zone: 15

RECORD OF BOREHOLE: GT11-02

DRILLING DATE: September 3rd, 2011
DRILLING CONTRACTOR: Boart Longyear

DATUM: NAD 83 ZONE 15

DEPTH SCALE METRES	DRILLING RIG	DRILLING METHOD	SOIL PROFILE: DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	TYPE	BLOWS/0.3m	RUN No.	RECOVERY %	GRADATION %: GRAVEL	SAND	FINES	SHEAR STRENGTH Cu, kPa (nat V. +, rem V. ⊕, Q - ●, U - ○) / WATER CONTENT % (Wp, W, Wl; field est. - ◎, lab - ○, ice est. - ⬠)	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
			Ground Surface		73.82											
0	(Drill #5 LF70) (HQ3)	ROTARY DRILLING	Loose, massive, dark brown to black, silty to sandy PEAT, some gravel, contains angular to sub-angular cobbles and boulders.		0.00 73.42				1							Thermistor installation # 26-2
			Compact, massive, grey, silty gravelly SAND, contains angular to sub-angular cobbles and boulders.		0.40	1-T2	SC									
1						2-T2	SC		2		33	35	32	NP		
									3							
2									4							
					70.82											
3			Becoming frozen (Vs). Chloride: 221mg/kg ; Sodium: 141mg/kg		3.00 70.12				5							
			Frozen (Vr), grey, silty SAND, some gravel, contains angular to sub-angular cobbles and boulders.		3.70 69.72	5b-T2	SC									
4			Frozen (Vr), grey, silty SAND, some gravel, trace clay, contains sub-angular cobbles and angular boulders.		4.10				6							
			Inferred ice content: 12.0%			6-T2	SC				18	47	35	NP		
5					68.42											
			Frozen (Vs), grey, silty gravelly SAND, trace clay, contains angular to sub-angular cobbles and boulders. Inferred ice content: 7.3%		5.40	7-T2	SC		8		27	41	32			
6									7							
					67.62											
			Frozen (Vr), grey, SILT, some sand, some gravel, trace clay, contains angular to sub-angular cobbles and boulders.		6.20											
7					66.72											
			Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.		7.10											
8																
9																
10																

DEPTH SCALE
1 : 50

LOGGED: E.S./J.B.
CHECKED: P.G./C.C.

File:N:\ACTIF\2011\1428\11-1428-0011 AGNICO-EAGLE - MEL\ADINE\4-CAD-GIS\LOG\11-1428-0011 TEST HOLES (BURNABY FORMAT)-MTL.GPJ Output Form:BC_BOREHOLE (SONIC) (AUTO) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB stelnesky 15-2-12

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT11-02

SHEET 2 OF 3

LOCATION: TSF DYKE B7

DATUM: NAD 83 ZONE 15

N: 6990558 E: 537737 UTM Zone: 15

DRILLING DATE: September 3rd, 2011

DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	ELEV. DEPTH (m)	No.	INDECES: ROCK STRENGTH R5 R4 R3 R2 R1; WEATHERING W2 W3 W4; ALTERATION 2 3 4	RECOVERY: TOTAL CORE % 80 60 40 20; R.Q.D. % 80 60 40 20	FRACTURE INDEX PER	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) 0 30 60 90; TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Cont'd from Record of Borehole.	67.32												
	(Drill #5 LF70) (HQ3) ROTARY DRILLING	Frozen (Vr), grey, SILT, some sand, some gravel, trace clay, contains angular to sub-angular cobbles and boulders. *(continued)*	6.50												
7			66.72												
		Slightly weathered, tightly foliated, very fine grained, faintly porous, strong, GREYWACKE, presence of quartz veins and veinlets, presence of sulphides.	7.10				0								
				8			1			VN,PL,Ro,Cl, Ch, 1					
							3			JN,UN,SM,Ch, Cl, 1 SH,PL,Ro,Ch, Cl, 2 SH,ST,SM,Cl, Ch, Gr, 3					
8							0								
							0								
							0								
							9			JN(x3),PL,Ro,Cl, Ch, 1					
				9			1			JN,PL,SM,Cl, Ch, <1 JN,PL,SM,Cl, <1 JN,PL,Ro,Cl, <1 JN,PL,Ro,Ch, Pt, <1					
9							0								
			64.22				0								
		Becoming fresh.	9.60				0								
				10			0								
10							1			FR,PL,SM					
							0								
							0								
				11			0			VN,PL,Ro					
11							0								
							0								
							1			JN,UN,SM					
				12			0								
12							0								
							0								
							0								
							0								
				13			0								
13							0								
							0								
							0								
							0			VN,PL,Ro					
14			59.72				0								
		Becoming slightly weathered.	14.10				1			FR,UN,SM,Fe					
							1			JN,PL,Ro,Fe					
				14			0								
15							0								
							0								
							0								
			58.22				0								
		Becoming fresh.	15.60				0								
							0								
16							1			JN,PL,SM,Su, <1					
				15			0								

CONTINUED NEXT PAGE

DEPTH SCALE

1 : 50

LOGGED: E.S./J.B.

CHECKED: P.G./C.C.

File:N:\ACTIF\2011\1428\11-1428-0011 AGNICO-EAGLE - MEL\ADINE\4-CAD-GIS\LOG\11-1428-0011 TEST HOLES (BURNABY FORMAT)-MTL.GPJ Output Form:BC_DRILLHOLE (MINING STD) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB stetnesky 15-2-12

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT11-02

SHEET 3 OF 3
DATUM: NAD 83 ZONE 15

LOCATION: TSF DYKE B7
N: 6990558 E: 537737 UTM Zone: 15

DRILLING DATE: September 3rd, 2011
DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (m)	No.	Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes. INDECES: ROCK STRENGTH (R5 R4 R3 R2 R1); WEATHERING (W2 W3 W4); ALTERATION (2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20); R.Q.D. % (80 60 40 20)	FRACTURE INDEX PER	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (90 60 30 0); TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
17		Becoming fresh. *(continued)*						0							
								0							
								0							
								0							
					16			1		90	FR,ST,SM				
18								0							
								0							
								0							
								0							
								0							
19								0							
					17			1		90	FR,ST,SM				
								0							
								0							
								0							
20								0							
								0							
								0							
								0							
21		(Drill #5 LF70) (HQ3)			18			1		90	JN,IR,SM,M, <1				
		ROTARY DRILLING						1		90	JN,IR,SM,Su, M, <1				
								0							
								2		90	JN,IR,SM,M, <1				
22											JN,IR,SM,M, <1				
								0							
					19			0							
								0							
								0							
23								0							
								0							
								1		90	FO,UN,Ro,M, <1				
					20			0							
24								0							
								0							
								0							
					21			1		90	FO,UN,Ro,M, <1				
				48.82											
25		End of Drillhole.		25.00											
26															

DEPTH SCALE
1 : 50

LOGGED: E.S./J.B.
CHECKED: P.G./C.C.

File:N:\ACTIF\2011\1428\11-1428-0011 AGNICO-EAGLE - MEL\ADINE\4-CAD-GIS\LOG\11-1428-0011 TEST HOLES (BURNABY FORMAT)-MTL.GPJ Output Form:BC_DRILLHOLE (MINING STD) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB stetnesky 15-2-12

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT11-03

SHEET 1 OF 2

LOCATION: TSF DYKE B7 / OVERBURDEN STOCKPILE - B7 EAST
N: 6990311 E: 538288 UTM Zone: 15

DRILLING DATE: September 1st, 2011
DRILLING CONTRACTOR: Boart Longyear

DATUM: NAD 83 ZONE 15

DEPTH SCALE METRES	DRILLING RIG / DRILLING METHOD	DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: BLOWS/0.3m	RUN No.	RUN: RECOVERY %	GRADATION %: GRAVEL	GRADATION %: SAND	GRADATION %: FINES	SHEAR STRENGTH Cu, kPa (nat V. + Q - ● / rem V. ⊕ U - ○) / WATER CONTENT % (Wp, W, Wl; field est. - ◎, lab - ○, ice est. - ⬠)	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Ground Surface		70.23											
0	(Drill #5 LF70) (HQ3) ROTARY DRILLING	Very loose, massive, dark brown to black, silty PEAT		0.00			20	1							
1				69.13				2							
		Becoming loose with presence of cobbles from 1.22m to 1.26m.		68.97				3							
		ICE with inclusions of grey SILT, some sand, some angular gravel.		68.73											
		Brownish grey, ICE and SILT, some sand, some angular gravel, contains angular to sub-angular cobbles and boulders. Inferred ice content: 458.5%		1.50	4a	SC		4							
2					4b	SC		5							
								6							
3				67.13											
		Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.		3.10											
4															
5															
6															
7															
8															
9															
10															

DEPTH SCALE
1 : 50

LOGGED: E.S./J.B.
CHECKED: P.G./C.C.

File:N:\ACTIF\2011\1428\11-1428-0011 AGNICO-EAGLE - MEL\ADINE\4-CAD-GIS\LOG\11-1428-0011 TEST HOLES (BURNABY FORMAT).MTL.GPJ Output Form:BC_BOREHOLE (SONIC) (AUTO) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB stetnesky 15-2-12

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT11-03

SHEET 2 OF 2

LOCATION: TSF DYKE B7 / OVERBURDEN STOCKPILE - B7 EAST

DATUM: NAD 83 ZONE 15

N: 6990311 E: 538288 UTM Zone: 15

DRILLING DATE: September 1st, 2011

DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (m)	No.	INDECES: ROCK STRENGTH R5 R4 R3 R2 R1; WEATHERING W2 W3 W4; ALTERATION 2 3 4	RECOVERY: TOTAL CORE % 80 60 40 20; R.Q.D. % 80 60 40 20	FRACTURE INDEX PER	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) 0 30 60 90; TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Cont'd from Record of Borehole.		67.73												
	(Drill #5 LF70) (HQ3) ROTARY DRILLING	Brownish grey, ICE and SILT, some sand, some angular gravel, contains angular to sub-angular cobbles and boulders. *(continued)*		2.50												
3				67.13												
		Slightly weathered, tightly foliated, dark grey, very fine grained, faintly porous, strong, GREYWACKE, presence of veinlets to dyke of quartz with abundant oxidation.		3.10	7			0								
								1			JN,PL,-, 0 JN,PL,-, 0					
4								1			JN,PL,Ro,Su, <1					
					8			0								
								0								
								0								
5								0								
					9			0								
								0								
6								0								
	(Drill #5 LF70) (HQ3) ROTARY DRILLING							1			FO,PL,Ro,Su, 1					
								2			JN,UN,SM,Fe, Cl, Su, <1 JN,PL,SM,Sa, Fe, 1					
								1								
7								6			JN,PL,SM,Cl, 1					
					10			14			SHR,PL,SM,Cl, Gr, 20					7.19 7.39
								3			JN,UN,SM,Cl, 2 JN,PL,Ro,Cl, 2 JN,ST,SM,Cl, Ca, 1					
								1			JN,PL,SM,Cl, 1					
8								1			JN,PL,Ro,Ca, <1					
								0								
								1			FR,PL,SM,Cl, <1					
					11			1								
9								1			JN,PL,Ro,Ca, Fe, <1 JN,PL,Ro,Fe, Ca, <1					
								3			VN,PL,Ro,Fe, Ca, <1 JN,UN,Ro,Cl, Fe, <1					
				60.63				1			JN,UN,Ro,Cl, Fe, 2 JN,UN,SM,Cl, 1					
		End of Drillhole.		9.60												
10																
11																
12																

DEPTH SCALE

1 : 50

LOGGED: E.S./J.B.

CHECKED: P.G./C.C.

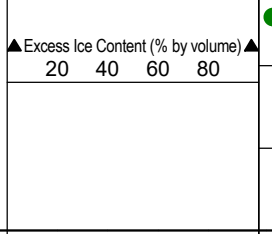
File:N:\ACTIF\2011\1428\11-1428-0011 AGNICO-EAGLE - MEL\ADINE\4-CAD-GIS\LOG\11-1428-0011 TEST HOLES (BURNABY FORMAT)-MTL.GPJ Output Form:BC_DRILLHOLE (MINING STD) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB stetnesky 15-2-12

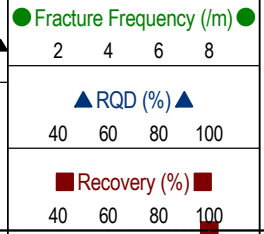
Borehole No: **GT24-01**

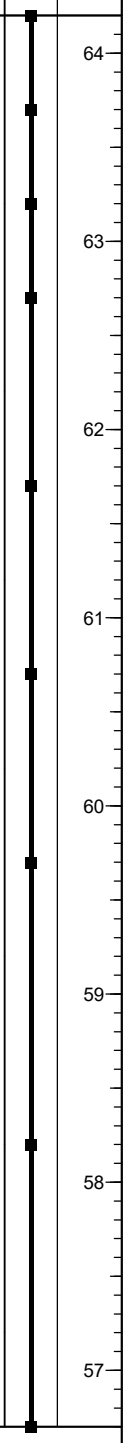
AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 64.2 m
Meliadine, Nunavut	UTM: 537356 E; 6990363 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Elevation (m)
0	HQ Diamond Drill with chilled brine	PEAT - some sand, grass, cobbles, rootlets, fine to coarse grained sand, black, (150 mm thick)	Nbe			64
		CLAY - some silt, some gravel, trace sand, fine to coarse grained angular to subangular gravel, low plastic, olive	at 0.15 m, Vu 24% excess ice		S1	
		- at 0.30 m, no visible gravel			R1	
1		- from 1.10 to 1.50 m, no recovery				63
		INFERRED COBBLES - greywacke				
		SAND - some gravel, cobbles disseminated throughout, fine to coarse grained sand, fractured greywacke cobbles, brown	Nbn		R2	
2					S2	
		- from 2.15 to 2.40 m, inferred cobbles, greywacke				62
		- from 2.60 to 2.70 m, no recovery				
3		GREYWACKE (BEDROCK) - slightly weathered (W2), moderately strong, grey, quartz veins				61
		- at 3.20 m, horizontal joint, slightly weathered, undulating, smooth, oxidization, multiple vertical oxidized joints			R3	
		- at 3.55 m, horizontal joint, slightly weathered, slightly rough				
4					R1	60
		- at 4.30 m, silt infill, horizontal joint, smooth				
					R4	
5		- at 5.15 m, horizontal joint, slightly weathered, rough				59
		- from 5.15 to 5.60 m, quartz veins				
6		- at 5.90 m, nearly horizontal joint, rough				
		- at 6.10 m, nearly horizontal joint, slightly weathered, undulating, rough				58
		- at 6.16 m, nearly horizontal joint, slightly weathered, undulating, rough, quartz vein			R5	
		- at 6.40 m, 45° horizontal joint, slightly weathered, slightly rough				
7		- at 6.45 m, horizontal joint, slightly weathered, smooth				
		- at 7.15 and 7.25 m, nearly horizontal joint, weathered, rough				57
7.5						







Contractor: Orbit Garant Drilling Inc.	Completion Depth: 16.1 m
Equipment Type: Skid mounted	Start Date: 2024 January 22
Logged By: DA	Completion Date: 2024 January 23
Reviewed By: FN	Page 1 of 3

TETRA TECH

Borehole No: **GT24-01**

AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 64.2 m
Meliadine, Nunavut	UTM: 537356 E; 6990363 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Excess Ice Content (% by volume) 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	GTC#2846	Elevation (m)
7.5	HQ Diamond Drill with chilled brine	- at 7.67 m, 45° joint, slightly rough, quartz vein - from 7.75 to 7.85 m, silt infill - moist, low plastic, grey - at 7.9 m, quartz vein			R6				56
8									
9		- at 8.8 and 9.0 m, nearly horizontal joint, undulating, smooth - at 9.07 m, 30° horizontal joint, undulating, smooth, silt infill			R7				55
10		- at 9.75 m, 30° horizontal joint, slightly weathered, smooth							54
11		- at 10.35 m, horizontal joint, slightly weathered, smooth			R8				53
12		- at 11.45 m, horizontal joint, slightly weathered, slightly rough - at 12.00 m, nearly horizontal joint, slightly weathered, slightly rough			R9				52
13		- at 12.66 and 13.16 m, nearly horizontal joint, slightly weathered, slightly rough							51
14					R10				50
15		- at 14.42 m, nearly horizontal joint, slightly weathered, rough							

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 16.1 m
Equipment Type: Skid mounted	Start Date: 2024 January 22
Logged By: DA	Completion Date: 2024 January 23
Reviewed By: FN	Page 2 of 3

Borehole No: **GT24-01**

AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 64.2 m
Meliadine, Nunavut	UTM: 537356 E; 6990363 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Excess Ice Content (% by volume) 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	GTC#2846	Elevation (m)
15									49
		- at 15.22 m, horizontal joint, slightly weathered, slightly rough - at 15.44 m, 45° joint, smooth, quartz vein			R11				
16		END OF BOREHOLE (16.10 metres) Ground temperature cable #2846 installed to 12.0 metres							48
17									47
18									46
19									45
20									44
21									43
22									42
22.5									

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 16.1 m
Equipment Type: Skid mounted	Start Date: 2024 January 22
Logged By: DA	Completion Date: 2024 January 23
Reviewed By: FN	Page 3 of 3

Borehole No: **GT24-02**

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 64 m
Meliadine, Nunavut	UTM: 537481 E; 6990172 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Excess Ice Content (% by volume) 20 40 60 80 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	Elevation (m)
0	HQ Diamond Drill with chilled brine	PEAT - rooty, fibrous, black, (100 mm thick)							64
		SAND - gravelly, trace silt, angular gravel, well graded, brown	Nbe		R1				
1									63
		SILT AND SAND - gravelly, trace clay, angular gravel, well graded, brown	Vs 1%						
2									62
		- at 2..20 m, (Gravel - 26%; Sand - 35%; Silt - 36%; Clay - 3%, Hydraulic Conductivity - 3.90E-06 cm/s)	at 2.20 m, Vs 40%		S1 R2 S2	9.38			
3		RUBBLE - washed gravel							61
		- from 3.50 to 3.59 m, gravel and sand layer - trace silt, grey	at 3.30 m, Vs, Vx, Vc 20-25%, clear lentiular ice lenses, coatings and ice crystals		R3				
4		GREYWACKE (BEDROCK) - fresh (W1), fine grained, very strong, dark grey, quartz veins, JSN: 5							60
		- at 3.90 m, vertical joint, oxide weathered, undulating, smooth							
		- at 4.08 and 4.19 m, subhorizontal joint, oxide weathered, undulating, smooth							
		- at 4.35 and 4.37 m, inclined joint, oxide weathered, undulating, smooth							
5		- at 4.58, 4.93, 5.08 and 5.41 m, subhorizontal joints, slightly weathered, undulating, smooth							59
		- from 4.62 to 7.70 80 mm thick frozen silt infill							
		- at 4.93, 5.54, 5.67 and 5.85 m, inclined joints, slightly weathered, undulating, rough			R4				
		- at 5.50 m, inclined joint, slightly weathered, undulating, smooth							
6		- at 6.00 m, JSN: 3							58
		- 6.12, 6.32, 6.33, 6.42 and 6.91 m, inclined joints, slightly weathered, undulating, smooth							
					R5				
7									57
7.5		- at 7.30 m, ~30 mm thick quartz vein							

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 9 m
Equipment Type: Skid mounted	Start Date: 2024 January 23
Logged By: EP	Completion Date: 2024 January 23
Reviewed By: FN	Page 1 of 2

Borehole No: **GT24-02**

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 64 m
Meliadine, Nunavut	UTM: 537481 E; 6990172 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Excess Ice Content (% by volume) 20 40 60 80 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	Elevation (m)
7.5		- at 7.60 and 7.66 m, frozen silt infill - from 7.60 to 8.27 m, rubble zone							
8					R6				56
		- at 8.54 m, 35 mm thick quartz vein							
9		END OF BOREHOLE (9.00 metres)							55
10									54
11									53
12									52
13									51
14									50
15									49

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 9 m
Equipment Type: Skid mounted	Start Date: 2024 January 23
Logged By: EP	Completion Date: 2024 January 23
Reviewed By: FN	Page 2 of 2

Borehole No: **GT24-03**

AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 67 m
Meliadine, Nunavut	UTM: 537633 E; 6990225 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Plastic Limit / Moisture Content / Liquid Limit (20 40 60 80)	Fracture Frequency (/m) (2 4 6 8) / RQD (%) (40 60 80 100) / Recovery (%) (40 60 80 100)	Elevation (m)
0	HQ Diamond Drill with chilled brine	PEAT - rooty, fibrous, black, (200 mm thick)	Nbe						67
		SAND AND SILT - some gravel, trace clay, angular gravel, well graded, brown	Vs, Vc 15-20%		EIC				
					R1				
1		- at 1.20 m, (Gravel - 20%; Sand - 42%; Silt - 35%; Clay - 3%)			S0	8.8			66
		INFERRED BOULDER - greywacke							
2		SAND AND SILT - some gravel, trace clay, angular gravel, well graded, grey	Vs, Vc 30%; clear lenticular ice lenses and ~1 mm ice coatings on grains		R2				65
		- at 2.70 m, (Gravel - 18%; Sand - 40%; Silt - 39%; Clay - 3%)			S1	8.1			
3		- at 3.00 m, cobbles disseminated throughout	from 3.00 m, Vs 1-3%						64
					R3				
4		- at 4.00 m, SILT AND SAND							63
		- at 4.02 m, (Gravel - 14%; Sand - 42%; Silt - 43%; Clay - 1%)			S2	9.2			
			at 4.60 m, Vs 15%, clear lenticular ice lenses		S3	16.4			
5		GREYWACKE (BEDROCK) - fresh to slightly weathered (W1-W2), medium strong, grey, quartz veins			R4				62
		- at 5.20 m, 45° joint, smooth, silty on planar face							
		- at 5.38 m, 45° joint, 40 mm thick quartz vein, oxidization							
		- at 5.63 m, 45° joint, slightly rough, oxidization							
6		- at 5.77 and 5.82 m, 45° joint, slightly weathered, slightly rough, oxidization							61
		- at 6.11 m, 45° joint, undulating, smooth, oxidization							
		- at 6.75 m, nearly horizontal joint, slightly weathered, slightly rough, oxidization			R5				
7		- 6.87 and 6.90 m, horizontal joint, slightly weathered, slightly rough			1R				60
7.5		- at 7.08 m, nearly horizontal joint, slightly rough, oxidization							

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 12 m
Equipment Type: Skid mounted	Start Date: 2024 January 23
Logged By: EP/DA	Completion Date: 2024 January 23
Reviewed By: FN	Page 1 of 2

AGNICO EAGLE

Borehole No: **GT24-03**

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 67 m
Meliadine, Nunavut	UTM: 537633 E; 6990225 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Plastic Limit / Moisture Content / Liquid Limit (20 40 60 80)	Fracture Frequency (/m) (2 4 6 8) / RQD (%) (40 60 80 100) / Recovery (%) (40 60 80 100)	Elevation (m)
7.5	HQ Diamond Drill with chilled brine	- at 7.32 m, 45° joint, moderately weathered, rough, oxidization - at 7.68 m, nearly vertical joint, undulating, oxidization, clay infill along joint - at 7.90 m, nearly horizontal joint, slightly weathered, slightly rough			R6				
8									59
9		- at 8.87 m, nearly horizontal joint, moderately weathered, clay infill along joint - at 9.26 m, nearly horizontal joint, moderately weathered, undulating, rough, clay infill along joint							58
10		- at 9.81 m, nearly vertical joint, smooth, oxidization, quartz vein - at 9.84 and 9.92 m, nearly horizontal joint, slightly rough, oxidization, clay infill along joint			R7				57
11		- at 10.69 and 10.73 m, 45° joint, slightly rough, oxidization							56
12		- at 11.10 and 11.15 m, horizontal joint, moderately weathered, rough - at 11.25 m, nearly horizontal joint, slightly rough - at 11.57 m, nearly horizontal joint, slightly weathered, slightly rough, 10 mm thick quartz veins - at 11.84 m, 45° joint, slightly rough, 20 mm thick quartz vein END OF BOREHOLE (12.00 metres)			R8				55
13									54
14									53
15									52

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 12 m
Equipment Type: Skid mounted	Start Date: 2024 January 23
Logged By: EP/DA	Completion Date: 2024 January 23
Reviewed By: FN	Page 2 of 2

Borehole No: **GT24-04**

AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 65.5 m
Meliadine, Nunavut	UTM: 537488 E; 6990333 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Excess Ice Content (% by volume) 20 40 60 80 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	Elevation (m)
0		PEAT - rooty, fibrous, black, (50 mm thick)							
		SAND - gravelly, silty, angular gravel, well graded, brown	Nbe, Vs 3%, very thin clear subhorizontal lenticular ice lenses		R1				
		- at 0.65 m, (Gravel - 32%; Sand - 40%; Silt & Clay - 28%, Hydraulic Conductivity - 1.80E-05 cm/s)			S1	10	●		
1		- from 1.00 to 1.40 m, rubble - washed gravel							64
			at 1.80 m, Vs 5%		R2 S2		▲		
2		GREYWACKE (BEDROCK) - fresh (W1), fine grained, very strong, green, mottled							
		- at 2.5 m, JSN: 2							63
3		- at 3.00 m, 15 mm thick quartz vein - at 3.11 and 3.27 m, inclined joint, undulating, smooth, slight oxidization			R3				62
		- at 3.50 m, dark grey							
4		- JSN: 4							61
					R4				
5	HQ Diamond Drill with chilled brine	- from 4.87 to 4.99 m, 120 mm thick frozen silt infill with 4 mm clear ice lens - from 5.04 to 5.07 m, 30 mm thick frozen silt infill - at 5.15 and 5.39 m, subhorizontal joint, undulating, rough, slight silt infill - at 5.50 m, JSN: 3							60
6					R5				59
		- from 6.26 to 6.29 m, 30 mm thick frozen silt infill with 20 mm thick clear ice lens - at 6.31 and 6.42 m, subhorizontal joint, planar, smooth, slight silt infill							
7		- at 7.06, 7.11, 7.16 and 7.71 m, inclined joint, slight weathered, undulating, rough, clay infill			R6				58
7.5									

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8 m
Equipment Type: Skid mounted	Start Date: 2024 January 23
Logged By: EP	Completion Date: 2024 January 23
Reviewed By: FN	Page 1 of 2

Borehole No: **GT24-04**

AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 65.5 m
Meliadine, Nunavut	UTM: 537488 E; 6990333 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Excess Ice Content (% by volume) 20 40 60 80 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	Elevation (m)
7.5									58
		- at 7.68 m, inclined joint, slight silt infill - at 7.86 m, vertical joint, slightly weathered, undulating, smooth							
8		END OF BOREHOLE (8.00 metres)							57
9									56
10									55
11									54
12									53
13									52
14									51
15									

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8 m
Equipment Type: Skid mounted	Start Date: 2024 January 23
Logged By: EP	Completion Date: 2024 January 23
Reviewed By: FN	Page 2 of 2

Borehole No: **GT24-05**

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 67 m
Meliadine, Nunavut	UTM: 537775 E; 6990140 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Unc. Compressive (MPa) 50 100 150 200 / Excess Ice Content (% by volume) 20 40 60 80 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	Elevation (m)
0	HQ Diamond Drill with chilled brine	PEAT - some gravel, grass, rootlets, fine to coarse grained angular gravel, black, (100 mm thick)	Nbn	EIC	S1	18.7			67
		INFERRED COBBLE - fractured, (50 mm thick)			R1				
		SAND AND SILT - trace gravel, fine to coarse grained sand, fine to coarse grained subangular gravel, mottled grey and brown							
1		- at 3.00 m, (Gravel - 9%; Sand - 46%; Silt & Clay - 45%)							66
		SAND - some silt, some gravel, fine to coarse grained sand, fine to coarse grained subangular gravel, brown							
		- at 0.80 m, clam shells							
		- from 1.10 to 1.30 m, no recovery							
		- from 1.30 to 1.40 m, inferred cobble							
		INFERRED BOULDER - greywacke	Vs 40-46%		R2				
2		SILT - sandy, gravelly, trace clay, fine to coarse grained sand, fine to coarse grained subangular gravel, light grey		EIC	S2	9.9			65
		- at 1.95 m, (Gravel - 27%; Sand, 34%; Silt - 37%; Clay - 2%)							
		- from 2.15 to 2.40 m, inferred cobbles - greywacke							
		- from 2.60 to 3.20 m, no recovery							
3		- from 3.20 to 3.35 m, inferred cobble - greywacke			R3				64
		GRAVEL RUBBLE - fractured rock							
		GREYWACKE (BEDROCK) - slightly weathered (W2), highly fractured, strong to very strong, grey							
4		- at 4.18 m, nearly horizontal joint, slightly weathered, undulating, rough							63
		- at 4.68 m, nearly horizontal joint, slightly rough			R4				
5		- at 5.03 m, 30° from horizontal joint, undulating, rough			1R				62
		- at 5.14 m, nearly horizontal joint, smooth							
		- at 5.28 m, 30° from horizontal joint, slightly rough, clay infill along joint							
		- at 5.62 m, nearly horizontal joint, slightly weathered, smooth, clay infill							
6		- at 6.00 m, 60° from horizontal joint, slightly rough, infill			R5				61
		- at 6.40 m, nearly horizontal joint, moderately weathered, rough, sand infill, quartz vein							
		- at 6.46 m, horizontal joint, slightly weathered, slightly rough							
7		- from 6.46 to 7.10 m, nearly vertical joint, undulating, slightly rough, silt infill							60
		- from 7.10 to 7.20 m, no recovery							
7.5		- at 7.25 m, 45° from horizontal joint, smooth							

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 10.1 m
Equipment Type: Skid mounted	Start Date: 2024 January 24
Logged By: DA	Completion Date: 2024 January 24
Reviewed By: FN	Page 1 of 2

Borehole No: **GT24-05**

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 67 m
Meliadine, Nunavut	UTM: 537775 E; 6990140 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Unc. Compressive (MPa) 50 100 150 200 / Excess Ice Content (% by volume) 20 40 60 80 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	Elevation (m)
7.5									
8	HQ Diamond Drill with chilled brine	- at 7.33 m, 30° from horizontal joint, slightly rough, clay infill - at 7.54 m, horizontal joint, slightly weathered, slightly rough - at 7.61 m, horizontal joint, slightly rough, silt infill - at 7.91, 8.01 and 8.09 m, nearly horizontal joint, slightly rough			R6 2R				59
9		- at 8.90 m, 45° joint, slightly rough, silt infill							58
10		- at 9.29 m, 60° from horizontal joint, smooth, two planar face - at 9.46 m, horizontal joint, slightly weathered, undulating, slightly rough, 15-20 mm thick silt infill - at 9.55 m, 60° from horizontal joint, slightly rough, silt infill - at 9.88 m, nearly horizontal joint, moderately weathered, slightly rough, silt infill			R7				57
		END OF BOREHOLE (10.10 metres)							
11									56
12									55
13									54
14									53
15									52

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 10.1 m
Equipment Type: Skid mounted	Start Date: 2024 January 24
Logged By: DA	Completion Date: 2024 January 24
Reviewed By: FN	Page 2 of 2

Borehole No: **GT24-06**

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 65.8 m
Meliadine, Nunavut	UTM: 537863 E; 6990049 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Excess Ice Content (% by volume) 20 40 60 80 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	Elevation (m)
0	HQ Diamond Drill with chilled brine	PEAT - rootlets, broken cobbles, black	Nbe						65
		- at 0.40 m, some gravel, coarse grained subangular gravel	Nbn		R1				
1		SAND - some silt, trace gravel, fine to coarse grained sand, fine to coarse grained subangular gravel, brown - from 0.70 to 1.00 m, no recovery							
		GRAVEL - sandy, some silt, trace clay, fine to coarse grained sand, fine to corse grained subangular gravel, light grey - at 1.25 m, (Gravel - 52%; Sand - 27%; Silt - 19%; Clay - 2%) - at 1.60 m, increase coarse grained sand - at 1.75 m, cobbles disseminated throughout - at 1.85 m, rubble	at 1.25 m, Vx, 15-20% at 1.39 m, Vc 15-25% at 1.14 m, Vs 35%		S1 EIC	8.1			64
2		No recovery			R2				
3		INFERRED COBBLES AND GRAVEL - highly fractured			R3				63
		RUBBLE - washed			R4				
4		GREYWACKE (BEDROCK) - moderately weathered (W3), strong, grey, quartz veins - at 4.00 m, nearly vertical joint, moderately weathered, undulating, rough - at 4.06, 4.08 and 4.12 m, nearly horizontal joint, slightly weathered, rough, oxidization - at 4.30 m, quartz prevalent - at 4.48 and 4.58 m, 30° from horizontal joint, smooth, oxidization - at 4.90 m, 10 mm thick quartz vein - at 4.97 and 5.00 m, nearly horizontal joint, moderately weathered, undulating, rough, oxidization - at 5.30 m, very strong - at 5.40 and 5.52 m, nearly horizontal joint, slightly weathered, undulating, smooth, oxidization			1R R5				62
5									61
6		QUARTZ ARENITE (BEDROCK) - moderately weathered (W3), fine grained, whitish grey - at 5.97 m, horizontal joint, moderately weathered, undulating, rough - at 6.03 m, nearly horizontal joint, moderately weathered, undulating, rough - at 6.21 m, nearly vertical joint, highly weathered, undulating, very rough, oxidization			R6				60
7		QUARTZ WACKE (BEDROCK) - moderately weathered (W3), mottled grey and olive - at 6.45 m, highly fractured			2R				59
7.5					R7				

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 10 m
Equipment Type: Skid mounted	Start Date: 2024 January 24
Logged By: DA	Completion Date: 2024 January 24
Reviewed By: FN	Page 1 of 2

Borehole No: **GT24-06**

AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 65.8 m
Meliadine, Nunavut	UTM: 537863 E; 6990049 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Excess Ice Content (% by volume) 20 40 60 80 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	Elevation (m)
7.5									
8	HQ Diamond Drill with chilled brine	GREYWACKE (BEDROCK) - fine grained, very strong, dark grey - at 6.70 m, horizontal joint, slightly weathered, smooth - at 7.05 m, 45° joint, two planar, slightly rough, oxidization - at 7.45 7.47 and 7.49 m, nearly horizontal joints through quartz vein, very rough, oxidized - at 7.58 and 7.61 m, nearly horizontal joint, slightly rough, silt infill - at 7.67 m, nearly horizontal joint, undulating, slightly rough - from 8.50 to 8.60 m, no recovery - at 8.77 m, nearly horizontal joint, undulating, slightly rough, silt infill - at 9.04 m, 45° joint, undulating, smooth - at 9.35 m, 45° joint, slightly rough - at 9.48 m, 60° from horizontal joint, undulating, slightly rough - at 9.68 m, nearly horizontal joint, smooth END OF BOREHOLE (10.00 metres)			R8				58
9									57
10									56
11									55
12									54
13									53
14									52
15									51

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 10 m
Equipment Type: Skid mounted	Start Date: 2024 January 24
Logged By: DA	Completion Date: 2024 January 24
Reviewed By: FN	Page 2 of 2

Borehole No: **GT24-07**

AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 65.8 m
Meliadine, Nunavut	UTM: 538102 E; 6989913 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Plastic Limit / Moisture Content / Liquid Limit (20 40 60 80)	Fracture Frequency (/m) (2 4 6 8) / RQD (%) (40 60 80 100) / Recovery (%) (40 60 80 100)	Elevation (m)
0	HQ Diamond Drill with chilled brine	PEAT - rooty, trace gravel, fibrous, black, (130 mm thick)	Nbn						
		GRAVEL AND SAND - some silt, trace organics, rootlets, well graded, brown			R1				
		SAND - some gravel, some silt, light grey, some shells	Vs 1%, very fine clear lenticular ice lenses, thermally disturbed						
1		ICE + SAND - fine grained sand, grey	ICE, clear 60%						65
		SILT AND SAND - trace gravel, fine grained sand, grey - at 1.45 m, (Gravel - 2%; Sand - 36%; Silt - 62%; Clay - 0%)	Nbe		R2 S1	20.9	●		
2		SAND - some silt, trace gravel, trace clay, fine grained sand, grey - at 1.75 m, (Gravel - 0%; Sand - 82%; Silt - 16%; Clay - 2%, Hydraulic Conductivity - 4.20E-05 cm/s)			S2	20.5	●		64
		No recovery							
		GREYWACKE (BEDROCK) - fresh (W1), fine grained, very strong, dark grey, JSN: 2 - from 2.78 to 2.82 m, gravel and sand - some silt infill							
3					R3				63
		- from 3.37 to 3.63 m, gravel and sand - some silt infill							
		- at 3.80 m, JSN: 3 - from 3.84 to 3.89, 4.27 to 4.48 and 4.57 to 4.60 m, gravel and sand - some silt infill - at 4.06, 4.85, 4.87, and 4.89 m, subhorizontal joint, slightly weathered, undulating, smooth - at 4.09 m, inclined joint, moderately weathered, undulating, smooth							62
4					R4				
5									61
		- at 5.43 and 5.52 m, inclined joint, slightly weathered, undulating, rough - from 5.70 to 6.05 m, rubble zone							
6					R5				60
		- at 6.61 m, inclined joint, slightly weathered, undulating, smooth - at 6.80 m, JSN: 2							
7									59
7.5									

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8.3 m
Equipment Type: Skid mounted	Start Date: 2024 January 26
Logged By: EP	Completion Date: 2024 January 26
Reviewed By: FN	Page 1 of 2

Borehole No: **GT24-07**

AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 65.8 m
Meliadine, Nunavut	UTM: 538102 E; 6989913 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Plastic Limit / Moisture Content / Liquid Limit (20 40 60 80)	Fracture Frequency (/m) (2 4 6 8) / RQD (%) (40 60 80 100) / Recovery (%) (40 60 80 100)	Elevation (m)
7.5					R6				58
8		- at 8.27 and 8.30 m, inclined joint, slightly weathered, undulating, rough							
		END OF BOREHOLE (8.30 metres)							57
9									
10									56
11									55
12									54
13									53
14									52
15									51

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8.3 m
Equipment Type: Skid mounted	Start Date: 2024 January 26
Logged By: EP	Completion Date: 2024 January 26
Reviewed By: FN	Page 2 of 2

Borehole No: **GT24-08**

AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 68 m
Meliadine, Nunavut	UTM: 538052 E; 6990021 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Elevation (m)
0	HQ Diamond Drill with chilled brine	PEAT - grass, rootlets, black, (100 mm thick)	Nbe				68
		COBBLES - (280 mm thick)					
		SILT AND SAND - some gravel, fine to medium grained sand, fine to coarse grained subangular gravel, light brown, clam shells	Vs 13%		EIC		
		- at 0.56 m, wavy stratified			R1		
1		- at 0.84 m, (Gravel - 12%; Sand - 38%; Silt - 47%; Clay - 3%)			S1	13.2	67
		- from 1.10 to 1.50 m, no recovery					
		- at 1.55 m, trace gravel, no visible shells	at 1.55 m, Vs 45%				
			at 1.70 m, Vc 20%		R2		
2			at 2.00 m, Nbn				66
		INFERRED COBBLES					
		- at 2.21 m, 20 mm thick brown sand seam					
		SAND AND GRAVEL - silty, fine to coarse grained sand, fine to coarse grained angular to subrounded gravel, light grey	Thermally disturbed				
3					R3		65
			at 3.40 m, Vs 15-20%				
4		No recovery					64
		RUBBLE - washed			R4		
5							63
		COBBLE					
		SAND AND GRAVEL - silty, cobbles disseminated throughout, fine to coarse grained sand, fine to coarse grained angular to subrounded gravel, light grey	Nbn				
6							62
		GREYWACKE (BEDROCK) - fresh to moderately weathered (W1-W3), fine grained, very strong, dark grey, quartz veins			R5		
		- at 5.93, 5.98 and 6.06 m, horizontal joint, smooth, brown silt infill			1R		
7		- at 6.00 m, nearly vertical joint, undulating, slightly rough					61
		- at 6.17 m, nearly horizontal joint, slightly rough, oxidization					
7.5		- at 6.43 m, 30° from horizontal joint, slightly rough,					

◇ Unc. Compressive (MPa) ◇ 50 100 150 200

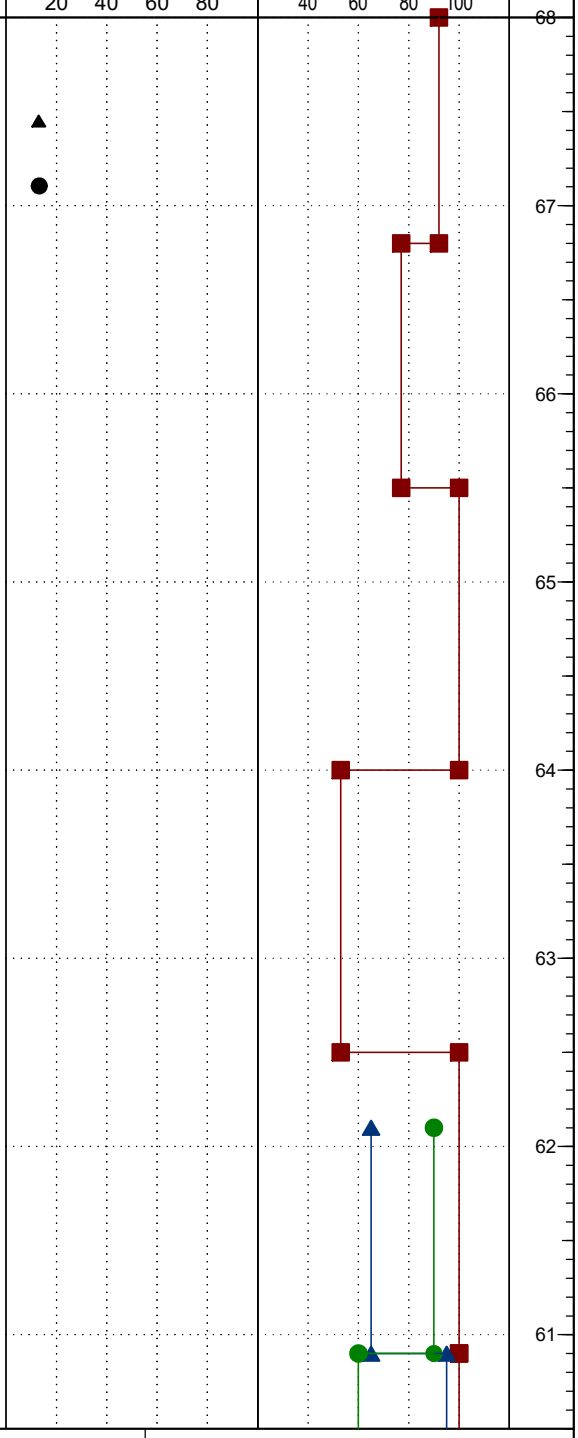
▲ Excess Ice Content (% by volume) ▲ 20 40 60 80

Plastic Limit — Moisture Content — Liquid Limit (20 40 60 80)

● Fracture Frequency (/m) ● 2 4 6 8

▲ RQD (%) ▲ 40 60 80 100

■ Recovery (%) ■ 40 60 80 100



TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 13.15 m
Equipment Type: Skid mounted	Start Date: 2024 January 26
Logged By: DA	Completion Date: 2024 January 26
Reviewed By: FN	Page 1 of 2

Borehole No: **GT24-08**

AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 68 m
Meliadine, Nunavut	UTM: 538052 E; 6990021 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Unc. Compressive (MPa) 50 100 150 200 / Excess Ice Content (% by volume) 20 40 60 80 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	Elevation (m)
7.5		oxidization							
		- at 6.65 m, 30° from horizontal joint, rough, oxidization			R6				
8		- at 6.82 m, 30° from horizontal joint, slightly rough, silt infill							60
		- at 7.00 m, very fractured, undulating							
		- at 7.28 m, horizontal joint, smooth							
		- at 7.31 m, 45° joint, smooth							
		- at 7.48 m, 30° from horizontal joint, slightly weathered, undulating, smooth							
9		- at 8.11 and 8.15 m, 30° horizontal joint, slightly rough							59
		- at 8.51 m, nearly horizontal joint, slightly weathered, smooth							
		- at 8.81 m, nearly horizontal joint, slightly rough			R7				
		- at 8.85 and 8.88 m, 30° from horizontal joint, rough							
		- at 9.60 m, 30° from horizontal joint, moderately weathered, smooth							
10									58
		- at 10.60 m, 45° joint, smooth							
		- at 10.64 and 10.92 m, nearly horizontal joint, slightly weathered, slightly rough, silt infill			2R R8		◇		
11		- at 10.95 and 11.05 m, 30° from horizontal joint, slightly rough							57
		- from 11.11 to 11.15 m, fractured zone, horizontal and nearly horizontal joints							
		- at 11.22 m, nearly horizontal joint, slightly weathered, smooth, silt infill							
		- at 11.34 m, nearly vertical joint, smooth, exits into fractured zone							
12		- from 11.43 to 11.53 m, fractured zone							56
		- at 12.15 m, 45° joint, slightly rough							
		- at 12.40 m, nearly horizontal joint, slightly weathered, smooth			R9				
		- at 12.50 and 12.53 m, nearly horizontal joint, slightly weathered, rough, silt infill							
13		- at 12.52 m, nearly horizontal joint, rough							55
		- at 12.64 and 12.66 m, nearly horizontal joint, slightly rough							
		END OF BOREHOLE (13.15 metres)							
14									54
15									53

HQ Diamond Drill with chilled brine

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 13.15 m
Equipment Type: Skid mounted	Start Date: 2024 January 26
Logged By: DA	Completion Date: 2024 January 26
Reviewed By: FN	Page 2 of 2

Borehole No: **GT24-09**

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 69.1 m
Meliadine, Nunavut	UTM: 538038 E; 6990120 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Fracture Frequency (/m) / RQD (%) / Recovery (%)	GTC#2843	Elevation (m)
0	HQ Diamond Drill with chilled brine	PEAT - rooty, fibrous, black, (40 mm thick)	Nbe					69
		SAND - gravelly, trace silt, rootlets, dark brown						
1		SAND AND GRAVEL - trace silt, angular gravel, well graded, brown	Vx 1%		R1			68
		GRAVEL AND SAND - trace silt, angular gravel, well graded, brown	Vc, Vx 1%		S1			
2		ICE + SAND AND GRAVEL - trace silt, angular gravel, well graded, grey	ICE, clear 60%		R2			67
		INFERRED COBBLES AND BOULDERS						
3		No recovery						66
		ICE + SAND AND SILT - trace silt, angular sand, well graded, grey	ICE, clear 55%					
		RUBBLE - inferred cobbles and boulders						
4		GRAVEL AND SAND - trace silt, angular gravel, well graded, grey	Vc, Vx 1%		R3			65
		No recovery						
5								64
					R4			
		GREYWACKE (BEDROCK) - slightly to moderately weathered (W2-W3), fine grained, very strong, grey, quartz veins				0 15		
6		- from 6.00 to 6.50 m, no recovery						63
		- at 6.50 m, fresh (W1), extremely strong, JSN: 3 - at 6.55 m, subvertical joint, slightly weathered, undulating, smooth, oxidization - at 6.60, 6.67 and 7.47 m, inclined joint, slightly weathered, undulating, smooth, oxidization - at 7.02 m, inclined joint, undulating, smooth, oxidization			R5			
7								62
7.5								

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 16.5 m
Equipment Type: Skid mounted	Start Date: 2024 January 25
Logged By: EP	Completion Date: 2024 January 25
Reviewed By: FN	Page 1 of 3

Borehole No: **GT24-09**

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 69.1 m
Meliadine, Nunavut	UTM: 538038 E; 6990120 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Fracture Frequency (/m) / RQD (%) / Recovery (%)	GTC#2843	Elevation (m)
7.5	HQ Diamond Drill with chilled brine	- at 7.50 m, JSN: 2						
8		- at 8.35 and 8.41 m, inclined joint, slightly weathered, undulating, rough			R6			61
9								60
10		- at 9.92, 9.94 and 9.97 m, inclined joint, slightly weathered, undulating, rough			R7			59
11		- at 10.50 m, JSN: 4 - at 10.80, 11.56 and 11.64 m, inclined joint, very slightly weathered, undulating, smooth - at 10.87 and 10.89 m, horizontal joint, very slightly weathered, undulating, smooth			R8			58
12		- at 12.00 m, increased quartz, JSN: 3						57
13		- at 12.63, 13.01, 13.03 an 13.10 m, horizontal joint, undulating, rough - at 12.88 m, inclined joint, undulating, rough			R9			56
14		- at 13.87, 14.32, 14.35 and 14.79 m, horizontal joint, undulating, rough			R10			55
15		- at 14.77 m, inclined joint, undulating, rough						

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 16.5 m
Equipment Type: Skid mounted	Start Date: 2024 January 25
Logged By: EP	Completion Date: 2024 January 25
Reviewed By: FN	Page 2 of 3

Borehole No: **GT24-09**

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 69.1 m
Meliadine, Nunavut	UTM: 538038 E; 6990120 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Fracture Frequency (/m) / RQD (%) / Recovery (%)	GTC#2843	Elevation (m)
15		- at 15.20, 15.51, 15.62, 15.70, 15.87 and 16.33 m, horizontal joint, undulating, rough			R11			54
16								53
		END OF BOREHOLE (16.50 metres) Ground temperature cable #2843 installed to 14.00 metres						
17								52
18								51
19								50
20								49
21								48
22								47
22.5								

Fracture Frequency (/m): 2 4 6 8
RQD (%): 40 60 80 100
Recovery (%): 40 60 80 100

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 16.5 m
Equipment Type: Skid mounted	Start Date: 2024 January 25
Logged By: EP	Completion Date: 2024 January 25
Reviewed By: FN	Page 3 of 3

Borehole No: **GT24-10**

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 72.8 m
Meliadine, Nunavut	UTM: 537830 E; 6990257 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Excess Ice Content (% by volume) 20 40 60 80 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	Elevation (m)
0	HQ Diamond Drill with chilled brine	PEAT - rooty, fibrous, black, (30 mm thick)	Nbe						72
		INFERRED BOULDER							
		GRAVEL AND SAND - some silt, angular gravel, well graded, brown	Vs, Vc 1-3%, fine clear lenticular ice lenses		R1				
1									
		GRAVEL - some sand, some silt, cobbles disseminated throughout, angular gravel, well graded, grey	Vx, Vs 20%						71
2		- at 2.15 m, (Gravel - 72%; Sand - 16%; Silt & Clay - 12%)			R2 S1	4.5			
		- from 2.60 to 3.00 m, inferred greywacke boulder							70
3		- at 3.00 m, sandy, trace silt, cobbles disseminated throughout, angular gravel, well graded, grey	Vs, Vx 5%						
			Vs, Vx 1%		S2 R3				69
4		- at 4.50 and from 4.95 to 5.2, inferred boulder							
5					R4				68
		GREYWACKE (BEDROCK) - fresh (W1), fine grained, very strong, dark grey, quartz veins, JSN: 0	at 5.35 m, 5 mm thick clear ice lens						
6		- at 6.00 m, JSN: 2							67
					R5				66
7		- at 7.14 and 7.40 m, inclined joint, slightly weathered, undulating, smooth							
7.5									

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 10.5 m
Equipment Type: Skid mounted	Start Date: 2024 January 24
Logged By: EP	Completion Date: 2024 January 24
Reviewed By: FN	Page 1 of 2

Borehole No: **GT24-10**

AGNICO EAGLE

Project: Geotechnical Investigation for TSF Expansion	Project No: ENG.EARC03140-36
Location:	Ground Elev: 72.8 m
Meliadine, Nunavut	UTM: 537830 E; 6990257 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Excess Ice Content (% by volume) 20 40 60 80 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	Elevation (m)
7.5	HQ Diamond Drill with chilled brine	- at 7.50 m, JSN: 3 - at 7.77, 8.65 and 8.71 m, inclined joint, slightly weathered, undulating, smooth			R6				65
8									
9									64
		- at 9.43, 9.44, 9.51, 9.52 and 10.41 m, horizontal joint, slightly weathered, undulating, smooth			R7				63
10		- at 9.88 m, inclined joint, slightly weathered, undulating, smooth							
		END OF BOREHOLE (10.50 metres)							62
11									
12									61
13									60
14									59
15									58

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 10.5 m
Equipment Type: Skid mounted	Start Date: 2024 January 24
Logged By: EP	Completion Date: 2024 January 24
Reviewed By: FN	Page 2 of 2

Borehole No: **GT25-01**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 68.4 masl
Nunavut	UTM: 538034 E; 6989975 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	Backfill	Elevation (m)
0	HQ Coring	PEAT - rootlets, fibrous, dark brown, frozen, (100 mm thick)	Nbn					68
		SAND (TILL) - gravelly, silty, trace cobbles, trace clay, fine to coarse grained angular to subrounded gravel and cobbles, low plastic clay, brown, frozen	Vx, Vc ~10%		R1			
					G1	10.7		
1		- 310 mm diameter boulder						67
			Vr ~25%					
			Vx, Vc ~10%					
2		- (Gravel - 35%; Sand - 41%; Silt - 23%; Clay - 1%)			G2 R2	13.5		66
		GREYWACKE (BEDROCK) - very fine grained, dark grey, occasional stained fractures						
3		- 40-45° fractures, planar to stepped, rough			R3			65
4		- 45-80° fractures, planar, undulating and stepped, rough						64
5					R4			

△ Temperature (°C) △ -10 0 10 20

Plastic Limit | Moisture Content | Liquid Limit

20 40 60 80

● Fracture Frequency (/m) ● 2 4 6 8

▲ RQD (%) ▲ 40 60 80 100

■ Recovery (%) ■ 40 60 80 100

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 5.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 20
Logged By: CNH	Completion Date: 2025 January 20
Reviewed By: HX	Page 1 of 2

Borehole No: **GT25-01**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 68.4 masl
Nunavut	UTM: 538034 E; 6989975 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
5	HQ Coring									63
		END OF BOREHOLE (5.7 metres) Note: Backfilled at completion								
6										62
7										61
8										60
9										59
10										

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 5.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 20
Logged By: CNH	Completion Date: 2025 January 20
Reviewed By: HX	Page 2 of 2

Borehole No: **GT25-02**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 65.1 masl
Nunavut	UTM: 537686 E; 6990127 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Elevation (m)
0		PEAT - rootlets, fibrous, dark brown, frozen, (100 mm thick)	Nbn			65
		GRAVEL - some organics, trace cobbles, trace sand, coarse grained subangular gravel and cobbles, grey, frozen	Vr		G1	
					R1	
1						64
		SAND AND GRAVEL - subangular to subrounded gravel, poorly graded - from 1.2 to 2.9 m, appears to be thermally disturbed			R2	
2	HQ Coring					63
					G2	
		GREYWACKE (BEDROCK) - fresh to slightly weathered, very fine grained, very to extremely strong (R5-R6), dark grey, occasional quartz veins				
3					R3	62
4		- 45° fractures, planar, slightly rough				61
5					R4	

△ Temperature (°C) △ -10 0 10 20

● Fracture Frequency (/m) ● 2 4 6 8

▲ RQD (%) ▲ 40 60 80 100

■ Recovery (%) ■ 40 60 80 100

Backfill

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 24
Logged By: CNH	Completion Date: 2025 January 24
Reviewed By: HX	Page 1 of 2

Borehole No: **GT25-02**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 65.1 masl
Nunavut	UTM: 537686 E; 6990127 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	△ Temperature (°C) △ -10 0 10 20	● Fracture Frequency (/m) ● 2 4 6 8 ▲ RQD (%) ▲ 40 60 80 100 ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
5									60
6	HQ Coring	- 45° fracture, irregular, rough							59
7		- ~45° fracture, irregular, rough			R5				58
8					R6				57
9		END OF BOREHOLE (8.7 metres) Note: Backfilled at completion							56
10									

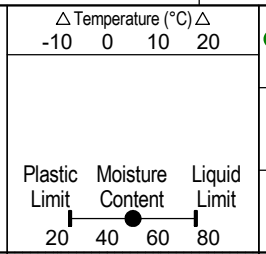
TETRA TECH

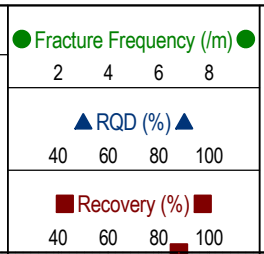
Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 24
Logged By: CNH	Completion Date: 2025 January 24
Reviewed By: HX	Page 2 of 2

Borehole No: GT25-03

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 63.8 masl
Nunavut	UTM: 537336 E; 6990200 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)
0		ICE - clean, clear, (180 mm thick)	ICE			
		SILT AND COBBLES - trace sand, black, frozen	Nbn			
		SAND - silty, gravelly, some shell fragments, trace clay, coarse grained sand, light brown, frozen			R1	
1		- (Gravel - 26%; Sand - 36%; Silt - 35%; Clay - 3%)			G1	14
	HQ Coring	GRAVEL AND COBBLES - silty, some sand, trace clay, rounded to subrounded gravel and cobbles, poorly graded, grey			R2	
2		- from 1.8 to 3.9 m, appears to be thermally disturbed				
					R3	
3		- (Gravel - 47%; Sand - 18%; Silt - 31%; Clay - 4%)			G2	9.4
4		GREYWACKE (BEDROCK) - fresh to slightly weathered, very fine grained, strong to extremely strong (R4-R6), dark grey				
		- 45-85° fractures, stepped and irregular, rough, trace staining on fractures			R4	
5						





Elevation (m): 63, 62, 61, 60, 59

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 22
Logged By: CNH	Completion Date: 2025 January 22
Reviewed By: HX	Page 1 of 2

Borehole No: **GT25-03**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 63.8 masl
Nunavut	UTM: 537336 E; 6990200 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
5										
6	HQ Coring	- 45-85° fractures, stepped and irregular, rough, trace staining on fractures			R5			19		58
7		- ~45° fractures, planar and undulating, rough								57
8					R6					56
9		END OF BOREHOLE (8.7 metres) Note: Backfilled at completion								55
10										54

TETRA TECH

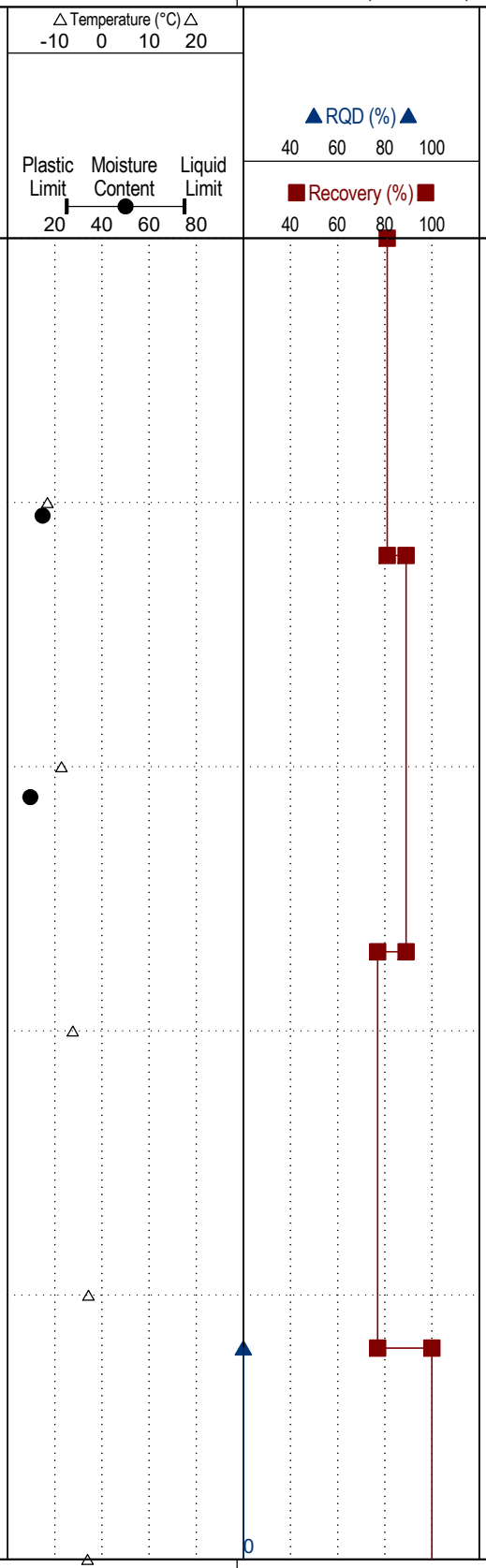
Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 22
Logged By: CNH	Completion Date: 2025 January 22
Reviewed By: HX	Page 2 of 2

Borehole No: **GT25-04**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 63.8 masl
Nunavut	UTM: 537384 E; 6990252 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)
0		ICE - clear, clean, (50 mm thick)	ICE			
		PEAT - sandy, gravelly, cobbly, rootlets, fibrous, subangular to subrounded gravel and cobbles, poorly graded, dark brown to dark grey, frozen	Nbn			
		SILT (TILL) - sandy, gravelly, trace clay, poorly graded, frozen	Vc, Vx ~5%		R1	
1					G1	14.8
	HQ Coring					
2		- (Gravel - 22%; Sand - 35%; Silt - 41%; Clay - 2%)			R2	
					G2	9.6
			Vs ~10%			
3						
		GREYWACKE (BEDROCK) - fresh to moderately weathered, very fine grained, very to extremely strong (R5-R6), dark grey			R3	
4						
5					R4	



Elevation (m)
63
62
61
60
59

GTC's | PVC Pipe

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 24
Logged By: CNH/DS	Completion Date: 2025 January 24
Reviewed By: HX	Page 1 of 2

Borehole No: **GT25-04**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 63.8 masl
Nunavut	UTM: 537384 E; 6990252 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	▲RQD (%)▲ 40 60 80 100 / ■Recovery (%)■ 40 60 80 100	GTC's	PVC Pipe	Elevation (m)
5											
6	HQ Coring										58
7		- pitting along outside of core and minor staining in fractures			R5			0			57
8		- no visible pitting or staining			R6			15			56
9		END OF BOREHOLE (8.7 metres) slough - 7.8 metres at completion Eight single bead ground temperature cables installed at 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0 and 7.8 metres Notes: Backfilled at completion Temperatures presented are from the installed ground temperature cables									55
10											54

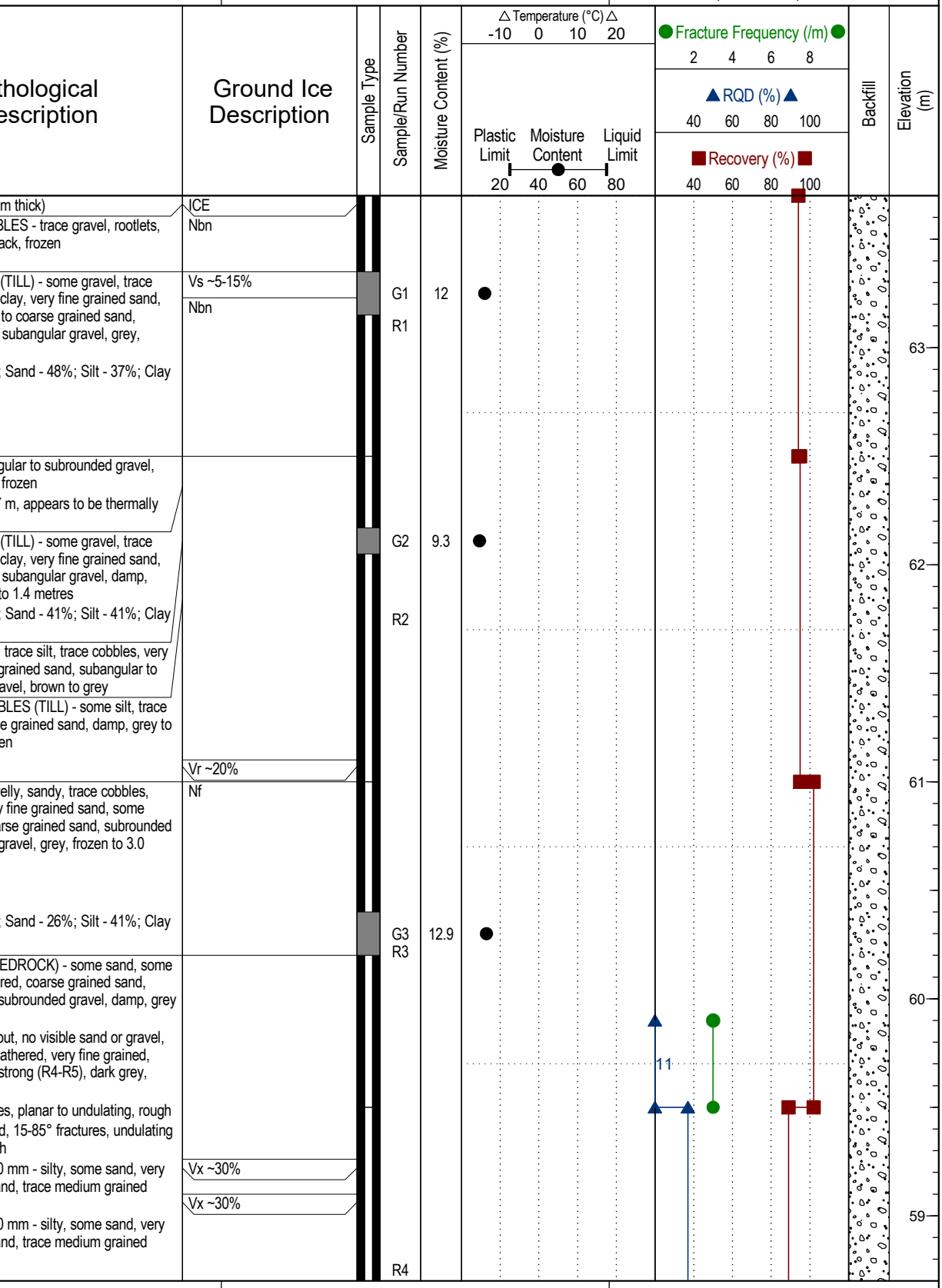
TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 24
Logged By: CNH/DS	Completion Date: 2025 January 24
Reviewed By: HX	Page 2 of 2

Borehole No: **GT25-05**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 63.7 masl
Nunavut	UTM: 537331 E; 6990280 N; Z 15

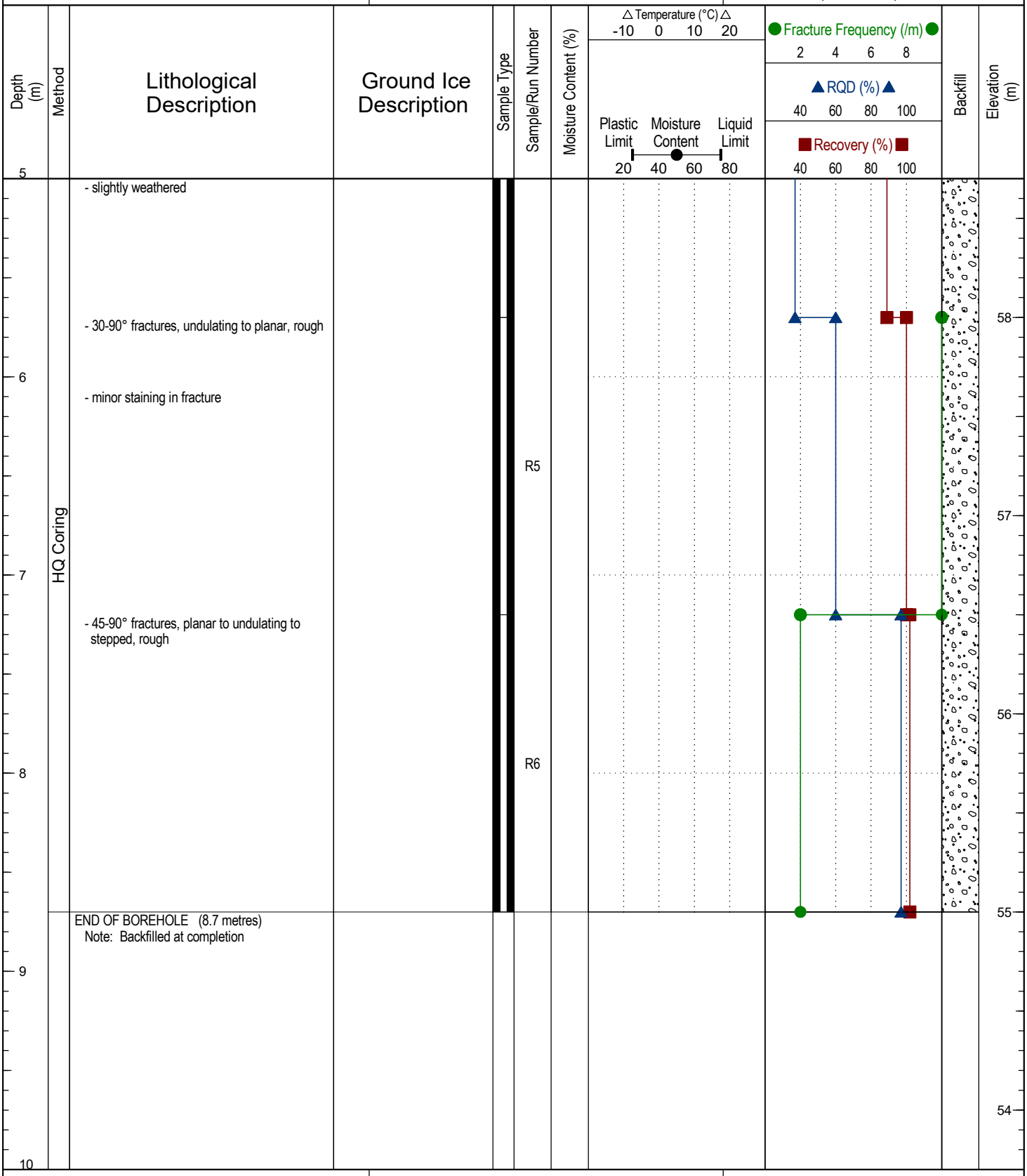
Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)
0		ICE - clear, (40 mm thick)	ICE			
		PEAT AND COBBLES - trace gravel, rootlets, dark grey to black, frozen	Nbn			
		SAND AND SILT (TILL) - some gravel, trace cobbles, trace clay, very fine grained sand, some medium to coarse grained sand, subrounded to subangular gravel, grey, frozen - (Gravel - 13%; Sand - 48%; Silt - 37%; Clay - 2%) - brown	Vs ~5-15% Nbn		G1 R1	12
1		GRAVEL - subangular to subrounded gravel, brown to grey, frozen - from 1.2 to 2.7 m, appears to be thermally disturbed				
		SAND AND SILT (TILL) - some gravel, trace cobbles, trace clay, very fine grained sand, subrounded to subangular gravel, damp, brown, frozen to 1.4 metres - (Gravel - 17%; Sand - 41%; Silt - 41%; Clay - 1%)			G2 R2	9.3
2	HQ Coring	GRAVEL - sandy, trace silt, trace cobbles, very fine to coarse grained sand, subangular to subrounded gravel, brown to grey				
		SAND AND COBBLES (TILL) - some silt, trace gravel, very fine grained sand, damp, grey to dark grey, frozen	Vr ~20%			
		SILT (TILL) - gravelly, sandy, trace cobbles, trace clay, very fine grained sand, some medium to coarse grained sand, subrounded to subangular gravel, grey, frozen to 3.0 metres - (Gravel - 32%; Sand - 26%; Silt - 41%; Clay - 1%)	Nf		G3 R3	12.9
3		GREYWACKE (BEDROCK) - some sand, some gravel, weathered, coarse grained sand, subangular to subrounded gravel, damp, grey to dark grey - pyrite throughout, no visible sand or gravel, moderately weathered, very fine grained, strong to very strong (R4-R5), dark grey, quartz veins - 30-60° fractures, planar to undulating, rough - highly fractured, 15-85° fractures, undulating to planar, rough - clay infill for 40 mm - silty, some sand, very fine grained sand, trace medium grained sand, grey - clay infill for 80 mm - silty, some sand, very fine grained sand, trace medium grained sand, grey	Vx ~30% Vx ~30%			
4						
5					R4	



Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 24
Logged By: DS	Completion Date: 2025 January 24
Reviewed By: HX	Page 1 of 2

Borehole No: GT25-05

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 63.7 masl
Nunavut	UTM: 537331 E; 6990280 N; Z 15



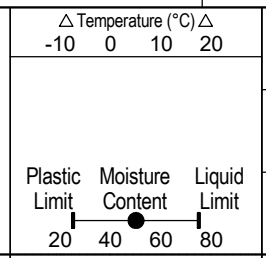
Contractor: Orbit Garant Drilling Inc.	Completion Depth: 8.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 24
Logged By: DS	Completion Date: 2025 January 24
Reviewed By: HX	Page 2 of 2

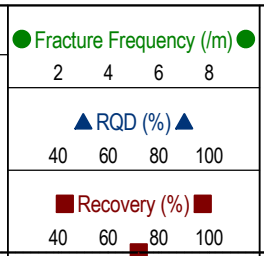
Borehole No: **GT25-06**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 64.2 masl
Nunavut	UTM: 537426 E; 6990230 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)
0		PEAT - rootlets, fibrous, dark brown, frozen, (60 mm thick)	Vs ~20%			
		SAND (TILL) - silty, very fine grained angular to subangular sand, well graded, brown to grey, frozen	Nbn			
		SAND AND SILT (TILL) - some gravel, trace clay, fine grained sand, angular to subangular gravel, well graded, brown, frozen			G1	12.6
		- (Gravel - 11%; Sand - 48%; Silt - 41%)			R1	
1						
			Vr, Vs ~20-40%			
2			Nbn		R2	
	HQ Coring	- (Gravel - 16%; Sand - 41%; Silt - 40%; Clay - 3%)			G2	77.2
3					G3	15.9
		GREYWACKE (BEDROCK) - fresh, very fine grained, very to extremely strong (R5-R6), dark grey			R3	
4						
		- fractures, irregular, planar, stepped, rough, trace staining				
5					R4	





Backfill

Elevation (m): 64, 63, 62, 61, 60

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 7.2 m
Equipment Type: Skid mounted	Start Date: 2025 January 22
Logged By: CNH	Completion Date: 2025 January 22
Reviewed By: HX	Page 1 of 2

Borehole No: **GT25-06**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 64.2 masl
Nunavut	UTM: 537426 E; 6990230 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
5										
6	HQ Coring	- ~45° fractures, irregular, stepped, rough, trace staining			R5					59
7										58
		END OF BOREHOLE (7.2 metres) Note: Backfilled at completion								57
8										56
9										55
10										

TETRA TECH

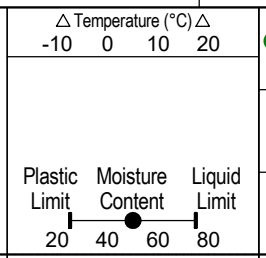
Contractor: Orbit Garant Drilling Inc.	Completion Depth: 7.2 m
Equipment Type: Skid mounted	Start Date: 2025 January 22
Logged By: CNH	Completion Date: 2025 January 22
Reviewed By: HX	Page 2 of 2

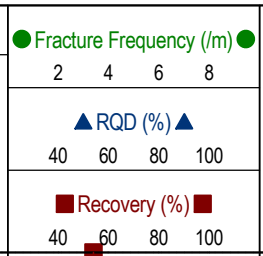
Borehole No: **GT25-07**

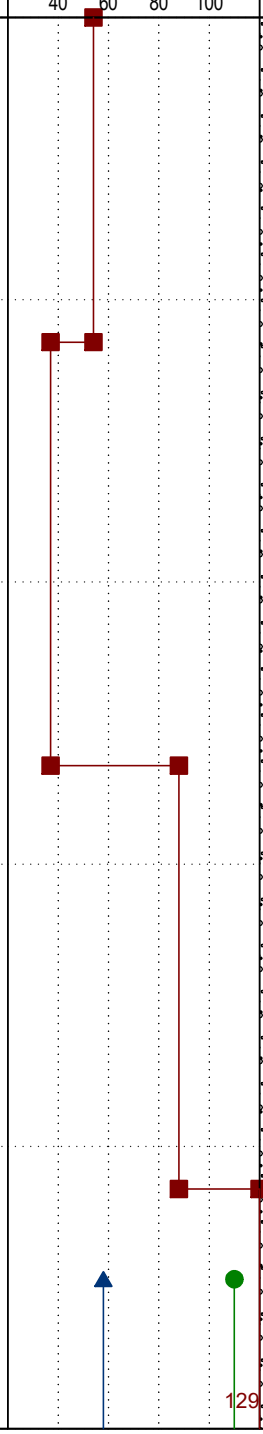
AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 64.3 masl
Nunavut	UTM: 537387 E; 6990325 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)
0		ICE - (30 mm thick)	ICE			
		PEAT - cobbly, some rootlets, moderately weathered, rounded, rough, black to brown to grey, frozen - trace gravel	Nbn		EI1	
		COBBLES - moderately weathered, rounded, rough, grey to brown - from 0.5 to 3.0 m, appears to be thermally disturbed			R1	
1		GRAVEL - trace cobbles, trace shells, slightly weathered, subangular to subrounded, rough, brown to grey				
	HQ Coring				R2	
2		- moderately weathered, subrounded				
		COBBLE - greywacke, slighty weathered, subrounded to subangular, dark grey				
3		SAND AND GRAVEL (TILL) - some silt, trace cobbles, very fine grained sand, some medium to coarse grained sand, subangular to subrounded gravel, rough, wet, grey - frozen	Nbn		R3 EI2	
		- (Gravel - 39%; Sand - 41%; Silt - 20%)			G3	7.8
		GREYWACKE (BEDROCK) - highly weathered, brown to dark grey				
4						
		- pyrite throughout, slightly weathered, very fine grained, strong to very strong (R4-R6), dark grey, quartz veins throughout - 30-90° fractures, planar to stepped to undulating, rough			R4	
5						







Backfill	Elevation (m)
	64
	63
	62
	61
	60

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 11.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 23
Logged By: DS	Completion Date: 2025 January 23
Reviewed By: HX	Page 1 of 3

Borehole No: **GT25-07**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 64.3 masl
Nunavut	UTM: 537387 E; 6990325 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
5										
	HQ Coring	- fresh								59
		- 30-90° fractures, planar to undulating, rough								
		- minor staining								
6										
					R5					58
		- slightly weathered - 30 mm thick minor staining								
7										
		- highly fractured, 15-90° fractures, stepped to undulating, rough - 90 mm thick quartz vein								57
		- 90 mm thick clay infill - silty, trace sand, medium plastic, grey			G4					
					R6					
8										
		- clay in fracture								56
		- 45-90° fractures, undulating, rough								
9										
		- 180 mm thick grey clay infill			R7					55
		- fresh								
10										

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 11.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 23
Logged By: DS	Completion Date: 2025 January 23
Reviewed By: HX	Page 2 of 3

Borehole No: **GT25-07**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 64.3 masl
Nunavut	UTM: 537387 E; 6990325 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
10										
	HQ Coring	- 15-90° fractures, planar to undulating, rough			R8					54
11										53
		END OF BOREHOLE (11.7 metres) Note: Backfilled at completion								
12										52
13										51
14										50
15										

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 11.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 23
Logged By: DS	Completion Date: 2025 January 23
Reviewed By: HX	Page 3 of 3

Borehole No: GT25-08

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 65.3 masl
Nunavut	UTM: 537410 E; 6990492 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	Backfill	Elevation (m)
0		PEAT - rootlets, black, frozen	Nbn					
		- cobbly, trace gravel, trace sand, coarse grained sand, brown						
		SAND AND SILT (TILL) - some cobbles, trace gravel, trace clay, very fine grained sand, some medium to coarse grained sand, brown, frozen to 1.2 metres	Vs ~5-10%		R1	17.3		
			Nf		FS1			
		- (Gravel - 8%; Sand - 46%; Silt - 45%; Clay - 1%)			EI2			
1		- wet						
		- from 1.2 to 1.4 m, appears to be thermally disturbed	Nbn					
		- frozen to 4.5 metres						
		- some gravel, grey			R2			
2					FS3			
	HQ Coring		Vx ~5-10%		EI4			
		- from 2.6 to 4.9 m, appears to be thermally disturbed						
		- trace cobbles						
3					R3			
		- some silt, very fine to fine grained sand, brown						
4		- damp			G5			
		SAND AND GRAVEL (TILL) - very fine to fine grained sand, some coarse grained sand,			R4			
5								

△ Temperature (°C) △ -10 0 10 20

■ Bulk Density (kg/m³) ■ 1400 1600 1800 2000

Plastic Limit | Moisture Content | Liquid Limit — 20 40 60 80

● Fracture Frequency (/m) ● 2 4 6 8

▲ RQD (%) ▲ 40 60 80 100

■ Recovery (%) ■ 40 60 80 100

9

12

65 64 63 62 61

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 13.2 m
Equipment Type: Skid mounted	Start Date: 2025 January 23
Logged By: CNH/DS	Completion Date: 2025 January 23
Reviewed By: HX	Page 1 of 3

Borehole No: **GT25-08**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 65.3 masl
Nunavut	UTM: 537410 E; 6990492 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / ■ Bulk Density (kg/m³) ■ 1400 1600 1800 2000 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
5		subrounded gravel, grey to brown								
		GREYWACKE (BEDROCK) - moderately weathered, very fine grained, damp, strong to very strong (R4-R5), dark grey, quartz veins throughout								
		- slightly weathered, fine to medium grained, medium strong to strong (R3-R4), 30-60° fractures, undulating to stepped								
6		- minor staining in fractures								60
		- minor staining in fractures								
		- minor staining in fractures			R5					59
7		- ~45° fractures, irregular, rough								58
	HQ Coring									
8					R6					57
		- ~90° fractures, irregular, rough, brown clay gauge								
9										56
					R7					
10										

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 13.2 m
Equipment Type: Skid mounted	Start Date: 2025 January 23
Logged By: CNH/DS	Completion Date: 2025 January 23
Reviewed By: HX	Page 2 of 3

Borehole No: **GT25-08**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 65.3 masl
Nunavut	UTM: 537410 E; 6990492 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / ■ Bulk Density (kg/m³) ■ 1400 1600 1800 2000 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
10										
	HQ Coring	- ~45° fractures, irregular, rough			R8					55
11										54
		- ~45° fractures, irregular and planar, rough								
12					R9					53
13										
		END OF BOREHOLE (13.2 metres) Note: Backfilled at completion								52
14										
										51
15										

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 13.2 m
Equipment Type: Skid mounted	Start Date: 2025 January 23
Logged By: CNH/DS	Completion Date: 2025 January 23
Reviewed By: HX	Page 3 of 3

Borehole No: **GT25-09**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 67.8 masl
Nunavut	UTM: 537616 E; 6990394 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)
0	HQ Coring	PEAT - rootlets, black, frozen, (160 mm thick)	ICE			
		COBBLES - some sand, trace silt, trace gravel, fine grained sand, some medium to coarse grained sand, brown to grey, frozen, (140 mm thick)	Nbn			
			Vs, Vr ~5-10%			
			Nbn		R1	
		COBBLES AND SAND (TILL) - some gravel, trace silt, fine grained sand, some medium to coarse grained sand, brown to grey, frozen	Vs, Vr ~5-10%			
			Nbn			
1		GRAVEL AND SAND (TILL) - silty, some cobbles, trace clay, very fine grained sand, some medium to coarse grained sand, brown, frozen			FS1	9
		- (Gravel - 37%; Sand - 36%; Silt - 25%; Clay - 2%)			EI2	
		- cobbly				
		- some gravel, trace cobbles, grey				
		- trace gravel	Vs, Vr ~10-30%			
2					R2	
					FS3	
		- quartz for 50 mm				
					G4	15.6
		GRAVEL - rounded gravel, brown to grey, frozen				
3		- from 2.7 to 4.5 m, appears to be thermally disturbed				
					R3	
4						
		SAND (TILL) - silty, trace gravel, trace clay, very fine grained sand, some medium to coarse grained sand, grey, frozen	Nbn			
5					R4	

Temperature (°C): -10 0 10 20

Bulk Density (kg/m³): 1400 1600 1800 2000

Plastic Limit | Moisture Content | Liquid Limit: 20 40 60 80

Fracture Frequency (/m): 2 4 6 8

RQD (%): 40 60 80 100

Recovery (%): 40 60 80 100

17

GTC #2869 | PVC Pipe | Elevation (m): 67 66 65 64 63

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 15 m
Equipment Type: Skid mounted	Start Date: 2025 January 21
Logged By: CNH/DS	Completion Date: 2025 January 21
Reviewed By: HX	Page 1 of 4

Borehole No: **GT25-09**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 67.8 masl
Nunavut	UTM: 537616 E; 6990394 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / ■ Bulk Density (kg/m³) ■ 1400 1600 1800 2000 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	GTC #2869	PVC Pipe	Elevation (m)
5					FS5						
		- 190 mm thick quartz seam GREYWACKE (BEDROCK) - pyrite throughout, fresh to slightly weathered, very fine grained, strong to very strong (R4-R5), dark grey, quartz veins and seams - 500 mm thick quartz seam - 45-90° fractures, undulating, rough - fresh, fine to medium grained, medium strong to strong (R3-R4), grey to brown									
6					R5						62
7	HQ Coring	- ~45° fractures, stepped, rough									61
8					R6						60
		- ~45° fractures, stepped to planar, rough, trace staining									59
9					R7						
											58
10											

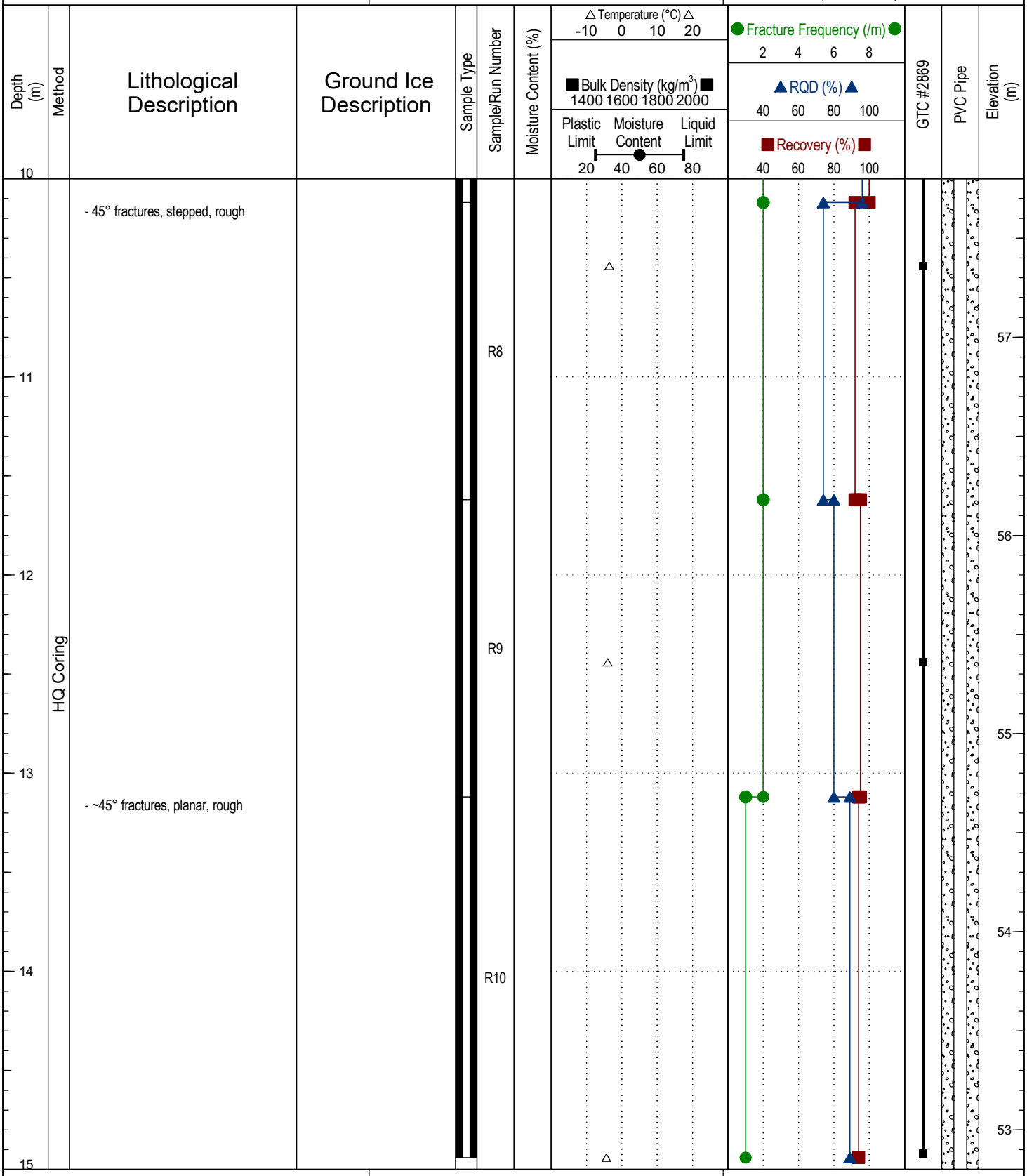
TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 15 m
Equipment Type: Skid mounted	Start Date: 2025 January 21
Logged By: CNH/DS	Completion Date: 2025 January 21
Reviewed By: HX	Page 2 of 4

Borehole No: **GT25-09**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 67.8 masl
Nunavut	UTM: 537616 E; 6990394 N; Z 15

AGNICO EAGLE



TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 15 m
Equipment Type: Skid mounted	Start Date: 2025 January 21
Logged By: CNH/DS	Completion Date: 2025 January 21
Reviewed By: HX	Page 3 of 4

Borehole No: **GT25-09**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 67.8 masl
Nunavut	UTM: 537616 E; 6990394 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / ■ Bulk Density (kg/m³) ■ 1400 1600 1800 2000 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	GTC #2869	PVC Pipe	Elevation (m)
15		END OF BOREHOLE (15.0 metres) Ground temperature cable #2869 installed to 15.0 metres in 75 mm PVC pipe Notes: Backfilled at completion Temperatures presented are from the installed ground temperature cable									52
16											51
17											50
18											49
19											48
20											

TETRA TECH

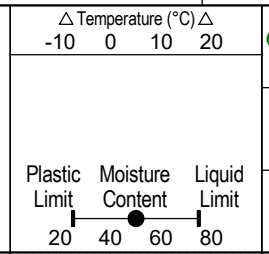
Contractor: Orbit Garant Drilling Inc.	Completion Depth: 15 m
Equipment Type: Skid mounted	Start Date: 2025 January 21
Logged By: CNH/DS	Completion Date: 2025 January 21
Reviewed By: HX	Page 4 of 4

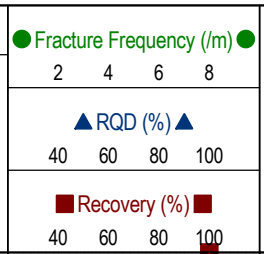
Borehole No: **GT25-10**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 69.9 masl
Nunavut	UTM: 537914 E; 6990164 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)
0		PEAT - rootlets, fibrous, dark brown, frozen, (100 mm thick)	Nbn			
		GRAVEL - some sand, angular to subangular gravel, fine to coarse grained sand, grey, frozen, (70 mm thick)				
		GRANITE (BOULDER) - (420 mm thick)				
		SAND (TILL) - silty, some cobbles, trace gravel, trace clay, very fine grained sand, some medium to coarse grained sand, brown, frozen	Nbn		R1	
					EI2	
1		- (Gravel - 6%; Sand - 69%; Silt - 24%; Clay - 1%)			G1	18.5
		- 660 mm thick granite boulder				
2					R2	
			Nbn			
			Vr, Vs ~20%		G3	19.6
	HQ Coring	- 350 mm thick granite boulder	Nbn			
3						
		- 280 mm thick greywacke boulder			R3	
		- trace clay, grey	Nbn			
					G5	23.8
4		- trace cobbles - (Gravel - 12%; Sand - 55%; Silt - 31%; Clay - 2%)			G4	11.3
		BEDROCK - weathered, fine to coarse grained, brown to grey				
		GREYWACKE (BEDROCK) - pyrite throughout, slightly weathered, very fine grained, strong to very strong (R4-R5), dark grey, quartz veins, occasional stained fracture - 30-90° fractures, undulating to planar, rough			R4	
5						





Backfill

Elevation (m): 69, 68, 67, 66, 65

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 11.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 20
Logged By: CNH/DS	Completion Date: 2025 January 20
Reviewed By: HX	Page 1 of 3

