Appendix G5

Report: *RSF Seepage Golder Report*

January 2014

REPORT ON

Rock Storage Facility Seepage - Meadowbank Gold Mine, Nunavut

Submitted to:
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REPORT

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Golder Associates

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1.0 INTRODUCTION

On November 8, 2013, Agnico-Eagle Mines Limited (AEM) received an inspector's direction from the Aboriginal Affairs and Northern Development of Canada (AANDC) related to the seepage of water from the Portage Rock Storage Facility (RSF) into Lake NP-2. According to the received direction, the RSF seepage contravenes AEM's type A water license #2AM-MEA0815 (water license). The inspector requested that AEM:

- Conduct an investigation about the release of waste from ST-16 sump location to Lake NP-2, which includes determining the source of the contaminated water in ST-16 sump;
- Conduct an investigation, in consultation with an independent firm, about possible failure of the Till plug designed to prevent waste from migrating out of ST-16 sump into Lake NP-2;
- Develop a plan in consultations with an independent engineering firm about:
  - Corrective measures that will be taken to immediately stop the release of waste;
  - Long term corrective measures that will be taken to secure waste in the future;
  - Counteraction and/or remediation of the adverse impacts of the prior releases.

On November 15, 2013, AEM requested that Golder Associates Ltd. (Golder) prepare an assessment report regarding the RSF based on the above. The assessment report includes findings and immediate actions, as well as presenting recommendations about the immediate- and long-term corrective actions.

2.0 BACKGROUND

This section presents the basic background information for the seepage through the RSF. The first subsection describes the general configuration of the concerned area and the second describes the basis of the assessment.

2.1 TSF and RSF Overview

Figure 1 presents the general configuration of the Tailings Storage Facility (TSF) and the RSF. The RSF is adjacent to the North Cell of the TSF and is used to store potentially acid generating (PAG) and non-acid generating (non-AG) waste rock. The North Cell of the TSF is used to store tailings and reclaim water for milling processes.

Rockfill roads RF1 and RF2 are located along the north-east side of the TSF and are perimeter structures that separate the RSF from the North Cell. The East and West diversion ditches are located around the northern area of the North Cell of the TSF to keep surface water from reaching the RSF and the TSF. Lake NP-2 and NP-1 are located north and east, respectively, of the RSF.

According to AEM, the access road between the RSF and Lake NP-2 was initially constructed to provide a separation between the RSF and Lake NP-2. It was also used to construct and service the diversion ditches (East and West) in 2012; this road is constructed with non-AG rockfill. The East Ditch flows through Lake NP-2 and connects to Lake NP-1. This ditch controls the water levels in these lakes such that the water level does not rise and overflow into the active mine area (i.e., the RSF).

2.2 Basis of the Assessment

During the AANDC Water License Inspection on July 29 and 30, 2013, AEM and the AANDC inspector observed red coloured seepage (suggesting the presence of iron precipitate) flowing from the northwest side of the RSF through the road perimeter into Lake NP-2, near monitoring station ST-16. Sample location ST-16 is a known area of seepage and is in a natural low depression area that serves as a sump.

AEM and the inspector took split water samples from Lake NP-2 and station ST-16. The chemical analyses from this sampling showed that these samples had elevated levels of metals (copper and nickel) when compared to samples collected at ST-16 from 2010 to July 2013, including a sample collected on July 11, 2013. Additional samples collected in August and September 2013 from ST-16 showed elevated concentration of copper, nickel and presence of cyanide. Additional sampling in Lake NP-2 showed that the same parameters were present in this lake at lower concentrations than ST-16.

When the red-coloured seepage was observed, AEM's immediate action plan (starting on July 27) consisted of dewatering the water from the sump area at the ST-16 water monitoring station. The sump area at sampling station ST-16 was completely dewatered by August 4, 2013. This action stopped the seepage to Lake NP-2 and confirmed that seepage from the RSF was visible at base of the RSF near the ST-16 location. Seepage water from the RSF was then redirected to the TSF North Cell by pumper trucks. AEM also designed and constructed a till plug on the upstream slope of the RSF perimeter road which, combined with the pumping program keeping a low water level within the sump, prevent the seepage from reaching Lake NP-2. Construction of till plug was performed between August 26 and September 1, 2013. Pumping of the sump continued on a regular basis from July 29 until approximately mid-October when the seepage water froze.

2.3 TSF and RSF Design Bases

The designs of the TSF and RSF were reviewed. The design of the TSF requires that a tailings beach is required against all perimeter structures of the TSF to reduce seepage from the TSF. In addition, the reclaim pond is to be operated towards the centre of the TSF North Cell to reduce seepage flow from the TSF (AEM 2009; Golder 2008b).

The rockfill roads of the TSF, RF1 and RF2, are designed as unlined rockfill roads for use as pipe berms for tailings deposition. The rockfill roads are designed for tailings containment and not to limit seepage. The design is based on the expectation that the seepage from the TSF to the RSF will be limited by the deposition of tailings adjacent to the rockfill faces, the operation of the Reclaim Pond toward the centre of the facility, and the freezing of tailings in the post-closure period (Golder 2011). The design recognizes the possibility of water moving from the TSF to the RSF once the pond reaches a certain elevation. It also notes, if necessary, the need to establish a system of contact water ditches and sumps to surround the RSF to capture and allow the monitoring of surface runoff and seepage from the RSF and direct it to suitable storage/treatment facilities (Golder 2011).

The RSF is expected to freeze within two years of placement, thereby reducing the risk of acid drainage and assisting in containing the seepage of water (Golder 2011). The RSF is to be capped with an insulating layer of non-AG rock.

3.0 REVIEW OF FACTUAL INFORMATION

Golder reviewed the available information to assess the current conditions and the potential sources of the seepage.

3.1 TSF and RSF Configuration

Prior to mine development, a watercourse ran from Lake NP-2 to the northwest arm of the Second Portage Lake where the TSF is now located as shown in Figure 1.

The water surface in Lake NP-2 is at El. 141.2 m, the base of the RSF on its north side (near ST-16) is at approximately El. 142 m, and the tailings pond water level was approximately between El. 145.6 m and 146.1 m from mid-July to mid-October 2013. This information confirms that the hydraulic gradient flows from the TSF to the sump at ST-16 upstream from Lake NP-2; this gradient is the reverse to that which existed before mine development started. This suggests the presence of saturated rockfill in a thawed condition at the bottom of the RSF having its water surface at El. 142 m; this corresponds to the seepage level at the exit of the RSF on its north side.

The review of the TSF operating configuration in September 2013 shows that tailings water was pounding directly against RF1 and RF2. Further, there was no tailings beach against RF2 and less than half of RF1 had a tailings beach. By mid-October, AEM confirms that the tailings beach along RF1 was covering 90% of the structure and that no beach along RF2 was yet in place.

It is also noted that the water management system consisting of diversion ditches surrounding the RSF is not completed.Since the water catchment basin of the TSF and RSF area directes the water towards the North and South Cells of the TSF and the only seepage observed out of the area is near the natural sump at sampling station ST-16, AEM considered that the provision of a collection system was not necessary. Rather, AEM used an observational approach at the natural sump and sampling station ST-16 to ensure that the water analyses results are appropriate.

3.2 Review of Monitoring and Sample Analyses

All the laboratory testing results provided by AEM to Golder, summarized below, are presented in Appendix A.

From July 30 to August 27, 2013, various water samples were taken by AEM and the AANDC inspector at sampling station ST-16 and at various sampling station on Lake NP-2 and NP-1. The locations of these samples are shown in Figure 3.

Starting August 28, 2013, AEM implemented a short-term monitoring program that included daily monitoring of weak acid dissociable cyanide (CN WAD) at the seepage area ST-16 and at NP-2 South. This short-term cyanide program used the non-accredited onsite assay lab. The program also includes once every-two-weeks monitoring for total and dissolved metals, general chemistry as well as total and free cyanide at sampling station ST-16, NP-2 South, NP-2 East and NP-2 West. These analyses were performed by Multi-Lab, an accredited laboratory. The once every-two-weeks monitoring was temporarily stopped in October due to the frozen conditions. A monthly monitoring station has been set for the winter on Lake NP-2; refer to Figure 3. The locations of the sampling areas as part of the short-term monitoring program are shown in Figure 4.

AEM provided Golder with the results of the sample analyses described above. Historical results at station ST-16 and the results from sampling station ST-21 (located inside the TSF) were also made available for comparison purposes. Multi Lab provided comments to AEM that it is difficult to compare the results from Multi Lab and those from AEM's onsite laboratory because the onsite free cyanide analysis is based on a qualitative method rather than a distillation standardized method used for the total and WAD cyanide.

The results show that the concentrations of copper, nickel, ammonia, and cyanide exceed the CCME criteria for Protection of Aquatic Life. The result of the trout toxicity test, sampled on August 28, show that the concentration was not lethal. An additional toxicity sample was taken on Dec 9, 2013 and the result was also not lethal for trout. A sample was analysed for copper in Lake NP-1 on August 21, 2013 and showed a low concentration. The concentration of metals observed from July 30 to August 27, 2013 at sampling station ST-16 are higher than the historical results from 100 to 1,000 times. These results are similar to the results from the samples taken at ST-21 inside the TSF, except for the concentration of iron which is much higher at ST-16 than at ST-21. These results, coupled with the presence of cyanide at ST-16, indicate that the origin of the seepage water is from the TSF.

The results from the short-term monitoring program show that the concentrations of metals and cyanide at sampling station ST-16 and in Lake NP-2 decreased from August to October 2013. This is an indication that the immediate actions taken by AEM to pump and control the RSF seepage were effective in decreasing the concentrations of metals and cyanide.

3.3 Thermistor Data

Golder reviewed the thermistor data in the area of the RSF. The location of these thermistors and their temperature versus depth profiles during 2012 and 2013 are shown in Figure 5. Figure 5 was developed using the TSF - Instrumentation Review document provided by AEM and is presented in Appendix C. The following points were developed during the review of the thermistor data:

- The thermistor inside the North Cell of the TSF (T-90-2) shows that the tailings are below 0^oC near Saddle Dam 1. This thermal condition, coupled with the expectation that the tailings are saturated, indicates that the tailings are frozen in this area.
- The thermistor inside the RSF (RSF-1) indicates that the waste rock pile is below 0^oC at this location. This thermistor is located in an area where the natural ground surface is above El. 142 m.
- RF2 (T122-1) indicates that rockfill road RF2 is below 0^oC in this area.
- The RF1-3 thermistor is installed along the upstream slope in a PVC casing partially covered with tailings. RF1-3 indicates that the tailings are thawed from their surface at approximately El. 145 m down to approximately El. 144.2 m. Below El. 144.2 m, the temperature is below 0^oC; as the tailings are expected to be saturated in this location, it is inferred that the tailings are frozen below El. 144.2 m.
- RF1-1 (T121-1) indicates that the rockfill was below 0^oC throughout 2013 at this location. Note that the natural ground surface is relatively shallow in this area.
- RF1-2 is located close to the former watercourse (like RF1-1) but its natural ground surface is at a lower level and indicates that the rockfill is thawed at the tailings water level (El. 145.7 m) and below 0^oC below El. 143 m. As the tailings are expected to be saturated, the tailings are expected to be frozen below El. 143 m.

These observations indicate that some parts of the rockfill road RF1 are not frozen due to thermal conditions (i.e., temperatures above 0°C) and the lack of saturated rockfill.

From November 8 to 11, 2013, AEM installed four additional thermistors in the RSF (RSF3 to RSF6) to monitor the temperatures in the structure and in the vicinity of the former lake and water course between Lake NP-2 and the second Portage arm (North Cell). The locations of these instruments are shown in Figure 5. The available results are limited for interpretation as the instruments are still showing a cooling trend but these data will be helpful to follow the freezing of the RSF along the former water course.

The following are noted based on a review of the data to December 6, 2013 for thermistors RSF3 to RSF6, inclusive:

- Thermistor RSF3 shows that the rockfill is at temperatures ranging from 0 to -5°C.
- Thermistor RSF4 shows temperatures in the rockfill from 2 to – 10°C.
- Thermistor RSF5 shows temperatures in the rockfill from 0 to -5°C.
- Thermistor RSF6 shows that the temperature of the rockfill ranges from -2 to -9°C.

Thermistors RSF3 to RSF6, inclusive, show that the thermistors continue to adjust to the ground temperature conditions; this is expected due to their recent installation dates. Continued monitoring of these thermistors is required for future interpretation.

4.0 SUMMARY OF AEM'S MITIGATION STRATEGY

Golder reviewed AEM's preliminary report on the seepage of water from the waste rock storage facility (included in Appendix B). This report contains AEM's findings and actions for the RSF. From the review of this document and from additional information provided by AEM, the following items are noted:

- AEM established a short-term monitoring program, as presented in Section 3.2, and will keep sampling one location during the winter;
- AEM established a pumping program (by pumper truck) to keep the water level low in the sump at sampling station ST-16 and to pump the seepage back into the TSF;
- AEM constructed a till plug to limit the seepage from the RSF to Lake NP-2. AEM will increase the pumping of the seepage water into the sump. The construction summary report of this structure was provided to Golder and is presented in Appendix D. ;
- AEM modified the tailings deposition plan to promote the development of tailings beaches against RF1 and RF2 and to ensure that the reclaim pond is operated away from the rockfill roads. AEM changed the tailings discharge point on September 2, 2013 to promote the development of a tailings beach against RF1 where tailings water was pounding directly against the structure. A new deposition plan was completed by AEM on November 17, 2013 and is presented in Appendix E.
- AEM installed four additional thermistors in the RSF to monitor ground temperatures in this area.
- AEM estimated the 2014 freshet water quantities for the freshet season emergency plan preparedness.

5.0 ASSESSMENT ON RSF SEEPAGE FINDINGS AND AEM'S MITIGATION PLAN

Golder considers that the long-term design intent of the TSF and the RSF can still be met provided that the design is executed in the field. The requirements include providing tailings beaches along any of the TSF perimeter structures, including the rockfill roads, and operating the reclaim pond toward the centre of the facility, namely, away from dikes and rockfill roads. It is to be noted that the concept envisaged the possibility of seepage. This is the reason why a contact water collection system was planned as a contingency measure.

TSF and RSF Configuration

The review of the TSF operating configuration indicates that tailings water was ponding directly against RF1 and RF2; these are perimeter structures of the TSF. The formation and maintenance of tailings beaches are required at all perimeter structures of the TSF to limit seepage from the facility and to maintain the reclaim pond in a centralized location. The updated deposition plan prepared, and currently being used, by AEM focusses on beach development at RF1 and RF2.

The water management system, consisting of diversion ditches surrounding the RSF has not been required to date. AEM stated that this system has not yet been constructed due to the ability of AEM to manage the seepage appropriately historically. The pumping activities and the construction of the till plug are considered to be effective seepage control measures.

Monitoring and Sample Analysis

Golder agrees with AEM that the cause of the high metals and cyanide concentration of the RSF seepage near ST-16 is due to the ingress of process water from the TSF. This suggests the presence of saturated and thawed rockfill linking the TSF to the RSF seepage near sampling station ST-16.

From the review of the data at the sampling station ST-16 and within Lake NP-2, where the metals and cyanide concentration decreased from August 4 to mid-October, it appears that the till plug, combined with the pumping program to maintain a low water level within the sump at sampling station ST-16, were appropriate measures to prevent further seepage from reaching Lake NP-2.

Till Plug

The till plug is constructed of low permeability till material placed on a granular filter layer against the rockfill road. This structure is considered to be physically stable. In terms of seepage control, the performance of the till plug and the associated pumping keeping a low water level in the sump at the sampling station ST-16 appears to be effective in managing seepage to Lake NP-2.

Thermistor Data

From the thermistor data, it is noted that the tailings near SD1 are frozen. Freeze-back of the tailings reduces the seepage of water from the TSF. It is expected that the tailings adjacent to RF1 and RF2, following the formation of the tailing beaches in these locations, would also freeze, thereby limiting seepage through the rockfill roads to the RSF.

The flow of tailings water through the RSF is complex and cannot be readily tracked with thermistors or others instruments. The recently-installed thermistors in the RSF will allow monitoring of the ground temperatures. This information will further enable overall monitoring of thermal and seepage conditions in and around the RSF.

2014 Freshet Water Quantity

AEM has estimated the 2014 freshet water quantity in preparing the freshet season emergency plan. Golder did not review this work. This evaluation should provide suitable information to help plan for the 2014 freshet season. This may include determining if a pumper truck, the sump, and the till plug at ST-16 will be adequate during the 2014 freshet.

6.0 RECOMMENDATIONS

Based on review summarized above, Golder recommends the following:

1) AEM should continue to develop and maintain tailings beaches adjacent to RF1 and RF2 and to operate the Reclaim Pond towards the centre of the TSF. These are the key recommendations.

2) AEM should consider the installation of additional water management infrastructure which could take the form of a permanent collection and pumping system at the sampling station ST-16 current sump. Also, consideration should be given for contact water ditches and sumps in the surrounding areas of the RSF if additional seepages of contaminated water are observed in the future.

3) The seepage at station ST-16 should continue to be collected and redirected to the TSF and monitored (location, quantity, quality). Continued monitoring is strongly recommended during the winter for seepage water quantity monitoring and possible development of an ice plug in the RSF. The area at ST-16 should be kept clean of snow to allow visual observation and to ensure that water at ST-16 does not overflow over the till plug into Lake NP-2.

4) Regular inspections all around the RSF should be performed, particularly during freshet, to ensure that runoff or any observed seepage is controlled and monitored prior to being released into the environment if the analyses results meet the requirement.

5) AEM should continue to monitor the tailings and waste rock freeze back following the Thermistor Monitoring Plan in accordance with Part 1, Item 11 of the Type-A water license.

6) AEM should provide the results of the 2014 monitoring to Golder for review and comment.

7.0 REPORT CLOSURE

We trust that this report satisfies your current requirements. Please contact the undersigned should you have any questions.

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Associate, Project Director

Reviewed by:

FOR

Paul Bedell, M.E.Sc., P. Eng.(NWT/NU)
Principal, Senior Geotechnical Engineer

FLB/YB/AB/PMB/

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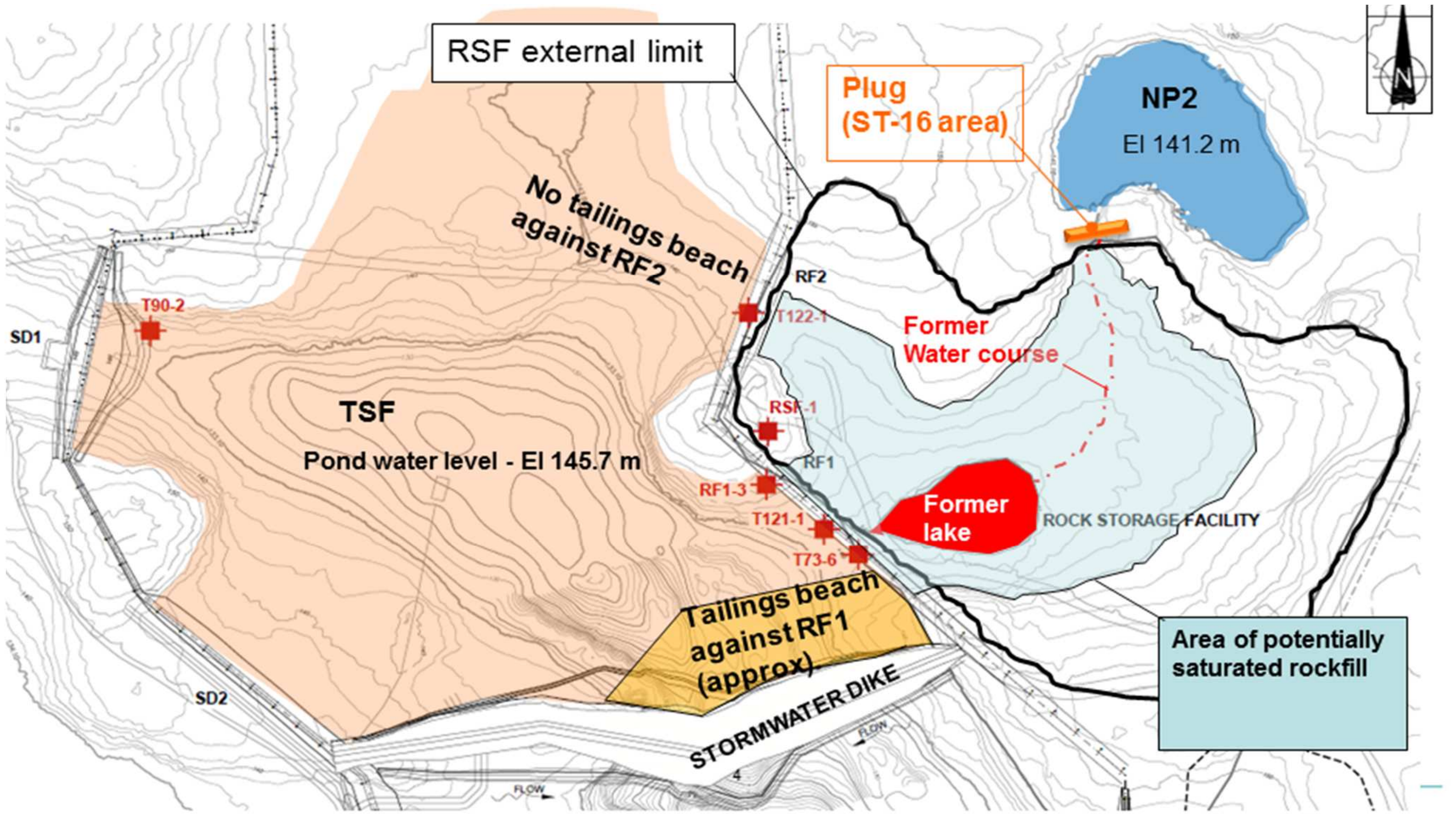
GENERAL CONFIGURATION OF THE TSF AND RSF FACILITIES



Golder Associés	Date : December 2013 Project : 13-1221-0115	AGNICO-EAGLE MINES MEADOWBANK DIVISION	**FIGURE 1**

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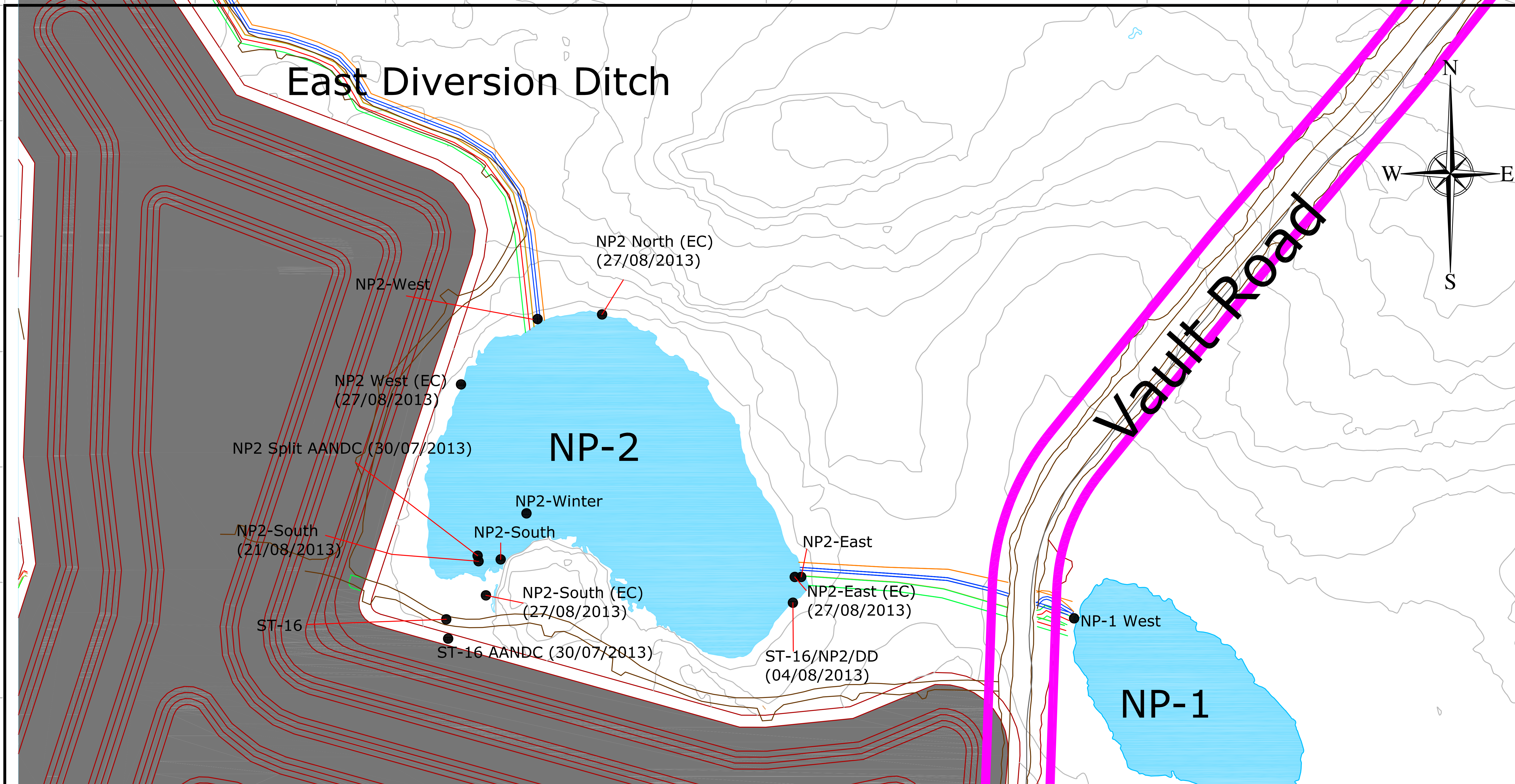

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REV	DESCRIPTION	DATE	PAR BY
1	Updated map	21/11/2013	MPM

REVISIONS

AGNICO EAGLE

DESSINÉ PAR / DRAWN BY: Marie–Pier Marcil — DATE: 30–08–2013
VÉRIFIÉ PAR / CHECKED BY:
APPROUVÉ PAR / APPROVED BY:
No. PROJET / PROJECT NO.:
DATE:

TITRE / TITLE: AGNICO EAGLE – Meadowbank Division

2013 Monitoring Station Seep + NP2 Lake
Sampling Location from July 30 to August 27, 2013

ÉCHELLE/SCALE: NA — FICHIER/FILE: .DWG

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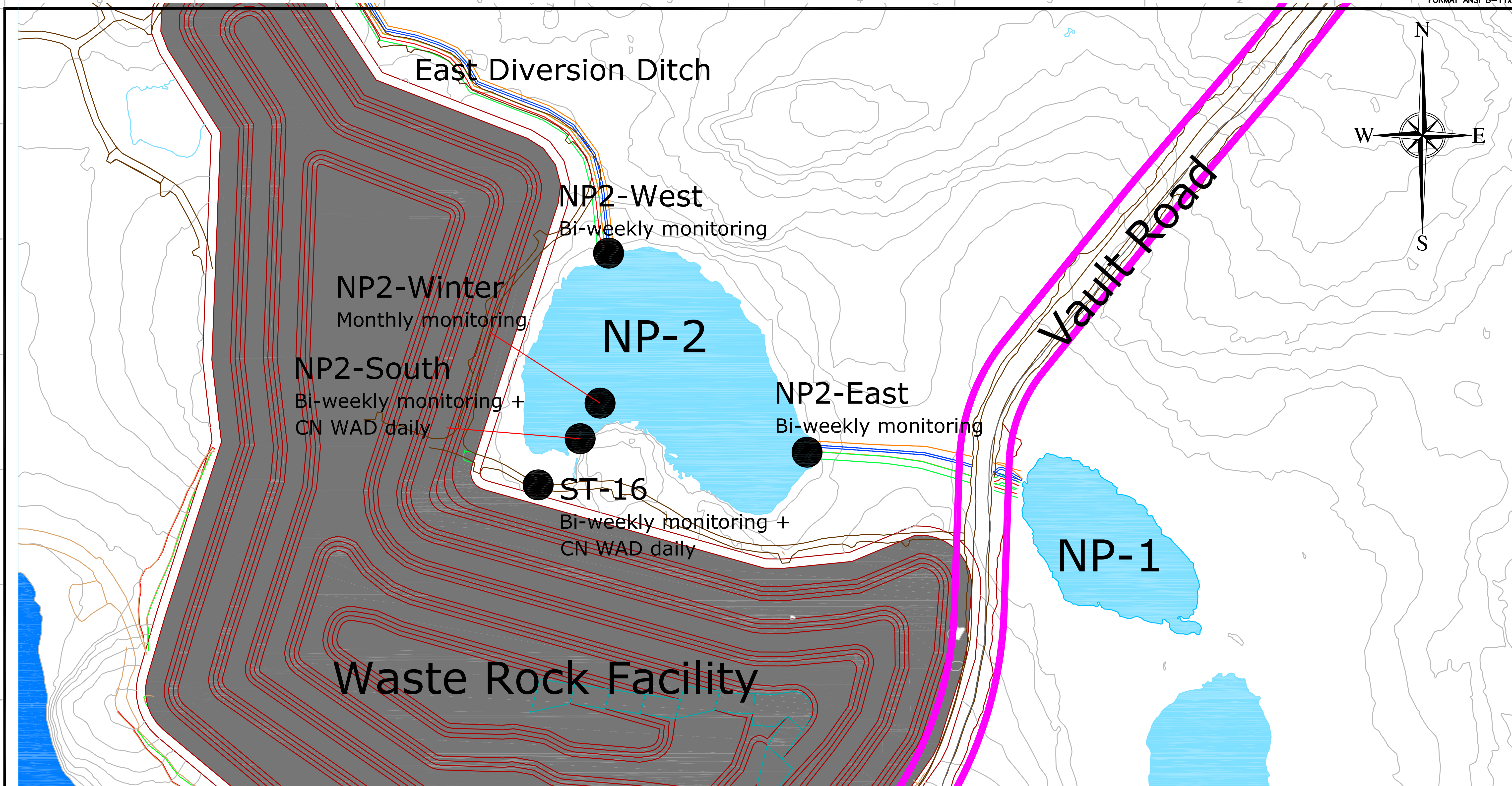

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1	Updated map	21/11/2013	MPM

REVISIONS

AGNICO EAGLE

DESSINÉ PAR / DRAWN BY: Marie–Pier Marcil
DATE: 30–08–2013
VÉRIFIÉ PAR / CHECKED BY:
APPROUVÉ PAR / APPROVED BY:
No. PROJET / PROJECT NO.:
DATE:

TITRE / TITLE: AGNICO EAGLE – Meadowbank Division
2013 Bi–weekly/Monthly Monitoring Station RSF Seepage
Short–Term Monitoring Program

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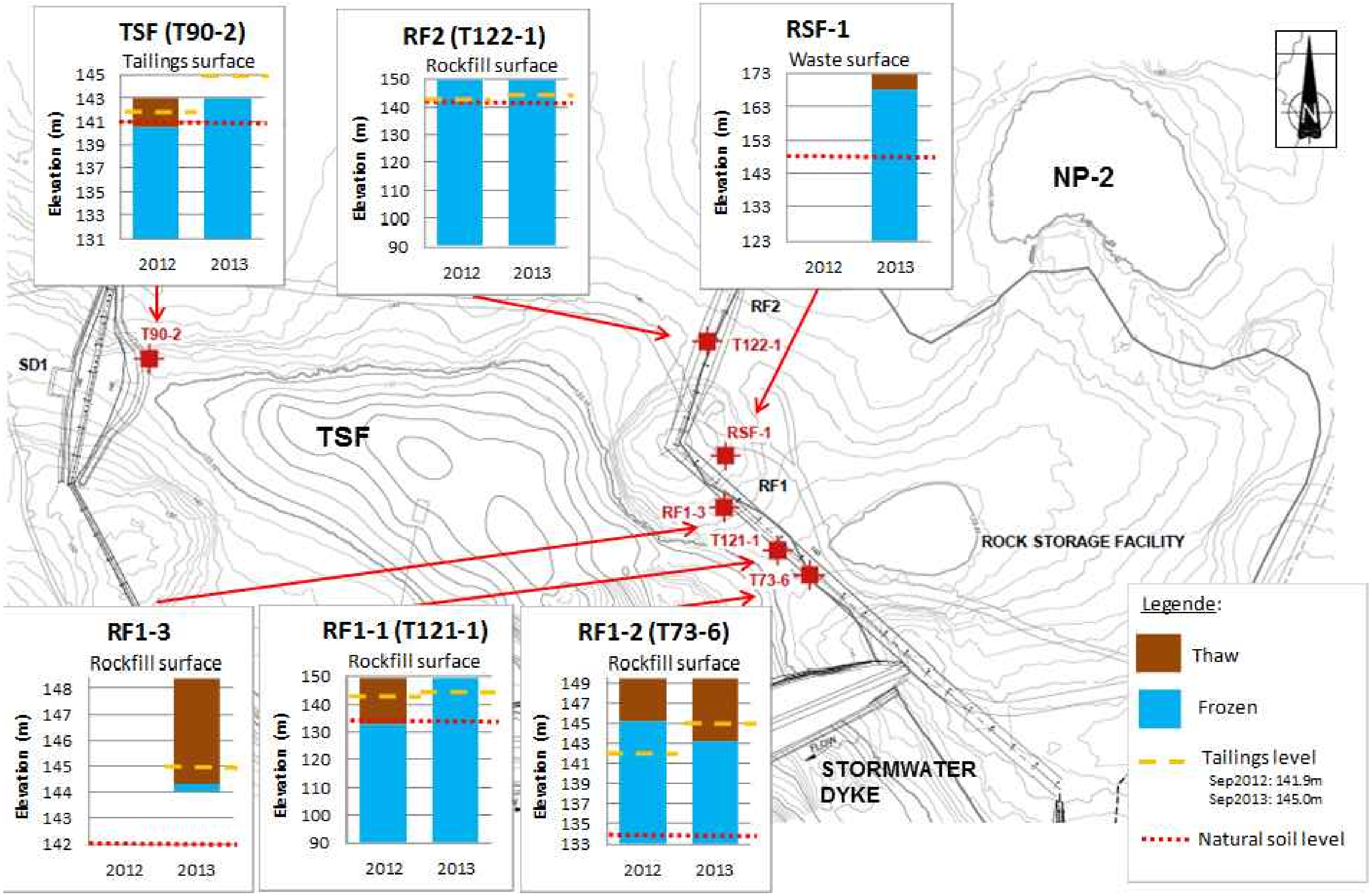

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TITLE					
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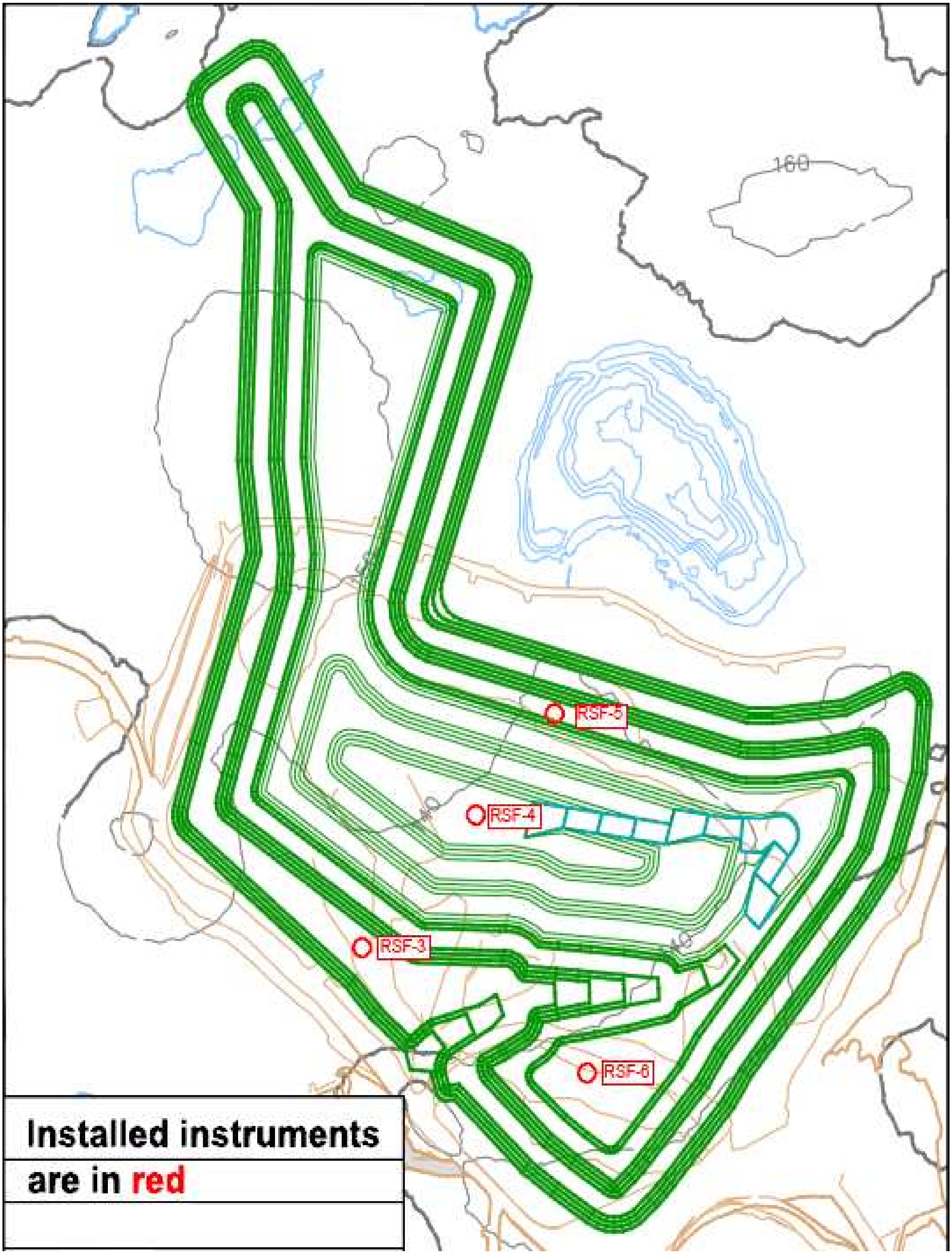
LOCATION OF THERMISTOR INSTALLED IN THE RSF IN NOVEMBER 2013



Golder Associés	Date : Dec, 2013 Project : 13-1221-0115	Figure provided by AEM	**FIGURE 5**

APPENDIX A

Chemical Analysis Results provided by AEM

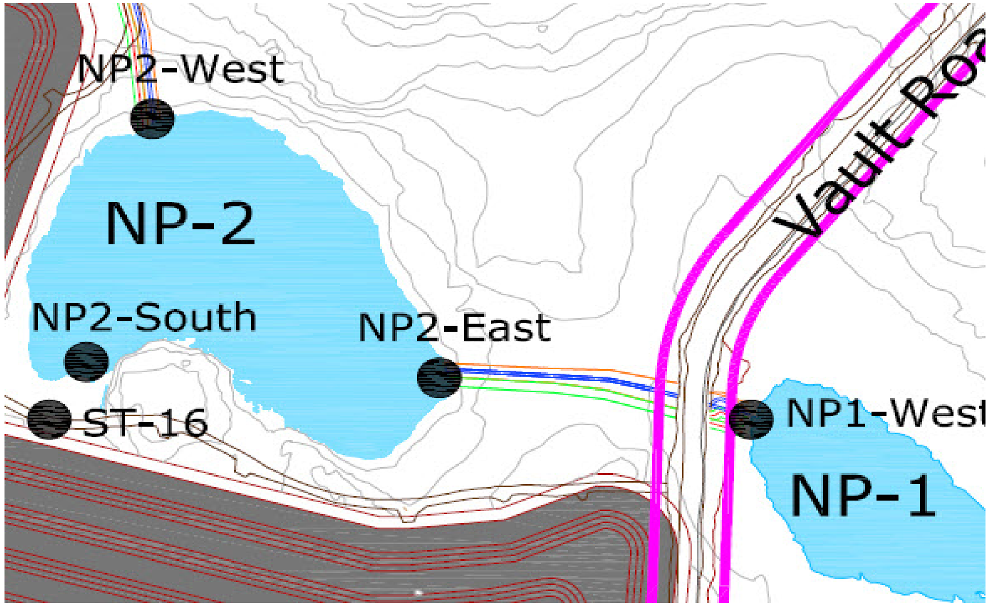
Table 1 – Historical ST-16 Results

Parameters	Date / Units	ST-16 Average 2011	ST-16 Average 2012	ST-16 11/06/2013	ST-16 04/07/2013	ST-16 Split 30/07/2013	ST-16 Split AANDC Result 30/07/2013
*pH		6.49	7.30	6.45	7.21		7.20
*Turbidity	NTU	17	34		17		123
*Conductivity	us/cm		154	420	1485		4510
Alkalinity	mg CaCo3/L	34	67	46	89	272	162
Aluminum	mg/L	0.159	0.513		0.464	0.042	0.045
Dissolved Aluminium	mg/L				0.027	< 0.006	
Ammonia	mgN/L	0.07	0.03	< 0.05	0.20	1.20	
Ammonia-nitrogen	mgN/L		0.22	0.45	7.80	34.00	
Total Dissolved Solids	mg/L	55	175	37	969	3792	
Total Suspended Solids	mg/L						50
Arsenic	mg/L	0.0020	0.0045	0.0029	0.0091	0.0139	0.0083
Dissolved As	mg/L				0.0031	0.0058	
Barium	mg/L	0.0095	0.0196		0.0741	0.1414	0.1480
Dissolved Barium	mg/L				0.0558	0.1433	
Cadmium	mg/L	0.00060	0.00004		0.00014	0.00065	0.00020
Dissolved Cadmium	mg/L				0.0001	0.0007	
Chloride	mg/L	2	3		15	450	192
Chromium	mg/L		0.0048		0.0034	0.0011	0.0010
Copper	mg/L	0.0017	0.0046	0.0028	2.3110	2.0380	3.3500
Dissolved Copper	mg/L				1.909	1.712	
Fluoride	mg/L	0.106	0.098		0.110	0.290	
Hardness	mg CaCO3/L	62	59		361	1417	1020
Iron	mg/L	1.21	1.94		1.60	4.40	21.90
Dissolved Iron	mg/L				0.17	0.06	
Lead	mg/L	0.0010	0.0056	< 0.0003	0.0015	0.0013	< 0.0001
Dissolved Lead	mg/L				< 0.0003	< 0.0003	
Manganese	mg/L	0.588	0.961		2.447	6.370	5.850
Dissolved Manganese	mg/L				2.110	6.055	
Mercury	mg/L	0.00062	0.00007		< 0.00010	0.00005	0.00015
Dissolved Mercury	mg/L				< 0.0001	< 0.0001	
Molybdenum	mg/L	0.001	0.001		0.026	0.170	0.083
Dissolved Molybdenum	mg/L				0.0204	0.1773	
Nickel	mg/L	0.0339	0.0395	0.0069	0.5149	2.0150	1.3300
Dissolved Nickel	mg/L				0.415	1.810	
Nitrate	mg/L	0.17	0.34		8.10	37.80	23.70
Selenium	mg/L	0.002	0.001		0.007	0.020	0.013
Dissolved Selenium	mg/L				0.005	0.023	

Silver	mg/L	0.0006	0.0049				0.0056
Dissolved Silver	mg/L				< 0.0002	0.0019	
Sulphate	mg/L	24	9		406	2400	1450
Thallium	mg/L	0.0025	0.0025		< 0.0050	< 0.0050	< 0.0001
Dissolved Thallium	mg/L				< 0.005	<	
Zinc	mg/L	0.005	0.008	< 0.001	0.010	0.009	< 0.005
Dissolved Zinc	mg/L				0.003	0.008	
Calcium (Ca)	mg/L						312
Magnesium (Mg)	mg/L						60
Potassium (K)	mg/L						88
Sodium (Na)	mg/L						590
Cesium	mg/L						0.0009
Rubidium	mg/L						0.0687
Ortho-Phosphate as Phosphorus	mg/L						
Antimony (Sb)	mg/L				0.0004	0.0012	0.0007
Boron (B)	mg/L				0.04	0.15	
Beryllium (Be)	mg/L				< 0.0005	< 0.0005	< 0.0001
Cobalt (Co)	mg/L				0.0729	0.3114	0.2290
Lithium (Li)	mg/L				< 0.005	0.006	0.004
Tin (Sn)	mg/L				< 0.001	< 0.001	
Strontium (Sr)	mg/L				0.44	2.14	1.40
Tianium (Ti)	mg/L				0.1300	0.5500	0.0007
Uranium (U)	mg/L				0.034	0.170	0.115
Vanadium (V)	mg/L				< 0.0005	< 0.0005	0.0011
Nitrite	mg/L				0.07	0.41	

Cyanide WAD (provided by AEM)

Date	location		
	ST-16		
	east	west	south
2013-08-21			
2013-08-27			
2013-08-28	7,280	3,38	
2013-08-29	3,960		0,2930
2013-08-30	1,520		0,0810
2013-08-31	1,290		0,0694
2013-09-01	0,970		0,0247
2013-09-02	2,830		0,0671
2013-09-03	2,500		0,0120
2013-09-04	2,490		0,5440
2013-09-05	1,600		0,0204
2013-09-07	1,650		0,0289
2013-09-10	0,671		0,3320
2013-09-13	2,150		0,0247
2013-09-15	0,459		0,0289
2013-09-17	0,443		0,0723
2013-09-19	0,493		<0.01
2013-09-21	0,070		0,0600
2013-09-23	0,050		<0.01
2013-09-25	0,063		0,0162
2013-09-27	0,148		<0.01
2013-09-29	0,556		0,0332
2013-10-01	0,091		0,0341
2013-10-02	0,204		0,0772
2013-10-08	0,154		0,0482
2013-10-11	0,069		0,0553



Data provided by AEM

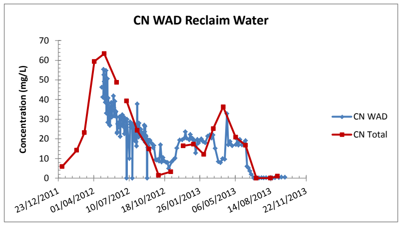
Parameters	Date / Unit	ST-16						NP-2 South						NP2- winter
		30-juil-13	21-août-13	27-08-2013	10-09-2013	23-09-2013	02-10-2013	30-juil-13	21-08-2013	27-08-2013	10-09-2013	23-09-2013	02-10-2013	17-11-2013
Alaklinity	mg CaCo3/L	272			174	92	106	177			55	54	55	
Ammonia nitrogen (NH3-NH4)	mg N/L	34			11,4	7,2	8,2	27,4			3,4	3,6	3,9	
TDS	mg/L	3792			934	640	617	2854			266	277	262	
CN total	mg/L		6,47	0,036	0,18	0,068	1,2		0,069	0,007	0,013	0,014	0,03	
CN Free	mg/L				3	2,5	6				1	1	1	
pH (Env. Dept.)					7,1	7,05	7,01				7	6,73	7,47	7,36
Conductivity (Env. Dept.)					1879	1083	1095				395	442	424	501
Turbidity (Env. Dept.)	NTU				20,4	7,57	8,18				2,83	3,87	3,43	2,36
Chloride	mg/L	450			175	94,1	86	587			21,7	18,7	17,6	
Fluoride	mg/L	0,29			0,26	0,26	0,22	0,02			0,13	0,03	0,12	
Hardness	mg CaCo3/L	1417			458	216	268	1031			134	101	106	
Nitrate	mg/L	37,8			5	3,9	2,9	23,5			1,3	1,3	1,2	
Nitrite	mg/L	0,41			1	0,68	1	0,4			0,16	0,14	0,14	
Sulphate	mg/L	2400			643	338	329	1546			110	118	111	
Dissolved Aluminium (Al)	mg/L	<0.006			<0.006	<0.006	<0.006	<0.006			<0.006	<0.006	0,117	
Dissolved Arsenic (As)	mg/L	0,0058			<0.0005	<0.0001	<0.0005	0,0022			<0.0005	<0.0005	<0.0005	
Dissolved Barium (Ba)	mg/L	0,1433			0,0439	0,0223	0,032	0,1329			0,0135	0,0117	0,0133	
Dissolved Cadmium (Cd)	mg/L	0,00065			0,00009	0,00003	<0.00002	0,00022			<0.00002	<0.00002	0,00218	
Dissolved Copper (Cu)	mg/L	1,712			0,4663	0,046	0,0017	2,949			0,0081	<0.0005	0,0217	
Dissolved Iron (Fe)	mg/L	4,4			0,16	0,08	0,03	0,15			0,01	0,02	0,39	
Dissolved Lead (Pb)	mg/L	<0.0003			<0.0003	<0.0003	<0.0003	<0.0003			<0.0003	0,0011	<0.0003	
Dissolved Manganese (Mn)	mg/L	6,055			5,441	2,644	0,0337	5,427			0,1781	0,1094	0,1065	
Dissolved Mercury (Hg)	mg/L	<0.0001			<0.0001	<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001	
Dissolved Molybdenum (Mo)	mg/L	0,1773			0,0222	0,0122	0,0027	0,0716			<0.0005	0,0009	0,0033	
Dissolved Nickel (Ni)	mg/L	1,81			0,3017	0,1065	0,0197	1,246			0,0324	0,0269	0,0298	
Dissolved Selenium (Se)	mg/L	0,023			0,004	0,002	0,003	0,014			<0.001	<0.001	0,001	
Dissolved Silver (Ag)	mg/L	0,0019			<0.0001	<0.0003	<0.0001	0,0024			<0.0001	<0.0001	0,0007	
Dissolved Thallium (Tl)	mg/L	<0.005			<0.005	<0.005		<0.005			<0.005	<0.005		
Dissolved Zinc (Zn)	mg/L	0,008			0,019	0,014		0,007			0,008	<0.001		
Aluminium (Al)	mg/L	0,042			0,078	0,048	0,15	0,024			0,008	0,011	0,154	
Antimony (Sb)	mg/L	0,0012			<0.0001	0,0001	<0.0001	0,0004			<0.0001	<0.0001	<0.0001	
Arsenic (As)	mg/L	0,0139		0,0241	0,0044	0,0019	<0.0005	0,0068		0,0015	<0.0005	0,001	<0.0005	
Boron (B)	mg/L	0,15			0,07	0,02	0,04	0,09			<0.01	<0.01	<0.01	
Barium (Ba)	mg/L	0,1414			0,0451	0,0239	0,0331	0,1419			0,0147	0,0133	0,0133	
Beryllium (Be)	mg/L	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	
Cadmium (Cd)	mg/L	0,00065			0,00034	<0.00002	0,00004	0,0003			<0.00002	<0.00002	<0.00002	
Copper (Cu)	mg/L	2,038		3,281	0,4963	0,0583	0,1417	3,261	0,1173	0,0887	0,0081	<0.0005	0,022	
Chromium (Cr)	mg/L	0,0011			<0.0006	<0.0006	<0.0006	<0.0006			<0.0006	<0.0006	<0.0006	
Cobalt (Co)	mg/L	0,3114			0,0808	0,0333	0,0412	0,2515			0,0106	0,0087	0,0079	
Iron (Fe)	mg/L	4,4		21,3	2,9	1,1	1,5	23,6		1,9	0,55	0,42	0,42	
Lithium (Li)	mg/L	0,006			<0.005	0,016	<0.005	0,005			<0.005	0,012	<0.005	
Manganese (Mn)	mg/L	6,37			5,533	2,628	3,287	6,464			0,1975	0,1189	0,0903	
Mercury (Hg)	mg/L	0,00005			<0.00001	<0.00001	<0.00001	0,00002			<0.00001	<0.00001	<0.00001	
Molybdenum (Mo)	mg/L	0,1704			0,0234	0,0128	0,0129	0,0871			0,0015	0,001	0,0008	
Nickel (Ni)	mg/L	2,015		1,227	0,2966	0,1092	0,1501	1,465		0,1319	0,0348	0,0287	0,037	
Lead (Pb)	mg/L	0,0013		<0.0003	<0.0003	<0.0003	<0.0003	<0.0003		<0.0003	<0.0003	<0.0003	<0.0003	
Selenium (Se)	mg/L	0,02			0,005	0,002	0,004	0,014			<0.001	<0.001	0,001	
Tin (Sn)	mg/L	<0.001			<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	
Strontium (Sr)	mg/L	2,14			0,439	0,27	0,317	1,62			0,118	0,112	0,131	
Titanium (Ti)	mg/L	0,55			0,16	0,06	0,05	0,39			0,03	0,02	0,02	
Thallium (Tl)	mg/L	<0.005			<0.005	<0.005	<0.005	<0.005			<0.005	<0.005	<0.005	
Uranium (U)	mg/L	0,17			0,018	0,006	0,008	0,144			0,002	0,001	0,001	
Vanadium (V)	mg/L	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	
Zinc (Zn)	mg/L	0,009		0,009	0,05	0,014	0,005	0,006		0,001	<0.001	<0.001	0,002	
							mt						mt	

