Appendix F3

Report: Assay Road Seepage Assessment and Engineering QCQA

TETRA TECH EBA

MEADOWBANK MINE, ASSAY ROAD SEEPAGE PHASE 2: ENVIRONMENTAL SITE ASSESSMENT AND ENGINEERING QA/QC

PRESENTED TO

Agnico Eagle Mines Limited

AUGUST 2014
ISSUED FOR USE
FILE: E14103172-01

CONSULTING ENGINEERS & SCIENTISTS · www.eba.ca

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

This page intentionally left blank.

EXECUTIVE SUMMARY

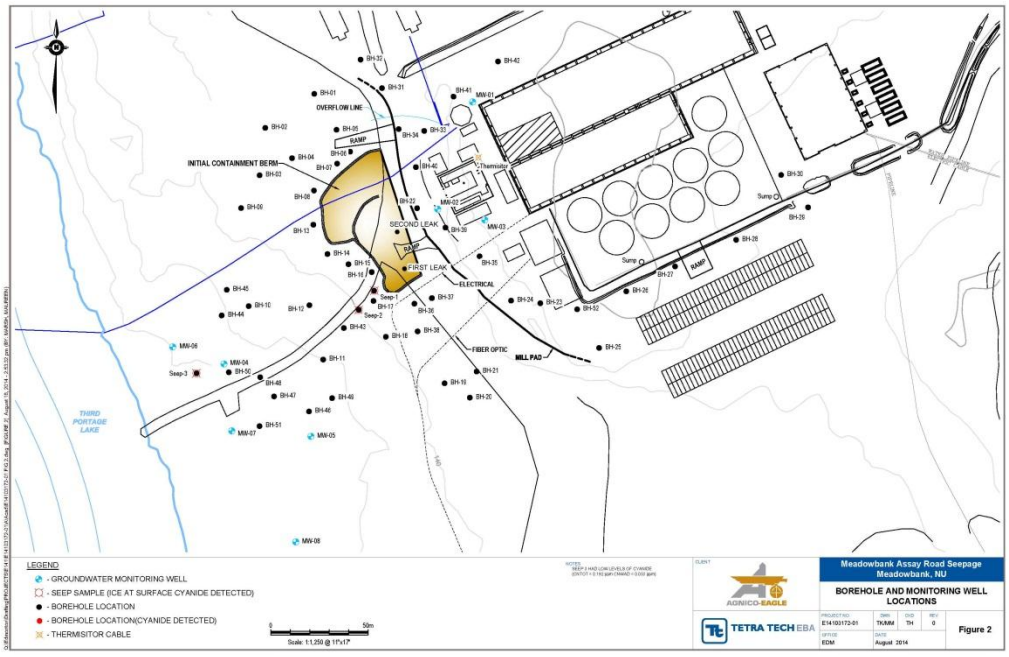
Tetra Tech EBA Inc. is pleased to provide this report to Agnico Eagle Mines (AEM) summarizing our findings from our Environmental Site Assessment of the Assay Road Seepage and the Quality Assurance/Quality Control (QA/QC) monitoring for the construction of the interception trench at the Meadowbank Mine, about 80 km north of Baker Lake, Nunavut. The purpose of this project was to identify cyanide impacted soil and groundwater; provide monitoring suggestions for cyanide impacted soil and groundwater; and perform QA/QC for the construction of an interception trench. The objectives of this work were as follows:

- Evaluate the extent of the soil impacted by the cyanide leak from the Meadowbank Mine Mill, with the goal of selecting a location for an interception trench;
- Provide recommendations for soil and groundwater monitoring after installation of the interception trench;
- Provide QA/QC services for the construction of the interception trench, and
- Provide a report summarizing the findings of the Environmental Site Assessment and the QA/QC services.

Phase 2 Environmental Evaluation

Tetra Tech EBA conducted an Environmental Site Assessment from February 19, 2014 to March 6, 2014 to investigate and evaluate the extent of ground impacted by the cyanide leak with the goal of selecting a location for an interception trench and to allow future determination of clean-up requirements of the contaminated materials.

The Environmental Site Assessment was conducted with a downhole hammer-air rotary drill without water. A total of 52 boreholes were drilled in various areas located on the tundra and pad. In addition to the boreholes, eight (8) monitoring wells were installed, three (3) on the pad and five (5) on the tundra (Figure 2). Soil samples were collected from each borehole and analysed for pH, Total (Strong Acid Dissociable) Cyanide and Weak Acid Dissociable (WAD) Cyanide. Where possible, ice or water samples were collected and analyzed for Total Cyanide and WAD Cyanide.



There are no guidelines for Total and WAD Cyanide in the Canadian Council of Ministers of the Environment (CCME), "*Soil Quality Guideline for the Protection of Environmental and Human Health*" or the Environmental Protection Division, Department of Environment, Government of Nunavut, "*Environmental Guideline for Contaminated Site Remediation*" (March 2009 Revised). Free cyanide was not analyzed in this assessment since WAD Cyanide includes free cyanide and this was an initial investigation to determine the extent of cyanide impacted soil down the grade from the Assay Lab. Therefore, the British Columbia Environmental Management Act for Contaminated Sites Regulations, Schedule 4 and 6 for Total and WAD Cyanide were used to evaluate the level of contamination.

A total of 62 soil samples collected from the natural area downslope of the mill pad were submitted for analysis of Total and WAD Cyanide, of which 17 samples detected Total Cyanide with values ranging from 0.5 to 51 mg/kg. Only one location (BH-38, 51 mg/kg) was greater than the British Columbia guidelines for Total Cyanide. As for WAD Cyanide, there were only three samples where WAD Cyanide was detected, with values ranging from 0.9 to 3 mg/kg. A total of 30 soil samples were collected from the mill pad and submitted for analysis of Total and WAD Cyanide, of which there was one sample (BH-22, 1.7 mg/kg) where Total Cyanide was detected. No WAD Cyanide was detected.

A total of 6 water (ice) samples collected from the natural area outside of the mill pad were submitted for analysis of Total and WAD Cyanide. Total Cyanide was detected with values ranging from 0.192 to 2.23 ppm. All water samples analyzed, except one (Seep 3), exceed Meadowbank's Water License No. 2AM-MEA0815 for Total Cyanide in effluent. On the mill pad, there was one water sample (BH-22) submitted where Total Cyanide (24.59 ppm) and WAD Cyanide (10.6 ppm) was detected.

Phase 2 Engineering

Tetra Tech EBA agreed with AEM's suggestion that an interception trench needed to be constructed downstream of the temporary containment berms that were rapidly constructed downslope of the mill pad when the seepage was first observed. AEM designed the interception trench, with consultation by Tetra Tech EBA, and Tetra Tech EBA was selected to perform geotechnical QA/QC during its construction. The purpose of the geotechnical engineering QA/QC program was to verify that geotechnical related construction activities were undertaken in accordance with the project drawings and specifications, and that the design intent was satisfied.

The AEM design for the interception trench utilizes shallow ditches and a sump. To mitigate anticipated thaw in permafrost the final design for the interception trench included significant over excavation and replacement with thaw stable materials, and a liner and cut-off system that is keyed in deep enough below the ditch or sump bottom to be below the depth of anticipated thaw. However, to insure thermal stability, it will be essential that water not be allowed to pond in the ditches or sump.

Conclusions

During this investigation cyanide was detected at a depth of 1.68 mbgs near the location where the seep was initially identified. Down gradient of the initial containment, cyanide was detected to depths of 0.7 mbgs. Cyanide was not detected approximately 60 m from the lake (BH-47) in the soil, but was found at low levels in water (ice) that accumulated on the surface (Seep 3). Seep 3 is located about 30 m from the lakes edge and had low levels of cyanide (Total cyanide - 0.192 mg/L; WAD cyanide - 0.033 mg/L). This information suggests that the cyanide initially infiltrated into the soil close to the initial seepage area; however further away from the seepage location cyanide may have accumulated only in the topsoil with little or no penetration into the underlying till overburden or bedrock.

It was decided that the interception trench would be installed between Seep 3 and BH-47. The location of the interception trench was based on the desire to minimize disturbance to the natural tundra downslope of the mill pad, and so it would act as a barrier between areas with detected cyanide contamination and the lake, while staying at least 30 m away from Third Portage Lake. An interception trench at this location should prevent the cyanide contamination from reaching Third Portage Lake. It is recommended that any water pooling within the collection area of the interception trench be pumped out within one day.

Spills from the CIP tanks were not being contained by the secondary containment system and hence cyanide impacted water was leaking into the foundation soils below the mill building and then out through the mill pad fill materials to the natural area downslope of the mill.. In order to remove the source of contamination, AEM has taken steps to repair/reseal areas in the secondary containment that were identified to be leaking and that lead to the observed seepage. The main area of concern was the secondary containment system around the CIP tanks, which has now been repaired.

A ground temperature monitoring cable (thermistor cable) was installed near the mill to determine ground temperatures in the pad. The cable indicates that the pad fill materials and underlying native ground have refrozen and the active layer was determined to be about 1.5 m thick in June. Therefore, repairs to the containment system in the mill in conjunction with the presence of frozen ground indicate that the potential for continued seepage should be minimal.

Recommendations

AEM has established a Freshet Action Plan (April 2014), which outlines work that AEM will undertake to monitor the interception trench and the sampling protocols. AEM will conduct daily inspections of the pumping, collection systems and perimeter area and will record all pumped volumes of water from the interception trench. Any of the water collected will be pumped to the mill and discharged with the tailings to the tailings storage facility (TSF). The sampling program in this action plan states that on a monthly basis AEM will submit water samples to Multi Lab for analysis of Free Cyanide, Total Cyanide, Copper and Iron from the interception trench, monitoring wells 14MW04, 14MW05,14MW06, 14MW07, and 14MW08, the original containment area and Third Portage Lake. Bi-weekly they will collect waters twice a week from the original containment berm, the interception trench, and monitoring wells 14MW02, 14MW03, 14MW08, 201, 202, and 203 to be submitted to the AEM on-site lab for WAD cyanide analysis.

After reviewing the information from this Environmental Site Assessment and AEM's Freshet Action Plan (April 2014), the following recommendations apply:

- Continue to sample the original containment berm, interception trench, Third Portage Lake and monitoring wells 14MW01 to 14MW08, 201, 202 and 203, if water is present and not frozen, for analysis of Free and Total cyanide, Copper, and Iron;
- In monitoring wells with known detected cyanide, collect water samples once in the spring and fall for analysis of ammonium, nitrate/nitrite, and pH. The purpose for the ammonium and nitrate/nitrite is that these compounds increase in response to biodegradation of cyanide;
- If water is ponding down gradient of the interception trench, water samples should be collected and submitted for analysis of Free and Total cyanide, Copper, and Iron;
- During the investigation, no seep (water) samples or soil samples were collected within 30 m of the lake. Cyanide was detected at Seep 3, thus further sampling should be conducted down gradient of the trench in

the soil and water. Water should be analyzed for Free and Total Cyanide, Copper, and Iron, while soils should be analyzed for Free and Total cyanide;

- Depending on the results of the soil samples collected and potentially ponded water samples collected within 30 m of Third Portage Lake it is recommended that sediment samples be collected from the shore of Third Portage Lake. These sediment samples should be analyzed for Free and Total Cyanide, Copper and Iron.
- AEM should install sumps inside the original containment berm to aid in the collection of water. This water can be pumped up to the mill and discharged with the TSF. This should improve collection of water in the spring near the mill pad;
- AEM should continue with the repairs to the mill to ensure seepage sources are eliminated; and
- Collect additional soil samples on the northeast side of the mill in the direction of Tear Drop Lake to confirm if any cyanide travelled in that direction. If water is observed in a drill hole a well should be installed.

The following soil sampling recommendations should be implemented at closure of the mine:

- Soil samples should be collected and tested for Free Cyanide in the areas where known cyanide was detected, as free cyanide was not analyzed in this investigation. These areas should be delineated in order to produce a remedial action plan, if needed;

TABLE OF CONTENTS

APPENDIX SECTIONS

TABLES

PHOTOGRAPHS

APPENDICES

ACRONYMS & ABBREVIATIONS

AEM	Agnico Eagle Mines
CCME	Canadian Council of Ministers of the Environment
mbgs	metres below ground surface
QA/QC	Quality Assurance/Quality Control
TSF	Tailings Storage Facility
SAD	Strong Acid Dissociable
WAD	Weak Acid Dissociable

LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Agnico Eagle Mines Limited and their agents. Tetra Tech EBA Inc. (Tetra Tech EBA) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Agnico Eagle Mines Limited, or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this report is subject to the terms and conditions stated in Tetra Tech EBA's Services Agreement. Tetra Tech EBA's General Conditions are provided in Appendix G of this report.

1.0 INTRODUCTION

Tetra Tech EBA Inc. (Tetra Tech EBA) is pleased to provide this report to Agnico Eagle Mines (AEM) summarizing our findings from our Environmental Site Assessment of the Assay Road Seepage and the quality assurance/quality control (QA/QC) monitoring of the construction of the interception trench at the Meadowbank Mine, about 80 km north of Baker Lake, Nunavut,. The purpose of this project was to identify cyanide impacted soil and groundwater; provide monitoring suggestions for cyanide in soil and groundwater; and perform quality assurance/quality control (QA/QC) during construction of an interception trench. The objectives of this work were as follows:

- Evaluate the extent of the soil impacted by a cyanide leak from the Meadowbank Mine Mill, with the goal of selecting a location for an interception trench;
- Provide recommendations for soil and groundwater monitoring after installation of the interception trench;
- Provide QA/QC services for the construction of the interception trench, and
- Provide a report summarizing the findings of the Environmental Site Assessment and the QA/QC services.

The Environmental Site Assessment was conducted in general accordance with the "*Environmental Guideline for Contaminated Site Remediation*" (Government of Nunavut 2009).

2.0 SCOPE OF WORK

2.1 Phase 2 Environmental Evaluation

Tetra Tech EBA conducted an Environmental Site Assessment from February 19, 2014 to March 6, 2014 to investigate and evaluate the extent of ground impacted by the cyanide leak with the goal of selecting a location for an interception trench and to allow future determination of clean-up requirements of the contaminated materials. During the drilling program there were some modifications made to the work plan. These changes included additional boreholes and monitoring wells and some proposed borehole locations were moved as the program progressed.

2.1.1 Scope of Environmental Site Assessment

The scope of work for the Environmental Site Assessment included the following:

- Conducting a safety meeting with AEM and Tetra Tech EBA representatives to review the Safety Plan and identify all hazards, PPE requirements, emergency contacts, and safe work practices.
- Determining where all underground utilities such as electrical and water lines are located on site prior to drilling.
- A total of 52 boreholes were drilled in various areas located on the tundra and pad. In addition to the boreholes, eight (8) monitoring wells were installed, three (3) on the pad, and five (5) on the tundra. All holes were drilled using a downhole hammer-air rotary drill without water.
- Samples were collected in most boreholes and monitoring well locations, where possible. There were some locations on the pad where soil samples could not be collected due to voids underneath or in the pad. Each borehole and monitoring well was drilled to bedrock.

- Samples were collected at the drill using either plywood or a metal pan and then scooped into plastic bags using a metal spoon. After each sample was collected, the pans, spoon, and plywood were brushed off to minimize cross contamination. In addition, before drilling each hole, the drill was purged using compressed air to clean off the drill bit. When moved from a known contaminated site on the pad to the tundra, the drill rod and drill bit where exchanged for clean rods and drill bits.
- A total of 92 soil samples were submitted to Maxxam Analytics in Montreal Quebec for analysis of Total (Strong Acid Dissociable) Cyanide and Weak Acid Dissociable (WAD) Cyanide. There were 10 samples submitted for soil pH. All soil samples were maintained below 4°C.
- Where possible, ice or water samples were collected and placed into plastic containers for analysis. A total of 7 samples were sent to Multi-Lab Direct in Val-d'Or Quebec for analysis of Total Cyanide and WAD Cyanide. All water/ice samples were maintained below 4°C. An additional sample was taken at the same time for each of the 7 water/ice samples and submitted to the on-site Assay Lab for analysis of WAD Cyanide.
- All borehole locations and monitoring well locations were determined using a handheld Trimble GPS.

2.2 Phase 2 Engineering

Tetra Tech EBA agreed with AEM's suggestion that an interception trench needed to be constructed downstream of the temporary containment berms. AEM designed the interception trench and Tetra Tech EBA performed geotechnical QA/QC during its construction. The QA/QC for the interception trench was carried out between April 24, 2014 and May 1, 2014. The purpose of the geotechnical engineering QA/QC program was to verify that geotechnical related construction activities were undertaken in accordance with the project drawings and specifications, and that the design intent was satisfied. This section provides Tetra Tech EBA's scope for the engineering work.

2.2.1 Phase 2 Engineering Scope of Work

The proposed Phase 2 engineering scope of work included the following:

- Reviewing AEM's Engineering design plan for the interception trench and providing feedback in a memo;
- Performing a visual inspection of the interception trench excavation and cleaning/preparation prior to 20 mm crushed aggregate/8% bentonite fill placement;
- Observing 20 mm crushed aggregate/8% bentonite fill placement and compaction;
- Providing geotechnical design clarifications and verification that the design intent was being achieved; and
- Overseeing the construction of the permanent interception trench in a QA/QC only capacity.

3.0 BACKGROUND INFORMATION

3.1 Site Details and Background

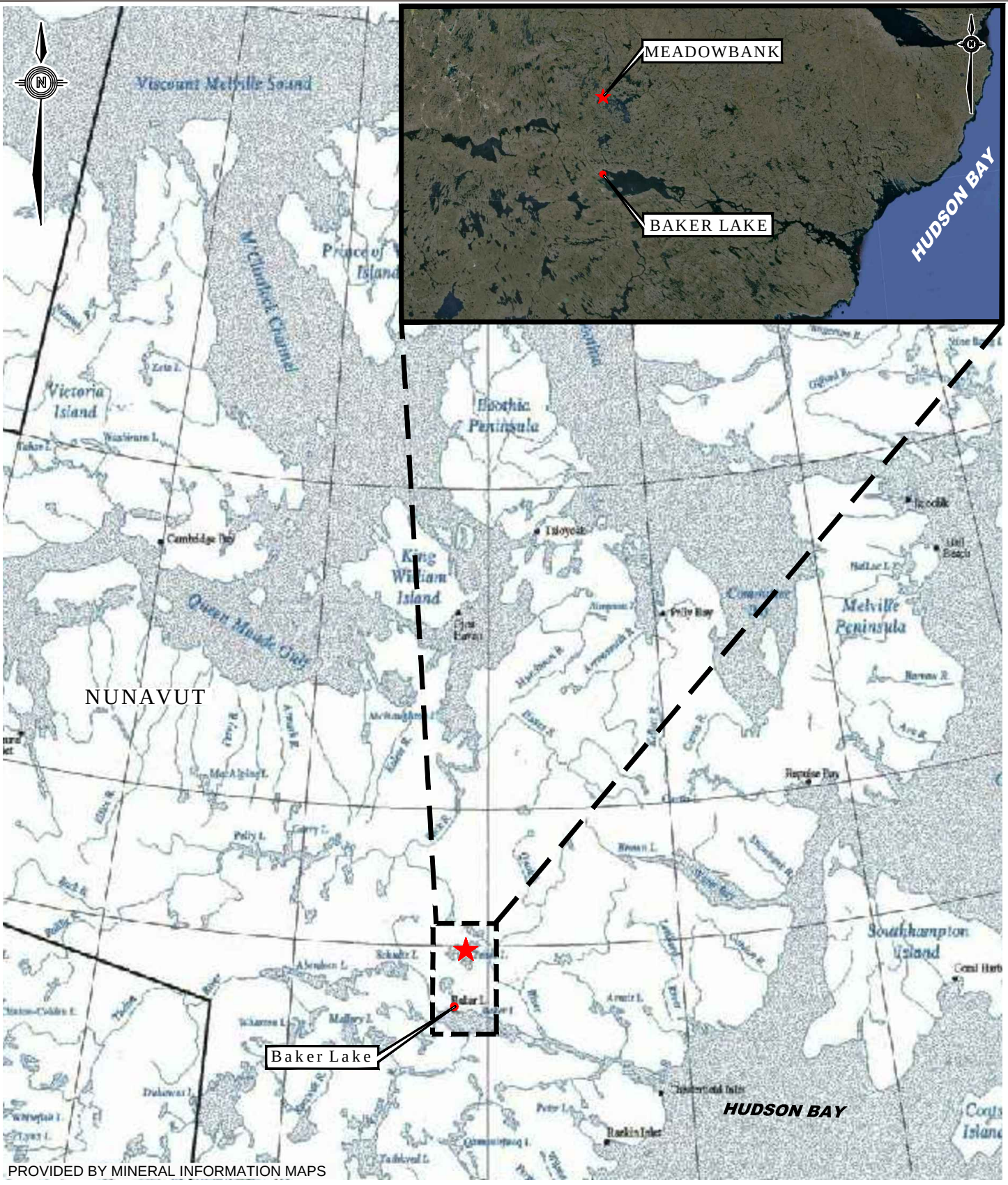
The Meadowbank Mine is located approximately 80 km north of Baker Lake, Nunavut (Figure 1) in the Kivalliq Region (formerly District of Keewatin). It is located near Third Portage Lake approximately 190 m northeast from the edge of the lake (65°1'30"N, 96°4'14"W). On November 26, 2013, Tetra Tech EBA was provided with a detailed report, "*Preliminary AEM Report – Assay Road Seepage*" (AEM, November 2013) discussing the seepage issue identified at the Meadowbank Mine. This report noted that on November 4, 2013, seepage was

first observed coming through the road embankment in front of the Assay Lab. Testing of the seepage water identified that it was process water, as indicated by the presence of cyanide, copper, and iron.

After the seepage was identified by AEM, a temporary containment berm was constructed downstream of the road to contain the water. Because of winter conditions, the seepage water froze relatively quickly and the ice was regularly removed from the containment area using a backhoe. As winter conditions continued, the amount of seepage decreased, due to freezing within the road embankment. The seepage was thought to be primarily originating from the mill, particularly from the CIP secondary containment system.

AEM drilled a number of boreholes on the mill pad, but only water samples were collected from holes that had enough water. AEM also collected water samples from groundwater wells installed by AEM (201, 202, and 203) located on the pad in front of the CIP area behind the Assay Lab. In the area where the cyanide leaked onto the ground surface downslope of the mill pad, three samples were collected from inside the temporary containment berm, along with an additional sample collected from the surface water of the lake downgrade of the leak. Cyanide was detected from the water samples collected from the wells and inside the temporary containment berm. Cyanide was not detected in the sample that was taken from the lake. Additional samples were taken from the lake near the water tank intake pipe intermittently from November 26, 2013 to May 26, 2014 and submitted to Multi Lab for analysis of Total Cyanide. Cyanide values ranged from less than 0.005 (detection limit is 0.005 mg/L) to 0.087 mg/L. These values are very low, as well, the Total Cyanide values have been below detection limits since April 1, 2014.

AEM conducted an assessment program inside the mill and determined that there were several secondary containment systems that required repair. AEM is currently undertaking an extensive repair/reseal program within the mill to ensure integrity of these containment systems that were identified to be leaking and which lead to the seepage. The main area of concern identified in this assessment program was the CIP tank secondary containment system which was designed to contain spills from the CIP tanks. This containment system has now been repaired.



Q:\Edmonton\Drafting\PROJECTS\E141\E14103172-01\A\Acad\E14103172-01 FIG 1.dwg [FIGURE 1] June 09, 2014 - 8:43:52 am (BY: KIROS, TIGISTI)

DRAWING NOT TO SCALE

CLIENT

AGNICO-EAGLE

TETRA TECH EBA

Meadowbank Assay Road Seepage
Meadowbank, NU

SITE LOCATION

PROJECT NO.	DWN	CKD	REV
E14103172-01	TK	TH	0

OFFICE	DATE
EDM	June 2014

Figure 1

3.2 Climate

Based on meteorological data from weather stations at Baker Lake, the mean annual temperature is -11°C. Based on 153 complete months of data at the Baker Lake Airport, the mean monthly air temperatures for Baker Lake ranged from -38.2°C in January 2004 to 13.7°C in June 2007. Total annual rainfall from 2000 to 2012 averaged 26 mm and 11 mm of snow water equivalent (Government of Canada 2014).

3.3 Site Topography and Vegetation

The Meadowbank Mine is located adjacent to Third Portage Lake in the Low Arctic ecoclimatic zone, characterized with low relief, having an elevation range of 0 to 70 m above the lake level. The site is predominantly covered in heath tundra interspersed with lichen-dominated bedrock outcroppings and boulder fields (Cumberland Resources Ltd. 2005).

3.4 Regional Bedrock Geology

The Meadowbank Mine is located on the Canadian Shield, which consists of Archean rocks. Archean rocks are greater than 2.5 billion years old and the Shield contains the largest area in the world of Archean rocks. The mine site is underlain with Archaean greenstone and metasedimentary rocks consisting of iron formation, intermediate volcanic and ultramafic rocks with quartzite in some areas. Enclosed within the greenstone are volcaniclastic sediments, felsic-to-intermediate flows and tuffs, sediments and oxide iron formations, and sericite schists. The ultramafic rocks contain serpentinite, chlorite, actinolite, and talc. There are two main faults identified in the Meadowbank Mine region, the Bay Zone Fault and the Second Portage Fault. There are areas where bedrock outcrops are found and the bedrock appears to follow the surface topography, with some local relief in the bedrock surface of 0.5 meters (Cumberland Resources Ltd. 2005).

3.5 Regional Surficial Soils

The area is partially covered with glacial till that has a sandy silty till with gravel matrix. The percent fines for silt and clay are typically 20 to 40%. Both boulders and cobbles are present in the till with the cobble content ranging from 0 to 35% with an average of 12% by volume. The colour of the till in this area ranges from dark brown to reddish brown (Cumberland Resources Ltd. 2005; Golder Associates. 2008).

3.6 Hydrogeology

The Meadowbank Mine is located near the surface water divide between the Back River basin, which flows north to northwest towards the Arctic Ocean and the Thelon River basin, which flows east to southeast into Hudson Bay. The regional deep groundwater flows northwest from the northwestern end of Third Portage Lake and in the southeast direction from the southeast end of Third Portage Lake and Second Portage Lakes.

Continuous permafrost depth extends between 450 and 550 m. Ground temperature measurements in the project area indicate an active zone thickness averaging 1.3 m in shallow overburden and up to 4 m adjacent to the lakes (Cumberland Resources Ltd. 2005). The shallow groundwater flow has little to no hydraulic connection with the groundwater regime located below the deep permafrost. Based on the regional geology and the presence of permafrost, the groundwater flow is likely complex and controlled by topography, surface water bodies, and bedrock structure. Vertical groundwater flow is limited by the permafrost. The period of groundwater flow is highly influenced by climatic conditions and flow is also likely limited to the short summer season when the active layer thaws, thus allowing water to flow in this horizon. It is expected that the surface water bodies are expressions of the water table.

Based on the site topography, it is expected that flow of water in the active layer is towards Third Portage Lake. Third Portage Lake is located approximately 190 m from the Mill Pad. From photos taken in the fall, there are areas located near the lake where water ponds, thus water in the active layer is close to surface in this area, and the grassy vegetation observed reflects wetland conditions.

