

Public Works and Government Services Canada (PWGSC)
on behalf of
Indian and Northern Affairs Canada (INAC)
Contaminants and Remediation Directorate (CARD)

SITE SUPERVISION FOR REMEDIATION AND CLEAN-UP
JOHNSON POINT STAGING FACILITY
JOHNSON POINT, NORTHWEST TERRITORIES

1740199

January 2007

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1.0 INTRODUCTION

1.1 GENERAL

Public Works and Government Services Canada (PWGSC) on behalf of Indian and Northern Affairs Canada (INAC), Contaminants and Remediation Directorate (CARD), retained EBA Engineering Consultants Ltd. (EBA) to assist PWGSC for General Site Supervision and Contract Administration Services for the Johnson Point product incineration and tank cleaning work. The subject site is located at Johnson Point, located about 270 kms northeast of Sachs Harbour, Northwest Territories (NT).

PWGSC directly retained Arctic Environmental Services Ltd. (AES) for the fuel incineration and tank cleaning services under a separate contract.

1.2 AUTHORIZATION

This project was undertaken as per PWGSC Contract No. E0211-060028/001/NCS dated July 11, 2006. On-site activities were completed under Water License No. N7L1-1814 and Land Use Permit Number N2006J0024, provided in Appendix A of this report.

1.3 SCOPE OF WORK

The Resident Site Engineer will inspect, coordinate and monitor all aspects of the work during the on-site work and liaise with the PWGSC Project Manager. Specifically, the scope of work can be summarized as follows:

- Monitor the progress of Contractor's work, compliance with all drawings and specifications, time schedules, quality standards, permits (Land, Water Use, and Inuvialuit Owned Land), and progress reports.
- Convey instructions regarding the required standards of workmanship to the Contractor.
- Refer to Specifications, confer and obtain guidance on these findings for the PWGSC Project Manager and then bring the matter to the attention of the Contractor.
- Communicate formally with the Contractor via memorandum form only, and file copies with the PWGSC Project Manager.
- Provide inspection of all aspects of the project, maintaining daily records of all work including photographic records.
- Attend meetings as required by the Project Manager.
- Review reports on Health and Safety strategies for each stage of the work.
- Review and process shop drawings.

- Provide detailed drawings, clarification instruction, Contemplated Change Notices, Task Authorizations and Change Orders as required to PWGSC Project Manager and/or Contractor.
- Review testing methods, data of inspection/testing agencies.
- Report on Contractors maintaining specified quality and schedules, ensuring that Contractors are monitoring delivery of critical materials and equipment.
- Consider and evaluate any suggestions or modifications to the documents advanced by the Contractor and immediately report these to PWGSC Project Manager with comments.
- Ensure that the PWGSC Project Manager is notified promptly when key pieces and/or components of materials and equipment are delivered, so that these parties can arrange for the appropriate personnel to have an opportunity to inspect prior to installation.
- Review and make recommendations on progress claims from the contractor.
- Verify quantities of materials received and record work progress through photographs.
- Issue interim and final deficiency reports.
- Finalize project documentation and accounts.
- Assist (if required) in release of holdback upon satisfactory completion.
- Prepare and submit as-built drawings and specifications.
- Prepare final reports based on requirements defined in the Land and Water Use Permits.
- Other reporting as per regulatory agencies.
- Overall quality assurance.
- Ensure appropriate health and safety standards are followed.
- Notify the PWGSC Project Manager if any human/archaeological remains and items of historical or scientific interests are found.
- Attend meetings as required, record the issues and decisions and prepare and distribute minutes to all attendees within two (2) days of the meeting.
- Keep a daily log recording relevant information such as weather, major equipment and material deliveries, daily activities and major work done, start/stop/completion of activities, presence of inspection of testing firms/tests/results, unusual site conditions experienced, significant developments/remarks, special visitors on-site, environmental incidents, stop work requests, etc.

- Prepare weekly reports indicating progress, major activities commencing /completed/in progress, major deliveries of equipment/materials, number of Inuvialuit employees working at the site, any difficulties encountered, materials and labour needed immediately, cost estimates of work completed and materials delivered, accidents, etc.
- Review Contractor's project schedule and provide PWGSC Project Manager with comments, discrepancies, etc.
- Monitor budget/cash flow requirements, and review value of progress of work against the approved cost breakdown.
- Forward the shop drawings for review to the PWGSC Project Manager, record problems and identify agreed remedial action. Monitor and record the progress of shop drawing review.
- Record Contractor's acknowledgement of receipt of all site instructions, ensure and record that required action does not have an impact on cost or schedule.
- As the work is based on unit prices, measure and record the quantities for verification of monthly progress claims and the final certificate of measurement.
- Conduct daily inspections to assess quality, defects and deficiencies; inform PWGSC Project Manager of the progress; measure quantities, etc.
- Review test reports, take necessary action when work fails to comply with Contract requirements, advise PWGSC Project Manager accordingly, and also assist PWGSC Project Manager in evaluating testing firm's invoices.
- Prepare Contemplated Change Notices (CCN), quotations, reviews and issue Change Orders (CO) and Task Authorization (TA).
- Submit monthly progress claims for work and materials as required in the Contract and submit appropriate forms as required.
- Conduct Interim Inspection to verify that all items are correctly stated ensuring that completed documents and any supporting documents are given to the PWGSC Project Manager for processing.
- Inform PWGSC Project Manager when satisfied that all work under the Remediation Contract has been completed, including all deficiency items listed during the Interim Inspection.
- At the end of the project, obtain/check/verify as-built marked-up hard copy from the Contractor for areas that show significant deviations from the original Contract drawings, including changes shown on Post-Contract Drawings, changes resulting from Change Orders or from On-Site Instructions or Task Authorizations. Provide a complete set of final shop drawings and list of changes to specifications.

2.0 BACKGROUND INFORMATION

The Johnson Point site, located 270 kms northeast of Sachs Harbour, was originally established as a staging/support area for oil and exploration for the north end of Banks Island in the 1970s. The site has been abandoned since the late 1970s when new regulatory/permitting processes were implemented. The site is still visited by the Inuvialuit for polar bear, seal and musk ox hunts. A number of exploration/mining companies may use the airstrip that is located on the site and may still use the site as a staging area for exploration further inland. INAC records show there are no current mineral leases/claims at Johnson Point.

Johnson Point is situated at 118 degrees, 30'00" Latitude; 72 degrees 45'10" Longitude and encompasses approximately 2.5 square kilometres. The terrain consists of low rolling plains covered with highly weathered soil and rock debris and little vegetation. Infrastructure found at the site consists of 19 vertical POL tanks, six horizontal POL tanks, five fuel sloops, various sumps/lagoons, roadways, a drum stockpile, and a 5,000 foot unmaintained gravel airstrip. During site visits in 2005, approximately half the airstrip was considered usable due to a wash out in one section.

Johnson Point is located on Crown land within the broader Inuvialuit Settlement Region and falls under the Inuvialuit Final Agreement. The site is remote with principle access by air for personnel supplies and equipment. The nearest communities are Sachs Harbour and Ulukhaktok (formerly Holman).

3.0 FIELDWORK

3.1 GENERAL

AES incinerated approximately 120,000 L of fuel over the course of the project. The fuel came from the storage tanks and 45-gallon drums left at various locations on the site, and from the fuel supply pipeline leading from the beach to the tank farm. AES cleaned all of the known tanks and drums on-site and treated the washwater and burned the recovered sludge material associated with this activity.

The sections below describe in more detail the key aspects of the project, including:

- Fuel Incineration
- Tank Cleaning
- Sludge Incineration
- Pipeline Cleaning and Cutting
- Barrel Cleaning and Crushing
- Incineration of Clean Wood Products around the site
- Cutting and Remediation of Former Powerline

- Baseline and Exit Sampling
- Sump Sampling

EBA compiled weekly reports during the field work. These are provided in Appendix B of this report.

Upon project completion, AES provided a Site Summary Report, which is in Appendix F of this report.

3.2 FUEL INCINERATION

AES incinerated approximately 120,000 L of fuel for this project. Fuel burning commenced on July 14, 2006 at 9 pm. Major fuel burning operations were complete by July 28, 2006. Some residual fuel, associated with the tank cleaning and pipe cleaning operations was also incinerated after July 28, 2006.

EBA estimates that approximately 44,000 L of fuel was burned to 11:15 am, July 20, 2006 with an additional 76,000 L of fuel burned after July 20, 2006. EBA was unable to accurately quantify the volume of fuel burned after July 20, 2006 due to a malfunction of AES's fuel pump meter.

The source of fuel incinerated for this project was as follows:

- Diesel fuel from the seven silver upright tanks located near the tank farm.
- Diesel fuel from the red upright tanks and silver bolted upright tanks located inside the tank farm.
- Diesel fuel from the 45-gallon drums stored near the tank farm, which were moved to this location by AES for burning from other areas of the site.
- Suspected varsol stored in 20-gallon drums inside the maintenance shed.
- Diesel fuel and aviation fuel products from the airstrip, including Aviation Gas, Jet-A, and Jet-B
- Five-gallon pails of motor oil and varsol from the airstrip drum dump and from other areas of the site

Waste oil was not encountered on-site.

3.3 TANK CLEANING

AES completed final cleaning of the tank farm tanks on July 23, 2006. Six of the tanks had liners and did not require cleaning. One of the lined tanks (Tank #18) had liquid (water) inside its bladder, and the bladder needed to be pumped out. The rest of the lined tanks did not have fuel or water inside them. AES commenced steam cleaning of the silver vertical tanks located outside the tankfarm and commenced repeated flushing of the 500-gallon tanks during the last week of the project, beginning July 29, 2006 and including July 28, 2006.

The following activities were completed prior to the commencement of tank cleaning operations:

Tank Farm Tanks:

- Removal of access doors and side panels from the silver bolted upright tanks inside the tank farm to ventilate the tanks prior to entry by site personnel for cleaning.
- Opening of access doors on the red-upright tanks inside the tank farm. The doors were left open for several days and the tanks pumped dry of fuel/water. Once the 10% Low Explosive Limit (LEL) was achieved the red-upright tanks were entered and cleaned by a confined space entry expert.
- Final cleaning and closing of the tanks inside the tank farm. Water associated with the cleaning of these tanks was treated and stored in the tank farm sump.
- Scrubbing and brushing of sludge material from around the bolts on the lower walls and base of the tanks inside the tank farm. The upper walls of the tanks did not require cleaning.
- Final cleaning of sludge from the base of the tanks inside the tank farm, using bags of sawdust and absorbent material to soak up rust slops and residual diesel.

Tanks from other areas:

- Removal of access doors from the silver vertical tanks located outside the tank farm and steam-cleaning of the tanks with water. Water associated with the cleaning of these tanks was treated and stored in the tank farm sump.
- Repeated flushing of 500 gallon tanks with approximately 500 gallons of water per tank. Water associated with the cleaning of these tanks was treated and stored in the tank farm sump.

3.4 SLUDGE INCINERATION

Bags of sawdust and absorbent material used to soak up sludge from the base of the tank farm tanks and from the bottom of the silver vertical tanks located outside the tank farm were burned in the camp's garbage incinerator.

3.5 PIPELINE CLEANING AND CUTTING

AES dismantled the fuel supply line during the first two weeks of the project. The fuel-supply line extended from the beach to the tank farm. AES also dismantled the associated pipeline piping located inside the tank farm. Fuel recovered from the pipeline was stored in tanks and 45-gallon drums, and incinerated using the fuel burner.

AES steam-cleaned the cut sections of the pipe-line, and treated the associated wash-water during the last week of the project beginning July 29, 2006.

3.6 BARREL CLEANING AND CRUSHING

During the second week of the project, AES steam-cleaned the 45-gallon drums collected from the site over a large plastic container installed inside the tank farm. Wastewater associated with this activity was treated and stored in the tank farm sump. AES later consolidated and crushed the empty drums using an INAC-supplied drum crusher.

3.7 INCINERATION OF CLEAN WOOD PRODUCTS AROUND THE SITE

During the first week of the project, AES collected garbage and untreated wood and wood products from the trailers and other structures on-site. The material was burned using a single-stage-burn garbage incinerator located at the air-strip. The garbage incinerator was also used to burn camp-only garbage, including sewage and solid waste from the toilet facilities.

3.8 CUTTING AND DECOMMISSIONING OF FORMER POWERLINE

AES cut down 55 poles before Mr. Allen's arrival on site. The poles were cut down and stacked for burning/future use or disposal. They used some of these poles to support the tents. Details of this task are in AES Site Summary Report, provided in Appendix F of this report.

3.9 BASELINE AND EXIT SAMPLING

Figure 2, attached with this report, shows the relative locations of six burn areas. Figures 3 to 8 show sampling IDs of each of the six burn locations (EBA06, EBA06-1, EBA06-2, EBA06-3, EBA06-4, and EBA06-5).

For each of the burn locations, six sampling points were identified; one sampling point directly below the burner, one sampling point either side of the burner, and four sampling points downwind of the burner in line with the prevalent wind direction.

Surficial soil samples were collected from each of these six sampling points (a) before and (b) after burning of fuel. These samples were submitted to Maxxam Analytics Inc. (Maxxam) for hydrocarbon analysis. One duplicate sample was also submitted from each of the burn locations.

The sampling points are identified in a certain pattern as explained below:

- “EBA06-5NW0NE - 0 - 0.1 m” means
 - Burn location 1 (EBA06)
 - 5 m northwest and 0 m northeast from burn point
 - Sample depth from surface to 0.1 m below grade
- “EBA06-1-5NW0NE - 0 - 0.1 m” means
 - Burn location 2 (EBA06-1)

- 5 m northwest and 0 m northeast from burn point
- Sample depth from surface to 0.1 m below grade

The sample identifications, sampling dates and hydrocarbon concentrations are tabulated and inserted in Appendix C of this report.

It should be noted that except for one sample, all the final soil samples had hydrocarbon concentrations below the most stringent Canadian Council of Ministers of the Environment (CCME) coarse-grained soil criteria.

One sample (sampling ID: EBA06-SSE05W - 0 - 0.1 m) had F3 concentration of 695 ppm on July 15, 2006 (baseline) and 882 ppm on July 23, 2006 (end of burning).

This information will feed into the detailed site assessment completed for the site and will be considered for remediation.

3.10 WASTEWATER

Numerous water samples were collected from Sump B (tank farm area) and treated grey water sump by EBA and AES during July and August 2006. These samples were submitted to Maxxam and ALS Environmental (ALS) for testing of BTEX, oil and grease, mineral oil and grease and surfactants. The results are tabulated in Table 1 (next page). Detailed analytical results are in Appendix D.

It should be noted that both oil and grease and mineral oil and grease were tested. The difference between the oil and grease and mineral oil and grease test is that in the latter test, there is a silica gel clean-up setup that is conducted, which removes naturally occurring organics that may be present. Silica gel clean-up (in mineral oil and grease test) removes animal and vegetable fats, decaying organic matter and other non-petroleum organic substances.

TABLE 1: WASTEWATER DATA

Description	Grey Water (Treated)						Sump B (Tank Farm Area)			
	EBA - Maxxam	EBA - Maxxam after confirmation	EBA - ALS	AES - ALS	EBA - Maxxam	EBA - ALS	EBA - ALS	AES - ALS	EBA - ALS	EBA - Maxxam
Sampling Date	July 24, 2006	July 24, 2006	July 28, 2006	Aug. 1, 2006*	Aug. 12, 2006	Aug 12, 2006	July 28, 2006	Aug. 1, 2006*	Aug. 12, 2006	Aug. 12, 2006
Benzene (mg/L)	<0.0005	<0.0005	-	-	-	-	<0.0005	<0.0005	-	-
Toluene (mg/L)	<0.0005	<0.0005	-	-	-	-	0.0006	<0.0005	-	-
Ethylbenzene (mg/L)	<0.0005	<0.0005	-	-	-	-	0.0017	0.0012	-	-
Xylenes (mg/L)	<0.001	<0.001	-	-	-	-	0.020	0.016	-	-
Oil and grease (mg/L)	47	14	66	50	-	-	10	4	<5	18
Mineral oil and grease (mg/L)	-	-	-	-	<5	<5	-	-	<5	<5
Surfactants (LAS)	-	-	-	-	-	1.0	-	-	-	-

*Sample receipt data at ALS Laboratories.

Upon notification and submission of the various water quality results documented in Table 1, Mr. Rob Walker of INAC advised Ms. Emma Pike of INAC on August 17, 2006, that wastewater from the grey water sump could be discharged immediately. No real concerns were identified with respect to the smaller sump as long as it goes through the same treatment process and considering the low volume.

Both sources of wastewater were treated through separate activated carbon column. Wastewater was retained in lined sumps during storage (until authorized to release). Wastewater was discharged August 16 to 18, 2006, as per Water License. The discharge locations are provided in AES Summary Report (attached in Appendix F).

4.0 REGULATORY

4.1 WILDLIFE OBSERVATIONS

The following observations were made by the camp's wildlife officers over the course of the project. Their observations are recorded in the daily wildlife logs for the site. EBA also understands that one of the wild-life monitors was requested to submit a report describing wildlife in the area to the Hunters and Trappers Committee (HTC) at the end of the project. The wildlife logs have been included in the AES Site Summary Report, attached as Appendix F of this report.

Some of the wildlife observed by Mr. Allen included:

- Birds - Old Squaws, Seagulls, Red-Throated Loons, Sandpipers, Eider Ducks, Common Loons, Red Phalopoe, Long Tailed Jager, Golden Plover, Arctic Terns, Snow Buntings, Tundra Swans
- Seals (Bearded Seals, Ringed Seals)
- Artic Foxes
- Musk Oxen
- Arctic Wolves

4.2 WATER

Drinking Water

Water was drawn from the adjacent unnamed river with the end pipe fit with a fish screen. Potable water was then treated through a reverse osmosis unit. AES collected and submitted a drinking water sample from the reverse osmosis drinking water treatment system on July 19, 2006. The sample was shipped to Maxxam in Yellowknife for potable water analysis. As expected, the 24-hour holding time for this analysis was not met. AES therefore assessed the results in terms of a zero bacteria count for the sample. EBA did not have the opportunity to review this laboratory report. Prior to receiving the results, bottled drinking water was used by AES for drinking and cooking at the site. Lab results of water samples are in AES Summary Report (attached in Appendix F of this report).

Water Inake

As per AES report (attached in Appendix F), about 1,000 litres of water per day was used over a period of 40 days. This amounts to about 40,000 litres total use. AES was in compliance with the water license issued for this project by the Northwest Territories Water Board, in accordance with the Northwest Territories Waters Act (N7L1-1814). A copy of the water license is in Appendix A of this report.

As per the water license, the daily quantity of water used for all purposes did not exceed 100 m³. Daily water take records for the site during the first two weeks of the project are in Table 2 as follows:

TABLE 2: WATER INTAKE RECORDS

Date	Daily Water Intake (m ³)	Quantity of Water Not to be Exceeded (m ³)
14-Jul-06	0.91	100
15-Jul-06	0.91	100
16-Jul-06	0.45	100
17-Jul-06	0.68	100
18-Jul-06	0.68	100
19-Jul-06	0.91	100
20-Jul-06	0.91	100
21-Jul-06	0.45	100
22-Jul-06	1.30	100
23-Jul-06	4.09	100
24-Jul-06	0.00	100
25-Jul-06	1.82	100
26-Jul-06	1.82	100
27-Jul-06	3.18	100
28-Jul-06	0.91	100

4.3 LAND

The wastewater discharge and activities associated with the discharge were completed in compliance with the land use permit (Land Use Permit Number N2006J0024) issued for this project by INAC.

4.4 ENVIRONMENTAL INCIDENTS / ACCIDENTS

Fuel Spills

There were several minor spills (<2 L) observed during the dismantling of the fuel supply line. EBA also observed a spill of <40 L on July 23, 2006. Although this spill was not reportable (<100 L), it was nevertheless reported to the government on July 24, 2006 (Northwest Territories Spill Report – File Number: 06-293). A copy of the Spill Report is provided in Appendix E.

The nearest water body to the spill was an unnamed lake located approximately 20 m to the south of the pipeline. In addition, the spill was contained by a natural depression and did not move more than 0.5 m from the spill location.

AES were not able to gain access to the area with a Bob Cat on the day of the spill. The ground near the spill was too soft and consisted of soft wet sand.

Air Emissions

Garbage Incinerator

A single-stage-burn garbage incinerator was in use at the site near the airstrip. EBA observed thick black intermittent smoke from the garbage incinerator; usually at the start of the burn. In at least one case, the smoke was due to the burning of plastic bags containing hydrocarbon soaked sawdust and absorbent material from the tank cleaning operation. In other cases, the smoking appeared to be related to the burning of rubber, wet blankets, and other incompatible material. Burning of this material was avoided by AES once it was realized that this material and the garbage incinerator were incompatible. The material was instead stored inside one of the bladdered tanks inside the tank farm for later disposal.

Fuel Burner

EBA also observed smoke from three fires on the ground directly below the burners at burner location 2 (two fires) and 5 (one fire). These fires were related to the operation of the fuel burner and involved small volumes of fuel (<2 L) catching alight as they left the fuel burner nozzle. The fires occurred on the ground only, below the burner, and were soon put out.

Pipeline

A ground fire was also observed beside the fuel-supply pipeline where absorbent material had been used to contain an area of pooled diesel (< 2 L) that had dripped from the pipeline over several days. This material was ignited three to four days later by sparks from a cut-off saw on July 23, 2006, but was quickly brought under control. Danger of hot works was communicated to site personnel and was subsequently more closely monitored and managed.

4.5 HEALTH AND SAFETY INCIDENTS / ACCIDENTS

Incidents / Accidents

Four minor safety incidents / accidents were reported over the course of the project and were recorded in the medic's logs as follows:

- Small finger cut. The cut did not require stitches and no time was lost.
- Sand particle in eye. The employee in question was using an ATV when the incident occurred. He was wearing his safety glasses and a helmet with a visor at the time. The employee was fully paid during one day of recovery process.

- Rash on the back of a worker's hand. The rash was unrelated to the job site.
- Minor pinching of a worker's finger resulting from the moving of empty drums.

AES was advised to report incidents to Workers Compensation Board (WCB) as appropriate. The medic's logs have not been included in this report, but are available upon request from AES.

Near Miss

A near miss also occurred in the second week of the project. No injuries occurred, but there was potential for a serious injury to have occurred as a result of this incident. As per AES's Health and Safety Plan, AES investigated the incident and prepared internal records of the incident. The incident occurred while the operator was using the forks of a Bob Cat to lift tank number 64 off the rear of its sleigh trailer unit near the airstrip. The toe bar on the trailer unit dropped down and went through the window of the Bob Cat, narrowly missing the operator. AES subsequently lowered all other tow hitches on site so a similar mishap would not occur in the future.

5.0 CONTRACTUAL REQUIREMENTS

5.1 ABORIGINAL STAFFING

The percentage of aboriginal employees on-site and under the employ of AES each day ranged from 73% to 77% with 60% remaining on July 29, the day following the completion of major operations. Details are included in the AES Site Summary Report (attached in Appendix F of this report).

6.0 TERMS AND CONDITIONS

For further limitations, reference should be made to the General Conditions in Appendix G.

7.0 CLOSURE

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


EBA Engineering Consultants Ltd.




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/ln




Jan 30, 2007

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Project Director, NWT/Nunavut
Direct Line: 867.766.3728 x121
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PERMIT TO PRACTICE EBA ENGINEERING CONSULTANTS LTD.
Signature 
Date <u>January 30, 2007</u>
PERMIT NUMBER: P 018
The Association of Professional Engineers, Geologists and Geophysicists of the NWT / NU



FIGURES



CLIENT

Public Works and
Government Services
Canada

EBA Engineering
Consultants Ltd.



**SITE SUPERVISION FOR REMEDIATION AND CLEAN-UP
JOHNSON POINT STAGING FACILITY
JOHNSON POINT, NWT**

Site Plan

PROJECT NO./FILE NO.
1740199
1740199C01a.cdr

OFFICE
EBA-EDM

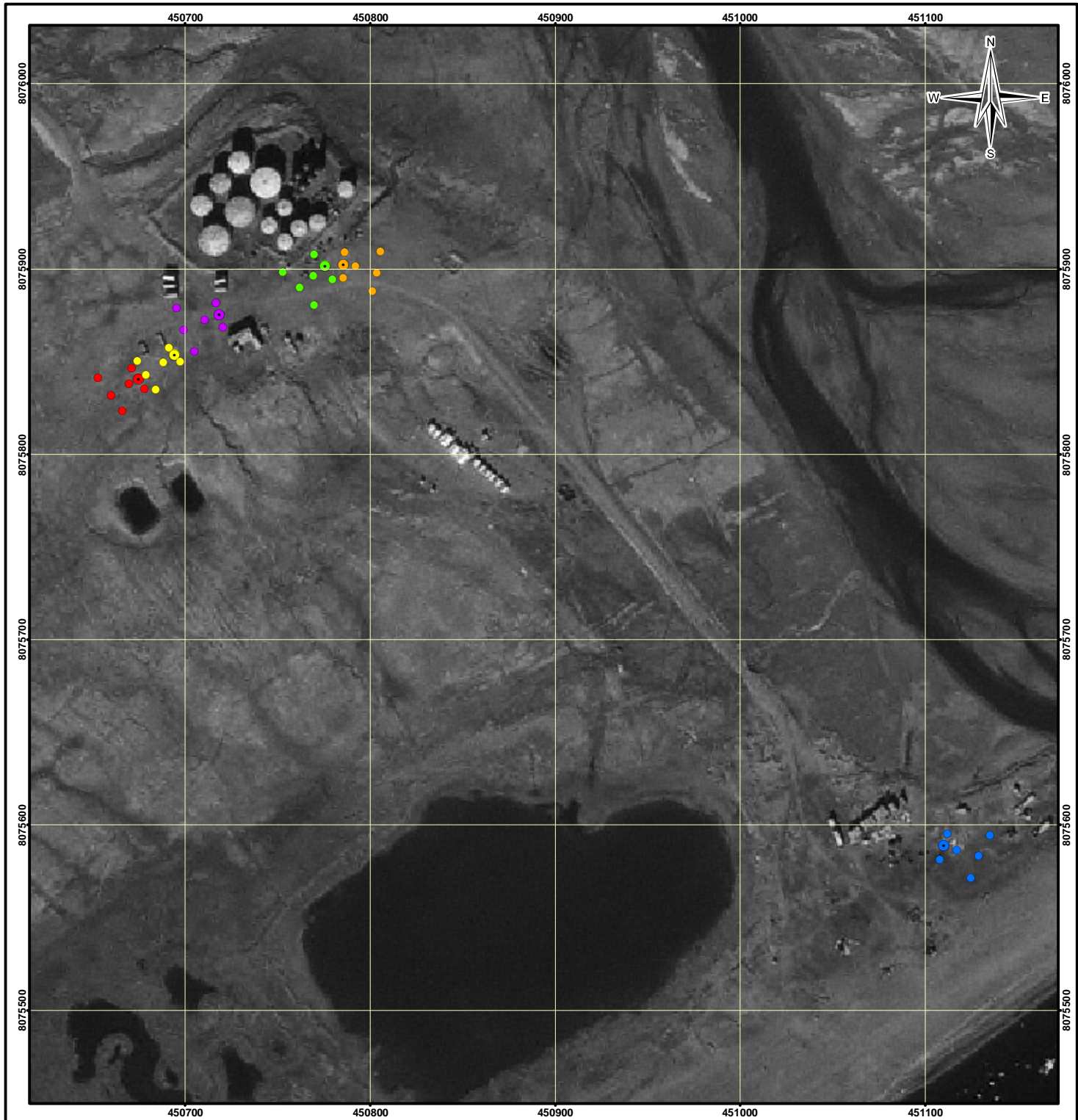
DWN
CLS

CKD
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REV
1

DATE
October 2006

Figure 1



LEGEND

- | | |
|-------------------|-----------------------------------|
| ● Burn Location 1 | ● Burn Location 1 Sample Location |
| ● Burn Location 2 | ● Burn Location 2 Sample Location |
| ● Burn Location 3 | ● Burn Location 3 Sample Location |
| ● Burn Location 4 | ● Burn Location 4 Sample Location |
| ● Burn Location 5 | ● Burn Location 5 Sample Location |
| ● Burn Location 6 | ● Burn Location 6 Sample Location |

NOTES

Base data source: Indian and Northern Affairs Canada

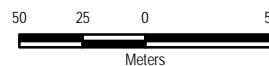
SITE SUPERVISION FOR REMEDIATION AND CLEANUP, JOHNSON POINT, NORTHWEST TERRITORIES

Burn Locations

PROJECTION
Universal Transverse Mercator

DATUM
NAD83

Scale: 1:3,000



FILE NO.
Figure_BurnLocations

PROJECT NO.

1740199

DWN

JLB

CKD

DD

REV

1

OFFICE

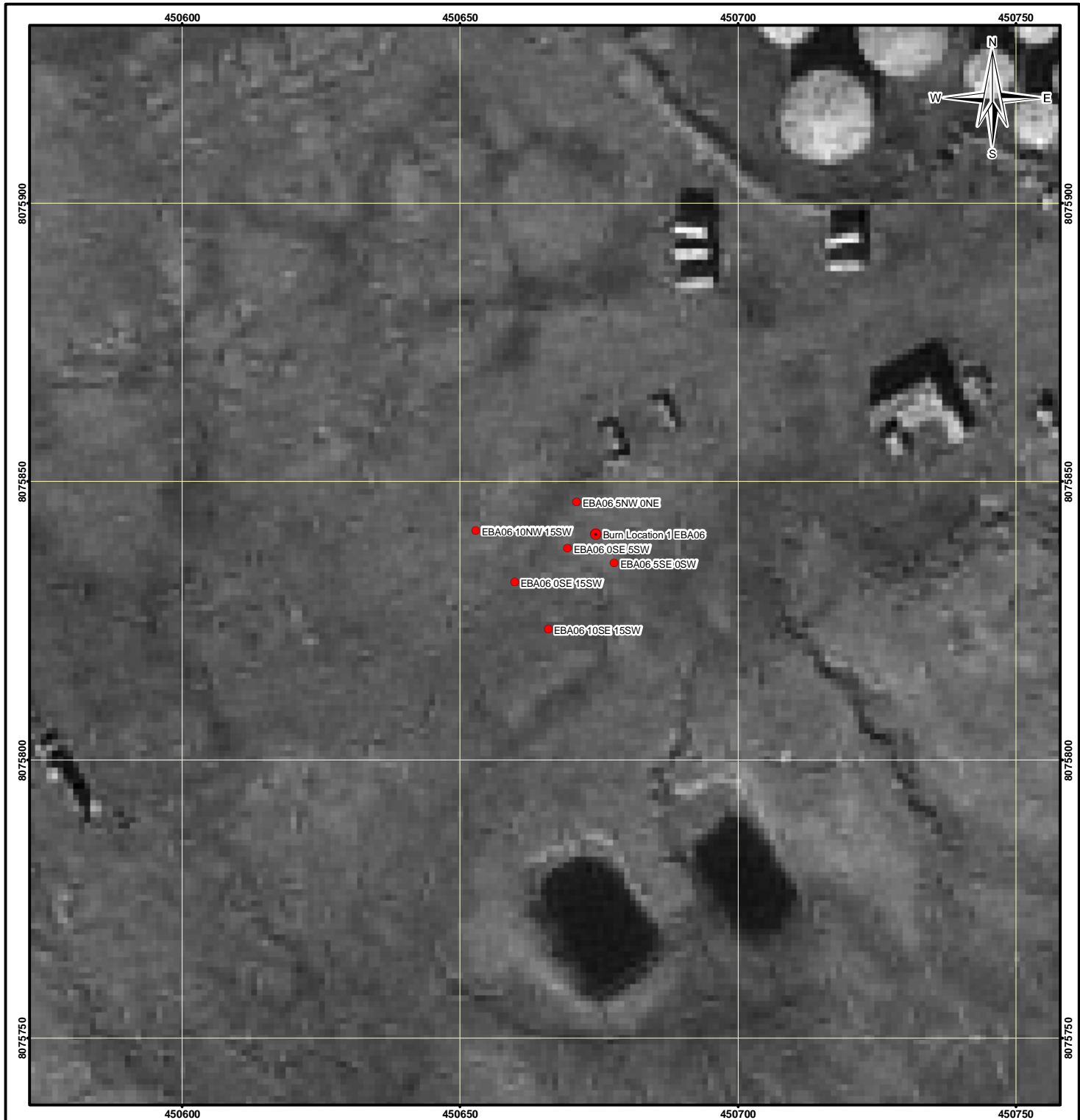
EBA-RIV

DATE

August 25, 2006

EBA Engineering
Consultants Ltd. 