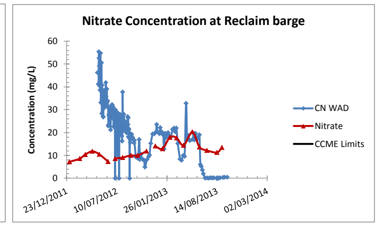
Data provided by AEM

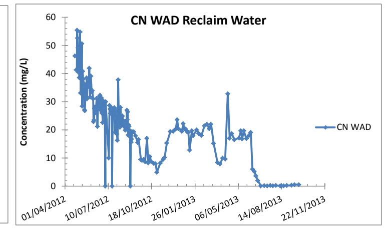
Parameters	Date / Unit	NP-2 East 04-août-12	NP-2 East 21-08-2013	NP-2 East 27-08-2013	NP-2 East 30-08-2013	NP-2 East 10-09-2013	NP-2 East 23-09-2013	NP-2 East 02-10-2013 (JK)	NP-2 West 21-08-2013	NP-2 West 30-08-2013	NP-2 West 10-09-2013	NP-2 West 23-09-2013	NP-2 West 02-10-2013	NP-2 North 27-08-2013	NP-1 West 21-08-2013	Phaser Lake 10-09-2013	Phaser Lake 23-09-2013	Phaser Lake 02-10-2013 (JK)
Alaklinity	mg CaCo3/L					54	54	55			54,0000	54,0000	55,0000			49	49	45
Ammonia nitrogen (NH3-NH4)	mg N/L					3,2	3,8	3,9			3,1000	3,6000	3,8000			0,08	0,32	<0.01
TDS	mg/L					281	276	264			284,0000	279,0000	263,0000			36	36	36
CN total	mg/L			0,012	0,018	0,011	0,014	0,014		0,0100	0,0170	0,0150	0,0170	0,017		0,007	<0.005	<0.005
CN Free	mg/L					1	<1	1			3	<1	1			<1	<1	<1
pH (Env. Dept.)						7,07	6,98	7,34			7,0400	6,8400	7,5400			6,83	7,12	7,57
Conductivity (Env. Dept.)						403	439	418			400,0000	446,0000	419,0000			37	56,2	60,1
Turbidity (Env. Dept.)	NTU					2,71	4,7	3,05			3,6800	3,7500	3,1400			0,7	0,68	0,56
Chloride	mg/L					21,3	19,2	16,8			20,9000	19,0000	17,1000			1,2	0,8	1,1
Fluoride	mg/L					0,12	0,02	0,12			0,0900	0,0200	0,1500			0,15	0,03	0,12
Hardness	mg CaCo3/L					122	104	108			131,0000	94,0000	102,0000			26	19	23
Nitrate	mg/L					3,1	1,3	1,4			1,2000	1,3000	1,3000			0,03	0,07	0,15
Nitrite	mg/L					0,16	0,14	0,14			0,1600	0,1400	0,1600			<0.01	<0.01	<0.01
Sulphate	mg/L					110	115	113			111,0000	118,0000	113,0000			3,9	8,3	4,2
Dissolved Aluminium (Al)	mg/L					0,012	<0.006	<0.006			0,0270	<0.006	<0.006			<0.006	<0.006	<0.006
Dissolved Arsenic (As)	mg/L					<0.0005	<0.0005	0,0006			<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	0,0006
Dissolved Barium (Ba)	mg/L					0,0133	0,0127	0,0136			0,0129	0,0114	0,0138			0,002	0,0019	0,0026
Dissolved Cadmium (Cd)	mg/L					<0.00002	<0.00002	<0.00002			<0.00002	<0.00002	<0.00002			<0.00002	<0.00002	<0.00002
Dissolved Copper (Cu)	mg/L					0,0143	<0.0005	0,006			0,0142	<0.0005	0,0048			0,0006	<0.0005	<0.0005
Dissolved Iron (Fe)	mg/L					0,02	0,03	0,02			0,0100	0,0100	0,0200			<0.01	<0.01	<0.01
Dissolved Lead (Pb)	mg/L					<0.0003	<0.0003	<0.0003			<0.0003	<0.0003	<0.0003			<0.0003	<0.0003	<0.0003
Dissolved Manganese (Mn)	mg/L					0,1889	0,1226	0,0812			0,1856	0,0995	0,0643			<0.0005	<0.0005	<0.0005
Dissolved Mercury (Hg)	mg/L					<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001
Dissolved Molybdenum (Mo)	mg/L					<0.0005	0,0008	0,0011			<0.0005	0,0007	0,0011			<0.0005	<0.0005	<0.0005
Dissolved Nickel (Ni)	mg/L					0,0312	0,0266	0,0243			0,0313	0,0238	0,0243			<0.0005	<0.0005	<0.0005
Dissolved Selenium (Se)	mg/L					<0.001	0,001	0,001			<0.001	<0.001	0,0010			<0.001	<0.001	<0.001
Dissolved Silver (Ag)	mg/L					<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001			<0.001	<0.001	<0.0001
Dissolved Thallium (Tl)	mg/L					<0.005	<0.005				<0.005	<0.005				<0.005	<0.005	
Dissolved Zinc (Zn)	mg/L					0,01	<0.001				0,0200	<0.001				<0.001	<0.001	
Aluminium (Al)	mg/L	0,046				0,122	<0.006	0,067			0,0270	0,0150	0,0790			0,023	<0.006	<0.006
Antimony (Sb)	mg/L	0,0001				0,0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001
Arsenic (As)	mg/L	<0.0005		<0.0005	<0.0005	0,0006	<0.0005	0,0015		0,0006	0,0009	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	0,0022
Boron (B)	mg/L	0,09				<0.01	<0.01	<0.01			<0.01	<0.01	<0.01			<0.01	<0.01	<0.01
Barium (Ba)	mg/L	0,0135				0,013	0,0128	0,0146			0,0143	0,0121	0,0143			0,0024	0,0019	0,0029
Beryllium (Be)	mg/L	<0.0005				<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005
Cadmium (Cd)	mg/L	<0.00002				<0.00002	<0.00002	0,00002			<0.00002	<0.00002	<0.00002			<0.00002	<0.00002	<0.00002
Copper (Cu)	mg/L	0,1713	0,0399	0,0389	0,0388	0,0302	<0.0005	0,0241	0,0406	0,0404	0,0298	<0.0005	0,0182	0,0405	<0.0005	<0.0005	<0.0005	<0.0005
Chromium (Cr)	mg/L	0,0018				<0.0006	<0.0006	<0.0006			<0.0006	<0.0006	<0.0006			<0.0006	<0.0006	<0.0006
Cobalt (Co)	mg/L	0,0132				0,0094	0,0089	0,0082			0,0104	0,0079	0,0076			<0.0005	<0.0005	<0.0005
Iron (Fe)	mg/L	0,41		0,48	0,47	0,43	0,41	0,51		0,49	0,59	0,47	0,48	0,61		<0.01	<0.01	0,04
Lithium (Li)	mg/L	0,01				<0.005	0,006	<0.005			<0.005	0,0120	<0.005			<0.005	<0.005	<0.005
Manganese (Mn)	mg/L	0,4091				0,1862	0,1301	0,0953			0,2023	0,1130	0,0939			<0.0005	<0.0005	0,0006
Mercury (Hg)	mg/L	<0.00001				<0.00001	<0.00001	<0.00001			<0.00001	<0.00001	<0.00001			<0.00001	<0.00001	<0.00001
Molybdenum (Mo)	mg/L	0,0035				0,0006	0,0008	0,0009			0,0012	0,0008	0,0008			<0.0005	<0.0005	<0.0005
Nickel (Ni)	mg/L	0,0568		0,0330	0,0354	0,0291	0,0288	0,0275		0,0363	0,0327	0,0259	0,0263	0,0319		<0.0005	<0.0005	0,0005
Lead (Pb)	mg/L	0,0099		<0.0003	<0.0003	<0.0003	<0.0003	<0.0003		0,0014	<0.0003	<0.0003	<0.0003	<0.0003		<0.0003	<0.0003	<0.0003
Selenium (Se)	mg/L	<0.001				<0.001	<0.001	<0.001			<0.001	<0.001	<0.001			<0.001	<0.001	<0.001
Tin (Sn)	mg/L	0,003				<0.001	<0.001	<0.001			<0.001	<0.001	<0.001			<0.001	<0.001	<0.001
Strontium (Sr)	mg/L	0,118				0,107	0,094	0,123			0,1050	0,1090	0,1330			0,026	0,027	0,032
Titanium (Ti)	mg/L	0,03				0,02	0,02	0,01			0,0300	0,0200	0,0100			<0.01	<0.01	<0.01
Thallium (Tl)	mg/L	<0.005				<0.005	<0.005	<0.005			<0.005	<0.005	<0.005			<0.005	<0.005	<0.005
Uranium (U)	mg/L	0,003				0,001	0,001	0,001			0,0020	0,0010	0,0010			<0.001	<0.001	<0.001
Vanadium (V)	mg/L	<0.0005				<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005
Zinc (Zn)	mg/L	<0.001		<0.001	0,008	<0.001	<0.001	0,002		0,0150	<0.001	0,0010	0,0020	0,004		<0.001	<0.001	0,001
													mt			mt		

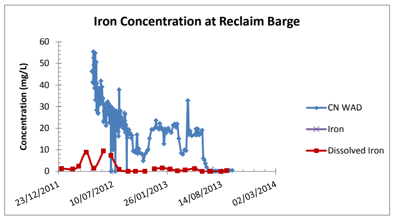
CN in the tailing pond

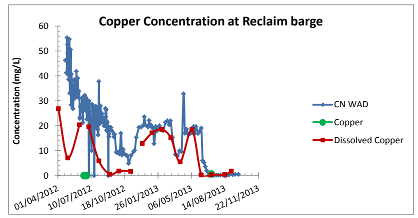
Date	CN wad (Assay lab)	CN wad (multilab)	CN free (multilab)	CN tot (multilab)
	ppm	mg/L	mg/L	mg/L
03/04/2012				59.37
24/04/2012	46.3			
26/04/2012		33.01		79.14
27/04/2012	41.3			
28/04/2012	41.2			
29/04/2012	55.4			
30/04/2012	52.6			
01/05/2012	49.2			63.38
02/05/2012	40.5			
03/05/2012	41.6			
04/05/2012	38.6			
05/05/2012	38.5			
06/05/2012	54.8			
07/05/2012	33.1			
08/05/2012	40.9			
09/05/2012	39.2			
10/05/2012	50.6			
11/05/2012	28.4			
12/05/2012	40.8			
13/05/2012	38			
14/05/2012	35.3			
15/05/2012	36.5			
16/05/2012	27.1			
17/05/2012	26.8			
18/05/2012	32.3			
19/05/2012	31.2			
20/05/2012	35.4			
21/05/2012	38.5	22.93		52.76
22/05/2012	31			
23/05/2012	36.1			
24/05/2012	37.7			
25/05/2012	35.4			
26/05/2012	36.3			
27/05/2012	41.9			
28/05/2012	35.8			
29/05/2012	31.7			
30/05/2012	39.1			
31/05/2012	39.1			
01/06/2012	34			
02/06/2012	33.5			
03/06/2012	34			
05/06/2012	31			
06/06/2012	22.9			
07/06/2012	23.5			
08/06/2012	27.6			
09/06/2012	28.1			
10/06/2012	27.3			
11/06/2012	26.1			
12/06/2012	28.1			
13/06/2012	31.2			
14/06/2012	27.8			
15/06/2012	21.2			
16/06/2012	27.5			
17/06/2012	27.5			
18/06/2012	30.7			
19/06/2012	28.6			
20/06/2012	32			
21/06/2012	32.3			
22/06/2012	27			
23/06/2012	29.8	29.7		
24/06/2012	31.4			
25/06/2012	26			
26/06/2012	27.2			
27/06/2012	22.6			
28/06/2012	30.4			
29/06/2012	27			
30/06/2012	27.7			
01/07/2012	29.7			
02/07/2012	29.7			
03/07/2012	???			
04/07/2012	30			
11/07/2012	10			
13/07/2012	28.7			
14/07/2012	27.4			
15/07/2012	25.9			
16/07/2012	27.4			
18/07/2012	27.8			
19/07/2012	???			
20/07/2012	25.9			
21/07/2012	26.9			
22/07/2012	27.3			
23/07/2012	25.9			
24/07/2012	27.9			
25/07/2012	24.1			
26/07/2012	19.1			
27/07/2012	27.2			
28/07/2012	25.74			
29/07/2012	25.8			
30/07/2012	18.5			
31/07/2012	16.3			
01/08/2012	22.8			
02/08/2012	37.8			
03/08/2012	23.7			
04/08/2012	23.6	24.0714286		
05/08/2012	23.4			
06/08/2012	20.9			
07/08/2012	28			

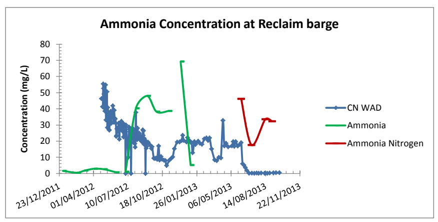


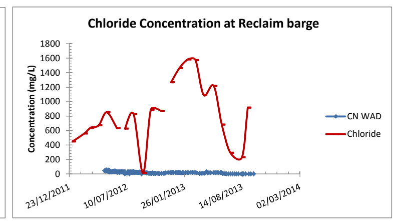


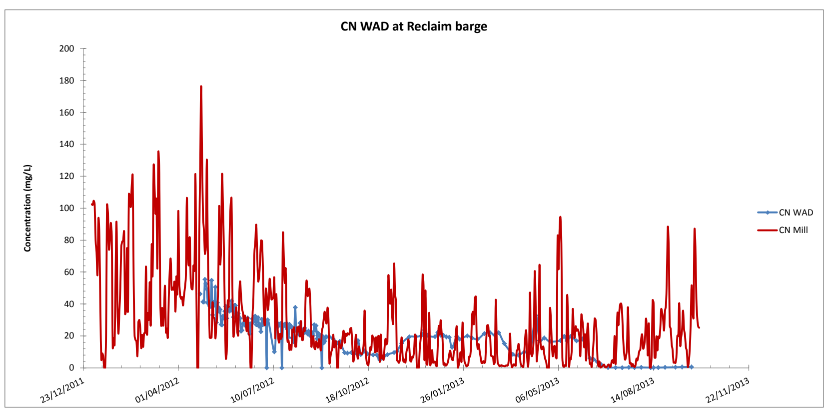












CN in the tailing pond

Date	CN wad (Assay lab) ppm	CN wad (multilab) mg/L	CN free (multilab) mg/L	CN tot (multilab) mg/L
08/08/2012	24.4			
09/08/2012	23.3			
10/08/2012	22.8			
11/08/2012	21.7	23.5		
12/08/2012	24.9			
13/08/2012	23			
14/08/2012	22.1			
15/08/2012	21.3			
16/08/2012	23			
17/08/2012	21.3			
18/08/2012	19.9	22.2142857		
19/08/2012	22.6			
20/08/2012	21.6			
21/08/2012	20.2			
22/08/2012	27			
23/08/2012	23.6			
24/08/2012	26.4			
25/08/2012	18.2	22.8		
26/08/2012	21.8			
27/08/2012	21.2			
28/08/2012	17.7			
29/08/2012	19.4			
30/08/2012	None			
31/08/2012	19.6			
01/09/2012	15.6	18		
02/09/2012	16.7			
03/09/2012	19.3			
04/09/2012	19.3			
07/09/2012	19.3	18.65		
11/09/2012	17.9			
16/09/2012	15.5			
18/09/2012	16.6			
23/09/2012	9.45			
26/09/2012	9.19			
30/09/2012	9.53	9.36		
03/10/2012	8.68			
07/10/2012	17			
10/10/2012	8.26			
14/10/2012	10.5			
17/10/2012	8.77			
23/10/2012	8.09	10.2166667		
27/10/2012	7.96			
30/10/2012	4.91			
07/11/2012	8.22			
14/11/2012	9.57			
17/11/2012	10.2			
22/11/2012	15.3			
30/11/2012	19.4			
07/12/2012	19.5			
13/12/2012	20.3			
16/12/2012	23.6			
19/12/2012	20.4			
27/12/2012	19.5	41.7		
30/12/2012	22.2	20.85		
02/01/2013	20.4			
05/01/2013	20.3			
08/01/2013	19.3			
11/01/2013	19.1			
14/01/2013	12.8			
19/01/2013	19.7			
22/01/2013	17.9			
30/01/2013	20.0			
04/02/2013	18.7			
10/02/2013	18.0			
17/02/2013	21.4			
23/02/2013	22.0			
28/02/2013	20.4			
04/03/2013	22.0			
10/03/2013	15.2			
19/03/2013	8.4			
25/03/2013	7.9			
31/03/2013	10.0			
06/04/2013	9.6			
12/04/2013	32.8			
16/04/2013	17.0	1.24	3	19.87
21/04/2013	18.7			
27/04/2013	16.5			
08/05/2013	17.1			
12/05/2013	19.7			
15/05/2013	16.8			
19/05/2013	19.7			
25/05/2013	16.9			
31/05/2013	18			
04/06/2013	19.1			
08/06/2013	6.01			
12/06/2013	5.21			
16/06/2013	3.64			
20/06/2013	2.0			
27/06/2013	0.0967			
05/07/2013	0.156			
12/07/2013	0.0829			
19/07/2013	0.247			
25/07/2013	0.142			
01/08/2013	0.237			
11/08/2013	0.0829			
14/08/2013	0.0765			
19/08/2013	0.133			
26/08/2013	0.242			
06/09/2013	0.355			
13/09/2013	0.501			
23/09/2013	0.499			

Calendar reference	**ST-21 (a)**
Sample ID	**ST-21**
Old calendar reference	**SW2a /SW2b**
Sampling location	**Tailings reclaim pond (reclaim pond)**

Number bold - italic = < LMD

Frequency	**Parameters**	**Date** / **Units**	**03/01/2012**	**13/02/2012**	**06/03/2012**	**03/04/2012**	**01/05/2012**	**05/06/2012**	**19/06/2012**	**26/06/2012**	**03/07/2012**	**02/08/2012**	**04/09/2012**	**01/10/2012**
ST-21 (a)	Alkalinity	(mg CaCO3/L)	126	125	147	157	145	75			98	102	117	114
Monthly (open water)	Ammonia (NH3)	mg/L	1.6	0.44	1.8	2.9	2.6	0.73			1	40.3	48	38.2
	Chloride	mg/L	449	559	639	672	853	634			626	826	13.5	889
	Cyanide (Cn(tot))	mg/L	5.89	14.22	23.18	59.37	63.38	48.76			39.26	24.34	14.87	1.44
	Fluoride	mg/L	0.5	0.49	0.54	0.3	2.5	***0.02***			0.06	0.23	0.52	0.48
	Hardness	(mg CaCO3/L)	914	1087	1057	1369	1008	1001			574	771	1045	1313
	Nitrate (NO3)	mg/L	7.2	8.6	10.4	11.8	10.5	7.3			8.6	9.1	10	10
	Nitrite (NO2)	mg/L	0.23	0.22	0.21	0.2	0.17	0.12			0.1	0.12	0.15	0.12
	pH		8.42	8.03	8.49	9.06	9.39	8.74	7.89		8.94	8.47	8.04	7.89
	Sulphate (SO2-4)	mg SO4/L	1825	2173	2477	2384	2508	1555			1457	1551	1703	1910
	TDS	mg/L	3012	3334	3620	3843	3374	4955			2343	2590	3213	3206
	Turbidity	NTU	0.88	2.53	6.49	2.51	2.21	14.74	12.36		16.8	4.18	3.87	4.16
	Dissolved Ag	mg/L	0.006	0.008	***0.005***	***0.005***	0.005	***0.005***			0.068	***0.005***	0.005	***0.005***
	Dissolved Al	mg/L	0.02	***0.01***	***0.01***	0.02	0.41	***0.01***			***0.01***	***0.01***	0.02	0.05
	Dissolved As	mg/L	0.045	0.018	0.015	0.041	0.071	0.006			0.011	0.012	0.009	0.008
	Dissolved Ba	mg/L	0.048	0.078	0.096	0.066	0.052	0.029			0.034	0.043	0.057	0.077
	Dissolved Cd	mg/L	***0.005***	***0.005***	***0.005***	***0.005***	***0.005***	***0.005***			***0.005***	***0.005***	0.005	***0.005***
	Dissolved Cu	mg/L	7.68	6.83	9.91	26.85	7.13	20.39			19.58	5.94	0.549	1.86
	Dissolved Fe	mg/L	1.3	1.1	2.4	8.9	1.5	9.5			7.4	0.93	0.05	***0.05***
	Dissolved Hg	mg/L	***0.0005***	***0.0005***	***0.0005***	***0.0005***	***0.0005***	***0.0005***			***0.0005***	0.0005	0.0005	***0.0005***
	Dissolved Mn	mg/L	0.023	0.034	0.032	***0.005***	0.032	***0.005***			0.009	0.005	0.017	0.095
	Dissolved Mo	mg/L	0.29	0.308	0.332	0.0005	0.31	0.232			0.262	0.29	0.349	0.361
	Dissolved Ni	mg/L	0.455	0.887	1.52	0.6	1.21	2.01			2.54	2.22	1.28	1.08
	Dissolved Pb	mg/L	***0.005***	***0.005***	***0.005***	0.009	***0.005***	0.005			***0.005***	***0.005***	0.005	***0.005***
	Dissolved Se	mg/L	***0.005***	***0.005***	0.006	0.014	0.021	0.013			0.009	0.02	0.015	0.014
	Dissolved Tl	mg/L	***0.01***	***0.01***	***0.01***	***0.01***	***0.01***	***0.01***			***0.01***	***0.01***	0.01	***0.01***
	Dissolved Zn	mg/L	0.018	0.01	0.006	***0.005***	1.39	***0.005***			0.034	***0.005***	0.005	0.006
	Ammonia-Nitrogen	mg/L												
	Ag	mg/L							0.158	0.263				
	Al	mg/L							0.0049	0.0119				
	As	mg/L							0.0305	0.0321				
	Ba	mg/L							***0.0005***	***0.0005***				
	Be	mg/L							0.00055	0.00019				
	Cd	mg/L							0.0092	0.0213				
	Co	mg/L							1.038	2.744				
	Cu	mg/L							***0.0006***	0.0106				
	Cr	mg/L							0.83	0.7				
	Fe	mg/L												
	Hg	mg/L							***0.005***	***0.005***				
	Li	mg/L							0.0194	0.0314				
	Mn	mg/L							0.2209	0.2576				
	Mo	mg/L							1.354	1.68				
	Ni	mg/L							0.0006	***0.0003***				
	Pb	mg/L							0.0007	***0.0001***				
	Sb	mg/L							0.009	0.008				
	Se	mg/L							***0.001***	***0.001***				
	Sn	mg/L							1.1	0.837				
	Sr	mg/L							0.34	0.43				
	Ti	mg/L							***0.005***	***0.005***				
	Tl	mg/L							0.01	0.009				
	U	mg/L							***0.0005***	***0.0005***				
	V	mg/L							***0.001***	0.015				
	Zn	mg/L												

Calendar reference	**ST-21 (a)**
Sample ID	**ST-21**
Old calendar reference	**SW2a /SW2b**
Sampling location	**Tailings reclaim pond (reclaim pond)**

Frequency	**Parameters**	**Date** / **Units**	**05/11/2012**	**03/12/2012**	**10/12/2012**	**08/01/2013**	**06/02/2013**	**05/03/2013**	**02/04/2013**	**07/05/2013**	**04/06/2013**	**04/07/2013**	**13/08/2013**	**02/09/2013**
ST-21 (a)	Alkalinity	(mg CaCO3/L)	129		134	115	134	142	113	106	77	127	154	143
Monthly (open water)	Ammonia (NH3)	mg/L	38.7		69.3	5.2					46.2			
	Chloride	mg/L	872		1267	1463	1582	1572	1092	1217	683	292	232	917
	Cyanide (Cn(tot))	mg/L	3.26		16.45	17.3	12.11	25.19	36.25	20.85	16.77	0.008	0.054	0.991
	Fluoride	mg/L	0.07		0.22	21.9	0.33	0.23	0.38	0.33	0.07	0.26	1.1	0.16
	Hardness	(mg CaCO3/L)	1177		1497	1607	2116	1795	1525	1583	891	662	751	759
	Nitrate (NO3)	mg/L	11.9		14.1	12.9	17.9	17.7	14.4	20.3	13.7	12.2	11.3	13.5
	Nitrite (NO2)	mg/L	0.07		0.19	0.27	0.29	0.16	0.34	0.33	0.06	0.31	0.9	1.1
	pH		8.09	8.59	8.14	9.04	9.42	9.14	8.9	9	8.85	8.28	7.72	8
	Sulphate (SO2-4)	mg SO4/L	2332		2644	2960	3125	2876	2248	2304	1276	1085	1169	1457
	TDS	mg/L				4943	568	5354	4242	4476	2954	1988		2020
	Turbidity	NTU	4.94	1.9	1.13	1.01	36.7	21.9	43.3	8.8	17.37	9.25	5.65	20.1
	Dissolved Ag	mg/L	***0.005***		0.015	***0.005***	0.011	0.01	***0.005***	0.0138	0.0044	***0.0002***	0.0057	0.0138
	Dissolved Al	mg/L	0.02		0.04	0.05	0.34	0.02	0.08	0.093	0.136	0.152	0.14	0.204
	Dissolved As	mg/L	0.011		0.012	0.019	0.012	0.01	0.011	0.0165	0.0078	0.0137	0.0161	0.0246
	Dissolved Ba	mg/L	0.082		0.084	0.107	0.101	0.144	0.096	0.104	0.0566	0.0465	0.0606	0.0667
	Dissolved Cd	mg/L	***0.005***		***0.005***	***0.005***	***0.005***	***0.005***	***0.005***	0.00085	0.00054	0.00035	0.00068	0.00089
	Dissolved Cu	mg/L	1.71		12.96	17.17	18.55	15.21	5.56	18.43	0.2915	0.3915	0.4183	1.777
	Dissolved Fe	mg/L	***0.05***		1.2	1.6	1.1	0.3	0.67	1.3	***0.01***	***0.01***	0.01	0.38
	Dissolved Hg	mg/L	***0.0005***		0.0003	0.0002	0.0003	***0.0001***	0.0002	0.0002	***0.0001***	***0.0001***	0.0001	0.0001
	Dissolved Mn	mg/L	0.039		0.007	***0.005***	0.071	0.009	***0.005***	***0.0005***	0.0713	0.4254	0.5621	0.4087
	Dissolved Mo	mg/L	0.411		0.437	0.492	0.481	0.469	0.332	0.4128	0.2472	0.171	0.2217	0.3091
	Dissolved Ni	mg/L	0.183		0.152	0.056	0.032	0.041	0.026	0.808	0.0876	0.0962	0.2999	0.6015
	Dissolved Pb	mg/L	***0.005***		***0.005***	***0.005***	***0.005***	***0.005***	***0.005***	***0.0003***	***0.0003***	***0.0003***	0.0012	0.0045
	Dissolved Se	mg/L	0.019		0.021	0.023	0.026	0.037	0.019	0.026	0.008	0.01	0.01	0.009
	Dissolved Tl	mg/L	***0.01***		***0.01***	***0.01***	***0.01***	***0.01***	***0.01***	***0.005***	***0.005***	***0.005***	***0.005***	***0.005***
	Dissolved Zn	mg/L	***0.005***		0.006	0.005	0.569	***0.005***	0.015	0.009	0.001	0.004	0.004	0.015
	Ammonia-Nitrogen	mg/L									46.2	17.6	33.5	32.3
	Ag	mg/L												
	Al	mg/L										0.409		
	As	mg/L										0.0208		
	Ba	mg/L										0.0598		
	Be	mg/L										***0.0005***		
	Cd	mg/L										0.00043		
	Co	mg/L												
	Cu	mg/L										0.6531		
	Cr	mg/L										0.0007		
	Fe	mg/L										0.56		
	Hg	mg/L										***0.00001***		
	Li	mg/L										***0.005***		
	Mn	mg/L										0.5164		
	Mo	mg/L										0.2041		
	Ni	mg/L										0.1204		
	Pb	mg/L										0.0045		
	Sb	mg/L										0.0014		
	Se	mg/L										0.012		
	Sn	mg/L										***0.001***		
	Sr	mg/L										0.798		
	Ti	mg/L										0.29		
	Tl	mg/L										***0.005***		
	U	mg/L										0.009		
	V	mg/L										***0.0005***		
	Zn	mg/L										0.006		

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Certificate of Analysis

Request number: **13-558291**

Date Received: 2013-08-30

Date Certificate Issued: 2013-09-13

Certificate Version: 1

☑ Official Certificate of Analysis

☐ Preliminary Certificate of Analysis

Client

MULTI-LAB DIRECT - Val d' Or

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P.O. Number	Your project ID.	Project Manager
NA	29228	M. Roger Turmel

Comments

This version replaces and cancels all earlier version.

NA : Information Not Available

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Certificate of Analysis

Client: MULTI-LAB DIRECT - Val d' Or

Request Number: 13-558291

P.O. Number	Your Project ID.	Project Manager
NA	29228	M. Roger Turmel

Sample(s)

Lab. No.		**2428475**
Your Reference		29228 NP-2-North
Matrix		Wastewater
Sampled by		M. Samuel Tapp / Jamie Kataluk
Site sampled		Meadowbank
Date sampled		2013-08-28
Date received		2013-08-30
Parameter(s) Method Reference		
Résultats toxicité truite	Preparation	-
QE006-01 (Accredited)	Analysis	-
	Sequential No.	NA
LC50-96h	% v/v	>100
% mortality at 100% v/v	% mort 96h	NA
CI 95% lower		NA
CI 95% upper		NA
Code Statistical method		AUCUN
Toxic units	U.T.	<1.0
Conclusion		Not lethal
Analysis details		APPENDIX

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Certificate of Analysis

Client: **MULTI-LAB DIRECT - Val d' Or** | **Request Number: 13-558291**

P.O. Number	Your Project ID.	Project Manager
NA	29228	M. Roger Turmel

Sample(s)

Lab. No.	**2428475**
Your Reference	29228 NP-2-North
Matrix	Wastewater
Sampled by	M. Samuel Tapp / Jamie Kataluk
Site sampled	Meadowbank
Date sampled	2013-08-28
Date received	2013-08-30

Parameter(s)
Method
Reference

Comments:

2428475 29228 NP-2-North — Truites - Type d'essai : CL50

Note 1: Results and comments, if any, relate only to samples submitted for analysis at the Saint-Augustin-de-Desmaures laboratory.

Linda Bouchard, biologist

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Appendix

Client: MULTI-LAB DIRECT **Request number:** 13-558291

BIOASSAY Rainbow trout

Lab. No: 2428475
Your reference: 29228 NP-2-North
Matrix: Wastewater
Sampled by: M. Samuel Tapp / Jamie Kataluk
Site sampled: Meadowbank

Sampling method: Grab
Date sampled (date and hour): 2013-08-28 08:00:00
Date received (date and hour): 2013-08-30 08:00:00
State of sampled received: Conform

Date and hour start analysis (0hrs): 2013-09-01 14:00
Date and hour end analysis (96hrs): 2013-09-05 14:00

Analysed by: JB JG

Organisms: *Oncorhynchus mykiss* ; Acclimation: ≥ 2 weeks
% mortality 7 days before test:<1

Lot #: PAV130809
Average weight of control fish (g): 0.45 **Minimum:** 0.33 **Maximum:** 0.54
± std. dev.: 0.07
Average fork length of control fish (mm): 36.4 **Minimum:** 32 **Maximum:** 43
± std. dev.: 3.5
Number of fish/container: 10
Loading density (g/L): 0.45
Volume of test solutions (L): 10
Height of test solutions (cm): 22
Photoperiod: 16hrs light / 8hrs darkness
Dilution water: Dechlorinated municipal water
Pre-aeration of sample: 30 minutes
Pre-aeration and aeration rate (mL/min/L ±1): 6.5
Pre-treatment of sample: NA
Protocol / Reference method: SPE1/RM/13, 2000, mod. 05/2007
No modification to protocol

sample concentration (% v/v)	number of fish 0 hrs	volume (L)	atypical or stressed 96hrs (number)	atypical or stressed 96hrs (%)	mortality 96hrs (number)	mortality 96hrs (%)	temperature (°C)		pH		dissolved oxygen (mg/L)		conductivity (µS/cm)
							0hrs	96hrs	0hrs	96hrs	0hrs	96hrs	0hrs
0.00	10	10	0	0	0	0	15.5	14.6	7.8	7.7	9.6	9.6	291
6.25	10	10	0	0	0	0	15.5	14.6	7.8	7.7	9.8	9.1	299
12.50	10	10	0	0	0	0	15.5	14.4	7.8	7.7	9.7	9.3	301
25.00	10	10	0	0	0	0	15.5	14.3	7.8	7.6	9.9	9.2	324
50.00	10	10	0	0	0	0	15.6	14.3	7.7	7.5	9.0	9.1	357
100.0	10	10	0	0	0	0	15.8	14.2	7.5	7.4	9.5	9.1	421
Sample characteristics before analysis			Appearance: Yellow,clear				15.8		7.5		8.9		419

Reference assay (Phenol)
Reference assay date: 2013-08-30
LC50-96h (mg/L of Phenol): 10.82
Lower C.I. at 95%: 9.000
Lower C.I. at 95%: 13.00

Geometric average: 9.110
Lower control limit: 6.580
Upper control limit: 11.63

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Certificate of Analysis

Request number: **13-577001**

Date Received: 2013-12-13

Date Certificate Issued: 2013-12-23

Certificate Version: 3

☑ Official Certificate of Analysis

☐ Preliminary Certificate of Analysis

Client

MAXXAM ANALYTIQUE INC.

2690, avenue Dalton
Québec, Québec, Canada
G1P 3S4
Telephone : (418) 658-5784
Fax : (418) 658-6594

P.O. Number	Your project ID.	Project Manager
NA	B381001	Mme Martine Bergeron

Comments

Version 3: English certificate requested by the client.

This version replaces and cancels all earlier version.

NA : Information Not Available

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Certificate of Analysis

Client: MAXXAM ANALYTIQUE INC.

Request Number: 13-577001

P.O. Number	Your Project ID.	Project Manager
NA	B381001	Mme Martine Bergeron

Sample(s)

Lab. No.	**2501751**
Your Reference	X08009-01R\31784
Matrix	Water
Sampled by	M. THÉRIAULT ET T. THOMSON
Site sampled	NA
Date sampled	2013-12-09
Date received	2013-12-13

Parameter(s) Method Reference		
Résultats toxicité truite	Préparation	-
QE006-01 (Accredited)	Analysis	-
	Sequential No.	NA
LC50-96h	% v/v	NA
% mortality at 100% v/v	% mort 96h	0
CI 95% lower		NA
CI 95% upper		NA
Code Statistical method		NA
Toxic units	U.T.	NA
Conclusion		Not lethal
Analysis details		APPENDIX

Comments:

2501751 X08009-01R\31784 Trout - Test type : Single concentration

Note 1: Results and comments, if any, relate only to samples submitted for analysis at the Saint-Augustin-de-Desmaures laboratory.

Stephan Veilleux, biologist

Exova

Appendix

Client: Maxxam Analytique Inc. **Request number:** 13-577001

BIOASSAY Rainbow trout

Lab. No:	2501751	**Sampling method:**	Grab
Your reference:	X08009-01R\31784	**Date sampled (date and hour):**	2013-12-09 15:30:00
Matrix:	Water	**Date received (date and hour):**	2013-12-13 13:00:00
Sampled by:	M. THÉRIAULT ET T. THOMSON	**State of sampled received:**	Conform
Site sampled:	NA		

Date and hour start analysis (0hrs): 2013-12-14 10:45 **Date and hour end analysis (96hrs):** 2013-12-18 10:45

Analysed by: JB GF

Organisms:	*Oncorhynchus mykiss*; Acclimation: ≥ 2 weeks % mortality 7 days before test:<1				
Lot #:	PAV131112				
Average weight of control fish (g):	0.45	**Minimum:**	0.34	**Maximum:**	0.52
± std. dev.:	0.07				
Average fork length of control fish (mm):	38.5	**Minimum:**	35	**Maximum:**	41
± std. dev.:	2.2				
Number of fish/container:	10				
Loading density (g/L):	0.45				
Volume of test solutions (L):	10				
Height of test solutions (cm):	22				
Photoperiod:	16hrs light / 8hrs darkness				
Dilution water:	Dechlorinated municipal water				
Pre-aeration of sample:	30 minutes				
Pre-aeration and aeration rate (mL/min/L ±1):	6.5				
Pre-treatment of sample:	NA				
Protocol / Reference method:	SPE1/RM/13, 2000, mod. 05/2007 No modification to protocol				

sample concentration (% v/v)	number of fish 0 hrs	volume (L)	atypical or stressed 96hrs (number)	atypical or stressed 96hrs (%)	mortality 96hrs (number)	mortality 96hrs (%)	temperature (°C)		pH		dissolved oxygen (mg/L)		conductivity (µS/cm)
							0hrs	96hrs	0hrs	96hrs	0hrs	96hrs	0hrs
0	10	10	0	0	0	0	14.2	15.9	7.3	7.3	9.9	9.4	270
100	10	10	0	0	0	0	14.8	15.7	6.9	7.3	9.9	9.7	564
Sample characteristics before analysis			Appearance: Yellow, clear				15.4		6.7		11.0		559

Reference assay (Phenol)		**Geometric average:**	9.16
Reference assay date:	2013-12-13	**Lower control limit:**	6.61
LC50-96h (mg/L of Phenol):	10.00	**Upper control limit:**	11.71
Lower C.I. at 95%:	8.57		
Lower C.I. at 95%:	11.60		

APPENDIX B

Preliminary AEM Report - Seepage Water from Waste Rock Storage Facility at Sample Location ST-16

AGNICO EAGLE

MEADOWBANK MINE

Preliminary AEM Report – Seepage Water From Waste Rock Storage Facility – Sample Location ST-16

SEPTEMBER 2013

TABLE OF CONTENTS

1. Issue

During an AANDC Water License inspection on July 29th and 30th 2013 it was observed that "red" colored seepage from the south - east side of the Waste Rock Storage Facility was seeping through the road perimeter into Lake NP-2. Samples were taken by both the Inspector and AEM staff (split sample). Analysis results from this sampling were received by AEM on August 16th, 2013. See Photos 1 and 2 below and Table 1.

Photo 1 – Shore of NP-2

Photo 2 – ST-16 Waste Rock seepage.

Table 1 – Historical ST-16 Results

Parameters	Date / Units	ST-16 Average 2011	ST-16 Average 2012	ST-16 11/06/2013	ST-16 04/07/2013	ST-16 Split 30/07/2013	ST-16 Split AANDC Result 30/07/2013
*pH		6.49	7.30	6.45	7.21		7.20
*Turbidity	NTU	17	34		17		123
*Conductivity	us/cm		154	420	1485		4510
Alkalinity	mg CaCo3/L	34	67	46	89	272	162
Aluminum	mg/L	0.159	0.513		0.464	0.042	0.045
Dissolved Aluminium	mg/L				0.027	< 0.006	
Ammonia	mgN/L	0.07	0.03	< 0.05	0.20	1.20	
Ammonia-nitrogen	mgN/L		0.22	0.45	7.80	34.00	
Total Dissolved Solids	mg/L	55	175	37	969	3792	
Total Suspended Solids	mg/L						50
Arsenic	mg/L	0.0020	0.0045	0.0029	0.0091	0.0139	0.0083
Dissolved As	mg/L				0.0031	0.0058	
Barium	mg/L	0.0095	0.0196		0.0741	0.1414	0.1480
Dissolved Barium	mg/L				0.0558	0.1433	
Cadmium	mg/L	0.00060	0.00004		0.00014	0.00065	0.00020
Dissolved Cadmium	mg/L				0.0001	0.0007	
Chloride	mg/L	2	3		15	450	192
Chromium	mg/L		0.0048		0.0034	0.0011	0.0010
Copper	mg/L	0.0017	0.0046	0.0028	2.3110	2.0380	3.3500
Dissolved Copper	mg/L				1.909	1.712	
Fluoride	mg/L	0.106	0.098		0.110	0.290	
Hardness	mg CaCO3/L	62	59		361	1417	1020
Iron	mg/L	1.21	1.94		1.60	4.40	21.90
Dissolved Iron	mg/L				0.17	0.06	
Lead	mg/L	0.0010	0.0056	< 0.0003	0.0015	0.0013	< 0.0001
Dissolved Lead	mg/L				< 0.0003	< 0.0003	
Manganese	mg/L	0.588	0.961		2.447	6.370	5.850
Dissolved Manganese	mg/L				2.110	6.055	
Mercury	mg/L	0.00062	0.00007		< 0.00010	0.00005	0.00015
Dissolved Mercury	mg/L				< 0.0001	< 0.0001	
Molybdenum	mg/L	0.001	0.001		0.026	0.170	0.083
Dissolved Molybdenum	mg/L				0.0204	0.1773	
Nickel	mg/L	0.0339	0.0395	0.0069	0.5149	2.0150	1.3300
Dissolved Nickel	mg/L				0.415	1.810	
Nitrate	mg/L	0.17	0.34		8.10	37.80	23.70
Selenium	mg/L	0.002	0.001		0.007	0.020	0.013
Dissolved Selenium	mg/L				0.005	0.023	

Silver	mg/L	0.0006	0.0049								0.0056
Dissolved Silver	mg/L					<	0.0002		0.0019		
Sulphate	mg/L	24	9				406		2400		1450
Thallium	mg/L	0.0025	0.0025			<	0.0050	<	0.0050	<	0.0001
Dissolved Thallium	mg/L					<	0.005	<			
Zinc	mg/L	0.005	0.008	<	0.001		0.010		0.009	<	0.005
Dissolved Zinc	mg/L						0.003		0.008		
Calcium (Ca)	mg/L										312
Magnesium (Mg)	mg/L										60
Potassium (K)	mg/L										88
Sodium (Na)	mg/L										590
Cesium	mg/L										0.0009
Rubidium	mg/L										0.0687
Ortho-Phosphate as Phosphorus	mg/L										
Antimony (Sb)	mg/L						0.0004		0.0012		0.0007
Boron (B)	mg/L						0.04		0.15		
Beryllium (Be)	mg/L					<	0.0005	<	0.0005	<	0.0001
Cobalt (Co)	mg/L						0.0729		0.3114		0.2290
Lithium (Li)	mg/L					<	0.005		0.006		0.004
Tin (Sn)	mg/L					<	0.001	<	0.001		
Strontium (Sr)	mg/L						0.44		2.14		1.40
Tianium (Ti)	mg/L						0.1300		0.5500		0.0007
Uranium (U)	mg/L						0.034		0.170		0.115
Vanadium (V)	mg/L					<	0.0005	<	0.0005		0.0011
Nitrite	mg/L						0.07		0.41		

2. Background Information

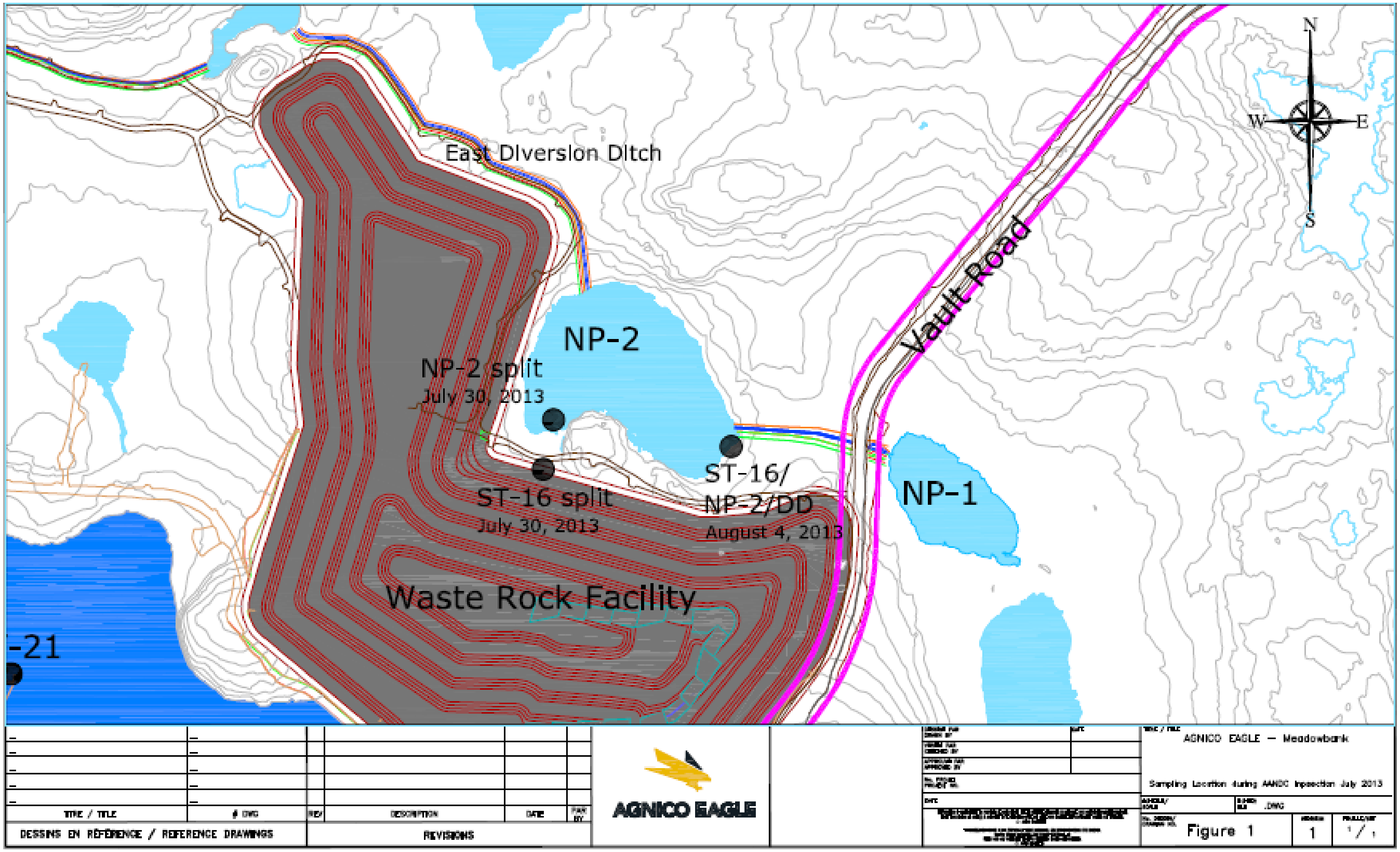
Historically, this “red” coloured water had not been observed previously at this location. The water was typically brown colored, indicative of freshet water which is usually impounded by the road and the waste rock. In the spring of 2012, a crushed NPAG rock road was constructed to isolate the sump from NP-2. Results from 2012 and initially in 2013 indicated that the water quality was good with no elevated copper or nickel and typical of freshet surface water quality (see Table 1 above). Based on the June water quality results and historical results in ST-16, AEM continued to monitor the sump as per the Type A water license.

In 2012 the construction of the East and West Diversion ditches was completed. These ditches are designed to keep freshet surface drainage from contacting the Waste Rock Storage Facility and the Tailings Storage Facility (TSF). The East ditch flows through Lakes NP- 2 and connects to Lake NP-1. After freshet there is little turnover in these lakes and the only inflows and outflows would be rainwater (See Figure 1). The ditches ensure that the water levels in these lakes do not rise and overflow into active mine areas such as the Waste Rock Facility and TSF.

In June 2013 we observed the normal brown color in the seep area initially up until approximately July 26th and 27th when the colour had changed to “red”. This is indicative of iron precipitate. The normal procedure is to have site water trucks pump out the seepage and deposit either in the TSF or use as dust suppressant in the mine pit only. Sample results from July 4th indicated that copper and nickel were elevated. This was an anomaly and our plan was to verify with the next sampling results (August 4th). There was no confirmed indication of actual seepage migrating through the perimeter road to Lake NP-2 until the red coloured seepage appeared around July 26th and 27th. At that point the red could be observed along the shoreline in NP-2. This was confined to the near shore and not in the main part of the lake. It was not observed at the exit of Lake NP-2. Removal of the seep water had previously commenced and was continuing at this point in time. **There was and has been no fish mortalities observed to date.**

As mentioned the AANDC inspector was on site July 29th and 30th, 2013 and split samples were taken. The seepage was evident in the Lake, along the near shore only (see photo 2), and we increased the removal of the seep water from the ST-16 sample location. Please see Figure 1 below for sample locations.

Figure 1 – Sampling Location during AANDC Inspection July 2013



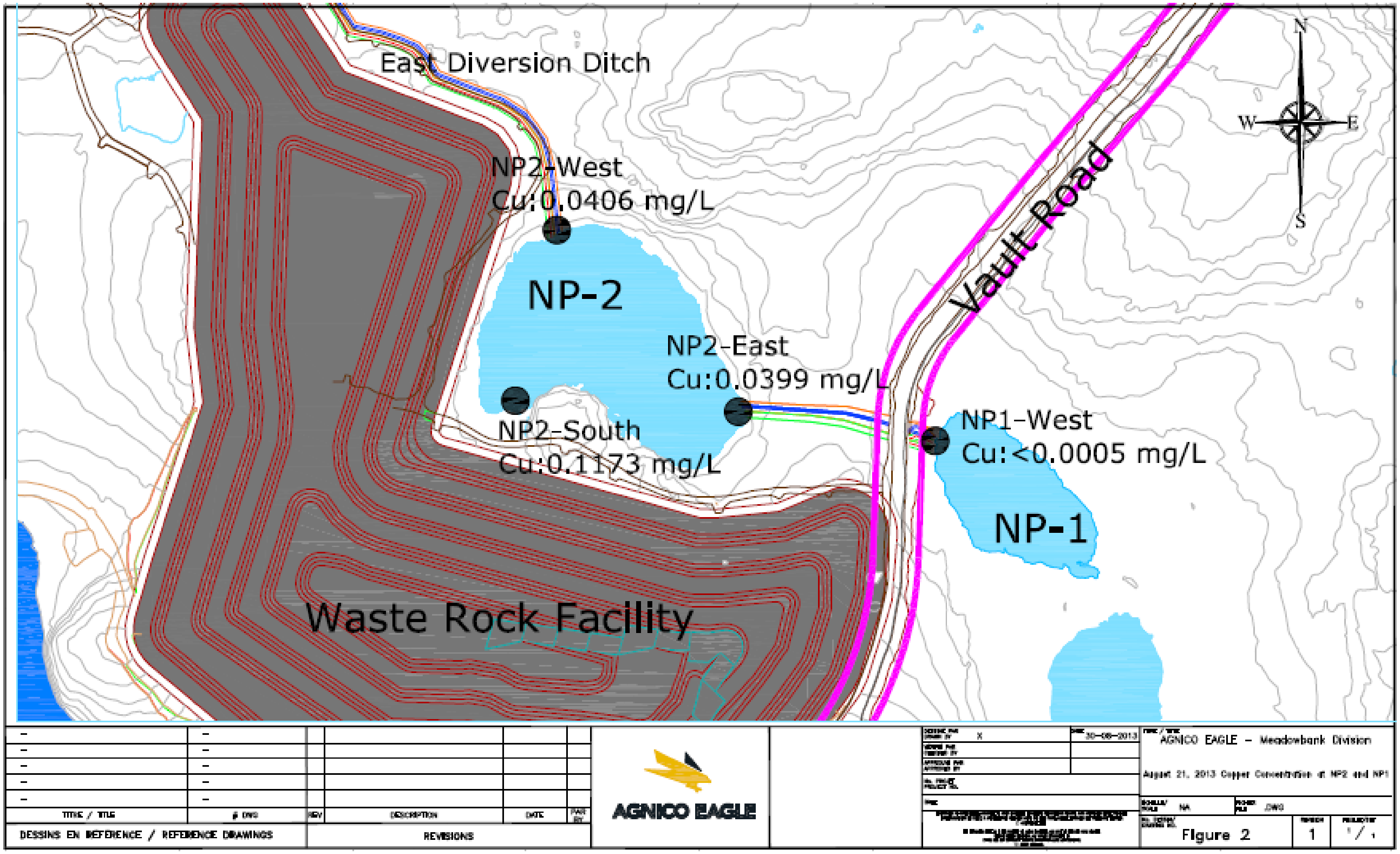
By August 4th AEM had lowered the level in the seepage area to the point where it was felt that the seepage through the road had stopped. Pumping of the sump continued and is still ongoing. Also on August 4th a sample was taken in NP-2 at the East end of the Lake in an area that exhibited clear water – see Figure 1 location.