3.7 Cyanide

Cyanide is a general term that refers to a group of chemicals where carbon and nitrogen combine to form compounds (CN). The chemistry of cyanide is complex, as there are different cyanide compounds, which have been grouped into five groups: free cyanide, simple cyanide compounds, weakly complexed cyanide, moderately strong complexed cyanide and strong complexed cyanide. These five groups have then been categorized into three common names: free cyanide, WAD cyanide, and Total cyanide. Most cyanide in solution combines with metals and metalloids and form dissolved complexes (Lottermoser, Bernd. 2007).

Free Cyanide

Free cyanide refers to two species: the cyanide anion (CN^-) dissolved in water and the hydrocyanic acid (HCN) formed in solution (Lottermoser, Bernd. 2007):

$$CN^-_{(aq)} + H_2O_{(l)} \longleftrightarrow HCN_{(aq)} + OH^-_{(aq)}$$

The amount of cyanide converted to hydrogen cyanide depends on the salinity and pH of the solution. At alkaline pH greater than 10.5, most of the free cyanide is present as the cyanide anion. Equal concentrations of CN and HCN are present at a pH of 9.3. At neutral to acidic pH conditions (pH < 8.3), all free cyanide is present as hydrogen cyanide. Hydrogen cyanide is volatile and can be dispersed to the atmosphere. As for the salinity, hydrogen cyanide is promoted in high saline conditions (Lottermoser, Bernd. 2007).

WAD Cyanide

Weak acid dissociable (WAD) cyanide consists of free cyanide, simple cyanide compounds, and weak to moderately strong complexes. Simple cyanide compounds are the salts of hydrocyanic acid (e.g.: NaCN, KCN, $Ca(CN)_2$, Cu(CN), Ni(CN)). These compounds exist as solid cyanides, some of which are water soluble, which can form free cyanide and dissolved cations. The weak to moderately strong complexes are metal complexes (e.g. $Zn(CN)^{-2}_4$, $Cd(CN)^-_3$, $Cu(CN)^-_2$, $Ni(CN)^{-2}_4$ and $Ag(CN)^-_2$) which create free cyanide when the pH is lowered to approximately 4.5 (Lottermoser, Bernd. 2007)

Total Cyanide

Total Cyanide consists of free cyanide, simple compounds, weak to moderately strong complexes and strong complexes. These strong complexes include complexes of gold, iron, and cobalt, and their destruction is slow under natural conditions. A change in environmental conditions such as pH, water temperature, salinity, complex concentration, oxidant concentration, and intensity of sunlight or UV radiation reduces the stability of the strong cyanide complexes (Lottermoser, Bernd. 2007).

Toxicity

Free cyanide is the most toxic cyanide form, since it causes toxicity at low concentrations. For the other cyanide species, WAD and Total, higher concentrations are required to induce toxicity. Hydrogen cyanate and cyanate ions are less toxic than hydrogen cyanide, while thiocyanate is relatively non-toxic compared to free cyanide. The stability of the cyanide influences the toxicity of the different cyanides. The more stable the cyanide, the less toxic

it is, particularly to aquatic life. Therefore, WAD cyanide is an appropriate measure for assessing potential toxicity of cyanide solutions to humans and animals (Lottermoser Bernd. 2007).

Fate and Transport in Soil

Transport and distribution of cyanide is mainly affected by volatilization and biodegradation in soils. Volatilization of cyanide increases in acidic soils and can be the dominant mechanism for cyanide loss from soil surfaces. Cyanide can also create metal complexes with heavy metals, especially iron, and precipitate out of solution. Hydrogen cyanide is not affected by photolysis in soils, but complex cyanides may rapidly photo dissociate and release free cyanide when exposed to sunlight. Cyanide can be absorbed to soil particles, particularly to clays and organic matter. The rate at which hydrogen cyanide and metal cyanide adsorb to soils in not significant when compared to volatilization and biodegradation. The high volatility of cyanide and the action of soil microbes do not permit high levels of cyanide to persist or accumulate in the soil under natural conditions. Biodegradation of cyanide in the soil by microbes tends to generate carbonates and ammonia. Cyanide in the soil will decompose to ammonia, carbon dioxide, and nitrogen (nitrate) in aerobic conditions and nitrogen (ammonium), thiocyanate, and carbon dioxide under anaerobic conditions (CCME. 1999).

Mobility of cyanide in the soil changes with stability and dissociation of the compound, soil type, soil permeability, soil chemistry, and presence of aerobic and anaerobic conditions. The following soil characteristics increase the mobility of cyanide: low pH, high negative soil charges, and low clay content. Whereas soils with neutral to alkaline pH, high clay content, high positive soil charges, presence of organic matter, iron, or other metal oxides can increase soil attenuation. Attenuation may be increased under aerobic conditions, since biodegradation is higher in aerobic conditions. Some comparisons were completed for different cyanide complexes for mobility, in that aqueous simple cyanide and ferricyanides tend to be very mobile in soil, while cyanides dissolved in leachate move slower than those in the aqueous solution. Copper, cobalt, zinc, and nickel-cyanide complexes were found to be more mobile than iron and manganese complexes (CCME. 1999).

4.0 ENVIRONMENTAL CRITERIA

The following subsections outline the rationale for the selection of applicable generic risk management guidelines for soil.

4.1 Regulatory Guidelines

The regulatory guideline documents that were consulted are summarized below. These documents provide a generic set of guidelines against which the analytical results are compared to provide a general site condition.

- Canadian Council of Ministers of the Environment, Soil Quality Guideline for the Protection of Environmental and Human Health (2007) - Wildland Land Use;
- Canadian Council of Ministers of the Environment, Canadian Water Quality Guidelines for Protection of Fresh/ Marine Water Aquatic Life (2007);
- Environmental Protection Division, Department of Environment, Government of Nunavut, Environmental Guideline for Contaminated Site Remediation (March 2009 Revised) - Wildland Land Use;
- British Columbia Environmental Management Act for Contaminated Sites Regulations, Schedule 4 Generic Numerical Soil Standards (2014) – Wildland Use and;
- British Columbia Environmental Management Act for Contaminated Sites Regulations, Schedule 6 Generic Numerical Water Standards (2014).

4.2 Criteria for Cyanide in Soil

Currently, there are no soil guidelines for Total and WAD Cyanide under the Canadian Council of Ministers of the Environment (CCME), "*Soil Quality Guideline for the Protection of Environmental and Human Health*" or the Environmental Protection Division, Department of Environment, Government of Nunavut, "*Environmental Guideline for Contaminated Site Remediation*" (March 2009 Revised). Only free cyanide is regulated under these guidelines, in which for Wildland land use, the guideline is 0.9 mg/kg. Free cyanide was not analyzed in this assessment since WAD Cyanide includes free cyanide and this was an initial investigation to determine the extent of cyanide impacted soil downgrade of the Assay Lab.

There are guidelines under the British Columbia (BC) Environmental Management Act for Contaminated Sites Regulations, Schedule 4 for Total and WAD Cyanide. Under these guidelines there are five (5) land use categories, Agriculture, Commercial Residential, Industrial, and Urban Park (Wildlands). Below are the definitions for each land use:

- **Agricultural:** means the use of land for the primary purpose of producing agricultural products for human or animal consumption including, without limitation, livestock raising operations, croplands, orchards, pastures, greenhouses, plant nurseries and farms;
- **Commercial:** means the use of land for the primary purpose of buying, selling or trading of merchandise or services including, without limitation, shopping malls, office complexes, restaurants, hotels, motels, grocery stores, automobile service stations, petroleum distribution operations, dry cleaning operations, municipal yards, warehouses, law courts, museums, churches, golf courses, government offices, air and sea terminals, bus and railway stations, and storage associated with these uses;
- **Residential:** means the use of land for the primary purpose of a residence by persons on a permanent, temporary or seasonal basis, including, without limitation, single family dwellings, cabins, apartments, condominiums or townhouses, or institutional facilities, including, without limitation, schools, hospitals, daycare operations, prisons, correctional centres and community centres;
- **Urban Park:** means the use of urban land for the primary purpose of outdoor recreation including, without limitation, municipal parks, fairgrounds, sports fields, rifle ranges, captive wildlife parks, biking and hiking areas, community beaches and picnic areas, but does not mean Wildlands such as ecological reserves, national or provincial parks, protected wetlands or woodlands, native forests, tundra and alpine meadows;
- **Wildlands:** means the use of land for the primary purpose of supporting natural ecosystems, including the use of land for ecological reserves, national or provincial parks, protected wetlands or woodlands, native forests, tundra and alpine meadows, but does not include uses defined as urban park land use. The land use of the site is Wildlands land use when the concentration of any substance in the soil at a depth of less than 3 metres is greater than the numerical standards for soil that would apply if the land use of the site were urban park land use.

For the purposes of this comparison, the urban park (Wildland) land use values from British Columbia (BC) Environmental Management Act for Contaminated Sites Regulations, Schedule 4 for Total and WAD Cyanide were used as a guideline. Maximum Total and WAD Cyanide from this act are 50 and 10 mg/kg, respectively.

4.3 Criteria for Cyanide in Water

4.3.1 Water Licence

As per Water Licence No. 2AM-MEA0815 (see Table A below), all effluent shall not exceed the following criteria for Cyanide:

Table A – Cyanide Effluent Criteria

Parameter	Max. Average Concentration	Max. Allowable Grab Sample Concentration
Total Cyanide (mg/L)	0.5	1.0

4.3.2 General Criteria

In this investigation Total and WAD cyanide were measured on site, but not free cyanide. The reason for this is that WAD cyanide includes free cyanide. Thus, free cyanide was not included in the analysis as the purpose of this investigation was to determine the extent of the cyanide impacted material. Also, WAD cyanide is an appropriate measure for assessing potential toxicity of cyanide solutions to humans and animals.

Currently, there are no water guidelines for Total, WAD and Free Cyanide under the Under the Government of Nunavut's Contaminated Guidelines, "*Environmental Guideline for Contaminated site Remediation*" (March 2009 Revised) for water. As for CCME's, "*Canadian Water Quality Guidelines for Protection of Fresh/ Marine Water Aquatic Life*" guideline, there are only standards for free cyanide for freshwater aquatic life (5 µg/l or 0.005 mg/L). Therefore the BC Environmental Management Act for Contaminated Sites Regulations (CSR), Schedule 6-Generic Numerical Water standards were utilized as it contains standards for both Total (Drinking Water: 200 mg/L) and WAD cyanide (Aquatic Life: 50 mg/L-freshwater or 10 mg/L for marine/estuary). Therefore the water licence criteria for Total Cyanide in effluent are utilized to evaluate the results from the testing on recovered water samples.

5.0 SITE WORK

5.1 Site Safety

In accordance with AEM's policies, Tetra Tech EBA staff completed AEM's online site orientation and safety training. Pre-job hazard assessments were completed prior to going in the field, and were updated with a field-level assessment once on site. In conjunction with AEM, Tetra Tech EBA completed a job hazard analysis form (See Appendix D) prior to conducting any field work. Each day, Tetra Tech EBA, AEM, and the driller conducted a safety meeting prior to drilling and completed a Safe Work Form, which was updated and signed daily. Tetra Tech EBA participated in the staff safety meetings at the beginning of the program with various mine manager representatives to go over the job hazard analysis and to review the scope of the project. Prior to drilling, the electrical and water lines were located on site. During the course of the work, Tetra Tech EBA met with the electrical supervisor to confirm holes located near the buildings and that when drilling near electrical lines, the power to these lines were locked out and tagged out.

For the geotechnical QA/QC work, Tetra Tech EBA staff completed AEM's online site orientation and safety training. Pre-job hazard assessments were completed prior to going in the field, and were updated with a field-level assessment once on site.

5.2 Soil Sampling Program

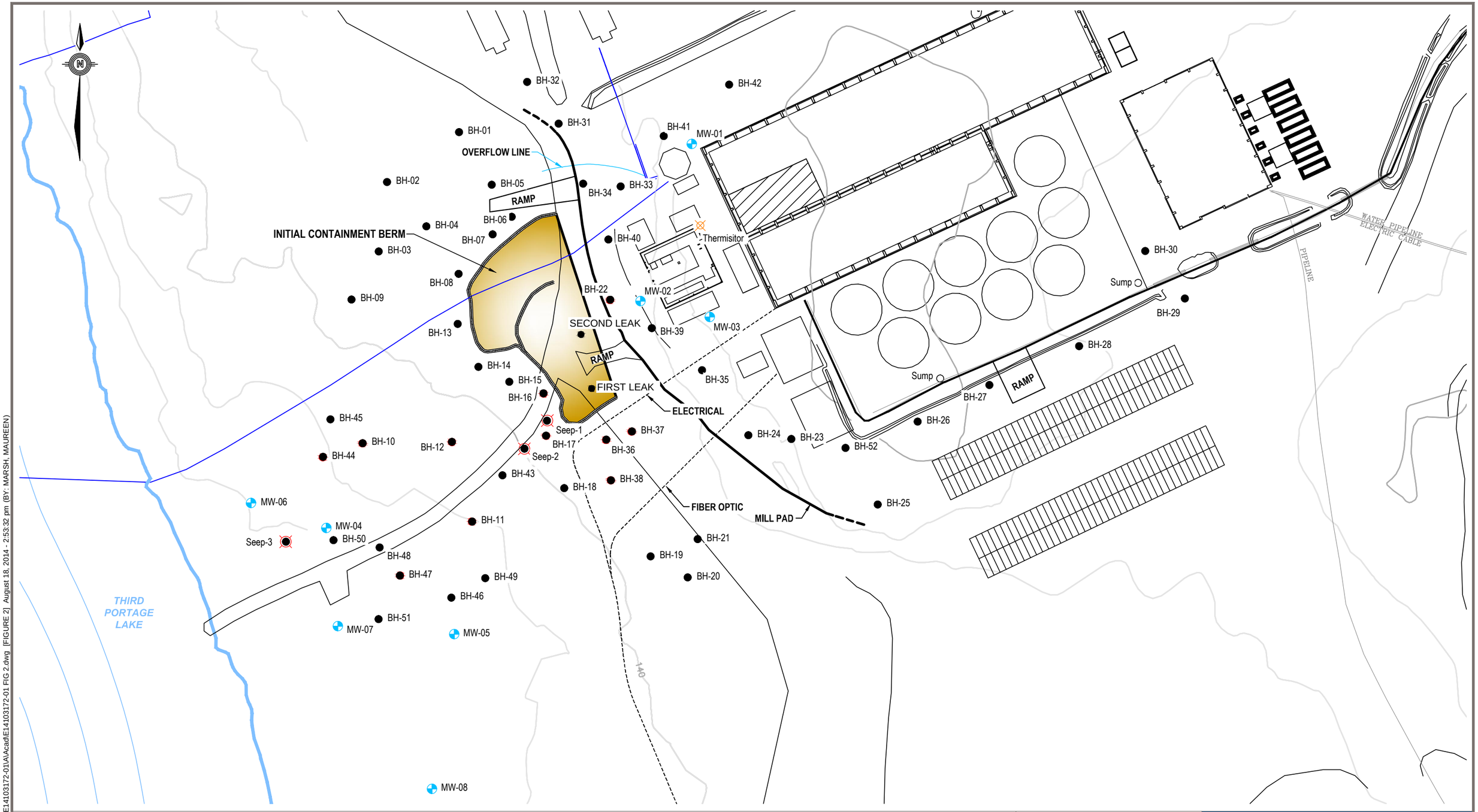
Prior to the drilling program, Tetra Tech EBA completed a walkthrough of the site with an AEM employee to explain where the leaks originated and where the water was originally coming out of the pad. After the walkthrough it was decided to begin drilling in front of the Assay Lab first then continue to drill on either side of the Assay Lab. Photos were taken throughout the drilling program (Photos 1-8).

A total of 52 boreholes were drilled in various areas (Figure 2). All holes were drilled using a downhole hammer-air rotary drill without water. Samples were collected from the drill using either plywood or a metal pan and then scooped into plastic bags using a metal spoon. After the collection of each sample, the pans, spoon, and plywood were brushed off to minimize cross contamination. In addition, before drilling each hole, the drill was purged using compressed air to clean off the drill bit. When moving from a known contaminated site on the pad to the tundra, the drill rod and drill bit were exchanged for clean rods and drill bits.

All borehole locations had the total depth recorded, and depth of refusal. The colour of the cuttings was noted at some, but not all borehole locations, during the drilling program. Cuttings collected from the pad were grey in colour, while cuttings collected from the native terrain downslope of the mill pad were brown to reddish brown in colour. There were some locations on the pad where soil samples could not be collected due to voids in the rockfill materials used to construct the pad or underneath the pad.

Soil samples were placed into plastic Ziploc bags supplied by the laboratory, stored in an insulated cooler and kept cold for transport to Maxxam Analytics International Corporation in Montreal, Quebec. Holding times for all soil samples were within acceptable limits. The temperature of the samples upon being received by the laboratory was below 4°C. No samples were broken or lost during transport.

A total of 92 samples were analyzed for Total and WAD cyanide and 8 samples were analyzed for soil pH.



LEGEND

- GROUNDWATER MONITORING WELL
- SEEP SAMPLE (ICE AT SURFACE CYANIDE DETECTED)
- BOREHOLE LOCATION
- BOREHOLE LOCATION(CYANIDE DETECTED)
- THERMISITOR CABLE

0 50m

Scale: 1:1,250 @ 11"x17"

NOTES

SEEP 3 HAD LOW LEVELS OF CYANIDE
(CNTOT = 0.192 ppm CNWAD = 0.033 ppm)

CLIENT

AGNICO-EAGLE

TETRA TECH EBA

Meadowbank Assay Road Seepage
Meadowbank, NU

BOREHOLE AND MONITORING WELL LOCATIONS

PROJECT NO.	DWN	CKD	REV
E14103172-01	TK/MM	TH	0
OFFICE: EDM	DATE: August 2014		

Figure 2

5.3 Water Sampling Program

Where possible, ice or water samples were collected during drilling and placed into plastic containers for analysis. Samples were stored in an insulated cooler and were kept cold for transport to Multi-Lab Direct in Val-d'Or Quebec. A total of seven samples were sent to Multi-Lab Direct for analysis of Total Cyanide and WAD Cyanide. All water/ice samples were maintained below 4°C. An additional sample was taken at the same time for each of the seven water/ice samples and submitted to the Assay Lab on site for analysis of WAD Cyanide.

In addition to the sampled boreholes, eight (8) monitoring wells were installed, three (3) on the pad and five (5) in the natural terrain downslope of the mill pad. Monitoring wells were completed with 2" PVC solid pipe with a slotted screen at the bottom. These screens vary in depth, depending on the borehole depth (See Appendix B). The screen was surrounded by a silica sand filter pack followed by bentonite to grade. There were no metal coverings placed on the wells at the time of installation. After installation, no water samples could be obtained at the time of the investigation, due to frozen ground conditions.

5.4 Thermistor Cable

A thermistor cable was installed to 15.5 mbgs behind the Assay Lab near old monitoring wells 201, 202, and 203. The thermistor cable was completed with a 3" PVC solid pipe with caps at the bottom and top. The inside of the PVC pipe was filled with fine crushed gravel to the top of the PVC pipe. Readings were taken at the time of installation and every few days afterwards to determine the ground temperature. Appendix E presents the measured ground temperature and the calibration for the thermistor cable.

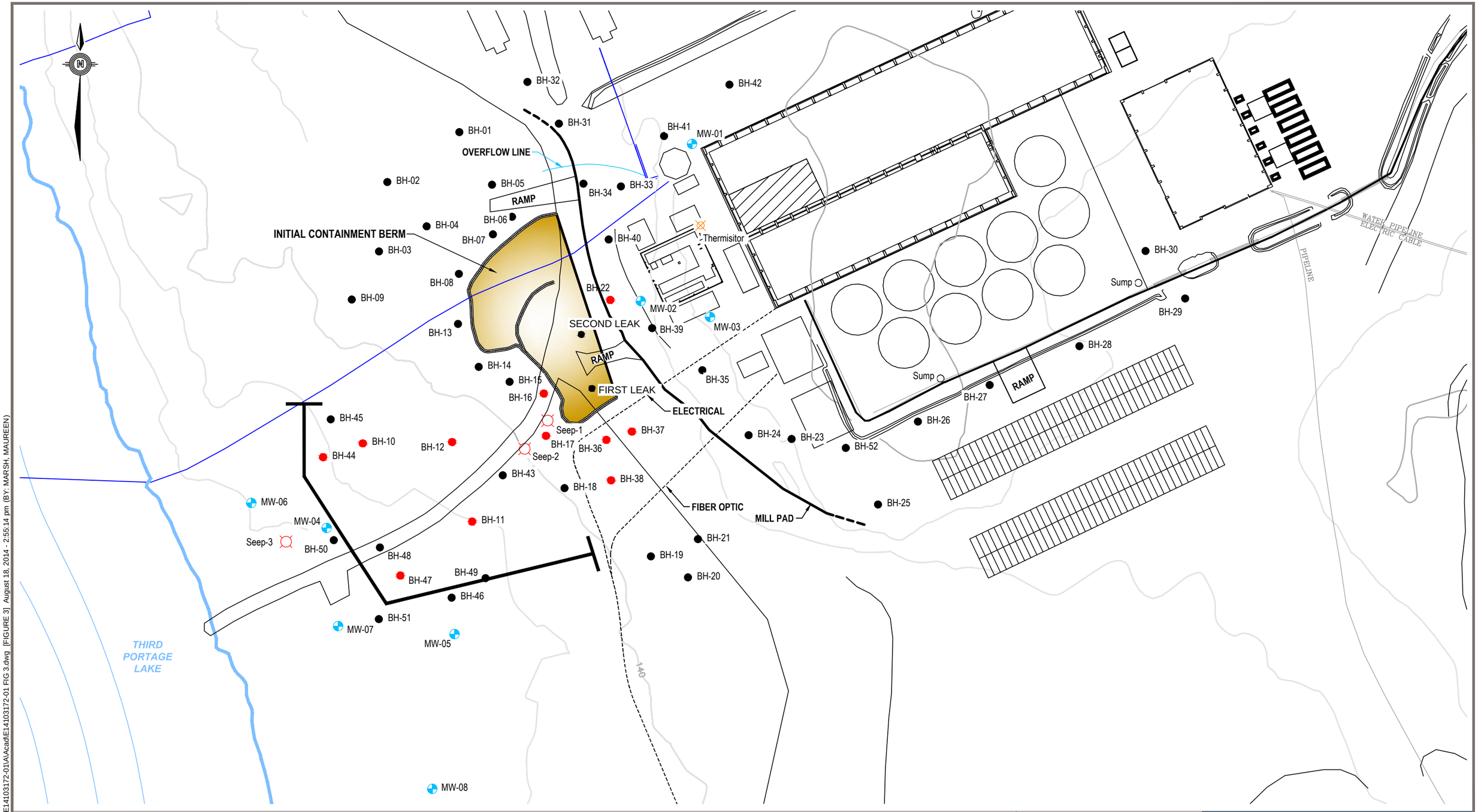
6.0 DESIGN AND CONSTRUCTION OF THE INTERCEPTION TRENCH

6.1 Interception Trench Location, Design and As-Built Construction

The interception trench design was developed by AEM with consultation by Tetra Tech EBA. The trench was located to minimize disturbance to the natural terrain, act as a barrier between detected cyanide and the lake, while staying at least 30 m away from Third Portage Lake. The approximate location of the interception trench is shown on Figure 3.

The initial design was to have a culvert within a rockfill mound and seacan placed on top for housing pumping equipment. The idea was to allow permafrost to aggrade into the bentonite material, providing a secondary impermeable boundary if water was allowed to pool in the collection area and started to slowly seep through the bentonite. This design was altered with input from Tetra Tech EBA and AEM, since the trench was over-blasted, and if the collection area was covered by rockfill to the original ground level, there was potential that the permafrost would aggrade too high and potentially freeze any pooled water before it could be pumped out. As a result, AEM committed that any pooled water in the collection area will be immediately pumped out to limit the possibility of long term pooling and seeping through the bentonite material, therefore the rockfill mound and seacan were abandoned.

Construction of the interception trench generally followed the intended design with a few changes made to "field-fit" to site conditions. As-built drawings provided by AEM are presented in Appendix C.



LEGEND

- GROUNDWATER MONITORING WELL
- SEEP SAMPLE (ICE AT SURFACE CYANIDE DETECTED)
- BOREHOLE LOCATION
- BOREHOLE LOCATION(CYANIDE DETECTED)
- THERMISITOR CABLE
- INTERCEPTION TRENCH

0 50m

Scale: 1:1,250 @ 11"x17"

NOTES

SEEP 3 HAD LOW LEVELS OF CYANIDE
(CNTOT = 0.192 ppm CNWAD = 0.033 ppm)

CLIENT

AGNICO-EAGLE

TETRA TECH EBA

Meadowbank Assay Road Seepage
Meadowbank, NU

INTERCEPTION TRENCH LOCATION

PROJECT NO.	DWN	CKD	REV
E14103172-01	TK/MM	TH	0

OFFICE: EDM

DATE: August 2014

Figure 3

The AEM design for the interception trench utilizes shallow ditches and a sump. To mitigate anticipated thaw in permafrost conditions, the final design for the interception trench includes significant over excavation and replacement with thaw stable materials, and a cut-off system keyed in deep enough below the ditch or sump bottom to be below the depth of anticipated thaw. However, to insure thermal stability, it will be essential that water not be allowed to pond in the ditches or sump for longer than 1 day.

6.1.1 Interception Trench Preparation

The excavation of blast debris from the interception trench was ongoing when Tetra Tech EBA arrived on site on April 24, 2014. Excavation was carried out with a Caterpillar (CAT) 365 excavator positioned parallel to the trench. Excavation removed the bulk of the blast material down to refusal on bedrock. The contractor was directed to remove all smaller rock fragments and unsound rock that remained at the bottom of the interception trench with the smaller CAT 345 backhoe equipped with a small (1 m wide) bucket fitted with “duck teeth”. Almost the entire excavation was located within sound bedrock. The bottom of the trench was somewhat irregular as a result of the inaccuracies of blasting. Photos 9 and 10 show the interception trench after the initial removal of blast material and after final cleaning, respectively.

6.1.2 Geotextile Placement

Geotextile was placed on the downstream slope of the interception trench under observation of Tetra Tech EBA. The geotextile was placed with a minimum panel overlap of 300 mm, and with approximately 1000 mm tied in at the top of the downstream slope. Photo 11 shows the geotextile on the downstream slope as it is being tied in.

6.1.3 20 mm Aggregate/8% Bentonite Material Placement

Bottom of Interception Trench

A mixture of 20 mm crushed aggregate with 8% bentonite (bentonite material) was placed on the bottom of the interception trench following inspection by Tetra Tech EBA. The bentonite material was compacted using a Wacker DPU 5045H Vibrating Plate with a minimum of four passes per lift; compaction activities are shown in Photo 12.

