



## TECHNICAL MEMORANDUM

**DATE** March 23, 2026

**Reference No.** CA0042236.1659-MEL2026-006-TM-Rev1

**TO** Cecilia Zafiris  
Agnico Eagle Mines Limited

**FROM** Jennifer Levenick and Kartik Jain

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### **MELIADINE PROJECT – UPDATED GROUNDWATER MODELLING FOR TIRIGANIAQ AND PUMP UNDERGROUNDS AND IN-PIT WATER STORAGE**

## **1.0 INTRODUCTION**

WSP Canada Inc. (WSP) is pleased to provide this updated hydrogeological assessment for the Meliadine mine. The Meliadine mine is located approximately 25 km north from Rankin Inlet and 80 km southwest from Chesterfield Inlet in the Kivalliq Region of Nunavut.

Groundwater inflows to the Meliadine open pits and undergrounds were previously assessed using a calibrated groundwater model in 2024 (WSP 2024b; 2024c). Relative to this modelling, this update considers the following revisions to the model:

- Updated fault structures in the area of Tiriganiaq and Pump undergrounds.
- Updated Tiriganiaq and Pump underground mine plans. Relative to previous mine plans, the Pump underground has been deepened and extends further below the base of cryopeg.
- Contact or saline water is being proposed to be stored in select pits during operations. Previous modelling had assumed each open pit would be dewatered during mining until mining ceased and the pits were allowed to reflood.

To complete the updated hydrogeological assessment, the 3D model previously developed for the project (WSP 2024b) was updated and used to provide predictions of groundwater inflows to the underground and open pits during mining. In addition, 2D cross-sectional models were developed to assess the potential seepage from open pits to the underlying underground with contact water or saline water storage.

## **2.0 ASSESSMENT OF GROUNDWATER INFLOWS TO UNDERGROUND AND OPEN PIT DEVELOPMENTS DURING MINING**

### **2.1 Model Updates**

The following updates were made to the existing calibrated model (WSP 2024b) based on the information provided by Agnico Eagle:

- Structures in the groundwater model were modified to reflect updated interpretations provided by Agnico Eagle. Following the revision of the fault structures, the calibration of the model was reviewed to assess if the revised alignments changed the quality of the model calibration (see Section 2.2).

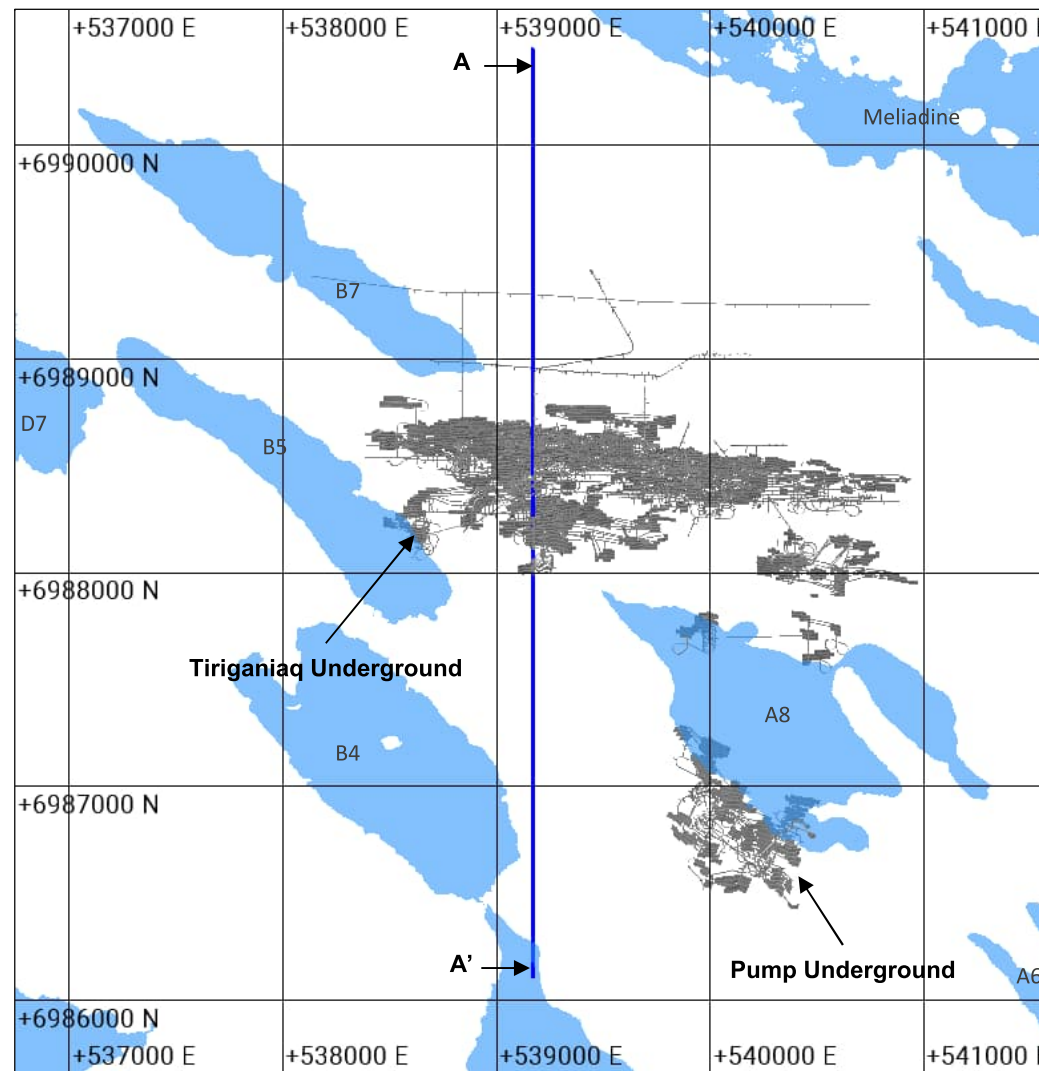
The Tiriganiaq and Pump mine plans were adjusted to match the annual development of the undergrounds up to the final year of mining in 2036. Table 1 presents a summary of the mine plan schedule for the project. Of the open pits and undergrounds listed in Table 1, only the Tiriganiaq underground (Tiri UG), Pump underground (Pump UG), WES03 pit, WN01 pit and PUMP04 pit are located in cryopeg or unfrozen rock (WSP 2024b). For reference the top of the cryopeg (3°C isotherm) and base of permafrost (0°C) are shown for two representative cross-sections in Figure 1 and Figure 2.