On August 16th results were received from the sampling conducted with AANDC (see Table 1 above for results) and the certificates are attached as Appendix 1. The copper, nickel, iron, manganese and sulphate were elevated. A preliminary investigation was launched by the Environment and Engineering Departments. Pumping of the seep water continued and all of this water was directed to the TSF. On August 19th the results from AEM's August 4th sample in NP-2 Lake at the East end were received and this too indicated elevated copper at a level of 0.1713 mg/l which exceeded the CCME criteria for Protection of Aquatic Life. All of this information was forwarded to the AANDC Inspector including all analysis results.

The investigation at this time was centered on seepage from the waste rock, specifically from the PAG material. Some waste rock at the site contains copper, iron and sulphides which could explain the elevated values observed in the sample results. This was not observed historically at this site. The main immediate action was to keep the waste rock seepage pumped down to prevent migration through the road into NP-2 Lake.

Further monitoring for copper only was undertaken in NP-2 Lake on August 21st, 2013. Results were received on August 24th and are indicated on Figure 2 below. The level had dropped significantly at NP-South, East and West and was not detected in NP-1 Lake. This was an indication that the seepage to the Lake had stopped due to pumping.

Figure 2 – August 21, 2013 Copper Concentration at NP-2 and NP-1



The investigation continued and a Plug/Dike design request to prevent any seepage from migrating through the road to NP-2 Lake was submitted to AEM's Engineering Department. A design was produced (see Figure 3 below). This was an additional measure taken to augment the pumping of the seep water. Construction of the Waste Rock Plug commenced on August 26th, 2013. Also, it was observed, after the pumping out of the water to a low level, that water was still seeping from the waste rock and this included two distinct areas in close proximity (approximately 15 m apart) to each other. One was "red" colored and the other "brown" - see photos 3 and 4 below.

Figure 3 – Plug Design

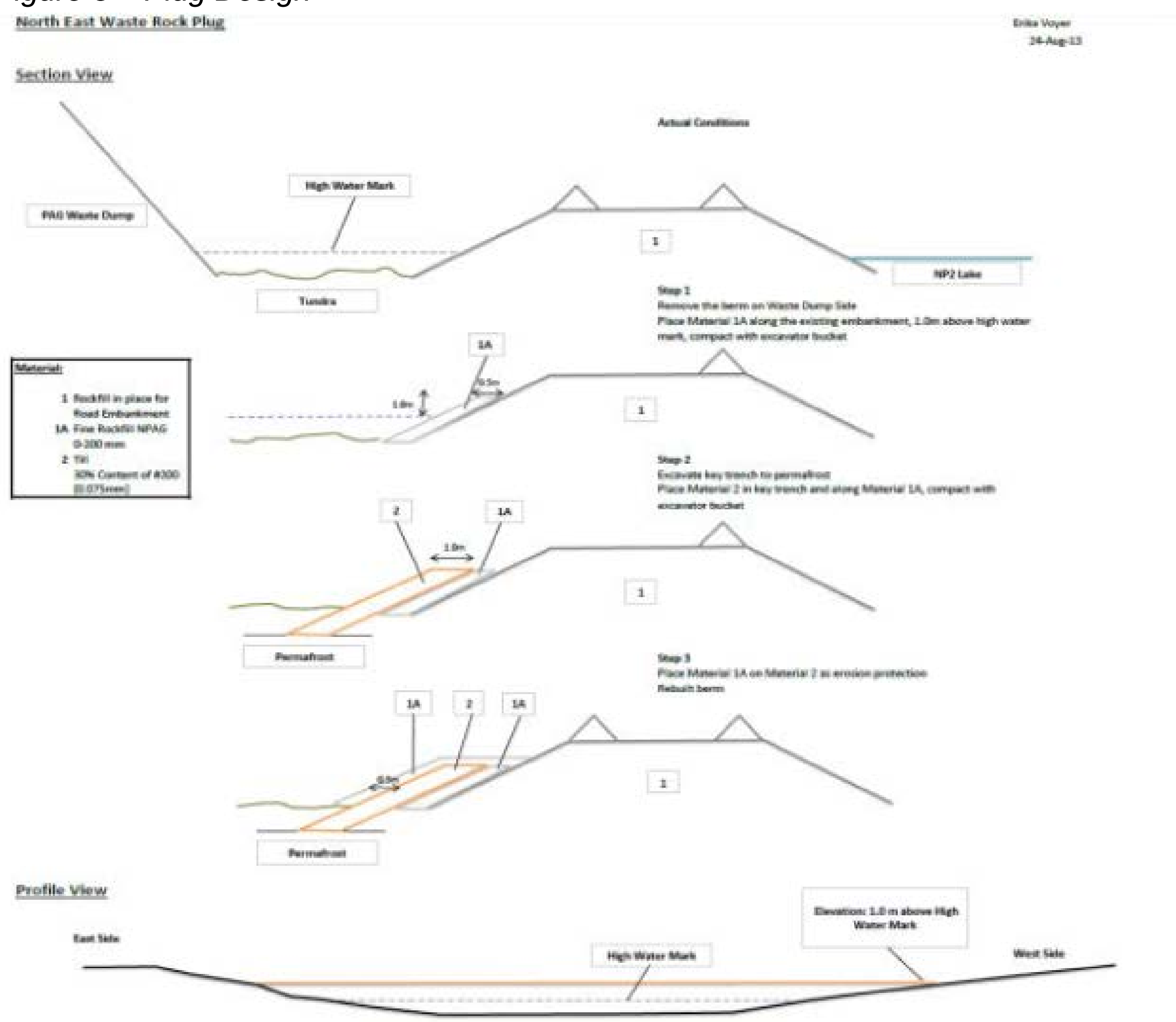



Photo 3 – Brown seepage


Photo 4 – Red seepage

A staff gauge has been placed at the seepage to determine the water level increases more definitively – see photo 5 below.

Photo 5 – Seepage Staff Gauge

On August 27th two Inspectors from AANDC and two Inspectors from Environment Canada attended the Meadowbank site and conducted sampling at the seep – ST-16 and at four locations around NP-2 Lake. AEM took duplicate samples during this visit. The construction project of the Waste Rock Plug had started and was being conducted during the visit. As previously stated AEM was of the opinion that the seepage through the road had stopped by August 21st.

Concurrent to the inspection, the preliminary investigation had determined that there was a hydraulic gradient that existed between the TSF reclaim water level and NP-2 Lake. The TSF water level was at elevation 145.7 m and NP-2 Lake was at elevation 141.2 m. Upon examining a topographical photo prior to mine development there was an indication that the former watercourse connecting the seep area to the North West Arm Second Portage Lake (now the TSF) could act as a conduit under the waste rock to the seep area – see photo 6 below. After conducting a comparison analysis of sample results in the TSF (sample station ST-21) several similarities became evident. Notably this included copper, nickel, chloride, sulphate, hardness – see comparison Table 2 below. AEM determined that is was possible that the TSF reclaim water could be migrating through the former water course to the seep area at a location along RF 1 rockfill road (TSF perimeter structure). This is the suspected migration route.

Table 2 – Comparison between ST-21 and ST-16

Parameters	Date Units	ST-21 Average 2013	ST-21 04/07/2013	ST-16 Split 30/07/2013	30/07/2013 Split AANDC Result
*pH		8.95	8.28		7.20
*Turbidity	NTU	20	9		123
*Conductivity	us/cm				4510
Alkalinity	mg CaCo3/L	116	127	272	162
Aluminum	mg/L	0.409	0.409	0.042	0.045
Dissolved Aluminium	mg/L	0.124	0.152	< 0.006	
Ammonia	mgN/L	25.70		1.20	
Ammonia-nitrogen	mgN/L	31.9	17.6	34.0	
Total Dissolved Solids	mg/L	3504	1988	3792	
Total Suspended Solids	mg/L				50
Arsenic	mg/L	0.0208	0.0208	0.0139	0.0083
Dissolved As	mg/L	0.0129	0.0137	0.0058	
Barium	mg/L	0.0598	0.0598	0.1414	0.1480
Dissolved Barium	mg/L	0.0936	0.0465	0.1433	
Cadmium	mg/L	0.00043	0.00043	0.00065	0.00020
Dissolved Cadmium	mg/L	0.00203	0.00035	0.0007	
Chloride	mg/L	1129	292	450	192
Chromium	mg/L	0.0007	0.0007	0.0011	0.0010
Copper	mg/L	0.6531	0.6531	2.0380	3.3500
Dissolved Copper	mg/L	10.8004	0.3915	1.712	
Fluoride	mg/L	3.36	0.26	0.290	
Hardness	mg CaCO3/L	1454	662	1417	1020
Iron	mg/L	0.56	0.56	4.4	21.9
Dissolved Iron	mg/L	0.71	< 0.01	0.06	
Lead	mg/L	0.0045	0.0045	0.0013	< 0.0001
Dissolved Lead	mg/L	0.0019	< 0.0003	< 0.0003	
Manganese	mg/L	0.5164	0.5164	6.370	5.850
Dissolved Manganese	mg/L	0.0839	0.4254	6.055	
Mercury	mg/L	0.000005	< 0.00001	0.00005	0.00015
Dissolved Mercury	mg/L	0.00015	< 0.0001	< 0.0001	
Molybdenum	mg/L	0.2041	0.2041	0.170	0.083
Dissolved Molybdenum	mg/L	0.372	0.171	0.1773	
Nickel	mg/L	0.1204	0.1204	2.0150	1.3300
Dissolved Nickel	mg/L	0.1638	0.0962	1.810	
Nitrate	mg/L	15.6	12.2	37.8	23.7
Selenium	mg/L	0.012	0.012	0.020	0.013
Dissolved Selenium	mg/L	0.021	0.010	0.023	
Silver	mg/L				0.0056
Dissolved Silver	mg/L	0.0067	< 0.0002	0.0019	
Sulphate	mg/L	2268	1085	2400	1450

Thallium	mg/L	0.0025	<	0.0050	<	0.0050	<	0.0001
Dissolved Thallium	mg/L	0.01	<	0.01				
Zinc	mg/L	0.006		0.006		0.009	<	0.005
Dissolved Zinc	mg/L	0.0865		0.004		0.008		
Calcium	mg/L							312
Magnesium	mg/L							60
Potassium	mg/L							88
Sodium	mg/L							590
Cesium	mg/L							0.0009
Rubidium	mg/L							0.0687
Antimony	mg/L	0.0014		0.0014		0.0012		0.0007
Boron	mg/L					0.15		
Beryllium	mg/L	0.00025	<	0.0005	<	0.0005	<	0.0001
Cobalt	mg/L					0.3114		0.2290
Lithium	mg/L	0.0025	<	0.005		0.006		0.004
Tin	mg/L	0.0005	<	0.001	<	0.001		
Strontium	mg/L	0.798		0.798		2.14		1.40
Titanium	mg/L	0.2900		0.2900		0.5500		0.0007
Uranium	mg/L	0.009		0.009		0.170		0.115
Vanadium	mg/L	0.00025	<	0.0005	<	0.0005		0.0011
Nitrite	mg/L	0.25		0.31		0.41		

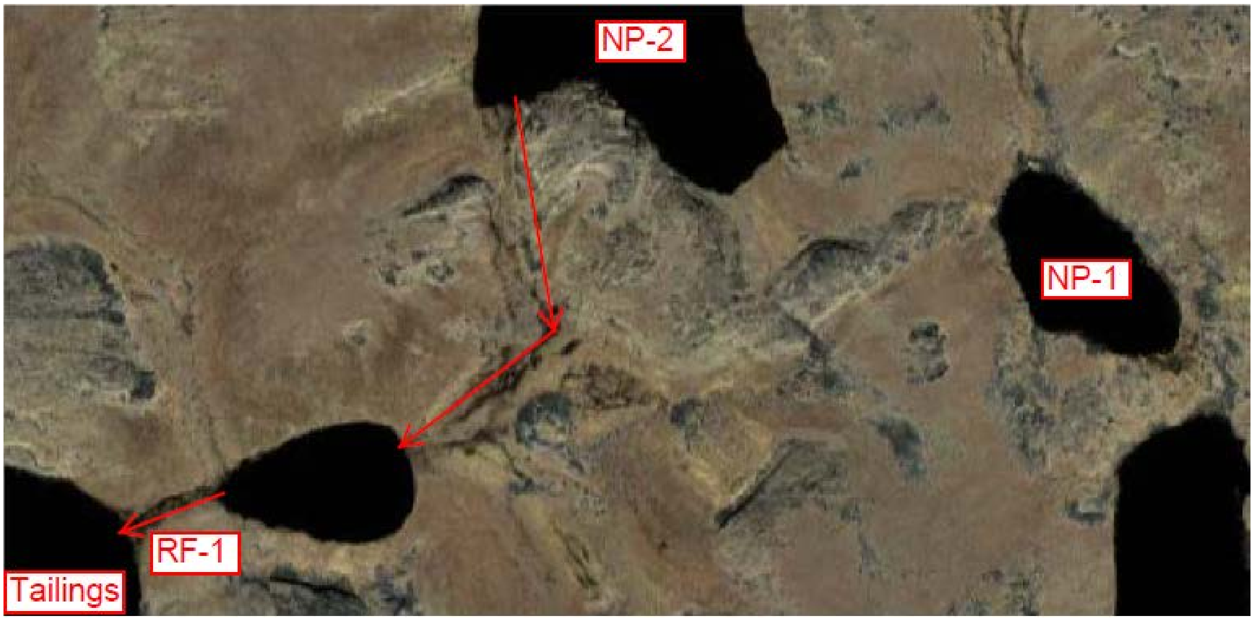


Photo 6 – Topography prior to mine development

Construction of the Waste Rock Plug was completed on September 1st. The seep areas are segregated and have been kept at low levels – see photo 7 below.

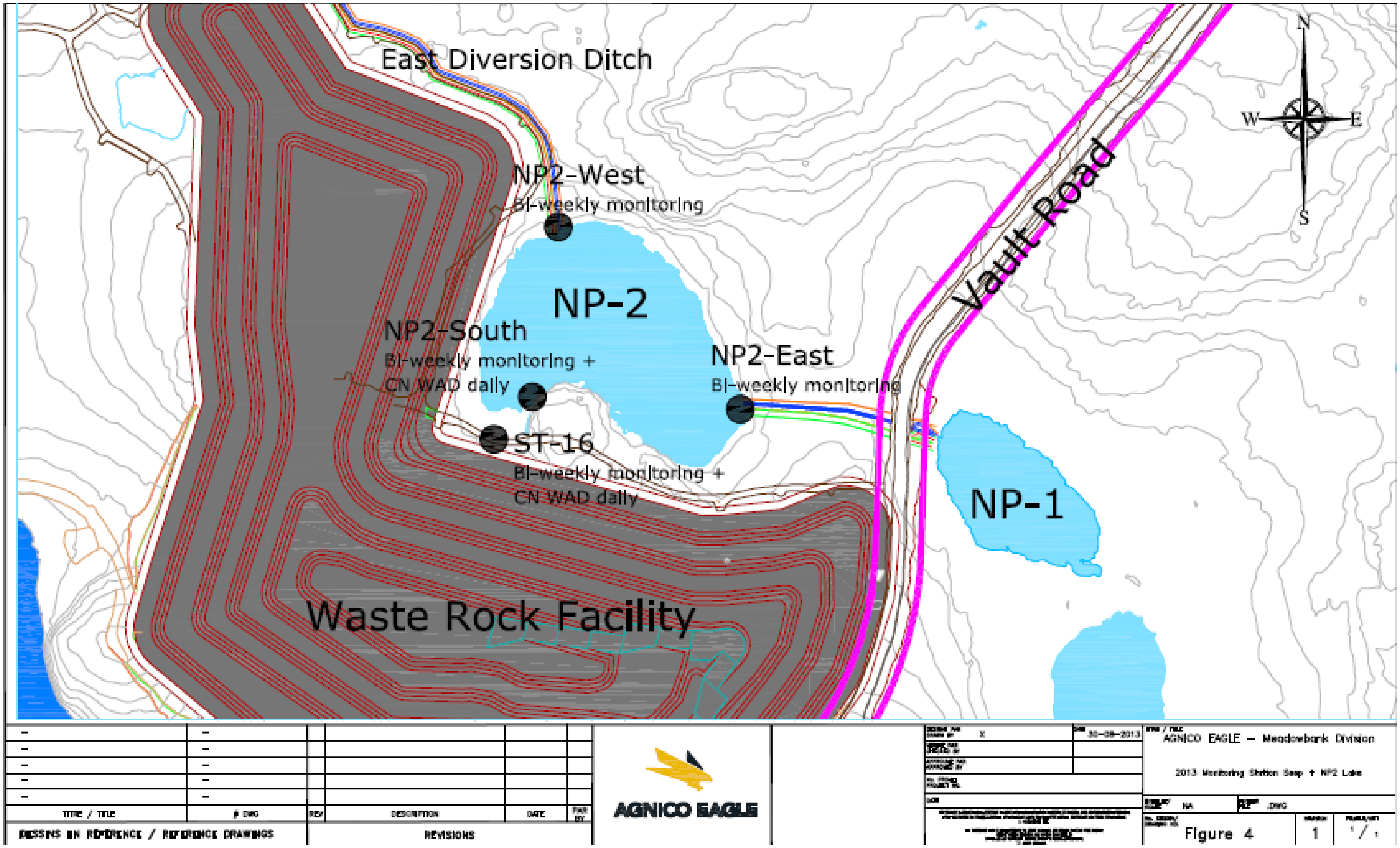
Photo 7 – Construction of Waste Rock Plug

3. Measures Taken/Action Plan

- Upon first noting the “red” seep water in NP-2 Lake (approximately July 26th) and after the initial AANDC inspection of July 30th AEM increased pumping of the seep water to prevent migration through the road. The seeps will be monitored daily and pumped out accordingly – daily if necessary;
- After receiving the sample analysis results from July 30th sampling conducted with the AANDC Inspector indicating elevated copper, nickel, etc. an investigation was started to determine the source of these metals. There was no previous history of this. Initially AEM concentrated on the waste rock properties and possible seepage of PAG rock;
- By August 28th, after noting a hydraulic gradient between the TSF and NP-2 Lake, the fact that a former watercourse connected the two areas (RF-1 and ST-16) under the Waste Rock Facility and the results of a comparative analysis of sample results from the TSF (ST-21) and the ST-16 seep area it was determined that it was possible for TSF reclaim to migrate to the seep area;
- A short term monitoring program was implemented (See Figure 4). The short term monitoring program includes daily monitoring of CN WAD using our on site assay laboratory at the seep areas ST-16 and in NP-2 Lake South location. In addition we will sample ST-16, NP-2 South, East and West bi weekly for total and dissolved metals, general chemistry as well as total and free cyanide (Group 2 and 3 of our NWB Water License parameters). Phaser Lake will be sampled also as an external reference; background samples for most metals were taken in 2003;
- A Waste Rock Plug/Dike was designed and constructed (commencing August 26th), under the supervision of the AEM Engineering Department, along the perimeter road to prevent any further seepage to Lake NP-2. This was completed on September 1st. A complete construction report and as-built drawing will be prepared;
- A staff gauge was placed in the seeps to better determine the seepage inflow;
- An internal SOP was completed (see Appendix 2) to ensure that seeps are pumped in a timely manner at the commencement of freshet and kept at a low level;
- Tailing deposition will be concentrated along the rockfill road in the area where the former watercourse was located to a level higher than the current water level in the TSF. This will direct the water away from the suspected migration route toward the reclaim barge and act as a plug. This commenced on September 2nd; and

- AEM has submitted (on September 2nd) a request for proposal from a third party engineering firm to assess why this seepage has occurred, verify the pathway under the waste rock storage area, if there any additional short term measures that can be implemented, further suggestions for management of freshet, whether an engineered collection and sump system is required for the seepage area, an evaluation of the seepage risk in the TSF and provision of recommendations for a permanent solution.

Figure 4 – Short term monitoring stations



4. Conclusion

AEM has completed a preliminary investigation into the discharge of seepage from the Waste Rock Storage Area in the location of sampling station ST-16 and determined that this material has likely seeped through the perimeter road into NP-2 Lake (fish bearing). Further to this, it appears likely that the seepage source is possibly reclaim water from the TSF migrating under the waste rock pile to ST-16 and subsequently through the perimeter road to NP-2 Lake. The seepage water at the ST-16 location has been kept to a low level and is checked daily.

Measures were implemented to stop the seepage to NP- 2 Lake and prevent it from re-occurring (Waste Rock Plug installation). Tailings deposition was changed on September 2nd to an area where the seepage is thought to be migrating. This action will also assist in pushing the water away from the rockfill perimeter structure and act as an additional “plug”.

A third party engineering firm was requested, on September 2nd, to submit a proposal to provide further assessment and recommendations, including whether additional permanent structures are required to correct this problem.

AEM is of the opinion that appropriate corrective and preventive measures have been undertaken in the short term to isolate the seepage and protect the receiving environment. For the longer term AEM plans to assess the findings of the third party engineering firm and submit any additional actions that are necessary.

APPENDIX 1

Results from the sampling conducted with AANDC

Analytical Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Stéphane Robert
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: V-28320

Sampling location:	SW-6(S-RSF) split (ST-6)	Sampling date:	July 30, 2013
Sample name:	SW-6(S-RSF) split (ST-6)	Sampling hour:	N/D
Sampled by:	Jeff Pratt	Date received:	July 31, 2013
Matrix:	Water		
Drinking water distribution:			

Reported on: August 16, 2013

Unless otherwise stated, all samples were received in acceptable condition.

Results relate only to the sample tested.

All samples will be disposed of after 30 days following analysis.

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Analytical Report

Lab number: V-28320

Sample name: SW-6(S-RSF) split (ST-6) Sampling date: July 30, 2013

Sampling location: SW-6(S-RSF) split (ST-6) Sampling hour: N/D

Parameter	Result		Method name	Analysis date
Alkalinity	272	mg CaCO3/L	M-TIT-1.0	August 01, 2013
Aluminium (Al)	0.042	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Aluminium (Al)	<0.006	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Antimony (Sb)	0.0012	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Silver (Ag)	0.0019	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Arsenic (As)	0.0139	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Arsenic (As)	0.0058	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Ammonia nitrogen (NH3-NH4)	34	mg N/L	Sous-traitance\Multilab Direct	August 02, 2013
Barium (Ba)	0.1414	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Barium (Ba)	0.1433	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Beryllium (Be)	<0.0005	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Boron (B)	0.15	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Cadmium (Cd)	0.00065	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Cadmium (Cd)	0.00065	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Chloride	450	mg/L	Sous-traitance\Multilab Direct	August 01, 2013
Chrome (Cr)	0.0011	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Cobalt (Co)	0.3114	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Copper (Cu)	2.038	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Copper (Cu)	1.712	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Hardness	1417	mg CaCO3/L	Sous-traitance\Multilab Direct	August 05, 2013
Tin (Sn)	<0.001	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Iron (Fe)	4.4	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Iron (Fe)	0.06	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Fluoride (F)	0.29	mg/L	Sous-traitance\Multilab Direct	August 08, 2013
Lithium (Li)	0.006	mg/L	Sous-traitance\Multilab Direct	August 07, 2013
Manganese (Mn)	6.370	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Manganese (Mn)	6.055	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Mercury (Hg)	0.00005	mg/L	Sous-traitance\Multilab Direct	August 02, 2013
Dissolved Mercury (Hg)	<0.0001	mg/L	Sous-traitance\Multilab Direct	August 15, 2013
Molybdenum (Mo)	0.1704	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Molybdenum (Mo)	0.1773	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Ammonia (NH3)	1.2	mg N/L	Sous-traitance\Multilab Direct	August 02, 2013
Nickel (Ni)	2.015	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Nickel (Ni)	1.810	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Nitrate (NO3)	37.8	mg N/L	Sous-traitance\Multilab Direct	August 01, 2013
Nitrite (NO2)	0.41	mg N/L	Sous-traitance\Multilab Direct	August 01, 2013
Lead (Pb)	0.0013	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Lead (Pb)	<0.0003	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Selenium (Se)	0.02	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Selenium (Se)	0.023	mg/L	Sous-traitance\Multilab Direct	August 05, 2013

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Analytical Report

Lab number: V-28320

Sample name: SW-6(S-RSF) split (ST-6)
Sampling location: SW-6(S-RSF) split (ST-6)
Sampling date: July 30, 2013
Sampling hour: N/D

Parameter	Result		Method name	Analysis date
Dissolved Solids	3792	mg/L	M-TIT-1.0	August 01, 2013
Strontium (Sr)	2.14	mg/L	Sous-traitance\Multilab Direct	August 07, 2013
Sulfate (SO4)	2400	mg SO4/L	Sous-traitance\Multilab Direct	August 05, 2013
Thallium (Tl)	<0.005	mg/L	Sous-traitance\Multilab Direct	August 07, 2013
Dissolved thallium (Tl)	<0.005	mg/L	Sous-traitance\Multilab Direct	August 07, 2013
Titanium (Ti)	0.55	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Uranium (U)	0.17	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Vanadium (V)	<0.0005	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Zinc (Zn)	0.009	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Zinc	0.008	mg/L	Sous-traitance\Multilab Direct	August 05, 2013

Sauf indication contraire, tous les échantillons ont été reçus en bon état.

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F-02-06
Version 3^{ième}: 26/10/2005

Detection limit

Lab number: V-28320

Sample name: SW-6(S-RSF) split (ST-6) | Sampling date: July 30, 2013
Sampling location: SW-6(S-RSF) split (ST-6) | Sampling hour: N/D

Parameter	Value	Unit	Method	Accreditation
Alkalinity	2	mg CaCO3/L	M-TIT-1.0	
Aluminium (Al)	0.006	mg/L	Sous-traitance	
Dissolved Aluminium (Al)	0.006	mg/L	Sous-traitance	
Antimony (Sb)	0.0001	mg/L	Sous-traitance	Yes
Dissolved Silver (Ag)	0.0002	mg/L	Sous-traitance	
Arsenic (As)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Arsenic (As)	0.0005	mg/L	Sous-traitance	
Ammonia nitrogen (NH3-NH4)	0.01	mg N/L	Sous-traitance	Yes
Barium (Ba)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Barium (Ba)	0.0005	mg/L	Sous-traitance	
Beryllium (Be)	0.0005	mg/L	Sous-traitance	
Boron (B)	0.01	mg/L	Sous-traitance	Yes
Cadmium (Cd)	0.00002	mg/L	Sous-traitance	Yes
Dissolved Cadmium (Cd)	0.00002	mg/L	Sous-traitance	
Chloride	0.5	mg/L	Sous-traitance	Yes
Chrome (Cr)	0.0006	mg/L	Sous-traitance	Yes
Cobalt (Co)	0.0005	mg/L	Sous-traitance	
Copper (Cu)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Copper (Cu)	0.0005	mg/L	Sous-traitance	
Hardness	1	mg CaCO3/L	Sous-traitance	
Tin (Sn)	0.001	mg/L	Sous-traitance	Yes
Iron (Fe)	0.01	mg/L	Sous-traitance	Yes
Dissolved Iron (Fe)	0.01	mg/L	Sous-traitance	
Fluoride (F)	0.02	mg/L	Sous-traitance	Yes
Lithium (Li)	0.005	mg/L	Sous-traitance	
Manganese (Mn)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Manganese (Mn)	0.0005	mg/L	Sous-traitance	
Mercury (Hg)	0.00001	mg/L	Sous-traitance	Yes
Dissolved Mercury (Hg)	0.0001	mg/L	Sous-traitance	
Molybdenum (Mo)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Molybdenum (Mo)	0.0005	mg/L	Sous-traitance	
Ammonia (NH3)	0.05	mg N/L	Sous-traitance	
Nickel (Ni)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Nickel (Ni)	0.0005	mg/L	Sous-traitance	
Nitrate (NO3)	0.01	mg N/L	Sous-traitance	Yes
Nitrite (NO2)	0.01	mg N/L	Sous-traitance	Yes
Lead (Pb)	0.0003	mg/L	Sous-traitance	Yes
Dissolved Lead (Pb)	0.0003	mg/L	Sous-traitance	
Selenium (Se)	0.001	mg/L	Sous-traitance	Yes
Dissolved Selenium (Se)	0.001	mg/L	Sous-traitance	

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Detection limit

Lab number: V-28320

Sample name: SW-6(S-RSF) split (ST-6) Sampling date: July 30, 2013

Sampling location: SW-6(S-RSF) split (ST-6) Sampling hour: N/D

Parameter	Value	Unit	Method	Accreditation
Dissolved Solids	1	mg/L	M-TIT-1.0	
Strontium (Sr)	0.005	mg/L	Sous-traitance	
Sulfate (SO4)	1	mg SO4/L	Sous-traitance	Yes
Thallium (Tl)	0.005	mg/L	Sous-traitance	
Dissolved thallium (Tl)	0.005	mg/L	Sous-traitance	
Titanium (Ti)	0.01	mg/L	Sous-traitance	
Uranium (U)	0.001	mg/L	Sous-traitance	
Vanadium (V)	0.0005	mg/L	Sous-traitance	Yes
Zinc (Zn)	0.001	mg/L	Sous-traitance	Yes
Dissolved Zinc	0.001	mg/L	Sous-traitance	

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F-02-06
Version 3ième: 26/10/2005

Quality control Report

Lab number: V-28320

Sample name:	SW-6(S-RSF) split (ST-6)	Sampling date:	July 30, 2013
Sampling location:	SW-6(S-RSF) split (ST-6)	Sampling hour:	N/D

Parameter		
Alkalinity mg CaCO3/L	Standard name	STD alcalinité
	Result	158
	Accuracy	91%
	Limit	123 - 167
Aluminium (Al) mg/L	Blank	<0.006
	Standard name	DMR-0311-2013-23m
	Result	5.77
	Accuracy	93.2%
	Limit	5.26 - 7.12
Dissolved Aluminium (Al) mg/L	Blank	<0.006
	Standard name	DMR-0311-2013-23
	Result	6.22
	Accuracy	99.5%
	Limit	5.26 - 7.12
Antimony (Sb) mg/L	Blank	<0.0001
	Standard name	DMR-0311-2013-23m
	Result	0.1885
	Accuracy	85.3%
	Limit	0.188 - 0.254
Dissolved Silver (Ag) mg/L	Blank	<0.0002
Arsenic (As) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	0.3401
	Accuracy	79.8%
	Limit	0.198 - 0.368
Dissolved Arsenic (As) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	0.3176
	Accuracy	95.5%
	Limit	0.236 - 0.372
Ammonia nitrogen (NH3-NH4) m	Blank	<0.01
	Standard name	DMR-0446-2013-NH3
	Result	5.3
	Accuracy	98.5%
	Limit	4.44 - 6.00
Barium (Ba) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	2.146
	Accuracy	89.4%
	Limit	2.0 - 2.8

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Quality control Report

Lab number: V-28320

Sample name: SW-6(S-RSF) split (ST-6) | Sampling date: July 30, 2013
Sampling location: SW-6(S-RSF) split (ST-6) | Sampling hour: N/D

Parameter		
Dissolved Barium (Ba) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	2.254
	Accuracy	93.9%
	Limit	2.04 - 2.76
Beryllium (Be) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	1.591
	Accuracy	93.6%
	Limit	1.4 - 2.0
Boron (B) mg/L	Blank	<0.01
	Standard name	DMR-0311-2013-23m
	Result	2.5
	Accuracy	86.8%
	Limit	2.45 - 3.31
Cadmium (Cd) mg/L	Blank	<0.00002
	Standard name	DMR-0311-2013-23m
	Result	0.91111
	Accuracy	98.8%
	Limit	0.8 - 1.0
Dissolved Cadmium (Cd) mg/L	Blank	<0.00002
	Standard name	DMR-0311-2013-23
	Result	0.87322
	Accuracy	97%
	Limit	0.8 - 1.0
Chloride mg/L	Blank	<0.5
	Standard name	DMR-0446-2013-CL
	Result	100
	Accuracy	99%
	Limit	87 - 111
Chrome (Cr) mg/L	Blank	<0.0006
	Standard name	DMR-0311-2013-23m
	Result	4.064
	Accuracy	99.7%
	Limit	3.44 - 4.66
Cobalt (Co) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	1.643
	Accuracy	94.7%
	Limit	1.33 - 1.79

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F-02-06
Version 3ième: 26/10/2005

Multilab DIRECT

Quality control Report

Lab number: V-28320

Sample name:	SW-6(S-RSF) split (ST-6)	Sampling date:	July 30, 2013
Sampling location:	SW-6(S-RSF) split (ST-6)	Sampling hour:	N/D

Parameter		
Copper (Cu) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	1.404
	Accuracy	86.8%
	Limit	1.05 - 1.43
Dissolved Copper (Cu) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	1.301
	Accuracy	95.1%
	Limit	1.05 - 1.43
Tin (Sn) mg/L	Blank	<0.001
Iron (Fe) mg/L	Blank	<0.01
	Standard name	DMR-0311-2013-23m
	Result	11.6
	Accuracy	89.5%
	Limit	8.9 - 12.1
Dissolved Iron (Fe) mg/L	Blank	<0.01
	Standard name	DMR-0311-2013-23
	Result	10.4
	Accuracy	99%
	Limit	8.9 - 12.1
Fluoride (F) mg/L	Blank	<0.02
	Standard name	DMR-0446-2013-12-F
	Result	2.9
	Accuracy	94.8%
	Limit	2.83 - 3.29
Lithium (Li) mg/L	Blank	<0.005
	Standard name	DMR-0773-2011-18a
	Result	0.863
	Accuracy	97.3%
	Limit	0.714 - 0.966
Manganese (Mn) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	3.956
	Accuracy	97.5%
	Limit	3.28 - 4.44
Dissolved Manganese (Mn) mg/l	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	3.675
	Accuracy	95.2%

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Quality control Report

Lab number: V-28320

Sample name:	SW-6(S-RSF) split (ST-6)	Sampling date:	July 30, 2013
Sampling location:	SW-6(S-RSF) split (ST-6)	Sampling hour:	N/D

Parameter		
	Limit	3.28 - 4.44
Mercury (Hg) mg/L	Blank	<0.00001
	Standard name	DMR-0311-2013-14-Hg
	Result	0.00418
	Accuracy	95.5%
	Limit	0.003 - 0.005
Dissolved Mercury (Hg) mg/L	Blank	<0.0001
	Standard name	DMR-0311-2013-14-Hg
	Result	0.0032
	Accuracy	80%
	Limit	0.003 - 0.005
Molybdenum (Mo) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	0.6781
	Accuracy	96.2%
	Limit	0.599 - 0.811
Dissolved Molybdenum (Mo) mg	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	0.6419
	Accuracy	91%
	Limit	0.599 - 0.811
Ammonia (NH3) mg N/L	Blank	<0.05
	Standard name	DMR-0446-2013-NH3
	Result	5.3
	Accuracy	98.5%
	Limit	4.44 - 6.00
Nickel (Ni) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	1.232
	Accuracy	91%
	Limit	0.96 - 1.30
Dissolved Nickel (Ni) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	1.147
	Accuracy	92.5%
	Limit	1.05 - 1.43
Nitrate (NO3) mg N/L	Blank	<0.01
	Sample duplicate	37.8-35.3
Nitrite (NO2) mg N/L	Blank	<0.01
	Standard name	DMR-0446-2013-NO2

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Quality control Report

Lab number: V-28320

Sample name:	SW-6(S-RSF) split (ST-6)	Sampling date:	July 30, 2013
Sampling location:	SW-6(S-RSF) split (ST-6)	Sampling hour:	N/D

Parameter		
	Result	2.5
	Accuracy	99.2%
	Limit	2.14 - 2.90
	Sample duplicate	0.41-0.40
Lead (Pb) mg/L	Blank	<0.0003
	Standard name	DMR-0311-2013-23m
	Result	0.9249
	Accuracy	97.2%
	Limit	0.8 - 1.0
Dissolved Lead (Pb) mg/L	Blank	<0.0003
	Standard name	DMR-0311-2013-23
	Result	0.9053
	Accuracy	99.4%
	Limit	0.8 - 1.0
Selenium (Se) mg/L	Blank	<0.001
	Standard name	DMR-0311-2013-23m
	Result	1.46
	Accuracy	91.9%
	Limit	1.15 - 1.55
Dissolved Selenium (Se) mg/L	Blank	<0.001
	Standard name	DMR-0311-2013-23
	Result	1.39
	Accuracy	97%
	Limit	1.15 - 1.55
Strontium (Sr) mg/L	Blank	<0.005
	Standard name	DMR-0773-2011-18a
	Result	1.25
	Accuracy	99.2%
	Limit	1.05 - 1.43
Sulfate (SO4) mg SO4/L	Blank	<0.6
	Standard name	DMR-0446-2013-SO4
	Result	117
	Accuracy	93.6%
	Limit	99 - 121
Thallium (Tl) mg/L	Blank	<0.005
	Standard name	STD Tl SC0187114 1000ppm
	Result	1001
	Accuracy	99.9%
	Limit	850 - 1150
Dissolved thallium (Tl) mg/L	Blank	<0.005

Sauf indication contraire, tous les échantillons ont été reçus en bon état.

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Multilab DIRECT

Quality control Report

Lab number: V-28320

Sample name: SW-6(S-RSF) split (ST-6) Sampling date: July 30, 2013

Sampling location: SW-6(S-RSF) split (ST-6) Sampling hour: N/D

Parameter		
	Standard name	STD Tl SC0187114 1000ppm
	Result	1001
	Accuracy	99.9%
	Limit	850 - 1150
Titanium (Ti) mg/L	Blank	<0.01
Uranium (U) mg/L	Blank	<0.001
	Standard name	DMR-0311-2013-23m
	Result	2.01
	Accuracy	85.1%
	Limit	1.49 - 2.01
Vanadium (V) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	1.950
	Accuracy	98%
	Limit	1.69 - 2.29
Zinc (Zn) mg/L	Blank	<0.001
	Standard name	DMR-0311-2013-23m
	Result	5.07
	Accuracy	87.6%
	Limit	3.83 - 5.19
Dissolved Zinc mg/L	Blank	<0.001
	Standard name	DMR-0311-2013-23
	Result	4.78
	Accuracy	94%
	Limit	3.83 - 5.19

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Additional information

Lab number: V-28320

Sample name: SW-6(S-RSF) split (ST-6) Sampling date: July 30, 2013

Sampling location: SW-6(S-RSF) split (ST-6) Sampling hour: N/D

Lab method	Method reference
M-TIT-1.0	MA.303-Titr Auto 2.0
M-MET-3.0	MA.200-Mét. 1.2
M-NH3-2.0	MA.300-N 2.0
M-CL-2.0	MA.300-Ions 1.3
M-CI-1.0	MA.300-Anions 1.0
M-NITR-2.0	MA.300-NO3 2.0
M-Lix-1.0	MA.100-Lix.com. 1.1
M-SULF-2.0	MA.300-Ions 1.3

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Analytical Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Stéphane Robert
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: V-28321

Sampling location:	NP2 split	Sampling date:	July 30, 2013
Sample name:	NP2 split	Sampling hour:	15:00
Sampled by:	Jeff Pratt	Date received:	July 31, 2013
Matrix:	Waste Water		
Drinking water distribution:			

Reported on: August 16, 2013

Unless otherwise stated, all samples were received in acceptable condition.

Results relate only to the sample tested.

All samples will be disposed of after 30 days following analysis.

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Analytical Report

Lab number: V-28321

Sample name: NP2 split — Sampling date: July 30, 2013
Sampling location: NP2 split — Sampling hour: 15:00

Parameter	Result		Method name	Analysis date
Alkalinity	177	mg CaCO3/L	M-TIT-1.0	August 01, 2013
Aluminium (Al)	0.024	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Aluminium (Al)	<0.006	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Antimony (Sb)	0.0004	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Silver (Ag)	0.0024	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Arsenic (As)	0.0068	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Arsenic (As)	0.0022	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Ammonia nitrogen (NH3-NH4)	27.4	mg N/L	Sous-traitance\Multilab Direct	August 02, 2013
Barium (Ba)	0.1419	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Barium (Ba)	0.1329	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Beryllium (Be)	<0.0005	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Boron (B)	0.09	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Cadmium (Cd)	0.0003	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Cadmium (Cd)	0.00022	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Chloride	587	mg/L	Sous-traitance\Multilab Direct	August 01, 2013
Chrome (Cr)	<0.0006	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Cobalt (Co)	0.2515	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Copper (Cu)	3.261	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Copper (Cu)	2.949	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Hardness	1031	mg CaCO3/L	Sous-traitance\Multilab Direct	August 05, 2013
Tin (Sn)	<0.001	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Iron (Fe)	23.6	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Iron (Fe)	0.15	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Fluoride (F)	0.02	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Lithium (Li)	0.005	mg/L	Sous-traitance\Multilab Direct	August 07, 2013
Manganese (Mn)	6.464	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Manganese (Mn)	5.427	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Mercury (Hg)	0.00002	mg/L	Sous-traitance\Multilab Direct	August 02, 2013
Dissolved Mercury (Hg)	<0.0001	mg/L	Sous-traitance\Multilab Direct	August 15, 2013
Molybdenum (Mo)	0.0871	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Molybdenum (Mo)	0.0716	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Ammonia (NH3)	0.14	mg N/L	Sous-traitance\Multilab Direct	August 02, 2013
Nickel (Ni)	1.465	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Nickel (Ni)	1.246	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Nitrate (NO3)	23.5	mg N/L	Sous-traitance\Multilab Direct	August 01, 2013
Nitrite (NO2)	0.4	mg N/L	Sous-traitance\Multilab Direct	August 01, 2013
Lead (Pb)	<0.0003	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Lead (Pb)	<0.0003	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Selenium (Se)	0.014	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Selenium (Se)	0.014	mg/L	Sous-traitance\Multilab Direct	August 05, 2013

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Analytical Report

Lab number: V-28321

Sample name: NP2 split — Sampling date: July 30, 2013

Sampling location: NP2 split — Sampling hour: 15:00

Parameter	Result		Method name	Analysis date
Dissolved Solids	2854	mg/L	M-TIT-1.0	August 01, 2013
Strontium (Sr)	1.62	mg/L	Sous-traitance\Multilab Direct	August 07, 2013
Sulfate (SO4)	1546	mg SO4/L	Sous-traitance\Multilab Direct	August 05, 2013
Thallium (Tl)	<0.005	mg/L	Sous-traitance\Multilab Direct	August 07, 2013
Dissolved thallium (Tl)	<0.005	mg/L	Sous-traitance\Multilab Direct	August 07, 2013
Titanium (Ti)	0.39	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Uranium (U)	0.144	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Vanadium (V)	<0.0005	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Zinc (Zn)	0.006	mg/L	Sous-traitance\Multilab Direct	August 05, 2013
Dissolved Zinc	0.007	mg/L	Sous-traitance\Multilab Direct	August 05, 2013

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F-02-06
Version 3ième: 26/10/2005

Detection limit

Lab number: V-28321

Sample name: NP2 split — Sampling date: July 30, 2013

Sampling location: NP2 split — Sampling hour: 15:00

Parameter	Value	Unit	Method	Accreditation
Alkalinity	2	mg CaCO3/L	M-TIT-1.0	
Aluminium (Al)	0.006	mg/L	Sous-traitance	
Dissolved Aluminium (Al)	0.006	mg/L	Sous-traitance	
Antimony (Sb)	0.0001	mg/L	Sous-traitance	Yes
Dissolved Silver (Ag)	0.0002	mg/L	Sous-traitance	
Arsenic (As)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Arsenic (As)	0.0005	mg/L	Sous-traitance	
Ammonia nitrogen (NH3-NH4)	0.01	mg N/L	Sous-traitance	Yes
Barium (Ba)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Barium (Ba)	0.0005	mg/L	Sous-traitance	
Beryllium (Be)	0.0005	mg/L	Sous-traitance	
Boron (B)	0.01	mg/L	Sous-traitance	Yes
Cadmium (Cd)	0.00002	mg/L	Sous-traitance	Yes
Dissolved Cadmium (Cd)	0.00002	mg/L	Sous-traitance	
Chloride	0.5	mg/L	Sous-traitance	Yes
Chrome (Cr)	0.0006	mg/L	Sous-traitance	Yes
Cobalt (Co)	0.0005	mg/L	Sous-traitance	
Copper (Cu)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Copper (Cu)	0.0005	mg/L	Sous-traitance	
Hardness	1	mg CaCO3/L	Sous-traitance	
Tin (Sn)	0.001	mg/L	Sous-traitance	Yes
Iron (Fe)	0.01	mg/L	Sous-traitance	Yes
Dissolved Iron (Fe)	0.01	mg/L	Sous-traitance	
Fluoride (F)	0.02	mg/L	Sous-traitance	Yes
Lithium (Li)	0.005	mg/L	Sous-traitance	
Manganese (Mn)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Manganese (Mn)	0.0005	mg/L	Sous-traitance	
Mercury (Hg)	0.00001	mg/L	Sous-traitance	Yes
Dissolved Mercury (Hg)	0.0001	mg/L	Sous-traitance	
Molybdenum (Mo)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Molybdenum (Mo)	0.0005	mg/L	Sous-traitance	
Ammonia (NH3)	0.05	mg N/L	Sous-traitance	
Nickel (Ni)	0.0005	mg/L	Sous-traitance	Yes
Dissolved Nickel (Ni)	0.0005	mg/L	Sous-traitance	
Nitrate (NO3)	0.01	mg N/L	Sous-traitance	Yes
Nitrite (NO2)	0.01	mg N/L	Sous-traitance	Yes
Lead (Pb)	0.0003	mg/L	Sous-traitance	Yes
Dissolved Lead (Pb)	0.0003	mg/L	Sous-traitance	
Selenium (Se)	0.001	mg/L	Sous-traitance	Yes
Dissolved Selenium (Se)	0.001	mg/L	Sous-traitance	

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F-02-06
Version 3ième: 26/10/2005

Detection limit

Lab number: V-28321

Sample name: NP2 split — Sampling date: July 30, 2013
Sampling location: NP2 split — Sampling hour: 15:00

Parameter	Value	Unit	Method	Accreditation
Dissolved Solids	1	mg/L	M-TIT-1.0	
Strontium (Sr)	0.005	mg/L	Sous-traitance	
Sulfate (SO4)	1	mg SO4/L	Sous-traitance	Yes
Thallium (Tl)	0.005	mg/L	Sous-traitance	
Dissolved thallium (Tl)	0.005	mg/L	Sous-traitance	
Titanium (Ti)	0.01	mg/L	Sous-traitance	
Uranium (U)	0.001	mg/L	Sous-traitance	
Vanadium (V)	0.0005	mg/L	Sous-traitance	Yes
Zinc (Zn)	0.001	mg/L	Sous-traitance	Yes
Dissolved Zinc	0.001	mg/L	Sous-traitance	

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Quality control Report

Lab number: V-28321

Sample name:	NP2 split	Sampling date:	July 30, 2013
Sampling location:	NP2 split	Sampling hour:	15:00

Parameter		
Alkalinity mg CaCO3/L	Standard name	STD alcalinité
	Result	158
	Accuracy	91%
	Limit	123 - 167
Aluminium (Al) mg/L	Blank	<0.006
	Standard name	DMR-0311-2013-23m
	Result	5.77
	Accuracy	93.2%
	Limit	5.26 - 7.12
Dissolved Aluminium (Al) mg/L	Blank	<0.006
	Standard name	DMR-0311-2013-23
	Result	6.22
	Accuracy	99.5%
	Limit	5.26 - 7.12
Antimony (Sb) mg/L	Blank	<0.0001
	Standard name	DMR-0311-2013-23m
	Result	0.1885
	Accuracy	85.3%
	Limit	0.188 - 0.254
Dissolved Silver (Ag) mg/L	Blank	<0.0002
Arsenic (As) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	0.3401
	Accuracy	79.8%
	Limit	0.198 - 0.368
Dissolved Arsenic (As) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	0.3176
	Accuracy	95.5%
	Limit	0.236 - 0.372
Ammonia nitrogen (NH3-NH4) m	Blank	<0.01
	Standard name	DMR-0446-2013-NH3
	Result	5.3
	Accuracy	98.5%
	Limit	4.44 - 6.00
Barium (Ba) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	2.146
	Accuracy	89.4%
	Limit	2.0 - 2.8

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Quality control Report

Lab number: V-28321

Sample name:	NP2 split	Sampling date:	July 30, 2013
Sampling location:	NP2 split	Sampling hour:	15:00

Parameter		
Dissolved Barium (Ba) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	2.254
	Accuracy	93.9%
	Limit	2.04 - 2.76
Beryllium (Be) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	1.591
	Accuracy	93.6%
	Limit	1.4 - 2.0
Boron (B) mg/L	Blank	<0.01
	Standard name	DMR-0311-2013-23m
	Result	2.5
	Accuracy	86.8%
	Limit	2.45 - 3.31
Cadmium (Cd) mg/L	Blank	<0.00002
	Standard name	DMR-0311-2013-23m
	Result	0.91111
	Accuracy	98.8%
	Limit	0.8 - 1.0
Dissolved Cadmium (Cd) mg/L	Blank	<0.00002
	Standard name	DMR-0311-2013-23
	Result	0.87322
	Accuracy	97%
	Limit	0.8 - 1.0
Chloride mg/L	Blank	<0.5
	Standard name	DMR-0446-2013-CL
	Result	100
	Accuracy	99%
	Limit	87 - 111
Chrome (Cr) mg/L	Blank	<0.0006
	Standard name	DMR-0311-2013-23m
	Result	4.064
	Accuracy	99.7%
	Limit	3.44 - 4.66
Cobalt (Co) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	1.643
	Accuracy	94.7%
	Limit	1.33 - 1.79

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Quality control Report

Lab number: V-28321

Sample name: NP2 split — Sampling date: July 30, 2013

Sampling location: NP2 split — Sampling hour: 15:00

Parameter		
Copper (Cu) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	1.404
	Accuracy	86.8%
	Limit	1.05 - 1.43
Dissolved Copper (Cu) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	1.301
	Accuracy	95.1%
	Limit	1.05 - 1.43
Tin (Sn) mg/L	Blank	<0.001
Iron (Fe) mg/L	Blank	<0.01
	Standard name	DMR-0311-2013-23m
	Result	11.6
	Accuracy	89.5%
	Limit	8.9 - 12.1
Dissolved Iron (Fe) mg/L	Blank	<0.01
	Standard name	DMR-0311-2013-23
	Result	10.4
	Accuracy	99%
	Limit	8.9 - 12.1
Lithium (Li) mg/L	Blank	<0.005
	Standard name	DMR-0773-2011-18a
	Result	0.863
	Accuracy	97.3%
	Limit	0.714 - 0.966
Manganese (Mn) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	3.956
	Accuracy	97.5%
	Limit	3.28 - 4.44
Dissolved Manganese (Mn) mg/l	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	3.675
	Accuracy	95.2%
	Limit	3.28 - 4.44
Mercury (Hg) mg/L	Blank	<0.00001
	Standard name	DMR-0311-2013-14-Hg
	Result	0.00418
	Accuracy	95.5%

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Quality control Report

Lab number: V-28321

Sample name:	NP2 split	Sampling date:	July 30, 2013
Sampling location:	NP2 split	Sampling hour:	15:00

Parameter		
	Limit	0.003 - 0.005
Dissolved Mercury (Hg) mg/L	Blank	<0.0001
	Standard name	DMR-0311-2013-14-Hg
	Result	0.0032
	Accuracy	80%
	Limit	0.003 - 0.005
Molybdenum (Mo) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	0.6781
	Accuracy	96.2%
	Limit	0.599 - 0.811
Dissolved Molybdenum (Mo) mg	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	0.6419
	Accuracy	91%
	Limit	0.599 - 0.811
Ammonia (NH3) mg N/L	Blank	<0.05
	Standard name	DMR-0446-2013-NH3
	Result	5.3
	Accuracy	98.5%
	Limit	4.44 - 6.00
Nickel (Ni) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
	Result	1.232
	Accuracy	91%
	Limit	0.96 - 1.30
Dissolved Nickel (Ni) mg/L	Blank	<0.0005
	Standard name	DMR-0311-2013-23
	Result	1.147
	Accuracy	92.5%
	Limit	1.05 - 1.43
Nitrate (NO3) mg N/L	Blank	<0.01
Nitrite (NO2) mg N/L	Blank	<0.01
	Standard name	DMR-0446-2013-NO2
	Result	2.5
	Accuracy	99.2%
	Limit	2.14 - 2.90
Lead (Pb) mg/L	Blank	<0.0003
	Standard name	DMR-0311-2013-23m
	Result	0.9249

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Quality control Report

Lab number: V-28321

Sample name:	NP2 split	Sampling date:	July 30, 2013
Sampling location:	NP2 split	Sampling hour:	15:00

Parameter		
Dissolved Lead (Pb) mg/L	Accuracy	97.2%
	Limit	0.8 - 1.0
	Blank	<0.0003
	Standard name	DMR-0311-2013-23
	Result	0.9053
Selenium (Se) mg/L	Accuracy	99.4%
	Limit	0.8 - 1.0
	Blank	<0.001
	Standard name	DMR-0311-2013-23m
	Result	1.46
Dissolved Selenium (Se) mg/L	Accuracy	91.9%
	Limit	1.15 - 1.55
	Blank	<0.001
	Standard name	DMR-0311-2013-23
	Result	1.39
Strontium (Sr) mg/L	Accuracy	97%
	Limit	1.15 - 1.55
	Blank	<0.005
	Standard name	DMR-0773-2011-18a
	Result	1.25
Sulfate (SO4) mg SO4/L	Accuracy	99.2%
	Limit	1.05 - 1.43
	Blank	<0.6
	Standard name	DMR-0446-2013-SO4
	Result	117
Thallium (Tl) mg/L	Accuracy	93.6%
	Limit	99 - 121
	Blank	<0.005
	Standard name	STD Tl SC0187114 1000ppm
	Result	1001
Dissolved thallium (Tl) mg/L	Accuracy	99.9%
	Limit	850 - 1150
	Blank	<0.005
	Standard name	STD Tl SC0187114 1000ppm
	Result	1001
	Accuracy	99.9%
	Limit	850 - 1150
Titanium (Ti) mg/L	Blank	<0.01
Uranium (U) mg/L	Blank	<0.001
	Standard name	DMR-0311-2013-23m

Sauf indication contraire, tous les échantillons ont été reçus en bon état.