Figure 2



LEGEND

- Burn Location 1
- Burn Location 1 Sample Location

NOTES

Base data source: Indian and Northern Affairs Canada

SITE SUPERVISION FOR REMEDIATION AND CLEANUP, JOHNSON POINT, NORTHWEST TERRITORIES

Burn Location 1

PROJECTION
Universal Transverse Mercator

DATUM
NAD83

Scale: 1:1,000
10 5 0 10
Meters

FILE NO.
Figure_BurnLocation1

PROJECT NO.
1740199

DWN
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1

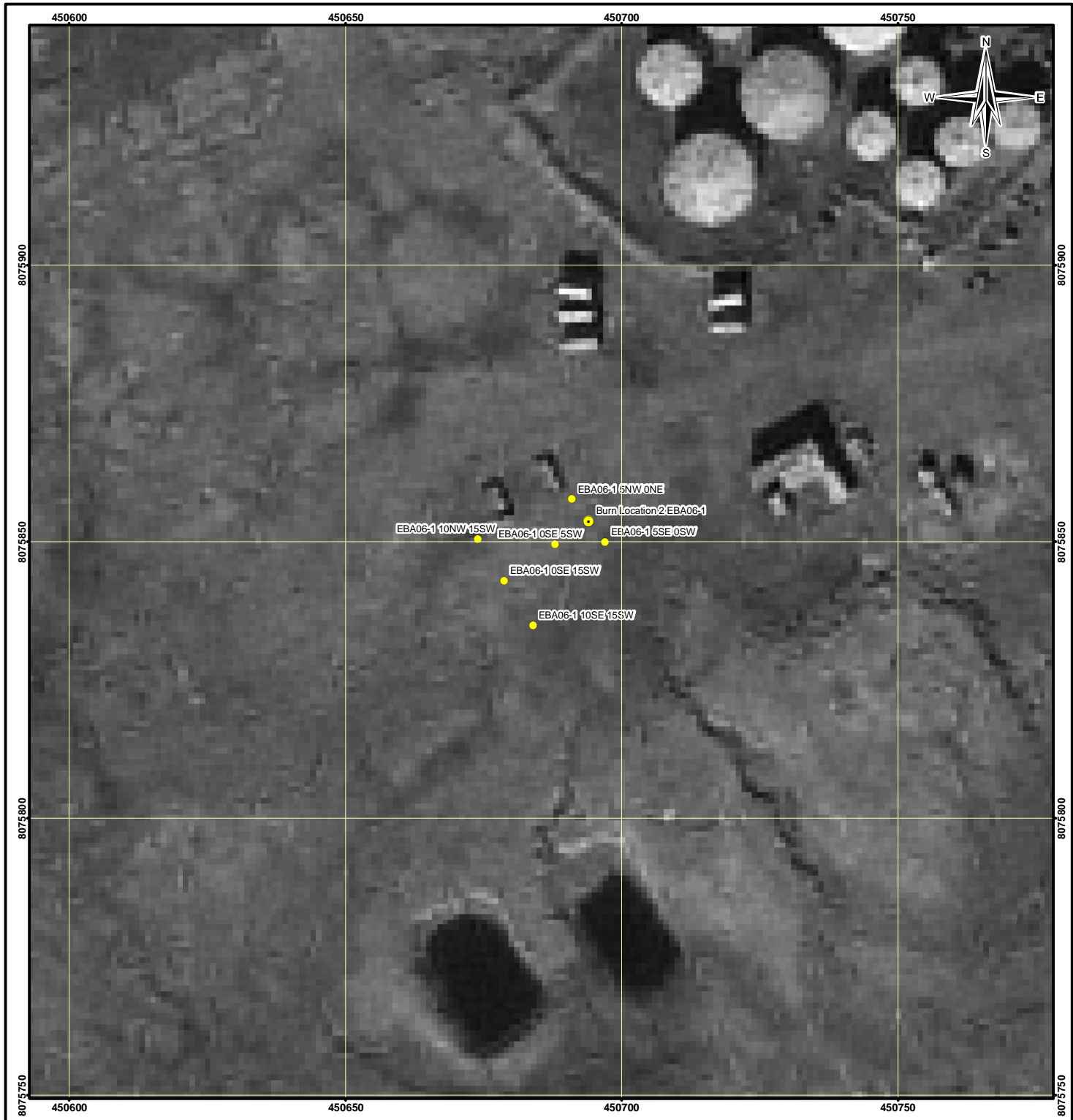
OFFICE
EBA-RIV

DATE
August 30, 2006

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Figure 3



LEGEND

- Burn Location 2
- Burn Location 2 Sample Location

NOTES

Base data source: Indian and Northern Affairs Canada

SITE SUPERVISION FOR REMEDIATION AND CLEANUP, JOHNSON POINT, NORTHWEST TERRITORIES

Burn Location 2

PROJECTION
Universal Transverse Mercator

DATUM
NAD83

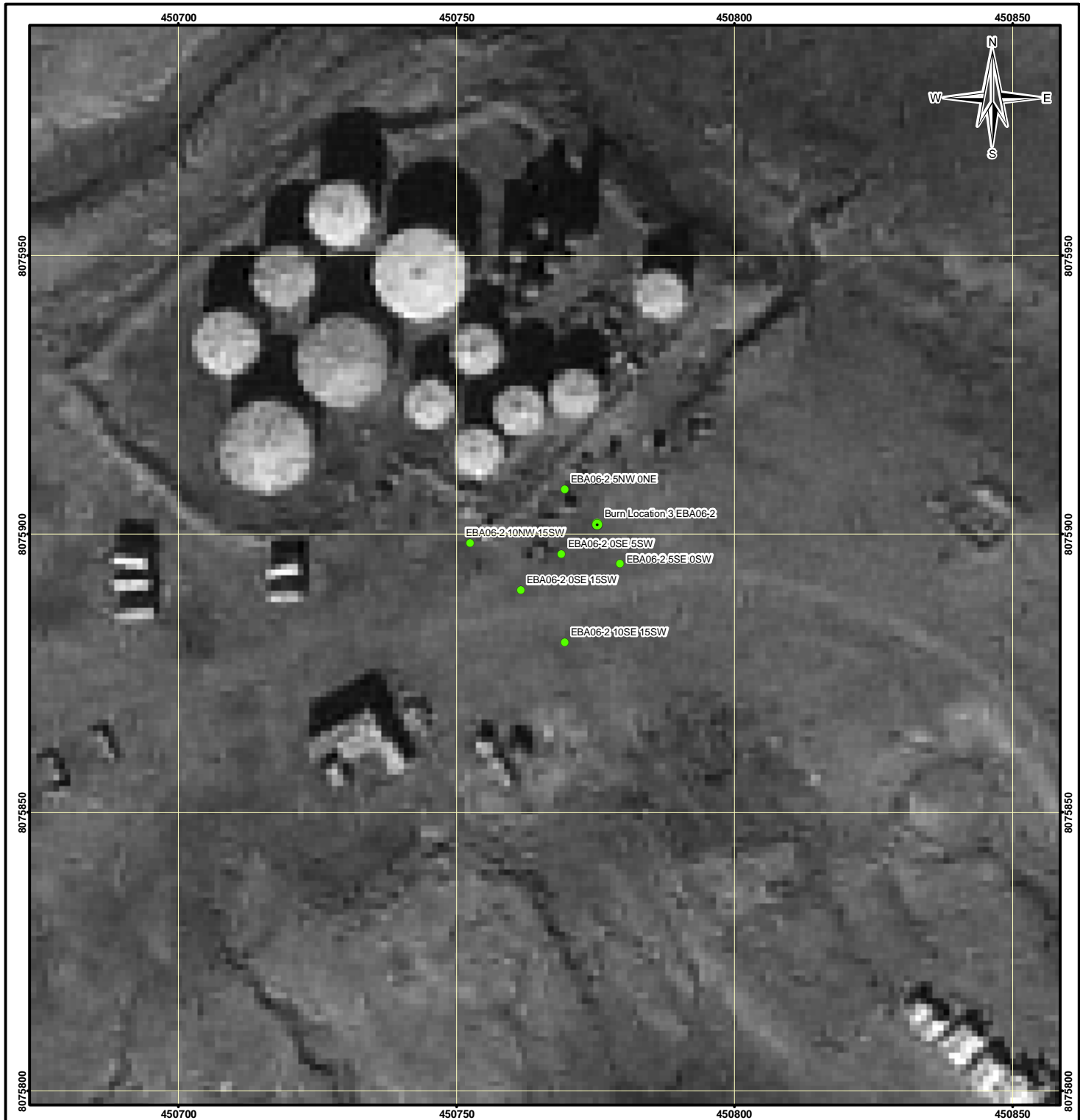
Scale: 1:1,000
10 5 0 10
Meters

FILE NO.
Figure_BurnLocation2

PROJECT NO. 1740199	DWN JLB	CKD DD	REV 1
OFFICE EBA-RIV	DATE August 30, 2006		

EBA Engineering
Consultants Ltd. 

Figure 4



LEGEND

- Burn Location 3
- Burn Location 3 Sample Location

NOTES

Base data source: Indian and Northern Affairs Canada

SITE SUPERVISION FOR REMEDIATION AND CLEANUP, JOHNSON POINT, NORTHWEST TERRITORIES

Burn Location 3

PROJECTION
Universal Transverse Mercator

DATUM
NAD83

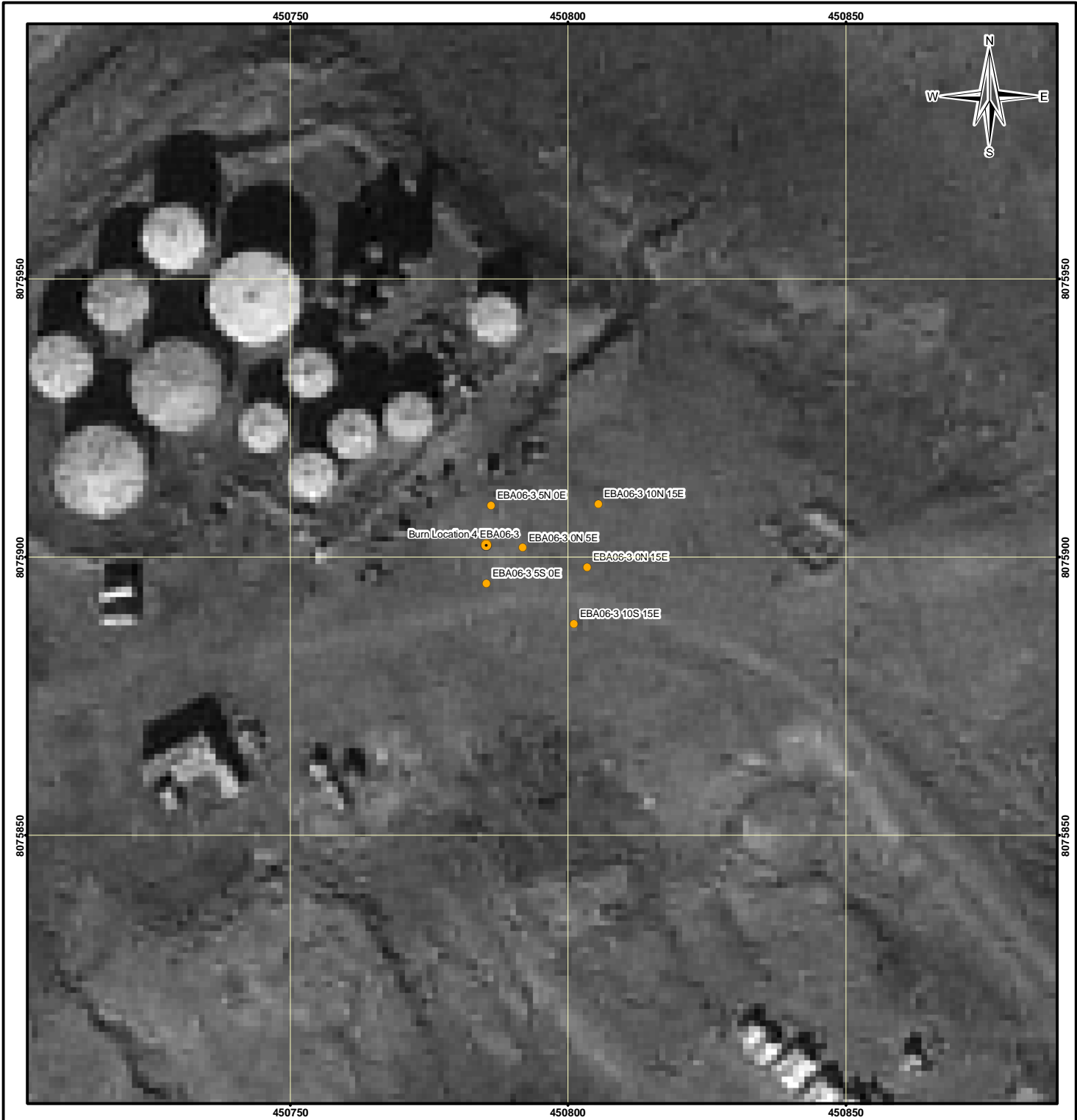
Scale: 1:1,000
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Meters

FILE NO.
Figure_BurnLocation3

PROJECT NO. 1740199	DWN JLB	CKD DD	REV 1
OFFICE EBA-RIV	DATE August 30, 2006		

EBA Engineering
Consultants Ltd. 

Figure 5



LEGEND

- Burn Location 4
- Burn Location 4 Sample Location

NOTES

Base data source: Indian and Northern Affairs Canada

SITE SUPERVISION FOR REMEDIATION AND CLEANUP, JOHNSON POINT, NORTHWEST TERRITORIES

Burn Location 4



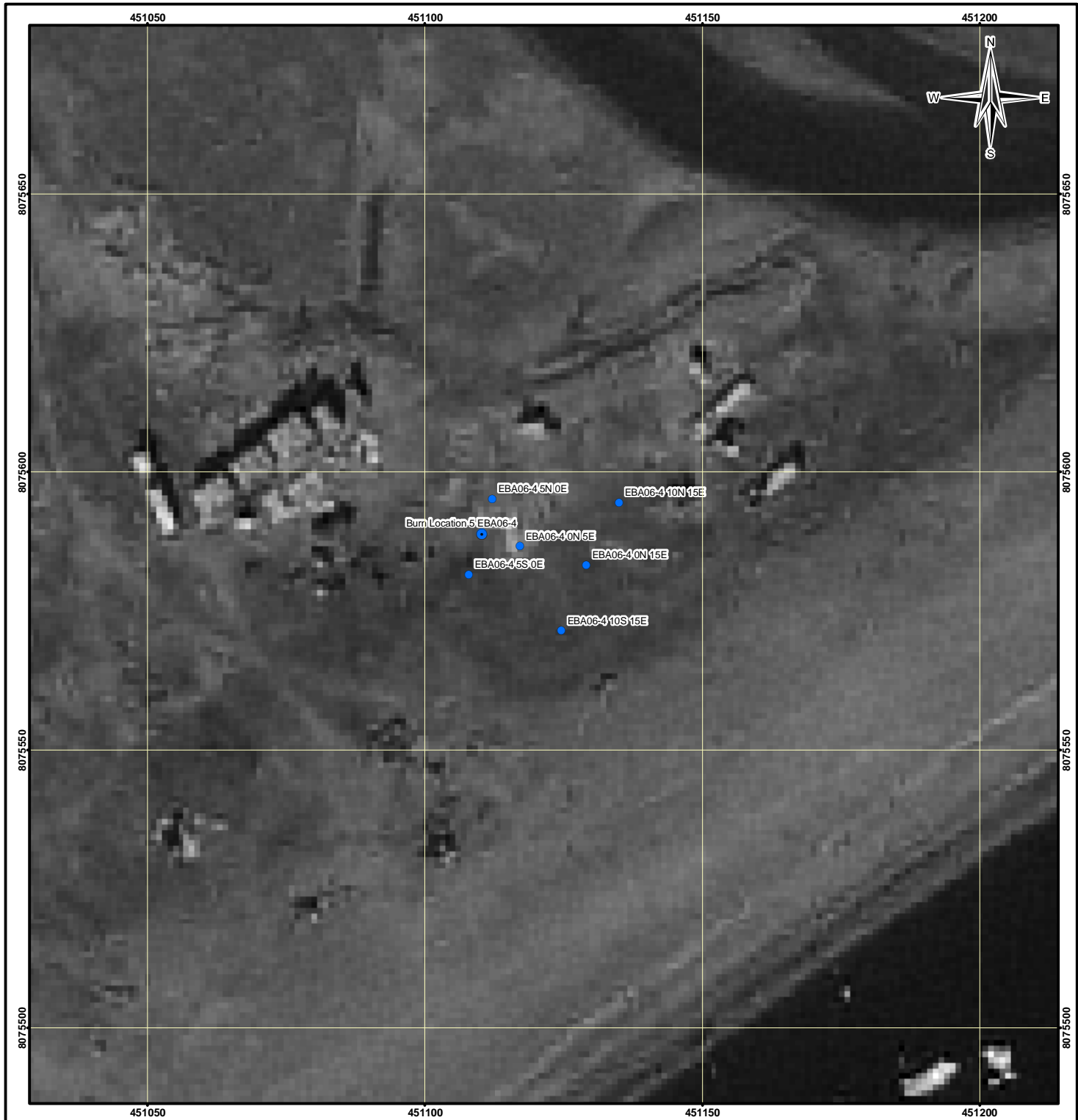
PROJECTION Universal Transverse Mercator		DATUM NAD83	
Scale: 1:1,000 10 5 0 10  Meters		EBA Engineering Consultants Ltd. 	
FILE NO. Figure_BurnLocation4			
PROJECT NO. 1740199	DWN JLB	CKD DD	REV 1
OFFICE EBA-RIV	DATE August 30, 2006		

Figure 6

EBA Engineering
Consultants Ltd. 

Figure 6



LEGEND

- Burn Location 5
- Burn Location 5 Sample Location

NOTES

Base data source: Indian and Northern Affairs Canada

SITE SUPERVISION FOR REMEDIATION AND CLEANUP, JOHNSON POINT, NORTHWEST TERRITORIES

Burn Location 5

PROJECTION
Universal Transverse Mercator

DATUM
NAD83

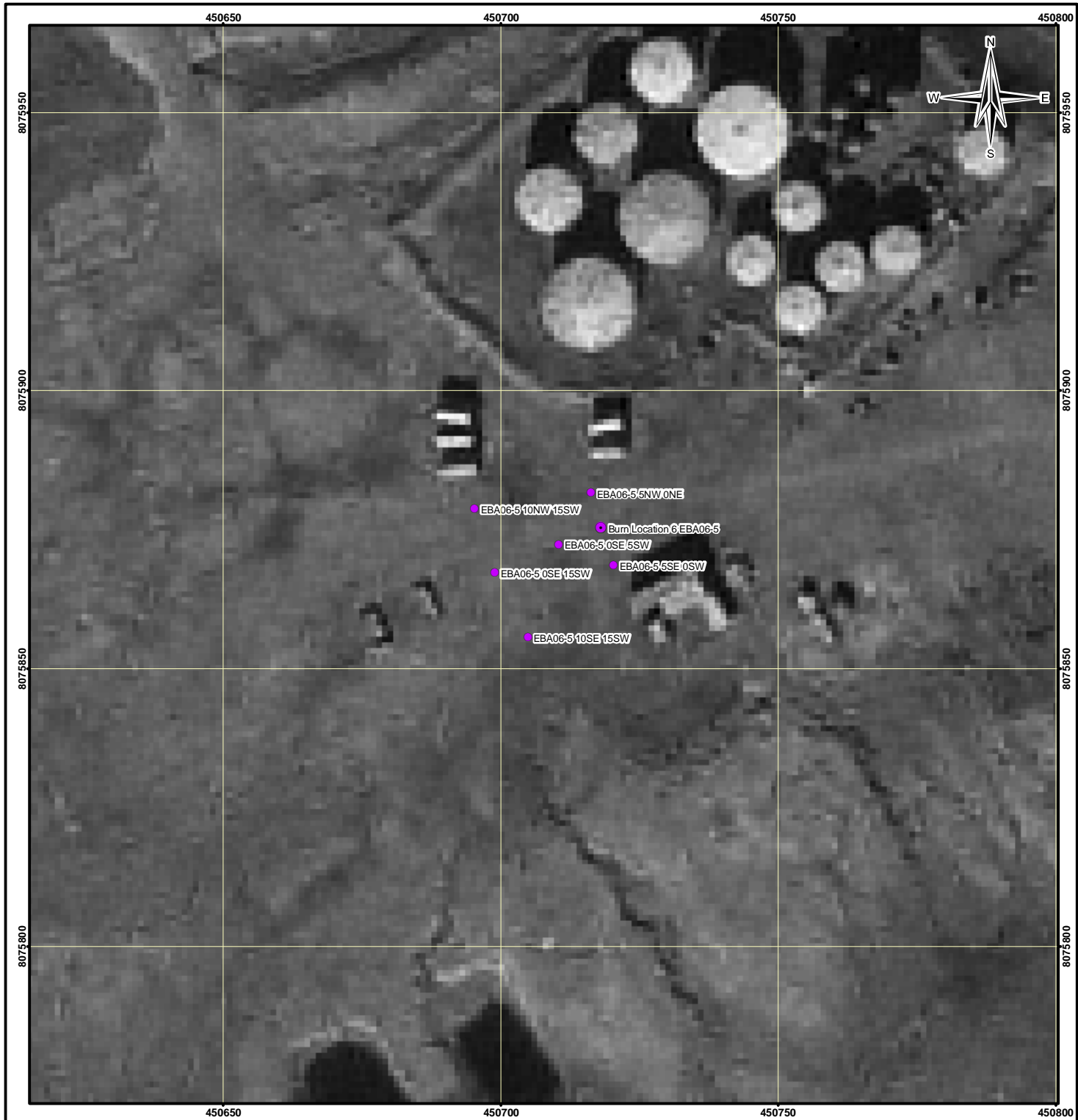
Scale: 1:1,000
10 5 0 10
Meters

FILE NO.
Figure_BurnLocation5

PROJECT NO. 1740199	DWN JLB	CKD DD	REV 1
OFFICE EBA-RIV	DATE August 30, 2006		

EBA Engineering
Consultants Ltd. 

Figure 7



LEGEND

- Burn Location 6
- Burn Location 6 Sample Location

NOTES

Base data source: Indian and Northern Affairs Canada

SITE SUPERVISION FOR REMEDIATION AND CLEANUP, JOHNSON POINT, NORTHWEST TERRITORIES

Burn Location 6

PROJECTION
Universal Transverse Mercator

DATUM
NAD83

Scale: 1:1,000
10 5 0 10
Meters

FILE NO.
Figure_BurnLocation6

PROJECT NO.
1740199

DWN
JLB

CKD
DD

REV
1

OFFICE
EBA-RIV

DATE
August 30, 2006

EBA Engineering
Consultants Ltd.



Figure 8

APPENDIX

APPENDIX A WATER LICENSE AND LAND USE PERMIT

NORTHWEST
TERRITORIES
WATER BOARD



NUNAPPA
SIVUNIUKPAIT
IMMAKUN

WATER REGISTER: N7L1-1814

July 10, 2006

Ms. Emma Pike
Contaminants and Remediation Directorate
Department of Indian and Northern Affairs Canada
P.O. Box 1500
YELLOWKNIFE, NT X1A 2R3

Contaminant and
Remediation Directorate

JUL 11 2006

Northwest Territories
Yellowknife, N.W.T.

Dear Ms. Pike:

ISSUANCE OF A "B" TYPE LICENCE-JOHNSON POINT

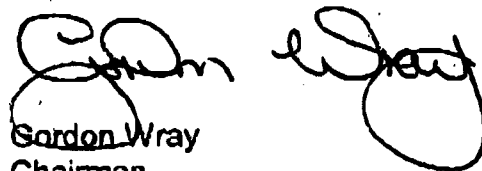
Attached is a duplicate of Licence No. N7L1-1814 granted to CARD-Johnson Point by the Northwest Territories Water Board in accordance with the *Northwest Territories Waters Act*. The other original of this Licence has been filed with the Department of Indian Affairs and Northern Development in Yellowknife, Northwest Territories.

Please be advised that this letter with attached procedures, all inspection reports, and correspondence related thereto are part of the public Water Register, and are intended to keep all interested parties informed of the manner in which the Licence requirements are being met. All Water Register material will be considered when the Licence comes up for renewal or amendment.

The full cooperation of Contaminants and Remediation Directorate is anticipated.

Post-it™ Fax Note	7671E	Date	# of pages
To	Brad Thompson	From	Emma Pike
Co./Dept.	PWGSC	Co.	
Phone #	780-497-3862	Phone #	867-669-2756
Fax #	780-497-3842	Fax #	" " 2721

Sincerely,


Gordon Wray
Chairman
N.W.T. Water Board

Attach.

669 2423

**GENERAL PROCEDURES FOR THE ADMINISTRATION OF LICENCES
ISSUED UNDER THE NORTHWEST TERRITORIES WATERS ACT
IN THE NORTHWEST TERRITORIES**

1. At the time of issuance, a copy of the Licence is placed on the Water Register in the Office of the Northwest Territories Water Board in Yellowknife, and is then available to the public.
2. To enforce the terms and conditions of the Licence, the Minister of Indian Affairs and Northern Development has appointed Inspectors in accordance with Section 35(1) of the *Northwest Territories Waters Act*. The Inspectors coordinate their activities with officials of the Water Resources Division of the Department of Indian Affairs and Northern Development. The Inspector responsible for Licence No. N7L1-1814 is located in the North Mackenzie -Inuvik District Office.
3. To keep the Water Board and members of the public informed of the Licensee's conformity to Licence conditions, the Inspectors prepare reports which detail observations on how each item in the Licence has been met. These reports are forwarded to the Licensee with a covering letter indicating what action, if any, should be taken. The inspection reports and covering letters are placed on the public Water Register, as are any responses received from the Licensee pertaining to the inspection reports. It is therefore of prime importance that you react in all areas of concern regarding all inspection reports so that these concerns may be clarified.
4. If the renewal of Licence No. N7L1-1814 is contemplated it is the responsibility of the Licensee to apply to the Water Board for renewal of the Licence. The past performance of the Licensee, new documentation and information, and points raised during a public hearing, if required, will be used to determine the terms and conditions of any Licence renewal. Please note that if the Licence expires and another has not been issued, then water and waste disposal must cease, or you, the Licensee, would be in contravention of the *Northwest Territories Waters Act*. It is suggested that an application for renewal of Licence No. N7L1-1814 be made at least eight months in advance of the Licence expiry date.
5. If, for some reason, Licence No. N7L1-1814 requires amendment, then a public hearing may be required. You are reminded that applications for amendments should be submitted as soon as possible to provide the Water Board with ample time to go through the amendment process. The process may take up to six (6) months or more depending on the scope of the amendment requested.

- 2 -

6. Specific clauses of your Licence make reference to the Board, Analyst or Inspector. The contact person, address, phone and fax number of each is:

BOARD: Executive Assistant
Northwest Territories Water Board
P.O. Box 1326
YELLOWKNIFE, NT X1A 2N9
Phone No: (867) 765-0106
Fax No: (867) 765-0114

ANALYST: Analyst
Water Laboratory
Department of Indian Affairs
and Northern Development
P.O. Box 1500, 4601 - 52nd Avenue
YELLOWKNIFE, NT X1A 2R3
Phone No: (867) 669-2780
Fax No: (867) 669-2718
July 669 2782

INSPECTOR: Inspector
North Mackenzie-Inuvik District Office
Department of Indian Affairs
and Northern Development
P.O. Box 2100
INUVIK, NT X0E 0T0
Phone No: (867) 777-3361
Fax No: (867) 777-2090

Don Aray 777,5976

NORTHWEST TERRITORIES WATER BOARD

Pursuant to the *Northwest Territories Waters Act* and Regulations the Northwest Territories Water Board, hereinafter referred to as the Board, hereby grants to

CONTAMINANTS AND REMEDIATION DIRECTORATE

(Licensee)

Indian and Northern Affairs Canada

P.O. Box 1500

of

YELLOWKNIFE, NT X1A 2R3

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water subject to the restrictions and conditions contained in the *Northwest Territories Waters Act* and Regulations made thereunder and subject to and in accordance with the conditions specified in this Licence.

Licence Number

N7L1-1814

Licence Type

"B"

Water Management Area

NORTHWEST TERRITORIES 07

Location

Johnson Point, Banks Island
Latitude 72°45'10" North and
Longitude 118°30' West,
NORTHWEST TERRITORIES

Purpose

To use water and dispose of waste for
industrial undertakings

Quantity of Water Not to be Exceeded

100 CUBIC METRES DAILY

Effective Date of Licence

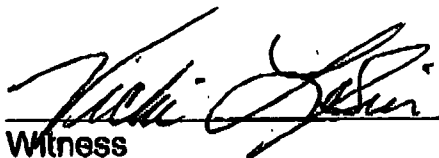
JULY 10, 2006

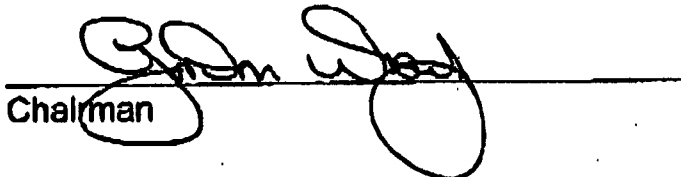
Expiry Date of Licence

JULY 9, 2009

This Licence issued and recorded at Yellowknife includes and is subject to the annexed conditions.

NORTHWEST TERRITORIES WATER BOARD


Witness


Chairman

PART A: SCOPE AND DEFINITIONS**1. Scope**

- a) This Licence entitles INAC Contaminants and Remediation Directorate to use Water and dispose of Waste for industrial undertakings on Banks Island for the Johnson Point Project located at Latitude 72°45'10" North, and Longitude 118°30' West, Northwest Territories;
- b) This Licence is issued subject to the conditions contained herein with respect to the taking of water and the depositing of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the *Northwest Territories Waters Act*, or other statutes imposing more stringent conditions relating to the quantity or type of Waste that may be so deposited or under which any such Waste may be so deposited this Licence shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations; and
- c) Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

2. Definitions

In this Licence: **N7L1-1814**

"Act" means the *Northwest Territories Waters Act*;

"Analyst" means an Analyst designated by the Minister under Section 35(1) of the *Northwest Territories Waters Act*;

"Average Concentration For Faecal Coliform" means the geometric mean of any four consecutive analytical results submitted to the Board in accordance with the sampling and analysis requirements specified in the "Surveillance Network Program";

"Board" means the Northwest Territories Water Board established under Section 10 of the *Northwest Territories Waters Act*;

"Greywater" means all liquid Wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet Wastes;

"Inspector" means an Inspector designated by the Minister under Section 35(1) of the *Northwest Territories Waters Act*;

"Licensee" means the holder of this Licence;

"Maximum Average Concentration" means the running average of any four consecutive analytical results, or if less than four analytical results collected, and submitted to the Inspector in accordance with the sampling and analysis requirements specified in the "Surveillance Network Program";

"Minister" means the Minister of Indian Affairs and Northern Development;

"Modification" means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does include an expansion;

"Project Description" refers to the report titled "INAC Contaminated Sites Program, Johnson Point: Waste Fuel Incineration and Environmental Assessment", dated "April 2006" and prepared by CARD;

"Sewage" means all toilet Waste and greywater;

"Toilet Wastes" mean all human excreta and associated products, but does not include greywater;

"Regulations" mean Regulations proclaimed pursuant to Section 33 of the *Northwest Territories Waters Act*;

"Sump" means an excavation with an impermeable layer for the purpose of catching or storing fluids.

"Waste" means Waste as defined by Section 2 of the *Northwest Territories Waters Act*; and

"Waters" mean Waters as defined by Section 2 of the *Northwest Territories Waters Act*.

PART B: GENERAL CONDITIONS

1. The Licensee shall file an Annual Report with the Board not later than December 1st of the year reported which shall contain the following information:
 - a) the total quantity in cubic metres of fresh Water obtained from all sources;
 - b) the total quantities in cubic metres of each and all Waste discharged;
 - c) the location and direction of flow of all Waste discharged to the land or Water;
 - d) a summary of any modifications carried out on the water supply and Waste disposal facilities, including all associated structures;
 - e) a list of spills and unauthorized discharges;
 - f) a description of the planned activities for the upcoming field season; and
 - g) any other details on water use or Waste disposal requested by the Board within forty-five (45) days before the annual report is due.
2. Meters, devices or other such methods used for measuring the volumes of Water used and Waste discharged shall be installed, operated and maintained by the Licensee to the satisfaction of an Inspector.
3. All monitoring data shall be submitted in printed form and electronically in spreadsheet format on a diskette or other electronic forms acceptable to the Board.
4. All reports shall be submitted to the Board in printed format accompanied by an electronic copy in a common word processing format on diskette or other electronic forms acceptable to the Board.
5. The Licensee shall ensure a copy of this Licence is maintained at the site of operation at all times.

PART C: CONDITIONS APPLYING TO WATER USE

1. The daily quantity of Water used for all purposes shall not exceed 100 cubic metres.
2. Where practical, the Licensee shall minimize freshwater use by serially transferring Water from one tank to another.
3. The Water intake hose used on the Water pumps shall be equipped with a screen with a mesh size sufficient to ensure no entrainment of fish (2.54 mm).

