September 10, 2008 Project No: Y22101066

Department of Community & Government Services
Kivalliq Region, Government of Nunavut
PO Box 002
Rankin Inlet, NU X0C 0G0

Via email: WThistle@GOV.NU.CA

Attention: Wayne Thistle, Project Officer

Subject: Nipisar Lake Fuel Spill, Assessment and Remediation
Rankin Inlet, NU
ISSUED FOR CLIENT REVIEW

1.0 INTRODUCTION

1.1 GENERAL

EBA Engineering Consultants Ltd. (EBA) was commissioned by the Government of Nunavut, Department of Community & Government Services (CGS), to conduct assessment and remediation work at the fuel spill site at Nipisar Lake in Rankin Inlet, NU.

The purpose this assessment was three fold:

- To provide direction for the remediation activities at the subject site, as commenced by CGS;
- To establish the boundaries of the hydrocarbon impacts in the soil;
- To assess the hydrocarbon impacts in groundwater and lake water.

This report summarizes the results of the assessment and remediation, and provides recommendations for future work.

1.2 AUTHORIZATION

Wayne Thistle, project officer for CGS, provided authorization to proceed with the Nipasar Lake assessment and remediation to Ms. Aileen Stevens of EBA via email on July 2, 2008.

1.3 SCOPE OF WORK

EBA conducted the following scope of work to meet the objectives of the project:

- Performed interviews with knowledgeable personnel and key witnesses to determine the spill history (as remediation activities were underway prior to EBA's arrival on-site);

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- Provided direction to the contractors performing the soil excavation activities based on in-field hydrocarbon vapour emission (HVE) monitoring;
- Conducted confirmatory soil sampling along the boundaries of the excavation, for laboratory analysis of hydrocarbon parameters (benzene, toluene, ethylbenzene, xylenes (BTEX), and F1 to F4 hydrocarbon fractions);
- Collected surface water, groundwater, and drinking water (from the pump house) samples for laboratory analysis of hydrocarbon parameters;
- Installed migration prevention measures, including geomembrane skirting and a downgradient containment wall, prior to backfilling of the excavated areas;
- Prepared a report documenting the results of the project and recommendations for future work, including disposal options for the excavated material and future measures for water treatment.

2.0 SITE DETAILS

2.1 GENERAL

The subject site is located approximately 2.5 kilometres north of the Hamlet of Rankin Inlet, on the banks of Nipisar Lake. This is the potable drinking water source for Rankin Inlet. The only building on-site (the pump house) facilites the water distribution system for the hamlet and is connected to an underground water pipe into the lake and to town, underground fuel pipe to the above ground fuel storage tank (AST), and is serviced by overhead electrical and telecommunication lines.

Mr. Kyle Levac of EBA was present on-site on July 4th to 6th, and again July 30th to August 3rd to conduct the scope of work.

2.2 SPILL DETAILS

EBA reviewed relevant photographs from the time of the spill, provided by Mark Gordon of CGS, and conducted personnel interviews to determine the amount of fuel spilled, the approximate time of discharge, pump house operations, and details of remedial activities undertaken prior to EBA's arrival. Interviews were conducted with:

- Mr. Arnie Brown, Hamlet of Rankin Inlet
- Joe Strickland, CGS, Facilities Manager
- Mr. Edmond Pilakapsi, CGS, Labourer
- Mr. Aaron Pilakapsi, CGS, Back Hoe operator

EBA was able to establish the following spill history:

On June 30th, 2008 a diesel fuel spill was discovered during a routine pump house inspection. A pipe leading from the diesel fuel storage tank, north of the pump house building, was discovered to be damaged and leaking product onto the ground. The visible surface staining on the soil indicated the migration of the fuel in the direction of the lake. A hydrocarbon sheen was reportedly visible on the lake. The pipe was damaged at an unknown time and an unknown quantity of fuel was released.

Efforts were made by CGS employees to contain the spill and minimise the amount of product reaching the water source. The leaking pipe was repaired to prevent additional release of product, and sorbent boom socks were reportedly placed on the beach and along the lake shore to capture free floating hydrocarbon product. Excavation activities were initiated prior to EBA's arrival on site, performed by the local Hamlet contractors and CGS staff. Reportedly approximately 26 loads of impacted soil were removed by an 8 m^3 capacity truck, and deposited at the Hamlet's landfill to await transport to a landfarm.

Groundwater accumulation was reportedly observed in the excavation area with a visible sheen, and as such, CGS employees applied sorbent booms to remove the product.

3.0 UTILITY LOCATION INFORMATION

EBA was not present on site at the initiation of subsurface activities. Upon EBA's arrival on site, underground utilities were already exposed including the water main and a fuel pipe. Additional utilities were provided by pole-mounted, overhead lines.

4.0 FIELD ACTIVITIES

EBA arrived on-site on July 4th, 2008 to assess the extent of hydrocarbon impacts at the Nipisar Lake pump house by the following methods:

- Visual and olfactory assessments were conducted in the excavation area and along the shoreline to establish the presence of obvious staining or odours.
- Soil samples were collected along the walls and the base of the excavation for hydrocarbon vapour emission (HVE) readings. (HVE readings are an in-field measurement used to assist in the selection of samples for chemical analysis and give indication of the relative hydrocarbon levels in soil.) HVE concentrations were measured using an Eagle Series Portable Multi-Gas Detector manufactured by RKI Instruments, calibrated to a hexane standard. In-field recommendations for further excavation requirements were based on HVE results.
- Five (5) water samples were collected from the pump house intake line on July 6th, 2008, at 2 hour intervals.

  Water samples were collected from the shore of Nipisar Lake on July 6th, 2008; one up-wind of the spill area and outside the boom sock, and 4 from inside the boom sock area.

All water samples were submitted to Maxxam Analytics (Maxxam) of Edmonton, AB for analysis of hydrocarbon parameters, and were requested on rush turnaround due to health and safety concerns for the public.

- A clay containment wall was constructed on the downgradient end of the excavation area, parallel to the shoreline. This containment wall was constructed to contain any groundwater in the excavation area, and prevent impacts from reaching the beach sand and lake water.
- Confirmatory soil samples were collected from the walls and base of the excavation area and submitted to Maxxam for analysis of hydrocarbon parameters. Samples were collected in an approximate 4m by 4 m grid.

Excavation work ceased on July 6th due to limitations imposed by permafrost at the base of the excavation, and the presence of the pump house and underground water main on the north and west edges of the excavation. *Note that HVE readings indicated no further excavation requirements on the east and southwest walls, however the base and walls below the pump house indicated elevated HVE readings.*

Upon receipt of results from the laboratory, EBA recommended further excavation activities were required and returned to site on July 30th, 2008. By this time, exposed permafrost at the base of the excavation had sufficient time to soften which facilitated further excavation. Field activities during the second event included the following:

- Soil samples were collected along the walls and the base of the excavation for hydrocarbon vapour emission (HVE) readings. In-field recommendations for further excavation requirements were based on HVE results.
- Five (5) water samples were collected from the pump house intake line on August 1st, 2008, at 2 hour intervals.

  Water samples were collected from the shore of Nipisar Lake on July 30th, 2008; one up-wind of the spill area and outside the boom sock, and 3 from inside the boom sock area.

  Water samples were collected from the base of the excavation on August 1st and 2nd, 2008.

  All water samples were submitted to Maxxam for analysis of hydrocarbon parameters.
- An impermeable, 16mil geomembrane liner was installed along the excavation wall on the downgradient side of the perimeter of the pump house. The liner was installed as a protective barrier to prevent leaching of known impacts from under the pump house foundation, into the remediated area.

  Liner was also installed along the excavation side of the clay containment wall, to assist in preventing potentially impacted groundwater from passing into the lake.

- Three monitor wells were installed in the excavation area for future monitoring or treatment purposes.
- Confirmatory soil samples were collected from the base of the excavation area and submitted to Maxxam for analysis of hydrocarbon parameters.

Samples were collected in accordance with generally accepted environmental practises. Disposable nitrile gloves were used for sampling at each sampling location, and HVE samples were warmed indoors prior to collecting a reading. Sampling locations were hand surveyed using a portable GPS unit. Photographs were taken during fieldwork with a digital camera. All environmental samples were placed in appropriate laboratory supplied containers, placed in a cooler under refrigerated conditions, and shipped to Maxxam under chain of custody protocol. Water samples were submitted for analysis of BTEX and F1 to F2 hydrocarbon fractions while soil samples were submitted for analysis of BTEX and F1 to F4 hydrocarbon fractions.

4.1 OBSERVATIONS

4.1.1 July 4th to July 7th, 2008

Based on the photographs provided by CGS employee Mark Gordon, the surface staining from the fuel spill appeared to commence at the north side of the pump house and migrate below and to the east of the pump house, southward to the lake. Excavation work completed at the time of EBA's arrival on July 4th included the length of the south and east walls of the pump house to 1 m below grade (mbg), and extended to approximately 2 m from the shoreline (approximately 13 m north/south) by approximately 22 m wide (east/west). Refer to Figure 2 for the detailed site plan.

Equipment used to conduct the excavation and associated work included a front end loader, a back hoe, a dump truck, and a bobcat. Some manual digging was conducted in proximity to underground fuel lines along the north side of the pump house.

EBA conducted the visual and olfactory assessment of the excavation area and established noticeable hydrocarbon odours primarily along the base of the excavation and the walls along the perimeter of the pump house. The lake water did not have noticeable sheen, however, the sand along the shoreline was observed to have locations of staining and odour.

Soil stratigraphy in the excavation area consisted of coarse and fine grained sand, pebbles and rock, with some clay and organics. Staining was observed on the walls of the excavation below the pump house, and on the base of the excavation in proximity to the pump house.

HVE readings collected from the walls and the base of the existing excavation supported the visual observations, indicating elevated readings along the perimeter of the pump house and the majority of the base of the excavation. Samples that yielded low or zero readings were collected from the north and east wall, and the eastern side of the base of excavation. Based on the visual and olfactory observations, and the HVE results, the excavation was advanced to a greater depth but not widened.

Groundwater was observed to be collecting in the southwest area of the excavation, occasionally observed to have a visible sheen. Sorbent pads were placed on the accumulated water when sheen was observed. To prevent this groundwater from migrating to the lake, a 20 m long containment wall was constructed to approximately 0.6 m above lake level on the south end of the excavation, on July 5th, 2008. Construction materials for the containment wall included clay and gravel fill.

At approximately 1.3 mbg, permafrost was encountered and excavation activities were ceased. Further limitations to the boundaries of the excavation were the presence of the pump house and the underground water main (on the north and west edges of the excavation).

EBA collected confirmatory soil samples upon completion of excavation work, samples of the beach sand beyond the containment wall, and lake water samples. Refer to Figures 4 and 5 for sample locations along the walls of the excavation. *Note that samples from the base of the excavation are not presented for this sampling event.* EBA further collected samples from the impacted stockpile and from the clay material for reference.

EBA obtained access to the pump house from Edmund Pilakapski, and collected samples from the main distribution pipe over a timeframe of 10 hours. Water from the distribution pipe did not have noticeable discoloration or odours.

EBA recommended that the excavation not be backfilled until receipt of laboratory results.

4.1.2 July 30th to August 3rd, 2008

Results were received from the laboratory and indicated that the confirmatory soil samples collected from the base of the excavation, the beach sand, and the walls under the pump house were above adopted criteria. As a result, EBA returned to site on July 30th, 2008 to conduct additional work.

To address the impacts remaining at the base of the excavation, EBA recommended further soil removal. This was feasible at this time since the exposed permafrost at the base of the excavation had sufficient time to soften. The walls under the pump house could not be advanced any further without compromising the support of the pump house, and in-situ treatment methods for this size of impacted area (45 m^2) were not cost effective. As such,

EBA recommended that a geomembrane liner be skirted around the perimeter of the impacted walls to contain the impacts. This was conducted using a 16 mil poly liner secured to the pump house, and draped sufficiently that upon backfilling, permafrost would be expected to advance and create a barrier with the liner.

Excavation activities were performed with Nanuq Lodge staff, between August 1st and August 3rd. Equipment on site included an excavator and a front end track loader.

Olfactory and HVE assessments were conducted throughout the excavation to determine if depth achieved had residual volatile hydrocarbon contamination. HVE readings eventually indicated that the depth achieved no longer showed signs of hydrocarbon impacts and additional excavation activities were halted at a depth of approximately 1.5 mbg.

Groundwater was observed to be collecting in the southwest area of the excavation. No sheen was observed. Two water samples were collected from inside the excavation for laboratory analysis.

Additional excavation was performed south of the containment wall to address the remaining impacts in the beach sand. Depth of excavation achieved was approximately 0.5 mbg. As a result of the excavation, the shoreline was advanced by approximately 2 m to the north, towards the containment wall. A sheen was initially observed on the water following the excavation and as such, sorbent pads were positioned to address this.

EBA collected confirmatory samples from the base of the excavation upon completion of the excavation work, and water samples from the main distribution pipe of the pump house over a period of 10 hours. Water from the distribution pipe did not have noticeable discoloration or odours. Refer to Figure 3 for the sampling locations.

Impacted soil that was removed prior to EBA's arrival was stockpiled off site at the landfill. All soil excavated under the supervision of EBA was stockpiled on-site on a water proof tarp to await transport to the landfill. Soil was moved to the landfill following EBA's departure, and amounted to approximately 4 truck loads (8 m^3 each).

Geomembrane liner remaining from the pump house skirting was used to line the north bank of the clay containment wall. Please refer to attached Figures 2 and 3 for geomembrane locations.

Three (3) monitoring wells were installed in the southern end of the excavation area for future monitoring and potential groundwater treatment purposes. Wells were constructed of 0.24 m diameter PVC pipe, perforated in the bottom 0.5 m, installed to grade. Wells were installed at the lowest grade of the excavation where groundwater was observed to be accumulating. The size of well casing was selected to facilitate insertion of pump lines for potential future extraction and treatment of accumulated groundwater, if necessary.

A limited amount of clean fill material was available while EBA was on site and as a result, backfilling activities were only partially completed on August 2nd. Remaining backfilling

activities were completed in the following week by CGS. In EBA's absence, photographs of the backfilling activities were provided by Joe Strickland of CGS. Please refer to Appendix A for site photographs.

5.0 ENVIRONMENTAL STANDARDS

5.1 SOIL

In the absence of Nunavut soil remediation guidelines, the following Government of the Northwest Territories (GNWT) soil standards have been adopted for comparison at the subject site:

- Environmental Guidelines for Contaminated Site Remediation, November 2003

Criteria for coarse grained surface soil were applicable for F1 to F4 hydrocarbon parameters, in the Tier 1 Eco-Soil Contact category. The generic criteria for other contaminants were applicable to the remaining parameters including Benzene, Toluene, Ethylbenzene and Xylene (BTEX).

5.2 WATER

In the absence of Nunavut or GNWT ground or surface water standards, the following federal and Alberta guidelines have been adopted for comparison purposes at this site:

- Guidelines for Canadian Drinking Water Quality (GCDWQ), 2008
- Canadian Water Quality Guidelines for Protection of Fresh Water Aquatic Life (FAL), 1999, updated November 2006, under the Canadian Council of Ministers of the Environment (CCME)
- Alberta Soil and Groundwater Remediation Guidelines (SGRG), 2007

Criteria for GDCWQ and CCME FAL were adopted for BTEX parameters. Alberta SGRG were adopted for F1 and F2 hydrocarbon fractions.