125, boul Industriel
Rouyn-Noranda (Québec)
J9X 6P2
Tél: (819) 797-0550
Fax:(819) 797-2155
Courriel:
multilab@cablevision.qc.ca

Quality control Report

Lab number: V-28321

Sample name: NP2 split — Sampling date: July 30, 2013

Sampling location: NP2 split — Sampling hour: 15:00

Parameter		
Vanadium (V) mg/L	Result	2.01
	Accuracy	85.1%
	Limit	1.49 - 2.01
	Blank	<0.0005
	Standard name	DMR-0311-2013-23m
Zinc (Zn) mg/L	Result	1.950
	Accuracy	98%
	Limit	1.69 - 2.29
	Blank	<0.001
	Standard name	DMR-0311-2013-23m
Dissolved Zinc mg/L	Result	5.07
	Accuracy	87.6%
	Limit	3.83 - 5.19
	Blank	<0.001
	Standard name	DMR-0311-2013-23
	Result	4.78
	Accuracy	94%
	Limit	3.83 - 5.19

125, boul Industriel
Rouyn-Noranda (Québec)
J9X 6P2
Tél: (819) 797-0550
Fax:(819) 797-2155
Courriel:
multilab@cablevision.qc.ca

Additional information

Lab number: V-28321

Sample name: NP2 split | Sampling date: July 30, 2013

Sampling location: NP2 split | Sampling hour: 15:00

Lab method	Method reference
M-TIT-1.0	MA.303-Titr Auto 2.0
M-MET-3.0	MA.200-Mét. 1.2
M-NH3-2.0	MA.300-N 2.0
M-CL-2.0	MA.300-Ions 1.3
M-CI-1.0	MA.300-Anions 1.0
M-NITR-2.0	MA.300-NO3 2.0
M-Lix-1.0	MA.100-Lix.com. 1.1
M-SULF-2.0	MA.300-Ions 1.3

Sauf indication contraire, tous les échantillons ont été reçus en bon état.

125, boul Industriel
Rouyn-Noranda (Québec)
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APPENDIX 2

SOP: Management of Water in Diversion Ditches, Seeps, and Collection Locations during Freshet

Water Management in Diversion Ditches, Seeps, and Collection Locations during Freshet

		PROCEDURE NUMBER:	**MBK-ENV-0006**
People concerned	Mine, Dikes, Engineering and Environment	**Prepared by**	**Jeffrey Pratt** **Environmental Coordinator**
		Authorized by	**Kevin Buck** **Environmental Superintendent**
Effective :	**September 4, 2013**	***"Safety First, Safety Last … Safety Always!"*** ***"No Repeats" – Our Stepping Stone to ZERO HARM***	

This procedure corresponds to the required minimum standard. Each and everyone also have to comply with the rules and regulations of the Nunavut Government in terms of health and safety at work.

Objective:

This procedure is put in place to give specific dates in which actions must be taken to avoid excess non-contact water impacting on site mining activity, and also to prevent excessive pooling of contact water that could lead to a release of contact water off the mine site. This procedure will keep the project in conformance with NWB license, Part D, Item 33; Part E, Item 9.

Concerned departments:

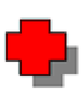

Environment


Mine


Engineering


Dyke and Dewatering

Risks/ Impacts Legend


Health & Safety


Process/quality


Costs


Environment

Management of Water in Diversion Ditches, Seeps, and Collection Locations during Freshet

Procedure	*Risks / Impacts*
Diversion Ditches	
1. No later than May 1, all diversion ditches must be cleaned free of ice and snow to allow freshet melt water to flow freely and prevent any obstructions within the diversion ditches.	Avoid Environmental Impact Avoid Excess water on Mine Site
2. Culverts under Vault road are to be steamed, if necessary, to free ice obstructions.	Avoid Environmental Impact Avoid Excess water on Mine Site and road wash out
3. Starting May 1 commence monitoring water moving through the diversion ditch system. Sampling for TSS must be completed by Environment Department, and shall initiate as soon as water flowing.	Avoid Environmental Impact
4. If TSS levels are elevated Sediment control measures must be put in place. This may include installation of silt fence, or turbidity barrier. To be conducted by Environment staff	Avoid Environmental Impact

Seep and Collection Locations

1. May 1st begin weekly inspections of seep areas and melt water collection locations. As per NWB license, Part E, Item 9.	Avoid Environmental Impact Avoid Excess water on Mine Site
2. At first sign of melt water collection, contact Environment Department. It will need to be determined if the water requires analysis prior to movement.	Avoid Environmental Impact Avoid Excess water on Mine Site
3. At first sign of melt water arrange with Mine or Dyke and Dewatering to begin removing water from seep and collection locations. Be sure to get an approved disposal location from the Environment Department.	Avoid Environmental Impact
4. Any movement of water must be recorded. Quantity of water moved and location water is drawn and dispensed must be recorded.	Required for Reporting to Government Agencies
5. All actions listed in this SOP are required corrective measures to mitigate any impacts related to surface drainage resulting from the Project's activities on off site receiving waters. As per NWB license, Part D, Item 33.	Avoid Environmental Impact

APPENDIX C

Tailings Storage Facilities – 2013 Instrumentation Review

Tailings Storage Facilities

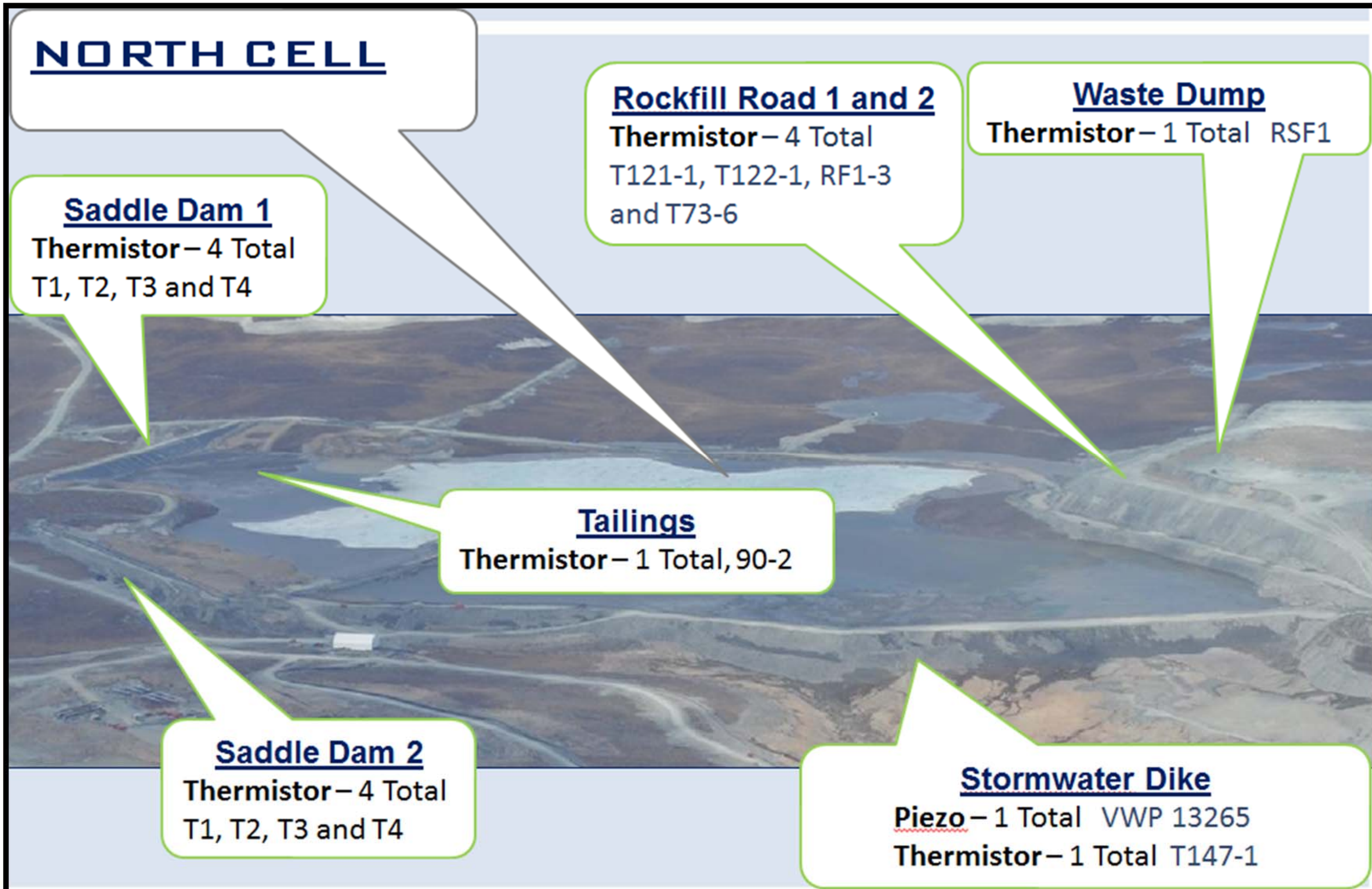
Instrumentation Review

Agnico Eagle Mines-Meadowbank Division

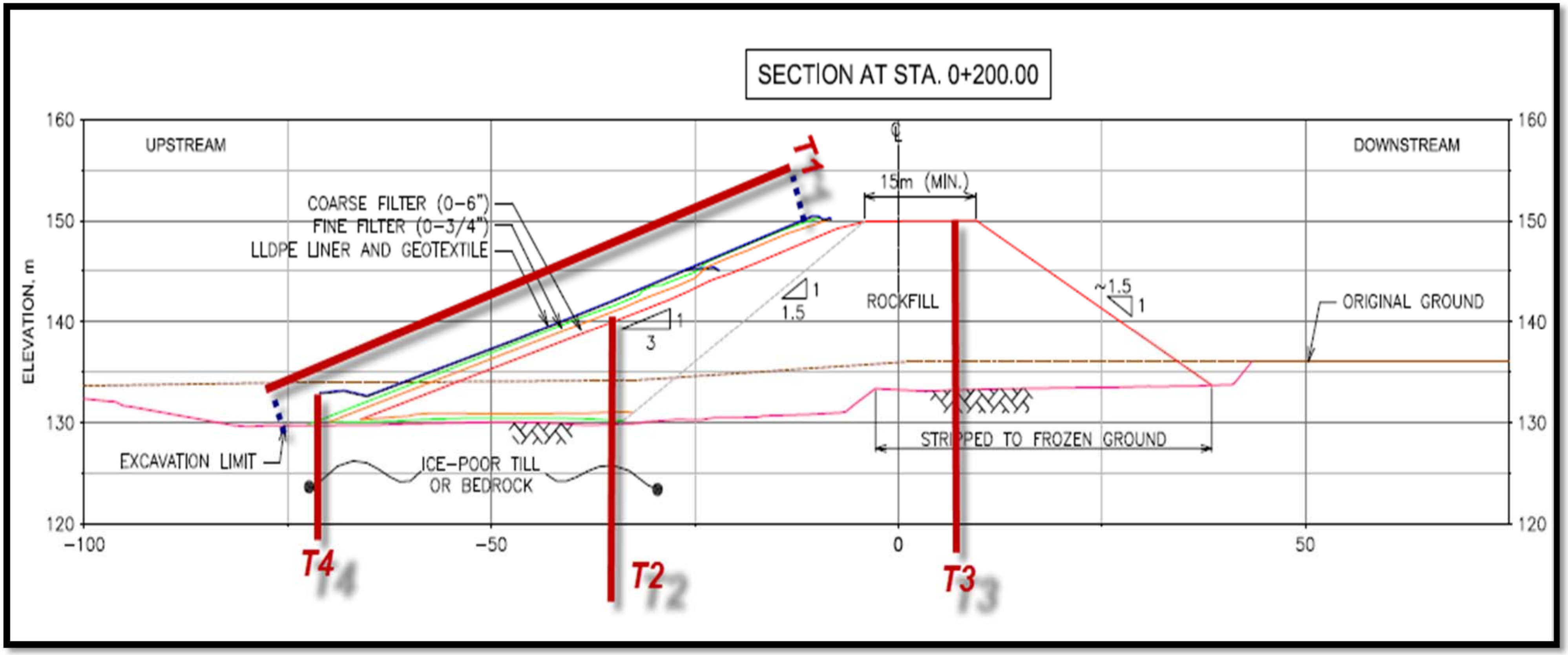
Meadowbank Dike Review Board

Meeting # 14 – September 9 to 11th, 2013

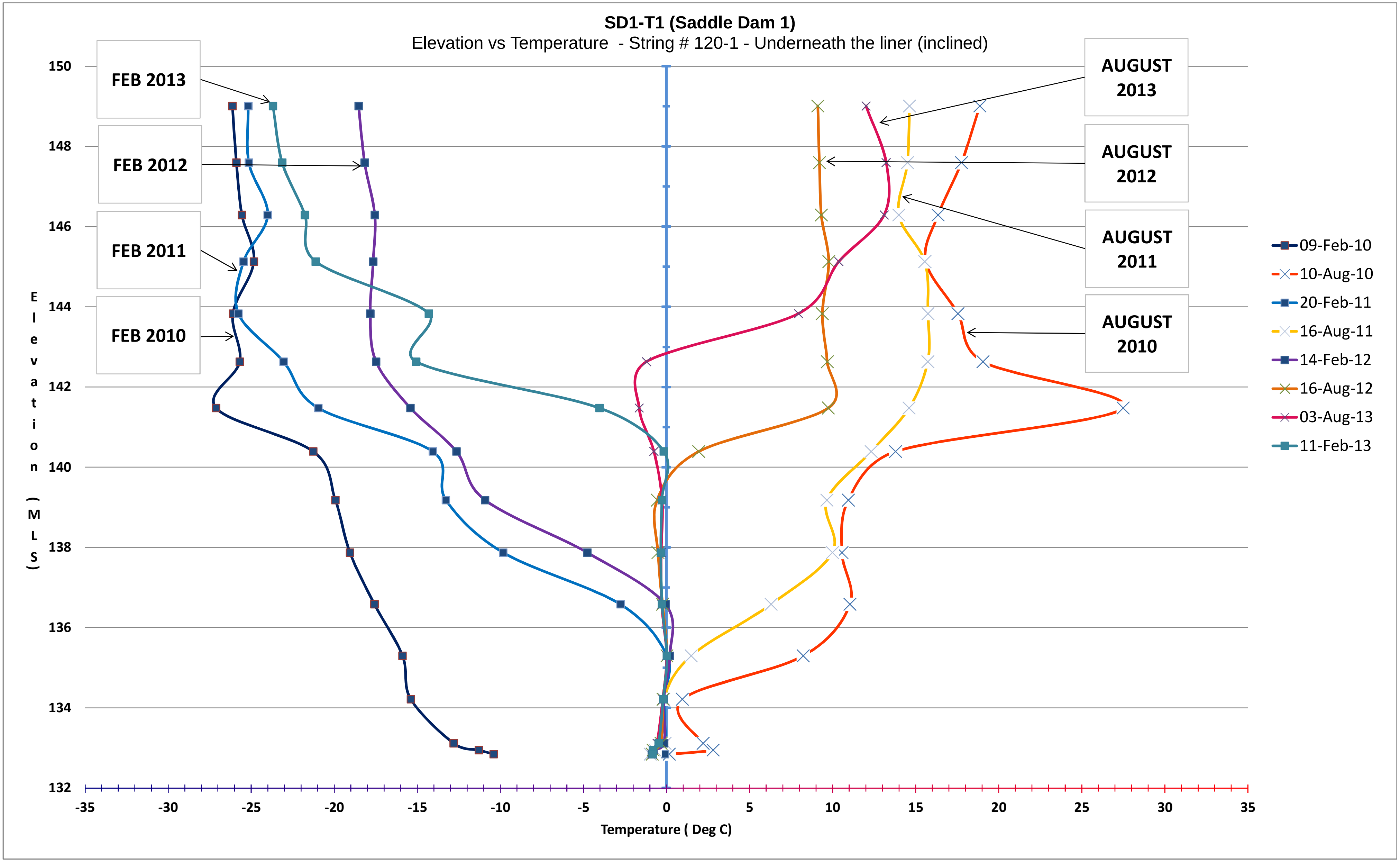
Meadowbank Mine Site, Nunavut


NORTH CELL
Rockfill Road 1 and 2
Thermistor – 4 Total
T121-1, T122-1, RF1-3 and T73-6
Waste Dump
Thermistor – 1 Total RSF1
Saddle Dam 1
Thermistor – 4 Total
T1, T2, T3 and T4
Tailings
Thermistor – 1 Total, 90-2
Saddle Dam 2
Thermistor – 4 Total
T1, T2, T3 and T4
Stormwater Dike
Piezo – 1 Total VWP 13265
Thermistor – 1 Total T147-1

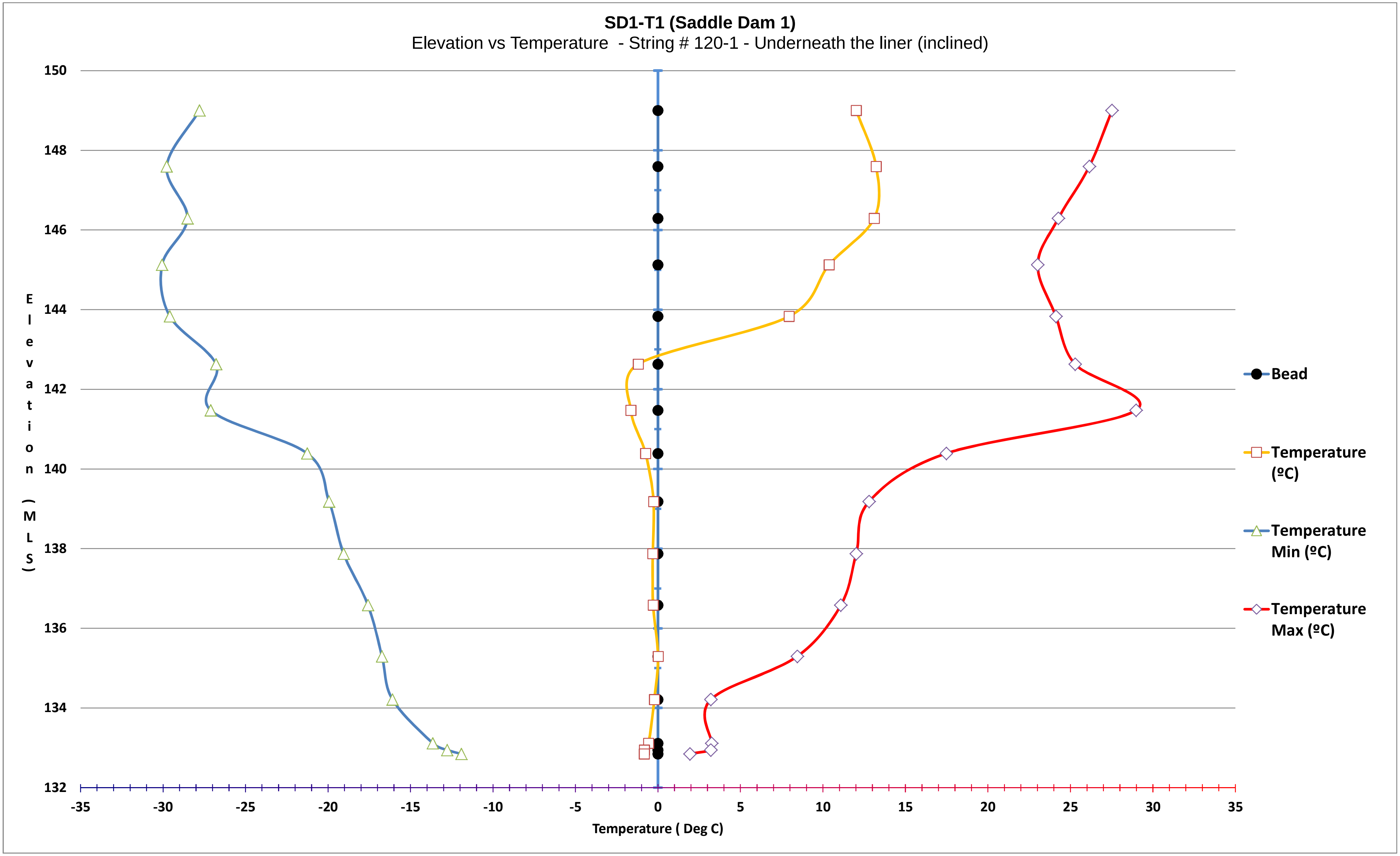
SD 1



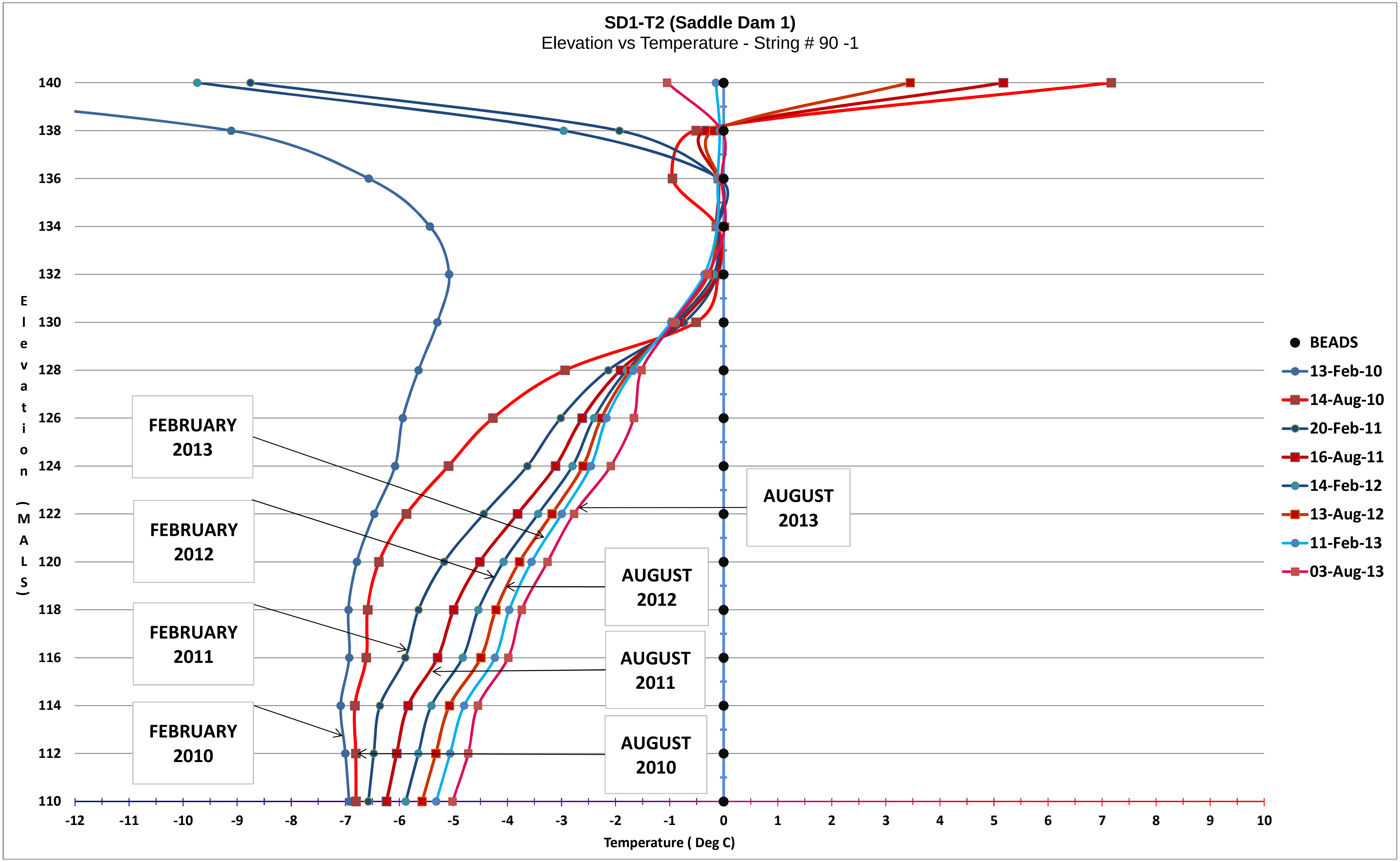
SECTION AT STA. 0+200.00
UPSTREAM
DOWNSTREAM
COARSE FILTER (0–6")
FINE FILTER (0–3/4")
LLDPE LINER AND GEOTEXTILE
15m (MIN.)
ROCKFILL
ORIGINAL GROUND
EXCAVATION LIMIT
ICE–POOR TILL
OR BEDROCK
STRIPPED TO FROZEN GROUND
ELEVATION, m
T1
T2
T3
T4

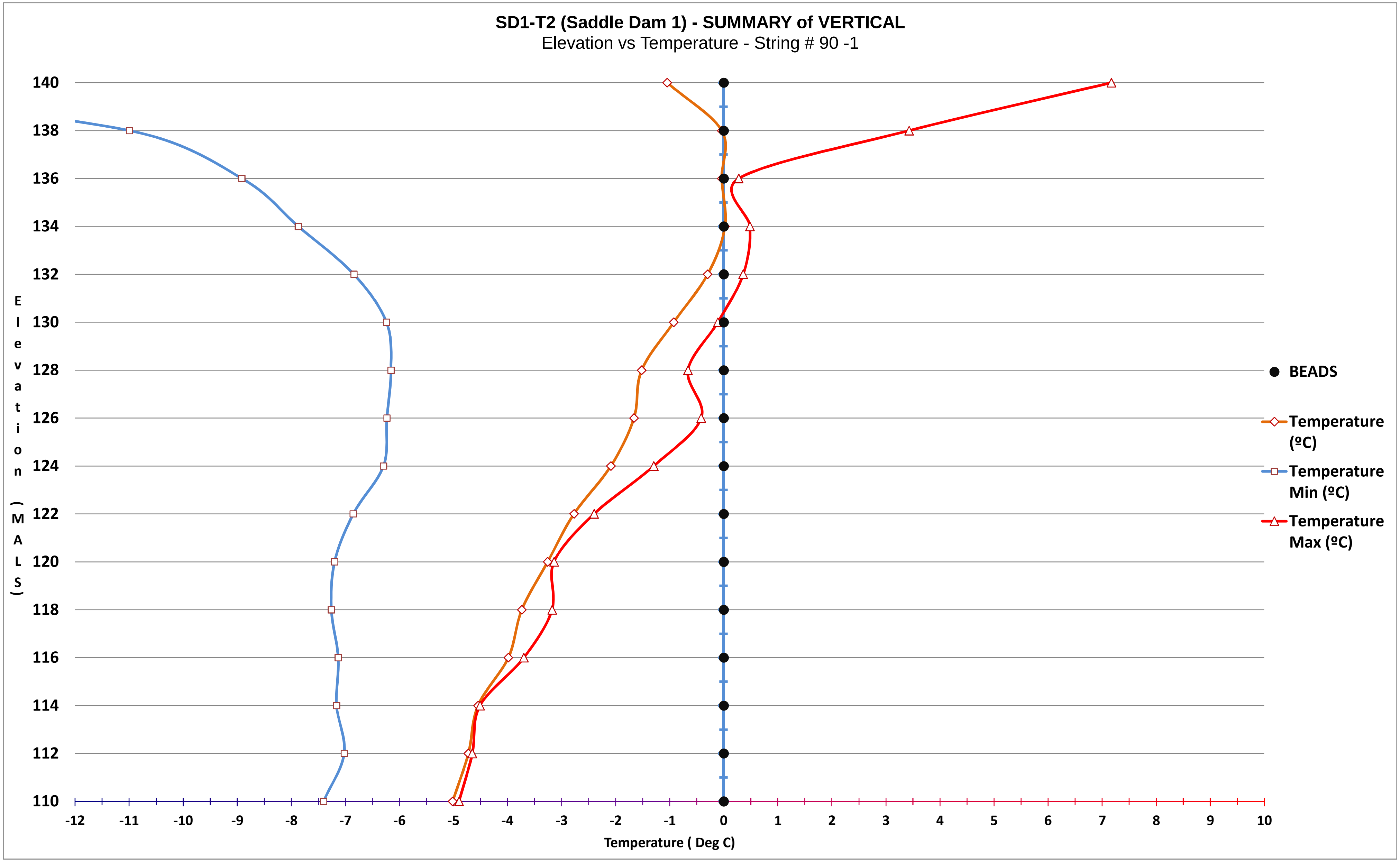


SD1-T1 (Saddle Dam 1)
Elevation vs Temperature - String # 120-1 - Underneath the liner (inclined)
FEB 2013
FEB 2012
FEB 2011
FEB 2010
AUGUST 2013
AUGUST 2012
AUGUST 2011
AUGUST 2010
Elevation (MLS)
Temperature (Deg C)
09-Feb-10
10-Aug-10
20-Feb-11
16-Aug-11
14-Feb-12
16-Aug-12
03-Aug-13
11-Feb-13

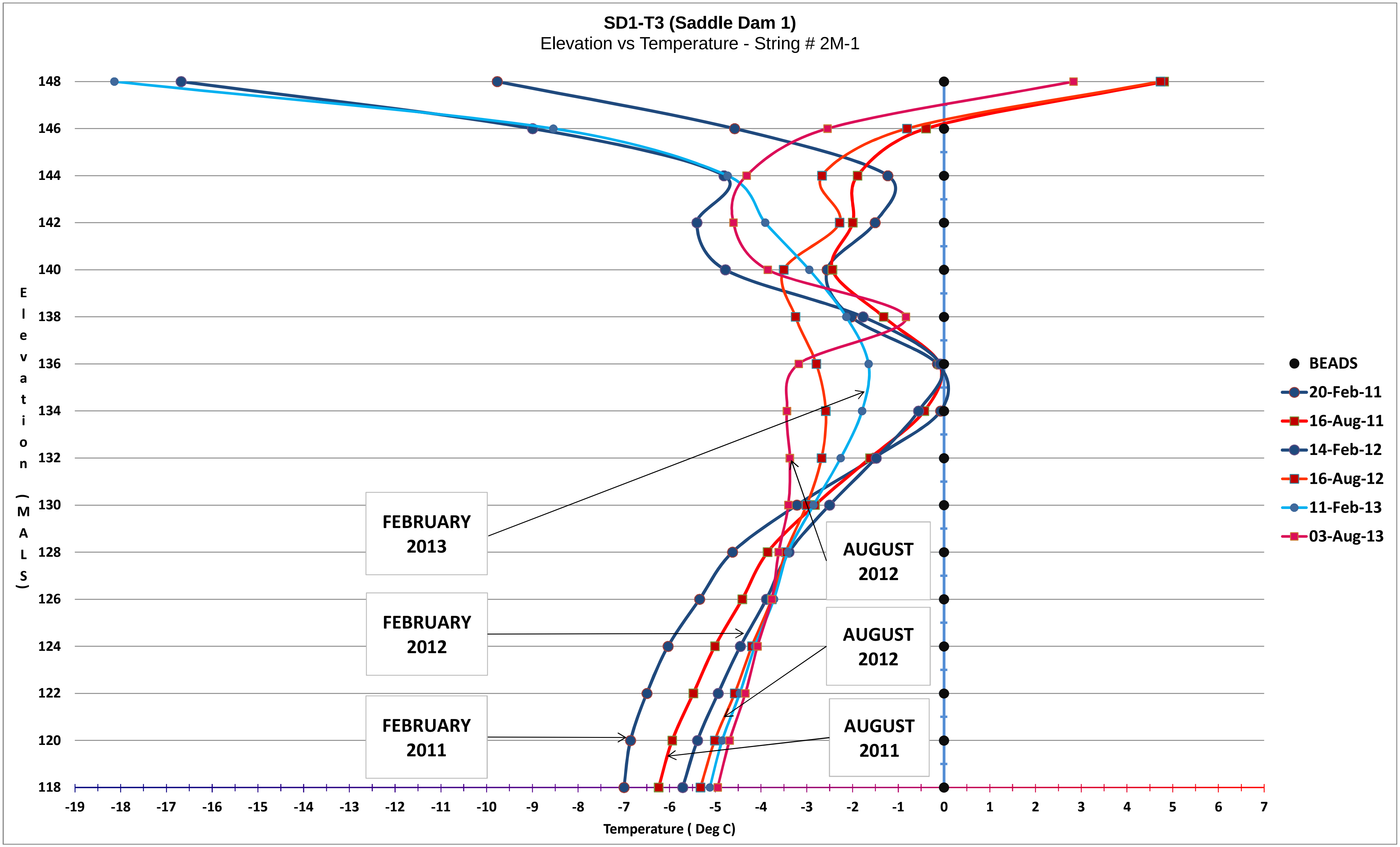


SD1-T1 (Saddle Dam 1)
Elevation vs Temperature - String # 120-1 - Underneath the liner (inclined)
Elevation (MLS)
150
148
146
144
142
140
138
136
134
132
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
Temperature (Deg C)
Bead
Temperature (ºC)
Temperature Min (ºC)
Temperature Max (ºC)

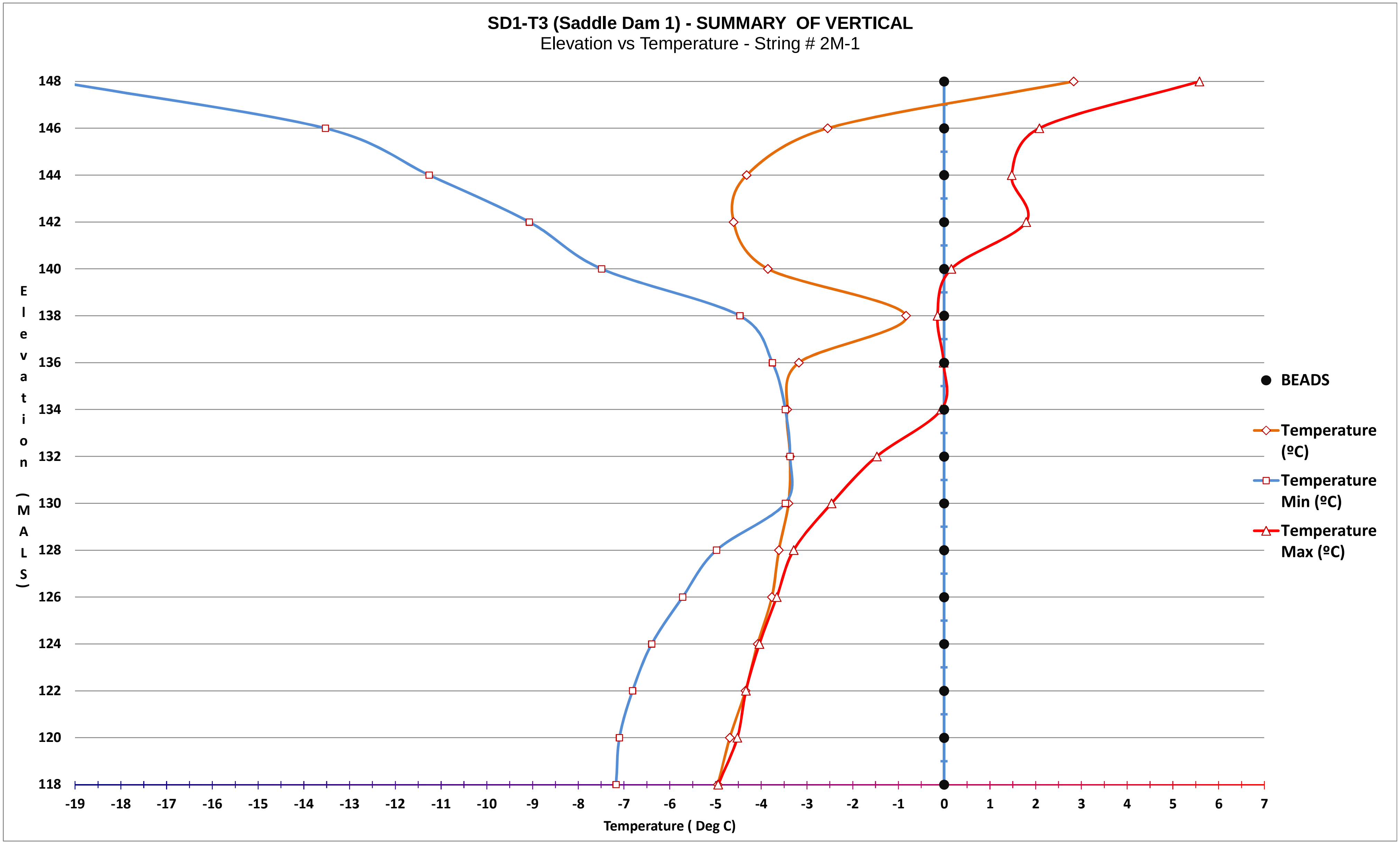

SD1-T2 (Saddle Dam 1)
Elevation vs Temperature - String # 90 -1
Elevation (MASL)
Temperature (Deg C)
140
138
136
134
132
130
128
126
124
122
120
118
116
114
112
110
-12
-11
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
9
10
FEBRUARY 2013
FEBRUARY 2012
FEBRUARY 2011
FEBRUARY 2010
AUGUST 2013
AUGUST 2012
AUGUST 2011
AUGUST 2010
BEADS
13-Feb-10
14-Aug-10
20-Feb-11
16-Aug-11
14-Feb-12
13-Aug-12
11-Feb-13
03-Aug-13



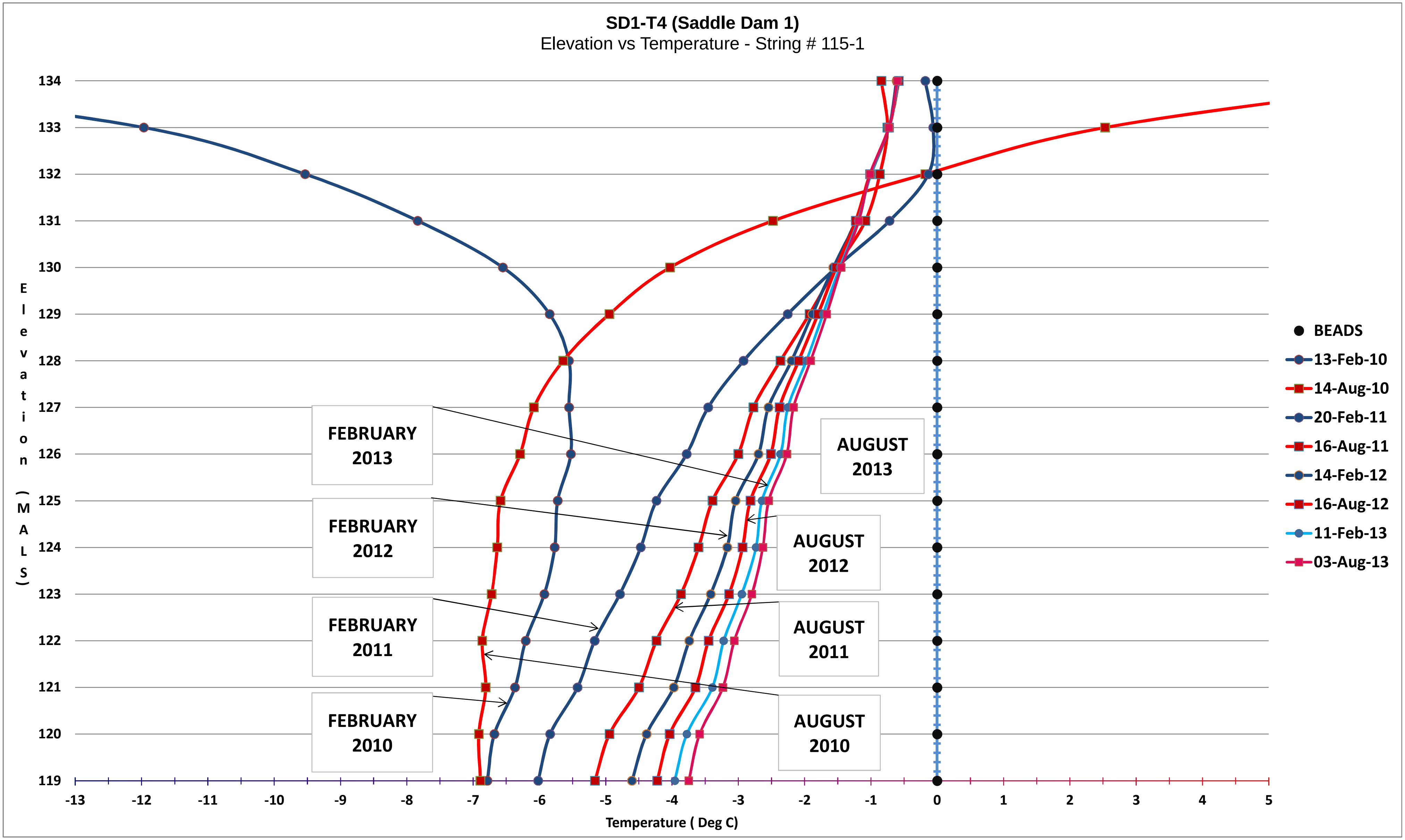
SD1-T2 (Saddle Dam 1) - SUMMARY of VERTICAL
Elevation vs Temperature - String # 90 -1
Elevation (MASL)
140
138
136
134
132
130
128
126
124
122
120
118
116
114
112
110
-12
-11
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
9
10
Temperature (Deg C)
BEADS
Temperature (ºC)
Temperature Min (ºC)
Temperature Max (ºC)

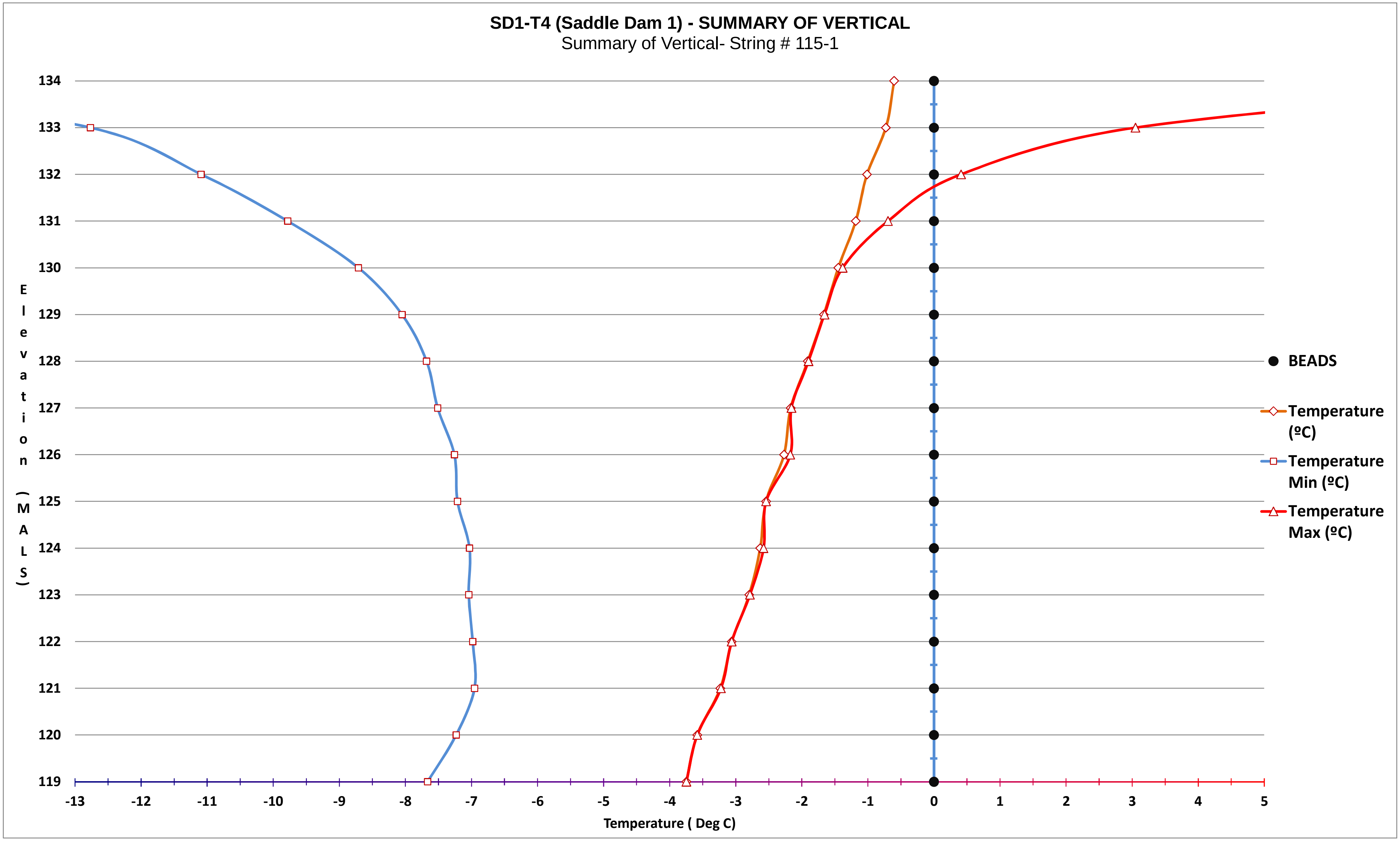


SD1-T3 (Saddle Dam 1)
Elevation vs Temperature - String # 2M-1
Elevation (MALS)
Temperature (Deg C)
148
146
144
142
140
138
136
134
132
130
128
126
124
122
120
118
-19
-18
-17
-16
-15
-14
-13
-12
-11
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
0
1
2
3
4
5
6
7
FEBRUARY 2013
FEBRUARY 2012
FEBRUARY 2011
AUGUST 2012
AUGUST 2012
AUGUST 2011
BEADS
20-Feb-11
16-Aug-11
14-Feb-12
16-Aug-12
11-Feb-13
03-Aug-13

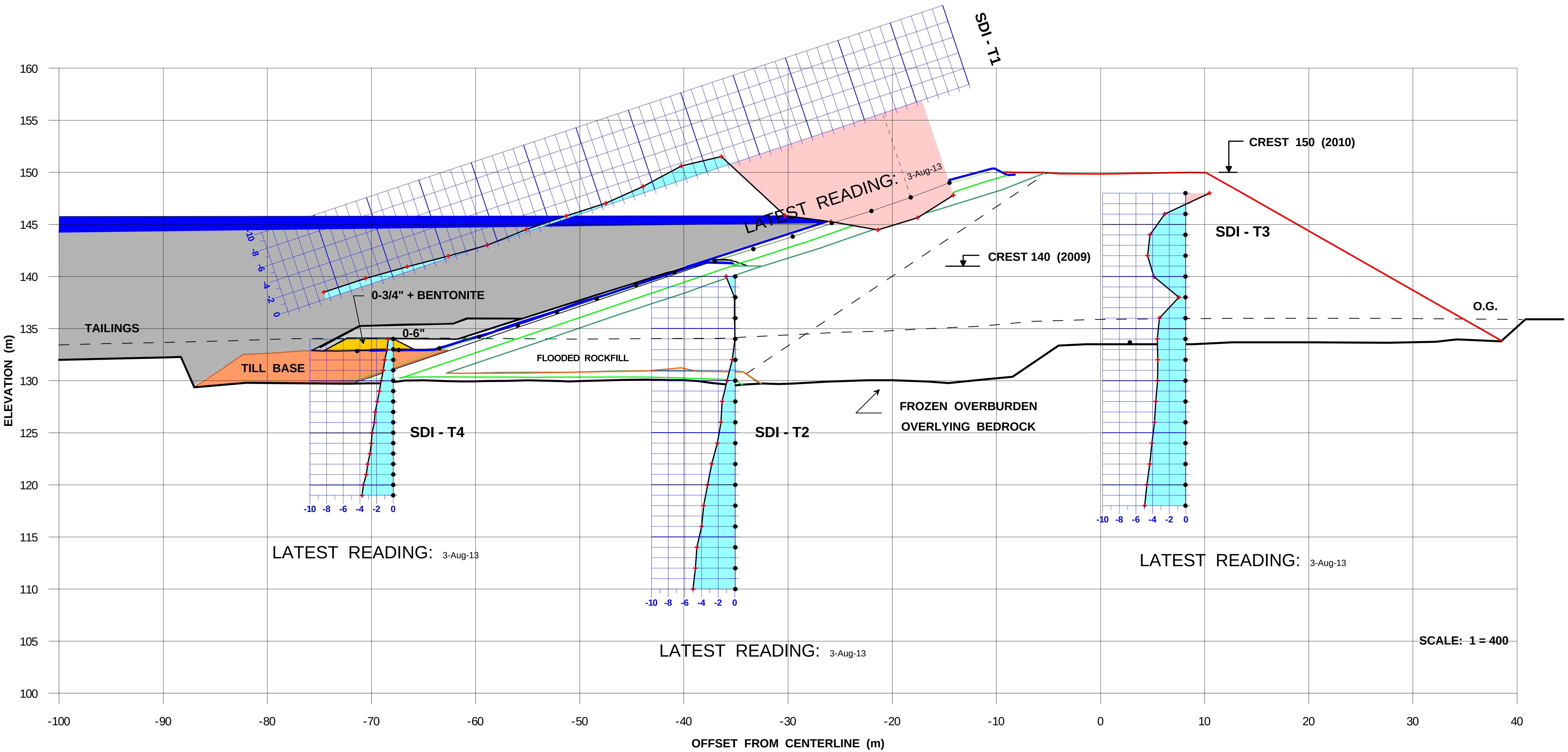


SD1-T3 (Saddle Dam 1) - SUMMARY OF VERTICAL
Elevation vs Temperature - String # 2M-1
Elevation (MASL)
148
146
144
142
140
138
136
134
132
130
128
126
124
122
120
118
-19
-18
-17
-16
-15
-14
-13
-12
-11
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
0
1
2
3
4
5
6
7
Temperature (Deg C)
BEADS
Temperature (ºC)
Temperature Min (ºC)
Temperature Max (ºC)