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. All Sewage from the camp shall be directed to the sump or as approved by an Inspector.
2. The Licensee shall dispose of all solid Wastes in a manner acceptable to the Inspector.
3. All Waste Water derived from sludge consolidation and tank cleaning operations must meet the following effluent parameters prior to disposal to the environment:

Parameter	Proposed Discharge Criteria
Oil and Grease	5 mg/L and none visible
Benzene	.370 mg/L
Toluene	.002 Mg/L
Ethylbenzene	.09 Mg/L

4. All analyses shall be conducted in accordance with methods prescribed in the current edition of "Standard Methods for the Examination of Water and Wastewater" or by such other methods as may be approved by an Analyst.
5. The Licensee must notify an Inspector at least five (5) days prior to any discharge of Waste Water from the holding tank.

6. The Licensee may commence the discharge of Waste Water from the holding tank upon receipt of an Inspector's approval.

PART E: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written approval from the Board, carry out Modifications to the planned undertakings provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a) the Licensee has notified an Inspector in writing of such proposed Modifications at least five (5) days prior to beginning the Modifications;
 - b) such Modifications do not place the Licensee in contravention of either this Licence or the Act;
 - c) an Inspector has not, during the five (5) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than five (5) days; and
 - d) an Inspector has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part E, Item 1 have not been met may be carried out only with written approval from an Inspector.
3. The Licensee shall provide to the Board as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modifications.

PART F: CONDITIONS APPLYING TO CONTINGENCY PLANNING

1. The Licensee will maintain a copy of the approved Spill Contingency Plan onsite in a readily available location, to the satisfaction of an Inspector.
2. The Licensee shall ensure that petroleum products, hazardous material and other Wastes associated with the project do not enter any Waters.

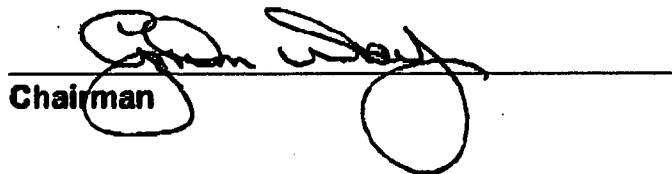
3. The Licensee shall ensure that all containment berms are constructed of an impermeable material, to the satisfaction of an Inspector.
4. If, during the period of this Licence, an unauthorized discharge of Waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a) report the incident immediately via the 24 Hour Spill Reporting Line (867) 920-8130; and
 - b) submit to an Inspector a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.

PART G: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

1. Upon completion of all activities, the Licensee shall ensure that all equipment and materials are removed from the site. Other final restoration activities as outlined in the Project Description should be implemented to the satisfaction of an Inspector.

NORTHWEST TERRITORIES WATER BOARD


Witness


Chairman



Indian and Northern
Affairs Canada

Affaires indiennes
et du Nord Canada

**FACSIMILE TRANSMITTAL
TRANSMISSION PAR TÉLÉCOPIEUR**

Number of pages including this page
Nombre de pages incluant cette page

7

Date

JAN 25/07.

FROM - DE

Name - Nom

Emma Pike

Position title - Titre du poste

Projects Officer

Directorate - Direction

Branch - Direction générale

CARD.

Room - Pièce

Facsimile no. - N° de télécopieur

Telephone no. - N° de téléphone

(867) 669-2756

TO - A

Name - Nom

Darva Das
EBA

Facsimile no. - No de télécopieur

873-3324

Telephone no. - N° de téléphone

766-3728.

As requested, the Johnson Point
land use permit.

Cheers,

EMMA.



**Indian and Northern
Affairs Canada**
www.inac.gc.ca

North Mackenzie District
P.O. Box 2100
Inuvik, NT X0E 0T0

**Affaires Indiennes
et du Nord Canada**
www.ainc.gc.ca

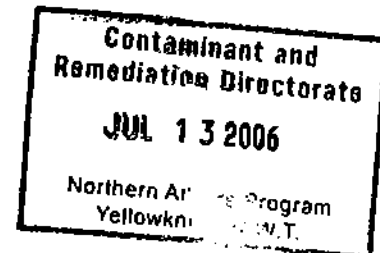
Telephone: (867) 777-3361
Fax: (867) 777-2090

July 10th, 2006

Contaminants and Remediation Directorate
PO Box 1500, 4920 52nd Ave.
Yellowknife, NT X1A 2R3

Attn: Emma Pike, Project Manager

**RE: Land Use Permit N2006J0024
Johnson's Point: Waste Fuel Incineration and Environmental Site
Assessment**



To Ms. Pike,

Enclosed is your copy of Land Use Permit N2006J0024 for the Johnson's Point: Waste Fuel Incineration and Environmental Site Assessment program as requested in your application dated May 9th, 2006.

Your application has received a wide distribution to other federal departments, departments of the Government of the N.W.T., communities in the area of your operation and concerned aboriginal groups. In distributing your application, we sought comments from these various agencies based on their area of expertise that will help ensure minimum negative impact on the environment. The issuance of this Permit indicates that as a result of this environmental screening process, it was decided that the potentially adverse environmental effects that may be caused by your proposal are mitigable with known technology and are not significant. The terms and conditions in the Permit will, in our opinion, provide the necessary protection to the environment.

Please adhere to the Operating Conditions annexed to your Land Use Permit.

If you have any questions, please do not hesitate to give me a call.

Sincerely,


Conrad Baetz
District Manager

Cc: Resource Management Officers - Inuvik



**LAND USE PERMIT
NORTHERN AFFAIRS PROGRAM**

**PERMIS D'UTILISATION DES TERRES
PROGRAMME DES AFFAIRES DU NORD**

Permit Class - Permis Catégorie A	Permit No - N° de permis N2006J0024
---	---

Subject to the Territorial Land Use Regulations and the terms and conditions in this permit, authority is hereby granted to:

Sous réserve du Règlement sur l'utilisation des terres territoriales et des conditions de ce permis:

Contaminants and Remediation Directorate
Indian and Northern Affairs Canada

Permittee - Détenteur de permis

To proceed with the land use operation described in the application of:

Est autorisé à entreprendre les travaux d'exploitation des terres décrits dans la demande de permis du:

Signature Emma Pike	Date May 6th, 2006
Type of Land Use Operation - Genre de travaux d'exploitation des terres 15 man camp for Waste Fuel Incineration and Environmental Site Assessment	
Location - Emplacement Johnson's Point, Victoria Island, NT	

This permit may be assigned, extended, discontinued, suspended or cancelled pursuant to the Territorial Land Use Regulations.

Ce permis peut faire l'objet d'une cession, d'une prolongation d'une cessation d'une suspension ou d'une annulation, en vertu du Règlement sur l'utilisation des terres territoriales.

Dated at _____ Engineer
Date à Inuvik, NT Ingénieur [Signature]

This _____ Day of _____
Ce 10th jour de July, 2006

Commencement Date _____ Expiry Date _____
Date du début des travaux July 10th, 2006 Date d'achèvement July 9th, 2008

NOTE

IT IS A CONDITION OF THIS PERMIT THAT THE PERMITTEE COMPLY WITH ANY OTHER APPLICABLE ACT, REGULATION, ORDINANCE BY - LAW OR ORDER DEFAULT HEREOF MAY RESULT IN SUSPENSION OR CANCELLATION OF THIS PERMIT.

REMARQUE

LE DÉTENTEUR DU PRÉSENT PERMIS DOIT SE CONFORMER À TOUT AUTRE RÈGLEMENT, LOI, DÉCRET RÈGLEMENT MUNICIPAL OU ARRÊTÉ APPLICABLE. LE MANQUEMENT À CETTE OBLIGATION POURRAIT DONNER LIEU À LA SUSPENSION OU À L'ANNULATION DU PERMIS.

**CONDITIONS ANNEXED TO AND FORMING PART OF
LAND USE PERMIT NUMBER N2006J0024**

31 (1) (a) - LOCATION AND AREA

- | | | |
|----|--|---|
| 1. | The Permittee shall not conduct this land use operation on any lands not designated in the accepted application, unless otherwise authorized, in writing, by the Engineer. | PLANS |
| 2. | The Permittee shall not conduct any part of the land use operation within three hundred (300) metres of any privately owned land or structure, unless otherwise authorized, in writing, by the Engineer. | PRIVATE
PROPERTY |
| 3. | The Permittee shall remove from Territorial Lands, all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building material. | REMOVE
WASTE
MATERIAL |
| 4. | The Permittee shall use existing campsites. | CAMP
LOCATION |
| 5. | The Permittee shall at all times conform to all applicable Federal, Territorial or local regulations, ordinances or bylaws. | CONFORM TO
APPLICABLE
LAWS |

31 (1) (b) - TIME

- | | | |
|----|--|---------------------------------------|
| 6. | The Permittee's Field Supervisor shall contact or meet with a Land Use Inspector at the Inuvik office of the Department of Indian Affairs and Northern Development, telephone number (867) 777-3361, at least 48 hours prior to the commencement of this land use operation. | CONTACT
INSPECTOR |
| 7. | The Permittee shall advise a Land Use Inspector at least ten (10) days prior to the completion of the land use operation of (a) his plan for removal or storage of equipment and materials, and (b) when final clean-up and restoration of the lands used will be completed. | REPORTS
BEFORE
REMOVAL |
| 8. | The Permittee shall complete all clean-up and restoration of the lands used prior to the expiry date of this Permit. | CLEAN-UP |
| 9. | The Engineer reserves the right to impose closure of any area to the Permittee in periods when dangers to natural resources are severe. | CLOSURE |

31 (1) (c) - EQUIPMENT

10. The Permittee shall not use any equipment except of the type, size, and number that is listed in the accepted application, unless otherwise authorized, in writing, by a Land Use Inspector.

**ONLY
APPROVED
EQUIPMENT**

11. The Permittee shall burn all combustible garbage and debris in a container acceptable to a Land Use Inspector.

INCINERATION

12. The Permittee shall ensure a garbage container is on site.

**GARBAGE
CONTAINER**

**31 (1) (e) - TYPE, LOCATION, CAPACITY
AND OPERATION OF FACILITIES**

13. The Permittee shall not locate any sump within thirty (30) metres of the normal high water mark of any stream.

**SUMPS
FROM WATER**

14. The Permittee shall backfill and restore all sumps prior to the expiry date of this Permit.

**BACKFILL
SUMPS**

15. The Permittee shall ensure that the land use area is kept clean and tidy at all times.

**CLEAN WORK
AREA**

**31 (1) (f) - CONTROL OR PREVENTION OF FLOODING,
EROSION AND SUBSIDENCE OF LAND**

16. The Permittee shall remove any obstruction to natural drainage caused by any part of this land use operation.

**NATURAL
DRAINAGE**

**31 (1) (g) - USE, STORAGE, HANDLING AND DISPOSAL
OF CHEMICAL OR TOXIC MATERIAL**

17. The Permittee shall not use chemicals in connection with the land use operation without the prior approval of the Engineer.

**APPROVAL
OF CHEMICALS**

18. The Permittee shall burn all garbage and debris at least daily.

**GARBAGE
DISPOSAL**

19. The Permittee shall remove all noncombustible garbage and debris from the land use area to a disposal site approved, in writing, by a Land Use Inspector.

**REMOVE
GARBAGE**

20. The Permittee shall report all spills immediately in accordance with instructions contained in "Spill Report" form N.W.T. 1086(10/79). 24 hour spill report line (867) 920-8130.

**REPORT
CHEMICAL
AND
PETROLEUM
SPILLS**

21. The Permittee shall dispose of all sewage in a manner approved by a Land Use Inspector.

**SEWAGE
DISPOSAL**

31 (1) (h) - WILDLIFE AND FISHERIES HABITAT

22. The Permittee shall not unnecessarily damage wildlife habitat in conducting this land use operation.

**HABITAT
DAMAGE**

23. Your operation is in an area where bears may be encountered. Proper food handling and garbage disposal procedures will lessen the likelihood of bears being attracted to your operation. Information about the latest bear detection and deterrent techniques can be obtained from the Department of Resources, Wildlife and Economic Development at (867) 777-7308 or (867) 777-7230.

**BEAR/MAN
CONFLICT**

24. The Permittee shall not in any circumstances deposit or allow the deposit of any deleterious substances (including but not limited to fuels, lubricants, hydraulics, and coolants) of any type into any waters, or in any place under any conditions where the deleterious substances may enter any waters.

**DEPOSITING
DELETERIOUS
SUBSTANCES**

**31 (1) (i) - OBJECTS AND PLACES OF RECREATIONAL,
SCENIC AND ECOLOGICAL VALUE**

25. The Permittee shall not feed wildlife.

**NO FEEDING
WILDLIFE**

26. The Permittee shall immediately suspend the Land Use operation on the site and notify the Land Use Inspector of the location of the site and nature of any unearthed materials, structures or artifacts.

**ARCHAEOLOGICAL
SITES AND /OR
BURIAL GROUND**

31 (1) (k) - PETROLEUM FUEL STORAGE

27. The Permittee shall not place any petroleum fuel storage containers within thirty (30) metres of the normal high water mark of any stream where possible.

**FUEL BY
STREAM**

28. The Permittee shall not allow petroleum products to spread to surrounding lands or into water bodies.

**FUEL
CONTAINMENT**

- | | | |
|-----|--|---|
| 29. | The Permittee shall not use bladders for storing and/or transporting petroleum products. | BLADDERS
PROHIBITED |
| 30. | The Permittee shall mark all fuel containers with the Permittee's name. This includes forty-five (45) gallon drums. | MARK
CONTAINERS |
| 31. | The Permittee shall at all times have on site sufficient spill clean-up equipment and material in readiness to clean-up all hazardous material which may be spilled. | SPILL
CLEAN-UP
EQUIPMENT |

**31 (1) (m) - MATTERS NOT INCONSISTENT
WITH THE REGULATIONS**

- | | | |
|-----|--|--|
| 32. | The Permittee shall display a copy of this Permit in a conspicuous place in each campsite established to carry out this land use operation. | DISPLAY
PERMIT |
| 33. | The Permittee shall keep on hand, at all times during this land use operation, a copy of the Land Use Permit. | COPY OF
PERMIT |
| 34. | <p>The Permittee shall provide in writing to the Engineer, at least forty-eight (48) hours prior to commencement of this land use operation, the following information:</p> <p>(a) person, or persons, in charge of the field operation to whom notices, orders, and reports may be served;</p> <p>(b) alternates;</p> <p>(c) all the indirect methods for contacting the above person(s).</p> | IDENTIFY
AGENT |
| 35. | The Permittee shall ensure that a copy of this Permit, operating conditions and definitions is provided to and understood by all contractors and sub-contractors prior to the start-up of this Land Use Operation. | PERMIT
CONTRACTORS
& SUB-
CONTRACTORS |
| 36. | <p>PART 1 - In this Permit:</p> <p style="padding-left: 40px;">"sump" means a man-made pit, trench hollow or cavity in the earth's surface used for the purpose of depositing waste material therein.</p> | |

APPENDIX

APPENDIX B WEEKLY REPORTS

**JOHNSON POINT
SITE SUPERVISION FOR REMEDIATION AND CLEAN-UP
WEEKLY REPORT
EBA FILE: 1740199
FOR THE PERIOD: JULY 14, 2006 TO JULY 20, 2006**

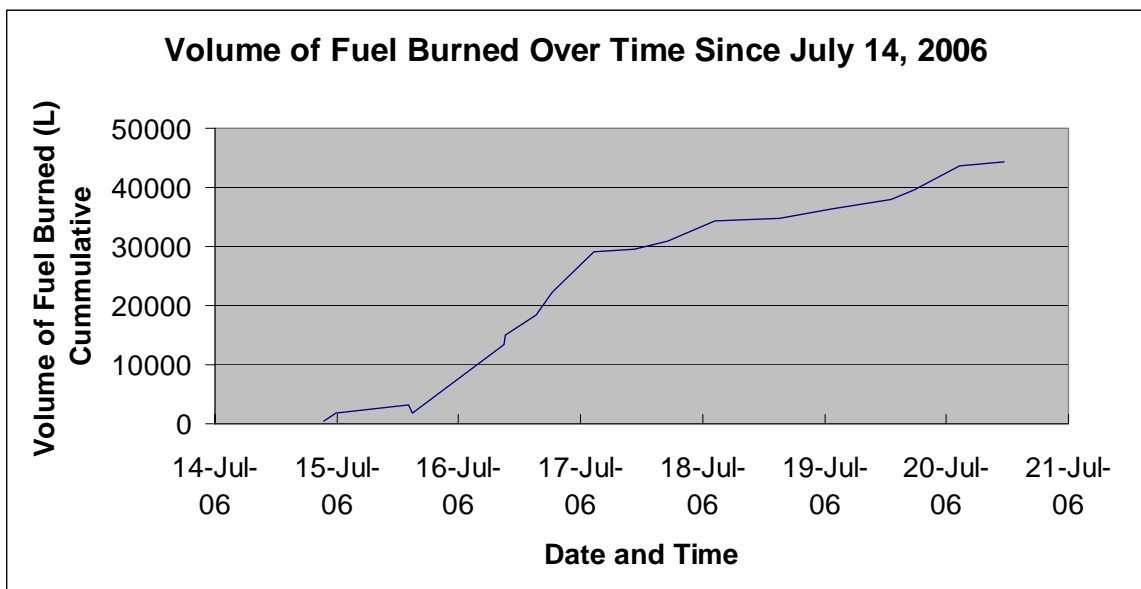
WEATHER				
Date (Year 2006)	Time	Temperature (°C)	General Conditions	Wind Direction & Speed (km/h)
July 14 (Fri.)	12:00 p.m.	-	Sunny	NE 30
July 15 (Sat.)	12:00 p.m.	1	Sunny	NE 30
July 16 (Sun.)	12:00 p.m.	6	Sunny, some cloud	NE 30
July 17 (Mon.)	12:00 p.m.	12	Sunny, very little cloud	NE 20
July 18 (Tues.)	12:00 p.m.	9	Overcast, light rain	NE 10 Calm
July 19 (Wed.)	12:00 p.m.	5	Overcast, light rain	NE 5 Calm
July 20 (Thurs.)	12:00 p.m.	10	Overcast, heavy rain in morning. Clearing by 10:00a.m.	W 20

1.0 OVERVIEW OF ACTIVITIES

1.1 VOLUME OF FUEL BURNED

Fuel incineration commenced on July 14, 2006 at 9 pm. Approximately 44,000 L of fuel was burned this week to 11:15 am July 20, 2006 (Figure 1). EBA was not able to accurately quantify the volume of fuel burned after 11:15 am due to a malfunction of AES's fuel pump meter. EBA estimates that an additional 6,000 L of fuel was burned between 11:15 am and 11:59 pm on July 20, taking the total volume of fuel burned this week to approximately 50,000 L.

Figure 1: Volume of Fuel Burned – Week 1 (9:00 p.m. July 14, 2006 to 11:15 a.m. July 20, 2006)

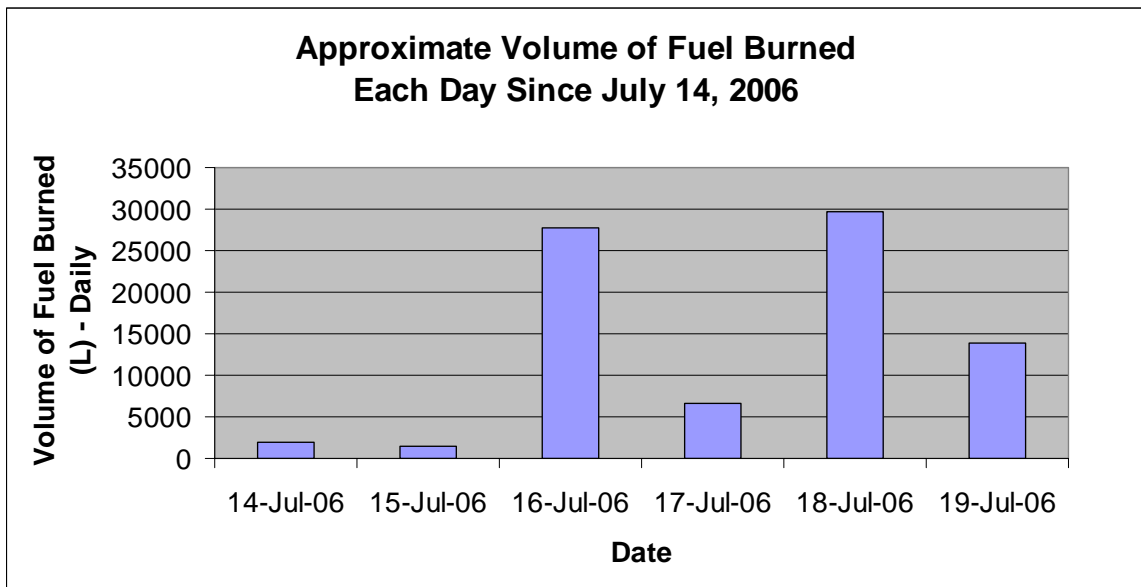


The source of the fuel burned in the incinerator this week was as follows:

- Diesel fuel from the 7 silver upright tanks, which are lying on their sides, near the tank farm. Less than 500 L of residual fuel remains in these tanks to be burned.
- Incineration of diesel fuel from the 45-gallon drums stored near the tank farm and those drums moved to this location from other areas of the site. AES collected approximately 20 more drums from areas of the site than were specified in the contract.
- Diesel fuel from the red upright tanks and silver bolted upright tanks inside the tank farm.

The volume of fuel burned on a daily basis this week, excluding July 20, 2006, is indicated shown in Figure 2.

Figure 2: Volume of Fuel Burned on a daily basis from July 14 to July 19, 2006



1.2 TANK CLEANING

Final cleaning on 12 tanks was completed this week. All of these tanks were located inside the tank farm. Six of the tanks inside the tank farm had liners and did not require cleaning. Only one of the lined tanks had liquid (water) inside that needed to be pumped out of the bladder (Tank # 18). The rest of the lined tanks inside the tank farm did not have fuel or water inside the bladder.

The following activities were completed this week prior to the commencement of the tank cleaning operations:

- Removal of access doors and side panels from the silver bolted upright tanks inside the tank farm. Removal of the access doors and side panels ventilates the tanks prior to entry for cleaning by general personnel.
- Opening of access-doors on the red-upright tanks inside the tank farm. Access-doors were left open for several days and the tanks pumped dry of fuel/water. Once the 10% Low Explosive Limit (LEL) was achieved the tanks were entered and cleaned by a confined space entry expert.

1.3 OTHER ACTIVITIES

The following 'other' activities were commenced this week and are expected to continue into next week:

- Burning of camp only garbage in the incinerator located at the airstrip, including sewage and solid waste from the toilet facilities.
- Treatment of water from the oil-water separator, collected in association with fuel incineration and tank washing activities inside the tank farm.
- Treatment of grey water from the sump behind the camp.

As per task authorizations provided to Arctic Environmental Services (AES) by Public Works and Government Services Canada (PWGSC), AES also completed or started the following tasks this week:

- Incineration of garbage in a single-stage garbage incinerator located at the airstrip. The garbage was collected from trailers and other structures located on-site in preparation for the arrival of the EBA assessment team.
- Dismantling of the fuel supply line leading from the beach to the tank farm. This work was stopped early this week but is expected to continue next week. An air pump will be used to remove fuel from inside the line prior to dismantling and cleaning activities. The pumped fuel will be stored in drums ready for incineration.

2.0 TESTING

Drinking water samples and baseline soil samples were collected and submitted to Maxxam Analytical for analysis this week. Wastewater samples were not collected this week.

2.1 WATER

AES collected and submitted a drinking water sample from the reverse osmosis drinking water treatment system on July 19, 2006. The sample was shipped to Maxxam Analytical in Yellowknife for potable water analysis. As expected, the 24 hour holding time for this analysis was not met. EBA will assess the results in terms of a zero bacteria count for the sample. In the interim, bottled drinking water is being used for drinking and cooking at the site.

2.2 WASTEWATER

Wastewater samples were not collected for analysis this week. AES do not wish to discharge treated water from the tank washing operation or treated water associated with the fuel incineration activities for several days. They would like to re-use this water as part of their drum/tank washing operations.

With respect to treated greywater from the greywater sump, EBA's discussions with AES and PWSGC confirm that AES has the go-ahead to store treated greywater in a second sump ready for analysis (oil and grease and BTEX). Provided that the measured concentrations of these parameters meet the proposed discharge criteria, as outlined in the water license for this project, AES will discharge this water to land at a distance of no less than 30 m from any stream or water body.

2.3 SOIL

EBA collected baseline 6 soil samples from each of the four proposed incinerator locations this week on July 15 (EBA06), July 17 (EBA06-1) and July 18, 2006 (EBA06-2 and EBA06-3). EBA's FINAL report will detail the sampling methodology and results.

Photo 1: Burn Location # 1 (EBA06) and #2 (EBA06-1)

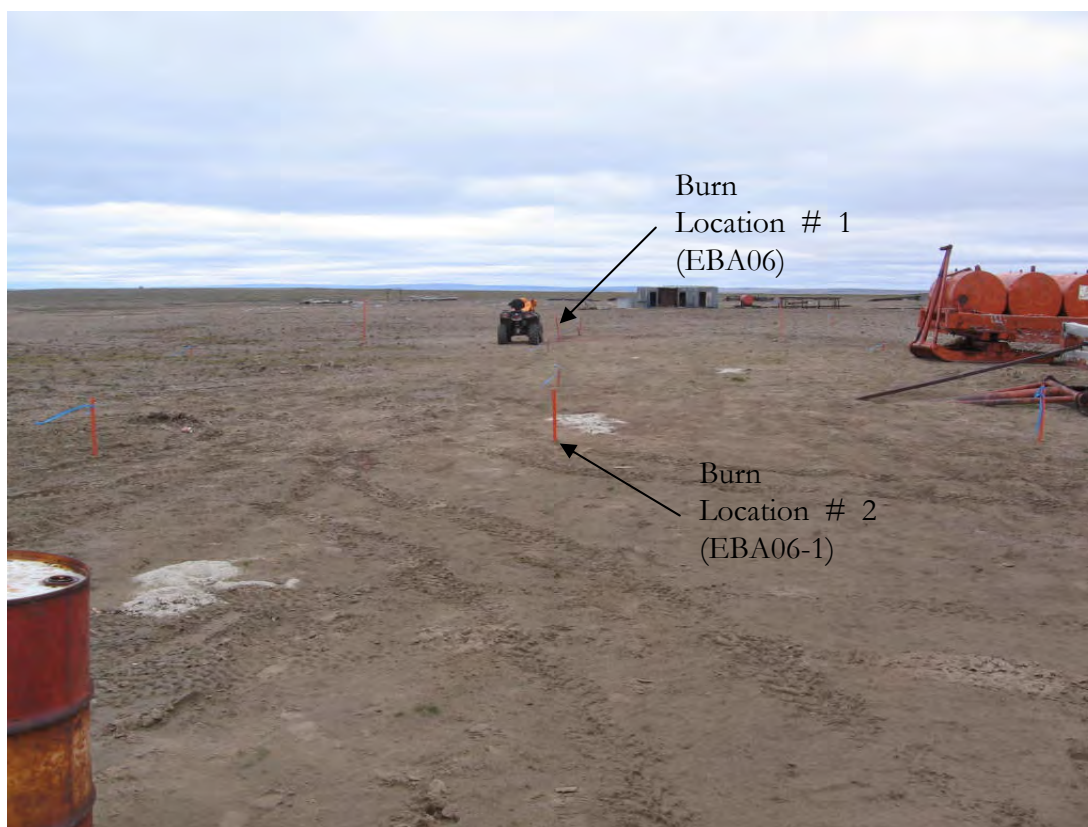


Photo 2: Burn Location # 3 (EBA06-2)

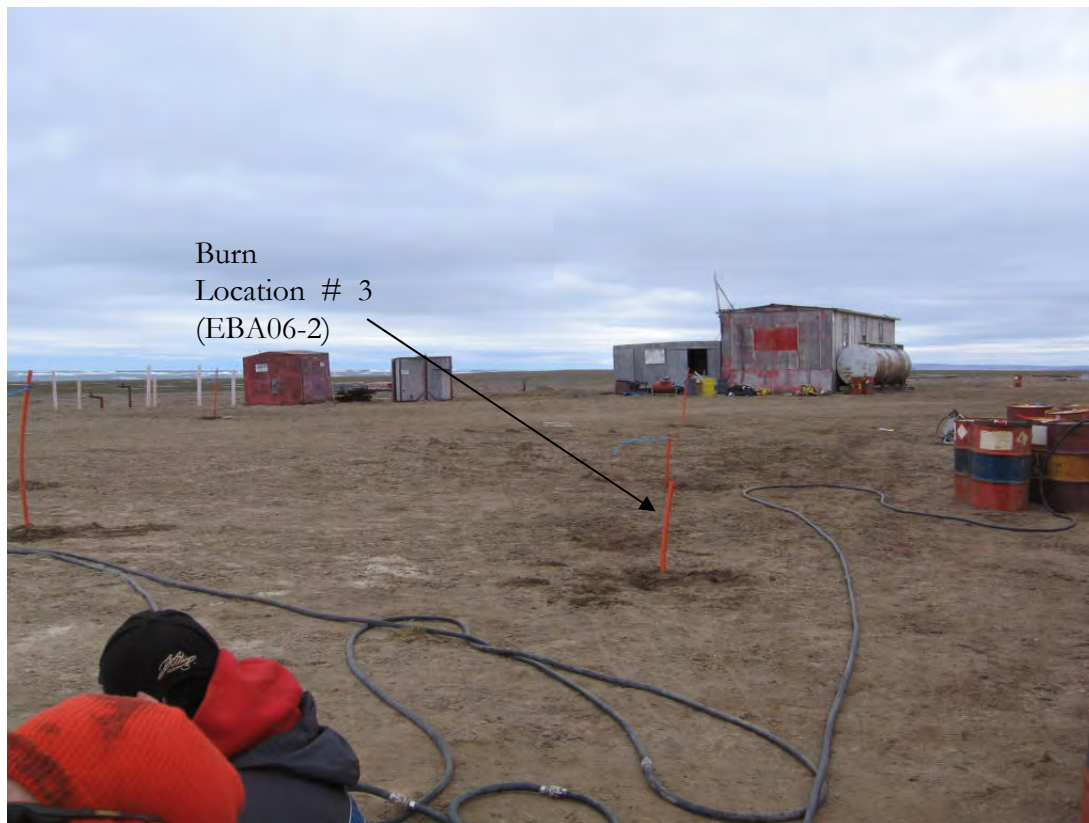
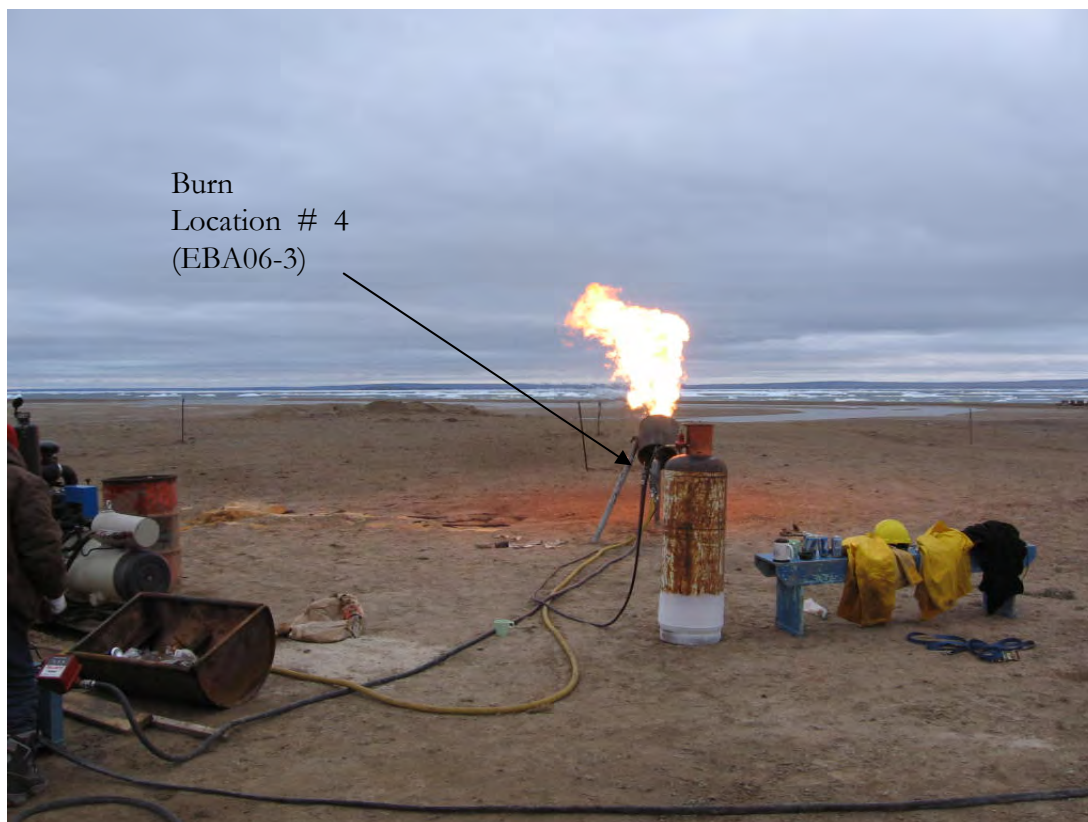


Photo 3: Burn Location # 4 (EBA06-3)



With the exception of samples collected from EBA06 on July 15, 2006, the baseline samples were collected prior to the burning of fuel at each location. In the case of EBA06, the six baseline soil samples were collected the day after a short 20 minute test burn of < 400 L completed on July 14, 2006.