6.0 RESULTS & DISCUSSION

6.1 JULY 4TH TO JULY 6TH

The first round of confirmatory sampling was conducted between July 4th and July 6th, 2008. Refer to attached Tables 1 through 5 for summarized analytical results while a full laboratory report is presented in Appendix B.

A summary of the results as compared to adopted criteria are summarized as follows:

- All 15 confirmatory soil samples taken from the north and west walls of the excavation (NTW and WTW series) were within adopted criteria for BTEX and F1 to F4 hydrocarbon parameters;
- Three (3) of the 4 samples (UBNW-1A, UBNW-2A and UBNW-2B) collected from under the pump house's south wall show concentrations of hydrocarbon parameters in exceedance of adopted criteria.
- Six (6) of the 8 samples (STW1-A, STW1-B, STW2-A, STW3-A, STW4-A, STW4-B) collected from the west wall of the excavation, below the east wall of the pump house, show concentrations of hydrocarbon parameters in exceedance of adopted criteria.
- Two (2) of the 3 samples (BS2, BS3) collected from the beach sand, south of the containment wall, showed concentrations of hydrocarbon parameters in exceedance of adopted criteria.
- Six (6) of the 11 samples (TF1, TF2, TF4, TF5, TF8, TF8) collected from the base of the excavation showed concentrations of hydrocarbon parameters in exceedance of adopted criteria.
- All 10 water samples collected from the lake and the pump house were within adopted criteria.
- Both of the samples (STP1, STP2) collected from the impacted soil stockpile were in exceedance of adopted criteria. Materials collected from the clay berm (CBM1) was within adopted criteria.

Based on laboratory results; hydrocarbon impacts were still present above applicable criteria in the soil below the pump house and along the base of the excavation.

6.2 July 30th to August 3rd

The second round of confirmatory sampling was conducted between July 30th and August 3rd, 2008. A summary of the soil and water results are presented in Tables 6 and 7, and compared to adopted criteria. The results are summarized as follows:

- All 7 soil samples collected from the base of the excavation were within adopted criteria.
- All 9 water samples collected from the lake and the pump house were within adopted criteria.
- One (1) of the 2 water samples (TW2) collected from the base of the excavation contained hydrocarbon parameter in exceedance of adopted criteria.

6.3 DISCUSSION

The following is a summary of the work completed and EBA's findings:

- Approximately 235 m^3 of impacted soil was excavated and removed from the spill site to the landfill.
- Confirmatory testing conducted over two sampling events (July 4th to 6th, and July 30th to August 3rd) confirm the boundaries of the excavation to be within adopted criteria.
- A geomembrane liner was installed below a portion of the pump house perimeter as a skirt to contain the remaining impacts in the soil below the building. It is anticipated that the permafrost layer will advance over the base of the line to its previous depth (~1.3 mbg) and thus create an impermeable barrier for migration of impacts.
- A clay containment wall was constructed and left in place to prevent potentially impacted groundwater from the spill area from reaching the lake. Three (3) monitor wells were installed in the downgradient area of the spill site, in the area where groundwater was collecting due to the containment wall, for future monitoring and potential treatment purposes.
- Lake and pump house water samples were collected at two sampling events (July 4th to 6th, and July 30th to August 3rd) and confirm that hydrocarbon parameters are within adopted criteria.
- The excavation area was backfilled with clean fill material.

7.0 CONCLUSIONS & RECOMMENDATIONS

Based on the results of the project, impacts from the diesel spill at the Nipisar Lake pump house have been remediated and contained. Lake and drinking water samples indicate impacts to the water from the spill are negligible.

EBA recommends the following actions:

- Seasonal sampling of the installed groundwater monitoring wells should be conducted to determine the effectiveness of the geomembrane containment skirt in containing impacts below the pump house. The wells should be developed and sampled for laboratory analysis of hydrocarbon parameters, and compared to federal and Alberta guidelines. If samples indicate exceedances of adopted criteria, monitoring wells should be pumped and recovered water treated or disposed of in accordance with applicable guidelines.
- Impacted soils from the excavation activities which were placed in the landfill, should be relocated to a controlled environment to prevent further leaching of impacts.
- Source water protection options, including secondary containment for all components of fuel systems, should be considered for Nipisar Lake to prevent future impacts.

EBA Engineering is currently in the process of evaluating water treatment options that would best suit CGS's needs for this project and in the future. This will be reported under separate cover.

8.0 CLOSURE

The contents of this report are subject to the limitations of EBA's General Conditions, presented in Appendix C. We trust that this report meets with your present requirements. Should you have any questions or comments please contact the undersigned at your convenience.

Yours truly,
EBA Engineering Consultants Ltd.

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Attachments:
Table 1: Soil Laboratory Results, Confirmatory Sampling Event #1 (July 6th, 2008)
Table 2: Soil Laboratory Results, Confirmatory Sampling Event #1 (July 6th, 2008)
Table 3: Soil Laboratory Results, Confirmatory Sampling Event #1 (July 6th, 2008)
Table 4: Soil Laboratory Results, Confirmatory Sampling Event #1 (July 6th, 2008)
Table 5: Water Laboratory Results, Sampling Event #1 (July 7th, 2008).
Table 6: Soil Laboratory Results, Confirmatory Sampling Event #2 (August 1st and 2nd, 2008)
Table 7: Water Laboratory Results, Sampling Event #2 (July 30th to August 2nd, 2008)
Figure 1: General Site Location
Figure 2: Detailed Site Plan
Figure 3: Excavation Floor: Confirmatory Sample Locations, Sampling Event #2 (August 2nd, 2008)
Figure 4: North Wall of Excavation: Confirmatory Sample Locations, Sampling Event #1 (July 6th, 2008)
Figure 5: West Wall of Excavation: Confirmatory Sample Locations, Sampling Event #1 (July 6th, 2008)
Appendix A: Photos
Appendix B: Laboratory Reports
Appendix C: EBA General Conditions

TABLES

TABLE 1: Soil Analytical Results, Confirmatory Sampling Event #1 (July 6th, 2008)

Sample Identification	Stock Pile - Impacted soil		Clay Berm	Excavation wall - Below the east wall of the pump house									GNWT Guideline for Contaminated Site Remediation
	STP1	STP2	CBM1	STW1-A	STW1-B	STW1-C	STW2-A	STW2-B	STW3-A	STW3-B	STW4-A	STW4-B	
Sample Date (M/D/Y)	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	Residential Coarse Grained Surface Soil
Moisture (%)	8.9	15	8.1	6.1	9.1	13	8.8	16	7.7	13	8.2	13	-
Hydrocarbons													-
Benzene	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.5[b]
Toluene	<0.020	0.35	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.8[b]
Ethylbenzene	<0.010	0.91	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	1.2[b]
Xylenes	0.83	***4.8***	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	1[b]
F1-BTEX	92	***210***	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	130[a]
F2 (C10-C16)	***1100***	***1800***	<10	<10	100	<10	<10	<10	<10	<10	<10	69	450[a]
F3 (C16-C34)	<10	49	<10	<10	71	14	23	39	23	35	54	<10	400[a]
F4 (C34-C50)	<10	<10	24	54	11	<10	<10	<10	<10	<10	27	10	2800[a]

Notes:

Bold - indicates exceedance of adopted criteria

All units are in parts per million (ppm) unless otherwise specified

'-' indicates not analysed, no applicable standard, or not applicable

a - Eco -Soil Contact Standards, as published by GNWT "Guidelines for Contaminated Site Remediation" November (2003).

b - Residential/Parkland land use standards.

TABLE 2: Soil Analytical Results, Confirmatory Sampling Event #1 (July 6th, 2008)

Sample Identification	Below Pump House South Wall				Excavation West Wall						GNWT Guideline for Contaminated Site Remediation
	UBEW-1A	UBEW-1B	UBEW-2A	UBEW-2B	NTW1-A	NTW1-B	NTW2-A	NTW2-B	NTW3-A	NTW3-B	
Sample Date (M/D/Y)	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	Residential Coarse Grained Surface Soil
Moisture (%)	8.4	11	22	8.0	4.0	4.5	3.3	5.8	16	77	-
Hydrocarbons											
Benzene	0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.5[b]
Toluene	***1.6***	<0.020	0.22	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.8[b]
Ethylbenzene	***3.6***	<0.010	0.37	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	1.2[b]
Xylenes	***19***	<0.040	***2.3***	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	1[b]
F1-BTEX	***1300***	<12	57	22	<12	<12	<12	<12	<12	<12	130[a]
F2 (C10-C16)	***4200***	<10	***490***	***670***	11	55	<10	<10	170	360	450[a]
F3 (C16-C34)	280	<10	<10	<10	<10	<10	<10	<10	<10	<10	400[a]
F4 (C34-C50)	<10	<10	<10	<10	26	24	24	35	43	160	2800[a]

Notes:

Bold - indicates exceedance of adopted criteria

All units are in parts per million (ppm) unless otherwise specified

'-' indicates not analysed, no applicable standard, or not applicable

a - Eco -Soil Contact Standards, as published by GNWT "Guidelines for Contaminated Site Remediation" November (2003).

b - Residential/Parkland land use standards.

TABLE 3: Soil Analytical Results, Confirmatory Sampling Event #1 (July 6th, 2008)													
Sample Identification	Beach Sand				Below Pump House East Wall								GNWT Guideline for Contaminated Site Remediation
	BS1	BS2	DUP3	BS3	STW1-A	STW1-B	STW2-A	STW2-B	STW3-A	STW3-B	STW4-A	STW4-B	
Sample Date (M/D/Y)	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	Residential Coarse Grained Surface Soil
Moisture (%)	13	12	13	14	13	15	8.9	17	7.1	13	15	12	-
Hydrocarbons													
Benzene	<0.0050	<0.0050	<0.0050	0.097	<0.0050	0.075	<0.0050	<0.0050	<0.0050	<0.0050	0.097	<0.0050	0.5[b]
Toluene	<0.020	0.77	0.35	***6.3***	***1.0***	***4.0***	***1.1***	0.064	***1.1***	<0.020	***7.0***	<0.020	0.8[b]
Ethylbenzene	<0.010	1.1	0.63	9.0	***3.2***	***5.7***	***2.6***	0.083	***2.1***	<0.010	***12***	<0.010	1.2[b]
Xylenes	<0.040	***5.8***	***3.2***	47	***17***	***26***	***14***	0.47	***11***	<0.040	***58***	0.53	1[b]
F1-BTEX	<12	***210***	***140***	***1700***	***890***	***1100***	***470***	45	***570***	<12	***3700***	31	130[a]
F2 (C10-C16)	40	***5500***	***1600***	***4800***	***5000***	***7900***	***8500***	230	***3300***	<10	***9600***	***1000***	450[a]
F3 (C16-C34)	58	***480***	150	***430***	***550***	***910***	***1100***	<10	***230***	<10	***930***	200	400[a]
F4 (C34-C50)	<10	<10	<10	<10	<10	41	<10	36	<10	<10	160	<10	2800[a]

Notes:
Bold - indicates exceedance of adopted criteria
All units are in parts per million (ppm) unless otherwise specified
'-' indicates not analysed, no applicable standard, or not applicable
a - Eco -Soil Contact Standards, as published by GNWT "Guidelines for Contaminated Site Remediation" November (2003).
b - Residential/Parkland land use standards.

TABLE 3: Soil Analytical Results, Confirmatory Sampling Event #1 (July 6th, 2008)													
Sample Identification	Beach Sand				Below Pump House East Wall								GNWT Guideline for Contaminated Site Remediation
	BS1	BS2	DUP3	BS3	STW1-A	STW1-B	STW2-A	STW2-B	STW3-A	STW3-B	STW4-A	STW4-B	
Sample Date (M/D/Y)	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	Residential Coarse Grained Surface Soil
Moisture (%)	13	12	13	14	13	15	8.9	17	7.1	13	15	12	-
Hydrocarbons													
Benzene	<0.0050	<0.0050	<0.0050	0.097	<0.0050	0.075	<0.0050	<0.0050	<0.0050	<0.0050	0.097	<0.0050	0.5[b]
Toluene	<0.020	0.77	0.35	***6.3***	***1.0***	***4.0***	***1.1***	0.064	***1.1***	<0.020	***7.0***	<0.020	0.8[b]
Ethylbenzene	<0.010	1.1	0.63	9.0	***3.2***	***5.7***	***2.6***	0.083	***2.1***	<0.010	***12***	<0.010	1.2[b]
Xylenes	<0.040	***5.8***	***3.2***	47	***17***	***26***	***14***	0.47	***11***	<0.040	***58***	0.53	1[b]
F1-BTEX	<12	***210***	***140***	***1700***	***890***	***1100***	***470***	45	***570***	<12	***3700***	31	130[a]
F2 (C10-C16)	40	***5500***	***1600***	***4800***	***5000***	***7900***	***8500***	230	***3300***	<10	***9600***	***1000***	450[a]
F3 (C16-C34)	58	***480***	150	***430***	***550***	***910***	***1100***	<10	***230***	<10	***930***	200	400[a]
F4 (C34-C50)	<10	<10	<10	<10	<10	41	<10	36	<10	<10	160	<10	2800[a]

Notes:
Bold - indicates exceedance of adopted criteria
All units are in parts per million (ppm) unless otherwise specified
'-' indicates not analysed, no applicable standard, or not applicable
a - Eco -Soil Contact Standards, as published by GNWT "Guidelines for Contaminated Site Remediation" November (2003).
b - Residential/Parkland land use standards.

TABLE 4: Soil Analytical Results, Confirmatory Sampling Event #1 (July 6th, 2008)														
Sample Identification	Base of Excavation													GNWT Guideline for Contaminated Site Remediation
	TF1	DUP1	TF2	TF3	TF4	TF5	DUP2	TF6	TF7	TF8	TF9	TF10	TF11	
Sample Date (M/D/Y)	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	Residential Coarse Grained Surface Soil
Moisture (%)	12	11	12	31	8.6	33	23	13	9.3	9.1	13	6.8	12	-
Hydrocarbons														
Benzene	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.5[b]
Toluene	<0.020	0.078	<0.020	<0.020	<0.020	***1.8***	0.34	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.8[b]
Ethylbenzene	0.33	0.36	.10	<0.010	<0.010	***1.3***	0.19	<0.010	<0.010	0.073	<0.010	0.053	<0.010	1.2[b]
Xylenes	3.3	***3.0***	0.82	<0.040	1.3	20	***4.8***	<0.040	<0.040	***3.9***	0.34	0.32	<0.040	1[b]
F1-BTEX	100	74	30	<12	***150***	***820***	***180***	<12	<12	***220***	51	18	<12	130[a]
F2 (C10-C16)	***2100***	***1800***	***650***	35	***3100***	***5300***	***4300***	90	230	***4000***	***920***	410	25	450[a]
F3 (C16-C34)	360	320	140	99	370	***620***	***610***	94	60	***500***	160	120	41	400[a]
F4 (C34-C50)	12	10	19	22	17	35	53	18	<10	16	11	21	12	2800[a]

Notes:
Bold - indicates exceedance of adopted criteria
All units are in parts per million (ppm) unless otherwise specified
'-' indicates not analysed, no applicable standard, or not applicable
a - Eco -Soil Contact Standards, as published by GNWT "Guidelines for Contaminated Site Remediation" November (2003).
b - Residential/Parkland land use standards.