Borehole No: **GT25-10**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 69.9 masl
Nunavut	UTM: 537914 E; 6990164 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
5										
6	HQ Coring	- 45-90° fractures, stepped to planar to undulating, rough - moderately weathered - 110 mm thick sand vein			R5					64
7		- 100 mm thick sand vein - fresh, 75-90° fractures, undulating to stepped, rough								63
8					R6					62
9		- 80° fractures, planar, rough								61
10					R7					60

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 11.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 20
Logged By: CNH/DS	Completion Date: 2025 January 20
Reviewed By: HX	Page 2 of 3

Borehole No: **GT25-10**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 69.9 masl
Nunavut	UTM: 537914 E; 6990164 N; Z 15

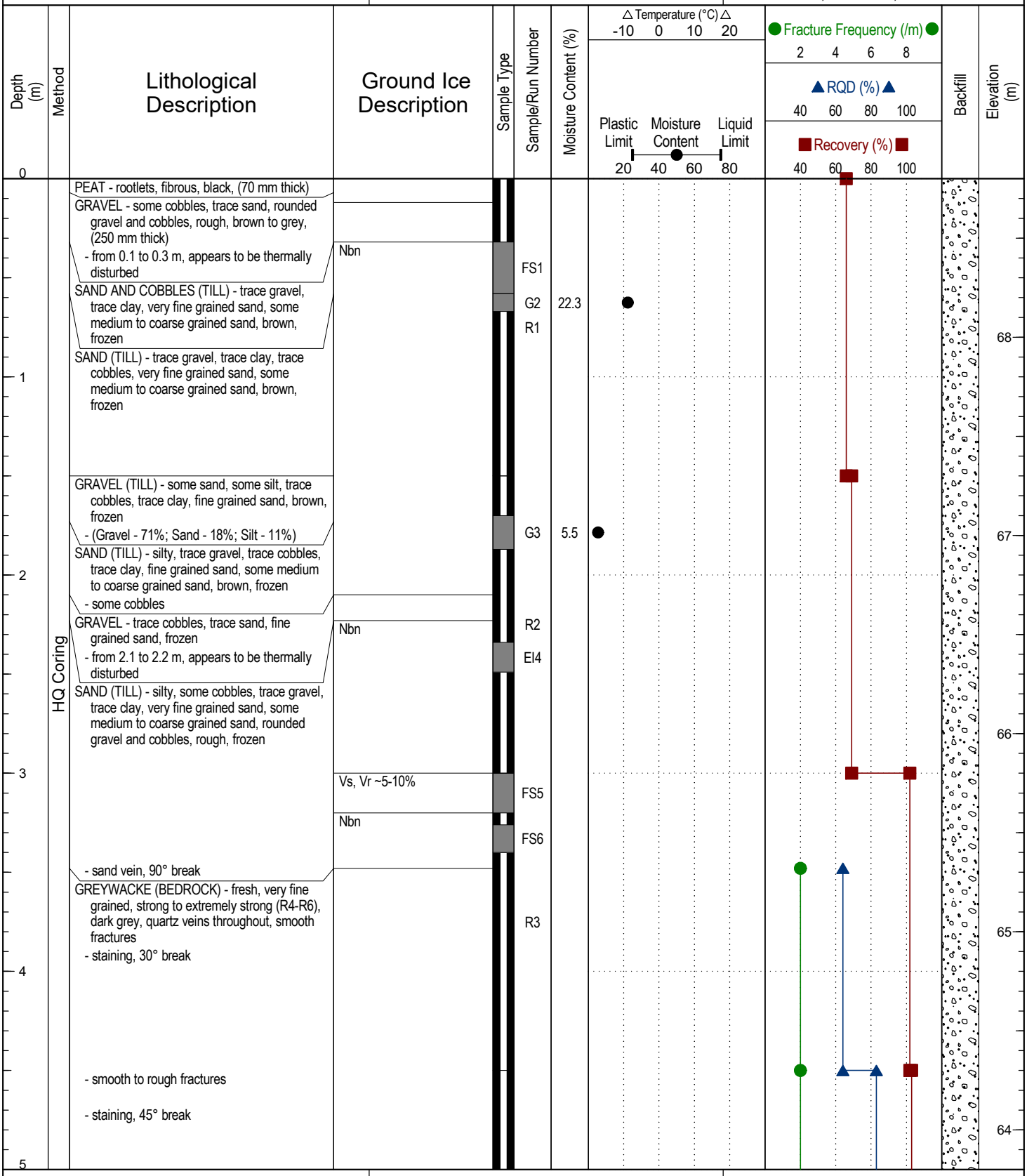
Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
10										
11	HQ Coring	- 85-90° fractures, undulating to planar, rough			R8					59
		END OF BOREHOLE (11.7 metres) Note: Backfilled at completion								
12										58
13										57
14										56
15										55

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 11.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 20
Logged By: CNH/DS	Completion Date: 2025 January 20
Reviewed By: HX	Page 3 of 3

Borehole No: **GT25-11**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 68.8 masl
Nunavut	UTM: 538088 E; 6990069 N; Z 15



Contractor: Orbit Garant Drilling Inc.	Completion Depth: 15 m
Equipment Type: Skid mounted	Start Date: 2025 January 20
Logged By: DS	Completion Date: 2025 January 20
Reviewed By: HX	Page 1 of 4

Borehole No: **GT25-11**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 68.8 masl
Nunavut	UTM: 538088 E; 6990069 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
5										
6	HQ Coring	- staining, 45° break - staining, 40° break - staining, 80° break - 45° fracture, rough			R4					63
7		- 30° fracture, rough			R5					62
8		- 15° fracture, rough - 85° fracture, rough - 85° fracture, rough - 45° fracture, rough			R6					61
9		- rough to smooth fractures								60
10		- 60° fracture			R7					59

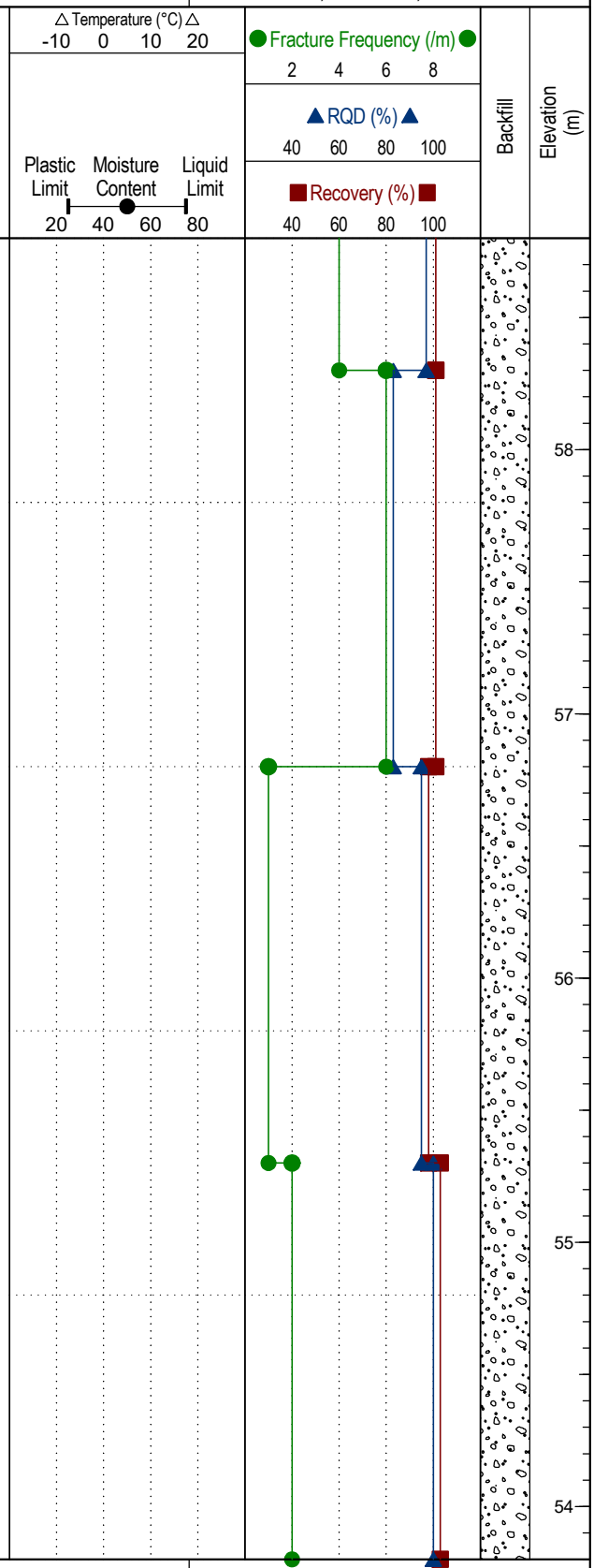
TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 15 m
Equipment Type: Skid mounted	Start Date: 2025 January 20
Logged By: DS	Completion Date: 2025 January 20
Reviewed By: HX	Page 2 of 4

Borehole No: **GT25-11**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 68.8 masl
Nunavut	UTM: 538088 E; 6990069 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)
10	HQ Coring	- 60° fracture - 85° fracture				
		- 60° fracture				
		- stepped, rough and smooth fractures				
		- 30° fracture, stepped, rough				
11		- 90° fracture, rough			R8	
		- 75° fracture, rough				
		- 90° fracture, rough - 90° fracture, rough - pyrite veins - 90° fracture, smooth, pyrite infill - 90° fracture, smooth, pyrite infill - 90° fracture, staining				
12		- 75° fracture, staining				
		- 75° fracture, rough			R9	
13						
14		- 90° fracture, rough			R10	
15		- 90° fracture, rough				



Contractor: Orbit Garant Drilling Inc.	Completion Depth: 15 m
Equipment Type: Skid mounted	Start Date: 2025 January 20
Logged By: DS	Completion Date: 2025 January 20
Reviewed By: HX	Page 3 of 4

Borehole No: **GT25-11**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 68.8 masl
Nunavut	UTM: 538088 E; 6990069 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
15		END OF BOREHOLE (15.0 metres) Note: Backfilled at completion								53
16										52
17										51
18										50
19										49
20										

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 15 m
Equipment Type: Skid mounted	Start Date: 2025 January 20
Logged By: DS	Completion Date: 2025 January 20
Reviewed By: HX	Page 4 of 4

ROCK CODE LOG

DDH #: GT-07-11A **Logger:** C. Meredith

DH DEPTH		STRAT	LITHO		SHEAR / FAULT ZONES					SULPHIDES/OXIDE (%)						BEDDING / FOL'N		
FROM	TO	CODE	ROCK CODE	DESCRIPTION	FROM	TO	TYPE	INT.	CA	as	cp	gn	mt	po	py	Depth	Type	CA
0.00	6.00	UG	**UG**	overburden, Casing to 6.0m														
6.00	8.00	SAM	**Qv-wa'ser**	Light grey, medium grained Kwa with cm scale bedding. 50% sericitic quartz vein in 2 parallel folded veins and their offshoots, 0.5-5.0cm, trending near parallel to CA at 7. Blue grey glassy quartz with strongly sericitic fractures parallel to vein contacts. Contacts are sharp with sericitic alteration within the veins. Texture is fractured and weakly brecciated. Trace euhedral pyrite along fractures generally at 40 to CA	6.00	7.15	sh	1	7						0.05			
				6.0-7.15m sericitic quartz vein near parallel to CA at 7, cross cut by a series of 6 sericite/pyrite filled fractures - 40 to CA	7.15	7.95	sh	1	7									
				7.0-7.2m overlap of 2 veins with interconnecting offshoots parallel to CA, 0.5-1.0cm - blue grey glassy quartz with narrow rims of sericite.														
				7.15-7.95m similar to the vein at 6.0m, folded, blue-grey glassy quartz with sericitic fractures and sericite rim along the contact. Cross cut by a series of 5 sericite-pyrite fractures, 40 to CA, the down hole apex of this vein has offshoots near parallel to CA														
				7.75-7.9m cross cutting sericitic quartz vein, 0.5cm over 15.0cm, 30 to CA														
8.00	11.90	SAM	**Kwa-s**	Medium to light grey, medium grained Kwa with cm scale bedding, in dm scale intervals. 15% dark grey Ks in mm-cm scale beds. There are 4 veins >0.5cm, 20, 30, 35 and 50 to CA. Traces of pyrite along vein contacts											0.01	8.70	S0	40
				9.0-9.9m series of 10 quartz-ankerite-pyrrhotite veinlets <0.5cm, 30 to CA sub-parallel to S2b with 2 cross cutting at 50 to CA												9.10	S1	50
				9.9-10.15m sericitic quartz vein with sericitic tension fractures. Vein is folded with apex down hole, limbs opening up hole - 1.0cm trailing off up hole												9.20	S2	25
				10.3-0.4m sericitic quartz vein - 0.5cm over 20.0cm, 35 to CA												10.90	S3	30
				10.75-10.9m sericitic quartz vein, 0.5cm over 15.0cm, 30 to CA												11.45	S2b	30
				10.9-11.05m light grey silt (2.0cm) with narrow dark grey/black mud/argillaceous bed (1.5cm on both sides of silt)., 30 to CA														
				11.0-11.1m 0.5cm sericitic quartz vein, 50 to CA														
11.90	15.05	SAM	**Kwa-qv'ser**	Similar to 6.0-8.0 light greenish grey, fine to medium grained Kwa - weakly sericitic and chloritic 40% sericitic quartz vein in 2 veins folded with fold axis near parallel to CA - limbs 8 to CA. Fractured and weakly brecciated textures. Sericitic and weakly chloritic fractures parallel to vein contacts. Offshoots are near parallel to CA to 30 to CA. Traces of pyrrhotite - along contacts/fractures. Traces of pyrite along fractures.	11.90	13.30	sh	1	10					1					
				11.9-13.3m folded vein, 1.0-4.0cm near parallel to CA, ~10 to CA. The upper contact has an offshoot at 3.5cm, 30 to CA - rim of pyrrhotite 0.1cm	13.80	15.05	sh	1	8									

ROCK CODE LOG

DDH #: GT-07-11A **Logger:** C. Meredith

DH DEPTH		STRAT	LITHO		SHEAR / FAULT ZONES					SULPHIDES/OXIDE (%)						BEDDING / FOL'N		
FROM	TO	CODE	ROCK CODE	DESCRIPTION	FROM	TO	TYPE	INT.	CA	as	cp	gn	mt	po	py	Depth	Type	CA
				13.8-15.05m Sericitic quartz vein with sharp contacts, 1.0-4.0cm, 8 to CA														
15.05	28.80	SAM	**Kwa**	Light to medium grey, fine to medium grained Kwa with <15% dark grey Ks in cm scale beds/intervals. Few veins >0.5cm - see details below. Veinlets <0.5cm are quartz ankerite or quartz-ankerite-pyrrhotite, 15 and 25 to CA										0.1		20.15	S2b	30
				16.95-17.2m sericitic quartz vein - blue grey quartz folded limbs 1.0-1.5cm over the interval, 25 to CA, cross cut by a series of 2 quartz-ankerite, 30 to CA.												21.70	S0	50
				19.25-19.7m 2 similar quartz-ankerite-pyrrhotite fractures/veinlets, 15 and 25 to CA												19.60	S0	45
				22.8-24.2m series of 13 fine quartz-ankerite-pyrrhotite veinlets/fractures, 30 to CA, subparallel to a weak foliation - strong sericitic bleaching adjacent to veinlets/fractures.														
				23.6m sericitic quartz vein - blue grey quartz, 0.5-1.0cm, 30 to CA.														
				25.55m quartz-ankerite-pyrrhotite, 0.2cm, 30 to CA, subparallel to foliation														
				25.6-25.75m quartz-ankerite-pyrrhotite, 2.2cm over 10.0m, 25 to CA, subparallel to foliation. This vein is cut by 1.0cm quartz-ankerite, 35 to CA over 10.0cm - wide sericitic alteration halo. A fine network of fractures emanates from the quartz-ankerite-pyrrhotite vein - the fractures are irregular from near parallel to veinlets to near parallel to CA.														
				26.4-27.0m fine fractures with sericitic alteration - quartz-ankerite and sericitic quartz fill/veinlets are parallel to the foliation at 35-40 to CA - with a high density of parallel "offshoots" 60 to CA														
				27.0-28.8m patchy sericitic bleaching														
28.80	30.35	SAM	**Kwa-qv'ser**	Medium grey, medium grained Kwa - poorly bedded. 25% sericitic quartz in 3 veins, 1.0-4.0cm, near parallel to CA, with strongly sericitic fractures 8-10 and 30 to CA. 0.5% Pyrrhotite along fractures and vein contacts. 0.01% - trace chalcopyrite with pyrrhotite.														
				28.8-29.35m folded sericitic quartz 1.0-4.0cm, 8-10 to CA with strong sericitization along fractures near parallel to CA. Pyrrhotite occurs along sericitic fractures and vein contact. Offshoots (35 to CA, pinched and bent) connect vein limbs that are near parallel to CA .														
				29.45-29.55m quartz-ankerite-pyrrhotite, 0.5cm, 35 to CA, siliceous and sericitic alteration halo to 0.5cm														
				29.65-30.15m series of fine fractures / veinlet ≤0.1cm have quartz-ankerite or sericitic quartz fill - siliceous alteration halos. There are 2 at 40 to CA and 6 at 15 to CA.														
				30.15-30.35m quartz-ankerite, 4.5cm 35 to CA - inclusions of Kwa are up to 1.0cm, parallel to contacts. This vein is cross cut by sericitic quartz veinlets, 0.1cm, 30 to CA and near parallel to CA.														

ROCK CODE LOG

DDH #: GT-07-11A **Logger:** C. Meredith

DH DEPTH		STRAT	LITHO		SHEAR / FAULT ZONES					SULPHIDES/OXIDE (%)						BEDDING / FOL'N		
FROM	TO	CODE	ROCK CODE	DESCRIPTION	FROM	TO	TYPE	INT.	CA	as	cp	gn	mt	po	py	Depth	Type	CA
30.35	42.50	SAM	**Kwa-s**	Medium grey, medium grained Kwa - in dm scale intervals, weakly foliated. 15% dark grey ks in cm scale intervals. Few veins >0.5cm - concentrated at 31.1-32.3m in a fracture zone. 0.5% pyrrhotite - euhedral to subhedral crystals along quartz-quartz-ankerite veinlets - 0.1-0.2cm, 40 to CA parallel to bedding										0.5		35.35	S0	40
				30.9-32.9m high intensity of 0.1-0.3cm quartz-ankerite parallel to bedding ~49 over the interval, approximately parallel, ± pyrrhotite as euhedral to subhedral crystals, 30 and 40 to CA parallel to S2a and bedding - occasionally 60 to CA.												36.70	S0	40
				31.1m vein fragment 1.0-4.0cm, irregular												38.70	S0	40
				31.35-31.45m quartz vein, cross cutting at 25 to CA, weakly sericitic - clean the vein cross cuts a smaller quartz-ankerite veinlet 30 to CA subparallel to the foliation.												39.10	S0	40
42.50	44.45	SAM	**Qv-wa'ser**	Strongly fractured to weakly brecciated sericitic quartz vein, upper contact is sharp at 10 to CA, offshoots are near parallel to CA, strong sericitic alteration halo. 15% light to medium grey, medium grained Kwa - weakly bedded, sericitic trace pyrrhotite and pyrite - fractures in veins and 0.1cm quartz-ankerite subparallel to bedding or disseminated euhedral to subhedral crystals in vein alteration zone.	42.50	43.55	sh	2	10					0.1	0.01			
				42.5-43.55m sericitic quartz vein: 1.0-5.0cm fractured/weakly brecciated - shear, 10 to CA														
				43.55-43.9m Kwa, moderately bedded, 40 to CA														
				43.9-44.45m sericitic quartz-calcite - fold nose axis near parallel to CA, limbs 30 to CA, offshoots near parallel to CA.														
44.45	47.00	SAM	**Kwa-s**	Light grey, medium to coarse grained Kwa in dm scale intervals. 15% light grey Ks in cm scale beds. 1 vein >0.5cm - quartz-ankerite, 1.0cm over 10.0cm, 40 to CA, wide sericitic alteration halo with euhedral to subhedral pyrrhotite (45.2m). Veinlets <0.5cm are quartz-ankerite and sericitic quartz, 20, 30 and 40 to CA ± euhedral - subhedral pyrite. Trace pyrite with 0.1cm quartz-ankerite as euhedral to subhedral crystals.											0.01	46.20	S0	50
47.00		EOH	**EOH**															

PROJECT No.: 09-1426-0015

RECORD OF BOREHOLE: GT09-15

SHEET 1 OF 3
DATUM: Geodetic

LOCATION: Meliadine Gold Project, Nunavut
N: 6989790 E: 538629 UTM NAD83 Zone: 15N
Survey Provided by: Comaplex Minerals Corp., Dated August 24, 2009

DRILLING DATE: August 31, 2009
DRILLING CONTRACTOR: Boart Longyear

SAMPLER HAMMER, 64kg; DROP, 762mm

DEPTH SCALE METRES	BORING RECORD	SOIL PROFILE: DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	TYPE (mm) / TYPE	BLOWS/0.3m	CORE: RUN No.	RECOVERY %	GRADATION %: GRAVEL	SAND	FINES	HYDRAULIC CONDUCTIVITY, k, cm/s; WATER CONTENT PERCENT (Wp, W, Wl)	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
0	Boart Longyear LF 70 PW	Ground Surface		67.78											
		Loose, moist, black grey SANDY PEAT.		0.00 / 67.49	1	DO		1							
		No recovery.		67.33											
		GRAVEL.		0.45 / 66.88	2	DO	21	2							
1		Compact, wet to free water, brown yellow SAND, some angular gravel, shells. Stone in tip of spoon.		0.90 / 66.43	3	DO	18	3							
		No recovery. @ 1.54m refusal.		66.24	4	DO	10	4							
		GRAVEL.		1.54 / 65.74				4B							
2		Dense, wet, grey, sub angular, silty SAND, little gravel. @ 2.39m refusal.		2.04 / 65.39	5	DO	45	5							
		Very dense, black grey, angular, sandy GRAVEL. @ 2.45m refusal.		65.18	6	DO	20	6		46	23	31		M	
		Stiff, moist, grey CLAYEY SILT, little gravel. @ 2.6m refusal.		2.60 / 64.96	7	DO	50	7							
3		Very dense, grey black red, angular GRAVEL. From 2.7m silty SAND, some gravel. @ 2.82m refusal.		2.82				8							
		GRAVEL (sub angular and mechanically broken). Sandstone, granite, greywacke.		64.43											
		Broken bedrock. Greywacke.		64.26 / 3.52											
4		Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.													
5															
6															
7															
8															
9															
10															

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AE/SG
CHECKED: AE/CJC

File:O:\ACTIVE_2009\1426\09-1426-0015_COMAPLEX_ENGINEERING_MELIADINE\GINT\09-1426-0015 (3200_6000) UPDATED.GPJ Output Form:BOREHOLE CUSTOM 3 (AUTO) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB KCapes 1/7/2/10

PROJECT No.: 09-1426-0015

RECORD OF DRILLHOLE: GT09-15

SHEET 2 OF 3
DATUM: Geodetic

LOCATION: Meliadine Gold Project, Nunavut
N: 6989790 E: 538629 UTM NAD83 Zone: 15N
Survey Provided by: Comaplex Minerals Corp., Dated August 24, 2009

DRILLING DATE: August 31, 2009
DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	ROCK STRENGTH INDEX	WEATHERING INDEX	RECOVERY TOTAL CORE %	RECOVERY R.Q.D. %	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: CORE ANGLE	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Cont'd from Record of Borehole.		64.26															
4				3.52															
		Fresh to slightly weathered, thinly foliated, grey, fine grained, strong GREYWACKE. Few thin quartz veins at random orientations. From 4.32 to 4.85 quartz veins 1cm to 2cm thick.			1	R5 R4 R3 R2 R1	W1 W2 W3 W4	80 60 40 20	80 60 40 20	1	2		JN,PL,RO,ST	20	1.5	1			
5													JN,ST,RO,ST	25	4	0.75			
													JN,CU,RO,ST	20	3	1			
													JN,CU,VR,ST	25	3	1			
					2					5	6								
6													JN,PL,SM,CC	12	1	2			
													JN,UN,RO,CC,Fe,1mm	20	3	1			
				61.26															
7				6.52															
		Slightly weathered, thinly foliated, dark grey, fine grained, medium strong GREYWACKE. More than one foliation orientation visible. Randomly oriented quartz veins.			3					3	2		FOL,IR,RO	25	3	1			
													FOL,PL,RO	20	1.5	1			
8				59.76									FOL,PL,RO	20	1.5	1			
				8.02									JN,IR,RO,ST	20	3	1			
													FOL,PL,RO,CC,0.1mm	12	1.5	2			
													JN,CU,RO,DC,0.1mm	12	3	3			
													JN,PL,RO,ST	20	1.5	1			
					4					7	12		FOL,PL,RO,ST	20	1.5	1			
9													FOL,PL,RO	20	1.5	1			
													JN,PL,RO	20	1.5	1			
													JN,PL,SM	12	1	1			
10		Slightly weathered to fresh, thinly foliated, dark grey, fine grained, strong GREYWACKE. Foliation is more apparent in the finer grained material.											FOL,CU,RO,ST	20	3	1			
					5					5	12		JN,PL,SM	12	1	1			
													FOL,CU,RO	20	3	1			
													JN,PL,RO	20	1.5	1			
11																			
													JN,IR,RO,DC,0.1mm	20	3	2			
													JN,PL,RO,DC,Fe,0.1mm	20	1.5	2			
					6					3	6								
12													JN,PL,RO,DC,0.1mm	20	1.5	2			
				55.26															
				12.52															
13		Fresh, thinly foliated, dark grey, medium grained, strong GREYWACKE.			7					4	12		FOL,PL,RO	20	1.5	1			
													JN,UN,SM,DC,M;	12	2	2			

CONTINUED NEXT PAGE

Boart Longyear LF 70
HQ3 Diamond core with water

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AE/SG
CHECKED: AE/CJC

File:C:\ACTIVE_2009\1426\09-1426-0015_COMAPLEX_ENGINEERING_MELIADINE\GINT\09-1426-0015 (3200_8000) UPDATED.GPJ Output Form:DRILLHOLE (CUSTOM 5) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB KCapas 1/7/10

PROJECT No.: 09-1426-0015

RECORD OF DRILLHOLE: GT09-15

SHEET 3 OF 3
DATUM: Geodetic

LOCATION: Meliadine Gold Project, Nunavut
N: 6989790 E: 538629 UTM NAD83 Zone: 15N
Survey Provided by: Comaplex Minerals Corp. Dated August 24, 2009

DRILLING DATE: August 31, 2009
DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	ROCK STRENGTH INDEX	WEATHERING INDEX	RECOVERY: TOTAL CORE %	RECOVERY: R.Q.D. %	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
14											12	Fe,0.1mm BC,-- JN,PL,RO,DC,M,0.1mm	12	1.5	2	Coal Gouge Broken Zone	13.78 14.02
15		Fresh, thinly foliated, dark grey, medium grained, strong GREYWACKE. *(continued)*			8					3	6	JN,PL,SM,DC,Fe; Ca,0.1mm JN,PL,SM	12 12	1 1	2 2		
16					9					7	12	JN,PL,RO,CC JN,PL,SM,DC,Fe; M,0.1mm JN,PL,RO,DC,Fe; M,0.1mm JN,PL,RO,DC,Fe; M,0.1mm JN,PL,RO,SA,Fe,0.1mm JN,PL,RO,SA JN,PL,RO,SA,Fe JN,PL,RO,SA	12 12 20 12 20 20 20 20	1.5 1 1.5 1.5 1 1.5 1.5 1.5	2 2 2 2 1 1 1 1		
17	Boart Longyear LF 70 HQ3 Diamond core with water			50.76													
18		Fresh, thinly foliated, dark grey, medium to fine grained, strong GREYWACKE.		17.02	10					3	6	JN,PL,SM,SA,Fe JN,PL,RO,DC,Fe,0.1mm JN,PL,RO,CC,0.1mm	12 20 20	1 1.5 1.5	1 2 2		
19		Fresh, medium to fine grained, thinly foliated, dark grey, strong GREYWACKE. @ 20.32m gouge with silt and gravel, but to 4mm thick, corresponds to EOH.		49.26 18.52	11					11	12	JN,CU,SM,SA,Fe JN,PL,K JN,PL,RO,DC,Fe,0.1mm JN,PL,RO,DC,Fe,0.1mm JN,PL,RO,SA,Fe JN,PL,RO,DC,Fe JN,CU,RO,DC,Fe; M JN,PL,RO,SA JN,PL,RO,DC JN,PL,RO,SA JN,PL,-,IN	20 6 20 20 20 20 12 20 20 20 6	2 0.5 1.5 1.5 1.5 1.5 3 1.5 1.5 1.5 1	2 1 2 2 1 2 2 2 2 1 4		
20				47.46													
21		End of Drillhole.		20.32													
22																	
23																	

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: AE/SG
CHECKED: AE/CJC

File:O:\ACTIVE_2009\1426\09-1426-0015_COMAPLEX_ENGINEERING_MELIADINE\GINT\09-1426-0015 (3200_6000) UPDATED.GPJ Output Form:DRILLHOLE (CUSTOM 5) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB KCapes 17/2/10

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT11-04

SHEET 1 OF 3

LOCATION: OVERBURDEN STOCKPILE - B7 EAST
N: 6990174 E: 538817 UTM Zone: 15

DRILLING DATE: August 31st, 2011
DRILLING CONTRACTOR: Boart Longyear

DATUM: NAD 83 ZONE 15

DEPTH SCALE METRES	DRILLING RIG	DRILLING METHOD	DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES BLOWS/0.3m	RUN No.	RUN RECOVERY %	GRADATION % GRAVEL	GRADATION % SAND	GRADATION % FINES	SHEAR STRENGTH Cu, kPa / WATER CONTENT %	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
			Ground Surface		69.00											
0	(Drill #5 LF70) (HQ3)	ROTARY DRILLING	ORGANIC SOIL.		68.85											
			Soft, brown, organic SILT, some sand, contains angular to sub-angular cobbles and boulders.		0.15 / 68.45				1							
			Very loose, grey, SAND, some to trace silt, contains angular to sub-angular cobbles and boulders.		0.55	2	SS	4	2							
1									3							
					67.50											
			Becoming frozen (Vs/Nbe).		1.50	4	SS	39	4		0	91	9			
			Inferred ice content: 25.5%													
2						5	SS	135	5							
			Inferred ice content: 2.6%													
									6							
3					65.21											
			Frozen (Vs), grey, SILT and SAND, some gravel, contains angular to sub-angular cobbles and boulders. Inferred ice content: 0.2%		3.79	7	SC				48	25	27			
4																
									7							
5					63.71											
			Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.		5.29											
6																
7																
8																
9																
10																

SHEAR STRENGTH Cu, kPa: nat V. + Q - ● / rem V. ⊕ U - ○ (20, 40, 60, 80)
WATER CONTENT %: Wp — W — Wl (10, 20, 30, 40); field est. - ◎ / lab - ○ / ice est. - ⬠

DEPTH SCALE
1 : 50

LOGGED: E.S./J.B.
CHECKED: P.G./C.C.

File:N:\ACTIF\2011\1428\11-1428-0011 AGNICO-EAGLE - MEL\ADINE\4-CAD-GIS\LOG\11-1428-0011 TEST HOLES (BURNABY FORMAT)-MTL.GPJ Output Form:BC_BOREHOLE (SONIC) (AUTO) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB sbelnesky 15-2-12

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT11-04

SHEET 2 OF 3

LOCATION: OVERBURDEN STOCKPILE - B7 EAST

DATUM: NAD 83 ZONE 15

N: 6990174 E: 538817 UTM Zone: 15

DRILLING DATE: August 31st, 2011

DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	ELEV. / DEPTH (m)	No.	INDECES: ROCK STRENGTH R5 R4 R3 R2 R1	INDECES: WEATHERING W2 W3 W4 / ALTERATION 2 3 4	RECOVERY: TOTAL CORE % 80 60 40 20	RECOVERY: R.Q.D. % 80 60 40 20	FRACTURE INDEX PER	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) 0 30 60 90	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
5	(Drill #5 LF70) (HQ3) ROTARY DRILLING	Cont'd from Record of Borehole.	64.00															
		Frozen (Vs), grey, SILT and SAND, some gravel, contains angular to sub-angular cobbles and boulders. *(continued)*	63.71															
		Moderately weathered, tightly foliated, dark grey, fine grained, faintly porous, strong, GREYWACKE, presence of dyke (quartz with sulphides)	5.29															5.29 5.59
6				8					25 0 0 0 20 0									6.36 6.56
7				9					0 2 25 0 1			,IR,Ro,Su JN,IR,Ro,Su, 1 ,IR,Ro,Su JN,IR,Ro,Su, 1 ,PL,Ro,Su JN,PL,Ro,Su, <1						7.25 7.49
8									15 0 0 10 10 25 25									8.30 8.50
9			59.21	10														8.85 9.13 9.48
10	(Drill #5 LF70) (HQ3) ROTARY DRILLING	Becoming moderately to highly weathered with presence of sulphides.	9.79						25 0 0									10.45
		Becoming moderately weathered.	58.50 10.50	11					7 0 0									10.70 10.85
11			57.71															
		Becoming slightly weathered.	11.29						0 0 0 0 4 0									
12				12														12.25 12.36
13				13					1 0 0 0									
14									1 1			,PL,- FO,PL,-, <1 ,PL,- FO,PL,-, <1						
15		*CONTINUED NEXT PAGE*																

DEPTH SCALE

1 : 50

LOGGED: E.S./J.B.

CHECKED: P.G./C.C.

File:N:\ACTIF\2011\1428\11-1428-0011 AGNICO-EAGLE - MEL\ADINE\4-CAD-GIS\LOG\11-1428-0011 TEST HOLES (BURNABY FORMAT)-MTL.GPJ Output Form:BC_DRILLHOLE (MINING STD) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB stetnesky 15-2-12

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT11-04

SHEET 3 OF 3

LOCATION: OVERBURDEN STOCKPILE - B7 EAST

DATUM: NAD 83 ZONE 15

N: 6990174 E: 538817 UTM Zone: 15

DRILLING DATE: August 31st, 2011

DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (m)	No.	Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes. INDECES: ROCK STRENGTH R5 R4 R3 R2 R1; WEATHERING W2 W3 W4; ALTERATION 2 3 4	RECOVERY: TOTAL CORE % 80 60 40 20; R.Q.D. % 80 60 40 20	FRACTURE INDEX PER	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) 0 30 60 90; TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
15	ROTARY DRILLING	Becoming slightly weathered. *(continued)*			14											
				53.21												
16		End of Drillhole.		15.79												
17																
18																
19																
20																
21																
22																
23																
24																
25																

DEPTH SCALE

1 : 50

LOGGED: E.S./J.B.

CHECKED: P.G./C.C.

File:N:\ACTIF\2011\1428\11-1428-0011 AGNICO-EAGLE - MEL\ADINE\4-CAD-GIS\LOG\11-1428-0011 TEST HOLES (BURNABY FORMAT)-MTL.GPJ Output Form:BC_DRILLHOLE (MINING STD) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB stetnesky 15-2-12

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT11-10

SHEET 1 OF 2
DATUM: NAD 83 ZONE 15

LOCATION: TSF DYKE B7 / OVERBURDEN STOCKPILE - B7 EAST
N: 6990040 E: 538553 UTM Zone: 15

DRILLING DATE: September 2nd, 2011
DRILLING CONTRACTOR: Boart Longyear

DEPTH SCALE METRES	DRILLING RIG / DRILLING METHOD	SOIL PROFILE: DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	TYPE	BLOWS/0.3m	RUN No.	RECOVERY %	GRADATION %: GRAVEL	SAND	FINES	SHEAR STRENGTH Cu, kPa (nat V. +, rem V. ⊕, Q - ●, U - ○) / WATER CONTENT % (Wp, W, Wl; field est. - ●, lab - ○, ice est. - ○)	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
0	(Drill #5 LF70) (HQ3) ROTARY DRILLING	Ground Surface		69.23											
		Loose, massive, dark brown to black, silty PEAT, some gravel, presence of rootlets.		0.00				1							
				68.48											
1		Frozen (Nf), massive, grey, ICE and SILT, some sand, trace clay.		0.75	2	SS		2							
								3							
		Inferred ice content: 83.3%			3	SC									
					4a	SC		4							
2		Inferred ice content: 452.8%			4b	SC									
					5	SC		5							
				66.73											
		Frozen (Nbn), grey gravelly sandy SILT, trace clay, contains angular to sub-angular cobbles and boulders.		2.50				6							
3					6	SC									
		Inferred ice content: 7.8%			7	SC		7		29	25	46	NP		
4															
5								8							
				63.40											
6		Frozen (Nbn), grey, SILT, trace sand, gravel and clay, contains angular to sub-angular cobbles and boulders.		5.83				9							
		Inferred ice content: 2.9%		62.95	9	SC				7	6	87			
				6.28											
7		Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.													
8															
9															
10															

DEPTH SCALE
1 : 50

LOGGED: E.S./J.B.
CHECKED: P.G./C.C.

File:N:\ACTIVE\2011\1428\11-1428-0011 AGMICO-EAGLE - MEL\ADR\NEW-CAD-GIS\LOG\11-1428-0011 TEST HOLES (BURNABY FORMAT)-MITL.GPJ Output Form:BC_BOREHOLE (SONIC) (AUTO) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB sheltweaty 15-2-12

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT11-10

SHEET 2 OF 2
DATUM: NAD 83 ZONE 15

LOCATION: TSF DYKE B7 / OVERBURDEN STOCKPILE - B7 EAST
N: 6990040 E: 538553 UTM Zone: 15

DRILLING DATE: September 2nd, 2011
DRILLING CONTRACTOR: Boart Longyear

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (m)	No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1)	INDICES: WEATHERING (W2 W3 W4) / ALTERATION (A)	RECOVERY: TOTAL CORE %	RECOVERY: R.Q.D. %	FRACTURE INDEX PER	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Faults/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
6		Cont'd from Record of Borehole.		63.23															
	(Drill #5 LF70) (HQ3) ROTARY DRILLING	Frozen (Nbn), grey, SILT, trace sand, gravel and clay, contains angular to sub-angular cobbles and boulders. *(continued)* Inferred ice content: 2.9%		6.00 62.95															
		Slightly weathered, foliated, grey, fine grained, strong, GREYWACKE.		6.28						0									
7					10					1			JN,PL,Ro,Cl, 1						
										1			VN,PL,Ro,Cl, 1						
										2			JN,ST,SM,Pt, Ca, <1						
										17			FLT,UN,SM,Go, 170					7.25	
										0			FLT,UN,SM,Go, 170					7.50	
8										0									
					11					1			FO,PL,SM						
										1			JN,PL,Ro,Cl, <1						
										1			JN,IR,SM,Cl, Fe, <1						
9	(Drill #5 LF70) (HQ3) ROTARY DRILLING			59.95						1			JN,PL,Ro,Cl, Fe, <1						
		Becoming fresh.		9.28						0									
										0									
										1			VN,PL,SM,Cl						
10					12					1			FR,PL,Ro,Fe						
										13								10.04	
										0								10.20	
										0									
11										4									
										1								10.96	
					13					1			FR,UN,Ro					11.10	
										0									
12				56.95						1			FLT,PL,SM,Cl, 150						
										0									
		End of Drillhole.		12.28															
13																			
14																			
15																			
16																			

DEPTH SCALE
1 : 50

LOGGED: E.S./J.B.
CHECKED: P.G./C.C.

File:N:\ACTIVE\2011\1428\11-1428-0011 AGNICO-EAGLE - MEL\MONEY\CAD-GIS\LOG\11-1428-0011 TEST HOLES (BURNABY FORMAT)-HITLGP.1 Output Form:BC_DRILLHOLE (MINING STD) Template:BC REGION TEMPLATE BETA 1.GDT Library:BC REGION LIBRARY.GLB dsweisky 15-2-12

PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-17

SHEET 1 OF 2
DATUM: Ground Surface

LOCATION: TSF Dike
N: ~6989520 E: ~538949 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.

DRILLING DATE: 7/28/2012
DRILLING CONTRACTOR: Boart Longyear

SAMPLER HAMMER, 64kg; DROP, 762mm

DEPTH SCALE METRES	DRILLING RIG	DRILLING METHOD	SOIL PROFILE: DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	TYPE	BLOWS/0.3m	RUN: RUN No.	RECOVERY %	ICE DESCRIPTION	GRADATION %: GRAVEL	SAND	FINES	SHEAR STRENGTH Cu, kPa (nat V. + Q - ●, rem V. ⊕ U - ○) / WATER CONTENT % (Wp, W, Wl; field est. - ◎, lab - ○, ice est. - ○)	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
0	LF-70 (HQ3)	Diamond Drilling	Ground Surface														
			(PT) PEAT, black, spongy, moist contains fibers and rootlets		0.05	1	GS					2	79	19			
			(SM) SILTY SAND, fine to coarse sand, trace fine to coarse and subrounded gravel, brown, contains cobbles and rootlets, moist		0.30	2	GS					10	81	9			
1			(SP) SAND, some silt and gravel, fine to coarse sand, fine to coarse and subrounded gravel, brown to grey, contains subangular cobbles and shells, moist to wet		0.60				1								
			No recovery.														
2																	
			(ML) SILT, some sand and gravel, grey, non-cohesive, homogeneous, frozen		2.47	3	SS	51	2			10	12	78			
3			marine odour, contains crushed fine shells								Nf						
			(SM) gravelly SILTY SAND, non-cohesive		3.35	4	SC		3			28	37	35			
			BOULDERS and COBBLES,		3.65												
4									4								
5									5								
6																	
7			(ML) gravelly sandy SILT, fine to coarse and subangular gravel, some sand, non-cohesive, heterogenous, frozen		7.10												
						5	SC		6		Nf	33	31	36			
8																	
			Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.		8.50												
9																	
10																	

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: FA/AS
CHECKED: DRAFT

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PROJECT No.: 11-1428-0011

LOCATION: TSF Dike

N: ~6989520 E: ~538949 UTM Zone: 15

Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.

INCLINATION: -90° AZIMUTH: n/a

RECORD OF BOREHOLE: GT12-17

DRILLING DATE: 6/4/2012

DRILLING CONTRACTOR: Boart Longyear

DATUM: Ground Surface

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
						INDICES: ROCK STRENGTH R5 R4 R3 R2 R1; WEATHERING W2 W3 W4; ALTERATION 3 2 3 4; RECOVERY: TOTAL CORE % 80 60 40 20; RQD % 80 60 40 20; FRACTURE INDEX PER RUN; Jn; DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (degrees) 90 60 30 0; TYPE AND SURFACE DESCRIPTION; JCON; Jr; Ja; Fault/Breccia/Gouge; Lost Core; Broken Zone	
		Cont'd from Record of Borehole.					
9	LF-70 (HO3) Diamond Drilling	Slightly weathered to fresh, thickly foliated, grey, fine grained, non-porous, strong, GREYWACKE or SILTSTONE, presence of calcite veining		8.50	6	FOL,PL,Ro.-	
10						FOL,PL,Ro.-	9.30 10.00
11					7		
		End of Drillhole.		11.50			
12							
13							
14							
15							
16							
17							
18							

DEPTH SCALE

1 : 50

Golder Associates

LOGGED: FA/AS

CHECKED:

DRAFT

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PROJECT No.: 11-1428-0011

LOCATION: TSF Dike
N: ~6989667 E: ~538811 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.

RECORD OF BOREHOLE: GT12-18

DRILLING DATE: 7/27/2012
DRILLING CONTRACTOR: Boart Longyear

SHEET 1 OF 2
DATUM: Ground Surface

DEPTH SCALE METRES	DRILLING RIG	DRILLING METHOD	SOIL PROFILE: DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: BLOWS/0.3m	RUN: RUN No.	RUN: RECOVERY %	ICE DESCRIPTION	GRADATION %: GRAVEL	GRADATION %: SAND	GRADATION %: FINES	SHEAR STRENGTH Cu, kPa (nat V. +, rem V. ⊕, Q - ●, U - ○) / WATER CONTENT % (Wp, W, Wl; field est. - ◎, lab - ○, ice est. - ◇)	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
			Ground Surface														
0	LF-70 (HQ3)	Diamond Drilling	(SM) gravelly SILTY SAND, (assumed)		0.00												
1			(GM) sandy SILTY GRAVEL, beige to grey, heterogeneous, contains cobbles about 70% by volume, non-cohesive, frozen		0.75	1	SC		1		Vs	43	30	27			
2						2	SC		2		Nf	41	30	29			
3			(ML) gravelly sandy SILT,		2.50	3	SC		3			32	30	38			
4			BOULDERS,		3.95												
			(ML/SP) gravelly SILT and SAND, grey, heterogeneous, contains cobbles about 70% by volume, non-cohesive, frozen		4.25				4								
5									5								
6						4	SC		6			19	41	40			
7			Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.		7.30												
8																	
9																	
10																	

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: FA
CHECKED: DRAFT

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PROJECT No.: 11-1428-0011

RECORD OF BOREHOLE: GT12-18

SHEET 2 OF 2
DATUM: Ground Surface

LOCATION: TSF Dike
N: ~6989667 E: ~538811 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.
INCLINATION: -90° AZIMUTH: n/a

DRILLING DATE: 7/27/2012
DRILLING CONTRACTOR: Boart Longyear

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1)	INDICES: WEATHERING (W1 W2 W3 W4) / ALTERATION (A1 2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20)	RECOVERY: RQD % (80 60 40 20)	FRACTURE INDEX PER METRE	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (degrees) (0 30 60 90)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	J CON	Jr	JB	Fault/Breccia/Gouge	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Cont'd from Record of Borehole.																
8	LF-70 (HO3) Diamond Drilling	Slightly weathered, thickly bedded, grey, medium grained, slightly porous, strong GREYWACKE or SILTSTONE, presence of calcite veining		7.30	6								FOL,UN,Ro,CC,Si, <1 mm FOL,UN,Ro,CC,Ca, <1 mm FOL,UN,Ro,CC,Ca, <1 mm FOL,UN,Ro,CC,Si, <1 mm FOL,UN,Ro,CC,Ca/Si, <1 mm FOL,UN,Ro,IN,Si, 5 mm					
9					7								FOL,UN,Ro,CC,Si, 1 mm FOL,UN,Ro,IN,Si, 3 mm FOL,UN,Ro,CC,Si, 1 mm FOL,IR,Ro,ST FOL,UN,Ro,CC,Si, <1 mm FOL,UN,Ro,CC,Si, <1 mm FOL,UN,Ro,CC,Si, <1 mm FOL,IR,Ro,CC,Si, <1 mm					
10					8								FOL,UN,Ro,IN,Si, 2 mm FOL,UN,Ro,CC,Si, <1 mm FOL,UN,Ro,IN,Si, 4 mm FOL,UN,Ro,IN,Si, 2 mm FOL,IR,Ro,IN,Si, 1 mm FOL,PL,Ro,CC,Ca, <1 mm					
11		Hole observed in rock, approximately 0.5 cm deep											FOL,UN,Ro,-					
													FOL,UN,Ro,IN,Si, 2 mm FOL,UN,Ro,CC,Si, 1 mm FOL,UN,Ro,IN,Si, 2 mm					
		End of Drillhole.		11.25														
12																		
13																		
14																		
15																		
16																		
17																		

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: FA
CHECKED: DRAFT

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PROJECT No.: 11-1428-0011

LOCATION: H15H lake
N: ~6990124 E: ~538413 UTM Zone: 15
Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only.

RECORD OF BOREHOLE: GT12-19

DRILLING DATE: 5/1/2012
DRILLING CONTRACTOR: Boart Longyear

SHEET 1 OF 2
DATUM: Ice Surface

SAMPLER HAMMER, 64kg; DROP, 762mm

DEPTH SCALE METRES	DRILLING RIG / DRILLING METHOD	SOIL PROFILE: DESCRIPTION	STRATA PLOT	ELEV. / DEPTH (m)	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: BLOWS/0.3m	RUN: RUN No.	RUN: RECOVERY %	ICE DESCRIPTION	GRADATION %: GRAVEL	GRADATION %: SAND	GRADATION %: FINES	SHEAR STRENGTH Cu, kPa / WATER CONTENT %	ADDITIONAL LAB. TESTING	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
0	LF-70 (HQ3) Diamond Drilling	Ice Surface														
		ICE,		0.00				1								
		COBBLES,		0.30												
1		(SM) gravelly SILTY SAND, angular gravel, beige, frozen		0.70				2		Nbe to Nbn						
		(ML) sandy SILT, some gravel, beige, homogeneous, non-cohesive, frozen		1.30	1 1B	SS SS		3		Nbn	0 16	34 24	66 60			Sa 1B = 15.2%*
2		(SM) gravelly SILTY SAND, beige to dark grey, heterogeneous, non-cohesive, frozen fine white shell fragments at 1.98-2.53 m		1.65	2 2B	SS SS		4		Nbe to Nbn	17 26	55 45	28 29			Sa 2B = 12.1%*
					3 3B	SS SS		5		Vs to Vc	19 7	57 65	24 28			Sa 3B = 12.5%*
		(ML) gravelly sandy SILT,		2.53	4	SS		6		Vr	29	33	38			
3		(SM) SILTY SAND, trace gravel, grey, homogeneous, non-cohesive, frozen		2.71	5 5B	SS SS		7			0 8	78 59	22 33			Sa 5B = 16.2%* note: * Moisture content not representative
		Bedrock Encountered. Refer to Record of Drillhole log for continuation of rock description.		3.05												
4																
5																
6																
7																
8																
9																
10																

SHEAR STRENGTH Cu, kPa: nat V. + Q - ●; rem V. ⊕ U - ○; scale 20 40 60 80
WATER CONTENT %: Wp — W — Wl; scale 10 20 30 40; field est. - ⊗; lab - ○; ice est. - ○

DEPTH SCALE
1 : 50

Golder Associates

LOGGED: FA
CHECKED:

DRAFT

File:O:\ACTIVE_2011\11428\11-1428-0011_AEMGEL\ADMIN\ETA\LINGS\v200_2012 DRILLING PROGRAM\GINT\MASTER\FILE 14AUG2012\MASTER_FILE_22AUGUST2012.GPJ Output Form BC_BOREHOLE (SONIC) (AUTO) Template BC REGION TEMPLATE BETA 2.GDT Library BC REGION LIBRARY.GLB Isaccardo 9/27/12

PROJECT No.: 11-1428-0011

LOCATION: H15H lake

N: ~6990124 E: ~538413 UTM Zone: 15

Note: Northing and Easting Coordinates have been determined by GPS in the field and are approximate only

INCLINATION: -90° AZIMUTH: n/a

RECORD OF BOREHOLE: GT12-19

DRILLING DATE: 5/1/2012

DRILLING CONTRACTOR: Boart Longyear

SHEET 2 OF 2

DATUM: Ice Surface

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (m)	RUN No.	Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
						INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1); WEATHERING (W2 W3 W4); ALTERATION (2 3 4); RECOVERY: TOTAL CORE % (80 60 40 20); RQD % (80 60 40 20); FRACTURE INDEX PER RUN; Jn; DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (degrees) (0-90); TYPE AND SURFACE DESCRIPTION; Jcon; Jr; Ja; Fault/Breccia/Gouge; Lost Core; Broken Core	
		Cont'd from Record of Borehole.					
4	LF-70 (HO3) Diamond Drilling	Slightly weathered, thickly foliated, grey, fine grained, faintly porous, medium strong, GREYWACKE or SILTSTONE		3.05	8	JN,UN,Ro,ST, 1 — Jcon 20 JN,UN,Ro,SA,M, 1 — Jcon 20	
5					9	JN,UN,Ro,SA,M, 1 — Jcon 20 JN,UN,Ro,SA,Sa, 1 — Jcon 20 VN,UN,Ro,SA,Qz, 1 — Jcon 20 VN,UN,Ro,SA,Pg, 1 — Jcon 20	
6					10		
		End of Drillhole.		6.18			
7							
8							
9							
10							
11							
12							
13							

DEPTH SCALE

1 : 50

Golder Associates

LOGGED: FA

CHECKED: DRAFT

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2013 MARCH GEOTECHNICAL SITE INVEST.	AGNICO-EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
MELIADINE GOLD PROJECT	DRILL: DIAMOND DRILL	E14103023-01.003-GT13-07
NUNAVUT	6989948.687N; 538688.61E; Zone 15	ELEVATION: 69.7 m

SAMPLE TYPE: HQ CORE | NQ CORE | CORE | NO RECOVERY | DISTURBED

BACKFILL TYPE: BENTONITE | PEA GRAVEL | SLOUGH | GROUT | DRILL CUTTINGS | SAND

Depth (m)	LITHOLOGICAL DESCRIPTION	GROUND ICE DESCRIPTION	SAMPLE TYPE	SAMPLE/RUN #	MOISTURE CONTENT (%)	Elevation (m)
0	PEAT - fibrous, dark brown to black, rootlets, some boulder pieces					
	BOULDER			R1		
	- at 0.38 m, crushed boulders with peat and sand in fractures	Nf		1S	13.4	69.0
1	SAND AND SILT - some fine to coarse, angular gravel, fine to coarse grained sand, very dark brown, boulders disseminated throughout			2S	10.8	
	- from 0.92 to 1.12 m, boulder			R2		68.0
2	- at 1.12 m, fine to medium grained sand, greyish brown					
	GREYWACKE - strong, grey, fine grained, foliated, calcite veins, JSN:2, W:3-4					
	- at 1.44 and 2.02 m, subvertical joints, planar, smooth, moderate weathering					67.0
3	- at 1.62 m, subvertical joint, undulating, rough, slightly weathered			R3		
	- at 1.69 m, subvertical joint, planar, smooth, highly weathered					
	- at 1.73 and 1.82 m, subvertical joint, planar, smooth, highly weathered					66.0
4	- at 1.88 m, subvertical joint, planar, smooth, slightly weathered					
	- at 2.14 m, subvertical joint, undulating, smooth, highly weathered					
	- at 2.42 m, JSN:3			R4		65.0
5	- at 2.47 and 3.69 m, subvertical joint, undulating, smooth, highly weathered					
	- at 2.56 m, subvertical joint, planar, smooth, slightly weathered					
	- from 2.61 to 2.95 m, vertical joint, stepped, rough, moderate weathering					64.0
6	- at 2.95 m, horizontal joint, undulating, rough, moderate weathering, silt infill					
	- at 3.05 m, subvertical joint, planar, smooth, moderate weathering			R5		
	- at 3.17 and 3.35 m, subhorizontal joints, undulating, smooth, moderate weathering					63.0
7	- at 3.22 m, subvertical joint, planar, smooth, slightly weathered					
	- at 3.27 and 3.64 m, subvertical joint, stepped, smooth, slightly weathered					
	- at 3.40 m, subvertical joint, undulating, rough, silt infill			R6		62.0
8	- at 3.92 m, JSN:4, W:2					
	- at 4.25 m, subhorizontal joint, planar, smooth, moderate weathering					
	- at 4.27 m, subhorizontal joint, undulating, rough, slightly weathered					61.0
9	- at 4.29 m, subvertical joint, planar, smooth, moderate weathering					
	- at 4.49 m, subhorizontal joint, planar, rough, slightly weathered			R7		
	- at 4.92 m, subvertical joint, stepped, smooth, moderate weathering					60.0
10	- at 5.12, 5.14 and 5.22 m, subhorizontal joint,					

UCS (MPa): 100 200 300 400

BULK DENSITY (kg/m³): 1400 1800 2200 2600

PLASTIC M.C. LIQUID: 20 40 60 80

FRACTURE FREQUENCY: 2 4 6 8

RQD (%): 40 60 80 100

RECOVERY (%): 40 60 80 100

#2403

LOGGED BY: JMS	COMPLETION DEPTH: 15.87 m
REVIEWED BY: VER	COMPLETE: 13/03/20
DRAWING NO:	Page 1 of 2

eba A TETRA TECH COMPANY

2013 MARCH GEOTECHNICAL SITE INVEST.	AGNICO-EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
MELIADINE GOLD PROJECT	DRILL: DIAMOND DRILL	E14103023-01.003-GT13-07
NUNAVUT	6989948.687N; 538688.61E; Zone 15	ELEVATION: 69.7 m

SAMPLE TYPE: HQ CORE | NQ CORE | CORE | NO RECOVERY | DISTURBED

BACKFILL TYPE: BENTONITE | PEA GRAVEL | SLOUGH | GROUT | DRILL CUTTINGS | SAND

Depth (m)	LITHOLOGICAL DESCRIPTION	GROUND ICE DESCRIPTION	SAMPLE TYPE	SAMPLE/RUN #	MOISTURE CONTENT (%)	UCS (MPa) 100 200 300 400; BULK DENSITY (kg/m³) 1400 1800 2200 2600; PLASTIC M.C. LIQUID 20 40 60 80	FRACTURE FREQUENCY 2 4 6 8; RQD (%) 40 60 80 100; RECOVERY (%) 40 60 80 100	#2403	Elevation (m)
10	planar, smooth, slightly weathered - at 5.67 m, subhorizontal joint, planar, smooth, slightly weathered - at 6.17 and 6.35 m, subvertical joint, planar, smooth, moderate weathering			R8					59.0
11	- at 6.53 m, subvertical joint, undulating, smooth, slightly weathered - at 6.73 m, subvertical joint, undulating, rough, moderate weathering - at 6.86 m, subvertical joint, planar, smooth, slightly weathered								58.0
12	- at 6.92 m, JSN:2 - at 7.32, 7.44 and 8.23 m, subvertical joints, planar, smooth, moderate weathering - at 7.37 m, vertical joint, undulating, smooth, slightly weathered			R9					57.0
13	- at 7.87 m, subvertical joint, planar, smooth, highly weathered - at 7.92 and 8.35 m, subvertical joints, undulating, rough, moderate weathering - at 8.18 m, vertical joint, undulating, smooth, slightly weathered			R10					56.0
14	- at 8.42 m, quartz veins, pyrite, JSN:6, W:3 - at 8.53 m, horizontal joint, undulating, rough, moderate weathering - at 8.73 m, horizontal joint, undulating, rough, slightly weathered								55.0
15	- at 8.89 m, subvertical joint, stepped, smooth, highly weathered - at 9.09 m, horizontal joint, stepped, rough, highly weathered - at 9.15 m, subhorizontal joint, undulating, rough, moderate weathering			R11					54.0
16	- from 9.15 to 9.27 m, crushed bedrock - at 9.50 and 9.70 m, subvertical joint, undulating, rough, silt infill - at 9.91 m, JSN:3, W:2 - at 10.08 m, horizontal joint, stepped, rough, silt infill								53.0
17	- at 10.20 m, subhorizontal joint, planar, rough, silt infill - at 10.70 and 11.08 m, subvertical joints, undulating, smooth, slightly weathered - at 11.19 m, subvertical joint, planar, smooth, slightly weathered								52.0
18	- at 11.42 m, JSN:2, W:1 - at 11.88 m, subhorizontal joint, undulating, rough, calcite infill - at 12.16 m, subhorizontal joint, planar, rough, slightly weathered, calcite infill								51.0
19	- at 12.92 m, JSN:0.5 - at 14.42 m, JSN:1 - at 14.46 m, subvertical joint, stepped, rough, slightly weathered								50.0
20	END OF BOREHOLE (15.87 metres) GTC #2403 installed to 15.00 metres								

LOGGED BY: JMS	COMPLETION DEPTH: 15.87 m
REVIEWED BY: VER	COMPLETE: 13/03/20
DRAWING NO:	Page 2 of 2

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2014 GEOTECHNICAL SITE INVESTIGATION	AGNICO EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
MELIADINE PROJECT	DRILL: DIAMOND DRILL	E14103181-GT14-13
NUNAVUT	6989501N; 538600E; Zone 15	ELEVATION: 65 m

SAMPLE TYPE: HQ CORE | NQ CORE | CORE | NO RECOVERY | DISTURBED

BACKFILL TYPE: BENTONITE | PEA GRAVEL | SLOUGH | GROUT | DRILL CUTTINGS | SAND

Depth (m)	LITHOLOGICAL DESCRIPTION	GROUND ICE DESCRIPTION	SAMPLE TYPE	SAMPLE/RUN #	MOISTURE CONTENT (%)	Elevation (m)
0	ORGANICS AND PEAT - fibrous, rootlets, (100 mm thick)	Nbn		S1	16	65.0
	SAND - silty gravelly, fine to coarse angular gravel, grey, frequent root inclusions			R1		
	- at 0.55 m, 100 mm diameter cobble					
1	- at 0.65 m, brown, no visible root inclusions			S2	11.8	64.0
	- at 1.00 m, fine to coarse grained sand, trace of shell fragments, cobbles disseminated throughout					
				R2		
2		Vx 2-5%				63.0
	- at 2.00 m, olive grey, cobbles disseminated throughout	Vx, Vc 5-10%				
		Vc 5%				
	- at 2.02 m, quartz cobble			S3	29.9	
	SAND AND SILT - some gravel, trace of clay, grey	Vs 1-5%, 1-2 mm thick ice lenses				
3				S4	17.5	62.0
	GREYWACKE (BEDROCK) - strong, grey black, fine grained, foliated, quartz veins, W:3, JSN:3	30 mm thick ice lens with silt and sand		R3		
	- at 3.25 and 3.45 m, subvertical joint, undulating, smooth to rough, slightly weathered					
4	- at 3.35 m, random joint, undulating, rough, slightly weathered					61.0
	- at 3.65 m, subvertical joint, undulating, rough, moderately weathered					
	- at 4.00 m, JSN:4			R4		
5	- at 4.06 m, subvertical joint, undulating, smooth, slightly weathered					60.0
	- at 4.24 and 5.29 m, subvertical joint, planar, smooth, moderately weathered					
	- at 5.05 m, horizontal joint, planar, smooth, slightly weathered					
6	- at 5.50 m, JSN: 3			R5		59.0
	- at 5.59 m, subvertical joint, planar, smooth, slightly weathered					
	- at 5.71 m, subvertical joint, undulating, smooth, slightly weathered					
7	- at 5.75 m, subvertical joint, planar, smooth, moderately weathered					58.0
	- at 5.82 m, subhorizontal joint, undulating, smooth, slightly weathered					
	END OF BOREHOLE (6.40 metres)					
8						57.0
9						56.0
10						55.0

UCS (MPa) 100 200 300 400

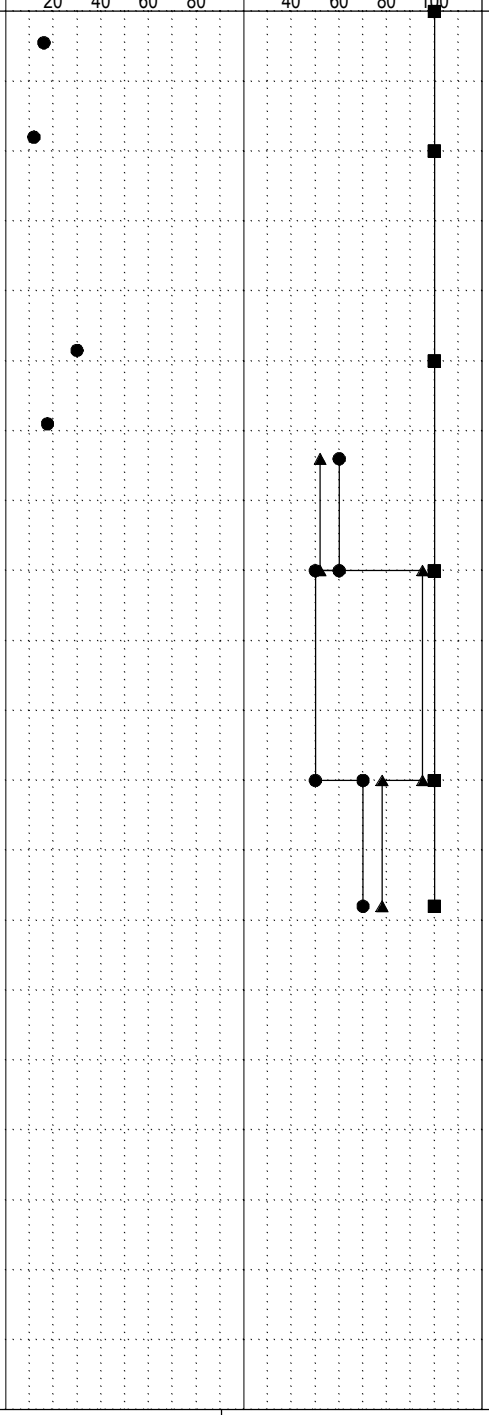
BULK DENSITY (kg/m^3) 1400 1800 2200 2600

PLASTIC M.C. LIQUID 20 40 60 80

FRACTURE FREQUENCY 2 4 6 8

RQD (%) 40 60 80 100

RECOVERY (%) 40 60 80 100



TETRA TECH EBA

LOGGED BY: JS/JGD	COMPLETION DEPTH: 6.4 m
REVIEWED BY: VER	COMPLETE: 14/03/29
DRAWING NO: E14103181-13	Page 1 of 1

Agnico Eagle Mines Ltd.

Borehole No: **GT17-17**

Project: D-CP3 and D-CP4 Phase 2 Geotechnical	Project No: ENG.EARC03076-01.WM19
Location: Meliadine Gold Project	Ground Elev: 64.835 m
Rankin Inlet, Nunavut	UTM: 538238.485 E; 6989790.043 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	Plastic Limit / Moisture Content / Liquid Limit (20 40 60 80)	Fracture Frequency (/m) (2 4 6 8) / RQD (%) (40 60 80 100) / Recovery (%) (40 60 80 100)	Elevation (m)
0		PEAT - rootlets, grass, fibrous, dark brown, brown with depth, (160 mm thick)	Nbn		S1	30.4			
		SAND - silty, trace gravel, trace cobbles, trace organics, brown, dark brown bands, fine to coarse sand	5 mm thick ice lens		S2	25.3			
1		COBBLE			R1				64
		SAND AND GRAVEL - some silt, trace gravel, trace organics, brown, dark brown bands, fine to coarse sand	Nbe		S3	18.5			
		No recovery							
		SAND - some silt, greyish brown, trace seashells, fine to medium sand	Nbn						
2		BOULDERS, COBBLES - matrix washed out, seashells disseminated throughout			R2				63
3		GREYWACKE - highly weathered (W3) and fractured, medium strong, iron oxides, JSN: 15							62
					R3			13	
4	Diamond Drill	- at 4.50 m, slightly weathered (W2), JSN:4							61
		- from 4.72 to 5.14 m, quartz veins disseminated throughout							
5		- at 4.84 m, subvertical joint, planar, rough, iron oxide			R4				60
		- from 5.14 to 5.32 m, crushed rock, moderately weathered (W3), iron oxide stains							
		- from 5.32 to 6.00 m, slightly weathered (W2), quartz veins disseminated throughout							
6		- at 5.55, 5.58 and 5.82 m, horizontal joints, undulating, rough							59
		- at 6.00 m, JSN:6							
		- from 6.21 to 6.43 m, subvertical joint, undulating, rough, iron oxides							
		- at 6.45 m, subhorizontal joint, planar, smooth, calcite infill, iron oxide			R5				58
7		- from 6.55 to 6.69 m, random joints, rock frequently crushed							
		- at 6.75, 6.81, 6.86, 6.93, 6.97 and 7.11 m, subvertical joints, planar to undulating, rough, calcite infill, iron oxide							
		- at 7.50 m, strong, JSN:4							57
8		- at 7.55 and 7.78 m, subvertical joints, undulating, rough, iron oxide			R6			138	
		- at 7.96 and 8.74 m, subhorizontal joints, stepped, rough							
		- at 8.90 m, subvertical joint, undulating, rough							56
9		END OF BOREHOLE (9.00 metres)							
10									55

TETRA TECH

Contractor: Orbit Garant	Completion Depth: 9 m
Drilling Rig Type: Skid mounted	Start Date: 2017 December 13
Logged By: FN/DB	Completion Date: 2017 December 13
Reviewed By: WTH	Page 1 of 1

Agnico Eagle Mines Ltd.

Borehole No: **GT17-18**

Project: D-CP3 and D-CP4 Phase 2 Geotechnical	Project No: ENG.EARC03076-01.WM19
Location: Meliadine Gold Project	Ground Elev: 64.525 m
Rankin Inlet, Nunavut	UTM: 538257.044 E; 6989749.811 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)
0	Diamond Drill	PEAT - rootlets, trace sand, fibrous, dark brown, fine sand, (260 mm thick)	Nbn			
		SAND - silty, some clay, some gravel, trace organics, dark brown to brown, fine to coarse sand, fine to coarse angular gravel			1S	20.7
					R1	
1		- cobbles disseminated throughout			2S	28.9
		- some gravel, trace silt				
		- at 1.80 m, silty, gravelly, trace clay			3S	16.4
2					R2	
		ICE AND SAND - some silt, trace to some gravel, trace organics	Vr, 90% ICE from 2.37 to 2.51 metres		4S	
		BOULDER - grey	Nbn			
3						
		SAND - some silt, trace gravel, trace clay, boulders and cobbles, brown, fine to medium sand			5S	17.4
					R3	
4						
5		GREYWACKE - highly weathered (W4), medium strong, grey, oxide staining in quartz veins, JSN:4			R4	
		- from 5.20 to 5.36 m, subvertical to vertical joint, moderately weathered (W3), undulating, rough, silt infill, iron oxide staining				
6		- at 5.36 and 5.57 m, subhorizontal joint, undulating, rough, iron oxide stains				
		- at 5.85 m, subvertical joint, moderately weathered (W3), undulating, rough, pyrite and quartz infill, iron oxide stains				
		- at 5.88 m, subvertical joint, undulating, rough, pyrite, quartz and silt infill, iron oxide stains			R5	
7		- from 5.88 to 6.00 m, subvertical joint, undulating, rough				
		- at 6.00 m, slightly weathered (W2), strong, quartz veins throughout, JSN:2				
8		- at 6.41, 6.74, 7.02, 7.14 and 7.39 m, subvertical joints, slightly weathered (W2), undulating, planar to smooth, iron oxide stains			R6	
		- at 7.50 m, JSN:9				
9		- at 8.03 m, subhorizontal joint, undulating, rough				
		- from 8.10 to 8.16 m, subvertical joint, undulating, smooth, quartz				
		- at 8.43 and 8.77 m, horizontal joint, undulating, rough, quartz infill				
10		- at 9.41 m, subhorizontal joint, undulating,			R7	

Plastic Limit | Moisture Content | Liquid Limit (20 40 60 80)

Fracture Frequency (/m) (2 4 6 8) ● — RQD (%) (40 60 80 100) ▲ — Recovery (%) (40 60 80 100) ■

GTC	Elevation (m)
	64
	63
	62
	61
	60
	59
	58
	57
	56
	55

TETRA TECH

Contractor: Orbit Garant	Completion Depth: 15 m
Drilling Rig Type: Skid mounted	Start Date: 2017 December 12
Logged By: FN/DB	Completion Date: 2017 December 13
Reviewed By: WTH	Page 1 of 3

Agnico Eagle Mines Ltd.

Borehole No: **GT17-18**

Project: D-CP3 and D-CP4 Phase 2 Geotechnical	Project No: ENG.EARC03076-01.WM19
Location: Meliadine Gold Project	Ground Elev: 64.525 m
Rankin Inlet, Nunavut	UTM: 538257.044 E; 6989749.811 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	Plastic Limit / Moisture Content / Liquid Limit (20 40 60 80)	Fracture Frequency (/m) (2 4 6 8) / RQD (%) (40 60 80 100) / Recovery (%) (40 60 80 100)	GTC	Elevation (m)
10		smooth, quartz infill								
11	Diamond Drill	- at 9.50 m, JSN:4 - at 9.52 and 9.90 m, subvertical joint, undulating, smooth, iron oxide stains - at 10.19 m, subhorizontal joint, undulating, rough - from 10.20 to 10.24 m, subvertical joint, planar, rough, iron oxide stains - from 10.50 to 10.69 m, silt layer - gravelly, brown, subrounded gravel - at 10.50 m, JSN:2 - at 10.95 m, subhorizontal joint, undulating, rough, silt infill - at 11.09 m, subhorizontal joint, undulating, rough, silt infill - at 11.25 and 11.32 m, random joints, undulating, rough, silt infill - at 11.50 m, subhorizontal joint, undulating, rough - at 11.74 m, subhorizontal, undulating, rough, mechanical - from 11.88 to 12.00 m, crushed rock - medium angular to subrounded gravel to boulders - at 12.00 m, JSN:12 - at 1.200 m, random joint, undulating, rough, silt infill, mechanical - from 12.34 to 12.49 m, vertical joint, undulating, rough, silt infill - at 12.49 and 12.50 m, subhorizontal joints, undulating, rough, silt infill - at 12.90 to 12.96 m, subhorizontal joints, undulating, rough - at 13.32 m, subhorizontal joint, undulating, rough - at 13.50 m, horizontal joint, undulating, rough, mechanical - at 13.50 m, subvertical joint, planar, smooth, mechanical - at 13.55 m, 2 mm thick subhorizontal white quartz vein - from 13.65 to 13.71 m, crushed rock - subangular - from 13.81 to 13.91 m, 3 mm thick subvertical white quartz veins - at 13.94 m, random joint, undulating, rough - at 14.16 m, subhorizontal joint, undulating, rough, quartz flecks in fracture - at 14.21 m, horizontal joint, stepped, rough, quartz flecks - from 14.21 to 14.28 m, crushed rock - subangular - at 14.28 m, subhorizontal joint, undulating, rough - from 14.28 to 14.34 m, subvertical joint, planar, smooth, on quartz vein - at 14.34 m, random joint, undulating, rough - from 14.34 to 14.48 m, subvertical joint,			R8 R9 R10					54 53 52 51 50 49 48 47 46 45
20										

TETRA TECH

Contractor: Orbit Garant	Completion Depth: 15 m
Drilling Rig Type: Skid mounted	Start Date: 2017 December 12
Logged By: FN/DB	Completion Date: 2017 December 13
Reviewed By: WTH	Page 2 of 3

Agnico Eagle Mines Ltd.

Borehole No: **GT17-18**

Project: D-CP3 and D-CP4 Phase 2 Geotechnical	Project No: ENG.EARC03076-01.WM19
Location: Meliadine Gold Project	Ground Elev: 64.525 m
Rankin Inlet, Nunavut	UTM: 538257.044 E; 6989749.811 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	Plastic Limit / Moisture Content / Liquid Limit (20 40 60 80)	Fracture Frequency (/m) (2 4 6 8) / RQD (%) (40 60 80 100) / Recovery (%) (40 60 80 100)	GTC	Elevation (m)
20		undulating, rough, iron stains, quartz made up 60% of face fracture								44
21										43
22		- quartz segments disseminated throughout - at 14.48 m, subhorizontal joint, undulating, rough, quartz segments in face fracture - from 14.48 to 14.57 m, subvertical joint, undulating, rough - at 14.57 m, random joint, undulating, rough - at 14.67 m, subhorizontal joint, planar, rough - from 14.67 to 14.70 m, crushed rock - subangular - at 14.70 m, subhorizontal joint, planar, rough - at 14.90 m, subvertical joint, undulating, smooth								42
23										41
24		END OF BOREHOLE (15.00 metres) Multibead GTC installed at 12.50 metres								40
25										39
26										38
27										37
28										36
29										35
30										

TETRA TECH

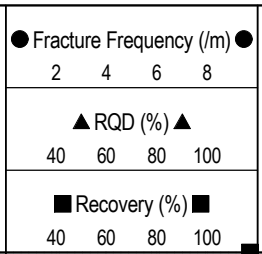
Contractor: Orbit Garant	Completion Depth: 15 m
Drilling Rig Type: Skid mounted	Start Date: 2017 December 12
Logged By: FN/DB	Completion Date: 2017 December 13
Reviewed By: WTH	Page 3 of 3

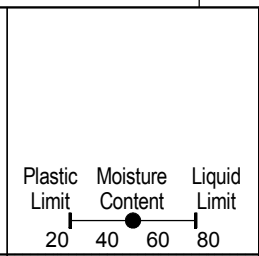
Agnico Eagle Mines Ltd.

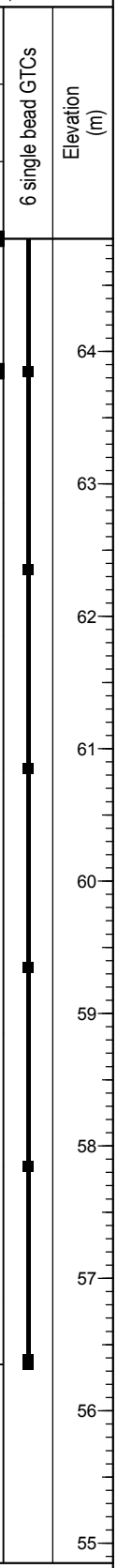
Borehole No: **GT17-19**

Project: D-CP3 and D-CP4 Phase 2 Geotechnical	Project No: ENG.EARC03076-01.WM19
Location: Meliadine Gold Project	Ground Elev: 64.85 m
Rankin Inlet, Nunavut	UTM: 538279.573 E; 6989698.175 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)
0		PEAT - trace silt, trace sand, rootlets, fibrous, dark brown, (170 mm thick)	Nbn			
		SAND - some gravel to gravelly, some silt, trace organics (roots), cobbles disseminated throughout, dark brown, fine to coarse sand, fine to coarse angular gravel			1S	17.4
					R1	
1		GRAVEL - sandy, silty			2S	8.7
		BOULDERS AND COBBLES - poor recovery				
					R2	
2		GREYWACKE - moderately weathered (W3), medium strong, grey, JSN:6				
		- 1.85, 1.87, 1.89 and 2.05 m, subvertical joints, planar, rough, iron oxide stains				
		- from 2.05 to 2.16 m, crushed rock - possibly void in bedrock, silt and sand infill				
3		- at 2.24 and 2.40 m, subvertical joints, undulating, rough, iron oxide stains				
		- at 2.50 m, highly weathered (W4), highly fractured with voids, mostly cobbles, fines washed out, JSN:15			R3	
4	Diamond Drill	- at 4.00 m, JSN:4				
		- from 4.00 to 4.63 m, crushed rock - possibly void in bedrock, silt and sand infill				
		- at 4.63 m, moderately weathered (W3), medium strong, grey, foliated, iron oxide stains on joints			R4	
5		- at 4.64 m, subhorizontal joints, undulating, smooth, iron oxide stains				
		- from 4.75 to 4.83 and 4.92 to 5.04 m, crushed rock				
6		- at 5.12, 5.23, 5.29 and 5.32 m, subvertical joints, undulating, rough, iron oxide stains				
		- at 5.50 m, slightly weathered (W2), fine grained, JSN:4			R5	
		- at 5.52, 5.56 and 5.60 m, subvertical joints, stepped to undulating, rough, calcite infill, iron oxide stains				
7		- at 5.72 and 6.50 m, subhorizontal joints, undulating, smooth				
		- at 6.16, 6.34,6.48 and 6.51 m, subvertical joints, undulating, smooth				
		- at 7.18, 7.47, 7.52, 7.61, 7.67 and 7.73 m, subvertical joints, undulating, rough, calcite infill, iron oxide stains			R6	
8		- from 7.84 to 7.95 m, crushed rock				
		- at 8.06 m, subvertical joint, undulating, rough				
		- at 8.27 m, horizontal joint, planar, smooth				
		- at 8.46 m, subvertical joint, stepped, rough				
		END OF BOREHOLE (8.50 metres)				
9		Six single bead GTCs installed				
10						







TETRA TECH

Contractor: Orbit Garant	Completion Depth: 8.5 m
Drilling Rig Type: Skid mounted	Start Date: 2017 December 13
Logged By: FN	Completion Date: 2017 December 13
Reviewed By: WTH	Page 1 of 1

Agnico Eagle Mines Ltd.

Borehole No: **GT17-20**

Project: D-CP3 and D-CP4 Phase 2 Geotechnical	Project No: ENG.EARC03076-01.WM19
Location: Meliadine Gold Project	Ground Elev: 65.851 m
Rankin Inlet, Nunavut	UTM: 538337.186 E; 6989653.544 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	Plastic Limit / Moisture Content / Liquid Limit (20 40 60 80)	Fracture Frequency (/m) (2 4 6 8) / RQD (%) (40 60 80 100) / Recovery (%) (40 60 80 100)	Elevation (m)
0	Diamond Drill	ORGANICS AND PEAT - grass, some silt, trace sand, trace gravel, rootlets, fibrous, dark brown, (100 mm thick)	Nbn						
		BOULDER			R1				
1		SAND - some silt, trace gravel, trace clay, grey, trace to some seashells disseminated throughout, fine to coarse subangular gravel			1S	19	●		65
		- brown, fine sand			2S	19.5	●		
		- cobble							
		GRAVEL - trace sand, coarse sand, subangular to subrounded gravel			R2			7	
2		GREYWACKE - (W3), medium strong, greyish black, foliated, white veins disseminated throughout, fine grained, JSN:6							64
		- from 1.52 to 1.58 m, subvertical joint, undulating, rough, iron stained							
		- at 1.58 m, subhorizontal joint, undulating, rough, iron stained							
3		- from 1.58 to 1.68 m, subvertical joint, undulating, rough, iron stained			R3			11	63
		- at 1.68 m, subhorizontal joint, undulating, rough, iron stained							
		- from 1.68 to 2.04 m, subvertical joint, undulating, rough, iron stained							
4		- at 1.83 m, random joint, stepped, rough							62
		- at 1.94 m, subhorizontal joint, undulating, rough							
		- from 1.94 to 1.99 m, crushed bedrock							
		- at 1.99, 2.03 and 2.09 m, subhorizontal joints, undulating, rough, 2.09 is silt infilled, iron stained			R4				
5		- at 2.23 m, subhorizontal joint, undulating, rough, mechanical break							61
		- at 2.50 m, JSN:12							
		- from 2.58 to 2.66 m, subvertical joint, undulating, rough, iron stained							
		- from 2.66 to 2.79 m, crushed rock							
6		- at 2.79 m, subhorizontal joint, undulating, rough							60
		- from 2.791 to 2.88 m, vertical joint, undulating, rough, silt infill							
		- at 2.88 m, subhorizontal joint, undulating, rough, silt infill, iron stained			R5				
		- from 2.88 to 2.96 m, silt and grey crushed gravel							
7		- at 2.96 m, random joint, undulating, rough							59
		- at 3.06 m, subvertical joint, undulating, rough							
		- at 3.09 m, subvertical joint, undulating, rough, silt infill							
		- from 3.09 to 3.33 m, crushed rock - subangular to subrounded, medium gravel to boulders							
8		- at 3.33 m, subhorizontal joint, undulating, smooth			R6				58
		- at 3.53 m, subhorizontal joint, undulating, smooth							
		- at 3.53 m, random joint, undulating, rough							
		- from 3.53 to 3.57 m, crushed rock - silt, fine to coarse sand, subangular to subrounded							
		- at 3.57 m, subhorizontal joint, undulating, rough							
9		- from 3.57 to 3.71 m, 20 mm thick vertical white vein							57
		- at 3.71 m, subvertical joint, undulating, rough, silt infill							
		- at 3.76 m, subvertical joint, undulating, smooth, mechanical break							
		- at 4.00 m, JSN:6							
10		- from 4.00 to 4.25 m, crushed rock - fine subangular to subrounded gravel to boulders							56

TETRA TECH

Contractor: Orbit Garant	Completion Depth: 8.5 m
Drilling Rig Type: Skid mounted	Start Date: 2017 December 12
Logged By: DB	Completion Date: 2017 December 12
Reviewed By: WTH	Page 1 of 2

Agnico Eagle Mines Ltd.