Since smoke was observed during the operation of the incinerator at all four locations, EBA submitted all of the above baseline samples to Maxxam Analytical on July 20, 2006 for analysis of BTEXs and CCME F1-F4 hydrocarbons. The requested analysis was agreed between EBA, PWSCG and Indian and Northern Affairs Canada (INAC) on July 14, 2006 at the site.

3.0 WORK REQUIRED FOR COMPLETION

3.1 NEXT WEEK'S ACTIVITIES

The following activities are scheduled to begin next week:

- Incineration of fuel from other areas of the site, including fuel from the 45-gallon drums stored at the airstrip. The fuel will be moved to the incinerator located near the tank farm rather than moving the incinerator down to the airstrip.
- Washing of 45-gallon drums inside one of the silver bolted tanks located inside the tank farm, and treatment of wash water associated with this activity.
- Crushing of the 45-gallon drums once they are washed. There is also an opportunity for training local people out of Sachs harbour on this task. AES will discuss this opportunity with INAC.
- Dismantling of the fuel supply line leading from the beach to the tank farm. This work was stopped earlier in the week, but is expected to continue next week.
- Collection and analysis of a treated wastewater sample from the grey water sump prior to its discharge to ground a distance of no less than 30 metres from any stream or water body.

3.2 FUTURE WORK

AES expect to finish all of the tasks assigned to them so far in 10 days time and are available for extra work.

4.0 SCHEDULE

The project is on schedule. AES had planned to burn approximately 50,000 L during the first week of the project. AES have met this target.

EBA understands that there are 61 tanks onsite (including drums), plus an additional 20 drums (approximately) that were found onsite by AES this week. So far 12 of the approximately 81 tanks known to be on site have been cleaned (15%). There are also additional tanks (drums) on the beach (airstrip) that contain unknown product. These will need to be assessed / tested by EBA.

With respect to the 19 tanks located inside the tank farm, 6 of these have liners and do not require cleaning. To date, all but 1 of the 13 tanks inside the tank farm that can be cleaned have been cleaned. None of the tanks located outside of the tank farm (including drums) have been cleaned.

5.0 REGULATORY

5.1 WILDLIFE

Between July 14 and July 20, 2006 the following wildlife was observed and recorded in the daily wildlife log by the two wildlife monitors on site:

- Birds (Old Squaws, Seagulls, Red Throated Loons, Sandpipers, Eider Ducks, Common Loons, Golden Plover, Arctic Terns, Snow Buntings, Tundra Swans);
- Seals (Bearded Seals, Ringed Seals);
- Artic Foxes;
- Musk Oxen; and
- Arctic Wolves.

One of the wildlife monitors has been asked to submit a report describing wildlife observed in the area to the Hunters and Trappers Committee (HTC) at the end of the project.

5.2 WATER

EBA considers that AES is compliance with the Water license (N7L1-1814) issued for this project by the Northwest Territories Water Board, in accordance with the *Northwest Territories Waters Act*.

As per the license issued for this project, the daily quantity of water used for all purposes did not exceed 100 m³. Daily water take records for the site this week were as follows:

Date	Daily Water Take (m ³)	Quantity of Water Not to be Exceeded (m ³)
14-Jul-06	0.91	100
15-Jul-06	0.91	100
16-Jul-06	0.45	100
17-Jul-06	0.68	100
18-Jul-06	0.68	100
19-Jul-06	0.91	100
20-Jul-06	0.91	100

5.3 LAND

EBA considers that AES is compliance with the land use permit (Land Use Permit Number N2006J0024) issued for this project by INAC.

6.0 ENVIRONMENTAL / SAFETY

No environmental incidents / accidents were reported for the work period. All fuel spills were either minor (less than 2 L) or non-reportable (10 L) and will be investigated and remediated as part of the project. An EBA assessment team will be arriving at the site in the first week of August, 2006. All spillages have been identified ready for their arrival.

Two safety incidents were reported for the work period as follows:

- Small cut on the finger of one of the employees onsite. The cut did not require stitches and no time was lost.
- Sand particle in the eye of one of the employees onsite. The employee was using an ATV when the incident occurred. He was wearing his safety glasses and a helmet with a visor at the time.

These incidents have been recorded in the medic's log for the site. No other incidents were reported to the medic this week.

7.0 STAFFING

Staffing for the project during the first week of operation is shown in Table 1. The percentage of aboriginal employees on-site under the employ of AES each day ranged from 75% to 77%.

Table 1: Johnson Point Personnel July 14 to July 20, 2006

	Jul-06						
	Week 1						
	F	S	S	M	T	W	T
Aboriginal Employees:	10	10	9	9	9	9	9
Non-Aboriginal Employees:	3	3	3	3	3	3	3
Percentage of Aboriginal Employees on site (%):	77	77	75	75	75	75	75

8.0 CLOSURE

We trust this report to be an accurate account of the work completed for the project during the reported period.

Should any discrepancies be noted, or should any questions arise regarding the contents of this report, please contact us.

Respectfully submitted,
EBA Engineering Consultants Ltd.



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/jnk

**JOHNSON POINT
SITE SUPERVISION FOR REMEDIATION AND CLEAN-UP
WEEKLY REPORT
EBA FILE: 1740199
FOR THE PERIOD: JULY 21, 2006 TO JULY 28, 2006**

WEATHER				
Date (Year 2006)	Time	Temperature (°C)	General Conditions	Wind Direction & Speed (km/h)
July 21 (Fri.)	12:00 p.m.	4	Overcast, very windy in morning	NE 30
July 22 (Sat.)	12:00 p.m.	6	Rain, light snow, overcast	NE 30
July 23 (Sun.)	12:00 p.m.	6	Overcast, light rain	NE 30
July 24 (Mon.)	12:00 p.m.	5	Overcast, some blue sky	NE 20
July 25 (Tues.)	12:00 p.m.	10	Sunny, blue sky	NE 10 Calm
July 26 (Wed.)	12:00 p.m.	17	Sunny	NE 5 Calm
July 27 (Thurs.)	12:00 p.m.	18	Sunny	W 20
July 28 (Fri.)	12:00 p.m.	12	Sunny	

1.0 OVERVIEW OF ACTIVITIES

1.1 VOLUME OF FUEL BURNED

Fuel incineration continued this week from 8:40 am on July 21, 2006. In the first week of the project, AES burned approximately 50,000 L of fuel. AES completed fuel burning at the site on July 28, 2006. The total volume of fuel burned for this project was approximately 100,000 L. EBA was not able to accurately quantify the volume of fuel burned after June 20, 2006 due to a malfunction of AES's fuel pump meter.

The source of fuel burned this week was as follows:

- Residual diesel from the 7 silver upright tanks lying on their sides near the tank farm;
- Suspected varsol stored in 20-gallon drums in the maintenance shed.
- Residual diesel (Tank 6) from the silver bolted upright tanks inside the tank farm;
- Diesel fuel and Aviation fuel products, including Aviation Gas, Jet-A, and Jet-B from other areas of the camp, including the upper camp area and the airstrip;

- Diesel fuel recovered from the fuel-supply pipeline and piping from the tank farm; and,
- Residual fuel products from the drum dump adjacent to the airstrip, including 5 gallon pails of motor oil and varsol. No waste oil was encountered on-site.

The burning of residual fuel from inside the red upright tanks inside the tank farm was completed last week.

1.2 TANK CLEANING

Final cleaning and closing of the tanks in the tank farm was also completed this week. Water associated with the cleaning of these tanks was treated and stored in the tank farm sump. The bags of sawdust and absorbent material that were used to clean the sludge at the base of the tanks were burned in the camp's garbage incinerator. The sludge encountered at the base of these tanks consisted of rust slops and residual diesel.

The following tank cleaning activities were also completed this week:

- Washing of 45-gallon drums. The drums were washed with a steam cleaner over a large plastic container to minimize water use on-site. Wastewater associated with this activity was treated and stored inside the tank farm sump.
- Scrubbing and brushing of sludge material from around the bolts on the lower walls and base of the tanks in the tank farm. The upper walls did not require cleaning.
- Flushing of 500 gallon tanks with water. A maximum of approximately 500 gallons of water was used for this activity. Water from the cleaned tanks was subsequently pumped to the next tank in line to be cleaned. When the tanks were full of water, diesel was pumped off the top, and a section from the top of the tank was removed to allow entry for wiping off the sides and base of the tank with absorbent pads. Depending on the condition of the tank, some tanks required repeated flushing. A LEL meter was used to ensure that 10% Lower Explosive Limit (LEL) was reached prior to tank entry.
- Final draining and flushing of the silver vertical tanks lying on their sides outside the tank farm. These tanks were not entered by site personnel, as per AES's discussions with PWGSC, due to the inherent risk associated with this task. Instead, the tanks were flushed and absorbent material placed at the lower base of the tank to ensure that it was free of free hydrocarbons and therefore safe for dismantling at a later date.

1.3 OTHER ACTIVITIES

The following 'other' activities were completed this week:

- Incineration of garbage from trailers and other structures located on-site in preparation for the arrival of the EBA assessment team.
- Dismantling of the fuel supply line running from the beach to the tank farm. Fuel recovered from the pipeline was stored in tanks, including drums, ready for incineration.
- Consolidating and labelling of drums at the beach that did not contain fuel or could not be opened. EBA was not able to sample the drums containing unknown product. Drum thieves were ordered this week but did not make it on the plane to camp.
- Crushing of empty drums on site by a 4-person team from Sach's Harbour. The drum crusher was supplied by INAC.

2.0 TESTING

The following samples were collected by EBA this week.

- Wastewater samples from the treated greywater sump and the tank farm sump.
- Baseline soil samples from the two new burner locations installed this week
- Exit soil samples from the six burner locations installed at the site since the beginning of the project.

AES did not collect a drinking water sample this week.

2.1 WATER

Drinking water samples were not collected for analysis this week. AES collected and submitted a drinking water sample from the reverse osmosis drinking water treatment system last week, on July 19, 2006.

2.2 WASTEWATER

Wastewater samples were collected from the treated greywater sump (Sump 1) on July 24 and from the tank farm sump (Sump 2) on July 28. Both samples were submitted to Maxxam Analytical for analysis of Oil and Grease and BTEX. EBA received the results for Sump 1 on July 28, 2006. The results of analysis for Oil and Grease did not meet the relevant discharge criteria. EBA collected another sample from the greywater sump on July 28, 2006 and submitted the sample for analysis of Oil and Grease Only to ALS Labs.

AES also collected their own sample for Oil and Grease analysis on the same day and submitted their sample to a different lab (ALS Labs).

2.3 SOIL

Photos 1 to 6 show the locations of the six fuel incinerator locations installed since the beginning of the project by AES. Burner locations 5 (EBA06-4) and 6 (EBA06-5) were installed this week. Burner locations 1, 2, 3 and 4 (EBA06, EBA06-1, EBA06-2, and EBA06-3) were installed last week.

EBA collected baseline samples from burner locations 5 (EBA06-4) and 6 (EBA06-5) on July 23 and July 26, 2006. Baseline samples from burner locations 1 (EBA06), 2 (EBA06-1), 3 (EBA06-2), and 4 (EBA06-3) were collected last week.

Exit soil samples were collected following the completion of burning activities at each location, on the following dates:

- Fuel Incinerator Locations 1, 2, 3 and 4 (EBA06, EBA06-1, EBA06-2, and EBA06-3) - July 23, 2006
- Fuel Incinerator Location 5 (EBA06-4) - July 26, 2006
- Fuel Incinerator Location 6 (EBA06-5) - July 28, 2006.

All soil samples were submitted to Maxxam Analytics Inc. for analysis of BTEXs and F1-F4 hydrocarbons, as per EBA's agreement with PWSGC and Indian and Northern Affairs Canada (INAC).

EBA's final report will detail the sampling methodology and results of baseline and exit samples for all six burner locations.

Photo 1: Burn Location 1 (EBA06) and 2 (EBA06-1)

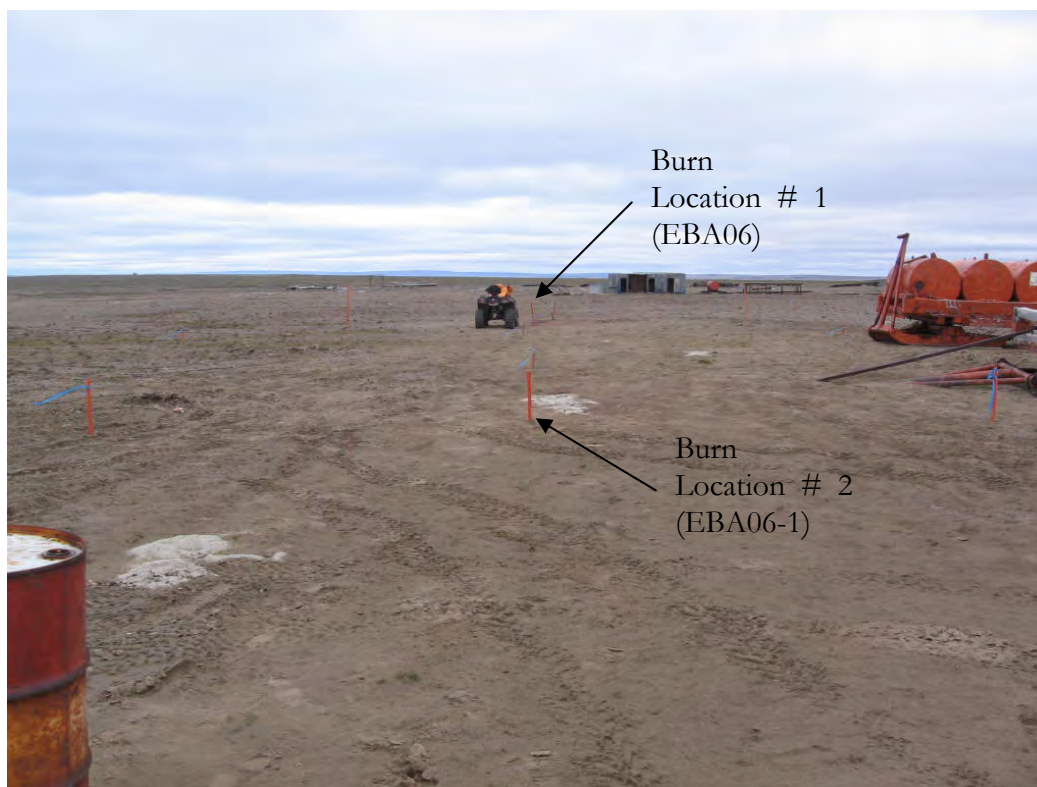


Photo 2: Burn Location 3 (EBA06-2)

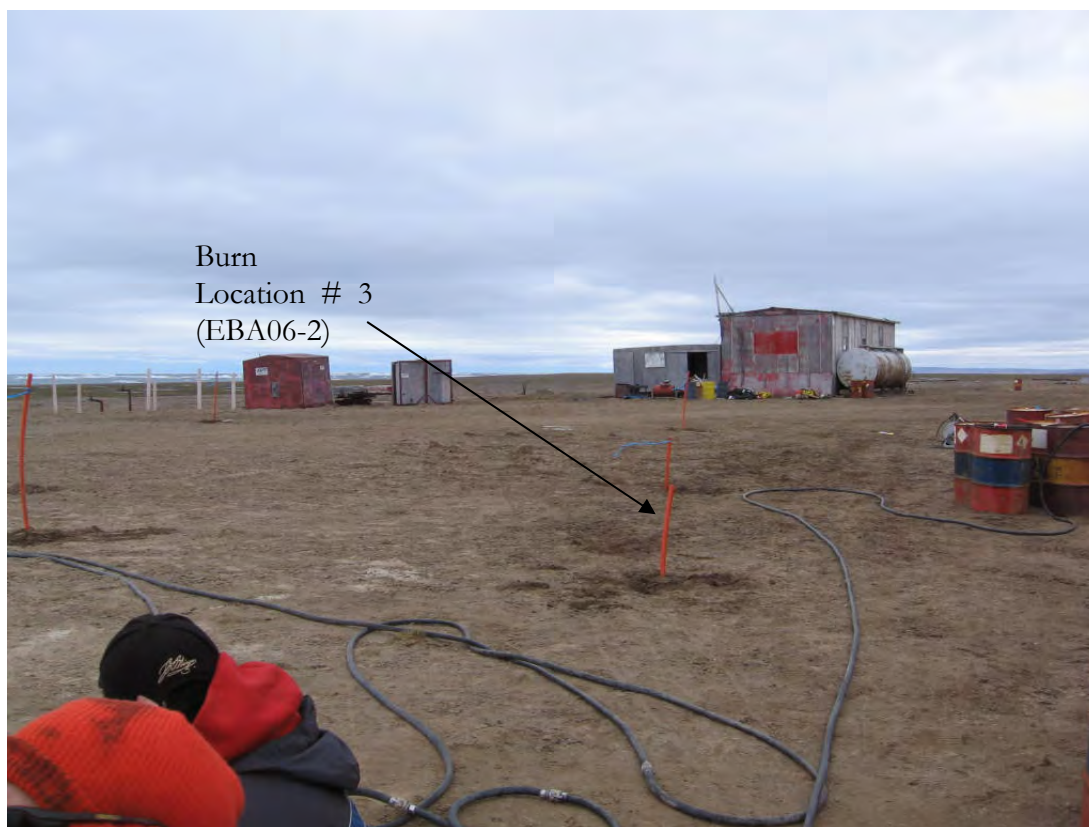


Photo 3: Burn Location 4 (EBA06-3)

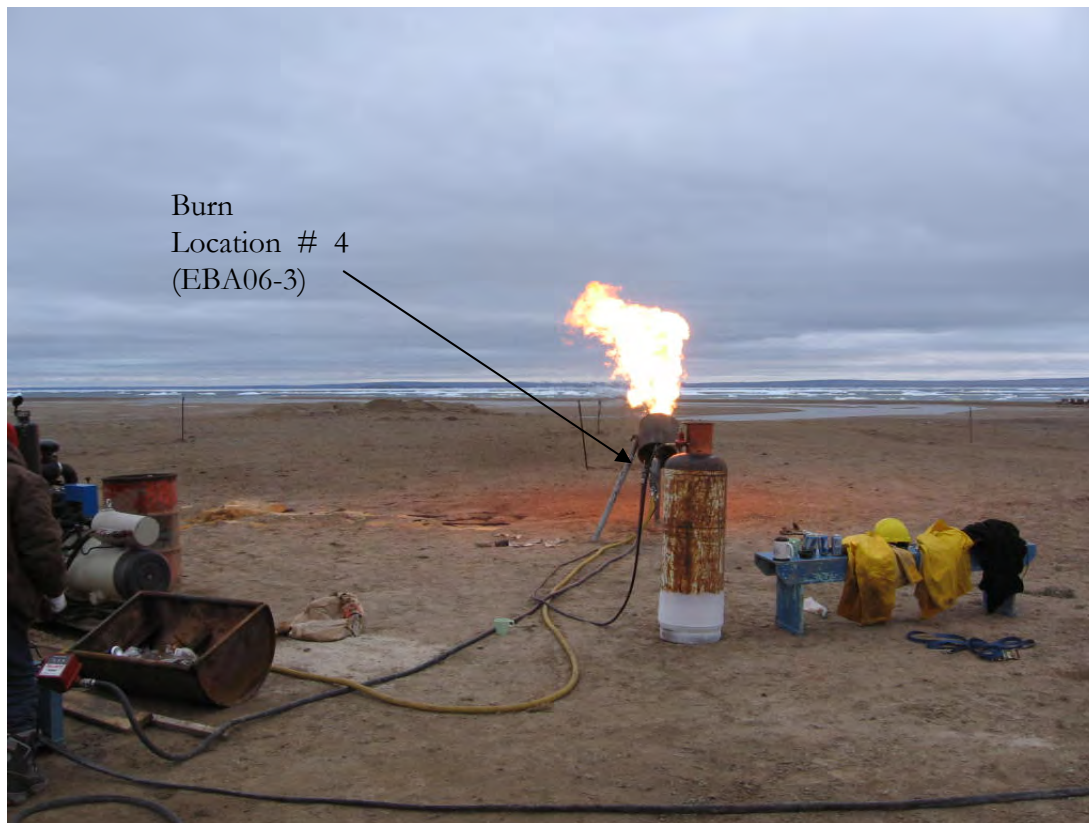


Photo 4: Burn Location 5 (EBA06-4)

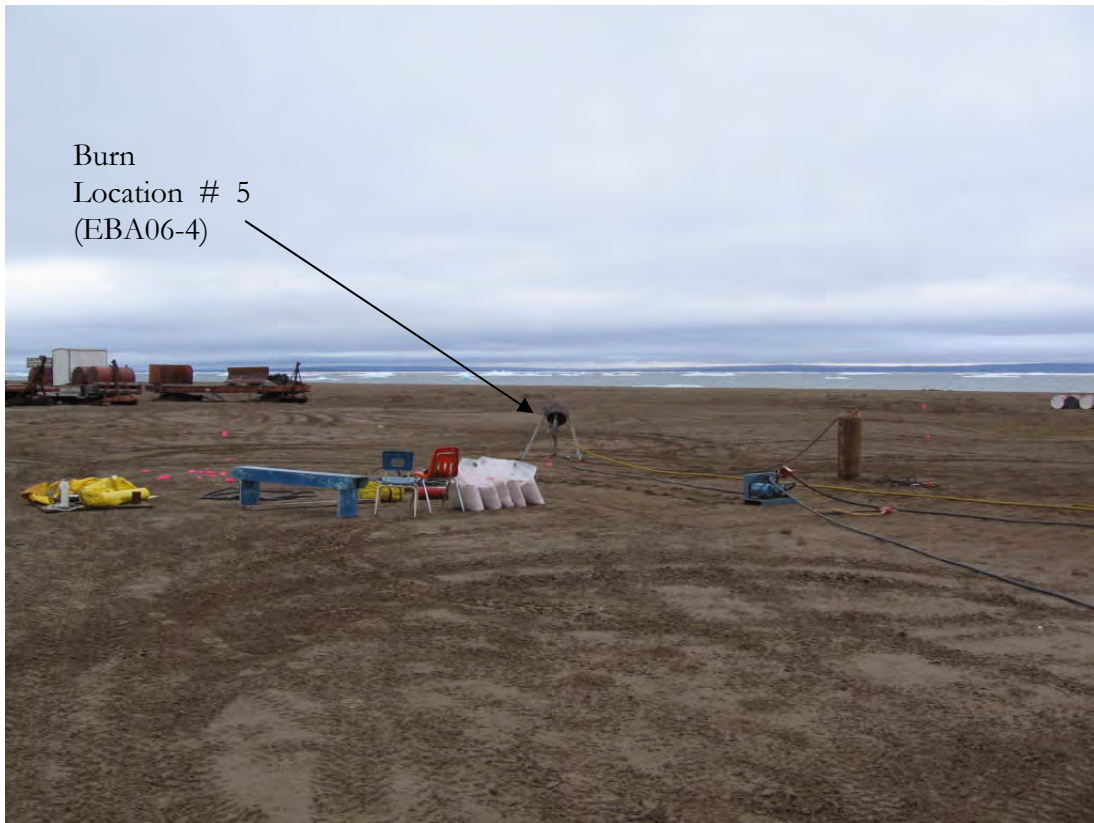
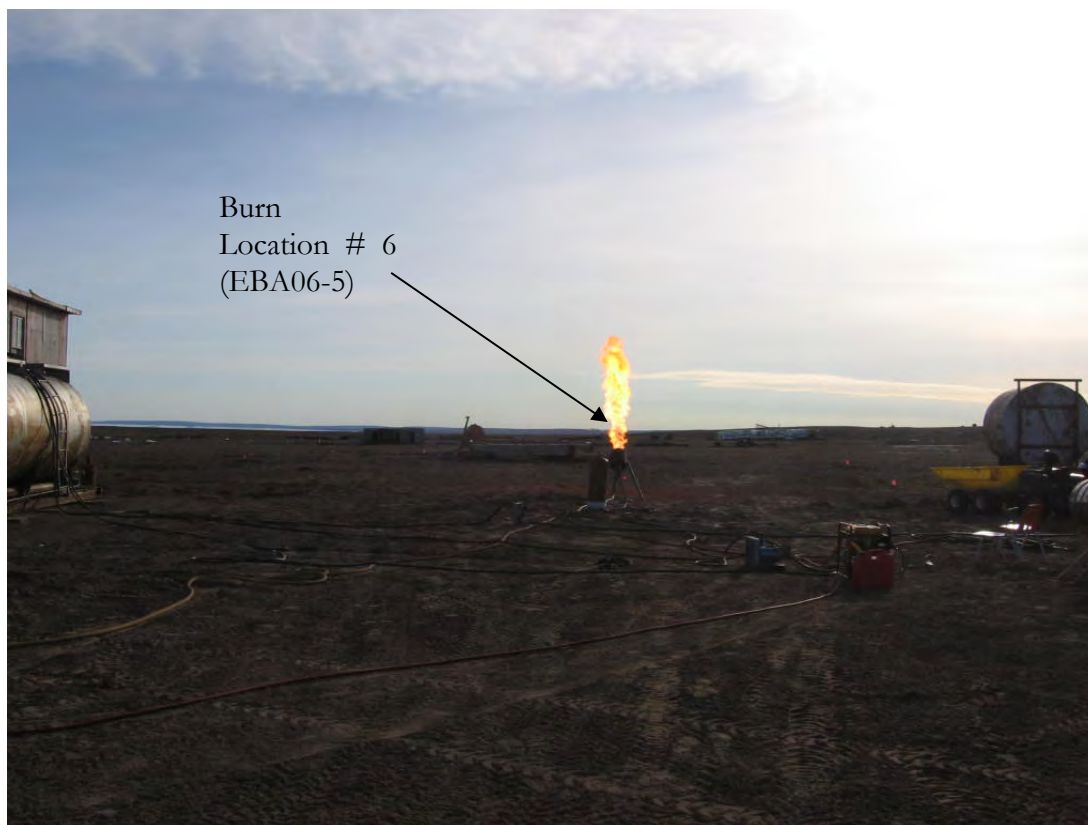


Photo 5: Burn Location 6 (EBA06-5)



3.0 WORK REQUIRED FOR COMPLETION

3.1 NEXT WEEK'S ACTIVITIES

The camp will remain open next week, with a skeleton crew awaiting the arrival of EBA's assessment team on August 6, 2006.

The skeleton crew will further cut and wash the sections of pipe from the fuel-supply pipeline. These are currently being stored behind the camp, and will be washed over a drip pan using a steam cleaner to minimize water use on-site. Wastewater associated with this activity will be collected, treated and stored inside 500 gallon tanks ready for discharge to land pending the results of laboratory analysis.

During this time, the following activities will take place at the camp:

- Burning of camp-only garbage in the incinerator located at the airstrip, including sewage and solid waste from the toilet facilities.

- Release of greywater from the greywater sump located behind the camp, pending the results of analysis.
- Continued treatment and storage of greywater prior to the arrival of the EBA assessment team.
- Release of wastewater from the sump inside the tank farm, pending the results of analysis.

3.2 FUTURE WORK

AES finished their tasks on July 29, 2006, except for final cleaning of the pipes from the pipeline and tank farm piping and cleaning of the remaining 500 gallon tanks. AES are available for extra work if required prior to the arrival of the EBA assessment team, such as collection of scrap metal from the site (old antennas, navigational equipment) and the crushing of empty cached DIAND fuel drums.

4.0 SCHEDULE

The project was finished ahead of schedule. AES burned approximately 100,000 L of fuel over the course of the project and cleaned all tanks (incl. drums) containing fuel on site. The remainder of the 500 gallon tanks will be cleaned next week. AES crushed all empty drums on site. AES is now on stand-by to service the requirements of PWGSC, INAC and/or EBA as required.

5.0 REGULATORY

5.1 WILDLIFE

Between July 21 and July 27, 2006 the following wildlife was observed and recorded in the daily wildlife log by the two wildlife monitors on site:

- Birds (Old Squaws, Seagulls, Red Throated Loons, Sandpipers, Eider Ducks, Common Loons, Snow Buntings, Red Phalarope, Long Tailed Jaeger);
- Seals (Bearded Seals, Ringed Seals); and
- Arctic Foxes.

One of the wildlife monitors has been asked to submit a report describing wildlife observed in the area to the Hunters and Trappers Committee (HTC) at the end of the project.

5.2 WATER

EBA considers that AES is in compliance with the Water license (N7L1-1814) issued for this project by the Northwest Territories Water Board, in accordance with the *Northwest Territories Waters Act*.

As per the license issued for this project, the daily quantity of water used for all purposes did not exceed 100 m³. Daily water take records for the site this week were as follows:

Date	Daily Water Take (m ³)	Quantity of Water Not to be Exceeded (m ³)
21-Jul-06	0.45	100
22-Jul-06	1.30	100
23-Jul-06	4.09	100
24-Jul-06	0.00	100
25-Jul-06	1.82	100
26-Jul-06	1.82	100
27-Jul-06	3.18	100
28-Jul-06	0.91	100

5.3 LAND

EBA considers that AES is in compliance with the land use permit (Land Use Permit Number N2006J0024) issued for this project by INAC.

6.0 ENVIRONMENTAL / SAFETY

Fuel Spills

There were several minor spills during the dismantling of the fuel supply line of < 2 L and one spill of < 40 L on July 23, 2004.

The larger spill, although not reportable (<100 L), was nevertheless reported to the government (Northwest Territories Spill Report – File Number: 06-293) on July 24, 2006. The nearest water body to the spill was a unnamed lake located 20 m to the south of the pipeline. The spill was contained by a natural depression and did not move more than 0.5 m from the spill location. AES were not able to gain access to the area with a Bob Cat on the day of the spill. The ground near the spill was too soft and consists of soft wet sand. An excavator with tracks will be required to access the area for clean-up. AES will provide this on the same flight as the assessment team.

EBA's assessment team will be arriving on-site on August 6, 2006. All fuel spillages have been identified, are ready for the arrival of the assessment team and will be investigated, and

remediated where required, by EBA as part of the project. The diesel impacted soil from the pipeline spill area will also be excavated at this time, and EBA will take confirmatory samples from the walls and base of the excavation to confirm the adequacy of remediation.

Air Emissions

A single-stage garbage incinerator was in use at the site, near the airstrip. EBA observed thick black intermittent smoke from the garbage incinerator, usually at the start of the burn. In at least one case, this was due to the burning of plastic bags containing hydrocarbon soaked sawdust and absorbent material from the tank cleaning operation. In other cases, the smoking appeared to be related to the burning of rubber, wet blankets, and other incompatible material. AES stopped burning such material and stored it inside one of bladdered tanks inside the tank farm ready later disposal.

EBA also observed smoke from three fires on the ground at burner location 2 (2 fires) and burner location 5 (1 fire). These fires were related to the operation of the fuel burner and involved small volumes of fuel (< 2 L) that spurted out from the fuel burner and caught fire. The fires occurred on the ground only, below the burner.

A ground fire was also observed beside the fuel-supply pipeline. Pooled diesel (< 2 L), which had dripped from the pipeline over time and was contained by absorbent material approximately 3-4 days prior to the fire, was ignited by sparks from the use of a cut-off saw on July 23, 2006.

Health and Safety

EBA observed a near miss this week. An operator was using the forks of a Bob Cat to lift tank 64, located beside the airstrip, off the rear of its sleigh trailer unit. The toe bar on the trailer unit dropped down and went through the window of the Bob Cat, narrowly missing the operator. There were no injuries, but there was potential for a serious injury to have occurred. As per AES's Health and Safety Plan, AES investigated the incident and has prepared internal records of the incident.

Two minor safety incidents were recorded in the medic's log for the site this week as follows:

- A rash on the back of a worker's hand, which was unrelated to the job site; and
- A minor pinching of a worker's finger resulting from the moving of empty drums.

No other incidents or accidents were reported to the medic this week.

Although not reportable to WCB, the above two incidents will nonetheless be reported by AES to the WCB next week. A copy of these incident reports will be provided to PWGSC by AES.

7.0 STAFFING

Staffing for the project during the second week of operation is shown in Table 1. The percentage of aboriginal employees on-site under the employ of AES each day ranged from 73% to 77%.