**Table 1: Mine Plan Schedule**

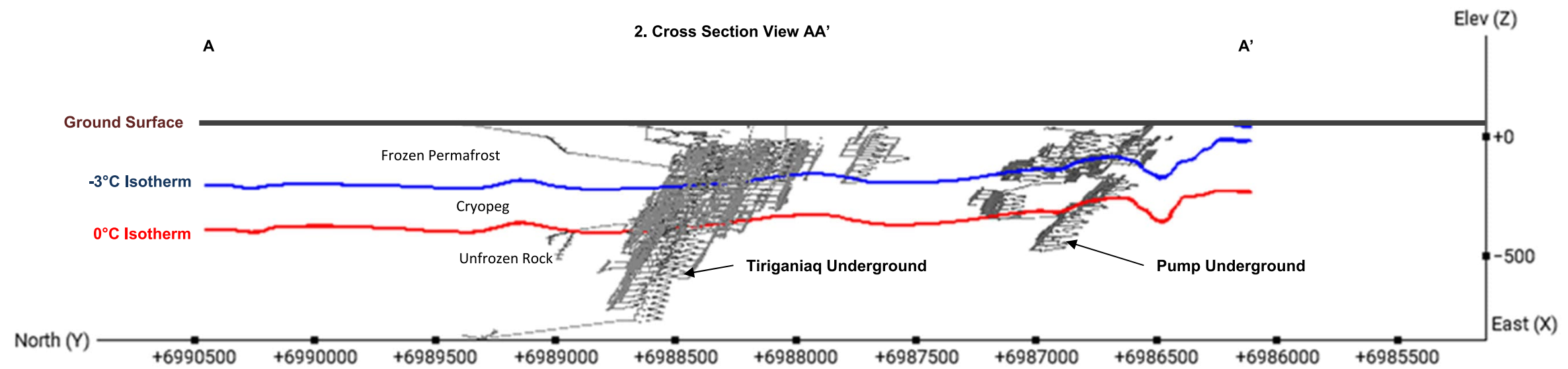
Calendar Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Mine Year	-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	
TIRI01	-	M	M	M	M	M	M	M	D	D	D	D	D	D	D	D	D	
TIRI02	M	Saline contact water storage								M	M	D	D	D	D	D	D	D
TIRI03	-	-	-	-	-	-	-	-	-	M	M	M	M	D	D	D	D	
TIRI04	-	-	-	-	-	-	-	-	-	-	-	M	M	M	D	D	D	
TIRI UG	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
WES01	-	-	-	-	-	-	-	-	-	M	M	D	D	D	D	D	D	
WES02	-	-	-	-	-	-	M	M	S	S	S	S	S	S	S	S	S	
WES03	-	-	-	-	-	-	M	M	CW	CW	CW	CW	CW	CW	CW	CW	CW	
WES04	-	-	-	-	-	-	-	-	-	-	-	-	-	M	M	D	D	
WN01	-	-	-	-	-	-	-	-	-	-	M	M	M	M	D	D	D	
PUMP01	-	-	-	-	-	M	CW	CW	CW	CW	CW	CW	CW	CW	CW	CW	CW	
PUMP02	-	-	-	-	-	M	M	S	S	S	S	S	S	S	S	S	S	
PUMP03	-	-	-	-	-	-	-	-	-	M	M	M	M	D	D	D	D	
PUMP04	-	-	-	-	-	-	-	-	-	-	-	-	M	M	M	D	D	
PUMP UG	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	
FZONE01	-	-	-	-	-	-	-	-	M	M	M	x	x	x	x	x	x	
FZONE02	-	-	-	-	-	-	-	-	M	CW	CW	CW	CW	CW	CW	CW	CW	
FZONE03	-	-	-	-	-	-	-	-	-	M	x	x	x	x	x	x	x	
Discovery	-	-	-	-	-	-	-	-	-	-	M	M	M	M	M	M	M	

M = Open pit mining and dewatering  
D = finished mining (OP), still dewatering  
U = Underground mining  
x = finished mining (UG or OP), no dewatering  
- = Pre-mining  
S = Saline contact water storage  
Contact Water Storage

1. Plan View



2. Cross Section View AA'



Note: All coordinates and elevations shown are in metres.