Borehole No: **GT17-20**

Project: D-CP3 and D-CP4 Phase 2 Geotechnical	Project No: ENG.EARC03076-01.WM19
Location: Meliadine Gold Project	Ground Elev: 65.851 m
Rankin Inlet, Nunavut	UTM: 538337.186 E; 6989653.544 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	Plastic Limit / Moisture Content / Liquid Limit (20 40 60 80)	Fracture Frequency (/m) (2 4 6 8) / RQD (%) (40 60 80 100) / Recovery (%) (40 60 80 100)	Elevation (m)
10		- from 4.25 to 4.35 m, silt layer - trace sand, grey, fine sand - from 4.35 to 4.45 m, crushed rock - angular, iron stained - at 4.45 m, random joint, undulating, rough, iron stained - from 4.48 to 4.52 m, subvertical joint, planar, rough, iron stained - at 4.54 m, random joint, undulating, rough, iron stained - at 4.59 m, subhorizontal joint, undulating, rough - from 4.59 to 4.78 m, subvertical joint, undulating, rough, iron stained - at 5.08 m, random joint, undulating, rough - at 5.10 m, subhorizontal joint, stepped, rough, silt infill - at 5.25 m, subhorizontal joint, undulating, rough, silt infill - from 5.38 to 5.50 m, subvertical joint, undulating, rough, iron stained - at 5.50 m, subhorizontal joint, planar, rough, iron stained, JSN:4 - from 5.50 to 5.62 m, subvertical joint, stepped, smooth, iron stained - from 5.58 to 5.65 m, subvertical joint, undulating, rough, iron stained - at 5.98 m, subhorizontal joint, stepped, smooth - at 6.08 m, subhorizontal joint, stepped, rough - from 6.28 to 6.33 m, subvertical joint, undulating, rough, mechanical break - at 6.33 m, subhorizontal joint, undulating, rough, iron stained - from 6.71 to 6.78 m, subvertical joint, stepped, rough, iron stained - from 6.78 to 6.81 m, random joint, undulating, rough, iron stained - from 6.88 to 6.94 m, subvertical joint, undulating, rough, 10 mm thick quartz vein - at 7.00 m, subhorizontal joint, undulating, rough, mechanical break - at 7.00 m, JSN:6 - at 7.01 m, 10 mm thick subhorizontal white quartz vein - at 7.28 m, random joint, stepped, rough - at 7.32 m, random joint, stepped, rough - at 7.39 m, subhorizontal joint, stepped, rough - at 7.49 m, random joint, stepped, rough - from 7.54 to 7.64 m, 10 mm thick subvertical white quartz vein - at 7.59 m, random joint, undulating, rough, quartz vein in fracture - from 7.59 to 7.69 m, vertical joint, undulating, rough - at 7.69 m, subhorizontal joint, undulating, rough - at 8.36 m, subhorizontal joint, undulating, rough, silt infill							55
11									
12									54
13									53
14									52
15									51
16									50
17									49
18									48
19		END OF BOREHOLE (8.50 metres)							47
20									46

TETRA TECH

Contractor: Orbit Garant	Completion Depth: 8.5 m
Drilling Rig Type: Skid mounted	Start Date: 2017 December 12
Logged By: DB	Completion Date: 2017 December 12
Reviewed By: WTH	Page 2 of 2

Borehole No: GT25-12

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	Backfill	Elevation (m)
0		ROCKFILL - angular to subangular gravel, grey to black, (300 mm thick)						101
		SILT (TAILINGS) - trace sand, trace clay, very fine grained sand, low plastic, dark grey, frozen	Nbe		G1			
					R1			
					FS2	26.1		
1					EI3			100
					Geo1			
					G4			
			Nbn		Geo2			
					FS5	18		
2					R2			99
					Geo3			
		GRAVEL - trace sand, angular to subangular gravel, coarse grained sand, black to grey, frozen						
		- from 2.7 to 2.9 m, appears to be thermally disturbed	Nbn		ST6			
3		SILT (TAILINGS) - trace sand, trace clay, very fine grained sand, low plastic, dark grey, frozen			R3			98
					ST7	22.7		
4		- damp						97
		- from 4.2 to 4.3 m, appears to be thermally disturbed	Nbn		R4			
		- frozen			G8			
					Geo4			
					FS9	17.3		
5		- 20 mm thick ice lens	Ice lens		EI10			

HQ Coring

△ Temperature (°C) △ -10 0 10 20

Bulk Density (kg/m^3) 1400 1600 1800 2000

Plastic Limit | Moisture Content | Liquid Limit

20 40 60 80

Recovery (%) 40 60 80 100

2283

15

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 32.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 28
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 1 of 7

TETRA TECH

Borehole No: GT25-12

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE

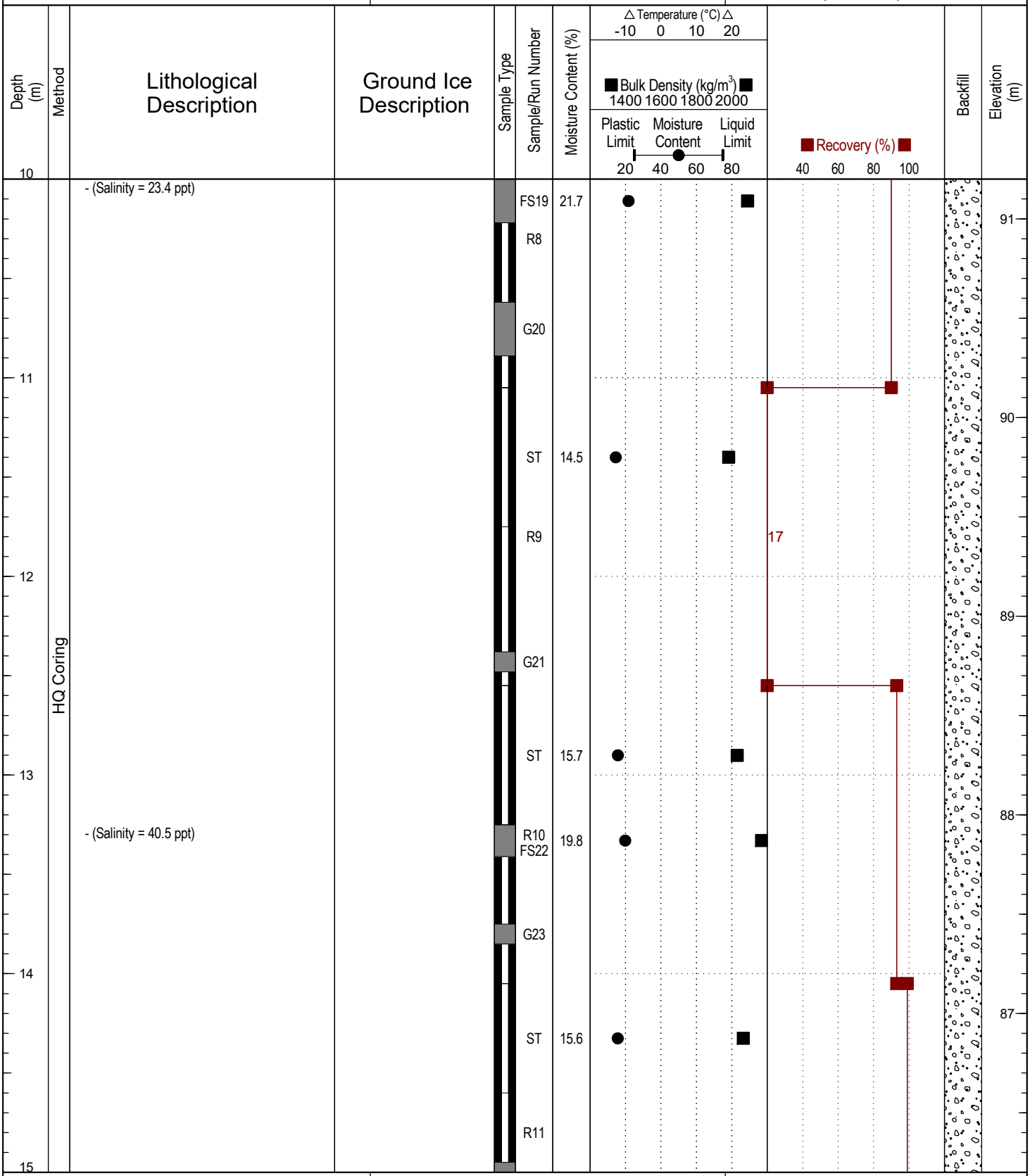
Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Bulk Density (kg/m³) 1400 1600 1800 2000 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	Recovery (%) 40 60 80 100	Backfill	Elevation (m)
5			Nbn							96
					ST11	24.7				
		- wet - from 5.7 to 6.0 m, appears to be thermally disturbed			R5 G12					
6		- frozen	Nbn							95
					Geo5					
					FS13	21				
					ST14	28.6				
7					Geo6 G15 R6					94
	HQ Coring		Vs ~20%							
			Nbn							
		- (Salinity = 11.6 ppt)			FS16	22.7				
8										93
					G18					
					FS17	19.6				
					R7					
9										92
					Geo7					
					ST					
10										

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 32.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 28
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 2 of 7

Borehole No: GT25-12

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

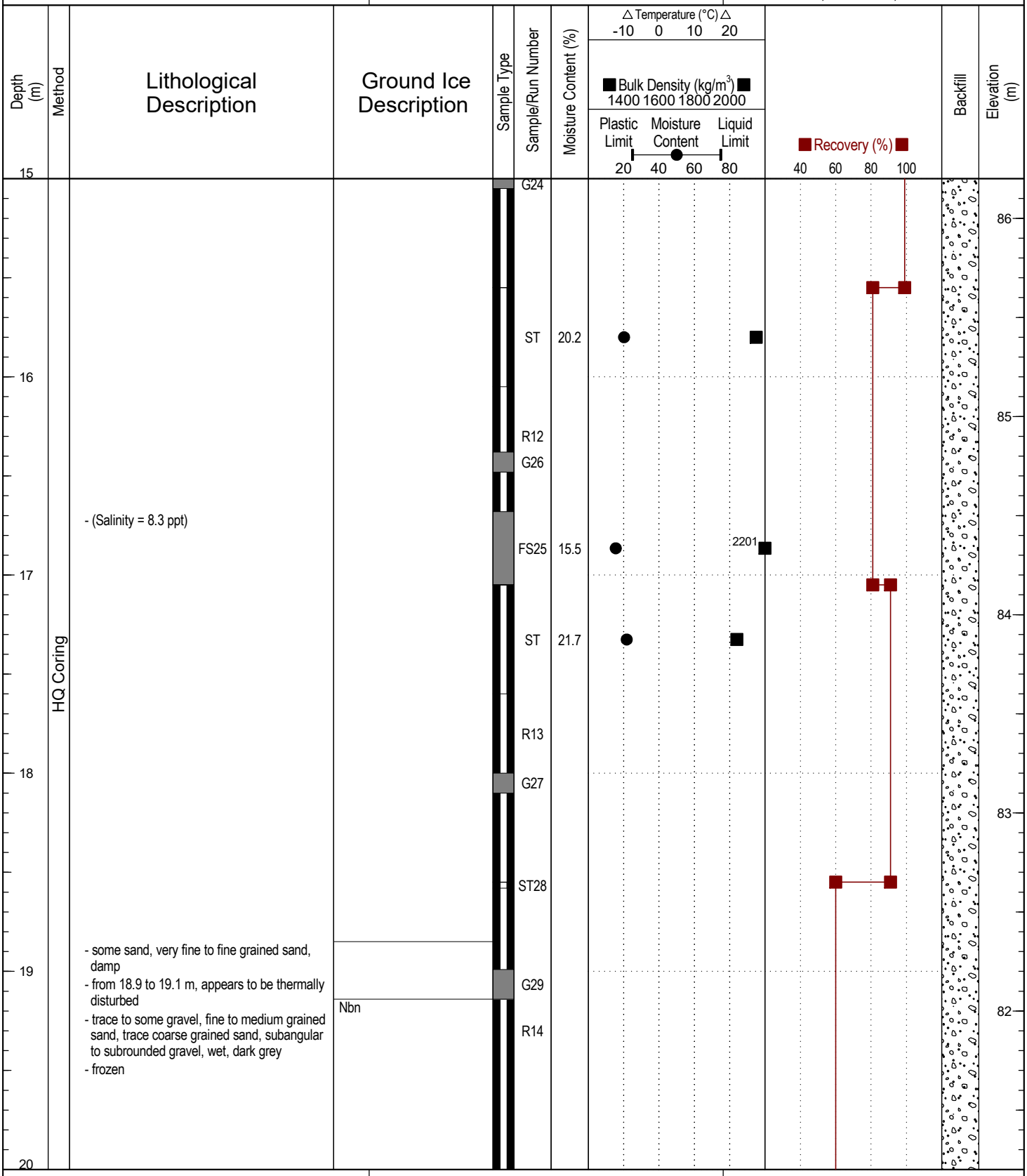


Contractor: Orbit Garant Drilling Inc.	Completion Depth: 32.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 28
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 3 of 7

Borehole No: GT25-12

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE



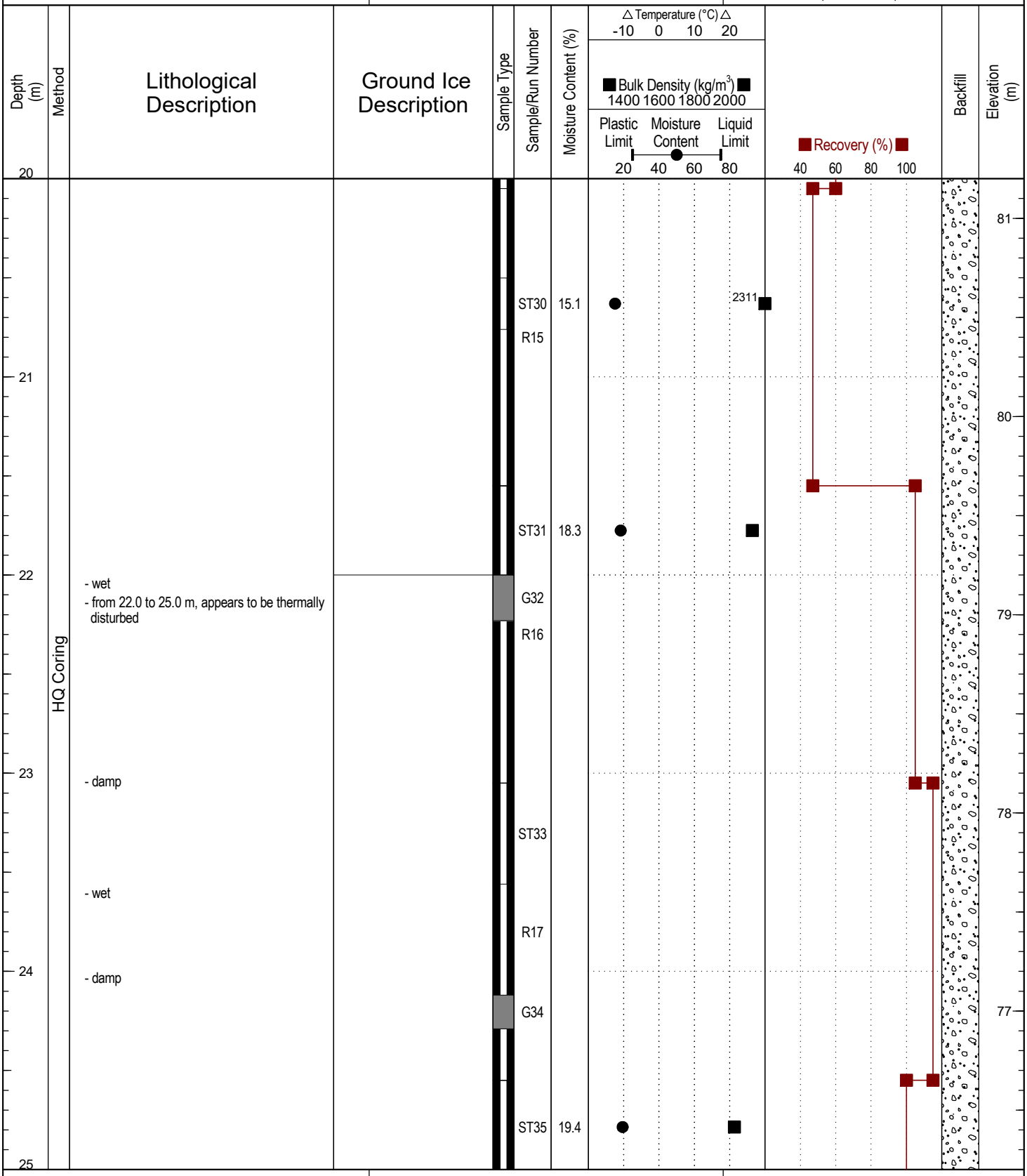
TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 32.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 28
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 4 of 7

Borehole No: GT25-12

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE



TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 32.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 28
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 5 of 7

Borehole No: GT25-12

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Bulk Density (kg/m³) 1400 1600 1800 2000 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	Recovery (%) 40 60 80 100	Backfill	Elevation (m)
25	HQ Coring	- frozen	Nbn		R18					76
					FS36	18.5				
					G37					
26										75
					ST38	17.3				
					R19					
27										74
					G39					
					ST40	18.1				
28										73
					R20					
					G41					
		SILT (TAILINGS) - clayey, some sand, fine grained sand, wet, soft, low plastic, dark grey - from 28.5 to 30.6 m, appears to be thermally disturbed								
29		- sandy, some clay, damp, compact, medium to dark grey			G42					72
					R21					
30										

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 32.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 28
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 6 of 7

Borehole No: GT25-12

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / Bulk Density (kg/m³) 1400 1600 1800 2000 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Recovery (%) 40 60 80 100	Backfill	Elevation (m)
30										
	HQ Coring	- frozen	Nbn		ST43					71
31					FS44	24.2	2215			70
					R22					
32					G45					69
					ST46	28.8				
		END OF BOREHOLE (32.5 metres) Note: Backfilled at completion Minor sloughing was observed during drilling								
33										68
34										67
35										

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 32.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 28
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 7 of 7

Borehole No: **GT25-12B**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	△ Temperature (°C) △ -10 0 10 20	● Fracture Frequency (/m) ● 2 4 6 8 ▲ RQD (%) ▲ 40 60 80 100 ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
0	HQ Coring	See GT25-12 for first 32.5 metres	See GT25-12 for first 32.5 metres						101
1									100
2									99
3									98
4									97
5									

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 42.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 30
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 1 of 9

Borehole No: **GT25-12B**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	△ Temperature (°C) △ -10 0 10 20	● Fracture Frequency (/m) ● 2 4 6 8 ▲ RQD (%) ▲ 40 60 80 100 ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
5	HQ Coring								96
6									95
7									94
8									93
9									92
10									

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 42.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 30
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 2 of 9

Borehole No: **GT25-12B**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	△ Temperature (°C) △ -10 0 10 20	● Fracture Frequency (/m) ● 2 4 6 8 ▲ RQD (%) ▲ 40 60 80 100 ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
10									
11	HQ Coring								91
12									90
13									89
14									88
15									87

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 42.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 30
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 3 of 9

Borehole No: **GT25-12B**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	△ Temperature (°C) △ -10 0 10 20	● Fracture Frequency (/m) ● 2 4 6 8 ▲ RQD (%) ▲ 40 60 80 100 ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
15									
16	HQ Coring								86
17									85
18									84
19									83
20									82

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 42.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 30
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 4 of 9

Borehole No: **GT25-12B**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	△ Temperature (°C) △ -10 0 10 20	● Fracture Frequency (/m) ● 2 4 6 8 ▲ RQD (%) ▲ 40 60 80 100 ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
20	HQ Coring								81
21									80
22									79
23									78
24									77
25									

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 42.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 30
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 5 of 9

Borehole No: **GT25-12B**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	△ Temperature (°C) △ -10 0 10 20	● Fracture Frequency (/m) ● 2 4 6 8 ▲ RQD (%) ▲ 40 60 80 100 ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
25									
26	HQ Coring								76
27									75
28									74
29									73
30									72

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 42.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 30
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 6 of 9

Borehole No: GT25-12B

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	△ Temperature (°C) △ -10 0 10 20	● Fracture Frequency (/m) ● 2 4 6 8 ▲ RQD (%) ▲ 40 60 80 100 ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
30									
31									71
32	HQ Coring								70
		GRAVEL - coarse grained subrounded to rounded gravel - from 32.5 to 33.5 m, appears to be thermally disturbed			R1				69
33									68
		SAND (TILL) - some gravel, poorly graded, brown - some shell fragments for 220 mm	Nbn						
34					G1				67
		- silty, trace gravel, trace cobbles, very fine grained sand	Vs, Vr ~25-50%		R2				
35									

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 42.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 30
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 7 of 9

Borehole No: **GT25-12B**

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	△ Temperature (°C) △ -10 0 10 20	● Fracture Frequency (/m) ● 2 4 6 8 ▲ RQD (%) ▲ 40 60 80 100 ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
35									
	HQ Coring	GREYWACKE (BEDROCK) - weathered, very fine grained, dark grey - fresh to slightly weathered, strong to extremely strong (R4-R6), 45-85° fractures, irregular, rough, trace staining			R3				66
36									65
37					R4				64
38		- pyrite throughout, fine grained, grey, quartz veins throughout, 15-80° fractures, planar to stepped to undulating, rough - staining							63
		- staining							
		- staining			R5				
39		- staining							62
		- staining, 0-90° fractures, irregular to undulating, rough							
40									

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 42.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 30
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 8 of 9

Borehole No: GT25-12B

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 101.2 masl
Nunavut	UTM: 538642 E; 6989740 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	△ Temperature (°C) △ -10 0 10 20	● Fracture Frequency (/m) ● 2 4 6 8 ▲ RQD (%) ▲ 40 60 80 100 ■ Recovery (%) ■ 40 60 80 100	Backfill	Elevation (m)
40									
	HQ Coring	- staining			R6				61
41		- 30-90° fractures, irregular to undulating to planar, rough - staining							60
42					R7				59
		END OF BOREHOLE (42.5 metres) Note: Backfilled at completion							
43									58
44									57
45									

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 42.5 m
Equipment Type: Skid mounted	Start Date: 2025 January 30
Logged By: CNH/DS	Completion Date: 2025 January 30
Reviewed By: HX	Page 9 of 9

Borehole No: GT25-13

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 100.6 masl
Nunavut	UTM: 538774 E; 6989698 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	Temperature (°C) / Bulk Density (kg/m³) / Plastic Limit – Moisture Content – Liquid Limit	Fracture Frequency (/m) / RQD (%) / Recovery (%)	GTC #2870	PVC Pipe	Elevation (m)
0	HQ Coring	ROCKFILL - black, (200 mm thick)									100
		SILT (TAILINGS) - trace sand, trace clay, very fine grained sand, low plastic, dark grey, frozen	Nbn		R1 G1						
1					FS2	22.5					99
					ST3						
					FS5	21.3					
2					R2 G4						98
3					G6 R3						
4					G7						97
5					R4						96

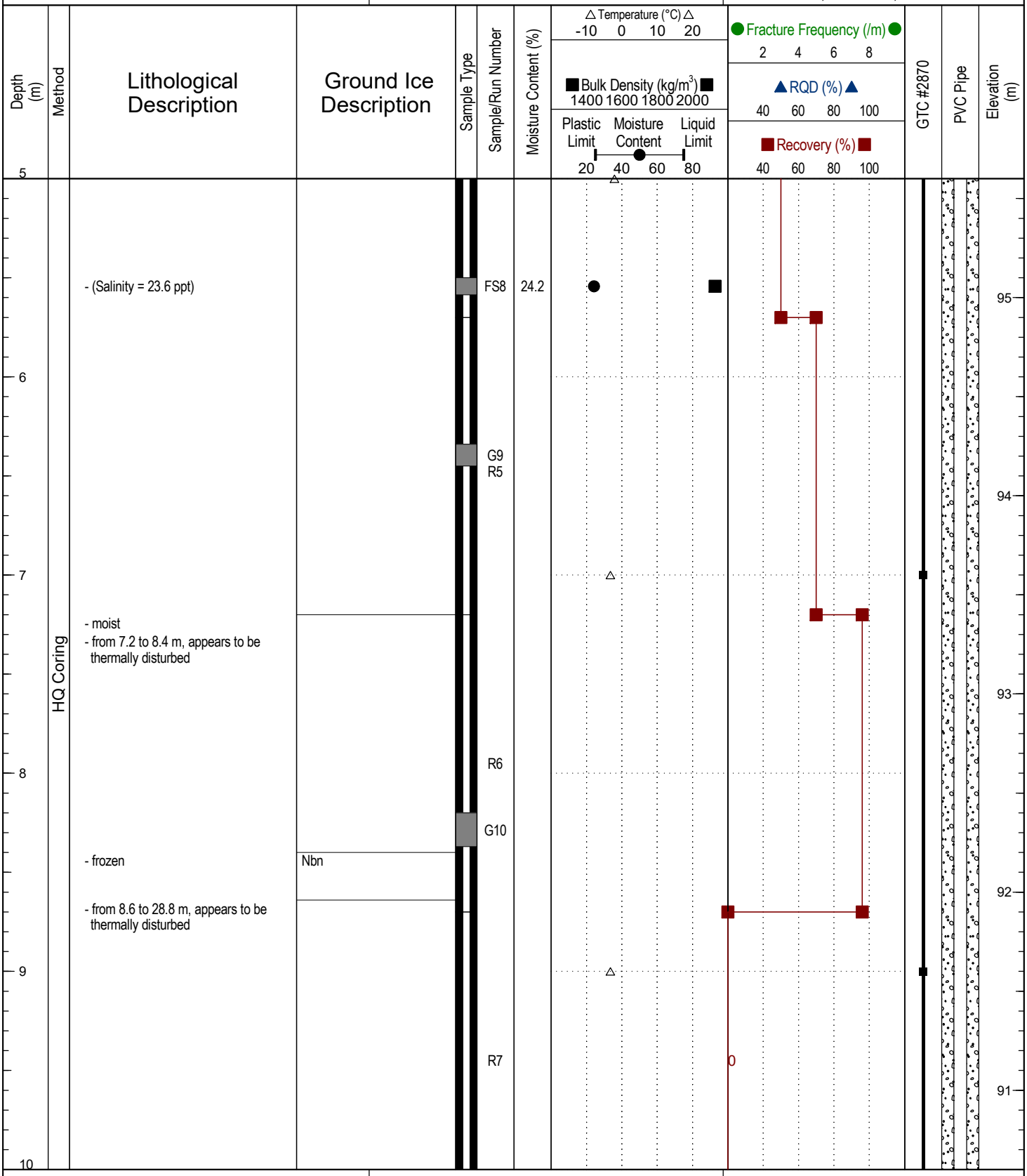
Temperature (°C): -10 0 10 20
Bulk Density (kg/m³): 1400 1600 1800 2000
Plastic Limit – Moisture Content – Liquid Limit: 20 40 60 80
Fracture Frequency (/m): 2 4 6 8
RQD (%): 40 60 80 100
Recovery (%): 40 60 80 100

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 41.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 18
Logged By: CNH/DS	Completion Date: 2025 January 19
Reviewed By: HX	Page 1 of 9

Borehole No: **GT25-13**

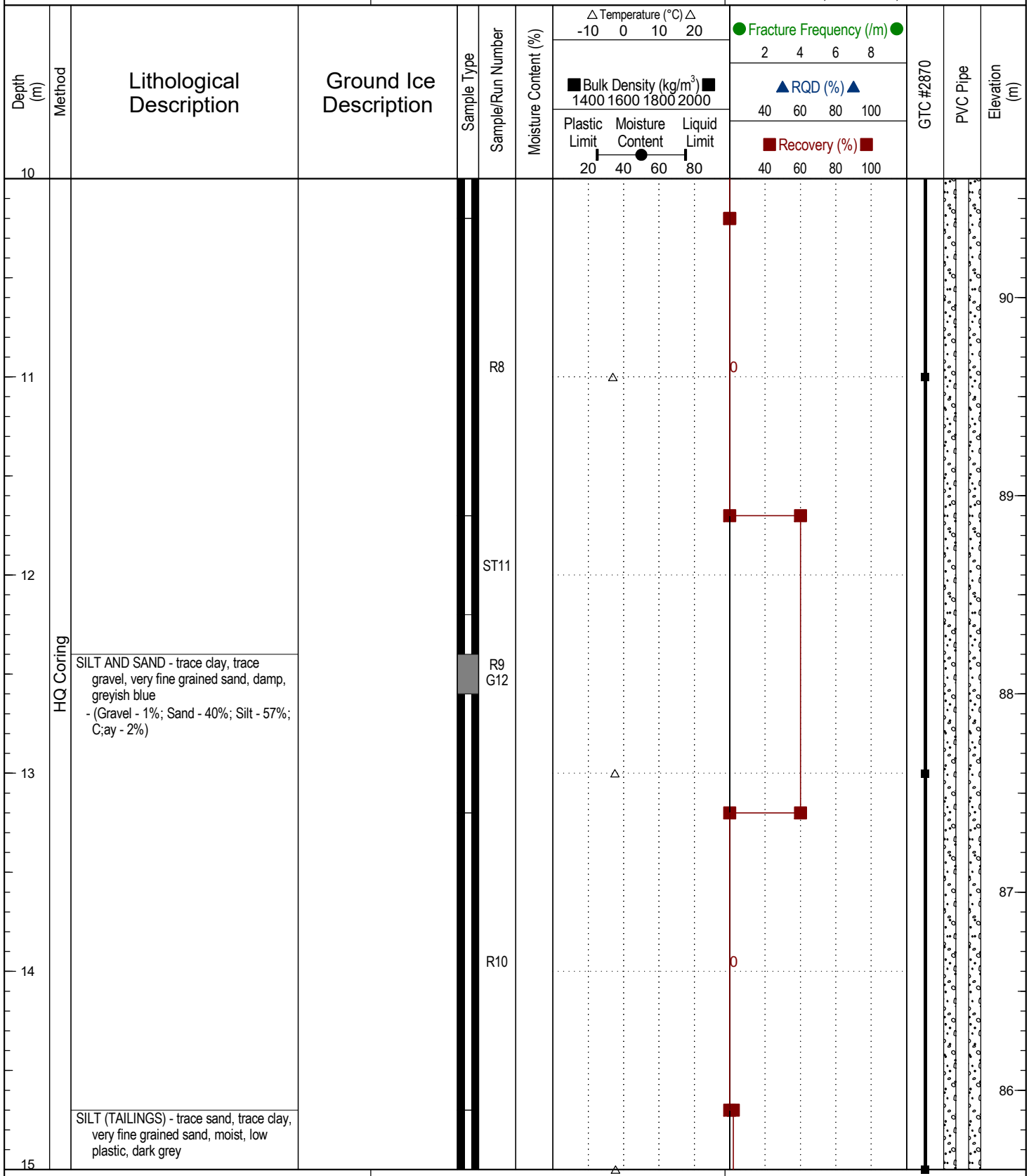
Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 100.6 masl
Nunavut	UTM: 538774 E; 6989698 N; Z 15



Contractor: Orbit Garant Drilling Inc.	Completion Depth: 41.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 18
Logged By: CNH/DS	Completion Date: 2025 January 19
Reviewed By: HX	Page 2 of 9

Borehole No: GT25-13

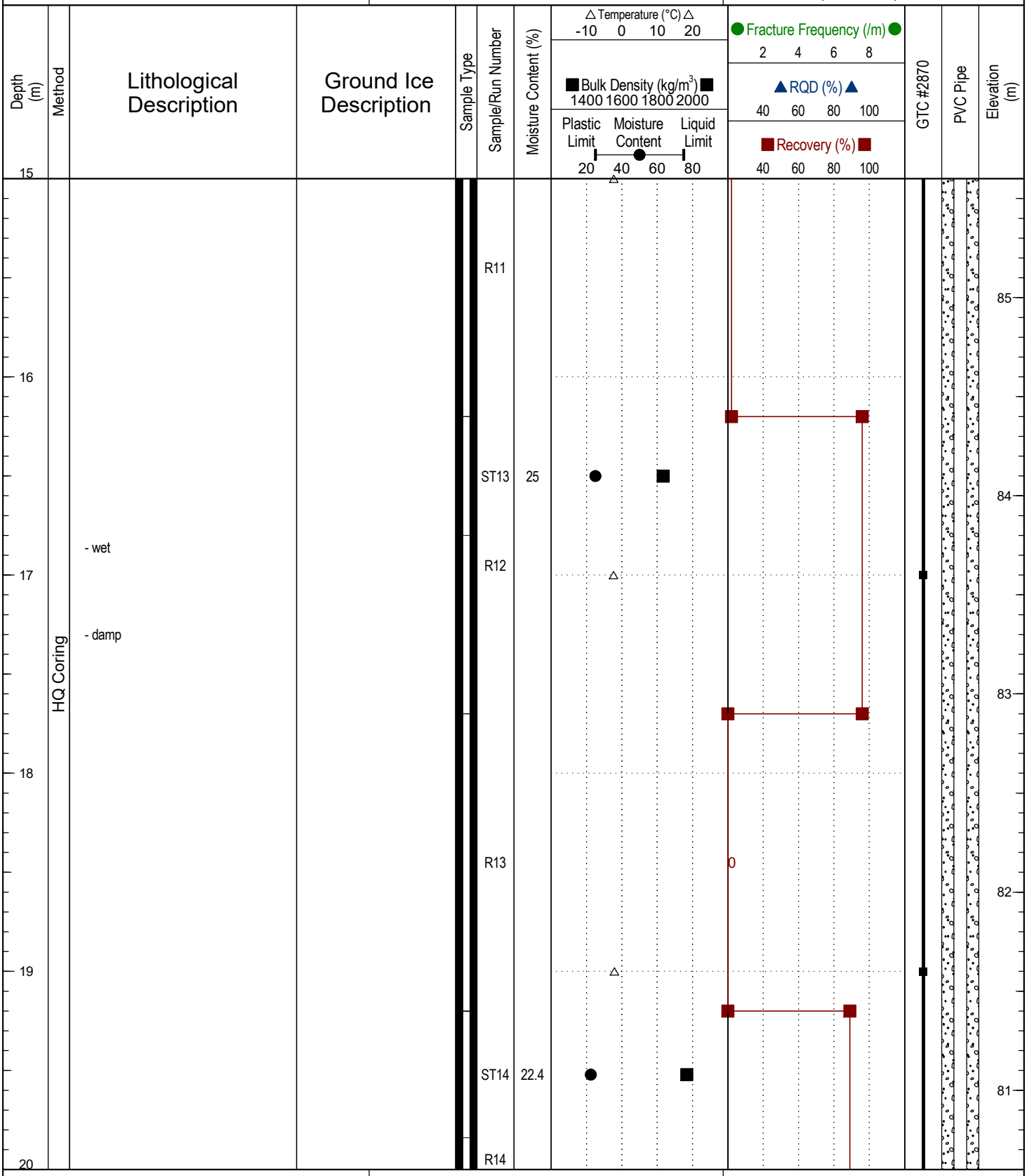
Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 100.6 masl
Nunavut	UTM: 538774 E; 6989698 N; Z 15



Contractor: Orbit Garant Drilling Inc.	Completion Depth: 41.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 18
Logged By: CNH/DS	Completion Date: 2025 January 19
Reviewed By: HX	Page 3 of 9

Borehole No: GT25-13

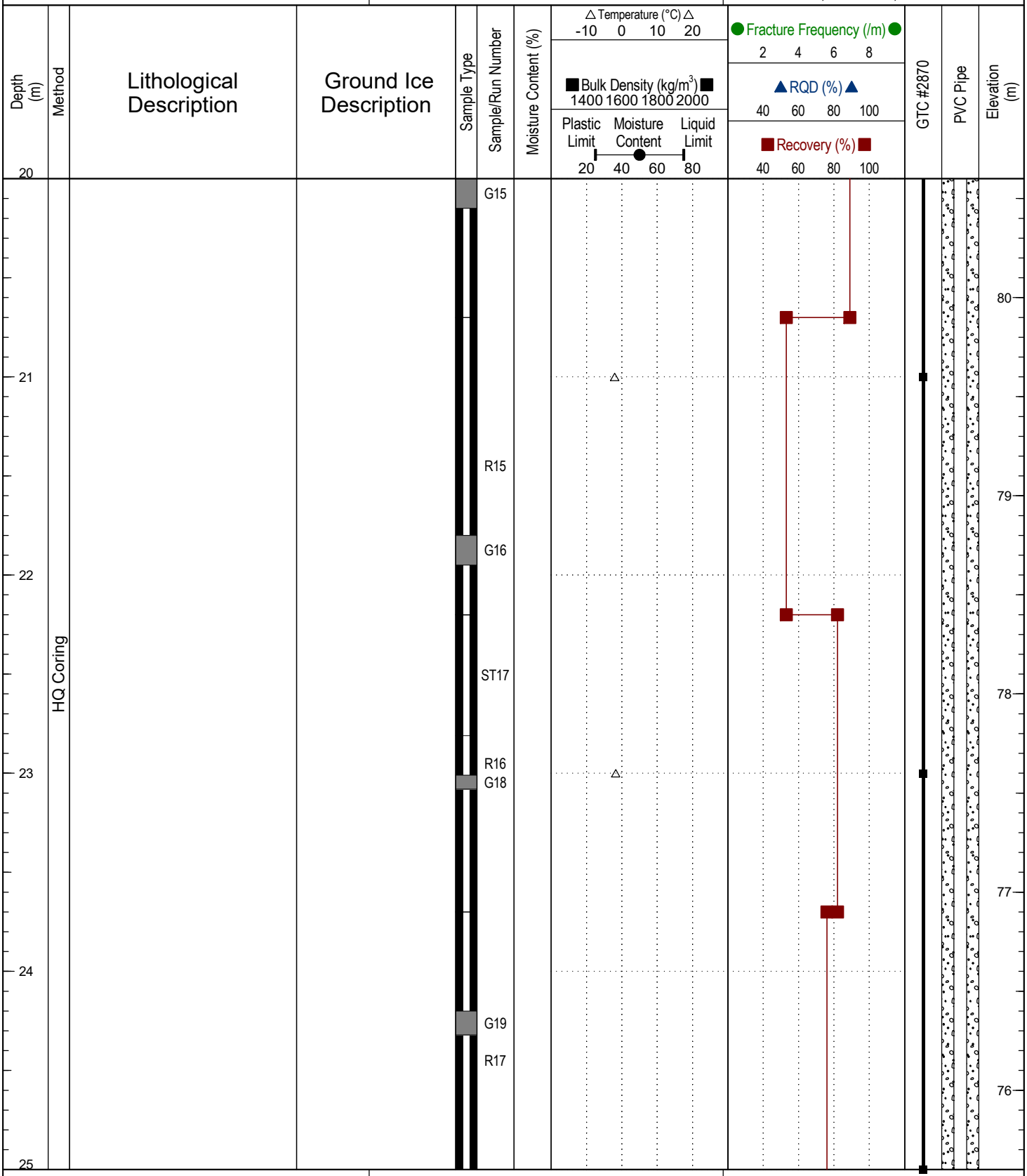
Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 100.6 masl
Nunavut	UTM: 538774 E; 6989698 N; Z 15



Contractor: Orbit Garant Drilling Inc.	Completion Depth: 41.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 18
Logged By: CNH/DS	Completion Date: 2025 January 19
Reviewed By: HX	Page 4 of 9

Borehole No: GT25-13

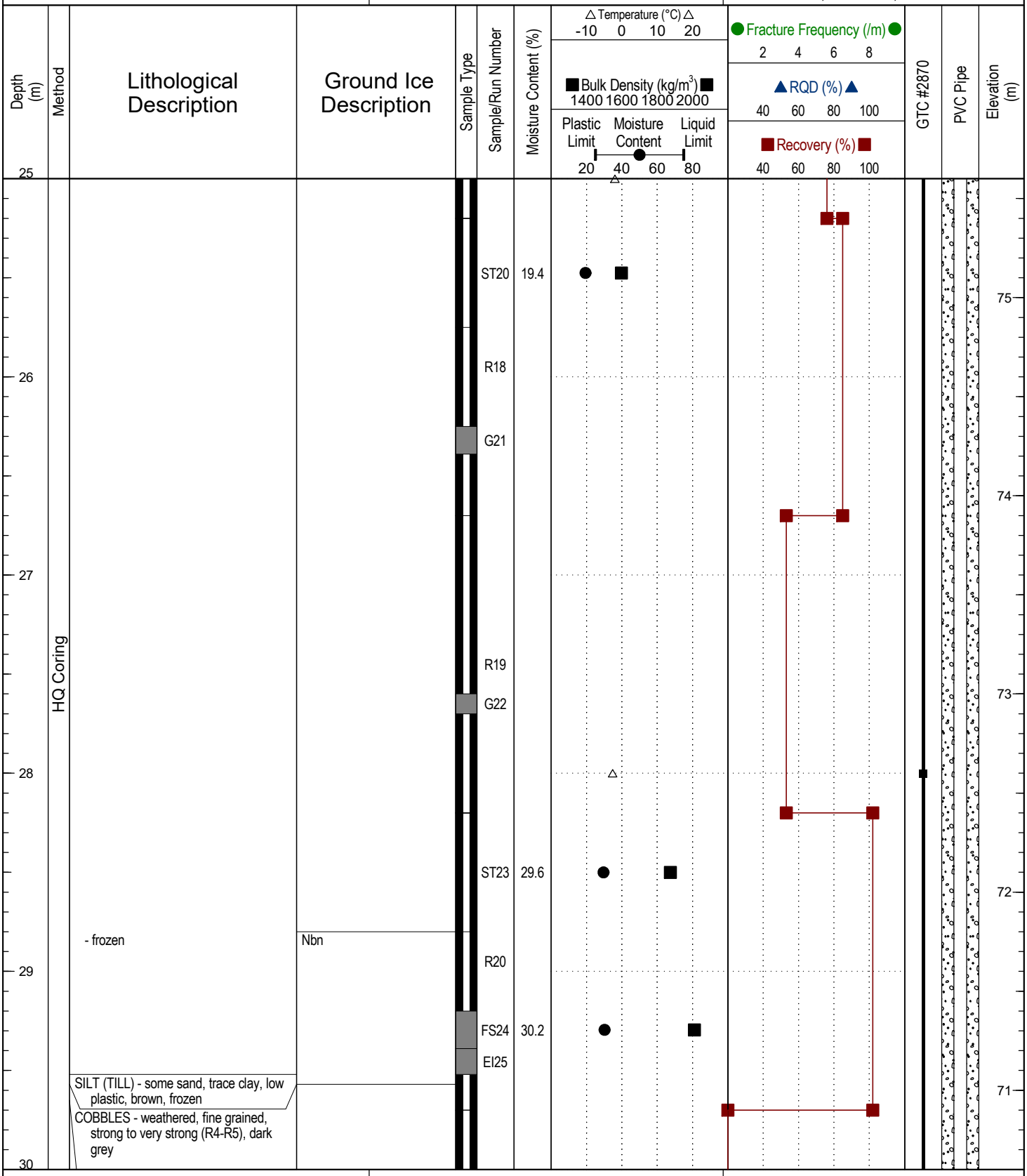
Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 100.6 masl
Nunavut	UTM: 538774 E; 6989698 N; Z 15



Contractor: Orbit Garant Drilling Inc.	Completion Depth: 41.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 18
Logged By: CNH/DS	Completion Date: 2025 January 19
Reviewed By: HX	Page 5 of 9

Borehole No: GT25-13

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 100.6 masl
Nunavut	UTM: 538774 E; 6989698 N; Z 15



Contractor: Orbit Garant Drilling Inc.	Completion Depth: 41.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 18
Logged By: CNH/DS	Completion Date: 2025 January 19
Reviewed By: HX	Page 6 of 9

Borehole No: GT25-13

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 100.6 masl
Nunavut	UTM: 538774 E; 6989698 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	Temperature (°C) -10 0 10 20 / Bulk Density (kg/m³) 1400 1600 1800 2000 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	Fracture Frequency (/m) 2 4 6 8 / RQD (%) 40 60 80 100 / Recovery (%) 40 60 80 100	GTC #2870	PVC Pipe	Elevation (m)
30		- from 29.6 to 29.7 m, appears to be thermally disturbed BEDROCK - highly weathered, fine grained, rounded, dark grey			R21			0			70
31		- 30-90° fractures									
32	HQ Coring	- fine to coarse grained, brown to light grey to dark grey - silt infill - some sand, trace clay, fine grained sand, damp, low plastic, grey			R22						69
33					R23						68
34		- highly fractured									67
35					R24						66

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 41.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 18
Logged By: CNH/DS	Completion Date: 2025 January 19
Reviewed By: HX	Page 7 of 9

Borehole No: GT25-13

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 100.6 masl
Nunavut	UTM: 538774 E; 6989698 N; Z 15

AGNICO EAGLE

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△ Temperature (°C) △ -10 0 10 20 / ■ Bulk Density (kg/m³) ■ 1400 1600 1800 2000 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	● Fracture Frequency (/m) ● 2 4 6 8 / ▲ RQD (%) ▲ 40 60 80 100 / ■ Recovery (%) ■ 40 60 80 100	GTC #2870	PVC Pipe	Elevation (m)
35											
	HQ Coring	GREYWACKE (BEDROCK) - slightly weathered, very fine grained, strong to extremely strong (R4-R6), dark grey, quartz and sand veins, 45-60° fractures, irregular, rough, stained - no visible quartz veins, 1-5 mm thick quartz veins									
36		- 130 mm thick sand vein - very fine grained sand - 45° fractures for 140 mm - at 36.02, 36.20, 36.25 and 37.05 m, horizontal fractures - 50 mm thick clay layer - silty, some gravel, trace sand, angular gravel, very fine grained sand, wet, medium plastic, light brown - 530 mm thick sand vein - 60° fractures for 440 mm			R25						65
37		- ~50° fractures, planar to undulating, rough									64
38					R26						63
39		- 45-80° fractures, planar to stepped, rough									62
40		- fracture infilled with medium brown clay gauge			R27						61

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 41.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 18
Logged By: CNH/DS	Completion Date: 2025 January 19
Reviewed By: HX	Page 8 of 9

TETRA TECH

Borehole No: **GT25-13**

AGNICO EAGLE

Project: 2025 Winter Site Investigation	Project No: ENG.EARC03140-42
Location: Meliadine Gold Mine	Ground Elev: 100.6 masl
Nunavut	UTM: 538774 E; 6989698 N; Z 15

Depth (m)	Method	Lithological Description	Ground Ice Description	Sample Type	Sample/Run Number	Moisture Content (%)	△Temperature (°C)△ -10 0 10 20 / ■Bulk Density (kg/m³)■ 1400 1600 1800 2000 / Plastic Limit Moisture Content Liquid Limit 20 40 60 80	●Fracture Frequency (/m)● 2 4 6 8 / ▲RQD (%)▲ 40 60 80 100 / ■Recovery (%)■ 40 60 80 100	GTC #2870	PVC Pipe	Elevation (m)
40											
41	HQ Coring				R28						60
42		END OF BOREHOLE (41.7 metres) Ground temperature cable #2870 installed to 35.00 metres in 75 mm PVC pipe Notes: Backfilled at completion Temperatures presented are from the installed ground temperature cable Sloughing and loss of circulation was observed during drilling as no casing was used to drill Borehole GT25-13									59
43											58
44											57
45											56

TETRA TECH

Contractor: Orbit Garant Drilling Inc.	Completion Depth: 41.7 m
Equipment Type: Skid mounted	Start Date: 2025 January 18
Logged By: CNH/DS	Completion Date: 2025 January 19
Reviewed By: HX	Page 9 of 9

APPENDIX B

TETRA TECH'S LIMITATIONS ON USE OF THIS DOCUMENT

LIMITATIONS ON USE OF THIS DOCUMENT

GEOTECHNICAL

1.1 USE OF DOCUMENT AND OWNERSHIP

This document pertains to a specific site, a specific development, and a specific scope of work. The document may include plans, drawings, profiles and other supporting documents that collectively constitute the document (the "Professional Document").

The Professional Document is intended for the sole use of TETRA TECH's Client (the "Client") as specifically identified in the TETRA TECH Services Agreement or other Contractual Agreement entered into with the Client (either of which is termed the "Contract" herein). TETRA TECH does not accept any responsibility for the accuracy of any of the data, analyses, recommendations or other contents of the Professional Document when it is used or relied upon by any party other than the Client, unless authorized in writing by TETRA TECH.

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Where TETRA TECH has expressly authorized the use of the Professional Document by a third party (an "Authorized Party"), consideration for such authorization is the Authorized Party's acceptance of these Limitations on Use of this Document as well as any limitations on liability contained in the Contract with the Client (all of which is collectively termed the "Limitations on Liability"). The Authorized Party should carefully review both these Limitations on Use of this Document and the Contract prior to making any use of the Professional Document. Any use made of the Professional Document by an Authorized Party constitutes the Authorized Party's express acceptance of, and agreement to, the Limitations on Liability.

The Professional Document and any other form or type of data or documents generated by TETRA TECH during the performance of the work are TETRA TECH's professional work product and shall remain the copyright property of TETRA TECH.

The Professional Document is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of TETRA TECH. Additional copies of the Document, if required, may be obtained upon request.

1.2 ALTERNATIVE DOCUMENT FORMAT

Where TETRA TECH submits electronic file and/or hard copy versions of the Professional Document or any drawings or other project-related documents and deliverables (collectively termed TETRA TECH's "Instruments of Professional Service"), only the signed and/or sealed versions shall be considered final. The original signed and/or sealed electronic file and/or hard copy version archived by TETRA TECH shall be deemed to be the original. TETRA TECH will archive a protected digital copy of the original signed and/or sealed version for a period of 10 years.

Both electronic file and/or hard copy versions of TETRA TECH's Instruments of Professional Service shall not, under any circumstances, be altered by any party except TETRA TECH. TETRA TECH's Instruments of Professional Service will be used only and exactly as submitted by TETRA TECH.

Electronic files submitted by TETRA TECH have been prepared and submitted using specific software and hardware systems. TETRA TECH makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

1.3 STANDARD OF CARE

Services performed by TETRA TECH for the Professional Document have been conducted in accordance with the Contract, in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Professional judgment has been applied in developing the conclusions and/or recommendations provided in this Professional Document. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of the Professional Document.

If any error or omission is detected by the Client or an Authorized Party, the error or omission must be immediately brought to the attention of TETRA TECH.

1.4 DISCLOSURE OF INFORMATION BY CLIENT

The Client acknowledges that it has fully cooperated with TETRA TECH with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The Client further acknowledges that in order for TETRA TECH to properly provide the services contracted for in the Contract, TETRA TECH has relied upon the Client with respect to both the full disclosure and accuracy of any such information.

1.5 INFORMATION PROVIDED TO TETRA TECH BY OTHERS

During the performance of the work and the preparation of this Professional Document, TETRA TECH may have relied on information provided by third parties other than the Client.

While TETRA TECH endeavours to verify the accuracy of such information, TETRA TECH accepts no responsibility for the accuracy or the reliability of such information even where inaccurate or unreliable information impacts any recommendations, design or other deliverables and causes the Client or an Authorized Party loss or damage.

1.6 GENERAL LIMITATIONS OF DOCUMENT

This Professional Document is based solely on the conditions presented and the data available to TETRA TECH at the time the data were collected in the field or gathered from available databases.

The Client, and any Authorized Party, acknowledges that the Professional Document is based on limited data and that the conclusions, opinions, and recommendations contained in the Professional Document are the result of the application of professional judgment to such limited data.

The Professional Document is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site conditions present, or variation in assumed conditions which might form the basis of design or recommendations as outlined in this document, at or on the development proposed as of the date of the Professional Document requires a supplementary exploration, investigation, and assessment.

TETRA TECH is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the Client.

1.7 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, TETRA TECH has not been retained to explore, address or consider and has not explored, addressed or considered any environmental or regulatory issues associated with development on the subject site.

1.8 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

Classification and identification of soils and rocks are based upon commonly accepted systems, methods and standards employed in professional geotechnical practice. This report contains descriptions of the systems and methods used. Where deviations from the system or method prevail, they are specifically mentioned.

Classification and identification of geological units are judgmental in nature as to both type and condition. TETRA TECH does not warrant conditions represented herein as exact, but infers accuracy only to the extent that is common in practice.

Where subsurface conditions encountered during development are different from those described in this report, qualified geotechnical personnel should revisit the site and review recommendations in light of the actual conditions encountered.

1.9 LOGS OF TESTHOLES

The testhole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

1.10 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from logs of test holes and/or soil/rock exposures. Stratigraphy is known only at the locations of the test hole or exposure. Actual geology and stratigraphy between test holes and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historical environment. TETRA TECH does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional exploration and review may be necessary.

1.11 PROTECTION OF EXPOSED GROUND

Excavation and construction operations expose geological materials to climatic elements (freeze/thaw, wet/dry) and/or mechanical disturbance which can cause severe deterioration. Unless otherwise specifically indicated in this report, the walls and floors of excavations must be protected from the elements, particularly moisture, desiccation, frost action and construction traffic.

1.12 SUPPORT OF ADJACENT GROUND AND STRUCTURES

Unless otherwise specifically advised, support of ground and structures adjacent to the anticipated construction and preservation of adjacent ground and structures from the adverse impact of construction activity is required.

1.13 INFLUENCE OF CONSTRUCTION ACTIVITY

Construction activity can impact structural performance of adjacent buildings and other installations. The influence of all anticipated construction activities should be considered by the contractor, owner, architect and prime engineer in consultation with a geotechnical engineer when the final design and construction techniques, and construction sequence are known.

1.14 OBSERVATIONS DURING CONSTRUCTION

Because of the nature of geological deposits, the judgmental nature of geotechnical engineering, and the potential of adverse circumstances arising from construction activity, observations during site preparation, excavation and construction should be carried out by a geotechnical engineer. These observations may then serve as the basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein.

1.15 DRAINAGE SYSTEMS

Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function. Where temporary or permanent drainage systems are installed within or around a structure, these systems must protect the structure from loss of ground due to mechanisms such as internal erosion and must be designed so as to assure continued satisfactory performance of the drains. Specific design details regarding the geotechnical aspects of such systems (e.g. bedding material, surrounding soil, soil cover, geotextile type) should be reviewed by the geotechnical engineer to confirm the performance of the system is consistent with the conditions used in the geotechnical design.

1.16 DESIGN PARAMETERS

Bearing capacities for Limit States or Allowable Stress Design, strength/stiffness properties and similar geotechnical design parameters quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition used in this report. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions considered in this report in fact exist at the site.

1.17 SAMPLES

TETRA TECH will retain all soil and rock samples for 30 days after this report is issued. Further storage or transfer of samples can be made at the Client's expense upon written request, otherwise samples will be discarded.

1.18 APPLICABLE CODES, STANDARDS, GUIDELINES & BEST PRACTICE

This document has been prepared based on the applicable codes, standards, guidelines or best practice as identified in the report. Some mandated codes, standards and guidelines (such as ASTM, AASHTO Bridge Design/Construction Codes, Canadian Highway Bridge Design Code, National/Provincial Building Codes) are routinely updated and corrections made. TETRA TECH cannot predict nor be held liable for any such future changes, amendments, errors or omissions in these documents that may have a bearing on the assessment, design or analyses included in this report.

APPENDIX C

COUPLED THERMAL AND SEEPAGE ANALYSES MEMO

TETRA TECH

TECHNICAL MEMO

ISSUED FOR USE

To:	Justin Bieber, Agnico Eagle Marielle Limoges, Agnico Eagle	**Date:**	April 2, 2026
c:	Jawad Haloui, Agnigo Eagle	**Memo No.:**	002
From:	Fai Ndofor, P.Geo., Tetra Tech Hongwei Xia, P.Eng., Tetra Tech Linping Wu, P.Eng., Tetra Tech	**File:**	704-ENG.EARC03140-34
Subject:	Coupled Thermal and Seepage Analyses for Tailings Storage Facility (TSF) Design Update, Meliadine Gold Mine, Nunavut, Revision 01 Agnico Eagle Document Number: 65-694-230-MEM-003		

1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) was retained by Agnico Eagle Mines Limited (Agnico Eagle) to undertake a detailed engineering design update for the Tailings Storage Facility (TSF) at the Meliadine Gold Mine (Meliadine Mine), Nunavut. The scope of the TSF design update includes raising the existing TSF and extending the existing TSF northwest.

In support of the design update, coupled thermal and seepage analyses were performed to characterize the thermal regime of the foundation soils and to estimate phreatic surface within the TSF during operation and after closure under long-term adopted climate change conditions. The predicted thermal regime and phreatic surface elevations will be incorporated in the subsequent slope stability and creep deformation assessment.

This technical memorandum summarizes the analysis methodology, key input parameters, assumptions, and results from the coupled thermal and seepage analyses. Additional details regarding the overall methodology, input parameters and design assumptions are documented in the Design Basis Memorandum (DBM) for the TSF design update (raise and extension) (Tetra Tech 2026). This technical memorandum provides supplemental information specific to the coupled thermal and seepage modelling and should be read in conjunction with the DBM. This technical memorandum will be included as an appendix to the TSF design update report.

2.0 COUPLED THERMAL AND SEEPAGE ANALYSES

2.1 Overall Methodology

The coupled thermal and seepage analyses were conducted using the TEMP/W and SEEP/W, packages of GeoStudio (SEQUENT 2024). A one-dimensional (1D) coupled thermal and seepage model was initially developed to calibrate the model against the measured in situ conditions, including ground temperature and moisture content. Following the model calibration, the 1D model was run over a 100-year period under the adopted climate change scenario to establish simplified hydraulic boundary conditions for subsequent two-dimensional (2D) modelling. Upon completion of the 1D analysis, a 2D coupled thermal and seepage model was developed along a representative cross-section. The 2D model incorporated the historical tailings placement sequence, the planned future raise, and the placement of the closure cover system. Consistent with the 1D analysis, the 2D model was run for 100 years following closure cover placement to evaluate the long-term thermal and hydraulic performance under the adopted climate change scenario.

Tetra Tech Canada Inc.
14940 - 123 Avenue
Edmonton, AB T5V 1B4 CANADA
Tel 780.451.2121 Fax 780.454.5688

2.2 Typical Section and Soil Profile

A representative model location (for the 1D model) and cross-section (for the 2D model) within the existing TSF footprint were selected for the coupled thermal and seepage analyses (Section A in Figure 1). The selection of both the 1D modal location and the 2D cross-section was supported by the following considerations:

- Ice-rich soils are present in the foundation at both the 1D model location and along the 2D cross-section as documented in Section 3.3 of the DBM. Modelling this condition ensures assessment of the most thermally sensitive foundation materials.
- Ground temperatures collected from the ground temperature cables (GTCs) installed at the 1D model location and in proximity to the 2D model cross-section indicate that the ground temperatures within the ice-rich soil layer are representative of thermal conditions observed across the existing TSF and proposed extension footprint. Comparison with other GTCs installed at other locations confirms that the selection location reasonably reflects the site-wide permafrost regime.
- The 1D model location was chosen near the center portion of the existing TSF to minimize potential boundary effects from the slope surfaces and to improve calibration reliability.
- For the coupled thermal and seepage analyses, the TSF crest elevation was modelled at 125 m based on the design concept and geometry presented in the 2024 Water Licence Amendment (Tetra Tech 2024). Subsequent engineering analyses (i.e., creep deformation and stability analyses) for the TSF design update and space constraints at the TSF plateau resulted in a proposed design crest elevation of 118 m. Although there are discrepancies between the crest elevation and geometry used in the coupled model (125 m) and the proposed design update (118 m), it is expected that the predicted long-term thermal and hydraulic conditions from the coupled analyses still reasonably reflect the long-term conditions associated with the proposed design.
- A separated coupled thermal and seepage analysis for a cross-section within the proposed TSF extension was not conducted. Available geotechnical information and GTC monitoring data indicate similar stratigraphy, ground ice conditions, and permafrost temperatures between the existing TSF and the proposed TSF extension footprint. While variations in overall geometry, tailings placement schedule, and annual thickness exist between existing TSF and the proposed TSF extension configuration, these differences are not expected to alter the long-term thermal performance and hydraulic conditions. It is Tetra Tech's opinion that the projected long-term results from the couple analyses are applicable to both the TSF raise and extension.

The subsurface conditions at the TSF, as summarized in Section 3.3 of the DBM, were used for modelling purposes, adopting a generalized foundation soil profile along Section A, consisting of:

- 1.5 m thick layer of SAND and SILT[1];
- 1 m thick layer of ice-rich SILT[2];

[1] Where applicable, the soil description has been based on the following classification system:
Principal soil constituent shall be capitalized in the soil description. The soil constituents are described in the following manner and are listed in decreasing order of significance:
- >35% "and" (soil constituent in capital letters, e.g., …and SAND) (Note that the use of the qualifier "and" is not to be applied to SILT/CLAY Principal constituents, i.e., SILT and CLAY)
- 21% to 35% "y – adjective" (e.g., silty, clayey)
- 10% to 20% "some" (soil constituent, e.g., some sand)
- >0 to 10% "trace" (soil constituent, e.g., trace gravel)

"occasional" use for noting presence of isolated occurrences

[2] The initial coupled thermal and seepage analyses assumed a continuous 1.0 m thick ice-rich SILT layer, consistent with the assumptions adopted in the existing TSF design. Additional data collected in late 2025 indicate that the thickness of the ice-rich SILT layer varies by location, generally ranging from 0.1 m to 0.8 m, with an average thickness of less than 0.5 m.
Considering the computational intensity and long run time associated with the 2D coupled model, the original assumption of a 1.0 m thick ice-rich silt layer was retained. A 1D analysis incorporating a 0.5 m thick ice-rich SILT layer was conducted to evaluate the impact of layer thickness on thermal performance. The comparison of results indicates that the influence of thickness variation on the projected ground temperatures within the ice-rich SILT layer and underlying soils is marginal. Therefore, the results from the 2D model with a 1.0 m thick ice-rich silt layer are considered still valid for use in the subsequent creep deformation and slope stability analyses.

- 2.5 m thick layer of ice-poor SILT and SAND; and
- Underlain by bedrock.

2.3 Mean Climatic Data

Climatic data required for the coupled thermal and seepage analyses include air temperature, precipitation, relative humidity (RH), wind speed, solar radiation, and snow cover thickness. The closest meteorological station with long-term climatic data is at Rankin Inlet (approximately 25 km south of the Meliadine Mine). Mean monthly air temperature, wind speed, snow cover, relative humidity, and precipitation at the Rankin Inlet station were obtained from the Climate Data website (Download — ClimateData.ca) and from Environment and Natural Resources Canada's website (https://climate.weather.gc.ca/climate_normals/index_e.html). Mean daily solar radiation data for the period 1951 to 1980 at Baker Lake station (Environment Canada 1982) were used for the Meliadine Mine site. Table 2-1 summarizes the mean climatic data for the Meliadine Mine site.

Table 2-1: Mean Climate Data Used for Coupled Thermal and Seepage Analyses

Month	Average Air Temperature (°C) [a]	Average Wind Speed (km/h) [b]	Average Snow Cover (m) [c]	Average Solar Radiation (W/m^2) [d]	Maximum RH (%) [e]	Minimum RH (%) [e]	Mean Precipitation (mm) [f]
January	-29.6	24.1	0.28	9.1	76.7	70.6	16.9
February	-30.0	24.0	0.31	38.7	73.0	68.1	16.8
March	-24.5	23.7	0.36	119.5	78.3	70.7	21.9
April	-15.5	23.0	0.35	206.4	85.7	74.0	29.0
May	-5.1	22.9	0.19	259.7	92.5	74.3	29.1
June	4.9	20.2	0.03	252.0	91.5	61.7	31.1
July	11.2	19.4	0.00	226.4	92.7	57.4	45.2
August	10.3	21.0	0.00	160.8	93.7	62.0	57.9
September	4.6	23.9	0.00	124.9	95.8	75.9	52.8
October	-3.5	26.1	0.04	41.3	94.5	78.3	56.8
November	-15.9	25.0	0.14	14.4	87.4	78.0	38.8
December	-23.8	24.2	0.24	3.7	82.2	75.5	24.0
Average	**-9.8**	**23.1**	-	-	-	-	-

Notes:
[a] Based on measured monthly air temperatures at Rankin Inlet station (1994-2023).
[b] Based on measured wind speed data at Rankin Inlet station (1991-2020 Climate Normals).
[c] Based on measured snow cover data at Rankin Inlet station (1983-2012).
[d] Based on measured solar radiation data at Baker Lake station (1951-1980).
[e] Based on measured relative humidity data at Rankin Inlet station (2019-2024)
[f] Based on the Rankin Inlet Design Storm and Precipitation Frequency Quantiles Update (Tetra Tech 2021a).

2.4 Climate Change Projection

The historical air temperature record at Rankin Inlet indicates a clear long-term warming trend. Consistent with current state-of-practice, this observed warming supports the inclusion of climate change in the coupled thermal and seepage analyses for the TSF design update.

To incorporate climate change into the TSF design update, Okane Consultants Inc. (Okane) conducted a climate change assessment for the Meliadine Mine using available Coupled Model Intercomparison Project Phase 6

(CMIP6) climate model outputs and developed a site-specific climate database (2025 to 2125) for the Shared Socioeconomic Pathway (SSP) climate change scenario (SSP2-4.5). Based on the direction provided by Agnico Eagle, the CMIP6 SSP2-4.5 climate change dataset developed by Okane was used for the TSF design update. The CMIP6 SSP2-4.5 climate change database provided by Okane includes maximum and minimum air temperatures, maximum and minimum relative humidities, precipitation, net radiation, and wind speed. Figures 3 to 7 present the projected annual mean air temperatures, the annual mean of maximum and minimum relative humidity, the annual total precipitation, the annual total net radiation, and the annual mean of wind speed, respectively, at the Meliadine Mine. More details on climate change projections are documented in Section 6.2.2.2 of the DBM.

2.5 Material Properties

To model the coupled effects of heat and water transfer within the TSF, five relationships are required, including:

1. Thermal conductivity function versus volumetric water content;
2. Volumetric heat capacity versus volumetric water content;
3. Unfrozen water content versus temperature;
4. Soil-water characteristic curve (volumetric water content versus matrix suction); and
5. Hydraulic conductivity versus matrix suction.

The details on these five relationships for each material used in the coupled thermal and seepage analyses are documented in Section 6.2.2 of the DBM. Table 2-2 summarizes the input parameters to derive the relationships.

Table 2-2: Input Parameters to Derive Convective Model for Tailings and Cover Materials

Material	Specific Gravity	Void Ratio	Dry Density (kg/m^3)	Saturated Volumetric Water Content (%)	Salinity (ppt)
Tailings	2.98	0.71	1,740	41.2	15
Overburden Cover	2.7	0.58	1,700	37.0	5
Waste Rock Cover	2.7	0.35	2,000	26.0	2
SAND and SILT	2.7	0.65	1,640	17.0	7
Ice-rich SILT	2.7	1.16	1,250	37.5	7
Ice-poor SILT	2.7	0.8	1,500	30.0	7
Bedrock	2.7	0.04	2,600	5.0	0

2.6 Tailings Placement Schedule and Temperature

Both the historical tailings placement and the future placement plan were considered in the coupled thermal and seepage analyses. The historical tailings placement was estimated using monthly field survey data provided by Agnico Eagle. The future tailings placement plan adopted in the coupled thermal and seepage analyses was developed based on the proposed TSF raise and the tailings production schedule.

Figure 8 presents the historical and future tailings placement schedule used in the coupled thermal and seepage analyses. Table 2-3 summarizes the tailings placement plan for the TSF raise used in the coupled thermal and seepage analyses. The average raise rate was estimated at 11.6 m/year for the TSF raise, assuming the tailings are placed in the TSF raise until it reaches design capacity. Thereafter, the tailings will be placed in the TSF

extension area. This represents a reasonably conservative assumption, as in practice, the tailings may be placed in both the TSF raise and extension concurrently during construction.

The tailings conveyed to the temporary storage building are approximately 20°C. The tailings temperature at placement range from 15°C to 20°C, depending on the seasons. A previous thermal study conducted by Okane (2022) indicated that the initial tailings temperatures have a negligible impact on the long-term thermal conditions of the TSF. A constant initial tailings temperature of 15.0°C was assumed in the coupled thermal and seepage analyses.

Table 2-3: Tailings Placement Schedule for the TSF Raise Adopted in the Analysis

Year	Tailings Solids to be Placed in TSF Raise (tonne)	Estimated Top Elevation (m)	Planned Placement Period
2027 Q1	489,420	103.7	January to March
2027 Q2	494,858	106.9	April to June
2027 Q3	500,296	110.5	July to September
2027 Q4	500,296	115.3	October to December
2028 Q1	489,420	123	January to March
2028 Q2	80,091	125	April
	-	125.5*	May to June
2028 Q3	-	126.5*	July to September
2028 Q4	-	128*	October to December
Total	2,554,381	/	/

*Till and waste rock cover placement

2.7 Model Boundary Conditions

2.7.1 Thermal Boundary Conditions

For both the 1D and 2D models, a ground surface energy balance boundary built into TEMP/W was applied to the exposed tailings, closure cover, and natural ground surface as applicable. During the active tailings and cover placement period, a snow reduction factor, determined through model calibration, was applied to the TSF top and slope surfaces to account for reduced snow accumulation resulting from construction activities and potential snow drifting. After completion of cover placement, full mean snow cover was applied to the TSF surfaces, which is a reasonably conservative assumption because thicker snow cover insulates the ground from winter heat loss and results in warmer thermal conditions in the TSF. The natural ground surface in the 2D model was assigned full mean snow cover during and after construction. A geothermal gradient of 0.017°C/m at depth was applied at the base of both models.

2.7.2 Hydraulic Boundary Conditions

The hydraulic boundary conditions applied to the TSF top surface in the 1D model include a climate boundary with snow removal during the operation period, and no snow removal (i.e., full mean snow cover) after closure cover placement.

For the 2D model, a simplified flux boundary condition obtained from the 1D model results was applied on the TSF surfaces to simulate the water infiltration into the TSF due to precipitation. A seepage face was assigned at the lower section of the slope in the 2D model, allowing water seepage from the TSF.

A unit hydraulic gradient boundary condition was assigned at the base of both the 1D and 2D models. This boundary condition assumes that water movement is controlled by gravity, resulting in a unit hydraulic gradient.

3.0 1D THERMAL MODEL CALIBRATION

The 1D thermal model was calibrated by adjusting key input parameters (i.e., snow cover thickness, snow thermal conductivity, ground absorptivity) until the model output matched the calibration targets (ground temperature and moisture content) to a satisfactory degree.

Figure 9 compares the temperature profiles predicted by the calibration model with measurements from the GTC installed at the center of the existing TSF on selected dates.

Figure 10 compares the predicted and measured ground temperatures at depths of 1m, 2m, and 4m below the original ground surface in the foundation soils. The results indicate that the predicted ground temperatures are slightly warmer than the measured values, with an average difference of approximately 0.4°C.

Figure 11 compares the predicted volumetric water contents with measurements from the tailings samples collected during the 2025 geotechnical drilling program (Tetra Tech 2025).

Overall, there was good agreement between the model projections and field measurements for both ground temperature and moisture content. A 20% snow factor was incorporated into the calibration model to account for snow removal activities during construction and for high ground snow drifting. The calibration results indicate that the model setup and input parameters are reasonable and suitable for long-term assessment.

4.0 RESULTS

4.1 Results from 1D Model

Following the completion of the 1D model calibration, the calibrated 1D model was extended to simulate future conditions by incorporating the projected tailings placement schedule and the design climate change scenario. The outputs from the 1D analysis were subsequently used as boundary conditions for the 2D coupled thermal and seepage analyses. Figure 12 presents the estimated water flux entering the TSF during both the active construction and the post-closure periods, as predicted by the 1D model. shows a summary of the average water balance at the top surfaces of the TSF. As indicated in Table 4-1, approximately 16.7% of the total precipitation is estimated to infiltrate into the TSF during the active placement period, increasing to 28.5% after post closure. Surface runoff during the active placement period is estimated to be 2.4% of the total precipitation.

Table 4-1: Summary of Average Water Balance for the TSF under SSP2-4.5

Parameters	Active Construction (Sep. 1, 2019 to Dec. 31, 2028)	Post Closure 2029 to 2050	Post Closure 2051 to 2125
Mean Total Precipitation (mm)	409 mm	470 mm	499 mm
Rainfall (% of Precipitation) **	42.4%	42.8%	44.8%
Snowfall (% of Precipitation) **	57.6%	57.2%	55.2%
Snowmelt (% of Precipitation)	8.1%	21.3%	21.5%
Evaporation (% of Precipitation)	31.3%	32.7%	38.7%
Runoff (% of Precipitation)	2.4%	0.0%	0.0%
Net Infiltration (% of Precipitation)	16.7%	31.4%	27.6%
Sublimation (% of Precipitation)	49.6%	35.9%	33.7%

Note:
*: sublimation includes the snow removal.
**: Precipitation at temperature below 0°C was assumed as snowfall, above 0°C was assumed as rainfall.

4.2 Results from the 2D Model

The 2D model along the representative cross-section was run by incorporating the historical and future tailings placement schedule, and the results from the 1D model. The results of the 2D coupled thermal and seepage analyses are summarized and discussed in the following sub-sections.

4.2.1 Thermal Condition

- Figures 13 to 15 show the predicted temperature profiles (trumpet curves) at the end of construction on January 1, 2029, and on October 1 for years 2039, 2059, 2079, 2099, and 2125 at three selected locations, including the center of the TSF, the middle slope of the proposed TSF raise, and the middle slope of the existing TSF;
- Figure 16 shows the predicted ground temperatures over time at selected locations within the ice-rich SILT layer;
- Figure 17 shows the predicted isotherms for January 1, 2029 (after cover placement); and
- Figures 18 to 22 show the predicted isotherms for October 1, in the years 2039, 2059, 2079, 2099, and 2125.

Figure 17 shows the predicted horizontal extent of thaw at the top of the ice-rich SILT layer.

The temperature profiles in Figures 13 to 15 indicate that the existing tailings are generally in a frozen condition, while the newly placed tailings are marginally frozen at the time of closure cover placement. Following closure, both tailings temperature and the thickness of unfrozen tailings increase gradually over time in response to climate change conditions. By year 2125, approximately 30 m of tailings is predicted to have thawed, and the remaining approximately 25 m of tailings is predicted to remain frozen. This trend is also evident in the isotherms presented in Figures 17 to 22.

Figure 16 presents the predicted ground temperatures within the ice-rich SILT at selected locations, based on the 2D coupled analyses. The selected locations include the center of the TSF and points located 150 m, 100 m, and 50 m from the TSF toe. The results in Figure 16 indicate that the ice-rich SILT temperatures decrease following the initial tailings placement, reaching a minimum of approximately -2.5°C. Over the long term, a gradual warming trend is observed at all locations due to climate change and potentially seepage flow in the tailings.

The most pronounced warming occurs at the 50 m from the toe location, where temperatures increase significantly over time and approach approximately -0.3°C by Year 2125. The 100 m from the toe location also shows notable warming 50 years after the cover placement. In contrast, the center and 150 m from the toe location remain relatively stable, maintaining temperatures below approximately -2.3°C throughout the simulation period. The results demonstrate that thermal impacts are most significant near the downstream toe, with influence progressively reduced toward the central portion of the TSF footprint.

To provide inputs for the slope stability and creep deformation analyses, the ice-rich SILT layer was delineated into five zones based on the predicted temperature distributions at the end of the simulation (Year 2125).

- Zone 1, ground temperature warmer than -0.5°C, extending from the TSF toe to 65 m inward. This zone is considered unfrozen due to the freezing-point depression caused by porewater salinity.
- Zone 2, ground temperatures between -0.5°C and -1.0°C, located from 65 m to 100 m from the TSF toe.
- Zone 3, ground temperatures between -1.0°C and -1.5°C, located from 100 m to 115 m from the TSF toe.
- Zone 4, ground temperatures between -1.5°C and -2.0°C, located from 115 m to 130 m from the TSF toe.
- Zone 5, ground temperatures colder than -2.0°C, located from 130 m from the TSF toe to the TSF center.

As shown in Figure 16, ground temperatures within the ice-rich SILT layer near the toe of the TSF are expected to gradually increase, leading to thawing. Figure 23 presents the thaw extent (horizontal distance from the toe of the TSF) within the ice-rich SILT layer over time. The results in Figure 23 indicate that the thaw extent within the ice-rich SILT layer is generally stable from 2025 to 2058; after 2058, progressive thawing is predicted, with a thawing rate of approximately 1 m/year in the horizontal direction.

4.2.2 Hydraulic Conditions

The predicted hydraulic conditions from the 2D coupled thermal and seepage analyses are presented in Figures 24 through 36.

- Figure 24 shows the predicted saturation zone distribution at the end of the construction.
- Figures 25 to 29 show the predicted distribution of the saturation zone for the years 2039, 2059, 2079, 2099, and 2125.
- Figure 30 shows the predicted saturation zone distribution from the extended 2D model run (beyond the 100-year simulation period).
- Figure 31 shows the predicted porewater pressure distribution at the end of construction.
- Figures 32 to 36 show the predicted porewater pressure distributions for 2039, 2059, 2079, 2099, and 2125.

The results in Figures 24 to 29 indicate that several isolated saturated zones, ranging in thickness from 0.4 m to 1.5 m, are present within the tailings at the end of construction. These zones likely result from seasonal water infiltration during summer periods. Over time, the isolated saturated zones are expected to progressively connect as the tailings undergo thawing in response to climate change and to seepage within the tailings.

As the thawing front advances downward within the tailings, the thickness and upper elevation of the fully saturated zone are predicted to decrease. The maximum thickness of the fully saturated zone is estimated to be approximately 20 m in Year 2039 and to decrease to approximately 15 m by Year 2125. Results from the extended 2D model run

(Figure 30) indicate that the maximum thickness of the fully saturated zone further decreases to approximately 12 m once the thawing front reaches the original ground surface.

The results presented in Figures 31 to 36 align with the conclusions drawn from the results of the saturated zone distribution (Figures 24 to 29). No excess porewater pressure was observed within the saturated zone of the TSF.

4.2.3 Interflow from TSF

summarizes the interflow through the TSF from cover materials and unfrozen tailings. In this study, the total interflow is defined as the lateral near-surface water flow that exits the TSF. This total interflow can generally be divided into two components:

1. Interflow from tailings, referring to the lateral flow originating from the unfrozen portion of the tailings; and
2. Interflow from the cover system, referring to the lateral flow occurring within the cover system that does not percolate through the unfrozen tailings.

As shown, the total interflow through the TSF is predicted to increase over time, from 10% during active placement period, to 33.0% during the period 2029 to 2050, to 37.6% during the period 2050 to 2125. A similar increasing trend is observed for interflow originating from the tailings. The primary driver of the increasing total interflow over time is likely due to the progressive increase in tailings thawing depth associated with climate change, which enhances hydraulic connectivity and later flow within the unfrozen zone.

Table 4-2: Summary of Interflow through the TSF during Post-closure under SSP2-4.5

Parameter	**Active Construction (Sep. 1, 2019 to Dec. 31, 2028)**	**Post Closure 2029 to 2050**	**Post Closure 2051 to 2125**
Average Annual Total Precipitation (mm)	409 mm	470 mm	499 mm
Total Interflow (% of Total Precipitation)	10.0%	33.0%	37.6%
Interflow from Cover System (% of Total Precipitation)	9.6%	25.9%	18.0%
Interflow from Tailings (% of Total Precipitation)	0.4%	7.1%	19.6%

5.0 LIMITATIONS OF MEMO

This memo and its contents are intended for the sole use of Agnico Eagle Mines Limited and their agents. Tetra Tech Canada Inc. (Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Agnico Eagle Mines Limited, or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this document is subject to the Limitations on Use of this Document attached in the Appendix or Contractual Terms and Conditions executed by both parties.

6.0 CLOSURE

We trust this technical memo meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.

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Prepared by:
Linping Wu, Ph.D., P.Eng.
Geotechnical Engineer, Arctic Group
Direct Line: 780.451.2121
Linping.Wu@tetratech.com

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704-ENG.EARC03140-34
704-ENG.EARC03140-34

Reviewed by:
Hongwei Xia, Ph.D., P.Eng.
Principal Specialist/Senior Geotechnical Engineer, Arctic Group
Direct Line: 587.460.3646
Hongwei.Xia@tetratech.com

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704-ENG.EARC03140-34
704-ENG.EARC03140-34

Reviewed by:
Fai Ndofor, M.Sc., P.Geo.
Principal Consultant, Arctic Group
Direct Line: 587.460.3486
Fai.Ndofor@tetratech.com

/jf/kla

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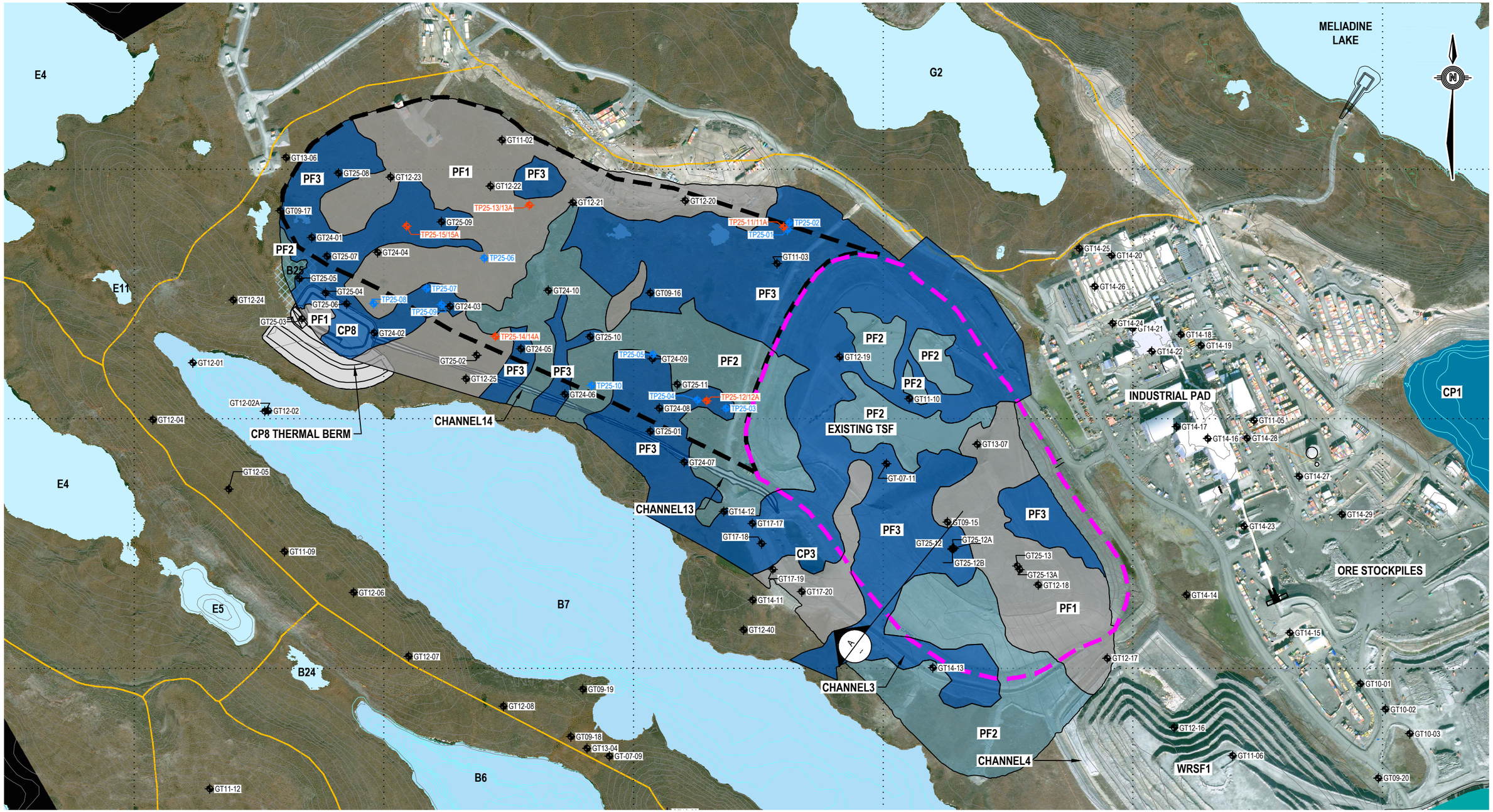


LEGEND:

- TESTPITS BY AGNICO EAGLE
- TESTPITS BY TETRA TECH
- BOREHOLE DRILLED
- CATCHMENT BOUNDARY

NOTE

SATELLITE IMAGE PROVIDED BY AGNICO EAGLE TAKEN ON SEPTEMBER 22, 2025

0 250 m

Scale: 1: 7 500

PERMAFROST EXTENT AND GROUND ICE CONTENT:

PF1 **Predominantly Ice-rich Permafrost with Negligible to Low Excess Ice Content (<10% by Volume of Excess Ice):**
Predominantly ice-rich ground with excess ice content generally less than 10% by volume of visible ice. May include patches of greater excess ice content (PF2, PF3) or permafrost-free ground.

PF2 **Predominantly Ice-Rich Permafrost with Medium Excess Ice Content (10%-20% by Volume of Excess Ice):**
Predominantly ice-rich ground with excess ice content ranging between 10% and 20% by volume of visible ice. May include patches of greater excess ice content (PF3), less excess ice content (PF1) or permafrost-free ground (PF0).

PF3 **Predominantly Ice-Rich Permafrost with High to Very High Excess Ice Content (>20% by Volume of Excess Ice):**
Predominantly ice-rich ground with excess ice content exceeding 20% by volume of visible ice. May include patches of lesser excess ice content (PF2), ice-poor permafrost (PF1), or permafrost-free ground.

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

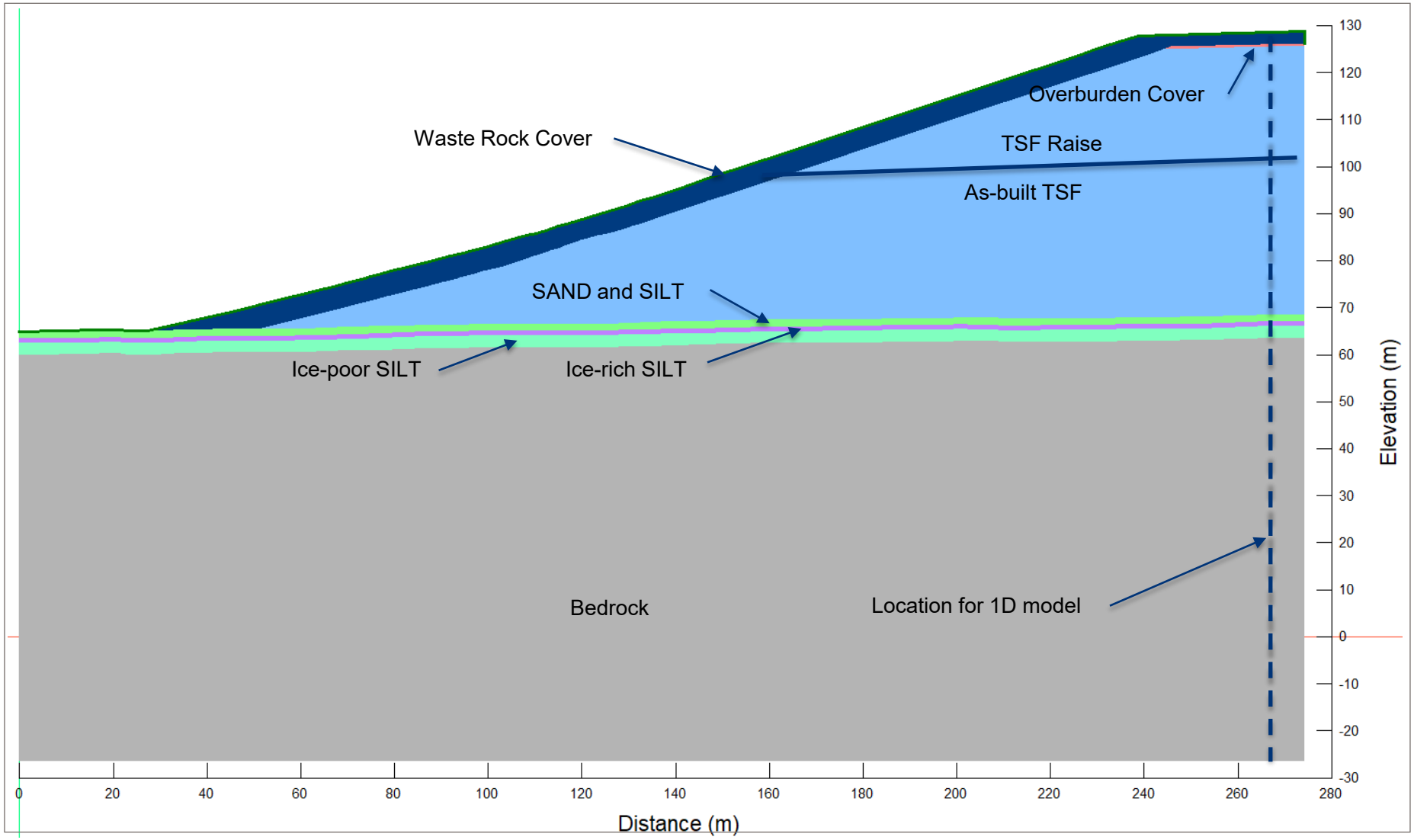
TAILINGS STORAGE FACILITY DESIGN UPDATE, MELIADINE GOLD MINE, NU

SECTION LOCATION FOR COUPLED THERMAL AND SEEPAGE ANALYSES

PROJECT NO.	DWN	CKD	REV
ENG.EARC03140-34	DS / DBD	HX	0
OFFICE: EDM	DATE: MARCH 2026		

Figure 1

Q:\Edmonton\Engineering\E141\Projects_MELIADINE\ENG.EARC03140-34 TSF Raise Detailed Design\DBM\CAD files\As-Built Test Pit Locations For TSF Expansion IFR - for Thermal Memo.dwg [FIGURE 1], March 26, 2026 - 9:46:49 am (BY: XIA, HONGWEI)



LEGEND

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

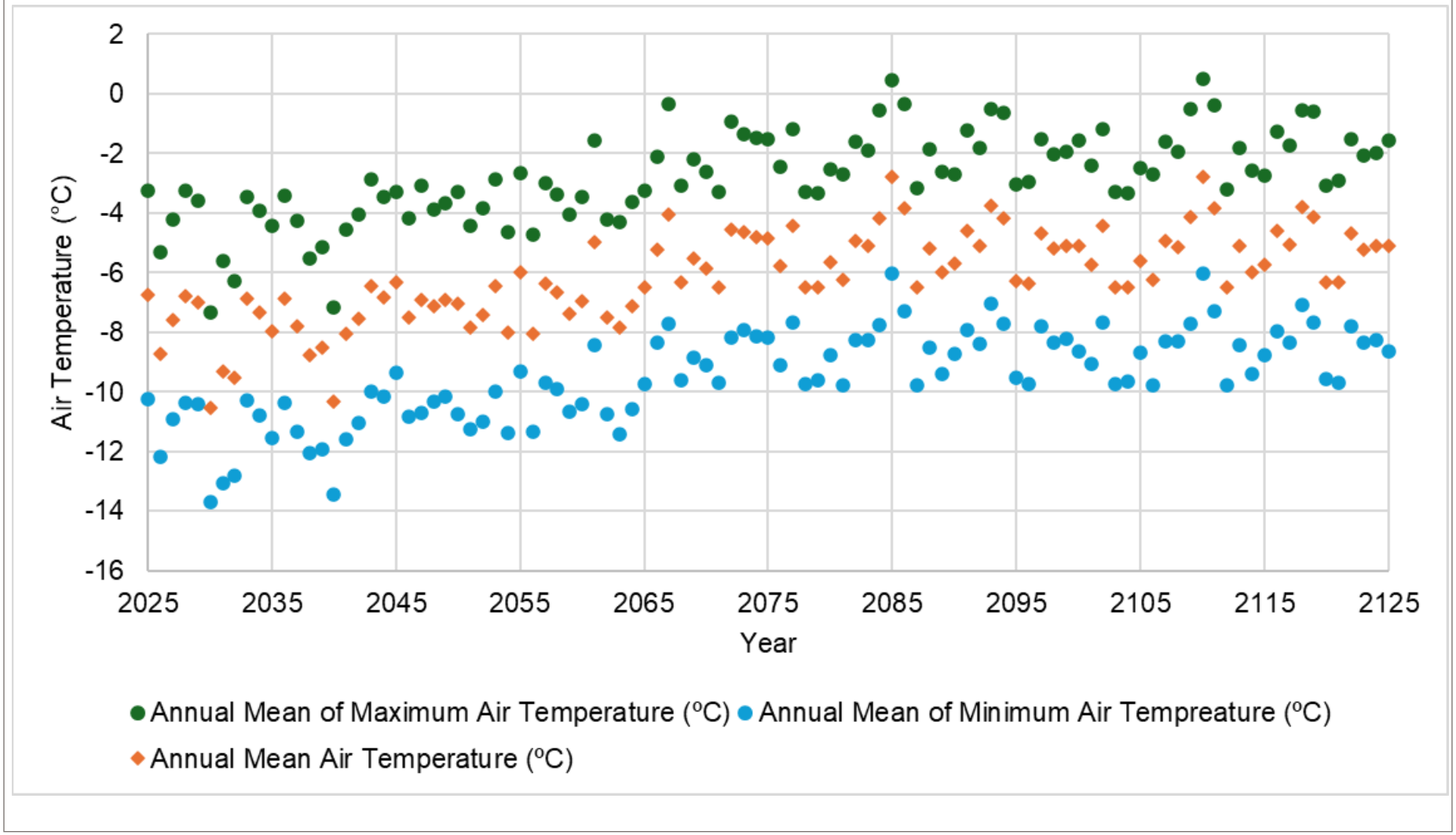
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Soil Profile and TSF Geometry of the Selected Cross-section for Modelling

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 2



LEGEND

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

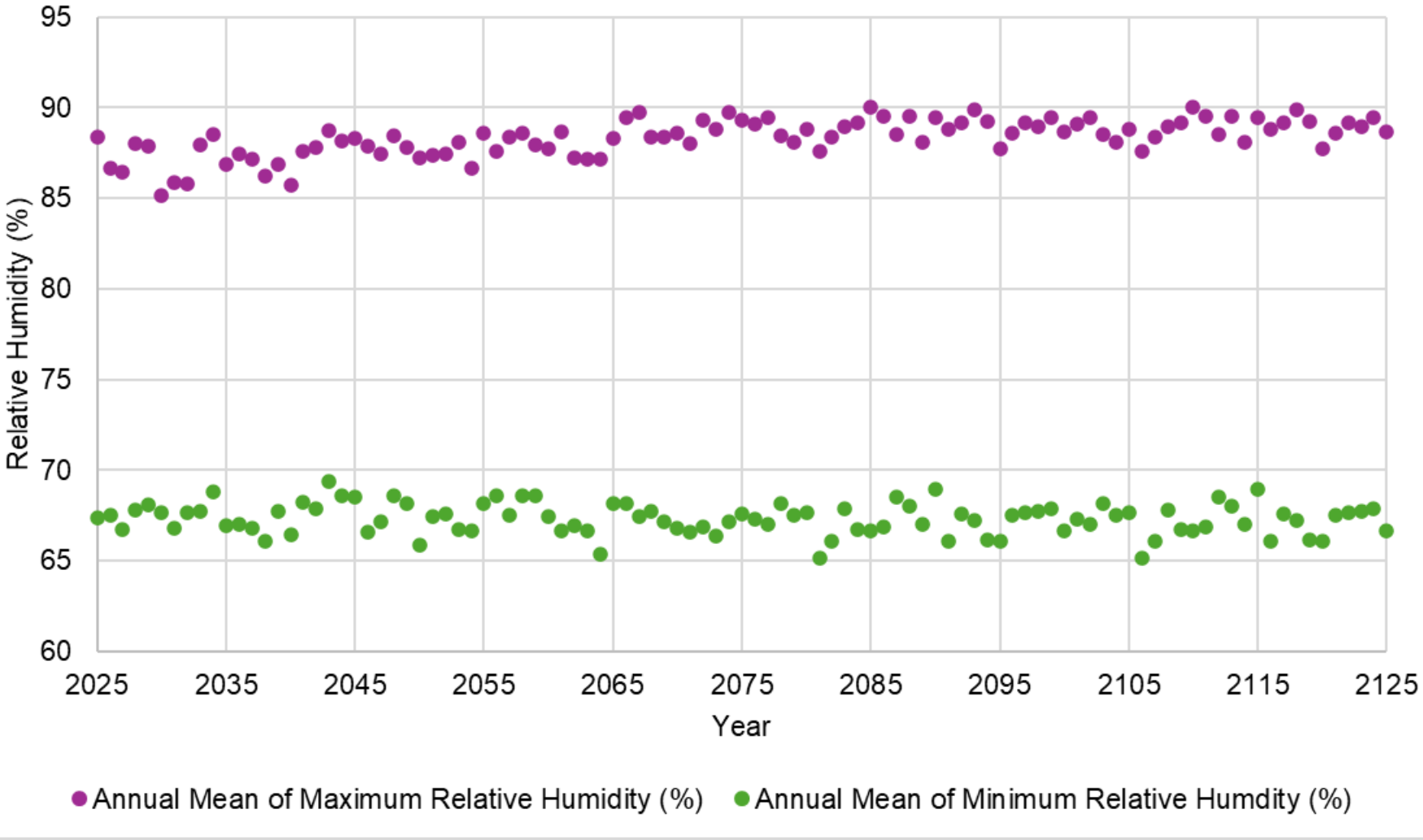
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Projection of Annual Mean Air Temperatures at Meliadine from 2025 to 2125

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 3



LEGEND

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

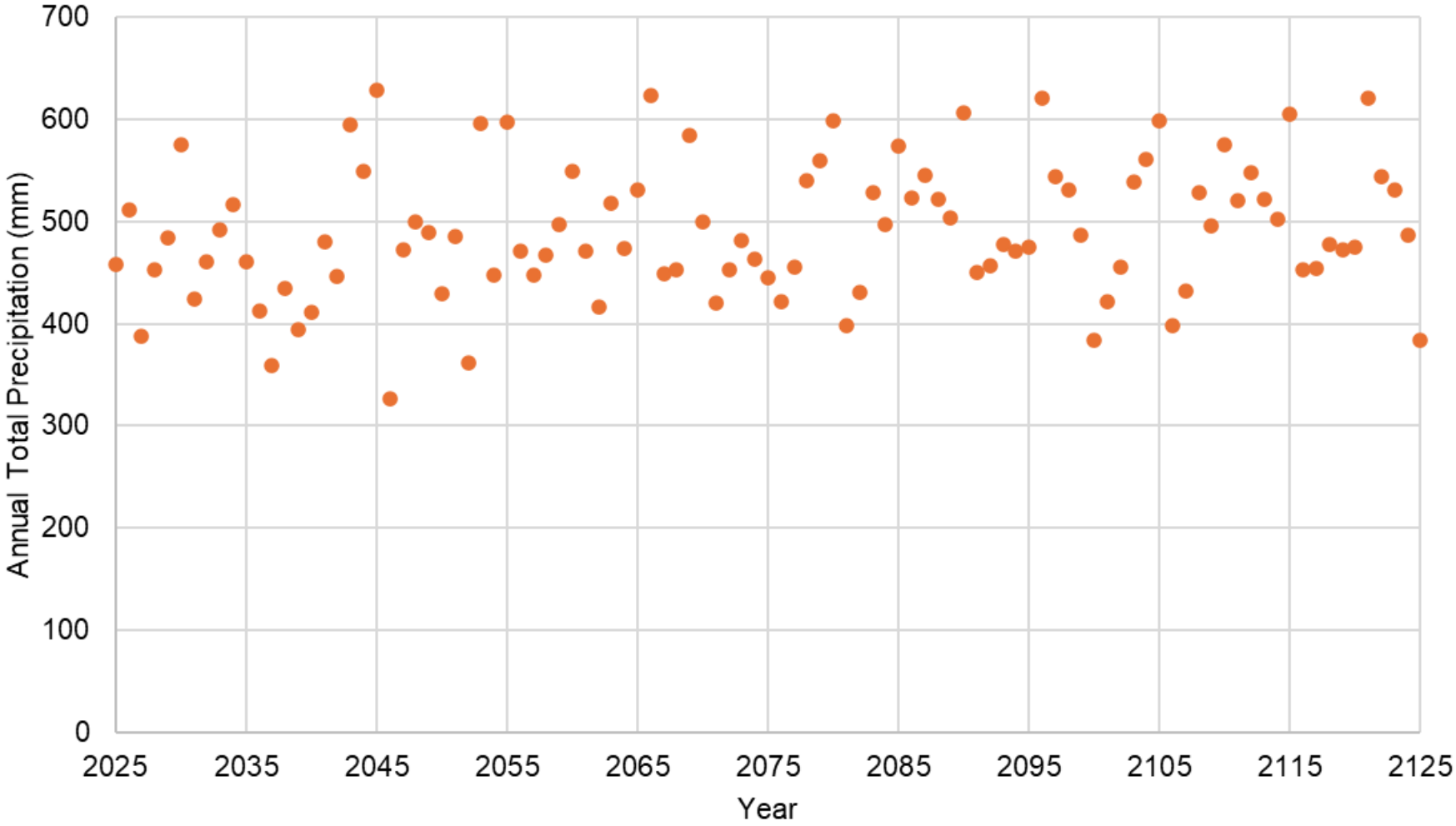
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Projection of Annual Mean of Maximum and Minimum Relative Humidity at Meliadine from 2025 to 2125