The aggregate/bentonite material was first placed to fill in the low (over-blasted) areas of the interception trench. Lift thicknesses between 200 and 300 mm were used. The bottom of the interception trench was built up in this manner until the desired thicknesses and grades were reached, as measured by the on-site surveyor. To meet the design intent, a minimum bentonite material thickness of 500 mm above the bedrock and minimum grades of 1.5 percent towards the collection area were achieved.

Downstream (Lake Side) Slope

Bentonite material was placed on the downstream slope of the trench in two lifts (300 mm and 200 mm) and compacted with the CAT 365 excavator bucket for a total thickness of 500 mm. Photo 13 shows the CAT 365 excavator compacting two lifts of bentonite material on the downstream slope.

Upstream (Mill side) Slope

Bentonite material was placed along the upstream slope to direct any flowing subsurface water (most likely flowing in the active layer at the overburden/bedrock contact) into the interception trench. Compaction was carried out with the CAT 365 excavator bucket. The contractor was directed to ensure there was no gap or “gutter” between the upstream wall and bentonite material. Care was taken so that the top of the bentonite material was below the overburden/bedrock contact. Photos 13 to 16 show bentonite placement on the upstream slope.

6.1.4 150 mm and Rock Fill Material Placement

The placement of the 150 mm and Rock Fill material was done after Tetra Tech EBA had left the site. This stage was not as crucial to the performance of the interception trench as the bentonite material placement. Photo 17 shows the interception trench at completion, photos courtesy of AEM.

6.1.5 Testing of 20 mm Crushed Aggregate/8% Bentonite Material

One sample (sample 1) of bentonite material was subjected to constant head hydraulic conductivity testing in Tetra Tech EBA's Edmonton laboratory in accordance with ASTM D5084. To get a sample representative of in-situ conditions, the sample was taken directly out of the bottom of the interception trench as the contractor was placing the bentonite material. In-situ moisture content prior to testing was 3.7%, moisture content after testing was 12.7%, with an average dry density of 1875 kg/m^3. The hydraulic conductivity of the bentonite material was determined to be 2.2 x 10^{-5} cm/s, which is adequate to minimize water seepage out of the interception trench. Detailed constant head hydraulic conductivity test results are presented in Appendix F.

7.0 RESULTS AND DISCUSSIONS

The results of the 2014 Meadowbank Mine Assay Seepage Environmental Site Assessment are presented in the following section and in Tables 1 to 3. The laboratory reports are in Appendix A.

7.1 Soil

Natural Terrain

There were a total of 62 soil samples submitted for analysis of Total and WAD Cyanide from the boreholes drilled in the natural terrain downslope of the mill pad. Of those 62 samples, there were 17 samples where Total Cyanide was detected, with values ranging from 0.5 to 51 mg/kg. When compared to the British Columbia (BC) Environmental Management Act: Contaminated Sites Regulations for Urban Park (Wildlands), Schedule 5, only one location (BH-38, 51 mg/kg) was greater than the BC guidelines (50 mg/kg) for Total Cyanide.

For WAD Cyanide, there were only three samples where WAD Cyanide was detected, with values ranging from 0.9 to 3 mg/kg. All of these samples were below the British Columbia (BC) Environmental Management Act: Contaminated Sites Regulations for Urban Park (Wildlands), Schedule 5 (10 mg/kg).

The pH of the soil on the tundra ranged from 6.89 to 7.20, which meets applicable guidelines.

Mill Pad

There were a total of 30 soil samples submitted for analysis of Total and WAD Cyanide from boreholes drilled through the pad. Of those 30 samples, there was one sample (BH-22, 1.7 mg/kg) where Total Cyanide was detected. No WAD Cyanide was detected. Water was observed in BH-22 and MW-02, which was located in front of the Assay Lab.

The pH of the material on the pad ranged from 8.58 to 9.38 which is greater than the applicable guidelines. This material is created mainly of crushed blast rock, which would have been pulverized during drilling. In gold mines there are issues with having waste rock having low pH causing acid drainage, thus having higher than neutral pH values is better than lower pH values. Therefore, the pH values observed in the pad should not be a concern.

7.2 Water

Natural Terrain

There were a total of 6 water (ice) samples submitted for analysis of Total and WAD Cyanide from the natural terrain downslope of the mill pad. Total and WAD Cyanide was detected at all six sample locations. Total Cyanide was detected with values ranging from 0.192 to 2.23 ppm. The Water Licence No. 2AM-MEA0815 provides effluent discharge for Total Cyanide at 0.5 ppm for maximum average concentration and 1.0 pm for maximum allowable grab sample concentration. Using this value as a guideline, all samples analyzed, except Seep 3, exceed the water License for Total Cyanide. Seep 3 is located approximately 30 m from the edge of the lake, where cyanide was detected.

The Water Licence No. 2AM-MEA0815 does not have effluent discharge values for WAD Cyanide. Using the BC guidelines as a guide, none of the water samples exceeded the BC guidelines to protect freshwater aquatic life (50 ppm).

Mill Pad

There was one water sample (BH-22) submitted for analysis of Total and WAD Cyanide from boreholes drilled in the pad. The Total Cyanide detected was 24.59 ppm and WAD Cyanide was 10.6 ppm. The Total Cyanide exceeds the effluent discharge established in the Water Licence No. 2AM-MEA0815.

Monitoring well MW-02 did contain water, but no sample was collected, as it was adjacent to BH-22.

7.3 Ground Temperature

Regular readings have been obtained from the thermistor cable between March 5, 2014 and June 16, 2014 to determine changes in the ground temperature regime and determine the thickness of the active layer. The active layer depth is approximately 1.5 mbgs and ground temperature at the depth of zero annual amplitude (approximately 12 mbgs) is -2.0°C.

8.0 CONCLUSIONS AND RECOMMENDATIONS

During this investigation cyanide was detected at a depth of 1.68 mbgs near the location where the seep was initially identified. Down gradient of the initial containment, cyanide was detected to depths of 0.7 mbgs. Cyanide was not detected approximately 60 m from the lake (BH-47) in the soil, but was found at low levels in water (ice) that accumulated on the surface (Seep 3). Seep 3 is located about 30 m from the lakes edge and had low levels of cyanide (Total cyanide- 0.192 mg/L; WAD cyanide-0.033 mg/L). This information suggests that the cyanide initially infiltrated into the soil close to the initial seepage area; however further away from the seepage cyanide may have accumulated in the topsoil with little infiltration into the mineral soil (till overburden) or bedrock.

It was decided that the interception trench be installed between Seep 3 and BH-47. The decision for the location of the interception trench was based on the premise to minimize disturbance to the natural terrain, and act as a barrier between detected cyanide and the lake, while staying at least 30 m away from Third Portage Lake. An interception trench at this location should prevent cyanide contamination reaching Third Portage Lake. It is recommended that any pooled water within the collection area of the interception trench be pumped out immediately.

In order to remove the source of contaminant, AEM has taken steps to repair/reseal the containment systems that have been identified to be leaking and lead to the seepage. The main area of concern was the CIP tank containment system, which has been repaired. A ground temperature cable (thermistor cable) was installed near

the mill to determine the ground thermal regime. The fact that the mill pad has refrozen and there is only a thin active layer in the pad indicates that the repairs to the containment system have been effective in limiting seepage to the point that the ground has refrozen as significant continued seepage would likely preclude freezing.

AEM has currently established a Freshet Action Plan (April 2014), which outlines protocols AEM will take to monitor the interception trench and sampling protocols. AEM will conduct daily inspections of the pumping, collection systems and perimeter area and will record all pumped volumes of water from the interception trench. Any of the water collected will be pumped to the mill and discharged with the tailings to the tailings storage facility (TSF). The sampling program in this action plan states that on a monthly basis AEM will submit water samples to Multi Lab for analysis of Free Cyanide, Total Cyanide, Copper and Iron from the interception trench, monitoring wells 14MW04, 14MW05, 14MW06, 14MW07, and 14MW08, the original containment area and Third Portage Lake. AEM will collect waters twice a week from the area within the original containment berm, the interception trench, and monitoring wells 14MW02, 14MW03, 14MW08, 201, 202, and 203 to be submitted to the AEM on-site lab for WAD cyanide analysis.

After reviewing the information from this Environmental Site Assessment and AEM's Freshet Action Plan (April 2014), the following recommendations apply:

- Continue to sample water ponding within the original containment berm, interception trench, Third Portage Lake and monitoring wells 14MW01 to 14MW08, 201, 202 and 203, if water is present and not frozen, for analysis by Multi Lab of Free and Total cyanide, Copper, and Iron;
- In monitoring wells with known detected cyanide, collect and submit water samples to Multi Lab once in the spring and fall for analysis of ammonium, nitrate/nitrite, and pH. The purpose for the ammonium and nitrate/nitrite is that these compounds increase with the biodegradation of cyanide;
- If water is ponding down gradient of the interception trench, water samples should be collected and submitted to Multi Lab for analysis of Free and Total cyanide, Copper, and Iron;
- During the investigation no seep (water) samples or soil samples were collected within 30 m of the lake. Cyanide was detected at Seep 3, thus further sampling should be conducted down gradient of the trench in the soil and water. Water should be analyzed by Multi Lab for Free and Total Cyanide, Copper, and Iron, while soils should be analyzed for Free and Total cyanide;
- Depending on the results of the soil samples collected and potentially ponded water samples collected within 30 m of Third Portage Lake then sediment samples should be collected from the shore of Third Portage Lake. These sediment samples should be analyzed by Multi Lab for Free and Total Cyanide, Copper and Iron.
- AEM should install sumps inside the original containment berm to aid in the collection of water. This water can be pumped up to the mill and discharged to the TSF. This should improve collection of water in the spring near the mill pad;
- If not already complete, AEM should continue with the repairs to the secondary containment systems within the mill to ensure seepage sources are eliminated; and
- Collect additional soil samples on the northeast side of the mill in the direction of Tear Drop Lake to confirm if any cyanide travelled in that direction. If water is observed in the boreholes during this recommended investigation a well should be installed.

The following soil sampling recommendations should be implemented at closure of the mine:

- Soil samples should be collected for Free cyanide in the areas where known cyanide was detected, as free cyanide was not analyzed in this investigation. These areas should be delineated in order to produce a remedial action plan, if needed;

9.0 CLOSURE

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

Respectfully submitted,
Tetra Tech EBA Inc.

Prepared by:
Tyrel Hemsley, M.Sc., A.I.T.
Environmental Scientist
Environment Practice
Direct Line: 780.451.2130 x520
Tyrel.Hemsley@tetratech.com

Prepared by:
Ernest Palczewski, B.Sc., Geol.I.T.
Geologist, Arctic Region
Engineering Practice
Direct Line: 780.451.2130 x353
Ernest.Palczewski@tetratech.com

Reviewed by:
Kevin W. Jones, P.Eng.
Vice President, Arctic Development
Engineering Practice
Direct Line: 780.451.2125
Kevin.Jones@tetratech.com

Reviewed by:
Michael J. Bensing, P.Eng. (Alberta)
Team Lead - Geoenvironmental
Environment Practice
Direct Line: 780.451.2130 x500
Mike.Bensing@tetratech.com

/tm

PERMIT TO PRACTICE
TETRA TECH EBA INC.
Signature
Date August 19, 2014
PERMIT NUMBER: P 018
NT/NU Association of Professional Engineers and Geoscientists

REFERENCES

Agnico Eagle, November 2013, Preliminary AEM Report – Assay Road Seepage

British Columbia Ministry of Environment. 2014. Environmental Management Act: Contaminated Sites Regulations, Schedule 4 Generic Numerical Soil Standards. Updated January 27,2014

British Columbia Ministry of Environment. 2014. Environmental Management Act: Contaminated Sites Regulations, Schedule 6 Generic Numerical Water Standards. Updated January 27,2014

CCME (Canadian Council of Ministers of the Environment), September 2007, Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health, Chapter 7. In: Canadian Environmental Quality Guidelines, CCME, 1999. Winnipeg, MB.

CCME (Canadian Council of Ministers of the Environment). 2007. Canadian water quality guidelines for the protection of aquatic life: summary table. Update 7.1, December 2007. In: Canadian Environmental Quality Guidelines, 1999, CCME, Winnipeg, MB.

CCME. 1999. Canadian Soil Quality Guidelines for Protection of Environmental and Human Health: Cyanide (Free) 1997. In. Canadian Environmental and Quality Guidelines, 1999, Canadian Council of Ministers of the Environment, Winnipeg

Cumberland Resources Ltd. 2005. Meadowbank Gold Project. Baseline Physical Ecosystem Report.

Golder Associates. 2008. 2007 Till Core Material Investigation and Laboratory Testing, Meadowbank Gold Project. Job No: 07-1413-0047/4000

Government of Canada. Baker Lake A Nunavut-Weather. http://climate.weather.gc.ca/climateData/monthlydata_e.html?timeframe=3&Prov=NU&StationID=1709&mlyRange=1946-01-01|2012-12-01&Year=2000&Month=01&Day=01. Acquired March 25, 2014.

Government of Nunavut. 2009. Environmental Guideline for Contaminated Site Remediation. Department of Environment's Environmental Protection Division. Revised March 2009

Lottermoser, Bernd. 2007. Mine Wastes: Characterization, Treatment and Environmental Impacts 2nd Edition. Springer

TABLES

Table 1: Analytical Results Tundra Soil - AEM- Meadowbank Assay Seepage

Parameters	Units	Guidelines	Downgradient of the Assay Lab														
		Wildland/ Urban Park	BH-01	BH-02	BH-03	BH-04	BH-05	BH-06	BH-07	BH-08	BH-09	BH-10	BH-11		BH-12		BH-13	BH-14
			40-60	0-44	40-60	0-39	0-45	40-75	40-60	40-60	40-52	0-40	0-40	40-62	0-40	40-70	40-70	40-70
pH[2]		6 to 8								6.91			7.20					
Total Cyanide[1]	mg/kg	50	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	13	30	0.6	1.5	1.4	<0.5	<0.5
WAD Cyanide[1]	mg/kg	10	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Moisture Content	%	NG	20	56	14	16	15	18	12	13	6.6	17	25	15	16	6.9	5.6	4.4
Laboratory Identification No.			X63656	X63657	X63658	X63659	X63660	X63661	X63662	X63663	X63664	X63665	X63666	X63667	X63668	X68074	X63669	X68075

Parameters	Units	Guidelines	Downgradient of the Assay Lab														
		Wildland/ Urban Park	BH-14	BH-15		BH-16			BH-17				BH-18		BH-19	BH-20	BH-21	BH-36
			70-112	40-70	70-100	0-40	70-100	100-140	40-70	70-100	100-140	140-168	40-70	70-100	40-59	40-70	70-90	40-70
pH[2]		6 to 8							7.12				6.89				7.93	
Total Cyanide[1]	mg/kg	50	<0.5	<0.5	<0.5	1.9	14	0.6	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	27
WAD Cyanide[1]	mg/kg	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3
Moisture Content	%	NG	4.2	14	9.4	11	7.9	8.2	12	9.9	7.0	3.8	13	12	3.7	6.8	2.9	9.4
Laboratory Identification No.			X63670	X63671	X68076	X68077	X63672	X68078	X63673	X68079	X68080	X63674	X63683	X68081	X63684	X63685	X63686	X68105

Parameters	Units	Guidelines	Downgradient of the Assay Lab															
		Urban Park (Wildland)	BH-36		BH-37		BH-38	BH-43			BH-44		BH-45	BH-46		BH-47	BH-48	
			70-100	100-129	40-70	70-109	0-29	0-40	70-100	100-121	40-70	70-94	40-52	40-70	100-139	0-41	40-70	100-140
pH[2]		6 to 8																
Total Cyanide[1]	mg/kg	50	1.7	0.9	1	0.9	**51**	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	4	<0.5	<0.5
WAD Cyanide[1]	mg/kg	10	<0.5	<0.5	1.2	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Moisture Content	%	NG	6.3	7.4	13	6.0	30	41	6.9	9.9	9.9	6.4	16	7.6	5.6	19	9.4	7.3
Laboratory Identification No.			X68106	X68107	X68114	X68115	X68116	X71668	X71669	X71670	X71671	X71672	X71673	X71674	X71675	X71676	X71677	X71678

Parameters	Units	Guidelines	Downgradient of the Assay Lab								Monitoring Wells					
		Urban Park (Wildland)	BH-49		BH-50			BH-51			MW-04	MW-05	MW-06	MW-07	MW-08	
			40-70	70-100	0-40	70-100	100-133	0-40	70-100	100-133	70-91	70-100	70-122	40-70	40-70	70-100
pH[2]		6 to 8														
Total Cyanide[1]	mg/kg	50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAD Cyanide[1]	mg/kg	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Moisture Content	%	NG	6.0	5.5	19	7.7	6.3	22	9.0	4.4	7.6	8.4	8.0	16	9.1	6.2
Laboratory Identification No.			X71679	X71680	X71681	X71682	X71683	X71684	X71685	X71686	X71690	X71691	X71692	X71693	X71694	X71695

Notes:

[1] Environmental Management Act: Contaminated Sites Regulations, British Columbia (updated January 31, 2014); Urban Park (Wildlands). The BC guidelines are in µg/g which are equal to mg/kg

[2] Environmental Guidelines for Contaminated Site Remediation, Nunavut. Wildland

Blank-Not analyzed

NG- No Guideline

Bold - Greater than the referenced guideline

Cyanide Detected

Table 2: Analytical Results for Mill Pad Soil - AEM- Meadowbank Assay Seepage

Parameters	Units	Guidelines	North of Mill			Northwest of Assay Lab				In Front of Assay Lab					Southwest of Assay Lab			
		Urban Park (Wildland)	BH-41		BH-42	BH-33		BH-34		BH-40		BH-22	BH-39		BH-35		BH-23	BH-24
			300-350	400-450	300-350	300-350	400-450	300-350	500-577	400-450	550-645	500-550	300-350	400-450	300-350	400-450	450-500	400-450
pH[2]		6 to 8														**9.28**		
Total Cyanide[1]	mg/kg	50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAD Cyanide[1]	mg/kg	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Moisture Content	%	NG	7.2	0.8	1.1	14	2.7	4.8	5.2	12	4.5	16	3.6	3.0	3.2	3.4	0.8	2.3
Laboratory Identification No.			X68121	X68122	X68123	X68099	X68100	X68101	X68102	X68119	X68120	X63687	X68117	X68118	X68103	X68104	X68082	X68083

Parameters	Units	Guidelines	Southwest of Assay Lab		Southwest side of Tanks								Northwest of Tanks		Monitoring Wells	
		Urban Park (Wildland)	BH-24	BH-52	BH-25			BH-26	BH-27	BH-28	BH-29		BH-30		MW-01	MW-03
			500-530	300-350	250-300	400-450	500-530	400-450	500-550	500-550	300-350	500-550	400-450	550-690	400-450	400-450
pH[2]		6 to 8			**9.30**						**8.58**			**9.38**		
Total Cyanide[1]	mg/kg	50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAD Cyanide[1]	mg/kg	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Moisture Content	%	NG	1.2	0.3	1.9	0.8	0.5	0.8	0.2	0.8	1.0	0.3	3.3	1.0	2.2	2.4
Laboratory Identification No.			X68088	X71687	X68089	X68090	X68091	X68092	X68093	X68094	X68095	X68096	X68097	X68098	X71688	X71689

Notes:

[1] Environmental Management Act: Contaminated Sites Regulations, British Columbia (updated January 31, 2014); Urban Park (Wildlands). The BC guidelines are in µg/g which are equal to mg/kg

[2] Environmental Guidelines for Contaminated Site Remediation, Nunavut. Wildland

Blank-Not analyzed

Bold - Greater than the referenced guideline

Cyanide Detected

Table 3: Water/Ice Analytical Results - AEM - Meadowbank Assay Seepage

Parameters	Unit	Guidelines			In Front of Assay Lab	Downgradient of Assay Lab-Tundra					
		Drinking Water [1]	Aquatic Life [1]	Licence No. 2AM-MEA0815	BH-22	BH-36	Seep 1	Seep 2	BH-11	BH-47	Seep 3
Total Cyanide[2]	mg/L	200	NG	0.5 (1.0)[4]	**24.59**	**2.23**	**2.31**	**1.59**	**1.76**	**1.05**	0.192
WAD Cyanide[2]	mg/L	NG	50	NG	10.6	0.644	0.944	0.935	1.48	0.101	0.033
WAD Cyanide[3]	mg/L	NG	50	NG		1.31	1.05	0.883	4.91	0.237	0.544
Laboratory Identification No.					V-32663	V-32719	V-32716	V-32717	V-32662	V-32758	V-32718

Notes:

[1] Environmental Management Act: Contaminated Sites Regulations, British Columbia (updated January 31, 2014); Schedule 6 Generic Numerical Water Standards

[2] Multi-lab Direct Analytical Results

[3] Meadowbank Assay Lab Analytical Results

[4] Maximum Average Concentration (Maximum Allowable Grab Sample Concentration)

Blank-Not analyzed

Bold = Greater than the referenced guideline or Water License

Cyanide Detected

PHOTOGRAPHS

Photo 1	Southwest view of the downhole hammer-air rotary drill drilling BH-18
Photo 2	Metal containers underneath the curtain of the drill to collect soil samples
Photo 3	Ice (~12 cm thick) located at BH-11.
Photo 4	Northwest view of drill, drilling BH-39 in front of the Assay Lab
Photo 5	View from MW-04 facing northeast towards the Assay Lab
Photo 6	Northwest view of the location for the three old wells (201, 202, and 203) located in the tires and the location of the thermistor cable just southeast of the tires. This area is located between the Assay Lab and the Mill.
Photo 7	View of the North side of the Mill, illustrating the location of monitoring well MW01 behind the two cement blocks
Photo 8	View on the south side of the tank farm drilling BH-27
Photo 9	West End of Interception Trench Facing Northwest, Trench Bottom Prior to Cleaning
Photo 10	West End of Interception Trench Facing Northwest, Trench Bottom after Cleaning, Contractors Laying Geotextile on Downstream Slope
Photo 11	East End of Interception Trench Facing Northeast, Geotextile Placement with Overlap and Tie-in at Top
Photo 12	West End of Interception Trench Facing North, Contractor Filling in and Compacting Low Areas
Photo 13	West End of Interception Trench Facing Northwest, Background: CAT 365 Excavator Bucket Compacting Two Lifts of Bentonite Material on Downstream Slope. Foreground: Two Lifts of Bentonite Material Visible
Photo 14	West End of Interception Trench Facing Southeast, CAT 365 Excavator Bucket Compacting Upstream Bentonite Material Slope below the Bedrock Contact
Photo 15	East End of Interception Trench Facing Northwest, Bentonite Material on Upstream Slope below Bedrock Contact
Photo 16	West End of Interception Trench Facing Northwest, Completed Bentonite Placement
Photo 17	East End of Interception Trench Facing Southwest, Completed Interception Trench Covered in Rockfill (Photo courtesy AEM)

Photo 1: Southwest view of the down hole air hammer drill drilling BH-18.

Photo 2: Metal containers underneath the curtain of the drill to collect soil samples.

Photo 3: Ice (~12 cm thick) located at BH-11.

Photo 4: Northwest view of drill, drilling BH-39 in front of the Assay Lab.

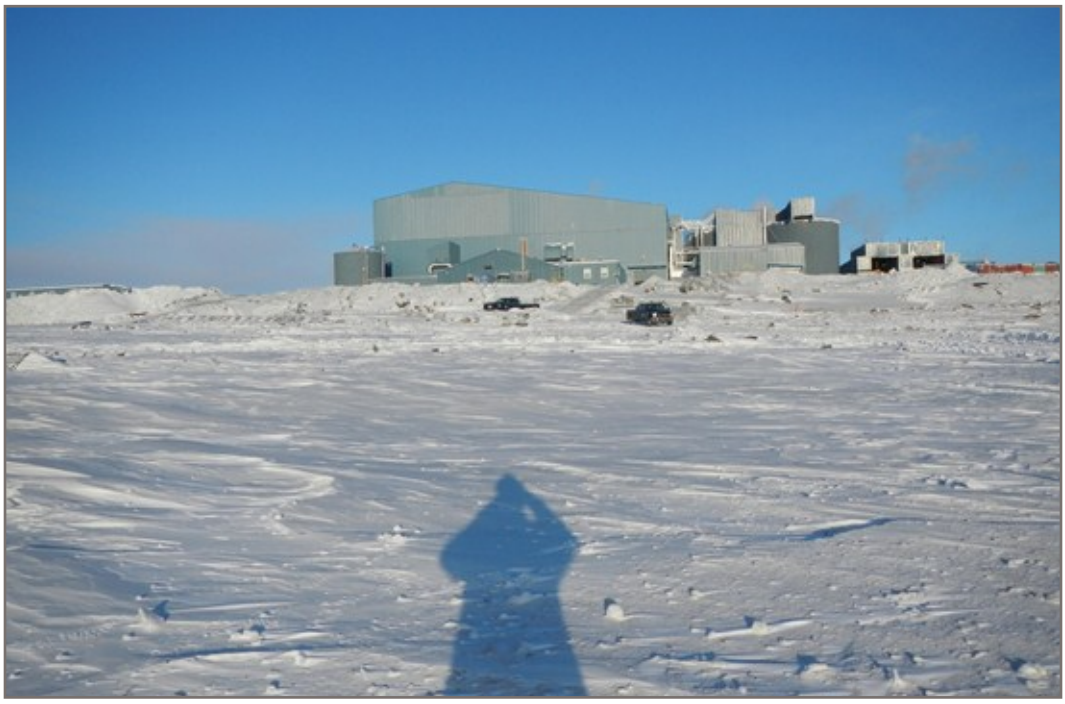


Photo 5: View from MW-04 facing northeast towards the Assay Lab.

Photo 6: Northwest view of the location for the three old wells (201, 202, and 203) located in the tires and the location of the thermistor cable just southeast of the tires. This area is located between the Assay Lab and the Mill.

Photo 7: View of the North side of the Mill , illustrating the location of monitoring well MW01 behind the two cement blocks.

Photo 8: View on the south side of the tank farm drilling BH-27.