SD1-T4 (Saddle Dam 1)
Elevation vs Temperature - String # 115-1
Elevation (MALS)
134
133
132
131
130
129
128
127
126
125
124
123
122
121
120
119
-13
-12
-11
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
0
1
2
3
4
5
Temperature (Deg C)
FEBRUARY 2013
FEBRUARY 2012
FEBRUARY 2011
FEBRUARY 2010
AUGUST 2013
AUGUST 2012
AUGUST 2011
AUGUST 2010
BEADS
13-Feb-10
14-Aug-10
20-Feb-11
16-Aug-11
14-Feb-12
16-Aug-12
11-Feb-13
03-Aug-13



SD1-T4 (Saddle Dam 1) - SUMMARY OF VERTICAL
Summary of Vertical- String # 115-1
Elevation (MALS)
134
133
132
131
130
129
128
127
126
125
124
123
122
121
120
119
-13
-12
-11
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
0
1
2
3
4
5
Temperature (Deg C)
BEADS
Temperature (ºC)
Temperature Min (ºC)
Temperature Max (ºC)



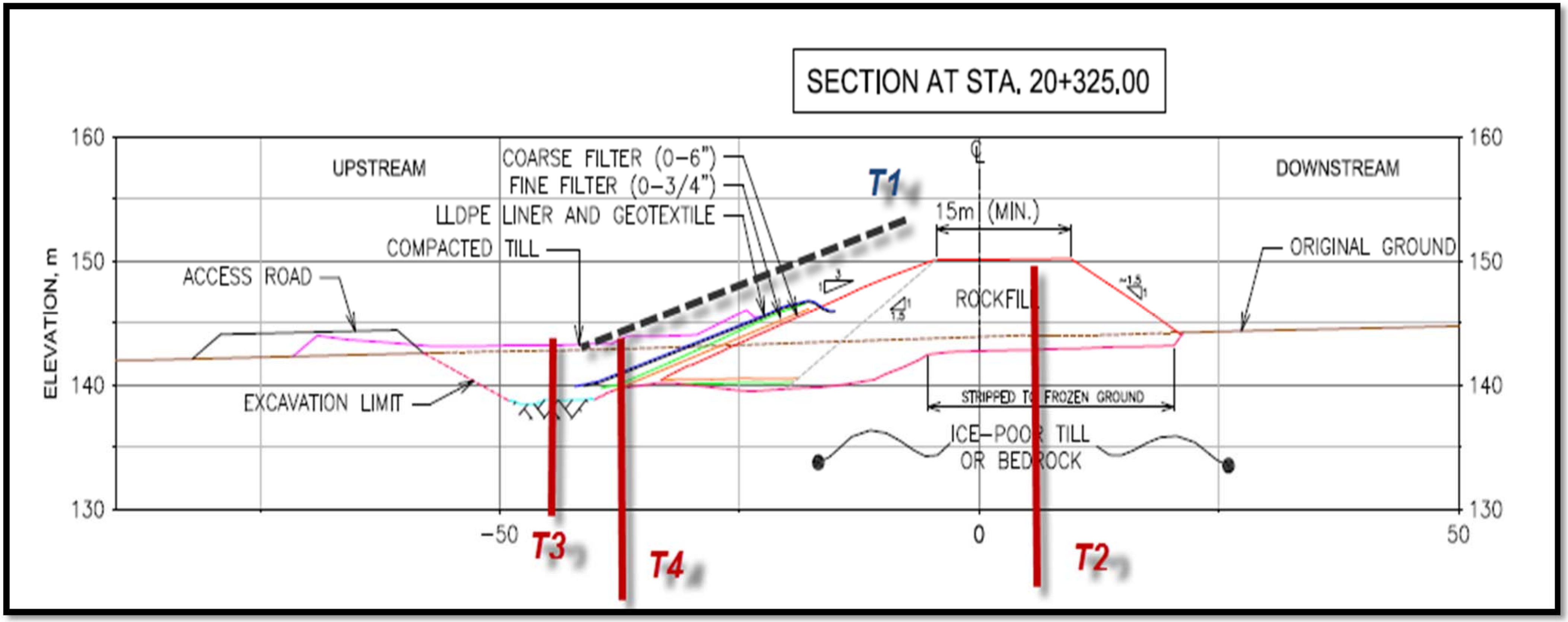
AGNICO-EAGLE MINES LIMITED - MEADOWBANK DIVISION

AGNICO EAGLE - MEADOWBANK MINE
SADDLE DAM 1 - GROUND TEMPERATURE MONITORING
LATEST TEMPERATURE PROFILES - AUGUST 2013
TAILINGS ELEVATION: 145 MASL WATER POND ELEVATION: 145.6 MASL

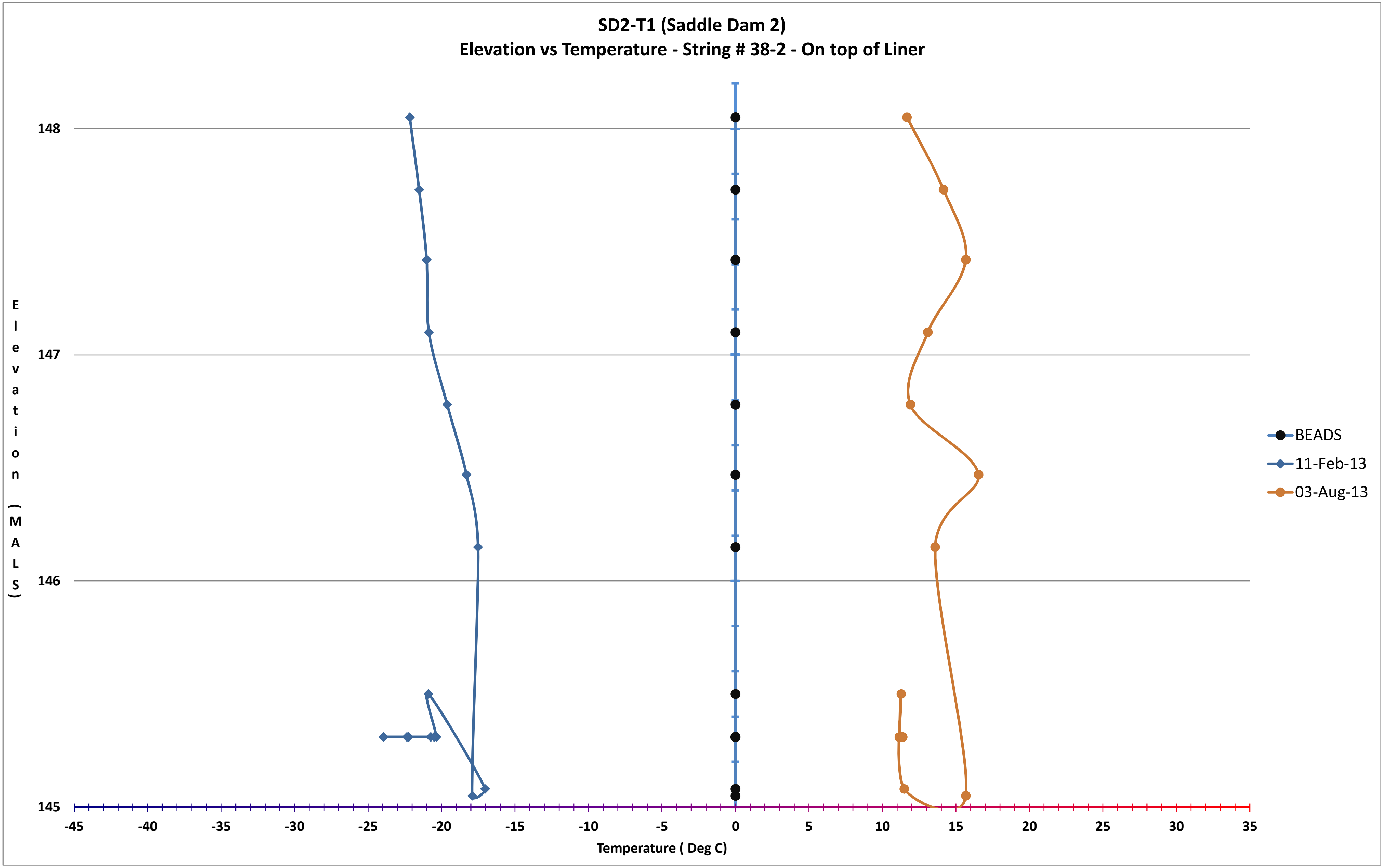
FIGURE 1

SD1 - TEMPERATURE MONITORING - FULL SECTION.GRF

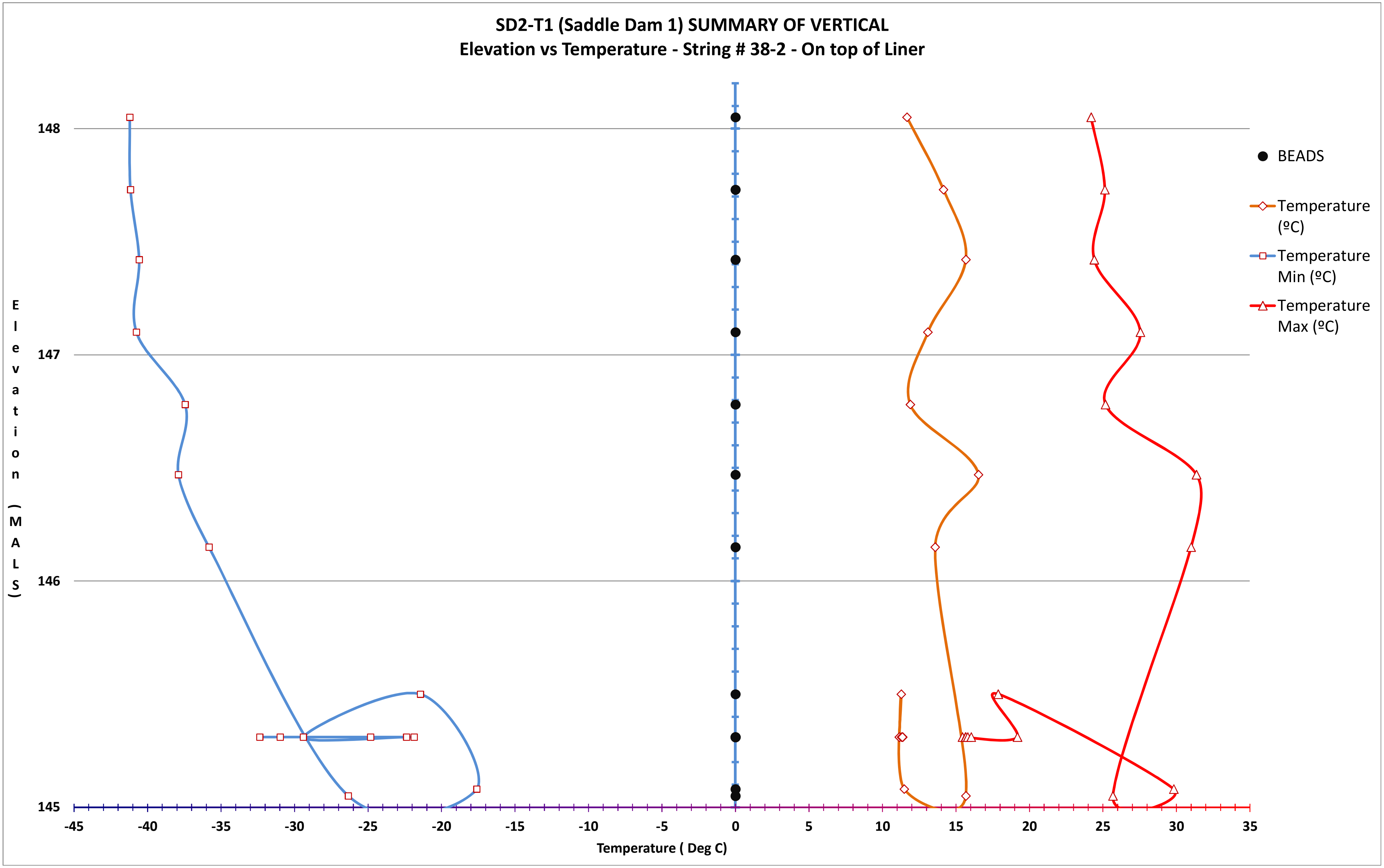
SD 2



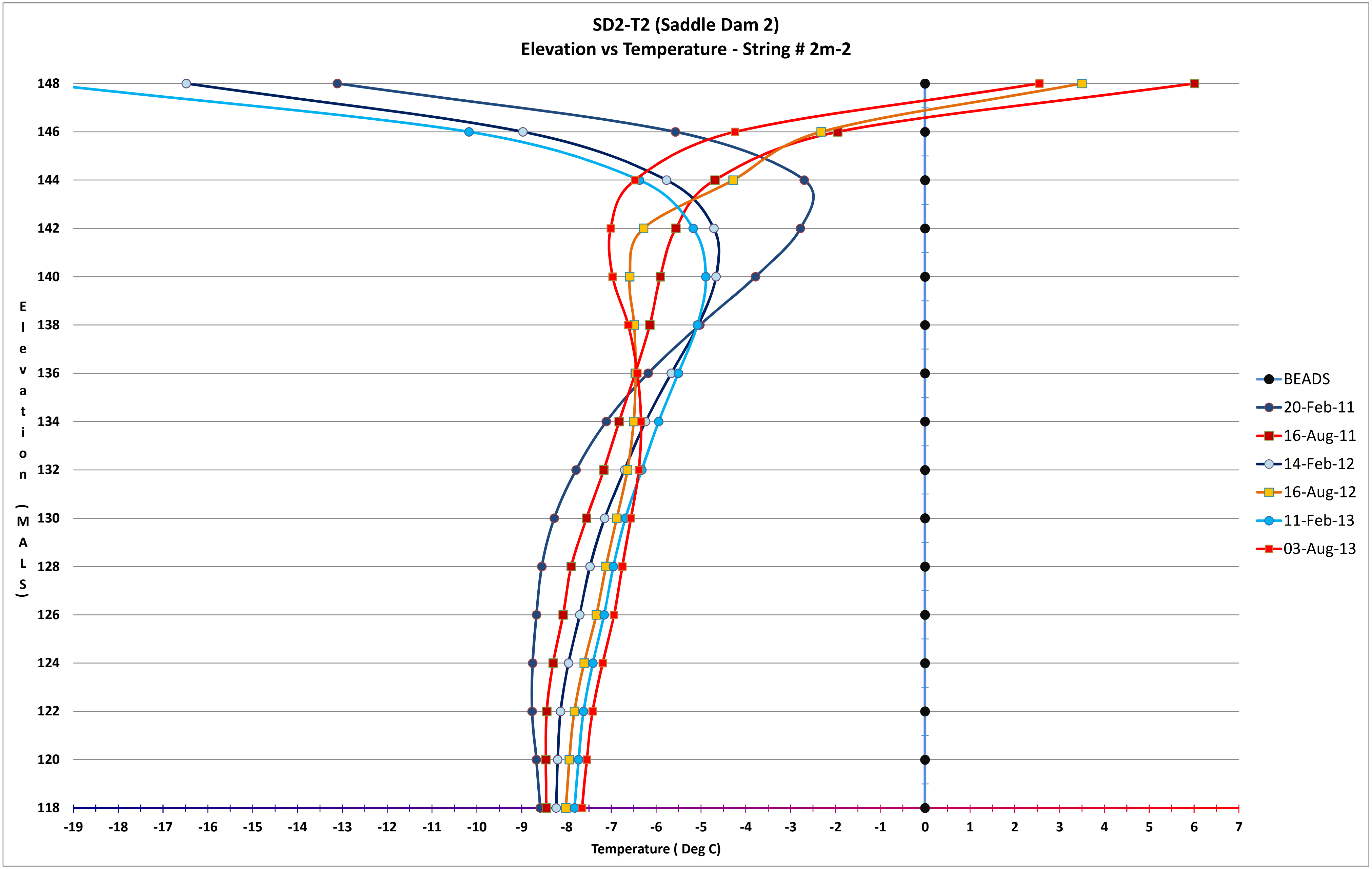
SECTION AT STA. 20+325.00
160
150
140
130
ELEVATION, m
UPSTREAM
DOWNSTREAM
COARSE FILTER (0–6")
FINE FILTER (0–3/4")
LLDPE LINER AND GEOTEXTILE
COMPACTED TILL
ACCESS ROAD
EXCAVATION LIMIT
15m (MIN.)
ORIGINAL GROUND
ROCKFILL
STRIPPED TO FROZEN GROUND
ICE–POOR TILL
OR BEDROCK
T1
T2
T3
T4
−50
0
50



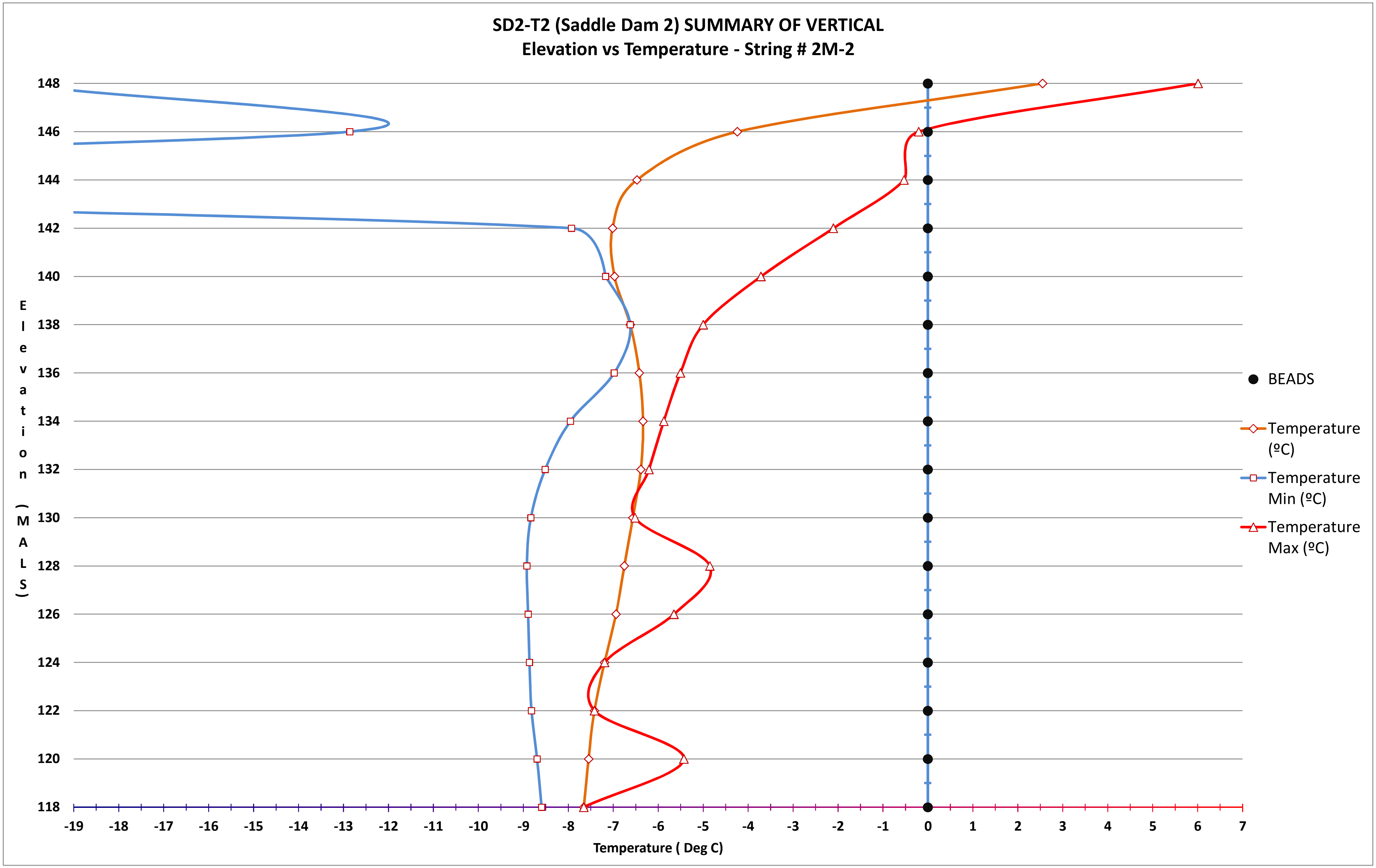
SD2-T1 (Saddle Dam 2)
Elevation vs Temperature - String # 38-2 - On top of Liner
Elevation (MALS)
148
147
146
145
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
Temperature (Deg C)
BEADS
11-Feb-13
03-Aug-13



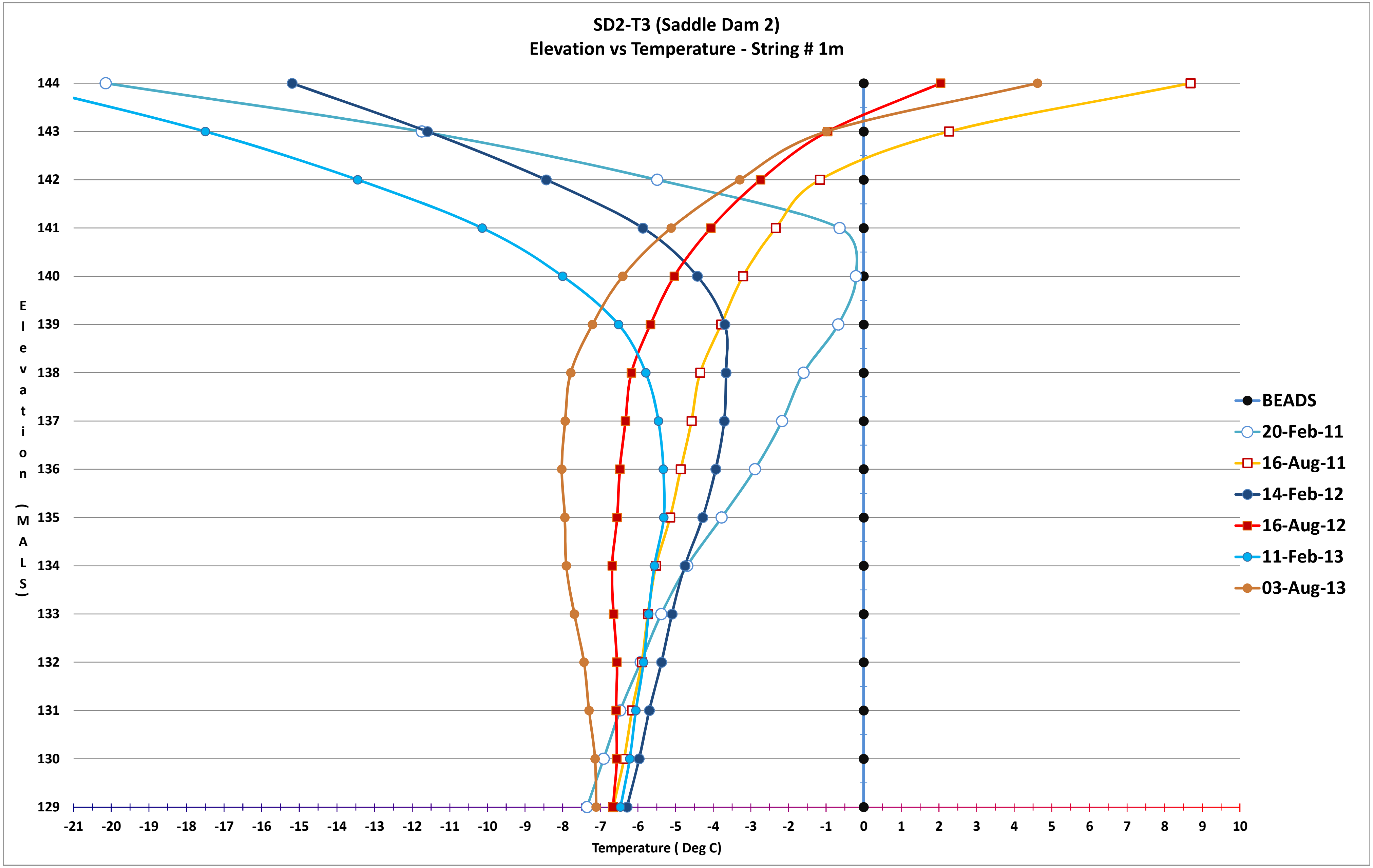
SD2-T1 (Saddle Dam 1) SUMMARY OF VERTICAL
Elevation vs Temperature - String # 38-2 - On top of Liner
Elevation (MALS)
148
147
146
145
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
Temperature (Deg C)
BEADS
Temperature (ºC)
Temperature Min (ºC)
Temperature Max (ºC)



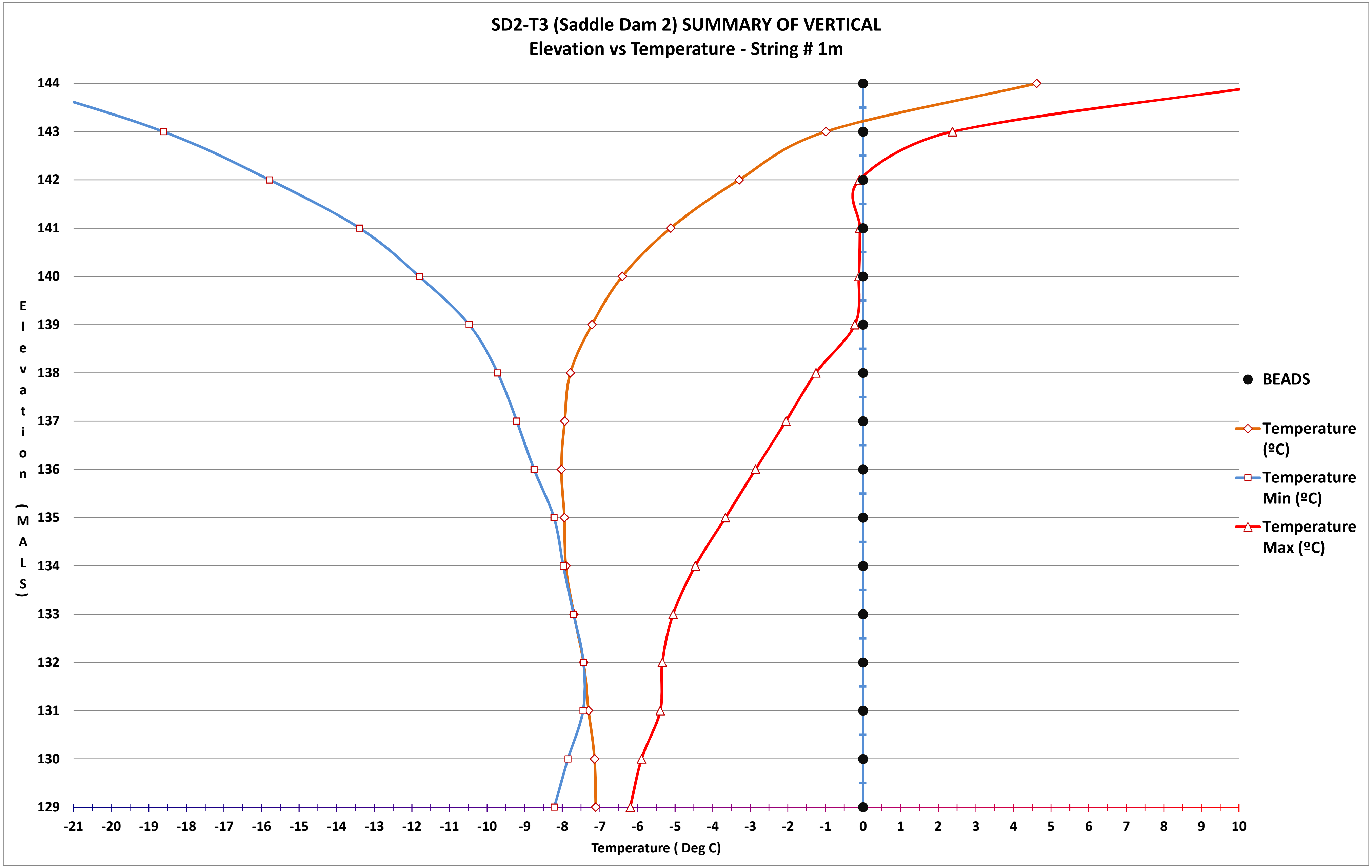
SD2-T2 (Saddle Dam 2)
Elevation vs Temperature - String # 2m-2
Elevation (MALS)
148
146
144
142
140
138
136
134
132
130
128
126
124
122
120
118
-19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7
Temperature (Deg C)
BEADS
20-Feb-11
16-Aug-11
14-Feb-12
16-Aug-12
11-Feb-13
03-Aug-13



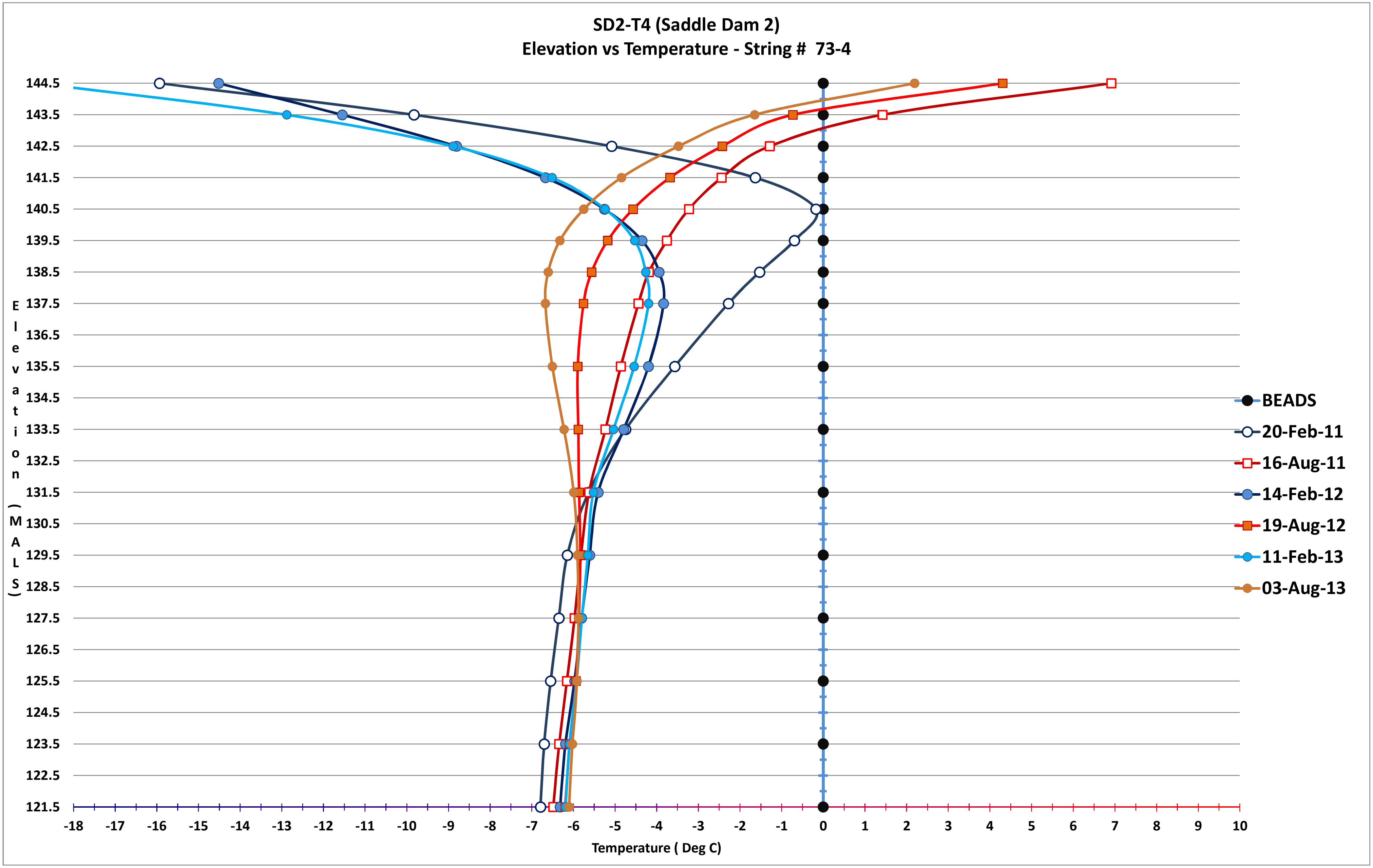
SD2-T2 (Saddle Dam 2) SUMMARY OF VERTICAL
Elevation vs Temperature - String # 2M-2
Elevation (MALS)
148
146
144
142
140
138
136
134
132
130
128
126
124
122
120
118
-19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7
Temperature (Deg C)
BEADS
Temperature (ºC)
Temperature Min (ºC)
Temperature Max (ºC)



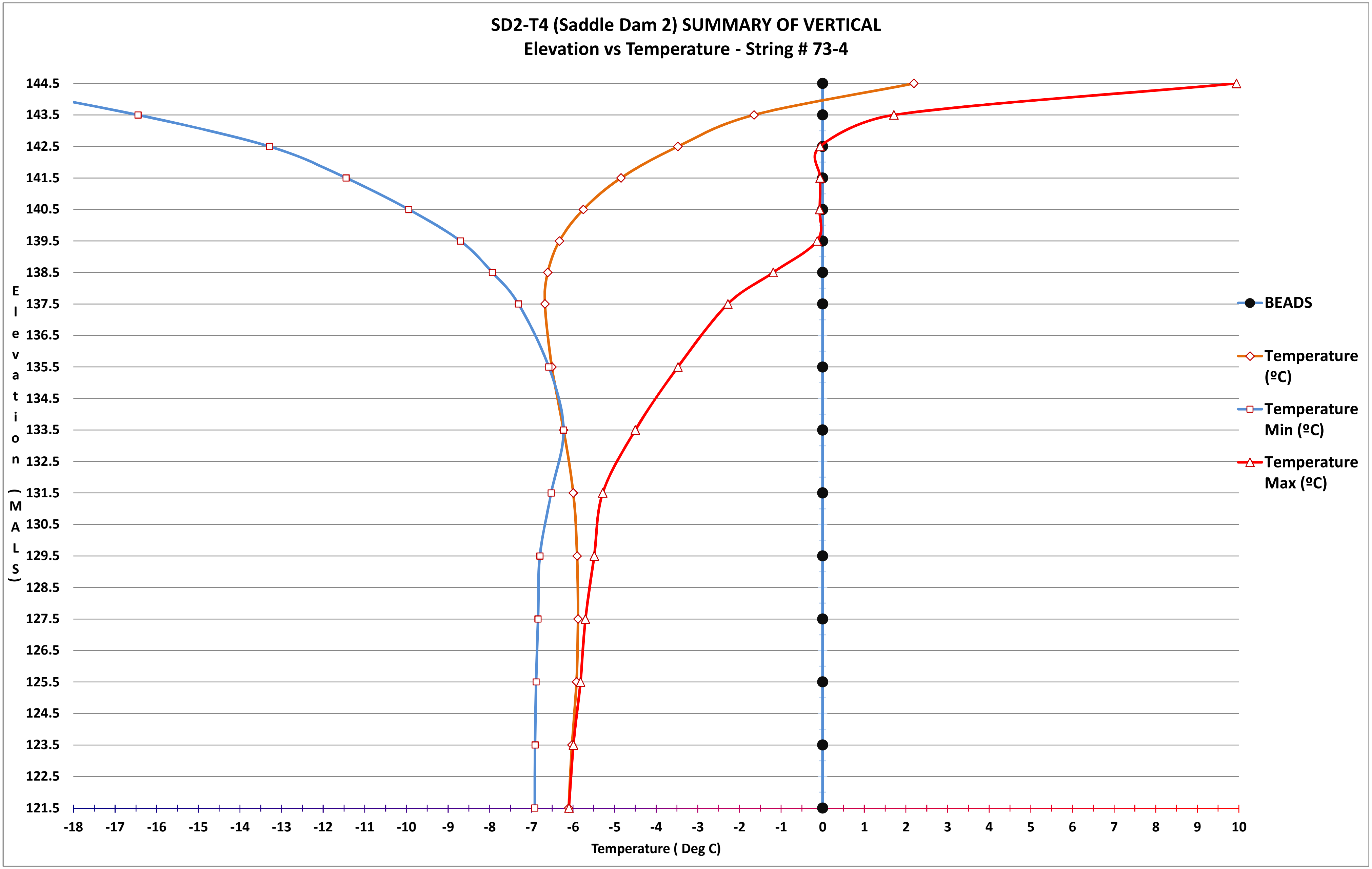
SD2-T3 (Saddle Dam 2)
Elevation vs Temperature - String # 1m
Elevation (MALS)
144
143
142
141
140
139
138
137
136
135
134
133
132
131
130
129
-21 -20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10
Temperature (Deg C)
BEADS
20-Feb-11
16-Aug-11
14-Feb-12
16-Aug-12
11-Feb-13
03-Aug-13



SD2-T3 (Saddle Dam 2) SUMMARY OF VERTICAL
Elevation vs Temperature - String # 1m
Elevation (MALS)
144
143
142
141
140
139
138
137
136
135
134
133
132
131
130
129
-21 -20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10
Temperature (Deg C)
BEADS
Temperature (ºC)
Temperature Min (ºC)
Temperature Max (ºC)

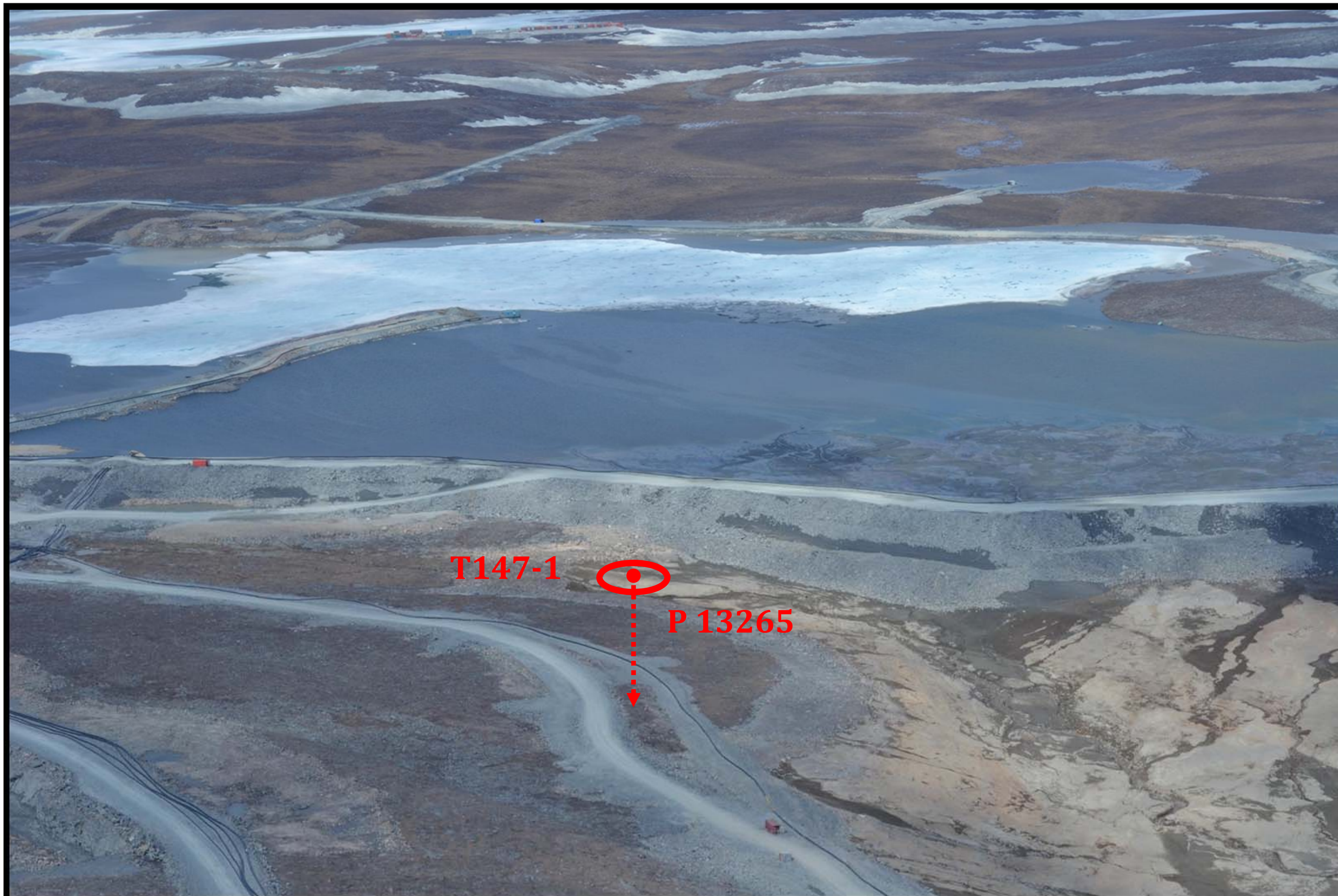


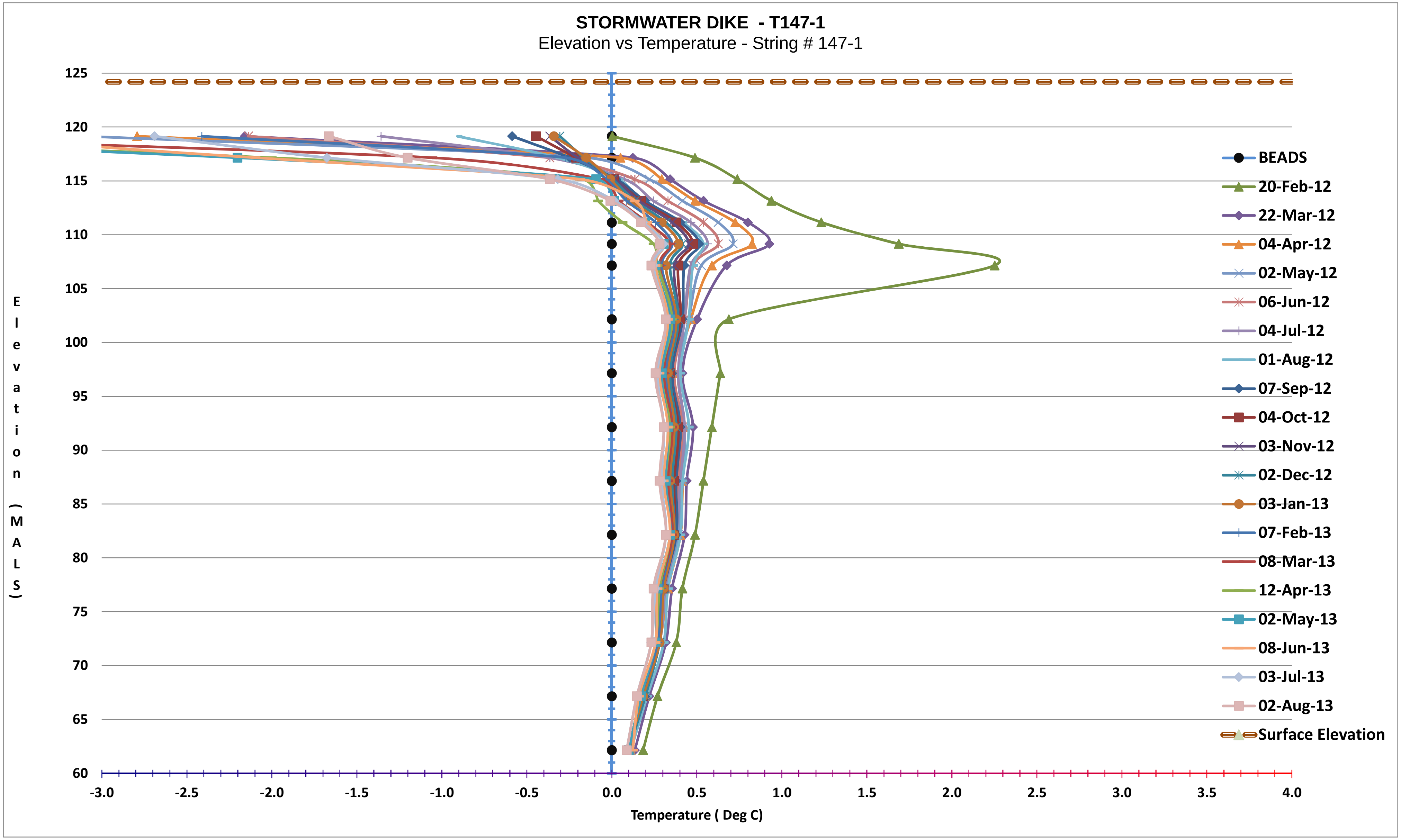
SD2-T4 (Saddle Dam 2)
Elevation vs Temperature - String # 73-4
Elevation (MASL)
144.5
143.5
142.5
141.5
140.5
139.5
138.5
137.5
136.5
135.5
134.5
133.5
132.5
131.5
130.5
129.5
128.5
127.5
126.5
125.5
124.5
123.5
122.5
121.5
-18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10
Temperature (Deg C)
BEADS
20-Feb-11
16-Aug-11
14-Feb-12
19-Aug-12
11-Feb-13
03-Aug-13



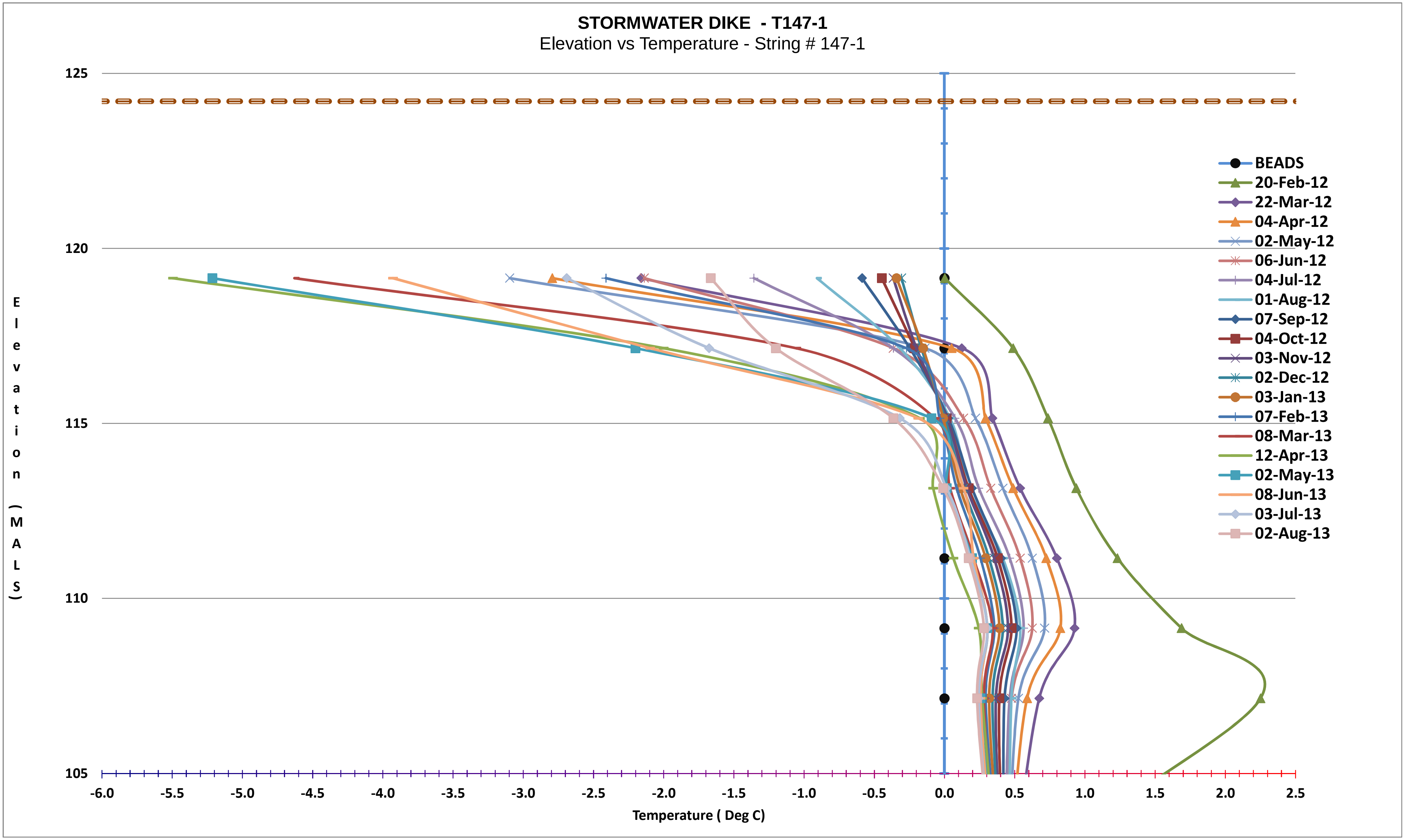
SD2-T4 (Saddle Dam 2) SUMMARY OF VERTICAL
Elevation vs Temperature - String # 73-4
144.5
143.5
142.5
141.5
140.5
139.5
138.5
137.5
136.5
135.5
134.5
133.5
132.5
131.5
130.5
129.5
128.5
127.5
126.5
125.5
124.5
123.5
122.5
121.5
Elevation (MALS)
-18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10
Temperature (Deg C)
BEADS
Temperature (ºC)
Temperature Min (ºC)
Temperature Max (ºC)

Stormwater





STORMWATER DIKE - T147-1
Elevation vs Temperature - String # 147-1
Elevation (MALS)
Temperature (Deg C)
125
120
115
110
105
100
95
90
85
80
75
70
65
60
-3.0
-2.5
-2.0
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
BEADS
20-Feb-12
22-Mar-12
04-Apr-12
02-May-12
06-Jun-12
04-Jul-12
01-Aug-12
07-Sep-12
04-Oct-12
03-Nov-12
02-Dec-12
03-Jan-13
07-Feb-13
08-Mar-13
12-Apr-13
02-May-13
08-Jun-13
03-Jul-13
02-Aug-13
Surface Elevation