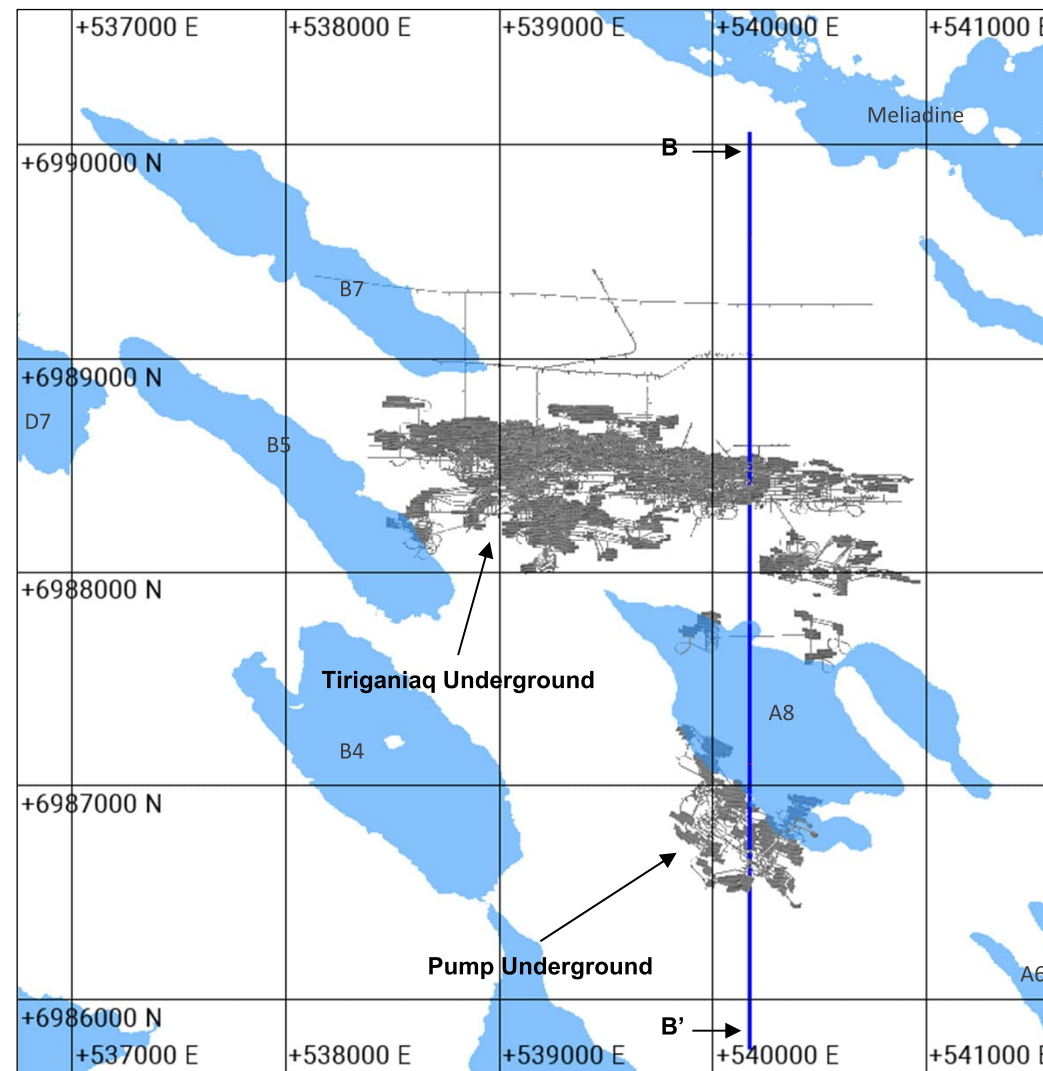
CLIENT	
CONSULTANT	
YYYY-MM-DD	2026-03-12
PREPARED	KJ
DESIGNED	KJ
REVIEWED	JL
APPROVED	JL

PROJECT  
AGNICO EAGLE MINES LIMITED  
MELIADINE MINE  
NUNAVUT

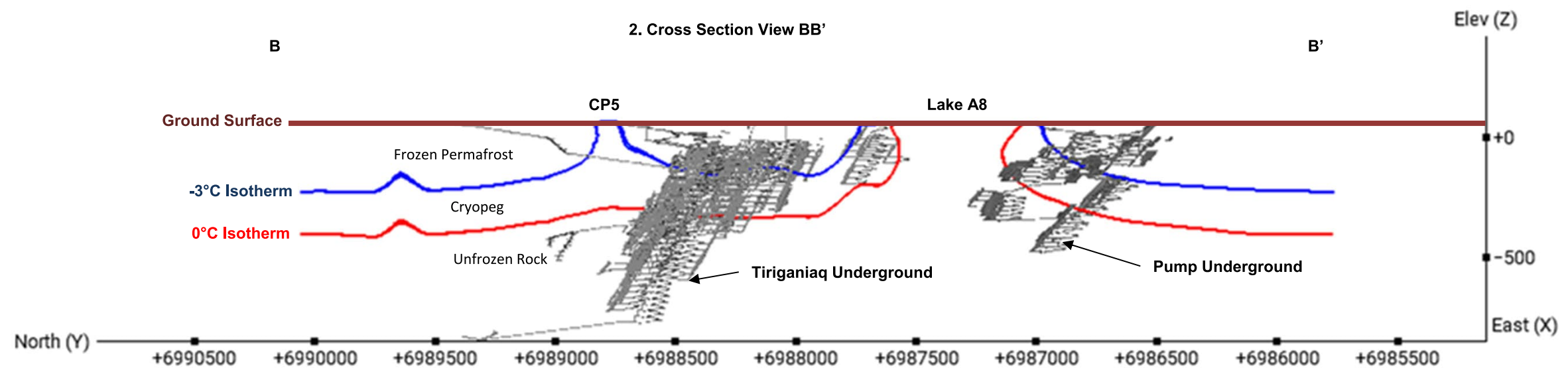
TITLE	<b>TIRIGANIAQ AND PUMP UNDERGROUNDS PLAN VIEW AND CROSS-SECTION VIEW (AA') WITH - 3°C AND 0°C MODELLED ISOTHERMS</b>	
PROJECT NO.	PHASE	REV.
CA0042236.1659		0
FIGURE	<b>1</b>	

25mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM A3S B

1. Plan View



2. Cross Section View BB'



Note: All coordinates and elevations shown are in metres.

CLIENT



CONSULTANT



YYYY-MM-DD 2026-03-12

PREPARED KJ

DESIGNED KJ

REVIEWED JL

APPROVED JL

PROJECT

AGNICO EAGLE MINES LIMITED  
MELIADINE MINE  
NUNAVUT

TITLE

**TIRIGANIAQ AND PUMP UNDERGROUNDS  
PLAN VIEW AND CROSS-SECTION VIEW (BB') WITH -  
3°C AND 0°C MODELLED ISOTHERMS**

PROJECT NO. CA0042236.1659

REV. 0

FIGURE 2

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## 2.2 Model Calibration Check

Following the inclusion of the revised structures, the ability of the model to predict historical inflows to the Tiriganiaq underground was verified.

Figure 3 presents a summary of measured versus predicted groundwater flow to the Tiriganiaq underground at the end of the calibration period (year 2024). Predicted inflows are generally similar to or slightly higher than observed flows, indicating the model is still reasonably calibrated for the purpose of predicting inflows to the underground developments over the life of mine.

## 2.3 Base Case Model Predictions

Table 2 presents a summary of the predicted groundwater inflows to the Tiriganiaq and Pump undergrounds during operations for the Base Case, along with the predicted total dissolved solids (TDS). Also included are the predicted inflows to the three open pits that are interpreted to intersect unfrozen bedrock.

The predicted groundwater inflows incorporate the effects of grouting. Like the model set-up for calibration and previous predictions (WSP 2024b), an effective hydraulic conductivity of  $1 \times 10^{-9}$  m/s was assigned to elements representative of grouted faults where the element size was approximately 10 m. In other areas of the model, where the element size increases from 10 m to approximately 25 m, the assigned effective hydraulic conductivity was increased to approximately  $3 \times 10^{-9}$  m/s to reflect the larger element size.