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 4



LEGEND

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

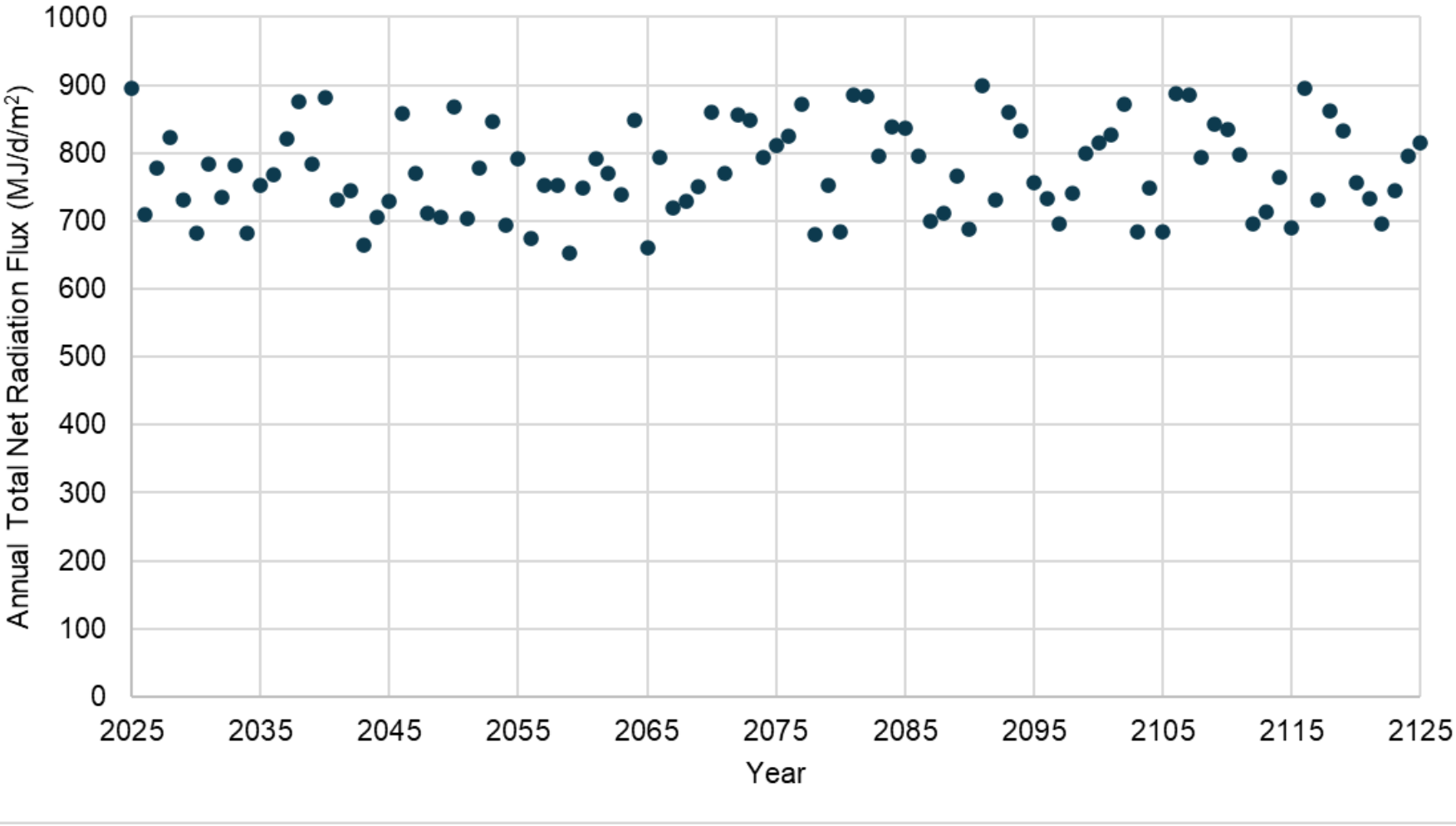
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Projection of Annual Total Precipitation at Meliadine from 2025 to 2125

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 5



LEGEND

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

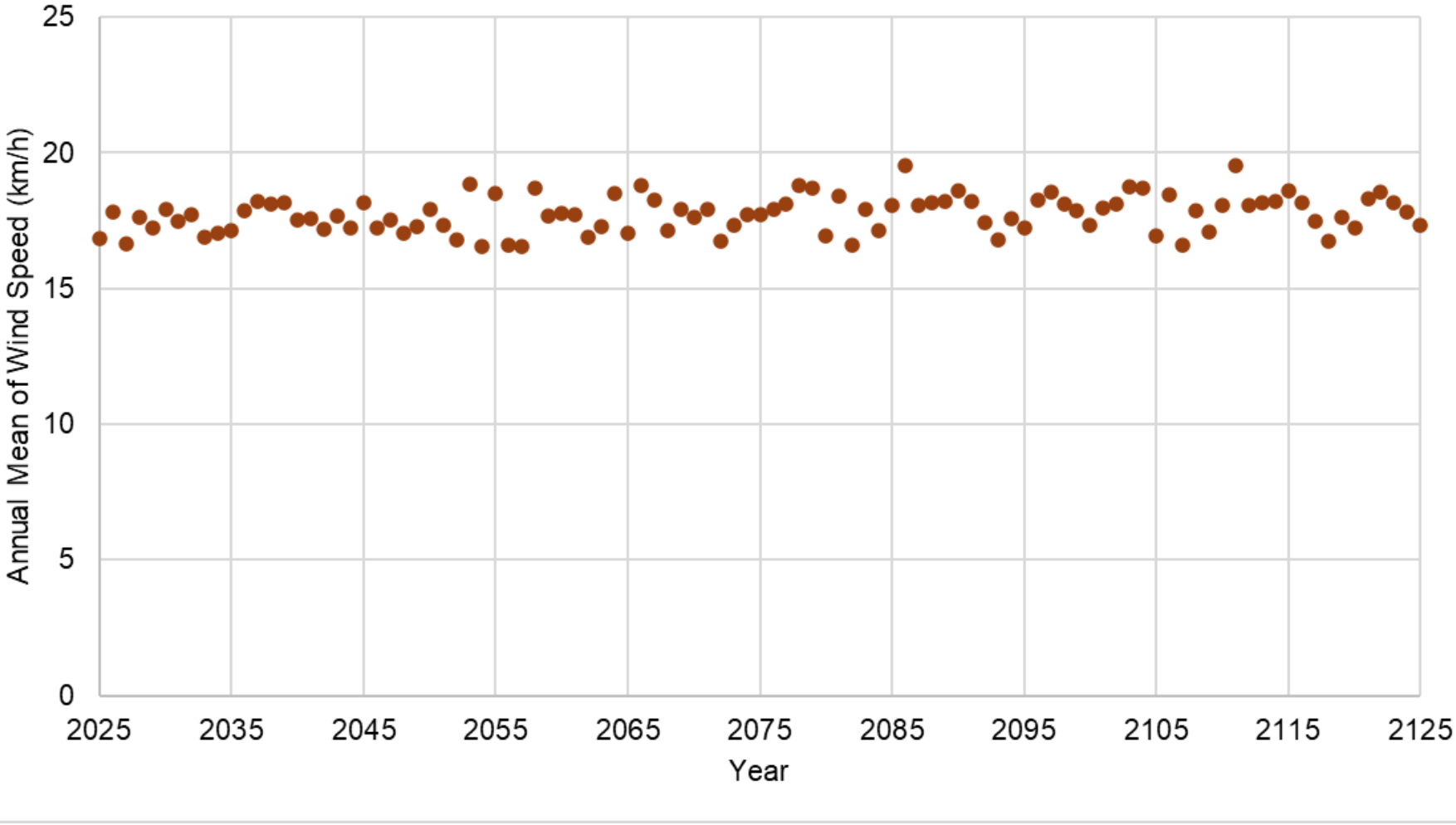
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Projection of Annual Total Net Radiation at Meliadine from 2025 to 2125

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 6



LEGEND

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

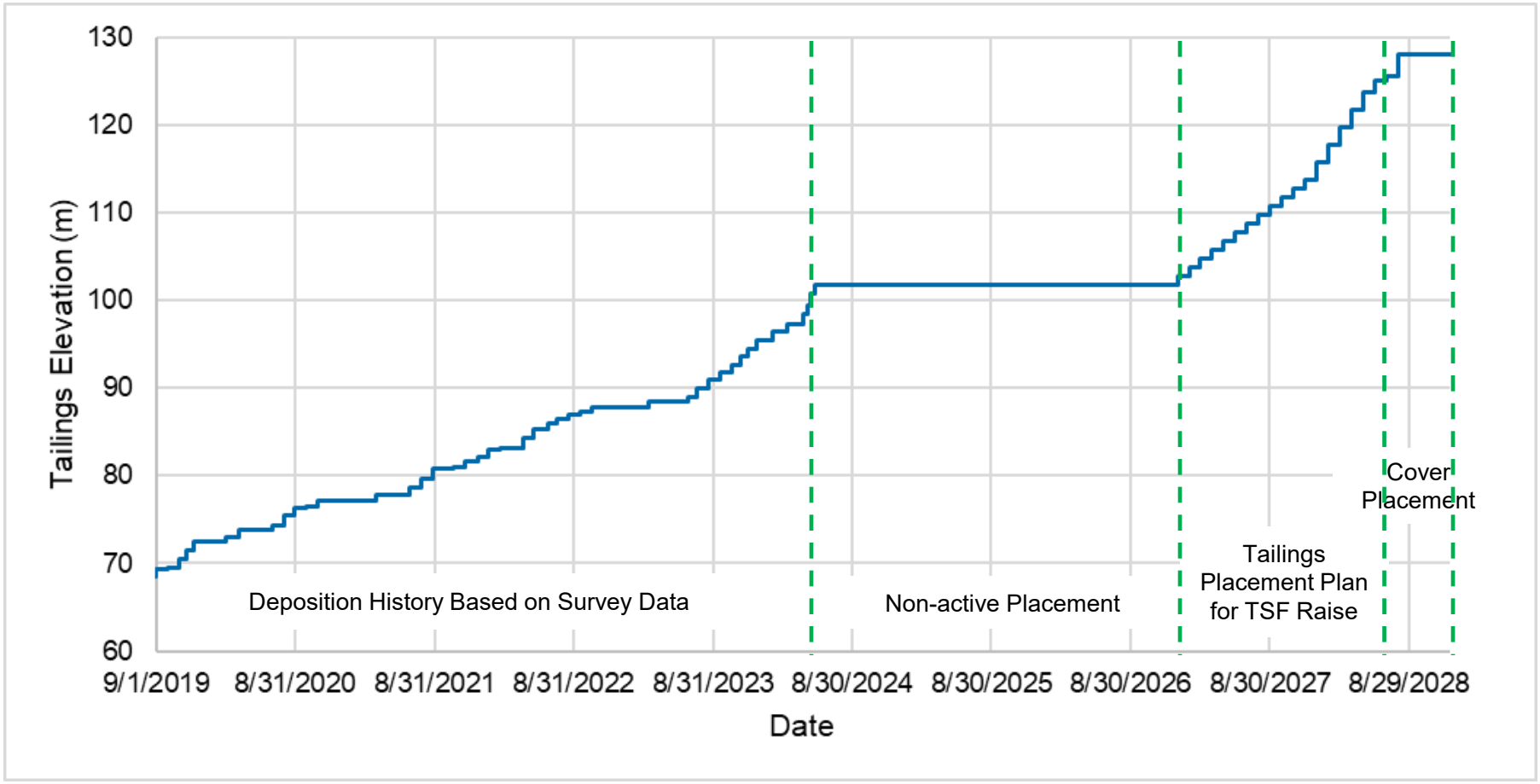
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Projected Annual Mean of Wind Speed at Meliadine from 2025 to 2125

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 7



LEGEND

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

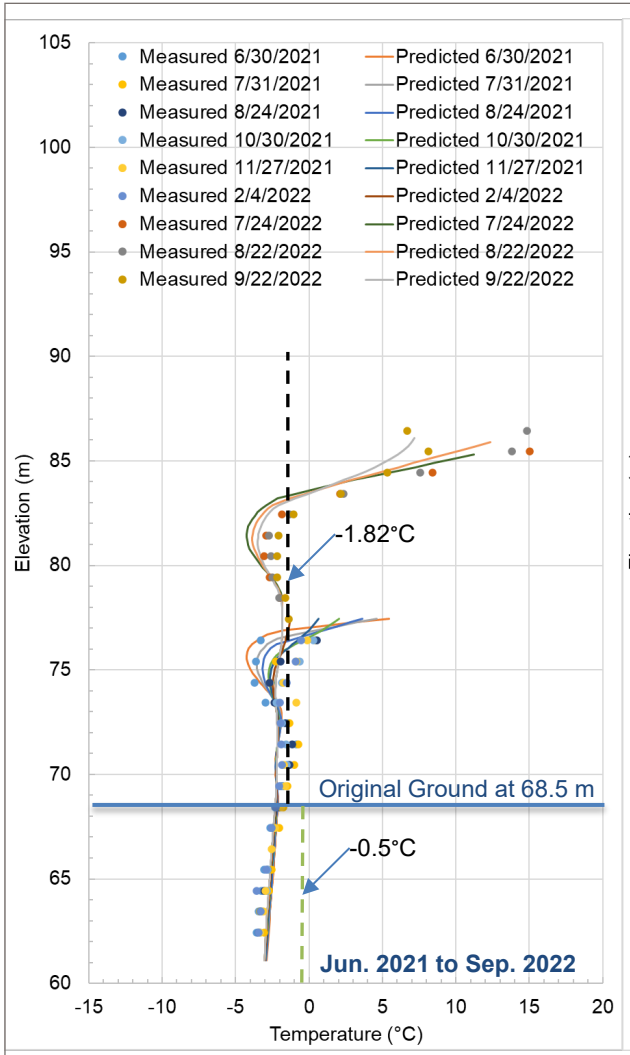
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

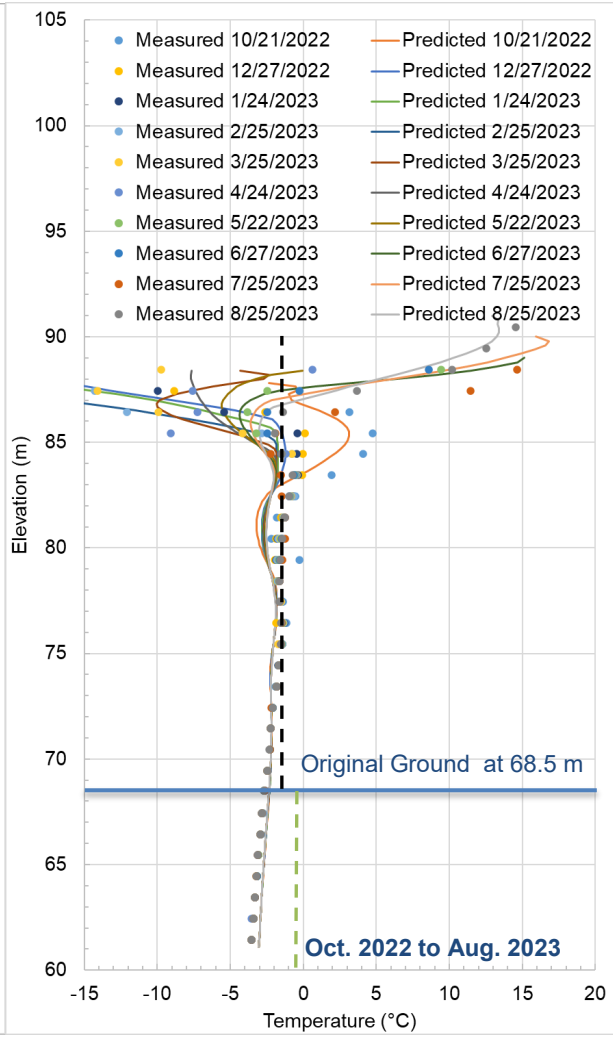
Tailings Deposition History and Deposition Plan for the Selected Section

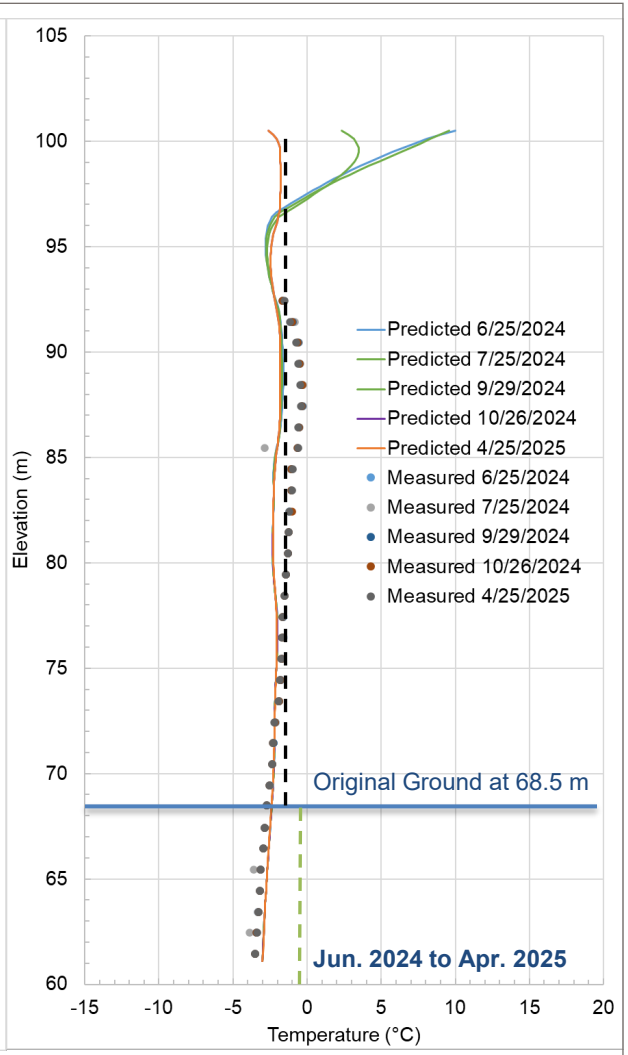
PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 8







LEGEND

- – – – Freezing Point Depression in Tailings (15 ppt): -1.82 °C
- – – – Freezing Point Depression in Foundation Soils (7 ppt): -0.5 °C

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

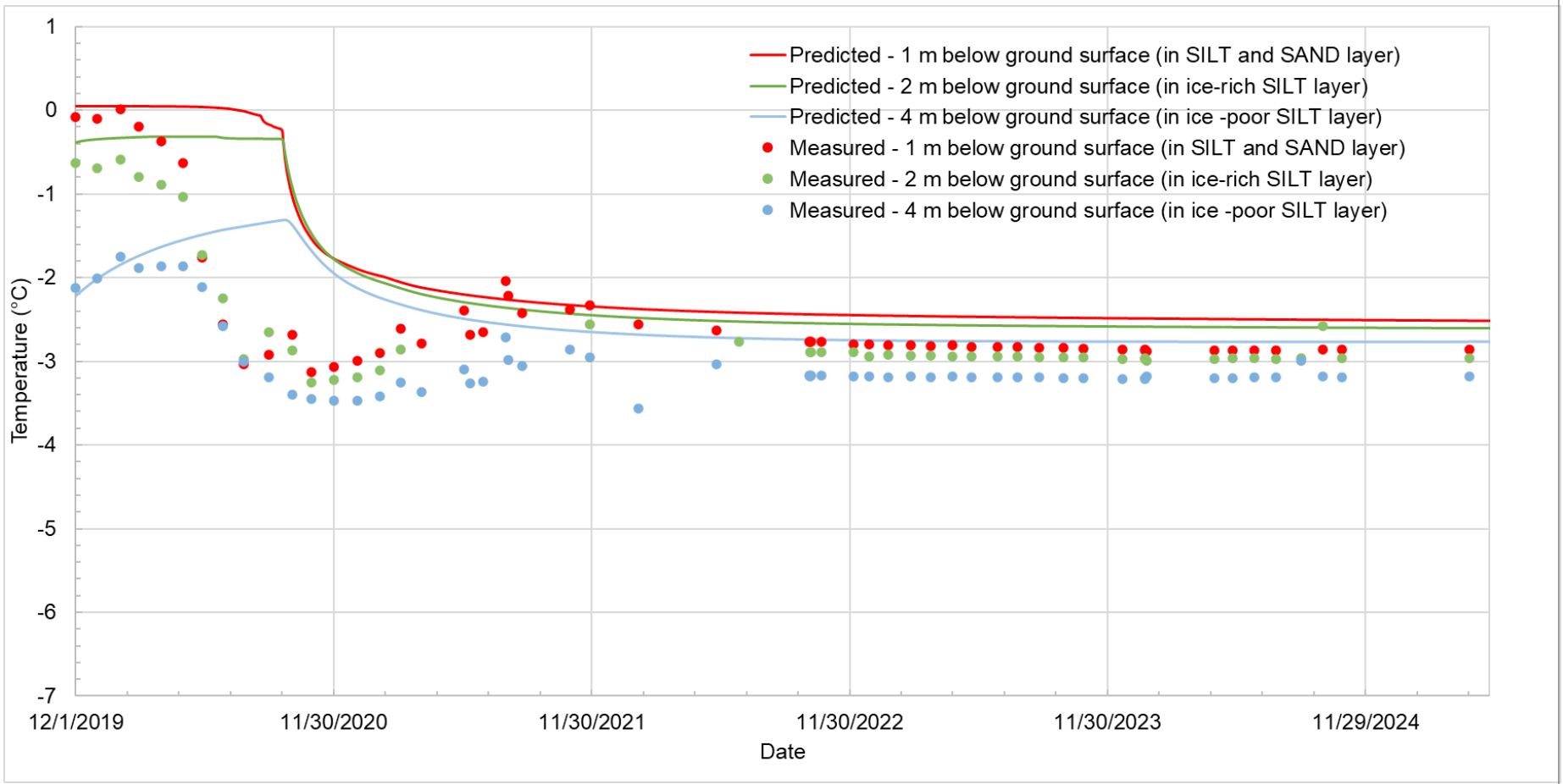
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Comparison of Measured Ground Temperatures with Predicted Values from 1D Model

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 9



LEGEND

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

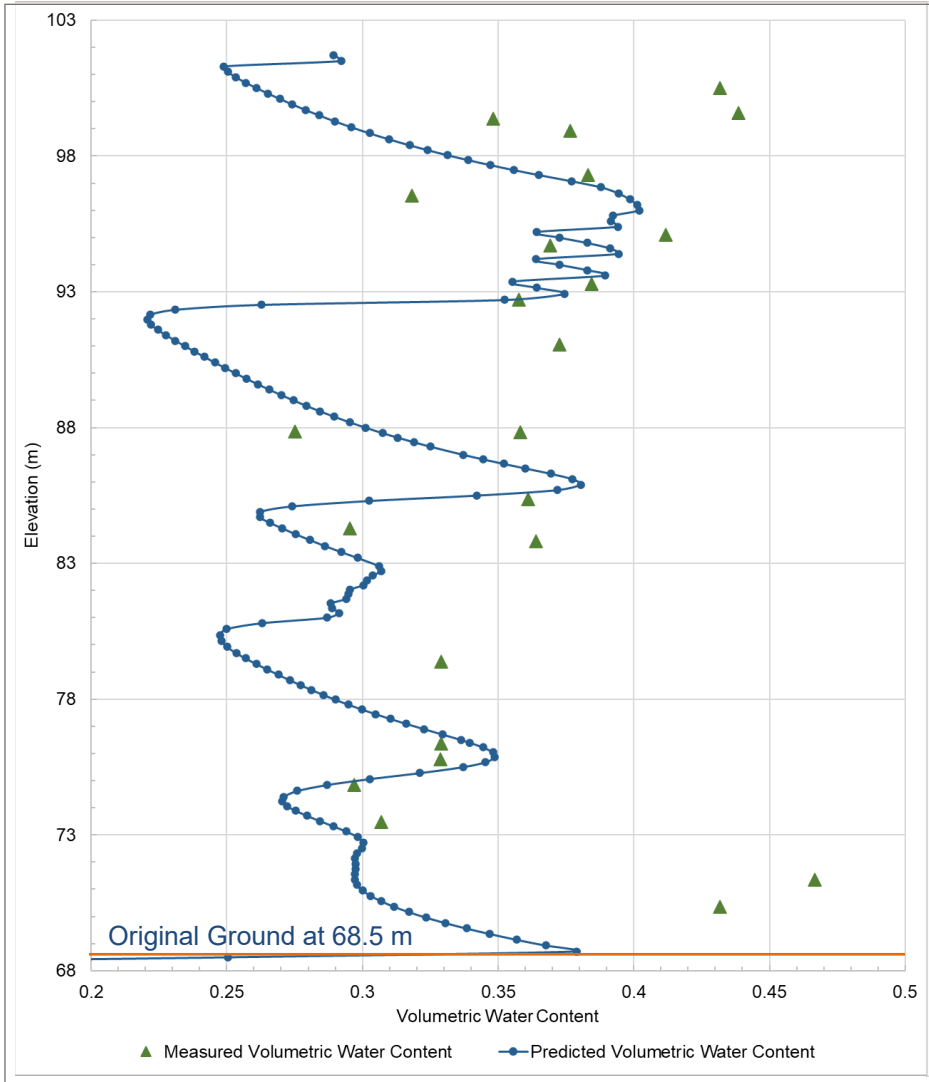
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

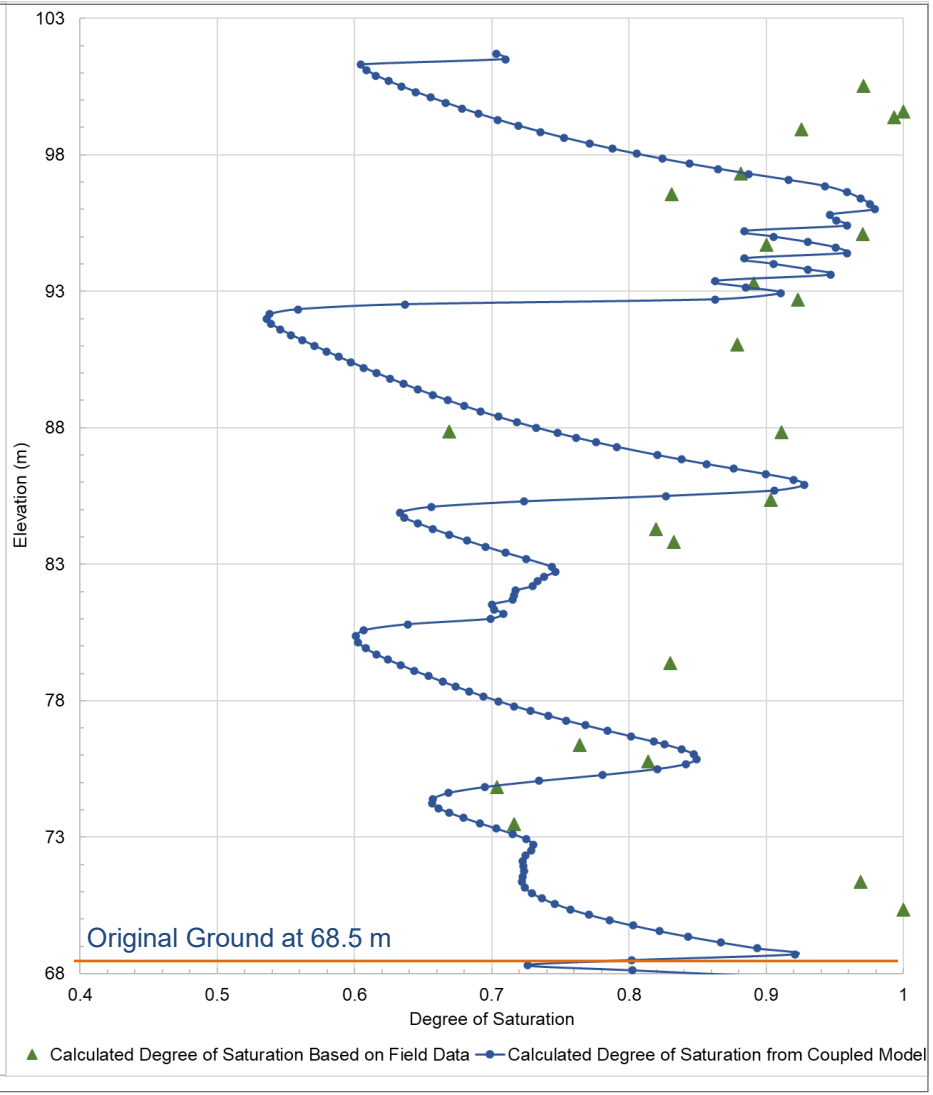
Comparison between the Predicted and Measured Ground Temperatures at Various Depths

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 10





LEGEND

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

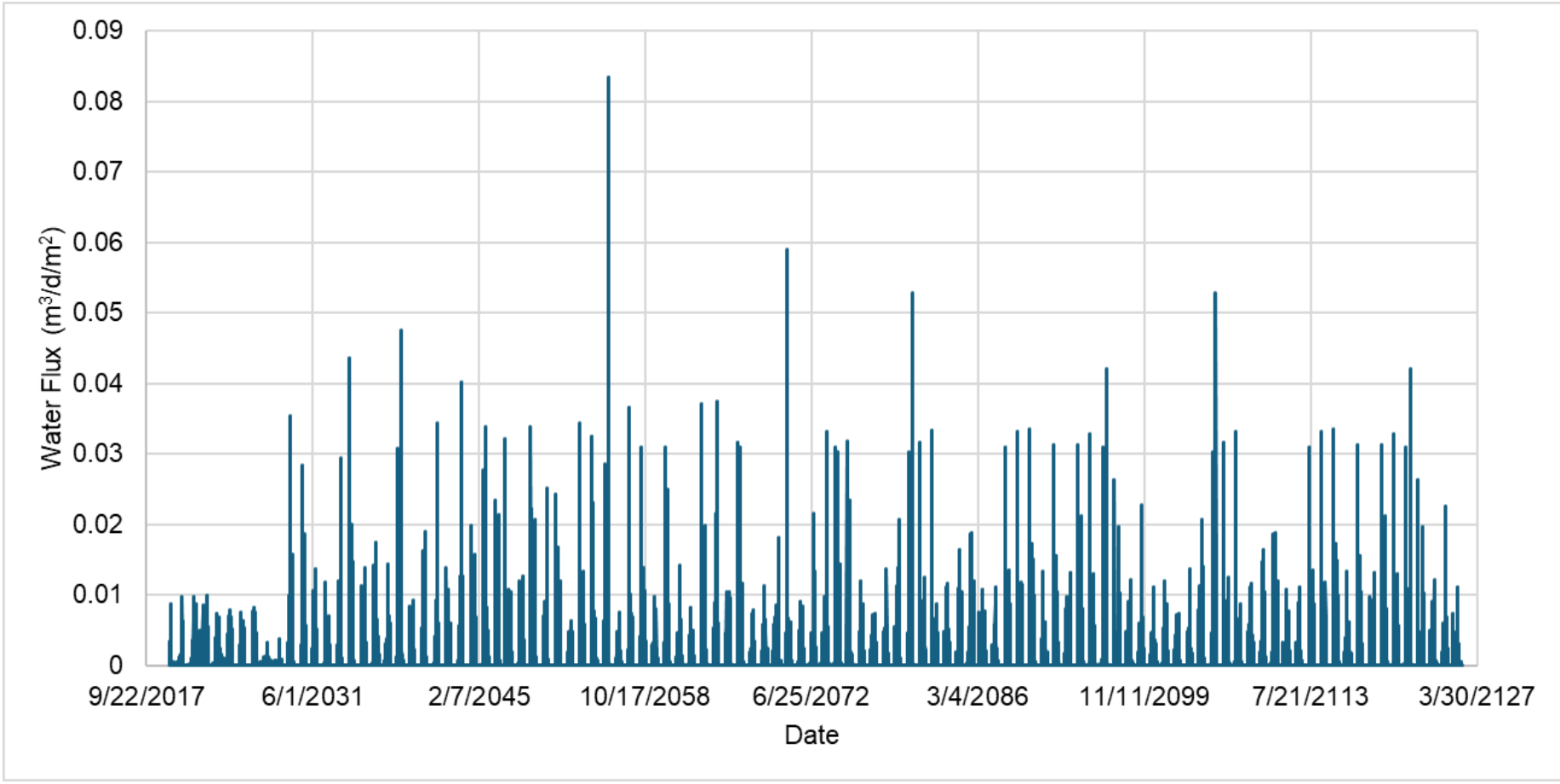
Comparison of Measured Volumetric Water Content and Degree of Saturation with Predicted Values from 1D Model

TETRA TECH

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 11



LEGEND

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

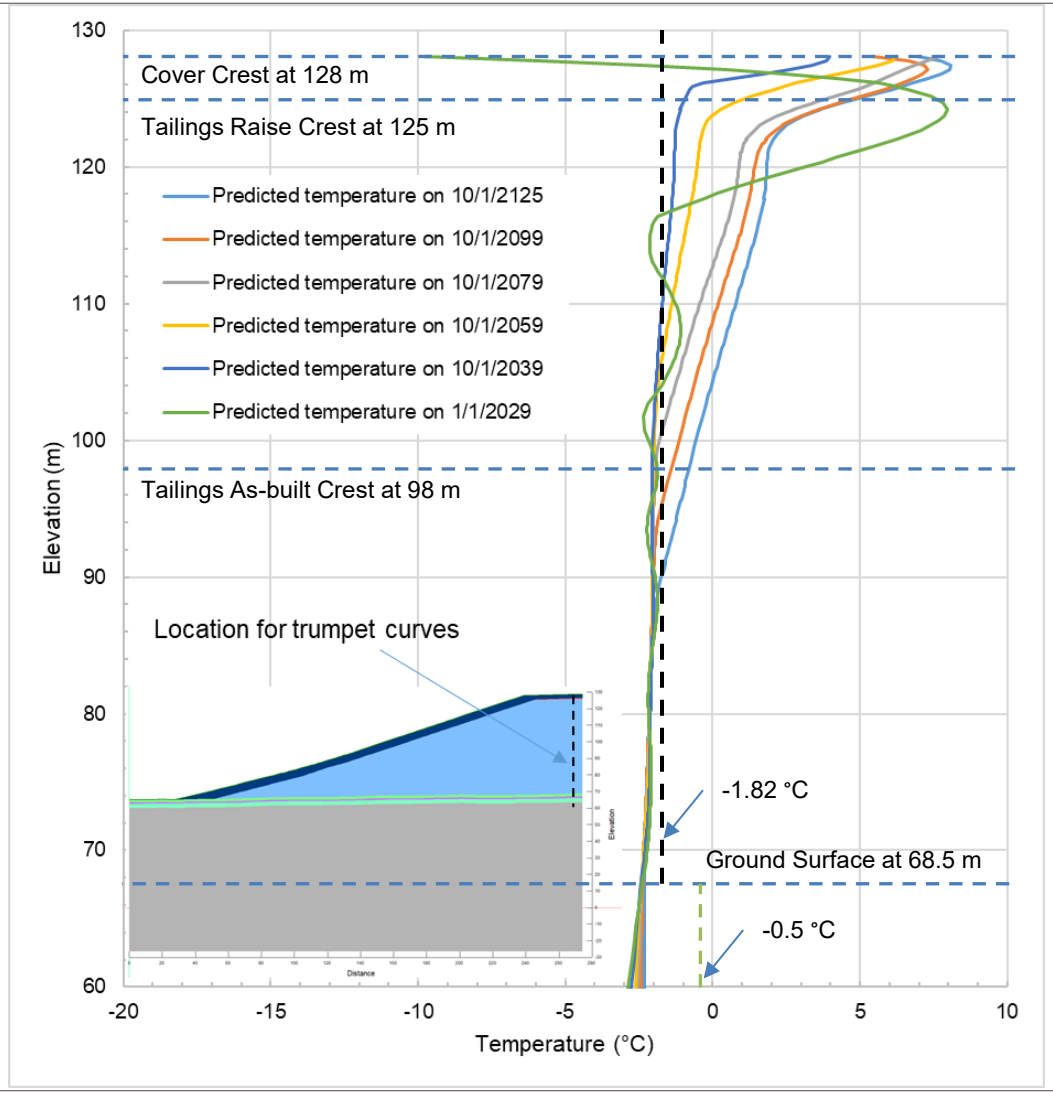
Estimated Water Flux from Top Surfaces of the 1D Model

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE
EDMONTON

DATE
MARCH 2026

Figure 12



LEGEND

- – – Freezing Point Depression in Tailings (15 ppt): -1.82 °C
- – – Freezing Point Depression in Foundation Soils (7 ppt): -0.5 °C

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

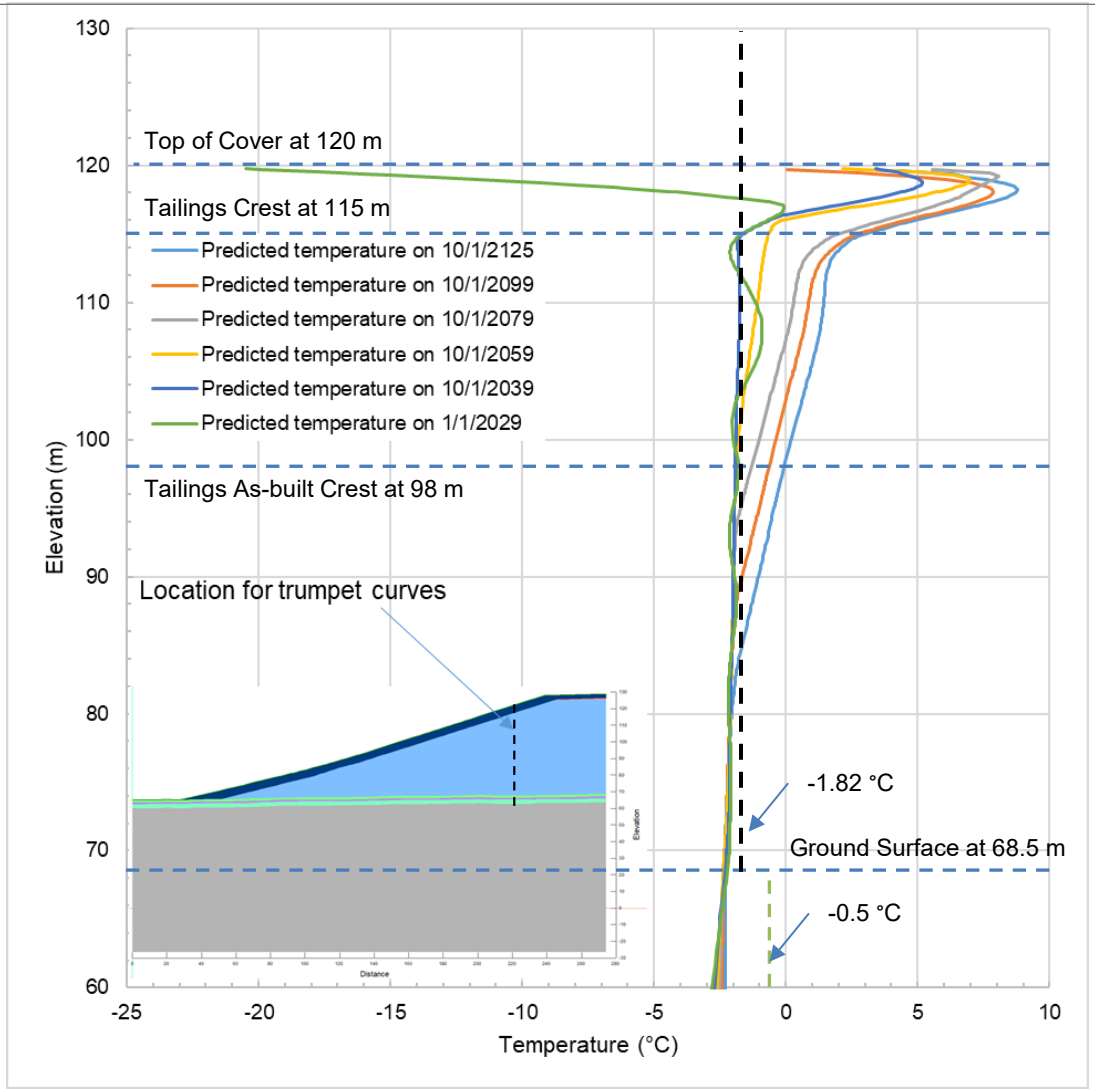
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Ground Temperature Profile at the Center of the TSF on Selected Dates from 2D Model

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 13



LEGEND

- – – Freezing Point Depression in Tailings (15 ppt): -1.82 °C
- – – Freezing Point Depression in Foundation Soils (7 ppt): -0.5 °C

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

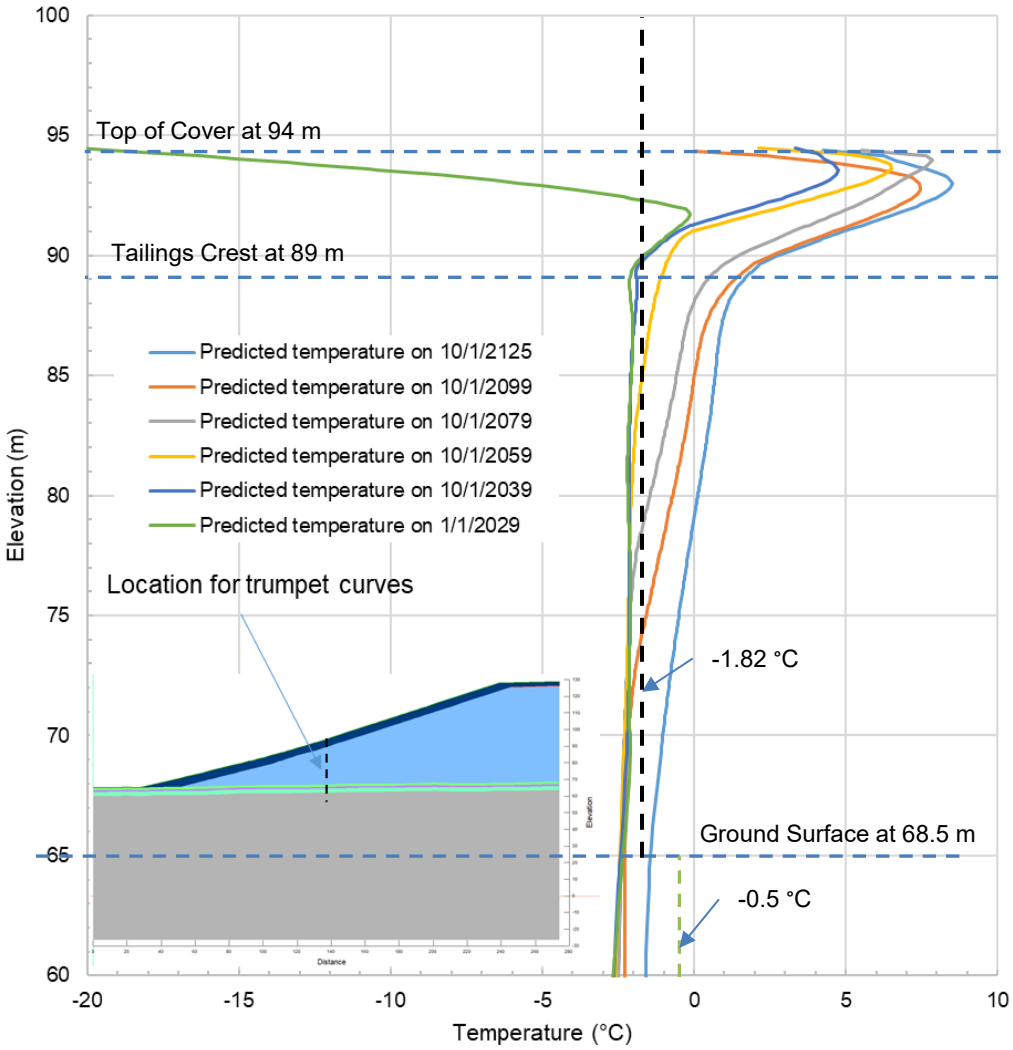
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Ground Temperature Profile at Raise Slope of the TSF on Selected Dates from 2D Model

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 14



LEGEND

- – – – Freezing Point Depression in Tailings (15 ppt): -1.82 °C
- – – – Freezing Point Depression in Foundation Soils (7 ppt): -0.5 °C

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

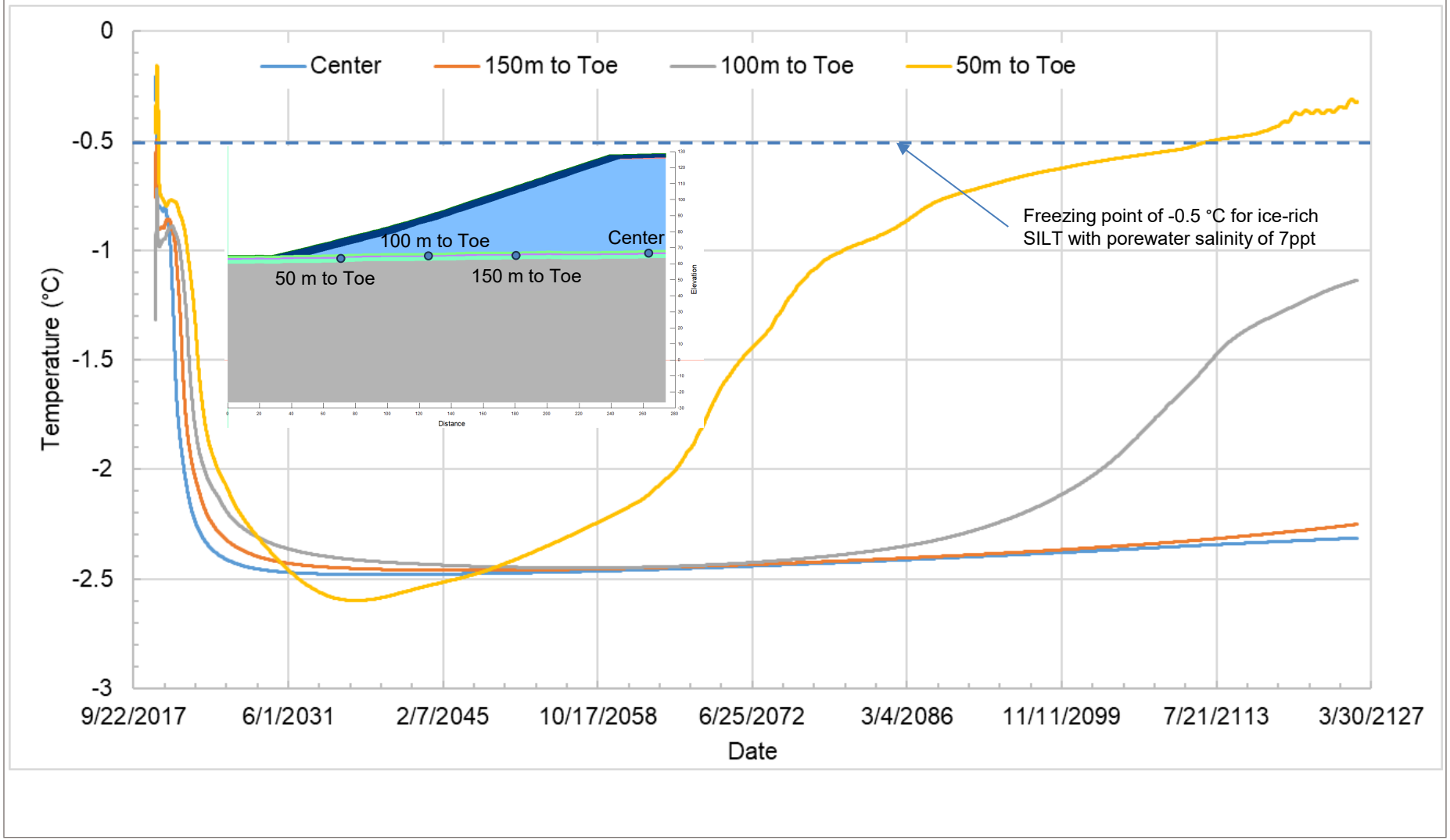
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Ground Temperature Profile at As-built Slope of the TSF on Selected Dates from 2D Model

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 15



LEGEND

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

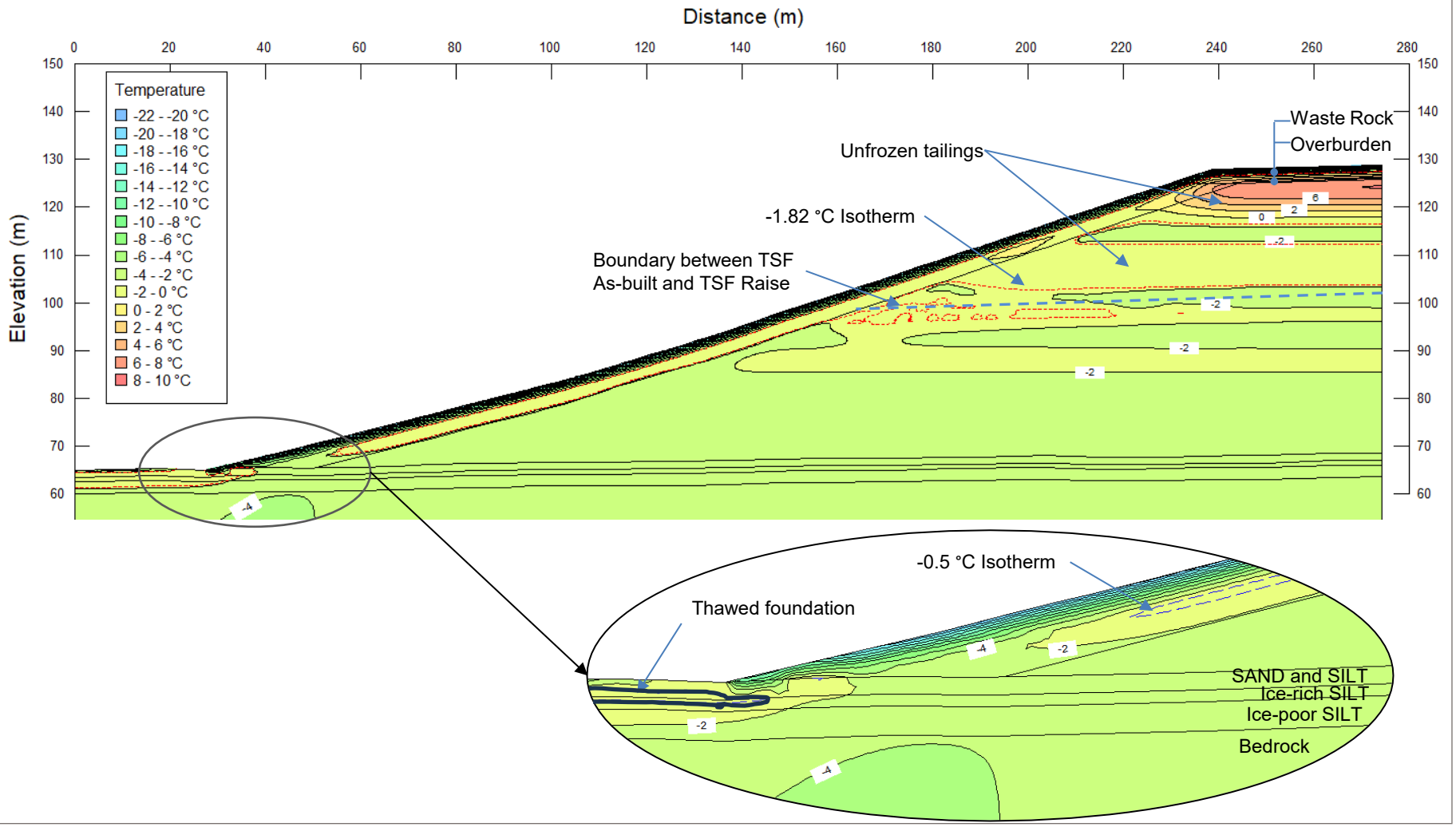
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Ground Temperature of Ice-rich SILT on Selected Locations from 2D Model

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 16



LEGEND

-0.5 °C Isotherm

-1.82 °C Isotherm

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

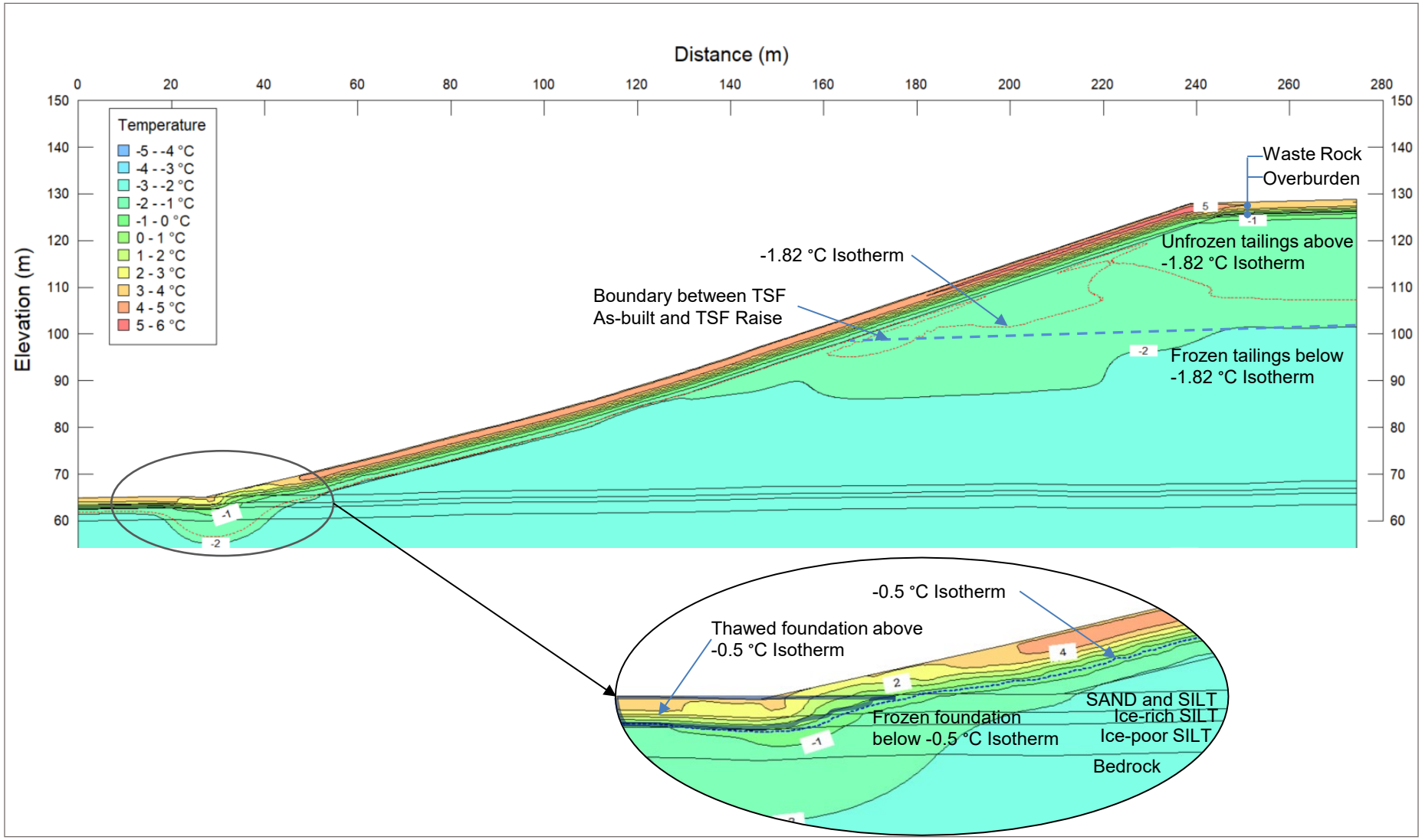
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Isotherms on January 1, 2029 (End of Construction)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 17



LEGEND

-0.5 °C Isotherm

-1.82 °C Isotherm

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

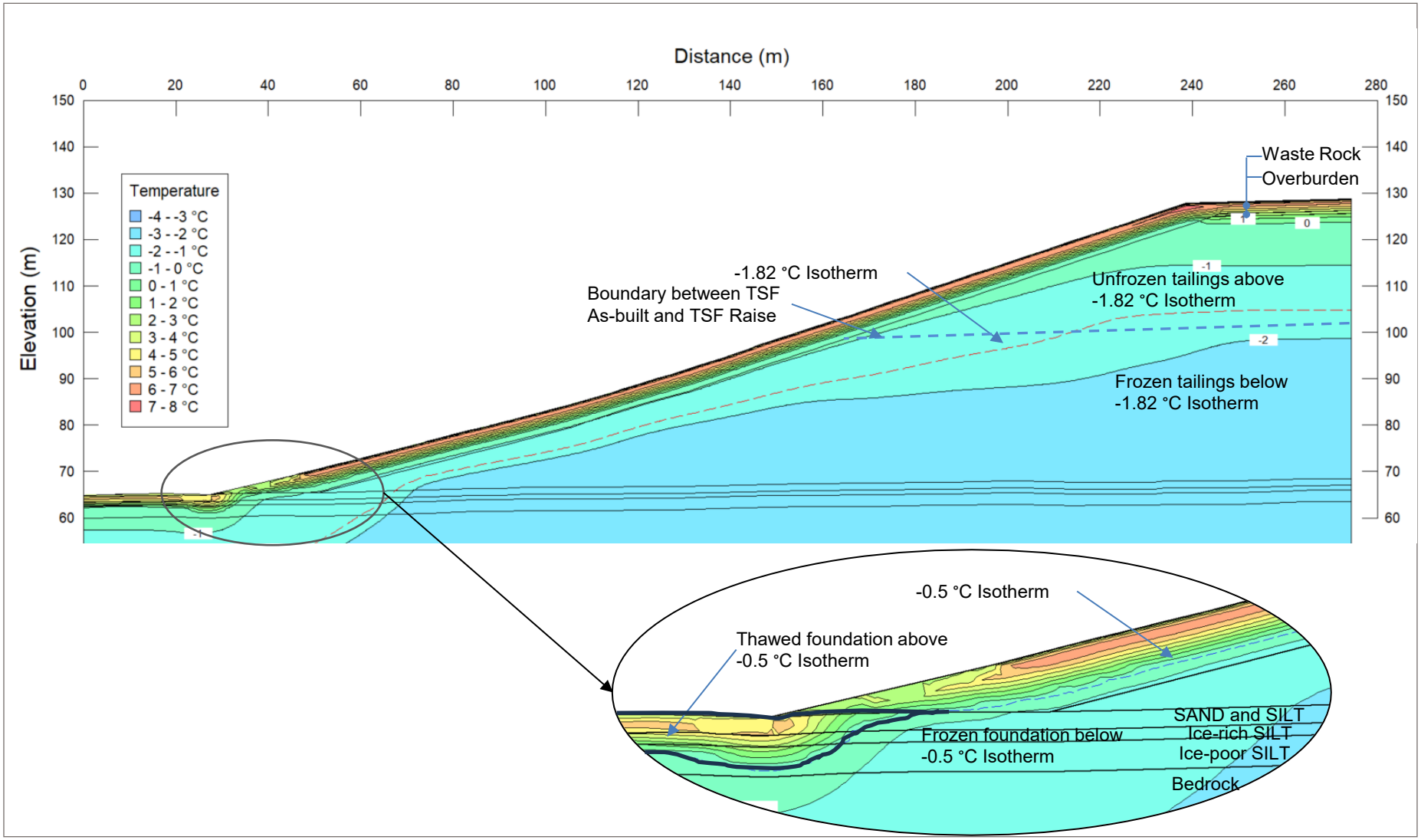
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Isotherms on October 1, 2039

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 18



LEGEND

------- -0.5 °C Isotherm

------- -1.82 °C Isotherm

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

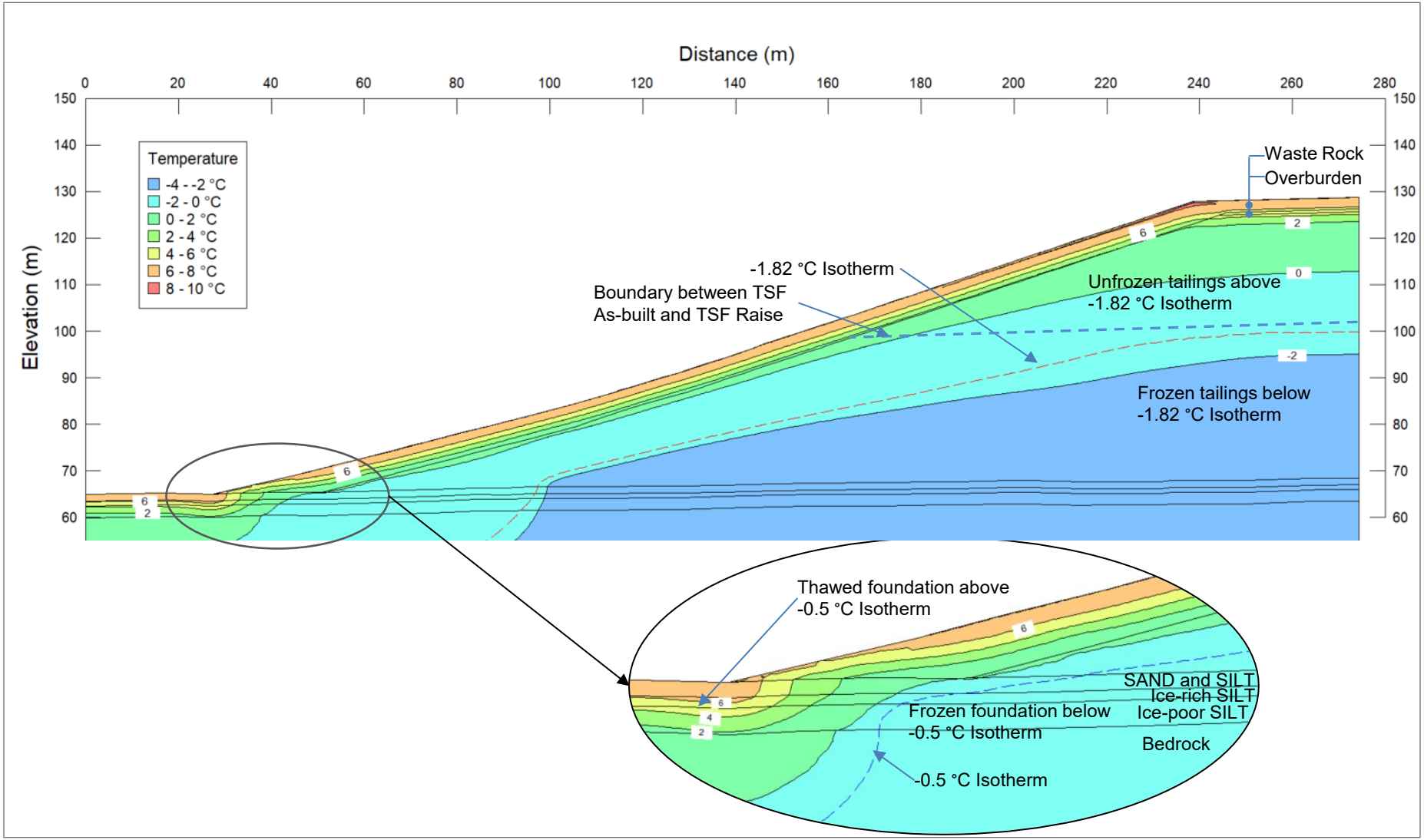
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Isotherms on October 1, 2059

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 19



LEGEND

-0.5 °C Isotherm

-1.82 °C Isotherm

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

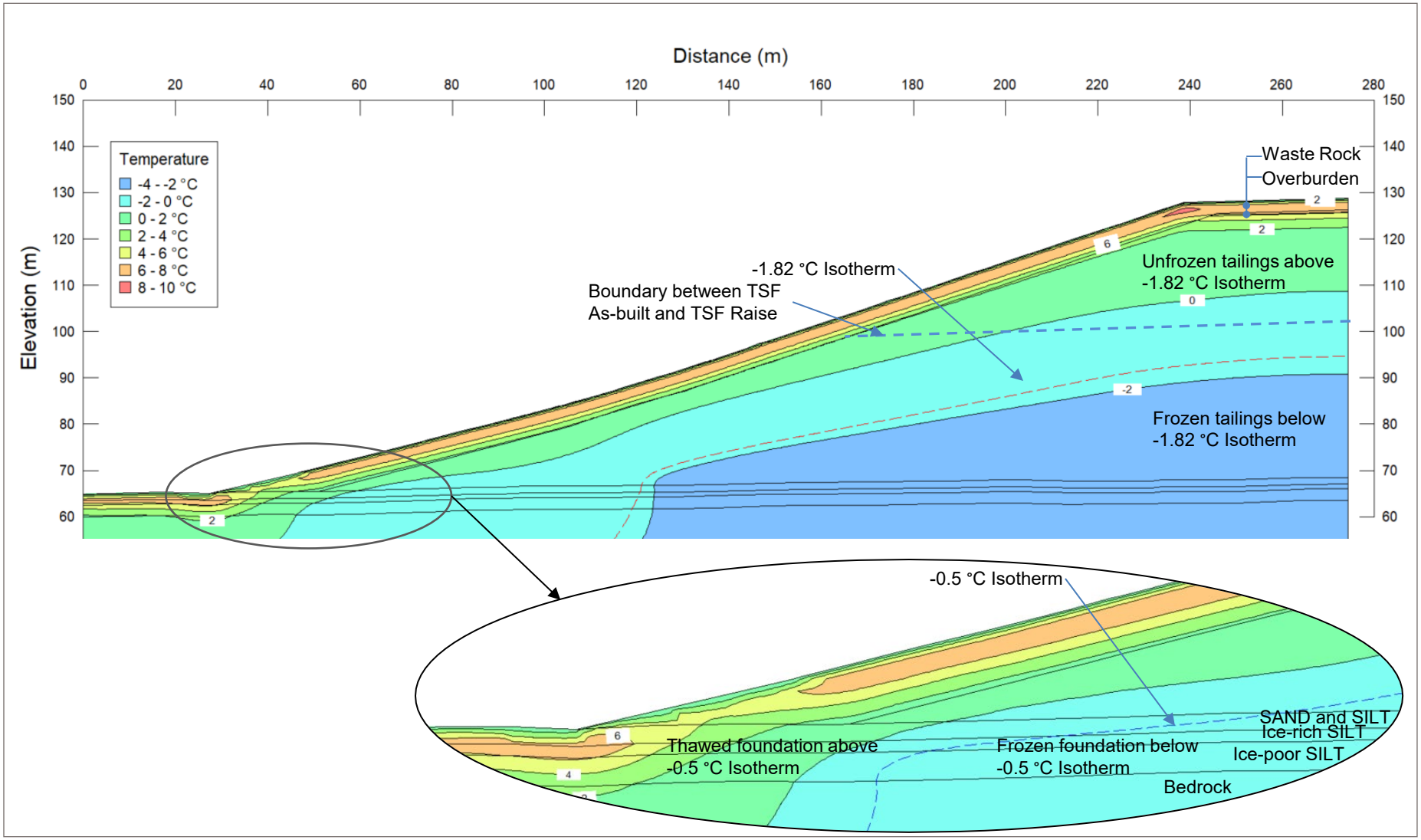
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Isotherms on October 1, 2079

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 20



LEGEND

-0.5 °C Isotherm

-1.82 °C Isotherm

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

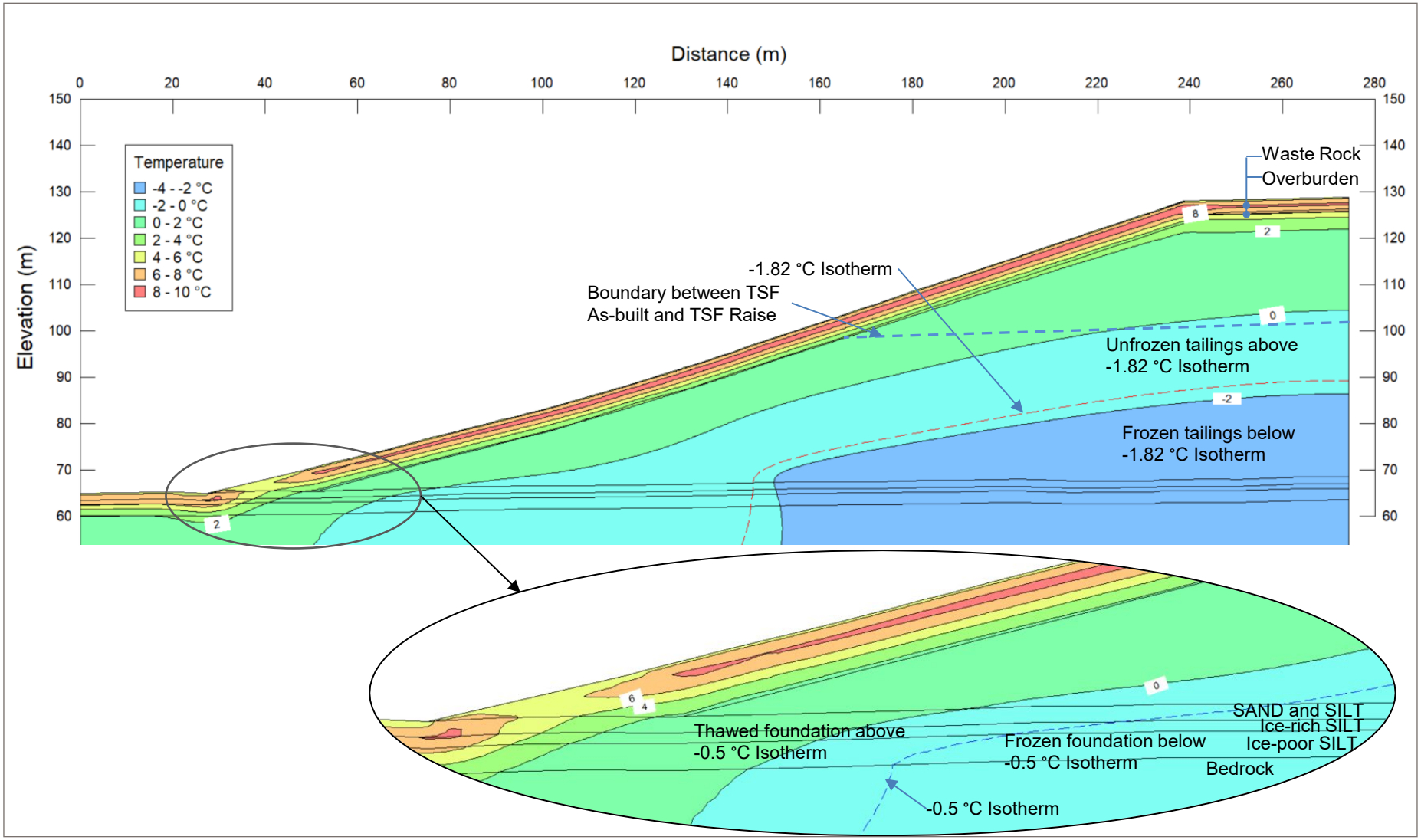
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Isotherms on October 1, 2099

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 21



LEGEND

-0.5 °C Isotherm

-1.82 °C Isotherm

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

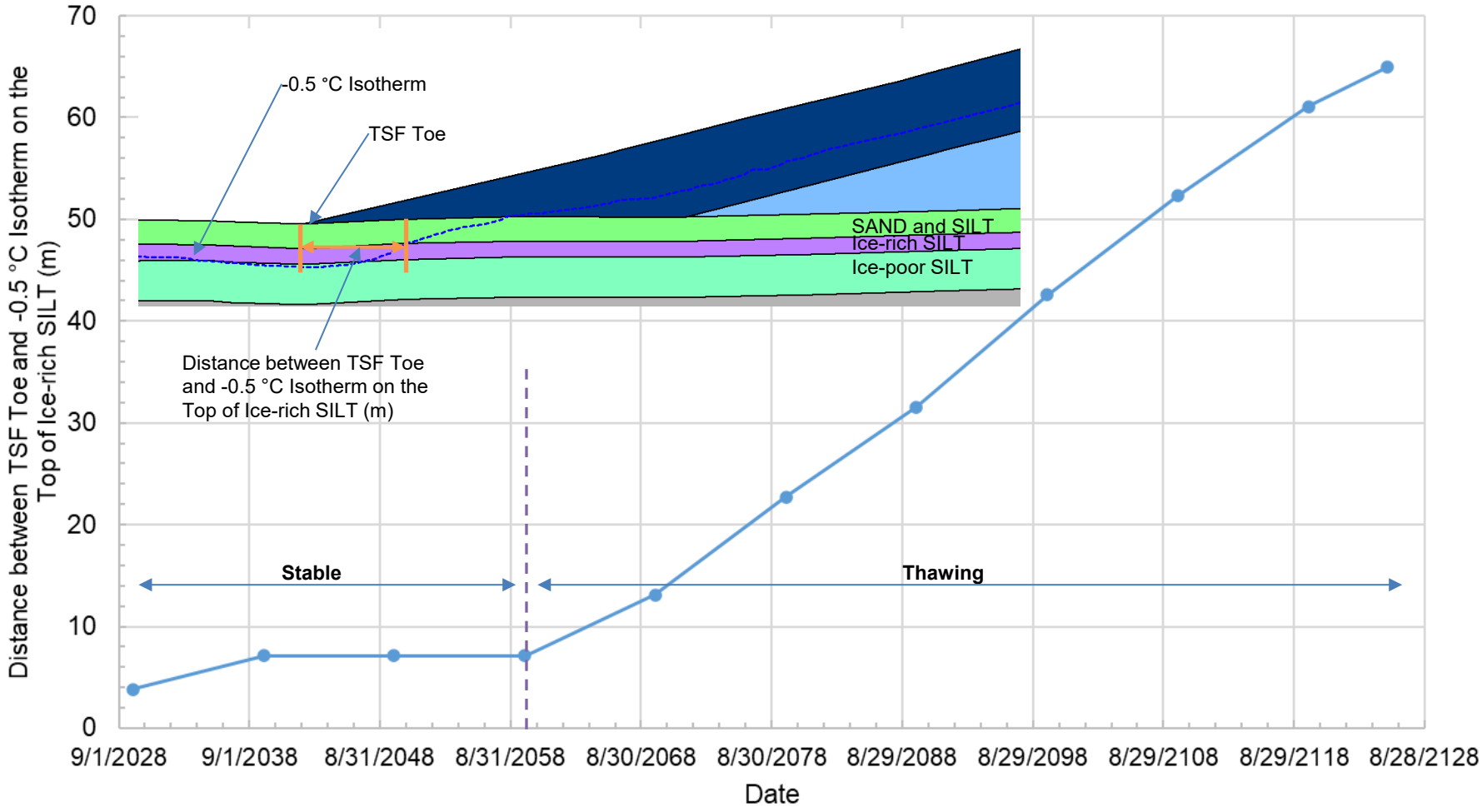
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Isotherms on October 1, 2125

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 22



LEGEND

------- -0.5 °C Isotherm

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

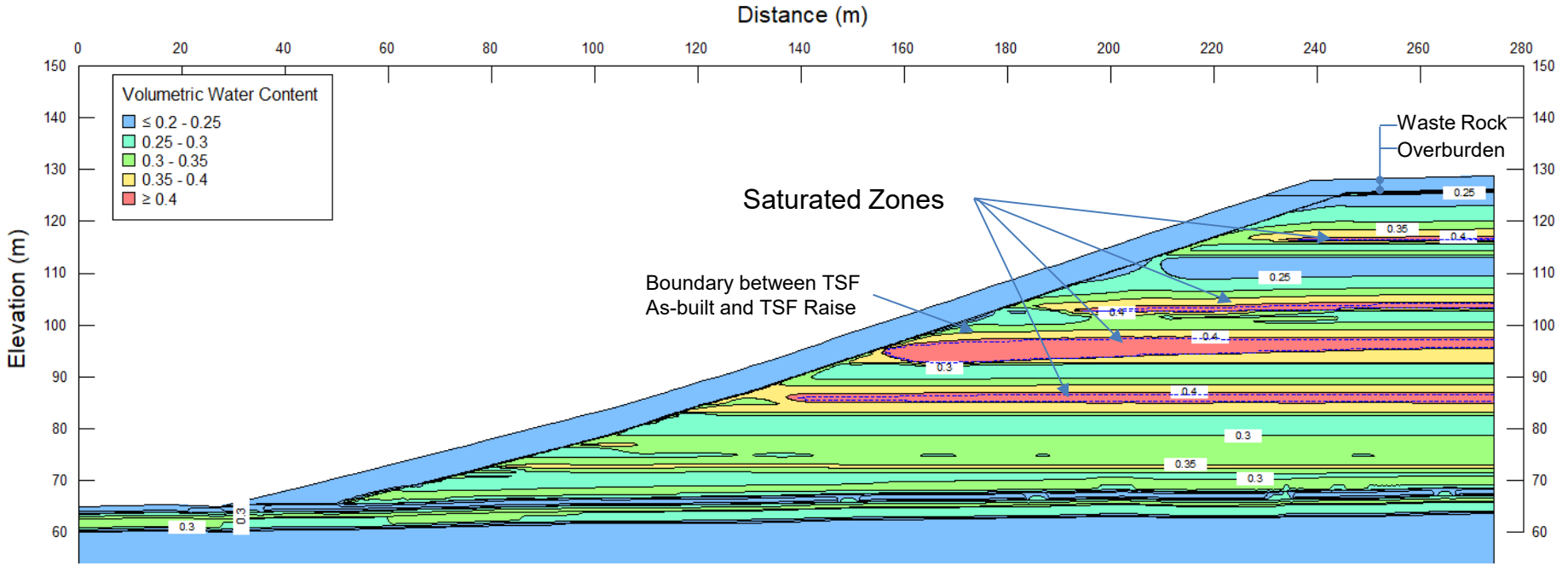
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Horizontal Thaw Extent within Ice-rich SILT Layer with Time

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE: EDMONTON
DATE: MARCH 2026

Figure 23



LEGEND

------- Saturated Zone with Volumetric Water Content > 0.41

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

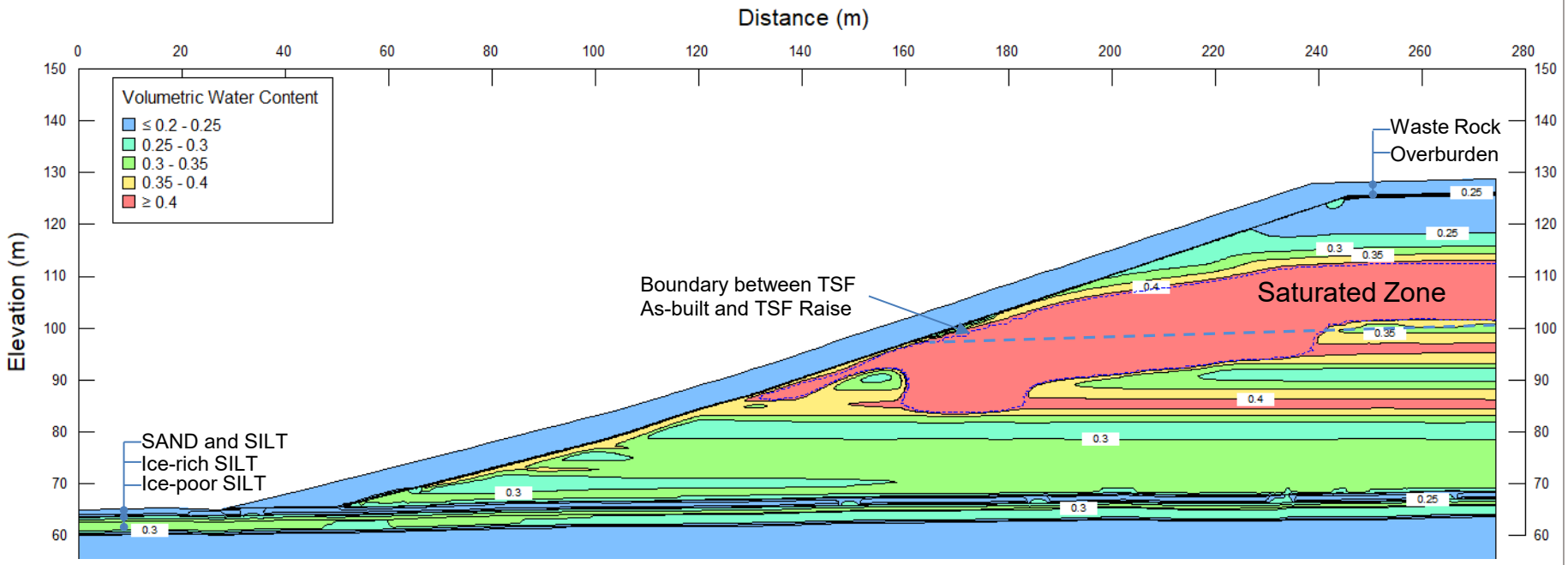
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Saturated Zone Distribution (End of Construction)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 24



LEGEND

------- Saturated Zone with Volumetric Water Content > 0.41

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

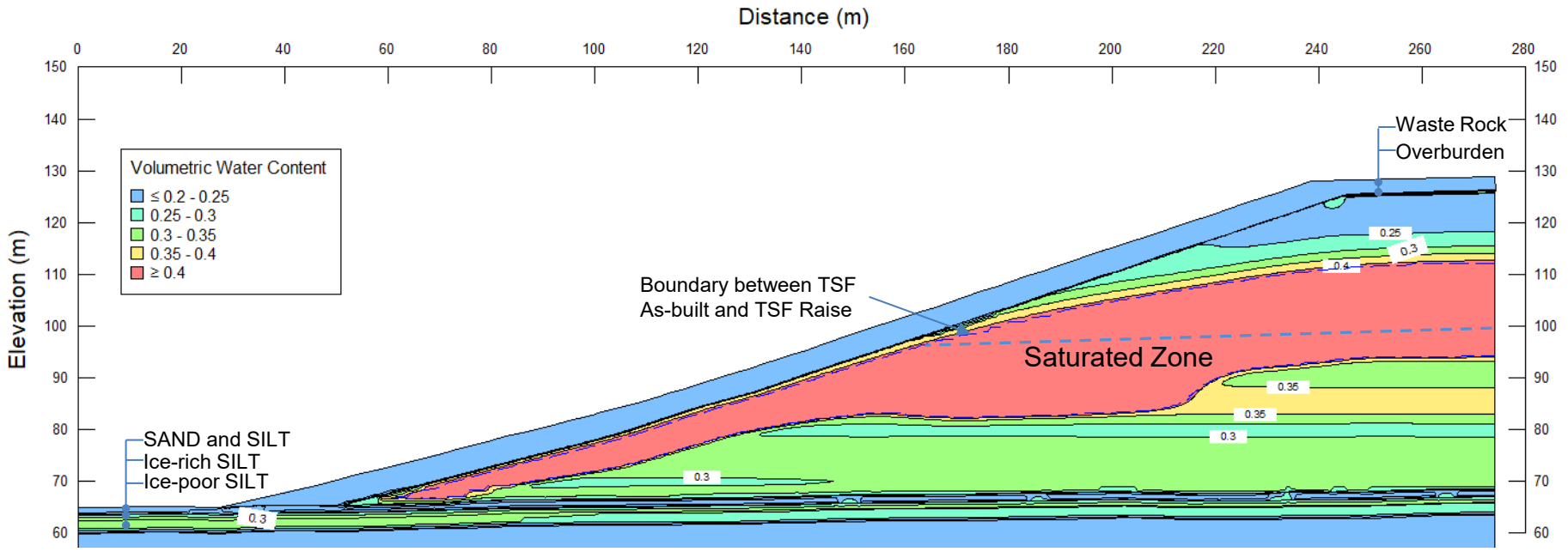
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Saturated Zone Distribution (Year 2039)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 25



LEGEND

------- Saturated Zone with Volumetric Water Content > 0.41

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

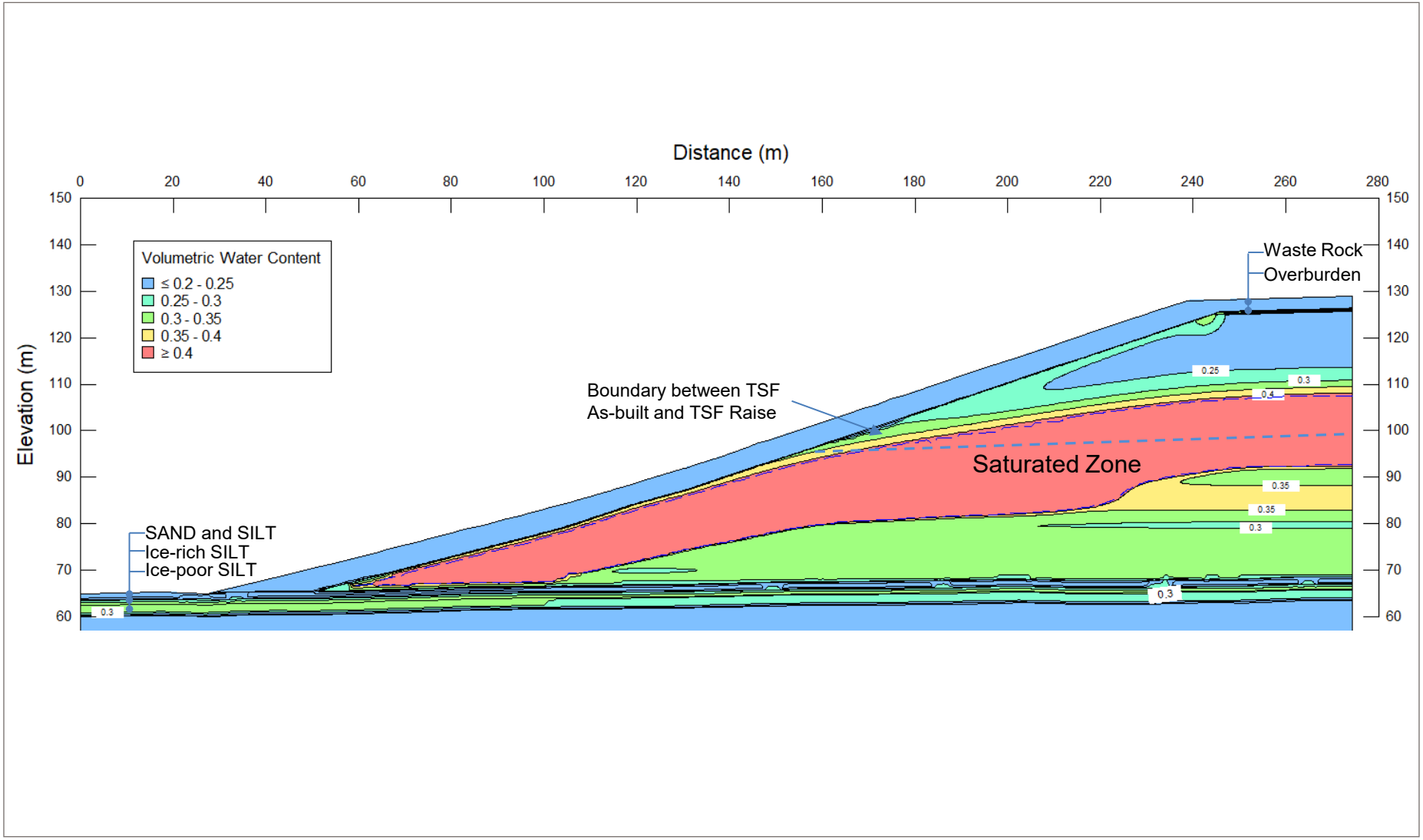
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Saturated Zone Distribution (Year 2059)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 26



LEGEND

------- Saturated Zone with Volumetric Water Content > 0.41

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

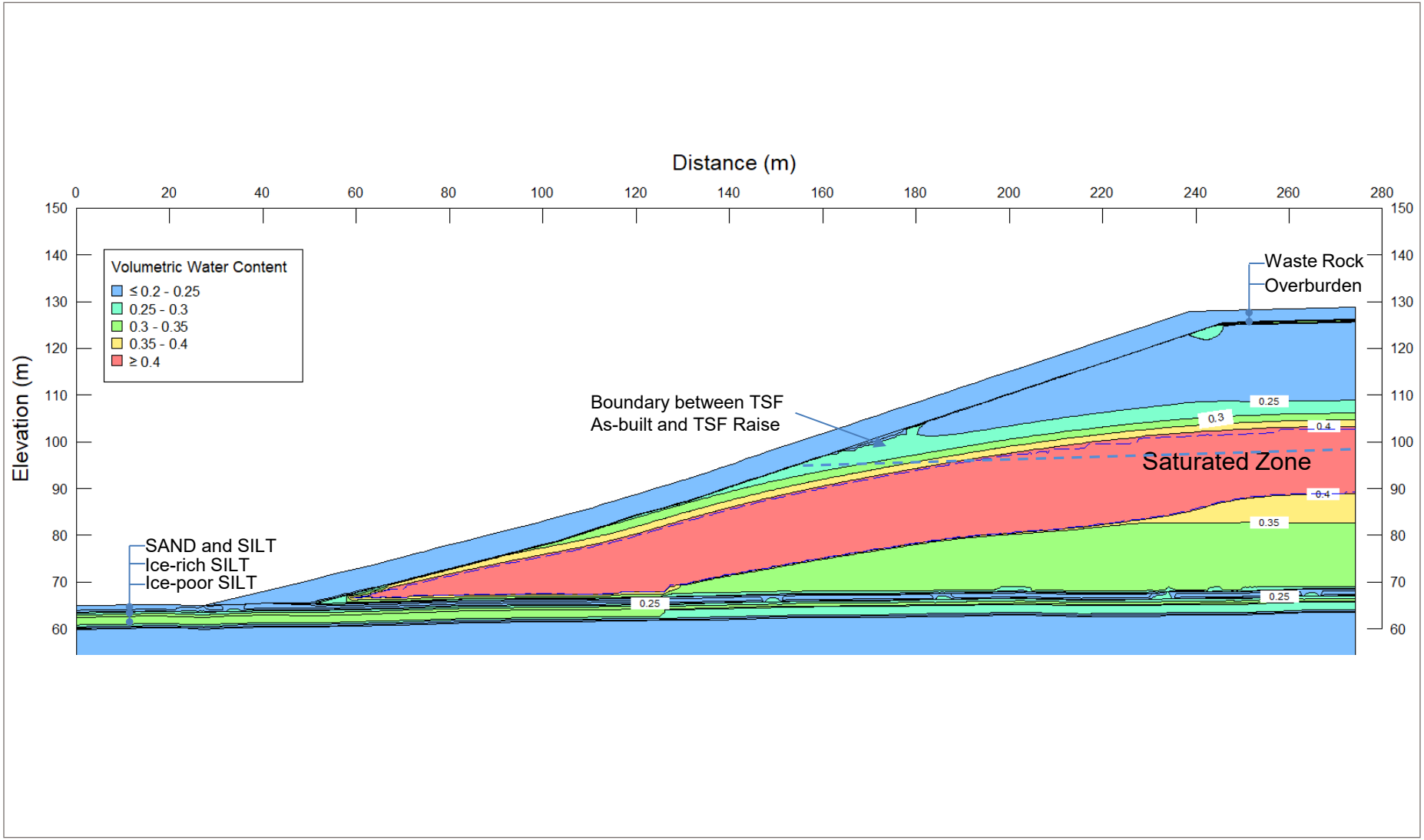
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Saturated Zone Distribution (Year 2079)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 27