Photo 9: West End of Interception Trench Facing Northwest
Trench Bottom Prior to Cleaning

Photo 10: West End of Interception Trench Facing Northwest
Trench Bottom after Cleaning. Contractors Laying Geotextile on Downstream Slope

Photo 11: East End of Interception Trench Facing Northeast
Geotextile Placement with Overlap and Tie-in at Top

Photo 12: West End of Interception Trench Facing North
Contractor Filling in and Compacting Low Areas

Photo 13: West End of Interception Trench Facing Northwest
Background: CAT 365 Excavator Bucket Compacting Two Lifts of Bentonite Material on Downstream Slope. Foreground: Two Lifts of Bentonite Material Visible

Photo 14: West End of Interception Trench Facing Southeast
CAT 365 Excavator Bucket Compacting Upstream Bentonite Material Slope Below the Bedrock Contact

Photo 15: East End of Interception Trench Facing Northwest
Bentonite Material on Upstream Slope Below Bedrock Contact

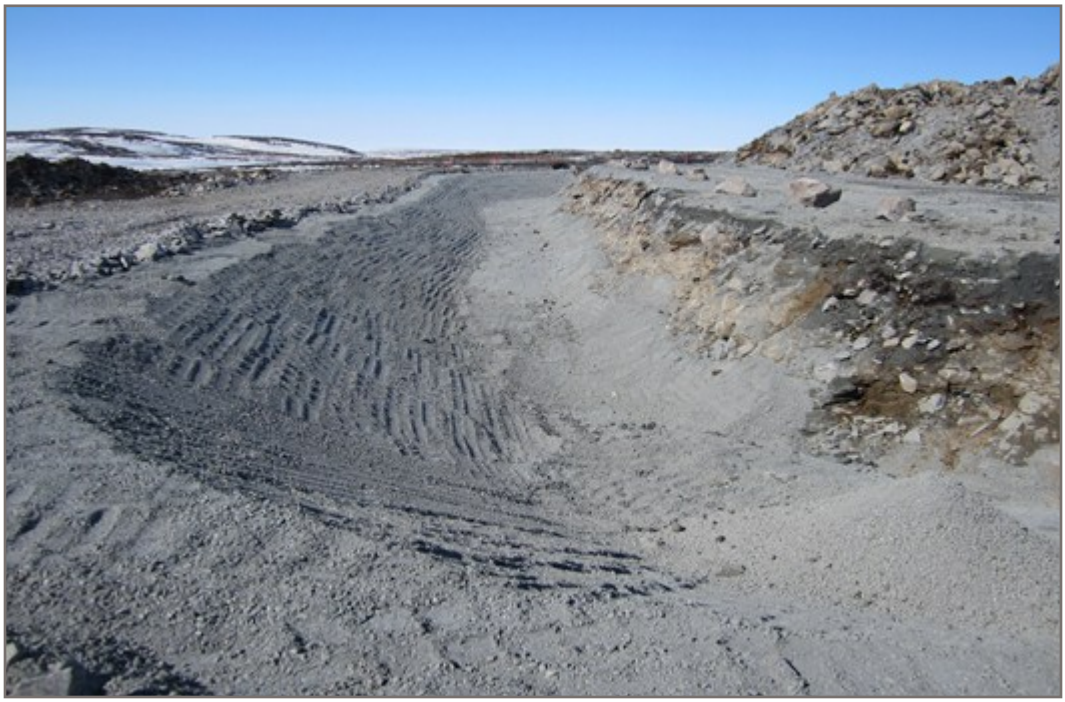


Photo 16: West End of Interception Trench Facing Northwest
Completed Bentonite Placement

Photo 17: East End of Interception Trench Facing Southwest
Completed Interception Trench Covered in Rockfill
(Photo courtesy AEM)

APPENDIX A
LABORATORY DATA

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-32716

Sampling location: Seep 1
Sampling date: February 27, 2014

Sample name: Seep 1
Sampling hour: N/D

Sampled by: Tyrel Hemsley
Date received: March 04, 2014

Matrix: Waste Water

Drinking water distribution:

Reported on: March 04, 2014

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.

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

Analytical Report

Lab number: V-32716

Sample name: Seep 1
Sampling location: Seep 1
Sampling date: February 27, 2014
Sampling hour: N/D

Parameter	Result	Method name	Analysis date
Cyanide W.A.D.	0.944 mg/L	Sous-traitance\Multilab Direct	March 04, 2014
Total Cyanide (CNt)	2.31 mg/L	M-CN-1.0	March 04, 2014

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

Detection limit

Lab number: V-32716

Sample name: Seep 1
Sampling location: Seep 1
Sampling date: February 27, 2014
Sampling hour: N/D

Parameter	Value	Unit	Method	Accreditation
Cyanide W.A.D.	0.005	mg/L	Sous-traitance	Yes
Total Cyanide (CNt)	0.005	mg/L	M-CN-1.0	Yes

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-32716

Sample name: Seep 1 | Sampling date: February 27, 2014

Sampling location: Seep 1 | Sampling hour: N/D

Parameter		
Total Cyanide (CNt) mg/L	Blank	<0.005
	Standard name	DMR-0025-2014-7
	Result	0.0780
	Accuracy	95.7%
	Limit	0.0693 - 0.0937

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-32716
Sample name: Seep 1
Sampling location: Seep 1
Sampling date: February 27, 2014
Sampling hour: N/D

Lab method	Method reference
M-CN-1.0	MA.300-CN 1.2

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

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-32717

Sampling location: Seep 2
Sampling date: February 27, 2014

Sample name: Seep 2
Sampling hour: N/D

Sampled by: Tyrel Hemsley
Date received: March 04, 2014

Matrix: Waste Water

Drinking water distribution:

Reported on: March 04, 2014

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.

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

Analytical Report

Lab number: V-32717

Sample name: Seep 2
Sampling location: Seep 2
Sampling date: February 27, 2014
Sampling hour: N/D

Parameter	Result	Method name	Analysis date
Cyanide W.A.D.	0.935 mg/L	Sous-traitance\Multilab Direct	March 04, 2014
Total Cyanide (CNt)	1.59 mg/L	M-CN-1.0	March 04, 2014

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

Detection limit

Lab number: V-32717

Sample name: Seep 2
Sampling location: Seep 2
Sampling date: February 27, 2014
Sampling hour: N/D

Parameter	Value	Unit	Method	Accreditation
Cyanide W.A.D.	0.005	mg/L	Sous-traitance	Yes
Total Cyanide (CNt)	0.005	mg/L	M-CN-1.0	Yes

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-32717

Sample name: Seep 2 | Sampling date: February 27, 2014

Sampling location: Seep 2 | Sampling hour: N/D

Parameter		
Total Cyanide (CNt) mg/L	Blank	<0.005
	Standard name	DMR-0025-2014-7
	Result	0.0780
	Accuracy	95.7%
	Limit	0.0693 - 0.0937

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-32717
Sample name: Seep 2
Sampling location: Seep 2
Sampling date: February 27, 2014
Sampling hour: N/D

Lab method	Method reference
M-CN-1.0	MA.300-CN 1.2

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

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-32718

Sampling location: Seep 3
Sampling date: February 27, 2014

Sample name: Seep 3
Sampling hour: N/D

Sampled by: Tyrel Hemsley
Date received: March 04, 2014

Matrix: Waste Water

Drinking water distribution:

Reported on: March 04, 2014

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.

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

Analytical Report

Lab number: V-32718

Sample name: Seep 3
Sampling location: Seep 3
Sampling date: February 27, 2014
Sampling hour: N/D

Parameter	Result	Method name	Analysis date
Cyanide W.A.D.	0.033 mg/L	Sous-traitance\Multilab Direct	March 04, 2014
Total Cyanide (CNt)	0.192 mg/L	M-CN-1.0	March 04, 2014

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

Detection limit

Lab number: V-32718

Sample name: Seep 3
Sampling location: Seep 3
Sampling date: February 27, 2014
Sampling hour: N/D

Parameter	Value	Unit	Method	Accreditation
Cyanide W.A.D.	0.005	mg/L	Sous-traitance	Yes
Total Cyanide (CNt)	0.005	mg/L	M-CN-1.0	Yes

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-32718

Sample name: Seep 3 | Sampling date: February 27, 2014

Sampling location: Seep 3 | Sampling hour: N/D

Parameter		
Total Cyanide (CNt) mg/L	Blank	<0.005
	Standard name	DMR-0025-2014-7
	Result	0.0780
	Accuracy	95.7%
	Limit	0.0693 - 0.0937

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-32718

Sample name: Seep 3
Sampling location: Seep 3

Sampling date: February 27, 2014
Sampling hour: N/D

Lab method	Method reference
M-CN-1.0	MA.300-CN 1.2

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

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-32719

Sampling location: BH-36
Sampling date: March 02, 2014
Sample name: BH-36
Sampling hour: N/D
Sampled by: Tyrel Hemsley
Date received: March 04, 2014
Matrix: Waste Water
Drinking water distribution:

Reported on: March 04, 2014

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.

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

Analytical Report

Lab number: V-32719

Sample name: BH-36
Sampling location: BH-36
Sampling date: March 02, 2014
Sampling hour: N/D

Parameter	Result	Method name	Analysis date
Cyanide W.A.D.	0.644 mg/L	Sous-traitance\Multilab Direct	March 04, 2014
Total Cyanide (CNt)	2.23 mg/L	M-CN-1.0	March 04, 2014

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

Detection limit

Lab number: V-32719

Sample name: BH-36
Sampling location: BH-36
Sampling date: March 02, 2014
Sampling hour: N/D

Parameter	Value	Unit	Method	Accreditation
Cyanide W.A.D.	0.005	mg/L	Sous-traitance	Yes
Total Cyanide (CNt)	0.005	mg/L	M-CN-1.0	Yes

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-32719

Sample name: BH-36 | Sampling date: March 02, 2014

Sampling location: BH-36 | Sampling hour: N/D

Parameter		
Total Cyanide (CNt) mg/L	Blank	<0.005
	Standard name	DMR-0025-2014-7
	Result	0.0780
	Accuracy	95.7%
	Limit	0.0693 - 0.0937

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-32719
Sample name: BH-36
Sampling location: BH-36
Sampling date: March 02, 2014
Sampling hour: N/D

Lab method	Method reference
M-CN-1.0	MA.300-CN 1.2

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

Your P.O. #: OP-310962-J
Your Project #: E14103172-01

Attention: Kevin Buck

Agnico Eagle Ltée-Division Meadowbank
Meadowbank
Baker Lake, Nunavut, Canada
Meadowbank
Nunavut, QC
CANADA X0C 0A0

Report Date: 2014/02/28
Report #: R1834795
Version: 1

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B410248
Received: 2014/02/27, 08:10

Sample Matrix: SOIL
Samples Received: 24

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Primary Reference
Weak Acid Dissociable Cyanides*	24	2014/02/27	2014/02/28	STL SOP-00035	MA. 300 - CN 1.2
Total Cyanide*	24	2014/02/27	2014/02/28	STL SOP-00035	MA. 300 - CN 1.2
pH*	5	2014/02/27	2014/02/27	STL SOP-00016	MA.100- pH1.1

Note: RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

* Maxxam is accredited as per the MDDEFP program.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Rita Kurdoghlanian, Project Manager
Email: RKurdoghlanian@maxxam.ca
Phone# (514) 448-9001 Ext:4272

==========

This report has been generated and distributed using a secure automated process.
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Maxxam Job #: B410248
Report Date: 2014/02/28

Agnico Eagle Ltée-Division Meadowbank
Client Project #: E14103172-01

Your P.O. #: OP-310962-J

CONVENTIONAL PARAMETERS (SOIL)

Maxxam ID					X63656		X63657		X63658		
Sampling Date					2014/02/21		2014/02/21		2014/02/21		
	Units	**A**	**B**	**C**	**BH-01 (40-60)**	**RDL**	**BH-02 (0-44)**	**RDL**	**BH-03 (40-60)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	20	N/A	56	N/A	14	N/A	N/A
CONVENTIONALS											
Total Cyanide (CN)	mg/kg	**2**	50	500	<0.5	0.5	<1	1	<0.5	0.5	1275367
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	0.5	<1	1	<0.5	0.5	1275397

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID					X63659	X63660	X63661	X63662		
Sampling Date					2014/02/21	2014/02/22	2014/02/22	2014/02/22		
	Units	**A**	**B**	**C**	**BH-04 (0-39)**	**BH-05 (0-45)**	**BH-06 (40-75)**	**BH-07 (40-60)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	16	15	18	12	N/A	N/A
CONVENTIONALS										
Total Cyanide (CN)	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	<0.5	0.5	1275367
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	0.5	1275397

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID					X63663	X63664		X63665		
Sampling Date					2014/02/22	2014/02/22		2014/02/22		
	Units	**A**	**B**	**C**	**BH-08 (40-60)**	**BH-09 (40-52)**	**RDL**	**BH-10 (0-40)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	13	6.6	N/A	17	N/A	N/A
CONVENTIONALS										
pH	pH	**-**	-	-	6.91	N/A	N/A	N/A	N/A	1275318
Total Cyanide (CN)	mg/kg	**2**	50	500	<0.5	<0.5	0.5	**13**	5	1275367
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	0.5	<0.5	0.5	1275397

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Maxxam Job #: B410248
Report Date: 2014/02/28

Agnico Eagle Ltée-Division Meadowbank
Client Project #: E14103172-01

Your P.O. #: OP-310962-J

CONVENTIONAL PARAMETERS (SOIL)

Maxxam ID					X63666		X63667	X63668	X63669		
Sampling Date					2014/02/22		2014/02/22	2014/02/22	2014/02/22		
	Units	**A**	**B**	**C**	**BH-11 (0-40)**	**RDL**	**BH-11 (40-62)**	**BH-12 (0-40)**	**BH-13 (40-70)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	25	N/A	15	16	5.6	N/A	N/A
CONVENTIONALS											
pH	pH	-	-	-	7.20	N/A	N/A	N/A	N/A	N/A	1275318
Total Cyanide (CN)	mg/kg	**2**	50	500	**30**	10	0.6	1.5	<0.5	0.5	1275367
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	0.5	<0.5	<0.5	<0.5	0.5	1275397

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID					X63669	X63670	X63671		X63672		
Sampling Date					2014/02/22	2014/02/22	2014/02/23		2014/02/23		
	Units	**A**	**B**	**C**	**BH-13 (40-70) Lab-Dup**	**BH-14 (70-112)**	**BH-15 (40-70)**	**RDL**	**BH-16 (70-100)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	5.6	4.2	14	N/A	7.9	N/A	N/A
CONVENTIONALS											
Total Cyanide (CN)	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	0.5	**14**	5	1275367
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	0.5	<0.5	0.5	1275397

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Maxxam Job #: B410248
Report Date: 2014/02/28

Agnico Eagle Ltée-Division Meadowbank
Client Project #: E14103172-01

Your P.O. #: OP-310962-J

CONVENTIONAL PARAMETERS (SOIL)

Maxxam ID					X63673	X63674	X63683	X63683		
Sampling Date					2014/02/23	2014/02/23	2014/02/23	2014/02/23		
	Units	**A**	**B**	**C**	**BH-17 (40-70)**	**BH-17 (140-168)**	**BH-18 (40-70)**	**BH-18 (40-70) Lab-Dup**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	12	3.8	13	13	N/A	N/A
CONVENTIONALS										
pH	pH	-	-	-	7.12	N/A	6.89	N/A	N/A	1275318
Total Cyanide (CN)	mg/kg	2	50	500	<0.5	0.5	<0.5	<0.5	0.5	1275367
Weak Acid Dissociable Cyanide (CN-)	mg/kg	2	10	100	<0.5	<0.5	<0.5	<0.5	0.5	1275397

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID					X63684	X63685	X63686	X63687		
Sampling Date					2014/02/23	2014/02/23	2014/02/23	2014/02/23		
	Units	**A**	**B**	**C**	**BH-19 (40-59)**	**BH-20 (40-70)**	**BH-21 (70-90)**	**BH-22 (500-550)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	3.7	6.8	2.9	16	N/A	N/A
CONVENTIONALS										
pH	pH	-	-	-	N/A	N/A	7.93	N/A	N/A	1275318
Total Cyanide (CN)	mg/kg	2	50	500	<0.5	<0.5	<0.5	1.7	0.5	1275367
Weak Acid Dissociable Cyanide (CN-)	mg/kg	2	10	100	<0.5	<0.5	<0.5	<0.5	0.5	1275397

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Maxxam Job #: B410248
Report Date: 2014/02/28

Agnico Eagle Ltée-Division Meadowbank
Client Project #: E14103172-01

Your P.O. #: OP-310962-J

CONVENTIONAL PARAMETERS (SOIL)

Maxxam ID					X63687		
Sampling Date					2014/02/23		
	Units	**A**	**B**	**C**	**BH-22 (500-550) Lab-Dup**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	16	N/A	N/A
CONVENTIONALS							
Total Cyanide (CN)	mg/kg	**2**	50	500	1.7	0.5	1275367
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	0.5	1275397

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Maxxam Job #: B410248
Report Date: 2014/02/28

Agnico Eagle Ltée-Division Meadowbank
Client Project #: E14103172-01

Your P.O. #: OP-310962-J

GENERAL COMMENTS

Condition of sample(s) upon receipt: GOOD

All results are calculated on a dry weight basis except where not applicable.

A,B,C: Criteria following appendix 2 of the " Soil Protection and Contaminated Sites Rehabilitation Policy " entitled " Generic criteria for soils and groundwater ". For all metals analyses in soil, the criterion A refers to " Background Level of St. Lawrence Lowlands Sector ".

For groundwaters:
The A and B criteria follow the appendix 2 of the " Soil Protection and Contaminated Sites Rehabilitation Policy " entitled " Generic criteria for soils and groundwater ". The criterion A refers to " Drinking Water " and the criterion B refers to "Seepage into Surface Water or Infiltration into Sewers ".

These criteria references are shown for visual aid only, and should not be interpreted otherwise.
- = This parameter is not part of the regulation.

CONVENTIONAL PARAMETERS (SOIL)

Please note that the results have not been corrected for QC recoveries nor for the method blank results.
Reported detection limits are multiplied by dilution factors used for sample analysis.

Results relate only to the items tested.

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Agnico Eagle Ltée-Division Meadowbank
Attention: Kevin Buck
Client Project #: E14103172-01
P.O. #: OP-310962-J
Site Location:

Quality Assurance Report

Maxxam Job Number: B410248

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units
1275318	KV1	QC Standard	pH	2014/02/27		99	%
		Spiked Blank	pH	2014/02/27		101	%
1275367	DB2	QC Standard	Total Cyanide (CN)	2014/02/28		103	%
		Spiked Blank	Total Cyanide (CN)	2014/02/28		111	%
		Method Blank	Total Cyanide (CN)	2014/02/28	<0.5		mg/kg
1275397	DB2	Spiked Blank	Weak Acid Dissociable Cyanide (CN-)	2014/02/28		105	%
		Method Blank	Weak Acid Dissociable Cyanide (CN-)	2014/02/28	<0.5		mg/kg

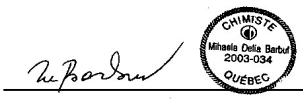
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

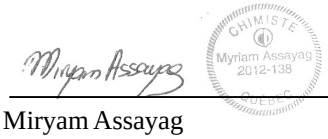
Validation Signature Page

Maxxam Job #: B410248

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Delia Barbul, B.Sc., Chemist



Miryam Assayag

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

27-Feb-14 08:10
Alain Lemieux
B410248
RG2 MTL-0124

Maxxam Analytique

☒ 889 Montée de Liesse, Ville St-Laurent
☐ 2690 Avenue Dalton, Sainte-Foy, Qué
☐ 737 boul. Barette, Chicoutimi, Québec

www.maxxamanalytics.com

ample Analysis and Chain of Custody Record

-9199 Toll Free: 1-877-4MA-XXAM (462-9926) Page 1 of 3

-6594

-8994

E-

Invoice Information	Report Information (if differs from invoice)
Company Name: AEM Meadowbank	Company Name:
Address: 10200 route de Preissac, Rouyn-Noranda, J0Y 1C0	Address:
Contact Name: Kevin Buck	Contact Name:
Telephone: 819-759-3555 ext. 6838	Phone:
Fax: 819 (759)-36603	Fax:
Sampler: Tyrel/Tom Thomson	Sampler:

I hereby acknowledge the understanding and acceptance of Maxxam's terms and conditions as listed on the back of this form.

Order No.: Project / Site:

Quotation No.: Project No.: E1410372-01

Sample Identification (sampling point)	Sample: Soil	Water	Other	Sampling (date / time)	To be filtered	Number of samples	pH	CN TOTAL	CN, WAD
BH-01 (40-60)	X			21/02/14		1		X	X
BH-02 (0-44)	X			21/02/14		1		X	X
BH-03 (40-60)	X			21/02/14		1		X	X
BH-04 (0-39)	X			21/02/14		1		X	X
BH-05 (0-45)	X			22/02/14		1		X	X
BH-06 (40-75)	X			22/02/14		1		X	X
BH-07 (40-60)	X			22/02/14		1		X	X
BH-08 (40-60)	X			22/02/14		1	X	X	X
BH-09 (40-52)	X			22/02/14		1		X	X
BH-10 (0-40)	X			22/02/14		1		X	X

LEGEND: ** Metals 13 elements (Ag, As, Ba, Cd, Co, Cr, Cu, Sn, Mn, Mo, Ni, Pb, Zn),
*** Metals 16 elements (Al, Sb, Ag, As, Ba, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Se, Na, Zn).

Types of Water: G = Groundwater P = Potable LW = Liquid Waste
Sur = Surface E = Effluent C = Catchment

Applicable Regulations: (To complete)

Turnaround Time: ☒ 24h ☐ 48h ☐ 72h ☐ Regular ☐ Date:

Unless clearly identified all water samples received at Maxxam analytics will be treated as non-potable and will not be subject to the requirements under the Quebec Drinking Water Regulation.

General Condition at Reception: 3 1 0

Chain of Custody

Relinquished by: Marie-Pier Marcil	Date: 25/02/14	Time: 9h30	Received by:
Relinquished by:	Date: 2014-02-27	Time: 08:10	Received by: Robbie Gingel

Number of coolers: Temperature upon reception:

Sample Transport: ☐ By Client ☐ MAXXAM Personnel ☒ Courier (Specify):

Remarks: Ice-yes Seal-yes

KEENWCOCFORMQE - Saint-Laurent - 07/09 WHITE: MAXXAM ANALYTICS INC BLUE: INVOICING YELLOW: RETURN TO CLIENT WITH FINAL REPORT PINK: CLIENT

Maxxam Analytique

889 Montée de Liesse, Ville St-Laurent, Québec H4T 1P5 — Telephone: (514) 448-9001 — Fax: (514) 448-9199 — Toll Free: 1-877-4MA-XXAM (462-9926)
2690 Avenue Dalton, Sainte-Foy, Québec G1P 3S4 — Telephone: (418) 658-5784 — Fax: (418) 658-6594
737 boul. Barette, Chicoutimi, Québec G7J 4C4 — Telephone: (418) 543-3788 — Fax: (418) 543-8994
www.maxxamanalytics.com

Sample Analysis and Chain of Custody Record

E-

Invoice Information	Report Information (if differs from invoice)
Company Name:	Company Name:
Address:	Address:
Contact Name:	Contact Name:
Telephone:	Telephone:
Fax:	Fax:
Sampler:	Sampler:

Order No.: Project / Site:
Quotation No.: Project No.:

I hereby acknowledge the understanding and acceptance of Maxxam's terms and conditions as listed on the back of this form.

Sample Identification (sampling point)	Sample Type: Soil	Water	Other	Sampling (date / time)	To be filtered	Number of samples	PH	CN TOTAL	CN WAD
BH-11 (0-40)	X			22/02/14		1	X	X	X
BH-11 (40-62)	X			22/02/14		1		X	X
BH-12 (0-40)	X			22/02/14		1		X	X
[illegible]									
BH-13(40-70)	X			22/02/14		1		X	X
BH-14 (70-112)	X			22/02/14		1		X	X
BH-15(40-70)	X			23/02/14		1		X	X
BH-16(70-100)	X			23/02/14		1		X	X
BH-17 (40-70)	X			23/02/14		1	X	X	X
BH-17 (140-168)	X			23/02/14		1		X	X

LEGEND: ** Metals 13 elements (Ag, As, Ba, Cd, Co, Cr, Cu, Sn, Mn, Mo, Ni, Pb, Zn),
*** Metals 16 elements (Al, Sb, Ag, As, Ba, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Se, Na, Zn).

Types of Water: G = Groundwater P = Potable LW = Liquid Waste Sur = Surface E = Effluent C = Catchment

Applicable Regulations: _____ (To complete)

Turnaround Time: ☐ 24h ☐ 48h ☐ 72h ☐ Regular ☐ Date: _____

Unless clearly identified all water samples received at Maxxam analytics will be treated as non-potable and will not be subject to the requirements under the Quebec Drinking Water Regulation.

General Condition at Reception: 3°1.0°

Chain of Custody

Relinquished by:	Date: 2014-02-27	Time: 08:10	Received by: [illegible] Robbie Gingras
Relinquished by:	Date:	Time:	Received by:

Number of coolers: _____ Temperature upon reception:

Sample Transport: ☐ By Client ☐ MAXXAM Personnel ☐ Courier (Specify):

Remarks: Ice-yes Seal-yes

KEENWOODFORMQE - Saint-Laurent - 07/09 — WHITE: MAXXAM ANALYTICS INC — BLUE: INVOICING — YELLOW: RETURN TO CLIENT WITH FINAL REPORT — PINK: CLIENT

Maxxam Analytique

- [ ] 889 Montée de Liesse, Ville St-Laurent, Québec H4T 1P5 — Telephone: (514) 448-9001 — Fax: (514) 448-9199 — Toll Free: 1-877-4MA-XXAM (462-9926)
- [ ] 2690 Avenue Dalton, Sainte-Foy, Québec G1P 3S4 — Telephone: (418) 658-5784 — Fax: (418) 658-6594
- [ ] 737 boul. Barette, Chicoutimi, Québec G7J 4C4 — Telephone: (418) 543-3788 — Fax: (418) 543-8994

www.maxxamanalytics.com

Sample Analysis and Chain of Custody Record

Page 3 of 3

E-

Invoice Information	Report Information (if differs from invoice)
Company Name:	Company Name:
Address:	Address:
Contact Name:	Contact Name:
Telephone:	Telephone:
Fax:	Fax:
Sampler:	Sampler:

Order No.: — Project / Site:

Quotation No.: — Project No.:

I hereby acknowledge the understanding and acceptance of Maxxam's terms and conditions as listed on the back of this form.

Sample Identification (sampling point)	Sample: Soil	Sample: Water Type	Sample: Other	Sampling (date / time)	To be filtered	Number of samples
BH-18 (40-70)	X			23/02/14		1
BH-19 (40-59)	X			23/02/14		1
BH-20 (40-70)	X			23/02/14		1
BH-21 (70-90)	X			23/02/14		1
BH-22 (500-550)	X			23/02/14		1

Sample Identification	PH (C10-C50)	O & G Min. / O & G Tot.	VOC (EPA 624) / BTEX / MAH	Phenols (GC/MS) / Phenols (Color.)	PAH	PCB (Congeners) (GC-MS)	Heavy Metals (Cd, Cr, Cu, Ni, Pb, Zn)	Metals ICP regulation - 13 ele.-soil** / 16 ele. water***	Mercury / Selenium-soil / Others:	F / Cl / SO4 / NO2 / NO3 / NO2 + NO3	TKN / NH3 / P-Tot.	pH / Conductivity / TSS	Sulfide (SH2) / Total Sulphur (S)	Tot.-CN / Ox.-CN / Free CN	BOD5 / COD / Turbidity / TOC	RDS / RMD	CUM ART. 10 / ART. 11	Potable Water: ORG. / INOR. / THM	COLIF (Fec.) / COLIF (Tot.) / TOTAL-PC	Explosive EPA 8095 / EPA 8330	Other (specify):	PH	CN TOTAL	CN WAD
BH-18 (40-70)																						X	X	X
BH-19 (40-59)																							X	X
BH-20 (40-70)																							X	X
BH-21 (70-90)																						X	X	X
BH-22 (500-550)																							X	X

LEGEND: ** Metals 13 elements (Ag, As, Ba, Cd, Co, Cr, Cu, Sn, Mn, Mo, Ni, Pb, Zn).
*** Metals 16 elements (Al, Sb, Ag, As, Ba, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Se, Na, Zn).