TABLE 5: Water Analytical Results, Confirmatory Sampling Event #1 (July 6th, 2008)

Sample Identification		Lake Water Samples					Pump House Water Samples					GCDWQ[a]	CCME FAL[b]	Alberta SGRG[c]
		LW1	LW2	LW3	LW4	LW5	PHA1	PHA2	PHA3	PHA4	PHA5	-	-	-
Sample Date		7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	7/6/2008	-	-	-
Hydrocarbons	Benzene	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.005	0.37	0.005
	Toluene	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.024	0.002	0.024
	Ethylbenzene	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0024	0.09	0.0024
	Xylenes	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.3	-	0.3
	F1-BTEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	2.2
	F2 (C10-C16)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	1.1

Notes:

All units are in parts per million (ppm) unless otherwise specified

'-' indicates not analyzed, no applicable standard, or not applicable

[a] Guidelines for Canadian Drinking Water Quality (2008)

[b] Canadian Water Quality Guidelines for protection of fresh water Aquatic Life, 1999, updated November 2006, under the Canadian Council of Ministers of the Environment (CCME)

[c] Alberta Soil and Groundwater Remediation Guidelines (2007)

TABLE 6: Soil Analytical Results, Confirmatory Sampling Event #2 (August 1st and 2nd, 2008)

Sample Identification	Excavation Floor								GNWT Guideline for Contaminated Site Remediation
	TF1	TF2	DUP3	TF3	TF4	TF5	TF6	TF7	
Sample Depth Below Grade (m)	0.3m	0.3m	0.3m	0.3m	0.3m	0.3m	0.3m	0.3m	Residential Coarse Grained Surface Soil
Sample Date (M/D/Y)	8/1/2008	8/1/2008	8/1/2008	8/2/2008	8/2/2008	8/2/2008	8/2/2008	8/2/2008	-
Moisture (%)	15	14	15	14	18	14	19	4.1	-
Hydrocarbons									-
Benzene	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.5[b]
Toluene	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.8[b]
Ethylbenzene	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	1.2[b]
Xylenes	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	1[b]
F1-BTEX	<12	<12	<12	<12	<12	<12	<12	<12	130[a]
F2 (C10-C16)	12	13	15	13	<10	<10	<10	150	450[a]
F3 (C16-C34)	11	12	11	29	<10	<10	12	64	400[a]
F4 (C34-C50)	<10	<10	<10	78	<10	<10	<10	<10	2800[a]

Notes:
Bold - indicates exceedance of adopted criteria
All units are in parts per million (ppm) unless otherwise specified
'-' indicates not analysed, no applicable standard, or not applicable
a - Eco -Soil Contact Standards, as published by GNWT "Guidelines for Contaminated Site Remediation" November (2003).
b - Residential/Parkland land use standards.

TABLE 7: Water Analytical Results, Confirmatory Sampling Event #2 (July 30th to August 1st, 2008)

Sample Identification		Lake Water Samples				Excavation Water Samples			Pump House Water Samples					GCDWQ[a]	CCME FAL[b]	Alberta SGRG [c]
		LW1	LW2	LW3	LW4	TW1	DUP3	TW2	PH1	PH2	PH3	PH4	PH5	-	-	-
Sample Date		7/30/2008	7/30/2008	7/30/2008	7/30/2008	8/1/2008	8/1/2008	8/2/2008	8/1/2008	8/1/2008	8/1/2008	8/1/2008	8/1/2008	-	-	-
Hydrocarbons	Benzene	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0013	<0.0004	<0.0004	<0.0004	<0.0004	<0.004	0.005	0.37	0.005
	Toluene	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.01	<0.0004	<0.0004	<0.0004	<0.0004	<0.004	0.024	0.002	0.024
	Ethylbenzene	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	***0.009***	<0.0004	<0.0004	<0.0004	<0.0004	<0.004	0.0024	0.09	0.0024
	Xylenes	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.018	<0.0004	<0.0004	<0.0004	<0.0004	<0.004	0.3	-	0.3
	F1-BTEX	<100	<100	<100	<100	<0.1	<0.1	0.45	<100	<100	<100	<100	<100	-	-	2.2
	F2 (C10-C16)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	***1.9***	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	1.1

Notes:

All units are in parts per million (ppm) unless otherwise specified

'-' indicates not analyzed, no applicable standard, or not applicable

Bold - indicates exceedance of Residential Land Use

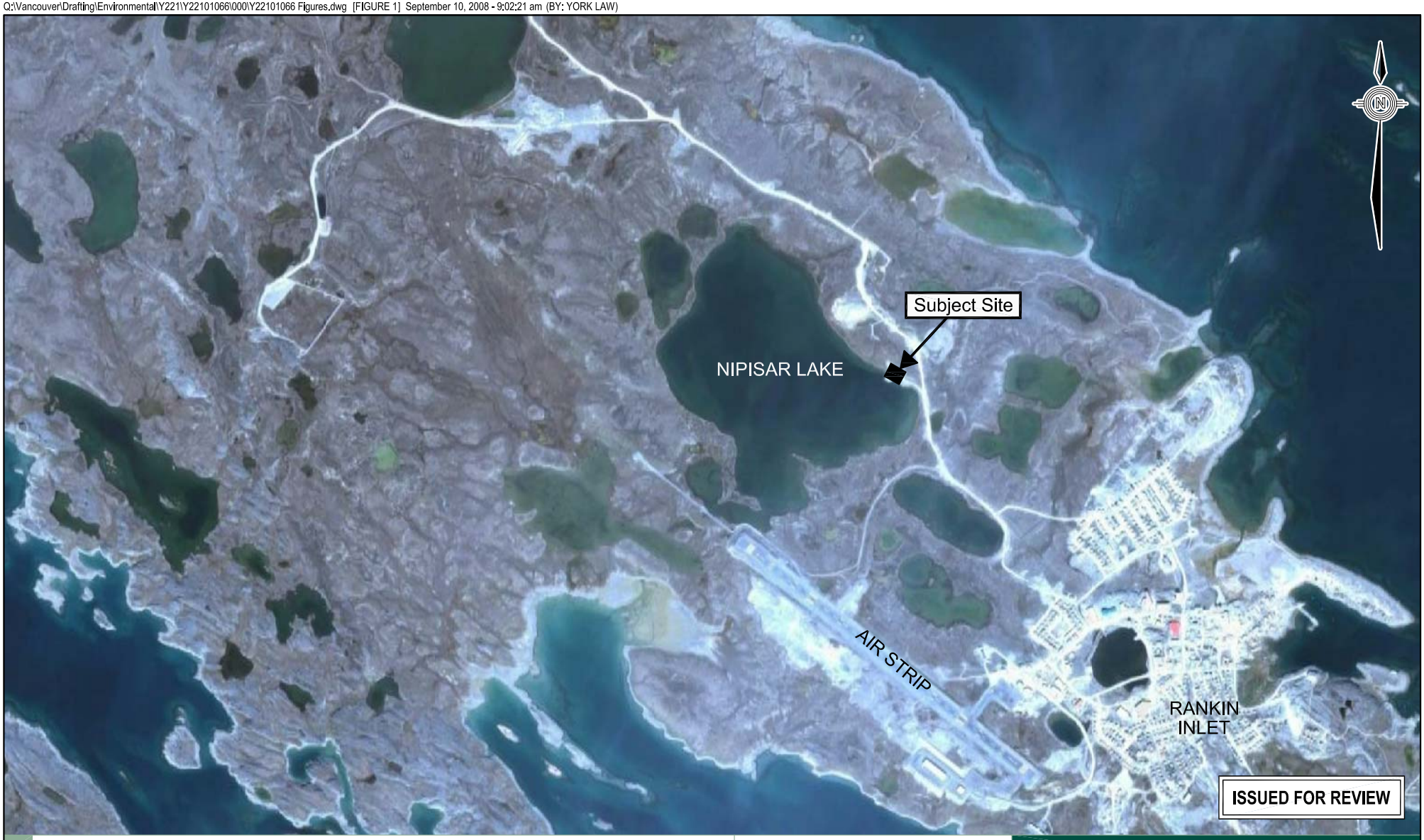
[a] Guidelines for Canadian Drinking Water Quality (2008)

[b] Canadian Water Quality Guidelines for protection of fresh water Aquatic Life, 1999, updated November 2006, under the Canadian Council of Ministers of the Environment (CCME)

[c] Alberta Soil and Groundwater Remediation Guidelines (2007)

FIGURES

Q:\Vancouver\Drafting\Environmental\Y221\Y22101066\000\Y22101066 Figures.dwg [FIGURE 1] September 10, 2008 - 9:02:21 am (BY: YORK LAW)



NOTE
BACKGROUND IMAGERY PROVIDED COURTESY OF GOOGLE EARTH AND IS SHOWN FOR VISUAL PURPOSES ONLY.

DRAWING NOT TO SCALE

CLIENT

Government of Nunavut, Department of Community and Government Services

NIPISAR LAKE ASSESSMENT AND REMEDIATION
RANKIN INLET, NU

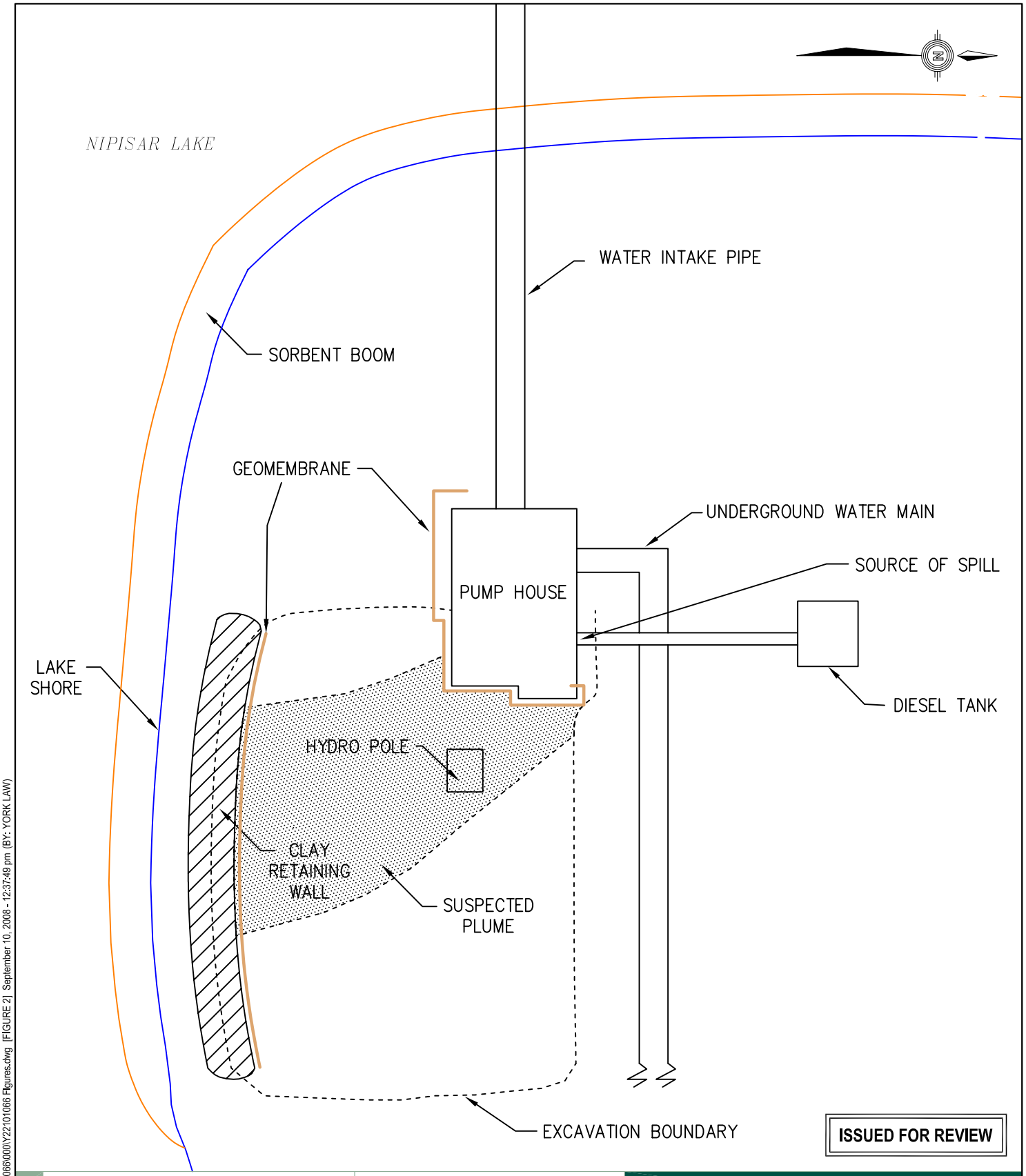
GENERAL SITE LOCATION

EBA Engineering Consultants Ltd.

PROJECT NO.	DWN	CKD	REV
Y22101066.000	YL	KL	0

OFFICE	DATE
VANC	August 2008

Figure 1



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2 0 2 6 10m

CLIENT

Government of Nunavut, Department of Community and Government Services

NIPISAR LAKE ASSESSMENT AND REMEDIATION
RANKIN INLET, NU

DETAILED SITE PLAN

EBA Engineering Consultants Ltd.

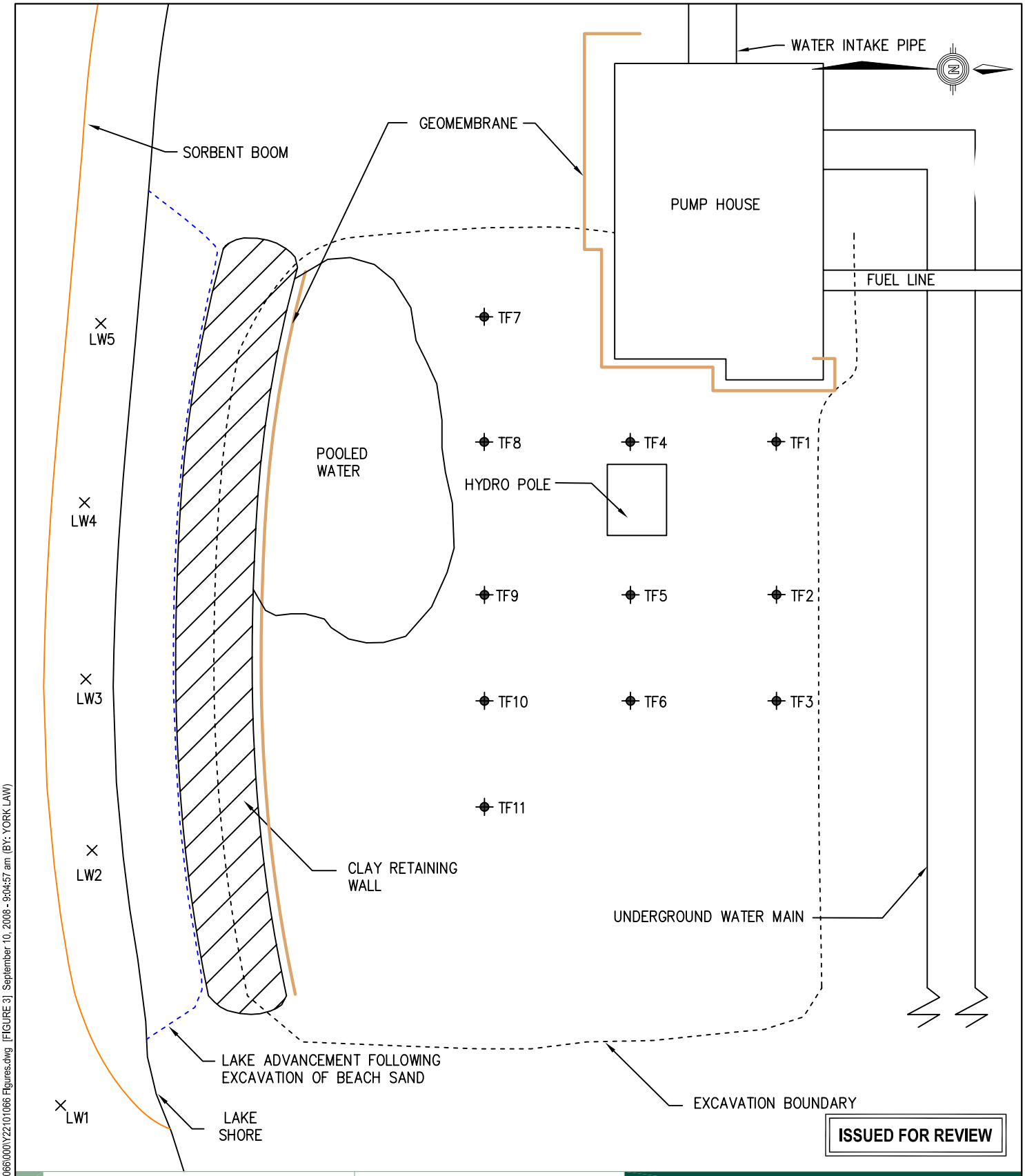
PROJECT NO.	DWN	CKD	REV
Y22101066.000	YL	KL	0

OFFICE: VANC

DATE: August, 2008

Figure 2

Q:\Vancouver\Drafting\Environmental\Y221\Y22101066\000\Y22101066 Figures.dwg [FIGURE 2] September 10, 2008 - 12:37:49 pm (BY: YORK LAW)



LEGEND

- TF TRENCH FLOOR
- BS BEACH SAND SAMPLE
- LW LAKE WATER SAMPLE
- BS SAMPLES IN EXCEEDANCE OF ADOPTED CRITERIA

SCALE 1:150

1 0 1 3 6m

CLIENT

Government of Nunavut, Department of Community and Government Services

NIPISAR LAKE ASSESSMENT AND REMEDIATION RANKIN INLET, NU

EXCAVATION FLOOR: CONFIRMATORY SAMPLE LOCATIONS SAMPLING EVENT #2 (AUGUST 2nd, 2008)

EBA Engineering Consultants Ltd.