STORMWATER DIKE - T147-1
Elevation vs Temperature - String # 147-1
125
120
115
110
105
Elevation (MALS)
-6.0
-5.5
-5.0
-4.5
-4.0
-3.5
-3.0
-2.5
-2.0
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
Temperature (Deg C)
BEADS
20-Feb-12
22-Mar-12
04-Apr-12
02-May-12
06-Jun-12
04-Jul-12
01-Aug-12
07-Sep-12
04-Oct-12
03-Nov-12
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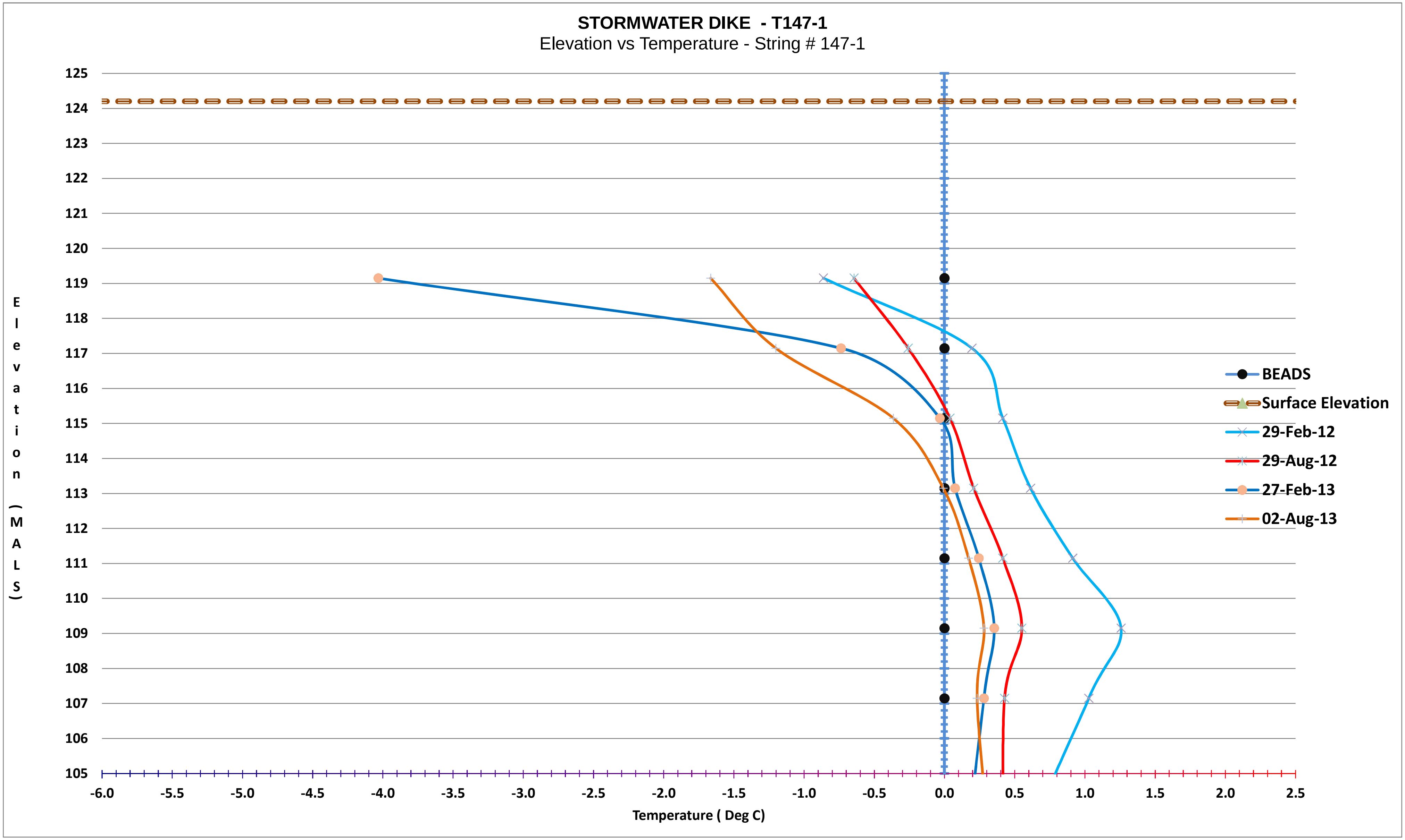
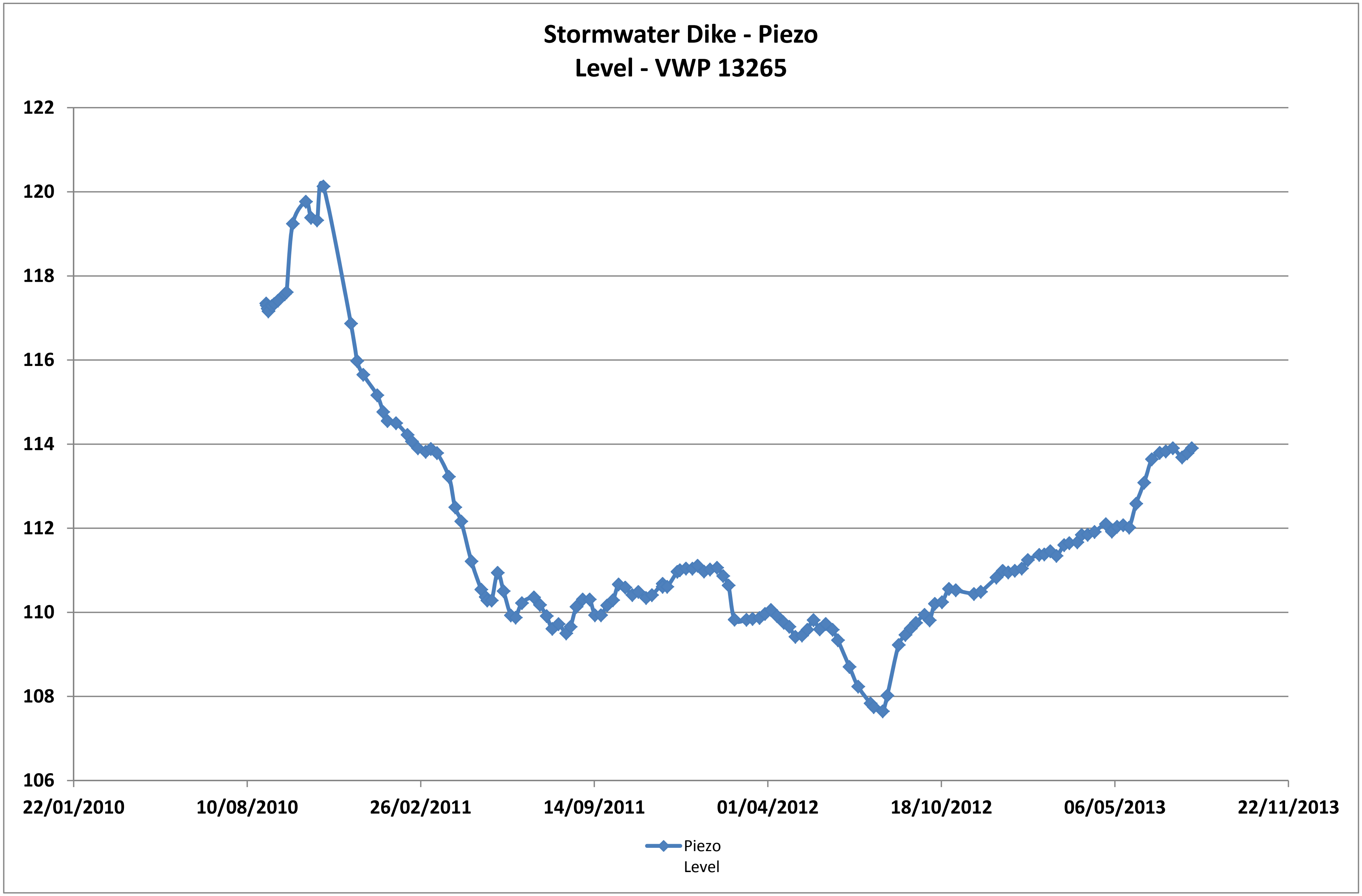
03-Jul-13
02-Aug-13

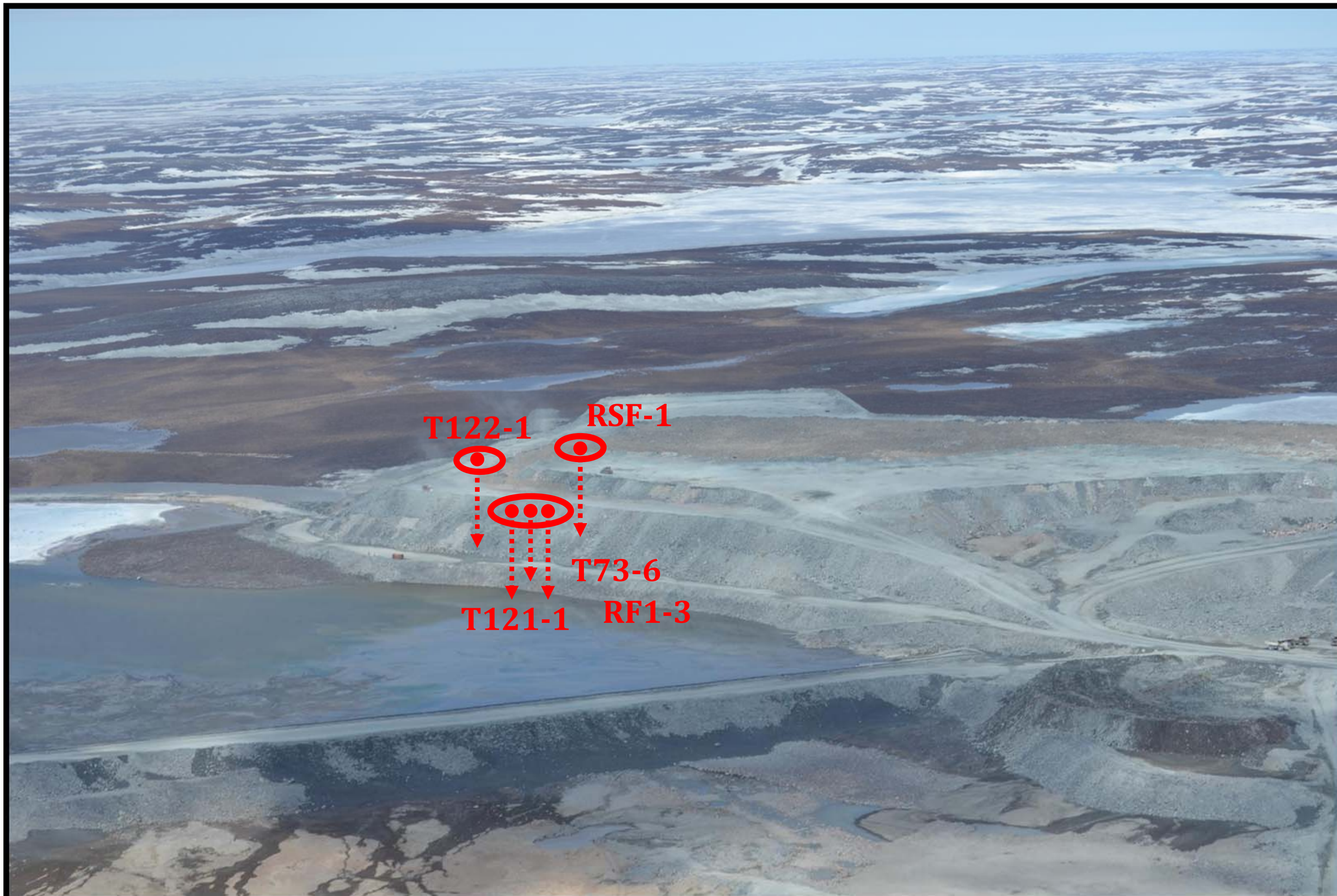


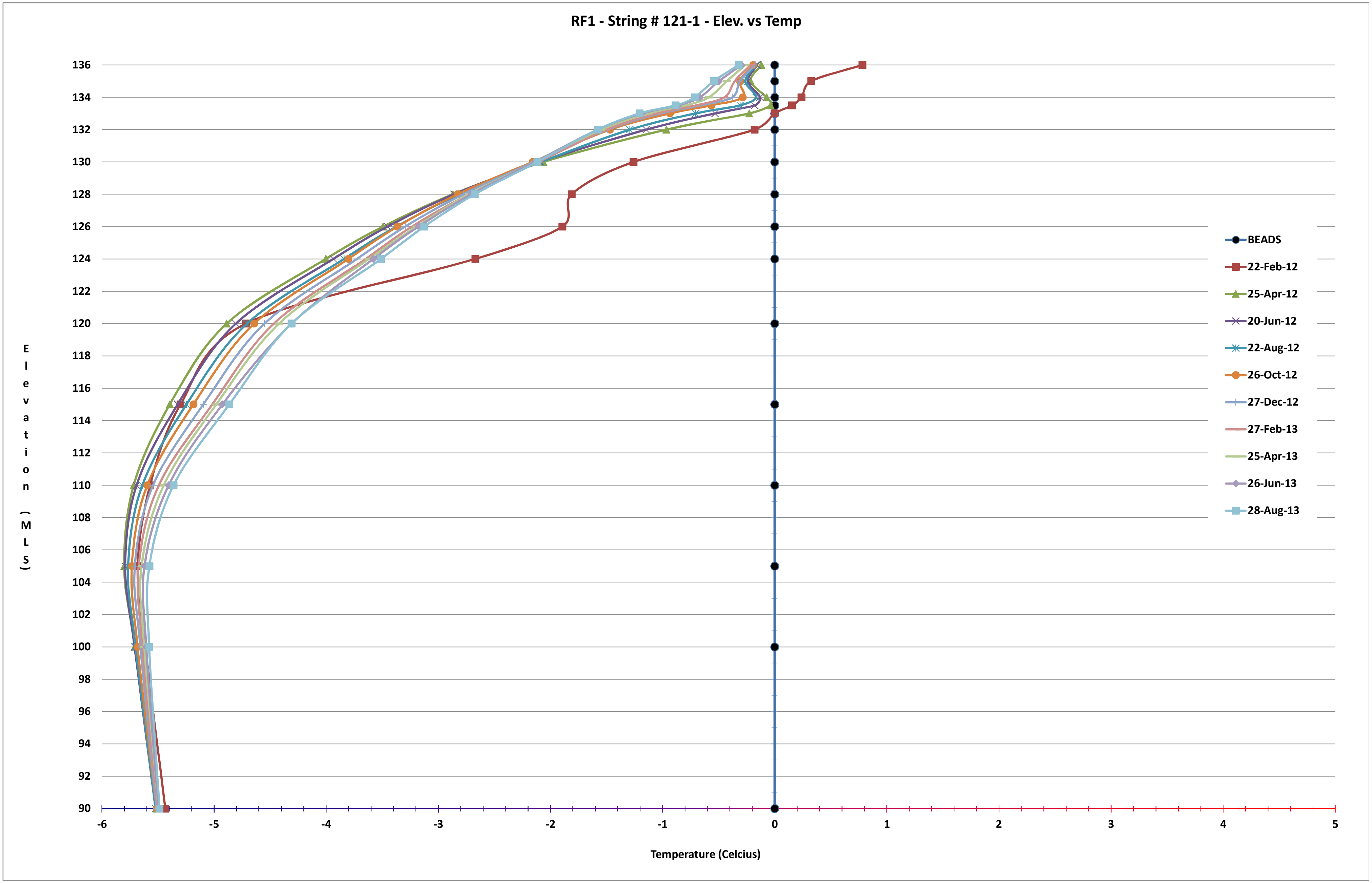
STORMWATER DIKE - T147-1
Elevation vs Temperature - String # 147-1
Elevation (MALS)
Temperature (Deg C)
125
124
123
122
121
120
119
118
117
116
115
114
113
112
111
110
109
108
107
106
105
-6.0
-5.5
-5.0
-4.5
-4.0
-3.5
-3.0
-2.5
-2.0
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
BEADS
Surface Elevation
29-Feb-12
29-Aug-12
27-Feb-13
02-Aug-13

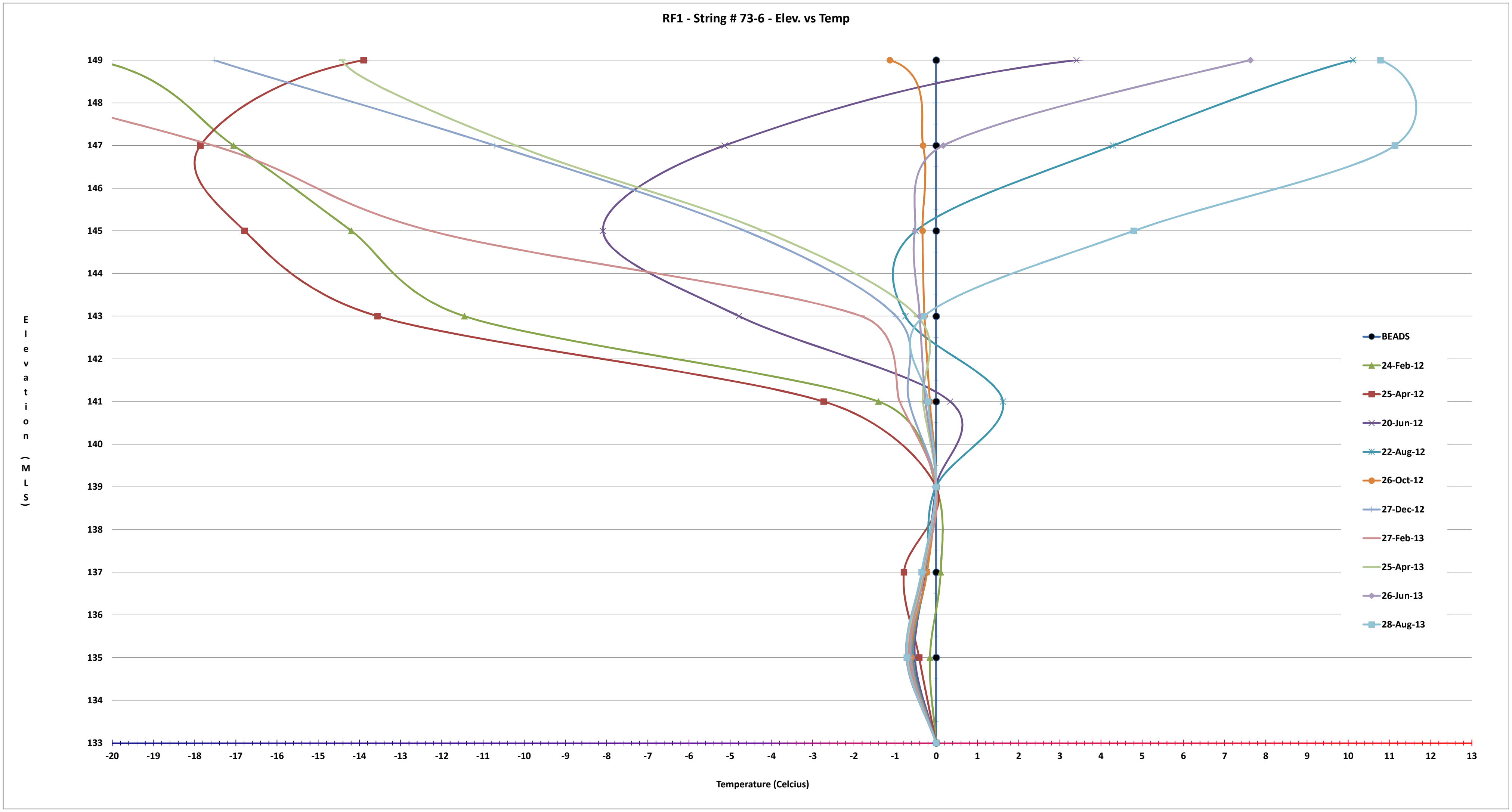


Stormwater Dike - Piezo
Level - VWP 13265
122
120
118
116
114
112
110
108
106
22/01/2010
10/08/2010
26/02/2011
14/09/2011
01/04/2012
18/10/2012
06/05/2013
22/11/2013
Piezo
Level

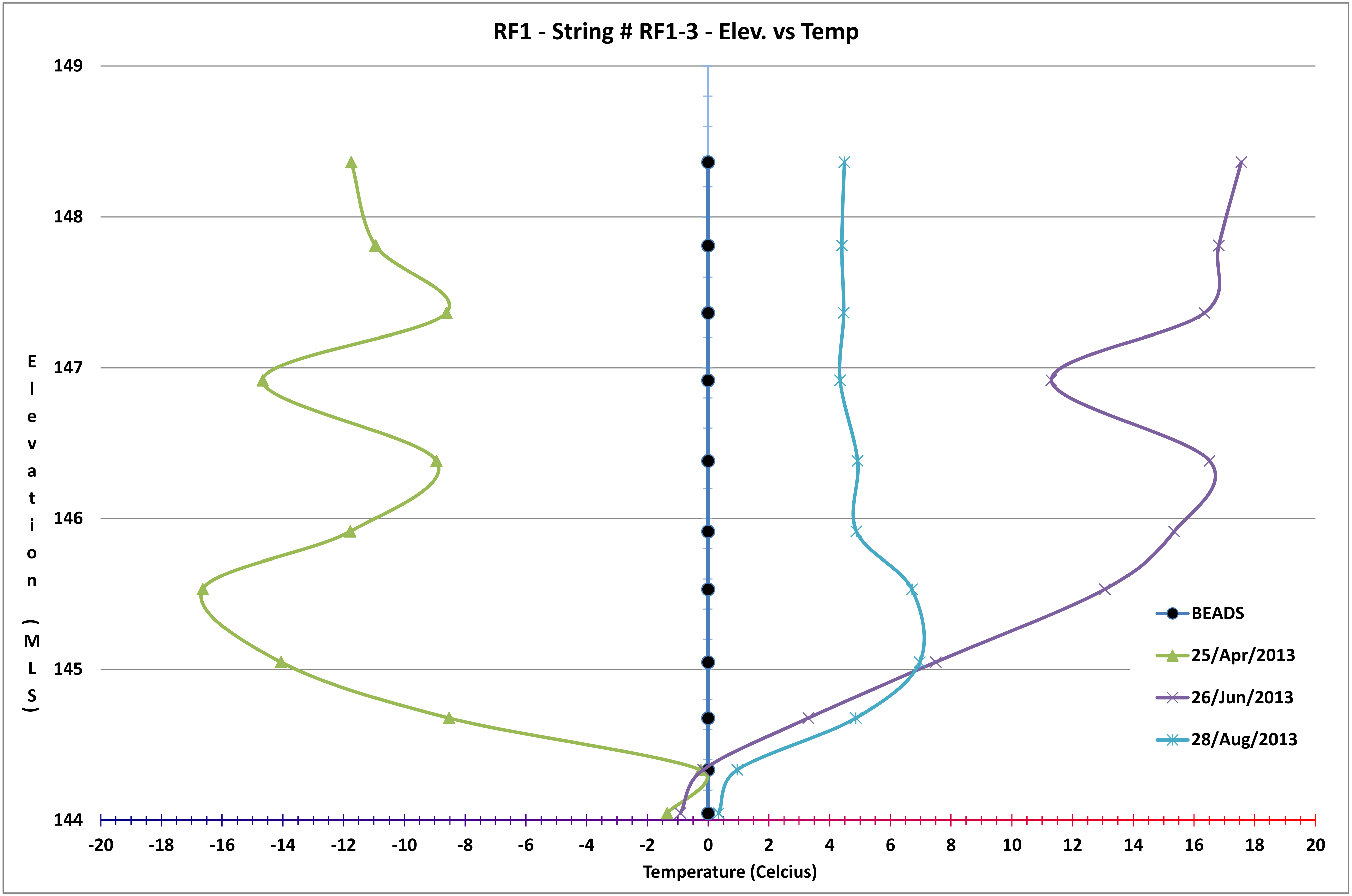
Waste Dump, RF1 and RF2



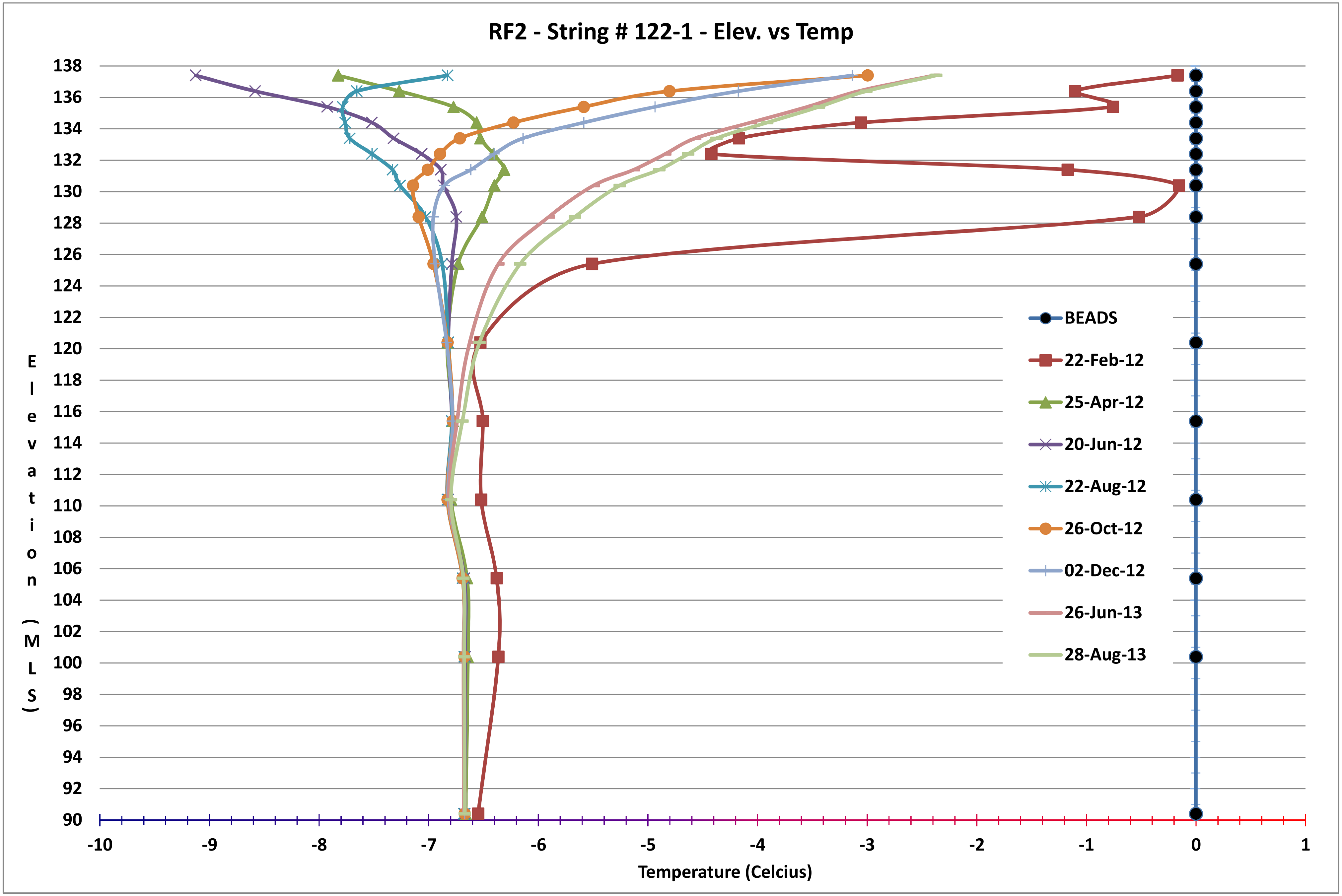

RF1 - String # 121-1 - Elev. vs Temp
Elevation (MSL)
Temperature (Celcius)
136
134
132
130
128
126
124
122
120
118
116
114
112
110
108
106
104
102
100
98
96
94
92
90
-6
-5
-4
-3
-2
-1
0
1
2
3
4
5
BEADS
22-Feb-12
25-Apr-12
20-Jun-12
22-Aug-12
26-Oct-12
27-Dec-12
27-Feb-13
25-Apr-13
26-Jun-13
28-Aug-13



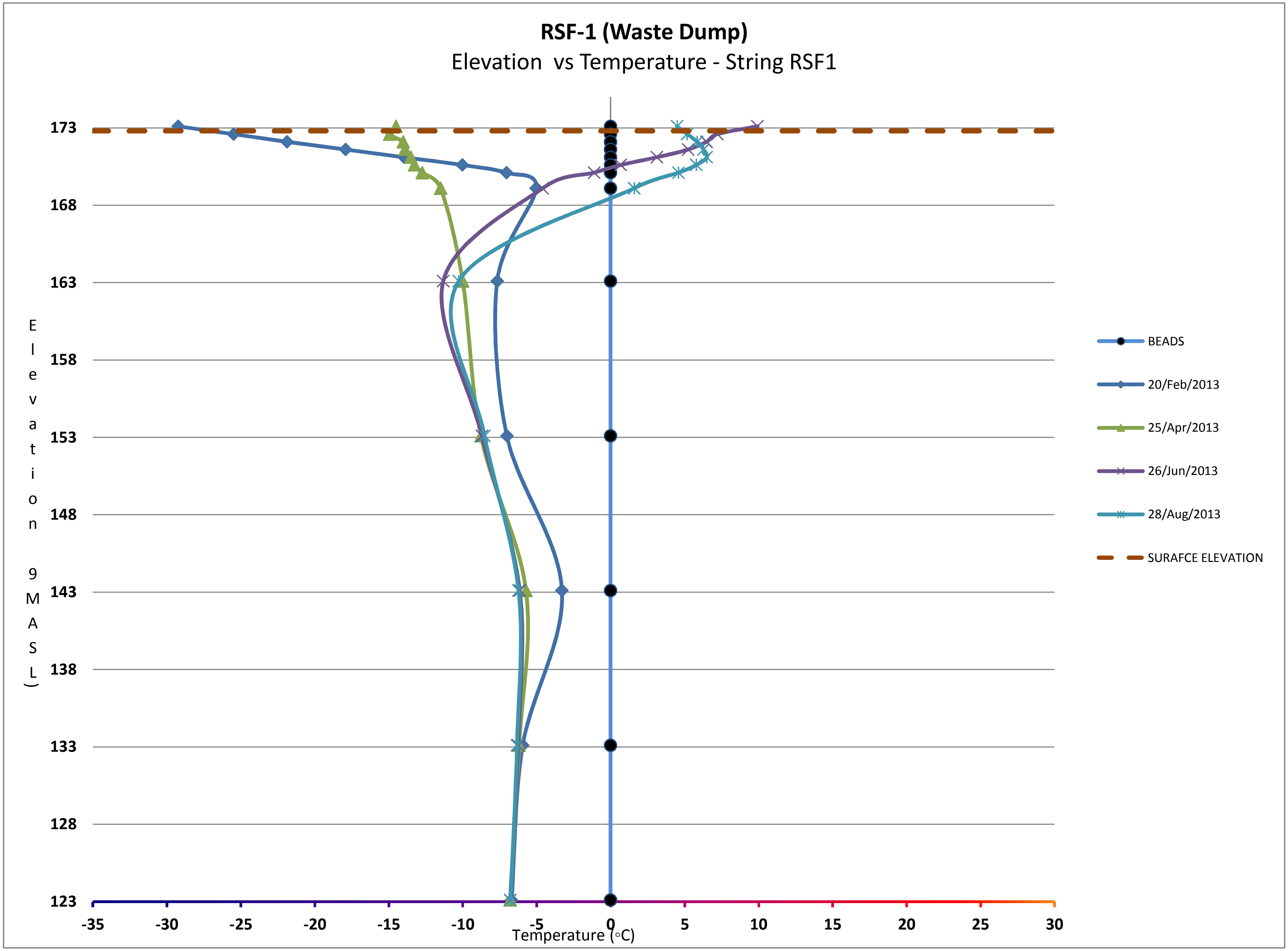
RF1 - String # 73-6 - Elev. vs Temp
Elevation (MLS)
149
148
147
146
145
144
143
142
141
140
139
138
137
136
135
134
133
-20
-19
-18
-17
-16
-15
-14
-13
-12
-11
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
9
10
11
12
13
Temperature (Celcius)
BEADS
24-Feb-12
25-Apr-12
20-Jun-12
22-Aug-12
26-Oct-12
27-Dec-12
27-Feb-13
25-Apr-13
26-Jun-13
28-Aug-13



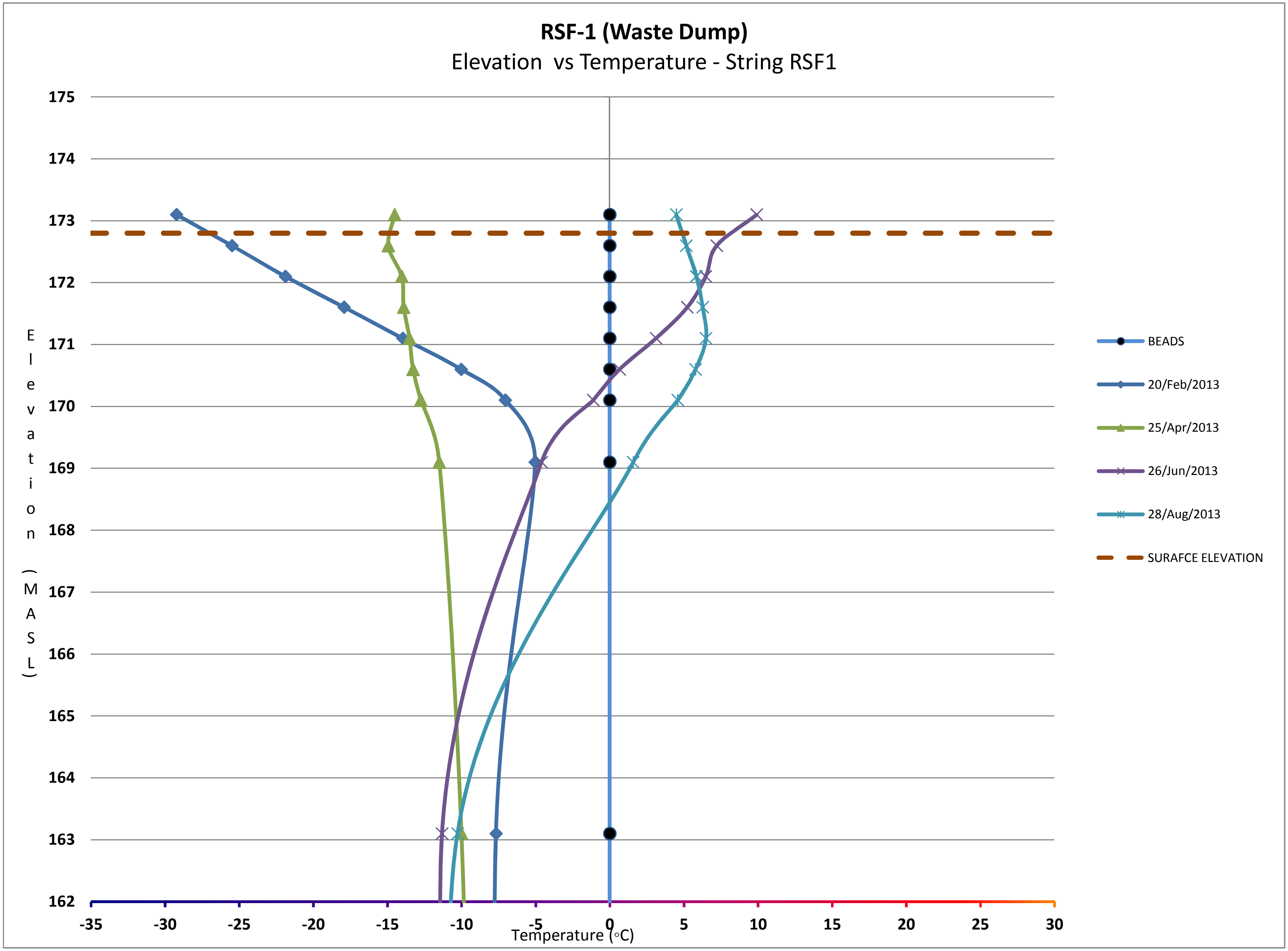
RF1 - String # RF1-3 - Elev. vs Temp
149
148
147
146
145
144
Elevation (MLS)
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
14
16
18
20
Temperature (Celcius)
BEADS
25/Apr/2013
26/Jun/2013
28/Aug/2013



RF2 - String # 122-1 - Elev. vs Temp
Elevation (MSL)
138
136
134
132
130
128
126
124
122
120
118
116
114
112
110
108
106
104
102
100
98
96
94
92
90
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
0
1
Temperature (Celcius)
BEADS
22-Feb-12
25-Apr-12
20-Jun-12
22-Aug-12
26-Oct-12
02-Dec-12
26-Jun-13
28-Aug-13

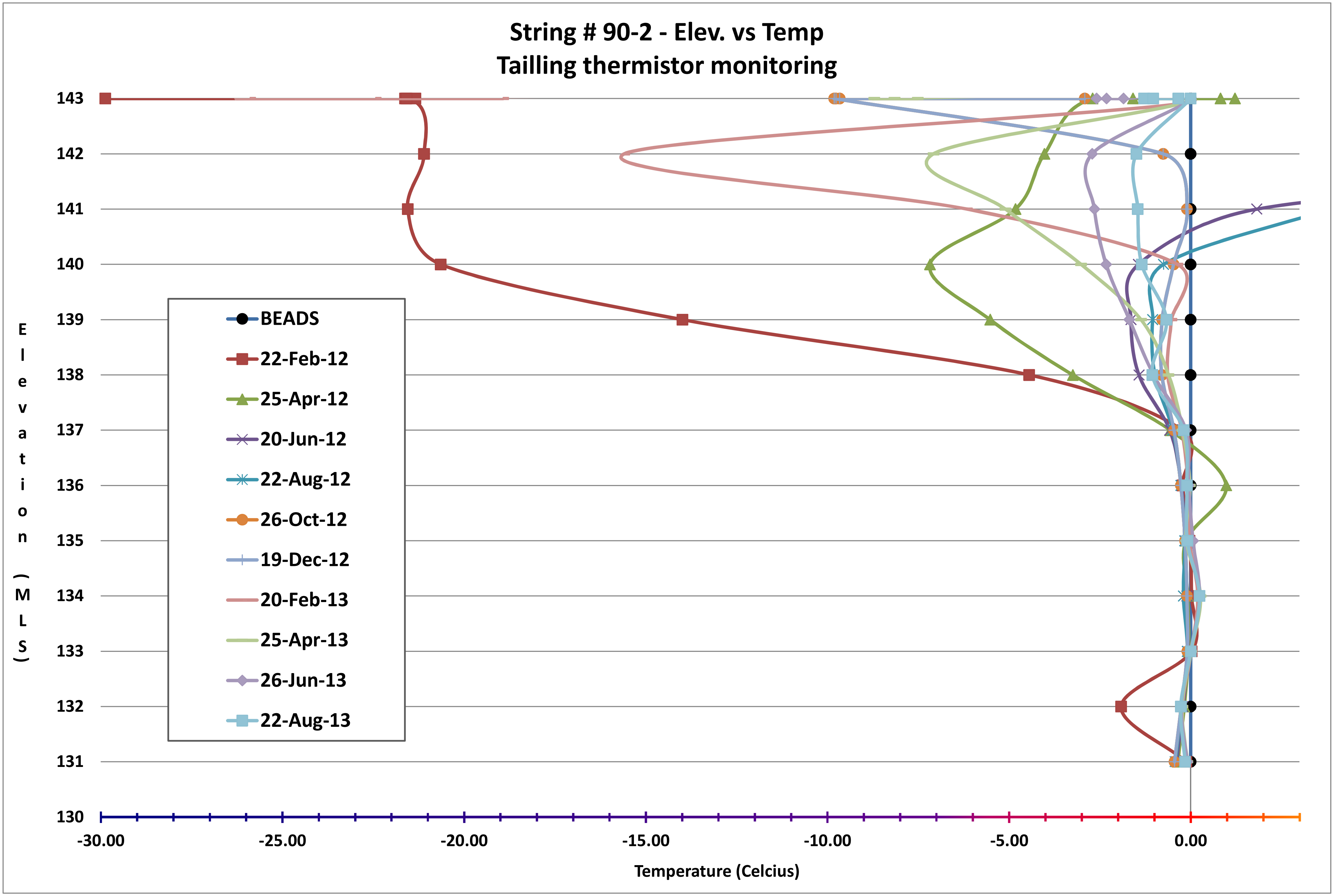


RSF-1 (Waste Dump)
Elevation vs Temperature - String RSF1
Elevation 9MASL)
173
168
163
158
153
148
143
138
133
128
123
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
Temperature (◦C)
BEADS
20/Feb/2013
25/Apr/2013
26/Jun/2013
28/Aug/2013
SURAFCE ELEVATION



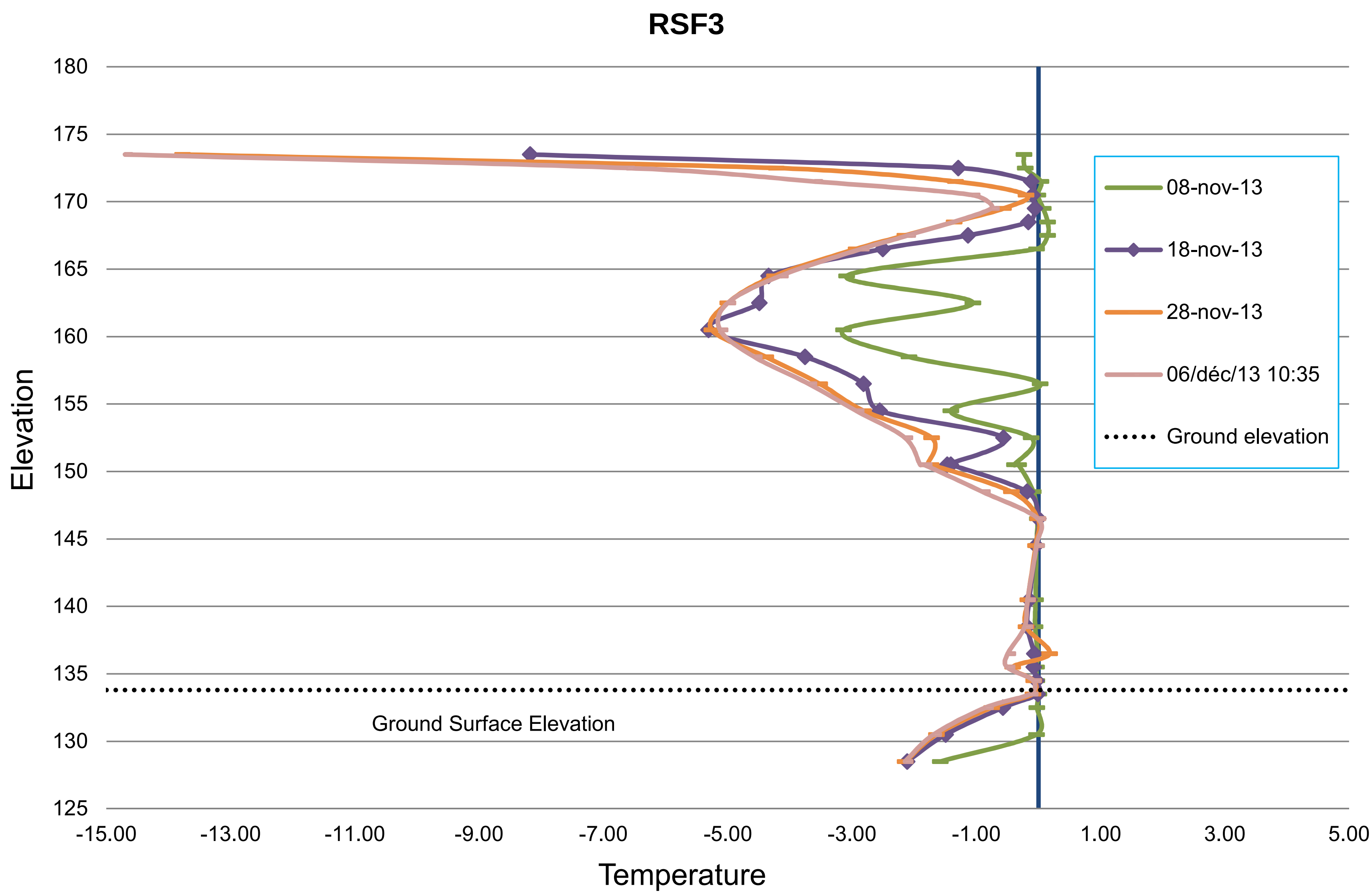
RSF-1 (Waste Dump)
Elevation vs Temperature - String RSF1
Elevation (MASL)
175
174
173
172
171
170
169
168
167
166
165
164
163
162
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
Temperature (◦C)
BEADS
20/Feb/2013
25/Apr/2013
26/Jun/2013
28/Aug/2013
SURAFCE ELEVATION

Tailings



String # 90-2 - Elev. vs Temp
Tailling thermistor monitoring
Elevation (MLS)
143
142
141
140
139
138
137
136
135
134
133
132
131
130
BEADS
22-Feb-12
25-Apr-12
20-Jun-12
22-Aug-12
26-Oct-12
19-Dec-12
20-Feb-13
25-Apr-13
26-Jun-13
22-Aug-13
-30.00
-25.00
-20.00
-15.00
-10.00
-5.00
0.00
Temperature (Celcius)

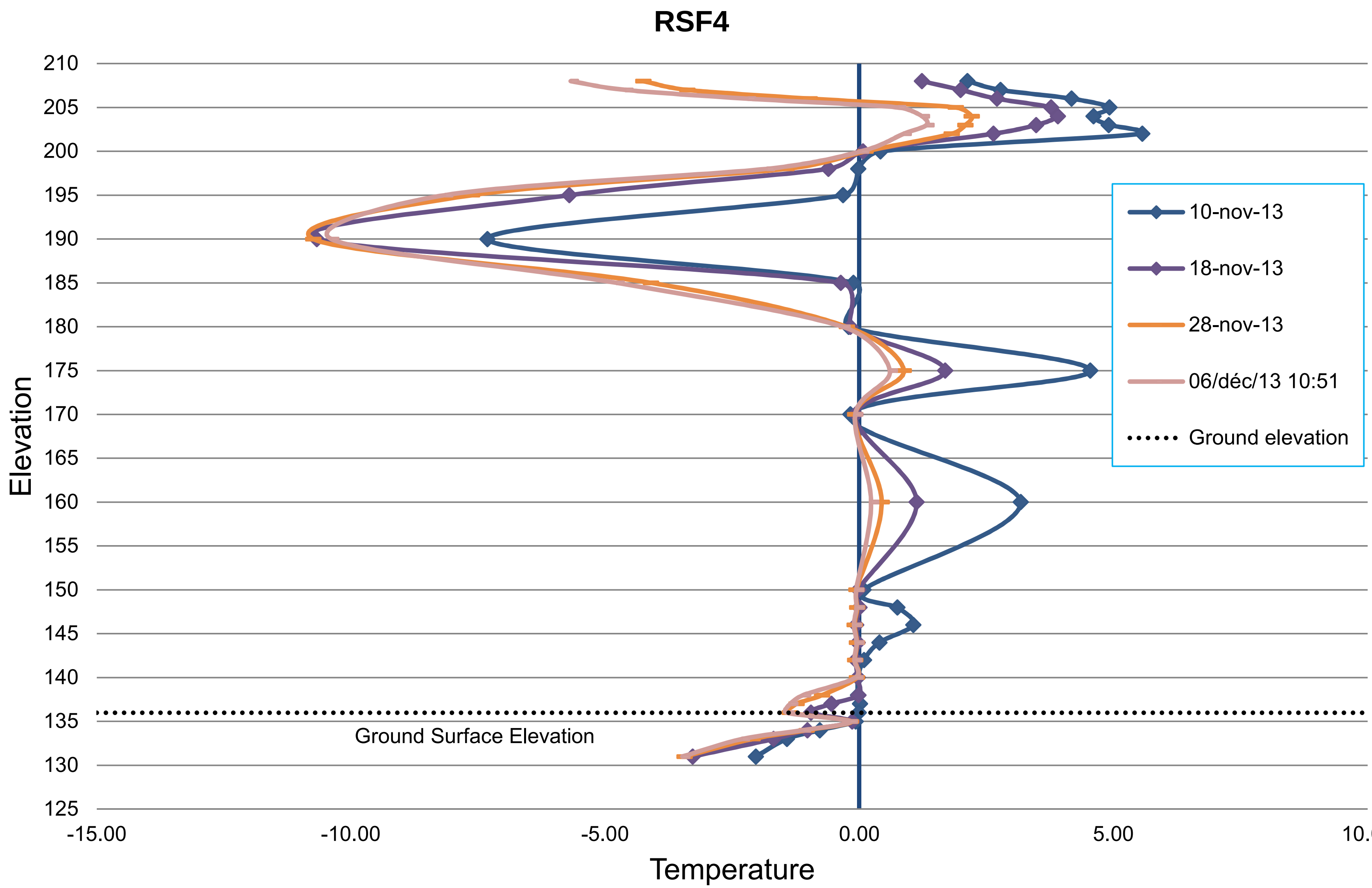
Portage Rock Storage Facilitie Newly Installed Thermistor



Golder Associés	Date : December 2013 Project : 13-1221-0115	Figure and data provided by AEM	**FIGURE C2-A**

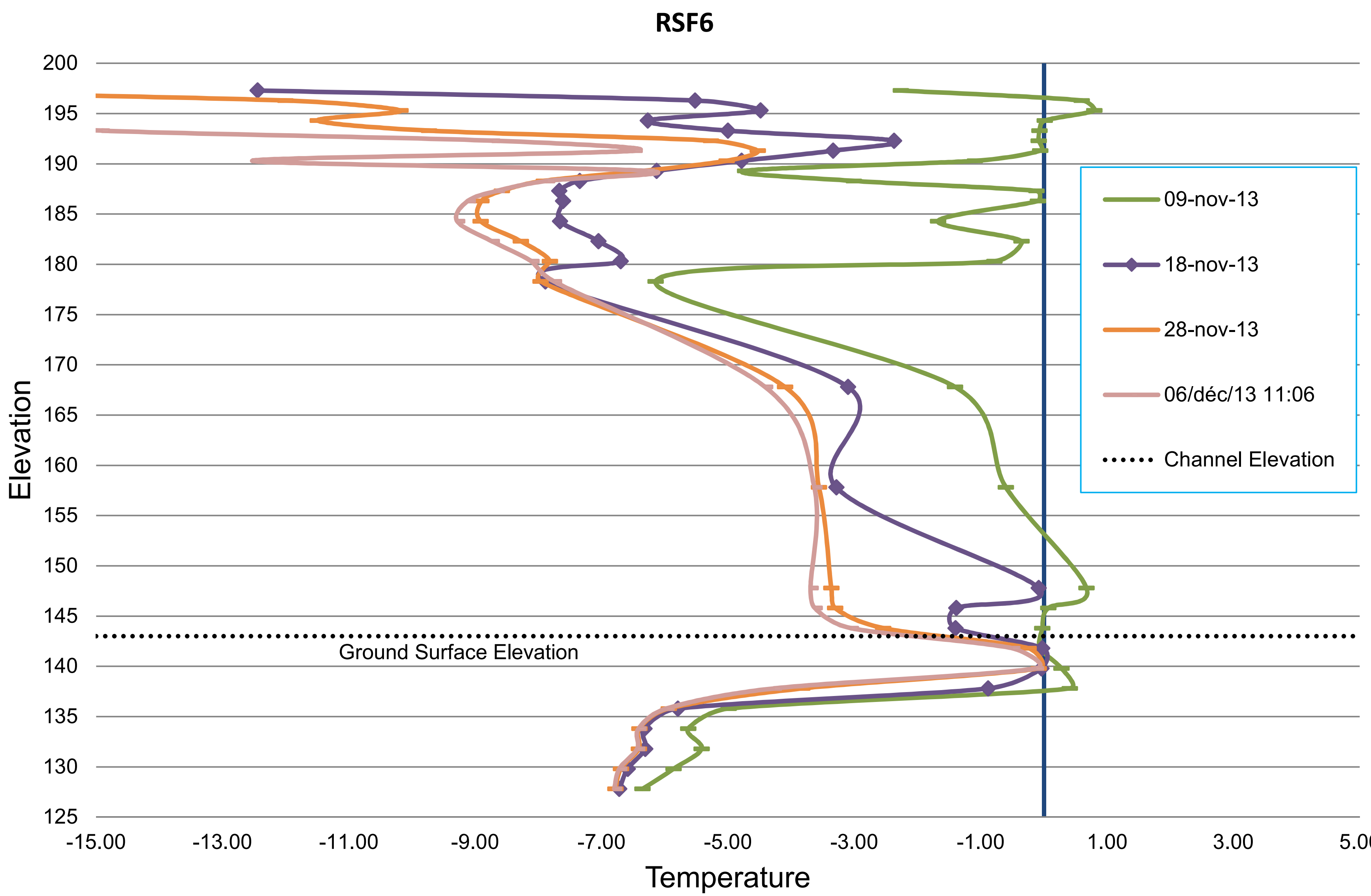
N:\Actif\2013\1221\13-1221-0115 AEM- RSF Seepage Report - Meadowbank\5 Préparation livrables\Rev A\Appendix C - TSF and RSF Thermistor Data\Appendix C2 - New RSF Thermistor(b).xlsx

Portage Rock Storage Facilitie Newly Installed Thermistor



Golder Associés	Date : December 2013 Project : 13-1221-0115	Figure and data provided by AEM	**FIGURE C2-B**

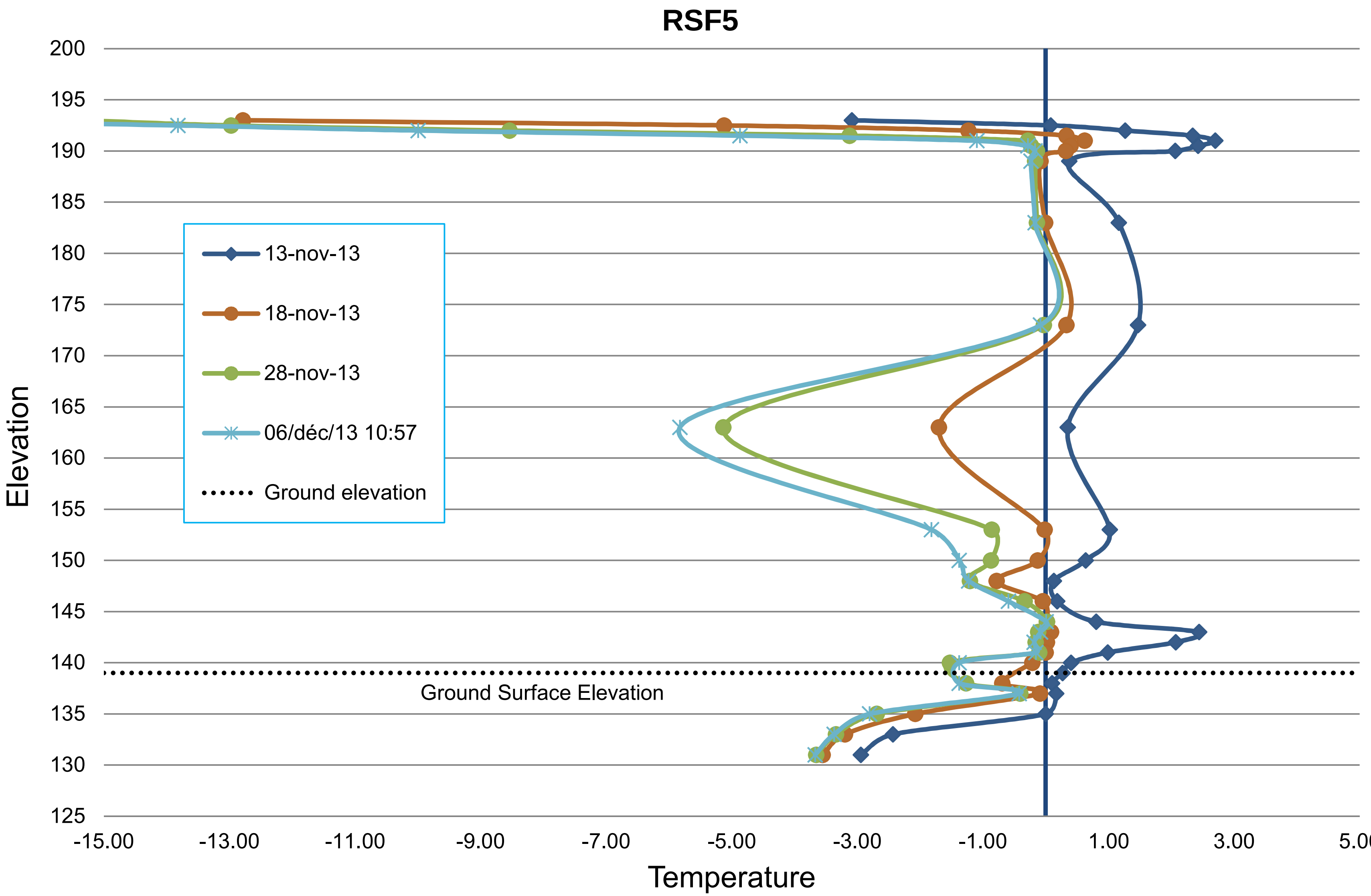
Portage Rock Storage Facilitie Newly Installed Thermistor



Golder Associés	Date : December 2013 Project : 13-1221-0115	Figure and data provided by AEM	FIGURE C2-D

N:\Actif\2013\1221\13-1221-0115 AEM- RSF Seepage Report - Meadowbank\5 Préparation livrables\Rev A\Appendix C - TSF and RSF Thermistor Data\Appendix C2 - New RSF Thermistor(b).xlsx

Portage Rock Storage Facilitie Newly Installed Thermistor



Golder Associés	Date : December 2013 Project : 13-1221-0115	Figure and data provided by AEM	**FIGURE C2-C**

APPENDIX D

Construction Summary Report Rock Storage Facility - Interim Till Plug

CONSTRUCTION SUMMARY REPORT
ROCK STORAGE FACILITY – INTERIM TILL PLUG

AGNICO-EAGLE MINES LIMITED
MEADOWBANK GOLD PROJECT

OCTOBER 30TH, 2013

EXECUTIVE SUMMARY

The construction of the Interim till plug at Meadowbank was conducted from August 26th 2013 and September 1st 2013. The till plug is located on the upstream side of the access road to the North Cell Ditches, between the Waste Rock Storage Facility (RSF) and the NP2 lake. The till plug is designed and constructed as a zoned earth fill structure intended to block seepage coming from the RSF to go into NP2 lake and facilitate seepage collection on the upstream side.