Predicted inflows to Tiriganiaq underground are predicted to peak at 1,525 m<sup>3</sup>/day in 2028. Inflows to Pump underground are lower (maximum predicted inflow of 350 m<sup>3</sup>/day), reflecting the shallower depth of mining. The shallower depth of mining at Pump also results in slightly lower TDS in the groundwater inflow in comparison to Tiriganiaq underground.

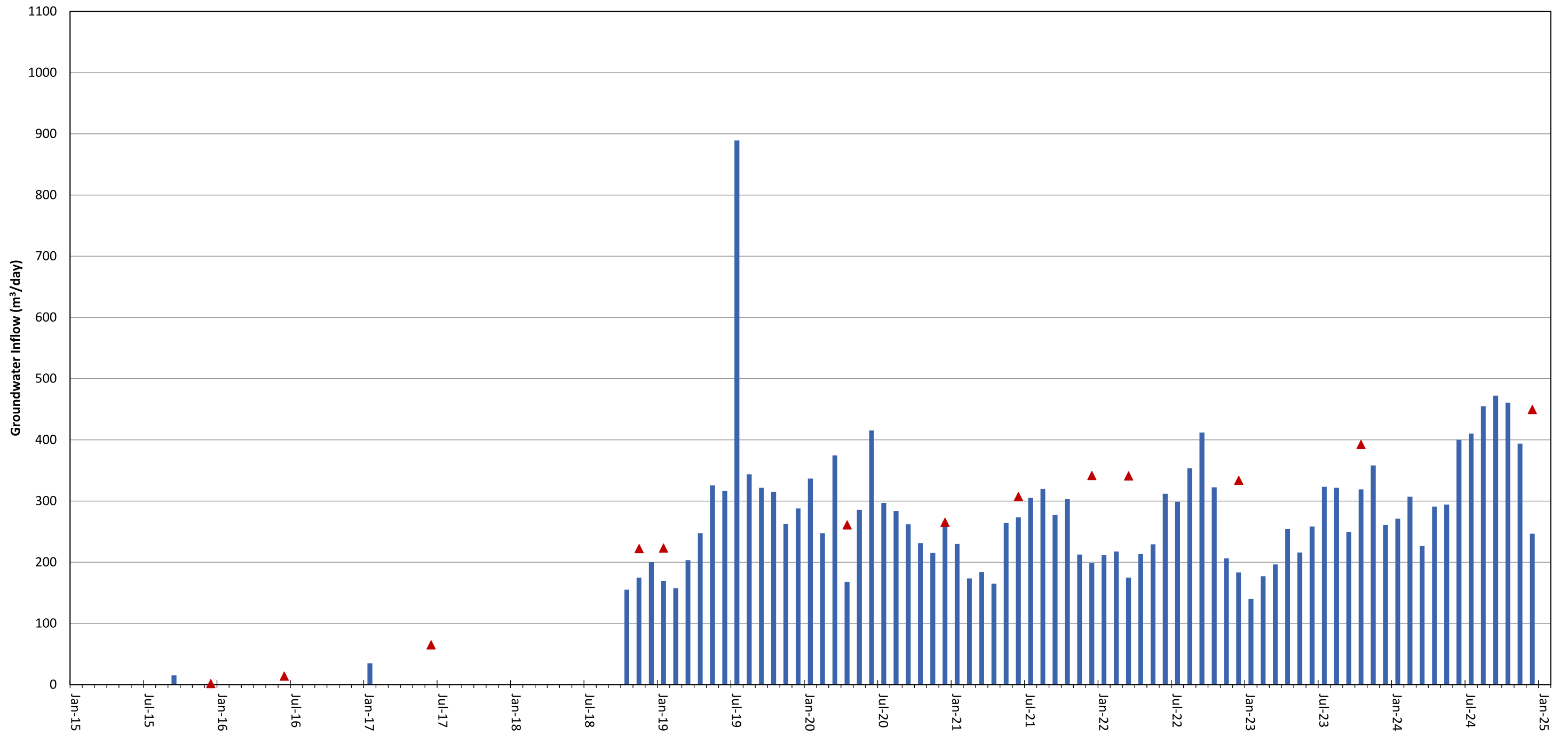
TDS in groundwater inflows is primarily controlled by the depth of the underground development and the proximity of the underground to lakes with open talik. Deeper excavations promote upwelling of higher salinity groundwater, increasing TDS in the inflowing water. Less saline water is intersected by the underground when the underground is in closer proximity to lakes in open talik (e.g., Pump Underground) where the underground intersects less saline groundwater.

## 2.4 Upper Bound Scenario

Consistent with past modelling (WSP 2024b), a sensitivity scenario was evaluated wherein the bedrock hydraulic conductivity was increased by a factor of two for the Tiriganiaq underground and factor of three for the Pump underground. A higher bedrock hydraulic conductivity increase was applied for Pump underground in comparison to Tiriganiaq underground as there is no operational data available in this area for model calibration.

Table 3 presents a summary of the predicted groundwater inflows to the Tiriganiaq and Pump undergrounds during operations for the Upper Bound Scenario. The predicted groundwater inflows incorporate the effects of grouting.

Predicted inflows to Tiriganiaq underground are predicted to peak at 2,300 m<sup>3</sup>/day in 2028, approximately 775 m<sup>3</sup>/day higher than the Base Case. Inflows to Pump underground are predicted to peak at 475 m<sup>3</sup>/day, approximately 125 m<sup>3</sup>/day higher than the Base Case.