Table 1: Johnson Point Personnel July 21 to July 28, 2006

	Jul-06							
	Week 2							
	F	S	S	M	T	W	T	F
Aboriginal Employees:	9	9	9	9	9	8	8	8
Non-Aboriginal Employees:	3	3	3	3	3	3	3	3
Percentage of Aboriginal Employees on site (%):	75	75	75	75	75	73	73	73

8.0 CLOSURE

We trust this report to be an accurate account of the work completed for the project during the reported period.

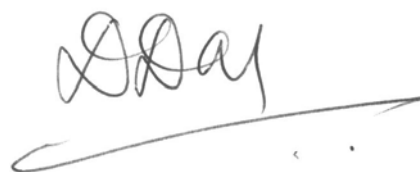
Should any discrepancies be noted, or should any questions arise regarding the contents of this report, please contact us.

Respectfully submitted,
EBA Engineering Consultants Ltd.



Neil Allen, B.Sc., M.Sc., PGDipEnvMngt.
Environmental Scientist
Direct Line: 604.685.0017 x229

/jnk



David Das, Ph.D., P.Eng
Project Director, NT/NU
Direct Line: 867.766.3728 x121

APPENDIX

APPENDIX C BASELINE AND EXIT SOIL SAMPLES ANALYTICAL DATA

Sample Location & ID		Sampling Date (Baseline/Exit)	BTEX (ppm)				Hydrocarbon Fractions (ppm)			
			Benzene	Toluene	Ethyl-benzene	Xylenes	F1 (C6-C10) – BTEX	F2 (>C10-C16)	F3 (>C16-C34)	F4 (>C34-C50)
Residential/Parkland Criteria			0.5	0.8	1.2	1	-	-	-	-
Industrial Criteria			5	0.8	20	20	-	-	-	-
Residential / Parkland ¹	Coarse-grained	Surface Soils (<1.5 m depths)				130	450	400	2800	
	Fine-grained					260	900	800	5600	
Industrial ¹	Coarse-grained					330 (230 ^a)	760 (150 ^a)	1700	3300	
	Fine-grained					660	1500	2500	6600	
Residential / Parkland ¹	Coarse-grained	Subsoil (>1.5 m depths)				350 (230 ^a)	1,500 (150 ^a)	2,500	10,000	
	Fine-grained					750	2,200	3,500	10,000	
Industrial ¹	Coarse-grained					700 (230 ^a)	2,000 (150 ^a)	3,500	10,000	
	Fine-grained					1,000	3,000	5,000	10,000	
BURN LOCATION 1										
EBA06-5NW0NE-0-0.1m	July 15, 2006	<0.04	<0.1	<0.1	<0.1	<10	46	289	10	
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	38	<10	
EBA06-5SE0SW-0-0.1m	July 15, 2006	<0.04	<0.1	<0.1	<0.1	<10	99	695	66	
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	21	882	141	
EBA06-0SE5SW-0-0.1m	July 15, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	256	13	
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	29	190	22	
EBA06-10SE15SW-0-0.1m	July 15, 2006	<0.04	<0.1	<0.1	<0.1	<10	11	376	39	
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	212	24	
EBA06-0SE15SW-0-0.1m	July 15, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	<10	<10	
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	40	<10	
EBA06-10NW15SW-0-0.1m	July 15, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	<10	<10	
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	30	34	
¹ = Eco Soil Contact										
^a = For protection against contaminated groundwater discharge to an adjacent surface waterbody										
Bold = Exceeds residential/parkland coarse-grained surficial soil (<1.5 m) criteria										

Sample Location & ID	Sampling Date (Baseline/Exit)	BTEX (ppm)				Hydrocarbon Fractions (ppm)			
		Benzene	Toluene	Ethyl-benzene	Xylenes	F1 (C6-C10) – BTEX	F2 (>C10-C16)	F3 (>C16-C34)	F4 (>C34-C50)
Residential/Parkland Criteria		0.5	0.8	1.2	1	-	-	-	-
Industrial Criteria		5	0.8	20	20	-	-	-	-
Residential / Parkland ¹	Coarse-grained	Surface Soils (<1.5 m depths)				130	450	400	2800
	Fine-grained					260	900	800	5600
Industrial ¹	Coarse-grained					330 (230 ^a)	760 (150 ^a)	1700	3300
	Fine-grained					660	1500	2500	6600
Residential / Parkland ¹	Coarse-grained	Subsoil (>1.5 m depths)				350 (230 ^a)	1,500 (150 ^a)	2,500	10,000
	Fine-grained					750	2,200	3,500	10,000
Industrial ¹	Coarse-grained					700 (230 ^a)	2,000 (150 ^a)	3,500	10,000
	Fine-grained					1,000	3,000	5,000	10,000
BURN LOCATION 2									
EBA06-1-5NW0NE-0-0.1m	July 17, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	240	<10
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	12	44	14
EBA06-1-5SE0SW-0-0.1m	July 17, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	378	<10
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	12	151	23
EBA06-1-0SE5SW-0-0.1m	July 17, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	361	14
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	18	52	67
EBA06-1-10SE15SW-0-0.1m	July 17, 2006	<0.04	<0.1	<0.1	<0.1	<10	26	944	144
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	15	118	22
EBA06-1-0SE15SW-0-0.1m	July 17, 2006	<0.04	<0.1	<0.1	<0.1	<10	22	766	142
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	14	103	27
EBA06-1-10NW15SW-0-0.1m	July 17, 2006	<0.04	<0.1	<0.1	<0.1	<10	21	465	70
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	12	103	17

¹ = Eco Soil Contact
^a = For protection against contaminated groundwater discharge to an adjacent surface waterbody
Bold = Exceeds residential/parkland coarse-grained surficial soil (<1.5 m) criteria

Sample Location & ID	Sampling Date (Baseline/Exit)	BTEX (ppm)				Hydrocarbon Fractions (ppm)			
		Benzene	Toluene	Ethyl-benzene	Xylenes	F1 (C6-C10) - BTEX	F2 (>C10-C16)	F3 (>C16-C34)	F4 (>C34-C50)
Residential/Parkland Criteria		0.5	0.8	1.2	1	-	-	-	-
Industrial Criteria		5	0.8	20	20	-	-	-	-
Residential / Parkland ¹	Coarse-grained	Surface Soils (<1.5 m depths)				130	450	400	2800
	Fine-grained					260	900	800	5600
Industrial ¹	Coarse-grained					330 (230 ^a)	760 (150 ^a)	1700	3300
	Fine-grained					660	1500	2500	6600
Residential / Parkland ¹	Coarse-grained	Subsoil (>1.5 m depths)				350 (230 ^a)	1,500 (150 ^a)	2,500	10,000
	Fine-grained					750	2,200	3,500	10,000
Industrial ¹	Coarse-grained					700 (230 ^a)	2,000 (150 ^a)	3,500	10,000
	Fine-grained					1,000	3,000	5,000	10,000
BURN LOCATION 3									
EBA06-2-5NW0NE-0-0.1m	July 18, 2006	<0.04	<0.1	<0.1	<0.1	<10	36	154	24
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	62	166	16
EBA06-2-5SE0SW-0-0.1m	July 18, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	84	21
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	11	<10	<10
EBA06-2-0SE5SW-0-0.1m	July 18, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	127	20
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	12	14	<10
EBA06-2-10SE15SW-0-0.1m	July 18, 2006	<0.04	<0.1	<0.1	<0.1	<10	26	124	31
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	<10	<10
EBA06-2-0SE15SW-0-0.1m	July 18, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	92	17
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	11	15	<10
EBA06-2-10NW15SW-0-0.1m	July 18, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	98	15
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	12	<10	<10

¹ = Eco Soil Contact

^a = For protection against contaminated groundwater discharge to an adjacent surface waterbody

Sample Location & ID		Sampling Date (Baseline/Exit)	BTEX (ppm)				Hydrocarbon Fractions (ppm)			
			Benzene	Toluene	Ethyl-benzene	Xylenes	F1 (C6-C10) - BTEX	F2 (>C10-C16)	F3 (>C16-C34)	F4 (>C34-C50)
Residential/Parkland Criteria			0.5	0.8	1.2	1	-	-	-	-
Industrial Criteria			5	0.8	20	20	-	-	-	-
Residential / Parkland ¹	Coarse-grained	Surface Soils (<1.5 m depths)				130	450	400	2800	
	Fine-grained					260	900	800	5600	
Industrial ¹	Coarse-grained					330 (230 ^a)	760 (150 ^a)	1700	3300	
	Fine-grained					660	1500	2500	6600	
Residential / Parkland ¹	Coarse-grained	Subsoil (>1.5 m depths)				350 (230 ^a)	1,500 (150 ^a)	2,500	10,000	
	Fine-grained					750	2,200	3,500	10,000	
Industrial ¹	Coarse-grained					700 (230 ^a)	2,000 (150 ^a)	3,500	10,000	
	Fine-grained					1,000	3,000	5,000	10,000	
BURN LOCATION 4										
EBA06-3-5S0E-0-0.1m	July 18, 2006									
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	33	10	
EBA06-3-5N0E-0-0.1m	July 18, 2006	<0.04	<0.1	<0.1	<0.1	<10	21	95	15	
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	10	87	20	
EBA06-3-0N5E-0-0.1m	July 18, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	77	15	
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	287	272	18	
EBA06-3-10S15E-0-0.1m	July 18, 2006	<0.04	<0.1	<0.1	<0.1	<10	31	187	71	
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	38	23	
EBA06-3-0N15E-0-0.1m	July 18, 2006	<0.04	<0.1	<0.1	<0.1	<10	14	89	22	
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	84	106	19	
EBA06-3-10N15E-0-0.1m	July 18, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	120	26	
	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	11	112	32	

¹ = Eco Soil Contact

^a = For protection against contaminated groundwater discharge to an adjacent surface waterbody

Sample Location & ID		Sampling Date (Baseline/Exit)	BTEX (ppm)				Hydrocarbon Fractions (ppm)			
			Benzene	Toluene	Ethyl-benzene	Xylenes	F1 (C6-C10) – BTEX	F2 (>C10-C16)	F3 (>C16-C34)	F4 (>C34-C50)
Residential/Parkland Criteria			0.5	0.8	1.2	1	-	-	-	-
Industrial Criteria			5	0.8	20	20	-	-	-	-
Residential / Parkland ¹	Coarse-grained	Surface Soils (<1.5 m depths)				130	450	400	2800	
	Fine-grained					260	900	800	5600	
Industrial ¹	Coarse-grained					330 (230 ^a)	760 (150 ^a)	1700	3300	
	Fine-grained					660	1500	2500	6600	
Residential / Parkland ¹	Coarse-grained	Subsoil (>1.5 m depths)				350 (230 ^a)	1,500 (150 ^a)	2,500	10,000	
	Fine-grained					750	2,200	3,500	10,000	
Industrial ¹	Coarse-grained					700 (230 ^a)	2,000 (150 ^a)	3,500	10,000	
	Fine-grained					1,000	3,000	5,000	10,000	
BURN LOCATION 5										
EBA06-4-5N0E-0-0.1m	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	16	57	14	
	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	18	95	30	
EBA06-4-0N15E-0-0.1m	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	21	35	<10	
	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	37	118	40	
EBA06-4-0N5E-0-0.1m	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	<10	<10	
	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	101	52	
EBA06-4-5S0E-0-0.1m	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	19	101	12	
	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	106	313	62	
EBA06-4-10S15E-0-0.1m	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	12	23	<10	
	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	87	51	
EBA06-4-10N15E-0-0.1m	July 23, 2006	<0.04	<0.1	<0.1	<0.1	<10	14	35	<10	
	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	31	32	
¹ = Eco Soil Contact ^a = For protection against contaminated groundwater discharge to an adjacent surface waterbody										

Sample Location & ID	Sampling Date (Baseline/Exit)	BTEX (ppm)				Hydrocarbon Fractions (ppm)			
		Benzene	Toluene	Ethyl-benzene	Xylenes	F1 (C6-C10) - BTEX	F2 (>C10-C16)	F3 (>C16-C34)	F4 (>C34-C50)
Residential/Parkland Criteria		0.5	0.8	1.2	1	-	-	-	-
Industrial Criteria		5	0.8	20	20	-	-	-	-
Residential / Parkland ¹	Coarse-grained	Surface Soils (<1.5 m depths)				130	450	400	2800
	Fine-grained					260	900	800	5600
Industrial ¹	Coarse-grained					330 (230 ^a)	760 (150 ^a)	1700	3300
	Fine-grained					660	1500	2500	6600
Residential / Parkland ¹	Coarse-grained	Subsoil (>1.5 m depths)				350 (230 ^a)	1,500 (150 ^a)	2,500	10,000
	Fine-grained					750	2,200	3,500	10,000
Industrial ¹	Coarse-grained					700 (230 ^a)	2,000 (150 ^a)	3,500	10,000
	Fine-grained					1,000	3,000	5,000	10,000
BURN LOCATION 6									
EBA06-5-5NW0NE-0-0.1m	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	13	29
	July 28, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	16	20
EBA06-5-5SE0SW-0-0.1m	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	15	43	<10
	July 28, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	<10	16
EBA06-5-0SE5SW-0-0.1m	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	15	41	<10
	July 28, 2006	<0.04	<0.1	<0.1	<0.1	<10	13	49	20
EBA06-5-10SE15SW-0-0.1m	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	18	56	16
	July 28, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	15	20
EBA06-5-0SE15SW-0-0.1m	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	15	31	<10
	July 28, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	28	23
EBA06-5-10NW15SW-0-0.1m	July 26, 2006	<0.04	<0.1	<0.1	<0.1	<10	17	134	30
	July 28, 2006	<0.04	<0.1	<0.1	<0.1	<10	<10	70	30

¹ = Eco Soil Contact

^a = For protection against contaminated groundwater discharge to an adjacent surface waterbody

Your Project #: 1740199
Site: JOHNSON POINT
Your C.O.C. #: 136456

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

1740199

Report Date: 2006/07/27

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A632223

Received: 2006/07/21, 13:13

Sample Matrix: Soil
Samples Received: 24

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX by HS GC/MS (MeOH extract)	20	2006/07/23	2006/07/25	EENVSOP-00004 V.2	EPA SW-846 8260B/502
BTEX by HS GC/MS (MeOH extract)	4	2006/07/24	2006/07/25	EENVSOP-00004 V.2	EPA SW-846 8260B/502
F1-BTEX Soil Cal	24	2006/07/23	2006/07/23		
CCME Hydrocarbons (F1; MeOH; HSGC)	20	2006/07/23	2006/07/26	EENVSOP-00002 V.5	
CCME Hydrocarbons (F1; MeOH; HSGC)	4	2006/07/24	2006/07/25	EENVSOP-00002 V.5	
CCME Hydrocarbons (F2-F4 in soil)	9	2006/07/25	2006/07/25	OR-412 v1.0	CWS PHCS Tier 1
CCME Hydrocarbons (F2-F4 in soil)	15	2006/07/25	2006/07/26	OR-412 v1.0	CWS PHCS Tier 1
Moisture	24	N/A	2006/07/25	GL107 v 4.0	SSMA 51.2

Encryption Key

Jeremy Wakaruk

Jeremy Wakaruk

27 Jul 2006 04:58:13 -06:00

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

JEREMY WAKARUK, BSc., Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
Phone# (780) 465-1212 Ext:223

EBA06
EBA06-1
EBA06-2
EBA06-3

Baseline

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

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332
Edmonton: 9619 - 42 Avenue T6E 5R2 Telephone(780) 465-1212 FAX(780) 450-4187

Page 1 of 1

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09463		
Sampling Date		2006/07/15		
		11:00		
COC Number		136456		
	Units	EBA06-5NWONE-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	46	10	1208633
F3 (C16-C34 Hydrocarbons)	mg/kg	289	10	1208633
F4 (C34-C50 Hydrocarbons)	mg/kg	10	10	1208633
Reached Baseline at C50	mg/kg	Yes	1	1208633
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	88		1206828
O-TERPHENYL (sur.)	%	94		1208633
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	97		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	106		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	104		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	101		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09464		
Sampling Date		2006/07/15		
		11:00		
COC Number		136456		
	Units	EBA06-5SEOSW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	99	10	1208633
F3 (C16-C34 Hydrocarbons)	mg/kg	695	10	1208633
F4 (C34-C50 Hydrocarbons)	mg/kg	66	10	1208633
Reached Baseline at C50	mg/kg	Yes	1	1208633
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	91		1206828
O-TERPHENYL (sur.)	%	100		1208633
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	97		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	105		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	105		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	100		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09465		
Sampling Date		2006/07/15		
		11:00		
COC Number		136456		
	Units	EBA06-0SE5SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208633
F3 (C16-C34 Hydrocarbons)	mg/kg	256	10	1208633
F4 (C34-C50 Hydrocarbons)	mg/kg	13	10	1208633
Reached Baseline at C50	mg/kg	Yes	1	1208633
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	84		1206828
O-TERPHENYL (sur.)	%	92		1208633
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	98		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	104		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	102		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	100		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09466		
Sampling Date		2006/07/15		
		11:00		
COC Number		136456		
	Units	EBA06-10SE15SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	11	10	1208633
F3 (C16-C34 Hydrocarbons)	mg/kg	376	10	1208633
F4 (C34-C50 Hydrocarbons)	mg/kg	39	10	1208633
Reached Baseline at C50	mg/kg	Yes	1	1208633
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	85		1206828
O-TERPHENYL (sur.)	%	97		1208633
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	96		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	109		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	105		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	99		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09467		
Sampling Date		2006/07/15		
		11:00		
COC Number		136456		
	Units	EBA06-0SE15SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208633
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	10	1208633
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1208633
Reached Baseline at C50	mg/kg	Yes	1	1208633
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	80		1206828
O-TERPHENYL (sur.)	%	98		1208633
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	98		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	104		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	101		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	100		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09468		
Sampling Date		2006/07/15		
		11:00		
COC Number		136456		
	Units	EBA06-10NW15SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208633
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	10	1208633
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1208633
Reached Baseline at C50	mg/kg	Yes	1	1208633
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	84		1206828
O-TERPHENYL (sur.)	%	95		1208633
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	97		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	108		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	103		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	102		1206827

RDL = Reportable Detection Limit

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09469		
Sampling Date		2006/07/17		
		15:30		
COC Number		136456		
	Units	EBA06-1-5NWONE-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208633
F3 (C16-C34 Hydrocarbons)	mg/kg	240	10	1208633
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1208633
Reached Baseline at C50	mg/kg	Yes	1	1208633
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	86		1206828
O-TERPHENYL (sur.)	%	96		1208633
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	97		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	110		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	105		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	99		1206827

RDL = Reportable Detection Limit

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09470		
Sampling Date		2006/07/17		
		15:30		
COC Number		136456		
	Units	EBA06-1-5SE0SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208633
F3 (C16-C34 Hydrocarbons)	mg/kg	378	10	1208633
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1208633
Reached Baseline at C50	mg/kg	Yes	1	1208633
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	87		1206828
O-TERPHENYL (sur.)	%	95		1208633
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	98		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	103		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	102		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	100		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09471		
Sampling Date		2006/07/15		
		15:30		
COC Number		136456		
	Units	EBA06-1-0SE5SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208633
F3 (C16-C34 Hydrocarbons)	mg/kg	361	10	1208633
F4 (C34-C50 Hydrocarbons)	mg/kg	14	10	1208633
Reached Baseline at C50	mg/kg	Yes	1	1208633
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	89		1206828
O-TERPHENYL (sur.)	%	92		1208633
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	98		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	107		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	106		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	100		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09472		
Sampling Date		2006/07/15		
		15:30		
COC Number		136456		
	Units	EBA06-1-10SE15SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	26	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	944	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	144	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	89		1206828
O-TERPHENYL (sur.)	%	82		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	99		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	104		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	102		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	101		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09473		
Sampling Date		2006/07/15		
		15:30		
COC Number		136456		
	Units	EBA06-1-0SE15SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	22	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	766	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	142	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	76		1206828
O-TERPHENYL (sur.)	%	84		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	97		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	102		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	101		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	101		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09474		
Sampling Date		2006/07/15		
		15:30		
COC Number		136456		
	Units	EBA06-1-10NW15SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	21	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	465	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	70	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	87		1206828
O-TERPHENYL (sur.)	%	87		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	97		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	103		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	103		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	102		1206827

RDL = Reportable Detection Limit

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09475		
Sampling Date		2006/07/18		
		10:00		
COC Number		136456		
	Units	EBA06-2-5NW0NE-0-0.1M-	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	36	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	154	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	24	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	86		1206828
O-TERPHENYL (sur.)	%	85		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	97		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	105		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	107		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	100		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09476		
Sampling Date		2006/07/18		
		10:00		
COC Number		136456		
	Units	EBA06-2-5SE0SW-0-0.1M	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	84	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	21	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	77		1206828
O-TERPHENYL (sur.)	%	84		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	96		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	111		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	106		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	101		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09477		
Sampling Date		2006/07/18		
		10:00		
COC Number		136456		
	Units	EBA06-2-0SE5SW-0-0.1M	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	127	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	20	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	86		1206828
O-TERPHENYL (sur.)	%	88		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	97		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	104		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	102		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	99		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09478		
Sampling Date		2006/07/18		
		10:00		
COC Number		136456		
	Units	EBA06-2-10SE15SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	124	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	31	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	81		1206828
O-TERPHENYL (sur.)	%	86		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	99		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	105		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	103		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	99		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09479		
Sampling Date		2006/07/18		
		10:00		
COC Number		136456		
	Units	EBA06-2-0SW15SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206820
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	92	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	17	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	85		1206828
O-TERPHENYL (sur.)	%	89		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	96		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	102		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	101		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	101		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09480		
Sampling Date		2006/07/18		
		10:00		
COC Number		136456		
	Units	EBA06-2-10NW15SW-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206821
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	98	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	15	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	80		1206828
O-TERPHENYL (sur.)	%	88		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	100		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	106		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	104		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	101		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09481		
Sampling Date		2006/07/18 18:00		
COC Number		136456		
	Units	EBA06-5NWONE-0-0.1M-19	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206821
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	100	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	27	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	88		1206828
O-TERPHENYL (sur.)	%	86		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	98		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	104		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	104		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	100		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09482		
Sampling Date		2006/07/18		
		18:00		
COC Number		136456		
	Units	EBA06-3-5NOE-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206828
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206821
F2 (C10-C16 Hydrocarbons)	mg/kg	21	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	95	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	15	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206827
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206827
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206827
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	83		1206828
O-TERPHENYL (sur.)	%	90		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	97		1206827
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	104		1206827
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	98		1206827
Extractable (MeOH) D8-TOLUENE (sur.)	%	102		1206827
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09483		
Sampling Date		2006/07/18		
		18:00		
COC Number		136456		
	Units	EBA06-3-0N5E-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206933
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206821
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	77	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	15	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206927
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206927
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	90		1206933
O-TERPHENYL (sur.)	%	92		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90		1206927
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	100		1206927
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	104		1206927
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1206927
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09484		
Sampling Date		2006/07/18		
		18:00		
COC Number		136456		
	Units	EBA06-3-10S15E-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206933
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206821
F2 (C10-C16 Hydrocarbons)	mg/kg	31	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	187	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	71	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206927
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206927
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	87		1206933
O-TERPHENYL (sur.)	%	89		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89		1206927
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	99		1206927
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	103		1206927
Extractable (MeOH) D8-TOLUENE (sur.)	%	93		1206927
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09485		
Sampling Date		2006/07/18		
		18:00		
COC Number		136456		
	Units	EBA06-3-0N15E-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206933
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206821
F2 (C10-C16 Hydrocarbons)	mg/kg	14	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	89	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	22	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206927
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206927
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	98		1206933
O-TERPHENYL (sur.)	%	88		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89		1206927
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	98		1206927
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	105		1206927
Extractable (MeOH) D8-TOLUENE (sur.)	%	93		1206927
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C09486		
Sampling Date		2006/07/18		
		18:00		
COC Number		136456		
	Units	EBA06-3-10N15E-0-0.1M	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1206933
F1 (C06-C10) - BTEX	mg/kg	<10	10	1206821
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1208804
F3 (C16-C34 Hydrocarbons)	mg/kg	120	10	1208804
F4 (C34-C50 Hydrocarbons)	mg/kg	26	10	1208804
Reached Baseline at C50	mg/kg	Yes	1	1208804
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1206927
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1206927
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1206927
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	83		1206933
O-TERPHENYL (sur.)	%	89		1208804
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89		1206927
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	100		1206927
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	103		1206927
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1206927
RDL = Reportable Detection Limit				

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		C09463	C09464		
Sampling Date		2006/07/15 11:00	2006/07/15 11:00		
COC Number		136456	136456		
		Units	EBA06-5NWONE-0-0.1M	EBA06-5SEOSW-0-0.1M	RDL QC Batch

Physical Properties					
Moisture	%	14.1	11.1	0.3	1206829
RDL = Reportable Detection Limit					

Maxxam ID		C09465	C09466		
Sampling Date		2006/07/15 11:00	2006/07/15 11:00		
COC Number		136456	136456		
		Units	EBA06-0SE5SW-0-0.1M	EBA06-10SE15SW-0-0.1M	RDL QC Batch

Physical Properties					
Moisture	%	10.9	13.6	0.3	1206829
RDL = Reportable Detection Limit					

Maxxam ID		C09467	C09468		
Sampling Date		2006/07/15 11:00	2006/07/15 11:00		
COC Number		136456	136456		
		Units	EBA06-0SE15SW-0-0.1M	EBA06-10NW15SW-0-0.1M	RDL QC Batch

Physical Properties					
Moisture	%	10.8	14.2	0.3	1206829
RDL = Reportable Detection Limit					

Maxxam ID		C09469	C09470		
Sampling Date		2006/07/17 15:30	2006/07/17 15:30		
COC Number		136456	136456		
		Units	EBA06-1-5NWONE-0-0.1M	EBA06-1-5SE0SW-0-0.1M	RDL QC Batch

Physical Properties					
Moisture	%	17.2	10.5	0.3	1206829
RDL = Reportable Detection Limit					

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		C09471	C09472		
Sampling Date		2006/07/15 15:30	2006/07/15 15:30		
COC Number		136456	136456		
	Units	EBA06-1-0SE5SW-0-0.1M	EBA06-1-10SE15SW-0-0.1M	RDL	QC Batch

Physical Properties					
Moisture	%	8.0	12.1	0.3	1206829
RDL = Reportable Detection Limit					

Maxxam ID		C09473	C09474		
Sampling Date		2006/07/15 15:30	2006/07/15 15:30		
COC Number		136456	136456		
	Units	EBA06-1-0SE15SW-0-0.1M	EBA06-1-10NW15SW-0-0.1M	RDL	QC Batch

Physical Properties					
Moisture	%	8.9	13.4	0.3	1206829
RDL = Reportable Detection Limit					

Maxxam ID		C09475	C09476		
Sampling Date		2006/07/18 10:00	2006/07/18 10:00		
COC Number		136456	136456		
	Units	EBA06-2-5NW0NE-0-0.1M-	EBA06-2-5SE0SW-0-0.1M	RDL	QC Batch

Physical Properties					
Moisture	%	14.2	5.4	0.3	1206829
RDL = Reportable Detection Limit					

Maxxam ID		C09477	C09478		
Sampling Date		2006/07/18 10:00	2006/07/18 10:00		
COC Number		136456	136456		
	Units	EBA06-2-0SE5SW-0-0.1M	EBA06-2-10SE15SW-0-0.1M	RDL	QC Batch

Physical Properties					
Moisture	%	8.6	11.2	0.3	1206829
RDL = Reportable Detection Limit					

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		C09479	C09480		
Sampling Date		2006/07/18 10:00	2006/07/18 10:00		
COC Number		136456	136456		
	Units	EBA06-2-0SW15SW-0-0.1M	EBA06-2-10NW15SW-0-0.1M	RDL	QC Batch

Physical Properties					
Moisture	%	7.3	12.3	0.3	1206829
RDL = Reportable Detection Limit					

Maxxam ID		C09481	C09482		
Sampling Date		2006/07/18 18:00	2006/07/18 18:00		
COC Number		136456	136456		
	Units	EBA06-5NWONE-0-0.1M-19	EBA06-3-5NOE-0-0.1M	RDL	QC Batch

Physical Properties					
Moisture	%	9.5	7.2	0.3	1206829
RDL = Reportable Detection Limit					

Maxxam ID		C09483	C09484	C09485		
Sampling Date		2006/07/18 18:00	2006/07/18 18:00	2006/07/18 18:00		
COC Number		136456	136456	136456		
	Units	EBA06-3-0N5E-0-0.1M	EBA06-3-10S15E-0-0.1M	EBA06-3-0N15E-0-0.1M	RDL	QC Batch

Physical Properties						
Moisture	%	10.1	11.9	5.7	0.3	1206935
RDL = Reportable Detection Limit						

Maxxam ID		C09486		
Sampling Date		2006/07/18 18:00		
COC Number		136456		
	Units	EBA06-3-10N15E-0-0.1M	RDL	QC Batch

Physical Properties				
Moisture	%	6.3	0.3	1206935
RDL = Reportable Detection Limit				



Maxxam Job #: A632223
Report Date: 2006/07/27

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: 1740199
Site Reference: JOHNSON POINT
Sampler Initials: NA

General Comments

Results relate only to the items tested.