Work carried out during construction of the till plug included excavation of soft sediment, till placement and water seepage control work. This construction report issued by AEM presents the general construction procedure.

As-Built data have been sent to the Tailings Storage Facility (TSF) designer for integration of the structure in the North Tailings Cell revised design.

DOCUMENT CONTROL

Document Version	Date	Revised Section	Revision
Draft	2013-09-30		
Final	2013-10-30		

CONSTRUCTION SUMMARY REPORT
ROCK STORAGE FACILITY – INTERIM TILL PLUG

TABLE OF CONTENT

APPENDIX

CONSTRUCTION SUMMARY REPORT
ROCK STORAGE FACILITY – INTERIM TILL PLUG

SECTION 1.0 - INTRODUCTION

The Portage Rockfill Storage Facility (RSF) at Meadowbank is located in the north portion of the main mine site, adjacent to the Tailing Storage Facilities (TSF). The Rockfill Roads (RF1 and RF2) along the west side of the RSF are part of the TSF North Cell. The North Cell Diversion Ditches (Diversion Ditches) are located around the North Cell to keep freshet surface drainage water from contacting the RSF and the TSF. The East ditch flows through Lake NP-2 and connects to Lake NP-1. Figure 1 presents the general arrangement of the TSF and RSF.

During an AANDC Water License inspection on July 29th and 30th 2013, it was observed that red colored seepage from the northwest side of the RSF was seeping through the road perimeter into Lake NP-2. Samples were taken by both the Inspector and AEM staff (split sample). Analysis results from this sampling were received by AEM on August 16th, 2013. The results received shown that the water collecting in the sump behind the waste dump and that seeped to NP-2 could originate from the supernatant tailing water.

To avoid further contamination of the Lake NP-2, design and construction of an interim till plug was undertaken by Agnico Eagle Mines (AEM). This construction was aimed to reduce the amount of seepage reported to NP-2 lake and to increase the pumping of the seep water contained within the sump. This construction is considered as a first step emergency action and further investigation will be undertaken to assess, prevent and control possible seepage from the TSF and RSF.

Following assessment of the situation, future permanent structures might be constructed if required. The interim plug structure might be incorporated to the permanent containment structure.

The construction work for the till plug was done by Fernand Gilbert Limited (SANA) under the supervision of AEM. The construction surveillance was done by AEM representatives. Survey of the work was completed by AEM.

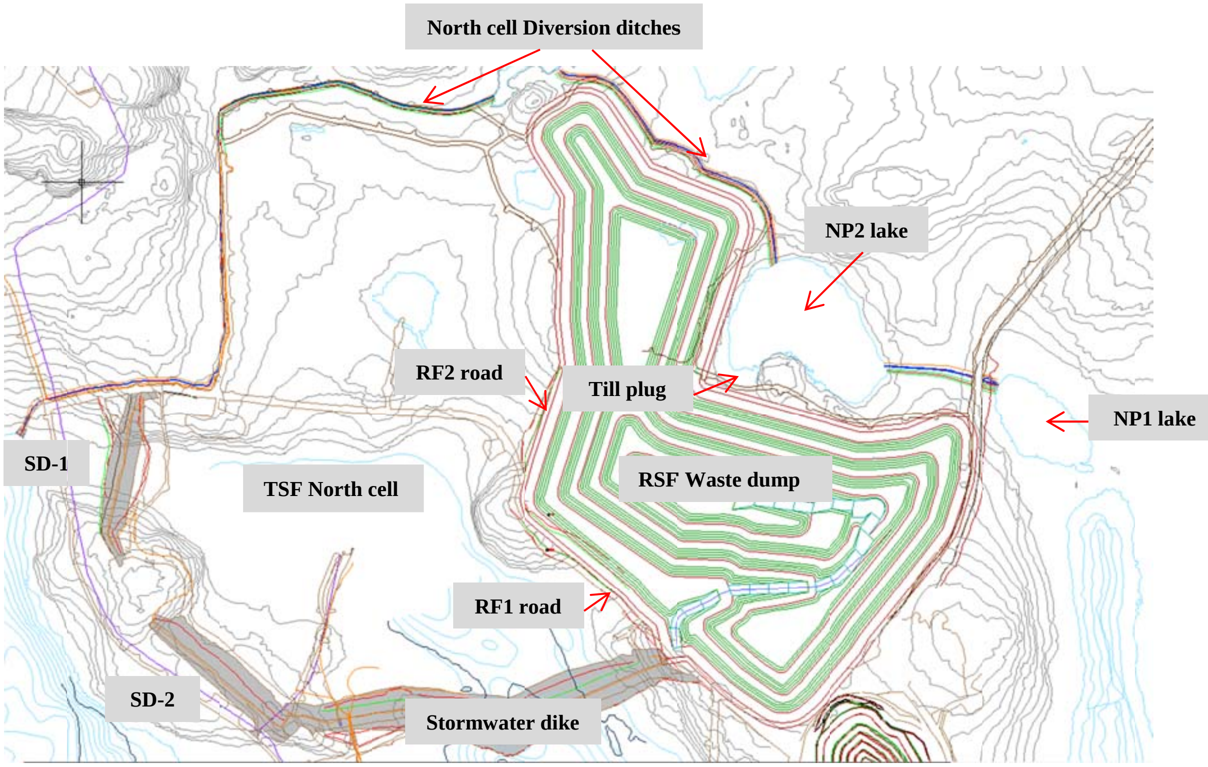


Figure 1: General arrangement of the TSF and RSF

SECTION 2.0 - SCOPE

This construction summary report presents the general construction procedure for the till plug conducted between August 26th 2013 and September 1st 2013 at Meadowbank. Work procedures and construction steps are summarized in this report. A review of the proposed design and technical specifications is presented, followed by the description of construction activities. The site inspection during construction, operation and monitoring are then presented.

SECTION 3.0 - DESIGN AND TECHNICAL SPECIFICATIONS

Design and Technical Specifications were elaborated by AEM Engineering prior to the start of the till plug construction and are resumed in the following section. Typical sections from the original design are available in Figure 2.

3.1 FILL MATERIALS AND PLACEMENT SPECIFICATIONS

The construction of the till plug includes three different zones of material. The requirements for each zone are described below.

3.1.1 Zone 1 – NPAG Rockfill

- The selected fill material consists of waste clean blasted rock from Portage/Goose pit composed of non-potentially acid generating (NPAG) rocks;
- The existing road along NP2 Lake and the RSF includes NPAG Rockfill material.

3.1.2 Zone 1A - Fine Rockfill (0-500 mm)

- The selected fill material consists of waste clean blasted rock (0-500 mm) from Portage/Goose Pit and is composed of NPAG rock;
- No topsoil, unsuitable organic soils, snow, ice are allowed in this zone;
- Lift thickness specified: 500 mm to 1 000 mm before compacting;
- Compaction achieved during placement with excavator bucket.

3.1.3 Zone 2 –Till

- Natural till is obtained from stripping of the Goose Pit or excavation in the Central Dike;
- Non-dispersive soil, including glacial till or clay with fines (sieve # 200 or <0.075 mm) content of minimum 30%, moisture requiring from -2% to +2% of OMC (Optimum Moisture Content).
- No topsoil, unsuitable organic soil, snow, ice, frozen lumps;
- Lift thickness specified: 300 mm to 500 mm before compacting;
- Compaction achieved during placement with excavator bucket.

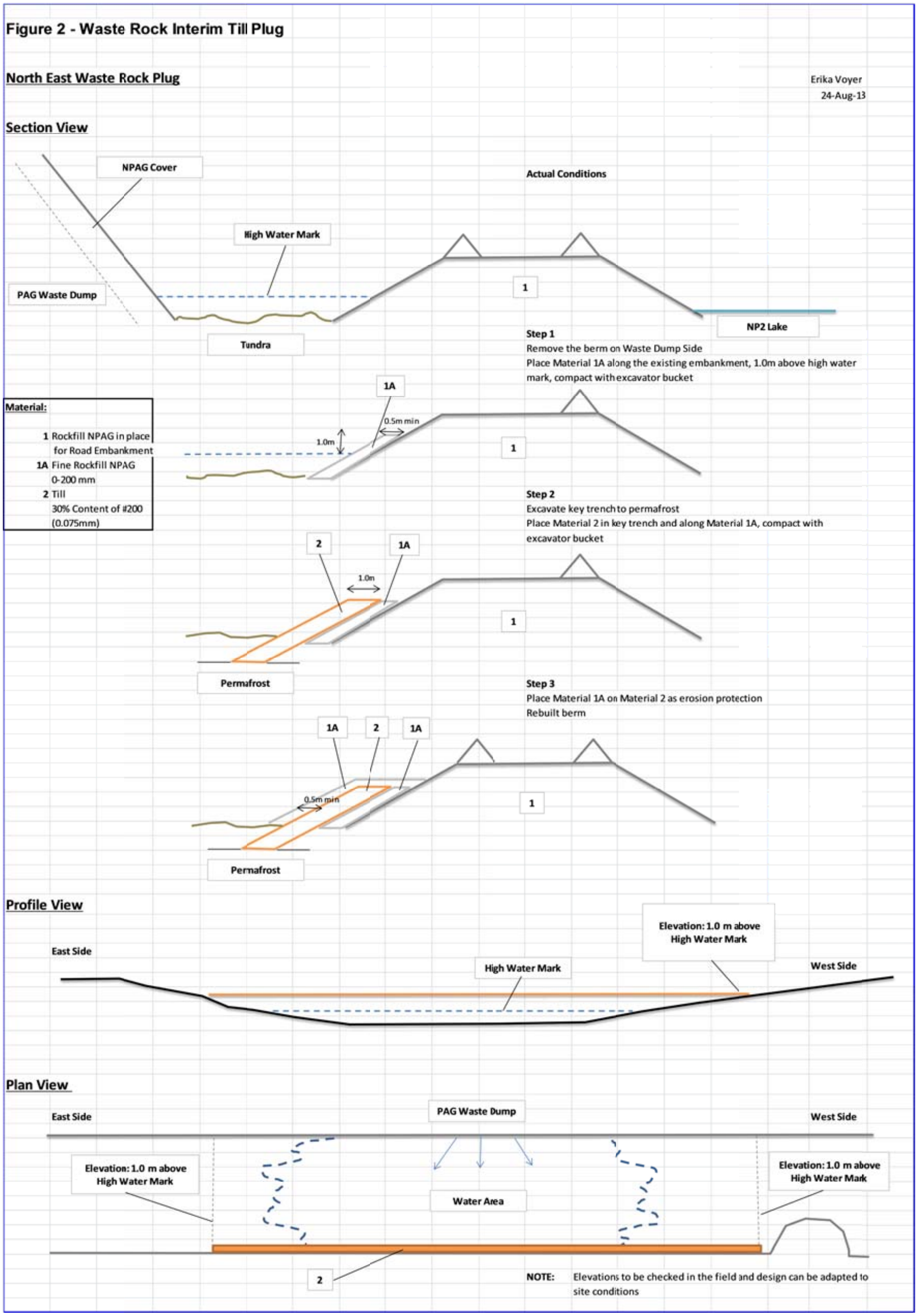


Figure 2: design drawings of the interim waste rock storage facility till plug to prevent seeping water from reaching NP-2 lake.

SECTION 4.0 - CONSTRUCTION ACTIVITIES AND DESCRIPTION OF THE WORK

The scope of work for the construction of the till plug conducted from August 26th 2013 to September 1st 2013 consists of activities listed in the following major work items:

- Sump dewatering and seepage control;
- Placement of the transition layer of Zone 1A "Fine Rockfill" along the road;
- Excavation of the trench below the road elevation;
- Zone 2 "Till" placement in the excavation and along the road;
- Zone 1A "Fine Rockfill" placement over the till as erosion protection.

These items are discussed in the following sections below.

Please note that in order to have the smallest section of the road exposed to seepage at any given time, all works was done in small section not wider than 3-4 meters. The steps followed were: preparation of the upstream slope, excavation of the foundation and till placement. Final cover for erosion protection placement over the till layer was done once before the end of the day. This sequence of events was also chosen to minimize the exposure time of the permafrost to the elements and prevent it to thaw. The concept of the design was to have a foundation composed of either bedrock or permafrost.

Selected photographs of the work progress taken throughout the construction program, showing various aspects of the construction work, are available in Appendix A.

As-built drawings are available in Appendix B.

4.1 SUMP DEWATERING AND SEEPAGE CONTROL

The first step prior to all works in the area is to pump the seepage water from the two main channels out of the till plug area. In order to control the water level through the entire construction period, a water truck from SANA was hauling (as needed) 14,000 litres of seepage water and disposed of it in the tailings pond over the Stormwater dike. A 3" diesel pump (model Godwin CD103) was placed within the 2 main deepest channels to keep them as empty as possible to allow the working area to be as dry as possible for the beginning of the excavation. The pump was moved as the work progresses.

Figure 3: view of the 2 main channels and the pumping station after the completion of the works.

4.2 TRANSITION LAYER OF ZONE 1A NPAG ROCKFILL ALONG THE ROAD

According to the design, a transition layer 1A needs to be put in place prior to the excavation and till placement along the entire upstream side of the road (on the RSF side). As the primary constituent material of the road was already fine NPAG soapstone, the 1A layer was replace by remodeling the in-situ material. The coarser material encountered was removed from the slope and the remaining finer soapstone was flattened and recompacted with the excavator bucket to create a 2 in 1 slope. The preparation of the road upstream slope began 1m above the high water marks left on the tundra after freshet, on both eastern and western abutments of the natural topographic low.

4.3 EXCAVATION OF THE TRENCH BELOW THE ROAD

Excavation of the unfrozen deleterious material was realized with a CAT 345 excavator. The excavation depth was adapted according to the material encountered. Unfrozen tundra, soft till and/or sediments were removed until refusal either on frozen till or bedrock. The foundation exposed was then cleaned and approved by AEM representative before further works performed. The excavation depth over the entire length of the road was ranging from 0.5 to 2.5 m deep (averaging around 1.3m). The deepest portions that had been excavated were the 2 main seepage channels and the shallowest were the eastern and western abutments that were directly over bedrock. As suggested by the Environment department, the excavation debris was put in front of the trench to act as a first barrier against any extraordinary event that might happen in the area. During the excavation, most of the water flooding the trench was flowing from the actual road structure itself and not from the tundra.

4.4 ZONE 2 TILL PLACEMENT IN THE EXCAVATION AND ALONG THE ROAD

Once a zone of 4-5m wide was excavated and the foundation exposed and approved by the AEM representative, a till layer of at least 500mm was placed in the excavation and compacted with the shovel bucket. The selected till was chosen to meet the specifications presented in section 3.1.3. The till was coming from a stock pile that was built in 2012 for Central dike construction, hauled with 50T trucks and dumped in the slope where it was pick up and spread with the excavator. Prior to any till placement, all the material coarser than 150mm was automatically discarded by the operator.

4.5 ZONE 1A FINE ROCKFILL PLACEMENT OVER THE TILL AS EROSION PROTECTION

Once the till layer was completed, a protective layer of fine filter has to be put in place to prevent any erosion of the layer. The selected material was fine soapstone that was hauled with 50T trucks from SANA. The rock was coming from Goose pit and dumped over the till blanket to be spread, placed and compacted by the excavator bucket. Every boulders or rocks over 500mm was discarded by the operator. The thickness of the protective layer was at least 500mm and has been adapted to the topography of the excavation.

SECTION 5.0 - QC CONTINUITY TESTING AND RESULTS

5.1 SITE INSPECTION AND PROCEDURE REVIEW

AEM representatives routinely conducted visual observation of work procedure during the construction. Review of the work procedure was done on a daily basis and corrections were made if needed. Daily survey was conducted by AEM representatives for daily progress and to ensure that limits and grades were followed correctly during the construction. Photographs of the work progress were taken throughout the construction program recorded. Daily report for each shift work were issued and filed by AEM representatives. The foundation of the trench was also assessed, approved and surveyed by the AEM representative prior to all material placements but no report was filed on this activity.

SECTION 6.0 - OPERATION AND MONITORING

Since the completion of the works, the water level is closely monitored by the both Environment and Engineering departments. A staff gauge has been placed at the seepage location to determine and visually quantify the water level increases. A visual daily inspection of the area is done after to ensure we keep the level as low as possible. Whether the water became too high, the Mine department or SANA is advise and a water truck is sent to the area to pump the water and dispose of it in the tailings pond. This operation will be continued until weather permitting in fall 2013 and will be restarted as soon as freshet begins in 2014.

SECTION 7.0 - SUMMARY AND CLOSURE

The construction of the interim till plug was conducted between August 26th and September 1st 2013. Construction was completed in accordance with the requirements of the construction design elaborated by AEM.

During the course of the work, one (1) field change was made to the proposed design to optimize the construction activities.

A visual monitoring program consisting of frequent field visit by the Geotechnical team was put in place to insure the integrity of the structure. As part of their normal routine, a water sampling campaign, of both upstream and downstream sides of the structure, is conducted by the Environment department.

APPENDIX A

Selected Till plug Construction Photos

Figure 1: Excavation of the active layer until reaching the permafrost. Between 0.5 and 3.8 m were required to reach proper foundation.

Figure 2: excavation of the foundation to permafrost / bedrock). The width of the trench at the bottom was at least one bucket wide. Note the excavated material is discarded on the upstream side.

Figure 3: till placement with the excavator bucket and compaction.

Figure 4: preparation of the transition NPAG on the roadside. Once excavation completed, soapstone was flattened and compacted before any till placement. Note the coarser material discarded from the till (red arrow).

Figure 5: final till placement over an entire section after 1 day of work. The till is flattened and compacted before any rockfill placement.

Figure 6: Final placement of soapstone rockfill protective layer (1A) over the till, once compacted.

Figure 7: water accumulation along the side of the road before works begin. View of the eastern channel.

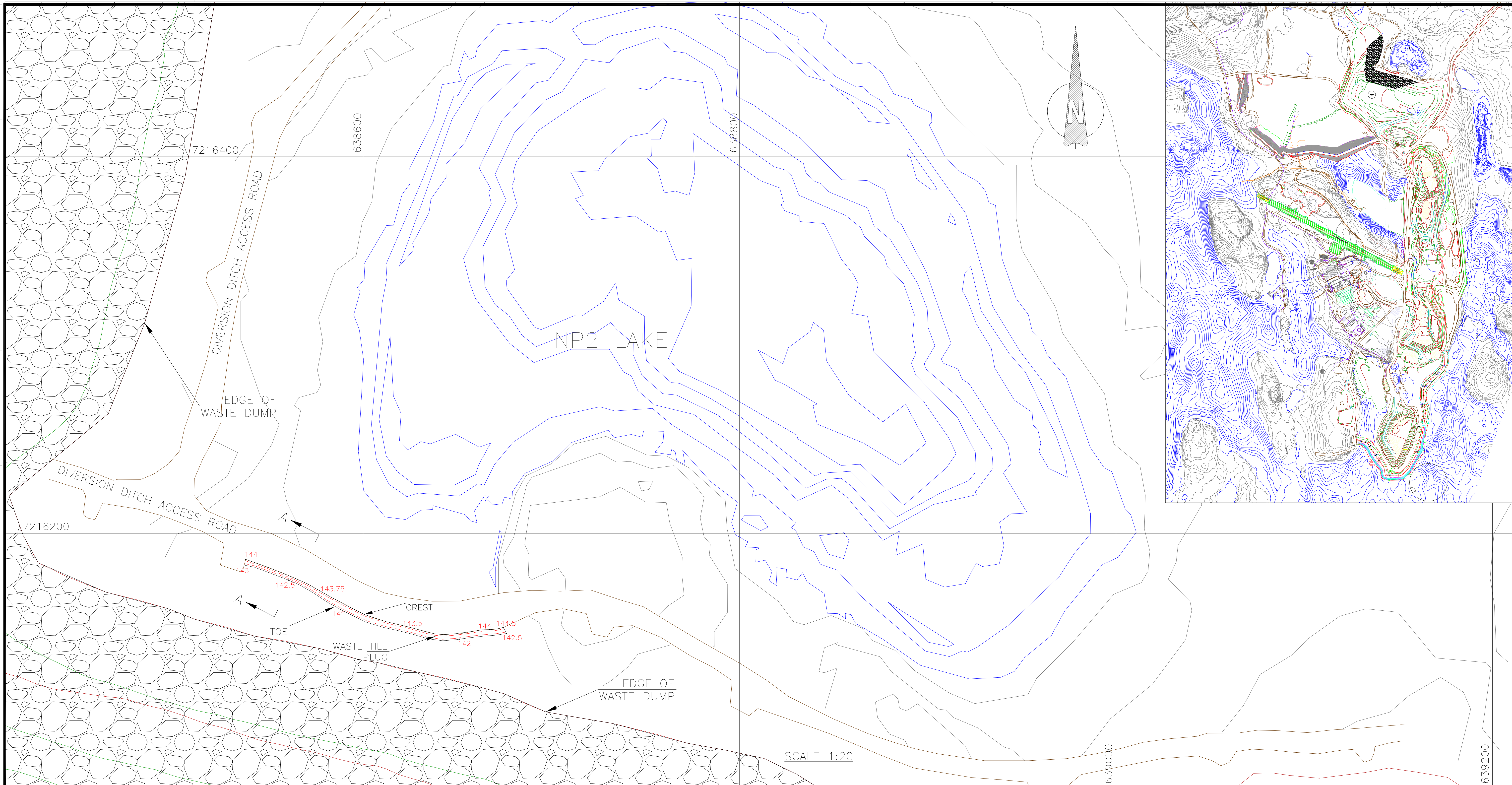
Figure 8: water accumulation along the side of the road before works begin. View of the western channel.

Figure 9: water control during the construction. A small 3" electric pump and a 3" diesel pumps were used.

Figure 10: photo of the final result of the entire till plug from West to East. The actual pumping station and the 2 active seepage channels are visible on the eastern abutment.

APPENDIX B
As-built drawings

FORMAT ANSI B – LANDSCAPE



TITLE	# DWG	
REFERENCE DRAWINGS		

REV	DESCRIPTION	DATE	BY
REVISIONS			

AGNICO EAGLE MEADOWBANK

DRAWN BY: T. DAHM	DATE: 2013/10/29	
CHECKED BY: P.GAGNON	2013/10/30	
APPROVED BY		
PROJECT NO.		
DATE		

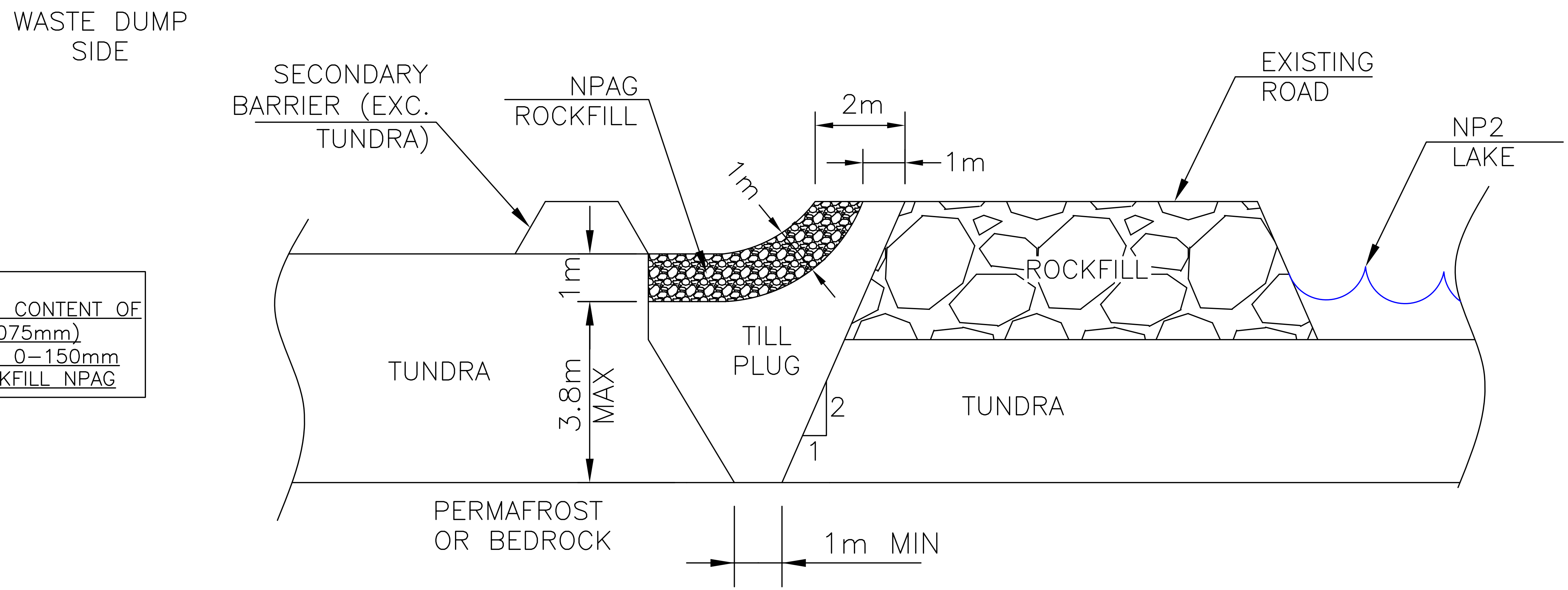
TITLE: AGNICO–EAGLE – MEADOWBANK DIVISION

WASTE DUMP TEMPORARY TILL PLUG AS–BUILT

SCALE	FILE		
AS NOTED	.DWG		
DRAWING NO.		REVISION	SHEET 1 / 1

X:\Waste Rock Plug\As–Built\Waste Till Plug.dwg, 30 Oct 2013

FORMAT ANSI B – LANDSCAPE



MATERIAL:
TILL: 30% CONTENT OF #200 (0.075mm)
ROCKFILL: 0–150mm
FINE ROCKFILL NPAG

SECTION VIEW A–A

TITLE	# DWG	REV	DESCRIPTION	DATE	BY
REFERENCE DRAWINGS		REVISIONS			

AGNICO EAGLE MEADOWBANK

DRAWN BY	T. DAHM	DATE	2013/10/29
CHECKED BY	P.GAGNON		2013/10/30
APPROVED BY			
PROJECT NO.			
DATE			

TITLE: AGNICO–EAGLE – MEADOWBANK DIVISION

WASTE DUMP TEMPORARY TILL PLUG TYPICAL SECTION

SCALE	1:100	FILE	.DWG
DRAWING NO.		REVISION	SHEET 1 / 1

APPENDIX E

TSF Deposition Plan 2013-Update 2013-10-17

AGNICO EAGLE

TAILINGS DEPOSITION PLAN UPDATE 2013-11-17

North Cell TSF model guideline

GUIDELINE

- Avoiding ice accumulation on the dike liner;
- Prevent tailings beach to reach the reclaim barge;
- Reclaim water pond maximum elevation of 148m;
- A minimum of two days per month of discharge by the by-pass of the booster pump is assumed for maintenance activities;
- Tailings beach to reach elevation 150m;
- Limit as much as possible deposition at the north end of the tailings pond during winter to reduce risk of freezing pipe;
- Raise beach on RF1 and RF2 to prevent tailings water from seeping out of the North Cell;
- Raise beaches on all external structures such as the roads around the tailings pond to prevent reclaim water from seeping towards the diversion ditches.

South Cell TSF model guideline

GUIDELINE

- Avoiding ice accumulation on the Central Dike liner;
- Prevent tailings beach to reach the reclaim barge;
- A minimum of two days per month of discharge by the by-pass of the booster pump is assumed for maintenance activities;
- Modelization of phase 1 of this cell, closure of this cell to be determined.

Model Parameters and assumptions

ASSUMPTIONS

- Deposition points will be moderately mobile in time (i.e. we can extend them on the tundra, and retract them as we deposit tailings throughout time);
- Ice formation in the reclaim pond during winter months follow the ice model table.
- Deposition points are added towards the end of life of the cell for closure purposes;

PARAMETERS

- The water balance used in this model assumes reclaim flow changes in function of season: summer 70 m^3/h fresh water (FW) & 380m^3/hr reclaim water (RW), and winter 90 m^3/h FW & 360 m^3/h RW;
- The model assumes a tailings dry density and a water balance that incorporates ice entrapment of 1.21t/m^3 for both the North and South Cell;
- Sub aerial tailings slope set at 0.5% for both North and South Cell
- Sub aqueous tailings slope set at 2.3% for the North cell (obtained from summer 2013 bathymetric analysis) and 4% for the South Cell (taken from the 2012 Golder Deposition plan of the North Cell) as this value seems to better represent the start of a new cell.

Ice Model	
Month	Ice thickness (m)
January	1.1
February	1.5
March	1.8
April	1.8
May	1.1
June	0
July	0
August	0
September	0
October	0.2
November	0.5
December	0.8

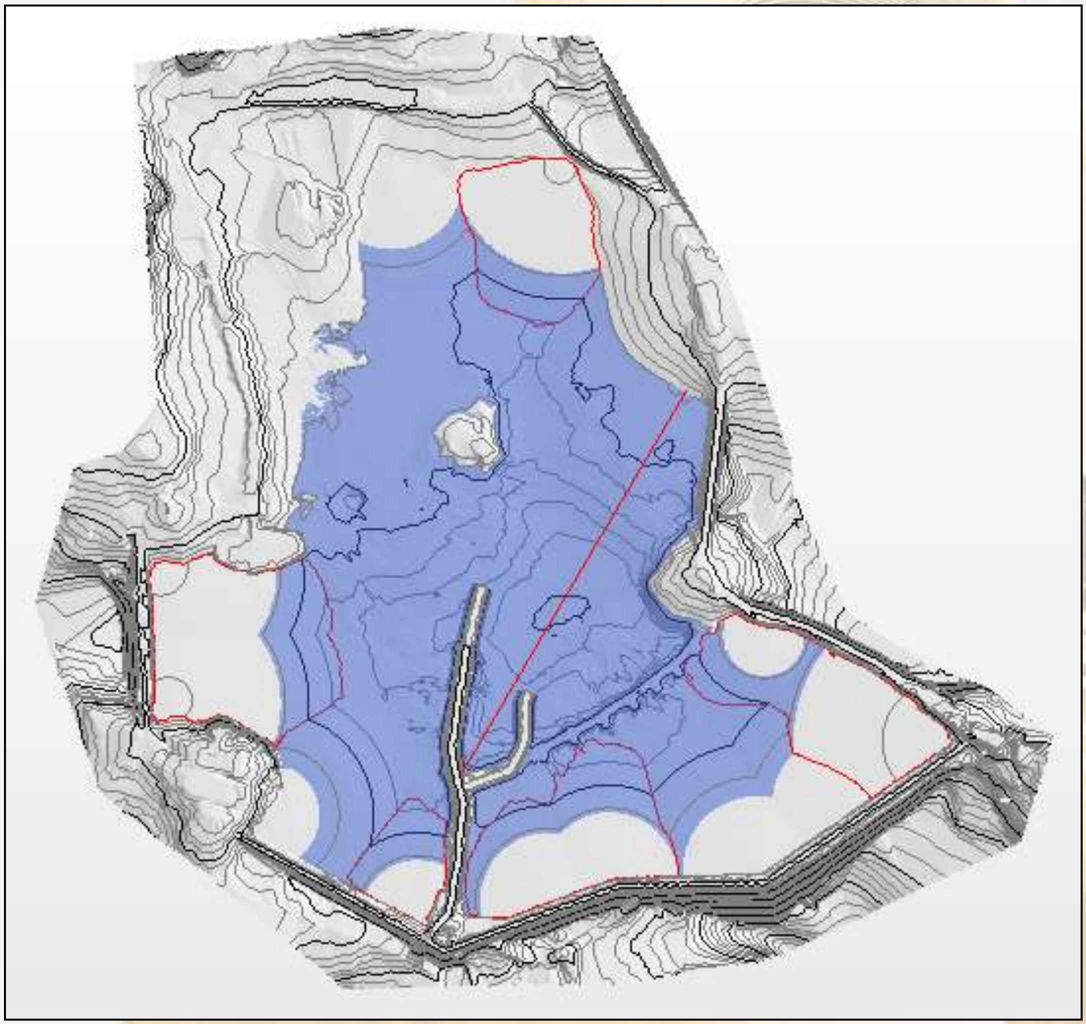
TSF deposition plan schedule

North and South Cell deposition phases

Period	Active Cell – Phase	Description
Current – September 2014	North Cell – Phase 1	- Bring the North Cell to the beginning of the winter 2014; the decreasing size and volume of the pond adversely affects the amount of free water due to ice formation, thus the North Cell cannot be closed off during the 2014/2015 winter.
October 2014 – June 2015	South Cell – Phase 1	- South Cell deposition during the winter months
July 2015 - September 2015	North Cell – Phase 2	- North Cell closure
September 2015 – End of mine life	South Cell - Phase 2	- South Cell deposition until end of mine life ***Still on-going; therefore will not be presented***

NORTH CELL DEPOSITION PLAN
PHASE 1

Section View Plot



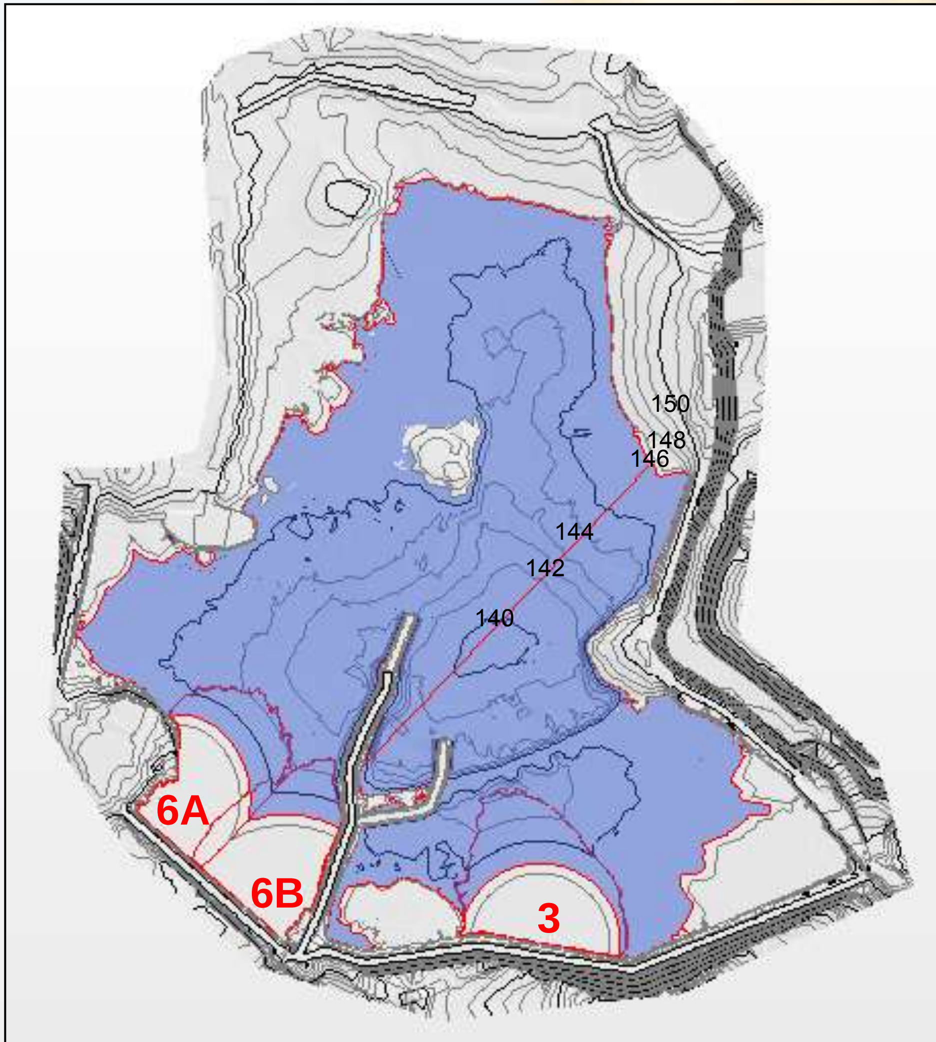
A section view along the alignment shown on the diagram will be included for each month. This will show a section view plotted on an elevation graph to show the change in pond topography across the reclaim water barge area. Left limit of the chart represents the barge area and as you look to the right on the graph you are going towards deposition point 7 (North-eastern direction).

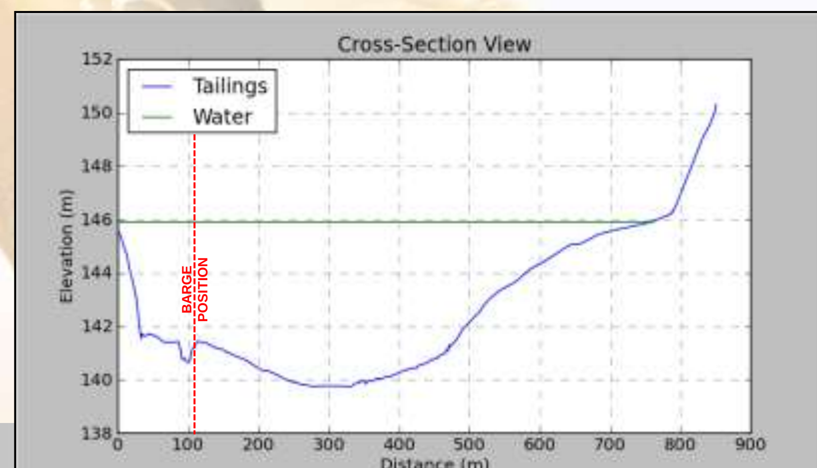
North Cell TSF deposition plan
From 09/16/2013 to 09/30/2013

Duration	Deposition Point	Tonnes
7	6B	76,120
5	3	60,725
3	6A	35,488

MODEL INPUT	
Water Balance Volume (m³)	1 455 036
Ice thickness (m)	0.00
Tonnes (t)	172 177

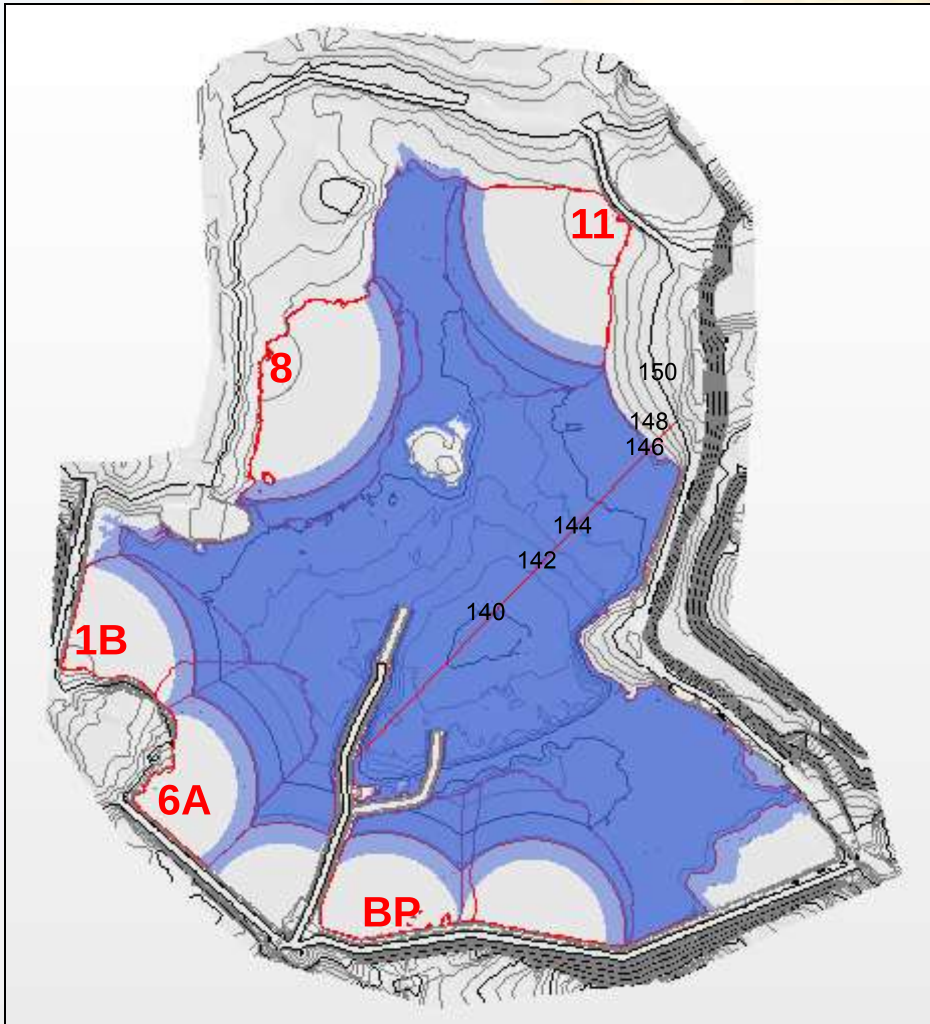
MODEL RESULTS	
Pond volume (m³)	1 416 508
Pond depth (m)	6.248
Pond elevation (m)	145.903
Min pond ele (m)	139.655
Ice thickness (m)	0
Unfrozen water elevation (m)	145.903
Ice volume (m³)	0
Ice ratio (%)	0
Transfer from South Cell (m³)	0





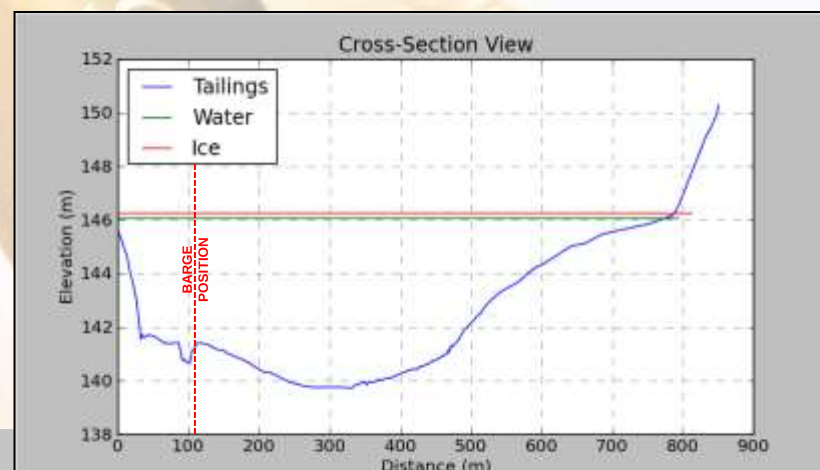
North Cell TSF deposition plan October 2013

Duration	Deposition Point	Tonnes
3	BP	43,009
3	6A	35,470
3	3	38,009
5	1B	56,733
12	11	145,711
5	8	66,857



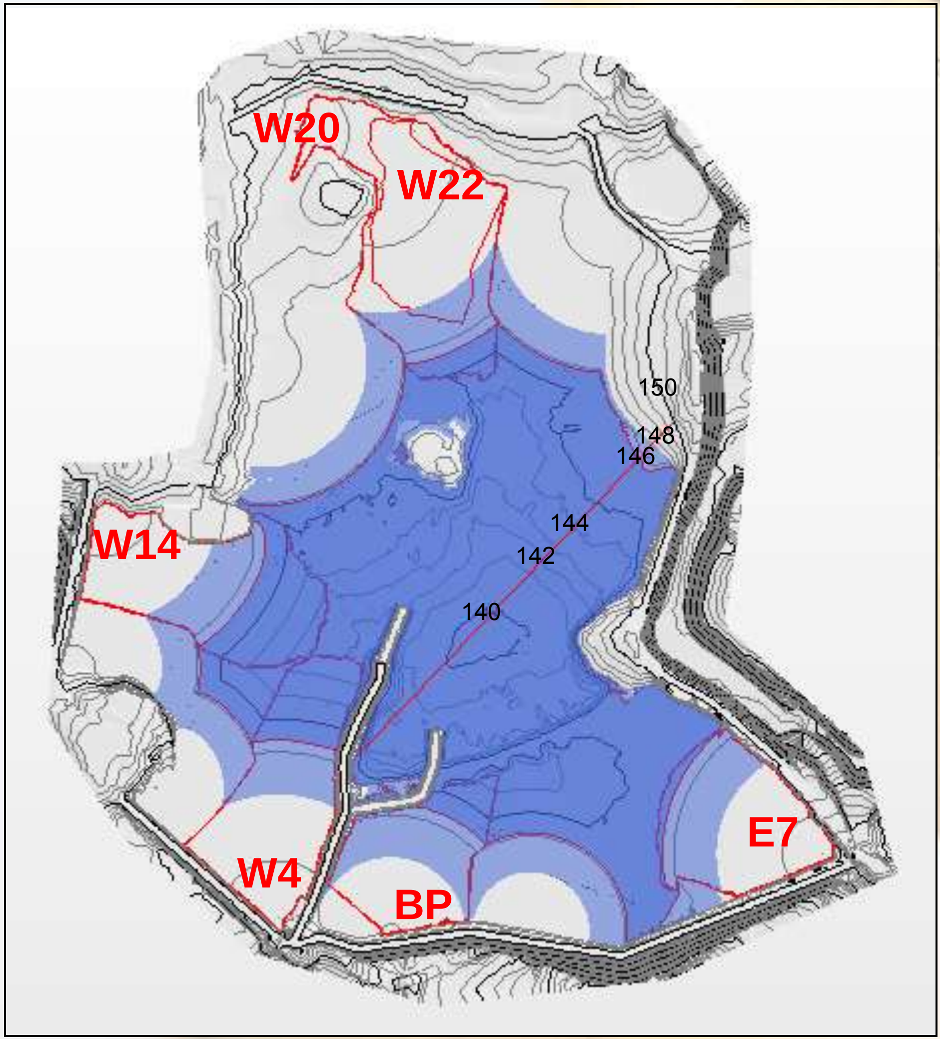
MODEL INPUT	
Water Balance Volume (m³)	1 503 962
Ice thickness (m)	0.20
Tonnes (t)	363,600

MODEL RESULTS	
Pond volume (m³)	1 362 552
Pond depth (m)	6.608
Pond elevation (m)	146.263
Min pond ele (m)	139.655
Ice thickness (m)	0.186
Unfrozen water elevation (m)	146.077
Ice volume (m³)	141 410
Ice ratio (%)	9%
Transfer from South Cell (m³)	140 000