- ▲ Predicted Groundwater Inflows
- Measured Groundwater Inflows

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PREPARED	DESIGNED	
REVIEWED	APPROVED	
2026-03-12	KJ	
KJ	JL	

PROJECT		AGNICO EAGLE MINES LIMITED MELIADINE MINE NUNAVUT	
TITLE			
<b>MEASURED VERSUS PREDICTED GROUNDWATER INFLOW TO TIRIGANIAQ UNDERGROUND</b>			
PROJECT NO.	PHASE	REV.	FIGURE
CA0042236.1659		0	<b>3</b>

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**Table 2: Predicted Groundwater Inflow and TDS Quality to Undergrounds and Open Pits during Mining – Base Case**

Year	Predicted Groundwater Inflow (m <sup>3</sup> /day)					Predicted TDS in Groundwater Inflow (mg/L)				
	Tiriganiaq Underground	Pump Underground	Wes03 Pit	WN01 Pit	Pump04 Pit	Tiriganiaq Underground	Pump Underground	Wes03 Pit	WN01 Pit	Pump04 Pit
2025	650	-	-	-	-	54,000	-	-	-	-
2026	1,100	-	200	-	-	53,500	-	1,500	-	-
2027	1,400	50	200	-	-	53,000	50,500	500	-	-
2028	1,525	100	-	-	-	53,500	47,000	-	-	-
2029	1,400	125	-	-	-	55,000	48,000	-	-	-
2030	1,325	175	-	<25	-	56,500	50,000	-	5,000	-
2031	1,325	275	-	<25	-	57,000	49,500	-	5,500	-
2032	1,350	325	-	<25	75	56,000	48,000	-	5,500	1,000
2033	1,350	350	-	<25	75	56,000	45,000	-	5,000	500
2034	1,350	350	-	-	75	56,500	42,500	-	-	500
2035	1,325	350	-	-	-	57,000	40,000	-	-	-
2036	1,325	350	-	-	-	57,500	38,500	-	-	-

**Table 3: Predicted Groundwater Inflow and TDS Quality to Undergrounds and Open Pits during Mining – Upper Bound**

Year	Predicted Groundwater Inflow (m3/day)					Predicted TDS in Groundwater Inflow (mg/L)				
	Tiriganiaq Underground	Pump Underground	Wes03 Pit	WN01 Pit	Pump04 Pit	Tiriganiaq Underground	Pump Underground	Wes03 Pit	WN01 Pit	Pump04 Pit
2025	925	-	-	-	-	54,500	-	-	-	-
2026	1,525	-	625	-	-	54,000	-	500	-	-
2027	2,075	100	625	-	-	55,000	47,000	500	-	-
2028	2,300	150	-	-	-	57,000	45,000	-	-	-
2029	2,100	200	-	-	-	60,000	46,500	-	-	-
2030	2,025	250	-	50	-	61,500	48,500	-	5,000	-
2031	2,000	375	-	50	-	62,500	48,000	-	4,500	-
2032	2,075	450	-	50	275	61,500	46,000	-	4,500	500
2033	2,100	450	-	50	275	61,500	42,500	-	4,000	500
2034	2,075	475	-	-	275	62,000	39,000	-	-	<500
2035	2,050	475	-	-	-	62,500	37,000	-	-	-
2036	2,050	475	-	-	-	63,500	36,500	-	-	-

### **3.0 ASSESSMENT OF PIT LAKE SEEPAGE LOSS TO UNDERGROUND DURING OPERATIONS**

This section presents an assessment of potential seepage from several open pits at the Mine that are being considered for deposition of saline or contact water during operations. For these predictions, the analysis considered the results of thermal modelling, which predicted the potential for permafrost to degrade below the pits in response to the placement of in-pit material.

Pits being considered for saline or contact water storage include:

- Tiri02 – Saline Water – Year 2021 to Year 2028
- Wes02 – Saline Water – Year 2028 to Year 2036
- Wes03 – Contact Water – Year 2028 to Year 2036
- Pump 01 – Contact Water – Year 2026 to Year 2036
- Pump 02 – Saline Water – Year 2027 to Year 2036
- Fzone02 – Contact Water – Year 2029 to Year 2036.

### **3.1 Thermal Assessment of Proposed Pit Flooding**

#### **3.1.1 Background – Permafrost and Cryopeg Depth**

Permafrost is defined as soil or rock where temperatures remain at or below 0°C for at least two consecutive years. The freezing temperature of water decreases when pressure and salinity increase. Consequently, within the permafrost unfrozen ground can be encountered at temperatures less than 0°C and in isolated pockets. These areas of unfrozen groundwater above the base of the permafrost (0°C isotherm) are referred to as cryopeg.

Groundwater inflows to the mine are expected to be negligible until mining extends below the depth of the permanently frozen portion of the permafrost into the cryopeg. The depth at which these inflows may occur will depend on the thickness of the cryopeg, and the freezing point depression caused by the groundwater salinity.

Deep groundwater samples collected near Tiriganiaq have a relative uniform TDS concentration of 55,000 mg/L. Considering the effect of salinity, the freezing point depression is estimated to be approximately -3°C, and cryopeg conditions are assumed between the 0°C and -3°C isotherms (WSP 2024a). This is expected to be too low of a temperature range near fresh-water lakes where groundwater salinity may be reduced (and the lower bound of the range raised); however, it is a conservative assumption for the assessment of groundwater inflows to underground developments (i.e., overpredicts inflows due to the assumption of less fully frozen ground). Near the Tiriganiaq underground away from the lakes, the top of the cryopeg (base of the frozen permafrost) would be approximately 225 metres below ground surface (mbgs).

### 3.1.2 Thermal Modelling Results

WSP conducted a thermal assessment to evaluate the potential effect of saline or contact water storage in open pits on the underlying permafrost conditions during operations (WSP 2026). The storage of saline or contact water in the open pits was modelled in two dimensions (2D) with each simulated 2D cross-section evaluated assuming instantaneous excavation and filling of the pits in Year 2025. Underground workings were incorporated below the pits, where present, on a year-by-year basis in the transient thermal analysis. As directed by Agnico, a 100-m crown pillar was assumed beneath pits in the model geometry. Undergrounds present within the crown pillar in the provided CAD files were artificially relocated in the model geometry to appear below the 100-m crown pillar zone. Plan view of the thermal model cross-sections is shown in Figure 4.

Based on the thermal modelling (WSP 2026), the following observations during mining operations are noted.

- **Wes03** presently has cryopeg below the west wall where it intersects with Lake A8 footprint. The cryopeg may expand with in-pit deposition of contact water, and development of the underground. The presence of cryopeg will allow for the seepage of pit water to the Tiriganiaq underground that may need to be managed during operations.
- **Tiri02, Wes02, Pump01, Pump02, and FZone02** are presently located within permafrost. Although localized thawing will occur beneath these pits as result of in-pit deposition of saline water or contact water, it is not predicted to extend deep enough to connect with the underground workings or deeper groundwater flow system. No enhanced seepage of water from the open pit to the underground or deeper groundwater flow system during operations is therefore expected at these five pits.