Quality Assurance Report

Maxxam Job Number: EA632223

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1206827 CD1	MATRIX SPIKE [C09464-01]	Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/25		98	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/25		107	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/25		107	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/25		100	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/25		94	%	60 - 140
		Extractable (MeOH) Toluene	2006/07/25		101	%	60 - 140
	SPIKE	Extractable (MeOH) Ethylbenzene	2006/07/25		101	%	60 - 140
		Extractable (MeOH) m & p-Xylene	2006/07/25		98	%	60 - 140
		Extractable (MeOH) o-Xylene	2006/07/25		102	%	60 - 140
		Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/25		98	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/25		102	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/25		105	%	60 - 140
	BLANK	Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/25		100	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/25		94	%	60 - 140
		Extractable (MeOH) Toluene	2006/07/25		95	%	60 - 140
		Extractable (MeOH) Ethylbenzene	2006/07/25		97	%	60 - 140
		Extractable (MeOH) m & p-Xylene	2006/07/25		96	%	60 - 140
		Extractable (MeOH) o-Xylene	2006/07/25		96	%	60 - 140
	RPD [C09463-01]	Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/25		98	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/25		105	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/25		101	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/25		101	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/25	<0.04		mg/kg	
		Extractable (MeOH) Toluene	2006/07/25	<0.1		mg/kg	
		Extractable (MeOH) Ethylbenzene	2006/07/25	<0.1		mg/kg	
		Extractable (MeOH) m & p-Xylene	2006/07/25	<0.1		mg/kg	
		Extractable (MeOH) o-Xylene	2006/07/25	<0.1		mg/kg	
		Extractable (MeOH) Xylenes (Total)	2006/07/25	<0.1		mg/kg	
		Extractable (MeOH) Benzene	2006/07/25	NC		%	50
		Extractable (MeOH) Toluene	2006/07/25	NC		%	50
		Extractable (MeOH) Ethylbenzene	2006/07/25	NC		%	50
		Extractable (MeOH) m & p-Xylene	2006/07/25	NC		%	50
		Extractable (MeOH) o-Xylene	2006/07/25	NC		%	50
		Extractable (MeOH) Xylenes (Total)	2006/07/25	NC		%	50
1206828 MA	MATRIX SPIKE [C09464-01]	4-BROMOFLUOROBENZENE (sur.)	2006/07/26		81	%	60 - 130
		F1 (C06-C10)	2006/07/26		92	%	60 - 130
	SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/07/26		77	%	60 - 130
		F1 (C06-C10)	2006/07/26		96	%	N/A
	BLANK	4-BROMOFLUOROBENZENE (sur.)	2006/07/26		82	%	60 - 130
		F1 (C06-C10)	2006/07/26	<10		mg/kg	
	RPD [C09463-01]	F1 (C06-C10)	2006/07/26	NC		%	50
1206829 SD7	BLANK	Moisture	2006/07/25	<0.3		%	
	RPD [C09463-01]	Moisture	2006/07/25	1.4		%	20
1206927 HW4	MATRIX SPIKE	Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/25		90	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/25		101	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/25		104	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/25		94	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/25		103	%	60 - 140
		Extractable (MeOH) Toluene	2006/07/25		99	%	60 - 140
	SPIKE	Extractable (MeOH) Ethylbenzene	2006/07/25		102	%	60 - 140
		Extractable (MeOH) m & p-Xylene	2006/07/25		102	%	60 - 140
		Extractable (MeOH) o-Xylene	2006/07/25		100	%	60 - 140
		Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/25		90	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/25		97	%	60 - 130

Quality Assurance Report (Continued)

Maxxam Job Number: EA632223

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1206927 HW4	SPIKE	Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/25		105	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/25		94	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/25		96	%	60 - 140
		Extractable (MeOH) Toluene	2006/07/25		92	%	60 - 140
		Extractable (MeOH) Ethylbenzene	2006/07/25		97	%	60 - 140
		Extractable (MeOH) m & p-Xylene	2006/07/25		95	%	60 - 140
	BLANK	Extractable (MeOH) o-Xylene	2006/07/25		93	%	60 - 140
		Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/25		89	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/25		96	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/25		106	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/25		94	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/25	<0.04		mg/kg	
	RPD	Extractable (MeOH) Toluene	2006/07/25	<0.1		mg/kg	
		Extractable (MeOH) Ethylbenzene	2006/07/25	<0.1		mg/kg	
		Extractable (MeOH) m & p-Xylene	2006/07/25	<0.1		mg/kg	
		Extractable (MeOH) o-Xylene	2006/07/25	<0.1		mg/kg	
		Extractable (MeOH) Xylenes (Total)	2006/07/25	<0.1		mg/kg	
		Extractable (MeOH) Benzene	2006/07/25	NC		%	50
		Extractable (MeOH) Toluene	2006/07/25	NC		%	50
		Extractable (MeOH) Ethylbenzene	2006/07/25	NC		%	50
		Extractable (MeOH) m & p-Xylene	2006/07/25	NC		%	50
		Extractable (MeOH) o-Xylene	2006/07/25	NC		%	50
		Extractable (MeOH) Xylenes (Total)	2006/07/25	NC		%	50
1206933 MA	MATRIX SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/07/25		86	%	60 - 130
		F1 (C06-C10)	2006/07/25		106	%	60 - 130
	SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/07/25		93	%	60 - 130
		F1 (C06-C10)	2006/07/25		97	%	N/A
	BLANK	4-BROMOFLUOROBENZENE (sur.)	2006/07/25		95	%	60 - 130
		F1 (C06-C10)	2006/07/25	<10		mg/kg	
	RPD	F1 (C06-C10)	2006/07/25	NC		%	50
1206935 SD7	BLANK	Moisture	2006/07/25	<0.3		%	
	RPD	Moisture	2006/07/25	12.4		%	20
1208633 AK3	MATRIX SPIKE	O-TERPHENYL (sur.)	2006/07/25		86	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/25		93	%	50 - 130
		F3 (C16-C34 Hydrocarbons)	2006/07/25		78	%	50 - 130
		F4 (C34-C50 Hydrocarbons)	2006/07/25		70	%	50 - 130
	SPIKE	O-TERPHENYL (sur.)	2006/07/25		89	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/25		101	%	80 - 120
		F3 (C16-C34 Hydrocarbons)	2006/07/25		81	%	80 - 120
		F4 (C34-C50 Hydrocarbons)	2006/07/25		81	%	80 - 120
	BLANK	O-TERPHENYL (sur.)	2006/07/25		119	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/25	<10		mg/kg	
		F3 (C16-C34 Hydrocarbons)	2006/07/25	<10		mg/kg	
		F4 (C34-C50 Hydrocarbons)	2006/07/25	<10		mg/kg	
	RPD	Reached Baseline at C50	2006/07/25	YES, RDL=1		mg/kg	
		F2 (C10-C16 Hydrocarbons)	2006/07/25	NC		%	50
		F3 (C16-C34 Hydrocarbons)	2006/07/25	NC		%	50
		F4 (C34-C50 Hydrocarbons)	2006/07/25	NC		%	50
1208804 AN1	MATRIX SPIKE	Reached Baseline at C50	2006/07/25	NC		%	50
		O-TERPHENYL (sur.)	2006/07/26		85	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/26		91	%	50 - 130
		F3 (C16-C34 Hydrocarbons)	2006/07/26		80	%	50 - 130
	SPIKE	F4 (C34-C50 Hydrocarbons)	2006/07/26		82	%	50 - 130
		O-TERPHENYL (sur.)	2006/07/26		85	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/26		103	%	80 - 120
		F3 (C16-C34 Hydrocarbons)	2006/07/26		97	%	80 - 120

Quality Assurance Report (Continued)

Maxxam Job Number: EA632223

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1208804 AN1	SPIKE	F4 (C34-C50 Hydrocarbons)	2006/07/26		83	%	80 - 120
	BLANK	O-TERPHENYL (sur.)	2006/07/26		86	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/26	<10		mg/kg	
		F3 (C16-C34 Hydrocarbons)	2006/07/26	<10		mg/kg	
		F4 (C34-C50 Hydrocarbons)	2006/07/26	<10		mg/kg	
		Reached Baseline at C50	2006/07/26	YES, RDL=1		mg/kg	
	RPD	F2 (C10-C16 Hydrocarbons)	2006/07/26	13.0		%	50
		F3 (C16-C34 Hydrocarbons)	2006/07/26	3.7		%	50
		F4 (C34-C50 Hydrocarbons)	2006/07/26	NC		%	50
		Reached Baseline at C50	2006/07/26	NC		%	50

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

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332
 Edmonton: 9619 - 42 Avenue T6E 5R2 Telephone(780) 465-1212 FAX(780) 450-4187



Your Project #: 1740199 JOHNSON POINT
Site: JOHNSON POINT
Your C.O.C. #: 144801

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

EBA06-3] Exit

Report Date: 2006/07/28

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A633083

Received: 2006/07/27, 10:00

Sample Matrix: Soil
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX by HS GC/MS (MeOH extract)	7	2006/07/27	2006/07/28	EENV SOP-00004 V.2	EPA SW-846 8260B/502
F1-BTEX Soil Cal	7	2006/07/27	2006/07/27		
CCME Hydrocarbons (F1; MeOH; HSGC)	7	2006/07/27	2006/07/28	EENV SOP-00002 V.5	
CCME Hydrocarbons (F2-F4 in soil)	7	2006/07/27	2006/07/27	OR-412 v1.0	CWS PHCS Tier 1
Moisture	7	N/A	2006/07/28	GL107 v 4.0	SSMA 51.2

Encryption Key

Jeremy Wakaruk

28 Jul 2006 05:16:45 -06:00

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

JEREMY WAKARUK, BSc., Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
Phone# (780) 465-1212 Ext:223

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

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332
Edmonton: 9619 - 42 Avenue T6E 5R2 Telephone(780) 465-1212 FAX(780) 450-4187

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16544	C16545		
Sampling Date		2006/07/23	2006/07/23		
COC Number		144801	144801		
	Units	EBA06-3-10S15E 0-0.1	EBA06-3-0N15E 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon					
F1 (C06-C10)	mg/kg	<10	<10	10	1213481
F1 (C06-C10) - BTEX	mg/kg	<10	<10	10	1213566
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	84	10	1213051
F3 (C16-C34 Hydrocarbons)	mg/kg	38	106	10	1213051
F4 (C34-C50 Hydrocarbons)	mg/kg	23	19	10	1213051
Reached Baseline at C50	mg/kg	Yes	Yes	1	1213051
Volatiles					
Extractable (MeOH) Benzene	mg/kg	<0.04	<0.04	0.04	1213480
Extractable (MeOH) Toluene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) o-Xylene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	1213480
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	90	90		1213481
O-TERPHENYL (sur.)	%	93	80		1213051
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	96	95		1213480
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	101	100		1213480
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	89	88		1213480
Extractable (MeOH) D8-TOLUENE (sur.)	%	101	99		1213480
RDL = Reportable Detection Limit					

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16546	C16547		
Sampling Date		2006/07/23	2006/07/23		
COC Number		144801	144801		
	Units	EBA06-3-10N-15E 0-0.1	EBA06-3-0N5E 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon					
F1 (C06-C10)	mg/kg	<10	<10	10	1213481
F1 (C06-C10) - BTEX	mg/kg	<10	<10	10	1213566
F2 (C10-C16 Hydrocarbons)	mg/kg	11	287	10	1213051
F3 (C16-C34 Hydrocarbons)	mg/kg	112	272	10	1213051
F4 (C34-C50 Hydrocarbons)	mg/kg	32	18	10	1213051
Reached Baseline at C50	mg/kg	Yes	Yes	1	1213051
Volatiles					
Extractable (MeOH) Benzene	mg/kg	<0.04	<0.04	0.04	1213480
Extractable (MeOH) Toluene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) o-Xylene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	1213480
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	95	88		1213481
O-TERPHENYL (sur.)	%	76	85		1213051
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	97	96		1213480
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	103	99		1213480
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	89	92		1213480
Extractable (MeOH) D8-TOLUENE (sur.)	%	101	100		1213480
RDL = Reportable Detection Limit					

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16548	C16549		
Sampling Date		2006/07/23	2006/07/23		
COC Number		144801	144801		
	Units	EBA06-3-5S0E 0-0.1	EBA06-3-5N0E 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon					
F1 (C06-C10)	mg/kg	<10	<10	10	1213481
F1 (C06-C10) - BTEX	mg/kg	<10	<10	10	1213566
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	10	1213051
F3 (C16-C34 Hydrocarbons)	mg/kg	33	87	10	1213051
F4 (C34-C50 Hydrocarbons)	mg/kg	10	20	10	1213051
Reached Baseline at C50	mg/kg	Yes	Yes	1	1213051
Volatiles					
Extractable (MeOH) Benzene	mg/kg	<0.04	<0.04	0.04	1213480
Extractable (MeOH) Toluene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) o-Xylene	mg/kg	<0.1	<0.1	0.1	1213480
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	1213480
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	91	83		1213481
O-TERPHENYL (sur.)	%	81	83		1213051
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90	88		1213480
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	97	96		1213480
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	114	115		1213480
Extractable (MeOH) D8-TOLUENE (sur.)	%	94	94		1213480
RDL = Reportable Detection Limit					

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16550		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-3-6N6E 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1213481
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213566
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1213051
F3 (C16-C34 Hydrocarbons)	mg/kg	76	10	1213051
F4 (C34-C50 Hydrocarbons)	mg/kg	18	10	1213051
Reached Baseline at C50	mg/kg	Yes	1	1213051
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1213480
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1213480
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1213480
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1213480
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1213480
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1213480
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	93		1213481
O-TERPHENYL (sur.)	%	74		1213051
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89		1213480
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	97		1213480
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	114		1213480
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1213480
RDL = Reportable Detection Limit				

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		C16544	C16545	C16546	C16547		
Sampling Date		2006/07/23	2006/07/23	2006/07/23	2006/07/23		
COC Number		144801	144801	144801	144801		
	Units	EBA06-3-10S15E 0-0.1	EBA06-3-0N15E 0-0.1	EBA06-3-10N-15E 0-0.1	EBA06-3-0N5E 0-0.1	RDL	QC Batch

Physical Properties							
Moisture	%	4.4	4.9	6.2	2.2	0.3	1213482

RDL = Reportable Detection Limit

Maxxam ID		C16548	C16549	C16550		
Sampling Date		2006/07/23	2006/07/23	2006/07/23		
COC Number		144801	144801	144801		
	Units	EBA06-3-5S0E 0-0.1	EBA06-3-5N0E 0-0.1	EBA06-3-6N6E 0-0.1	RDL	QC Batch

Physical Properties						
Moisture	%	3.3	5.4	4.9	0.3	1213482

RDL = Reportable Detection Limit



Maxxam Job #: A633083
Report Date: 2006/07/28

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: 1740199 JOHNSON POINT
Site Reference: JOHNSON POINT
Sampler Initials: NA

General Comments

Results relate only to the items tested.

Quality Assurance Report

Maxxam Job Number: EA633083

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1213051 KB4	MATRIX SPIKE	O-TERPHENYL (sur.)	2006/07/27		71	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/27		69	%	50 - 130
		F3 (C16-C34 Hydrocarbons)	2006/07/27		64	%	50 - 130
		F4 (C34-C50 Hydrocarbons)	2006/07/27		66	%	50 - 130
	SPIKE	O-TERPHENYL (sur.)	2006/07/27		79	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/27		90	%	80 - 120
		F3 (C16-C34 Hydrocarbons)	2006/07/27		86	%	80 - 120
		F4 (C34-C50 Hydrocarbons)	2006/07/27		82	%	80 - 120
	BLANK	O-TERPHENYL (sur.)	2006/07/27		71	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/27	<10		mg/kg	
		F3 (C16-C34 Hydrocarbons)	2006/07/27	<10		mg/kg	
		F4 (C34-C50 Hydrocarbons)	2006/07/27	<10		mg/kg	
	RPD	Reached Baseline at C50	2006/07/27	YES, RDL=1		mg/kg	
		F2 (C10-C16 Hydrocarbons)	2006/07/27	33.6		%	50
		F3 (C16-C34 Hydrocarbons)	2006/07/27	NC		%	50
		F4 (C34-C50 Hydrocarbons)	2006/07/27	NC		%	50
		Reached Baseline at C50	2006/07/27	NC		%	50
1213480 CD1	MATRIX SPIKE [C16545-01]	Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/28		96	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/28		102	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/28		89	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/28		100	%	60 - 140
	SPIKE	Extractable (MeOH) Benzene	2006/07/28		102	%	60 - 140
		Extractable (MeOH) Toluene	2006/07/28		103	%	60 - 140
		Extractable (MeOH) Ethylbenzene	2006/07/28		107	%	60 - 140
		Extractable (MeOH) m & p-Xylene	2006/07/28		102	%	60 - 140
		Extractable (MeOH) o-Xylene	2006/07/28		101	%	60 - 140
		Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/28		91	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/28		95	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/28		111	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/28		96	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/28		103	%	60 - 140
		Extractable (MeOH) Toluene	2006/07/28		101	%	60 - 140
		Extractable (MeOH) Ethylbenzene	2006/07/28		102	%	60 - 140
		Extractable (MeOH) m & p-Xylene	2006/07/28		103	%	60 - 140
		Extractable (MeOH) o-Xylene	2006/07/28		93	%	60 - 140
	BLANK	Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/28		89	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/28		94	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/28		112	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/28		92	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/28	<0.04		mg/kg	
		Extractable (MeOH) Toluene	2006/07/28	<0.1		mg/kg	
		Extractable (MeOH) Ethylbenzene	2006/07/28	<0.1		mg/kg	
		Extractable (MeOH) m & p-Xylene	2006/07/28	<0.1		mg/kg	
		Extractable (MeOH) o-Xylene	2006/07/28	<0.1		mg/kg	
		Extractable (MeOH) Xylenes (Total)	2006/07/28	<0.1		mg/kg	
	RPD [C16544-01]	Extractable (MeOH) Benzene	2006/07/28	NC		%	50
		Extractable (MeOH) Toluene	2006/07/28	NC		%	50
		Extractable (MeOH) Ethylbenzene	2006/07/28	NC		%	50
		Extractable (MeOH) m & p-Xylene	2006/07/28	NC		%	50
		Extractable (MeOH) o-Xylene	2006/07/28	NC		%	50
		Extractable (MeOH) Xylenes (Total)	2006/07/28	NC		%	50
1213481 MA	MATRIX SPIKE [C16545-01]	4-BROMOFLUOROBENZENE (sur.)	2006/07/28		90	%	60 - 130
		F1 (C06-C10)	2006/07/28		91	%	60 - 130
	SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/07/28		101	%	60 - 130

Quality Assurance Report (Continued)

Maxxam Job Number: EA633083

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1213481 MA	SPIKE	F1 (C06-C10)	2006/07/28		104	%	80 - 120
	BLANK	4-BROMOFLUOROBENZENE (sur.)	2006/07/28		87	%	60 - 130
		F1 (C06-C10)	2006/07/28	<10		mg/kg	
	RPD [C16544-01]	F1 (C06-C10)	2006/07/28	NC		%	50
1213482 CN1	BLANK	Moisture	2006/07/28	<0.3		%	
	RPD [C16544-01]	Moisture	2006/07/28	10.1		%	20

NC = Non-calculable

RPD = Relative Percent Difference

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332

Edmonton: 9619 - 42 Avenue T6E 5R2 Telephone(780) 465-1212 FAX(780) 450-4187



Your Project #: 1740199 JOHNSON POINT
Site: JOHNSON POINT
Your C.O.C. #: 144801

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

✓ EBA 06-1
✓ EBA 06-2
✓ EBA 06-4
✓ EBA 06-5

Exit
Baseline
Report Date: 2006/08/01

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A633123

Received: 2006/07/27, 10:00

Sample Matrix: Soil
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX by HS GC/MS (MeOH extract)	20	2006/07/28	2006/07/29	EENVSOP-00004 V.2	EPA SW-846 8260B/502
BTEX by HS GC/MS (MeOH extract)	8	2006/07/28	2006/07/30	EENVSOP-00004 V.2	EPA SW-846 8260B/502
F1-BTEX Soil Cal	28	2006/07/27	2006/07/27		
CCME Hydrocarbons (F1; MeOH; HSGC)	28	2006/07/28	2006/07/29	EENVSOP-00002 V.5	
CCME Hydrocarbons (F2-F4 in soil)	23	2006/07/31	2006/07/31	OR-412 v1.0	CWS PHCS Tier 1
CCME Hydrocarbons (F2-F4 in soil)	5	2006/07/31	2006/08/01	OR-412 v1.0	CWS PHCS Tier 1
Moisture	20	N/A	2006/07/28	GL107 v 4.0	SSMA 51.2
Moisture	8	N/A	2006/07/29	GL107 v 4.0	SSMA 51.2

Encryption Key

Jeremy Wakaruk

01 Aug 2006 02:59:12 -06:00

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

JEREMY WAKARUK, BSc., Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
Phone# (780) 465-1212 Ext:223

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

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CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16873	C16877		
Sampling Date		2006/07/23	2006/07/23		
COC Number		144801	144801		
	Units	EBA06-1-5NW0NE 0-0.1	EBA06-1-5SE0SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon					
F1 (C06-C10)	mg/kg	<10	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	<10	10	1213566
F2 (C10-C16 Hydrocarbons)	mg/kg	12	12	10	1216029
F3 (C16-C34 Hydrocarbons)	mg/kg	44	151	10	1216029
F4 (C34-C50 Hydrocarbons)	mg/kg	14	23	10	1216029
Reached Baseline at C50	mg/kg	Yes	Yes	1	1216029
Volatiles					
Extractable (MeOH) Benzene	mg/kg	<0.04	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	1214711
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	78	94		1214712
O-TERPHENYL (sur.)	%	84	83		1216029
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	91	93		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	99	100		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	114	119		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	90	93		1214711
RDL = Reportable Detection Limit					

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16878		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-1-0SE5SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213566
F2 (C10-C16 Hydrocarbons)	mg/kg	18	10	1216029
F3 (C16-C34 Hydrocarbons)	mg/kg	52	10	1216029
F4 (C34-C50 Hydrocarbons)	mg/kg	67	10	1216029
Reached Baseline at C50	mg/kg	Yes	1	1216029
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1214711
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	72		1214712
O-TERPHENYL (sur.)	%	83		1216029
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	106		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	110		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	91		1214711
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16879		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-1-10SE15SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	15	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	118	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	22	10	1216030
Reached Baseline at C50	mg/kg	Yes	1	1216030
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1214711
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	87		1214712
O-TERPHENYL (sur.)	%	78		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	92		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	124		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	91		1214711
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16880		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-1-0SE15SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	14	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	103	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	27	10	1216030
Reached Baseline at C50	mg/kg	Yes	1	1216030
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1214711
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	81		1214712
O-TERPHENYL (sur.)	%	76		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	92		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	122		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	92		1214711
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16881		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-1-10NW15SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	12	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	103	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	17	10	1216030
Reached Baseline at C50	mg/kg	Yes	1	1216030
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1214711
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	93		1214712
O-TERPHENYL (sur.)	%	79		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	92		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	113		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	92		1214711
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16882	C16883		
Sampling Date		2006/07/23	2006/07/23		
COC Number		144801	144801		
	Units	EBA06-1-6NW6SW 0-0.1	EBA06-2-5NW0NE 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon					
F1 (C06-C10)	mg/kg	<10	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	12	62	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	166	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	16	10	1216030
Reached Baseline at C50	mg/kg	Yes	Yes	1	1216030
Volatiles					
Extractable (MeOH) Benzene	mg/kg	<0.04	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	1214711
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	87	83		1214712
O-TERPHENYL (sur.)	%	95	81		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90	89		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	92	91		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	118	126		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	95	92		1214711
RDL = Reportable Detection Limit					

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16896	C16897		
Sampling Date		2006/07/23	2006/07/23		
COC Number		144801	144801		
	Units	EBA06-2-5SE0SW 0-0.1	EBA06-2-0SE5SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon					
F1 (C06-C10)	mg/kg	<10	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	11	12	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	14	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	10	1216030
Reached Baseline at C50	mg/kg	Yes	Yes	1	1216030
Volatiles					
Extractable (MeOH) Benzene	mg/kg	<0.04	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	1214711
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	73	95		1214712
O-TERPHENYL (sur.)	%	78	77		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89	88		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	93	92		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	113	123		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	92	92		1214711
RDL = Reportable Detection Limit					

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16898		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-2-10SE15SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1216030
Reached Baseline at C50	mg/kg	Yes	1	1216030
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1214711
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	80		1214712
O-TERPHENYL (sur.)	%	77		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	96		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	114		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	93		1214711
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16899		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-2-0SE15SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	11	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	15	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1216030
Reached Baseline at C50	mg/kg	Yes	1	1216030
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1214711
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	83		1214712
O-TERPHENYL (sur.)	%	74		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	92		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	92		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	123		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	92		1214711
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16900		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-2-10NW15SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	12	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1216030
Reached Baseline at C50	mg/kg	Yes	1	1216030
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1214711
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	88		1214712
O-TERPHENYL (sur.)	%	78		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	94		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	117		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	93		1214711
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16901	C16902		
Sampling Date		2006/07/23	2006/07/23		
COC Number		144801	144801		
	Units	EBA06-2-6NW15SW 0-0.1	EBA06-4-6N6E 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon					
F1 (C06-C10)	mg/kg	<10	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	12	13	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	29	80	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	18	10	1216030
Reached Baseline at C50	mg/kg	Yes	Yes	1	1216030
Volatiles					
Extractable (MeOH) Benzene	mg/kg	<0.04	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	1214711
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	85	89		1214712
O-TERPHENYL (sur.)	%	80	78		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89	89		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	89	96		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	126	116		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	90	95		1214711

RDL = Reportable Detection Limit

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16905	C16906		
Sampling Date		2006/07/23	2006/07/23		
COC Number		144801	144801		
	Units	EBA06-4-5N0E 0-0.1	EBA06-4-0N15E 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon					
F1 (C06-C10)	mg/kg	<10	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	16	21	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	57	35	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	14	<10	10	1216030
Reached Baseline at C50	mg/kg	Yes	Yes	1	1216030
Volatiles					
Extractable (MeOH) Benzene	mg/kg	<0.04	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	1214711
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	82	82		1214712
O-TERPHENYL (sur.)	%	79	78		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90	89		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	92	98		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	122	109		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	94	95		1214711

RDL = Reportable Detection Limit

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16907	C16908		
Sampling Date		2006/07/23	2006/07/23		
COC Number		144801	144801		
	Units	EBA06-4-0N5E 0-0.1	EBA06-4-5S0E 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon					
F1 (C06-C10)	mg/kg	<10	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	19	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	101	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	12	10	1216030
Reached Baseline at C50	mg/kg	Yes	Yes	1	1216030
Volatiles					
Extractable (MeOH) Benzene	mg/kg	<0.04	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	1214711
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	86	85		1214712
O-TERPHENYL (sur.)	%	83	78		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	88	90		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	95	94		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	110	123		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	95	92		1214711
RDL = Reportable Detection Limit					

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16909		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-4-10S15E 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214712
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	12	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	23	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1216030
Reached Baseline at C50	mg/kg	Yes	1	1216030
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214711
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1214711
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1214711
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	72		1214712
O-TERPHENYL (sur.)	%	80		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89		1214711
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	93		1214711
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	114		1214711
Extractable (MeOH) D8-TOLUENE (sur.)	%	92		1214711
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16910	C16911		
Sampling Date		2006/07/23	2006/07/23		
COC Number		144801	144801		
	Units	EBA06-4-10N15E	EBA06-5-5NW0NE	RDL	QC Batch
		0-0.1	0-0.1		

Ext. Pet. Hydrocarbon					
F1 (C06-C10)	mg/kg	<10	<10	10	1214913
F1 (C06-C10) - BTEX	mg/kg	<10	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	14	<10	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	35	38	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	10	1216030
Reached Baseline at C50	mg/kg	Yes	Yes	1	1216030
Volatiles					
Extractable (MeOH) Benzene	mg/kg	<0.04	<0.04	0.04	1214911
Extractable (MeOH) Toluene	mg/kg	<0.1	<0.1	0.1	1214911
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	<0.1	0.1	1214911
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	<0.1	0.1	1214911
Extractable (MeOH) o-Xylene	mg/kg	<0.1	<0.1	0.1	1214911
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	1214911
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	90	86		1214913
O-TERPHENYL (sur.)	%	76	77		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	94	96		1214911
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	101	106		1214911
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	97	100		1214911
Extractable (MeOH) D8-TOLUENE (sur.)	%	99	97		1214911
RDL = Reportable Detection Limit					

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16942		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-5-5SE0SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214913
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	21	10	1216030
F3 (C16-C34 Hydrocarbons)	mg/kg	882	10	1216030
F4 (C34-C50 Hydrocarbons)	mg/kg	141	10	1216030
Reached Baseline at C50	mg/kg	Yes	1	1216030
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214911
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1214911
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	92		1214913
O-TERPHENYL (sur.)	%	84		1216030
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	94		1214911
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	102		1214911
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	100		1214911
Extractable (MeOH) D8-TOLUENE (sur.)	%	99		1214911
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16943	C16944		
Sampling Date		2006/07/23	2006/07/23		
COC Number		144801	144801		
	Units	EBA06-5-0SE5SW 0-0.1	EBA06-5-10SE15SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon					
F1 (C06-C10)	mg/kg	<10	<10	10	1214913
F1 (C06-C10) - BTEX	mg/kg	<10	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	29	<10	10	1216267
F3 (C16-C34 Hydrocarbons)	mg/kg	190	212	10	1216267
F4 (C34-C50 Hydrocarbons)	mg/kg	22	24	10	1216267
Reached Baseline at C50	mg/kg	Yes	Yes	1	1216267
Volatiles					
Extractable (MeOH) Benzene	mg/kg	<0.04	<0.04	0.04	1214911
Extractable (MeOH) Toluene	mg/kg	<0.1	<0.1	0.1	1214911
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	<0.1	0.1	1214911
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	<0.1	0.1	1214911
Extractable (MeOH) o-Xylene	mg/kg	<0.1	<0.1	0.1	1214911
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	1214911
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	101	89		1214913
O-TERPHENYL (sur.)	%	77	64		1216267
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	93	96		1214911
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	103	104		1214911
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	100	98		1214911
Extractable (MeOH) D8-TOLUENE (sur.)	%	97	100		1214911

RDL = Reportable Detection Limit

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16945		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-5-0SE15SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214913
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1216267
F3 (C16-C34 Hydrocarbons)	mg/kg	40	10	1216267
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1216267
Reached Baseline at C50	mg/kg	Yes	1	1216267
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214911
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1214911
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	89		1214913
O-TERPHENYL (sur.)	%	63		1216267
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	94		1214911
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	102		1214911
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	100		1214911
Extractable (MeOH) D8-TOLUENE (sur.)	%	97		1214911
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16946		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-5-10NW15SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214913
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1216267
F3 (C16-C34 Hydrocarbons)	mg/kg	30	10	1216267
F4 (C34-C50 Hydrocarbons)	mg/kg	34	10	1216267
Reached Baseline at C50	mg/kg	Yes	1	1216267
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214911
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1214911
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	90		1214913
O-TERPHENYL (sur.)	%	58		1216267
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	94		1214911
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	104		1214911
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	101		1214911
Extractable (MeOH) D8-TOLUENE (sur.)	%	97		1214911
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C16947		
Sampling Date		2006/07/23		
COC Number		144801		
	Units	EBA06-5-6SE6SW 0-0.1	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1214913
F1 (C06-C10) - BTEX	mg/kg	<10	10	1213567
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1216267
F3 (C16-C34 Hydrocarbons)	mg/kg	52	10	1216267
F4 (C34-C50 Hydrocarbons)	mg/kg	31	10	1216267
Reached Baseline at C50	mg/kg	Yes	1	1216267
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1214911
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1214911
Extractable (MeOH) Ethylbenzene	mg/kg	0.2	0.1	1214911
Extractable (MeOH) m & p-Xylene	mg/kg	3.5	0.1	1214911
Extractable (MeOH) o-Xylene	mg/kg	2.3	0.1	1214911
Extractable (MeOH) Xylenes (Total)	mg/kg	5.8	0.1	1214911
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	93		1214913
O-TERPHENYL (sur.)	%	62		1216267
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	97		1214911
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	117		1214911
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	101		1214911
Extractable (MeOH) D8-TOLUENE (sur.)	%	99		1214911
RDL = Reportable Detection Limit				

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		C16873	C16877	C16878		
Sampling Date		2006/07/23	2006/07/23	2006/07/23		
COC Number		144801	144801	144801		
	Units	EBA06-1-5NW0NE 0-0.1	EBA06-1-5SE0SW 0-0.1	EBA06-1-0SE5SW 0-0.1	RDL	QC Batch

Physical Properties						
Moisture	%	8.7	10.5	9.1	0.3	1214726
RDL = Reportable Detection Limit						

Maxxam ID		C16879	C16880	C16881		
Sampling Date		2006/07/23	2006/07/23	2006/07/23		
COC Number		144801	144801	144801		
	Units	EBA06-1-10SE15SW 0-0.1	EBA06-1-0SE15SW 0-0.1	EBA06-1-10NW15SW 0-0.1	RDL	QC Batch

Physical Properties						
Moisture	%	13.2	7.2	8.0	0.3	1214726
RDL = Reportable Detection Limit						

Maxxam ID		C16882	C16883	C16896		
Sampling Date		2006/07/23	2006/07/23	2006/07/23		
COC Number		144801	144801	144801		
	Units	EBA06-1-6NW6SW 0-0.1	EBA06-2-5NW0NE 0-0.1	EBA06-2-5SE0SW 0-0.1	RDL	QC Batch

Physical Properties						
Moisture	%	8.0	10.2	6.5	0.3	1214726
RDL = Reportable Detection Limit						

Maxxam ID		C16897	C16898	C16899		
Sampling Date		2006/07/23	2006/07/23	2006/07/23		
COC Number		144801	144801	144801		
	Units	EBA06-2-0SE5SW 0-0.1	EBA06-2-10SE15SW 0-0.1	EBA06-2-0SE15SW 0-0.1	RDL	QC Batch

Physical Properties						
Moisture	%	6.7	7.0	9.6	0.3	1214726
RDL = Reportable Detection Limit						

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		C16900	C16901	C16902		
Sampling Date		2006/07/23	2006/07/23	2006/07/23		
COC Number		144801	144801	144801		
	Units	EBA06-2-10NW15SW 0-0.1	EBA06-2-6NW15SW 0-0.1	EBA06-4-6N6E 0-0.1	RDL	QC Batch

Physical Properties						
Moisture	%	7.8	6.9	8.8	0.3	1214726
RDL = Reportable Detection Limit						

Maxxam ID		C16905	C16906	C16907	C16908		
Sampling Date		2006/07/23	2006/07/23	2006/07/23	2006/07/23		
COC Number		144801	144801	144801	144801		
	Units	EBA06-4-5N0E 0-0.1	EBA06-4-0N15E 0-0.1	EBA06-4-0N5E 0-0.1	EBA06-4-5S0E 0-0.1	RDL	QC Batch

Physical Properties							
Moisture	%	8.7	9.0	10.9	8.8	0.3	1214726
RDL = Reportable Detection Limit							

Maxxam ID		C16909		C16910	C16911		
Sampling Date		2006/07/23		2006/07/23	2006/07/23		
COC Number		144801		144801	144801		
	Units	EBA06-4-10S15E 0-0.1	QC Batch	EBA06-4-10N15E 0-0.1	EBA06-5-5NW0NE 0-0.1	RDL	QC Batch

Physical Properties							
Moisture	%	12.3	1214726	10.0	7.5	0.3	1214914
RDL = Reportable Detection Limit							

Maxxam ID		C16942	C16943	C16944		
Sampling Date		2006/07/23	2006/07/23	2006/07/23		
COC Number		144801	144801	144801		
	Units	EBA06-5-5SE0SW 0-0.1	EBA06-5-0SE5SW 0-0.1	EBA06-5-10SE15SW 0-0.1	RDL	QC Batch

Physical Properties						
Moisture	%	9.2	6.5	8.8	0.3	1214914
RDL = Reportable Detection Limit						

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		C16945	C16946	C16947		
Sampling Date		2006/07/23	2006/07/23	2006/07/23		
COC Number		144801	144801	144801		
	Units	EBA06-5-0SE15SW	EBA06-5-10NW15SW	EBA06-5-6SE6SW	RDL	QC Batch
		0-0.1	0-0.1	0-0.1		

Physical Properties						
Moisture	%	10.7	10.2	11.2	0.3	1214914

RDL = Reportable Detection Limit



Maxxam Job #: A633123
Report Date: 2006/08/01

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: 1740199 JOHNSON POINT
Site Reference: JOHNSON POINT
Sampler Initials: NA

General Comments

Results relate only to the items tested.