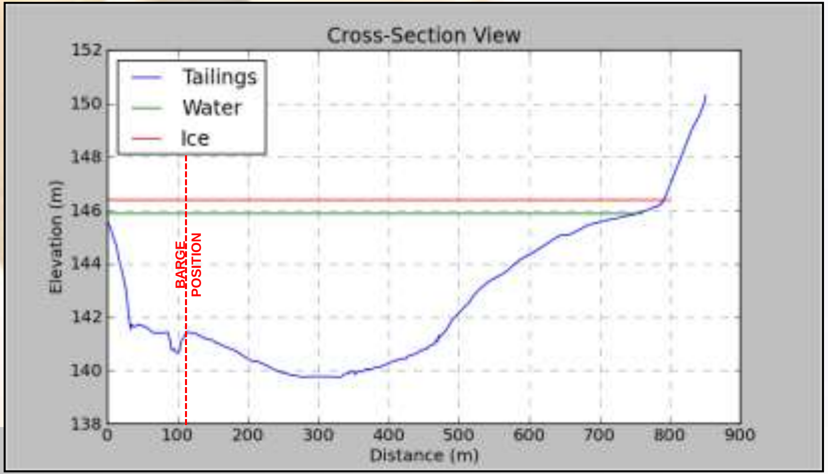
North Cell TSF deposition plan November 2013

Duration	Deposition Point	Tonnes
2	BP	20,474
5	W22	51,004
5	W20	55,385
6	W14	71,786
6	W4	71,875
3	E7	27,937



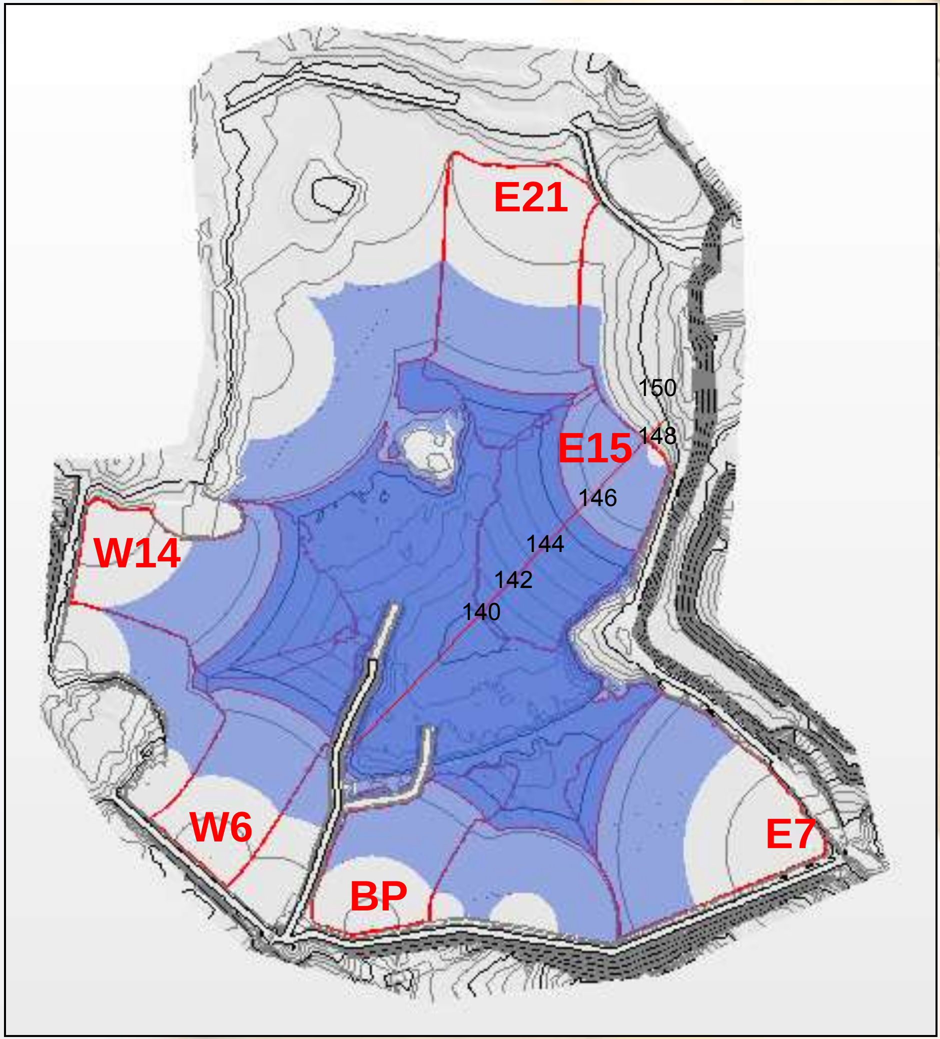
MODEL INPUT	
Water Balance Volume (m³)	1 443 996.00
Ice thickness (m)	0.50
Tonnes (t)	321 180

MODEL RESULTS	
Pond volume (m³)	1 122 802
Pond depth (m)	6.735
Pond elevation (m)	146.390
Min pond ele (m)	139.655
Ice thickness (m)	0.50
Unfrozen water elevation (m)	145.890
Ice volume (m³)	321 194
Ice ratio (%)	22%
Transfer to South Cell (m³)	0



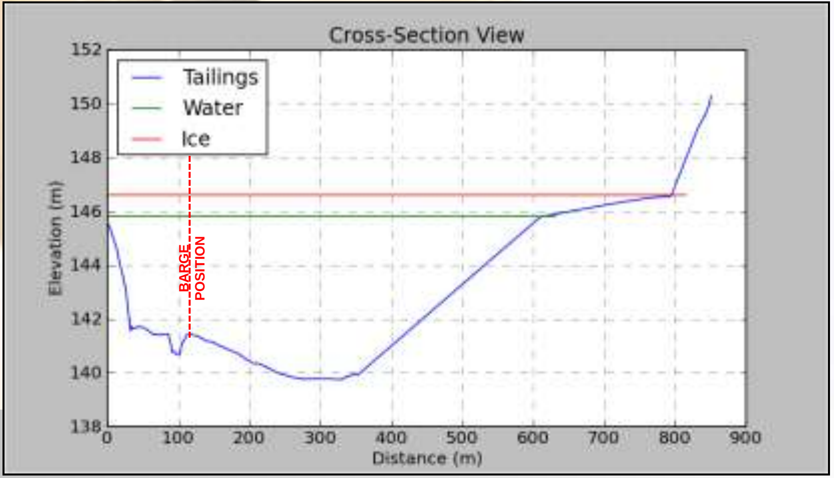
North Cell TSF deposition plan December 2013

Duration	Deposition Point	Tonnes
2	BP	23,445
5	E7	70,165
6	W18	70,259
6	W12	70,252
6	E21	71,365
4	E15	47,694



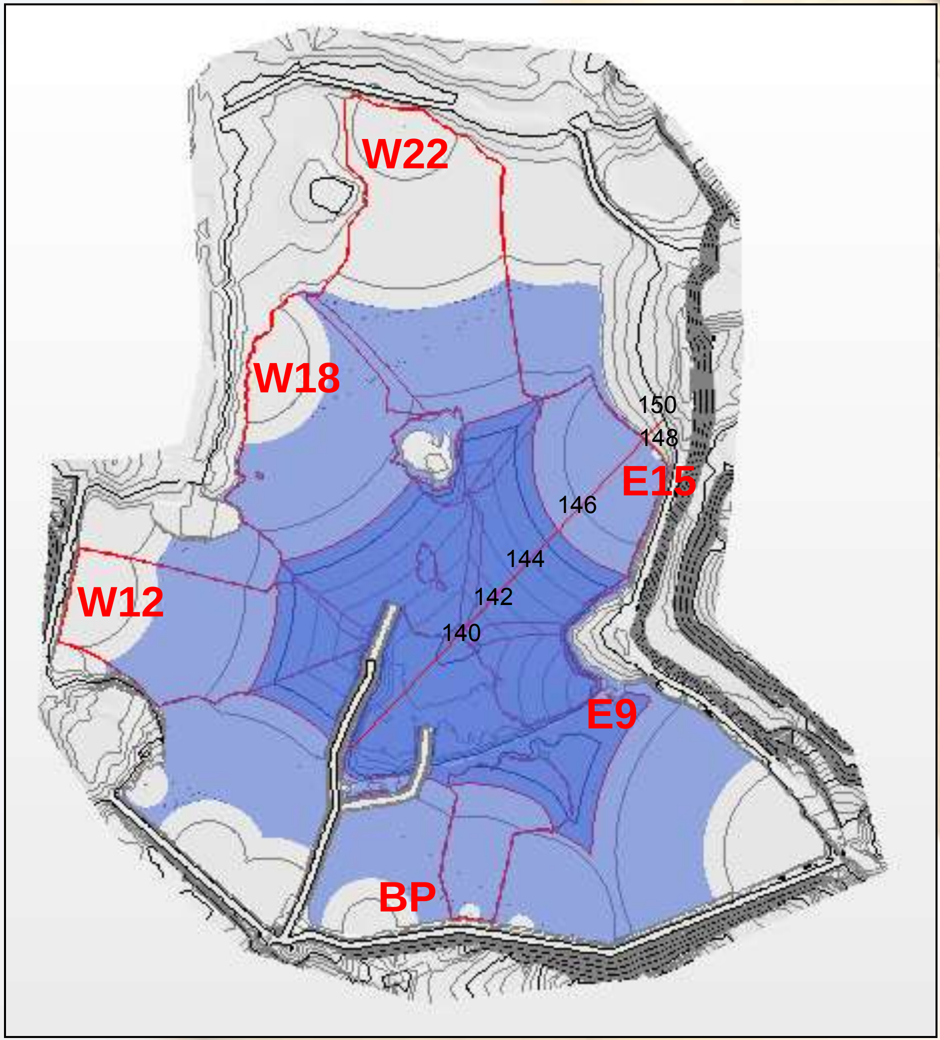
MODEL INPUT	
Water Balance Volume (m³)	1 372 715
Ice thickness (m)	1.10
Tonnes (t)	369,660

MODEL RESULTS	
Pond volume (m³)	887 636
Pond depth (m)	6.869
Pond elevation (m)	146.610
Min pond ele (m)	139.741
Ice thickness (m)	0.501
Unfrozen water elevation (m)	145.798
Ice volume (m³)	485 079
Ice ratio (%)	35%
Transfer to South Cell (m³)	0



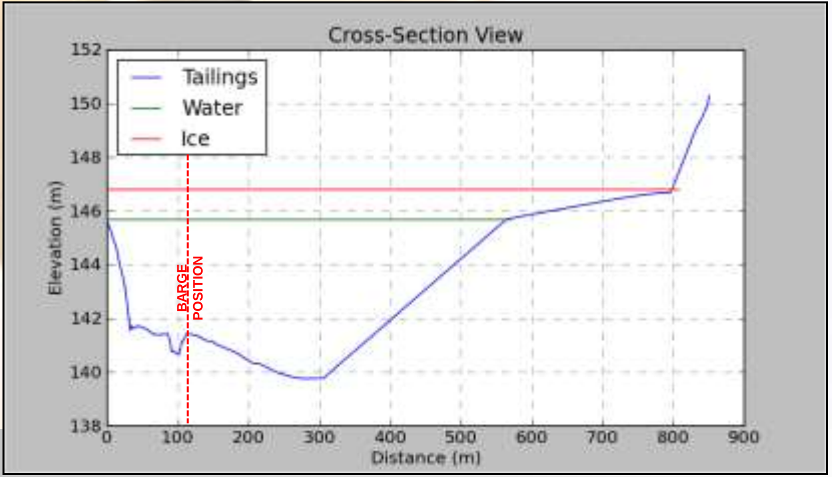
North Cell TSF deposition plan January 2014

Duration	Deposition Point	Tonnes
2	BP	23,196
3	E9	34,873
8	W22	92,932
7	W18	81,366
4	W12	46,472
7	E15	81,419



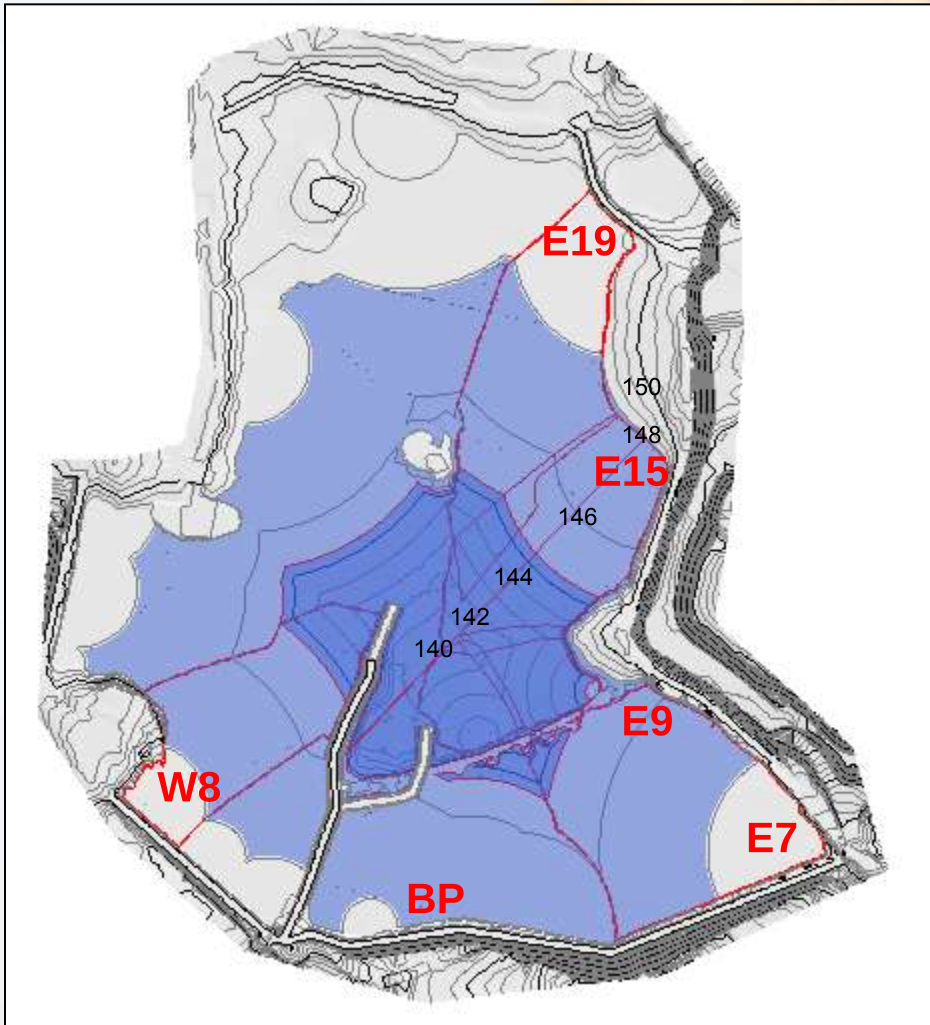
MODEL INPUT	
Water Balance Volume (m³)	1 300 648
Ice thickness (m)	1.10
Tonnes (t)	360,995

MODEL RESULTS	
Pond volume (m³)	669 758
Pond depth (m)	6.039
Pond elevation (m)	145.701
Min pond ele (m)	139.662
Ice thickness (m)	1.11
Unfrozen water elevation (m)	146.809
Ice volume (m³)	630 890
Ice ratio (%)	49%
Transfer to South Cell (m³)	0



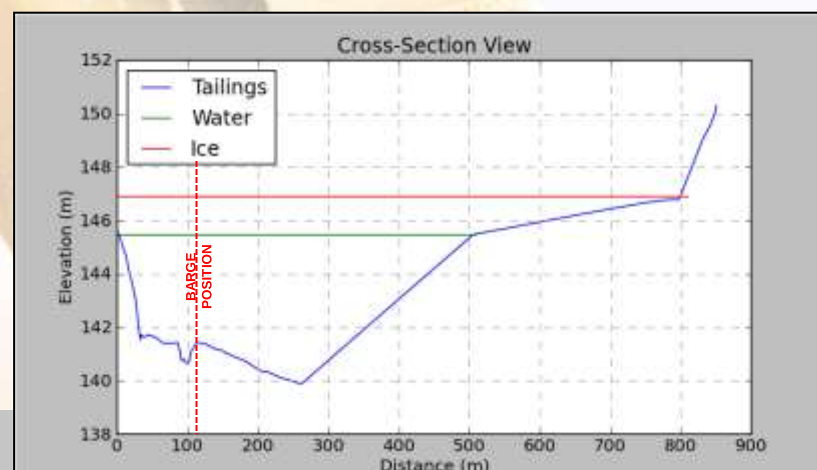
North Cell TSF deposition plan February 2014

Duration	Deposition Point	Tonnes
2	BP	20,669
2	E9	20,665
4	E7	41,080
6	W8	62,027
8	E19	82,452
6	E15	62,077



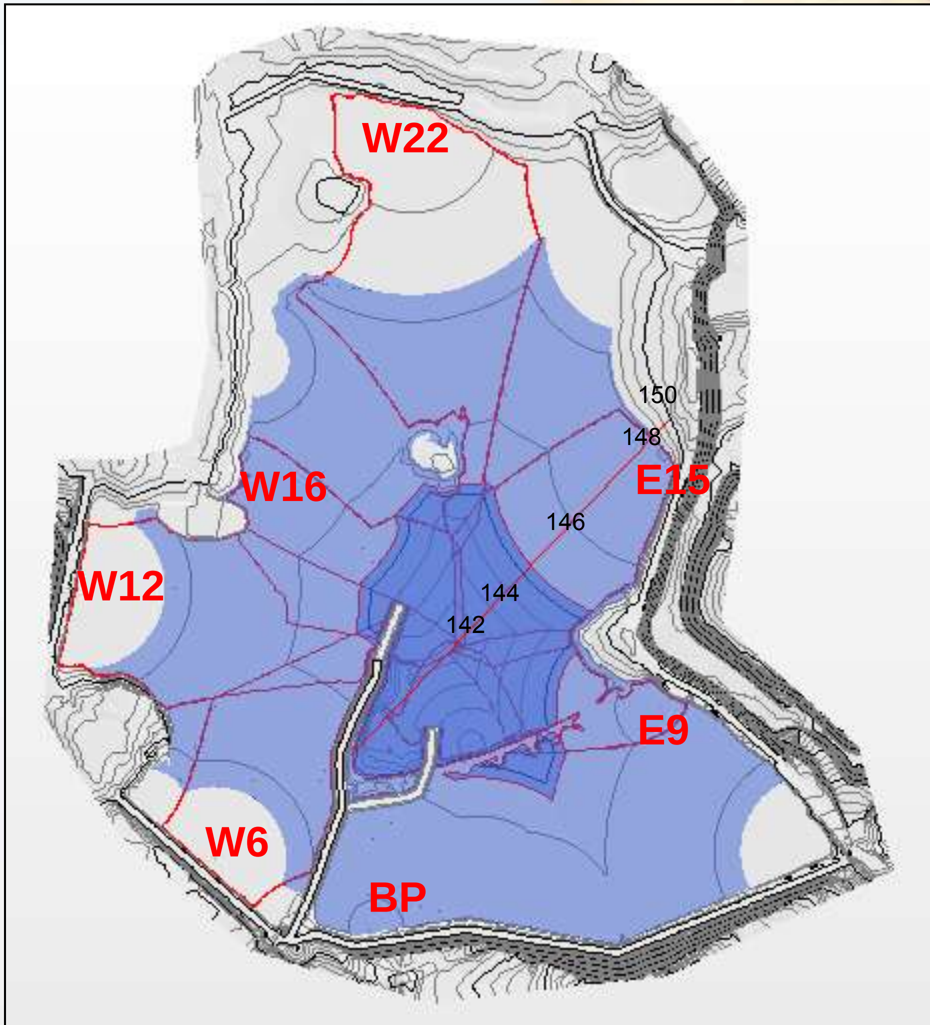
MODEL INPUT	
Water Balance Volume (m³)	1,185,974
Ice thickness (m)	1.50
Tonnes (t)	288,988

MODEL RESULTS	
Pond volume (m³)	459 343
Pond depth (m)	7.029
Pond elevation (m)	146.978
Min pond ele (m)	139.874
Ice thickness (m)	1.504
Unfrozen water elevation (m)	145.474
Ice volume (m³)	797 203
Ice ratio (%)	65%
Transfer to South Cell (m³)	0



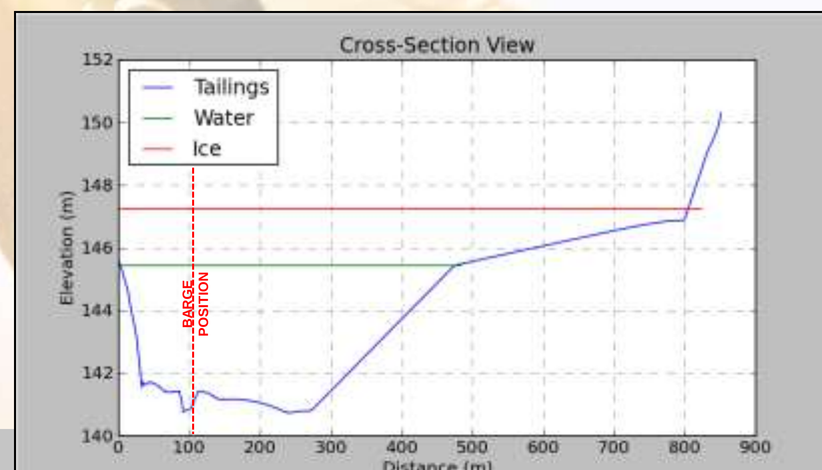
North Cell TSF deposition plan March 2014

Duration	Deposition Point	Tonnes
2	BP	20,662
5	W22	58,960
6	W16	70,926
6	W10	70,984
4	E15	47,335
4	E9	47,188
4	W6	47,771



MODEL INPUT	
Water Balance Volume (m³)	1 163 247
Ice thickness (m)	1.80
Tonnes (t)	367,009

MODEL RESULTS	
Pond volume (m³)	309 900
Pond depth (m)	6.728
Pond elevation (m)	147.245
Min pond ele (m)	140.517
Ice thickness (m)	1.795
Unfrozen water elevation (m)	145.450
Ice volume (m³)	853 347
Ice ratio (%)	73%
Transfer to South Cell (m³)	0

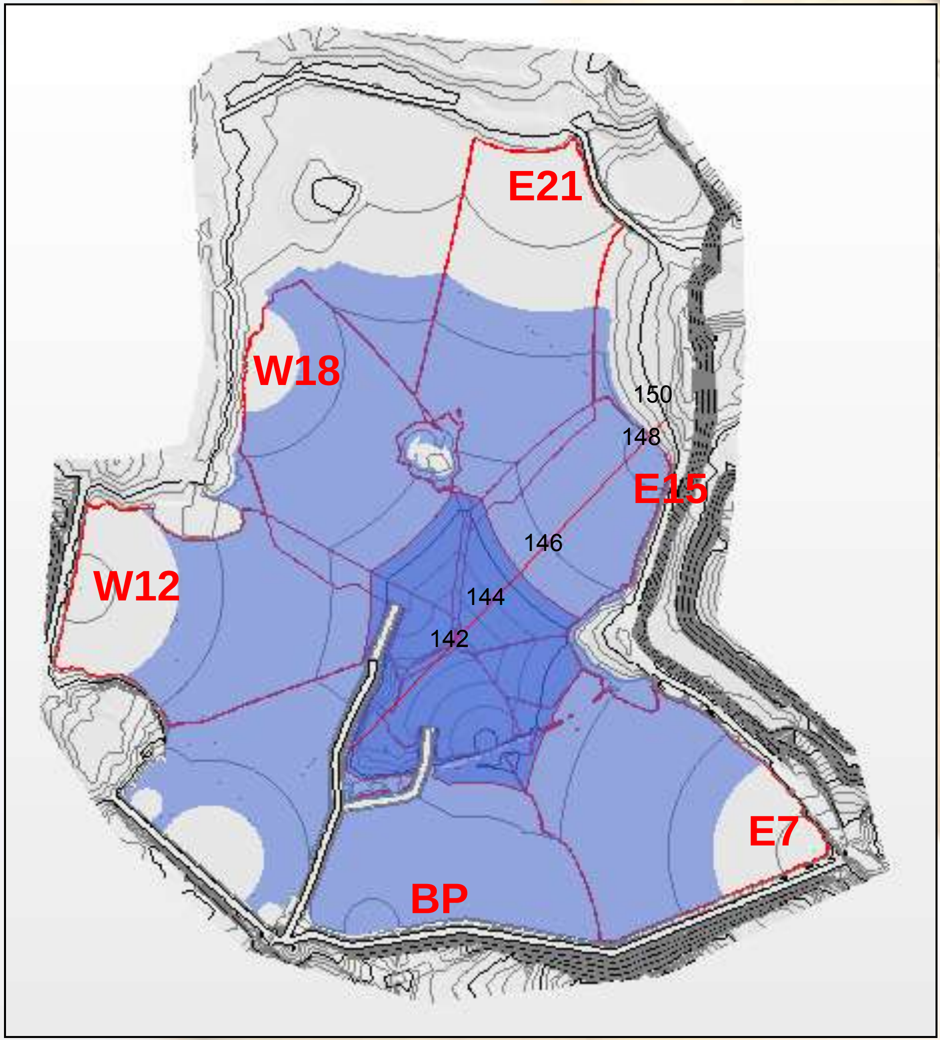


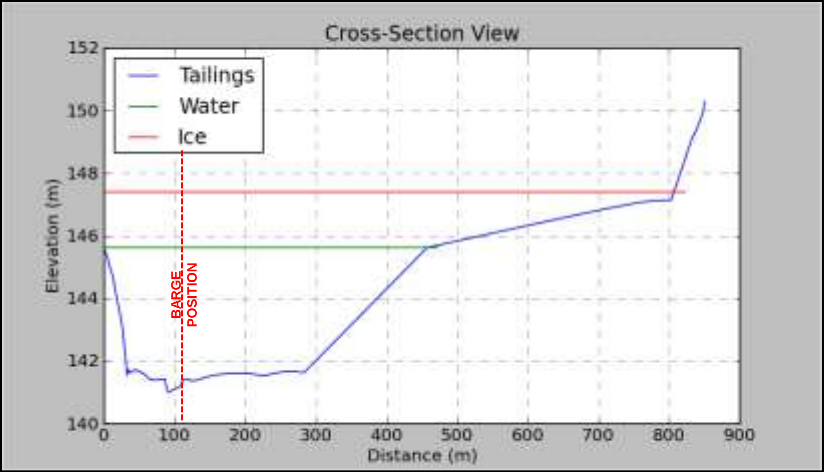
North Cell TSF deposition plan April 2014

Duration	Deposition Point	Tonnes
2	BP	23 478
6	E7	70 435
6	W18	70 435
6	W8	70 435
6	E21	70 435
4	E15	46 956

MODEL INPUT	
Water Balance Volume (m³)	1,054,214
Ice thickness (m)	1.80
Tonnes (t)	348,990

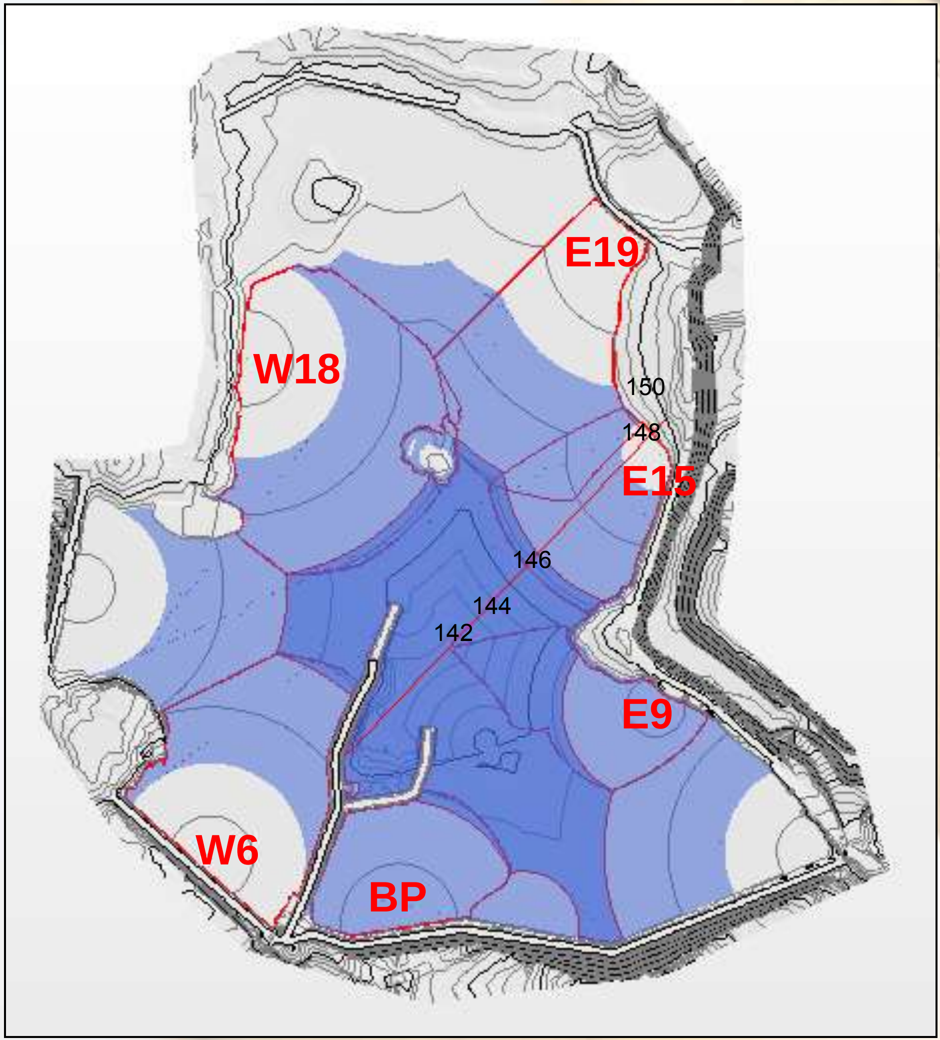
MODEL RESULTS	
Pond volume (m³)	260 298
Pond depth (m)	6.699
Pond elevation (m)	147.411
Min pond ele (m)	140.712
Ice thickness (m)	1.780
Unfrozen water elevation (m)	145.631
Ice volume (m³)	833 459
Ice ratio (%)	76%
Transfer to South Cell (m³)	0





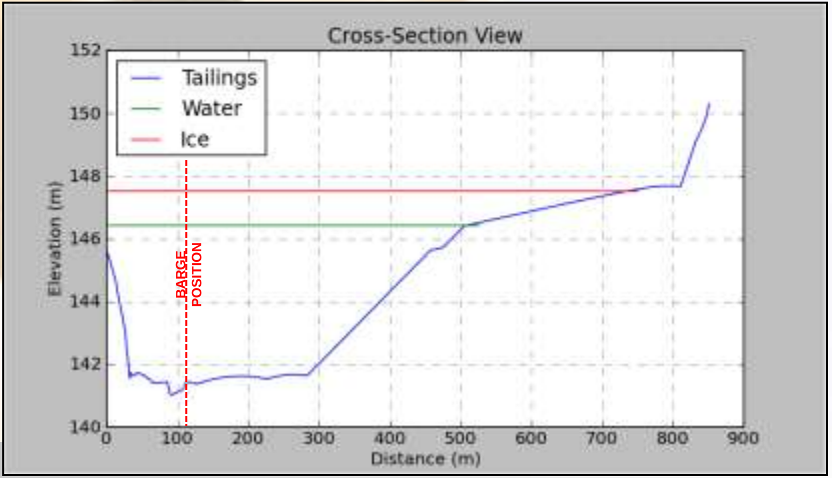
North Cell TSF deposition plan May 2014

Duration	Deposition Point	Tonnes
2	BP	23,401
9	W18	93,536
6	W6	64,411
6	E19	64,344
4	E15	41,497
4	E9	41,577



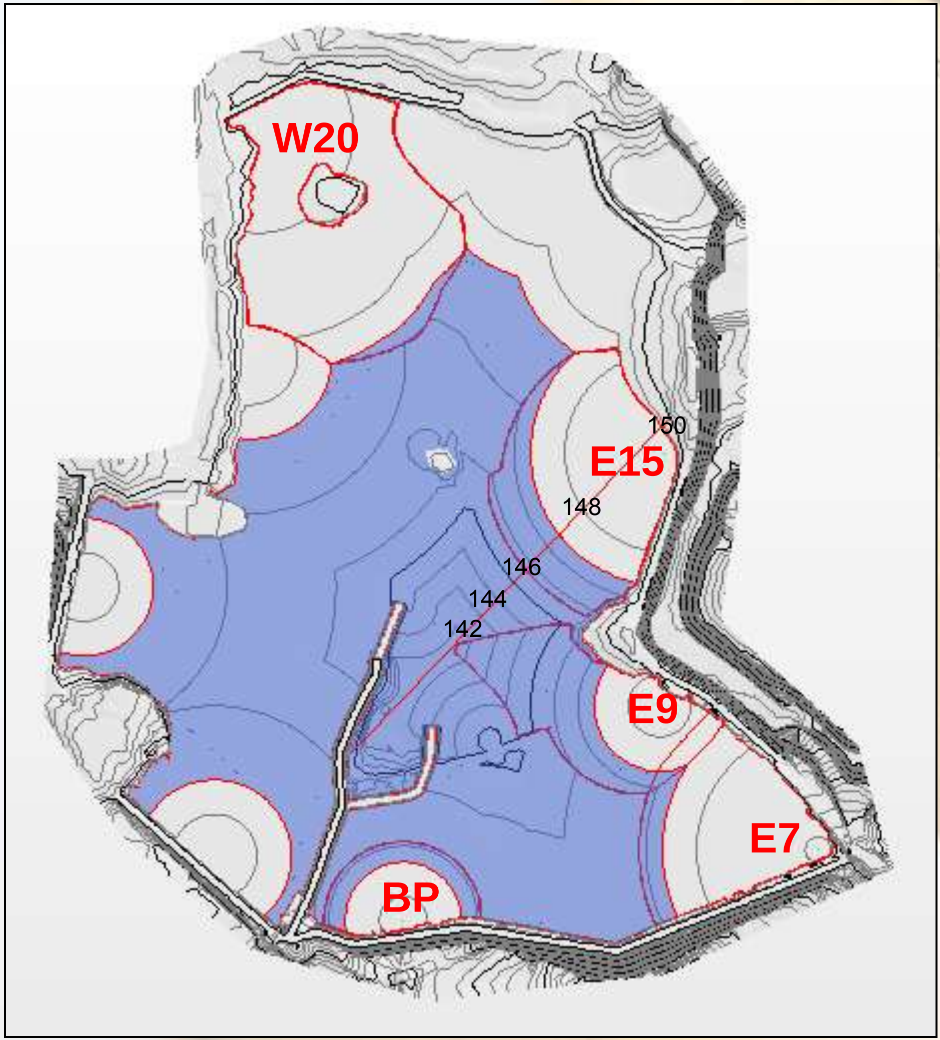
MODEL INPUT	
Water Balance Volume (m³)	1 044 070
Ice thickness (m)	1.10
Tonnes (t)	325,004

MODEL RESULTS	
Pond volume (m³)	412 777
Pond depth (m)	6.047
Pond elevation (m)	147.518
Min pond ele (m)	141.471
Ice thickness (m)	1.108
Unfrozen water elevation (m)	146.410
Ice volume (m³)	631 293
Ice ratio (%)	60%
Transfer to South Cell (m³)	0



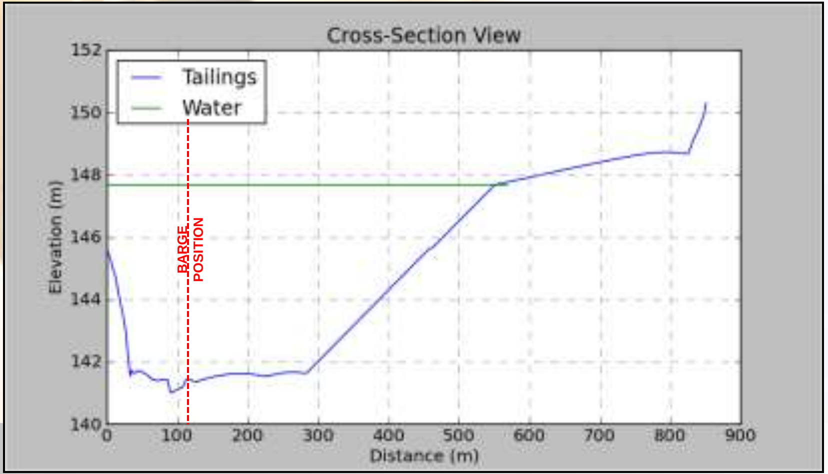
North Cell TSF deposition plan June 2014

Duration	Deposition Point	Tonnes
2	BP	23,377
9	W20	105,309
4	E9	46,790
9	E15	70,141
6	E7	70,141



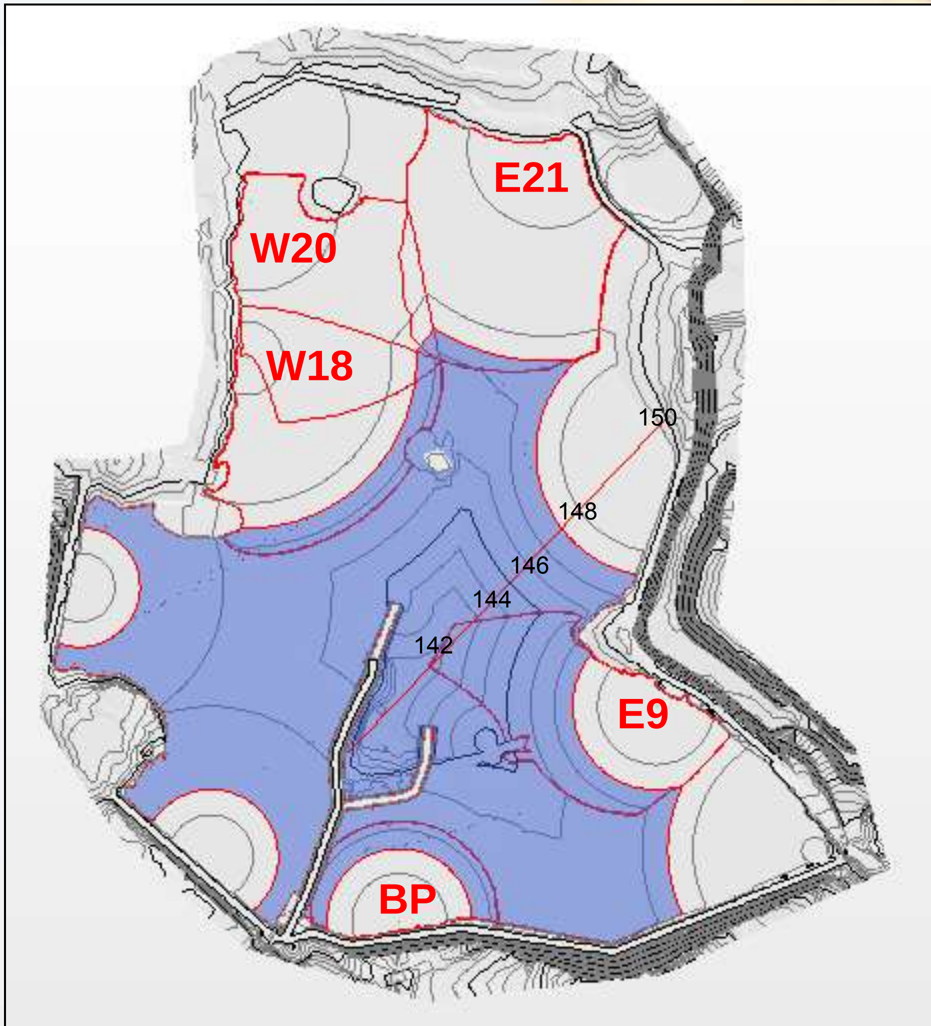
MODEL INPUT	
Water Balance Volume (m³)	1 059 689
Ice thickness (m)	0
Tonnes (t)	354 990

MODEL RESULTS	
Pond volume (m³)	1 056 178
Pond depth (m)	6.202
Pond elevation (m)	147.682
Min pond ele (m)	141.480
Ice thickness (m)	0
Unfrozen water elevation (m)	147.682
Ice volume (m³)	0
Ice ratio (%)	0
Transfer to South Cell (m³)	0



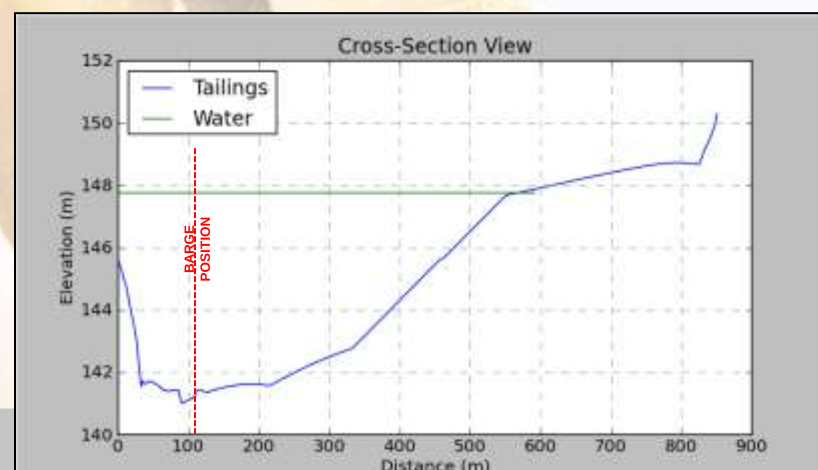
North Cell TSF deposition plan July 2014

Duration	Deposition Point	Tonnes
2	BP	23,269
9	E21	104,342
6	E9	69,856
5	W20	58,066
9	W18	104,633



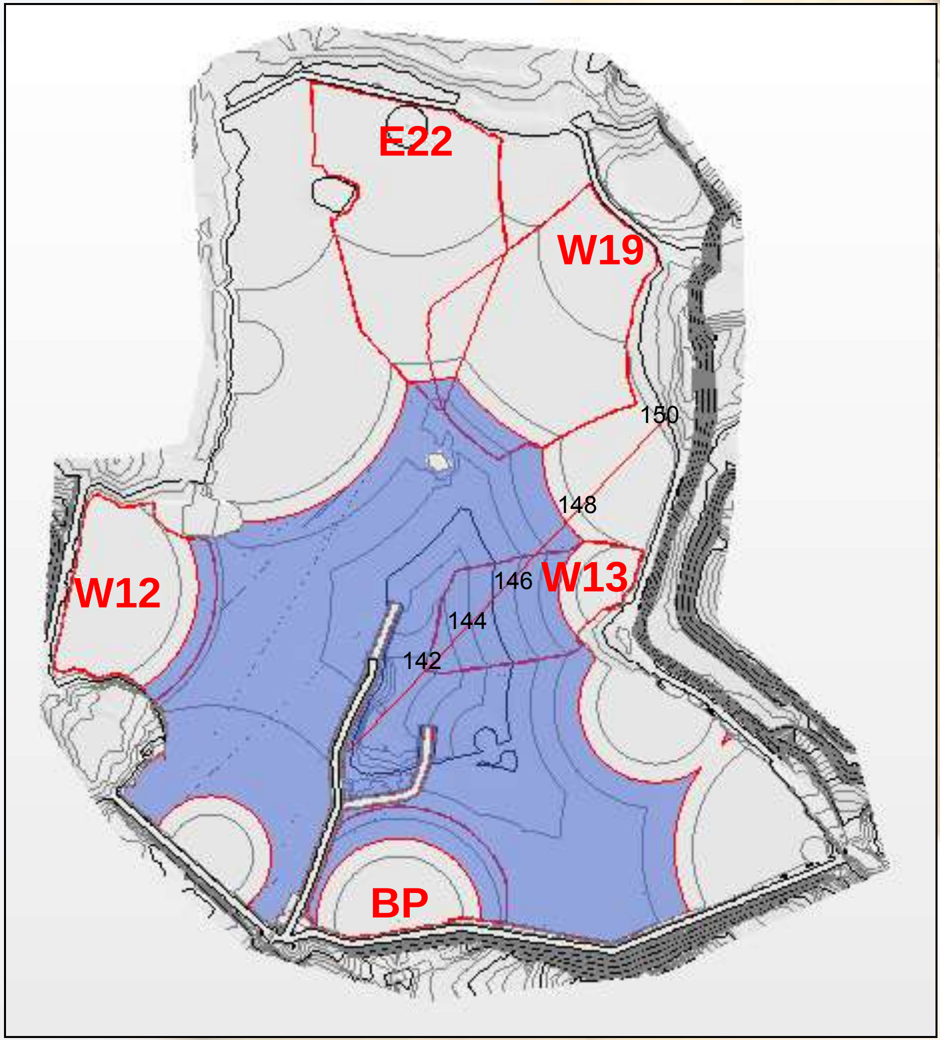
MODEL INPUT	
Water Balance Volume (m³)	999 244
Ice thickness (m)	0
Tonnes (t)	354,234

MODEL RESULTS	
Pond volume (m³)	994 558
Pond depth (m)	6.219
Pond elevation (m)	649 483
Min pond ele (m)	141.549
Ice thickness (m)	0
Unfrozen water elevation (m)	147.768
Ice volume (m³)	0
Ice ratio (%)	0
Transfer to South Cell (m³)	0



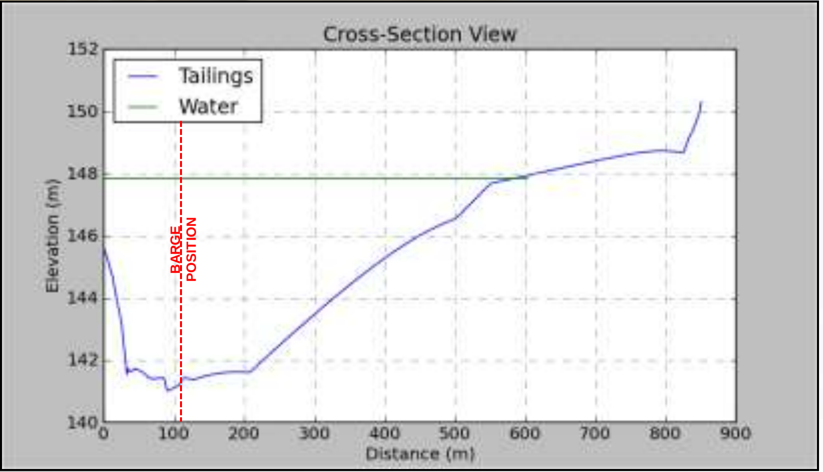
North Cell TSF deposition plan August 2014

Duration	Deposition Point	Tonnes
2	BP	23,401
9	W18	93,536
6	W6	64,411
6	E19	64,344
4	E15	41,497
4	E9	41,577



MODEL INPUT	
Water Balance Volume (m³)	1,197,430
Ice thickness (m)	0
Tonnes (t)	354,234

MODEL RESULTS	
Pond volume (m³)	911,888
Pond depth (m)	6.047
Pond elevation (m)	147.855
Min pond ele (m)	141.808
Ice thickness (m)	0
Unfrozen water elevation (m)	147.855
Ice volume (m³)	0
Ice ratio (%)	0
Transfer to South Cell (m³)	0

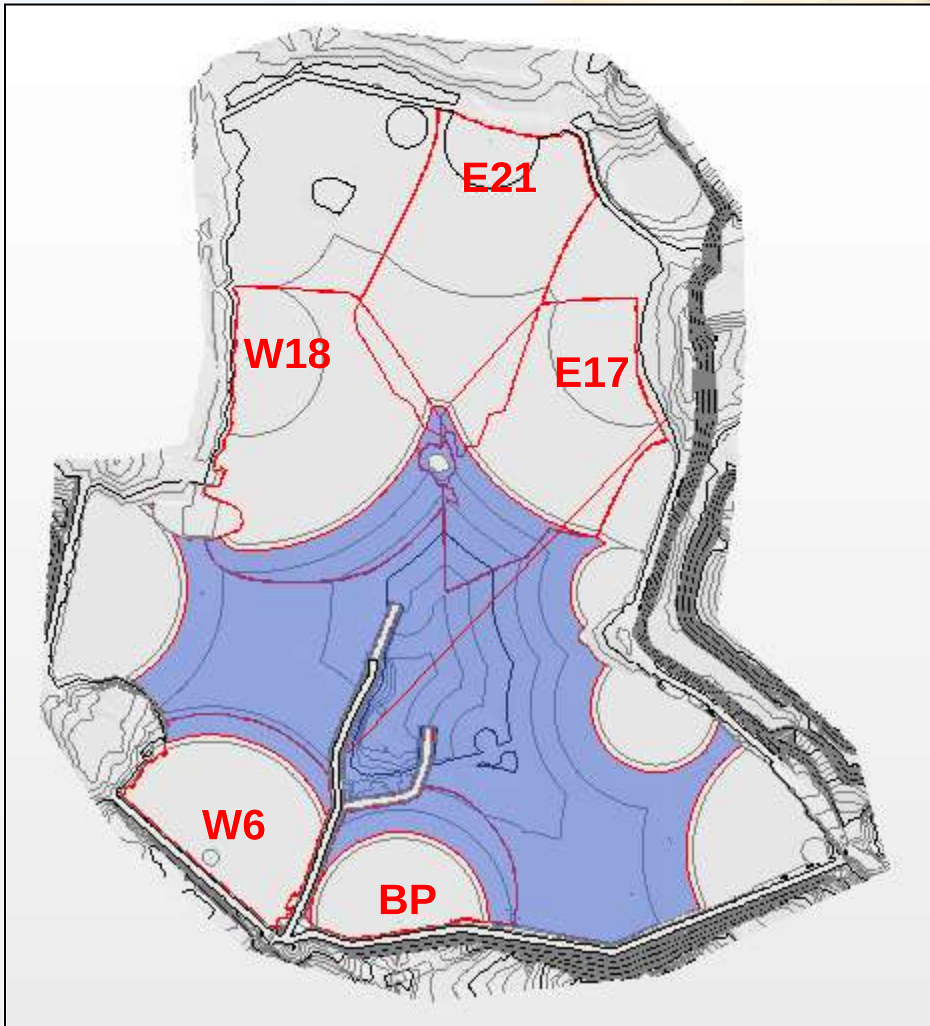


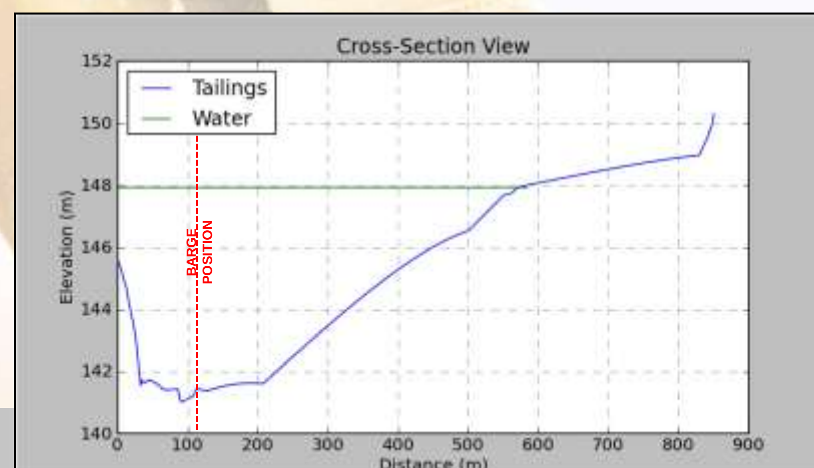
North Cell TSF deposition plan September 2014

Duration	Deposition Point	Tonnes
2	BP	23,265
6	E21	69,639
8	W18	92,798
8	E17	92,949
6	W6	69,749

MODEL INPUT	
Water Balance Volume (m³)	892 523
Ice thickness (m)	0.00
Tonnes (t)	348,990

MODEL RESULTS	
Pond volume (m³)	889 585
Pond depth (m)	6.423
Pond elevation (m)	147.939
Min pond ele (m)	141.516
Ice thickness (m)	0
Unfrozen water elevation (m)	147.939
Ice volume (m³)	0
Ice ratio (%)	0
Transfer to South Cell (m³)	0





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