## 3.2 Groundwater Model Setup – Pit Lake Seepage

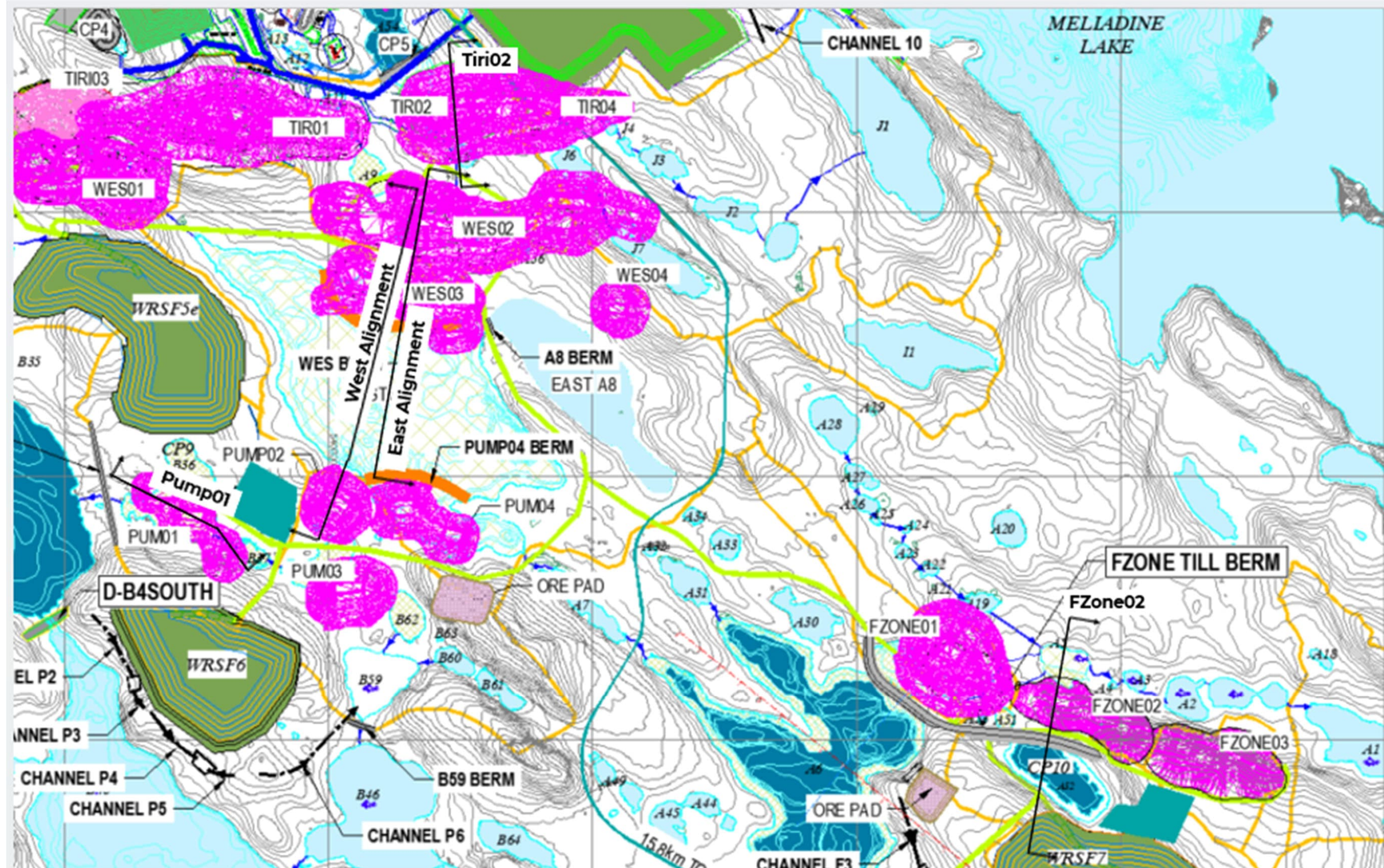
### 3.2.1 Model Approach and Domain

In consideration of element size in the 3D model, and the vertical flow direction of the seepage loss to the underlying underground development or groundwater flow system, 2D cross-sectional models were developed in FEFLOW to predict seepage loss from the pits to undergrounds. Based on the thermal model results, seepage losses were assessed only for Wes03 pit. East Alignment thermal model section captures the deepest portions of the Wes03 pits along with Lake A8 (Figure 4).


The 2D FEFLOW section was developed based on the thermal modelling results (Section 3.1.2, WSP 2026), along with the interpreted hydrostratigraphy and groundwater flow conditions from the previously developed 3D model. Predictions were made for thermal conditions predicted to be present at the end of mining, with and without water storage, to estimate the increased inflow to the underground from pit lake seepage. Using end of mining thermal conditions provide a maximum potential seepage loss to the underground (i.e., earlier years would have less permafrost degradation, which would reduce seepage loss).

The predicted seepage loss from the 2D FEFLOW section was upscaled or multiplied by the full width of the Wes03 pit perpendicular to the section line to estimate the total seepage loss from the pit to the underground. This is conservative as the pit depth will shallow out towards the crests of the pits, reducing the seepage loss to the underlying bedrock relative to what is predicted by the 2D model that intersect the deeper portion of the pits.

The extent of the 2D groundwater model was selected to be similar to the thermal model section, which is reasonable for the prediction of vertical seepage from the pit lakes to the underlying undergrounds. The model domain includes approximately 80,000 elements each, with an approximate element size of 5m. The model domain is shown in Figure 5.