Types of Water: G = Groundwater, Sur = Surface, P = Potable, E = Effluent, LW = Liquid Waste, C = Catchment

Applicable Regulations: ________ (To complete)

Turnaround Time: [ ] 24h [ ] 48h [ ] 72h [ ] Regular [ ] Date:

Unless clearly identified all water samples received at Maxxam analytics will be treated as non-potable and will not be subject to the requirements under the Quebec Drinking Water Regulation.

General Condition at Reception: 3'1'0'

Chain of Custody

Relinquished by:	Date: 2014-02-27	Time: 08:10	Received by: [signature] Robbie Gingell
Relinquished by:	Date:	Time:	Received by:

Number of coolers: — Temperature upon reception:

Remarks: Ice - yes; Seal - yes

Sample Transport: [ ] By Client [ ] MAXXAM Personnel [ ] Courier (Specify):

KEENVCOCFORMQE - Saint-Laurent - 07/09 — WHITE: MAXXAM ANALYTICS INC — BLUE: INVOICING — YELLOW: RETURN TO CLIENT WITH FINAL REPORT — PINK: CLIENT

Your P.O. #: OP-310962-J
Your Project #: E14103172-01

Attention: Kevin Buck

Agnico Eagle Ltée-Division Meadowbank
Meadowbank
Baker Lake, Nunavut, Canada
Meadowbank
Nunavut, QC
CANADA X0C 0A0

Report Date: 2014/03/07
Report #: R1836907
Version: 1

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B411247
Received: 2014/03/05, 08:10

Sample Matrix: SOIL
Samples Received: 40

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Primary Reference
Weak Acid Dissociable Cyanides*	40	2014/03/06	2014/03/07	STL SOP-00035	MA. 300 - CN 1.2
Total Cyanide*	40	2014/03/05	2014/03/06	STL SOP-00035	MA. 300 - CN 1.2
pH*	4	2014/03/06	2014/03/06	STL SOP-00016	MA.100- pH1.1

Note: RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

* Maxxam is accredited as per the MDDEFP program.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Rita Kurdoghlanian, Project Manager
Email: RKurdoghlanian@maxxam.ca
Phone# (514) 448-9001 Ext:4272

==========

This report has been generated and distributed using a secure automated process.
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Maxxam Job #: B411247
Report Date: 2014/03/07

Agnico Eagle Ltée-Division Meadowbank
Client Project #: E14103172-01

Your P.O. #: OP-310962-J
Sampler Initials: TT

CONVENTIONAL PARAMETERS (SOIL)

Maxxam ID					X68074	X68074	X68075	X68076		
Sampling Date					2014/02/22	2014/02/22	2014/02/22	2014/02/23		
	Units	**A**	**B**	**C**	**BH-12 (40-70)**	**BH-12 (40-70) Lab-Dup**	**BH-14 (40-70)**	**BH-15 (70-100)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	6.9	6.9	4.4	9.4	N/A	N/A
CONVENTIONALS										
Total Cyanide (CN)	mg/kg	**2**	50	500	1.4	1.6	<0.5	<0.5	0.5	1277739
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	0.5	1277819

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID					X68077	X68078	X68079	X68080		
Sampling Date					2014/02/23	2014/02/23	2014/02/23	2014/02/23		
	Units	**A**	**B**	**C**	**BH-16 (0-40)**	**BH-16 (100-140)**	**BH-17 (70-100)**	**BH-17 (100-140)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	11	8.2	9.9	7.0	N/A	N/A
CONVENTIONALS										
Total Cyanide (CN)	mg/kg	**2**	50	500	1.9	0.6	<0.5	<0.5	0.5	1277739
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	0.5	1277819

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID					X68081	X68082	X68083	X68088		
Sampling Date					2014/02/23	2014/02/25	2014/02/25	2014/02/25		
	Units	**A**	**B**	**C**	**BH-18 (70-100)**	**BH-23 (450-500)**	**BH-24 (400-450)**	**BH-24 (500-530)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	12	0.8	2.3	1.2	N/A	N/A
CONVENTIONALS										
Total Cyanide (CN)	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	<0.5	0.5	1277739
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	0.5	1277819

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Maxxam Job #: B411247
Report Date: 2014/03/07

Agnico Eagle Ltée-Division Meadowbank
Client Project #: E14103172-01

Your P.O. #: OP-310962-J
Sampler Initials: TT

CONVENTIONAL PARAMETERS (SOIL)

Maxxam ID					X68089	X68090	X68091	X68091		
Sampling Date					2014/02/25	2014/02/25	2014/02/25	2014/02/25		
	Units	**A**	**B**	**C**	**BH-25 (250-300)**	**BH-25 (400-450)**	**BH-25 (500-530)**	**BH-25 (500-530) Lab-Dup**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	1.9	0.8	0.5	0.5	N/A	N/A
CONVENTIONALS										
pH	pH	**-**	-	-	9.30	N/A	N/A	N/A	N/A	1277885
Total Cyanide (CN)	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	<0.5	0.5	1277739
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	0.5	1277819

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID					X68092	X68093	X68094	X68095		
Sampling Date					2014/02/27	2014/02/27	2014/02/27	2014/02/27		
	Units	**A**	**B**	**C**	**BH-26 (400-450)**	**BH-27 (500-550)**	**BH-28 (500-550)**	**BH-29 (300-350)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	0.8	0.2	0.8	1.0	N/A	N/A
CONVENTIONALS										
pH	pH	**-**	-	-	N/A	N/A	N/A	8.58	N/A	1277885
Total Cyanide (CN)	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	<0.5	0.5	1277739
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	0.5	1277819

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Maxxam Job #: B411247
Report Date: 2014/03/07

Agnico Eagle Ltée-Division Meadowbank
Client Project #: E14103172-01

Your P.O. #: OP-310962-J
Sampler Initials: TT

CONVENTIONAL PARAMETERS (SOIL)

Maxxam ID					X68096	X68097		X68098		
Sampling Date					2014/02/27	2014/02/27		2014/02/27		
	Units	**A**	**B**	**C**	**BH-29 (500-550)**	**BH-30 (400-450)**	**QC Batch**	**BH-30 (550-690)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	0.3	3.3	N/A	1.0	N/A	N/A
CONVENTIONALS										
pH	pH	-	-	-	N/A	N/A	1277885	9.38	N/A	1277885
Total Cyanide (CN)	mg/kg	2	50	500	<0.5	<0.5	1277739	<0.5	0.5	1277740
Weak Acid Dissociable Cyanide (CN-)	mg/kg	2	10	100	<0.5	<0.5	1277819	<0.5	0.5	1277816

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID					X68099	X68100	X68101	X68102		
Sampling Date					2014/03/01	2014/03/01	2014/03/01	2014/03/01		
	Units	**A**	**B**	**C**	**BH-33 (300-350)**	**BH-33 (400-450)**	**BH-34 (300-350)**	**BH-34 (500-577)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	14	2.7	4.8	5.2	N/A	N/A
CONVENTIONALS										
Total Cyanide (CN)	mg/kg	2	50	500	<0.5	<0.5	<0.5	<0.5	0.5	1277740
Weak Acid Dissociable Cyanide (CN-)	mg/kg	2	10	100	<0.5	<0.5	<0.5	<0.5	0.5	1277816

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID					X68103	X68104		X68105		
Sampling Date					2014/03/02	2014/03/02		2014/03/02		
	Units	**A**	**B**	**C**	**BH-35 (300-350)**	**BH-35 (400-450)**	**RDL**	**BH-36 (40-70)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	3.2	3.4	N/A	9.4	N/A	N/A
CONVENTIONALS										
pH	pH	-	-	-	N/A	9.28	N/A	N/A	N/A	1277885
Total Cyanide (CN)	mg/kg	2	50	500	<0.5	<0.5	0.5	**27**	10	1277740
Weak Acid Dissociable Cyanide (CN-)	mg/kg	2	10	100	<0.5	<0.5	0.5	**3**	1	1277816

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Maxxam Job #: B411247
Report Date: 2014/03/07

Agnico Eagle Ltée-Division Meadowbank
Client Project #: E14103172-01

Your P.O. #: OP-310962-J
Sampler Initials: TT

CONVENTIONAL PARAMETERS (SOIL)

Maxxam ID					X68106	X68107		X68114	X68114		
Sampling Date					2014/03/02	2014/03/02		2014/03/02	2014/03/02		
	Units	**A**	**B**	**C**	**BH-36 (70-100)**	**BH-36 (100-129)**	**RDL**	**BH-37 (40-70)**	**BH-37 (40-70) Lab-Dup**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	6.3	7.4	N/A	13	13	N/A	N/A
CONVENTIONALS											
Total Cyanide (CN)	mg/kg	**2**	50	500	1.7	0.9	0.5	1	1	1	1277740
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	0.5	1.2	1.1	0.5	1277816

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID					X68115		X68116		X68117		
Sampling Date					2014/03/02		2014/03/02		2014/03/02		
	Units	**A**	**B**	**C**	**BH-37 (70-109)**	**RDL**	**BH-38 (0-29)**	**RDL**	**BH-39 (300-350)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	6.0	N/A	30	N/A	3.6	N/A	N/A
CONVENTIONALS											
Total Cyanide (CN)	mg/kg	**2**	50	500	0.9	0.5	51	10	<0.5	0.5	1277740
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	0.9	0.5	<0.5	0.5	<0.5	0.5	1277816

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID					X68118	X68119	X68119	X68120		
Sampling Date					2014/03/02	2014/03/02	2014/03/02	2014/03/02		
	Units	**A**	**B**	**C**	**BH-39 (400-450)**	**BH-40 (400-450)**	**BH-40 (400-450) Lab-Dup**	**BH-40 (550-645)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	3.0	12	12	4.5	N/A	N/A
CONVENTIONALS										
Total Cyanide (CN)	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	<0.5	0.5	1277740
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	0.5	1277816

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Maxxam Job #: B411247
Report Date: 2014/03/07

Agnico Eagle Ltée-Division Meadowbank
Client Project #: E14103172-01

Your P.O. #: OP-310962-J
Sampler Initials: TT

CONVENTIONAL PARAMETERS (SOIL)

Maxxam ID					X68121	X68122	X68123		
Sampling Date					2014/03/02	2014/03/02	2014/03/02		
	Units	**A**	**B**	**C**	**BH-41 (300-350)**	**BH-41 (400-450)**	**BH-42 (300-350)**	**RDL**	**QC Batch**
% Moisture	%	-	-	-	7.2	0.8	1.1	N/A	N/A
CONVENTIONALS									
Total Cyanide (CN)	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	0.5	1277740
Weak Acid Dissociable Cyanide (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	0.5	1277816

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Maxxam Job #: B411247
Report Date: 2014/03/07

Agnico Eagle Ltée-Division Meadowbank
Client Project #: E14103172-01

Your P.O. #: OP-310962-J
Sampler Initials: TT

GENERAL COMMENTS

Condition of sample(s) upon receipt: GOOD

All results are calculated on a dry weight basis except where not applicable.

A,B,C: Criteria following appendix 2 of the " Soil Protection and Contaminated Sites Rehabilitation Policy " entitled " Generic criteria for soils and groundwater ". For all metals analyses in soil, the criterion A refers to " Background Level of St. Lawrence Lowlands Sector ".

For groundwaters:
The A and B criteria follow the appendix 2 of the " Soil Protection and Contaminated Sites Rehabilitation Policy " entitled " Generic criteria for soils and groundwater ". The criterion A refers to " Drinking Water " and the criterion B refers to "Seepage into Surface Water or Infiltration into Sewers ".

These criteria references are shown for visual aid only, and should not be interpreted otherwise.
- = This parameter is not part of the regulation.

CONVENTIONAL PARAMETERS (SOIL)

Please note that the results have not been corrected for QC recoveries nor for the method blank results.
Reported detection limits are multiplied by dilution factors used for sample analysis.

Results relate only to the items tested.

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Agnico Eagle Ltée-Division Meadowbank
Attention: Kevin Buck
Client Project #: E14103172-01
P.O. #: OP-310962-J
Site Location:

Quality Assurance Report

Maxxam Job Number: B411247

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units
1277739	CC6	QC Standard	Total Cyanide (CN)	2014/03/06		109	%
		Spiked Blank	Total Cyanide (CN)	2014/03/06		104	%
		Method Blank	Total Cyanide (CN)	2014/03/06	<0.5		mg/kg
1277740	DB2	QC Standard	Total Cyanide (CN)	2014/03/06		117	%
		Spiked Blank	Total Cyanide (CN)	2014/03/06		103	%
		Method Blank	Total Cyanide (CN)	2014/03/06	<0.5		mg/kg
1277816	DB2	Spiked Blank	Weak Acid Dissociable Cyanide (CN-)	2014/03/07		108	%
		Method Blank	Weak Acid Dissociable Cyanide (CN-)	2014/03/07	<0.5		mg/kg
1277819	CC6	Spiked Blank	Weak Acid Dissociable Cyanide (CN-)	2014/03/07		106	%
		Method Blank	Weak Acid Dissociable Cyanide (CN-)	2014/03/07	<0.5		mg/kg
1277885	KV1	QC Standard	pH	2014/03/06		100	%
		Spiked Blank	pH	2014/03/06		102	%

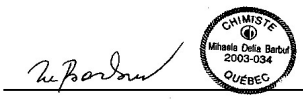
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

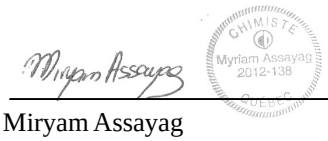
Validation Signature Page

Maxxam Job #: B411247

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Delia Barbul, B.Sc., Chemist



Miryam Assayag

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

5-Mar-14 08:10
Alain Lemieux
B411247
MF5 MTL-0024

Maxxam Analytique

☒ 889 Montée de Liesse
☐ 2690 Avenue Dalton, S
☐ 737 boul. Barette, Chico

Fax: (514) 448-9199 Toll Free: 1-877-4MA-XXAM (462-9926)
Fax: (418) 658-6594
Telephone: (418) 543-3788 Fax: (418) 543-8994
www.maxxamanalytics.com

Sample Analysis and Chain of Custody Record

E-

Invoice Information	Report Information (if differs from invoice)
Company Name: AEM Meadowbank	Company Name:
Address: 10200 route de Preissac, Rouyn-Noranda J0Y 1C0	Address:
Contact Name: Kevin Buck	Contact Name:
Telephone: 819. 759. 3555 x6838	Telephone:
Fax: 819. 759. 3663	Fax:
Sampler: Tyrel / Tom	Sampler:

I hereby acknowledge the understanding and acceptance of Maxxam's terms and conditions as listed on the back of this form.

Order No.: Project / Site:
Quotation No.: Project No.: E14103172-01

Sample Identification (sampling point)	Sample: Soil	Water	Other	Sampling (date / time)	To be filtered	Number of samples	CN TOTAL	CN WAD	pH
BH-12 (40-70)	X			Feb 22/14		1	X	X	
BH-14 (40-70)				Feb 22/14		1	X	X	
BH-15 (70-100)				Feb 23/14		1	X	X	
BH-16 (0-40)						1	X	X	
BH-16 (100-140)						1	X	X	
BH-17 (70-100)						1	X	X	
BH-17 (100-140)						1	X	X	
BH-18 (70-100)						1	X	X	
BH-23 (450-500)				Feb 25/14		1	X	X	
BH-24 (400-450)	V			V		1	X	X	

PH (Cn-Cle) ☐ | O & G Min. ☐ | O & G Tot. ☐ | VOC (EPA 624) ☐ | BTEX ☐ | MAH ☐ | Phenols (GC/MS) ☐ | Phenols (Colorc) ☐ | PAH ☐ | PCB (Congeners) (GC-MS) ☐ | Heavy Metals (Cd, Cr, Cu, Ni, Pb, Zn) ☐ | Metals ICP regulation - 13 ele.-tox** ☐ | 16 ele. water*** ☐ | Mercury ☐ | Selenium-soil ☐ | Others: ☐ | F- ☐ | Cl ☐ | SO4 ☐ | NO2 ☐ | NO3 ☐ | NO2 + NO3 ☐ | NH3 ☐ | TKN ☐ | P-Tot. ☐ | pH ☐ | Conductivity ☐ | TSS ☐ | Sulfide (SH-) ☐ | Total Sulphur (S) ☐ | Tot.-CN ☐ | Ox.-CN ☐ | Free CN ☐ | BODs ☐ | COD ☐ | Turbidity ☐ | TOC ☐ | RMD ☐ | CUM. ART. 10 ☐ | ART. 11 ☐ | Potable Water ☐ | ORG. ☐ | INORG. ☐ | THM ☐ | COLIF (Fec.) ☐ | COLIF (Tot.) ☐ | TOTAL-PC ☐ | Explosive ☐ | EPA 8095 ☐ | EPA 8330 ☐ | Other (specify):

LEGEND: ** Metals 13 elements (Ag, As, Ba, Cd, Co, Cr, Cu, Sn, Mn, Mo, Ni, Pb, Zn),
*** Metals 16 elements (Al, Sb, Ag, As, Ba, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Se, Na, Zn).

Types of Water: G = Groundwater P = Potable LW = Liquid Waste Sur = Surface E = Effluent C = Catchment

Applicable Regulations: (To complete)

Turnaround Time: ☒ 24h ☐ 48h ☐ 72h ☐ Regular ☐ Date:

Unless clearly identified all water samples received at Maxxam analytics will be treated as non-potable and will not be subject to the requirements under the Quebec Drinking Water Regulation.

General Condition at Reception:

Chain of Custody

Relinquished by: Tyrel Hemsley Tyrel Hemsley	Date: Mar 2/14	Time: 1807	Received by:	Remarks: ICE-YES SEAL-NO
Relinquished by:	Date:	Time:	Received by:	

Number of coolers: 2 Temperature upon reception: 0° 0° 0° / 0° 1° 0°

Sample Transport: ☐ By Client ☐ MAXXAM Personnel ☒ Courier (Specify):

KEENVCOCFORMQE - Saint-Laurent - 07/09 WHITE: MAXXAM ANALYTICS INC BLUE: INVOICING YELLOW: RETURN TO CLIENT WITH FINAL REPORT PINK: CLIENT

Mario Franca MARIO FRANCA 2014/03/05 08:10

Sample Analysis and Chain of Custody Record

Page 2 of 4

Maxxam Analytique

☒ 889 Montée de Liesse, Ville St-Laurent, Québec H4T 1P5 — Telephone: (514) 448-9001 — Fax: (514) 448-9199 — Toll Free: 1-877-4MA-XXAM (462-9926)
☐ 2690 Avenue Dalton, Sainte-Foy, Québec G1P 3S4 — Telephone: (418) 658-5784 — Fax: (418) 658-6594
☐ 737 boul. Barette, Chicoutimi, Québec G7J 4C4 — Telephone: (418) 543-3788 — Fax: (418) 543-8994
www.maxxamanalytics.com

E-

Invoice Information	Report Information (if differs from invoice)
Company Name:	Company Name:
Address: Same as Page 1	Address:
Contact Name:	Contact Name:
Telephone:	Telephone:
Fax:	Fax:
Sampler:	Sampler:

I hereby acknowledge the understanding and acceptance of Maxxam's terms and conditions as listed on the back of this form.

Order No.: _____ Project / Site: _____
Quotation No.: _____ Project No.: E14103172-01

Sample Identification (sampling point)	Sample Type: Soil	Water	Other	Sampling (date / time)	To be filtered	Number of samples	CN TOTAL	CN WAD	pH
BH-24 (500-530)	X			Feb 25/14		1	X	X	
BH-25 (250-300)						1	X	X	X
BH-25 (400-450)						1	X	X	
BH-25 (500-550)				↓		1	X	X	
BH-26 (400-450)				Feb 27/14		1	X	X	
BH-27 (500-550)						1	X	X	
BH-28 (500-550)						1	X	X	
BH-29 (300-350)						1	X	X	X
BH-29 (500-550)						1	X	X	
BH-30 (400-450)	↓			↓		1	X	X	

Columns: PH (Cn-Cle) | O & G Min. | O & G Tot. | BTEX | MAH | VOC (EPA 624) | Phenols (GC/MS) | Phenols (Colour) | PAH | PCB (Congeners) (GC-MS) | Heavy Metals (Cd, Cr, Cu, Ni, Pb, Zn) | Metals ICP regulation - 13 ele.-soil** | 16 ele. water*** | Mercury | Selenium-soil | Others: | F | Cl | SO4 | NO2 | NO3 | NO2 + NO3 | TKN | NH3 | P-Tot. | pH | Conductivity | TSS | Sulfide (SH) | Total Sulphur (S) | Tot.-CN | Ox.-CN | Free CN | BOD5 | COD | TOC | Turbidity | RMD | CUM | ART. 10 | ART. 11 | Potable Water: | ORG. | INOR. | THM | COLIF (Fec.) | COLIF (Tot.) | TOTAL-PC | Explosive | EPA 8095 | EPA 8330 | Other (specify):

LEGEND: ** Metals 13 elements (Ag, As, Ba, Cd, Co, Cr, Cu, Sn, Mn, Mo, Ni, Pb, Zn),
*** Metals 16 elements (Al, Sb, Ag, As, Ba, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Se, Na, Zn).

Types of Water: G = Groundwater, Sur = Surface, P = Potable, E = Effluent, LW = Liquid Waste, C = Catchment

Applicable Regulations: _____ (To complete)

Turnaround Time: ☒ 24h ☐ 48h ☐ 72h ☐ Regular ☐ Date: _____

Unless clearly identified all water samples received at Maxxam analytics will be treated as non-potable and will not be subject to the requirements under the Quebec Drinking Water Regulation.

General Condition at Reception:

Chain of Custody

Relinquished by: Tyrel Hemsley Tyrel Hemsley	Date: Mar 2/14	Time: 1807	Received by:
Relinquished by:	Date:	Time:	Received by:

Number of coolers: 2 — Temperature upon reception: 0° 0° 0° / 0° 1° 0°

Sample Transport: ☐ By Client ☐ MAXXAM Personnel ☒ Courier (Specify):

Remarks: ICE - YES SEAL - NO

KEENVCOCFORMQE - Saint-Laurent - 07/09 — WHITE: MAXXAM ANALYTICS INC — BLUE: INVOICING — YELLOW: RETURN TO CLIENT WITH FINAL REPORT — PINK: CLIENT

Marc Frisch MARC FRISCH 2014/03/05 08:10

Maxxam Analytique

Sample Analysis and Chain of Custody Record

☒ 6889 Montée de Liesse, Ville St-Laurent, Québec H4T 1P5 — Telephone: (514) 448-9001 — Fax: (514) 448-9199 — Toll Free: 1-877-4MA-XXAM (462-9926)
☐ 2690 Avenue Dalton, Sainte-Foy, Québec G1P 3S4 — Telephone: (418) 658-5784 — Fax: (418) 658-6594
☐ 737 boul. Barette, Chicoutimi, Québec G7J 4C4 — Telephone: (418) 543-3788 — Fax: (418) 543-8994
www.maxxamanalytics.com

E-

Invoice Information	Report Information (if differs from invoice)
Company Name:	Company Name:
Address: Same as Page 1	Address:
Contact Name:	Contact Name:
Telephone:	Telephone:
Fax:	Fax:
Sampler:	Sampler:

I hereby acknowledge the understanding and acceptance of Maxxam's terms and conditions as listed on the back of this form.

Order No.: Project / Site:

Quotation No.: Project No.: E141031 72-01

Sample Identification (sampling point)	Sample: Soil	Water	Other	Sampling (date / time)	To be filtered	Number of samples	CN TOTAL	CN WAD	pH
BH-30 (550-690)	X			Feb 27/14		1	X	X	X
BH-33 (300-350)				Mar 1/14		1	X	X	
BH-33 (400-450)						1	X	X	
BH-34 (300-350)						1	X	X	
BH-34 (500-577)						1	X	X	
BH-35 (300-350)				Mar 2/14		1	X	X	
BH-35 (400-450)						1	X	X	X
BH-36 (40-70)						1	X	X	
BH-36 (70-100)						1	X	X	
BH-36 (100-129)						1	X	X	

PH (Cn-Cn) ☐ | O & G Min. ☐ | O & G Tot. ☐ | VOC (EPA 624) ☐ | BTEX ☐ | MAH ☐ | Phenols (GC/MS) ☐ | Phenols (Colour) ☐ | PAH ☐ | PCB (Congeners) (GC-MS) ☐ | Heavy Metals (Cd, Cr, Cu, Ni, Pb, Zn) ☐ | Metals ICP regulation - 13 ele.-soil** ☐ | 16 ele.-water*** ☐ | Mercury ☐ | Selenium-soil ☐ | Others: | F ☐ | Cl ☐ | SO4 ☐ | NO3 ☐ | NO2 + NO3 ☐ | TKN ☐ | NH3 ☐ | P-Total ☐ | pH ☐ | Conductivity ☐ | TSS ☐ | Sulfide (SH) ☐ | Total Sulphur (S) ☐ | Tot.-CN ☐ | Ox.-CN ☐ | Free CN ☐ | BOD5 ☐ | COD ☐ | Turbidity ☐ | TOC ☐ | RDS ☐ | RMD ☐ | CUM ☐ | ART. 11 ☐ | ART. 19 ☐ | Potable Water: ORG. ☐ | INOR. ☐ | THM ☐ | COLIF (Fec.) ☐ | COLIF (Tot.) ☐ | TOTAL-PC ☐ | Explosive ☐ | EPA 8260 ☐ | EPA 8095 ☐ | Other (specify): ☐

LEGEND: ** Metals 13 elements (Ag, As, Ba, Cd, Co, Cr, Cu, Sn, Mn, Mo, Ni, Pb, Zn),
*** Metals 16 elements (Al, Sb, Ag, As, Ba, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Se, Na, Zn).

Types of Water: G = Groundwater P = Potable LW = Liquid Waste
Sur = Surface E = Effluent C = Catchment

Applicable Regulations: (To complete)

Turnaround Time: ☒ 24h ☐ 48h ☐ 72h ☐ Regular ☐ Date:

Unless clearly identified all water samples received at Maxxam analytics will be treated as non-potable and will not be subject to the requirements under the Quebec Drinking Water Regulation.