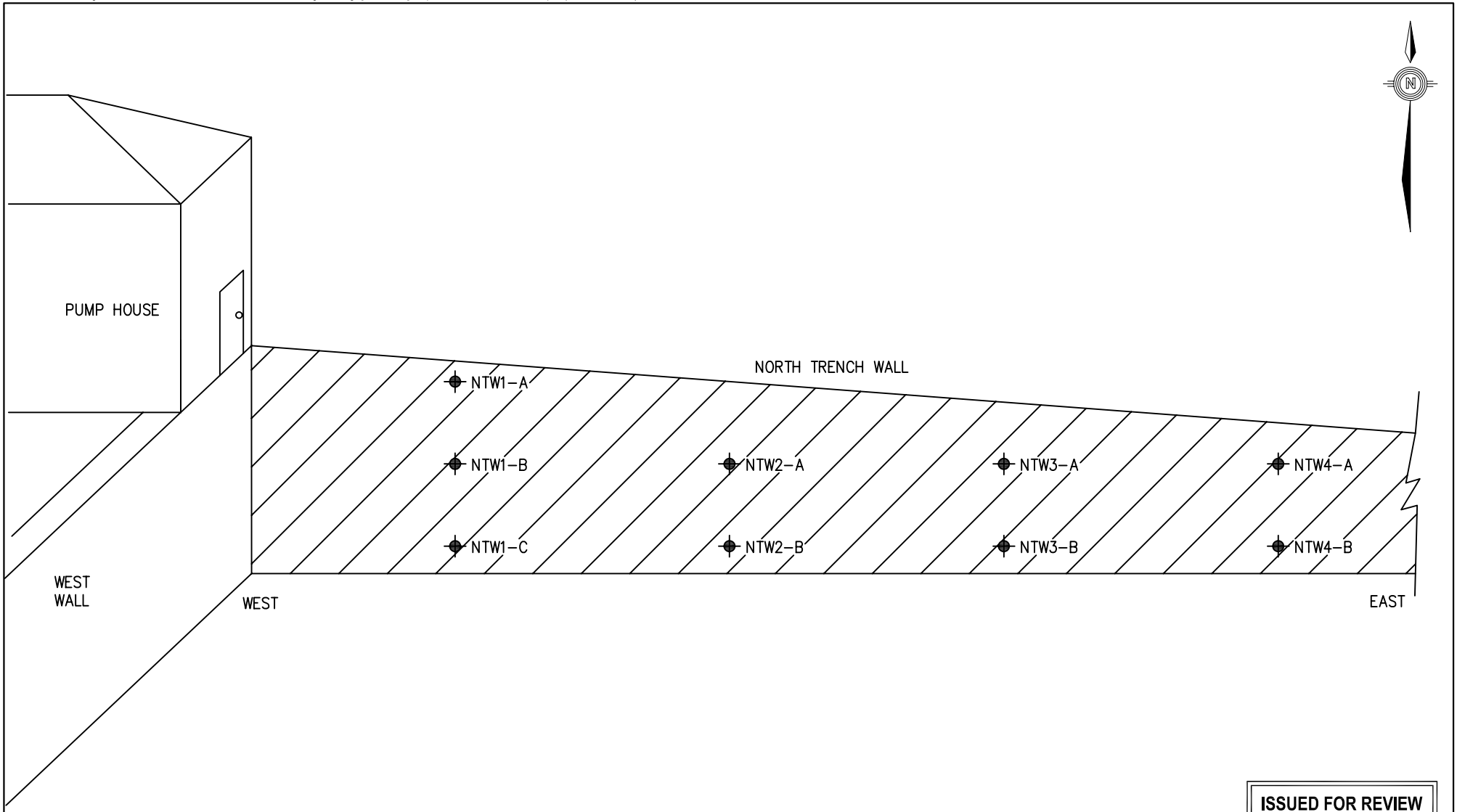
PROJECT NO.	DWN	CKD	REV
Y22101066.000	YL	KL	0

OFFICE	DATE
VANC	August, 2008

Figure 3

Q:\Vancouver\Drafting\Environmental\Y2211\Y22101066\000\Y22101066 Figures.dwg [FIGURE 3] September 10, 2008 - 9:04:57 am (BY: YORK LAW)

Q:\Vancouver\Drafting\Environmental\Y221\Y22101066\000\Y22101066 Figures.dwg [FIGURE 4] September 10, 2008 - 12:37:58 pm (BY: YORK LAW)



ISSUED FOR REVIEW

LEGEND

- SAMPLE LOCATION
- SAMPLES IN EXCEEDANCE OF ADOPTED CRITERIA

SCALE 1:40

400 0 400 1000 1600m

CLIENT

Government of Nunavut, Department of Community and Government Services

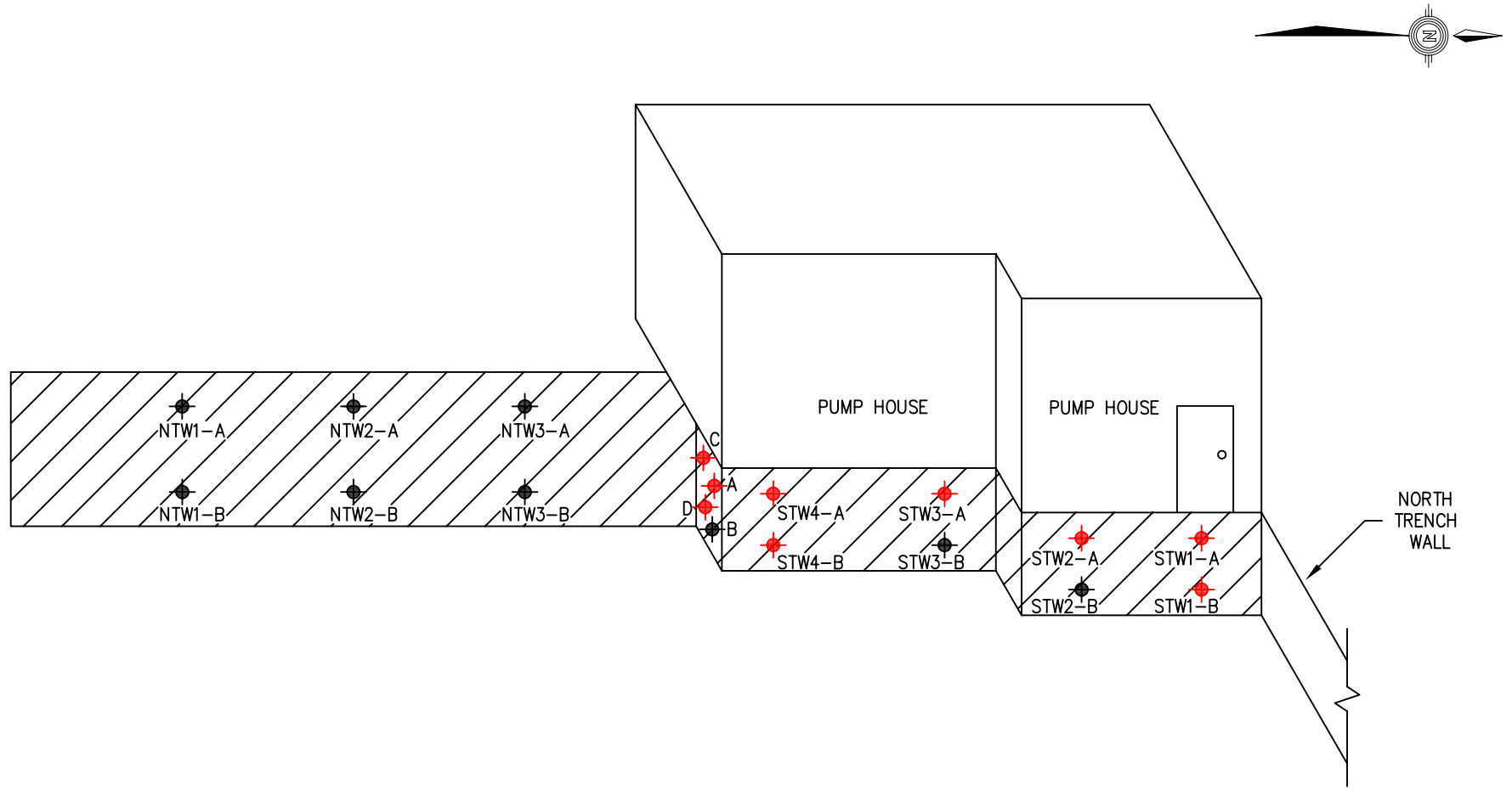
NIPISAR LAKE ASSESSMENT AND REMEDIATION
RANKIN INLET, NU

NORTH WALL OF EXCAVATION:
CONFIRMATORY SAMPLE LOCATIONS
SAMPLING EVENT #1 (JULY 6th, 2008)

EBA Engineering Consultants Ltd.

PROJECT NO.	DWN	CKD	REV
Y22101066.000	YL	KL	0
OFFICE: VANC	DATE: August 2008		

Figure 4



C– UBEW–2A A– UBEW–1A
D– UBEW–2B B– UBEW–1B

ISSUED FOR REVIEW

LEGEND

SAMPLE LOCATION
SAMPLES IN EXCEEDANCE OF ADOPTED CRITERIA

SCALE 1:75

500 0 500 1500 3000mm

CLIENT

Government of Nunavut, Department of Community and Government Services

NIPISAR LAKE ASSESSMENT AND REMEDIATION
RANKIN INLET, NU

WEST WALL OF EXCAVATION:
CONFIRMATORY SAMPLE LOCATIONS
SAMPLING EVENT #1 (JULY 6th, 2008)

EBA Engineering Consultants Ltd.

PROJECT NO.	DWN	CKD	REV
Y22101066.000	YL	KL	0
OFFICE: VANC	DATE: August 2008		

Figure 5

APPENDIX

APPENDIX A PHOTOS

Photo 1
(CGS photo: June 30th, 2008) Surface staining prior to excavation activities

Photo 2
(CGS photo: June 30th, 2008) Initial excavation activities

Photo 3
(CGS photo: June 30th, 2008) Sorbent pads on shoreline

Photo 4
(EBA photo: July 4th, 2008) Sorbent boom around shoreline

Photo 5
(EBA photo: August 1st, 2008) Clay containment wall

Photo 6
(EBA photo: August 3rd, 2008) Excvation of beach, south of containment wall

Photo 7
(EBA photo: August 1st, 2008) Monitoring wells in trench and geomembrane on clay containment wall.

Photo 8
(EBA photo: August 1st, 2008) Building skirt

Photo 9
(EBA photo: July 6th, 2008) Impacted soil stockpile at Rankin Inlet landfill

Photo 10
(CGS photo: August 13th, 2008) Post-backfilling activities

APPENDIX

APPENDIX B LABORATORY REPORT

Maxxam Analytics Inc

Your Project #: Y22101066 NIPISAR LAKE
Site: RANKIN INLET, NUNAVUT
Your C.O.C. #: 31445, 31442, 31441, 31440

Attention: AILEEN STEVENS
EBA ENGINEERING CONSULTANTS LTD.
#201, 4916 - 49 Street
P.O. Box 2244
YELLOWKNIFE, NT
CANADA X1A-2P7

Report Date: 2008/07/15

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A833658
Received: 2008/07/09, 8:25

Sample Matrix: Soil
Samples Received: 47

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/F1 by HS GC/MS (MeOH extract)	46	2008/07/09	2008/07/10	EENVSOP-00005 EENVSOP-00002	EPA 8260C / CCME
BTEX/F1 by HS GC/MS (MeOH extract)	1	2008/07/09	2008/07/11	EENVSOP-00005 EENVSOP-00002	EPA 8260C / CCME
CCME Hydrocarbons (F2-F4 in soil)	20	2008/07/07	2008/07/10	EENVSOP-00007 EENVSOP-00006	CWS PHCS Tier 1
CCME Hydrocarbons (F2-F4 in soil)	20	2008/07/09	2008/07/10	EENVSOP-00007 EENVSOP-00006	CWS PHCS Tier 1
CCME Hydrocarbons (F2-F4 in soil)	7	2008/07/09	2008/07/14	EENVSOP-00007 EENVSOP-00006	CWS PHCS Tier 1
CCME Hydrocarbons (F4G in soil)	1	2008/07/09	2008/07/15		
Moisture	47	N/A	2008/07/10	EENVSOP-00139	Carter SSMA 51.2

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

Encryption Key

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

JEREMY WAKARUK, B.Sc. Biology, Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
Phone# (780) 577-7105 Ext:7105

==========

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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 1

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59130	K59136	K59137	K59138		
Sampling Date		2008/07/07	2008/07/07	2008/07/07	2008/07/07		
COC Number		31445	31445	31445	31445		
	Units	**DUP1**	**DUP2**	**DUP3**	**BS1**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	11	23	13	13	0.3	2424298
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	1800	4300	1600	40	10	2423297
F3 (C16-C34 Hydrocarbons)	mg/kg	320	610	150	58	10	2423297
F4 (C34-C50 Hydrocarbons)	mg/kg	10	53	<10	<10	10	2423297
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes		2423297
Volatiles							
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	2422122
Toluene	mg/kg	0.078	0.34	0.35	<0.020	0.020	2422122
Ethylbenzene	mg/kg	0.36	0.19	0.63	<0.010	0.010	2422122
Xylenes (Total)	mg/kg	3.0	4.8	3.2	<0.040	0.040	2422122
m & p-Xylene	mg/kg	2.0	2.8	1.7	<0.040	0.040	2422122
o-Xylene	mg/kg	1.0	2.1	1.5	<0.020	0.020	2422122
F1 (C6-C10) - BTEX	mg/kg	74	180	140	<12	12	2422122
(C6-C10)	mg/kg	77	180	140	<12	12	2422122
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	97	97	100	99		2422122
D10-ETHYLBENZENE (sur.)	%	103	96	109	100		2422122
D4-1,2-DICHLOROETHANE (sur.)	%	92	94	92	91		2422122
D8-TOLUENE (sur.)	%	101	100	101	101		2422122
O-TERPHENYL (sur.)	%	92	93	90	102		2423297