Quality Assurance Report

Maxxam Job Number: EA633123

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1214711 MC1	MATRIX SPIKE [C16877-01]	Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/29		93	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/29		103	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/29		116	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/29		90	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/29		113	%	60 - 140
		Extractable (MeOH) Toluene	2006/07/29		101	%	60 - 140
		Extractable (MeOH) Ethylbenzene	2006/07/29		100	%	60 - 140
	SPIKE	Extractable (MeOH) m & p-Xylene	2006/07/29		102	%	60 - 140
		Extractable (MeOH) o-Xylene	2006/07/29		100	%	60 - 140
		Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/29		91	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/29		98	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/29		119	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/29		90	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/29		111	%	60 - 140
	BLANK	Extractable (MeOH) Toluene	2006/07/29		97	%	60 - 140
		Extractable (MeOH) Ethylbenzene	2006/07/29		99	%	60 - 140
		Extractable (MeOH) m & p-Xylene	2006/07/29		100	%	60 - 140
		Extractable (MeOH) o-Xylene	2006/07/29		99	%	60 - 140
		Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/29		90	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/29		99	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/29		109	%	60 - 140
	RPD [C16873-01]	Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/29		91	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/29	<0.04		mg/kg	
		Extractable (MeOH) Toluene	2006/07/29	<0.1		mg/kg	
		Extractable (MeOH) Ethylbenzene	2006/07/29	<0.1		mg/kg	
		Extractable (MeOH) m & p-Xylene	2006/07/29	<0.1		mg/kg	
		Extractable (MeOH) o-Xylene	2006/07/29	<0.1		mg/kg	
		Extractable (MeOH) Xylenes (Total)	2006/07/29	<0.1		mg/kg	
		Extractable (MeOH) Benzene	2006/07/29	NC		%	50
		Extractable (MeOH) Toluene	2006/07/29	NC		%	50
		Extractable (MeOH) Ethylbenzene	2006/07/29	NC		%	50
		Extractable (MeOH) m & p-Xylene	2006/07/29	NC		%	50
		Extractable (MeOH) o-Xylene	2006/07/29	NC		%	50
		Extractable (MeOH) Xylenes (Total)	2006/07/29	NC		%	50
1214712 KO	MATRIX SPIKE [C16877-01]	4-BROMOFLUOROBENZENE (sur.)	2006/07/29		84	%	60 - 130
		F1 (C06-C10)	2006/07/29		98	%	60 - 130
	SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/07/29		82	%	60 - 130
		F1 (C06-C10)	2006/07/29		101	%	N/A
	BLANK	4-BROMOFLUOROBENZENE (sur.)	2006/07/29		82	%	60 - 130
		F1 (C06-C10)	2006/07/29	<10		mg/kg	
	RPD [C16873-01]	F1 (C06-C10)	2006/07/29	NC		%	50
1214726 SD7	BLANK	Moisture	2006/07/28	<0.3		%	
	RPD [C16873-01]	Moisture	2006/07/28	10.5		%	20
1214911 MC1	MATRIX SPIKE	Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/30		96	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/30		106	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/30		88	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/30		101	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/30		94	%	60 - 140
		Extractable (MeOH) Toluene	2006/07/30		97	%	60 - 140
		Extractable (MeOH) Ethylbenzene	2006/07/30		102	%	60 - 140
	SPIKE	Extractable (MeOH) m & p-Xylene	2006/07/30		106	%	60 - 140
		Extractable (MeOH) o-Xylene	2006/07/30		114	%	60 - 140
		Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/30		95	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/30		102	%	60 - 130

Quality Assurance Report (Continued)

Maxxam Job Number: EA633123

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1214911 MC1	SPIKE	Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/30		98	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/30		98	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/30		102	%	60 - 140
		Extractable (MeOH) Toluene	2006/07/30		100	%	60 - 140
		Extractable (MeOH) Ethylbenzene	2006/07/30		98	%	60 - 140
		Extractable (MeOH) m & p-Xylene	2006/07/30		99	%	60 - 140
	BLANK	Extractable (MeOH) o-Xylene	2006/07/30		99	%	60 - 140
		Extractable (MeOH) 4-BROMOFLUOROBEN	2006/07/30		96	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/07/30		102	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/07/30		101	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/07/30		98	%	60 - 140
		Extractable (MeOH) Benzene	2006/07/30	<0.04		mg/kg	
	RPD	Extractable (MeOH) Toluene	2006/07/30	<0.1		mg/kg	
		Extractable (MeOH) Ethylbenzene	2006/07/30	<0.1		mg/kg	
		Extractable (MeOH) m & p-Xylene	2006/07/30	<0.1		mg/kg	
		Extractable (MeOH) o-Xylene	2006/07/30	<0.1		mg/kg	
		Extractable (MeOH) Xylenes (Total)	2006/07/30	<0.1		mg/kg	
		Extractable (MeOH) Benzene	2006/07/30	NC		%	50
		Extractable (MeOH) Toluene	2006/07/30	NC		%	50
		Extractable (MeOH) Ethylbenzene	2006/07/30	NC		%	50
		Extractable (MeOH) m & p-Xylene	2006/07/30	NC		%	50
		Extractable (MeOH) o-Xylene	2006/07/30	NC		%	50
		Extractable (MeOH) Xylenes (Total)	2006/07/30	NC		%	50
1214913 KO	MATRIX SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/07/29		85	%	60 - 130
		F1 (C06-C10)	2006/07/29		90	%	60 - 130
	SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/07/29		86	%	60 - 130
		F1 (C06-C10)	2006/07/29		88	%	80 - 120
	BLANK	4-BROMOFLUOROBENZENE (sur.)	2006/07/29		105	%	60 - 130
		F1 (C06-C10)	2006/07/29	<10		mg/kg	
	RPD	F1 (C06-C10)	2006/07/29	NC		%	50
1214914 CN1	BLANK	Moisture	2006/07/29	<0.3		%	
	RPD	Moisture	2006/07/29	5.6		%	
1216029 KB4	MATRIX SPIKE	O-TERPHENYL (sur.)	2006/07/31		106	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/31		-2.6 (1)	%	50 - 130
		F3 (C16-C34 Hydrocarbons)	2006/07/31		262 (1)	%	50 - 130
		F4 (C34-C50 Hydrocarbons)	2006/07/31		184 (1)	%	50 - 130
	SPIKE	O-TERPHENYL (sur.)	2006/07/31		85	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/31		102	%	80 - 120
		F3 (C16-C34 Hydrocarbons)	2006/07/31		110	%	80 - 120
		F4 (C34-C50 Hydrocarbons)	2006/07/31		89	%	80 - 120
	BLANK	O-TERPHENYL (sur.)	2006/07/31		86	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/31	<10		mg/kg	
		F3 (C16-C34 Hydrocarbons)	2006/07/31	<10		mg/kg	
		F4 (C34-C50 Hydrocarbons)	2006/07/31	<10		mg/kg	
	RPD	Reached Baseline at C50	2006/07/31	YES, RDL=1		mg/kg	
		F2 (C10-C16 Hydrocarbons)	2006/07/31	NC		%	50
		F3 (C16-C34 Hydrocarbons)	2006/07/31	124 (1)		%	50
		F4 (C34-C50 Hydrocarbons)	2006/07/31	93.9 (1)		%	50
1216030 KB4	MATRIX SPIKE [C16880-01]	Reached Baseline at C50	2006/07/31	NC		%	50
		O-TERPHENYL (sur.)	2006/07/31		76	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/31		82	%	50 - 130
		F3 (C16-C34 Hydrocarbons)	2006/07/31		78	%	50 - 130
	SPIKE	F4 (C34-C50 Hydrocarbons)	2006/07/31		68	%	50 - 130
		O-TERPHENYL (sur.)	2006/07/31		82	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/07/31		112	%	80 - 120

Quality Assurance Report (Continued)

Maxxam Job Number: EA633123

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1216030 KB4	SPIKE	F3 (C16-C34 Hydrocarbons)	2006/07/31		116	%	80 - 120
		F4 (C34-C50 Hydrocarbons)	2006/07/31		92	%	80 - 120
		O-TERPHENYL (sur.)	2006/07/31		86	%	30 - 130
	BLANK	F2 (C10-C16 Hydrocarbons)	2006/07/31	<10		mg/kg	
		F3 (C16-C34 Hydrocarbons)	2006/07/31	<10		mg/kg	
		F4 (C34-C50 Hydrocarbons)	2006/07/31	<10		mg/kg	
		Reached Baseline at C50	2006/07/31	YES, RDL=1		mg/kg	
		F2 (C10-C16 Hydrocarbons)	2006/07/31	NC		%	50
		F3 (C16-C34 Hydrocarbons)	2006/07/31	4.1		%	50
		F4 (C34-C50 Hydrocarbons)	2006/07/31	NC		%	50
		Reached Baseline at C50	2006/07/31	NC		%	50
1216267 AN1	MATRIX SPIKE	O-TERPHENYL (sur.)	2006/08/01		72	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/08/01		84	%	50 - 130
		F3 (C16-C34 Hydrocarbons)	2006/08/01		124	%	50 - 130
		F4 (C34-C50 Hydrocarbons)	2006/08/01		100	%	50 - 130
	SPIKE	O-TERPHENYL (sur.)	2006/08/01		98	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/08/01		118	%	80 - 120
		F3 (C16-C34 Hydrocarbons)	2006/08/01		99	%	80 - 120
		F4 (C34-C50 Hydrocarbons)	2006/08/01		103	%	80 - 120
	BLANK	O-TERPHENYL (sur.)	2006/08/01		65	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/08/01	<10		mg/kg	
		F3 (C16-C34 Hydrocarbons)	2006/08/01	<10		mg/kg	
		F4 (C34-C50 Hydrocarbons)	2006/08/01	<10		mg/kg	
	RPD	Reached Baseline at C50	2006/08/01	YES, RDL=1		mg/kg	
		F2 (C10-C16 Hydrocarbons)	2006/08/01	NC		%	50
		F3 (C16-C34 Hydrocarbons)	2006/08/01	NC		%	50
		F4 (C34-C50 Hydrocarbons)	2006/08/01	NC		%	50
		Reached Baseline at C50	2006/08/01	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.

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332

Edmonton: 9619 - 42 Avenue T6E 5R2 Telephone(780) 465-1212 FAX(780) 450-4187

Your Project #: 1740199
Site: JOHNSON POINT
Your C.O.C. #: 144804

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

EBA06-4
EBA06-5 } Exit
Exit Samples

Report Date: 2006/08/02

+

EBA06-5 **Baseline**

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A633896

Received: 2006/07/29, 8:45

Sample Matrix: Soil
Samples Received: 18

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX by HS GC/MS (MeOH extract)	18	2006/08/01	2006/08/02	EENVSOP-00004 V.2	EPA SW-846 8260B/502
F1-BTEX Soil Cal	18	2006/08/01	2006/08/01		
CCME Hydrocarbons (F1; MeOH; HSGC)	18	2006/08/01	2006/08/02	EENVSOP-00002 V.5	
CCME Hydrocarbons (F2-F4 in soil)	18	2006/08/01	2006/08/02	OR-412 v1.0	CWS PHCS Tier 1
Moisture	18	N/A	2006/08/02	GL107 v 4.0	SSMA 51.2

Encryption Key

Jeremy Wakaruk

Jeremy Wakaruk

02 Aug 2006 05:32:34 -06:00

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

JEREMY WAKARUK, BSc., Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
Phone# (780) 465-1212 Ext:223

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

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CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22451		
Sampling Date		2006/07/26		
COC Number		144804		
	Units	EBA06-4-5N0E-0-0.1M	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	18	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	95	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	30	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	75		1219088
O-TERPHENYL (sur.)	%	90		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	88		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	99		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	113		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	96		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22473		
Sampling Date		2006/07/26		
COC Number		144804		
	Units	EBA06-4-5S0E-0-0.1M	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	106	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	313	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	62	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	65		1219088
O-TERPHENYL (sur.)	%	90		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	88		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	100		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	110		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	95		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22474		
Sampling Date		2006/07/26		
COC Number		144804		
	Units	EBA06-4-0N5E-0-0.1M	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	101	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	52	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	60		1219088
O-TERPHENYL (sur.)	%	81		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	99		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	110		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22475		
Sampling Date		2006/07/26		
COC Number		144804		
	Units	EBA06-4-10N15E-0-0.1M	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	31	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	32	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	74		1219088
O-TERPHENYL (sur.)	%	84		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	88		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	99		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	112		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22476		
Sampling Date		2006/07/26		
COC Number		144804		
	Units	EBA06-4-10S15E-0-0.1M	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	87	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	51	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	64		1219088
O-TERPHENYL (sur.)	%	81		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	100		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	110		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22477		
Sampling Date		2006/07/26		
COC Number		144804		
	Units	EBA06-4-0N15E-0-0.1M	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	37	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	118	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	40	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	73		1219088
O-TERPHENYL (sur.)	%	82		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	88		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	99		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	110		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	95		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22483		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-5NW0NE-0-0.1MEXIT	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	16	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	20	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	80		1219088
O-TERPHENYL (sur.)	%	83		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	88		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	101		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	108		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	95		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22484		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-5SE0SW-0-0.1MEXIT	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	16	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	106		1219088
O-TERPHENYL (sur.)	%	85		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	88		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	99		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	109		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	95		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22485		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-0SE5SW-0-0.1MEXIT	RDL	QC Batch

Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	13	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	49	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	20	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	76		1219088
O-TERPHENYL (sur.)	%	85		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	88		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	99		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	117		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22486		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-10SE15SW-0-0.1MEXIT	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	15	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	20	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	122		1219088
O-TERPHENYL (sur.)	%	83		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	88		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	99		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	109		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22487		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-0SE15SW-0-0.1MEXIT	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	28	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	23	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	83		1219088
O-TERPHENYL (sur.)	%	88		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	98		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	110		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	93		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22488		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-10NW15SW-0-0.1MEXIT	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	70	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	30	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	66		1219088
O-TERPHENYL (sur.)	%	81		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	100		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	109		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22503		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-5NW0NE-0-0.1MBASE	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	13	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	29	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	87		1219088
O-TERPHENYL (sur.)	%	80		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	97		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	115		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22504		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-5SE0SW-0-0.1MBASE	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	15	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	43	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	68		1219088
O-TERPHENYL (sur.)	%	93		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	88		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	98		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	112		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	95		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22505		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-0SE5SW-0-0.1MBASE	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	15	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	41	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	63		1219088
O-TERPHENYL (sur.)	%	85		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	88		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	98		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	117		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	95		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22506		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-10SE15SW-0-0.1MBASE	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	18	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	56	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	16	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	103		1219088
O-TERPHENYL (sur.)	%	87		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	98		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	114		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22507		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-0SE15SW-0-0.1MBASE	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	15	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	31	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	72		1219088
O-TERPHENYL (sur.)	%	88		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	90		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	98		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	111		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1219083
RDL = Reportable Detection Limit				

CCME PHC SOIL PACKAGE (SOIL)

Maxxam ID		C22508		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-10NW15SW-0-0.1MBASE	RDL	QC Batch
Ext. Pet. Hydrocarbon				
F1 (C06-C10)	mg/kg	<10	10	1219088
F1 (C06-C10) - BTEX	mg/kg	<10	10	1219091
F2 (C10-C16 Hydrocarbons)	mg/kg	17	10	1219159
F3 (C16-C34 Hydrocarbons)	mg/kg	134	10	1219159
F4 (C34-C50 Hydrocarbons)	mg/kg	30	10	1219159
Reached Baseline at C50	mg/kg	Yes	1	1219159
Volatiles				
Extractable (MeOH) Benzene	mg/kg	<0.04	0.04	1219083
Extractable (MeOH) Toluene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Ethylbenzene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) m & p-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) o-Xylene	mg/kg	<0.1	0.1	1219083
Extractable (MeOH) Xylenes (Total)	mg/kg	<0.1	0.1	1219083
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	74		1219088
O-TERPHENYL (sur.)	%	86		1219159
Extractable (MeOH) 4-BROMOFLUOROBENZENE (sur.)	%	89		1219083
Extractable (MeOH) D10-ETHYLBENZENE (sur.)	%	98		1219083
Extractable (MeOH) D4-1,2-DICHLOROETHANE (sur.)	%	119		1219083
Extractable (MeOH) D8-TOLUENE (sur.)	%	94		1219083
RDL = Reportable Detection Limit				

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		C22451	C22473	C22474		
Sampling Date		2006/07/26	2006/07/26	2006/07/26		
COC Number		144804	144804	144804		
	Units	EBA06-4-5N0E-0-0.1M	EBA06-4-5S0E-0-0.1M	EBA06-4-0N5E-0-0.1M	RDL	QC Batch

Physical Properties						
Moisture	%	7.9	10.1	5.7	0.3	1219089

RDL = Reportable Detection Limit

Maxxam ID		C22475	C22476		
Sampling Date		2006/07/26	2006/07/26		
COC Number		144804	144804		
	Units	EBA06-4-10N15E-0-0.1M	EBA06-4-10S15E-0-0.1M	RDL	QC Batch

Physical Properties					
Moisture	%	14.1	15.6	0.3	1219089

RDL = Reportable Detection Limit

Maxxam ID		C22477	C22483		
Sampling Date		2006/07/26	2006/07/28		
COC Number		144804	144804		
	Units	EBA06-4-0N15E-0-0.1M	EBA06-5-5NW0NE-0-0.1MEXIT	RDL	QC Batch

Physical Properties					
Moisture	%	7.0	4.3	0.3	1219089

RDL = Reportable Detection Limit

Maxxam ID		C22484	C22485		
Sampling Date		2006/07/28	2006/07/28		
COC Number		144804	144804		
	Units	EBA06-5-5SE0SW-0-0.1MEXIT	EBA06-5-0SE5SW-0-0.1MEXIT	RDL	QC Batch

Physical Properties					
Moisture	%	3.3	4.2	0.3	1219089

RDL = Reportable Detection Limit

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		C22486	C22487		
Sampling Date		2006/07/28	2006/07/28		
COC Number		144804	144804		
	Units	EBA06-5-10SE15SW-0-0.1MEXIT	EBA06-5-0SE15SW-0-0.1MEXIT	RDL	QC Batch

Physical Properties					
Moisture	%	1.9	5.1	0.3	1219089
RDL = Reportable Detection Limit					

Maxxam ID		C22488	C22503		
Sampling Date		2006/07/28	2006/07/28		
COC Number		144804	144804		
	Units	EBA06-5-10NW15SW-0-0.1MEXIT	EBA06-5-5NW0NE-0-0.1MBASE	RDL	QC Batch

Physical Properties					
Moisture	%	5.8	4.8	0.3	1219089
RDL = Reportable Detection Limit					

Maxxam ID		C22504	C22505		
Sampling Date		2006/07/28	2006/07/28		
COC Number		144804	144804		
	Units	EBA06-5-5SE0SW-0-0.1MBASE	EBA06-5-0SE5SW-0-0.1MBASE	RDL	QC Batch

Physical Properties					
Moisture	%	4.6	6.6	0.3	1219089
RDL = Reportable Detection Limit					

Maxxam ID		C22506	C22507		
Sampling Date		2006/07/28	2006/07/28		
COC Number		144804	144804		
	Units	EBA06-5-10SE15SW-0-0.1MBASE	EBA06-5-0SE15SW-0-0.1MBASE	RDL	QC Batch

Physical Properties					
Moisture	%	4.0	4.6	0.3	1219089
RDL = Reportable Detection Limit					

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		C22508		
Sampling Date		2006/07/28		
COC Number		144804		
	Units	EBA06-5-10NW15SW-0-0.1MBASE	RDL	QC Batch

Physical Properties				
Moisture	%	6.6	0.3	1219089
RDL = Reportable Detection Limit				



Maxxam Job #: A633896
Report Date: 2006/08/02

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: 1740199
Site Reference: JOHNSON POINT
Sampler Initials: NA

General Comments

Results relate only to the items tested.

Quality Assurance Report

Maxxam Job Number: EA633896

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1219083 HW4	MATRIX SPIKE [C22473-01]	Extractable (MeOH) 4-BROMOFLUOROBEN	2006/08/02		90	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/08/02		102	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/08/02		110	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/08/02		95	%	60 - 140
		Extractable (MeOH) Benzene	2006/08/02		100	%	60 - 140
		Extractable (MeOH) Toluene	2006/08/02		98	%	60 - 140
		Extractable (MeOH) Ethylbenzene	2006/08/02		101	%	60 - 140
		Extractable (MeOH) m & p-Xylene	2006/08/02		102	%	60 - 140
		Extractable (MeOH) o-Xylene	2006/08/02		99	%	60 - 140
	SPIKE	Extractable (MeOH) 4-BROMOFLUOROBEN	2006/08/02		89	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/08/02		101	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/08/02		111	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/08/02		94	%	60 - 140
		Extractable (MeOH) Benzene	2006/08/02		99	%	60 - 140
		Extractable (MeOH) Toluene	2006/08/02		95	%	60 - 140
		Extractable (MeOH) Ethylbenzene	2006/08/02		98	%	60 - 140
		Extractable (MeOH) m & p-Xylene	2006/08/02		99	%	60 - 140
		Extractable (MeOH) o-Xylene	2006/08/02		94	%	60 - 140
	BLANK	Extractable (MeOH) 4-BROMOFLUOROBEN	2006/08/02		88	%	60 - 140
		Extractable (MeOH) D10-ETHYLBENZENE (	2006/08/02		99	%	60 - 130
		Extractable (MeOH) D4-1,2-DICHLOROETH	2006/08/02		113	%	60 - 140
		Extractable (MeOH) D8-TOLUENE (sur.)	2006/08/02		95	%	60 - 140
		Extractable (MeOH) Benzene	2006/08/02	<0.04		mg/kg	
		Extractable (MeOH) Toluene	2006/08/02	<0.1		mg/kg	
		Extractable (MeOH) Ethylbenzene	2006/08/02	<0.1		mg/kg	
		Extractable (MeOH) m & p-Xylene	2006/08/02	<0.1		mg/kg	
		Extractable (MeOH) o-Xylene	2006/08/02	<0.1		mg/kg	
		Extractable (MeOH) Xylenes (Total)	2006/08/02	<0.1		mg/kg	
	RPD [C22451-01]	Extractable (MeOH) Benzene	2006/08/02	NC		%	50
		Extractable (MeOH) Toluene	2006/08/02	NC		%	50
		Extractable (MeOH) Ethylbenzene	2006/08/02	NC		%	50
		Extractable (MeOH) m & p-Xylene	2006/08/02	NC		%	50
		Extractable (MeOH) o-Xylene	2006/08/02	NC		%	50
		Extractable (MeOH) Xylenes (Total)	2006/08/02	NC		%	50
1219088 KO	MATRIX SPIKE [C22473-01]	4-BROMOFLUOROBENZENE (sur.)	2006/08/02		99	%	60 - 130
		F1 (C06-C10)	2006/08/02		99	%	60 - 130
	SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/08/02		87	%	60 - 130
		F1 (C06-C10)	2006/08/02		91	%	80 - 120
	BLANK	4-BROMOFLUOROBENZENE (sur.)	2006/08/02		88	%	60 - 130
		F1 (C06-C10)	2006/08/02	<10		mg/kg	
	RPD [C22451-01]	F1 (C06-C10)	2006/08/02	NC		%	50
1219089 CN1	BLANK	Moisture	2006/08/02	<0.3		%	
	RPD [C22451-01]	Moisture	2006/08/02	5.9		%	20
1219159 KB4	MATRIX SPIKE [C22473-01]	O-TERPHENYL (sur.)	2006/08/02		87	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/08/02		96	%	50 - 130
		F3 (C16-C34 Hydrocarbons)	2006/08/02		79	%	50 - 130
		F4 (C34-C50 Hydrocarbons)	2006/08/02		73	%	50 - 130
		O-TERPHENYL (sur.)	2006/08/02		91	%	30 - 130
	SPIKE	F2 (C10-C16 Hydrocarbons)	2006/08/02		98	%	80 - 120
		F3 (C16-C34 Hydrocarbons)	2006/08/02		82	%	80 - 120
		F4 (C34-C50 Hydrocarbons)	2006/08/02		81	%	80 - 120
	BLANK	O-TERPHENYL (sur.)	2006/08/02		99	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/08/02	11, RDL=10		mg/kg	

Quality Assurance Report (Continued)

Maxxam Job Number: EA633896

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1219159 KB4	BLANK	F3 (C16-C34 Hydrocarbons)	2006/08/02	<10		mg/kg	
		F4 (C34-C50 Hydrocarbons)	2006/08/02	<10		mg/kg	
		Reached Baseline at C50	2006/08/02	YES, RDL=1		mg/kg	
	RPD [C22451-01]	F2 (C10-C16 Hydrocarbons)	2006/08/02	NC		%	50
		F3 (C16-C34 Hydrocarbons)	2006/08/02	15.5		%	50
		F4 (C34-C50 Hydrocarbons)	2006/08/02	NC		%	50
		Reached Baseline at C50	2006/08/02	NC		%	50

NC = Non-calculable
 RPD = Relative Percent Difference

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332
 Edmonton: 9619 - 42 Avenue T6E 5R2 Telephone(780) 465-1212 FAX(780) 450-4187

APPENDIX

APPENDIX D SUMP ANALYTICAL DATA

David Das

From: Emma Pike [pikee@inac-ainc.gc.ca]
Sent: Thursday, August 17, 2006 4:49 PM
To: David Das; Robert Valteau
Cc: Brad Thompson
Subject: Re: Fwd: ALS sump water results (JP)

1740199

DDay
Aug 17/06.



Re: Fwd: ALS sump
water result...

FYI - for the files. Already let Bob know who was going to pass it onto James and the site.
The smaller sump is not an issue - Rob said as long as it went through the same treatment process and he saw the volume we are talking about, so no real concerns there.

Cheers,
Emma

Emma Pike, Project Manager
Contaminants and Remediation Directorate, DIAND Ph (867) 669-2756 Fx (867) 669-2721

David Das

From: Rob-NWT Walker [walkerrd@inac-ainc.gc.ca]
Sent: Thursday, August 17, 2006 2:13 PM
To: Emma Pike
Subject: Re: Fwd: ALS sump water results (JP)

1740199 . DDa
Aug 17 106 .

Emma , after seeing the latest lab results from Johnson Point, all fall within license limits and discharge can commence immediately. As discussed earlier any further discharge into the kitchen sump should continue to be filtered before discharge.

Regards

Rob

David Das

From: David Das
Sent: Wednesday, August 16, 2006 10:59 AM
To: 'Emma Pike'; Brad Thompson; Robert Valteau
Cc: Joel Gowman
Subject: JP Sumpwater Summary (Wed, Aug 16, 2006 morning)

Hello All:

I received the Maxxam lab data for the sump water samples submitted on Mon, Aug 14, 2006. It is attached for your information. The results are summarized below:

AUG 14 SUBMISSION:

- the grey water sample had mineral oil and grease below 5 mg/L.
- the Sump B (tank farm area) had mineral oil and grease below 5 mg/L, but oil and grease 18 mg/L

PREVIOUS SUBMISSIONS:

The grey water samples previously had oil and grease of 47 mg/L (EBA-Maxxam), 14 mg/L (EBAMaxxam - after confirmation), 66 mg/L (EBA-ALS) and 50 mg/L (AES-ALS). Benzene, toluene and ethylbenzene concentrations were below water licence criteria.

The other Sump (tank farm, referred to as Sump 2 before) water sample had oil and grease concentrations of 4 mg/L (AES-ALS) and 10 mg/L (EBA-ALS). Benzene, toluene and ethylbenzene concentrations were below water licence criteria.

All the lab results are attached in this email. ALS results (for the submission of Aug 14) apparently will be delayed. Hope this helps.
Thanks and best regards.

David Das



Sump_final_analysisA633090-R2006-07 A633090-R2006-07 c_L417238.PDF c_L418101.PDF
_A636153-R2... -28_15-11-59.p... -28_17-12-19.p... (425 KB) (429 KB)

-----Original Message-----

From: Emma Pike [<mailto:pikee@inac-ainc.gc.ca>]
Sent: Tuesday, August 15, 2006 9:05 PM
To: David Das; Brad Thompson; Robert Valteau
Cc: Joel Gowman
Subject: Re: JP Sumpwater Update (Tues, Aug 15, 2006 afternoon)

We still need the lab results to show the inspector, so no, we can't pump until those results are available and he gives the okay. Good news though for the greywater - just need the paperwork to follow. We'll have to see what our options are for the tank farm sump -hopefully we'll get more results from EBA shortly?

Look forward to the lab results soon,

Emma

Emma Pike, Project Manager
Contaminants and Remediation Directorate, DIAND Ph (867) 669-2756 Fx (867) 669-2721

>>> "Robert Valteau" <arctices@ssimicro.com> 08/15/06 5:54 PM >>>

JP Sumpwater Update (Tues, Aug 15, 2006 afternoon) I'm glad to see the grey water sump so low. Can we now pump? The tank farm site has previously tested OK. Don't know how it could possibly go up. I'd like approval to pump it too. There is no floating product, and mineral oil & grease passes, as do your previous BTEX readings right David?

Regards to all.

Bob

----- Original Message -----

From: David Das

To: David Das ; Brad Thompson

Cc: Emma Pike ; Joel Gowman ; Robert Valteau

Sent: Tuesday, August 15, 2006 4:43 PM

Subject: JP Sumpwater Update (Tues, Aug 15, 2006 afternoon)

Hi Brad:

Good afternoon. I just want to update you all on the preliminary sump water results:

(A) I received a verbal confirmation from Maxxam that

- the mineral oil and grease for both (a) greywater (treated) and (b) sump B (tank farm area) is below 5 mg/L.

- The total oil and grease of sump water B (tank farm) is now 18 mg/L (previously reported to be 10 mg/L to EBA and 4 mg/L to AES, right Bob ?), seems to have gone up a bit

(B) It seems for some reason ALS lab in Vancouver hasn't received the samples yet that were handed over to Randy (of ALS-YK) Mon (Aug 14) morning.

Thanks.

David Das



CERTIFICATE OF ANALYSIS

Date: August 18, 2006

ALS File No. Z1193

Report On: 1740199 Water Analysis

Report To: **EBA Engineering Consultants Ltd.**
PO Box 2244
#201 - 4916 - 49 Street
Yellowknife, NT
X1A 2P7

Attention: **Mr. D. (David) Das**

Received: August 15, 2006

ALS ENVIRONMENTAL

per:

Janice Pearson, - Account Manager
Can Dang, B.Sc. - Senior Account Manager

File No. Z1193

RESULTS OF ANALYSIS - Water



Sample ID	Grey water treated	Sump-B
Sample Date	06-08-12	06-08-12
ALS ID	1	2

Extractables

Oil and Grease	-	<5.0
Mineral Oil & Grease	<5.0	<5.0

Organic Parameters

Surfactants	LAS	1.00	-
-------------	-----	------	---

Results are expressed as milligrams per litre except where noted.
< = Less than the detection limit indicated.

Appendix 1 - METHODOLOGY



Outlines of the methodologies utilized for the analysis of the samples submitted are as follows

Mineral Oil and Grease in Water

This analysis is carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Methods 3510 & 9071, published by the United States Environmental Protection Agency (EPA), "Standard Methods for the Examination of Water and Wastewater", 20th ed., Method 5520, published by the American Public Health Association, and "BC Environmental Laboratory Manual for the Analysis of Water, Wastewater, Sediment and Biological Materials," 5th ed., published by the B.C. Ministry of Environment, Lands & Parks, 1994. The procedure involves an extraction of the entire water sample with hexane followed by a silica gel clean-up, to remove most naturally occurring non-petrogenic organic compounds. This extract is then evaporated to dryness, and the residue weighed to determine Mineral Oil and Grease.

Recommended Holding Time:

Sample: 28 days Extract: 40 days

Reference: Puget Sound Protocols

Laboratory Location: ALS Environmental, Vancouver

Conventional Parameters in Water

These analyses are carried out in accordance with procedures described in "Methods for Chemical Analysis of Water and Wastes" (USEPA), "Manual for the Chemical Analysis of Water, Wastewaters, Sediments and Biological Tissues" (BCMOE), and/or "Standard Methods for the Examination of Water and Wastewater" (APHA). Further details are available on request.

Laboratory Location: ALS Environmental, Vancouver

Oil & Grease in Water

This analysis is carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Methods 3510 & 9071, published by the United States Environmental Protection Agency (EPA), "Standard Methods for the Examination of Water and Wastewater", 20th ed., Method 5520, published by the American Public Health Association, and "BC Environmental Laboratory Manual for the Analysis of Water, Wastewater, Sediment and Biological Materials," 5th ed., published by the B.C. Ministry of Environment, Lands & Parks, 1994. The procedure involves an extraction of the entire water sample with hexane. This extract is then evaporated to dryness, and the residue weighed to determine Oil and Grease.

Recommended Holding Time:

Sample: 28 days Extract: 40 days

Reference: Puget Sound Protocols

File No. Z1193

Appendix 1 - METHODOLOGY - Continued



Laboratory Location: ALS Environmental, Vancouver

Results contained within this certificate relate only to the samples as submitted.

This Certificate Of Analysis shall only be reproduced in full, except with the written approval of ALS Environmental.