LEGEND

------- Saturated Zone with Volumetric Water Content > 0.41

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

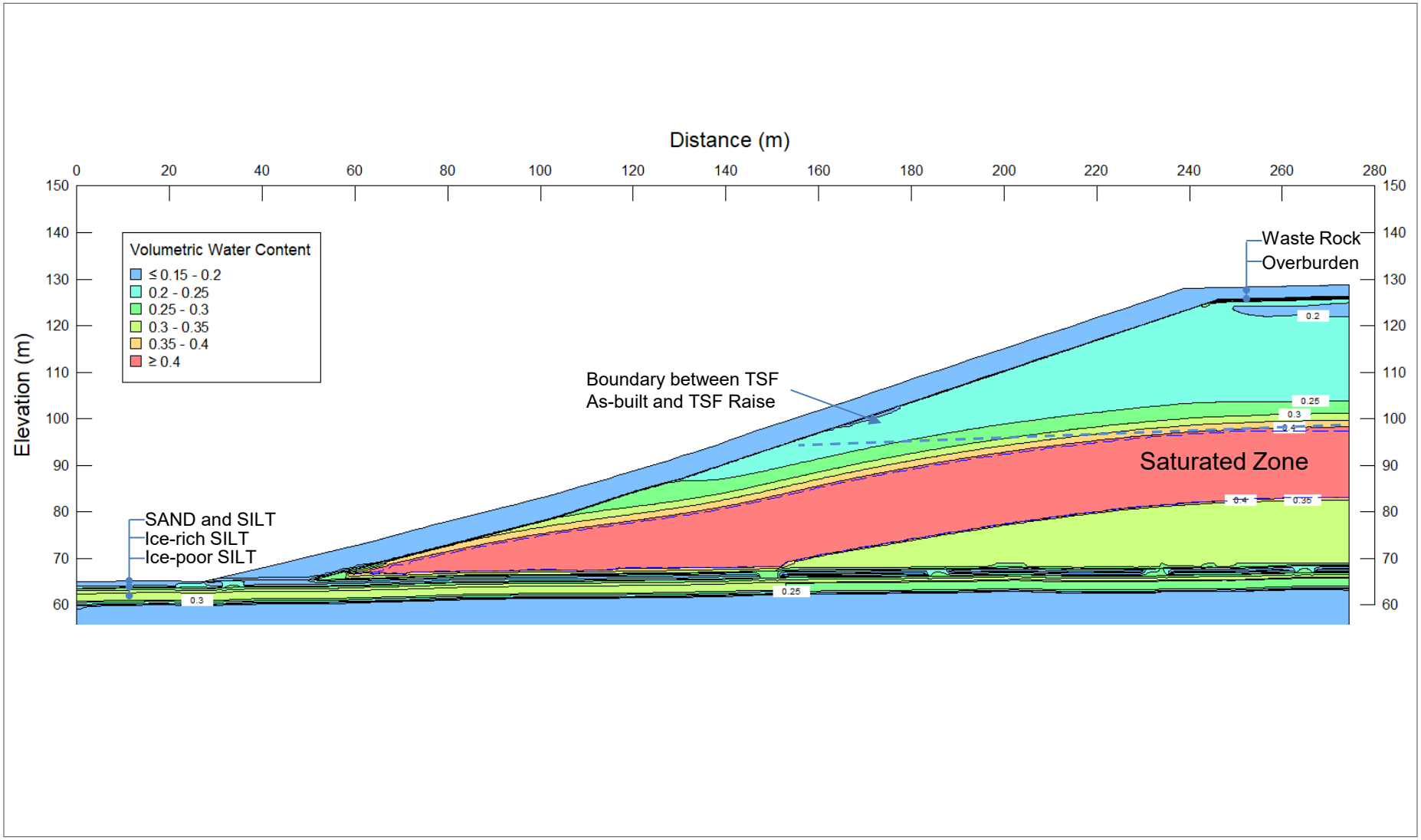
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Saturated Zone Distribution (Year 2099)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 28



LEGEND

------- Saturated Zone with Volumetric Water Content > 0.41

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

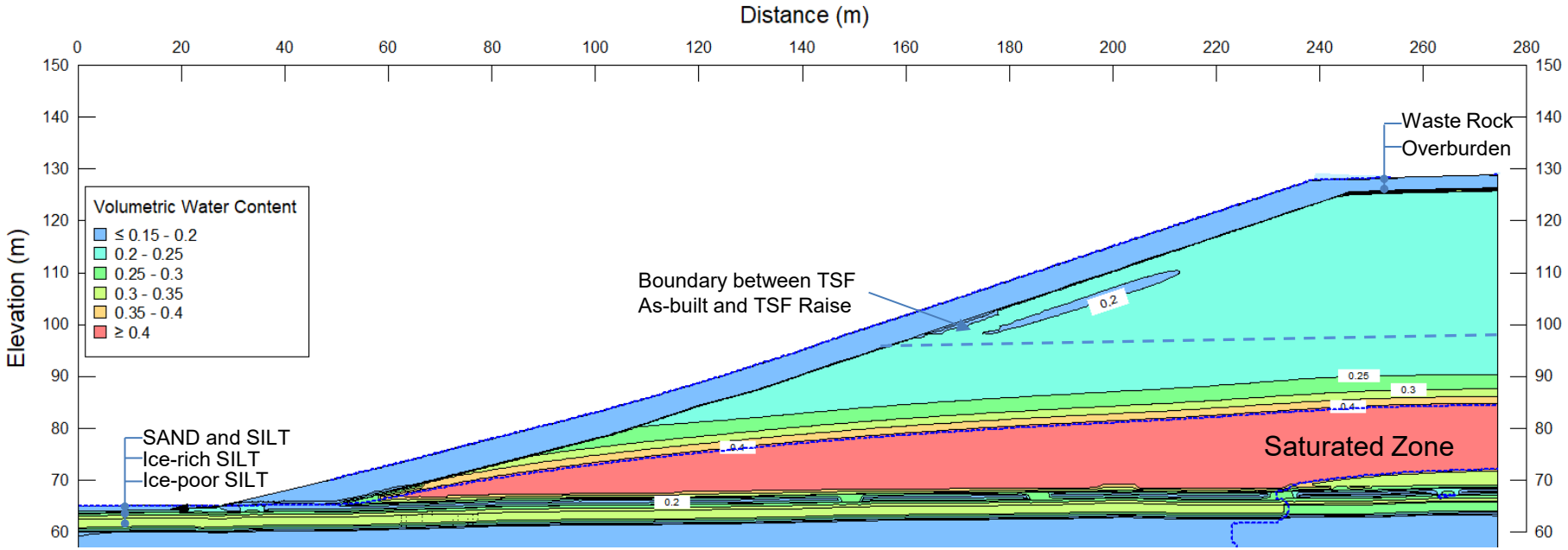
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Saturated Zone Distribution (Year 2125)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 29



LEGEND

Saturated Zone with Volumetric Water Content > 0.41

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

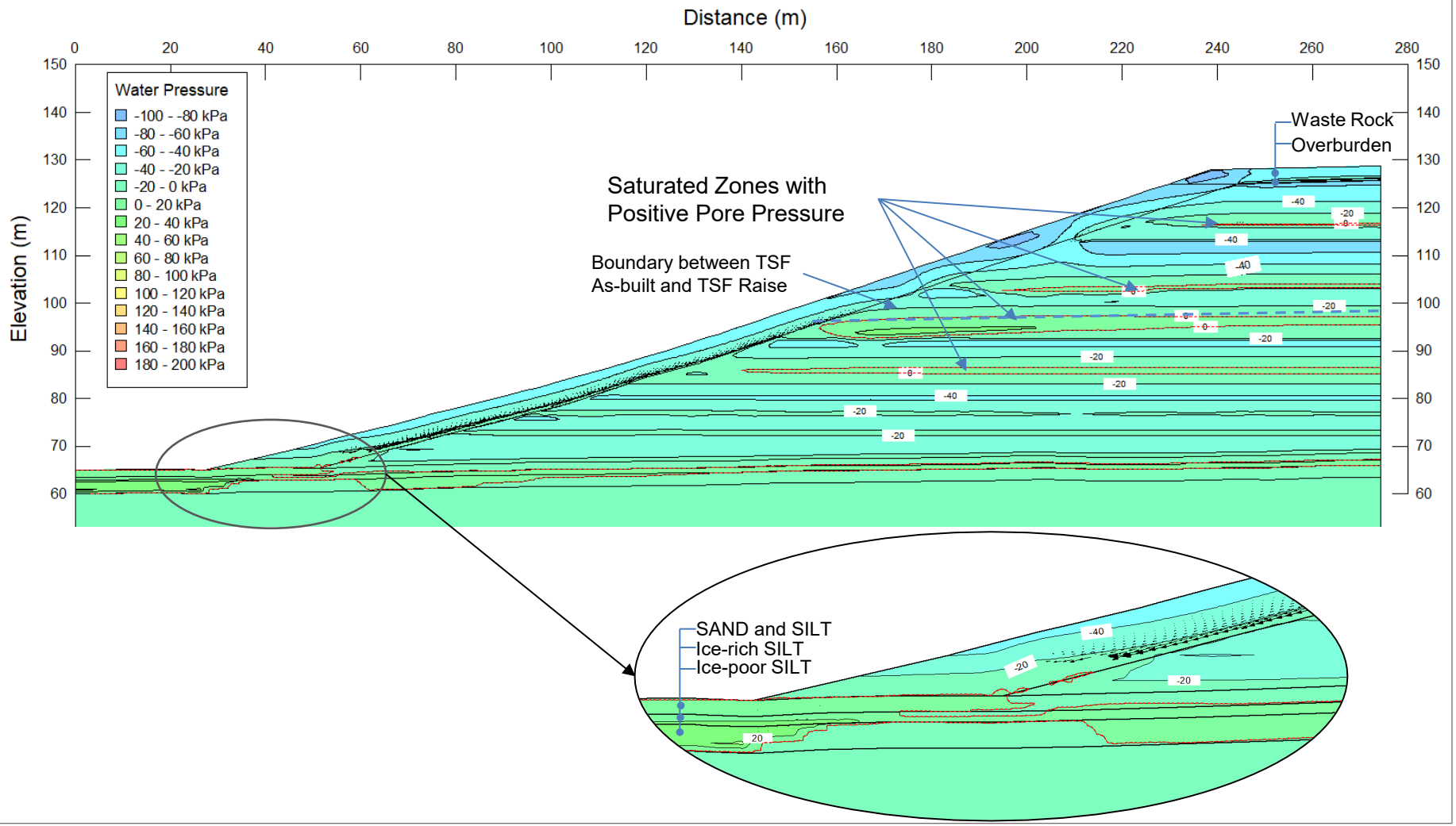
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Saturated Zone Distribution from the Extended 2D Model Run

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 30



LEGEND

Pore-water Pressure of 0 kPa

Water Flow Vector

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

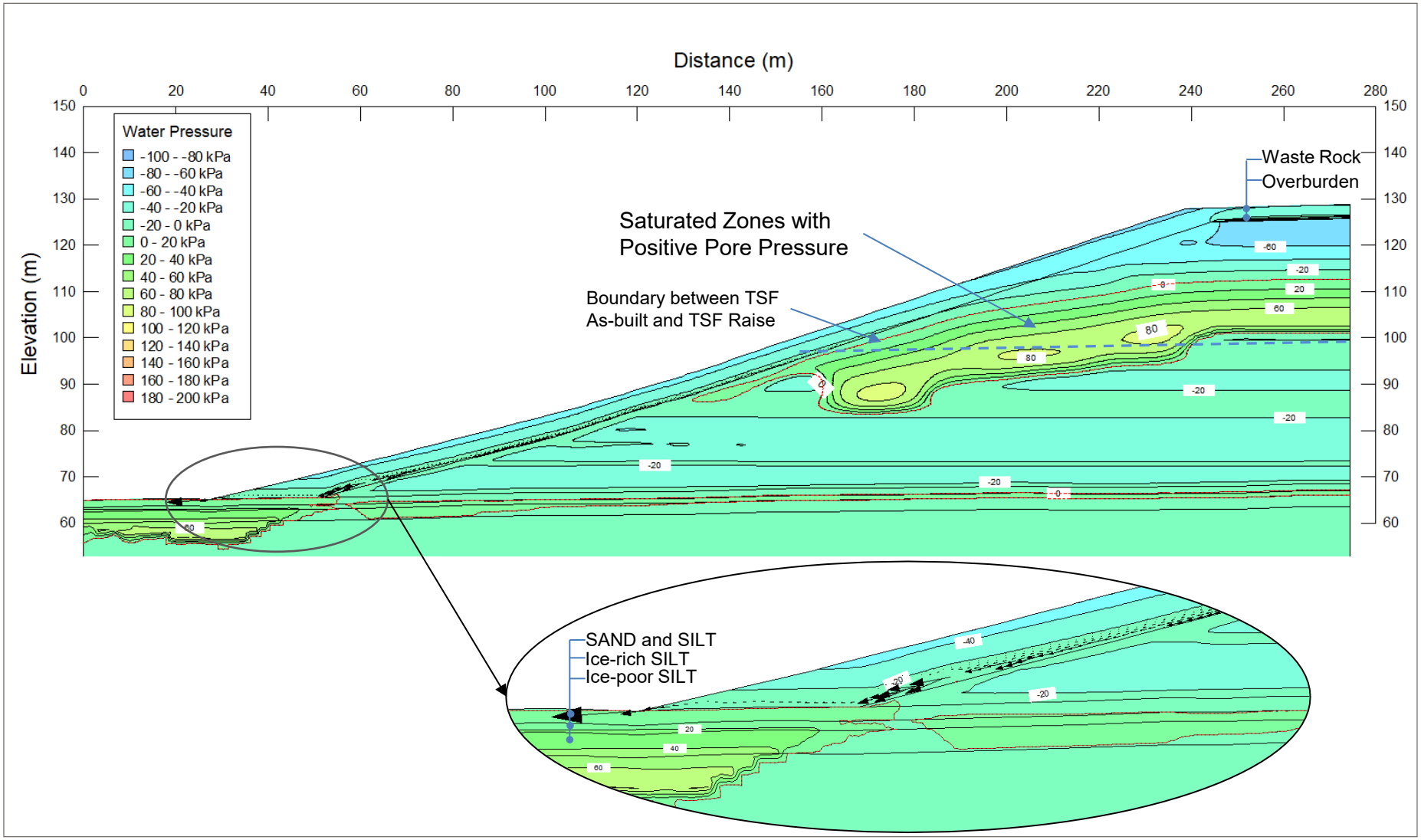
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Porewater Pressure Distribution (End of Construction)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 31



LEGEND

Pore-water Pressure of 0 kPa

Water Flow Vector

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

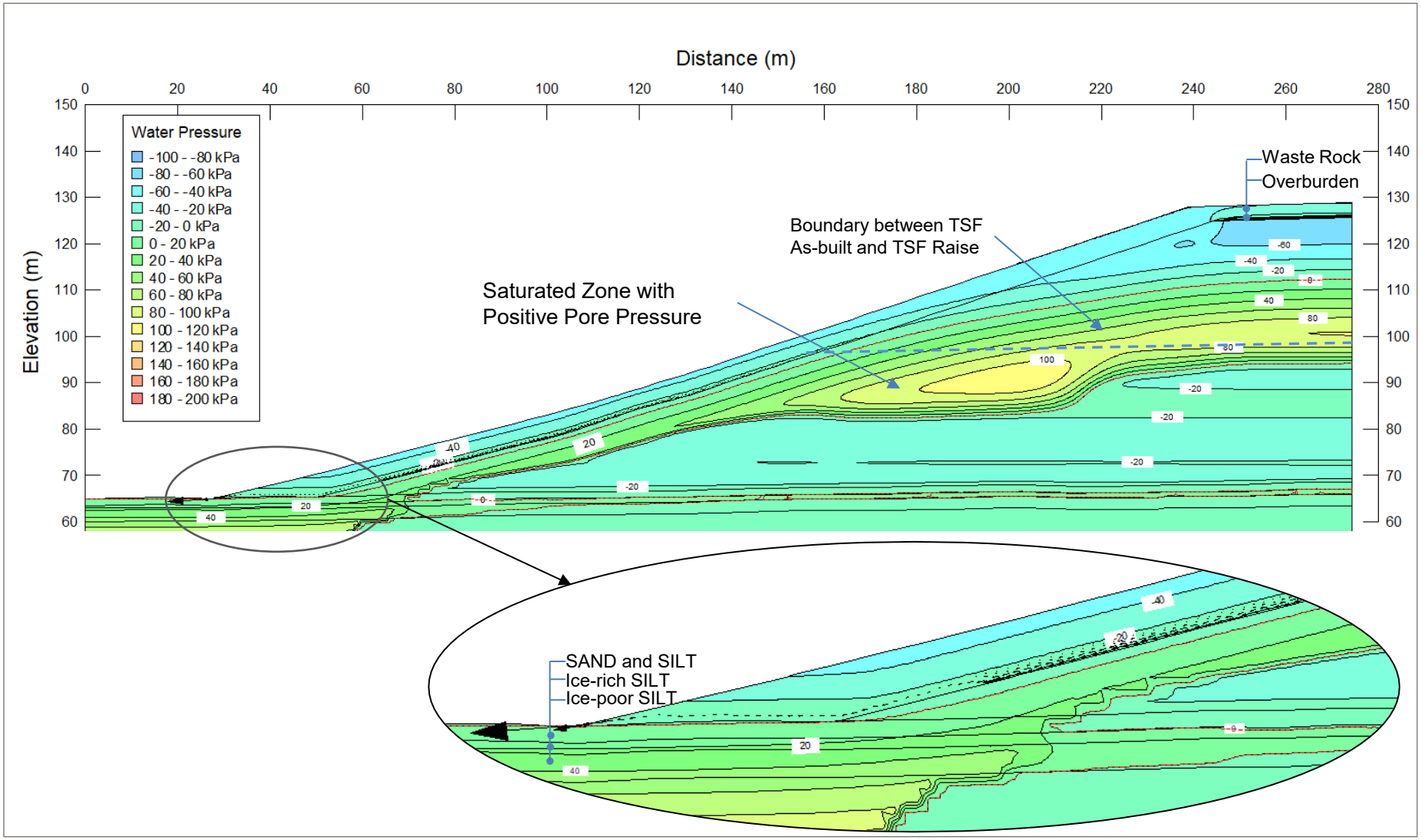
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Porewater Pressure Distribution (Year 2039)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 32



LEGEND

Pore-water Pressure of 0 kPa

Water Flow Vector

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

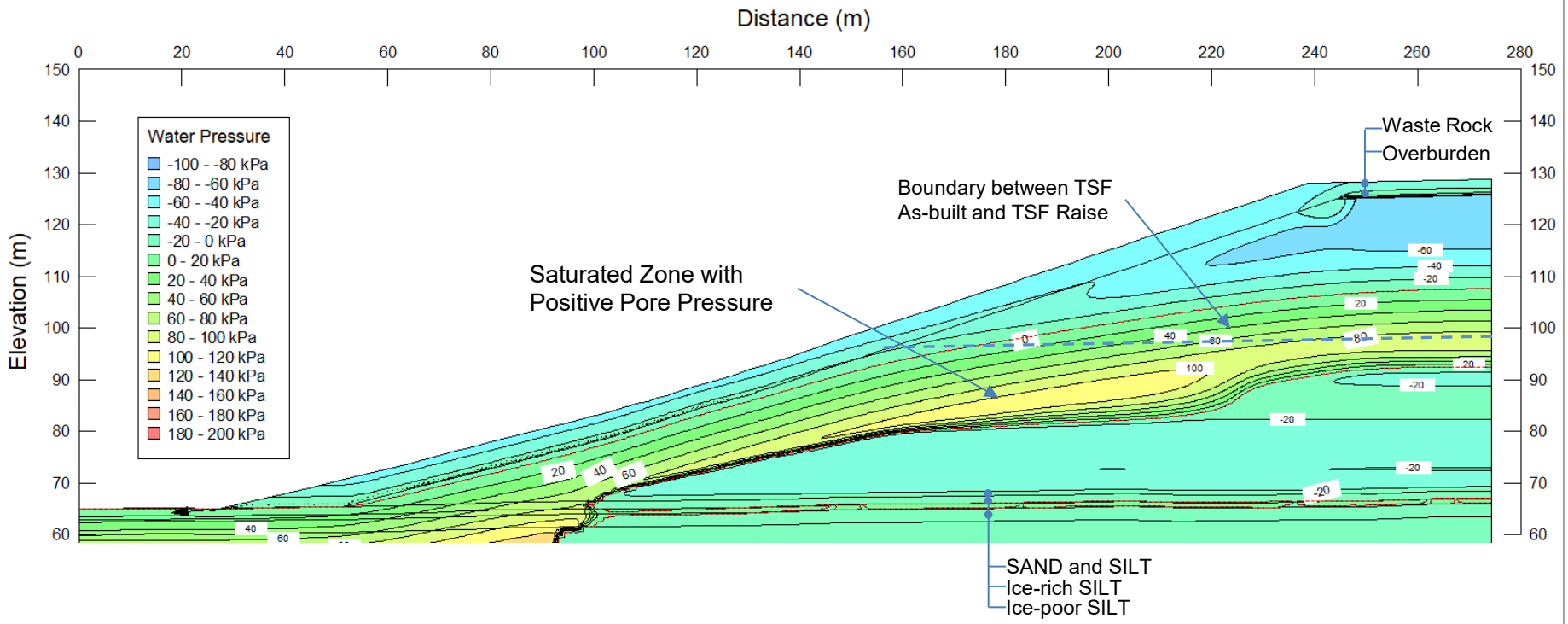
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Porewater Pressure Distribution (Year 2059)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 33



LEGEND

Pore-water Pressure of 0 kPa

Water Flow Vector

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

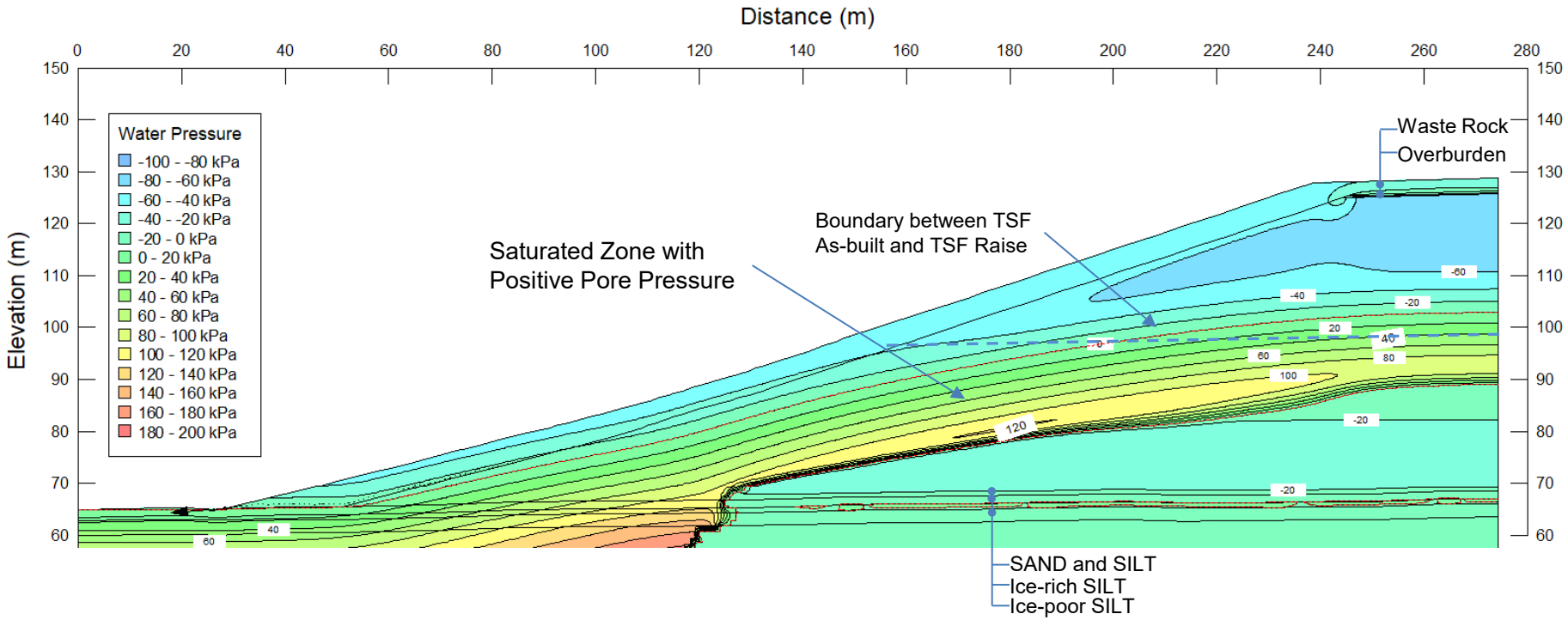
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Porewater Pressure Distribution (Year 2079)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 34



LEGEND

Pore-water Pressure of 0 kPa

Water Flow Vector

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

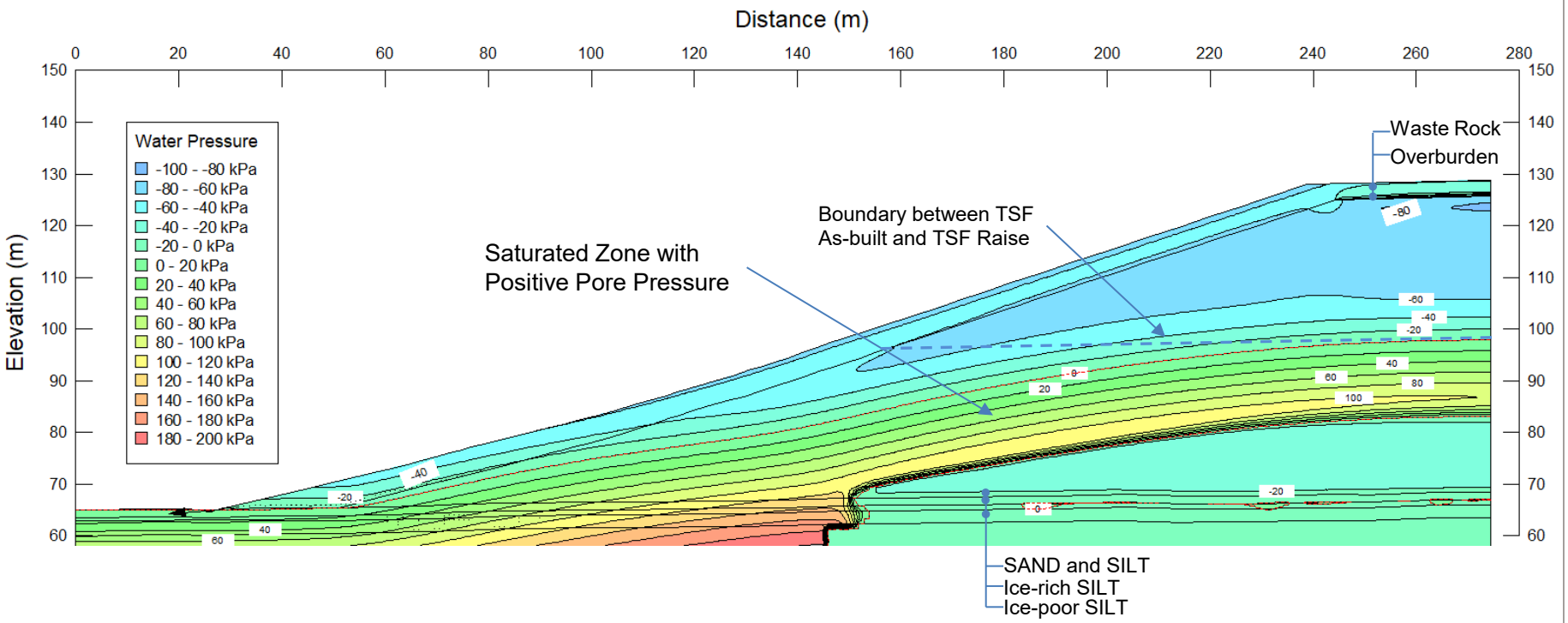
COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Porewater Pressure Distribution (Year 2099)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 35



LEGEND

Pore-water Pressure of 0 kPa

Water Flow Vector

NOTES

STATUS
ISSUED FOR USE

CLIENT
AGNICO EAGLE

TETRA TECH

COUPLED THERMAL AND SEEPAGE ANALYSES FOR TSF DESIGN UPDATE, MELAIDINE GOLD MINE, NU

Predicted Porewater Pressure Distribution (Year 2125)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 36

APPENDIX A

TETRA TECH'S LIMITATIONS ON USE OF THIS DOCUMENT

LIMITATIONS ON USE OF THIS DOCUMENT

GEOTECHNICAL

1.1 USE OF DOCUMENT AND OWNERSHIP

This document pertains to a specific site, a specific development, and a specific scope of work. The document may include plans, drawings, profiles and other supporting documents that collectively constitute the document (the "Professional Document").

The Professional Document is intended for the sole use of TETRA TECH's Client (the "Client") as specifically identified in the TETRA TECH Services Agreement or other Contractual Agreement entered into with the Client (either of which is termed the "Contract" herein). TETRA TECH does not accept any responsibility for the accuracy of any of the data, analyses, recommendations or other contents of the Professional Document when it is used or relied upon by any party other than the Client, unless authorized in writing by TETRA TECH.

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Where TETRA TECH submits electronic file and/or hard copy versions of the Professional Document or any drawings or other project-related documents and deliverables (collectively termed TETRA TECH's "Instruments of Professional Service"), only the signed and/or sealed versions shall be considered final. The original signed and/or sealed electronic file and/or hard copy version archived by TETRA TECH shall be deemed to be the original. TETRA TECH will archive a protected digital copy of the original signed and/or sealed version for a period of 10 years.

Both electronic file and/or hard copy versions of TETRA TECH's Instruments of Professional Service shall not, under any circumstances, be altered by any party except TETRA TECH. TETRA TECH's Instruments of Professional Service will be used only and exactly as submitted by TETRA TECH.

Electronic files submitted by TETRA TECH have been prepared and submitted using specific software and hardware systems. TETRA TECH makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

1.3 STANDARD OF CARE

Services performed by TETRA TECH for the Professional Document have been conducted in accordance with the Contract, in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Professional judgment has been applied in developing the conclusions and/or recommendations provided in this Professional Document. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of the Professional Document.

If any error or omission is detected by the Client or an Authorized Party, the error or omission must be immediately brought to the attention of TETRA TECH.

1.4 DISCLOSURE OF INFORMATION BY CLIENT

The Client acknowledges that it has fully cooperated with TETRA TECH with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The Client further acknowledges that in order for TETRA TECH to properly provide the services contracted for in the Contract, TETRA TECH has relied upon the Client with respect to both the full disclosure and accuracy of any such information.

1.5 INFORMATION PROVIDED TO TETRA TECH BY OTHERS

During the performance of the work and the preparation of this Professional Document, TETRA TECH may have relied on information provided by third parties other than the Client.

While TETRA TECH endeavours to verify the accuracy of such information, TETRA TECH accepts no responsibility for the accuracy or the reliability of such information even where inaccurate or unreliable information impacts any recommendations, design or other deliverables and causes the Client or an Authorized Party loss or damage.

1.6 GENERAL LIMITATIONS OF DOCUMENT

This Professional Document is based solely on the conditions presented and the data available to TETRA TECH at the time the data were collected in the field or gathered from available databases.

The Client, and any Authorized Party, acknowledges that the Professional Document is based on limited data and that the conclusions, opinions, and recommendations contained in the Professional Document are the result of the application of professional judgment to such limited data.

The Professional Document is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site conditions present, or variation in assumed conditions which might form the basis of design or recommendations as outlined in this document, at or on the development proposed as of the date of the Professional Document requires a supplementary exploration, investigation, and assessment.

TETRA TECH is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the Client.

1.7 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, TETRA TECH has not been retained to explore, address or consider and has not explored, addressed or considered any environmental or regulatory issues associated with development on the subject site.

1.8 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

Classification and identification of soils and rocks are based upon commonly accepted systems, methods and standards employed in professional geotechnical practice. This report contains descriptions of the systems and methods used. Where deviations from the system or method prevail, they are specifically mentioned.

Classification and identification of geological units are judgmental in nature as to both type and condition. TETRA TECH does not warrant conditions represented herein as exact, but infers accuracy only to the extent that is common in practice.

Where subsurface conditions encountered during development are different from those described in this report, qualified geotechnical personnel should revisit the site and review recommendations in light of the actual conditions encountered.

1.9 LOGS OF TESTHOLES

The testhole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

1.10 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from logs of test holes and/or soil/rock exposures. Stratigraphy is known only at the locations of the test hole or exposure. Actual geology and stratigraphy between test holes and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historical environment. TETRA TECH does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional exploration and review may be necessary.

1.11 PROTECTION OF EXPOSED GROUND

Excavation and construction operations expose geological materials to climatic elements (freeze/thaw, wet/dry) and/or mechanical disturbance which can cause severe deterioration. Unless otherwise specifically indicated in this report, the walls and floors of excavations must be protected from the elements, particularly moisture, desiccation, frost action and construction traffic.

1.12 SUPPORT OF ADJACENT GROUND AND STRUCTURES

Unless otherwise specifically advised, support of ground and structures adjacent to the anticipated construction and preservation of adjacent ground and structures from the adverse impact of construction activity is required.

1.13 INFLUENCE OF CONSTRUCTION ACTIVITY

Construction activity can impact structural performance of adjacent buildings and other installations. The influence of all anticipated construction activities should be considered by the contractor, owner, architect and prime engineer in consultation with a geotechnical engineer when the final design and construction techniques, and construction sequence are known.

1.14 OBSERVATIONS DURING CONSTRUCTION

Because of the nature of geological deposits, the judgmental nature of geotechnical engineering, and the potential of adverse circumstances arising from construction activity, observations during site preparation, excavation and construction should be carried out by a geotechnical engineer. These observations may then serve as the basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein.

1.15 DRAINAGE SYSTEMS

Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function. Where temporary or permanent drainage systems are installed within or around a structure, these systems must protect the structure from loss of ground due to mechanisms such as internal erosion and must be designed so as to assure continued satisfactory performance of the drains. Specific design details regarding the geotechnical aspects of such systems (e.g. bedding material, surrounding soil, soil cover, geotextile type) should be reviewed by the geotechnical engineer to confirm the performance of the system is consistent with the conditions used in the geotechnical design.

1.16 DESIGN PARAMETERS

Bearing capacities for Limit States or Allowable Stress Design, strength/stiffness properties and similar geotechnical design parameters quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition used in this report. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions considered in this report in fact exist at the site.

1.17 SAMPLES

TETRA TECH will retain all soil and rock samples for 30 days after this report is issued. Further storage or transfer of samples can be made at the Client's expense upon written request, otherwise samples will be discarded.

1.18 APPLICABLE CODES, STANDARDS, GUIDELINES & BEST PRACTICE

This document has been prepared based on the applicable codes, standards, guidelines or best practice as identified in the report. Some mandated codes, standards and guidelines (such as ASTM, AASHTO Bridge Design/Construction Codes, Canadian Highway Bridge Design Code, National/Provincial Building Codes) are routinely updated and corrections made. TETRA TECH cannot predict nor be held liable for any such future changes, amendments, errors or omissions in these documents that may have a bearing on the assessment, design or analyses included in this report.

APPENDIX D

LONG-TERM CREEP DEFORMATION ANALYSES MEMO

TETRA TECH

TECHNICAL MEMO

ISSUED FOR USE

To:	Justin Bieber, Agnico Eagle Marielle Limoges, Agnico Eagle	**Date:**	April 2, 2026
c:	Jawad Haloui, Agnigo Eagle Nigel Goldup, P.Eng., Tetra Tech	**Memo No.:**	003
From:	Hongwei Xia, P.Eng., Tetra Tech Fai Ndofor, P.Geo., Tetra Tech	**File:**	704-ENG.EARC03140-34
Subject:	Long-term Creep Deformation Analyses for Tailings Storage Facility (TSF) Design Update (Raise and Extension), Meliadine Gold Mine, Nunavut, Revision 01 Agnico Eagle Document Number: 65-694-230-MEM-004		

1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) was retained by Agnico Eagle Mines Limited (Agnico Eagle) to undertake a detailed engineering design update for the Tailings Storage Facility (TSF) at the Meliadine Gold Mine (Meliadine Mine), Nunavut. The scope of the TSF design update includes raising the existing TSF and extending it towards the northwest.

To support the design update, long-term creep deformation analyses of the TSF were performed using geotechnical data from previous drilling and testpit programs, along with results from coupled thermal and seepage analyses. The analyses assessed the potential long-term deformation of the TSF due to creep of ice-rich soils present in the TSF foundation.

This technical memorandum summarizes the analysis methodology, key input parameters, adopted assumptions, proposed design acceptance criteria, results of the creep deformation analyses, and proposed mitigation measures to meet the long-term performance objectives. It will be included as an appendix to the TSF design update report and should be read in conjunction with the Design Basis Memorandum (DBM) (Tetra Tech 2026a), the technical memos for the coupled thermal and seepage analyses (Tetra Tech 2026b), and the slope stability assessment (Tetra Tech 2026c).

2.0 SITE CONDITIONS AND CHARACTERIZATION

The Meliadine Mine site is located within the Southern Arctic Climatic Region, with monthly mean air temperature typically above 0°C from June to September and below 0°C from October to May. The mean annual temperature for the period of record, from 1994 to 2023, was -9.8°C, based on measured air temperatures at Rankin Inlet (Station 2303401). The annual total precipitation at the Meliadine Mine under mean conditions is 394 mm/year, with approximately half as snow and half as rainfall (Tetra Tech 2021a).

The dominant terrain in the Meliadine Mine area consists of glacial landforms, including drumlins (glacial till), eskers (gravel and sand), and lakes. The surveyed lake surface elevations in the Meliadine Mine area range from about 51 meters above sea level (masl) at Meliadine Lake to about 74 masl for local small, perched lakes. Most of the perched lakes at the Meliadine Mine site are relatively shallow (less than 2 m water depth). Late winter ice thicknesses on freshwater lakes range from 1.0 m to 2.3 m, with an average thickness of 1.7 m.

The Meliadine Mine site is in a zone of continuous permafrost with permafrost depths between 285 m and 430 m based on ground temperature data from thermistors installed near the Tiriganiaq, FZone, and Discovery deposits

Tetra Tech Canada Inc.
14940 - 123 Avenue
Edmonton, AB T5V 1B4 CANADA
Tel 780.451.2121 Fax 780.454.5688

(WSP 2024). The typical permafrost ground temperatures at the depths of zero annual amplitude (typically at depths below 18 m) are in the range of -5.9°C to -7.0°C in the areas away from lakes and streams. The geothermal gradient ranges from 0.015°C/m to 0.02°C/m (WSP 2024). The measured ground temperature data indicate that the active layer ranges from 1.0 m to 3.0 m in areas of shallow soils and areas away from the influence of lakes.

The Meliadine Mine site is in an area of low seismic risk and is classified as “Class C” based on ground conditions. The Peak Ground Acceleration (PGA) for a reference “Class C” site under various Annual Exceedance Probability (AEP) was estimated using the 2020 National Building Code of Canada Seismic Hazard Tool. The estimated PGA is 0.0285 g for a 5% in 50-year probability of exceedance (0.001 per annum or 1 in 1,000 year return) and 0.0498 g for a 2% in 50-year probability of exceedance (0.000404 per annum or 1 in 2,475 year return) for the Meliadine Mine site.

3.0 SUBSURFACE CONDITIONS

Several geotechnical drilling programs, totalling 45 boreholes drilled, were conducted to collect subsurface condition information within the footprint of the existing TSF and extension. Excess ice was observed in most boreholes at various depths, with ice-rich soil thickness ranging from 0.15 m to 0.4 m, averaging approximately 0.26 m. Based on the borehole logs, the soil stratigraphy beneath the existing TSF and extension area is generally consistent and consists of a thin layer of organic material overlying SAND or SILT[1], ice-rich SILT, gravelly SILT and SAND, and cobbles with traces of clay. The thickness of the overburden within the TSF footprint ranges from 0.13 m to 8.5 m, with an average of approximately 4.5 m.

Two testpit programs, with 20 testpits excavated, were conducted in August and September of 2025 to assess the presence and distribution of ice or ice-rich soils in the TSF foundation. Ice or ice-rich soils were identified in 17 of the 20 testpits, with thickness ranging from 0.3 m to 0.8 m, and an average of approximately 0.45 m.

A terrain and permafrost mapping study conducted within the existing TSF and its extension area indicates that permafrost soils with more than 20% excess ice content by volume occupy approximately 44% of the TSF footprint. Further details on the findings from the geotechnical drilling programs, testpit programs, and the terrain and permafrost mapping study are documented in Section 3.3 of the DBM (Tetra Tech 2026a).

4.0 CREEP ANALYSES METHODOLOGY AND MODEL

4.1 Creep Deformation

Frozen ice-rich soils and or ice behave as visco-plastic materials under loading. Several types of deformation may occur, including instantaneous elastic and plastic deformation, consolidation, and time-dependent deformation (creep). The instantaneous elastic and plastic deformations are usually very small compared to those induced by creep. The creep behaviour of frozen ice-rich soils or ice depends strongly on the soil temperature, pore water

[1] Where applicable, the soil description has been based on the following classification system:
Principal soil constituent shall be capitalized in the soil description. The soil constituents are described in the following manner and are listed in decreasing order of significance:
- >35% “and” (soil constituent in capital letters, e.g., …and SAND) (Note that the use of the qualifier “and” is not to be applied to SILT/CLAY Principal constituents, i.e., SILT and CLAY)
- 21% to 35% “y – adjective” (e.g., silty, clayey)
- 10% to 20% “some” (soil constituent, e.g. some sand)
- >0 to 10% “trace” (soil constituent, e.g. trace gravel)

“occasional” use for noting presence of isolated occurrences

salinity, ice content, magnitude of the load, loading rates, and boundary conditions. The creep behaviour of a frozen soil or ice under loading is comprised of three distinct states, as shown in Figure 1, including:

- A primary creep state in which the strain rate decreases with time;
- A secondary creep state in which the strain rate remains constant with time; and
- A tertiary creep state in which the strain rate increases with time and eventually leads to failure.

At stress levels below the failure stress of the frozen soils, the secondary creep theoretically continues indefinitely, provided that the accumulated strain does not reach the failure strain of the material. Since the primary creep portion generally occurs rapidly in ice-rich soils and contributes a small portion (less than 5%) of total deformation, it is generally ignored for design purposes.

4.2 Creep Deformation Criteria

The stresses imposed by staged tailings placement and progressive increases in stack height can induce secondary creep within the ice-rich SILT foundation layer. This time-dependent behaviour can lead to gradual settlement, lateral spreading, and shear strain accumulation over the operational and closure periods. Therefore, deformation control becomes a serviceability-driven design requirement rather than relying solely on factor of safety against slope instability. As no formal technical guidelines defining deformation acceptance criteria are available, it is necessary to establish performance-based acceptance thresholds to limit long-term deformations and preserve the structural integrity of the TSF.

For the TSF design update, a normalized displacement criterion ($\Delta H/H$, $\Delta V/H$) of 1% over 100 years was adopted, where ΔH or ΔV represents the horizontal or vertical displacement, respectively, and H is the maximum TSF height.

For the TSF at the Meliadine Mine, with a maximum height of approximately 50 m under the proposed design geometry, this corresponds to an allowable horizontal or vertical displacement of approximately 0.5 m over 100 years. This limit is intended to maintain global geometry, crest alignment, and surface drainage gradients within acceptable tolerances. In addition, a long-term creep rate of 5 mm/year over 0.5 m thick ice-rich SILT layer was applied to assess time-dependent deformation trends and confirm that predicted movements remain gradual and operationally manageable.

In addition to displacement limits, strain-based criteria were also considered to assess foundation performance. Creep testing on the frozen soil samples collected at the Meliadine Mine was attempted; however, the results were not considered reliable due to difficulties in obtaining high quality samples and challenges associated with transporting samples to the laboratory. Therefore, strain criteria were established based on published literature and some relevant northern mine case histories.

- Sego and Morgenstern (1983) conducted constant strain-rate experiments on polycrystalline ice and observed that at tested strain rates (i.e., less than 8.3 $x10^{-5}s^{-1}$), the ice did not experience brittle failure or deform into tertiary creep to strains of up to 15%. These findings indicate that ice undergoes ductile deformation at low strain rates, even up to 15% axial strain.
- Zhu and David (1986) conducted a series of uniaxial constant-stress and constant-strain-rate compression tests on remolded, saturated, frozen specimens of Fairbanks silt under various conditions (temperatures ranging from -0.5°C to -10.0°C and densities ranging from 1,080 kg/cm^3 to 1,400 kg/cm^3). The derived shear strain rates for tests at stress levels ranging from 760 kPa to 1,400 kPa and at a testing temperature of -2.0°C were typically in the order of $1.0x10^{-7}$ s^{-1} to $1.0x10^{-3}s^{-1}$ prior to the onset of tertiary creep.

- Berggren (1983) conducted constant-stress tests on Svea clay (a saline marine clay from Svalbard, Norway). Test results showed that the frozen saline clay undergoes ductile deformation at low strain rates (less than 10^{-5} s^{-1}), even up to 20% to 30% strain.
- EBA Engineering Consultants Ltd. conducted a series of uniaxial constant-stress and constant-strain-rate compression tests on ice-rich SILT samples collected from the Diavik Diamond Mine to support the design of the Processed Kimberlite Containment Facility. Constant-stress tests were conducted at applied stresses of 200 kPa, 400 kPa, and 750 kPa at approximately -2.0°C. Measured axial strain ranged from 5% to 31% while the samples remained in the secondary creep stage (NISHI-KHON/SNC-LAVALIN 2001).
- Areson and Springman (2005) conducted a series of triaxial constant-stress and constant-strain-rate tests on ice-rich permafrost samples. Measured axial strain ranged typically between 10% and 26% during the secondary creep stage.

Based on the literature review, design experience from other northern mine sites in the Northwest Territories and Nunavut, observed field performance of structures built on ice-rich foundations, and engineering judgment regarding the risk of brittle rupture, a shear strain rate of 1.0×10^{-6} s^{-1} and an allowable shear strain between 20% and 30% (corresponding to axial strain of 13% and 20% under no volume change condition) were selected as design thresholds for the creep assessment of the ice-rich SILT layer.

These combined displacement and shear strain design criteria provide a practical, performance-based framework for managing time-dependent creep deformation within the ice-rich SILT layer, while ensuring the long-term serviceability and structural integrity of the TSF.

4.3 Creep Deformation Analysis Methodology

The creep deformation analyses for the TSF design update were performed using FLAC 8.0 (Fast Lagrangian Analysis of Continua), a commercial two-dimensional explicit finite-difference program for engineering mechanics computations (Itasca, 2018). FLAC provides a wide range of capabilities and advanced constitutive models for evaluating complex geotechnical situations, including creep deformation modelling. Two-dimensional stress-deformation (plane-strain) analyses were performed to evaluate the creep behaviour of the ice-rich SILT layer in the TSF foundation.

Results of the coupled thermal and seepage analyses indicate that temperatures within the ice-rich SILT layer remain relatively stable during the first 50 years (2031 to 2081), followed by gradual warming in response to the long-term climate change and potential seepage flow in the tailings (Tetra Tech 2026b).

As the creep behaviour of frozen soils is strongly temperature-dependent, temperature-dependent creep parameters were assigned to the model element based on the predicted temperature distributions from the coupled thermal and seepage analyses. Two time intervals (i.e., 0 to 50 years and 50 to 100 years) were defined to represent the projected ground temperature changes associated with long-term climate change. The analytical procedure used in the modelling is as follows:

- **Initial State**: In situ stresses within the TSF and permafrost foundation were initialized using elastic parameters for all materials, with gravity activated. The model was brought to static equilibrium under self-weight conditions.
- **Elastic-plastic Phase**: Material models for the tailings, foundation soils, and cover materials (waste rock and overburden) were changed from elastic to Mohr-Coulomb elastic-plastic. The model was then brought back to equilibrium to establish the pre-creep stress state.

- **Creep Phase**: Temperature-dependent elastic and creep properties were assigned to the ice-rich SILT layer based on the predicted ground temperature distributions for each time interval from the coupled thermal and seepage analyses. The displacement and velocity of each element were set to zero to ignore displacement and velocity generated during the elastic-plastic phase. The model was then advanced to simulate 100 years of creep deformation and compute associated stresses and displacements.

Roller boundaries were applied along the left and right model extents, allowing vertical movement while restraining horizontal displacement. A fixed boundary was applied at the base of the model to prevent both vertical and horizontal movement.

4.4 Constitutive Model and Input Parameters

4.4.1 Elastic-plastic Model and Input Parameters

The ice-poor foundation soils, tailings, waste rock and overburden cover materials were modelled as elastic-plastic materials, using a Mohr-Coulomb constitutive model. The bedrock was assumed to be non-deformable.

Deformation parameters (elastic modulus) for SAND and SILT, ice-poor soils, and ice-rich SILT were estimated using empirical equations developed for freshwater frozen soils (Johnston 1981), with engineering judgment applied to account for reduced stiffness in saline frozen soils due to unfrozen water. Poisson's ratios were selected based on typical mean values for similar materials reported by Bowles (1982) and Johnston (1981).

For the tailings, waste rock and overburden cover materials, deformation parameters were estimated based on the in situ principal stresses within each soil layer and the following non-linear hyperbolic elastic equation proposed by Duncan et al. (1980), adopting recommended typical values for Rf, K, and n:

$$E_t = \left[1 - \frac{R_f \cdot (1 - sin\,\varphi) \cdot (\sigma_1' - \sigma_3')}{2c \cdot cos\,\varphi + 2 \cdot \sigma_3' \cdot sin\,\varphi}\right]^2 \cdot K \cdot Pa \cdot \left(\frac{\sigma_3'}{Pa}\right)^n$$

where:

E_t	=	tangent modulus;
R_f	=	failure ratio;
c	=	cohesion (kPa);
ϕ	=	angle of internal friction;
σ'	=	effective principal stress
Pa	=	atmospheric pressure = 101 kPa; and
K and n	=	experimentally determined empirical coefficients.

Shear strength parameters for the foundation soils (SAND and SILT, ice-poor soils) and tailings were estimated using available testing results at the Meliadine Mine, supplemented by a literature review, experience with similar materials, and engineering judgement. The long-term shear strength of the frozen ice-rich SILT was estimated using predicted temperatures from the coupled thermal and seepage analyses, the relationships presented by Weaver and Morgenstern (1981), and adjustments made to account for the porewater salinity conditions at the Meliadine Mine.

The shear strengths of the overburden cover material (friction angle of 28°) and the waste rock cover (friction angle of 42°) were selected based on Tetra Tech's experience with similar materials at the Meliadine Mine and other northern mine sites. Additional details and references supporting the selection of the shear strength parameters are provided in Section 6.3.4 of the DBM.

The material properties used for the elastic-plastic model in the creep deformation analyses are summarized in Table 1.

Table 1: Elastic and Shear Strength Properties

Material	Bulk Density (kg/m^3)	Elastic Modulus, (kPa)	Poisson Ratio (-)	Cohesion (kPa)	Friction Angle (°)
Ice-rich SILT	1,600	$1.0x10^6$	0.35/0.499[(a)]	60 to 130[(b)]	0
Ice-poor soils	2,000	$4.0x10^6$	0.3	0	35
SAND and SILT	1,800	$3.0x10^6$	0.3	0	31
Tailings[(c)]	1,900	$1.35x10^5$	0.35	0	34
Waste Rock	2,200	$4.0x10^4$	0.25	0	42
Overburden	1,700	$2.0x10^4$	0.3	0	28

[(a)]: No volume change assumed during creep.
[(b)]: Estimated based on predicted ground temperature distribution within the ice-rich SILT layer obtained from the coupled thermal and seepage analyses.
[(c)]: Tailings assumed in an unfrozen condition, dense, compacted.

4.4.2 Creep Deformation Model and Input Parameters

Several creep deformation models have been developed over the last six decades as a result of research on the creep of frozen soils (Andersland and Ladanyi 2004).

Norton-Bayley type power law models are widely used to model primary and secondary creep behaviour. These models account for the influence of soil characteristics, such as soil type, ice content, temperature, and salinity, as well as the stress level in the soil. Vyalov (1959) proposed a model to describe the creep behaviour of frozen soils using power-law relationships to represent the primary and secondary stages of creep under uniaxial compression.

Secondary creep is commonly described using a simple power law of the following form:

$$\dot{\varepsilon} = B \cdot \sigma^n$$

where:

$\dot{\varepsilon}$ = Strain rate (year $^{-1}$);

σ = Deviatoric stress (kPa); and

B, n, = Creep parameters which are a function of soil types, temperature, ice content, and salinity. ($B=kPa^{-n}$/year, n=unitless).

Application of the power-law creep model to a monitored slope was presented by Foriero (1988), demonstrating the practical implementation of power-law creep modelling in frozen ground engineering.

The creep properties are strongly dependent on soil type, salinity, temperature, and ice content. Ice-rich soils are commonly modelled as polycrystaline ice, as recommended by Morgenstern et al. (1980), given that the mechanical behavior of the ice-rich soils is largely governed by the ice matrix.

For the TSF creep deformation analyses at the Meliadine Mine, the creep properties of the ice-rich SILT were defined based on the predicted ground temperatures over time obtained from the coupled thermal and seepage analyses and a porewater salinity of 7 ppt. Additional details regarding the coupled thermal and seepage analyses are presented in Tetra Tech (2026b).

Table 2 summarizes the creep properties of the ice-rich SILT used in the power-law creep model.

Table 2: Creep Properties of ice-rich SILT

Material	Temperature (°C)	B* (kPa^{-n}/year)	n**	Elastic Modulus (kPa)
Ice-rich SILT	0 to -0.5 (thawed)	-	-	$1.0x10^5$
	-1.0	$1.8x10^{-7}$	3	
	-1.5	$1.0x10^{-7}$	3	
	-2.0	$6.0x10^{-6}$	3	$1.0x10^6$
	-2.5	$4.0x10^{-8}$	3	
	-3.0	$3.0x10^{-8}$	3	$2.0x10^6$

* Based on Morgenstern et al. (1980) and adjusted for soils with a salinity of 7 ppt.
** Based on Morgenstern et al. (1980).

4.5 Modelled Geometry and Soil Profiles

Two representative cross-sections (one for the TSF raise and one for the extension) were developed for the creep deformation analyses. Multiple preliminary geometry configurations (with different side slopes and crest elevations) were evaluated to support the selection of the preferred geometry for detailed design.

Based on the required design capacity, the results of the slope stability analyses, and space constraints on the TSF plateau, the following design geometries were selected:

TSF Raise:

- The side slope above the current as-built elevation: 3 Horizontal (H):1Vertical (V)
- Tailings crest elevation: 115 m
- Final top surface slope: 4%
- Waste rock cover thickness on the side slopes for the raise: 4.0 m
- Closure cover on the top surface: 0.5 m thick overburden till layer and 2.5 m thick waste rock layer

TSF Extension:

- Side slope configuration: 4H:1V below Elevation 100 m; 3H:1V above Elevation 100 m
- Tailings crest elevation: 115 m
- Final top surface slope: 4%
- Waste rock cover thickness on the side slopes: 4.0 m to 4.5 m
- Closure cover on the top surface: 0.5 m thick overburden till layer and 2.5 m thick waste rock layer

Typical cross-sections for the selected geometries are presented in Figure 2 (the TSF raise) and Figure 3 (the TSF extension), respectively.

Based on the subsurface conditions described in Section 3.0, a generalized foundation soil profile was adopted for the creep deformation analyses, as summarized in Table 3.

Table 3: Soil Profile used for Creep Deformation Analyses

Soil	Depth Range (m)
Sand and Silt	0 to 1.5
Ice-rich SILT	1.5 to 2.0
Ice-poor soils	2.0 to 4.5
Bedrock	Below 4.5

It should be noted that a continuous 0.5 m thick layer of ice-rich SILT beneath the TSF area was assumed in the analyses. However, findings from previous site investigations in the TSF area and a permafrost mapping study indicated that the ice-rich layer is likely discontinuous across the site and generally thinner than 0.5 m. Therefore, the assumption of a continuous 0.5 m thick ice-rich SILT layer, represents a reasonably conservative modelling approach for evaluating long-term creep deformation of the TSF.

4.6 Case Analyzed

Three representative cases were developed to evaluate the long-term creep deformation of the ice-rich SILT layer and to assess compliance with the adopted displacement and strain-based design criteria over the 100-year analysis period.

Case 1 represents the baseline configuration with the selected geometry and a continuous 0.5 m thick ice-rich SILT layer in the TSF foundation. As described in Section 4.3, temperatures within the ice-rich SILT layer remain relatively stable during the first 50 years (2031 to 2081), followed by gradual warming in response to long-term climate change. A portion of the ice-rich SILT in the TSF foundation (approximately 50 m from the toe of the TSF) is expected to be in thawing process from Year 2080 (Tetra Tech 2026b). The projected ground temperatures at the mid-depth of ice-rich SILT layer obtained from the coupled thermal and seepage analyses were adopted for Case 1. However, it is assumed that the thawing portion of the ice-rich SILT zone remains frozen at -1.0°C. Thaw consolidation would occur in the thawed zone, and creep of the consolidated SILT is expected to be negligible. As a result, the assumption regarding the ice-rich SILT temperature adopted in Case 1 likely provides an upper-bound estimation of the long-term creep deformation.

Case 2 adopts the same geometry and foundation conditions as Case 1 but assigns different ground temperatures to the portion of the ice-rich SILT layer that is expected to thaw. In this case, the affected zone is modelled as thawed SILT from Year 2080, with no secondary creep behaviour considered for the thawed material.

Case 3 assesses a scenario in which the ice-rich SILT layer is discontinuous across the Meliadine Mine site. In this case, a continuous ice-rich SILT layer is assumed to exist only within the TSF footprint, with no ice-rich SILT present outside of the TSF footprint. The ground temperatures assigned to the ice-rich SILT layer in Case 3 are consistent with those adopted in Case 2.

For each case, the predicted long-term horizontal and vertical crest displacements (ΔH and ΔV), normalized deformation ratios (ΔH/H and ΔV/H), shear strain rates, and cumulative shear strains within the ice-rich SILT layer were compared against the established performance thresholds described in Section 4.2. Where exceedances were identified, mitigation measures were developed to ensure long-term serviceability of the TSF after closure. The

proposed mitigation measures include the construction of a toe buttress and shear key along the toe of the existing TSF, as well as a toe buttress along the toe of the TSF extension with a shear key within the TSF extension footprint, where the ice-rich SILT layer is present.

5.0 CREEP DEFORMATION ANALYSIS RESULTS

Tables 4 and 5 summarize the predicted creep displacement, shear strain rate, and accumulated shear strain within the ice-rich SILT layer after 100 years for the proposed TSF raise and extension, respectively. Values highlighted in red indicate exceedance of the established design thresholds. Values highlighted in yellow indicate marginal exceedance of the established design thresholds. Values highlighted in green indicate compliance with the established design thresholds.

Representative results from the creep deformation analyses for the proposed TSF raise and extension are presented in Figures 4 through 19.

- Figures 4 to 7 present the horizontal, vertical, and total displacement, and maximum accumulated shear strain within the ice-rich SILT layer after 100 years for the TSF raise without mitigation (Case 1a).
- Figures 8 to 11 present the corresponding results for the TSF raise with mitigation (Case 1b).
- Figures 12 to 15 present the horizontal, vertical, and total displacement, and maximum accumulated shear strain within the ice-rich SILT layer after 100 years for the TSF extension without mitigation (Case 1a).
- Figures 16 to 19 present the corresponding results for the TSF extension with mitigation (Case 1b).

6.0 DISCUSSIONS AND RECOMMENDATIONS

The results presented in Tables 4 and 5 indicate that the baseline case without mitigation does not fully meet the adopted long-term serviceability design criteria. Although the slope stability assessment (Tetra Tech 2026c) shows that global stability can be maintained without mitigation, the predicted normalized displacement and localized shear strain accumulation exceed the 1% deformation threshold and the associated shear strain limits (20% to 30%) after the 100-year analysis period.

In contrast, the cases which incorporate the proposed mitigation measures (i.e., a toe buttress and shear key), demonstrate compliance with both the displacement-based and strain-based thresholds, with predicted creep rates and cumulated shear strains remaining below the acceptable limits. The ice-rich SILT layer below the TSF is expected to deform in a secondary creep state and, is expected to undergo ductile deformation in the long term based on the calculated shear strain rate.

Figures showing the distribution of horizontal displacement (Figures 4 and 12) and vertical displacement (Figures 5 and 13) indicate that the maximum horizontal displacement is expected to occur at mid-height on the side slope, while the maximum vertical displacement is expected to occur near the slope crest.

The proposed mitigation measures are intended to serve as a long-term performance management requirement rather than immediate operational changes. The proposed mitigation measures can be implemented in stages aligned with future construction and closure objectives. Therefore, the implementation of the proposed mitigation does not affect current short-term operations or the immediate functionality of the TSF.

The creep deformation analyses were conducted under the assumption that a continuous 0.5 m thick ice-rich SILT layer is present beneath the entire TSF footprint. This assumption is likely conservative based on the available site investigation data and the permafrost extent mapping.

To optimize the location and extents of the proposed mitigation measures and support informed decision-making regarding mitigation implementation, Tetra Tech recommends that additional geotechnical investigation programs be conducted to verify the design assumption. In addition to the investigation programs, an enhanced monitoring program is also recommended to validate field performance and manage uncertainty. Instrumentation may include settlement plates, inclinometers, thermistor strings, and satellite-based survey monitoring (e.g., InSAR).

Measured displacements and ground temperatures should be systematically compared with model predictions to assess performance against the design criteria. Monitoring data will also be used to calibrate and refine the creep model parameters to reduce uncertainty and improve confidence in long-term projections, and to support adaptive management. This integrated approach ensures that mitigation measures are implemented in stages and in a data-informed manner while maintaining uninterrupted short-term TSF operations.

7.0 LIMITATIONS OF MEMO

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8.0 CLOSURE

We trust this technical memo meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.

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704-ENG.EARC03140-34

Prepared by:
Hongwei Xia, Ph.D., P.Eng.
Principal Specialist/Senior Geotechnical Engineer,
Arctic Group
Direct Line: 587.460.3646
Hongwei.Xia@tetratech.com

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704-ENG.EARC03140-34
704-ENG.EARC03140-34
704-ENG.EARC03140-34

Reviewed by:
Fai Ndofor, M.Sc., P.Geo.
Principal Consultant, Arctic Group
Direct Line: 587.460.3486
Fai.Ndofor@tetratech.com

/jf/kla

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TABLES

Table 4 Result Summary of TSF Raise Creep Deformation Analyses (after 100 Years)
Table 5 Result Summary of TSF Extension Creep Deformation Analyses (after 100 Years)

Table 4: Result Summary of TSF Raise Creep Deformation Analyses (after 100 Years)

Case	Assumption	Note	Maximum Horizontal Displacement (m)	Maximum Vertical Displacement (m)	Normalized Horizontal Displacement, ΔH/H (%)	Normalized Vertical Displacement, ΔV/H (%)	Maximum Shear Strain Rate (sec^{-1})	Maximum Shear Strain in ice-rich SILT Layer (%)
1a	Continuous 0.5 m thick ice-rich SILT layer (frozen)	Tailings crest at 115 m, without mitigation	1.50	0.80	2.9%	1.5%	2.0E-06	120%
1b		Tailings crest at 115 m, with 15 m high toe buttress and shear key	0.45	0.25	0.9%	0.5%	8.0E-07	45%
2a	Continuous ice-rich SILT layer thawing with time	Tailings crest at 115 m, without mitigation (ice-rich thawing)	1.00	0.55	1.9%	1.1%	2.5E-07	110%
2b		Tailings crest at 115 m, with 15 m high toe buttress and shear key (ice-rich thawing)	0.22	0.11	0.4%	0.2%	4.0E-07	20%
3b	Discoutunous ice-rich SILT layer (thawing)	Tailings crest at 115 m, with 15 m high toe buttress and shear key (ice-rich thawing)	0.13	0.06	0.3%	0.1%	4.0E-07	16%

Table 5: Result Summary of TSF Extension Creep Deformation Analyses (after 100 Years)

Case	Assumption	Note	Maximum Horizontal Displacement (m)	Maximum Vertical Displacement (m)	Normalized Horizontal Displacement, ΔH/H (%)	Normalized Vertical Displacement, ΔV/H (%)	Maximum Shear Strain Rate (sec^{-1})	Maximum Shear Strain in ice-rich SILT Layer (%)	
								Zone front of Shear Key	Zone behind Shear Key
1a	Continuous 0.5 m thick ice-rich SILT layer (frozen)	Tailings crest at 115 m, without mitigation	1.10	0.60	2.1%	1.2%	1.7E-06	120%	
1b		Tailings crest at 115 m, with 5 m high toe buttress and shear key	0.10	0.04	0.2%	0.1%	4.0E-07	14%	8%
2a	Continuous ice-rich SILT layer thawing with time	Tailings crest at 115 m, without mitigation (ice-rich thawing)	0.90	0.45	1.7%	0.9%	5.5E-07	95%	
2b		Tailings crest at 115 m, with 5 m high toe buttress and shear key (ice-rich thawing)	0.10	0.03	0.2%	0.1%	6.5E-07	12%	5%
3b	Discoutunous ice-rich SILT layer (thawing)	Tailings crest at 115 m, with 5 m high toe buttress and shear key (ice-rich thawing)	0.09	0.03	0.2%	0.1%	6.5E-07	12%	5%

FIGURES

Figure 1 Typical Creep Curve for Frozen Soil (after Ladanyi, 1972)
Figure 2 Typical Cross-section Analyzed for TSF Raise Design
Figure 3 Typical Cross-section Analyzed for TSF Extension Design
Figure 4 Contours of Horizontal Displacement (m) 100 years for Case 1a, TSF Raise
Figure 5 Contours of Vertical Displacement (m) after 100 years for Case 1a, TSF Raise
Figure 6 Total Displacement (m) after 100 Years for Case 1a, TSF Raise
Figure 7 Maximum Shear Strain within the ice-rich SILT layer after 100 years for Case 1a, TSF Raise
Figure 8 Contours of Horizontal Displacement (m) after 100 years for Case 1b, TSF Raise
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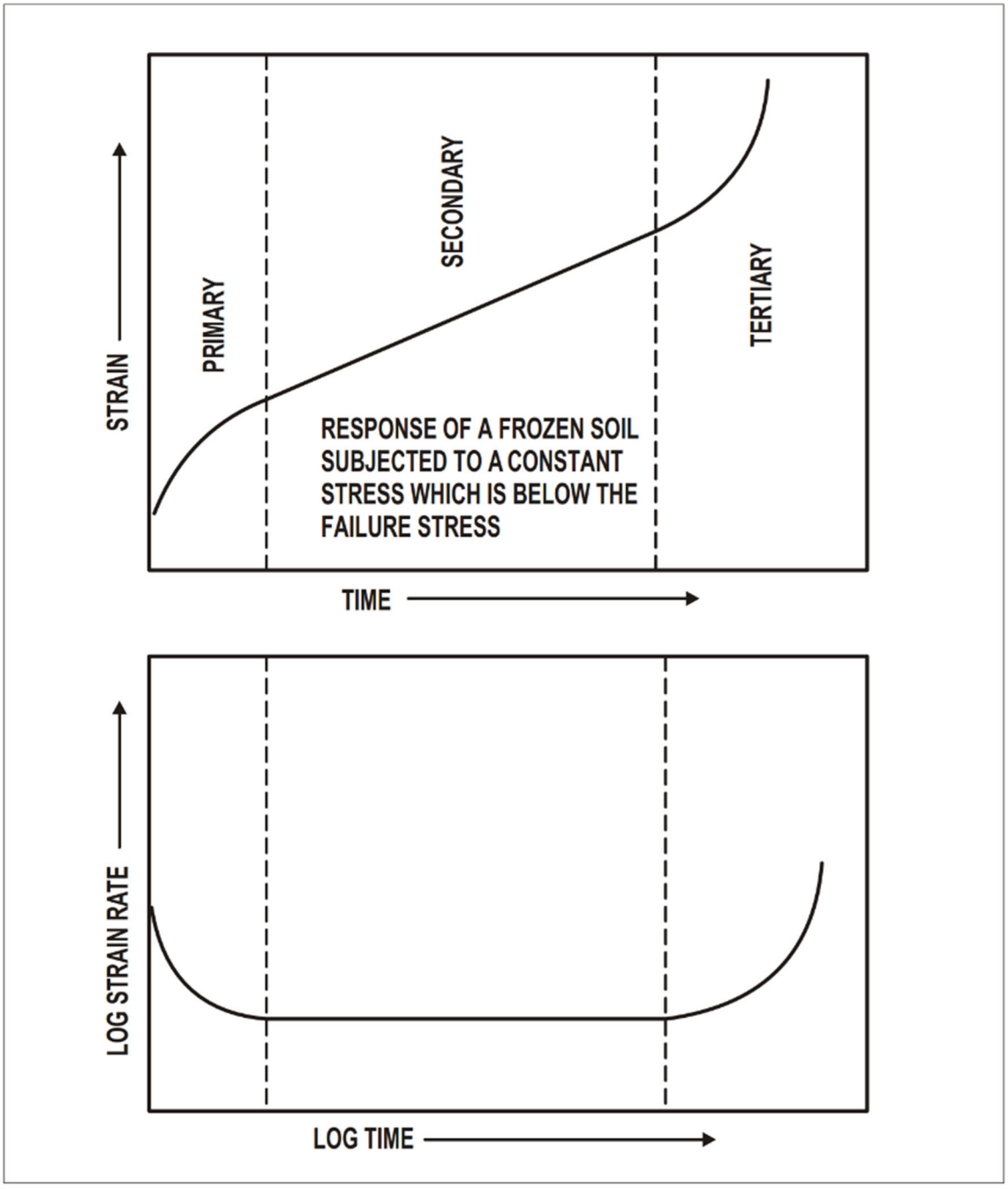
Figure 17 Contours of Vertical Displacement (m) after 100 Years for Case 1b, TSF Extension
Figure 18 Total Displacement (m) after 100 years for Case 1b, TSF Extension
Figure 19 Maximum Shear Strain within the ice-rich SILT Layer after 100 years for Case 1b, TSF Extension



LEGEND

NOTES

(After Ladanyi, 1972)

STATUS

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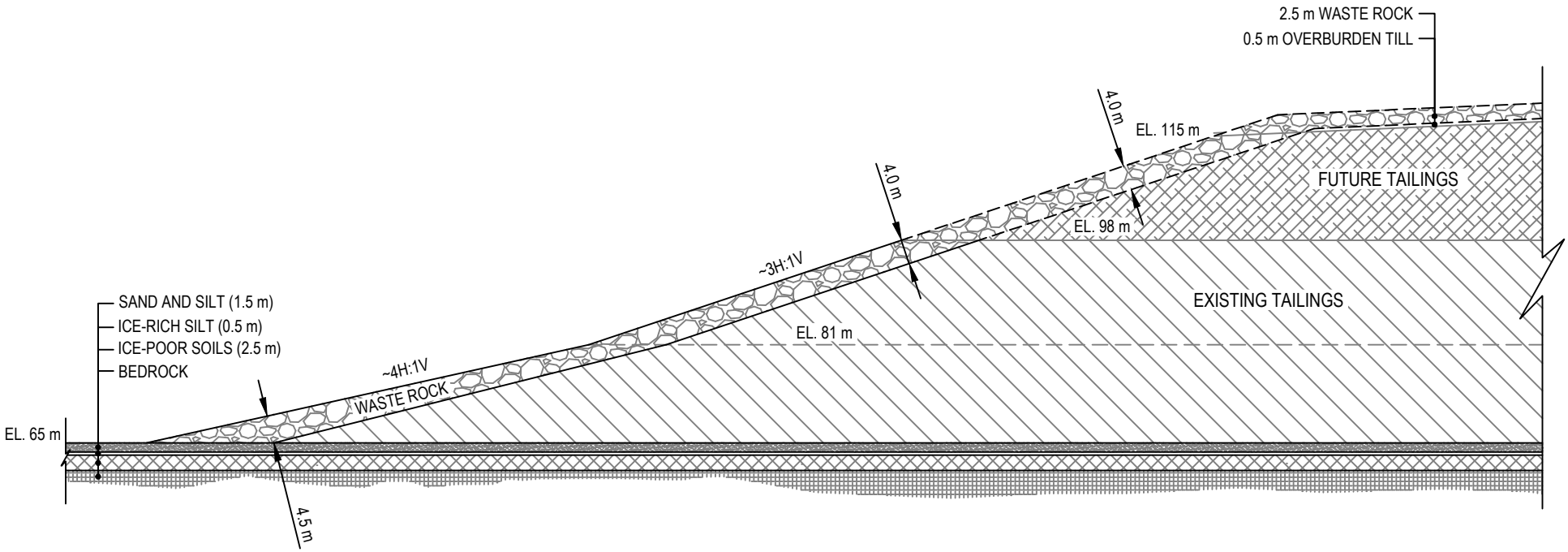
LONG-TERM CREEP DEFORMATION ANALYSES FOR TSF RAISE AND EXTENSION, MELIADINE GOLD MINE , NU

Typical Creep Curve for Frozen Soil

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EBA-EDM	MARCH 2026

Figure 1



0 50 m

Scale: 1: 1000

STATUS
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CLIENT

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LONG-TERM CREEP DEFORMATION ANALYSES FOR TSF DESIGN UPDATE, MELIADINE GOLD MINE, NU

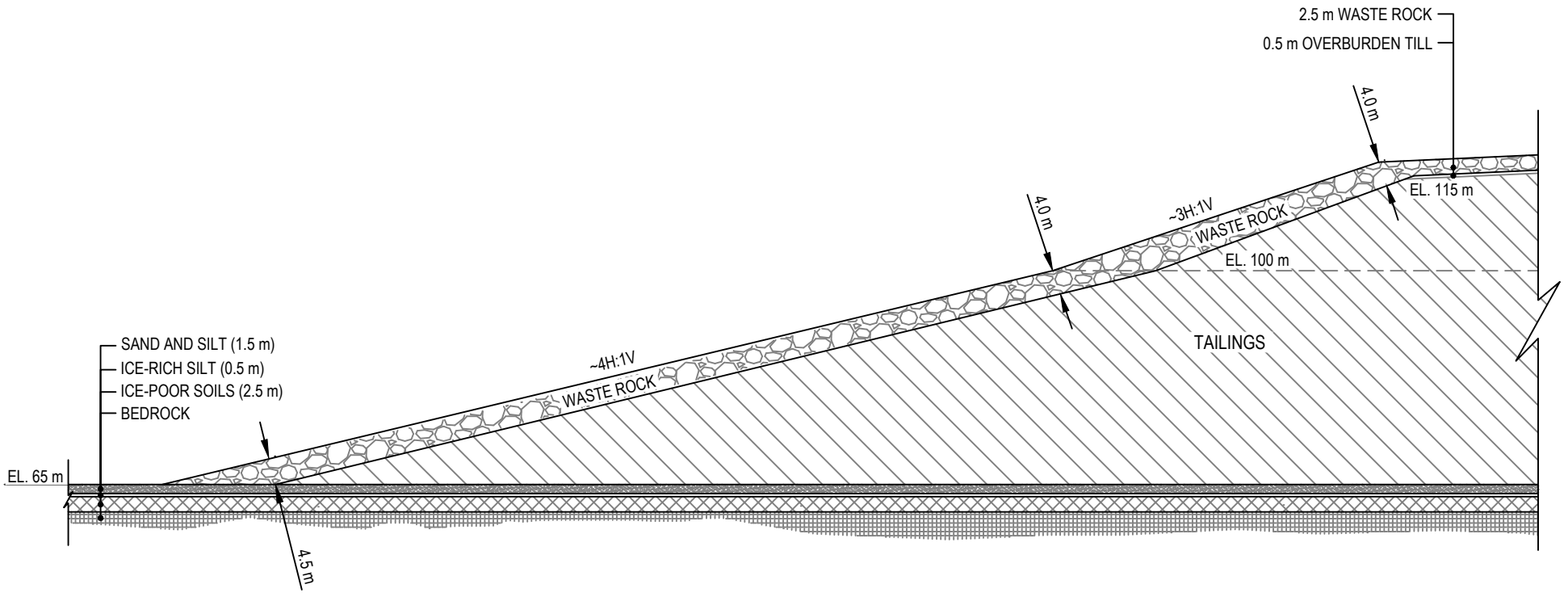
TYPICAL CROSS-SECTION ANALYZED FOR TSF RAISE DESIGN

PROJECT NO.	DWN	CKD	REV
ENG.EARC03140-34	DBD	HX	0

OFFICE	DATE
EDM	February 26, 2026

Figure 2

Q:\Edmonton\Engineering\E141\Projects_MELIADINE\ENG.EARC03140-34 TSF Raise Detailed Design\DBM\CAD files\ENG.EARC03140-34 Figures 2 and 3.dwg [FIGURE 3] March 26, 2026 - 10:36:58 am (BY: XIA, HONGWEI)



0 50 m

Scale: 1: 1000

STATUS
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CLIENT

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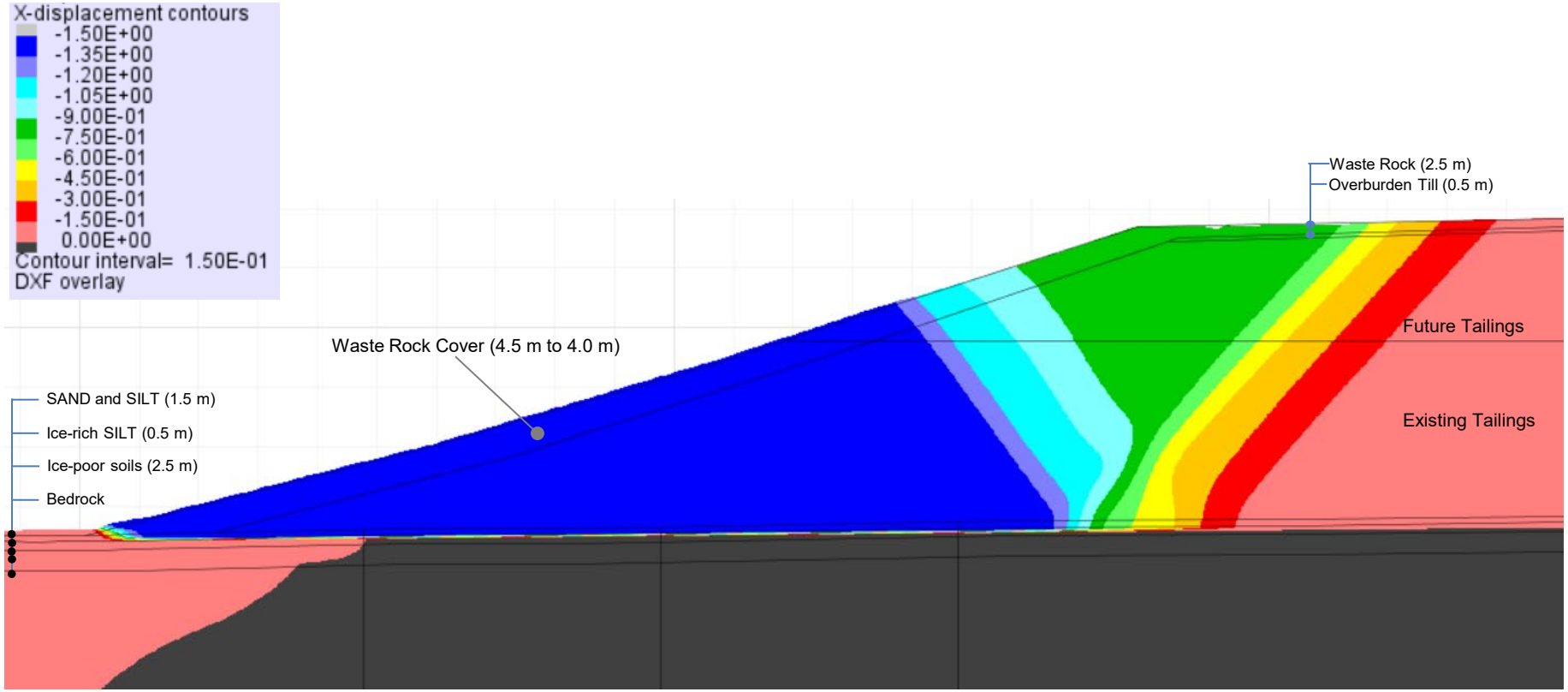
LONG-TERM CREEP DEFORMATION ANALYSES FOR TSF DESIGN UPDATE, MELIADINE GOLD MINE, NU

TYPICAL CROSS-SECTION ANALYZED FOR TSF EXTENSION DESIGN

PROJECT NO.	DWN	CKD	REV
ENG.EARC03140-34	DBD	HX	0

OFFICE	DATE
EDM	February 26, 2026

Figure 3



LEGEND

NOTES

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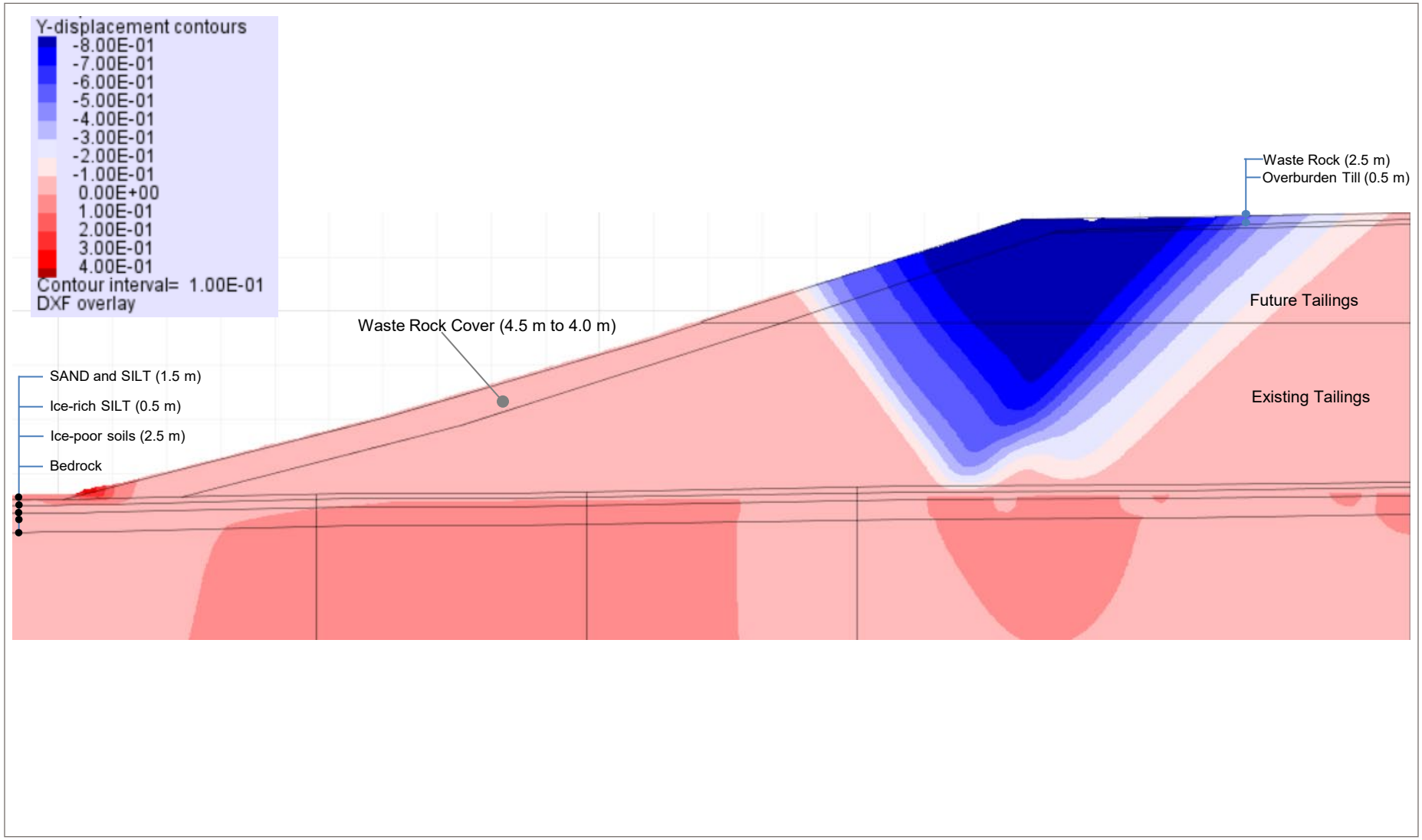
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Contours of Horizontal Displacement (m) after 100 years for Case 1a, TSF Raise

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 4



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NOTES

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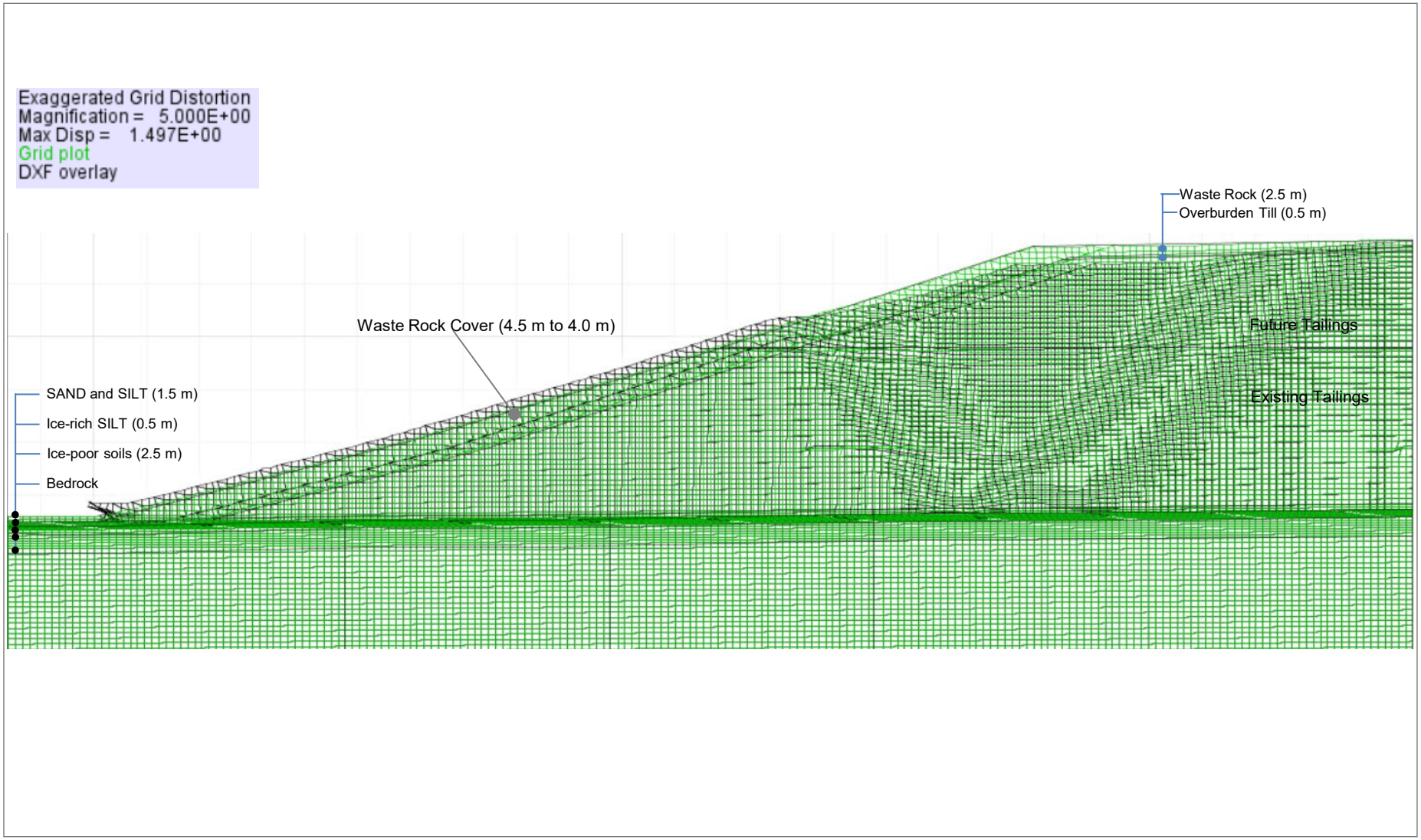
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Contours of Vertical Displacement (m) after 100 years for Case 1a, TSF Raise

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 5



LEGEND

NOTES

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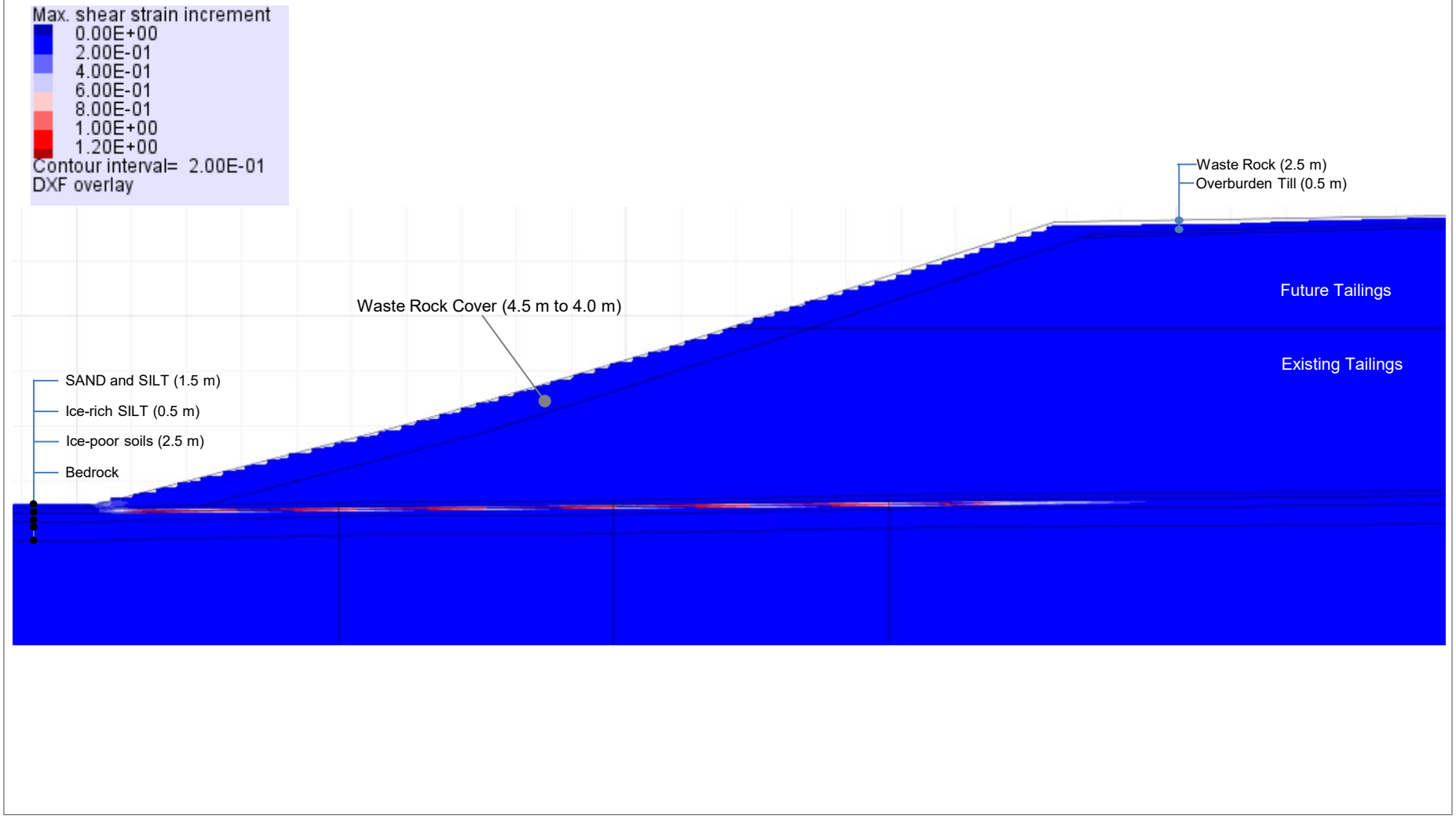
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Total Displacement (m) after 100 years for Case 1a, TSF Raise