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59139		K59140		
Sampling Date		2008/07/07		2008/07/07		
COC Number		31445		31445		
	Units	**BS2**	**RDL**	**BS3**	**RDL**	**QC Batch**
Physical Properties						
Moisture	%	12	0.3	14	0.3	2424298
Ext. Pet. Hydrocarbon						
F2 (C10-C16 Hydrocarbons)	mg/kg	5500	10	4800	10	2423297
F3 (C16-C34 Hydrocarbons)	mg/kg	480	10	430	10	2423297
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	<10	10	2423297
Reached Baseline at C50	mg/kg	Yes		Yes		2423297
Volatiles						
Benzene	mg/kg	<0.0050	0.0050	0.097	0.0050	2422122
Toluene	mg/kg	0.77	0.020	6.3	0.020	2422122
Ethylbenzene	mg/kg	1.1	0.010	9.0	0.010	2422122
Xylenes (Total)	mg/kg	5.8	0.040	47	0.40	2422122
m & p-Xylene	mg/kg	3.4	0.040	31	0.40	2422122
o-Xylene	mg/kg	2.4	0.020	16	0.20	2422122
F1 (C6-C10) - BTEX	mg/kg	210	12	1700	12	2422122
(C6-C10)	mg/kg	220	12	1800	12	2422122
Surrogate Recovery (%)						
4-BROMOFLUOROBENZENE (sur.)	%	88		100		2422122
D10-ETHYLBENZENE (sur.)	%	106		99		2422122
D4-1,2-DICHLOROETHANE (sur.)	%	89		94		2422122
D8-TOLUENE (sur.)	%	101		103		2422122
O-TERPHENYL (sur.)	%	90		92		2423297

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59141	K59142	K59143	K59144		
Sampling Date		2008/07/07	2008/07/07	2008/07/07	2008/07/07		
COC Number		31445	31445	31445	31445		
	Units	**TF1**	**TF2**	**TF3**	**TF4**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	12	12	31	8.6	0.3	2424298
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	2100	650	35	3100	10	2423297
F3 (C16-C34 Hydrocarbons)	mg/kg	360	140	99	370	10	2423297
F4 (C34-C50 Hydrocarbons)	mg/kg	12	19	22	17	10	2423297
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes		2423297
Volatiles							
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	2422122
Toluene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	2422122
Ethylbenzene	mg/kg	0.33	0.10	<0.010	<0.010	0.010	2422122
Xylenes (Total)	mg/kg	3.3	0.82	<0.040	1.3	0.040	2422122
m & p-Xylene	mg/kg	2.3	0.40	<0.040	<0.040	0.040	2422122
o-Xylene	mg/kg	1.0	0.42	<0.020	1.3	0.020	2422122
F1 (C6-C10) - BTEX	mg/kg	100	30	<12	150	12	2422122
(C6-C10)	mg/kg	110	31	<12	150	12	2422122
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	92	96	99	91		2422122
D10-ETHYLBENZENE (sur.)	%	107	103	102	103		2422122
D4-1,2-DICHLOROETHANE (sur.)	%	93	91	91	94		2422122
D8-TOLUENE (sur.)	%	100	98	102	100		2422122
O-TERPHENYL (sur.)	%	95	92	89	89		2423297

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59145	K59146	K59147	K59151		
Sampling Date		2008/07/07	2008/07/07	2008/07/07	2008/07/07		
COC Number		31445	31445	31442	31442		
	Units	**TF5**	**TF6**	**TF7**	**TF8**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	33	13	9.3	9.1	0.3	2424298
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	5300	90	230	4000	10	2423297
F3 (C16-C34 Hydrocarbons)	mg/kg	620	94	60	500	10	2423297
F4 (C34-C50 Hydrocarbons)	mg/kg	35	18	<10	16	10	2423297
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes		2423297
Volatiles							
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	2422122
Toluene	mg/kg	1.8	<0.020	<0.020	<0.020	0.020	2422122
Ethylbenzene	mg/kg	1.3	<0.010	<0.010	0.073	0.010	2422122
Xylenes (Total)	mg/kg	20	<0.040	<0.040	3.9	0.040	2422122
m & p-Xylene	mg/kg	13	<0.040	<0.040	0.99	0.040	2422122
o-Xylene	mg/kg	7.6	<0.020	<0.020	2.9	0.020	2422122
F1 (C6-C10) - BTEX	mg/kg	820	<12	<12	220	12	2422122
(C6-C10)	mg/kg	850	<12	<12	220	12	2422122
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	91	105	93	94		2422122
D10-ETHYLBENZENE (sur.)	%	107	104	100	92		2422122
D4-1,2-DICHLOROETHANE (sur.)	%	93	93	93	89		2422122
D8-TOLUENE (sur.)	%	99	100	102	99		2422122
O-TERPHENYL (sur.)	%	95	94	98	92		2423297

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59152	K59153	K59154	K59155		
Sampling Date		2008/07/07	2008/07/07	2008/07/07	2008/07/06		
COC Number		31442	31442	31442	31442		
	Units	**TF9**	**TF10**	**TF11**	**STW1-A**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	13	6.8	12	13	0.3	2424298
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	920	410	25	5000	10	2423297
F3 (C16-C34 Hydrocarbons)	mg/kg	160	120	41	550	10	2423297
F4 (C34-C50 Hydrocarbons)	mg/kg	11	21	12	<10	10	2423297
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes		2423297
Volatiles							
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	2422122
Toluene	mg/kg	<0.020	<0.020	<0.020	1.0	0.020	2422122
Ethylbenzene	mg/kg	<0.010	0.053	<0.010	3.2	0.010	2422122
Xylenes (Total)	mg/kg	0.34	0.32	<0.040	17	0.040	2422122
m & p-Xylene	mg/kg	<0.040	0.18	<0.040	11	0.040	2422122
o-Xylene	mg/kg	0.34	0.14	<0.020	6.1	0.020	2422122
F1 (C6-C10) - BTEX	mg/kg	51	18	<12	890	12	2422122
(C6-C10)	mg/kg	52	18	<12	910	12	2422122
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	106	100	101	104		2422122
D10-ETHYLBENZENE (sur.)	%	104	104	100	107		2422122
D4-1,2-DICHLOROETHANE (sur.)	%	95	90	96	94		2422122
D8-TOLUENE (sur.)	%	100	102	100	99		2422122
O-TERPHENYL (sur.)	%	89	86	85	87		2423297

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59156	K59157		K59158		
Sampling Date		2008/07/06	2008/07/06		2008/07/06		
COC Number		31442	31442		31442		
	Units	**STW1-B**	**STW2-A**	**QC Batch**	**STW2-B**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	15	8.9	2424298	17	0.3	2423998
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	7900	8500	2423297	230	10	2422187
F3 (C16-C34 Hydrocarbons)	mg/kg	910	1100	2423297	<10	10	2422187
F4 (C34-C50 Hydrocarbons)	mg/kg	41	<10	2423297	36	10	2422187
Reached Baseline at C50	mg/kg	Yes	Yes	2423297	Yes		2422187
Volatiles							
Benzene	mg/kg	0.075	<0.0050	2422122	<0.0050	0.0050	2422133
Toluene	mg/kg	4.0	1.1	2422122	0.064	0.020	2422133
Ethylbenzene	mg/kg	5.7	2.6	2422122	0.083	0.010	2422133
Xylenes (Total)	mg/kg	26	14	2422122	0.47	0.040	2422133
m & p-Xylene	mg/kg	17	9.0	2422122	0.28	0.040	2422133
o-Xylene	mg/kg	9.3	5.5	2422122	0.19	0.020	2422133
F1 (C6-C10) - BTEX	mg/kg	1100	470	2422122	45	12	2422133
(C6-C10)	mg/kg	1100	490	2422122	45	12	2422133
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	106	98	2422122	97		2422133
D10-ETHYLBENZENE (sur.)	%	104	106	2422122	101		2422133
D4-1,2-DICHLOROETHANE (sur.)	%	94	91	2422122	101		2422133
D8-TOLUENE (sur.)	%	101	98	2422122	101		2422133
O-TERPHENYL (sur.)	%	86	91	2423297	67		2422187

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59159	K59160		K59163		
Sampling Date		2008/07/06	2008/07/06		2008/07/06		
COC Number		31442	31442		31442		
	Units	**STW3-A**	**STW3-B**	**RDL**	**STW4-A**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	7.1	13	0.3	15	0.3	2423998
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	3300	<10	10	9600	10	2422187
F3 (C16-C34 Hydrocarbons)	mg/kg	230	<10	10	930	10	2422187
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	10	160	10	2422187
Reached Baseline at C50	mg/kg	Yes	Yes		No		2422187
Volatiles							
Benzene	mg/kg	<0.0050	<0.0050	0.0050	0.097	0.0050	2422133
Toluene	mg/kg	1.1	<0.020	0.020	7.0	0.020	2422133
Ethylbenzene	mg/kg	2.1	<0.010	0.010	12	0.10	2422133
Xylenes (Total)	mg/kg	11	<0.040	0.040	58	0.40	2422133
m & p-Xylene	mg/kg	6.6	<0.040	0.040	37	0.40	2422133
o-Xylene	mg/kg	4.0	<0.020	0.020	21	0.20	2422133
F1 (C6-C10) - BTEX	mg/kg	570	<12	12	3700	12	2422133
(C6-C10)	mg/kg	580	<12	12	3800	12	2422133
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	116	98		107		2422133
D10-ETHYLBENZENE (sur.)	%	102	101		104		2422133
D4-1,2-DICHLOROETHANE (sur.)	%	99	97		95		2422133
D8-TOLUENE (sur.)	%	99	101		99		2422133
O-TERPHENYL (sur.)	%	75	73		70		2422187

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59164	K59166	K59167	K59168		
Sampling Date		2008/07/06	2008/07/07	2008/07/07	2008/07/07		
COC Number		31441	31441	31441	31441		
	Units	**STW4-B**	**STP1**	**STP2**	**CBM1**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	12	8.9	15	8.1	0.3	2423998
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	1000	1100	1800	<10	10	2422187
F3 (C16-C34 Hydrocarbons)	mg/kg	200	<10	49	<10	10	2422187
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	24	10	2422187
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes		2422187
Volatiles							
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	2422133
Toluene	mg/kg	<0.020	<0.020	0.35	<0.020	0.020	2422133
Ethylbenzene	mg/kg	<0.010	<0.010	0.91	<0.010	0.010	2422133
Xylenes (Total)	mg/kg	0.53	0.83	4.8	<0.040	0.040	2422133
m & p-Xylene	mg/kg	0.33	0.14	3.1	<0.040	0.040	2422133
o-Xylene	mg/kg	0.20	0.69	1.7	<0.020	0.020	2422133
F1 (C6-C10) - BTEX	mg/kg	31	92	210	<12	12	2422133
(C6-C10)	mg/kg	31	93	220	<12	12	2422133
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	97	105	109	96		2422133
D10-ETHYLBENZENE (sur.)	%	104	103	105	105		2422133
D4-1,2-DICHLOROETHANE (sur.)	%	92	94	94	94		2422133
D8-TOLUENE (sur.)	%	101	101	100	102		2422133
O-TERPHENYL (sur.)	%	72	78	79	76		2422187

RDL = Reportable Detection Limit

Maxxam Analytics Inc

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59169	K59170	K59171	K59172		
Sampling Date		2008/07/07	2008/07/07	2008/07/07	2008/07/07		
COC Number		31441	31441	31441	31441		
	Units	**UBEW-1A**	**UBEW-1B**	**UBEW-2A**	**UBEW-2B**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	8.4	11	22	8.0	0.3	2423998
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	4200	<10	490	670	10	2422187
F3 (C16-C34 Hydrocarbons)	mg/kg	280	<10	<10	<10	10	2422187
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	2422187
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes		2422187
Volatiles							
Benzene	mg/kg	0.015	<0.0050	<0.0050	<0.0050	0.0050	2422133
Toluene	mg/kg	1.6	<0.020	0.22	<0.020	0.020	2422133
Ethylbenzene	mg/kg	3.6	<0.010	0.37	<0.010	0.010	2422133
Xylenes (Total)	mg/kg	19	<0.040	2.3	<0.040	0.040	2422133
m & p-Xylene	mg/kg	12	<0.040	1.3	<0.040	0.040	2422133
o-Xylene	mg/kg	6.8	<0.020	1.1	<0.020	0.020	2422133
F1 (C6-C10) - BTEX	mg/kg	1300	<12	57	22	12	2422133
(C6-C10)	mg/kg	1400	<12	60	22	12	2422133
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	131	96	99	92		2422133
D10-ETHYLBENZENE (sur.)	%	105	105	110	102		2422133
D4-1,2-DICHLOROETHANE (sur.)	%	96	94	93	95		2422133
D8-TOLUENE (sur.)	%	100	100	103	100		2422133
O-TERPHENYL (sur.)	%	79	68	74	78		2422187

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

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Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59173	K59174	K59175	K59176		
Sampling Date		2008/07/06	2008/07/06	2008/07/06	2008/07/06		
COC Number		31441	31441	31441	31441		
	Units	**NTW1-A**	**NTW1-B**	**NTW2-A**	**NTW2-B**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	4.0	4.5	3.3	5.8	0.3	2423998
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	11	55	<10	<10	10	2422187
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	2422187
F4 (C34-C50 Hydrocarbons)	mg/kg	26	24	24	35	10	2422187
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes		2422187
Volatiles							
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	2422133
Toluene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	2422133
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	<0.010	0.010	2422133
Xylenes (Total)	mg/kg	<0.040	<0.040	<0.040	<0.040	0.040	2422133
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	0.040	2422133
o-Xylene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	2422133
F1 (C6-C10) - BTEX	mg/kg	<12	<12	<12	<12	12	2422133
(C6-C10)	mg/kg	<12	<12	<12	<12	12	2422133
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	97	91	100	98		2422133
D10-ETHYLBENZENE (sur.)	%	106	105	105	103		2422133
D4-1,2-DICHLOROETHANE (sur.)	%	94	96	95	94		2422133
D8-TOLUENE (sur.)	%	101	99	102	101		2422133
O-TERPHENYL (sur.)	%	77	70	80	79		2422187