General Condition at Reception:

Chain of Custody

Relinquished by: Tyrel Hemsley Tyrel Hemsley	Date: Mar 2/14	Time: 1807	Received by:
Relinquished by:	Date:	Time:	Received by:

Number of coolers: 2 — Temperature upon reception: 0° 0° 0° / 0° 1° 0°

Sample Transport: ☐ By Client ☐ MAXXAM Personnel ☒ Courier (Specify):

Remarks: ICE-YES SEAL-NO

KEENVCOCFORM0E - Saint-Laurent - 07/09 — WHITE: MAXXAM ANALYTICS INC — BLUE: INVOICING — YELLOW: RETURN TO CLIENT WITH FINAL REPORT — PINK: CLIENT

Mario Fraser MARIO FRASER 2014/03/05 08:10

Maxxam Analytique

Sample Analysis and Chain of Custody Record Page 4 of 4

☒ 889 Montée de Liesse, Ville St-Laurent, Québec H4T 1P5 — Telephone: (514) 448-9001 — Fax: (514) 448-9199 — Toll Free: 1-877-4MA-XXAM (462-9926)
☐ 2690 Avenue Dalton, Sainte-Foy, Québec G1P 3S4 — Telephone: (418) 658-5784 — Fax: (418) 658-6594
☐ 737 boul. Barette, Chicoutimi, Québec G7J 4C4 — Telephone: (418) 543-3788 — Fax: (418) 543-8994
www.maxxamanalytics.com

E-

Invoice Information	Report Information (if differs from invoice)
Company Name:	Company Name:
Address: Same as Page 1	Address:
Contact Name:	Contact Name:
Telephone:	Telephone:
Fax:	Fax:
Sampler:	Sampler:

Order No.: _____ Project / Site: _____
Quotation No.: _____ Project No.: E14/03172-01

I hereby acknowledge the understanding and acceptance of Maxxam's terms and conditions as listed on the back of this form.

Sample Identification (sampling point)	Sample Type: Soil	Water	Other	Sampling (date / time)	To be filtered	Number of samples	PH (Cn-Cs) ☐	O & G Min. ☐	O & G Tot. ☐	VOC (EPA 624) ☐	BTEX ☐	MAH ☐	Phenols (GC/MS) ☐	Phenols (Colorc) ☐	PAH	PCB (Congeners) (GC-MS)	Heavy Metals (Cd, Cr, Cu, Ni, Pb, Zn)	Metals (ICP regulation - 13 ele.-soil)** ☐	Metals 16 ele. water*** ☐	Mercury ☐	Selenium-soil ☐	Others:	F- ☐	Cl ☐	SO4 ☐	NO2 ☐	NO3 ☐	NO3 + NO2 ☐	TKN ☐	NH3 ☐	P-Tot. ☐	pH ☐	Conductivity ☐	TSS ☐	Sulfide (SH-) ☐	Total Sulphur (S) ☐	Tot.-CN ☐	Ox.-CN ☐	Free CN ☐	BOD5 ☐	COD ☐	Turbidity ☐	TOC ☐	RDS ☐	RMD ☐	CUM. ART. 10 ☐	ART. 11 ☐	Potable Water: ORG. ☐	INOR. ☐	THM ☐	COLIF (Fec.) ☐	COLIF (Tot.) ☐	TOTAL-PC ☐	Explosive	EPA 8330 ☐	EPA 8095 ☐	Other (specify):	CN TOTAL	CN WAD	pH
BH-37 (40-70)	X			Mar 2/14		1																																																				X	X	
BH-37 (70-109)	↓			↓		1																																																			X	X	
BH-38 (0-29)						1																																																		X	X	
BH-39 (300-350)						1																																																		X	X	
BH-39 (400-450)						1																																																		X	X	
BH-40 (400-450)						1																																																		X	X	
BH-40 (550-645)						1																																																		X	X	
BH-41 (300-350)						1																																																		X	X	
BH-41 (400-450)						1																																																		X	X	
BH-42 (300-350)	↓			↓		1																																																		X	X	

LEGEND: ** Metals 13 elements (Ag, As, Ba, Cd, Co, Cr, Cu, Sn, Mn, Mo, Ni, Pb, Zn),
*** Metals 16 elements (Al, Sb, Ag, As, Ba, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Se, Na, Zn).

Types of Water: G = Groundwater P = Potable LW = Liquid Waste
Sur = Surface E = Effluent C = Catchment

Applicable Regulations: _____ (To complete)

Turnaround Time: ☒ 24h ☐ 48h ☐ 72h ☐ Regular ☐ Date: _____

Unless clearly identified all water samples received at Maxxam analytics will be treated as non-potable and will not be subject to the requirements under the Quebec Drinking Water Regulation.

General Condition at Reception:

Chain of Custody

Relinquished by: Tyrel Hensley Tyrel Hensley	Date: Mar 2/14	Time: 1807	Received by:	Remarks: ICE-YES SEAL-NO
Relinquished by:	Date:	Time:	Received by:	

Number of coolers: 2 Temperature upon reception: 0° 0° 0° / 0° 1° 0°

Sample Transport: ☐ By Client ☐ MAXXAM Personnel ☒ Courier (Specify):

KEENVCOCFORM08 - Saint-Laurent - 07/09 WHITE: MAXXAM ANALYTICS INC BLUE: INVOICING YELLOW: RETURN TO CLIENT WITH FINAL REPORT PINK: CLIENT

2014/03/07 14:26

Marie France MARIE FRANCE 2014/03/05 08:10

Votre # de commande: OP-310962-J
Votre # du projet: E14103172-01

Attention: Kevin Buck

Agnico Eagle Ltée-Division Meadowbank
Meadowbank
Baker Lake, Nunavut, Canada
Meadowbank
Nunavut, QC
CANADA X0C 0A0

Date du rapport: 2014/03/12
 # Rapport: R1838755
Version: 1

CERTIFICAT D'ANALYSES

 # DE DOSSIER MAXXAM: B412113
Reçu: 2014/03/10, 08:00

Matrice: SOL
Nombre d'échantillons reçus: 28

Analyses	Quantité	Date de l' extraction	Date Analysé	Méthode de laboratoire	Référence Primaire
Cyanures disponibles*	28	2014/03/10	2014/03/12	STL SOP-00035	MA. 300 - CN 1.2
Cyanures Totaux*	28	2014/03/10	2014/03/11	STL SOP-00035	MA. 300 - CN 1.2

Notez: Les données brutes sont utilisées pour le calcul du RPD (% d'écart relatif). L'arrondissement des résultats finaux peut expliquer la variation apparente.

* Maxxam détient l'accréditation pour cette analyse selon le programme du MDDEFP.

clé de cryptage

Veuillez adresser toute question concernant ce certificat d'analyse à votre chargé(e) de projets

Rita Kurdoghlanian, Chargée de projets
Email: RKurdoghlanian@maxxam.ca
Phone# (514) 448-9001 Ext:4272

==========

Ce rapport a été produit et distribué en utilisant une procédure automatisée sécuritaire.
Maxxam a mis en place des procédures qui protègent contre l'utilisation non autorisée de la signature électronique et emploie les «signataires» requis, conformément à la section 5.10.2 de la norme ISO/CEI 17025:2005(E). Veuillez vous référer à la page des signatures de validation pour obtenir les détails des validations pour chaque division.

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Dossier Maxxam: B412113
Date du rapport: 2014/03/12

Agnico Eagle Ltée-Division Meadowbank
Votre # du projet: E14103172-01

Votre # de commande: OP-310962-J

PARAMÈTRES CONVENTIONNELS (SOL)

Identification Maxxam					X71668	X71669	X71670	X71671	X71671		
Date d'échantillonnage					2014/03/03	2014/03/03	2014/03/03	2014/03/03	2014/03/03		
	UNITÉS	**A**	**B**	**C**	**BH-43 (0-40)**	**BH-43 (70-100)**	**BH-43 (100-121)**	**BH-44 (40-70)**	**BH-44 (40-70) Dup. de Lab.**	**LDR**	**Lot CQ**
% Humidité	%	-	-	-	41	6.9	9.9	9.9	9.9	N/A	N/A
CONVENTIONNELS											
Cyanures Totaux	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	0.6	0.6	0.5	1279232
Cyanures disponibles (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1279273

N/A = Non Applicable
LDR = Limite de détection rapportée
Lot CQ = Lot Contrôle Qualité

Identification Maxxam					X71672	X71673	X71674	X71675		
Date d'échantillonnage					2014/03/03	2014/03/03	2014/03/03	2014/03/03		
	UNITÉS	**A**	**B**	**C**	**BH-44 (70-94)**	**BH-45 (40-52)**	**BH-46 (40-70)**	**BH-46 (100-139)**	**LDR**	**Lot CQ**
% Humidité	%	-	-	-	6.4	16	7.6	5.6	N/A	N/A
CONVENTIONNELS										
Cyanures Totaux	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	<0.5	0.5	1279232
Cyanures disponibles (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	0.5	1279273

N/A = Non Applicable
LDR = Limite de détection rapportée
Lot CQ = Lot Contrôle Qualité

Identification Maxxam					X71676		X71677	X71678	X71679		
Date d'échantillonnage					2014/03/03		2014/03/03	2014/03/03	2014/03/03		
	UNITÉS	**A**	**B**	**C**	**BH-47 (0-41)**	**LDR**	**BH-48 (40-70)**	**BH-48 (100-140)**	**BH-49 (40-70)**	**LDR**	**Lot CQ**
% Humidité	%	-	-	-	19	N/A	9.4	7.3	6.0	N/A	N/A
CONVENTIONNELS											
Cyanures Totaux	mg/kg	**2**	50	500	**4**	1	<0.5	<0.5	<0.5	0.5	1279232
Cyanures disponibles (CN-)	mg/kg	**2**	10	100	<0.5	0.5	<0.5	<0.5	<0.5	0.5	1279273

N/A = Non Applicable
LDR = Limite de détection rapportée
Lot CQ = Lot Contrôle Qualité

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Dossier Maxxam: B412113
Date du rapport: 2014/03/12

Agnico Eagle Ltée-Division Meadowbank
Votre # du projet: E14103172-01

Votre # de commande: OP-310962-J

PARAMÈTRES CONVENTIONNELS (SOL)

Identification Maxxam					X71680	X71681	X71682	X71683	X71683		
Date d'échantillonnage					2014/03/03	2014/03/03	2014/03/03	2014/03/03	2014/03/03		
	UNITÉS	**A**	**B**	**C**	**BH-49 (70-100)**	**BH-50 (0-40)**	**BH-50 (70-100)**	**BH-50 (100-133)**	**BH-50 (100-133) Dup. de Lab.**	**LDR**	**Lot CQ**
% Humidité	%	-	-	-	5.5	19	7.7	6.3	6.3	N/A	N/A
CONVENTIONNELS											
Cyanures Totaux	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1279232
Cyanures disponibles (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1279273

N/A = Non Applicable
LDR = Limite de détection rapportée
Lot CQ = Lot Contrôle Qualité

Identification Maxxam					X71684	X71685	X71686	X71687	X71688		
Date d'échantillonnage					2014/03/03	2014/03/03	2014/03/03	2014/03/03	2014/03/04		
	UNITÉS	**A**	**B**	**C**	**BH-51 (0-40)**	**BH-51 (70-100)**	**BH-51 (100-133)**	**BH-52 (300-350)**	**MW-01 (400-450)**	**LDR**	**Lot CQ**
% Humidité	%	-	-	-	22	9.0	4.4	0.3	2.2	N/A	N/A
CONVENTIONNELS											
Cyanures Totaux	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1279232
Cyanures disponibles (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1279273

N/A = Non Applicable
LDR = Limite de détection rapportée
Lot CQ = Lot Contrôle Qualité

Identification Maxxam					X71689	X71690	X71691	X71692	X71693		
Date d'échantillonnage					2014/03/04	2014/03/05	2014/03/05	2014/03/05	2014/03/05		
	UNITÉS	**A**	**B**	**C**	**MW-03 (400-450)**	**MW-04 (70-91)**	**MW-05 (70-100)**	**MW-06 (70-122)**	**MW-07 (40-70)**	**LDR**	**Lot CQ**
% Humidité	%	-	-	-	2.4	7.6	8.4	8.0	16	N/A	N/A
CONVENTIONNELS											
Cyanures Totaux	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1279232
Cyanures disponibles (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1279273

N/A = Non Applicable
LDR = Limite de détection rapportée
Lot CQ = Lot Contrôle Qualité

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Dossier Maxxam: B412113
Date du rapport: 2014/03/12

Agnico Eagle Ltée-Division Meadowbank
Votre # du projet: E14103172-01

Votre # de commande: OP-310962-J

PARAMÈTRES CONVENTIONNELS (SOL)

Identification Maxxam					X71694	X71695	X71695		
Date d'échantillonnage					2014/03/05	2014/03/05	2014/03/05		
	UNITÉS	**A**	**B**	**C**	**MW-08 (40-70)**	**MW-08 (70-100)**	**MW-08 (70-100) Dup. de Lab.**	**LDR**	**Lot CQ**
% Humidité	%	-	-	-	9.1	6.2	6.2	N/A	N/A
CONVENTIONNELS									
Cyanures Totaux	mg/kg	**2**	50	500	<0.5	<0.5	<0.5	0.5	1279232
Cyanures disponibles (CN-)	mg/kg	**2**	10	100	<0.5	<0.5	<0.5	0.5	1279273

N/A = Non Applicable
LDR = Limite de détection rapportée
Lot CQ = Lot Contrôle Qualité

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Dossier Maxxam: B412113
Date du rapport: 2014/03/12

Agnico Eagle Ltée-Division Meadowbank
Votre # du projet: E14103172-01

Votre # de commande: OP-310962-J

REMARQUES GÉNÉRALES

État des échantillons à l'arrivée: BON

Tous les résultats sont calculés sur une base sèche excepté lorsque non-applicable.

A,B,C: Ces critères proviennent de l'Annexe 2 de la « Politique de protection des sols et de réhabilitation des terrains contaminés ». Pour les analyses de métaux(et métalloides) dans les sols, le critère A désigne la « Teneur de fond Secteur Basses-Terres du Saint-Laurent ».
A,B-eau souterraine: A=Critère pour fin de consommation; B=Critère pour la résurgence dans les eaux de surface ou infiltration dans les égouts.
Ces références ne sont rapportées qu'à titre indicatif et ne doivent être interprétées dans aucun autre contexte.

- = Ce composé ne fait pas parti de la réglementation.

PARAMÈTRES CONVENTIONNELS (SOL)

Veuillez noter que les résultats n'ont pas été corrigés ni pour la récupération des échantillons de contrôle qualité, ni pour le blanc de méthode.
Les limites de détections indiquées sont multipliées par les facteurs de dilution utilisés pour l'analyse des échantillons.

Les résultats ne se rapportent qu'aux échantillons soumis pour analyse

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Agnico Eagle Ltée-Division Meadowbank
Attention: Kevin Buck
Votre # du projet: E14103172-01
P.O. #: OP-310962-J
Adresse du site:

Rapport Assurance Qualité

Dossier Maxxam: B412113

Lot Num	Lot Init	Type CQ	Groupe	Date Analysé aaaa/mm/jj	Valeur	Réc	UNITÉS
1279232	DB2	MRC	Cyanures Totaux	2014/03/11		96	%
		Blanc fortifié	Cyanures Totaux	2014/03/11		109	%
		Blanc de méthode	Cyanures Totaux	2014/03/11	<0.5		mg/kg
1279273	CC6	Blanc fortifié	Cyanures disponibles (CN-)	2014/03/12		109	%
		Blanc de méthode	Cyanures disponibles (CN-)	2014/03/12	<0.5		mg/kg

MRC: Un échantillon de concentration connue préparé dans des conditions rigoureuses par un organisme externe. Utilisé pour vérifier la justesse de la méthode.
Blanc fortifié: Un blanc, d'une matrice exempte de contaminants, auquel a été ajouté une quantité connue d'analyte provenant généralement d'une deuxième source. Utilisé pour évaluer la précision de la méthode.
Blanc de méthode: Une partie aliquote de matrice pure soumise au même processus analytique que les échantillons, du prétraitement au dosage. Sert à évaluer toutes contaminations du laboratoire.
Réc = Récupération

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

Page des signatures de validation

Dossier Maxxam: B412113

Les résultats analytiques ainsi que les données de contrôle-qualité contenus dans ce rapport furent vérifiés et validés par les personnes suivantes:

Delia Barbul, B.Sc., Chimiste

==========

Maxxam a mis en place des procédures qui protègent contre l'utilisation non autorisée de la signature électronique et emploie les «signataires» requis, conformément à la section 5.10.2 de la norme ISO/CEI 17025:2005(E). Veuillez vous référer à la page des signatures de validation pour obtenir les détails des validations pour chaque division.

889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tél. : (514) 448-9001 Télécopieur : (514) 448-9199 Ligne sans frais : 1-877-4MAXXAM (462-9926)

10-Mar-14 08:00
Alain Lemieux
B412113
ICB MTL-0084

Maxxam Analytique

☒ 889 Montée de Liesse, Ville St-Laurent, Québec H4T 1P
☐ 2690 Avenue Dalton, Sainte-Foy, Québec G1P 3S4
☐ 737 boul. Barette, Chicoutimi, Québec G7J 4C4

Analysis and Chain of Custody Record

: 1-877-4MA-XXAM (462-9926) Page 1 of 3

E-

Invoice Information	Report Information (if differs from invoice)
Company Name: AEM Meadowbank	Company Name:
Address: 10200 route de Preissac, Rouyn-Noranda J0Y 1C0	Address:
Contact Name: Kevin Bach	Contact Name:
Telephone: 819.759.3555 x6838	Telephone:
Fax: 819.759.3613	Fax:
Sampler: Tyrel / Tom / Martin	Sampler:

I hereby acknowledge the understanding and acceptance of Maxxam's terms and conditions as listed on the back of this form.

Order No.: Project / Site:

Quotation No.: Project No.: E14103172-01

Sample Identification (sampling point)	Sample: Soil	Water	Type	Other	Sampling (date / time)	To be filtered	Number of samples	PH [Cc-Cc]	O & G Tot.	O & G Min.	VOC (EPA 624)	BTEX	MAH	Phenols (GC/MS)	Phenols (Colour)	PAH	PCB (Congeners) (GC-MS)	Heavy Metals (Cd, Cr, Cu, Ni, Pb, Zn)	16 ele. water***	Metals (ICP regulation - 13 ele.-soil**	Selenium-soil	Others:	Mercury	F	Cl	SO4	NO2	NO3 + NO2	TKN	P-Tot.	NH3	Conductivity	TSS	pH	Sulfide [S2-]	Total Sulphur [S]	Tot-CN	Ox.-CN	Free CN	BODs	COD	Turbidity	TOC	RBS	RMD	CUM	AST.10	AST.11	TKM	INOR.	ORG.	Potable Water	COLIF [Fec.]	TOTAL-PC	COLIF [Tot.]	Explosive	EPA 8330	EPA 8095	Other (specify):	CN Total	CN WAD
BH-43 (0-40)	X				Mar. 3/14		1																																																		X	X
BH-43 (70-100)							1																																																	X	X
BH-43 (100-121)							1																																																	X	X
BH-44 (40-70)							1																																																	X	X
BH-44 (70-94)							1																																																	X	X
BH-45 (40-52)							1																																																	X	X
BH-46 (40-70)							1																																																	X	X
BH-46 (100-139)							1																																																	X	X
BH-47 (0-41)							1																																																	X	X
BH-48 (40-70)	↓				↓		1																																																	X	X

LEGEND: ** Metals 13 elements (Ag, As, Ba, Cd, Co, Cr, Cu, Sn, Mn, Mo, Ni, Pb, Zn),
*** Metals 16 elements (Al, Sb, Ag, As, Ba, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Se, Na, Zn).

Types of Water: G = Groundwater P = Potable LW = Liquid Waste
Sur = Surface E = Effluent C = Catchment

Applicable Regulations: (To complete)

Turnaround Time: ☒ 24h ☐ 48h ☐ 72h ☐ Regular ☐ Date:

Unless clearly identified all water samples received at Maxxam analytics will be treated as non-potable and will not be subject to the requirements under the Quebec Drinking Water Regulation.

General Condition at Reception:
ICE NO
seal NO

Chain of Custody

Relinquished by: Tyrel Hemsley Tyrel Hemsley	Date: Mar 5/14	Time: 1824	Received by:
Relinquished by:	Date: 2014/03/10	Time: 08:00	Received by: CATALINA BORGEA
Number of coolers: 2	Temperature upon reception:		2° 2° 2° 1° 1° 1°
Sample Transport: ☐ By Client ☐ MAXXAM Personnel ☒ Courier (Specify):			

Remarks:

KEENVCOCFORMQE - Saint-Laurent - 07/09 WHITE: MAXXAM ANALYTICS INC BLUE: INVOICING YELLOW: RETURN TO CLIENT WITH FINAL REPORT PINK: CLIENT

Maxxam Analytique
☒ 889 Montée de Liesse, Ville St-Laurent, Québec H4T 1P5 Telephone: (514) 448-9001 Fax: (514) 448-9199 Toll Free: 1-877-4MA-XXAM (462-9926)
☐ 2690 Avenue Dalton, Sainte-Foy, Québec G1P 3S4 Telephone: (418) 658-5784 Fax: (418) 658-6594
☐ 737 boul. Barette, Chicoutimi, Québec G7J 4C4 Telephone: (418) 543-3788 Fax: (418) 543-8994
www.maxxamanalytics.com

Sample Analysis and Chain of Custody Record

Invoice Information	Report Information (if differs from invoice)
Company Name:	Company Name:
Address: Same as page 1	Address:
Contact Name:	Contact Name:
Telephone:	Telephone:
Fax:	Fax:
Sampler:	Sampler:

I hereby acknowledge the understanding and acceptance of Maxxam's terms and conditions as listed on the back of this form.

Order No.: Project / Site:

Quotation No.: Project No.: E14103172-01

Sample Identification (sampling point)	Sample Type: Soil	Sample Type: Water	Sample Type: Other	Sampling (date / time)	To be filtered	Number of samples	CN TOTAL	CN WAD
BH-48 (100-140)	X			Mar. 3/14		1	X	X
BH-49 (40-70)	|			|		1	X	X
BH-49 (70-100)	|			|		1	X	X
BH-50 (0-40)	|			|		1	X	X
BH-50 (70-100)	|			|		1	X	X
BH-50 (100-133)	|			|		1	X	X
BH-51 (0-40)	|			|		1	X	X
BH-51 (70-100)	|			|		1	X	X
BH-51 (100-133)	|			|		1	X	X
BH-52 (300-350)	V			V		1	X	X

PH [Cr-Cr6] ☐ | O & G Min. ☐ | O & G Tot. ☐ | VOC [EPA 624] ☐ | BTEX ☐ MAH ☐ | Phenols [GC/MS] ☐ | Phenols (Colour) ☐ | PAH ☐ | PCB [Congeners] [GC-MS] ☐ | Heavy Metals [Cd, Cr, Cu, Ni, Pb, Zn] ☐ | Metals ICP regulation - 13 ele.-soil** ☐ | 16 ele.-water*** ☐ | Mercury ☐ | Selenium-soil ☐ | Others: ☐ | F ☐ | Cl ☐ | SO4 ☐ | NO2 ☐ | NO3 ☐ | NO2 + NO3 ☐ | TKN ☐ | NH3 ☐ | P-Tot. ☐ | pH ☐ | Conductivity ☐ | TSS ☐ | Total Sulphur (S) ☐ | Sulfide (SH-) ☐ | Tot.-CN ☐ | Ox.-CN ☐ | Free CN ☐ | BOD5 ☐ | COD ☐ | Turbidity ☐ | TOC ☐ | BDS ☐ | RMD ☐ | CUM ☐ | ART.-10 ☐ | ART.-11 ☐ | Potable Water: ORG. ☐ | INORG. ☐ | THM ☐ | COLIF (Fec.) ☐ | COLIF (Tot.) ☐ | TOTAL-PC ☐ | Explosive ☐ | EPA 8260 ☐ | EPA 8330 ☐ | Other (specify): ☐

LEGEND: ** Metals 13 elements (Ag, As, Ba, Cd, Co, Cr, Cu, Sn, Mn, Mo, Ni, Pb, Zn),
*** Metals 16 elements (Al, Sb, Ag, As, Ba, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Se, Na, Zn).

Types of Water: G = Groundwater P = Potable LW = Liquid Waste Sur = Surface E = Effluent C = Catchment

Applicable Regulations: _____ (To complete)

Turnaround Time: ☒ 24h ☐ 48h ☐ 72h ☐ Regular ☐ Date: _____

Unless clearly identified all water samples received at Maxxam analytics will be treated as non-potable and will not be subject to the requirements under the Quebec Drinking Water Regulation.

General Condition at Reception: ICE NO Real NO

Chain of Custody

Relinquished by: Tyrel Hemsley Tyrel Hemsley	Date: Mar 5/14	Time: 1824	Received by:
Relinquished by:	Date: 2014/03/10	Time: 08:00	Received by: CATALINA BORGES

Number of coolers: 2 Temperature upon reception: 2° 2° 2° 1° 1° 1°

Sample Transport: ☐ By Client ☐ MAXXAM Personnel ☒ Courier (Specify):

Remarks:

KEENVCOCFORM0E - Saint-Laurent - 07/09 WHITE: MAXXAM ANALYTICS INC BLUE: INVOICING YELLOW: RETURN TO CLIENT WITH FINAL REPORT PINK: CLIENT

Sample Analysis and Chain of Custody Record

Maxxam Analytique

☒ 889 Montée de Liesse, Ville St-Laurent, Québec H4T 1P5 — Telephone: (514) 448-9001 — Fax: (514) 448-9199 — Toll Free: 1-877-4MA-XXAM (462-9926)
☐ 2690 Avenue Dalton, Sainte-Foy, Québec G1P 3S4 — Telephone: (418) 658-5784 — Fax: (418) 658-6594
☐ 737 boul. Barette, Chicoutimi, Québec G7J 4C4 — Telephone: (418) 543-3788 — Fax: (418) 543-8994
www.maxxamanalytics.com

E:

Invoice Information	Report Information (if differs from invoice)
Company Name:	Company Name:
Address: Same as	Address: Page 1
Contact Name:	Contact Name:
Telephone:	Telephone:
Fax:	Fax:
Sampler:	Sampler:

Order No.: _____ Project / Site: _____
Quotation No.: _____ Project No.: E14(03172-01

I hereby acknowledge the understanding and acceptance of Maxxam's terms and conditions as listed on the back of this form.

Sample Identification (sampling point)	Sample: Soil	Water	Other	Sampling (date / time)	To be filtered	Number of samples	PH (Ox-Cx)	O & G Min.	O & G Tot.	VOC (EPA 624)	BTEX	MAH	Phenols (Colloz)	Phenols (GC/MS)	PAH	PCB (Congeners) (GC-MS)	Heavy Metals (Cd, Cr, Cu, Ni, Pb, Zn)	16 eléments***	Metals (CCP regulation - 13 eléments**)	Others:	Mercury	Selenium-soil	F	Cl	SO4	NOx	NO2	NO3 + NO2	TKN	P-Tot.	Conductivity	TSS	pH	Sulfide (Strl.)	Total Sulphur (S)	Ox.-Cn	Free Cn	Tot.-Cn	BOD5	COD	Turbidity	TOC	RDS	RMD	CUM	ART. 10	Potable Water: ORG.	INORG.	THM	COLIF (Fec.)	COLIF (Tot.)	TOTAL-PC	Explosive	EPA 8260	EPA 8270	Other (specify):			
MW-01 (400-450)	X			Mar 4/14		1																																																	X	X
MW-03 (400-450)				↓		1																																																X	X
MW-04 (70-91)				Mar. 5/14		1																																																X	X
MW-05 (70-100)						1																																																	X	X
MW-06 (70-122)						1																																																	X	X
MW-07 (40-70)						1																																																	X	X
MW-08 (40-70)						1																																																	X	X
MW-08 (70-100)	↓			↓		1																																																	X	X

LEGEND: ** Metals 13 elements (Ag, As, Ba, Cd, Co, Cr, Cu, Sn, Mn, Mo, Ni, Pb, Zn),
*** Metals 16 elements (Al, Sb, Ag, As, Ba, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Se, Na, Zn).