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 6



LEGEND

NOTES

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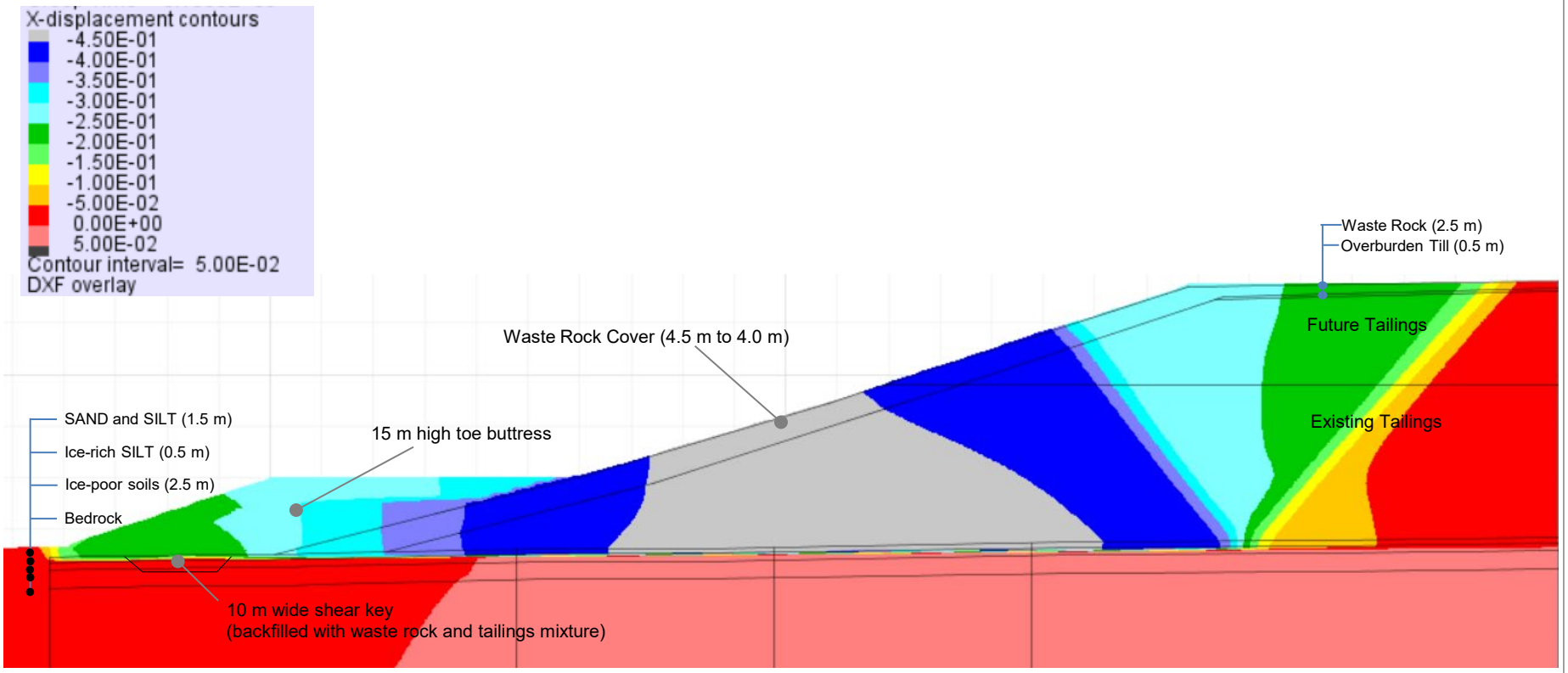
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Maximum Shear Strain within ice-rich SILT Layer after 100 years for Case 1a, TSF Raise

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 7



LEGEND

NOTES

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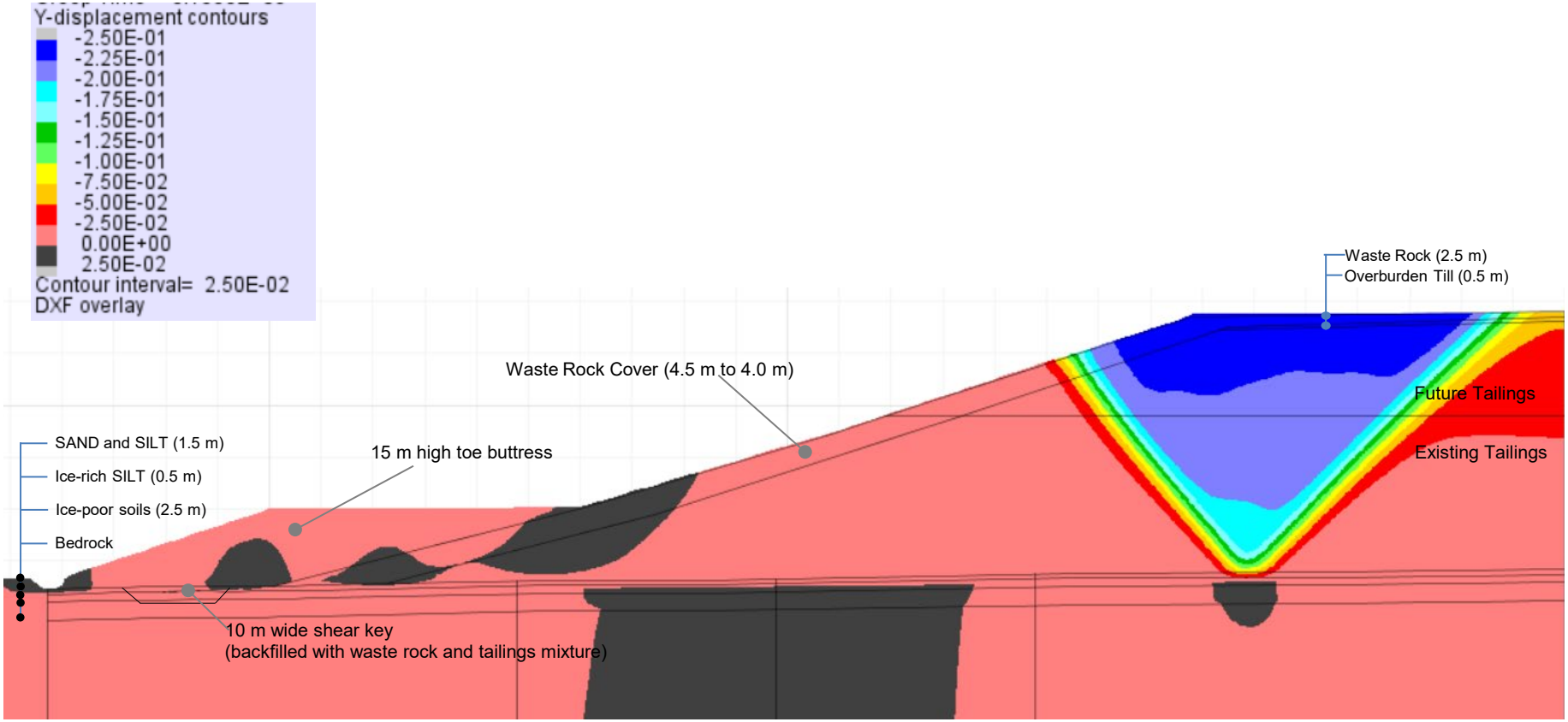
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Contours of Horizontal Displacement (m) after 100 years for Case 1b, TSF Raise

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 8



LEGEND

NOTES

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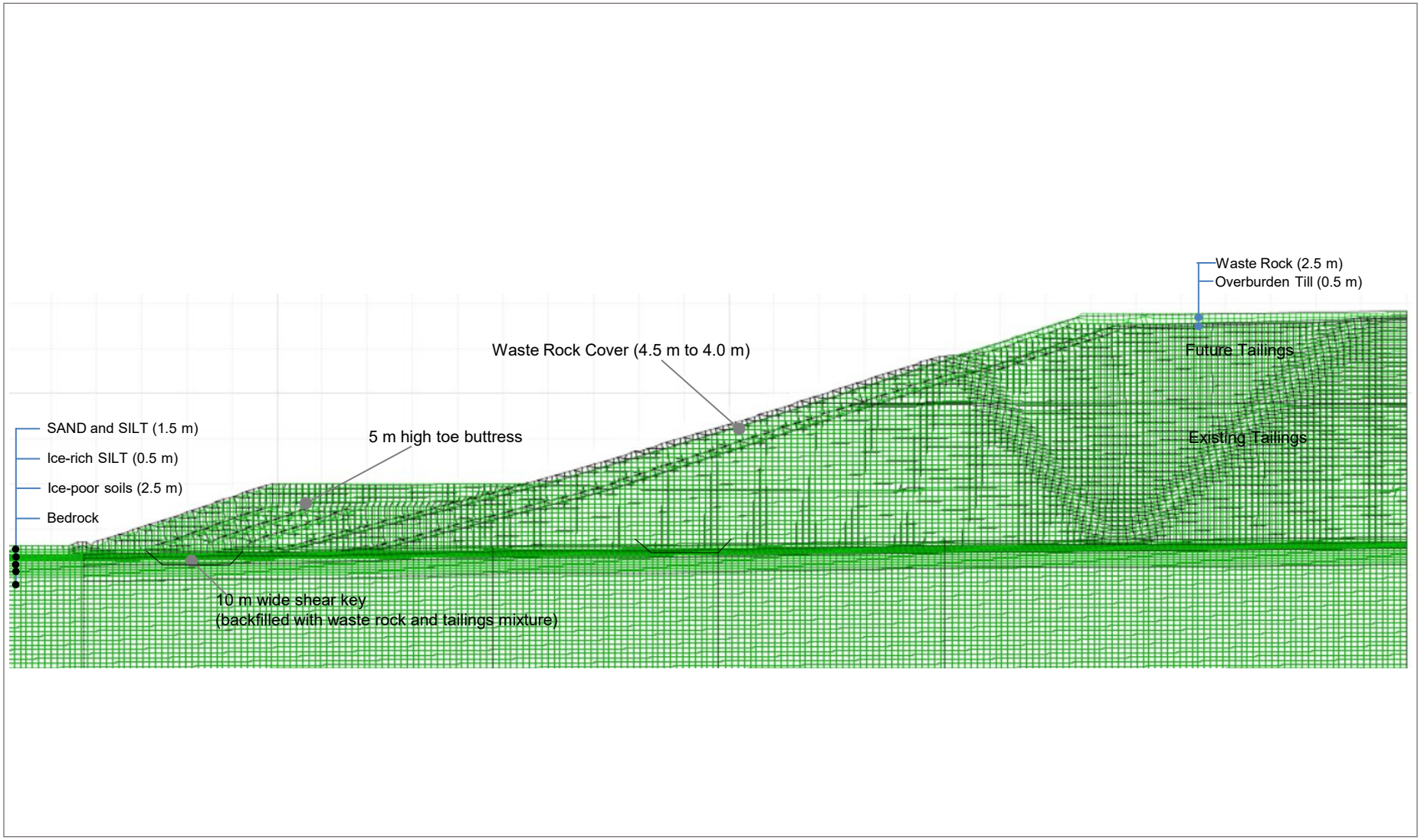
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Contours of Vertical Displacement (m) after 100 years for Case 1b, TSF Raise

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 9



LEGEND

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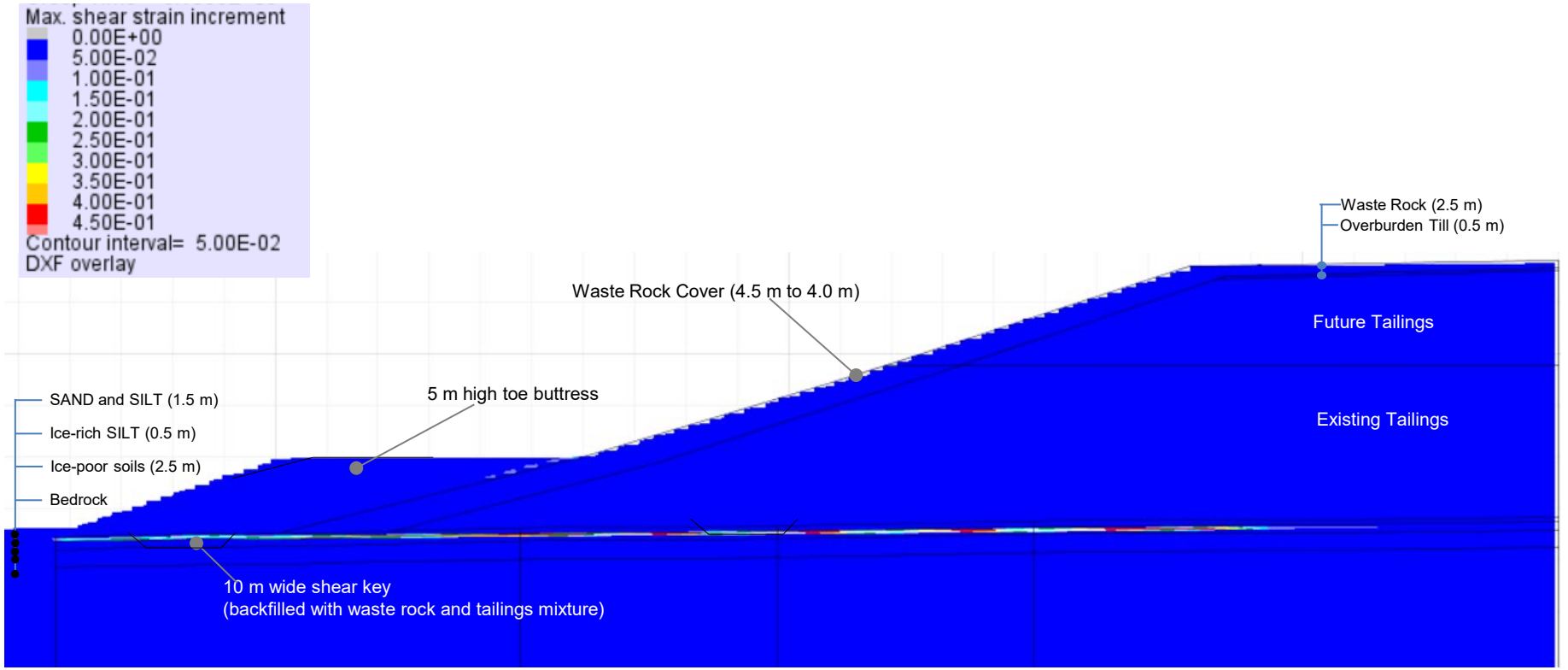
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Maximum Shear Strain within ice-rich SILT Layer after 100 years for Case 1b, TSF Raise

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 10



LEGEND

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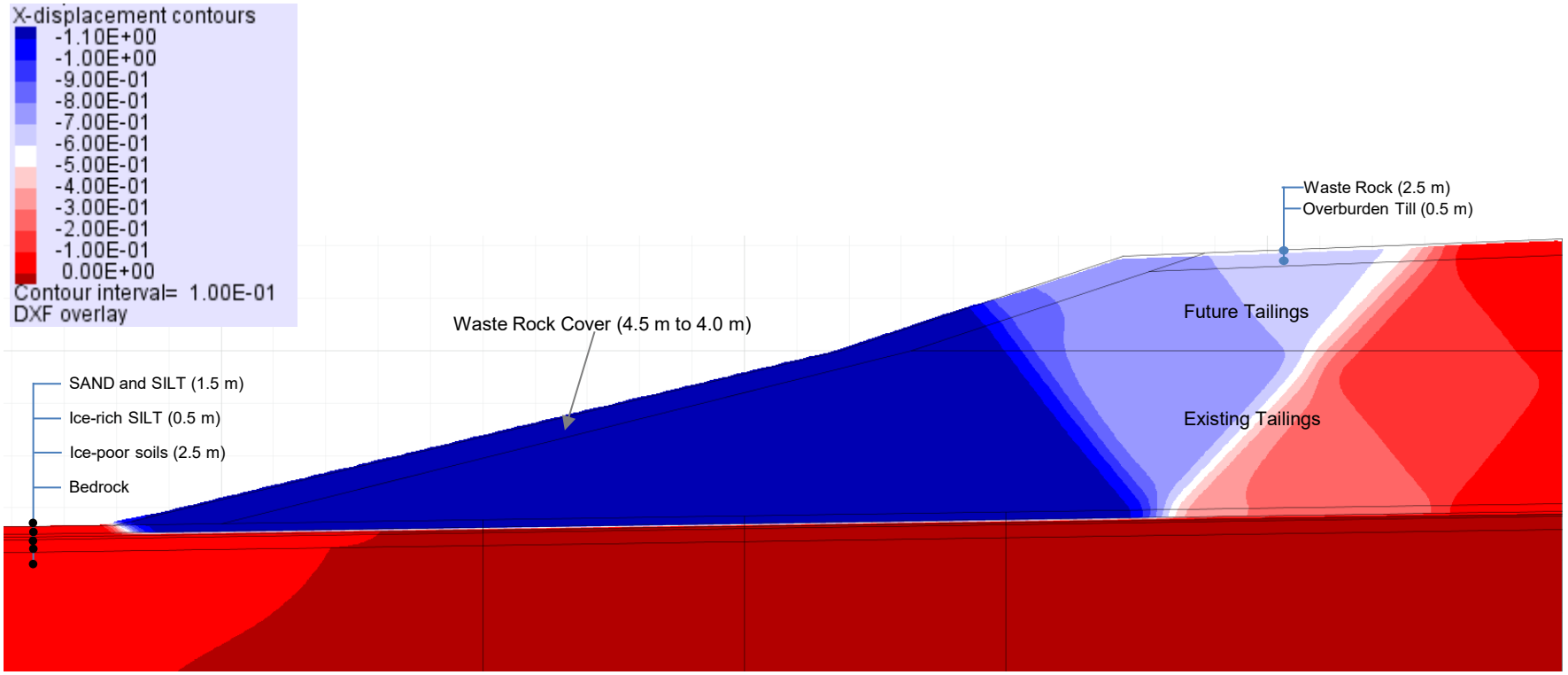
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Maximum Shear Strain within ice-rich SILT Layer after 100 years for Case 1b, TSF Raise

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 11



LEGEND

NOTES

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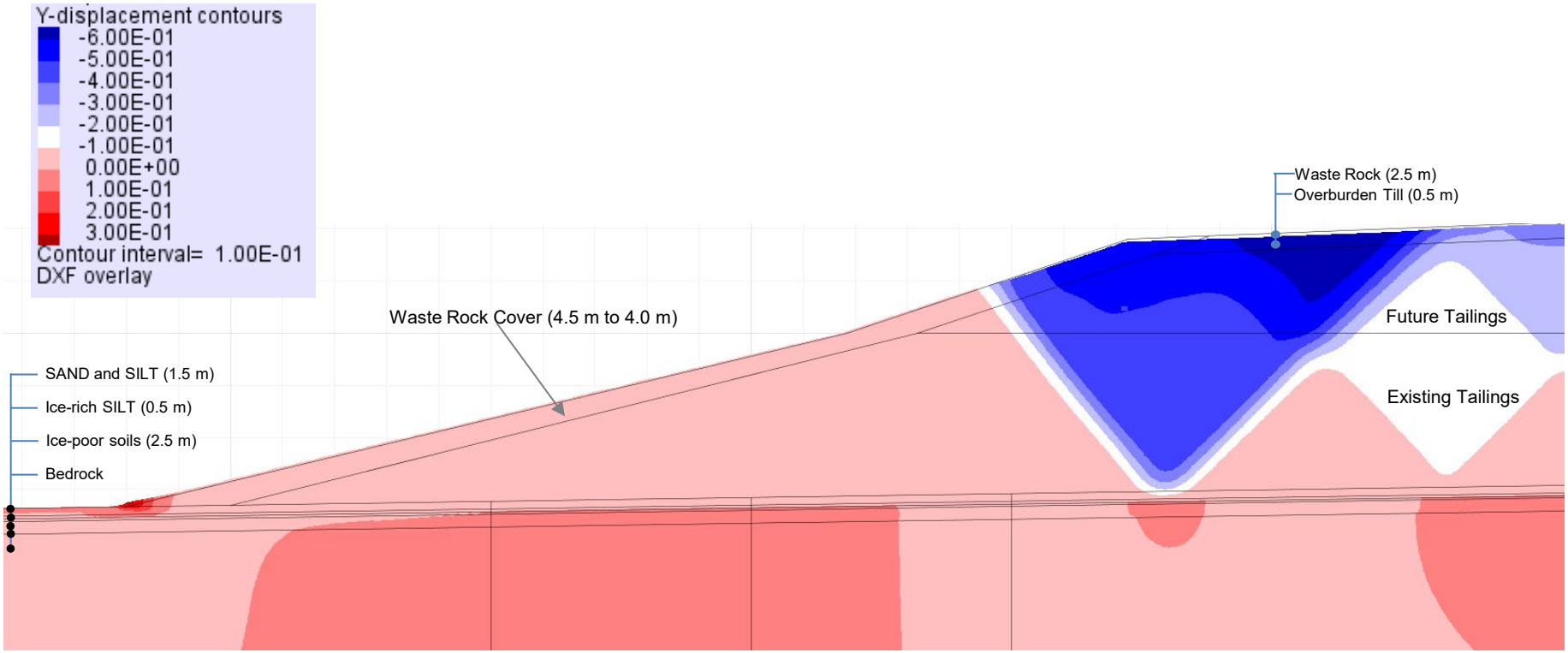
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Contours of Horizontal Displacement (m) after 100 years for Case 1a, TSF Extension

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 12



LEGEND

NOTES

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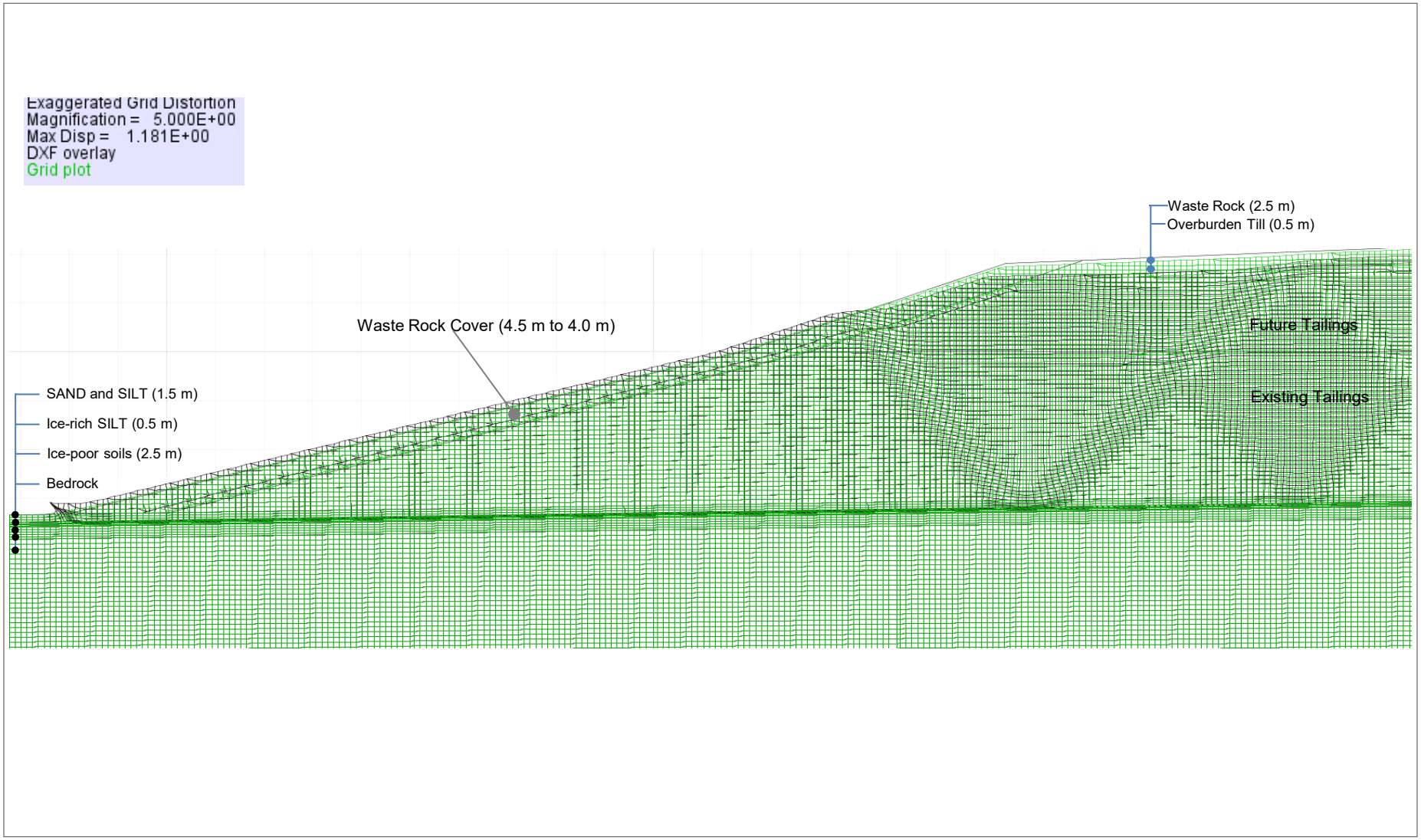
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Contours of Vertical Displacement (m) after 100 years for Case 1a, TSF Extension

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 13



LEGEND

NOTES

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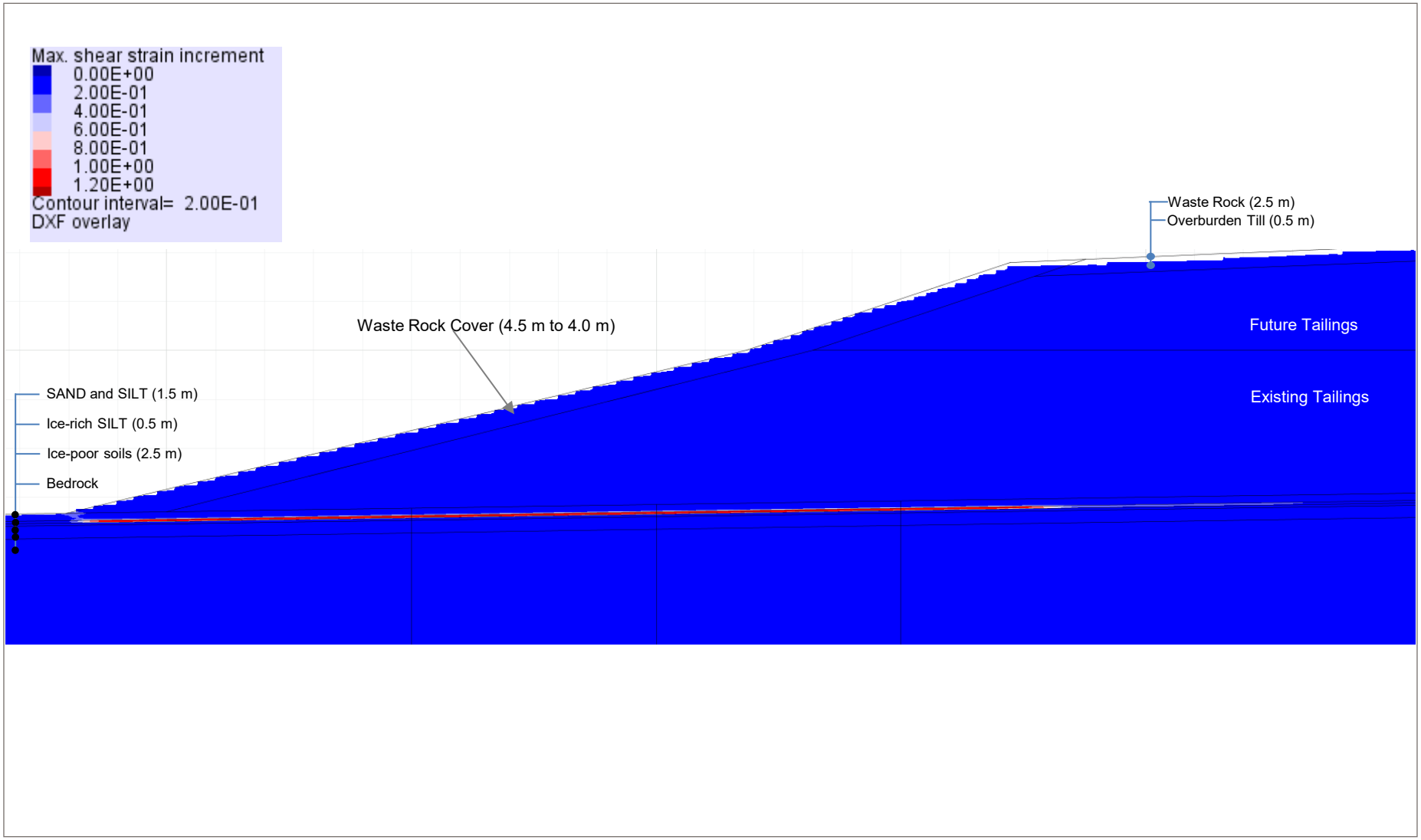
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Total Displacement (m) after 100 years for Case 1a, TSF Extension

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 14



LEGEND

NOTES

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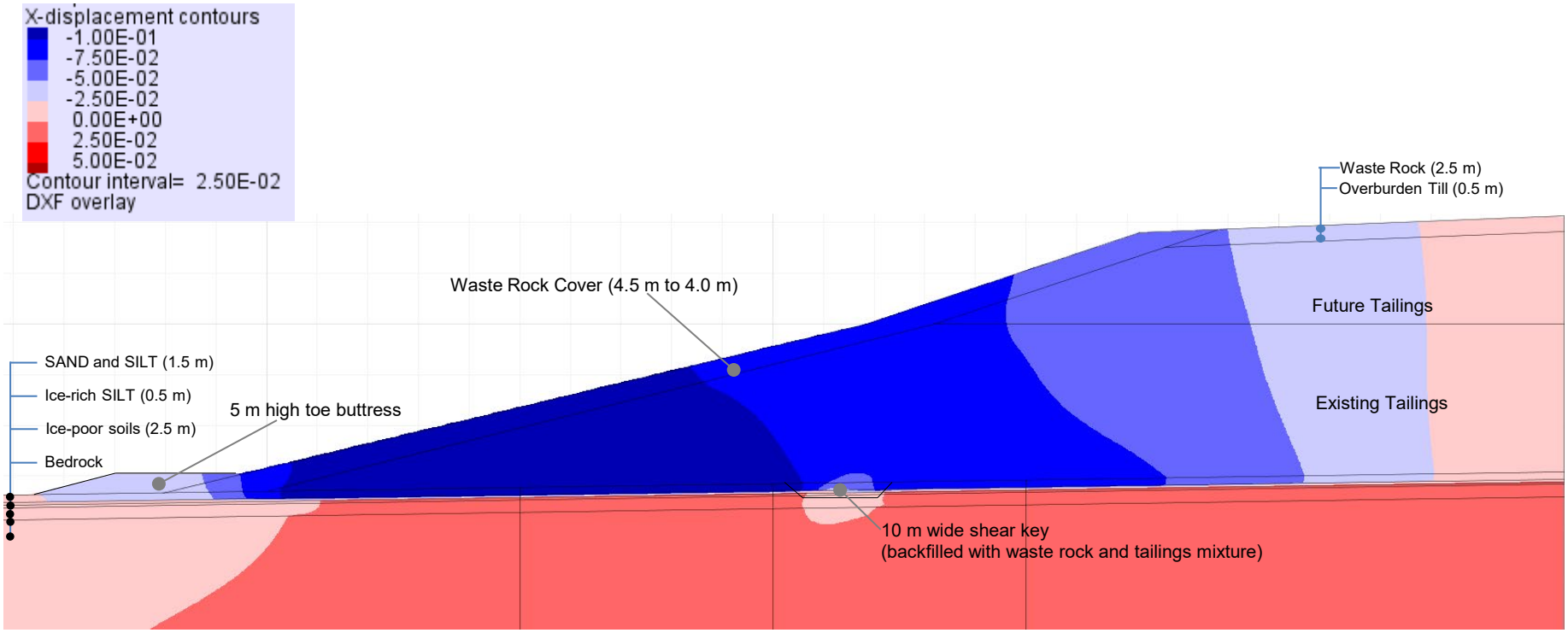
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Maximum Shear Strain within ice-rich SILT Layer after 100 years for Case 1a, TSF Extension

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 15



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NOTES

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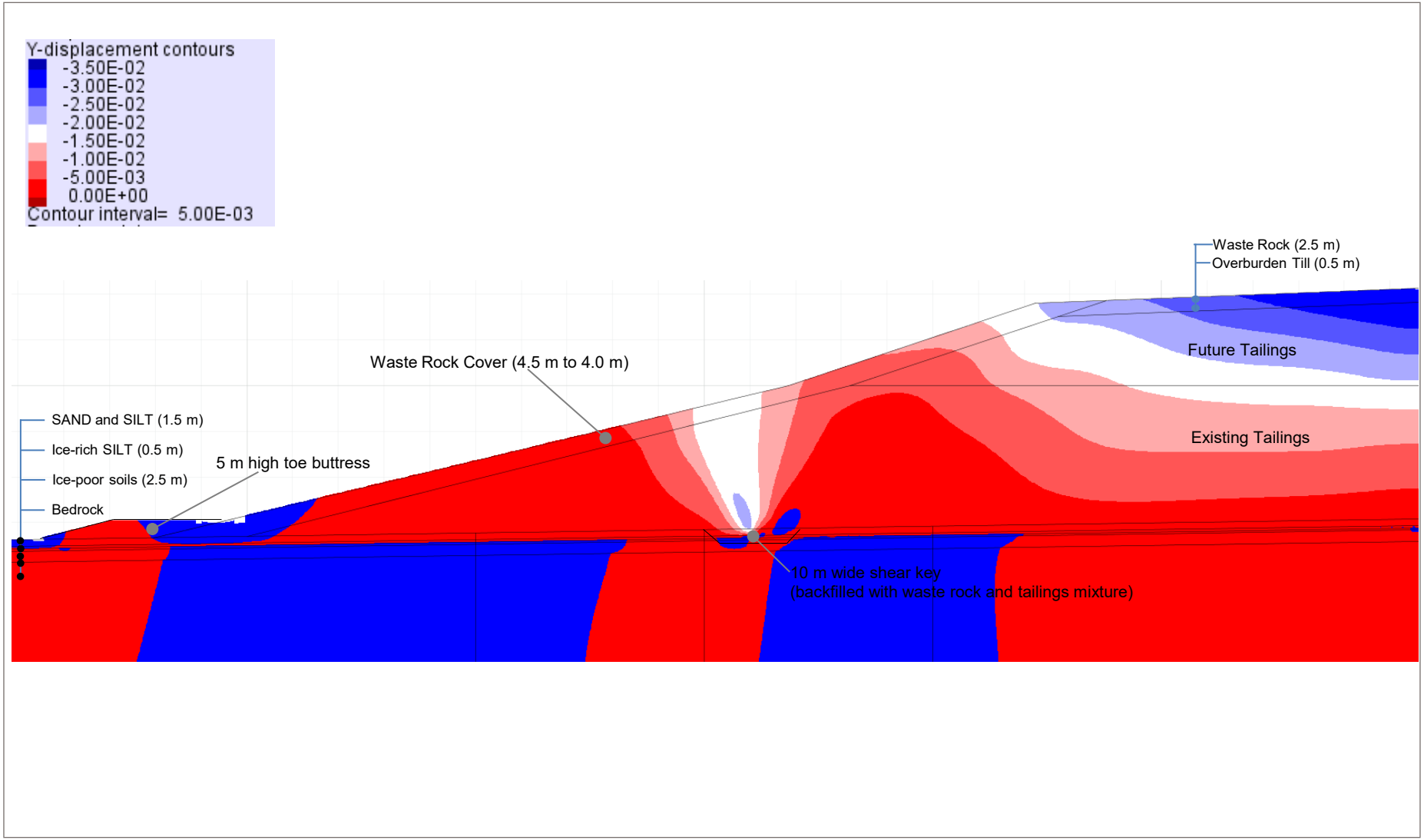
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Contours of Horizontal Displacement (m) after 100 years for Case 1b, TSF Extension

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 16



LEGEND

NOTES

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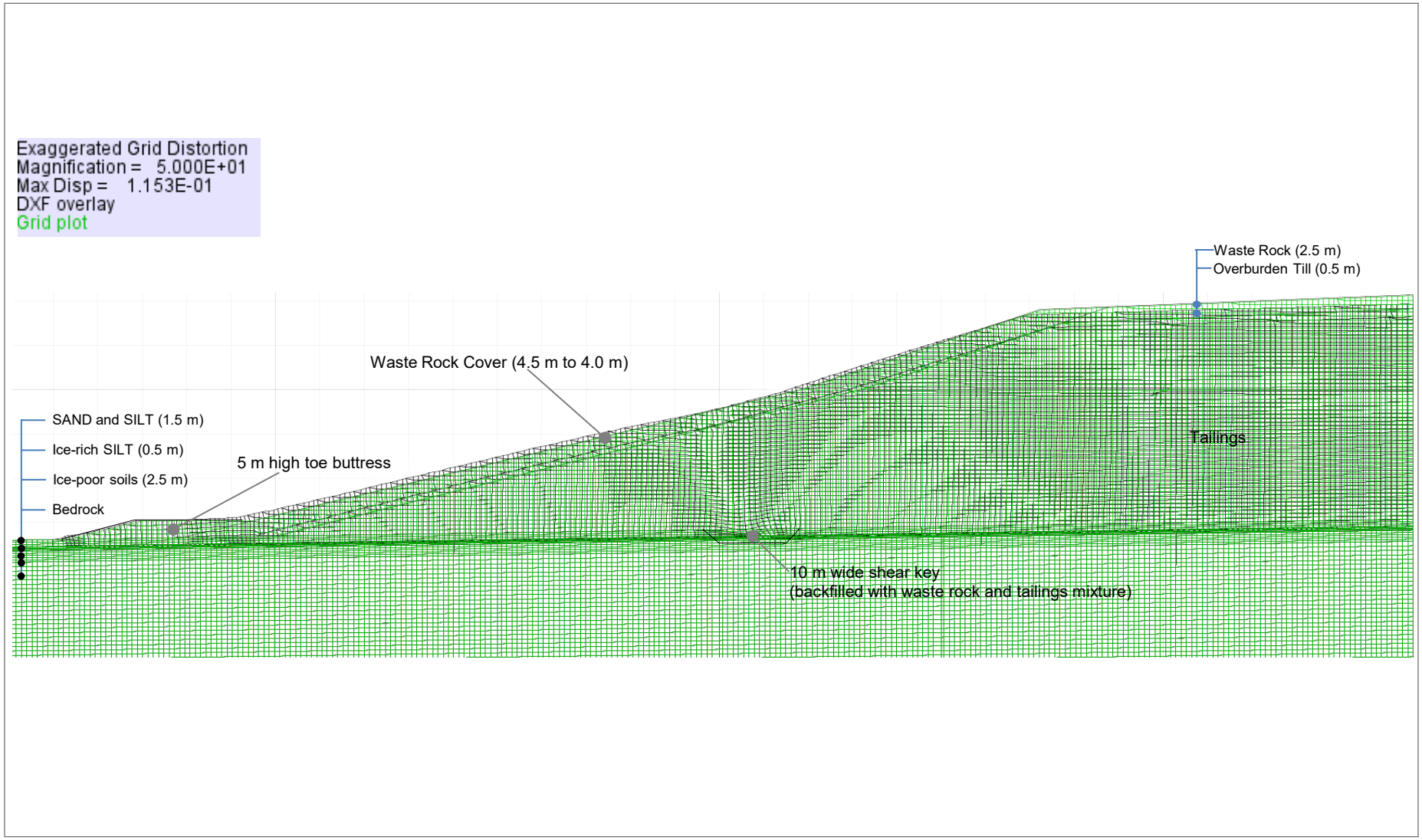
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Contours of Vertical Displacement (m) after 100 years for Case 1b, TSF Extension

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 17



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NOTES

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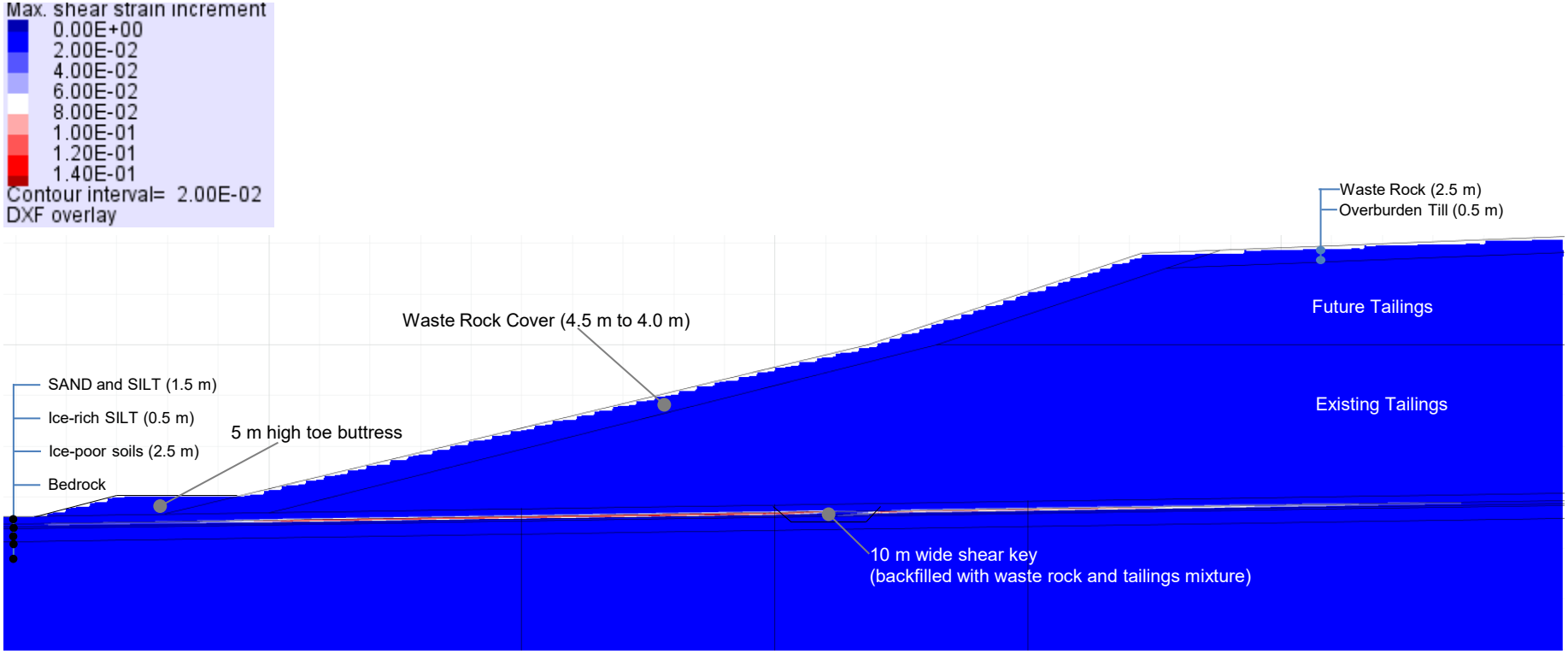
LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Total Displacement (m) after 100 years for Case 1b, TSF Extension

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 18



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NOTES

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TETRA TECH

LONG-TERM CREEP DEFORMATION ANALYSES OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Maximum Shear Strain within ice-rich SILT Layer after 100 years for Case 1b, TSF Extension

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	HX	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure 19

APPENDIX A

TETRA TECH'S LIMITATIONS ON USE OF THIS DOCUMENT

LIMITATIONS ON USE OF THIS DOCUMENT

GEOTECHNICAL

1.1 USE OF DOCUMENT AND OWNERSHIP

This document pertains to a specific site, a specific development, and a specific scope of work. The document may include plans, drawings, profiles and other supporting documents that collectively constitute the document (the "Professional Document").

The Professional Document is intended for the sole use of TETRA TECH's Client (the "Client") as specifically identified in the TETRA TECH Services Agreement or other Contractual Agreement entered into with the Client (either of which is termed the "Contract" herein). TETRA TECH does not accept any responsibility for the accuracy of any of the data, analyses, recommendations or other contents of the Professional Document when it is used or relied upon by any party other than the Client, unless authorized in writing by TETRA TECH.

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1.2 ALTERNATIVE DOCUMENT FORMAT

Where TETRA TECH submits electronic file and/or hard copy versions of the Professional Document or any drawings or other project-related documents and deliverables (collectively termed TETRA TECH's "Instruments of Professional Service"), only the signed and/or sealed versions shall be considered final. The original signed and/or sealed electronic file and/or hard copy version archived by TETRA TECH shall be deemed to be the original. TETRA TECH will archive a protected digital copy of the original signed and/or sealed version for a period of 10 years.

Both electronic file and/or hard copy versions of TETRA TECH's Instruments of Professional Service shall not, under any circumstances, be altered by any party except TETRA TECH. TETRA TECH's Instruments of Professional Service will be used only and exactly as submitted by TETRA TECH.

Electronic files submitted by TETRA TECH have been prepared and submitted using specific software and hardware systems. TETRA TECH makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

1.3 STANDARD OF CARE

Services performed by TETRA TECH for the Professional Document have been conducted in accordance with the Contract, in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Professional judgment has been applied in developing the conclusions and/or recommendations provided in this Professional Document. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of the Professional Document.

If any error or omission is detected by the Client or an Authorized Party, the error or omission must be immediately brought to the attention of TETRA TECH.

1.4 DISCLOSURE OF INFORMATION BY CLIENT

The Client acknowledges that it has fully cooperated with TETRA TECH with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The Client further acknowledges that in order for TETRA TECH to properly provide the services contracted for in the Contract, TETRA TECH has relied upon the Client with respect to both the full disclosure and accuracy of any such information.

1.5 INFORMATION PROVIDED TO TETRA TECH BY OTHERS

During the performance of the work and the preparation of this Professional Document, TETRA TECH may have relied on information provided by third parties other than the Client.

While TETRA TECH endeavours to verify the accuracy of such information, TETRA TECH accepts no responsibility for the accuracy or the reliability of such information even where inaccurate or unreliable information impacts any recommendations, design or other deliverables and causes the Client or an Authorized Party loss or damage.

1.6 GENERAL LIMITATIONS OF DOCUMENT

This Professional Document is based solely on the conditions presented and the data available to TETRA TECH at the time the data were collected in the field or gathered from available databases.

The Client, and any Authorized Party, acknowledges that the Professional Document is based on limited data and that the conclusions, opinions, and recommendations contained in the Professional Document are the result of the application of professional judgment to such limited data.

The Professional Document is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site conditions present, or variation in assumed conditions which might form the basis of design or recommendations as outlined in this document, at or on the development proposed as of the date of the Professional Document requires a supplementary exploration, investigation, and assessment.

TETRA TECH is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the Client.

1.7 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, TETRA TECH has not been retained to explore, address or consider and has not explored, addressed or considered any environmental or regulatory issues associated with development on the subject site.

1.8 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

Classification and identification of soils and rocks are based upon commonly accepted systems, methods and standards employed in professional geotechnical practice. This report contains descriptions of the systems and methods used. Where deviations from the system or method prevail, they are specifically mentioned.

Classification and identification of geological units are judgmental in nature as to both type and condition. TETRA TECH does not warrant conditions represented herein as exact, but infers accuracy only to the extent that is common in practice.

Where subsurface conditions encountered during development are different from those described in this report, qualified geotechnical personnel should revisit the site and review recommendations in light of the actual conditions encountered.

1.9 LOGS OF TESTHOLES

The testhole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

1.10 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from logs of test holes and/or soil/rock exposures. Stratigraphy is known only at the locations of the test hole or exposure. Actual geology and stratigraphy between test holes and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historical environment. TETRA TECH does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional exploration and review may be necessary.

1.11 PROTECTION OF EXPOSED GROUND

Excavation and construction operations expose geological materials to climatic elements (freeze/thaw, wet/dry) and/or mechanical disturbance which can cause severe deterioration. Unless otherwise specifically indicated in this report, the walls and floors of excavations must be protected from the elements, particularly moisture, desiccation, frost action and construction traffic.

1.12 SUPPORT OF ADJACENT GROUND AND STRUCTURES

Unless otherwise specifically advised, support of ground and structures adjacent to the anticipated construction and preservation of adjacent ground and structures from the adverse impact of construction activity is required.

1.13 INFLUENCE OF CONSTRUCTION ACTIVITY

Construction activity can impact structural performance of adjacent buildings and other installations. The influence of all anticipated construction activities should be considered by the contractor, owner, architect and prime engineer in consultation with a geotechnical engineer when the final design and construction techniques, and construction sequence are known.

1.14 OBSERVATIONS DURING CONSTRUCTION

Because of the nature of geological deposits, the judgmental nature of geotechnical engineering, and the potential of adverse circumstances arising from construction activity, observations during site preparation, excavation and construction should be carried out by a geotechnical engineer. These observations may then serve as the basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein.

1.15 DRAINAGE SYSTEMS

Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function. Where temporary or permanent drainage systems are installed within or around a structure, these systems must protect the structure from loss of ground due to mechanisms such as internal erosion and must be designed so as to assure continued satisfactory performance of the drains. Specific design details regarding the geotechnical aspects of such systems (e.g. bedding material, surrounding soil, soil cover, geotextile type) should be reviewed by the geotechnical engineer to confirm the performance of the system is consistent with the conditions used in the geotechnical design.

1.16 DESIGN PARAMETERS

Bearing capacities for Limit States or Allowable Stress Design, strength/stiffness properties and similar geotechnical design parameters quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition used in this report. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions considered in this report in fact exist at the site.

1.17 SAMPLES

TETRA TECH will retain all soil and rock samples for 30 days after this report is issued. Further storage or transfer of samples can be made at the Client's expense upon written request, otherwise samples will be discarded.

1.18 APPLICABLE CODES, STANDARDS, GUIDELINES & BEST PRACTICE

This document has been prepared based on the applicable codes, standards, guidelines or best practice as identified in the report. Some mandated codes, standards and guidelines (such as ASTM, AASHTO Bridge Design/Construction Codes, Canadian Highway Bridge Design Code, National/Provincial Building Codes) are routinely updated and corrections made. TETRA TECH cannot predict nor be held liable for any such future changes, amendments, errors or omissions in these documents that may have a bearing on the assessment, design or analyses included in this report.

APPENDIX E

SLOPE STABILITY ASSESSMENT MEMO

TETRA TECH

TECHNICAL MEMO

ISSUED FOR USE

To:	Justin Bieber, Agnico Eagle Marielle Limoges, Agnico Eagle	**Date:**	April 2, 2026
c:	Jawad Haloui, Agnigo Eagle	**Memo No.:**	004
From:	Fai, Ndofor, P.Geo., Tetra Tech Hongwei Xia, P.Eng., Tetra Tech Linping Wu, P.Eng., Tetra Tech	**File:**	ENG.EARC03140-34
Subject:	Slope Stability Assessment for the Tailings Storage Facility (TSF) Design Update (Raise and Extension), Meliadine Gold Mine, Nunavut, Revision 01 Agnico Eagle Document Number: 65-694-230-MEM-005		

1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) was retained by Agnico Eagle Mines Limited (Agnico Eagle) to undertake a detailed engineering design update for the Tailings Storage Facility (TSF) at the Meliadine Gold Mine (Meliadine Mine), Nunavut. The scope of the TSF design update includes raising the existing TSF and extending it in the northwest.

A design geometry for the TSF raise and extension was proposed based on the required design capacity, the results of long-term creep deformation analyses, and space constraints on the TSF plateau. Slope stability analyses were then performed to assess the short- and long-term physical stability of the proposed TSF design update against slope failure under various loading conditions.

This technical memorandum summarizes the methodology, design criteria, input parameters, assumptions, and results of the slope stability analyses. Additional details on the overall methodology, input parameters, and design assumptions are documented in the Design Basis Memorandum (DBM) (Tetra Tech 2026a). This technical memorandum provides supplemental information specific to the slope stability analysis and should be read in conjunction with the DBM. It will be included as an appendix to the TSF design update report.

2.0 SLOPE STABILITY ANALYSIS

2.1 Overall Methodology

Limit equilibrium analyses were conducted to determine the factor of safety (FoS) against slope failure during construction and in the long term after construction of the TSF raise and extension. All analyses were conducted using the two-dimensional, limit equilibrium software, Slope/W in GeoStudio (Seequent 2024). The Morgenstern-Price method with a half-sine interslice force assumption was adopted in the analyses. Potential post-construction seismic loading was modelled as pseudo-static with a design horizontal peak ground acceleration (PGA).

2.2 Stability Acceptance Criteria for Factors of Safety

The slope stability acceptance criteria for the TSF design update were developed in accordance with both the design guideline published by Hawley and Cunning (2017) – Guidelines for Mine Waste Dump and Stockpile Design

Tetra Tech Canada Inc.
14940 - 123 Avenue
Edmonton, AB T5V 1B4 CANADA
Tel 780.451.2121 Fax 780.454.5688

and Agnico Eagle's corporate management standard (Agnico Eagle 2019) for the TSF, Water Management Infrastructure, and Rock Storage Facilities.

Table 1 lists the selected slope stability criteria for the TSF design update. More details on the rationales for the criteria selection are documented in Section 5.0 of the DBM (Tetra Tech 2026a).

Table 1: Slope Stability Criteria for the TSF Design Update

Potential Failure Mode and Conditions	Loading Condition	Adopted FoS	Source Document
Surficial, shallow slips (during construction)	Static	1.3	Hawley and Cunning (2017) & Agnico Eagle (2019)
Local deep-seated slips (during construction)	Static	1.5	Hawley and Cunning (2017)
Long-term, global deep-seated slips for base cases (after construction)	Static	1.5	Hawley and Cunning (2017) & Agnico Eagle (2019)
Long-term, global deep-seated slips for base cases (after construction)	Pseudo-Static	1.1	
Long-term, global deep-seated slips for base cases (after construction)	Post-Earthquake (undrained condition)	1.2	Agnico Eagle (2019)
Long-term, global deep-seated slips for sensitivity cases with conservative assumptions (after construction)	Static	1.4	Hawley and Cunning (2017)

The selected FoS presented in Table 1 for the design of the TSF design update meets or exceeds the FoS recommended in Agnico Eagle's Corporate Management Standard (Agnico Eagle 2019) and widely accepted tailings management practices in the mining industry, such as those presented in the Dam Safety Guidelines by the Canadian Dam Association (CDA 2013), Technical Bulletin – Application of Dam Safety Guidelines to Mining Dams (CDA 2019), and Tailings Dam Safety Bulletin No. 194 by the International Commission on Large Dams (2025).

3.0 STABILITY ANALYSIS INPUT DATA AND CASES

3.1 Cross Sections

Six representative cross-section locations, as shown in Figure 1, were selected for slope stability assessment. The selection considered subsurface conditions and the risk level in the event of slope failure. Rationales for selecting the cross-section locations are documented in Section 6.3.1 of the DBM (Tetra Tech 2026a).

3.2 Soil Profile

The generalized foundation soil profiles for each section, interpreted from nearby borehole logs, are summarized in Table 2. Details on the subsurface conditions for each section are provided in Section 6.3.3 of the DBM. Organic material is localized within the TSF footprint, and some is expected to be removed during the snow-removal process prior to tailings placement or to be compressed under tailings loads. Therefore, the local presence of a compressed thin organic layer was not specifically considered and was represented by the equivalent underlying overburden soils.

The available borehole logs and testpit data indicate that the thickness of ice-rich SILT layer varies by location, generally ranging from 0.1 m to 0.8 m, with an average thickness of less than 0.5 m. The thickness of ice-rich SILT layer adopted for the slope stability analyses varies by cross-section. For sections where the observed thickness is less than 0.5 m (i.e., Sections A, B, and E), a thickness of 0.5 m was assumed. For sections where the observed thickness exceeds 0.5 (i.e., Sections C, D, and F), a thickness of 0.8 m was adopted for the analyses.

Table 2: Foundation Soil Profile for Each Section

Section		Soil Type	Depth (m)	Boreholes Nearby
TSF Raise	Section A	SAND	0-0.5	GT07-11, GT17-18, GT17-19, and GT17-20
		Ice-rich SILT	0.5-0.8	
		GRAVEL	0.8-1.3	
		Bedrock	-	
	Section B	Silty SAND	0-0.5	GT12-17, GT12-18, and GT25-13
		GRAVEL	0.5-2.0	
		Ice-poor SILT	2.0-3.5	
		SILT and SAND	3.5-5.5	
		Bedrock	-	
	Section C	Ice-poor SILT	0-0.5	GT11-10 and GT11-04
		SAND	0.5-1.5	
		Ice-rich SILT	1.5-2.3	
		Ice-poor SILT	2.3-5.8	
		Bedrock	-	
TSF Extension	Section D	Ice-poor SILT	0-1.0	GT11-03, TP25-01, TP25-02, and TP25-11/11A
		Ice-rich SILT	1.0-1.8	
		Bedrock	-	
	Section E	SAND and SILT	0-0.5	GT09-17, GT13-06, GT25-08, GT12-23, GT25-09, and TP25-15/15A
		Ice-rich SILT	0.5-1.0	
		SAND and GRAVEL	1.0-3.0	
		Bedrock	-	
	Section F	Ice-poor SILT	0-1.0	GT24-07, GT24-08, GT25-01, GT25-11, TP25-12/12A, TP25-03, and TP25-04
		Ice-rich SILT	1.0-1.8	
		SAND and GRAVEL	1.8-3.3	
		Bedrock	-	

3.3 Material Properties

Table 3 summarizes the material properties used in the stability analyses. The properties of all materials, except the ice-rich SILT, were estimated from available test results at the Meliadine Mine, a literature review, experience with similar materials, and engineering judgment. The long-term shear strength of the frozen ice-rich SILT within different temperature zones was estimated using predicted temperatures from the coupled thermal and seepage analyses, the relationships presented by Weaver and Morgenstern (1981), and adjustments to account for porewater salinity conditions at the Meliadine Mine. Additional details on the selection of the material properties are documented in Section 6.3.4 of the DBM (Tetra Tech 2026a).

Table 3: Material Properties used in the Slope Stability Analyses

Material		Effective Angle of Internal Friction, Ø, (°)	Cohesion, *c*, (kPa)	Bulk Density (kg/m^3)
Waste Rock Cover		42	0	2,040
Overburden Cover		28	0	1,960
Tailings		34	0	1,900
GRAVEL (Ice-poor or Thawed)		35	0	2,000
SAND and GRAVEL		34	0	2,000
SAND (Ice-poor or Thawed)		32	0	1,800
Silty SAND		32	0	1,800
SAND and SILT (Ice-poor or Thawed)		31	0	1,800
Thawed SILT		28	0	1,700
Ice-rich SILT [(1)]	-0.5°C to -1°C	0	60	1,600
	-1°C to -1.5°C	0	100	1,600
	-1.5°C to -2°C	0	120	1,600
	< -2°C	0	130	1,600
Thawing ice-rich SILT		28	0	1,600
Thawed ice-rich SILT		28	0	1,700
Ice-poor SILT		28	0	1,700

Notes:
[(1)] Based on a porewater salinity of 7 ppt, temperatures warmer than -0.5°C are considered unfrozen due to the freezing point depression.

3.4 Other Input Parameters

3.4.1 Excess Pore Water Pressure

Excess pore water pressure generated by tailings placement above the original ground is not expected when the foundation soils are frozen. Excess pore water pressure may be generated when foundation soils thaw due to tailings placement in the summer or long-term climate change, if thawing occurs faster than the excess pore water pressure is produced. To consider the potential generation of excess pore water pressure, a pore pressure coefficient ($\overline{B}$) or pore-pressure ratio (Ru) was used together with an assumed piezometric line.

Morgenstern and Nixon studied the consolidation of thawing soils and concluded that the excess pore-water pressures and the degree of consolidation in thawing soils depend primarily on the thawing consolidation ratio (R) (Morgenstern and Nixon 1971). Closed-form solutions were developed to calculate the normalized pore-pressure distribution in the thawing layer for different thawing consolidation ratios. The thaw consolidation ratio, R, can be calculated using the following equation:

$$R = \frac{\alpha}{2\sqrt{C_v}}$$

where:

α denotes a constant, which can be determined through thermal analysis or measured ground temperature data; and

C_v denotes the coefficient of consolidation of the thawing soil.

The results of the coupled thermal and seepage analyses (Tetra Tech 2026b) indicate that ground temperatures within the ice-rich SILT layer near the toe of the TSF are expected to gradually increase, eventually leading to thawing. The predicted thaw extent within the ice-rich SILT layer remains generally stable from 2025 to 2058. After 2058, progressive thawing is anticipated, with a thawing rate of approximately 1 m/year in the horizontal direction. As a result of the thawing, excess pore-water pressure may develop within the ice-rich SILT layer.

Following the approach recommended by Morgenstern and Nixon (1971), the estimated Ru is approximately 0.11. This estimate is based on an average coefficient of consolidation (C_v) of 0.0117 cm²/s, determined from consolidation tests on a remolded sample collected during the 2024 drilling program (Tetra Tech 2024), and the predicted horizontal thawing rate of 1 m/year.

The following excess pore-water pressure parameters were used in the slope stability analyses for the TSF design update:

- Short-term static loading condition: a pore-water pressure ratio ($\bar{B}$) = 0.15 was used for thawing ice-rich silt, and $\bar{B}$ of 0.1 was used for coarse soils (i.e., sand).
- Long-term static loading condition: Excess pore-water pressure is expected to dissipate over time; as a result, only hydrostatic water pressure exists in the long term.

A sensitivity analysis with a R_u of 0.15 was also conducted to assess the scenario in which excess pore water pressure is generated during the thawing of the ice-rich SILT and does not fully dissipate over a reasonable time period.

3.4.2 Water Table in TSF

The results of the coupled thermal and seepage analyses (Tetra Tech 2026b) indicate that a fully saturated zone within the tailings is expected to develop, with its thickness gradually decreasing and its upper elevation lowering over time as the thawing front advances downward. The maximum thickness of the fully saturated zone is estimated to be approximately 20 m in Year 2039, decreasing to approximately 15 m by Year 2125. Results from the extended 2D model simulation further indicate that the maximum thickness of the fully saturated zone reduces to approximately 12 m once the thawing front reaches the original ground surface.

For the slope stability analyses, a 15 m thick fully saturated tailings zone directly above the original ground surface was assumed under long-term conditions. The phreatic surface was assumed to coincide with the top of the fully saturated tailings zone.

3.4.3 Seismic Loading

Pseudo-static analysis was used to simulate seismic loading. This method typically applies a horizontal acceleration coefficient to represent the seismic loading induced by an earthquake.

The estimated PGA is 0.0285 g for a 5% in 50-year probability of exceedance (0.001 per annum or 1 in 1,000 year return) and 0.0498 g for a 2% in 50-year probability of exceedance (0.000404 per annum or 1 in 2,475 year return) at the Meliadine Mine site. A horizontal PGA of 0.0498 g was used for the pseudo-static analysis.

3.4.4 Undrained Shear Strength

The results of laboratory testing conducted on tailings samples collected from current mine operations indicated that, under the testing conditions, the tailings generally exhibit a contractive response at small strains (less than 4% axial strain) and then transition to a dilative response by the end of the tests (at 15% of axial strain) (Tetra Tech 2025). Comparison of the in situ data collected during the 2025 drilling program with the laboratory test results suggests that the in situ tailings are on the dilative side of the state-parameter framework.

For dilative materials, a reduction in pore-water pressure (i.e., the generation of negative excess pore-water pressure) is expected under undrained shear conditions, increasing effective stress and shear strength. As a result, such materials are generally considered stable and less susceptible to liquefaction.

Although the tailings at the Meliadine Mine is expected to exhibit dilative behaviour under the applied placement and compaction protocol, a sensitivity analysis was performed to evaluate the FoS under undrained conditions. An undrained stress ratio, S_u/σ'_{vc}, of 0.25, estimated from the direct simple shear tests conducted as part of the 2025 laboratory testing program was used for this assessment (Tetra Tech 2025).

3.5 Cases Evaluated

Slope stability along the selected six representative cross-sections was assessed under the following loading conditions:

- Slope stability under static loading during construction;
- Slope stability under long-term static loading conditions after construction;
- Slope stability under seismic (pseudo-static) loading after construction; and
- Sensitivity cases under long-term static loading conditions at the selected critical cross-sections.

The sensitivity analyses include the following scenarios:

- Elevated water table in the TSF, assuming that the water table is located at the mid-height of the TSF.
- Excess pore-water pressure generation due to thawing of the ice-rich SILT, with a R_u of 0.15.
- Development of vertical cracking at the crest of the TSF.
- Undrained shear condition, using an undrained stress ratio, S_u/σ'_{vc} of 0.25.
- Fully thawed ice-rich SILT layer in long term.

The potential consequences of slope instability vary with the depth and extent of failure. Accordingly, the following three types of slope slip failure were considered:

- **Surficial, shallow slip failure:** A shallow failure involving the side slopes of the TSF with a failure depth not exceeding 5 m.

- **Local deep-seated slip failure:** A slip failure occurring within the side slopes of the TSF without extending into the foundation soils, with a failure depth of up to 15 m.
- **Global deep-seated slip failure:** A large-scale slip failure that extends through the tailings and potentially into the foundation soils, with a failure depth typically exceeding 15 m. The runout associated with the failure may impact adjacent mining infrastructure, water management systems, or the surrounding watershed.

4.0 STABILITY ANALYSIS RESULTS AND DISCUSSION

The calculated FoS for the stability analyses of the TSF design update are summarized in Table 4, along with the required minimum FoS. Figures A1 to F4 in Appendix A present the selected slope stability analysis cases and results. The results in Table 4 indicate that the calculated FoS for all assessed loading conditions meets or exceeds the adopted stability criteria as outlined in Section 2.2.

The results of the long-term creep deformation analyses indicated that mitigation measures are required, where the ice-rich SILT layer is present, to prevent excessive deformation are required as long-term performance management. (Tetra Tech 2026c). The proposed mitigation measures include the construction of a toe buttress and shear key along the toe of the existing TSF, as well as a toe buttress along the toe of the TSF extension with a shear key within the TSF extension footprint. The slope stability analyses conducted for the TSF design update did not incorporate the proposed mitigation measures. Implementation of the proposed mitigation measures is expected to further strengthen the TSF's long-term physical stability and performance.

Table 4: Summary of Slope Stability Analysis Results

Section	Condition		Required Minimum Factor of Safety	Calculated Minimum Factor of Safety	Figure No.
A (Raise)	During construction	Shallow slip	1.3	2.19	A1
		Local deep-seated slip	1.5	2.30	A2
	Long-term after construction	Static loading	1.5	1.58	A3
		Pseudo-static loading	1.1	1.38	A4
B (Raise)	During construction	Shallow slip	1.3	2.20	B1
		Local deep-seated slip	1.5	2.30	B2
	Long-term after construction	Static loading	1.5	2.01	B3
		Pseudo-static loading	1.1	1.72	B4
C (Raise)	During construction	Shallow slip	1.3	2.17	C1
		Local deep-seated slip	1.5	2.35	C2
	Long-term after construction	Static loading	1.5	1.50	C3
		Pseudo-static loading	1.1	1.30	C4
	Long-term after construction, sensitivity case	Static loading with water table at the mid-height of the TSF	1.4	1.40	C5
		Excess pore water pressure due to thawing ice-rich SILT (R_u=0.15)	1.4	1.41	C6
		Undrained condition (S_u/σ'_{vc}=0.25)	1.2	1.21	C7
		Static loading with 8 m tension crack with water	1.4	1.45	C8
		Fully thawed ice-rich SILT layer in long term	1.5	1.93	C9
D (Extension)	During construction	Shallow slip	1.3	2.42	D1
		Local deep-seated slip	1.5	2.57	D2
	Long-term after construction	Static loading	1.5	1.52	D3
		Pseudo-static loading	1.1	1.28	D4
	Long-term after construction, sensitivity case	Static loading with water table at the mid-height of the TSF	1.4	1.48	D5
		Excess pore water pressure due to thawing ice-rich SILT (R_u=0.15)	1.4	1.46	D6
		Undrained condition (S_u/σ'_{vc}=0.25)	1.2	1.22	D7
		Static loading with 8 m tension crack with water	1.4	1.52	D8
		Fully thawed ice-rich SILT layer in long term	1.5	2.17	D9

Table 4: Summary of Slope Stability Analysis Results

Section	Condition		Required Minimum Factor of Safety	Calculated Minimum Factor of Safety	Figure No.
E (Extension)	During construction	Shallow slip	1.3	2.70	E1
		Local deep-seated slip	1.5	2.60	E2
	Long-term after construction	Static loading	1.5	1.63	E3
		Pseudo-static loading	1.1	1.42	E4
F (Extension)	During construction	Shallow slip	1.3	2.41	F1
		Local deep-seated slip	1.5	2.65	F2
	Long-term after construction, base case	Static loading	1.5	1.57	F3
		Pseudo-static loading	1.1	1.30	F4

5.0 LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Agnico Eagle Mines Limited and their agents. Tetra Tech Canada Inc. (Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Agnico Eagle Mines Limited, or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this document is subject to the Limitations on Use of this Document attached in Appendix B or Contractual Terms and Conditions executed by both parties.

6.0 CLOSURE

We trust this technical memo meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.

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ENG.EARC03140-34

Prepared by:
Linping Wu, Ph.D., P.Eng.
Geotechnical Engineer, Arctic Group
Direct Line: 780.932.6983
Linping.Wu@tetratech.com

REGISTERED PROFESSIONAL ENGINEER H. XIA LICENSEE NT/NU
2026-04-02
ENG.EARC03140-34
ENG.EARC03140-34
ENG.EARC03140-34

Reviewed by:
Hongwei Xia, Ph.D, P.Eng.
Principal Specialist/Senior Geotechnical Engineer, Arctic Group
Direct Line: 587.460.3646
Hongwei.Xia@tetratech.com

REGISTERED PROFESSIONAL ENGINEER F. NDOFOR NT/NU
2026-04-03
ENG.EARC03140-34
ENG.EARC03140-34
ENG.EARC03140-34

Reviewed by:
Fai Ndofor, M.Sc., P.Geo., PMP
Principal Consultant – Arctic Group
Direct Line: 587.460.3486
Fai.Ndofor@tetratech.com

/jf/kla

PERMIT TO PRACTICE
TETRA TECH CANADA INC.
Signature _____
Date 2026-04-03
PERMIT NUMBER: P 018
NT/NU Association of Professional Engineers and Geoscientists

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FIGURES

Figure 1 Typical Section Location for Slope Stability Analysis

537000.0 537500.0 538000.0 538500.0 539000.0 539500.0

6990500.0 6990000.0 6989500.0

PROPOSED TSF EXPANSION

MELIADINE LAKE

E4 E11 E5 B24 B25 B7 B6 G2

CP8 THERMAL BERM

CHANNEL14 CHANNEL13 CHANNEL3 CHANNEL4

EXISTING TSF

INDUSTRIAL PAD

ORE STOCKPILES

WRSF1

CP1 CP3 CP8

PF1 PF2 PF3

GT11-02 GT13-06 GT25-08 GT12-23 GT12-22 GT09-17 GT25-09 GT24-01 GT25-07 GT24-04 GT25-05 GT25-04 GT25-06 GT12-24 GT25-03 GT24-02 GT12-01 GT12-02A GT12-02 GT12-04 GT12-05 GT11-09 GT12-06 GT12-07 GT09-19 GT12-08 GT09-18 GT13-04 GT07-09 GT11-12 GT12-09 GT25-02 GT25-10 GT24-06 GT25-11 GT24-08 GT25-01 GT24-07 GT14-12 GT17-17 GT17-18 GT17-19 GT17-20 GT14-11 GT12-40 GT24-10 GT09-16 GT25-10 GT24-05 GT25-02 GT12-25 GT24-03 GT12-20 GT11-03 GT12-19 GT11-10 GT13-07 GT07-11 GT09-15 GT25-12 GT25-12A GT25-12B GT25-13 GT25-13A GT12-18 GT14-13 GT12-17 GT11-04 GT14-25 GT14-20 GT14-26 GT14-24 GT14-21 GT14-18 GT14-19 GT14-22 GT14-17 GT14-16 GT14-28 GT11-05 GT14-27 GT14-29 GT14-23 GT14-14 GT14-15 GT10-01 GT10-02 GT10-03 GT12-16 GT11-06 GT09-20

TP25-13/13A TP25-15/15A TP25-06 TP25-07 TP25-08 TP25-09 TP25-14/14A TP25-05 TP25-04 TP25-12/12A TP25-03 TP25-11/11A TP25-01

A A' B B' C C' D D' E E' F F'

LEGEND:

- TESTPITS BY AGNICO EAGLE
- TESTPITS BY TETRA TECH
- BOREHOLE DRILLED
- CATCHMENT BOUNDARY

NOTE

SATELLITE IMAGE PROVIDED BY AGNICO EAGLE TAKEN ON SEPTEMBER 22, 2025

0 250 m

Scale: 1: 7 500

PERMAFROST EXTENT AND GROUND ICE CONTENT:

PF1 **Predominantly Ice-rich Permafrost with Negligible to Low Excess Ice Content (<10% by Volume of Excess Ice):**
Predominantly ice-rich ground with excess ice content generally less than 10% by volume of visible ice. May include patches of greater excess ice content (PF2, PF3) or permafrost-free ground.

PF2 **Predominantly Ice-Rich Permafrost with Medium Excess Ice Content (10%-20% by Volume of Excess Ice):**
Predominantly ice-rich ground with excess ice content ranging between 10% and 20% by volume of visible ice. May include patches of greater excess ice content (PF3), less excess ice content (PF1) or permafrost-free ground (PF0).

PF3 **Predominantly Ice-Rich Permafrost with High to Very High Excess Ice Content (>20% by Volume of Excess Ice):**
Predominantly ice-rich ground with excess ice content exceeding 20% by volume of visible ice. May include patches of lesser excess ice content (PF2), ice-poor permafrost (PF1), or permafrost-free ground.

STATUS
ISSUED FOR USE

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TAILING STORAGE FACILITY DESIGN UPDATE , MELIADINE GOLD MINE, NU

TYPICAL SECTION LOCATIONS FOR SLOPE STABILITY ANALYSIS

TETRA TECH

PROJECT NO.	DWN	CKD	REV
ENG.EARC03140-34	DS / DBD	HX	0

OFFICE: EDM
DATE: December 2025

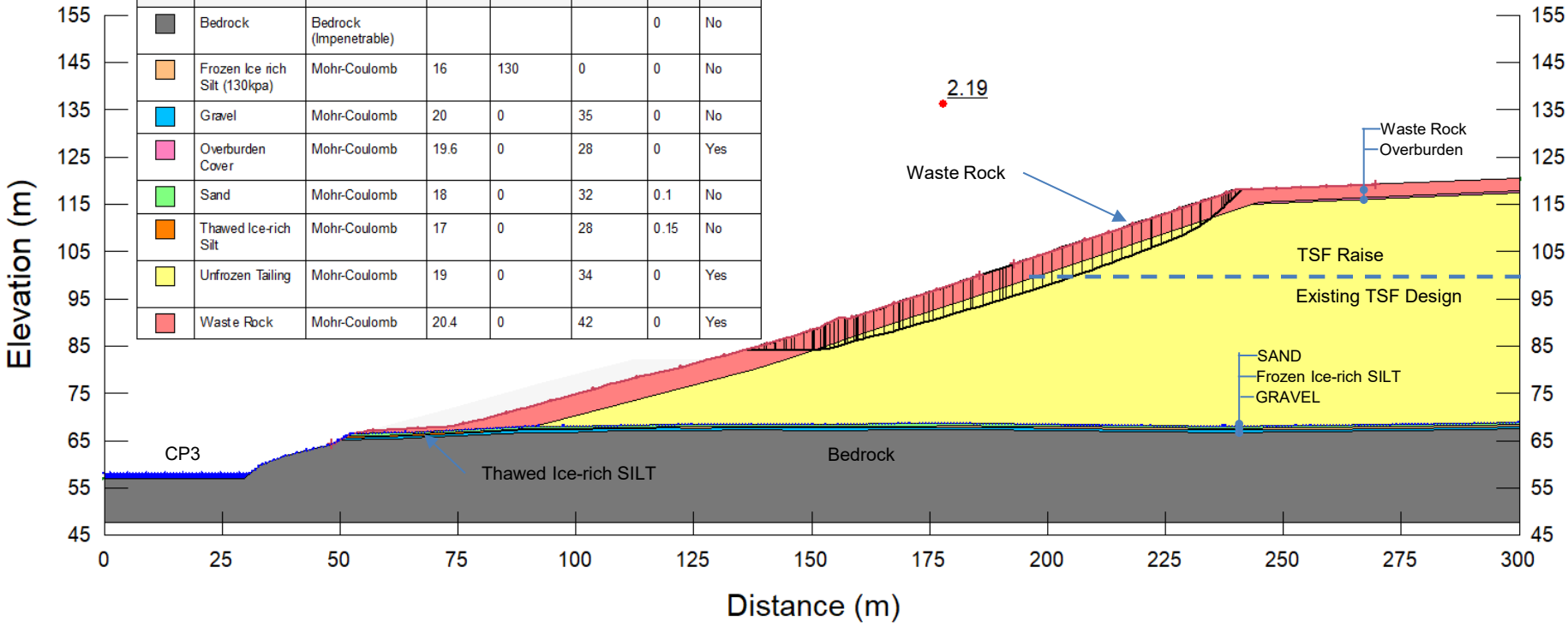
Figure 1

Q:\Edmonton\Engineering\E141\Projects_MELIADINE\ENG.EARC03140-34 TSF Raise Detailed Design\DBM\CAD files\As-Built Test Pit Locations For TSF Expansion IFR - for DBM_Fig A3.dwg [FIGURE A3] March 26, 2026 - 9:04:19 am (BY: XIA, HONGWEI)

APPENDIX A

STABILITY ANALYSIS RESULTS

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)	B-bar	Add Weight
	Bedrock	Bedrock (Impenetrable)				0	No
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0	0	No
	Gravel	Mohr-Coulomb	20	0	35	0	No
	Overburden Cover	Mohr-Coulomb	19.6	0	28	0	Yes
	Sand	Mohr-Coulomb	18	0	32	0.1	No
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28	0.15	No
	Unfrozen Tailing	Mohr-Coulomb	19	0	34	0	Yes
	Waste Rock	Mohr-Coulomb	20.4	0	42	0	Yes



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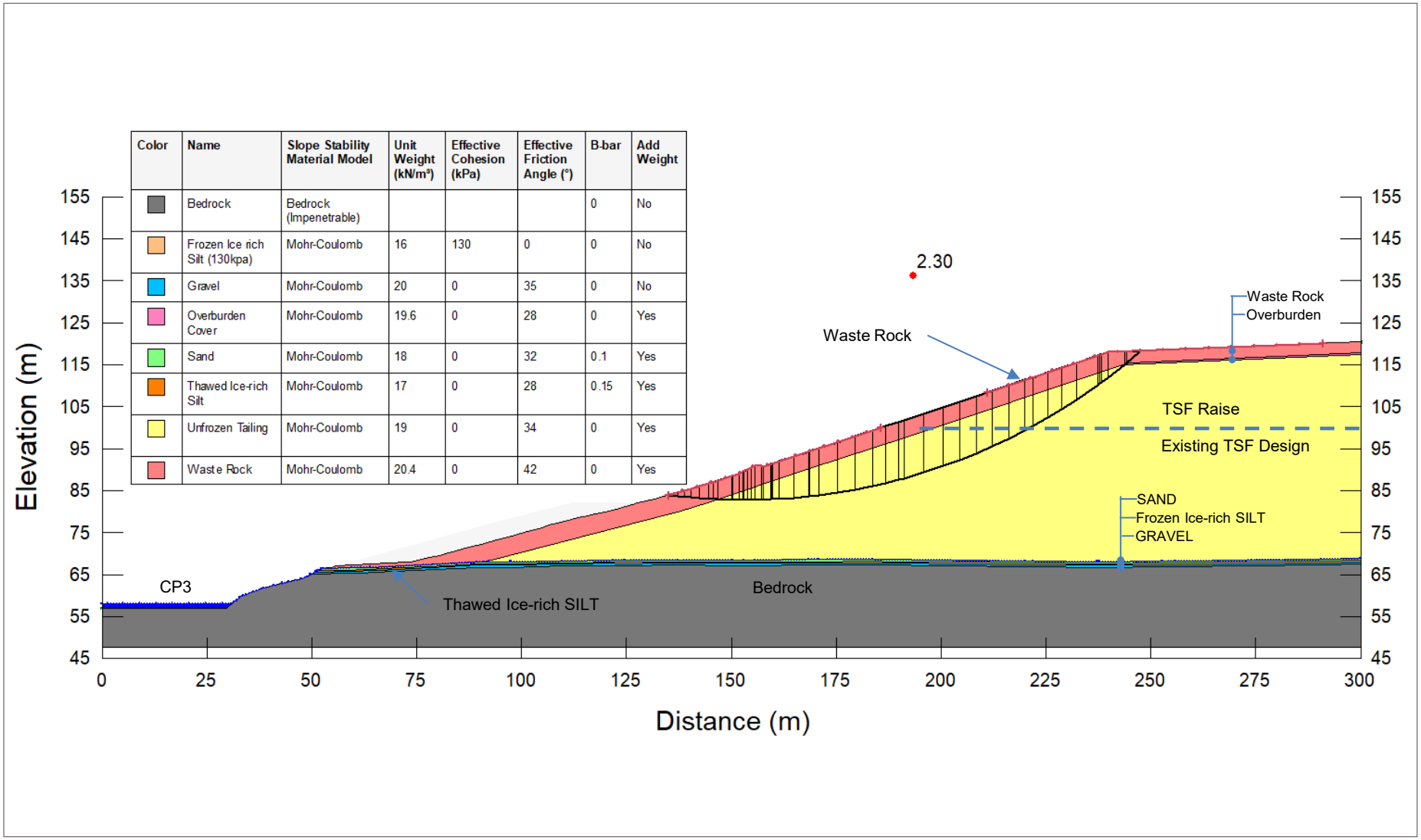
SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section A: Static Short-term Analysis during Construction (Shallow Slip)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure A1



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

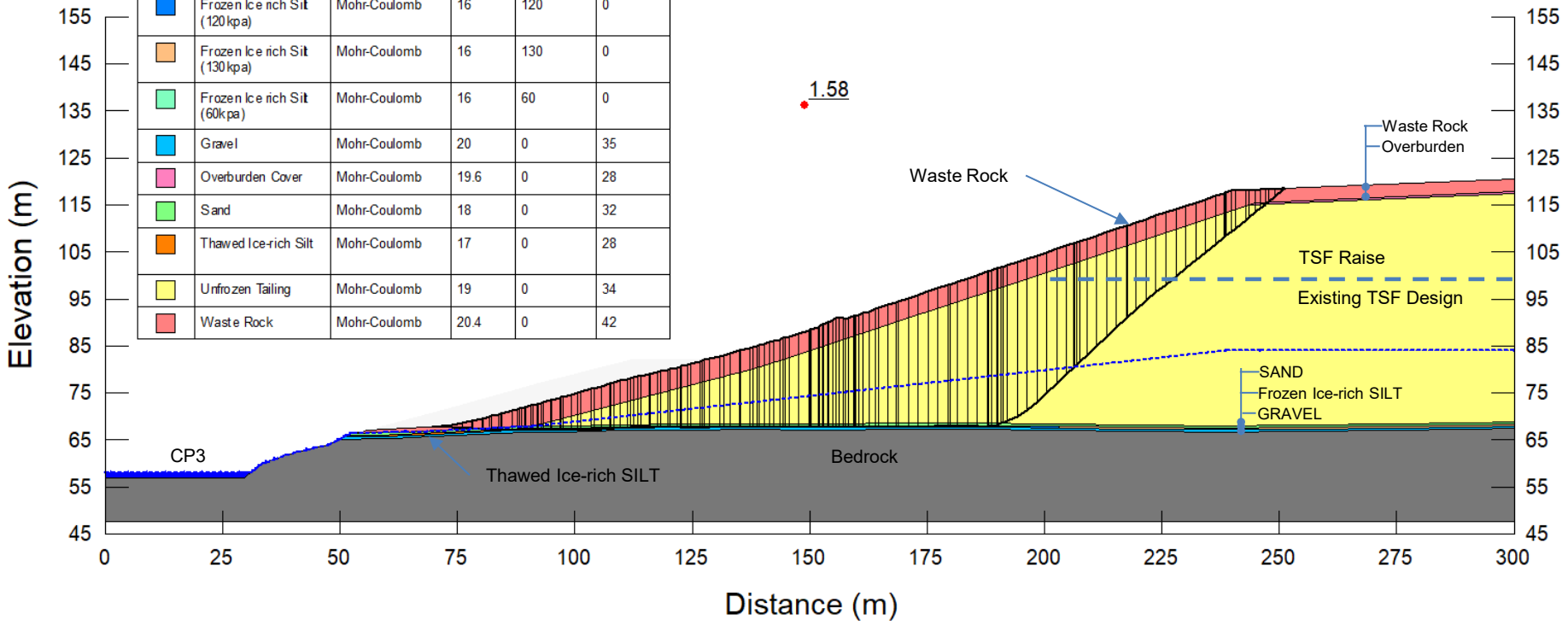
Section A: Static Short-term Analysis during Construction (Local Deep-seated Slip)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure A2

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Frozen Ice rich Silt (100 kpa)	Mohr-Coulomb	16	100	0
	Frozen Ice rich Silt (120 kpa)	Mohr-Coulomb	16	120	0
	Frozen Ice rich Silt (130 kpa)	Mohr-Coulomb	16	130	0
	Frozen Ice rich Silt (60 kpa)	Mohr-Coulomb	16	60	0
	Gravel	Mohr-Coulomb	20	0	35
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Sand	Mohr-Coulomb	18	0	32
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

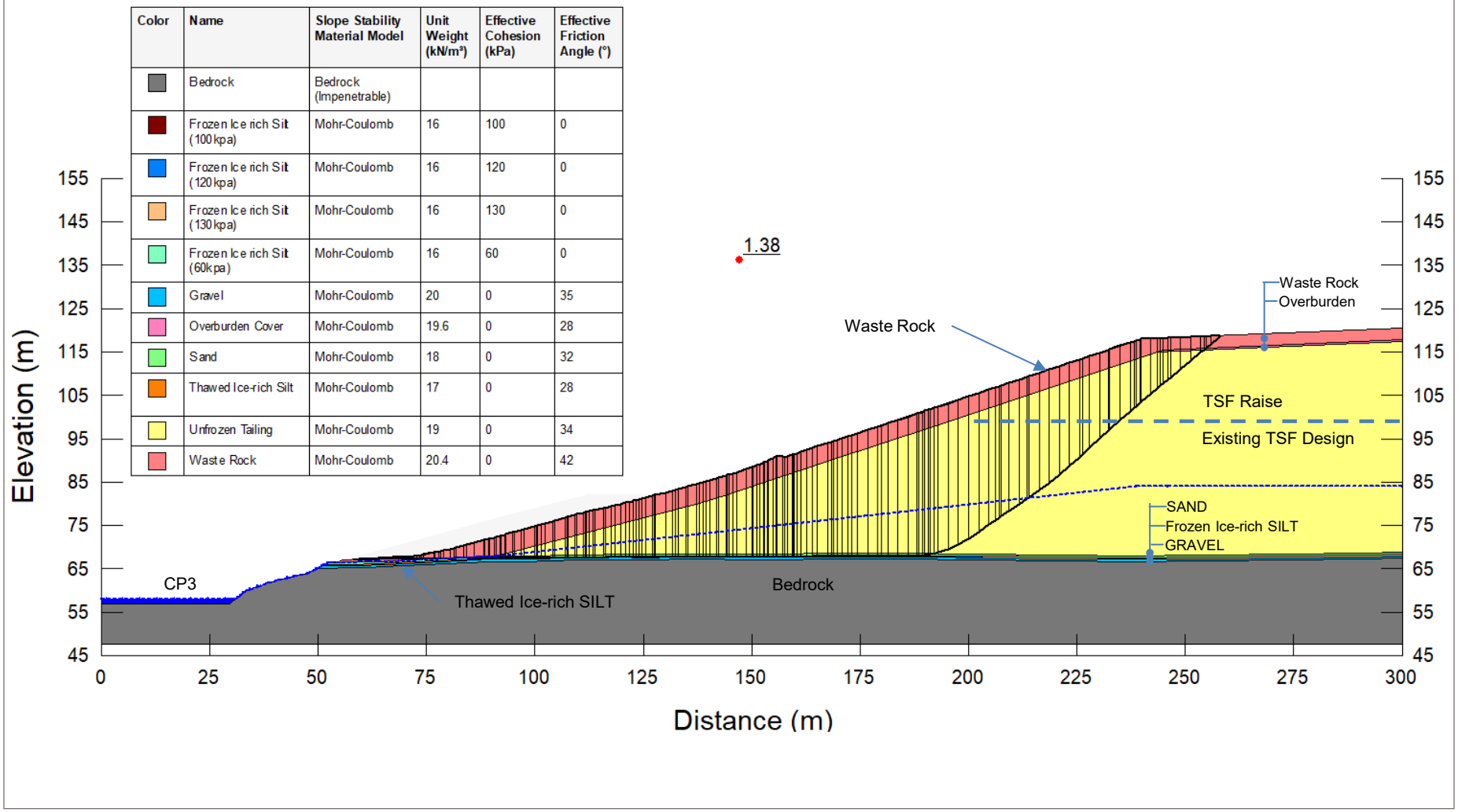
Section A: Static Long-term Analysis after Construction (100 Years)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure A3

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Frozen Ice rich Sit (100 kpa)	Mohr-Coulomb	16	100	0
	Frozen Ice rich Sit (120 kpa)	Mohr-Coulomb	16	120	0
	Frozen Ice rich Sit (130 kpa)	Mohr-Coulomb	16	130	0
	Frozen Ice rich Sit (60 kpa)	Mohr-Coulomb	16	60	0
	Gravel	Mohr-Coulomb	20	0	35
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Sand	Mohr-Coulomb	18	0	32
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section A: Pseudo-static Long-term Analysis after Construction

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
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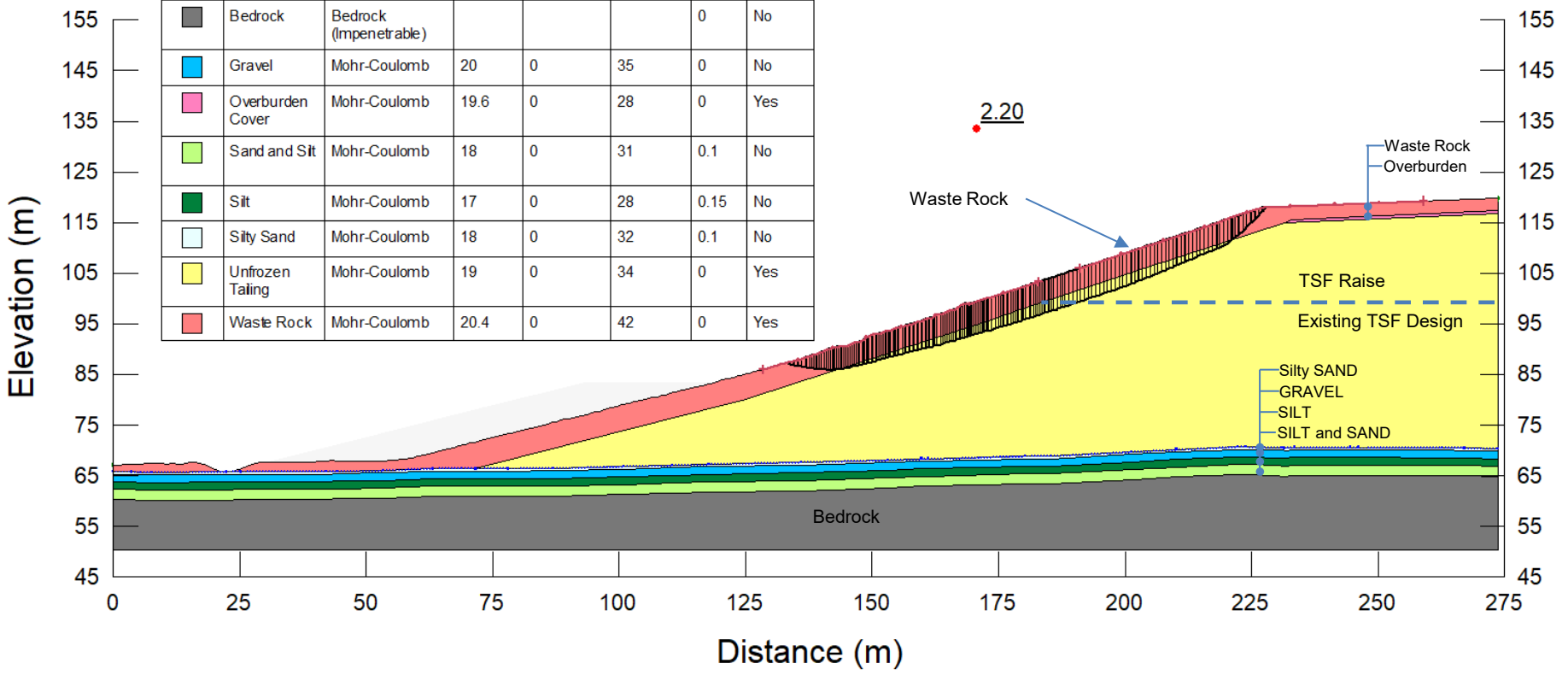
Figure A4