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
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Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59177	K59179	K59180		
Sampling Date		2008/07/06	2008/07/06	2008/07/06		
COC Number		31440	31440	31440		
	Units	**NTW3-A**	**NTW3-B**	**WTW01-A**	**RDL**	**QC Batch**
Physical Properties						
Moisture	%	16	77	6.1	0.3	2423998
Ext. Pet. Hydrocarbon						
F2 (C10-C16 Hydrocarbons)	mg/kg	170	360	<10	10	2422187
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	<10	<10	10	2422187
F4 (C34-C50 Hydrocarbons)	mg/kg	43	160	54	10	2422187
Reached Baseline at C50	mg/kg	Yes	Yes	Yes		2422187
Volatiles						
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	0.0050	2422133
Toluene	mg/kg	<0.020	<0.020	<0.020	0.020	2422133
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	0.010	2422133
Xylenes (Total)	mg/kg	<0.040	<0.040	<0.040	0.040	2422133
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	0.040	2422133
o-Xylene	mg/kg	<0.020	<0.020	<0.020	0.020	2422133
F1 (C6-C10) - BTEX	mg/kg	<12	<12	<12	12	2422133
(C6-C10)	mg/kg	<12	<12	<12	12	2422133
Surrogate Recovery (%)						
4-BROMOFLUOROBENZENE (sur.)	%	91	91	91		2422133
D10-ETHYLBENZENE (sur.)	%	111	109	102		2422133
D4-1,2-DICHLOROETHANE (sur.)	%	95	97	95		2422133
D8-TOLUENE (sur.)	%	99	99	97		2422133
O-TERPHENYL (sur.)	%	78	74	79		2422187

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59181	K59182	K59183	K59184		
Sampling Date		2008/07/06	2008/07/06	2008/07/06	2008/07/06		
COC Number		31440	31440	31440	31440		
	Units	**WTW01-B**	**WTW01-C**	**WTW02-A**	**WTW02-B**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	9.1	13	8.8	16	0.3	2424264
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	100	<10	<10	<10	10	2423293
F3 (C16-C34 Hydrocarbons)	mg/kg	71	14	23	39	10	2423293
F4 (C34-C50 Hydrocarbons)	mg/kg	11	<10	<10	<10	10	2423293
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes		2423293
Volatiles							
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	2422204
Toluene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	2422204
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	<0.010	0.010	2422204
Xylenes (Total)	mg/kg	<0.040	<0.040	<0.040	<0.040	0.040	2422204
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	0.040	2422204
o-Xylene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	2422204
F1 (C6-C10) - BTEX	mg/kg	<12	<12	<12	<12	12	2422204
(C6-C10)	mg/kg	<12	<12	<12	<12	12	2422204
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	101	103	101	102		2422204
D10-ETHYLBENZENE (sur.)	%	104	105	104	106		2422204
D4-1,2-DICHLOROETHANE (sur.)	%	82	81	84	78		2422204
D8-TOLUENE (sur.)	%	103	102	101	104		2422204
O-TERPHENYL (sur.)	%	96	93	88	92		2423293

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59185	K59186	K59187		
Sampling Date		2008/07/06	2008/07/06	2008/07/06		
COC Number		31440	31440	31440		
	Units	**WTW03-A**	**WTW03-B**	**WTW04-A**	**RDL**	**QC Batch**
Physical Properties						
Moisture	%	7.7	13	8.2	0.3	2424264
Ext. Pet. Hydrocarbon						
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	10	2423293
F3 (C16-C34 Hydrocarbons)	mg/kg	23	35	54	10	2423293
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	27	10	2423293
Reached Baseline at C50	mg/kg	Yes	Yes	Yes		2423293
Volatiles						
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	0.0050	2422204
Toluene	mg/kg	<0.020	<0.020	<0.020	0.020	2422204
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	0.010	2422204
Xylenes (Total)	mg/kg	<0.040	<0.040	<0.040	0.040	2422204
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	0.040	2422204
o-Xylene	mg/kg	<0.020	<0.020	<0.020	0.020	2422204
F1 (C6-C10) - BTEX	mg/kg	<12	<12	<12	12	2422204
(C6-C10)	mg/kg	<12	<12	<12	12	2422204
Surrogate Recovery (%)						
4-BROMOFLUOROBENZENE (sur.)	%	102	102	105		2422204
D10-ETHYLBENZENE (sur.)	%	103	105	111		2422204
D4-1,2-DICHLOROETHANE (sur.)	%	83	87	83		2422204
D8-TOLUENE (sur.)	%	102	102	103		2422204
O-TERPHENYL (sur.)	%	92	86	99		2423293

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		K59188		
Sampling Date		2008/07/06		
COC Number		31440		
	Units	**WTW04-B**	**RDL**	**QC Batch**
Physical Properties				
Moisture	%	13	0.3	2423998
Ext. Pet. Hydrocarbon				
F2 (C10-C16 Hydrocarbons)	mg/kg	69	10	2422187
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	10	2422187
F4 (C34-C50 Hydrocarbons)	mg/kg	10	10	2422187
Reached Baseline at C50	mg/kg	Yes		2422187
Volatiles				
Benzene	mg/kg	<0.0050	0.0050	2422133
Toluene	mg/kg	<0.020	0.020	2422133
Ethylbenzene	mg/kg	<0.010	0.010	2422133
Xylenes (Total)	mg/kg	<0.040	0.040	2422133
m & p-Xylene	mg/kg	<0.040	0.040	2422133
o-Xylene	mg/kg	<0.020	0.020	2422133
F1 (C6-C10) - BTEX	mg/kg	<12	12	2422133
(C6-C10)	mg/kg	<12	12	2422133
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	92		2422133
D10-ETHYLBENZENE (sur.)	%	104		2422133
D4-1,2-DICHLOROETHANE (sur.)	%	96		2422133
D8-TOLUENE (sur.)	%	98		2422133
O-TERPHENYL (sur.)	%	83		2422187

RDL = Reportable Detection Limit

Maxxam Job #: A833658
Report Date: 2008/07/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		K59163		
Sampling Date		2008/07/06		
COC Number		31442		
	Units	**STW4-A**	**RDL**	**QC Batch**
OIL & GREASE				
F4G (Heavy Hydrocarbons - Grav.)	mg/kg	540	500	2435414

RDL = Reportable Detection Limit

AT1 BTEX AND F1-F4 IN SOIL (SOIL) Comments

Sample K59182-01 CCME Hydrocarbons (F2-F4 in soil): Sample extracted with rotomixer instead of mechanical extractor due to the presence of rocks in matrix.

Sample K59185-01 CCME Hydrocarbons (F2-F4 in soil): Sample extracted with rotomixer instead of mechanical extractor due to the presence of rocks in matrix.

Sample K59187-01 CCME Hydrocarbons (F2-F4 in soil): Sample extracted with rotomixer instead of mechanical extractor due to the presence of rocks in matrix.

Sample K59130-01 BTEX/F1 by HS GC/MS (MeOH extract): Duplicates do not match due sample being non-homogenous.

Sample K59140-01 BTEX/F1 by HS GC/MS (MeOH extract): RDL Raised due to sample dilution.

Sample K59163-01 BTEX/F1 by HS GC/MS (MeOH extract): RDL raised due to sample dilution.

Results relate only to the items tested.

EBA ENGINEERING CONSULTANTS LTD.
Attention: AILEEN STEVENS
Client Project #: Y22101066 NIPISAR LAKE
P.O. #:
Site Reference: RANKIN INLET, NUNAVUT

Quality Assurance Report

Maxxam Job Number: EA833658

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
2422122	DR3	MATRIX SPIKE						
		[K59136-01]	4-BROMOFLUOROBENZENE (sur.)	2008/07/11		98	%	60 - 140
			D10-ETHYLBENZENE (sur.)	2008/07/11		102	%	30 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2008/07/11		97	%	60 - 140
			D8-TOLUENE (sur.)	2008/07/11		98	%	60 - 140
			Benzene	2008/07/11		94	%	60 - 140
			Toluene	2008/07/11		115	%	60 - 140
			Ethylbenzene	2008/07/11		131	%	60 - 140
			m & p-Xylene	2008/07/11		NC	%	60 - 140
			o-Xylene	2008/07/11		NC	%	60 - 140
			(C6-C10)	2008/07/11		NC	%	60 - 140
		SPIKE	4-BROMOFLUOROBENZENE (sur.)	2008/07/10		97	%	60 - 140
			D10-ETHYLBENZENE (sur.)	2008/07/10		101	%	30 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2008/07/10		96	%	60 - 140
			D8-TOLUENE (sur.)	2008/07/10		101	%	60 - 140
			Benzene	2008/07/10		94	%	60 - 140
			Toluene	2008/07/10		102	%	60 - 140
			Ethylbenzene	2008/07/10		104	%	60 - 140
			m & p-Xylene	2008/07/10		100	%	60 - 140
			o-Xylene	2008/07/10		98	%	60 - 140
			(C6-C10)	2008/07/10		96	%	80 - 120
		BLANK	4-BROMOFLUOROBENZENE (sur.)	2008/07/10		101	%	60 - 140
			D10-ETHYLBENZENE (sur.)	2008/07/10		104	%	30 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2008/07/10		95	%	60 - 140
			D8-TOLUENE (sur.)	2008/07/10		101	%	60 - 140
			Benzene	2008/07/10	<0.0050		mg/kg	
			Toluene	2008/07/10	<0.020		mg/kg	
			Ethylbenzene	2008/07/10	<0.010		mg/kg	
			Xylenes (Total)	2008/07/10	<0.040		mg/kg	
			m & p-Xylene	2008/07/10	<0.040		mg/kg	
			o-Xylene	2008/07/10	<0.020		mg/kg	
			F1 (C6-C10) - BTEX	2008/07/10	<12		mg/kg	
			(C6-C10)	2008/07/10	<12		mg/kg	
		RPD [K59130-01]	Benzene	2008/07/10	NC		%	50
			Toluene	2008/07/10	NC		%	50
			Ethylbenzene	2008/07/10	69.5 (1)		%	50
			Xylenes (Total)	2008/07/10	62.6 (1)		%	50
			m & p-Xylene	2008/07/10	71.4 (1)		%	50
			o-Xylene	2008/07/10	46.9		%	50
			F1 (C6-C10) - BTEX	2008/07/10	2.1		%	50
			(C6-C10)	2008/07/10	4.3		%	50
2422133	HW4	MATRIX SPIKE						
		[K59159-01]	4-BROMOFLUOROBENZENE (sur.)	2008/07/10		117	%	60 - 140
			D10-ETHYLBENZENE (sur.)	2008/07/10		105	%	30 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2008/07/10		93	%	60 - 140
			D8-TOLUENE (sur.)	2008/07/10		100	%	60 - 140
			Benzene	2008/07/10		99	%	60 - 140
			Toluene	2008/07/10		NC	%	60 - 140
			Ethylbenzene	2008/07/10		NC	%	60 - 140
			m & p-Xylene	2008/07/10		NC	%	60 - 140
			o-Xylene	2008/07/10		NC	%	60 - 140
			(C6-C10)	2008/07/10		NC	%	60 - 140
		SPIKE	4-BROMOFLUOROBENZENE (sur.)	2008/07/10		97	%	60 - 140
			D10-ETHYLBENZENE (sur.)	2008/07/10		100	%	30 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2008/07/10		101	%	60 - 140

EBA ENGINEERING CONSULTANTS LTD.
Attention: AILEEN STEVENS
Client Project #: Y22101066 NIPISAR LAKE
P.O. #:
Site Reference: RANKIN INLET, NUNAVUT

Quality Assurance Report (Continued)

Maxxam Job Number: EA833658

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
2422133	HW4	SPIKE	D8-TOLUENE (sur.)	2008/07/10		99	%	60 - 140
			Benzene	2008/07/10		102	%	60 - 140
			Toluene	2008/07/10		92	%	60 - 140
			Ethylbenzene	2008/07/10		102	%	60 - 140
			m & p-Xylene	2008/07/10		102	%	60 - 140
			o-Xylene	2008/07/10		98	%	60 - 140
			(C6-C10)	2008/07/10		93	%	80 - 120
		BLANK	4-BROMOFLUOROBENZENE (sur.)	2008/07/10		94	%	60 - 140
			D10-ETHYLBENZENE (sur.)	2008/07/10		107	%	30 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2008/07/10		102	%	60 - 140
			D8-TOLUENE (sur.)	2008/07/10		100	%	60 - 140
			Benzene	2008/07/10	<0.0050		mg/kg	
			Toluene	2008/07/10	<0.020		mg/kg	
			Ethylbenzene	2008/07/10	<0.010		mg/kg	
			Xylenes (Total)	2008/07/10	<0.040		mg/kg	
			m & p-Xylene	2008/07/10	<0.040		mg/kg	
			o-Xylene	2008/07/10	<0.020		mg/kg	
			F1 (C6-C10) - BTEX	2008/07/10	<12		mg/kg	
			(C6-C10)	2008/07/10	<12		mg/kg	
		RPD [K59158-01]	Benzene	2008/07/10	NC		%	50
			Toluene	2008/07/10	NC		%	50
			Ethylbenzene	2008/07/10	23.7		%	50
			Xylenes (Total)	2008/07/10	40.0		%	50
			m & p-Xylene	2008/07/10	NC		%	50
			o-Xylene	2008/07/10	42.3		%	50
			F1 (C6-C10) - BTEX	2008/07/10	NC		%	50
			(C6-C10)	2008/07/10	NC		%	50
2422187	KW2	MATRIX SPIKE [K59159-01]	O-TERPHENYL (sur.)	2008/07/10		77	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/10		NC	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2008/07/10		79	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2008/07/10		85	%	50 - 130
		SPIKE	O-TERPHENYL (sur.)	2008/07/10		76	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/10		82	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2008/07/10		82	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2008/07/10		86	%	80 - 120
		BLANK	O-TERPHENYL (sur.)	2008/07/10		82	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/10	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2008/07/10	<10		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2008/07/10	<10		mg/kg	
		RPD [K59158-01]	F2 (C10-C16 Hydrocarbons)	2008/07/10	23.7		%	50
			F3 (C16-C34 Hydrocarbons)	2008/07/10	NC		%	50
			F4 (C34-C50 Hydrocarbons)	2008/07/10	NC		%	50
2422204	JM7	MATRIX SPIKE	4-BROMOFLUOROBENZENE (sur.)	2008/07/09		105	%	60 - 140
			D10-ETHYLBENZENE (sur.)	2008/07/09		114	%	30 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2008/07/09		86	%	60 - 140
			D8-TOLUENE (sur.)	2008/07/09		104	%	60 - 140
			Benzene	2008/07/09		93	%	60 - 140
			Toluene	2008/07/09		104	%	60 - 140
			Ethylbenzene	2008/07/09		110	%	60 - 140
			m & p-Xylene	2008/07/09		116	%	60 - 140
			o-Xylene	2008/07/09		109	%	60 - 140
			(C6-C10)	2008/07/09		68	%	60 - 140
		SPIKE	4-BROMOFLUOROBENZENE (sur.)	2008/07/09		104	%	60 - 140
			D10-ETHYLBENZENE (sur.)	2008/07/09		108	%	30 - 130

EBA ENGINEERING CONSULTANTS LTD.
Attention: AILEEN STEVENS
Client Project #: Y22101066 NIPISAR LAKE
P.O. #:
Site Reference: RANKIN INLET, NUNAVUT

Quality Assurance Report (Continued)