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**AGNICO EAGLE**

CONSULTANT  
  
 YYYY-MM-DD 2026-03-12  
 PREPARED KJ  
 DESIGNED JX  
 REVIEWED JL  
 APPROVED JL

PROJECT  
 AGNICO EAGLE MINES LIMITED  
 MELIADINE MINE  
 NUNAVUT

TITLE  
**PLAN VIEW OF THERMAL SECTIONS**

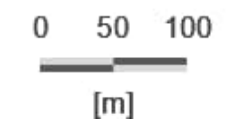
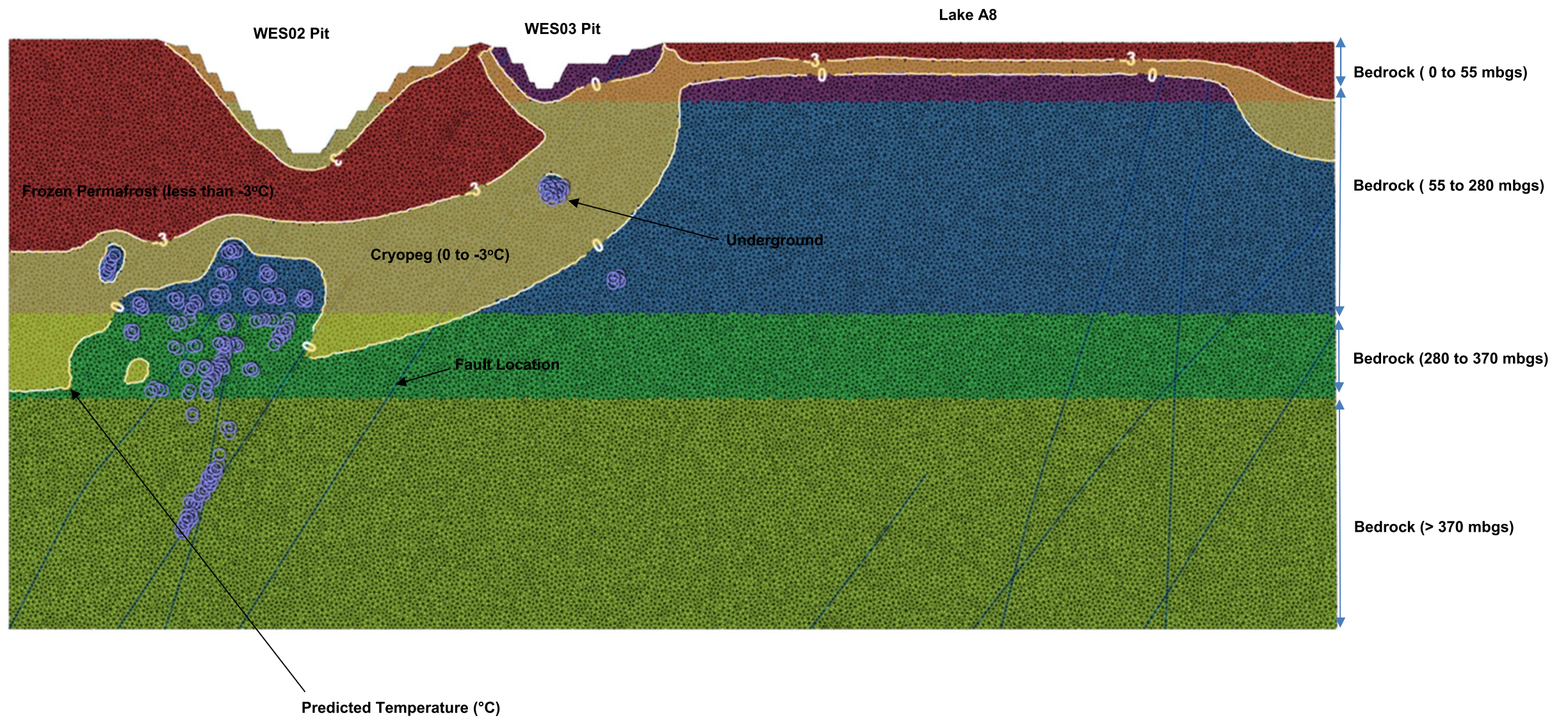
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PHASE

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FIGURE 4

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM A3S B



CLIENT		PROJECT	AGNICO EAGLE MINES LIMITED MELIADINE MINE NUNAVUT
CONSULTANT		TITLE	<b>MODEL DOMAIN AND PERMAFROST ASSUMPTIONS FOR CONTACT WATER STORAGE IN WES03 OPEN PIT</b>
	YYYY-MM-DD	2026-03-12	PROJECT NO. CA0042236.1659
	PREPARED	KJ	PHASE
	DESIGNED	KJ	REV.
	REVIEWED	JL	0
	APPROVED	JL	FIGURE
			<b>5</b>

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### 3.2.2 Hydrostratigraphy and Model Parameters

The 2D cross-sectional models incorporate the bedrock units and faults present near the pits and undergrounds, consistent with the 3D model. For most pits, faults are in close proximity and are interpreted to connect the pit to the underlying underground developments. Presentation of the faults, hydrostratigraphic units, and interpreted permafrost and cryopeg conditions are presented on Figure 5. The hydraulic conductivity of the bedrock and faults is unchanged from the previously calibrated 3D model (WSP 2024b).

Faults within the Mine area generally range from 2 to 6 m thick. An exception is the Pyke Fault and KMS corridor that have larger interpreted widths (15 to 100 m). The KMS corridor has a large enough width that it can be represented using model elements; all other faults were represented in the model using discrete feature elements with their transmissivity set to match the fault properties in the 3D model.

To mitigate groundwater inflows, Agnico Eagle actively grouts faults, joints and other structures within the rock that contribute to inflow to the underground. To simulate this grouting, elements representative of the faults within 30 m of the underground were assigned an effective hydraulic conductivity of  $3 \times 10^{-9}$  m/s. This approach is consistent with how grouting was represented in the 3D model (WSP 2024b).

### 3.2.3 Model Boundary Conditions

Model boundary conditions provide a link between the model domain and the surrounding hydrologic and hydrogeologic systems. Two types of flow boundary conditions were used in the model: specified head, general head and no-flow (zero-flux) boundaries. These boundaries are summarized below.

Specified head boundaries were assigned to the left and right boundaries of the model domain to represent inflow and outflow out of the sides of the model domain. The assigned hydraulic head was set based on the predicted hydraulic heads in the three-dimensional model at the end of mining at the location of cross-section end points. Overall, where underlying undergrounds are present, this boundary condition will not significantly affect the seepage predictions, as the primary control is the pit lake elevation, the depth of the underlying underground, and the transmissivity of the bedrock between the pit lake and the underground with permafrost degradation.

Specified head boundaries were used to represent the in-pit deposition of contact water in Wes03 pit. No boundary conditions were assigned to the Wes02 pit, as it is expected to remain entirely within permafrost, with only localized thawing and no hydraulic connection to the underground workings. Wes03 pit lake elevation was set to 62.2 m, consistent with values previously provided by Agnico Eagle for post-closure conditions. Lake A8, adjacent to the Wes03 pit, was not represented with boundary conditions as it is assumed to be fully dewatered during mining.