Types of Water: G = Groundwater P = Potable LW = Liquid Waste Sur = Surface E = Effluent C = Catchment

Applicable Regulations: _____ (To complete)

Turnaround Time: ☒ 24h ☐ 48h ☐ 72h ☐ Regular ☐ Date: _____

Unless clearly identified all water samples received at Maxxam analytics will be treated as non-potable and will not be subject to the requirements under the Quebec Drinking Water Regulation.

General Condition at Reception: Real NO ICE NO

Chain of Custody

Relinquished by: Tyrel Hemsley Tyrel Hemsley	Date: Mar. 5/14	Time: 1824	Received by:
Relinquished by:	Date: 2014/03/10	Time: 08:00	Received by: CATALINA BORGEA
Number of coolers: 2	Temperature upon reception:		2° 2° 2° 1° 1° 1°
Sample Transport: ☐ By Client ☐ MAXXAM Personnel ☒ Courier (Specify):			

Remarks:

KEEN/COCFORMOE - Saint-Laurent - 07/09 — WHITE: MAXXAM ANALYTICS INC — BLUE: INVOICING — YELLOW: RETURN TO CLIENT WITH FINAL REPORT — PINK: CLIENT

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-32662

Sampling location:	BH-11	Sampling date:	February 22, 2014
Sample name:	BH-11	Sampling hour:	N/D
Sampled by:	Tom Thomson / Tyrel	Date received:	February 26, 2014
Matrix:	Water		

Drinking water distribution:

Reported on: February 28, 2014

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.

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

Analytical Report

Lab number: V-32662

Sample name: BH-11
Sampling location: BH-11
Sampling date: February 22, 2014
Sampling hour: N/D

Parameter	Result	Method name	Analysis date
Total Cyanide (CNt)	1.76 mg/L	M-CN-1.0	February 26, 2014
Cyanide W.A.D.	1.48 mg/L	Sous-traitance\Multilab Direct	February 26, 2014

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

Detection limit

Lab number: V-32662

Sample name: BH-11
Sampling location: BH-11
Sampling date: February 22, 2014
Sampling hour: N/D

Parameter	Value	Unit	Method	Accreditation
Total Cyanide (CNt)	0.005	mg/L	M-CN-1.0	Yes
Cyanide W.A.D.	0.005	mg/L	Sous-traitance	Yes

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-32662

Sample name: BH-11 | Sampling date: February 22, 2014

Sampling location: BH-11 | Sampling hour: N/D

Parameter		
Total Cyanide (CNt) mg/L	Blank	<0.005
	Standard name	DMR-0025-2014-7
	Result	0.0800
	Accuracy	98.2%
	Limit	0.0693 - 0.0937

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

Additional information

Lab number: V-32662

Sample name: BH-11
Sampling location: BH-11
Sampling date: February 22, 2014
Sampling hour: N/D

There was no bottle for the analysis of pH.

Lab method	Method reference
M-CN-1.0	MA.300-CN 1.2

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

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-32663

Sampling location:	BH-22	Sampling date:	February 23, 2014
Sample name:	BH-22	Sampling hour:	N/D
Sampled by:	Tom Thomson / Tyrel	Date received:	February 26, 2014
Matrix:	Water		

Drinking water distribution:

Reported on: February 28, 2014

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.

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

Analytical Report

Lab number: V-32663

Sample name: BH-22
Sampling location: BH-22
Sampling date: February 23, 2014
Sampling hour: N/D

Parameter	Result	Method name	Analysis date
Total Cyanide (CNt)	24.59 mg/L	M-CN-1.0	February 26, 2014
Cyanide W.A.D.	10.6 mg/L	Sous-traitance\Multilab Direct	February 26, 2014

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

Detection limit

Lab number: V-32663

Sample name: BH-22
Sampling location: BH-22
Sampling date: February 23, 2014
Sampling hour: N/D

Parameter	Value	Unit	Method	Accreditation
Total Cyanide (CNt)	0.005	mg/L	M-CN-1.0	Yes
Cyanide W.A.D.	0.005	mg/L	Sous-traitance	Yes

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-32663

Sample name: BH-22
Sampling location: BH-22
Sampling date: February 23, 2014
Sampling hour: N/D

Parameter		
Total Cyanide (CNt) mg/L	Blank	<0.005
	Standard name	DMR-0025-2014-7
	Result	0.0800
	Accuracy	98.2%
	Limit	0.0693 - 0.0937

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-32663

Sample name: BH-22
Sampling location: BH-22
Sampling date: February 23, 2014
Sampling hour: N/D

There was no bottle for the analysis of pH.

Lab method	Method reference
M-CN-1.0	MA.300-CN 1.2

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

Analytical Report

Company: **Agnico Eagle Division Meadowbank**

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

Lab number: V-32758

Sampling location:	BH-47	Sampling date:	March 03, 2014
Sample name:	BH-47	Sampling hour:	N/D
Sampled by:	Tyrel Hemsley	Date received:	March 07, 2014
Matrix:	Waste Water		

Drinking water distribution:

Reported on: March 10, 2014

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.

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

Analytical Report

Lab number: V-32758

Sample name: BH-47
Sampling location: BH-47
Sampling date: March 03, 2014
Sampling hour: N/D

Parameter	Result	Method name	Analysis date
Cyanide W.A.D.	0.101 mg/L	Sous-traitance\Multilab Direct	March 07, 2014
Total Cyanide (CNt)	1.05 mg/L	M-CN-1.0	March 07, 2014

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

Detection limit

Lab number: V-32758

Sample name: BH-47
Sampling location: BH-47
Sampling date: March 03, 2014
Sampling hour: N/D

Parameter	Value	Unit	Method	Accreditation
Cyanide W.A.D.	0.005	mg/L	Sous-traitance	Yes
Total Cyanide (CNt)	0.005	mg/L	M-CN-1.0	Yes

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-32758

Sample name: BH-47 | Sampling date: March 03, 2014

Sampling location: BH-47 | Sampling hour: N/D

Parameter		
Total Cyanide (CNt) mg/L	Blank	<0.005
	Standard name	DMR-0025-2014-7
	Result	0.0820
	Accuracy	99.4%
	Limit	0.0693 - 0.0937

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-32758
Sample name: BH-47
Sampling location: BH-47
Sampling date: March 03, 2014
Sampling hour: N/D

Lab method	Method reference
M-CN-1.0	MA.300-CN 1.2

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

APPENDIX B
BOREHOLE NOTES AND MONITORING WELL LOGS

MEADOWBANK ASSAY ROAD SEEPAGE	AGNICO EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
	DRILL: DOWN HOLE HAMMER - AIR ROTARY	E14103172-01.002-MW-01
MEADOWBANK. NU		

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

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

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT (PLASTIC / M.C. / LIQUID)	STANDARD PENETRATION (N) 20 40 60 80; UNC. COMPRESSIVE STRENGTH (kPa) 50 100 150 200; POCKET PEN. (kPa) 100 200 300 400	MW01	Depth (ft)
0	FILL - grey, frozen to 1.90 metres					0
1						5
2						
3						10
4						
5	BEDROCK					15
	END OF BOREHOLE (5.23 metres) Monitoring well installed to 5.23 metres					
6						20
7						
7.5						25

TETRA TECH EBA

LOGGED BY: TH	COMPLETION DEPTH: 5.23 m
REVIEWED BY: MB	COMPLETE: 14/03/04
DRAWING NO:	Page 1 of 1

MEADOWBANK ASSAY ROAD SEEPAGE	AGNICO EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
	DRILL: DOWN HOLE HAMMER - AIR ROTARY	E14103172-01.002-MW-02
MEADOWBANK. NU		

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

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

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT: PLASTIC / M.C. / LIQUID (20 40 60 80)	STANDARD PENETRATION (N) 20 40 60 80; UNC. COMPRESSIVE STRENGTH (kPa) 50 100 150 200; POCKET PEN. (kPa) 100 200 300 400	MW02	Depth (ft)
0	FILL - frozen to 2.40 metres					0
1						5
2						
3						10
4	- water at installation					
5						15
6						20
7	BEDROCK END OF BOREHOLE (6.50 metres) slough - 5.43 metres at 0 hrs. Monitoring well installed to 5.43 metres					
7.5						25

TETRA TECH EBA

LOGGED BY: TH	COMPLETION DEPTH: 6.5 m
REVIEWED BY: MB	COMPLETE: 14/03/04
DRAWING NO:	Page 1 of 1

MEADOWBANK ASSAY ROAD SEEPAGE	AGNICO EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
	DRILL: DOWN HOLE HAMMER - AIR ROTARY	E14103172-01.002-MW-03
MEADOWBANK. NU		

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

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

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT	PLASTIC / M.C. / LIQUID (20 40 60 80)	STANDARD PENETRATION (N) 20 40 60 80; UNC. COMPRESSIVE STRENGTH (kPa) 50 100 150 200; POCKET PEN. (kPa) 100 200 300 400	MW03	Depth (ft)
0	FILL - grey, frozen to 2.70 metres						0
1							5
2							
3							10
4							
5							15
	BEDROCK						
	END OF BOREHOLE (5.29 metres) Monitoring well installed to 5.29 metres						
6							20
7							
7.5							25

TETRA TECH EBA

LOGGED BY: TH	COMPLETION DEPTH: 5.29 m
REVIEWED BY: MB	COMPLETE: 14/03/04
DRAWING NO:	Page 1 of 1

MEADOWBANK ASSAY ROAD SEEPAGE	AGNICO EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
	DRILL: DOWN HOLE HAMMER - AIR ROTARY	E14103172-01.002-MW-04
MEADOWBANK. NU		

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

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

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT (PLASTIC / M.C. / LIQUID; 20 40 60 80)	STANDARD PENETRATION (N) 20 40 60 80; UNC. COMPRESSIVE STRENGTH (kPa) 50 100 150 200; POCKET PEN. (kPa) 100 200 300 400	MW04	Depth (ft)
0	TUNDRA - undisturbed soil, reddish brown, frozen					0
1	BEDROCK					5
	END OF BOREHOLE (1.03 metres) Monitoring well installed to 1.03 metres					
2						10
3						
4						15
5						
6						20
7						
7.5						25

TETRA TECH EBA

LOGGED BY: TH	COMPLETION DEPTH: 1.03 m
REVIEWED BY: MB	COMPLETE: 14/03/05
DRAWING NO:	Page 1 of 1

MEADOWBANK ASSAY ROAD SEEPAGE	AGNICO EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
	DRILL: DOWN HOLE HAMMER - AIR ROTARY	E14103172-01.002-MW-05
MEADOWBANK. NU		

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

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

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT (PLASTIC / M.C. / LIQUID)	STANDARD PENETRATION (N) / UNC. COMPRESSIVE STRENGTH (kPa) / POCKET PEN. (kPa)	MW05	Depth (ft)
0	TUNDRA - undisturbed soil, reddish brown, frozen					0
1	BEDROCK					5
	END OF BOREHOLE (1.32 metres) Monitoring well installed to 1.32 metres					
2						10
3						
4						15
5						
6						20
7						
7.5						25

STANDARD PENETRATION (N): 20 40 60 80

UNC. COMPRESSIVE STRENGTH (kPa): 50 100 150 200

POCKET PEN. (kPa): 100 200 300 400

PLASTIC M.C. LIQUID: 20 40 60 80

TETRA TECH EBA

LOGGED BY: TH	COMPLETION DEPTH: 1.32 m
REVIEWED BY: MB	COMPLETE: 14/03/05
DRAWING NO:	Page 1 of 1

MEADOWBANK ASSAY ROAD SEEPAGE	AGNICO EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
	DRILL: DOWN HOLE HAMMER - AIR ROTARY	E14103172-01.002-MW-06
MEADOWBANK. NU		

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

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

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT (PLASTIC / M.C. / LIQUID)	STANDARD PENETRATION (N) 20 40 60 80; UNC. COMPRESSIVE STRENGTH (kPa) 50 100 150 200; POCKET PEN. (kPa) 100 200 300 400	MW'06	Depth (ft)
0	TUNDRA - undisturbed soil, reddish brown, frozen					0
1						5
	BEDROCK					
	END OF BOREHOLE (1.36 metres) Monitoring well installed to 1.36 metres					
2						10
3						
4						15
5						
6						20
7						
7.5						25

TETRA TECH EBA

LOGGED BY: TH	COMPLETION DEPTH: 1.36 m
REVIEWED BY: MB	COMPLETE: 14/03/05
DRAWING NO:	Page 1 of 1

MEADOWBANK ASSAY ROAD SEEPAGE	AGNICO EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
	DRILL: DOWN HOLE HAMMER - AIR ROTARY	E14103172-01.002-MW-07
MEADOWBANK. NU		

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

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

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT (PLASTIC / M.C. / LIQUID)	STANDARD PENETRATION (N) 20 40 60 80; UNC. COMPRESSIVE STRENGTH (kPa) 50 100 150 200; POCKET PEN. (kPa) 100 200 300 400	MW07	Depth (ft)
0	TUNDRA - undisturbed soil, reddish brown, frozen					0
1						5
	BEDROCK					
	END OF BOREHOLE (1.62 metres) Monitoring well installed to 1.62 metres					
2						
3						10
4						
5						15
6						20
7						
7.5						25

TETRA TECH EBA

LOGGED BY: TH	COMPLETION DEPTH: 1.63 m
REVIEWED BY: MB	COMPLETE: 14/03/05
DRAWING NO:	Page 1 of 1

MEADOWBANK ASSAY ROAD SEEPAGE	AGNICO EAGLE MINES LIMITED	PROJECT NO. - BOREHOLE NO.
	DRILL: DOWN HOLE HAMMER - AIR ROTARY	E14103172-01.002-MW-08
MEADOWBANK. NU		

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

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

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT (PLASTIC / M.C. / LIQUID)	STANDARD PENETRATION (N) 20 40 60 80 / UNC. COMPRESSIVE STRENGTH (kPa) 50 100 150 200 / POCKET PEN. (kPa) 100 200 300 400	MW08	Depth (ft)
0	TUNDRA - undisturbed soil, reddish brown, frozen					0
1						5
	BEDROCK					
	END OF BOREHOLE (1.33 metres) Monitoring well installed to 1.33 metres					
2						
3						10
4						
						15
5						
6						20
7						
7.5						25

TETRA TECH EBA

LOGGED BY: TH	COMPLETION DEPTH: 1.33 m
REVIEWED BY: MB	COMPLETE: 14/03/05
DRAWING NO:	Page 1 of 1

APPENDIX C
INTERCEPTION TRENCH AS-BUILT DRAWINGS

FORMAT ANSI B–PORTRAIT

Site Service building

Wing 12

Wing 7

Assay lab

First containment

Freshwater pipe

Interception trench

Electric cable

Collection point

BH-01 BH-02 BH-03 BH-04 BH-05 BH-06 BH-07 BH-08 BH-09 BH-10 BH-11 BH-12 BH-17 BH-18 BH-19 BH-20 BH-21 BH-22 BH-23 BH-24 BH-25 BH-26 BH-31 BH-32 BH-33 BH-34 BH-36 BH-37 BH-38 BH-39 BH-40 BH-41 BH-43 BH-44 BH-45 BH-46 BH-47 BH-48 BH-49 BH-50 BH-51 BH-52

MW-01 MW-02 MW-03 MW-04 MW-05 MW-06 MW-07

Seep-1 Seep-2 Seep-3

A A' B B' C C' D D'

LEGEND

- GROUNDWATER MONITORING WELL
- SEEP SAMPLE (ICE AT SURFACE CYANIDE DETECTED)
- BOREHOLE LOCATION
- BOREHOLE LOCATION(CYANIDE DETECTED)
- THERMISITOR CABLE

REV	DESCRIPTION	DATE	BY

REVISIONS

AGNICO EAGLE MEADOWBANK

DRAWN BY	ROBERT CLOUATRE	DATE	15–05–2014
CHECKED BY			
APPROVED BY			
PROJECT NO.			
DATE			

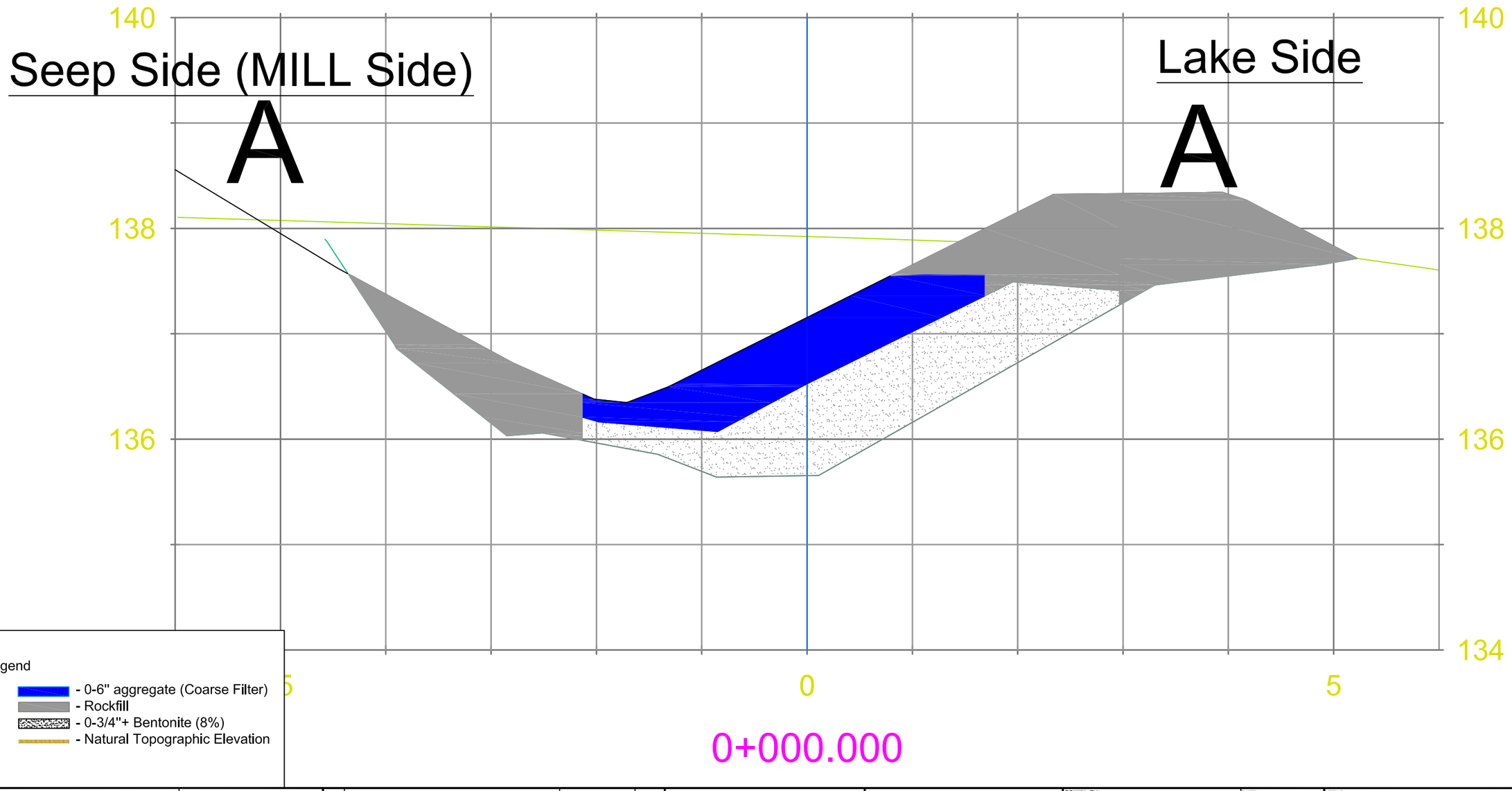
TITLE
AGNICO–EAGLE – MEADOWBANK DIVISION
MILL SEEPAGE
INTERCEPTION TRENCH
PLAN VIEW

SCALE	FILE
N.T.S.	.DWG

DRAWING NO.	REVISION	SHEET
		7 / 7

E:\MILL TRENCH AS BUILT1.dwg, 20 Mai 2014

FORMAT ANSI B – LANDSCAPE



TITLE	# DWG	REV	DESCRIPTION	DATE	BY

REFERENCE DRAWINGS

REVISIONS

AGNICO EAGLE
MEADOWBANK

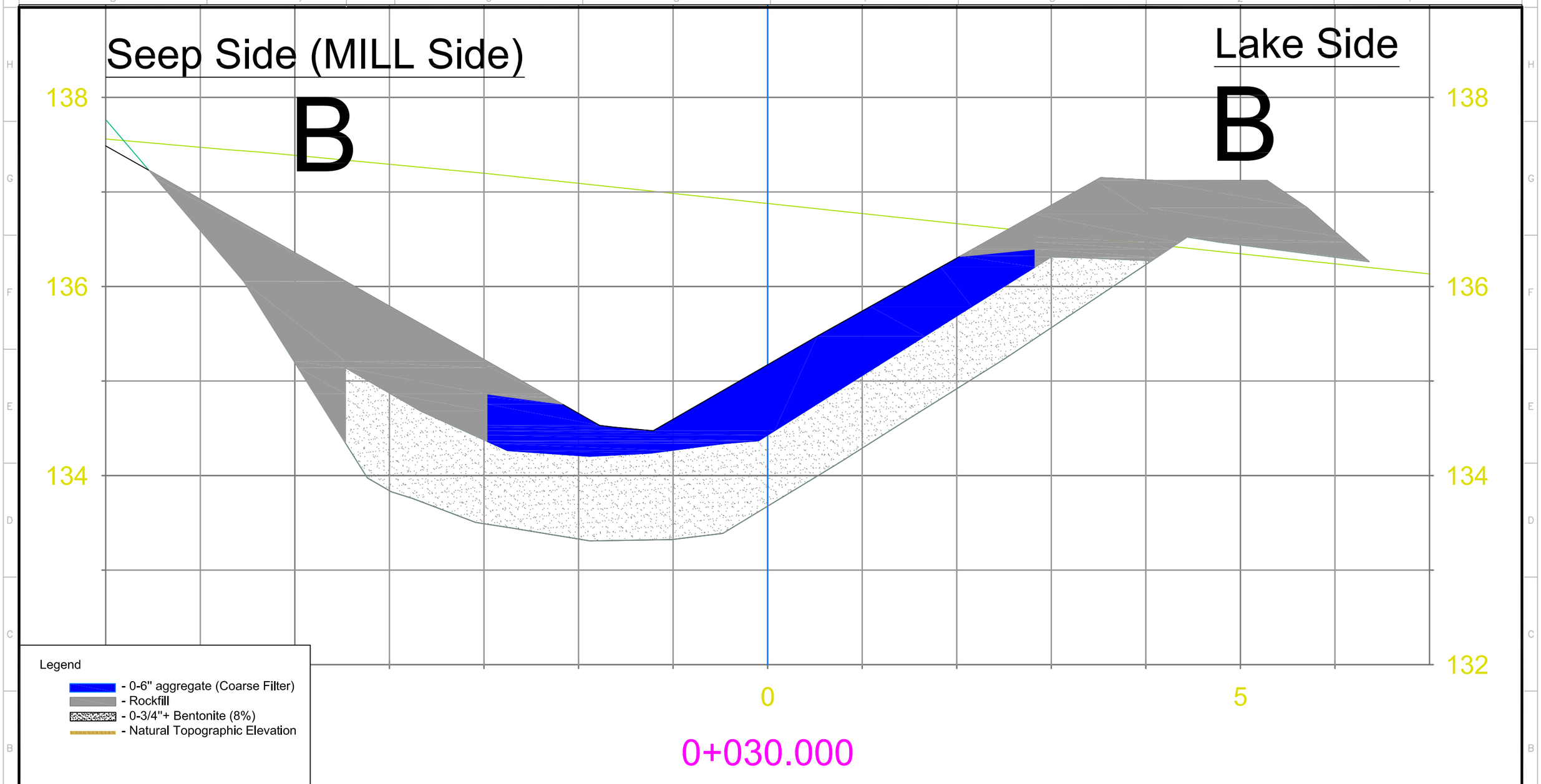
DRAWN BY	ROBERT CLOUATRE	DATE	15–05–2014
CHECKED BY			
APPROVED BY			
PROJECT NO.			
DATE			

TITLE
AGNICO–EAGLE – MEADOWBANK DIVISION
MILL SEEPAGE
INTERCEPTION TRENCH
SECTION A–A'

SCALE	FILE		
N.T.S.	.DWG		
DRAWING NO.		REVISION	SHEET
			2 / 7

E:\MILL TRENCH AS BUILT1.dwg, 20 Mai 2014

FORMAT ANSI B – LANDSCAPE



TITLE	# DWG	REV	DESCRIPTION	DATE	BY

REFERENCE DRAWINGS

REVISIONS

AGNICO EAGLE
MEADOWBANK

DRAWN BY	ROBERT CLOUATRE	DATE	15-05-2014
CHECKED BY			
APPROVED BY			
PROJECT NO.			
DATE			

TITLE
AGNICO–EAGLE – MEADOWBANK DIVISION
MILL SEEPAGE
INTERCEPTION TRENCH
SECTION B–B'

SCALE	FILE	REVISION	SHEET
N.T.S.	.DWG		3 / 7

DRAWING NO.