Maxxam Job Number: EA833658

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
2422204	JM7	SPIKE	D4-1,2-DICHLOROETHANE (sur.)	2008/07/09		91	%	60 - 140
			D8-TOLUENE (sur.)	2008/07/09		102	%	60 - 140
			Benzene	2008/07/09		96	%	60 - 140
			Toluene	2008/07/09		105	%	60 - 140
			Ethylbenzene	2008/07/09		111	%	60 - 140
			m & p-Xylene	2008/07/09		116	%	60 - 140
			o-Xylene	2008/07/09		110	%	60 - 140
			(C6-C10)	2008/07/09		86	%	80 - 120
		BLANK	4-BROMOFLUOROBENZENE (sur.)	2008/07/09		102	%	60 - 140
			D10-ETHYLBENZENE (sur.)	2008/07/09		111	%	30 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2008/07/09		91	%	60 - 140
			D8-TOLUENE (sur.)	2008/07/09		101	%	60 - 140
			Benzene	2008/07/09	<0.0050		mg/kg	
			Toluene	2008/07/09	<0.020		mg/kg	
			Ethylbenzene	2008/07/09	<0.010		mg/kg	
			Xylenes (Total)	2008/07/09	<0.040		mg/kg	
			m & p-Xylene	2008/07/09	<0.040		mg/kg	
			o-Xylene	2008/07/09	<0.020		mg/kg	
			F1 (C6-C10) - BTEX	2008/07/09	<12		mg/kg	
			(C6-C10)	2008/07/09	<12		mg/kg	
		RPD	Benzene	2008/07/09	NC		%	50
			Toluene	2008/07/09	NC		%	50
			Ethylbenzene	2008/07/09	NC		%	50
			Xylenes (Total)	2008/07/09	NC		%	50
			m & p-Xylene	2008/07/09	NC		%	50
			o-Xylene	2008/07/09	NC		%	50
			F1 (C6-C10) - BTEX	2008/07/09	NC		%	50
			(C6-C10)	2008/07/09	NC		%	50
2423293	KW2	MATRIX SPIKE	O-TERPHENYL (sur.)	2008/07/14		59	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/14		84	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2008/07/14		76	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2008/07/14		72	%	50 - 130
		SPIKE	O-TERPHENYL (sur.)	2008/07/14		59	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/14		100	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2008/07/14		92	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2008/07/14		83	%	80 - 120
		BLANK	O-TERPHENYL (sur.)	2008/07/14		92	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/14	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2008/07/14	<10		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2008/07/14	<10		mg/kg	
		RPD	F2 (C10-C16 Hydrocarbons)	2008/07/14	38.7		%	50
			F3 (C16-C34 Hydrocarbons)	2008/07/14	47.9		%	50
			F4 (C34-C50 Hydrocarbons)	2008/07/14	NC		%	50
2423297	JT7	MATRIX SPIKE						
		[K59136-01]	O-TERPHENYL (sur.)	2008/07/10		80	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/10		NC	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2008/07/10		84	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2008/07/10		87	%	50 - 130
		SPIKE	O-TERPHENYL (sur.)	2008/07/10		76	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/10		93	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2008/07/10		96	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2008/07/10		104	%	80 - 120
		BLANK	O-TERPHENYL (sur.)	2008/07/10		95	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/10	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2008/07/10	<10		mg/kg	

EBA ENGINEERING CONSULTANTS LTD.
Attention: AILEEN STEVENS
Client Project #: Y22101066 NIPISAR LAKE
P.O. #:
Site Reference: RANKIN INLET, NUNAVUT

Quality Assurance Report (Continued)

Maxxam Job Number: EA833658

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
2423297	JT7	BLANK	F4 (C34-C50 Hydrocarbons)	2008/07/10	<10		mg/kg	
		RPD [K59130-01]	F2 (C10-C16 Hydrocarbons)	2008/07/10	6.9		%	50
			F3 (C16-C34 Hydrocarbons)	2008/07/10	8.9		%	50
			F4 (C34-C50 Hydrocarbons)	2008/07/10	NC		%	50
2423998	RT1	BLANK	Moisture	2008/07/10	<0.3		%	
		RPD [K59158-01]	Moisture	2008/07/10	10.1		%	20
2424264	RT1	BLANK	Moisture	2008/07/10	<0.3		%	
		RPD	Moisture	2008/07/10	8.0		%	20
2424298	RT1	BLANK	Moisture	2008/07/10	<0.3		%	
		RPD [K59130-01]	Moisture	2008/07/10	12.8		%	20
2435414	JR1	SPIKE	F4G (Heavy Hydrocarbons - Grav.)	2008/07/15		93	%	N/A
		BLANK	F4G (Heavy Hydrocarbons - Grav.)	2008/07/15	<500		mg/kg	
		RPD	F4G (Heavy Hydrocarbons - Grav.)	2008/07/15	NC		%	50

N/A = Not Applicable
NC = Non-calculable
RPD = Relative Percent Difference
(1) Please note that the recovery of some compounds are outside control limits however the overall quality control for this analysis meets our acceptability criteria.

Your Project #: Y22101066 NIPISAR LAKE
Site: RANKIN INLET, NUNAVUT
Your C.O.C. #: 31444

Attention: AILEEN STEVENS
EBA ENGINEERING CONSULTANTS LTD.
#201, 4916 - 49 Street
P.O. Box 2244
YELLOWKNIFE, NT
CANADA X1A-2P7

Report Date: 2008/07/10

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A833596
Received: 2008/07/09, 8:25

Sample Matrix: Water
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/F1 in Water by HS GC/MS	8	N/A	2008/07/09	EENVSOP-00004 EENVSOP-00002	EPA 8260C / CCME
BTEX/F1 in Water by HS GC/MS	2	N/A	2008/07/10	EENVSOP-00004 EENVSOP-00002	EPA 8260C / CCME
CCME Hydrocarbons in Water (F2; C10-C16)	10	2008/07/09	2008/07/09	EENVSOP-00009 EENVSOP-00008	EPA 8015D/3510C

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

Encryption Key

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

JEREMY WAKARUK, B.Sc. Biology, Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
Phone# (780) 577-7105 Ext:7105

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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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 1

Maxxam Analytics Inc

Maxxam Job #: A833596
Report Date: 2008/07/10

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F2 (WATER)

Maxxam ID		K58861	K58862	K58863	K58864		
Sampling Date		2008/07/06	2008/07/06	2008/07/06	2008/07/06		
COC Number		31444	31444	31444	31444		
	Units	**LW1**	**LW2**	**LW3**	**LW4**	**RDL**	**QC Batch**
Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	2420572
Volatiles							
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	2420573
Toluene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	2420573
Ethylbenzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	2420573
o-Xylene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	2420573
m & p-Xylene	ug/L	<0.8	<0.8	<0.8	<0.8	0.8	2420573
Xylenes (Total)	ug/L	<0.8	<0.8	<0.8	<0.8	0.8	2420573
F1 (C6-C10) - BTEX	ug/L	<100	<100	<100	<100	100	2420573
(C6-C10)	ug/L	<100	<100	<100	<100	100	2420573
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	96	105	105	98		2420573
D4-1,2-DICHLOROETHANE (sur.)	%	83	105	102	81		2420573
D8-TOLUENE (sur.)	%	97	102	102	99		2420573
O-TERPHENYL (sur.)	%	105	105	107	106		2420572

RDL = Reportable Detection Limit

Maxxam Analytics Inc

Maxxam Job #: A833596
Report Date: 2008/07/10

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F2 (WATER)

Maxxam ID		K58865	K58866	K58867	K58868		
Sampling Date		2008/07/06	2008/07/06	2008/07/06	2008/07/06		
COC Number		31444	31444	31444	31444		
	Units	**LW5**	**PHA1**	**PHA2**	**PHA3**	**RDL**	**QC Batch**
Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	mg/L	<0.1	<0.1	<0.1	<0.1	0.1	2420572
Volatiles							
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	2420573
Toluene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	2420573
Ethylbenzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	2420573
o-Xylene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	2420573
m & p-Xylene	ug/L	<0.8	<0.8	<0.8	<0.8	0.8	2420573
Xylenes (Total)	ug/L	<0.8	<0.8	<0.8	<0.8	0.8	2420573
F1 (C6-C10) - BTEX	ug/L	<100	<100	<100	<100	100	2420573
(C6-C10)	ug/L	<100	<100	<100	<100	100	2420573
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	107	108	109	107		2420573
D4-1,2-DICHLOROETHANE (sur.)	%	103	99	106	102		2420573
D8-TOLUENE (sur.)	%	100	100	101	103		2420573
O-TERPHENYL (sur.)	%	106	105	105	102		2420572

RDL = Reportable Detection Limit

Maxxam Job #: A833596
Report Date: 2008/07/10

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET, NUNAVUT
Sampler Initials: KL

AT1 BTEX AND F1-F2 (WATER)

Maxxam ID		K58869	K58870		
Sampling Date		2008/07/06	2008/07/06		
COC Number		31444	31444		
	Units	**PHA4**	**PHA5**	**RDL**	**QC Batch**
Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	mg/L	<0.1	<0.1	0.1	2420572
Volatiles					
Benzene	ug/L	<0.4	<0.4	0.4	2420573
Toluene	ug/L	<0.4	<0.4	0.4	2420573
Ethylbenzene	ug/L	<0.4	<0.4	0.4	2420573
o-Xylene	ug/L	<0.4	<0.4	0.4	2420573
m & p-Xylene	ug/L	<0.8	<0.8	0.8	2420573
Xylenes (Total)	ug/L	<0.8	<0.8	0.8	2420573
F1 (C6-C10) - BTEX	ug/L	<100	<100	100	2420573
(C6-C10)	ug/L	<100	<100	100	2420573
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	106	105		2420573
D4-1,2-DICHLOROETHANE (sur.)	%	97	108		2420573
D8-TOLUENE (sur.)	%	106	103		2420573
O-TERPHENYL (sur.)	%	106	106		2420572

RDL = Reportable Detection Limit

General Comments

Results relate only to the items tested.

EBA ENGINEERING CONSULTANTS LTD.
Attention: AILEEN STEVENS
Client Project #: Y22101066 NIPISAR LAKE
P.O. #:
Site Reference: RANKIN INLET, NUNAVUT

Quality Assurance Report

Maxxam Job Number: EA833596

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
2420572	KO	MATRIX SPIKE	O-TERPHENYL (sur.)	2008/07/09		105	%	70 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/09		86	%	70 - 130
		SPIKE	O-TERPHENYL (sur.)	2008/07/10		108	%	70 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/10		91	%	80 - 120
		BLANK	O-TERPHENYL (sur.)	2008/07/09		104	%	70 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/09	<0.1		mg/L	
		RPD	F2 (C10-C16 Hydrocarbons)	2008/07/10	57.2 (1)		%	40
2420573	RI3	MATRIX SPIKE						
		[K58862-01]	4-BROMOFLUOROBENZENE (sur.)	2008/07/09		96	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2008/07/09		105	%	70 - 130
			D8-TOLUENE (sur.)	2008/07/09		110	%	70 - 130
			Benzene	2008/07/09		105	%	70 - 130
			Toluene	2008/07/09		109	%	70 - 130
			Ethylbenzene	2008/07/09		105	%	70 - 130
			o-Xylene	2008/07/09		100	%	70 - 130
			m & p-Xylene	2008/07/09		99	%	70 - 130
			(C6-C10)	2008/07/09		85	%	70 - 130
		SPIKE	4-BROMOFLUOROBENZENE (sur.)	2008/07/09		97	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2008/07/09		98	%	70 - 130
			D8-TOLUENE (sur.)	2008/07/09		111	%	70 - 130
			Benzene	2008/07/09		104	%	70 - 130
			Toluene	2008/07/09		107	%	70 - 130
			Ethylbenzene	2008/07/09		106	%	70 - 130
			o-Xylene	2008/07/09		101	%	70 - 130
			m & p-Xylene	2008/07/09		99	%	70 - 130
			(C6-C10)	2008/07/09		91	%	80 - 120
		BLANK	4-BROMOFLUOROBENZENE (sur.)	2008/07/09		107	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2008/07/09		95	%	70 - 130
			D8-TOLUENE (sur.)	2008/07/09		105	%	70 - 130
			Benzene	2008/07/09	<0.4		ug/L	
			Toluene	2008/07/09	<0.4		ug/L	
			Ethylbenzene	2008/07/09	<0.4		ug/L	
			o-Xylene	2008/07/09	<0.4		ug/L	
			m & p-Xylene	2008/07/09	<0.8		ug/L	
			Xylenes (Total)	2008/07/09	<0.8		ug/L	
			F1 (C6-C10) - BTEX	2008/07/09	<100		ug/L	
			(C6-C10)	2008/07/09	<100		ug/L	
		RPD [K58861-01]	Benzene	2008/07/10	NC		%	40
			Toluene	2008/07/10	NC		%	40
			Ethylbenzene	2008/07/10	NC		%	40
			o-Xylene	2008/07/10	NC		%	40
			m & p-Xylene	2008/07/10	NC		%	40
			Xylenes (Total)	2008/07/10	NC		%	40
			F1 (C6-C10) - BTEX	2008/07/10	NC		%	40
			(C6-C10)	2008/07/10	NC		%	40

NC = Non-calculable
RPD = Relative Percent Difference
(1) Please note that the recovery of some compounds are outside control limits however the overall quality control for this analysis meets our acceptability criteria.

Your Project #: Y22101066 NIPISAR LAKE
Site: RANKIN INLET
Your C.O.C. #: 58265

Attention: KYLE LEVAC
EBA ENGINEERING CONSULTANTS LTD.
#201, 4916 - 49 Street
P.O. Box 2244
YELLOWKNIFE, NT
CANADA X1A-2P7

Report Date: 2008/08/15

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A840417
Received: 2008/08/11, 8:10

Sample Matrix: Soil
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/F1 by HS GC/MS (MeOH extract)	8	2008/08/11	2008/08/12	EENVSOP-00005 EENVSOP-00002	EPA 8260C / CCME
CCME Hydrocarbons (F2-F4 in soil)	8	2008/08/11	2008/08/12	EENVSOP-00007 EENVSOP-00006	CWS PHCS Tier 1
Moisture	8	N/A	2008/08/11	EENVSOP-00139	Carter SSMA 51.2

* Results relate only to the items tested.