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)	B-bar	Add Weight
	Bedrock	Bedrock (Impenetrable)				0	No
	Gravel	Mohr-Coulomb	20	0	35	0	No
	Overburden Cover	Mohr-Coulomb	19.6	0	28	0	Yes
	Sand and Silt	Mohr-Coulomb	18	0	31	0.1	No
	Silt	Mohr-Coulomb	17	0	28	0.15	No
	Silty Sand	Mohr-Coulomb	18	0	32	0.1	No
	Unfrozen Tailing	Mohr-Coulomb	19	0	34	0	Yes
	Waste Rock	Mohr-Coulomb	20.4	0	42	0	Yes



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

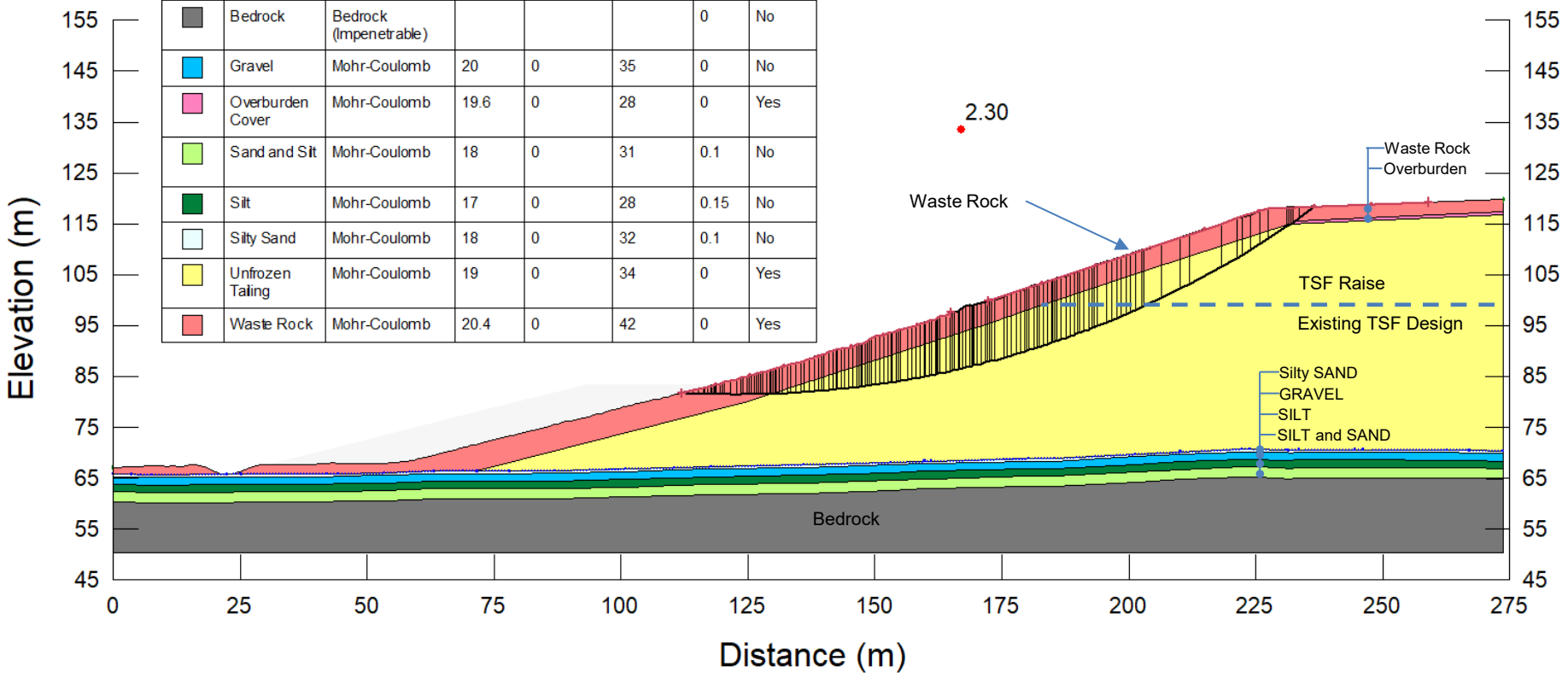
Section B: Static Short-term Analysis during Construction (Shallow Slip)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure B1

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)	B-bar	Add Weight
	Bedrock	Bedrock (Impenetrable)				0	No
	Gravel	Mohr-Coulomb	20	0	35	0	No
	Overburden Cover	Mohr-Coulomb	19.6	0	28	0	Yes
	Sand and Silt	Mohr-Coulomb	18	0	31	0.1	No
	Silt	Mohr-Coulomb	17	0	28	0.15	No
	Silty Sand	Mohr-Coulomb	18	0	32	0.1	No
	Unfrozen Tailing	Mohr-Coulomb	19	0	34	0	Yes
	Waste Rock	Mohr-Coulomb	20.4	0	42	0	Yes



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

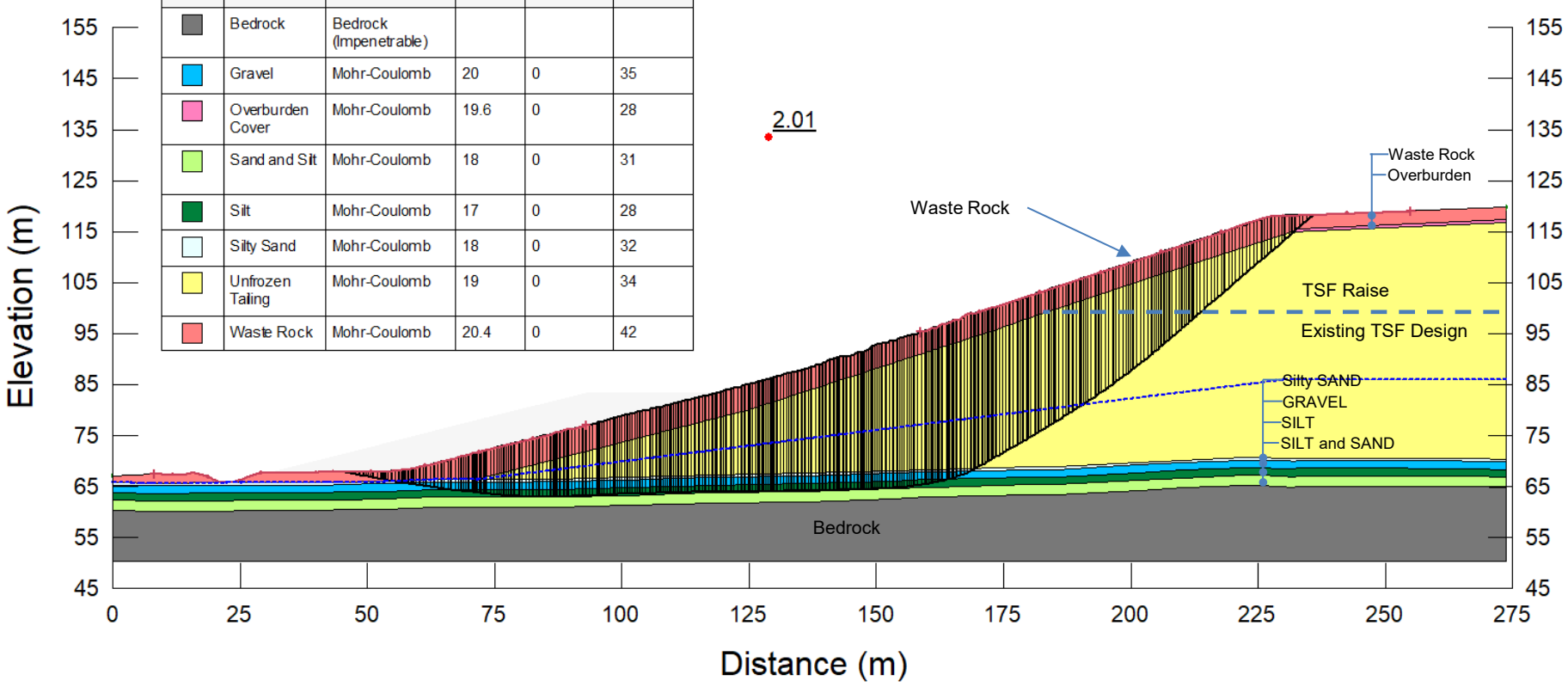
Section B: Static Short-term Analysis during Construction (Local Deep-seated Slip)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure B2

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Gravel	Mohr-Coulomb	20	0	35
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Sand and Silt	Mohr-Coulomb	18	0	31
	Silt	Mohr-Coulomb	17	0	28
	Silty Sand	Mohr-Coulomb	18	0	32
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

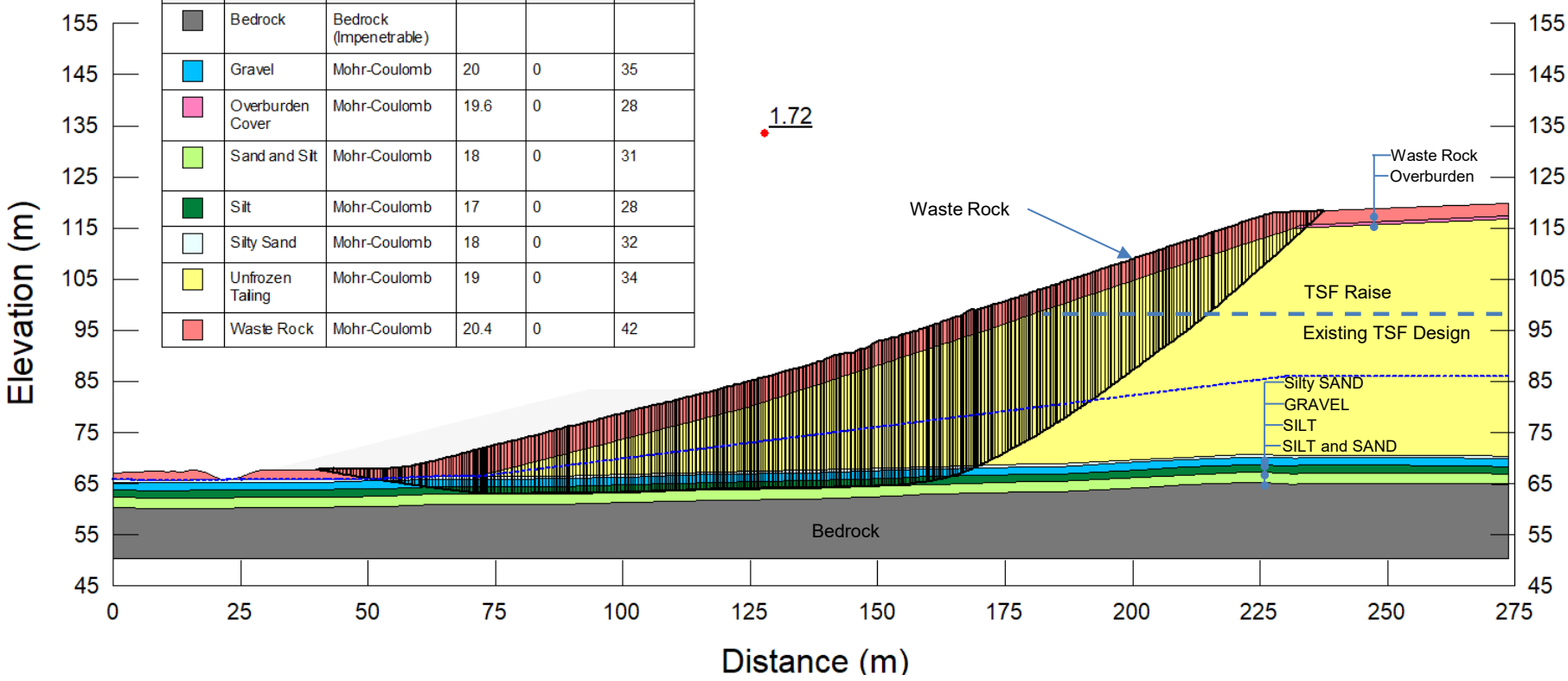
Section B: Static Long-term Analysis after Construction (100 Years)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure B3

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Gravel	Mohr-Coulomb	20	0	35
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Sand and Silt	Mohr-Coulomb	18	0	31
	Silt	Mohr-Coulomb	17	0	28
	Silty Sand	Mohr-Coulomb	18	0	32
	Unfrozen Taling	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

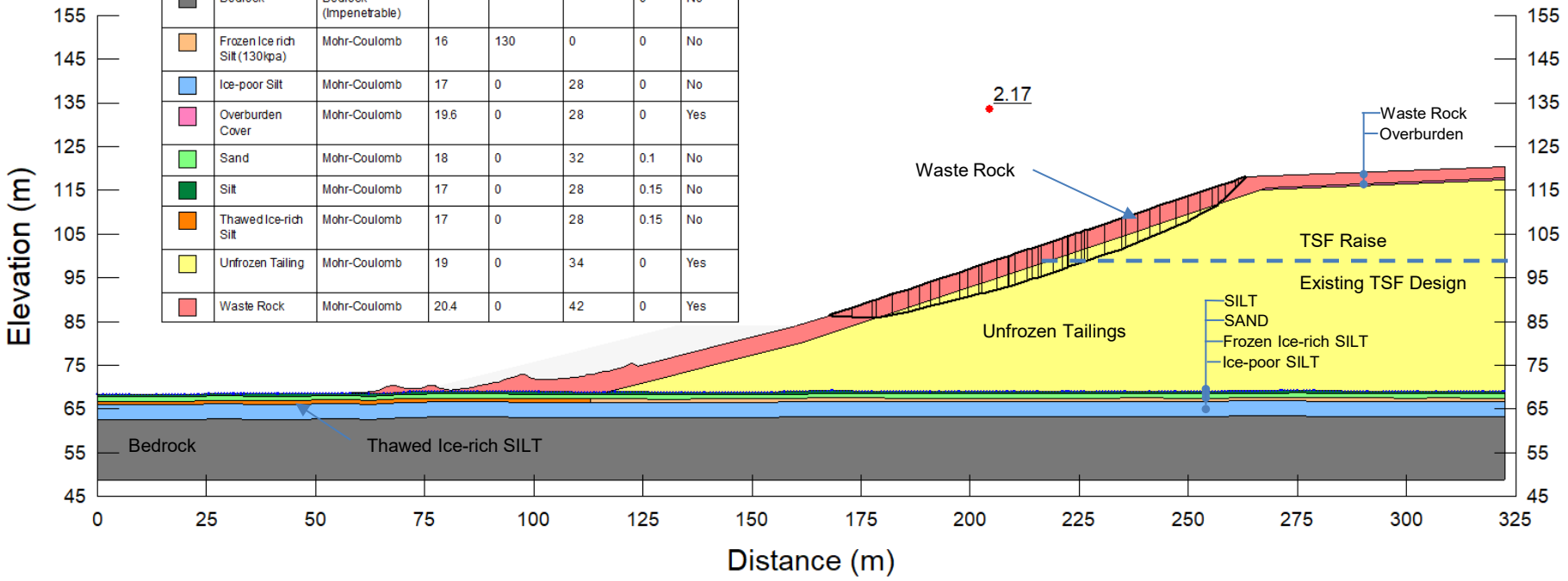
Section B: Pseudo-static Long-term Analysis after Construction

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure B4

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)	B-bar	Add Weight
	Bedrock	Bedrock (Impenetrable)				0	No
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0	0	No
	Ice-poor Silt	Mohr-Coulomb	17	0	28	0	No
	Overburden Cover	Mohr-Coulomb	19.6	0	28	0	Yes
	Sand	Mohr-Coulomb	18	0	32	0.1	No
	Silt	Mohr-Coulomb	17	0	28	0.15	No
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28	0.15	No
	Unfrozen Tailing	Mohr-Coulomb	19	0	34	0	Yes
	Waste Rock	Mohr-Coulomb	20.4	0	42	0	Yes



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

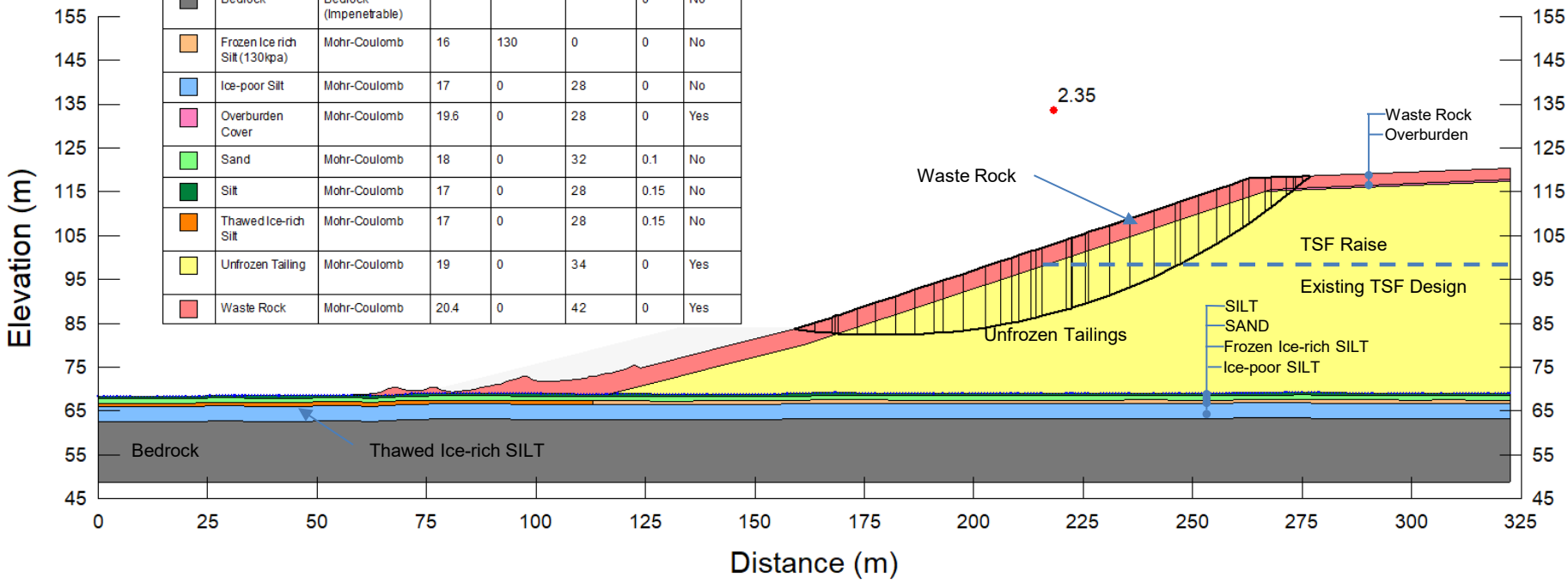
Section C: Static Short-term Analysis during Construction (Shallow Slip)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure C1

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)	B-bar	Add Weight
	Bedrock	Bedrock (Impenetrable)				0	No
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0	0	No
	Ice-poor Silt	Mohr-Coulomb	17	0	28	0	No
	Overburden Cover	Mohr-Coulomb	19.6	0	28	0	Yes
	Sand	Mohr-Coulomb	18	0	32	0.1	No
	Silt	Mohr-Coulomb	17	0	28	0.15	No
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28	0.15	No
	Unfrozen Tailing	Mohr-Coulomb	19	0	34	0	Yes
	Waste Rock	Mohr-Coulomb	20.4	0	42	0	Yes



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section C: Static Short-term Analysis during Construction (Local Deep-seated Slip)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
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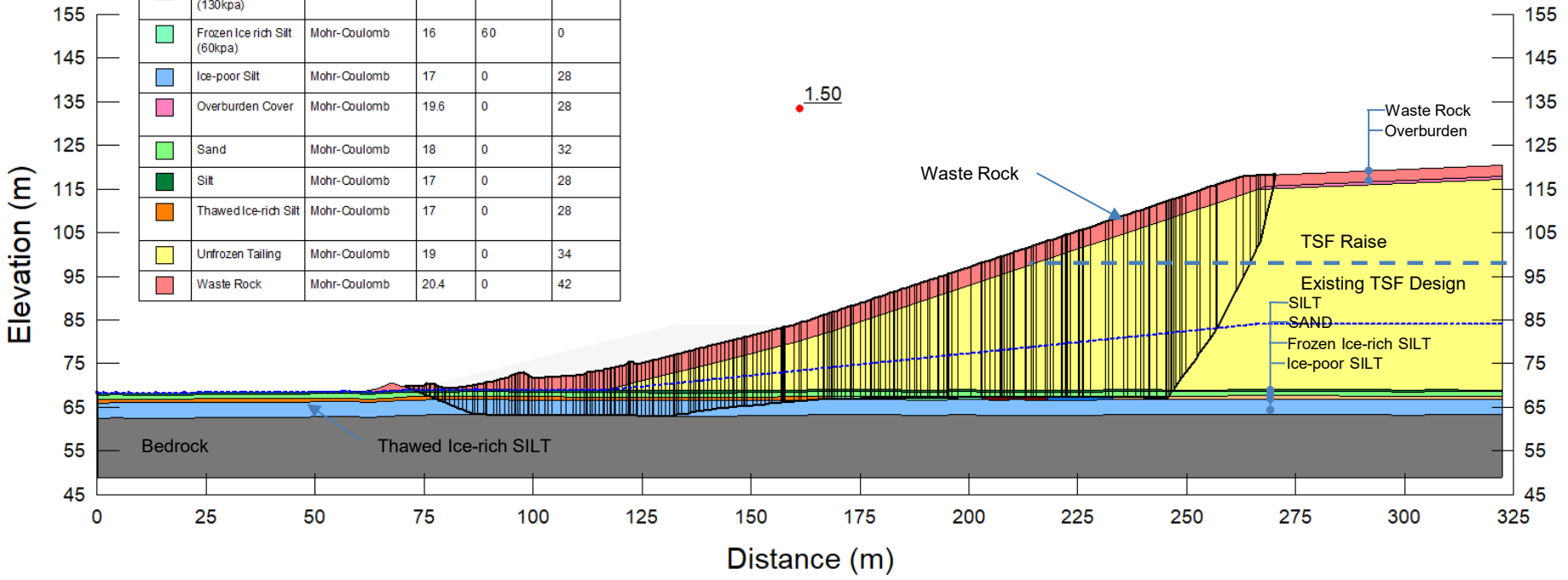
Figure C2

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Frozen Ice rich Silt (100kpa)	Mohr-Coulomb	16	100	0
	Frozen Ice rich Silt (120kpa)	Mohr-Coulomb	16	120	0
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16	60	0
	Ice-poor Silt	Mohr-Coulomb	17	0	28
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Sand	Mohr-Coulomb	18	0	32
	Silt	Mohr-Coulomb	17	0	28
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

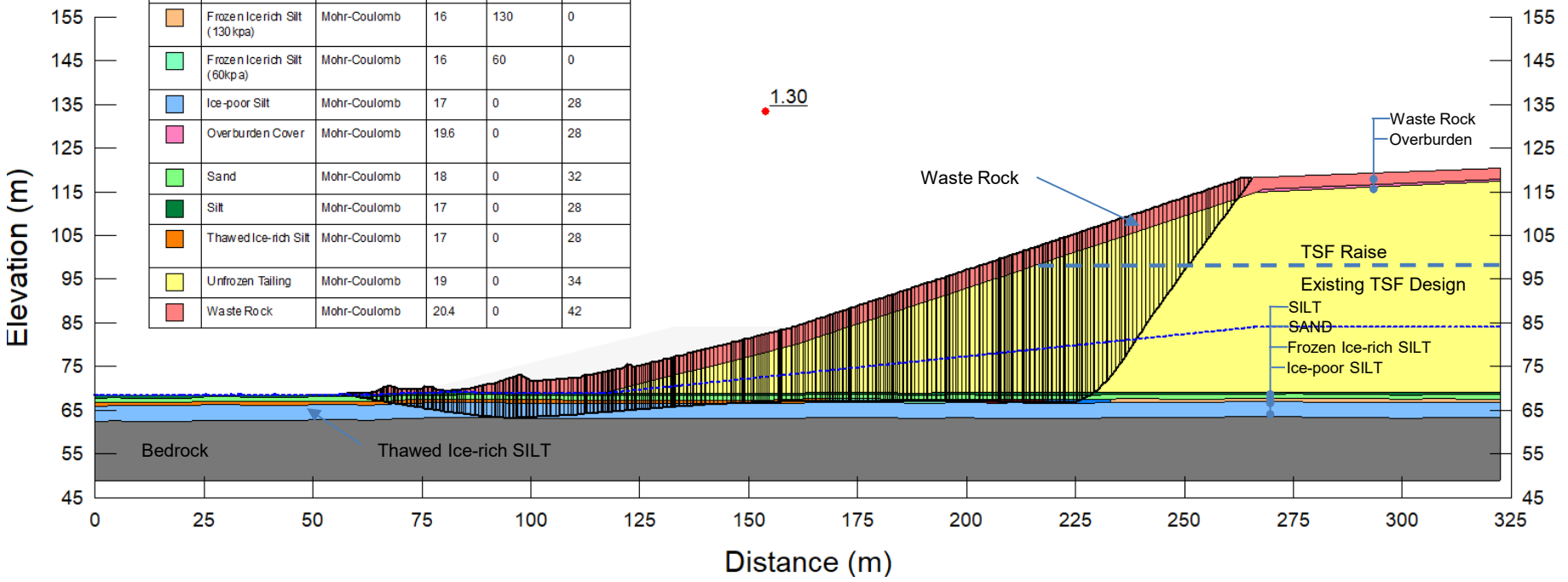
Section C: Static Long-term Analysis after Construction (100 Years)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure C3

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Frozen Ice rich Silt (100 kpa)	Mohr-Coulomb	16	100	0
	Frozen Ice rich Silt (120 kpa)	Mohr-Coulomb	16	120	0
	Frozen Ice rich Silt (130 kpa)	Mohr-Coulomb	16	130	0
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16	60	0
	Ice-poor Silt	Mohr-Coulomb	17	0	28
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Sand	Mohr-Coulomb	18	0	32
	Silt	Mohr-Coulomb	17	0	28
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

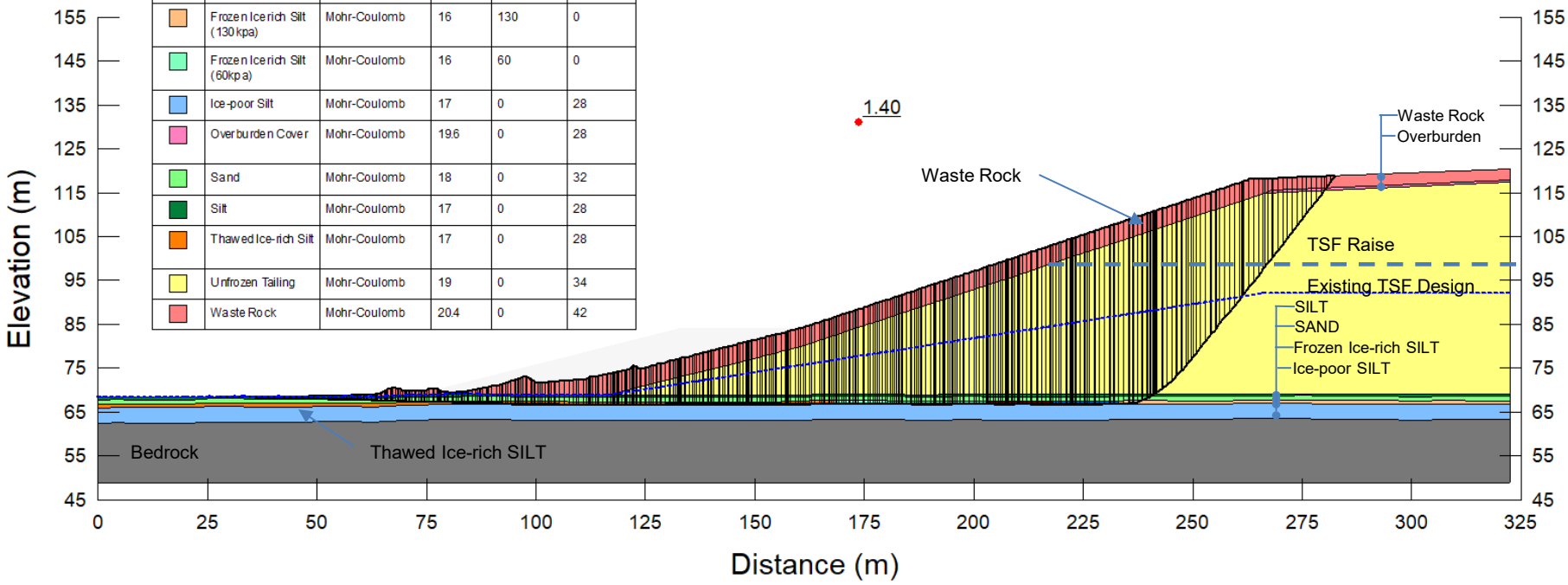
Section C: Pseudo-static Long-term Analysis after Construction (100 Years)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure C4

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Frozen Ice rich Silt (100 kpa)	Mohr-Coulomb	16	100	0
	Frozen Ice rich Silt (120 kpa)	Mohr-Coulomb	16	120	0
	Frozen Ice rich Silt (130 kpa)	Mohr-Coulomb	16	130	0
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16	60	0
	Ice-poor Silt	Mohr-Coulomb	17	0	28
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Sand	Mohr-Coulomb	18	0	32
	Silt	Mohr-Coulomb	17	0	28
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



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NOTES

Water table at 50% of TSF height

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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

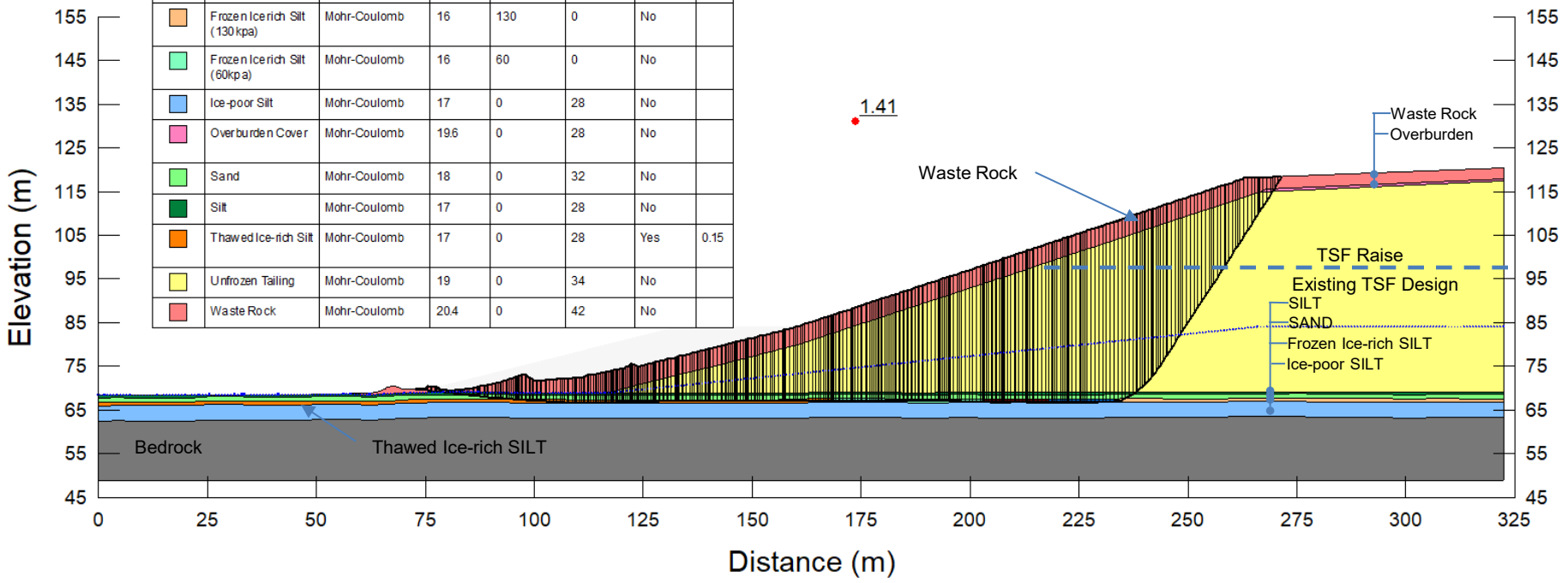
Section C: Static Long-term Analysis for Sensitivity Case with Elevated Water Table

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure C5

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)	Include Ru	Ru
	Bedrock	Bedrock (Impenetrable)				No	
	Frozen Icerich Silt (100kpa)	Mohr-Coulomb	16	100	0	No	
	Frozen Icerich Silt (120kpa)	Mohr-Coulomb	16	120	0	No	
	Frozen Icerich Silt (130kpa)	Mohr-Coulomb	16	130	0	No	
	Frozen Icerich Silt (60kpa)	Mohr-Coulomb	16	60	0	No	
	Ice-poor Silt	Mohr-Coulomb	17	0	28	No	
	Overburden Cover	Mohr-Coulomb	19.6	0	28	No	
	Sand	Mohr-Coulomb	18	0	32	No	
	Silt	Mohr-Coulomb	17	0	28	No	
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28	Yes	0.15
	Unfrozen Tailing	Mohr-Coulomb	19	0	34	No	
	Waste Rock	Mohr-Coulomb	20.4	0	42	No	



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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

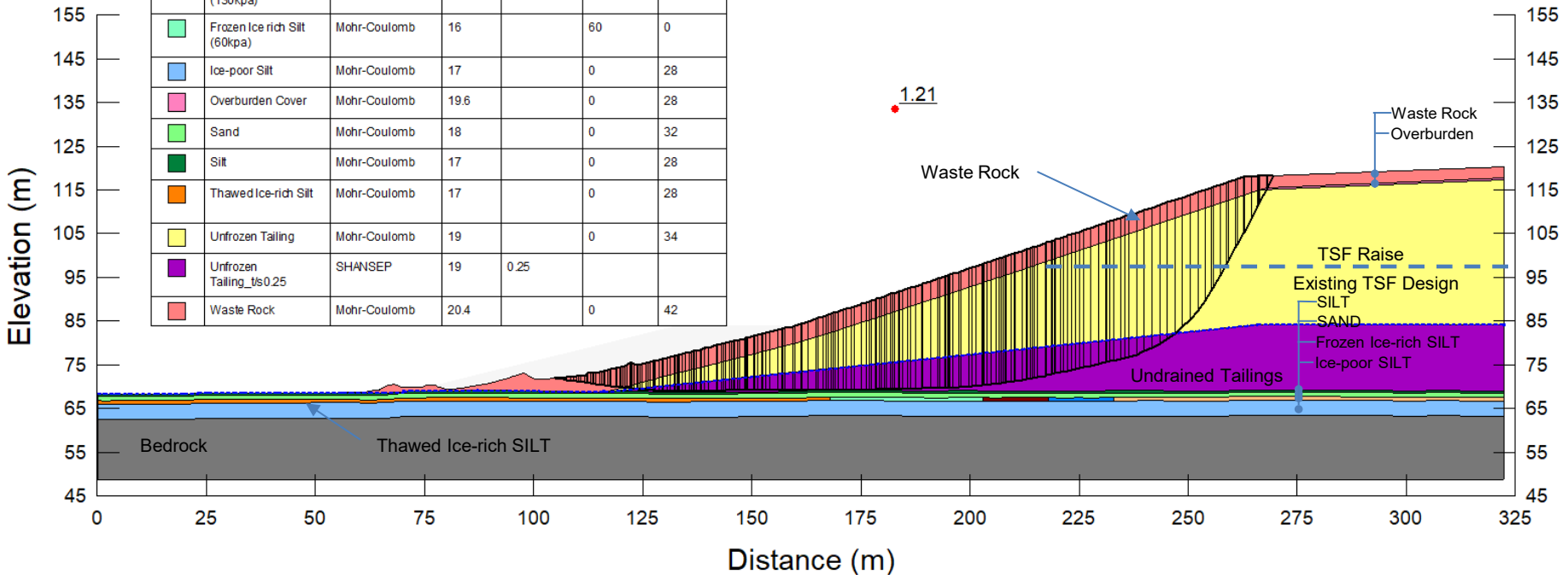
Section C: Static Long-term Analysis for Sensitivity Case with Excess Pore Water Pressure in Thawing Ice-rich Silt

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure C6

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Tau/Sigma	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)				
	Frozen Ice rich Silt (100kpa)	Mohr-Coulomb	16		100	0
	Frozen Ice rich Silt (120kpa)	Mohr-Coulomb	16		120	0
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16		130	0
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16		60	0
	Ice-poor Silt	Mohr-Coulomb	17		0	28
	Overburden Cover	Mohr-Coulomb	19.6		0	28
	Sand	Mohr-Coulomb	18		0	32
	Silt	Mohr-Coulomb	17		0	28
	Thawed Ice-rich Silt	Mohr-Coulomb	17		0	28
	Unfrozen Tailing	Mohr-Coulomb	19		0	34
	Unfrozen Tailing_t/s0.25	SHANSEP	19	0.25		
	Waste Rock	Mohr-Coulomb	20.4		0	42



LEGEND

NOTES

STATUS
ISSUED FOR USE

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AGNICO EAGLE

TETRA TECH

SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

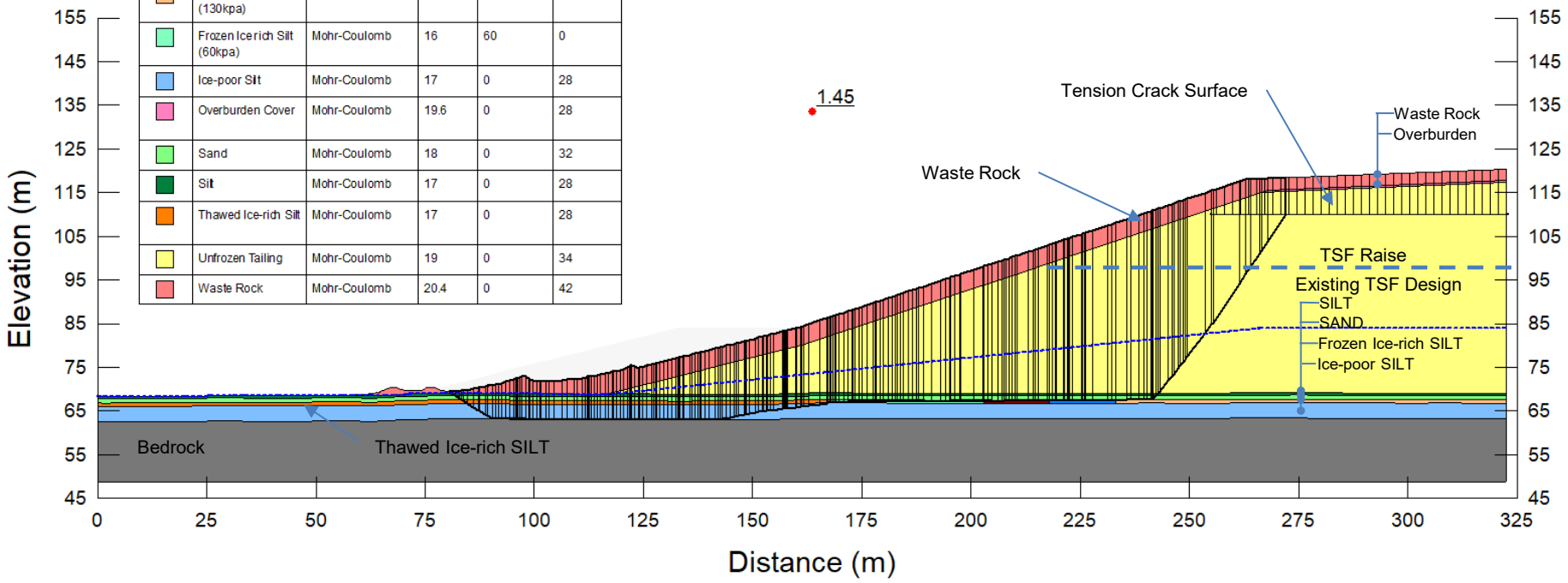
Section C: Post-Earthquake Analysis for Sensitivity Case with Saturated Tailings in Undrained Condition

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure C7

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Frozen Ice rich Silt (100kpa)	Mohr-Coulomb	16	100	0
	Frozen Ice rich Silt (120kpa)	Mohr-Coulomb	16	120	0
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16	60	0
	Ice-poor Silt	Mohr-Coulomb	17	0	28
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Sand	Mohr-Coulomb	18	0	32
	Silt	Mohr-Coulomb	17	0	28
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



LEGEND

NOTES

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TETRA TECH

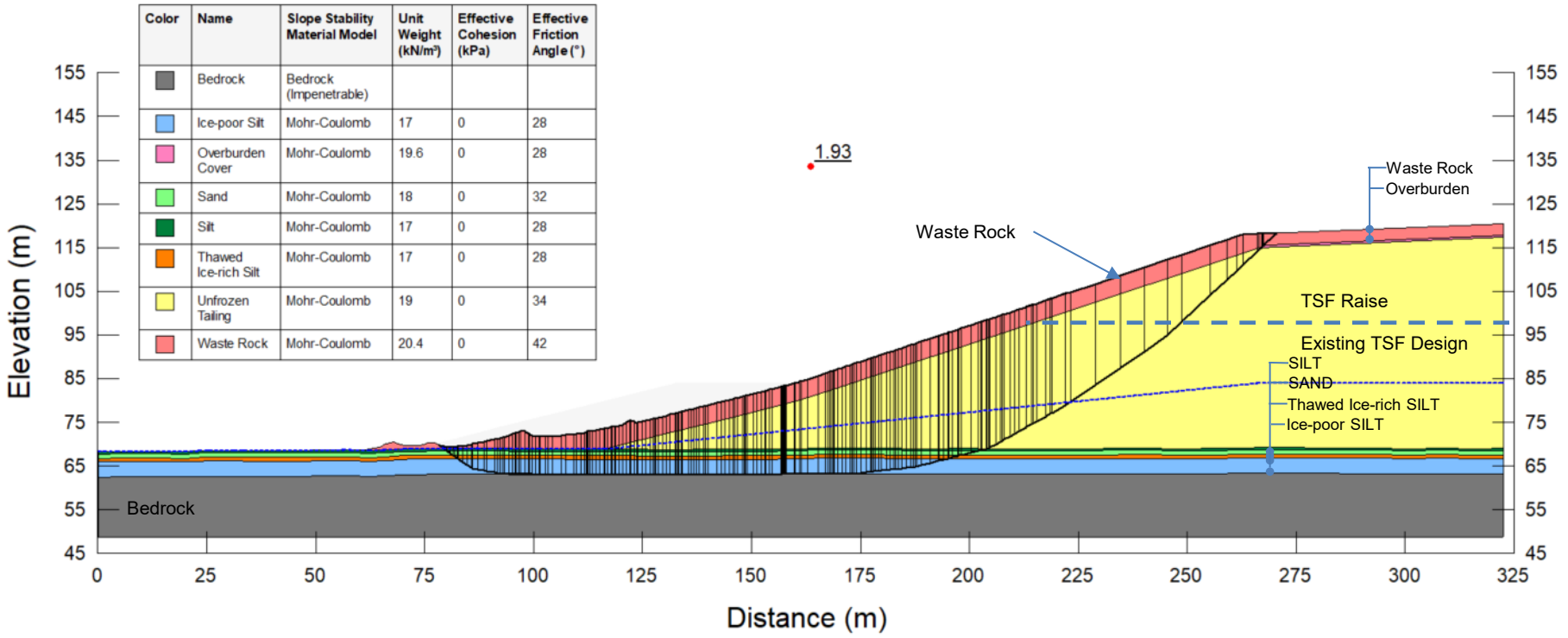
SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section C: Static Long-term Analysis for Sensitivity Case with 8 m Tension Crack Filled with Water

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure C8



LEGEND

NOTES

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AGNICO EAGLE

TETRA TECH

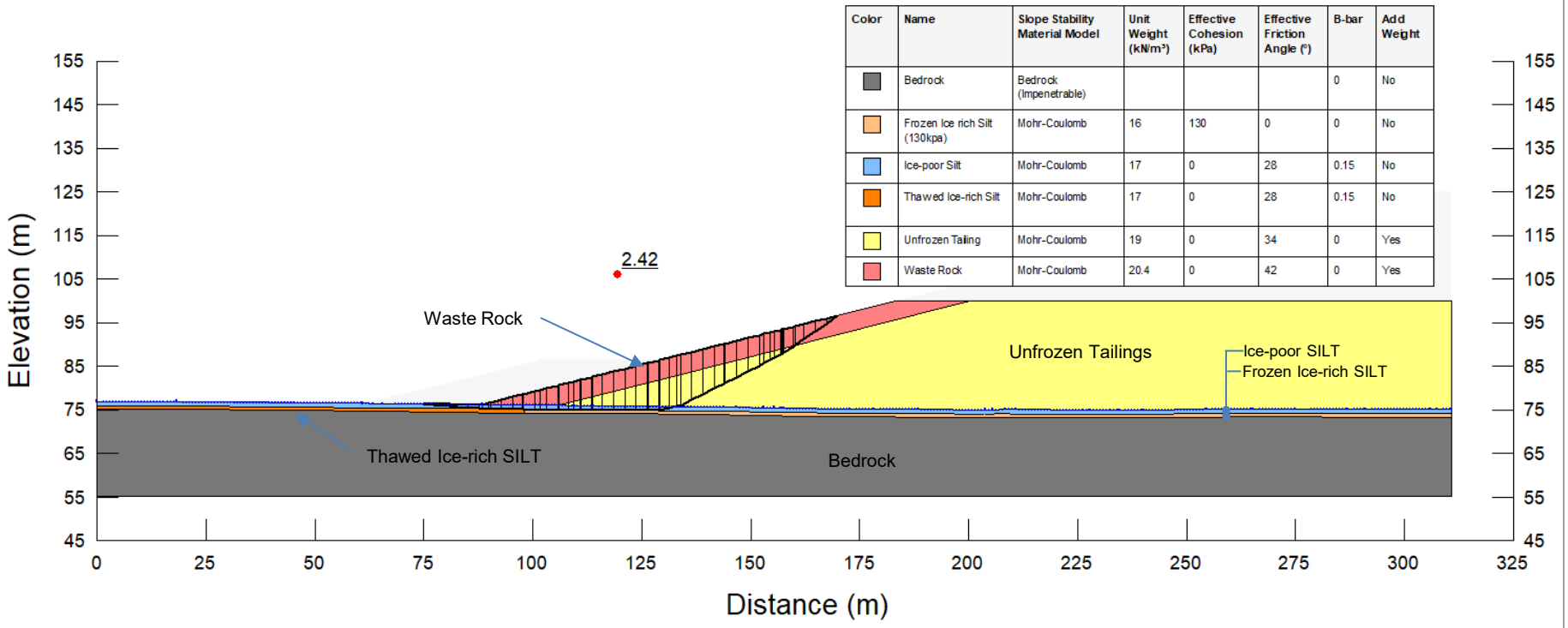
SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section C: Static Long-term Analysis after Construction with Fully Thawed Ice-rich SILT

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure C9



LEGEND

NOTES

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TETRA TECH

SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

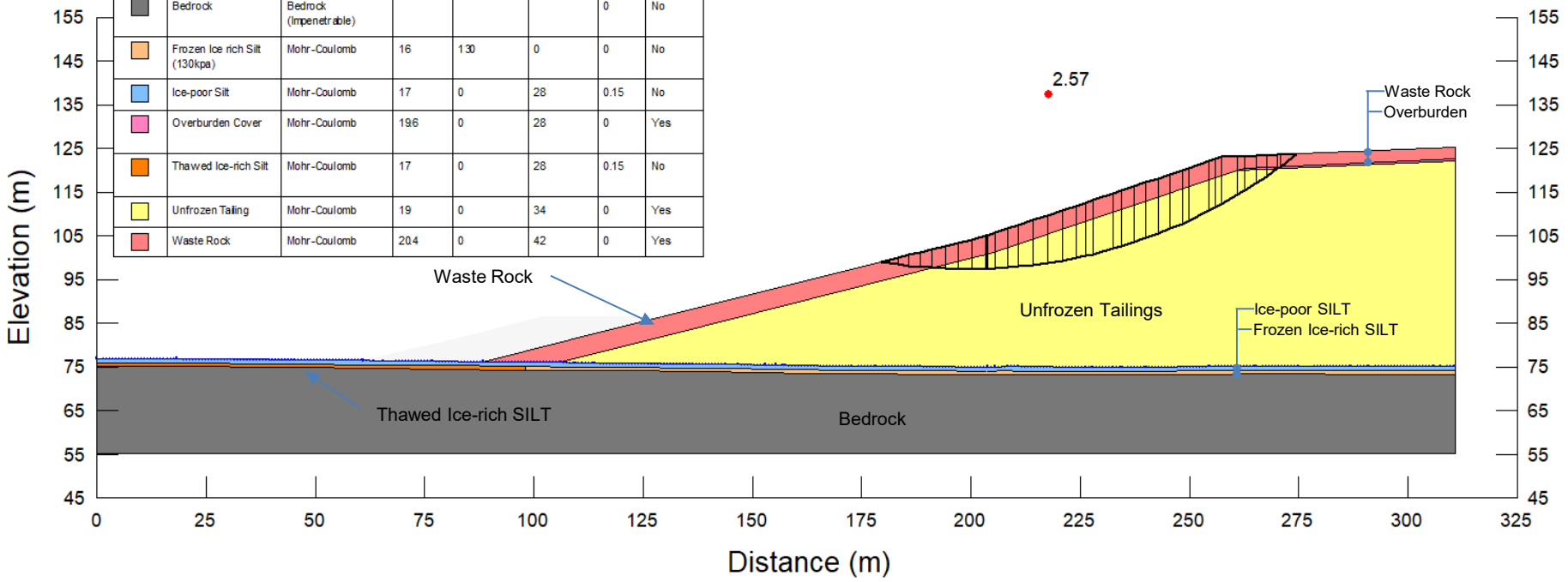
Section D: Static Short-term Analysis during Construction (EL. 100m)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure D1

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)	B-bar	Add Weight
	Bedrock	Bedrock (Impenetrable)				0	No
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0	0	No
	Ice-poor Silt	Mohr-Coulomb	17	0	28	0.15	No
	Overburden Cover	Mohr-Coulomb	19.6	0	28	0	Yes
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28	0.15	No
	Unfrozen Tailing	Mohr-Coulomb	19	0	34	0	Yes
	Waste Rock	Mohr-Coulomb	20.4	0	42	0	Yes



LEGEND

NOTES

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TETRA TECH

SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

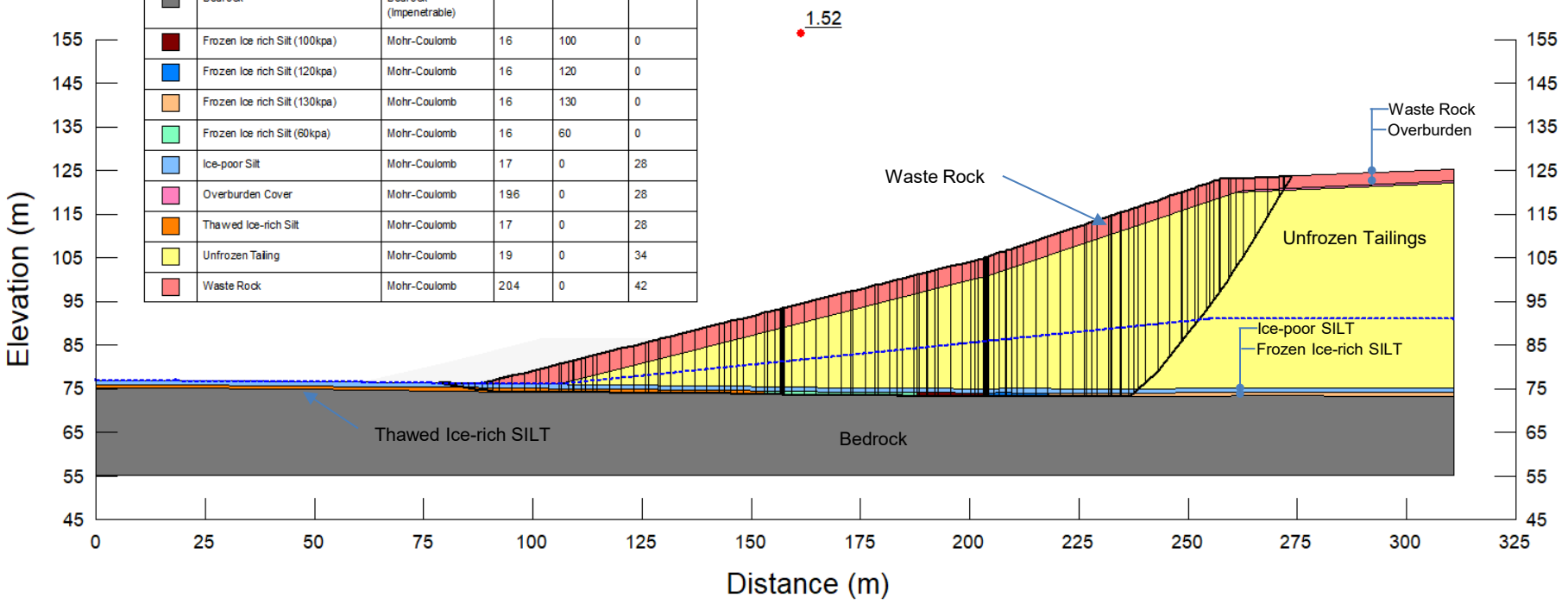
Section D: Static Short-term Analysis during Construction (Local Deep-seated Slip)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure D2

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Frozen Ice rich Silt (100kpa)	Mohr-Coulomb	16	100	0
	Frozen Ice rich Silt (120kpa)	Mohr-Coulomb	16	120	0
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16	60	0
	Ice-poor Silt	Mohr-Coulomb	17	0	28
	Overburden Cover	Mohr-Coulomb	196	0	28
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	204	0	42



LEGEND

NOTES

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TETRA TECH

SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

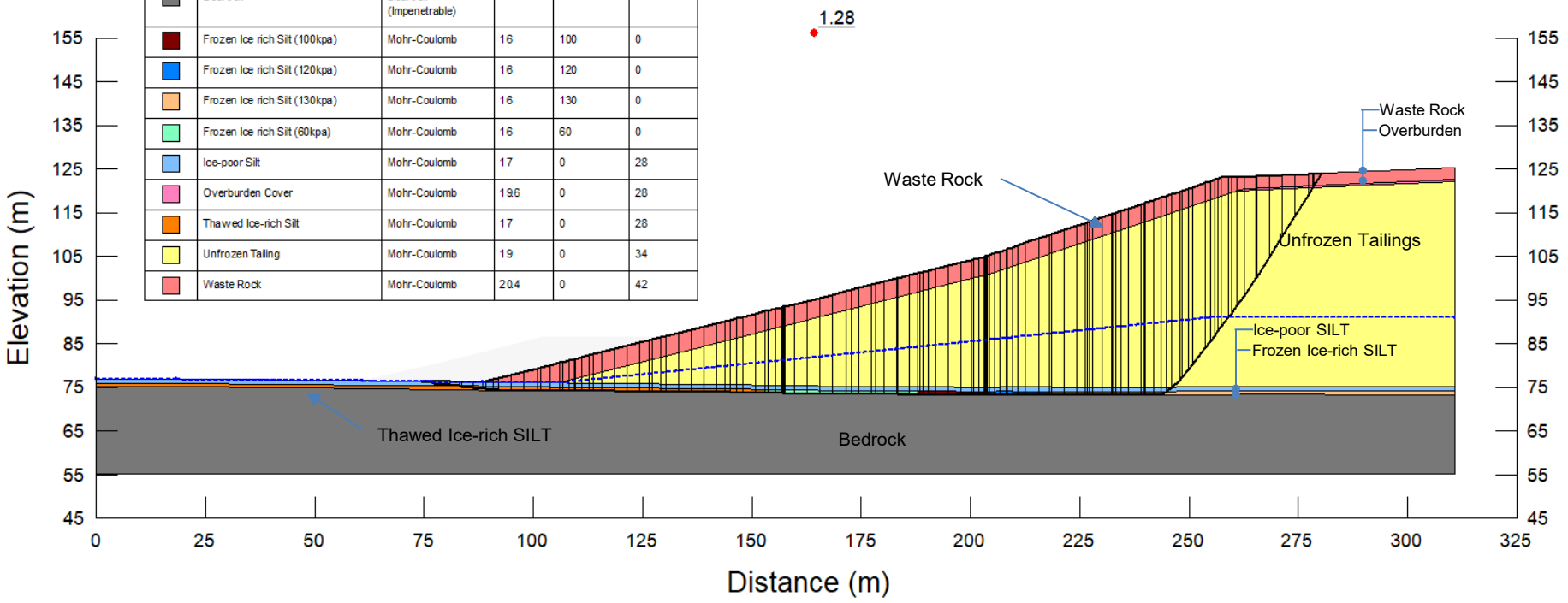
Section D: Static Long-term Analysis after Construction (100 Years)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure D3

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Frozen Ice rich Silt (100kpa)	Mohr-Coulomb	16	100	0
	Frozen Ice rich Silt (120kpa)	Mohr-Coulomb	16	120	0
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16	60	0
	Ice-poor Silt	Mohr-Coulomb	17	0	28
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



LEGEND

NOTES
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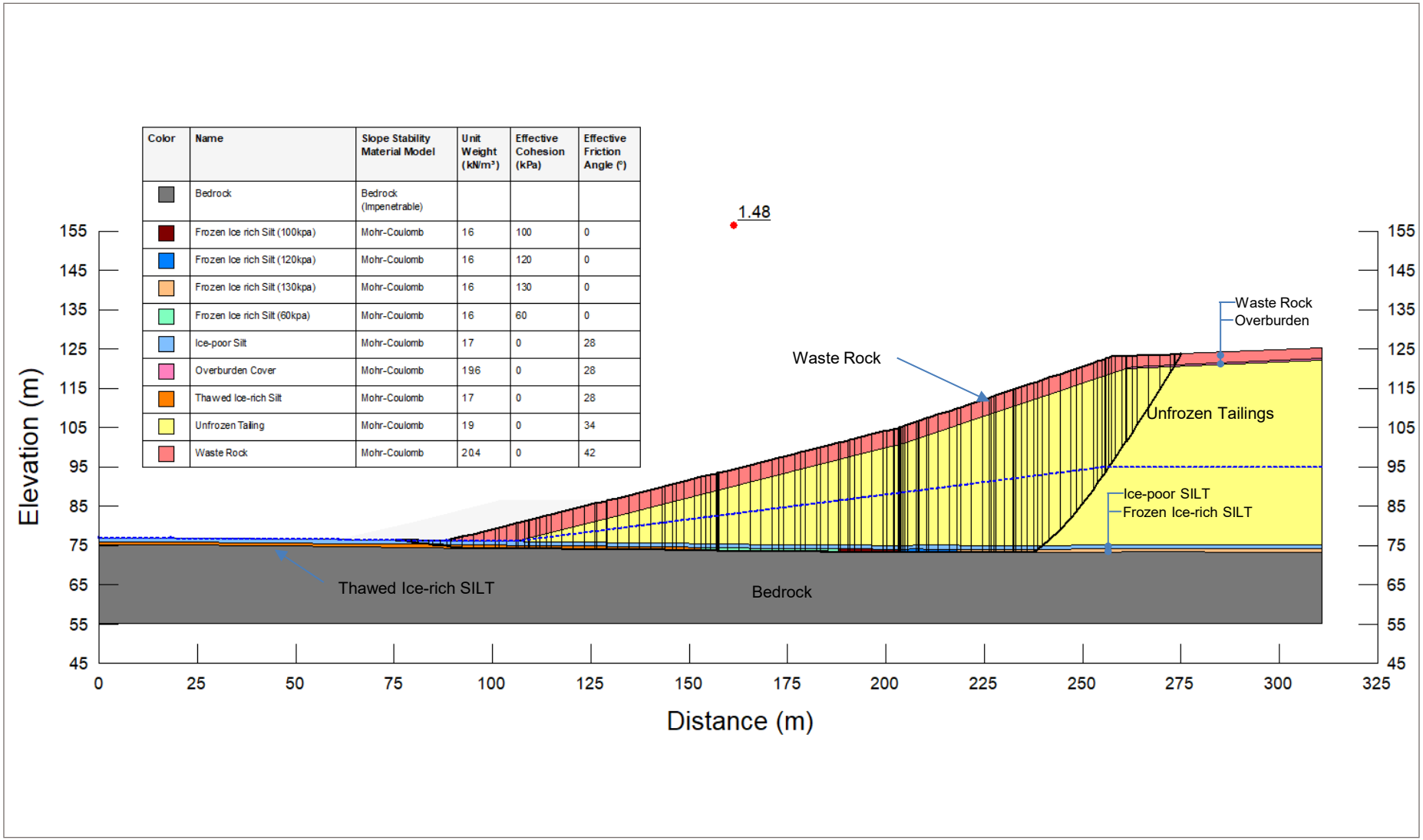
SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section D: Pseudo-static Long-term Analysis after Construction (100 Years)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure D4



LEGEND

NOTES

Water table at 50% of TSF height

STATUS

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SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

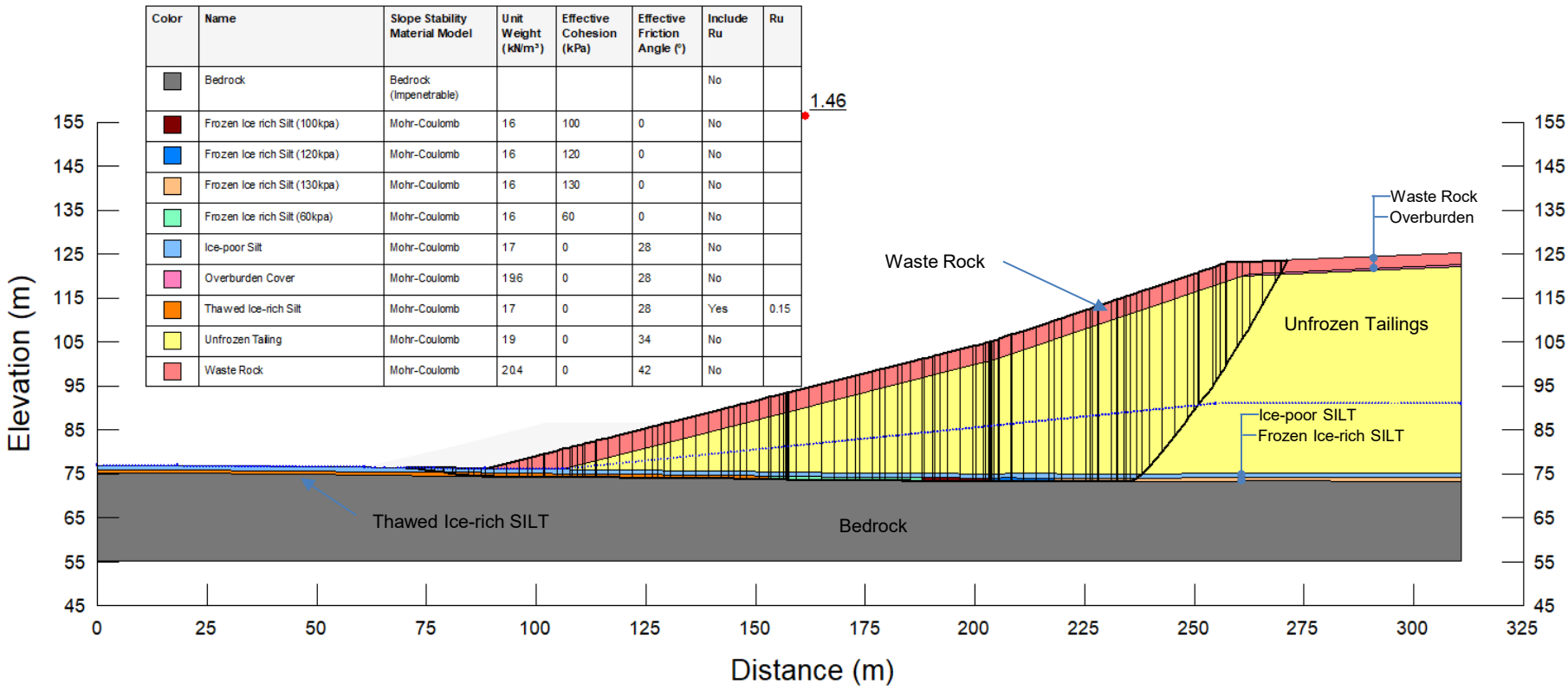
Section D: Static Long-term Analysis for Sensitivity Case with Elevated Water Table

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure D5

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)	Include Ru	Ru
	Bedrock	Bedrock (Impenetrable)				No	
	Frozen Ice rich Silt (100kpa)	Mohr-Coulomb	16	100	0	No	
	Frozen Ice rich Silt (120kpa)	Mohr-Coulomb	16	120	0	No	
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0	No	
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16	60	0	No	
	Ice-poor Silt	Mohr-Coulomb	17	0	28	No	
	Overburden Cover	Mohr-Coulomb	19.6	0	28	No	
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28	Yes	0.15
	Unfrozen Tailing	Mohr-Coulomb	19	0	34	No	
	Waste Rock	Mohr-Coulomb	20.4	0	42	No	



LEGEND

NOTES

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TETRA TECH

SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

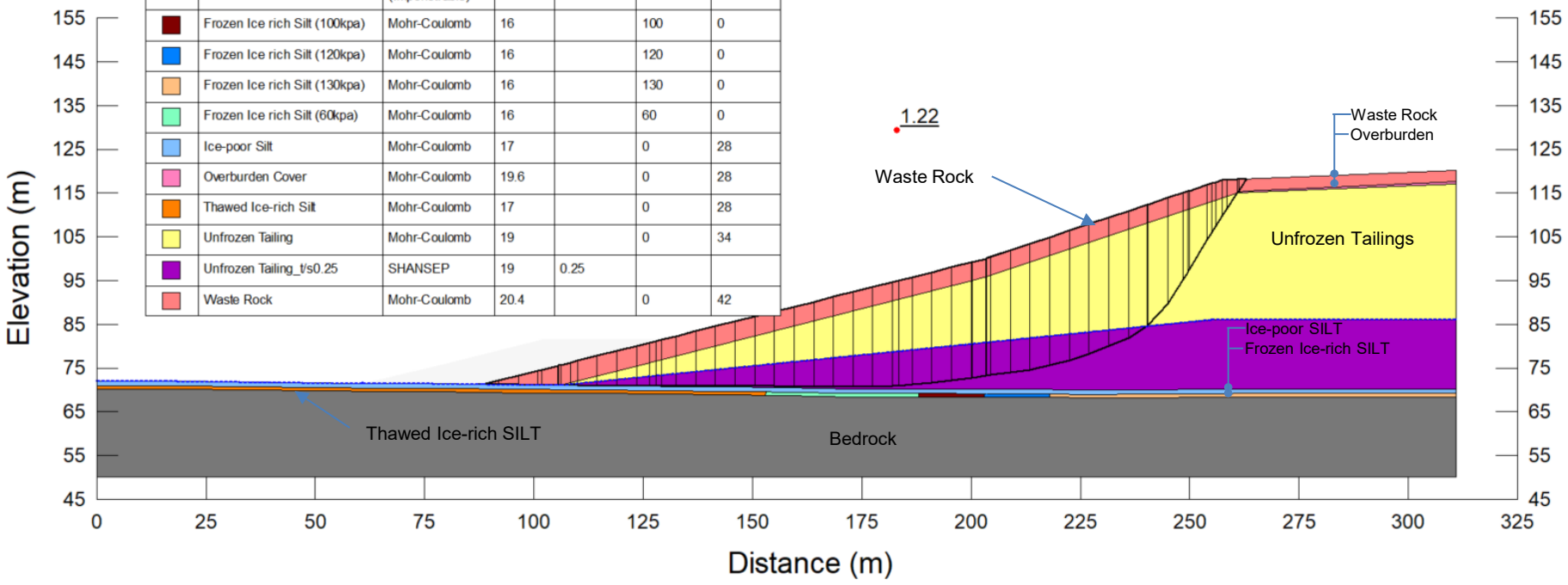
Section D: Static Long-term Analysis for Sensitivity Case with Excess Pore Water Pressure in Thawing Ice-rich Silt

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure D6

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Tau/Sigma	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)				
	Frozen Ice rich Silt (100kpa)	Mohr-Coulomb	16		100	0
	Frozen Ice rich Silt (120kpa)	Mohr-Coulomb	16		120	0
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16		130	0
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16		60	0
	Ice-poor Silt	Mohr-Coulomb	17		0	28
	Overburden Cover	Mohr-Coulomb	19.6		0	28
	Thawed Ice-rich Silt	Mohr-Coulomb	17		0	28
	Unfrozen Tailing	Mohr-Coulomb	19		0	34
	Unfrozen Tailing_t/s0.25	SHANSEP	19	0.25		
	Waste Rock	Mohr-Coulomb	20.4		0	42



LEGEND

NOTES

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TETRA TECH

SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

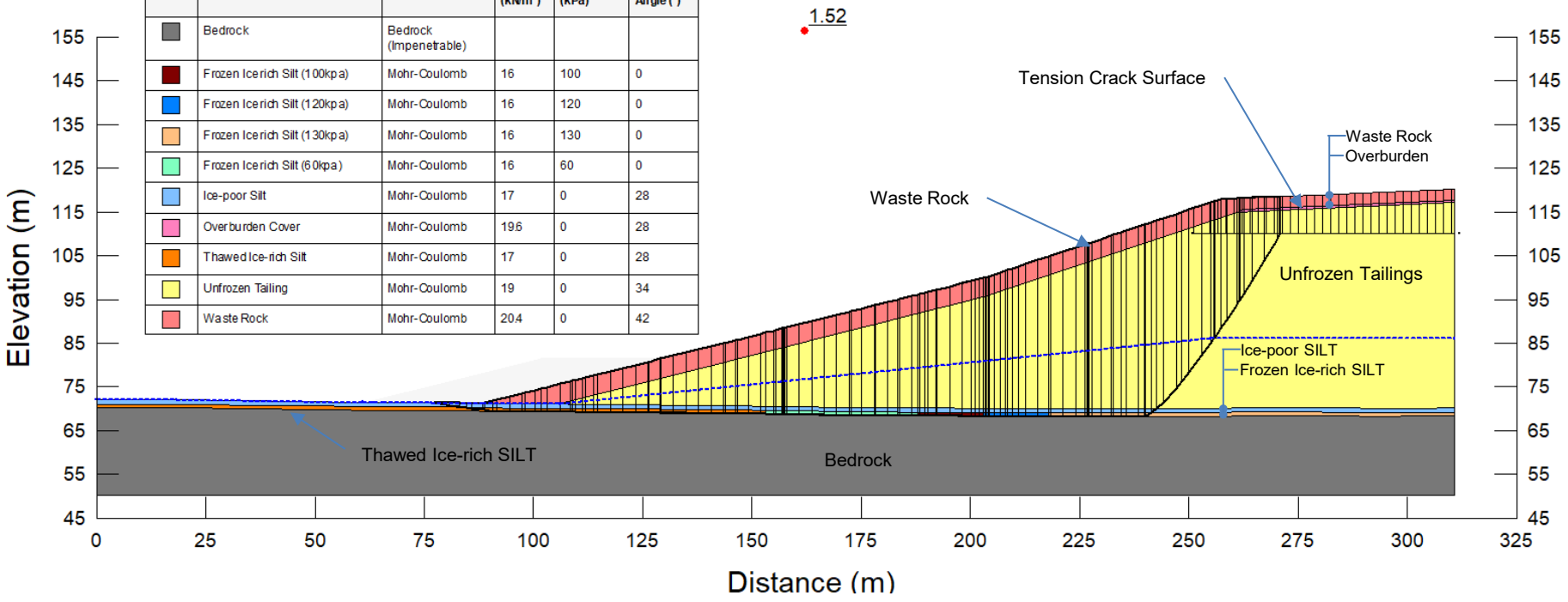
Section D: Post-Earthquake Analysis for Sensitivity Case with Saturated Tailings in Undrained Condition

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure D7

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Frozen Ice rich Silt (100kpa)	Mohr-Coulomb	16	100	0
	Frozen Ice rich Silt (120kpa)	Mohr-Coulomb	16	120	0
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16	60	0
	Ice-poor Silt	Mohr-Coulomb	17	0	28
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



LEGEND

NOTES

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AGNICO EAGLE

TETRA TECH

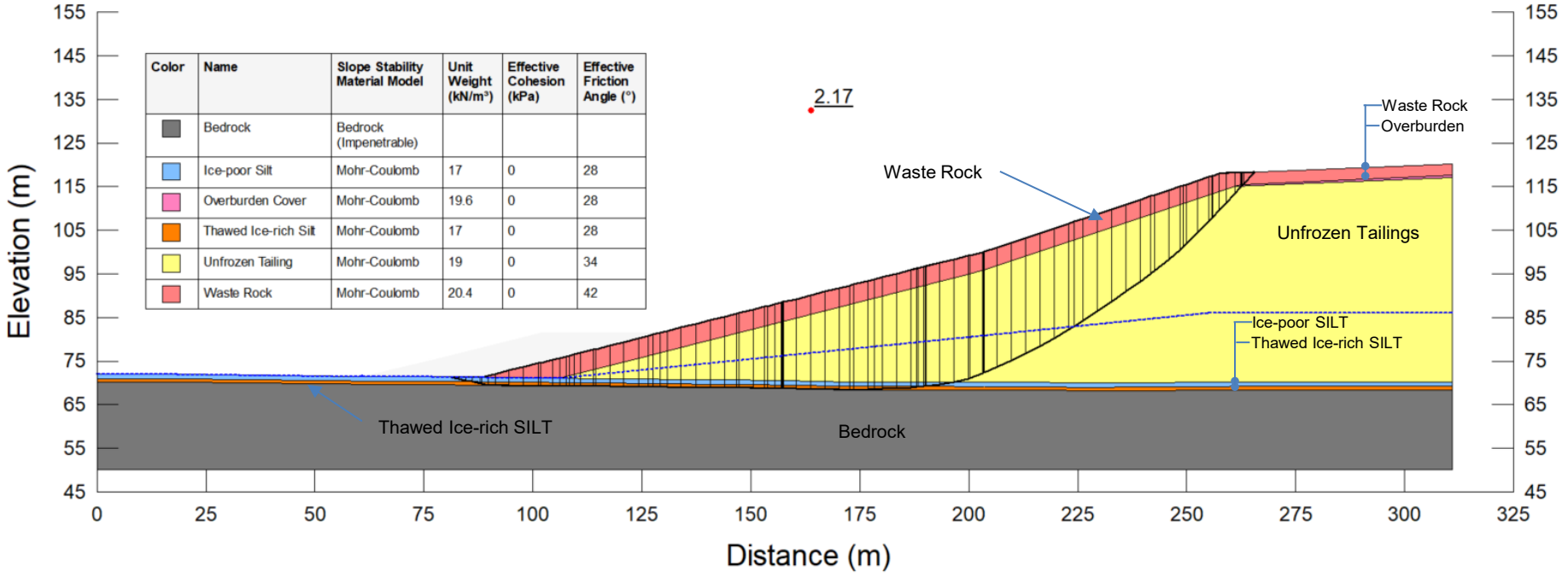
SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section D: Static Long-term Analysis for Sensitivity Case with 8 m Tension Crack Filled with Water

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure D8



LEGEND

NOTES

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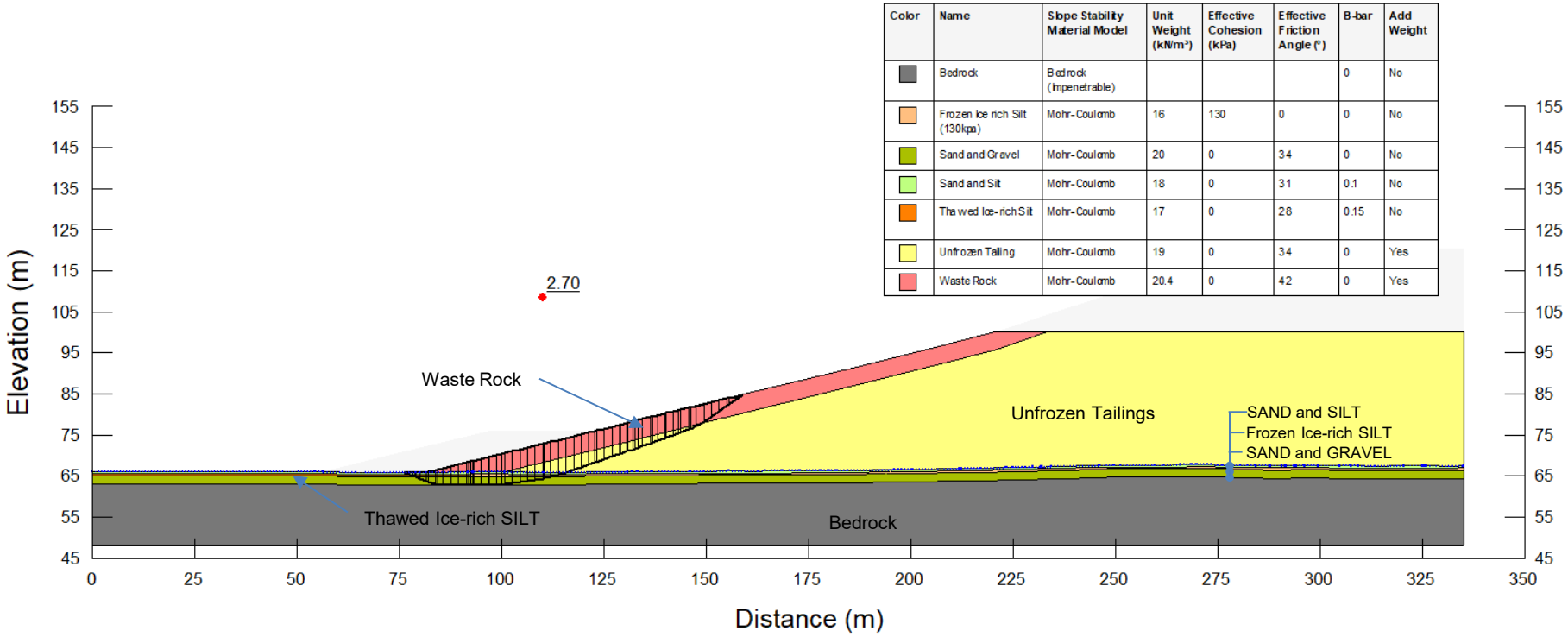
SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section D: Static Long-term Analysis after Construction with Fully Thawed Ice-rich SILT

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure D9



LEGEND

NOTES

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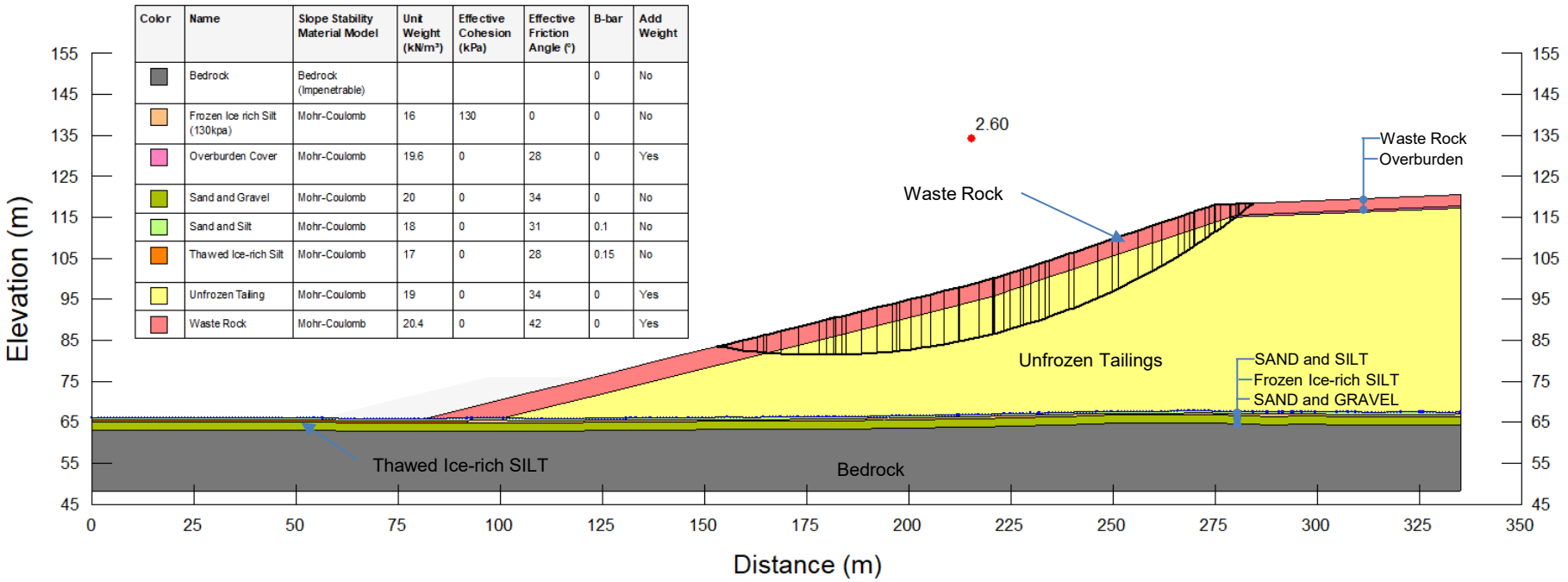
SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section E: Static Short-term Analysis during Construction (EL. 100m)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure E1



LEGEND

NOTES

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TETRA TECH

SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

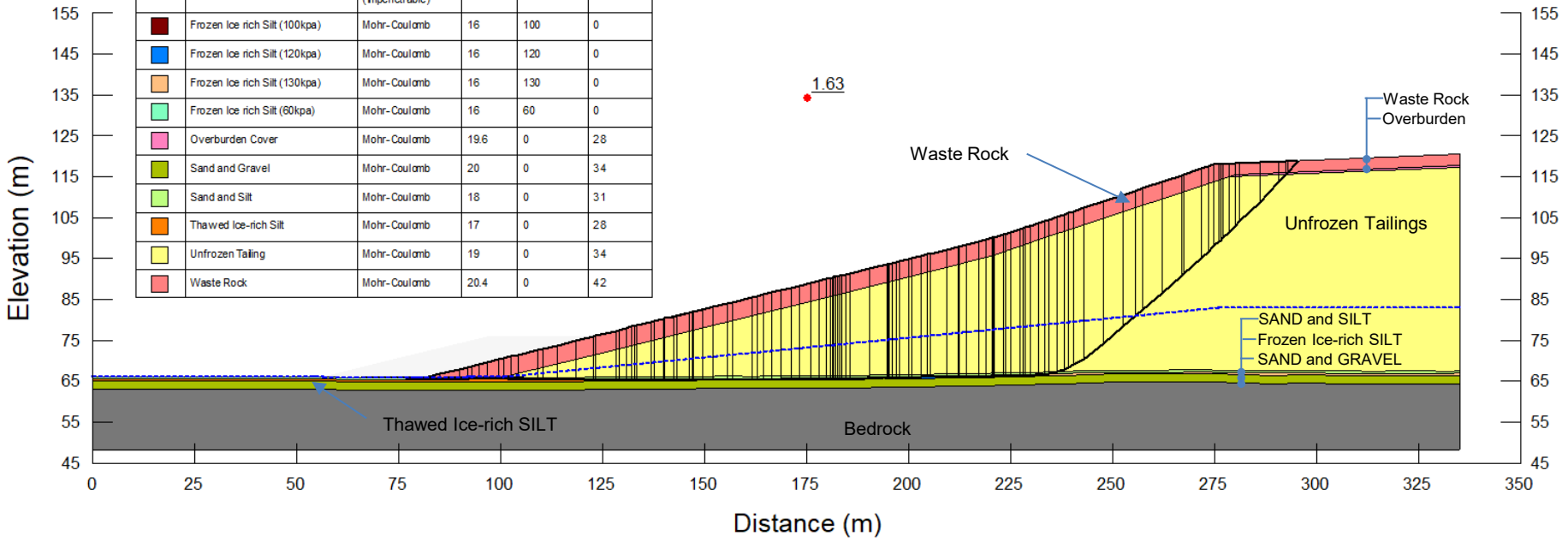
Section E: Static Short-term Analysis during Construction (Local Deep-seated Slip)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure E2

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Frozen Ice rich Silt (100kpa)	Mohr-Coulomb	16	100	0
	Frozen Ice rich Silt (120kpa)	Mohr-Coulomb	16	120	0
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16	60	0
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Sand and Gravel	Mohr-Coulomb	20	0	34
	Sand and Silt	Mohr-Coulomb	18	0	31
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



LEGEND

NOTES

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TETRA TECH

SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

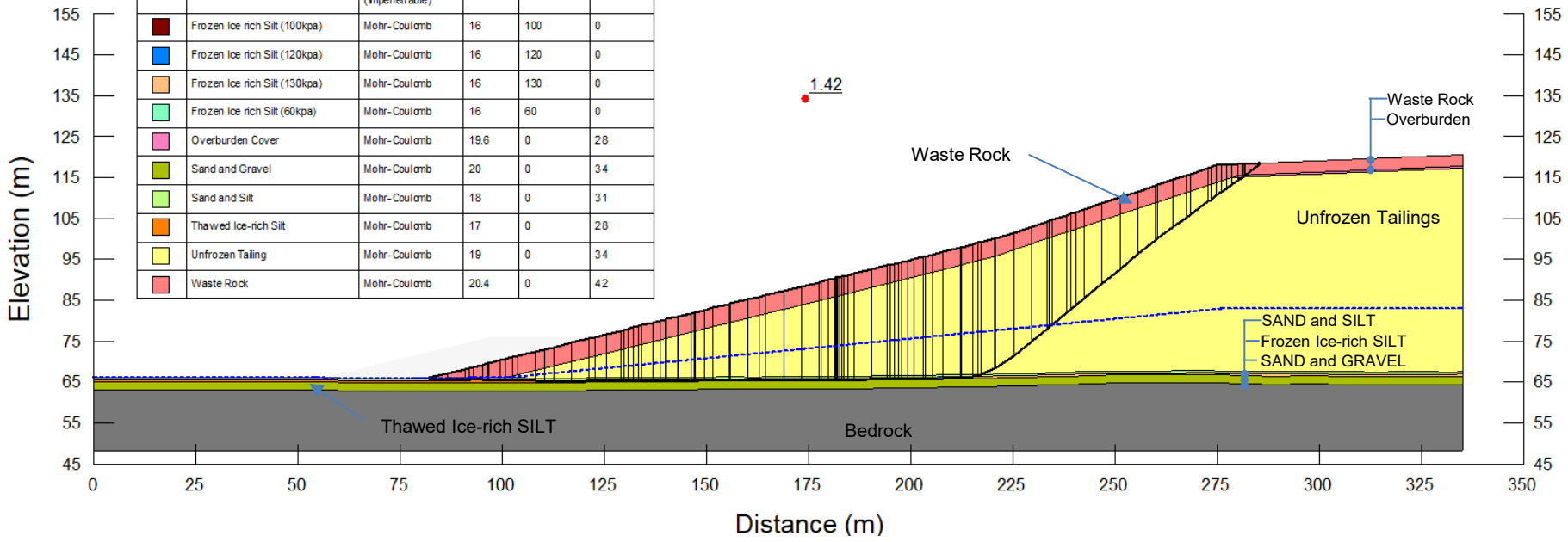
Section E: Static Long-term Analysis after Construction (100 Years)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure E3

Color	Name	Slope Stability Material Model	Unit Weight (kN/m³)	Effective Cohesion (kPa)	Effective Friction Angle (°)
	Bedrock	Bedrock (Impenetrable)			
	Frozen Ice rich Silt (100kpa)	Mohr-Coulomb	16	100	0
	Frozen Ice rich Silt (120kpa)	Mohr-Coulomb	16	120	0
	Frozen Ice rich Silt (130kpa)	Mohr-Coulomb	16	130	0
	Frozen Ice rich Silt (60kpa)	Mohr-Coulomb	16	60	0
	Overburden Cover	Mohr-Coulomb	19.6	0	28
	Sand and Gravel	Mohr-Coulomb	20	0	34
	Sand and Silt	Mohr-Coulomb	18	0	31
	Thawed Ice-rich Silt	Mohr-Coulomb	17	0	28
	Unfrozen Tailing	Mohr-Coulomb	19	0	34
	Waste Rock	Mohr-Coulomb	20.4	0	42



LEGEND

NOTES
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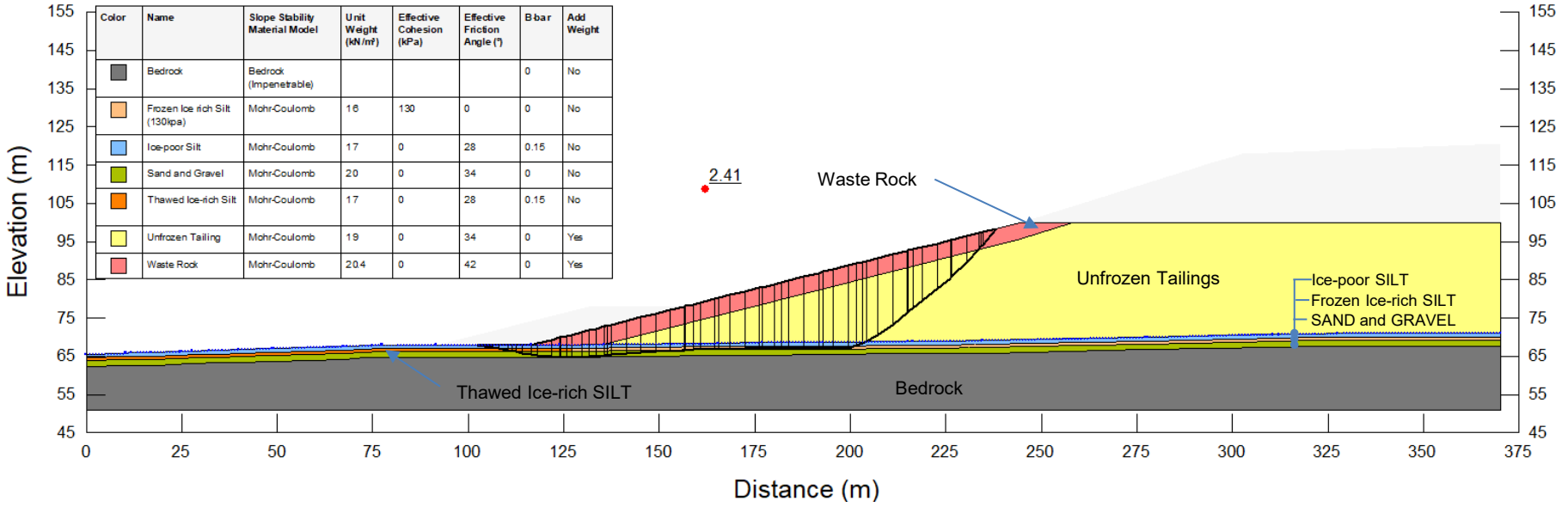
SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section E: Pseudo-static Long-term Analysis after Construction

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure E4



LEGEND

NOTES

STATUS
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AGNICO EAGLE

TETRA TECH

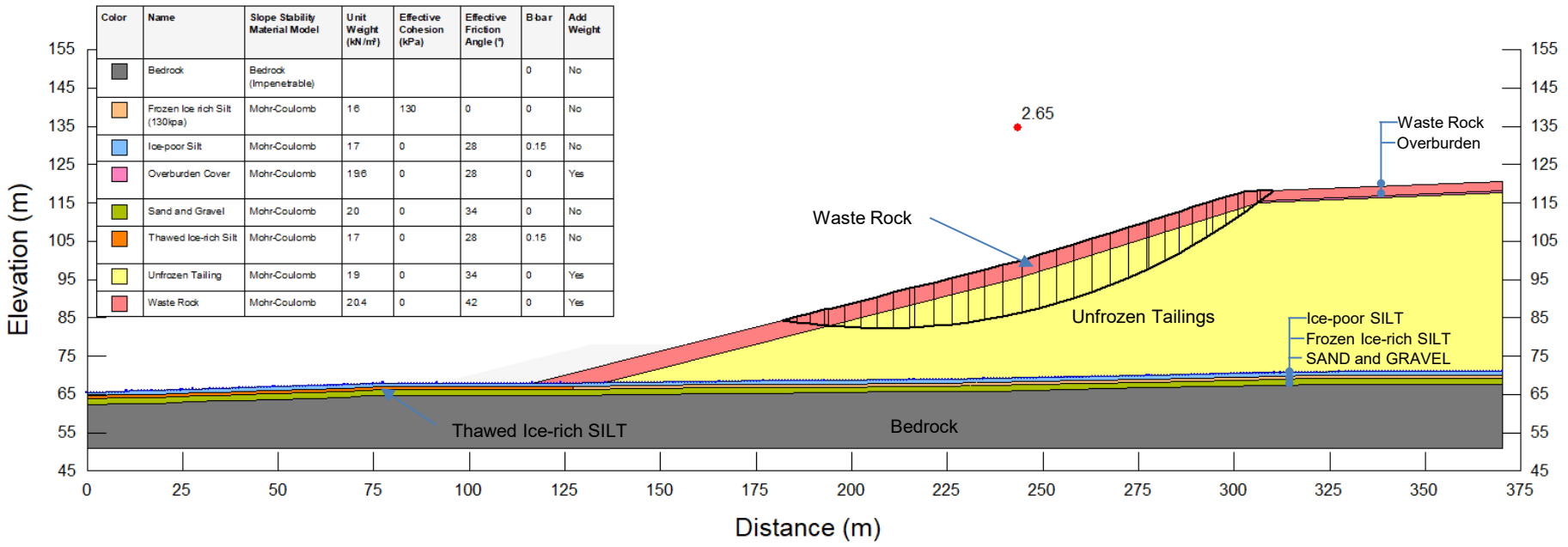
SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section F: Static Short-term Analysis during Construction (Shallow Slip)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure F1



LEGEND

NOTES

STATUS
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AGNICO EAGLE

TETRA TECH

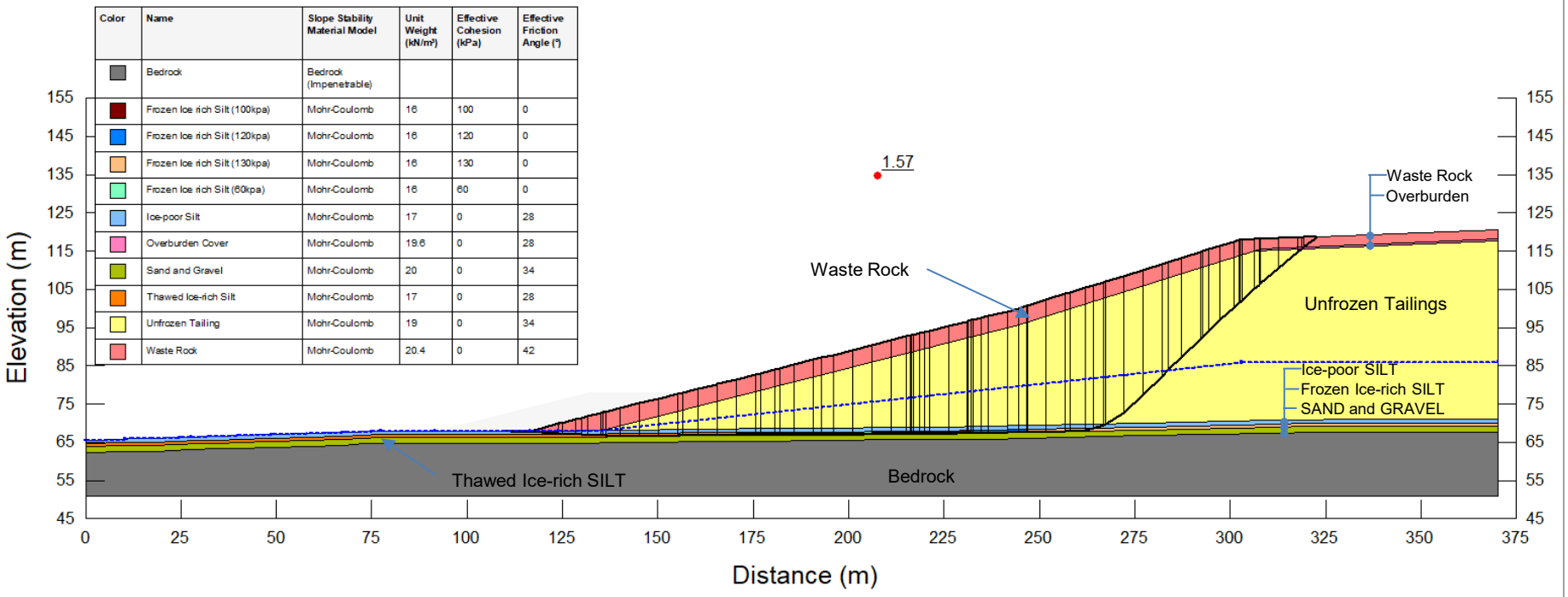
SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section F: Static Short-term Analysis during Construction (Local Deep-seated Slip)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure F2



LEGEND

NOTES

STATUS
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TETRA TECH

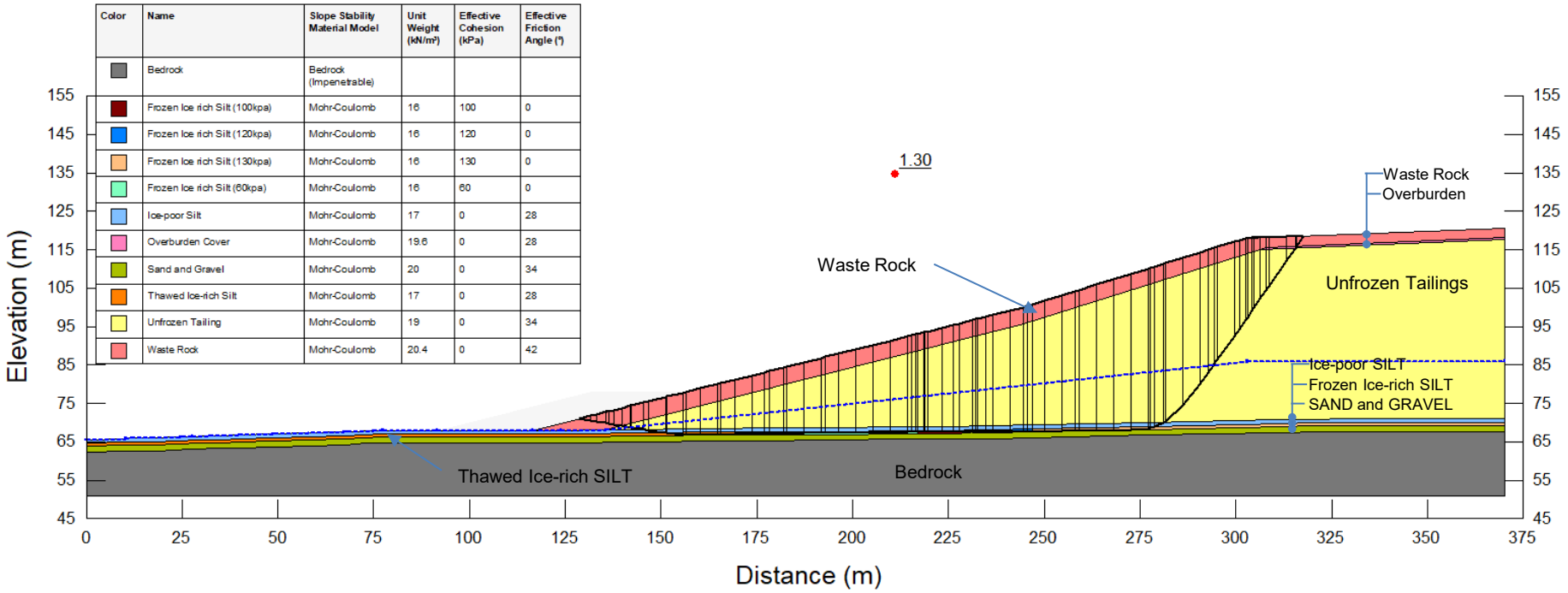
SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section F: Static Long-term Analysis after Construction (100 Years)

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure F3



LEGEND

NOTES

PGA: 0.0498 g

STATUS

ISSUED FOR USE

CLIENT

AGNICO EAGLE

TETRA TECH

SLOPE STABILITY ASSESSMENT OF TSF DESIGN UPDATE, MELIADINE MINE, NUNAVUT

Section F: Pseudo-static Long-term Analysis after Construction

PROJECT NO.	DWN	CKD	APVD	REV
ENG.EARC03140-34	LW	HX	HX	A

OFFICE	DATE
EDMONTON	MARCH 2026

Figure F4

APPENIDX B

TETRA TECH'S LIMITATIONS ON USE OF THIS DOCUMENT

LIMITATIONS ON USE OF THIS DOCUMENT

GEOTECHNICAL

1.1 USE OF DOCUMENT AND OWNERSHIP

This document pertains to a specific site, a specific development, and a specific scope of work. The document may include plans, drawings, profiles and other supporting documents that collectively constitute the document (the "Professional Document").