E:\MILL TRENCH AS BUILT1.dwg, 20 Mai 2014

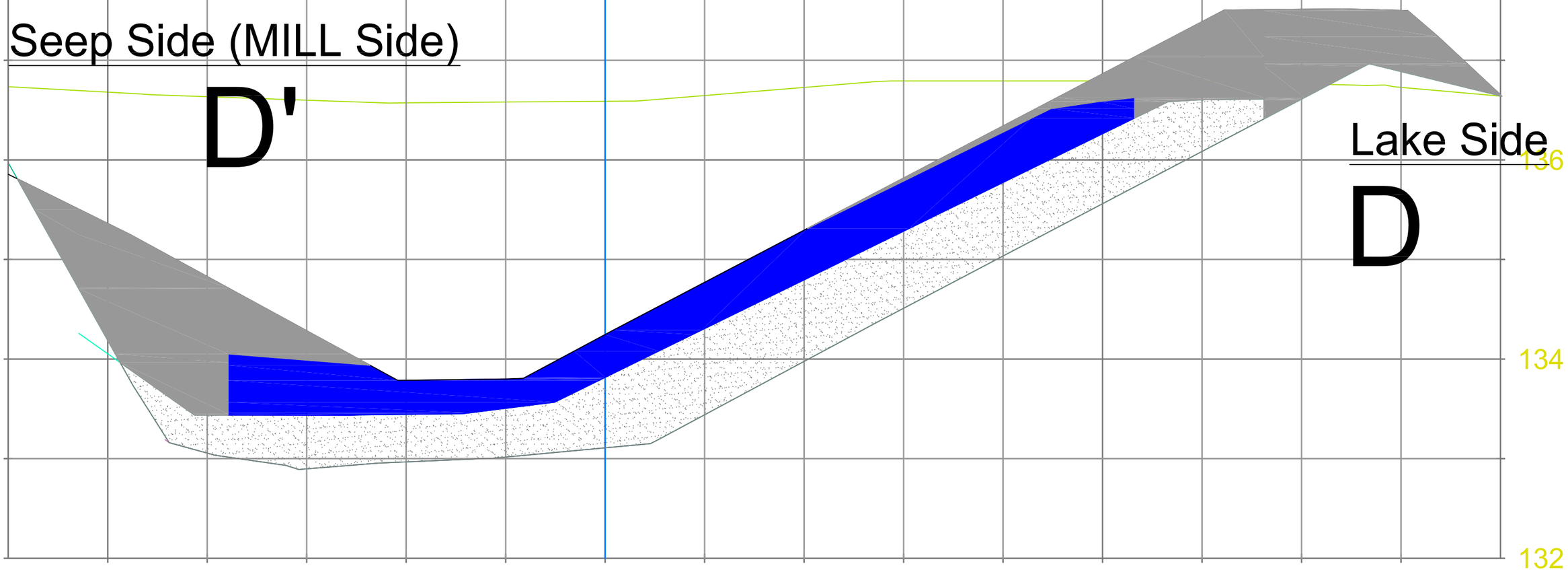
FORMAT ANSI B – LANDSCAPE

Seep Side (MILL Side)

D'

Lake Side

D



0+070.000

Legend

- 0-6" aggregate (Coarse Filter)
- Rockfill
- 0-3/4"+ Bentonite (8%)
- Natural Topographic Elevation

TITLE	# DWG	REV	DESCRIPTION	DATE	BY

REFERENCE DRAWINGS

REVISIONS

AGNICO EAGLE
MEADOWBANK

DRAWN BY	ROBERT CLOUATRE	DATE	15-05-2014
CHECKED BY			
APPROVED BY			
PROJECT NO.			
DATE			

TITLE
AGNICO–EAGLE – MEADOWBANK DIVISION
MILL SEEPAGE
INTERCEPTION TRENCH
SECTION D–D'

SCALE	FILE
N.T.S.	.DWG

DRAWING NO.	REVISION	SHEET
		5 / 7

E:\MILL TRENCH AS BUILT1.dwg, 20 Mai 2014

APPENDIX D
JOB HAZARD ANALYSIS

AGNICO EAGLE
MEADOWBANK

JOB HAZARD ANALYSIS WORKSHEET

Form

DRAFT Rev 0

FACILITY / SITE:	Meadowbank	**DATE:**	09-02-2014
DEPARTMENT:	ENG/ENV/MINE/SITE SERVICE/ ELEC	**REVIEW DATE(S):**	As needed
JOB BEING ANALYSED:	Drilling Investigation – Assay Road Leakage	**TEAM LEADER:**	Tom Thomson/ Ryan VanEngen/ Jeff Pratt

Step	Describe Job Steps	Hazards/Potential Incidents	Risk Control Methods Required
	List the natural steps of the job (not too broad and not too fine)	*What can happen at each step? Can an employee be struck by/caught on/contacted by/struck against/contact with/caught between?*	*Describe how hazards will be managed or removed. Consider elimination/substitution, engineering controls, administrative controls, personal protective equipment.*
1	Check the bootlegs before stake out of the holes.	1.1 Hit an old drilled hole.	1.1 Surveyor will validate the position of the holes to be drilled to ensure that there are no old holes in the vicinity of them. If yes, the regulation 14.52 of the mine act should then be apply (No drilling to be conducted within 1 m. of a bootleg)
2	Remove snow from drill locations.	2.1 Get equipment stuck, in deep snow 2.2 Slip, trips, and Falls in deep snow.	2.1 Site Services will remove snow a day or two prior to the drill program along mill, leach pad and tundra locations. 2.2 ensure stable footing and use proper ppe
3	Close the Road.	3.1 Equipment going through the road while drilling. 3.2 Access for emergency vehicles in assay lab and mill	3.1 Site service will close the road before staking out the holes. Site service will send an e-mail to all Meadowbank about the closure of the road. 3.2 Pick up trucks w keys will be placed and red-tap will be installed to indicate road closure.
4	Stake out the holes and electrical cables (surveyor)	4.1 Slips Trips and Falls 4.2 Weather – dress accordingly and take necessary breaks to warm up	4.1 Watch footing. 4.2 See Cold weather Manual.
5	Power off on electrical cable close to the drilling area	5.1 **Electrocution - death**	5.1 Power will be shut-off by electrical group and the **Driller will lockout the power supply before drilling.** *NOTE: If electrical group is unavailable to shut off power, drilling in the vicinity of power lines will

			not occur. Drilling in vicinity of electrical lines will be put off until February 24th. Electrical department is aware of the plan and will assist Environment on February 24th with power shut down
6	Drilling	6.1 Dust and potential exposure to CN gases and liquids 6.2 Electrical cables and building 6.3 Communication cable 6.4 Grounding cable 6.5 Noise 6.6 Working outside mill doors	6.1 Wear dust mask at all time when close to the drill (within 10 meters) and ensure multi gas vapour cartridges are used; wear Tyvek suits, nitrile gloves and goggles at all times; use mill decontamination area at all times; no eating or drinking while near the contamination site. Be sure to take your time and stay warm under cold conditions – use decontamination for warming up. Wash-up after work is complete. 6.2 Underground electrical cable to be stake-out by surveyor. Power cable to be power-off before drilling. Minimal distance between a hole and an electrical cable fix at 3 meters. Before starting drilling, the Environmental Technician in charge will have to wait for the confirmation from the electrical group that the power has been shut down and driller is locked out the power supply. **All work near electrical cable will be completed on February 24th** 6.3 Minimal distance between a hole and a communication cable fix at 3 meters. 6.4 Minimal distance between a hole and a grounding cable fix at 3 meters if possible but must be greater than 1.5 meters. 6.5 Wear hearing protection at all time when close

			to the drill (within 10 meters) 6.6 When drilling outside any of the access doors to the mill the inside of the man door or overhead door will need to be taped off with RED DANGER TAPE, so no one exits the door. This will be completed and coordinated with Mill employees.
7	Moving the drill in between each holes	7.1 Collision in between drill and Environment technician 7.2 Overhead collisions and drill mast balance issues	7.1 Always have a good communication between the driller and the Environment Technician when moving. Communication will be on Surface Channel 5 or with loud verbal communication. Environment technician should always be at a minimal distance of 10 meters of the drill when moving. 7.2 Ensure mast of drill is in a safe position while moving.
8	Environment technician drilling follow-up	8.1 Heavy equipment running (drill) that could injure the Environment Technician.	8.1 Always keep a minimal distance of 5 meters from the drill when drilling. Always have good communication between the driller and the Environment Technician when drilling. Communication will be on Surface Channel 5 or loud verbal communication.
9	Sample of water/cuttings (Environment Technician)	9.1 Heavy equipment running (drill) that could injure the Environment Technician. 9.2 DUST 9.3 CN gases or liquid contaminate exposure	9.1 The drill must stop any activity when the Environment Technician will perform his sampling. Always have a good communication between the driller and the Environment Technician when drilling. Communication will be on Channel 5. 9.2 Fine samples will contain dust that could potentially contain Asbestos, so a half mask must be worn when sampling.

			9.3 Use Tyvek suit at all times, nitrile gloves, goggles and face mask with multi gas vapour cartridges. Be sure to use decontamination area and wash up after work is completed.
10	Fill-up of the holes with steaming	10.1 Heavy equipment running (loader); 10.2 Lifting and digging with hand held shovel	10.1 A spotter should be there at all time when the loader will perform is job. The Road will remain closed at that time as well. 10.2 Use proper techniques for shoveling and stay within your means. If needed a loader could be made available around the mill. On the tundra, it is preferable to complete the filling by hand to avoid disturbing the tundra.
11	Turning power back after drilling near electrical cable is completed	11.1 Electrical hazard	11.1 Before putting the power back, the Environmental Technician in charge will advise the electrical group that the drilling is completed in the vicinity of the electrical cable. The driller will then remove lock from lock out.
12	Keep departments aware of drilling plan	12.1 Create a busy work area with too many groups working in one area. 12.2 Create a stop in production for mill if certain areas are blocked off and they cannot plan around it.	12.1 Relay work locations at morning management meeting to all departments. ~~12.2 Attend Mill morning meeting 7:15 a.m. in mill boardroom to relay the drill locations for the day.~~

AGNICO EAGLE
MEADOWBANK

JOB HAZARD ANALYSIS WORKSHEET

Form

DRAFT Rev 0

Permits Required (check all that apply)

LOTO:	X	Confined Space	
Hot work		Pre Excavation	Review Drilling pattern and follow it. Meet with Mill and Electrical department.
Electrical Work		Lift Permit	

PPE (check all that apply)

Safety Glasses	X	Safety Boots	
Hardhat	X	Face shield	
Gloves	X	Welding helmet	
Kevlar Gloves		Earplugs X	
Chemical gloves		Ear muffs	
Apron		Chemical clothing	Tyvek suits
Goggles		Respirator X	Half mask respirator with P100 filters if exposed to dust. 6000 3m multigas and goggles

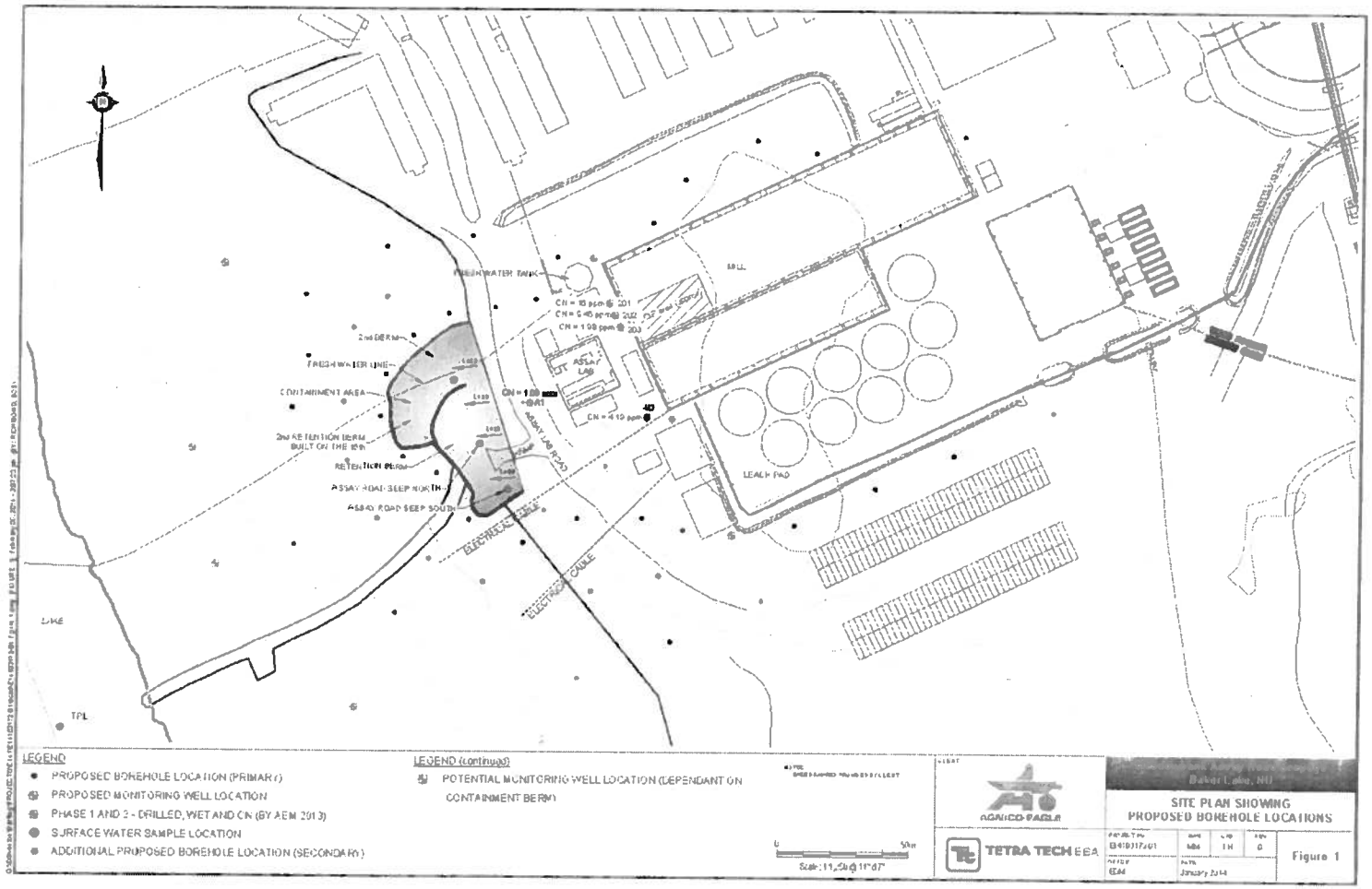
Emergency Information :

Evacuation Route:	
Evacuation Signal:	Fire alarm or While on channel 5 switch to Channel 3 "Code 1, Code 1, Code 1"
Assembly Point:	Arctic corridor
Location of Eyewash/shower:	
Emergency phone number:	6911
First aid location:	Medical Center

Note: LOTO acronym for Lock out tag out

Team Member	Tom Thomson	Signature	
Team Member	Tyrel Hemsley	Signature	Tyrel Hemsley Feb 21/14
Team Member	Jon Oliver	Signature	
Team Member	STEPHEN POTVIN	Signature	
Team Member	DOUGLAS PICARD	Signature	
Team Member	Martin Thériault Médérick Gagnon	Signature	

Team Member		Signature	
Supervisor	RYAN VANENGEN	Signature	
H&S Coordinator		Signature	
H&S Superintendent		Signature	



APPENDIX E
GROUND TEMPERATURE DATA

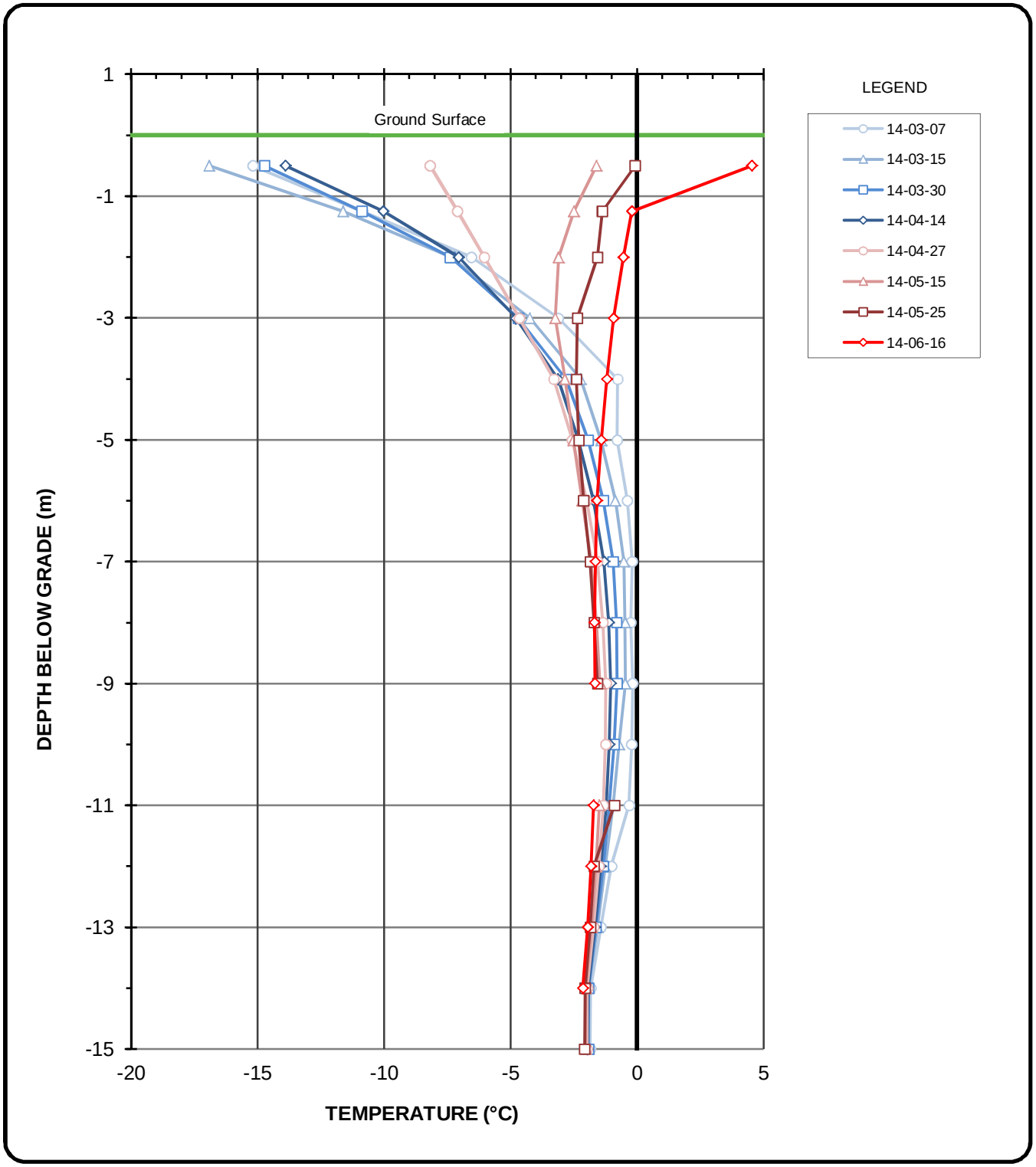
THERMISTOR STRING CALIBRATION

Project:	GTC Fabrication	Thermistor String No.:	2496
Project No.:	E14103172-01	Client String No.:	
Client:	Agnico-Eagle Mines Limited	Location of Installation:	
Attention:		Calibration Temp.:	0.02
Email:		Date of Calibration:	February 18, 2014

Depth of Thermistor (meters)	Colour of Wire	Plug Letter	Calibration Resistance (kΩ)			Temperature (ºC)	Calibration Factor (ºC)
			Trial 1	Trial 2	Trial 3		
0.5	Black	A	16.31	16.32	16.32	0.00	0.02
1.25	Purple	B	16.29	16.30	16.30	0.03	-0.01
2.0	Tan	C	16.32	16.32	16.32	0.00	0.02
3.0	Grey	D	16.33	16.34	16.34	-0.02	0.04
4.0	Red	E	16.34	16.34	16.34	-0.02	0.04
5.0	Brown	F	16.34	16.35	16.35	-0.03	0.05
6.0	Pink	G	16.30	16.31	16.31	0.02	0.00
7.0	Blue	H	16.32	16.32	16.32	0.00	0.02
8.0	Green	J	16.29	16.30	16.30	0.03	-0.01
9.0	Yellow	K	16.37	16.38	16.38	-0.07	0.09
10.0	Silver	L	16.31	16.31	16.31	0.02	0.00
11.0	Orange	N	16.33	16.34	16.34	-0.02	0.04
12.0	Orange/White	P	16.31	16.32	16.32	0.00	0.02
13.0	Black/White	R	16.30	16.30	16.30	0.03	-0.01
14.0	Brown/White	S	16.30	16.31	16.31	0.02	0.00
15.0	Red/White	T	16.35	16.35	16.35	-0.03	0.05
	White	M					

Lead Length: 1.5m

Carrier:		Date Shipped:	
W/B Number:		Shipped by:	


Ground Surface
LEGEND
14-03-07
14-03-15
14-03-30
14-04-14
14-04-27
14-05-15
14-05-25
14-06-16
DEPTH BELOW GRADE (m)
TEMPERATURE (°C)
1
-1
-3
-5
-7
-9
-11
-13
-15
-20
-15
-10
-5
0
5

APPENDIX F

CONSTANT HEAD PERMEABILITY TEST RESULTS, 20 MM CRUSHED AGGREGATE/8% BENTONITE

CONSTANT HEAD HYDRAULIC CONDUCTIVITY TEST REPORT

ASTM D5084

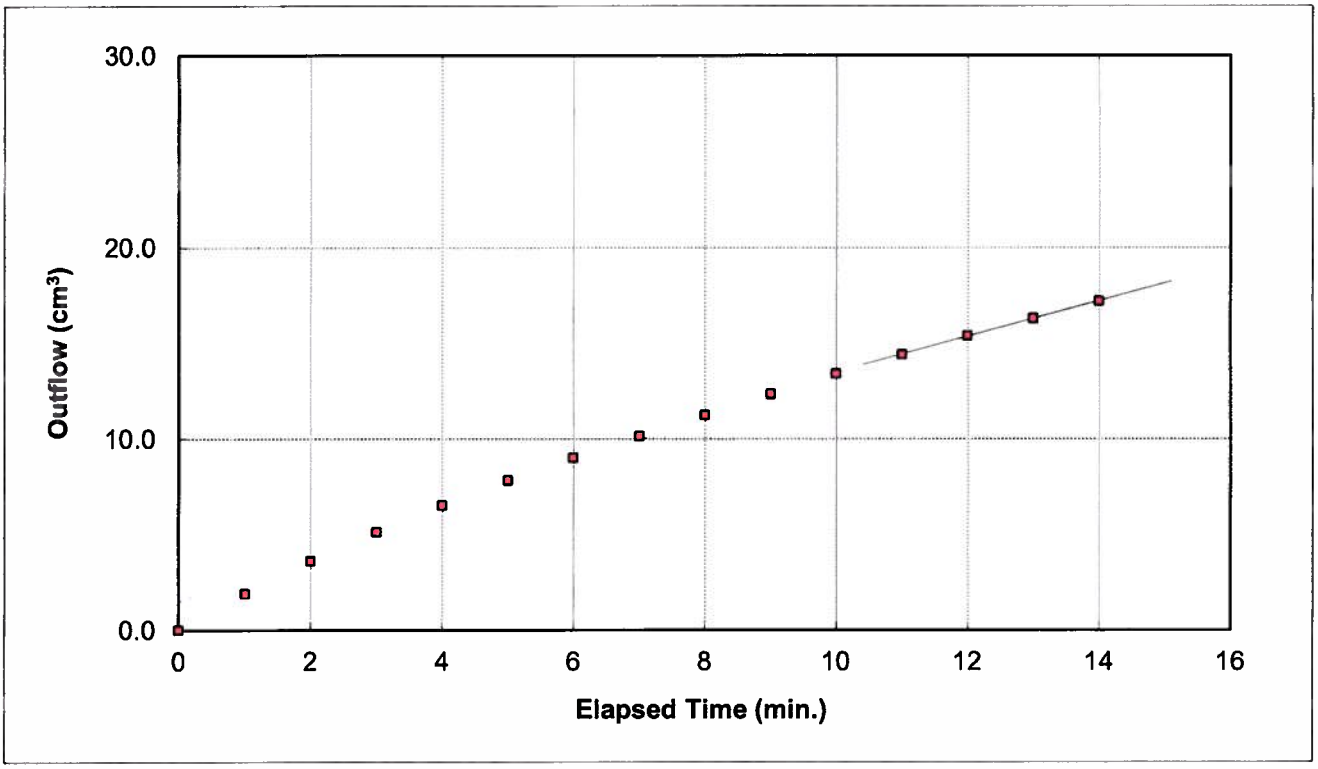
Project:	Assay Road Seepage Trench	Test No.:	P-1
Project No.:	E14103172-01.003	Sample No.:	1
Client:	Agnico-Eagle Mines Ltd.	Sample Depth:	
Attention:		Date Tested:	May 20, 2014
		Tested By:	SK

Soil Description: SAND & GRAVEL, 20 mm max., some silt with 8% bentonite

	Initial	Final
Moisture Content (%)	3.7	12.7
Dry Density (kg/m3)	1875	1875
Compaction SPD (if applicable)	NA	NA

Sample Height =	17.02	cm
Sample Diameter =	9.86	cm
Head Differential =	15	kPa
Flow Q =	0.016	cm^3/sec
Hydraulic Gradient i =	8.99	
Area of Sample A =	76.28	cm^2
Slope =	0.015	cm^3/sec

Hydraulic Conductivity k_{20} = 2.2E-05 cm/sec



Remarks: Sample remolded at moisture content as received

Reviewed By: _____ P.Eng.

TETRA TECH

APPENDIX G

TETRA TECH EBA GENERAL TERMS AND CONDITIONS

GENERAL CONDITIONS

GEOTECHNICAL REPORT

This report incorporates and is subject to these “General Conditions”.

1.0 USE OF REPORT AND OWNERSHIP

This geotechnical report pertains to a specific site, a specific development and a specific scope of work. It is not applicable to any other sites nor should it be relied upon for types of development other than that to which it refers. Any variation from the site or development would necessitate a supplementary geotechnical assessment.

This report and the recommendations contained in it are intended for the sole use of Tetra Tech EBA’s Client. Tetra Tech EBA does not accept any responsibility for the accuracy of any of the data, the analyses or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than Tetra Tech EBA’s Client unless otherwise authorized in writing by Tetra Tech EBA. Any unauthorized use of the report is at the sole risk of the user.

This report is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of Tetra Tech EBA. Additional copies of the report, if required, may be obtained upon request.

2.0 ALTERNATE REPORT FORMAT

Where Tetra Tech EBA submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed Tetra Tech EBA’s instruments of professional service), only the signed and/or sealed versions shall be considered final and legally binding. The original signed and/or sealed version archived by Tetra Tech EBA shall be deemed to be the original for the Project.

Both electronic file and hard copy versions of Tetra Tech EBA’s instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except Tetra Tech EBA. Tetra Tech EBA’s instruments of professional service will be used only and exactly as submitted by Tetra Tech EBA.

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

3.0 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, Tetra Tech EBA has not been retained to investigate, address or consider and has not investigated, addressed or considered any environmental or regulatory issues associated with development on the subject site.

4.0 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

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

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

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

5.0 LOGS OF TESTHOLES

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

6.0 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

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

7.0 PROTECTION OF EXPOSED GROUND

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

8.0 SUPPORT OF ADJACENT GROUND AND STRUCTURES

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

9.0 INFLUENCE OF CONSTRUCTION ACTIVITY

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

10.0 OBSERVATIONS DURING CONSTRUCTION

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

11.0 DRAINAGE SYSTEMS

Where temporary or permanent drainage systems are installed within or around a structure, the systems which will be installed must protect the structure from loss of ground due to internal erosion and must be designed so as to assure continued performance of the drains. Specific design detail of such systems should be developed or reviewed by the geotechnical engineer. Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function.

12.0 BEARING CAPACITY

Design bearing capacities, loads and allowable stresses quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition assumed. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions assumed in this report in fact exist at the site.

13.0 SAMPLES

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

14.0 INFORMATION PROVIDED TO TETRA TECH EBA BY OTHERS

During the performance of the work and the preparation of the report, Tetra Tech EBA may rely on information provided by persons other than the Client. While Tetra Tech EBA endeavours to verify the accuracy of such information when instructed to do so by the Client, Tetra Tech EBA accepts no responsibility for the accuracy or the reliability of such information which may affect the report.