Encryption Key

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

JEREMY WAKARUK, B.Sc., Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
Phone# (780) 577-7105 Ext:7105

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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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 1

Maxxam Job #: A840417
Report Date: 2008/08/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		L05685	L05686		L05687		
Sampling Date		2008/08/01	2008/08/01		2008/08/02		
	Units	TF1	TF2	QC Batch	TF3	RDL	QC Batch
Physical Properties							
Moisture	%	15	14	2496669	14	0.3	2496669
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	12	13	2498797	13	10	2498808
F3 (C16-C34 Hydrocarbons)	mg/kg	11	12	2498797	29	10	2498808
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	2498797	78	10	2498808
Reached Baseline at C50	mg/kg	YES	YES	2498797	YES		2498808
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	92	95	2498797	65		2498808
Volatiles							
Benzene	mg/kg	<0.0050	<0.0050	2497896	<0.0050	0.0050	2497896
Toluene	mg/kg	<0.020	<0.020	2497896	<0.020	0.020	2497896
Ethylbenzene	mg/kg	<0.010	<0.010	2497896	<0.010	0.010	2497896
Xylenes (Total)	mg/kg	<0.040	<0.040	2497896	<0.040	0.040	2497896
m & p-Xylene	mg/kg	<0.040	<0.040	2497896	<0.040	0.040	2497896
o-Xylene	mg/kg	<0.020	<0.020	2497896	<0.020	0.020	2497896
F1 (C6-C10) - BTEX	mg/kg	<12	<12	2497896	<12	12	2497896
(C6-C10)	mg/kg	<12	<12	2497896	<12	12	2497896
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	80	99	2497896	96		2497896
D10-ETHYLBENZENE (sur.)	%	97	106	2497896	99		2497896
D4-1,2-DICHLOROETHANE (sur.)	%	91	88	2497896	92		2497896
D8-TOLUENE (sur.)	%	96	97	2497896	94		2497896

RDL = Reportable Detection Limit

Maxxam Analytics Inc
Maxxam Job #: A840417
Report Date: 2008/08/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET
Sampler Initials: KL

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		L05688	L05689	L05690		L05691	L05692		
Sampling Date		2008/08/02	2008/08/02	2008/08/02		2008/08/02	2008/08/01		
	Units	**TF4**	**TF5**	**TF6**	**QC Batch**	**TF7**	**DUP3**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	18	14	19	2496669	4.1	15	0.3	2500862
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	2498797	150	15	10	2498797
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	<10	12	2498797	64	11	10	2498797
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	2498797	<10	<10	10	2498797
Reached Baseline at C50	mg/kg	YES	YES	YES	2498797	YES	YES		2498797
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	104	111	104	2498797	102	104		2498797
Volatiles									
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	2497896	<0.0050	<0.0050	0.0050	2497896
Toluene	mg/kg	<0.020	<0.020	<0.020	2497896	<0.020	<0.020	0.020	2497896
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	2497896	<0.010	<0.010	0.010	2497896
Xylenes (Total)	mg/kg	<0.040	<0.040	<0.040	2497896	<0.040	<0.040	0.040	2497896
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	2497896	<0.040	<0.040	0.040	2497896
o-Xylene	mg/kg	<0.020	<0.020	<0.020	2497896	<0.020	<0.020	0.020	2497896
F1 (C6-C10) - BTEX	mg/kg	<12	<12	<12	2497896	<12	<12	12	2497896
(C6-C10)	mg/kg	<12	<12	<12	2497896	<12	<12	12	2497896
Surrogate Recovery (%)									
4-BROMOFLUOROBENZENE (sur.)	%	95	96	95	2497896	96	96		2497896
D10-ETHYLBENZENE (sur.)	%	102	99	102	2497896	101	103		2497896
D4-1,2-DICHLOROETHANE (sur.)	%	93	92	96	2497896	87	88		2497896
D8-TOLUENE (sur.)	%	95	95	94	2497896	97	96		2497896

RDL = Reportable Detection Limit

Maxxam Analytics Inc

Maxxam Job #: A840417
Report Date: 2008/08/15

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET
Sampler Initials: KL

QUALITY ASSURANCE REPORT

			Matrix Spike		Spike		Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
2496669	Moisture	2008/08/11					<0.3	%	3.3	20
2497896	4-BROMOFLUOROBENZENE (sur.)	2008/08/12	93	60 - 140	85	60 - 140	82	%		
2497896	D10-ETHYLBENZENE (sur.)	2008/08/12	104	30 - 130	96	30 - 130	95	%		
2497896	D4-1,2-DICHLOROETHANE (sur.)	2008/08/12	101	60 - 140	94	60 - 140	91	%		
2497896	D8-TOLUENE (sur.)	2008/08/12	95	60 - 140	95	60 - 140	95	%		
2497896	Benzene	2008/08/12	99	60 - 140	89	60 - 140	<0.0050	mg/kg	NC	50
2497896	Toluene	2008/08/12	89	60 - 140	84	60 - 140	<0.020	mg/kg	NC	50
2497896	Ethylbenzene	2008/08/12	97	60 - 140	92	60 - 140	<0.010	mg/kg	NC	50
2497896	m & p-Xylene	2008/08/12	88	60 - 140	89	60 - 140	<0.040	mg/kg	NC	50
2497896	o-Xylene	2008/08/12	94	60 - 140	87	60 - 140	<0.020	mg/kg	NC	50
2497896	(C6-C10)	2008/08/12	86	60 - 140	90	80 - 120	<12	mg/kg	NC	50
2497896	Xylenes (Total)	2008/08/12					<0.040	mg/kg	NC	50
2497896	F1 (C6-C10) - BTEX	2008/08/12					<12	mg/kg	NC	50
2498797	O-TERPHENYL (sur.)	2008/08/12	95	50 - 130	95	50 - 130	101	%		
2498797	F2 (C10-C16 Hydrocarbons)	2008/08/12	90	50 - 130	100	80 - 120	<10	mg/kg	NC	50
2498797	F3 (C16-C34 Hydrocarbons)	2008/08/12	88	50 - 130	95	80 - 120	<10	mg/kg	NC	50
2498797	F4 (C34-C50 Hydrocarbons)	2008/08/12	84	50 - 130	113	80 - 120	<10	mg/kg	NC	50
2498808	O-TERPHENYL (sur.)	2008/08/12	68	50 - 130	99	50 - 130	67	%		
2498808	F2 (C10-C16 Hydrocarbons)	2008/08/12	62	50 - 130	101	80 - 120	<10	mg/kg	NC	50
2498808	F3 (C16-C34 Hydrocarbons)	2008/08/12	62	50 - 130	99	80 - 120	<10	mg/kg	NC	50
2498808	F4 (C34-C50 Hydrocarbons)	2008/08/12	67	50 - 130	101	80 - 120	<10	mg/kg	NC	50
2500862	Moisture	2008/08/11					<0.3	%	3.1	20

N/A = Not Applicable
NC = Non-calculable
RPD = Relative Percent Difference

Your Project #: Y22101066 NIPISAR LAKE
Site: RANKIN INLET
Your C.O.C. #: 58264

Attention: KYLE LEVAC
EBA ENGINEERING CONSULTANTS LTD.
#201, 4916 - 49 Street
P.O. Box 2244
YELLOWKNIFE, NT
CANADA X1A-2P7

Report Date: 2008/08/12

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A840397
Received: 2008/08/11, 8:10

Sample Matrix: Water
Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/F1 in Water by HS GC/MS	12	N/A	2008/08/11	EENVSOP-00004 EENVSOP-00002	EPA 8260C / CCME
CCME Hydrocarbons in Water (F2; C10-C16)	12	2008/08/11	2008/08/11	EENVSOP-00009 EENVSOP-00008	EPA 8015D/3510C

* Results relate only to the items tested.

Encryption Key

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

JEREMY WAKARUK, B.Sc., Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
Phone# (780) 577-7105 Ext:7105

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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. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 1

Maxxam Analytics Inc

Maxxam Job #: A840397
Report Date: 2008/08/12

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET
Sampler Initials: KL

AT1 BTEX AND F1-F2 (WATER)

Maxxam ID		L05553	L05555	L05556	L05557	L05558	L05559		
Sampling Date		2008/08/01	2008/08/01	2008/08/01	2008/08/01	2008/08/01	2008/08/01		
	Units	**TW1**	**TW2**	**PH1**	**PH2**	**PH3**	**PH4**	**RDL**	**QC Batch**
Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	mg/L	<0.1	1.9	<0.1	<0.1	<0.1	<0.1	0.1	2496184
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	109	106	109	106	106	106		2496184
Volatiles									
Benzene	ug/L	<0.4	1.3	<0.4	<0.4	<0.4	<0.4	0.4	2496351
Toluene	ug/L	<0.4	10	<0.4	<0.4	<0.4	<0.4	0.4	2496351
Ethylbenzene	ug/L	<0.4	9.0	<0.4	<0.4	<0.4	<0.4	0.4	2496351
o-Xylene	ug/L	<0.4	18	<0.4	<0.4	<0.4	<0.4	0.4	2496351
m & p-Xylene	ug/L	<0.8	34	<0.8	<0.8	<0.8	<0.8	0.8	2496351
Xylenes (Total)	ug/L	<0.8	52	<0.8	<0.8	<0.8	<0.8	0.8	2496351
F1 (C6-C10) - BTEX	ug/L	<100	450	<100	<100	<100	<100	100	2496351
(C6-C10)	ug/L	<100	530	<100	<100	<100	<100	100	2496351
Surrogate Recovery (%)									
4-BROMOFLUOROBENZENE (sur.)	%	102	89	103	99	101	100		2496351
D4-1,2-DICHLOROETHANE (sur.)	%	115	106	107	112	111	105		2496351
D8-TOLUENE (sur.)	%	99	101	97	97	101	92		2496351

RDL = Reportable Detection Limit

Maxxam Analytics Inc

Maxxam Job #: A840397
Report Date: 2008/08/12

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET
Sampler Initials: KL

AT1 BTEX AND F1-F2 (WATER)

Maxxam ID		L05560	L05561	L05562	L05563	L05564	L05565		
Sampling Date		2008/08/01	2008/08/01	2008/07/30	2008/07/30	2008/07/30	2008/07/30		
	Units	**PH5**	**DUP3**	**LW1**	**LW2**	**LW3**	**LW4**	**RDL**	**QC Batch**
Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	2496184
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	108	114	104	108	110	109		2496184
Volatiles									
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4	2496351
Toluene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4	2496351
Ethylbenzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4	2496351
o-Xylene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4	2496351
m & p-Xylene	ug/L	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	0.8	2496351
Xylenes (Total)	ug/L	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	0.8	2496351
F1 (C6-C10) - BTEX	ug/L	<100	<100	<100	<100	<100	<100	100	2496351
(C6-C10)	ug/L	<100	<100	<100	<100	<100	<100	100	2496351
Surrogate Recovery (%)									
4-BROMOFLUOROBENZENE (sur.)	%	95	99	98	101	100	100		2496351
D4-1,2-DICHLOROETHANE (sur.)	%	105	109	101	122	121	111		2496351
D8-TOLUENE (sur.)	%	98	97	100	91	88	100		2496351

RDL = Reportable Detection Limit

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET
Sampler Initials: KL

Package 1	10.3°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

Maxxam Analytics Inc

Maxxam Job #: A840397
Report Date: 2008/08/12

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: Y22101066 NIPISAR LAKE
Site Reference: RANKIN INLET
Sampler Initials: KL

QUALITY ASSURANCE REPORT

			Matrix Spike		Spike		Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
2496184	O-TERPHENYL (sur.)	2008/08/11	110	70 - 130	112	70 - 130	103	%		
2496184	F2 (C10-C16 Hydrocarbons)	2008/08/11	NC	70 - 130	98	80 - 120	<0.1	mg/L	NC	40
2496351	4-BROMOFLUOROBENZENE (sur.)	2008/08/11	86	70 - 130	99	70 - 130	97	%		
2496351	D4-1,2-DICHLOROETHANE (sur.)	2008/08/11	109	70 - 130	93	70 - 130	95	%		
2496351	D8-TOLUENE (sur.)	2008/08/11	99	70 - 130	106	70 - 130	99	%		
2496351	Benzene	2008/08/11	102	70 - 130	95	70 - 130	<0.4	ug/L	NC	40
2496351	Toluene	2008/08/11	103	70 - 130	107	70 - 130	<0.4	ug/L	NC	40
2496351	Ethylbenzene	2008/08/11	101	70 - 130	101	70 - 130	<0.4	ug/L	NC	40
2496351	o-Xylene	2008/08/11	102	70 - 130	104	70 - 130	<0.4	ug/L	NC	40
2496351	m & p-Xylene	2008/08/11	102	70 - 130	104	70 - 130	<0.8	ug/L	NC	40
2496351	(C6-C10)	2008/08/11	89	70 - 130	100	80 - 120	<100	ug/L	NC	40
2496351	Xylenes (Total)	2008/08/11					<0.8	ug/L	NC	40
2496351	F1 (C6-C10) - BTEX	2008/08/11					<100	ug/L	NC	40

N/A = Not Applicable
NC = Non-calculable
RPD = Relative Percent Difference

APPENDIX

APPENDIX C GENERAL CONDITIONS

ENVIRONMENTAL REPORT – GENERAL CONDITIONS

This report incorporates and is subject to these "General Conditions".

1.0 USE OF REPORT

This 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 those to which it refers. Any variation from the site or proposed development would necessitate a supplementary investigation and assessment.

This report and the assessments and recommendations contained in it are intended for the sole use of EBA's client. 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 EBA's client unless otherwise authorized in writing by 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 EBA. Additional copies of the report, if required, may be obtained upon request.

2.0 LIMITATIONS OF REPORT

This report is based solely on the conditions which existed on site at the time of EBA's investigation. The client, and any other parties using this report with the express written consent of the client and EBA, acknowledge that conditions affecting the environmental assessment of the site can vary with time and that the conclusions and recommendations set out in this report are time sensitive.

The client, and any other party using this report with the express written consent of the client and EBA, also acknowledge that the conclusions and recommendations set out in this report are based on limited observations and testing on the subject site and that conditions may vary across the site which, in turn, could affect the conclusions and recommendations made.

The client acknowledges that EBA is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the client.

2.1 INFORMATION PROVIDED TO EBA BY OTHERS

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

3.0 LIMITATION OF LIABILITY

The client recognizes that property containing contaminants and hazardous wastes creates a high risk of claims brought by third parties arising out of the presence of those materials. In consideration of these risks, and in consideration of EBA providing the services requested, the client agrees that EBA's liability to the client, with respect to any issues relating to contaminants or other hazardous wastes located on the subject site shall be limited as follows:

1. With respect to any claims brought against EBA by the client arising out of the provision or failure to provide services hereunder shall be limited to the amount of fees paid by the client to EBA under this Agreement, whether the action is based on breach of contract or tort;
2. With respect to claims brought by third parties arising out of the presence of contaminants or hazardous wastes on the subject site, the client agrees to indemnify, defend and hold harmless EBA from and against any and all claim or claims, action or actions, demands, damages, penalties, fines, losses, costs and expenses of every nature and kind whatsoever, including solicitor-client costs, arising or alleged to arise either in whole or part out of services provided by EBA, whether the claim be brought against EBA for breach of contract or tort.

4.0 JOB SITE SAFETY

EBA is only responsible for the activities of its employees on the job site and is not responsible for the supervision of any other persons whatsoever. The presence of EBA personnel on site shall not be construed in any way to relieve the client or any other persons on site from their responsibility for job site safety.

5.0 DISCLOSURE OF INFORMATION BY CLIENT

The client agrees to fully cooperate with EBA with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The client acknowledges that in order for EBA to properly provide the service, EBA is relying upon the full disclosure and accuracy of any such information.

6.0 STANDARD OF CARE

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

7.0 EMERGENCY PROCEDURES

The client undertakes to inform EBA of all hazardous conditions, or possible hazardous conditions which are known to it. The client recognizes that the activities of EBA may uncover previously unknown hazardous materials or conditions and that such discovery may result in the necessity to undertake emergency procedures to protect EBA employees, other persons and the environment. These procedures may involve additional costs outside of any budgets previously agreed upon. The client agrees to pay EBA for any expenses incurred as a result of such discoveries and to compensate EBA through payment of additional fees and expenses for time spent by EBA to deal with the consequences of such discoveries.

8.0 NOTIFICATION OF AUTHORITIES

The client acknowledges that in certain instances the discovery of hazardous substances or conditions and materials may require that regulatory agencies and other persons be informed and the client agrees that notification to such bodies or persons as required may be done by EBA in its reasonably exercised discretion.

9.0 OWNERSHIP OF INSTRUMENTS OF SERVICE

The client acknowledges that all reports, plans, and data generated by EBA during the performance of the work and other documents prepared by EBA are considered its professional work product and shall remain the copyright property of EBA.

10.0 ALTERNATE REPORT FORMAT

Where EBA submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed EBA's instruments of professional service), the Client agrees that only the signed and sealed hard copy versions shall be considered final and legally binding. The hard copy versions submitted by EBA shall be the original documents for record and working purposes, and, in the event of a dispute or discrepancies, the hard copy versions shall govern over the electronic versions. Furthermore, the Client agrees and waives all future right of dispute that the original hard copy signed version archived by EBA shall be deemed to be the overall original for the Project.

The Client agrees that both electronic file and hard copy versions of EBA's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except EBA. The Client warrants that EBA's instruments of professional service will be used only and exactly as submitted by EBA.

The Client recognizes and agrees that electronic files submitted by EBA have been prepared and submitted using specific software and hardware systems. EBA makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.