The Professional Document is intended for the sole use of TETRA TECH's Client (the "Client") as specifically identified in the TETRA TECH Services Agreement or other Contractual Agreement entered into with the Client (either of which is termed the "Contract" herein). TETRA TECH does not accept any responsibility for the accuracy of any of the data, analyses, recommendations or other contents of the Professional Document when it is used or relied upon by any party other than the Client, unless authorized in writing by TETRA TECH.

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1.2 ALTERNATIVE DOCUMENT FORMAT

Where TETRA TECH submits electronic file and/or hard copy versions of the Professional Document or any drawings or other project-related documents and deliverables (collectively termed TETRA TECH's "Instruments of Professional Service"), only the signed and/or sealed versions shall be considered final. The original signed and/or sealed electronic file and/or hard copy version archived by TETRA TECH shall be deemed to be the original. TETRA TECH will archive a protected digital copy of the original signed and/or sealed version for a period of 10 years.

Both electronic file and/or hard copy versions of TETRA TECH's Instruments of Professional Service shall not, under any circumstances, be altered by any party except TETRA TECH. TETRA TECH's Instruments of Professional Service will be used only and exactly as submitted by TETRA TECH.

Electronic files submitted by TETRA TECH have been prepared and submitted using specific software and hardware systems. TETRA TECH makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

1.3 STANDARD OF CARE

Services performed by TETRA TECH for the Professional Document have been conducted in accordance with the Contract, in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Professional judgment has been applied in developing the conclusions and/or recommendations provided in this Professional Document. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of the Professional Document.

If any error or omission is detected by the Client or an Authorized Party, the error or omission must be immediately brought to the attention of TETRA TECH.

1.4 DISCLOSURE OF INFORMATION BY CLIENT

The Client acknowledges that it has fully cooperated with TETRA TECH with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The Client further acknowledges that in order for TETRA TECH to properly provide the services contracted for in the Contract, TETRA TECH has relied upon the Client with respect to both the full disclosure and accuracy of any such information.

1.5 INFORMATION PROVIDED TO TETRA TECH BY OTHERS

During the performance of the work and the preparation of this Professional Document, TETRA TECH may have relied on information provided by third parties other than the Client.

While TETRA TECH endeavours to verify the accuracy of such information, TETRA TECH accepts no responsibility for the accuracy or the reliability of such information even where inaccurate or unreliable information impacts any recommendations, design or other deliverables and causes the Client or an Authorized Party loss or damage.

1.6 GENERAL LIMITATIONS OF DOCUMENT

This Professional Document is based solely on the conditions presented and the data available to TETRA TECH at the time the data were collected in the field or gathered from available databases.

The Client, and any Authorized Party, acknowledges that the Professional Document is based on limited data and that the conclusions, opinions, and recommendations contained in the Professional Document are the result of the application of professional judgment to such limited data.

The Professional Document is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site conditions present, or variation in assumed conditions which might form the basis of design or recommendations as outlined in this document, at or on the development proposed as of the date of the Professional Document requires a supplementary exploration, investigation, and assessment.

TETRA TECH is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the Client.

1.7 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, TETRA TECH has not been retained to explore, address or consider and has not explored, addressed or considered any environmental or regulatory issues associated with development on the subject site.

1.8 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

Classification and identification of soils and rocks are based upon commonly accepted systems, methods and standards employed in professional geotechnical practice. This report contains descriptions of the systems and methods used. Where deviations from the system or method prevail, they are specifically mentioned.

Classification and identification of geological units are judgmental in nature as to both type and condition. TETRA TECH does not warrant conditions represented herein as exact, but infers accuracy only to the extent that is common in practice.

Where subsurface conditions encountered during development are different from those described in this report, qualified geotechnical personnel should revisit the site and review recommendations in light of the actual conditions encountered.

1.9 LOGS OF TESTHOLES

The testhole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

1.10 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from logs of test holes and/or soil/rock exposures. Stratigraphy is known only at the locations of the test hole or exposure. Actual geology and stratigraphy between test holes and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historical environment. TETRA TECH does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional exploration and review may be necessary.

1.11 PROTECTION OF EXPOSED GROUND

Excavation and construction operations expose geological materials to climatic elements (freeze/thaw, wet/dry) and/or mechanical disturbance which can cause severe deterioration. Unless otherwise specifically indicated in this report, the walls and floors of excavations must be protected from the elements, particularly moisture, desiccation, frost action and construction traffic.

1.12 SUPPORT OF ADJACENT GROUND AND STRUCTURES

Unless otherwise specifically advised, support of ground and structures adjacent to the anticipated construction and preservation of adjacent ground and structures from the adverse impact of construction activity is required.

1.13 INFLUENCE OF CONSTRUCTION ACTIVITY

Construction activity can impact structural performance of adjacent buildings and other installations. The influence of all anticipated construction activities should be considered by the contractor, owner, architect and prime engineer in consultation with a geotechnical engineer when the final design and construction techniques, and construction sequence are known.

1.14 OBSERVATIONS DURING CONSTRUCTION

Because of the nature of geological deposits, the judgmental nature of geotechnical engineering, and the potential of adverse circumstances arising from construction activity, observations during site preparation, excavation and construction should be carried out by a geotechnical engineer. These observations may then serve as the basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein.

1.15 DRAINAGE SYSTEMS

Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function. Where temporary or permanent drainage systems are installed within or around a structure, these systems must protect the structure from loss of ground due to mechanisms such as internal erosion and must be designed so as to assure continued satisfactory performance of the drains. Specific design details regarding the geotechnical aspects of such systems (e.g. bedding material, surrounding soil, soil cover, geotextile type) should be reviewed by the geotechnical engineer to confirm the performance of the system is consistent with the conditions used in the geotechnical design.

1.16 DESIGN PARAMETERS

Bearing capacities for Limit States or Allowable Stress Design, strength/stiffness properties and similar geotechnical design parameters quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition used in this report. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions considered in this report in fact exist at the site.

1.17 SAMPLES

TETRA TECH will retain all soil and rock samples for 30 days after this report is issued. Further storage or transfer of samples can be made at the Client's expense upon written request, otherwise samples will be discarded.

1.18 APPLICABLE CODES, STANDARDS, GUIDELINES & BEST PRACTICE

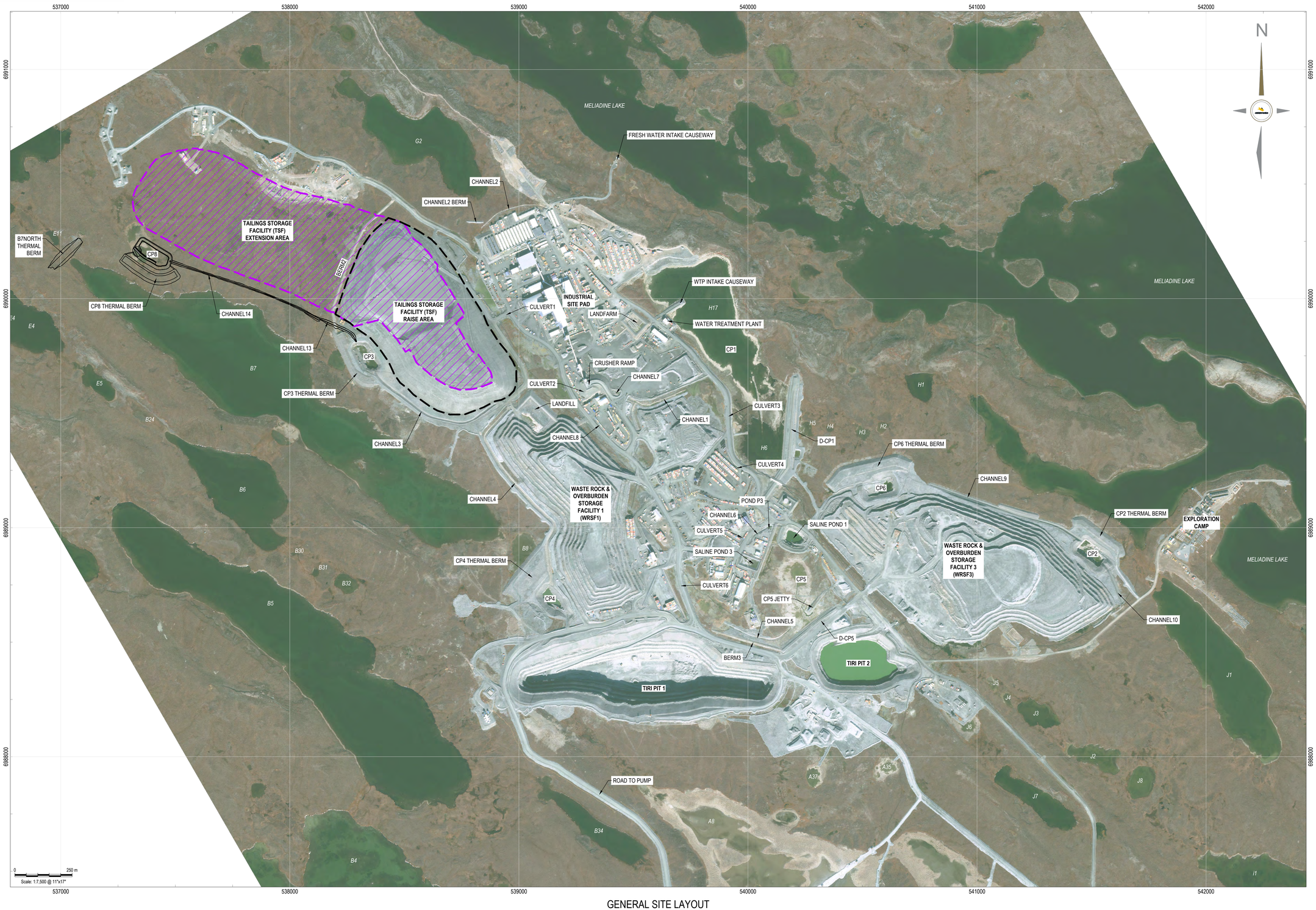
This document has been prepared based on the applicable codes, standards, guidelines or best practice as identified in the report. Some mandated codes, standards and guidelines (such as ASTM, AASHTO Bridge Design/Construction Codes, Canadian Highway Bridge Design Code, National/Provincial Building Codes) are routinely updated and corrections made. TETRA TECH cannot predict nor be held liable for any such future changes, amendments, errors or omissions in these documents that may have a bearing on the assessment, design or analyses included in this report.

APPENDIX F

ISSUED FOR CONSTRUCTION DRAWINGS

NO. DESSIN
DRAWING NO. 65-684-230-001

FORMAT ARCHD



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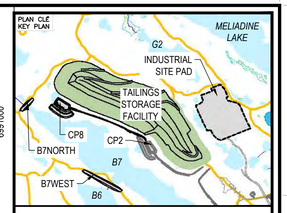
KEY PLAN



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H. XIA
2026-04-02
NTINU

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REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
0	2026-04-02	ISSUED FOR CONSTRUCTION	HX	HX	
A	2026-02-28	ISSUED FOR REVIEW	HX	HX	

REVISIONS

-
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TITRE / TITLE
AGNICO EAGLE MELIADINE GOLD MINE

GENERAL SITE LAYOUT

DESSINÉ PAR / DRAWN BY	EL	DATE 2026-04-02
VÉRIFIÉ PAR / CHECKED BY	HX	2026-04-02
APPROUVÉ PAR / APPROVED BY	HX	2026-04-02
ÉCHELLE / SCALE	1:7500	DATE 2026-04-02

NO. DESSIN / DRAWING NO. 65-684-230-001

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
65	0	1 / 9

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NO. DESSIN
DRAWING NO. 65-684-230-002-003

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3	6 989 820.96	538 918.90
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7	6 989 760.02	538 969.79
8	6 989 743.01	538 980.29
9	6 989 724.83	538 988.56

SHEAR KEY 1 LAYOUT POINTS		
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11	6 989 687.01	539 001.16
12	6 989 659.25	539 008.17
13	6 989 658.54	539 002.21
14	6 989 683.72	538 995.89
15	6 989 702.91	538 990.51
16	6 989 721.58	538 983.39
17	6 989 739.80	538 975.21
18	6 989 756.71	538 964.61

SHEAR KEY 1 LAYOUT POINTS		
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20	6 989 786.88	538 939.07
21	6 989 802.05	538 926.16
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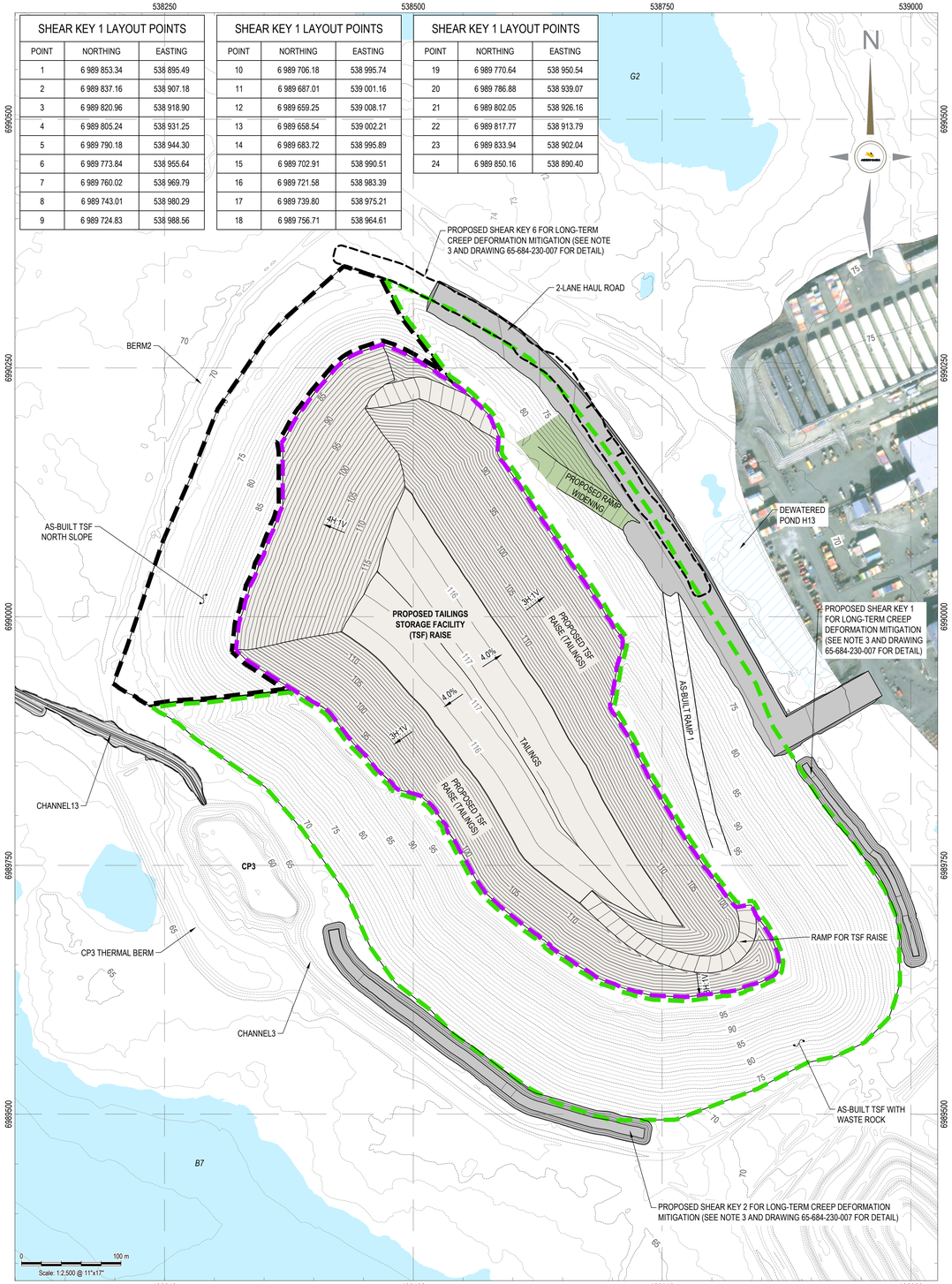

TAILINGS STORAGE FACILITY RAISE
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30	6 989 612.36	538 487.18
31	6 989 600.94	538 503.59
32	6 989 588.47	538 519.23
33	6 989 576.25	538 535.06
34	6 989 564.75	538 551.41

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38	6 989 516.93	538 615.44
39	6 989 510.49	538 634.31
40	6 989 504.69	538 653.45
41	6 989 498.93	538 672.60
42	6 989 494.78	538 692.13
43	6 989 489.98	538 711.53
44	6 989 485.42	538 732.57

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53	6 989 534.39	538 574.64
54	6 989 546.69	538 558.86

SHEAR KEY 2 LAYOUT POINTS		
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56	6 989 570.21	538 526.52
57	6 989 582.48	538 510.71
58	6 989 594.75	538 494.94
59	6 989 605.64	538 479.37
60	6 989 618.50	538 462.84
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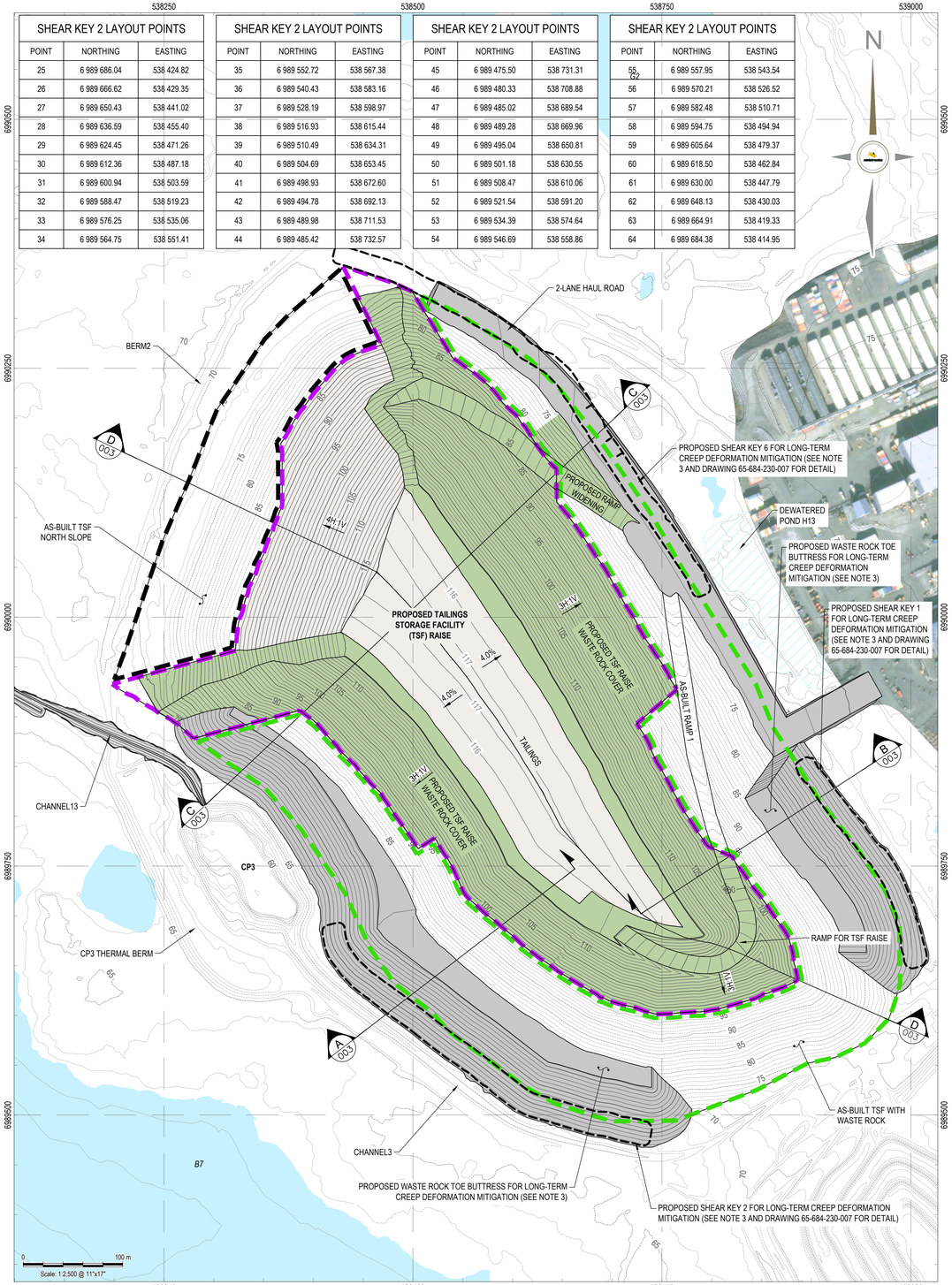

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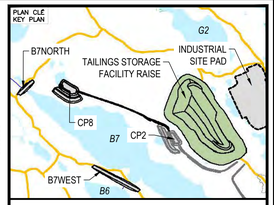

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NOTES GÉNÉRALES / GENERAL NOTES

1. MATERIAL PLACEMENT AND FOUNDATION PREPARATION SHOULD BE IN ACCORDANCE WITH THE CONSTRUCTION METHOD AND PROCEDURES DESCRIBED IN THE TSF DESIGN UPDATE REPORT AND OPERATIONAL PROTOCOLS ESTABLISHED.
2. EXISTING TSF CONTOUR BASED ON THE SURVEY TAKEN BY AGNICO EAGLE; DATED JUNE 15, 2025.
3. THE PROPOSED TOE BUTTRESS AND SHEAR KEY WILL BE FURTHER DEFINED AND OPTIMIZED ONCE ADDITIONAL SUB-SURFACE INFORMATION AVAILABLE. THE LOCATION AND EXTENT OF THE TOE BUTTRESS AND SHEAR KEY WILL BE INFORMED BASED ON MONITORING DATA, OBSERVED FACILITY PERFORMANCE, AND UPDATED ENGINEERING ASSESSMENTS.

REGISTERED PROFESSIONAL ENGINEER
NT/NU
2026-04-02

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AGNICO EAGLE

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0	2026-04-02	ISSUED FOR CONSTRUCTION	HX	HX	
A	2026-02-28	ISSUED FOR REVIEW	HX	HX	

REVISIONS

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TITRE / TITLE
AGNICO EAGLE MELIADINE GOLD MINE

TAILINGS STORAGE FACILITY RAISE
PLAN VIEW

DESSINÉ PAR / DRAWN BY	EL	DATE 2026-04-02
VERIFIÉ PAR / CHECKED BY	HX	2026-04-02
APPROUVÉ PAR / APPROVED BY	HX	2026-04-02
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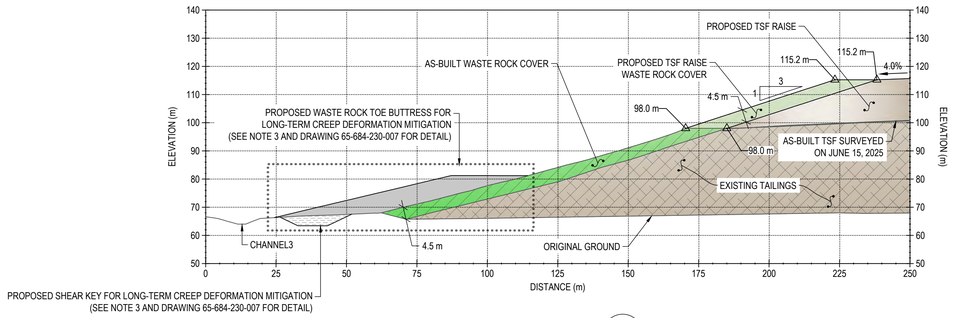

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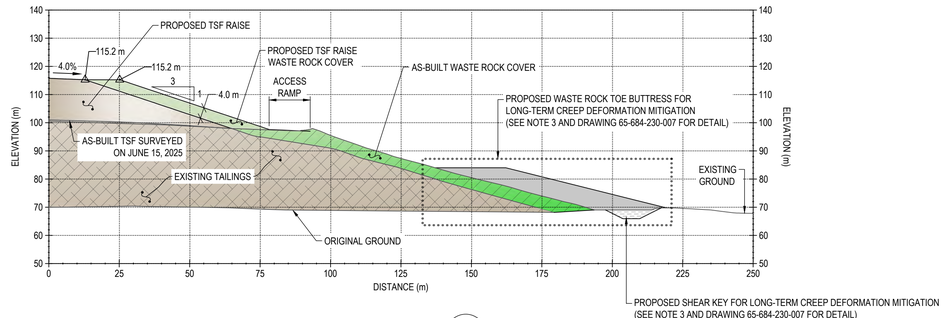

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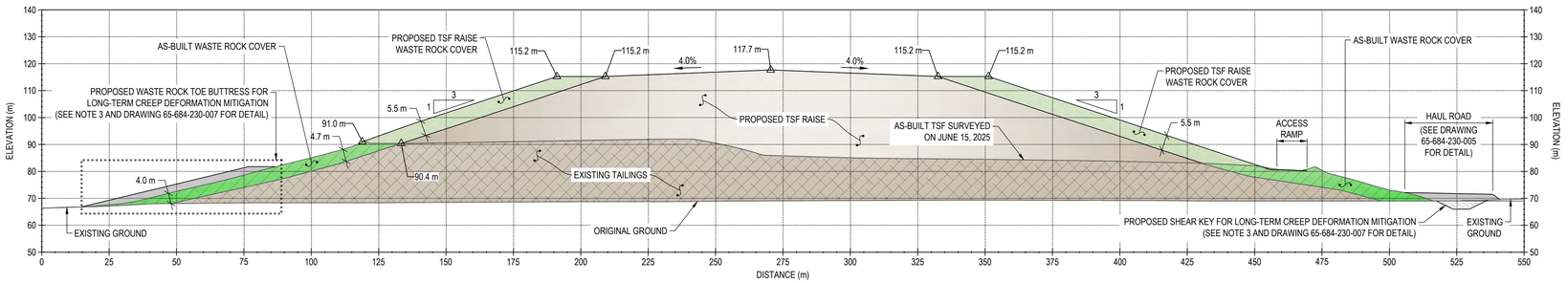

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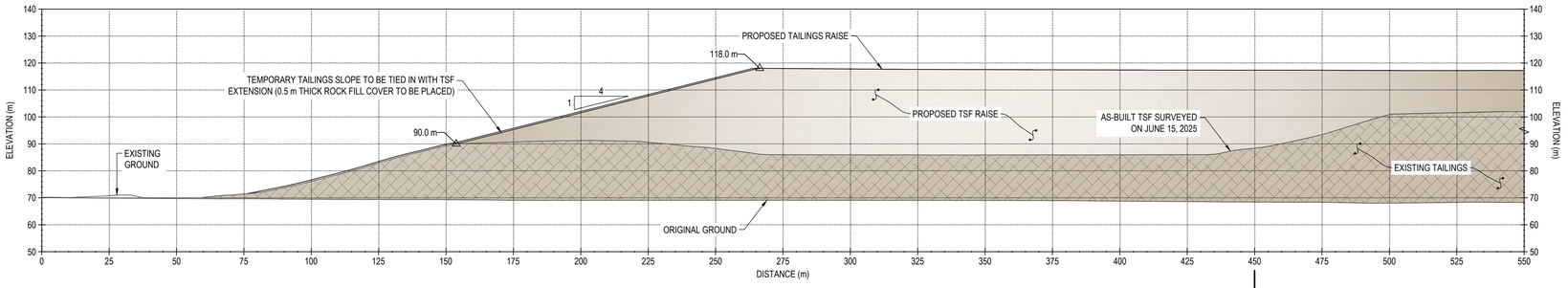

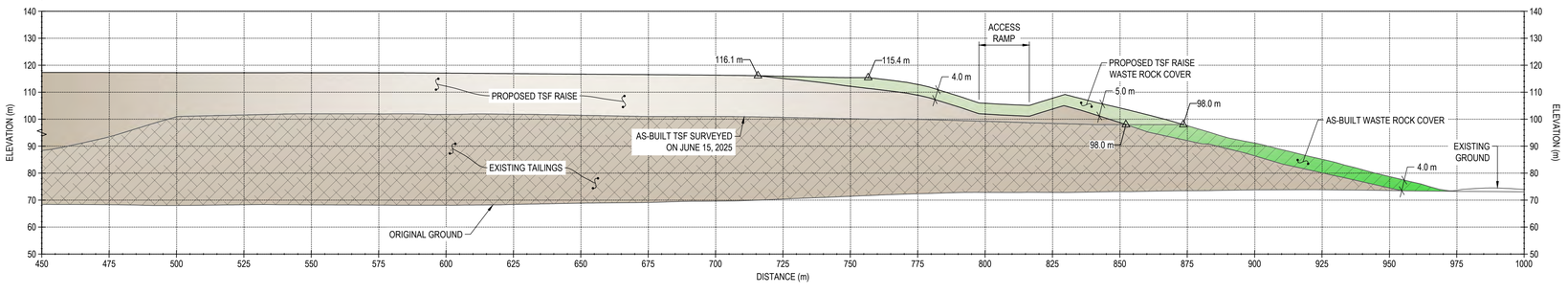

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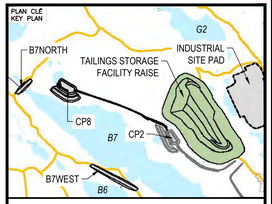

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REGISTERED PROFESSIONAL ENGINEER
H. XIA
Member
NT/NU
2026-04-02

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AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
0	2026-04-02	ISSUED FOR CONSTRUCTION	HX	HX	
A	2026-02-28	ISSUED FOR REVIEW	HX	HX	

REVISIONS

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TITRE / TITLE
AGNICO EAGLE MELIADINE GOLD MINE

TAILINGS STORAGE FACILITY RAISE
CROSS-SECTIONS

DESSINÉ PAR / DRAWN BY	EL	DATE 2026-04-02
VÉRIFIÉ PAR / CHECKED BY	HX	2026-04-02
APPROUVÉ PAR / APPROVED BY	HX	2026-04-02
ÉCHELLE / SCALE	1:1000	DATE 2026-04-02

NO. DESSIN / DRAWING NO. 65-684-230-003

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
65	0	3 / 9

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FILE NO. 65-684-230-002-003.dwg

NO. DESSIN
DRAWING NO. 65-684-230-004-006

FORMAT ARCHD

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POINT	NORTHING	EASTING
65	6 990 254.34	537 782.60
66	6 990 245.71	537 806.01
67	6 990 235.64	537 828.88
68	6 990 227.94	537 852.60
69	6 990 218.59	537 875.77
70	6 990 209.59	537 899.09
71	6 990 200.99	537 922.51
72	6 990 191.98	537 945.83
73	6 990 184.17	537 969.57
74	6 990 174.99	537 992.80
75	6 990 166.08	538 016.10
76	6 990 156.55	538 039.21

SHEAR KEY 3 LAYOUT POINTS		
POINT	NORTHING	EASTING
77	6 990 146.49	538 062.09
78	6 990 135.29	538 084.44
79	6 990 123.54	538 106.51
80	6 990 113.47	538 129.37
81	6 990 104.27	538 152.60
82	6 990 094.47	538 175.25
83	6 990 085.46	538 170.92
84	6 990 094.59	538 149.75
85	6 990 103.86	538 126.55
86	6 990 113.81	538 103.63
87	6 990 125.52	538 081.54
88	6 990 136.77	538 059.22

SHEAR KEY 3 LAYOUT POINTS		
POINT	NORTHING	EASTING
89	6 990 146.90	538 036.37
90	6 990 156.48	538 013.28
91	6 990 165.31	537 989.95
92	6 990 174.57	537 966.75
93	6 990 182.37	537 943.01
94	6 990 191.33	537 919.68
95	6 990 199.98	537 896.27
96	6 990 208.92	537 872.93
97	6 990 218.34	537 849.78
98	6 990 225.93	537 826.02
99	6 990 236.10	537 803.19
100	6 990 244.75	537 779.79

SHEAR KEY 5 LAYOUT POINTS		
POINT	NORTHING	EASTING
131	6 990 394.62	537 881.84
132	6 990 381.94	537 903.36
133	6 990 370.89	537 925.75
134	6 990 363.20	537 949.52
135	6 990 355.36	537 973.24
136	6 990 347.14	537 996.84
137	6 990 339.78	538 020.70
138	6 990 335.08	538 045.21
139	6 990 328.54	538 069.32
140	6 990 323.28	538 093.76
141	6 990 319.77	538 118.49
142	6 990 313.37	538 142.64

SHEAR KEY 5 LAYOUT POINTS		
POINT	NORTHING	EASTING
143	6 990 306.81	538 166.76
144	6 990 298.97	538 190.49
145	6 990 292.48	538 214.61
146	6 990 282.07	538 237.20
147	6 990 273.77	538 260.78
148	6 990 265.29	538 284.29
149	6 990 256.47	538 314.02
150	6 990 246.77	538 311.58
151	6 990 256.48	538 279.22
152	6 990 264.98	538 255.71
153	6 990 273.14	538 232.09
154	6 990 283.69	538 209.55

SHEAR KEY 5 LAYOUT POINTS		
POINT	NORTHING	EASTING
155	6 990 290.10	538 185.40
156	6 990 297.85	538 161.64
157	6 990 304.43	538 137.52
158	6 990 310.22	538 113.26
159	6 990 314.15	538 088.59
160	6 990 319.43	538 064.16
161	6 990 326.18	538 040.10
162	6 990 330.73	538 015.55
163	6 990 338.37	537 991.77
164	6 990 346.64	537 968.20
165	6 990 354.24	537 944.40
166	6 990 362.12	537 920.69

SHEAR KEY 5 LAYOUT POINTS		
POINT	NORTHING	EASTING
167	6 990 373.29	537 898.35
168	6 990 385.97	537 876.83

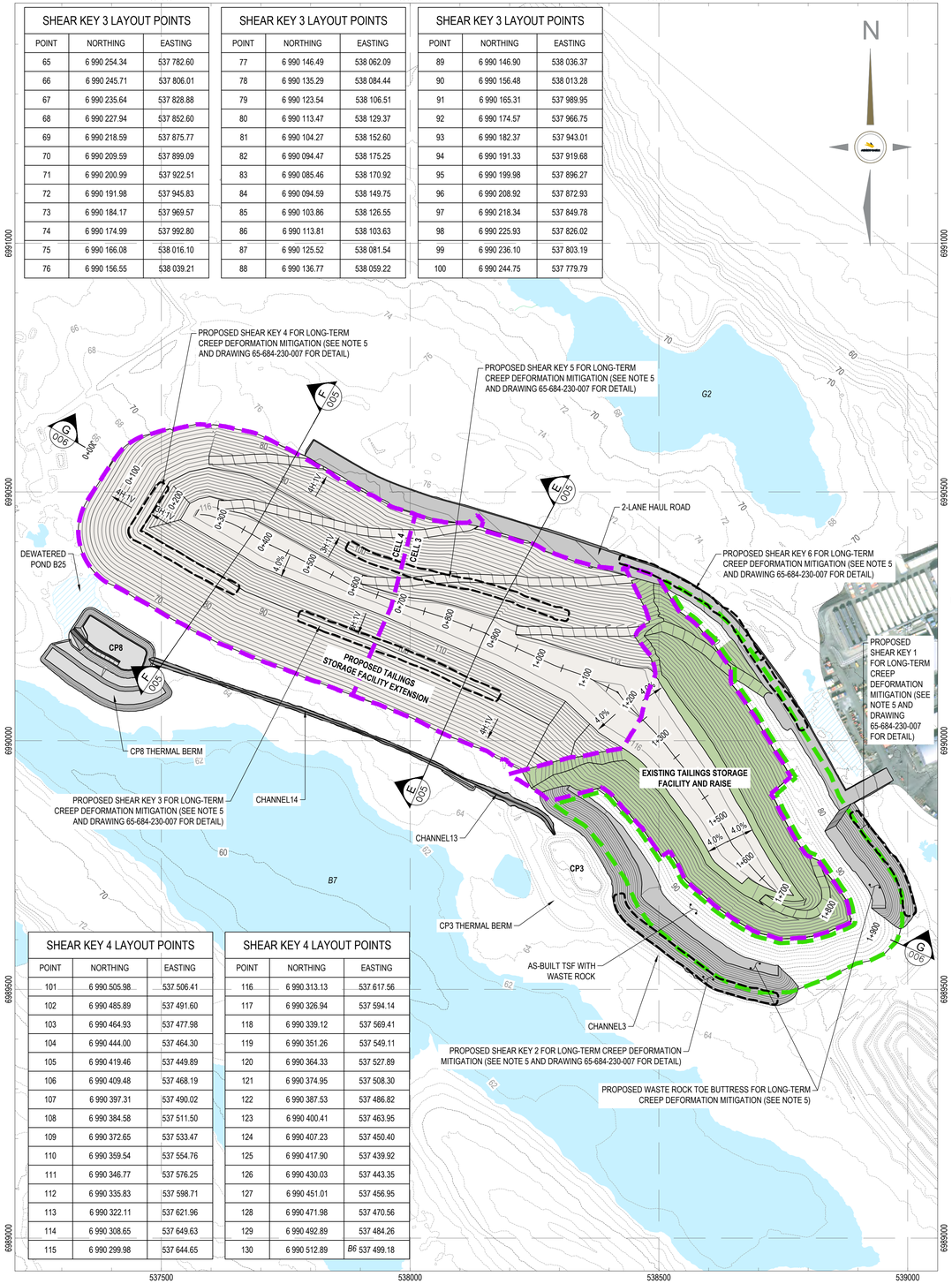
SHEAR KEY 4 LAYOUT POINTS		
POINT	NORTHING	EASTING
101	6 990 505.98	537 506.41
102	6 990 485.89	537 491.60
103	6 990 464.93	537 477.98
104	6 990 444.00	537 464.30
105	6 990 419.46	537 449.89
106	6 990 409.48	537 468.19
107	6 990 397.31	537 490.02
108	6 990 384.58	537 511.50
109	6 990 372.65	537 533.47
110	6 990 359.54	537 554.76
111	6 990 346.77	537 576.25
112	6 990 335.83	537 598.71
113	6 990 322.11	537 621.96
114	6 990 308.65	537 649.63
115	6 990 299.98	537 644.65

SHEAR KEY 4 LAYOUT POINTS		
POINT	NORTHING	EASTING
116	6 990 313.13	537 617.56
117	6 990 326.94	537 594.14
118	6 990 339.12	537 569.41
119	6 990 351.26	537 549.11
120	6 990 364.33	537 527.89
121	6 990 374.95	537 508.30
122	6 990 387.53	537 486.82
123	6 990 400.41	537 463.95
124	6 990 407.23	537 450.40
125	6 990 417.90	537 439.92
126	6 990 430.03	537 443.35
127	6 990 451.01	537 456.95
128	6 990 471.98	537 470.56
129	6 990 492.89	537 484.26
130	6 990 512.89	B6 537 499.18

SHEAR KEY 6 LAYOUT POINTS		
POINT	NORTHING	EASTING
169	6 990 366.39	538 427.20
170	6 990 359.07	538 451.10
171	6 990 351.20	538 474.83
172	6 990 341.48	538 497.80
173	6 990 330.50	538 520.24
174	6 990 318.12	538 541.88
175	6 990 306.39	538 563.85
176	6 990 293.69	538 585.37
177	6 990 280.49	538 606.53
178	6 990 264.38	538 625.06
179	6 990 249.61	538 645.13
180	6 990 230.12	538 660.55
181	6 990 208.98	538 673.74
182	6 990 187.85	538 686.94
183	6 990 167.29	538 701.13

SHEAR KEY 6 LAYOUT POINTS		
POINT	NORTHING	EASTING
184	6 990 146.41	538 714.86
185	6 990 125.32	538 728.27
186	6 990 105.80	538 743.76
187	6 990 085.23	538 757.94
188	6 990 064.45	538 771.85
189	6 990 043.61	538 785.64
190	6 990 029.26	538 791.74
191	6 990 026.38	538 786.47
192	6 990 041.02	538 780.23
193	6 990 061.76	538 766.43
194	6 990 082.54	538 752.52
195	6 990 101.99	538 739.11
196	6 990 121.82	538 723.39
197	6 990 142.84	538 710.03
198	6 990 163.76	538 696.27

SHEAR KEY 6 LAYOUT POINTS		
POINT	NORTHING	EASTING
199	6 990 185.20	538 681.54
200	6 990 206.31	538 668.33
201	6 990 228.35	538 654.74
202	6 990 245.32	538 640.92
203	6 990 259.46	538 621.62
204	6 990 275.70	538 602.84
205	6 990 288.24	538 582.80
206	6 990 301.46	538 560.43
207	6 990 312.33	538 540.25
208	6 990 325.06	538 517.70
209	6 990 336.43	538 494.49
210	6 990 345.41	538 473.22
211	6 990 353.60	538 448.54
212	6 990 360.61	538 425.60



TAILINGS STORAGE FACILITY EXTENSION
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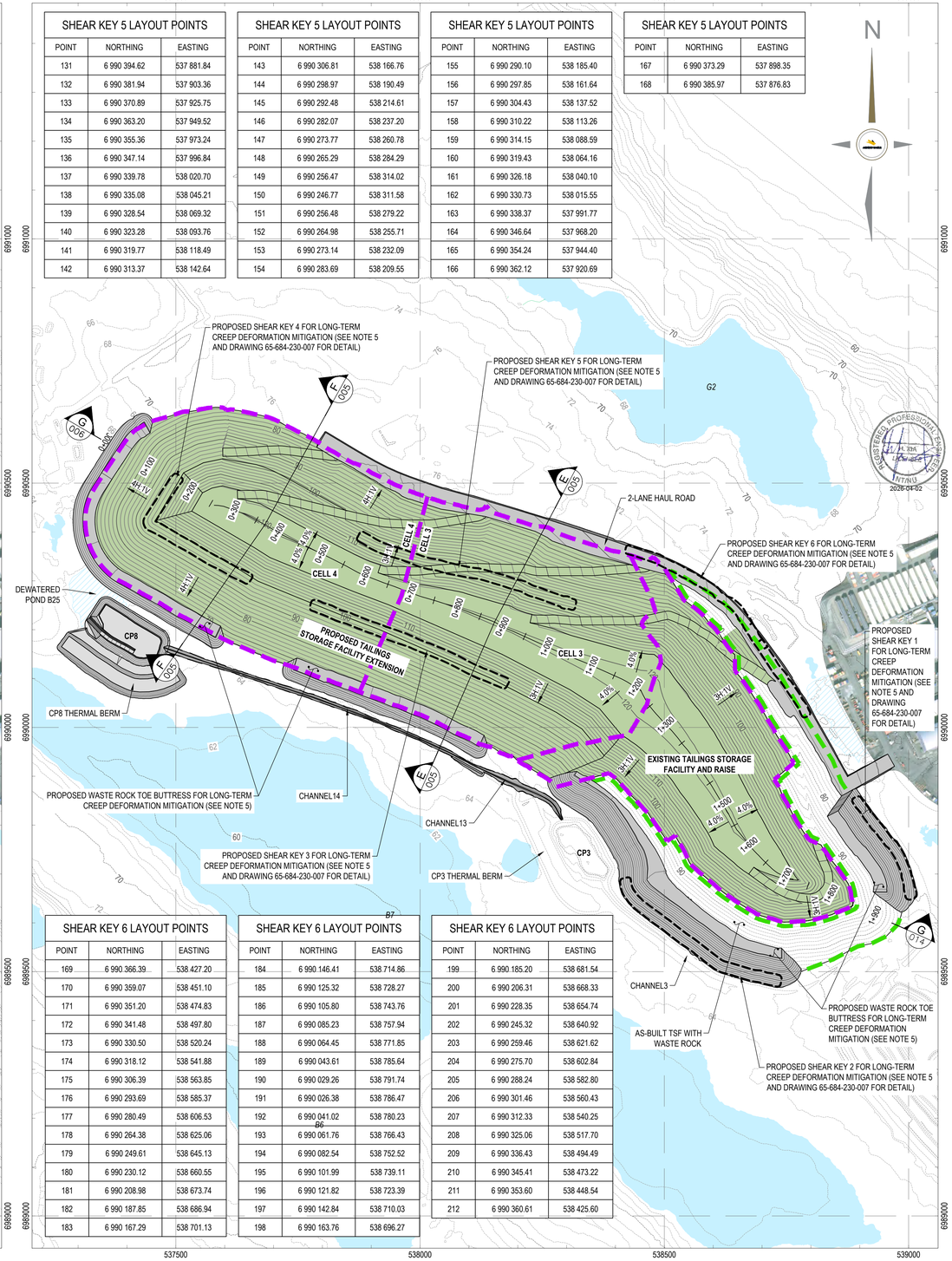

TAILINGS STORAGE FACILITY EXTENSION WITH WASTE ROCK COVER
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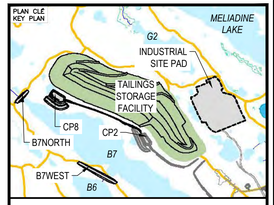

TETRA TECH

NOTES GÉNÉRALES / GENERAL NOTES

1. MATERIAL PLACEMENT AND FOUNDATION PREPARATION SHOULD BE IN ACCORDANCE WITH THE CONSTRUCTION METHOD AND PROCEDURES DESCRIBED IN THE TSF DESIGN UPDATE REPORT AND OPERATIONAL PROTOCOLS ESTABLISHED.
2. EXISTING TSF CONTOUR BASED ON THE SURVEY TAKEN BY AGNICO EAGLE; DATED JUNE 15, 2025.
3. THE ACTUAL SIZE OF TSF EXTENSION CELL3 AND CELL4 OR SUB-CELLS MAY VARY DEPENDING ON THE ACTUAL TAILINGS PLACEMENT SCHEDULE AND OTHER OPERATIONAL CONSIDERATIONS.
4. DETAILED MONTHLY TAILINGS PLACEMENT PLAN WILL BE DEVELOPED TO GUIDE THE OPERATIONS.
5. THE PROPOSED TOE BUTTRESS AND SHEAR KEY WILL BE FURTHER DEFINED AND OPTIMIZED ONCE ADDITIONAL SUB-SURFACE INFORMATION AVAILABLE. THE LOCATION AND EXTENT OF THE TOE BUTTRESS AND SHEAR KEY WILL BE INFORMED BASED ON MONITORING DATA, OBSERVED FACILITY PERFORMANCE, AND UPDATED ENGINEERING ASSESSMENTS.

REGISTERED PROFESSIONAL ENGINEER
NT/NU
2026-04-02

PERMIT TO PRACTICE
TETRA TECH CANADA INC.
Signature _____
Date _____
PERMIT NUMBER: P 018
NT/NU Association of Professional Engineers and Geoscientists

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AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
0	2026-04-02	ISSUED FOR CONSTRUCTION	HX	HX	
A	2026-02-28	ISSUED FOR REVIEW	HX	HX	

REVISIONS

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TITRE / TITLE
AGNICO EAGLE MELIADINE GOLD MINE

TAILINGS STORAGE FACILITY EXTENSION
PLAN VIEW

DESSINÉ PAR / DRAWN BY	EL	DATE 2026-04-02
VÉRIFIÉ PAR / CHECKED BY	HX	2026-04-02
APPROUVÉ PAR / APPROVED BY	HX	2026-04-02
ÉCHELLE / SCALE	1:5000	DATE 2026-04-02

NO. DESSIN / DRAWING NO. 65-684-230-004

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
65	0	4 / 9

AE-CART-ARCH D

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FILE NO. 65-684-230-004-006.dwg

NO. DESSIN
DRAWING NO. 65-684-230-004-006

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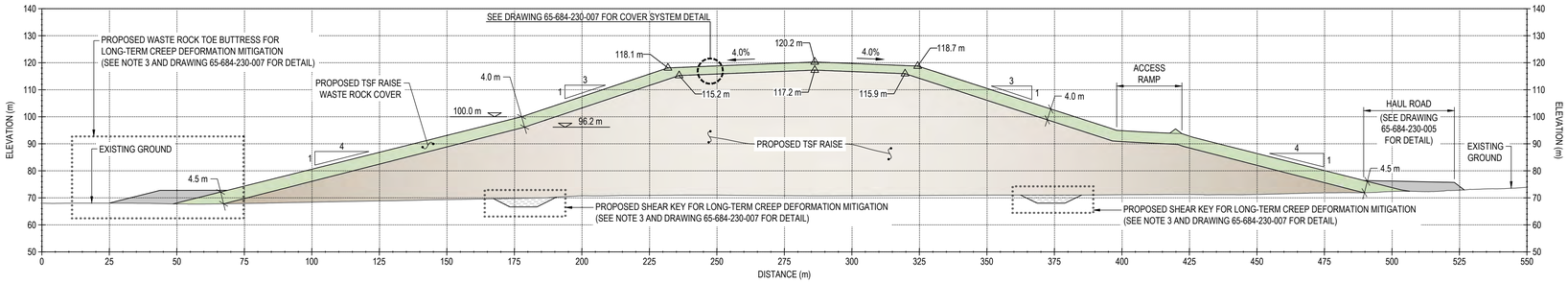

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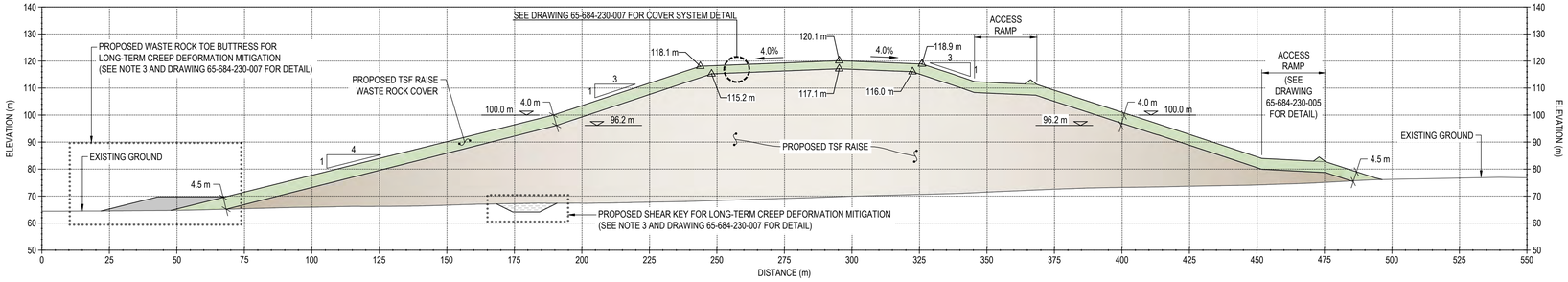

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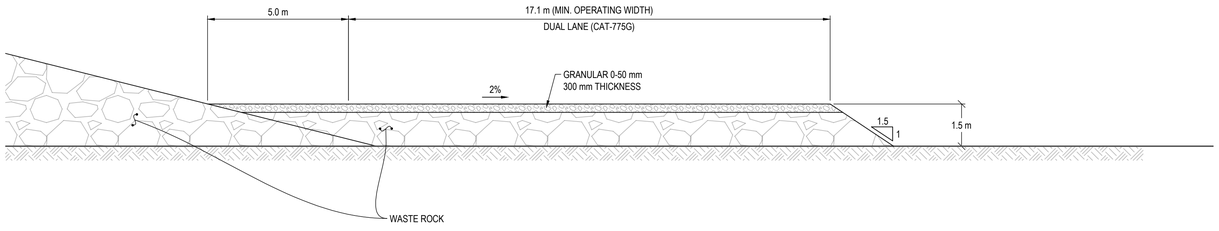
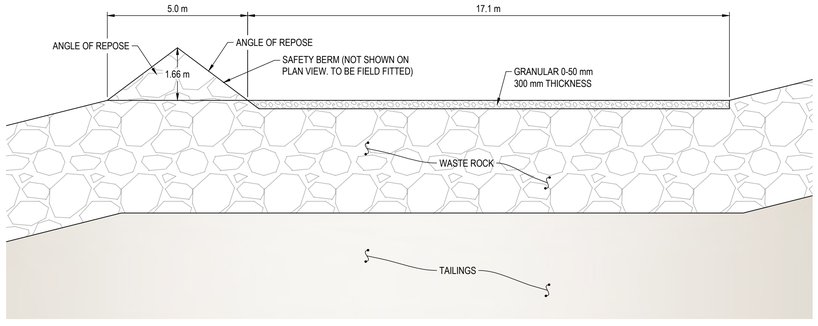
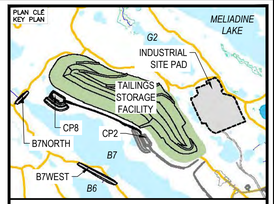


TYPICAL SECTION FOR HAUL ROAD
NOT TO SCALE



TYPICAL SECTION FOR TAILINGS STORAGE FACILITY ACCESS RAMP
NOT TO SCALE

PLAN CLÉ
KEY PLAN



TETRA TECH

NOTES GÉNÉRALES / GENERAL NOTES

1. MATERIAL PLACEMENT AND FOUNDATION PREPARATION SHOULD BE IN ACCORDANCE WITH THE CONSTRUCTION METHOD AND PROCEDURES DESCRIBED IN THE TSF DESIGN UPDATE REPORT AND OPERATIONAL PROTOCOLS ESTABLISHED.
2. EXISTING TSF CONTOUR BASED ON THE SURVEY TAKEN BY AGNICO EAGLE; DATED JUNE 15, 2025.
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REGISTERED PROFESSIONAL ENGINEER
NT/NU
2026-04-02

PERMIT TO PRACTICE
TETRA TECH CANADA INC.
Signature _____
Date _____
PERMIT NUMBER: P 018
NT/NU Association of Professional Engineers and Geoscientists

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AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
0	2026-04-02	ISSUED FOR CONSTRUCTION	HX	HX	
A	2026-02-28	ISSUED FOR REVIEW	HX	HX	

REVISIONS

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TITRE / TITLE
AGNICO EAGLE MELIADINE GOLD MINE

TAILINGS STORAGE FACILITY EXTENSION
CROSS-SECTIONS

DESSINÉ PAR / DRAWN BY	EL	DATE 2026-04-02
VÉRIFIÉ PAR / CHECKED BY	HX	2026-04-02
APPROUVÉ PAR / APPROVED BY	HX	2026-04-02
ÉCHELLE / SCALE	1:1000	DATE 2026-04-02

NO. DESSIN / DRAWING NO. 65-684-230-005

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
65	0	5 / 9

AE-CART-ARCH D

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NO. DESSIN
DRAWING NO. 65-684-230-004-006

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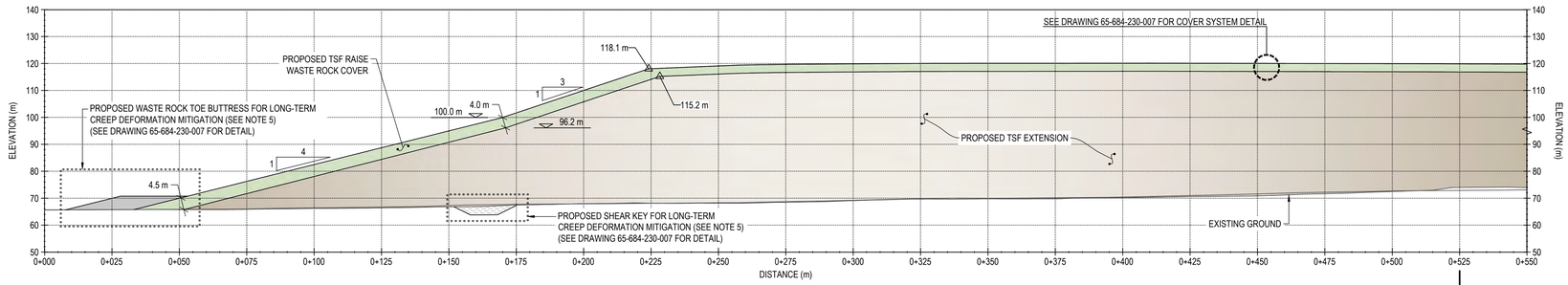

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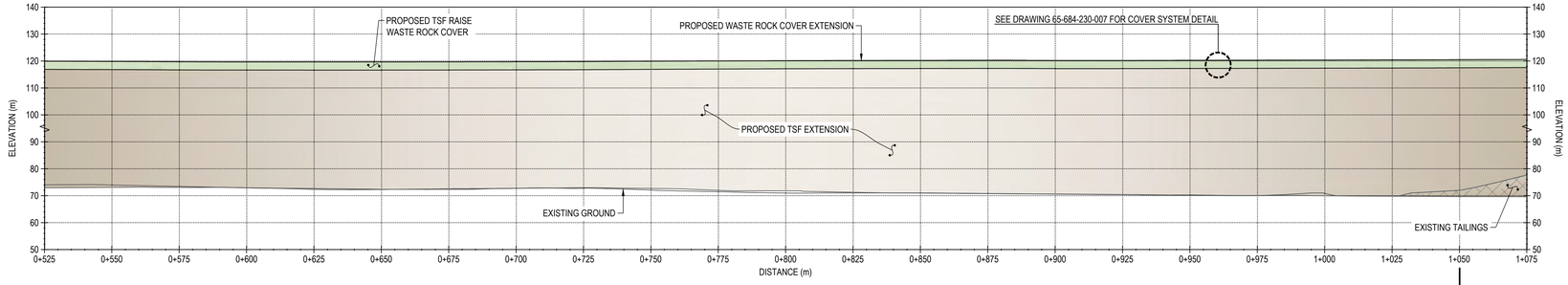

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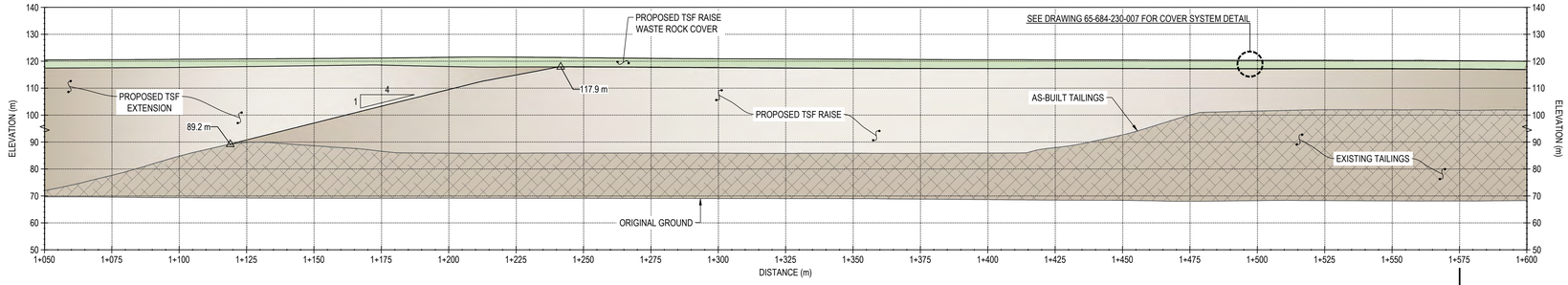

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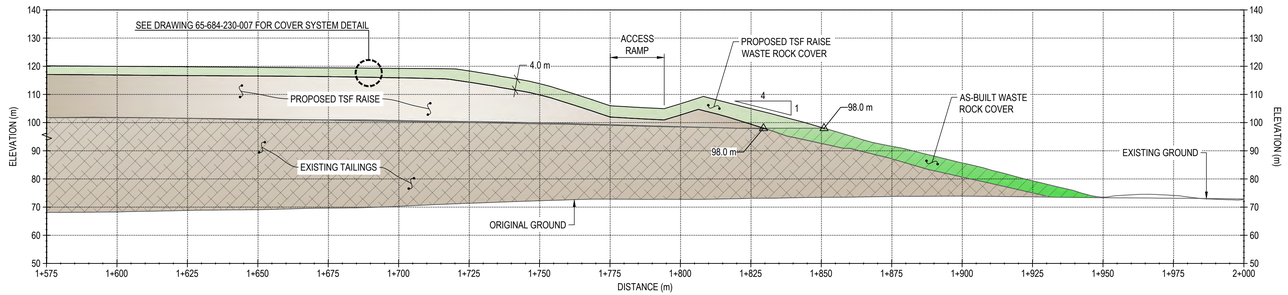

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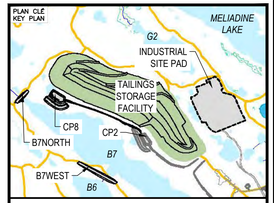

TETRA TECH

NOTES GÉNÉRALES / GENERAL NOTES

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REGISTERED PROFESSIONAL ENGINEER
NT/NU
2026-04-02

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TETRA TECH CANADA INC.
Signature
Date
PERMIT NUMBER: P 018
NT/NU Association of Professional Engineers and Geoscientists

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DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

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AGNICO EAGLE

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A	2026-02-28	ISSUED FOR REVIEW	HX	HX	

REVISIONS

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TITRE / TITLE
AGNICO EAGLE MELIADINE GOLD MINE

TAILINGS STORAGE FACILITY EXTENSION
CROSS-SECTION G-G'

DESSINÉ PAR / DRAWN BY	EL	DATE 2026-04-02
VÉRIFIÉ PAR / CHECKED BY	HX	2026-04-02
APPROUVÉ PAR / APPROVED BY	HX	2026-04-02
ÉCHELLE / SCALE	1:1000	DATE 2026-04-02

NO. DESSIN / DRAWING NO. 65-684-230-006

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
65	0	6 / 9

AE-CART-ARCH D

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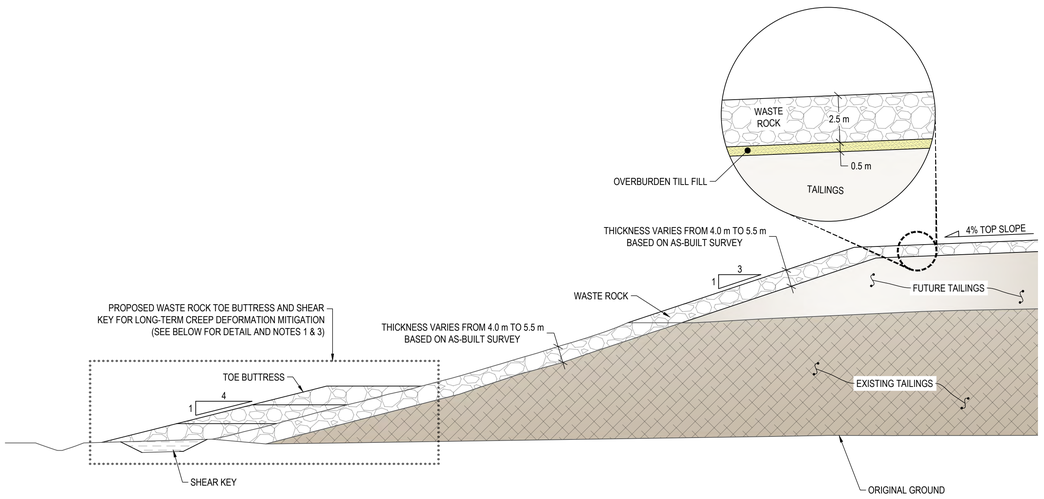
FILE NO. 65-684-230-004-006.dwg

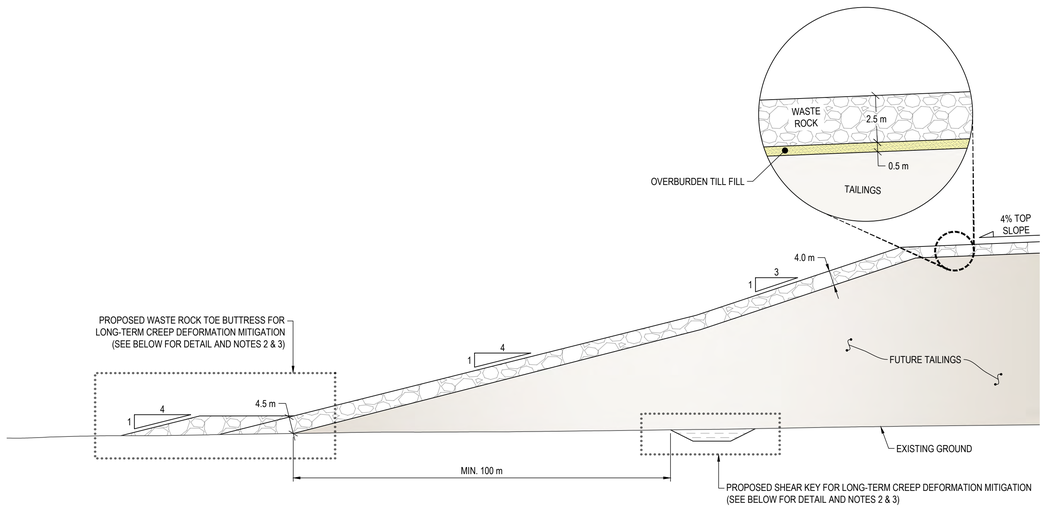
NO. DESSIN
DRAWING NO. 65-684-230-007

FORMAT ARCHD



TYPICAL DESIGN SECTION FOR TAILINGS STORAGE FACILITY RAISE

NOT TO SCALE



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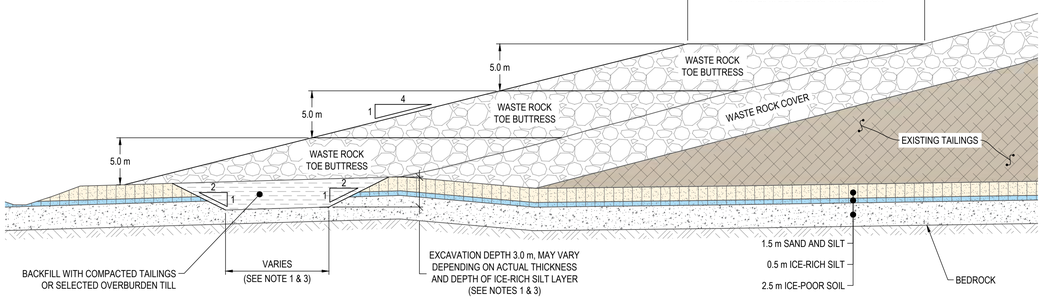
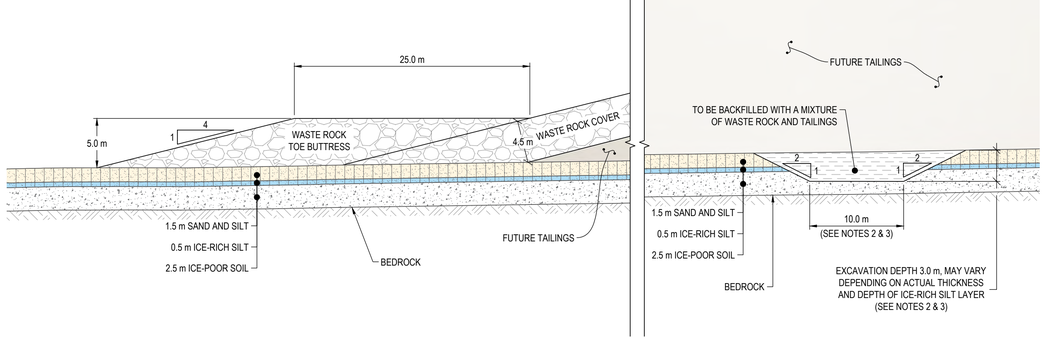
NOT TO SCALE



TYPICAL DESIGN SECTION FOR TAILINGS STORAGE FACILITY RAISE BUTTRESS AND SHEAR KEY (SEE NOTE 1)

NOT TO SCALE

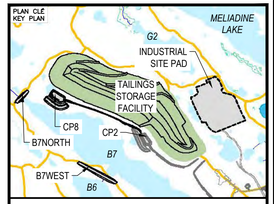


TYPICAL DESIGN SECTION FOR TAILINGS STORAGE FACILITY EXTENSION BUTTRESS AND SHEAR KEY (SEE NOTE 1)

NOT TO SCALE

ITEM	UNITS	ESTIMATED IN-PLACE QUANTITY
WASTE ROCK FILL FOR TSF RAISE TOE BUTTRESS	m³	296,300
WASTE ROCK FILL FOR TSF EXTENSION TOE BUTTRESS	m³	137,300
SHEAR KEY EXCAVATION FOR TSF RAISE	m³	52,600
SHEAR KEY EXCAVATION FOR TSF EXTENSION	m³	64,100
WASTE ROCK FILL FOR HAUL ROAD	m³	110,200
SURFACING MATERIAL FOR HAUL ROAD	m³	15,100
WASTE ROCK FILL FOR RAMP WIDENING	m³	6,600

PLAN CLÉ
KEY PLAN



TETRA TECH

NOTES GÉNÉRALES / GENERAL NOTES

1. THE BASE WIDTH OF THE PROPOSED SHEAR KEY FOR THE TSF RAISE VARIES BETWEEN 6.0 M AND 10.0 M DEPENDING ON FIELD CONDITIONS.
2. THE PROPOSED SHEAR KEY FOR THE TSF EXTENSION IS LOCATED APPROXIMATELY 100 M INWARD FROM THE TAILINGS TOE WITH A SIDE SLOPE OF 2H:1V AND AN ESTIMATED BASE WIDTH OF 10 M.
3. THE PROPOSED TOE BUTTRESS AND SHEAR KEY WILL BE FURTHER DEFINED AND OPTIMIZED ONCE ADDITIONAL SUB-SURFACE INFORMATION AVAILABLE. THE LOCATION AND EXTENT OF THE TOE BUTTRESS AND SHEAR KEY WILL BE INFORMED BASED ON MONITORING DATA, OBSERVED FACILITY PERFORMANCE, AND UPDATED ENGINEERING ASSESSMENTS.

ASSOCIATION OF PROFESSIONAL ENGINEERS AND GEOSCIENTISTS NT/NU
2026-04-02

PERMIT TO PRACTICE
TETRA TECH CANADA INC.
Signature
Date 2026-04-02
PERMIT NUMBER: P 018
NT/NU Association of Professional Engineers and Geoscientists

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A	2026-02-28	ISSUED FOR REVIEW	HX	HX	

REVISIONS

TITRE / TITLE
AGNICO EAGLE MELIADINE GOLD MINE

TAILINGS STORAGE FACILITY RAISE AND EXTENSION
PROPOSED MITIGATION MEASURES
TYPICAL SECTIONS

DESSINÉ PAR / DRAWN BY	EL	DATE 2026-04-02
VÉRIFIÉ PAR / CHECKED BY	HX	2026-04-02
APPROUVÉ PAR / APPROVED BY	HX	2026-04-02
ÉCHELLE / SCALE	NTS	DATE 2026-04-02

NO. DESSIN / DRAWING NO. 65-684-230-007

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
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FILE NO. 65-684-230-007.dwg

NO. DESSIN DRAWING NO. 65-684-230-008-009

FORMAT ARCHD

EXISTING GTC FOR TSF RAISE		
POINT	NORTHING	EASTING
GTC-01A	6 989 948.5	538 721.6
GTC-02	6 989 945.0	538 661.1
GTC-03	6 989 762.9	538 675.3
GTC-04	6 989 665.0	538 907.2
TSF-GTC-2A	6 989 603.2	538 725.6
TSF-GTC-05	6 989 809.0	538 528.0
TSF-GTC-06	6 989 988.8	538 299.6
TSF-GTC-08	6 990 258.1	538 466.0
TSF-GTC-055	6 989 821.0	538 529.3
TSF-GTC-222	6 989 603.7	538 723.5
TSF-GTC07	6 989 988.8	538 510.0

PROPOSED GTC FOR TSF EXTENSION				
POINT	NORTHING	EASTING	TOP BEAD ELEVATION (m)	BOTTOM BEAD ELEVATION (m)
GTC-09	6 990 390.0	538 153.0	80	62
GTC-10	6 990 064.0	538 020.0	75	59
GTC-11	6 990 146.0	538 028.0	95	59
GTC-12	6 990 224.0	538 119.0	116	62
GTC-13	6 990 560.0	537 594.0	90	63
GTC-14	6 990 373.0	537 501.0	90	54
GTC-15	6 990 361.0	537 982.0	100	60
GTC-16	6 990 367.0	537 738.0	116	60

PROPOSED SAAV FOR TSF EXTENSION				
POINT	NORTHING	EASTING	TOP ELEVATION (m)	BOTTOM ELEVATION (m)
SAAV1	6 989 685.0	538 481.0	76	58
SAAV2	6 989 763.0	538 550.0	98	58
SAAV3	6 990 155.9	538 655.8	78	60
SAAV4	6 990 061.2	538 549.2	116	60
SAAV5	6 990 060.0	538 030.0	75	59
SAAV6	6 990 142.0	538 038.0	95	59
SAAV7	6 990 393.0	538 146.0	80	62
SAAV8	6 990 264.0	538 078.0	116	62
SAAV9	6 990 330.0	537 414.0	70	54
SAAV10	6 990 381.0	537 490.0	90	54

EXISTING GROUND TEMPERATURE CABLE

PROPOSED GROUND TEMPERATURE CABLE

PROPOSED SAAV

PF1 **PREDOMINANTLY ICE-RICH PERMAFROST WITH NEGLIGIBLE TO LOW EXCESS ICE CONTENT (<10% BY VOLUME OF EXCESS ICE):** PREDOMINANTLY ICE-RICH GROUND WITH EXCESS ICE CONTENT GENERALLY LESS THAN 10% BY VOLUME OF VISIBLE ICE. MAY INCLUDE PATCHES OF GREATER EXCESS ICE CONTENT (PF2, PF3) OR PERMAFROST-FREE GROUND.

PF2 **PREDOMINANTLY ICE-RICH PERMAFROST WITH MEDIUM EXCESS ICE CONTENT (10%-20% BY VOLUME OF EXCESS ICE):** PREDOMINANTLY ICE-RICH GROUND WITH EXCESS ICE CONTENT RANGING BETWEEN 10% AND 20% BY VOLUME OF VISIBLE ICE. MAY INCLUDE PATCHES OF GREATER EXCESS ICE CONTENT (PF3), LESS EXCESS ICE CONTENT (PF1) OR PERMAFROST-FREE GROUND (PF0).

PF3 **PREDOMINANTLY ICE-RICH PERMAFROST WITH HIGH TO VERY HIGH EXCESS ICE CONTENT (>20% BY VOLUME OF EXCESS ICE):** PREDOMINANTLY ICE-RICH GROUND WITH EXCESS ICE CONTENT EXCEEDING 20% BY VOLUME OF VISIBLE ICE. MAY INCLUDE PATCHES OF LESSER EXCESS ICE CONTENT (PF2), ICE-POOR PERMAFROST (PF1), OR PERMAFROST-FREE GROUND.

537000 537500 538000 538500 539000 539500

6991000 6990500 6990000 6989500

N

PROPOSED TAILINGS STORAGE FACILITY EXPANSION

EXISTING TAILINGS STORAGE FACILITY

INDUSTRIAL PAD

WRSF1

MELIADINE LAKE

B7NORTH THERMAL BERM

CP8 THERMAL BERM

CHANNEL14

CHANNEL13

CHANNEL3

E4 E11 E5 B24 B7 B6 G2 CP8 B7NORTH B7 B7WEST B6

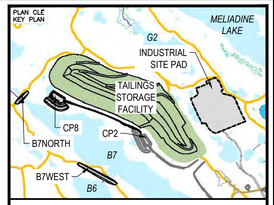
GTC-13 GTC-14 GTC-16 GTC-15 GTC-09 GTC-12 GTC-11 GTC-10 GTC-02 GTC-01A GTC-05 GTC-03 GTC-04

SAAV1 SAAV2 SAAV3 SAAV4 SAAV5 SAAV6 SAAV7 SAAV8 SAAV9 SAAV10

TSF-GTC-08 TSF-GTC-06 TSF-GTC07 TSF-GTC-055 TSF-GTC-222

0 200 m
Scale: 1:4,000 @ 11"x17"

PLAN CLÉ KEY PLAN



TETRA TECH

NOTES GÉNÉRALES / GENERAL NOTES

1. GTC LENGTHS VARY BY INSTALLATION LOCATION; REFER TO THE LAYOUT TABLE FOR PRELIMINARY ESTIMATES. FINAL LENGTHS SHALL BE CONFIRMED PRIOR TO ORDERING.
2. BEAD SPACING SHALL BE DETERMINED PRIOR TO ORDERING.
3. SAAV LENGTHS VARY BY INSTALLATION LOCATION; REFER TO THE LAYOUT TABLE FOR PRELIMINARY ESTIMATES. FINAL LENGTHS SHALL BE CONFIRMED PRIOR TO ORDERING.
4. INSTALLATION LOCATIONS MAY VARY BASED ON CONSTRUCTION SEQUENCING AND FIELD CONDITIONS AND SHALL BE FINALIZED PRIOR TO INSTALLATION.

REGISTERED PROFESSIONAL ENGINEER NT/NU 2026-04-02

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Date
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A	2026-02-28	ISSUED FOR REVIEW	HX	HX	

REVISIONS

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TITRE / TITLE

AGNICO EAGLE MELIADINE GOLD MINE

TAILINGS STORAGE FACILITY
INSTRUMENTATION PLAN VIEW

DESSINÉ PAR DRAWN BY	EL	DATE 2026-04-02
VERIFIÉ PAR CHECKED BY	HX	2026-04-02
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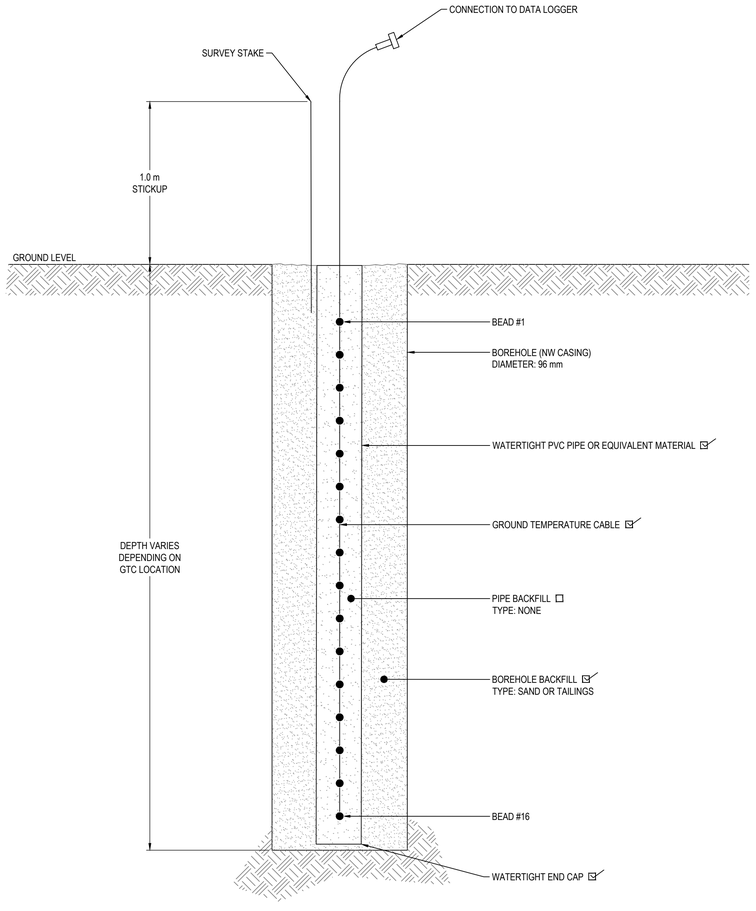

GROUND TEMPERATURE CABLE TYPICAL DETAIL (SEE NOTES 1 AND 2)
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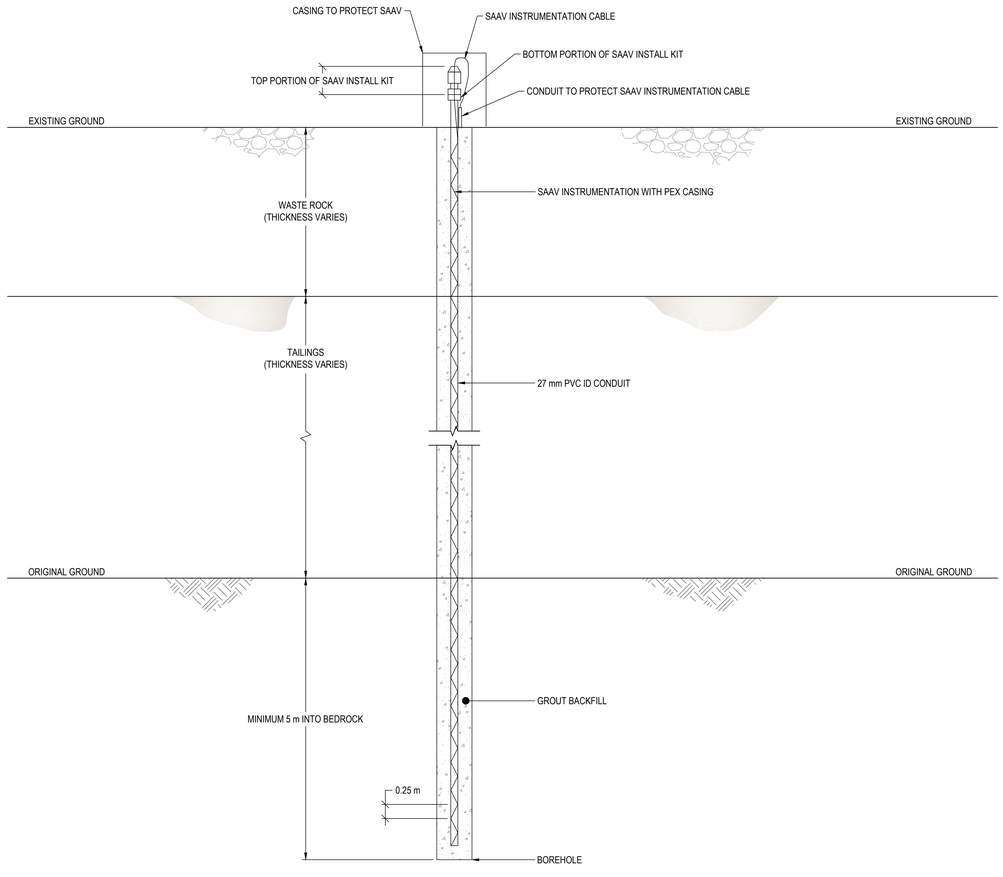
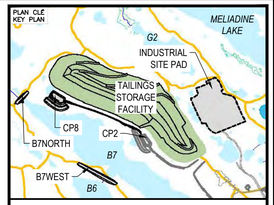


SAAV TYPICAL DETAIL (SEE NOTES 3 AND 4)
NOT TO SCALE

PLAN CLÉ
KEY PLAN



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NOTES GÉNÉRALES / GENERAL NOTES

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REGISTERED PROFESSIONAL ENGINEER
NT/NU
2026-04-02

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TITRE / TITLE
AGNICO EAGLE MELIADINE GOLD MINE

TAILINGS STORAGE FACILITY
INSTRUMENTATION TYPICAL DETAILS

DESSINÉ PAR / DRAWN BY	EL	DATE 2026-04-02
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