Underground mine workings in unfrozen bedrock were simulated in the model using specified head boundaries constrained to only allow the outflow of water from the surrounding bedrock into the mine (i.e., these boundaries act as seepage faces). Consistent with the 3D model, cryopeg was represented using elements with slightly reduced hydraulic conductivity relative to fully unfrozen bedrock. Linearly decreasing hydraulic conductivity with temperature is assumed within the cryopeg zone with a full order of magnitude decrease assumed at the top of the basal cryopeg, and hydraulic conductivity equivalent to unfrozen rock at the bottom of the basal cryopeg. A reasonable calibration of the 3D model to measured inflows in Tiriganiaq underground was achieved with this assumption, with the underground extending through the cryopeg into the underlying unfrozen bedrock (WSP 2024b).

A no-flow boundary applied along the bottom of the model. Flow at greater depth is expected to be negligible and is not a component being assessed in this work (was previously predicted by the 3D model). The objective is to reasonably predict the incremental increase in flow from pit lake seepage.

Mesh elements representing permafrost (excluding the cryopeg) were deactivated in each model simulation. The permafrost zones were assigned to the model based on the 2D thermal modelling results (WSP 2026).

### **3.2.4 Seepage Predictions**

Based on the thermal modelling, only Wes03 pit was estimated to have potential to increase seepage to the underlying undergrounds.

Seepage predictions were modelled for the best estimate of calibrated model parameters, and for a sensitivity scenario wherein the hydraulic conductivity of the shallow bedrock between 55 and 280 m below ground surface was assumed to be five times higher than the calibrated model values in the 3D groundwater model. This sensitivity was selected in consideration that minimal hydraulic testing has been conducted in the shallow bedrock, as it is predominantly in permafrost, and it's the properties of this bedrock unit that will affect seepage loss.

Seepage loss from Wes03 was simulated for the end of mining conditions. This approach provides a conservative estimate of seepage flows to the Tiriganiaq underground from WES03 for the years it's expected to contain contact water (2028 to 2036; Table 1). Seepage loss from Wes03 to the Tiriganiaq underground was predicted to be 90 m<sup>3</sup>/day, increasing to 375 m<sup>3</sup>/day for the sensitivity scenario.

Based on the 2D and 3D groundwater model results, combined inflow to the Tiriganiaq Underground from regional groundwater inflow and WES03 pit lake seepage is provided on Table 4 and Table 5.

**Table 4: Predicted Groundwater Inflow and Seepage Loss to Undergrounds and Open Pits during Mining – Base Case**

Year	Predicted Flow Rate (m <sup>3</sup> /day)						
	Groundwater Inflow to Pump Underground	Groundwater Inflow to Wes03 Pit during Mining	Groundwater Inflow to WN01 Pit during Mining	Groundwater Inflow to Pump04 Pit During Mining	Groundwater Inflow to Tiriganiaq Underground	Seepage Loss from Wes03 Pit to Tiriganiaq Underground	Total Inflow to Tiriganiaq Underground
2025	-	-	-	-	650	-	650
2026	-	200	-	-	1,100	-	1,100
2027	50	200	-	-	1,400	-	1,400
2028	100	-	-	-	1,525	90	1,615
2029	125	-	-	-	1,400	90	1,490
2030	175	-	<25	-	1,325	90	1,415
2031	275	-	<25	-	1,325	90	1,415
2032	325	-	<25	75	1,350	90	1,440
2033	350	-	<25	75	1,350	90	1,440
2034	350	-	-	75	1,350	90	1,440
2035	350	-	-	-	1,325	90	1,415
2036	350	-	-	-	1,325	90	1,415

**Table 5: Predicted Groundwater Inflow and Seepage Loss to Undergrounds and Open Pits during Mining – Upper Bound**

Year	Predicted Flow Rate (m <sup>3</sup> /day)						
	Groundwater Inflow to Pump Underground	Groundwater Inflow to Wes03 Pit during Mining	Groundwater Inflow to WN01 Pit during Mining	Groundwater Inflow to Pump04 Pit During Mining	Groundwater Inflow to Tiriganiaq Underground	Seepage Loss from Wes03 Pit to Tiriganiaq Underground	Total Inflow to Tiriganiaq Underground
2025	-	-	-	-	925	-	925
2026	-	625	-	-	1,525	-	1,525
2027	100	625	-	-	2,075	-	2,075
2028	150	-	-	-	2,300	375	2,675
2029	200	-	-	-	2,100	375	2,475
2030	250	-	50	-	2,025	375	2,400
2031	375	-	50	-	2,000	375	2,375
2032	450	-	50	275	2,075	375	2,450
2033	450	-	50	275	2,100	375	2,475
2034	475	-	-	275	2,075	375	2,450
2035	475	-	-	-	2,050	375	2,425
2036	475	-	-	-	2,050	375	2,425

## 4.0 CLOSURE

We trust the above meets your present requirements. If you have any questions or require addition information, please contact the undersigned.

### WSP Canada Inc.

ORIGINAL SIGNED BY:



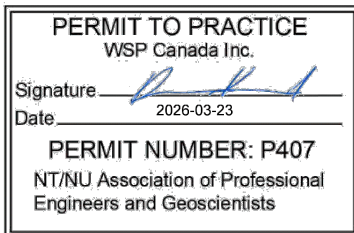
Jennifer Levenick, MSc, P.Eng.  
Principal Senior Hydrogeologist

A handwritten signature in blue ink that reads "Kartik Jain".

Kartik Jain, MSc  
Mine Water Group

JL/KJ/vk/cb

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## REFERENCES

WSP (WSP Canada Inc.). 2024a. Updated Summary of Existing Conditions Meliadine Mine. WSP Doc. 22513890-942-R-Rev1-2000. January 18, 2024.

WSP. 2024b. Updated Hydrogeology Modelling. WSP Doc. CA0020476.6818-MWL2024\_004-R-Rev0. January 24, 2024.

WSP. 2024c. Meliadine Mine – Updated Hydrogeological Modelling with the Inclusion of the Pump Underground. WSP Doc. CA004223.159-001-TM-Rev0. October 21, 2024.

WSP. 2026. Thermal Assessment of Proposed Storage of Water in Open Pits during Operation. WSP Doc. CA0066296.6872-MEL-001-TM-Rev0. March 23, 2026.

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