End of Report



Environmental Division

PRELIMINARY RESULTS

EBA ENG CONSULTANTS LTD

ATTN: DAVID DAS

Reported On: 03-AUG-06 05:15 PM

P.O. BOX 2244 #201 4916 - 49 ST

YELLOWKNIFE NT X1A 2P7

Lab Work Order #: **L418101**

Date Received: **02-AUG-06**

Project P.O. #:

Job Reference: 1740199

Legal Site Desc:

CofC Numbers: 090482

Other Information:

Comments:

ROY JONES
General Manager

For any questions about this report please contact your Account Manager:

CATHERINE EVARISTO-CORDERO

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.



ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L418101-1	SUMP 1 JP								
Sampled By:	NA on 28-JUL-06								
Matrix:	WATER								
	Oil and Grease	66		1	mg/L		03-AUG-06	AHK	R426863
L418101-2	SUMP 2 JP								
Sampled By:	NA on 28-JUL-06								
Matrix:	WATER								
	BTEX								
	Benzene	<0.0005		0.0005	mg/L		02-AUG-06	CTL	R426848
	Toluene	0.0006		0.0005	mg/L		02-AUG-06	CTL	R426848
	Ethylbenzene	0.0017		0.0005	mg/L		02-AUG-06	CTL	R426848
	m+p-Xylene	0.0088		0.0005	mg/L		02-AUG-06	CTL	R426848
	o-Xylene	0.011		0.0005	mg/L		02-AUG-06	CTL	R426848
	Xylenes	0.020		0.0005	mg/L		02-AUG-06	CTL	R426848
	Oil and Grease	10		1	mg/L		03-AUG-06	AHK	R426863
* Refer to Referenced Information for Qualifiers (if any) and Methodology.									

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BTX-PT-ED	Water	BTEX	EPA 5030	EPA 5030/8260 P&T GC-MS
OGG-ED	Water	Oil and Grease-Gravimetric		APHA 5520 B Hexane MTBE ext. Gravime
OGG-ED	Water	Oil and Grease-Gravimetric		APHA 5520 G HEXANE MTBE EXT. GRAVIME

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

090482

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA		

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million.

mg/L (units) - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.



Environmental Division

PRELIMINARY RESULTS

ARCTIC ENVIRONMENTAL SERVICES

ATTN: ROBERT J VALLEAU

Reported On: 02-AUG-06 03:45 PM

BOX 8 SITE 207 RR2

ST ALBERT AB T8N 1M9

Lab Work Order #: L417238

Date Received: 01-AUG-06

Project P.O. #:

Job Reference:

Legal Site Desc:

CofC Numbers: 260844

Other Information:

Comments:

ROY JONES
General Manager

For any questions about this report please contact your Account Manager:

AVERLEIGH MILKS

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.



Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L417238-1	WATER SUMP 1								
Sampled By:	R J VALLEAU								
Matrix:	WATER								
	Oil and Grease	50		2	mg/L		02-AUG-06	AHK	R426277
L417238-2	WATER SUMP 2								
Sampled By:	R J VALLEAU								
Matrix:	WATER								
BTEX									
	Benzene	<0.0005		0.0005	mg/L	01-AUG-06	01-AUG-06	JDW	R426253
	Toluene	<0.0005		0.0005	mg/L	01-AUG-06	01-AUG-06	JDW	R426253
	Ethylbenzene	0.0012		0.0005	mg/L	01-AUG-06	01-AUG-06	JDW	R426253
	m+p-Xylene	0.0068		0.0005	mg/L	01-AUG-06	01-AUG-06	JDW	R426253
	o-Xylene	0.0094		0.0005	mg/L	01-AUG-06	01-AUG-06	JDW	R426253
	Xylenes	0.016		0.0005	mg/L	01-AUG-06	01-AUG-06	JDW	R426253
	Oil and Grease	4		4	mg/L		02-AUG-06	AHK	R426277
* Refer to Referenced Information for Qualifiers (if any) and Methodology.									

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BTX-PT-ED	Water	BTEX	EPA 5030	EPA 5030/8260 P&T GC-MS
OGG-ED	Water	Oil and Grease-Gravimetric		APHA 5520 B Hexane MTBE ext. Gravime
OGG-ED	Water	Oil and Grease-Gravimetric		APHA 5520 G HEXANE MTBE EXT. GRAVIME

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

260844

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA		

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million.

mg/L (units) - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.



Your Project #: 1740199 JOHNSON POINT
Site: JOHNSON POINT
Your C.O.C. #: 144803

Attention: NEIL ALLEN

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

Report Date: 2006/07/28

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A633090

Received: 2006/07/27, 10:00

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
BTEX in Water by HS GC/MS	1	2006/07/27	2006/07/28	EENV SOP-00004 V.2	EPA SW 846 8260 B
Oil and Grease (Gravimetric, n-Hexane)	1	N/A	2006/07/28	EDM SOP-0051	Gravimetric

Encryption Key

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

JEREMY WAKARUK, BSc., Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
Phone# (780) 465-1212 Ext:223

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Total cover pages: 1

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Edmonton: 9619 - 42 Avenue T6E 5R2 Telephone (780) 465-1212 FAX (780) 450-4187

Page 1 of 5

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		C16603		
Sampling Date		2006/07/24		
COC Number		144803		
	Units	SUMP 1	RDL	QC Batch

Misc. Organics				
Extractable (n-Hex.) Oil and grease	mg/L	47	4	1214431
RDL = Reportable Detection Limit				

VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		C16603		
Sampling Date		2006/07/24		
COC Number		144803		
	Units	SUMP 1	RDL	QC Batch

Volatiles				
Benzene	ug/L	<0.5	0.5	1213337
Toluene	ug/L	<0.5	0.5	1213337
Ethylbenzene	ug/L	<0.5	0.5	1213337
o-Xylene	ug/L	<0.5	0.5	1213337
m & p-Xylene	ug/L	<1	1	1213337
Xylenes (Total)	ug/L	<1	1	1213337
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	99		1213337
D4-1,2-DICHLOROETHANE (sur.)	%	95		1213337
D8-TOLUENE (sur.)	%	100		1213337

RDL = Reportable Detection Limit



Maxxam Job #: A633090
Report Date: 2006/07/28

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: 1740199 JOHNSON POINT
Site Reference: JOHNSON POINT
Sampler Initials: NA

General Comments

Results relate only to the items tested.

Quality Assurance Report

Maxxam Job Number: EA633090

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1213337 MC1	MATRIX SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/07/28		94	%	70 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2006/07/28		97	%	70 - 130
		D8-TOLUENE (sur.)	2006/07/28		99	%	70 - 130
		Benzene	2006/07/28		93	%	70 - 130
		Toluene	2006/07/28		92	%	70 - 130
		Ethylbenzene	2006/07/28		94	%	70 - 130
		o-Xylene	2006/07/28		89	%	70 - 130
		m & p-Xylene	2006/07/28		90	%	70 - 130
	SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/07/28		96	%	70 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2006/07/28		95	%	70 - 130
		D8-TOLUENE (sur.)	2006/07/28		99	%	70 - 130
		Benzene	2006/07/28		94	%	70 - 130
		Toluene	2006/07/28		93	%	70 - 130
		Ethylbenzene	2006/07/28		94	%	70 - 130
		o-Xylene	2006/07/28		88	%	70 - 130
		m & p-Xylene	2006/07/28		88	%	70 - 130
	BLANK	4-BROMOFLUOROBENZENE (sur.)	2006/07/28		95	%	70 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2006/07/28		101	%	70 - 130
		D8-TOLUENE (sur.)	2006/07/28		99	%	70 - 130
		Benzene	2006/07/28	<0.5		ug/L	
		Toluene	2006/07/28	<0.5		ug/L	
		Ethylbenzene	2006/07/28	<0.5		ug/L	
		o-Xylene	2006/07/28	<0.5		ug/L	
		m & p-Xylene	2006/07/28	<1		ug/L	
		Xylenes (Total)	2006/07/28	<1		ug/L	
	RPD	Benzene	2006/07/28	NC		%	40
		Toluene	2006/07/28	NC		%	40
		Ethylbenzene	2006/07/28	NC		%	40
		o-Xylene	2006/07/28	NC		%	40
		m & p-Xylene	2006/07/28	NC		%	40
		Xylenes (Total)	2006/07/28	NC		%	40
1214431 AP4	Calibration Check	Extractable (n-Hex.) Oil and grease	2006/07/28		91	%	N/A
	BLANK	Extractable (n-Hex.) Oil and grease	2006/07/28	<2		mg/L	
N/A = Not Applicable NC = Non-calculable RPD = Relative Percent Difference							

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Your Project #: 1740199 JOHNSON POINT
Site: JOHNSON POINT
Your C.O.C. #: 144803

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

Report Date: 2006/07/28

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A633090

Received: 2006/07/27, 10:00

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX in Water by HS GC/MS	1	2006/07/27	2006/07/28	EENV SOP-00004 V.2	EPA SW 846 8260 B
Oil and Grease (Gravimetric, n-Hexane)	1	N/A	2006/07/28	EDM SOP-0051	Gravimetric

Encryption Key

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JEREMY WAKARUK, BSc., Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
Phone# (780) 465-1212 Ext:223

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RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		C16603		
Sampling Date		2006/07/24		
COC Number		144803		
	Units	SUMP 1	RDL	QC Batch

Misc. Organics				
Extractable (n-Hex.) Oil and grease	mg/L	14	2	1215604
RDL = Reportable Detection Limit				

VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		C16603		
Sampling Date		2006/07/24		
COC Number		144803		
	Units	SUMP 1	RDL	QC Batch

Volatiles				
Benzene	ug/L	<0.5	0.5	1213337
Toluene	ug/L	<0.5	0.5	1213337
Ethylbenzene	ug/L	<0.5	0.5	1213337
o-Xylene	ug/L	<0.5	0.5	1213337
m & p-Xylene	ug/L	<1	1	1213337
Xylenes (Total)	ug/L	<1	1	1213337
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	99		1213337
D4-1,2-DICHLOROETHANE (sur.)	%	95		1213337
D8-TOLUENE (sur.)	%	100		1213337

RDL = Reportable Detection Limit



Maxxam Job #: A633090
Report Date: 2006/07/28

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: 1740199 JOHNSON POINT
Site Reference: JOHNSON POINT
Sampler Initials: NA

General Comments

Results relate only to the items tested.



Your Project #: 1740199
Site: JOHNSON POINT
Your C.O.C. #: 136393

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

Report Date: 2006/08/16

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A636153

Received: 2006/08/14, 12:20

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mineral Oil and Grease	2	N/A	2006/08/15	EENVSOP-00121 V.1	EPA 1664
Oil and Grease (Gravimetric, n-Hexane) @	1	N/A	2006/08/15	EDM SOP-0051	Gravimetric

(1)

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JEREMY WAKARUK, BSc., Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
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RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		C37028	C37029		
Sampling Date		2006/08/12	2006/08/12		
COC Number		136393	136393		
	Units	GREYWATER (TREATED)	SUMP-B	RDL	QC Batch

OIL & GREASE					
Oil & Grease (mineral/synthetic)	mg/L	<5	<5	5	1233681
Misc. Organics					
Extractable (n-Hex.) Oil and grease	mg/L		18	10	1233683
RDL = Reportable Detection Limit					

RESULTS OF CHEMICAL ANALYSES OF WATER Comments

Sample C37028-01 Mineral Oil and Grease: Detection limits adjusted based on sample volume available. Results obtained using 250mL of sample; Total Mineral Oil and Grease = 2mg/L

Sample C37029-01 Mineral Oil and Grease: Detection limits adjusted based on sample volume available. Results obtained using 250mL of sample; Total Mineral Oil and Grease = <2mg/L

Sample C37029-01 Oil and Grease (Gravimetric, n-Hexane): Detection limits adjusted based on sample volume available.

Results relate only to the items tested.

Quality Assurance Report

Maxxam Job Number: EA636153

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1233681 AP4	Calibration Check	Oil & Grease (mineral/synthetic)	2006/08/15		84	%	N/A
	BLANK	Oil & Grease (mineral/synthetic)	2006/08/15	<2		mg/L	
1233683 AP4	Calibration Check	Extractable (n-Hex.) Oil and grease	2006/08/15		84	%	N/A
	BLANK	Extractable (n-Hex.) Oil and grease	2006/08/15	<2		mg/L	
N/A = Not Applicable							

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Quality Assurance Report

Maxxam Job Number: EA633090

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1213337 MC1	MATRIX SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/07/28		94	%	70 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2006/07/28		97	%	70 - 130
		D8-TOLUENE (sur.)	2006/07/28		99	%	70 - 130
		Benzene	2006/07/28		93	%	70 - 130
		Toluene	2006/07/28		92	%	70 - 130
		Ethylbenzene	2006/07/28		94	%	70 - 130
		o-Xylene	2006/07/28		89	%	70 - 130
		m & p-Xylene	2006/07/28		90	%	70 - 130
		4-BROMOFLUOROBENZENE (sur.)	2006/07/28		96	%	70 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2006/07/28		95	%	70 - 130
		D8-TOLUENE (sur.)	2006/07/28		99	%	70 - 130
		Benzene	2006/07/28		94	%	70 - 130
		Toluene	2006/07/28		93	%	70 - 130
		Ethylbenzene	2006/07/28		94	%	70 - 130
		o-Xylene	2006/07/28		88	%	70 - 130
	BLANK	m & p-Xylene	2006/07/28		88	%	70 - 130
		4-BROMOFLUOROBENZENE (sur.)	2006/07/28		95	%	70 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2006/07/28		101	%	70 - 130
		D8-TOLUENE (sur.)	2006/07/28		99	%	70 - 130
		Benzene	2006/07/28	<0.5		ug/L	
	RPD	Toluene	2006/07/28	<0.5		ug/L	
		Ethylbenzene	2006/07/28	<0.5		ug/L	
		o-Xylene	2006/07/28	<0.5		ug/L	
		m & p-Xylene	2006/07/28	<1		ug/L	
		Xylenes (Total)	2006/07/28	<1		ug/L	
		Benzene	2006/07/28	NC		%	40
		Toluene	2006/07/28	NC		%	40
		Ethylbenzene	2006/07/28	NC		%	40
		o-Xylene	2006/07/28	NC		%	40
		m & p-Xylene	2006/07/28	NC		%	40
		Xylenes (Total)	2006/07/28	NC		%	40

NC = Non-calculable

RPD = Relative Percent Difference

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APPENDIX

APPENDIX E SPILL REPORT



NWT SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24 - Hour Report Line

Phone: (867) 920-8130

Fax: (867) 873-6924

A Report date and time 07/24/06		B Date and time of spill (if known) 07/23/06 18:00hr		C <input checked="" type="checkbox"/> Original report <input type="checkbox"/> Update no. _____		Spill number 06-293	
D Location and map coordinates (if known) and direction (if moving) JOHNSON Pt (BARKS IS. N.W.T. UTM 807 57 86 72° LAT. 45 MIN. N. 118° LONG. 30 MIN. W.							
E Party responsible for spill ARCTIC ENV. SERVICES, EDMONTON							
F Product(s) spilled and estimated quantities (provide metric volumes/weights if possible) 40 Ltrs. DIESEL							
G Cause of spill CARING OLD PIPE LINE / PIPE DROPPED							
H Is spill terminated? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no		If spill is continuing, give estimated rate N/A		J Is further spillage possible? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no		K Extent of contaminated area (in square metres if possible) 1m x 50cm.	
L Factors affecting spill or recovery (weather conditions, terrain, snow cover, etc.) No.				M Containment (natural depression, dikes, etc.) GROUND (SAND)			
N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials NATURAL DEPRESSION - CLEAN UP OF SITE WILL BE COMPLETED ON AUG 5th.							
O Do you require assistance? <input checked="" type="checkbox"/> no <input type="checkbox"/> yes, describe:				P Possible hazards to persons, property, or environment; eg: fire, drinking water, fish or wildlife No.			
Q Comments and/or recommendations						FOR SPILL LINE USE ONLY	
						Lead Agency INAC -	
						Spill significance	
						Lead Agency contact and time INAC - MIKE PALMER 12:30 ENVR - CAROL BEADMAN 07/24/06	
						Is this file now closed? <input type="checkbox"/> yes <input type="checkbox"/> no	
Reported by NEIL ALLEN		Position, Employer, Location ENV. SCIENTIST / JOHNSON Pt		Telephone 867-920-2287		Reported to Position, Employer, Location Telephone	

RECEIVED '06-07-24 17:32 FROM- 8736924

TO-

P001/001

APPENDIX

APPENDIX F AES SITE SUMMARY REPORT

Report to:

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

2006 Johnson Point Site Activities Report



Submitted by:

**Arctic Environmental Services
99 Taltheilei Drive
Box 1447
Yellowknife, NT**

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APPENDICES

Appendix A: Site Photographs

Appendix B: Off-site Waste Disposal Documentation

Appendix C: Water Sample Analytical Results

Appendix D: Location of Wastewater Release

1.0 Introduction

Johnson Point was used as a staging area for oil and gas exploration in the Canadian Arctic. It is located on Banks Island on an isolated fog-prone coast 270 kilometers northeast of Sachs Harbour and north of Ulukhaktok (formerly Holman). The site was abandoned in the mid 1980s and is now under the authority and responsibility of the Contaminant and Remediation Directorate (CARD) within Indian and Northern Affairs Canada (INAC).

Infrastructure present at the site includes a 1,500 m gravel airstrip, a bermed tank farm containing 19 fuel tanks, and abandoned camp facilities. Previous investigations at the site confirmed that residual fuel was present in some of the tanks on-site. Due to the potential environmental risk this fuel posed, it was decided that remediation activities should be implemented.

To address the waste fuel at the Johnson Point site, Arctic Environmental Services Limited (AES) was awarded a contract to incinerate waste fuel, clean the tanks, and treat and oily water present in the tanks.

Existing site camp facilities and equipment were not functional/usable. Therefore, AES established a temporary tent camp from which to conduct remedial operations, and to provide a base of support for additional assessment work conducted by EBA Engineering Ltd. During the execution of on-site activities, it was determined that the useable length of the air strip was limited to approximately 610 m.

The work was located in the Inuvialuit Settlement Region (ISR). Maximizing Inuvialuit labour and services were major contractual requirements on this project as per the Inuvialuit Final Agreement (IFA).

2.0 Overview of Activities

In summary, the work at Johnson Point consisted of camp supply, onsite fuel incineration, tank cleaning, water treatment, and drum removal, and support for the environmental assessment. This work was completed within a 44-day window of opportunity between early July to the latter part of August, 2006.

Specific activities conducted by AES on site included:

- Mobilization date for the construction crew was July 5, 2006. The major site work commenced on July 14, 2006.
- Construction of tent camp was completed Between July 5 and July 16, 2006.
- Supply of camp services. Camp operations formally commenced on July 18 and were completed August 18, 2006.
- Collection of scattered drums (June 15 and 16)
- Removal of power poles (July 14 through 17)

- Incineration of approximately 108,150 L of waste fuel between July 18 and August 11, 2006.
- Decommissioning and cleaning of piping and pipelines at the site
- Cleaning of bulk storage tanks
- Cleaning of sloop tanks
- Treatment of 104,000 L of wastewater
- Removal of 11 drums of hazardous materials for southern disposal
- Training of drum crushing crew
- Solid waste incineration
- Assisting engineer with soil sample collection
- Demobilization

Infrastructure items supplied by AES but left behind at site, which by agreement became the property of INAC, included:

- Tent frames and floor structures (11)
- Out-house structures (2)
- Liner material used for wastewater sumps

Copies of photographs taken during on-site activities are provided in Appendix A.

3.0 Site Activities

3.1 Decommissioning of Power Line

This activity was not part of the original scope of work but was included since the power poles were needed for the construction of the camp. The pole line consisted of 55 poles, which were not treated (no creosote). Each pole was cut down using a chain saw and a skid steer loader stockpiled the felled poles between the tent camp and the road. The poles were left at the stockpile location in case they were needed to support future remediation activities. Some of the poles were used to assist in the camp construction, the remaining ones were left in the stockpile location. There was no wire on any of the power poles that needed to be collected and/or disposed of.

3.2 Fuel Incineration

A “Jet Flare” incinerator, designed and constructed by AES, was used to complete incineration of hydrocarbon liquids. The “Jet Flare” Incinerator provided a smokeless burn and met the approval of DIAND, Transport Canada, Department of National Defense, and the Government of the NWT for use in remote Arctic locations where other technologies or off-site transport/disposal are cost prohibitive.

The Jet Flare has an incineration rate of 100 drums/day (or 21,000 L/day, based on 10-30 weight waste oil). Its advantages include its dependability and its simplicity, and its ability to cleanly burn a wide range of products including high-octane hydrocarbons, waste and lube oils, and other hydrocarbons. One other advantage was its portability; the

incinerator was easily transported to site using a Twin-Otter size aircraft. The weight of the unit plus hoses and accessories is under 500 lbs, but the compressor required to run it weighed approximately 2200 lbs.

The incinerator was operated in three main areas: the upper sloop area; the tank farm; and the beach/runway area. Air pumps and intrinsically safe electric pumps were used to provide feedstock to the incinerator at each location. Drums were also hauled to the incineration sites and pipeline contents were pumped into tanks which were also delivered to the incineration sites.

All incineration sites were monitored by EBA to ensure the surrounding soil was not contaminated in the process of incineration. No remediation of any of the incineration sites was necessary. The onsite skid steer loader, equipped with a barrel clamp, was used in loading and moving drums. Forks were used for moving tanks.

Residual fuel products within larger tanks (tank farm bulk storage tanks) were pumped to the incinerator feed stock tank or directly to the incinerator, depending on cleanliness of the product.

Pre-mixing/blending of the feedstock was not required. However, water-contaminated fuel was passed through an oil-water separator, from which fuel was pumped off the top directly to the incinerator. Oily water was processed through the on-site wastewater treatment system, described in Section 4.2.

3.3 Tank Cleaning

After the liquid hydrocarbons and/or the oily water had been removed from all of the tanks on-site, cleaning activities commenced. Tank #6 and #18 contained only oily water which was removed and treated prior to the commencement of cleaning activities. Additional details regarding the treatment of oily water are provided in Section 4.2.

In total 64 tanks were cleaned. There were 6 tanks which contained plastic bladders and were not cleaned. These liners will be removed and disposed of as part of future remediation activities.

Cleaning activities generally consisted of a hot water wash and/or interior scrubbing and the placement of absorbent material (hydrocarbon absorbent pads or sawdust). Interior cleaning of the large tanks was completed by staff who were certified for work in confined spaces. Following cleaning activities, the tanks were inspected by the on-site engineer to confirm that hydrocarbons had been removed and the tanks could be classified as non-hazardous waste as part of the next phase of remediation activities. Used absorbent materials was disposed of in the solid waste incinerator brought to the site by AES.

Approximately 20 of the 64 tanks cleaned were 500 gallon tanks. These tanks were filled with water and 60 cm x 60 cm openings were cut to allow thorough cleaning and access by a man who scrubbed the interior after draining the tank.

All tanks less than 500 gallons in size were moved to one location for washing using the skid steer loader. After washing, the tanks were consolidated in the region of the tank farm.

3.4 Pipe Cleaning and Cutting

Piping and pipelines located on-site were drained of product by gravity draining them into collectors and then pumping the product into tanks, which were then taken to the incinerator. This operation was conducted as a controlled release and collection system. Where necessary, sections of piping were raised using the skid-steer loader to control drainage. All pipeline liquids were recovered and either directly incinerated or were passed first through the oil/water separator.

Once the pipe section was drained, it was cut into 12 m lengths. The pipe was then hauled to a common station (north of the roadway across from the tent camp), where it was allowed to drip dry (drip pans were provided). Once all of the liquid had drained out, the pipe was cut into 6 m lengths and then steam cleaned. The wash-water was collected and treated through the oil/water separator. The cleaned pipe was stockpiled on racks across the road north of the camp location for future disposal as non-hazardous waste

Pipeline decommissioning activities commenced about July 18 and were completed by August 4, 2006. Cleaning activities occurred between August 7 to 10, 2006.

3.5 Off-site Disposal of Hazardous and/or Unknown Waste

There was an estimated 2000 litres of liquids that could not be incinerated for various reason. For example, several of the drums could not be safely opened, despite all efforts to do so. Other drums contained glycol, which could not be incinerated.

Ten drums were taken by aircraft to Inuvik, where they were shipped by Northwest Transport to Solvent Buddy in Edmonton for final disposal. Shipment of the waste was completed in accordance with Transportation of Dangerous Goods regulations. A copy of the waybill is provided in Appendix B.

3.6 Miscellaneous Waste Incineration

Miscellaneous waste was incinerated on site using the single-stage solid waste incinerator. This waste was incinerated between July 14 and August 18, 2006 and included:

- Camp kitchen and packing garbage
- Sewage (solids and liquids)

- Absorbent pads and sawdust from tank cleaning
- Absorbent pads from treated-water holding cells
- Wood waste and paper products collected from trailer cleaning activities
- Excess laboratory supplies provided to AES by EBA

The incinerator was used on a daily basis so as to avoid any wildlife attractant and was used until August 17.

4.0 Water and Wastewater

4.1 Water Use

Approximately 1000 litres per day were used over a period of 40 days. This amounts to about 40,000 litres total use. Raw water for camp use was collected from the river located north of the tank farm, and was treated through a reverse osmosis unit. Testing results are attached in Appendix C.

4.2 Wastewater Treatment and Discharge

Only grey water from the camp was treated prior to discharge. Black water (sewage) was incinerated on-site. Grey water was passed through an activated carbon filter and stored in a lined sump located to the east of the tent camp prior to discharge. Samples of the treated wastewater were submitted for laboratory analyses to confirm discharge criteria defined in the water license were met.

All the oily water present at the site from within the tanks and generated as a result of the tank and barrel washing activities was passed through an oil/water separator and then the water was then passed through an activated carbon filter. Following the treatment, the water was stored in one of two lined sumps. One was located within the bermed tank farm area on the east side (between tanks 2 and 3) and the second was located on the west side of the tank farm, also within the bermed area. Similarly, samples of the treated wastewater were submitted for laboratory analyses to confirm discharge criteria defined in the water license were met.

Approval to discharge the treated wastewater was received on August 17, 2007. Approximately 20,000 L of wastewater was discharge from the sump containing the treated grey water and 60,000 L was discharged from the sump containing the wastewater from the tanks and washing process. The locations of the wastewater discharge are identified on Figure 1 provided in Appendix D.

Once the sumps were emptied, the liners were folded and transferred to the tent frame location and stored as a neatly- folded package for future use on site.

5.0 Wildlife Observations

Wildlife records were kept by EBA representatives and by wildlife monitors supplied by Sachs Harbour Hunters and Trappers. AES kept no records directly. The following animals were observed by AES staff:

- Jellyfish
- Fox
- Muskox
- Seals
- Various birds

No bears were seen during on-site activities. There was a set of footprints identified as bear prints. They apparently were old prints that the monitors advised that they likely pre-dated the presence of our camp.

6.0 Inuvialuit Benefits

6.1 Inuvialuit Labour

AES was committed to maximizing Inuvialuit labour during the Johnson Point project. Table 1 summarizes the level of Inuvialuit involvement achieved. Overall 63% of the labour employed at Johnson Point was Inuvialuit from Sachs Harbour and Inuvik. Other aboriginal labour employed at the site was Gwich'in (20%) from Inuvik. Other parties employed consisted of site management and specialty operators (incinerator and wash crew).

TABLE 1 Inuvialuit Benefit Plan Summary – Inuvialuit Labour Johnson Point Fuel Incineration Project		
Total Man-Hours	6264 hrs	100%
Management hours, including specialty operators	904 hrs	14.5%
Inuvialuit	4080 hrs	65%
Northern (Non-Inuvialuit)	1280 hrs	20.5%
Southern	0 hrs	0%

6.2 Inuvialuit Subcontractors

As is shown in Table 2, 40% of the monies paid to subcontractors and/or suppliers were Inuvialuit subcontractors or suppliers.

TABLE 2 Inuvialuit Benefit Plan Summary – Inuvialuit Subcontracting Johnson Point Fuel Incineration Project
--

Inuvialuit Sub-contractor	20%
Northern Non-Inuvialuit sub-contractor	80%
Southern	<1%

Specific Inuvialuit business used during the completion of the Johnson Point work include the following:

- Aklak Air.
- Stanton Distributing
- Ikahuk Co-op
- Manny Kudlak
- Arctic Dove
- Sachs Harbour Hunters & Trappers Committee

Other Inuvialuit-owned businesses supplied approximately 30% of contracted work or supplies. However, at the time of contract award they were not registered on the Inuvialuit Business List and were therefore considered to be northern aboriginal suppliers.

6.3 Inuvialuit Training

During the execution of the project an opportunity was identified where AES could provide training to selected residents of Sachs Harbour associated with the environmental procedures for cleaning and crushing drums. Approximately 250 barrels were present around the site and INAC did have a barrel crusher available for use by AES. Based on this AES, INAC and the Inuvialuit Regional Corporation came to an agreement to fund a training program.

The training program specifically consisted of bring four people from Sachs Harbour to the site for four days. They were provided orientation and training associated with AES's site specific health and safety policy. This included remote site camp operations, camp maintenance and associated environmental concerns, and general principles of environmental remediation. The training staff received instruction and "hands-on" experience with the following:

- Cleaning of barrels
- Operation of the barrel crusher
- Treatment of wastewater from the wash process

These skills are generally applicable to many of the environmental remediation projects completed in the north.

All of the approximately 250 drums identified at the site were cleaned and crushed. The crushed drums were transported to the beach adjacent to the runway prior to their disposal as part of future remediation activities.

7.0 Environmental Health and Safety

7.1 Safety Incidents

Two safety incidents occurred on site. The first was a grain of sand that entered the eye of an ATV operator from another ATV. At the time of the incident, the operator was wearing a helmet with a visor. The sand grain could not be washed out of the eye and was eventually removed from the eye by the natural tearing process. Upon removal, the operator went back to work. Operators were requested to use goggles from that point forward. Helmets, complete with visors, had always been mandatory use safety gear.

The second safety incident was a near-miss accident. A skid steer loader was being used to remove tanks from a sled. During this process, the operator had to move the sled tongue in order to remove a tank sitting on the deck. While he was on the deck, another worker decided that he could move the tongue with the skid steer, and attempted to do so. The tongue came down on the cab, causing the windshield to shatter, and nearly striking the skid steer operator. There was no injury.

As a result of this incident, the specific worker and skid steer operator were debriefed, and the general work force was addressed the same day at a safety meeting. Qualified skid steer operators amongst the crew were redefined, and the assembly of workers was put on notice regarding safe operations of all mobile equipment. Specific action that was taken was to lower all remaining skid unit tongues that were found to be similarly suspended.

7.2 Spill Incidents

There was one spill incident which occurred during the removal of the pipeline. A section of pipeline cracked open during lifting, and released some diesel/water mixture. Most of this material was immediately caught into containment (consisting of a 2x1 metre plastic trough with 30cm sides) which was present as part of the Spill Contingency Plan. In total, approximately 40 L were spilled with 20 L were immediately captured. The remaining 20 L soaked into the ground.

Absorbent material was applied to the bare ground surface. While performing pipe cutting activities in this area, sparks from the cutting tool ignited the hydrocarbons on the ground. This fire extinguished itself naturally over the course of a few minutes. Fire extinguishers were close by to control the small fire if it had been necessary. To remove the potential fire risk associated with this soil, it was excavated and transferred into the bermed area at the tank farm, as there is already impacted soil in this area. The entire incident was photographed by EBA, and samples were collected from test pits around the perimeter of the spill. The results from these samples all indicated hydrocarbon parameters below the applicable criteria.

APPENDICES

APPENDIX A:

SITE PHOTOGRAPHS





APPENDIX B:

OFF-SITE WASTE DISPOSAL DOCUMENTATION

SOLVENT BUDDY LTD.

2 Gloucester Drive

St. Albert, AB

T8N 2A4

PH (780) 461-9452

GST # R 897070231

FAX # (780) 469-2106

SOLD TO: Arctic Environmental Services Ltd.
Box 8 Site 207 - RR2
St. Albert, Alberta
T8M 1M9

P.O. # Robert		DATE: Sept 28/06	INVOICE # 13949	
QTY	PKG	DESCRIPTION	UNIT PRICE	AMOUNT
6	drums	Flammable Liquid NOS Jet Fuel	\$100.00	\$600.00
2	drums	Ethylene Glycol	\$150.00	\$300.00
1	drum	Ethylene Glycol (overpack)	\$225.00	\$225.00
2	drums	Ethylene Glycol (10 gal drum)	\$45.00	\$90.00
1		5% insurance recovery		\$60.75
			SUBTOTAL	\$1,275.75
			GST@6%	\$76.55
COMMENTS: Terms Net 30, Please pay from invoice No Statement will be issued			TOTAL	\$1,352.30

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING LEAK, SPILL, FIRE OR EXPOSURE

CALL

BILL OF LADING NO. 143551

TO CONEE: Solvent Buddy		FROM: SHIPPER Arctic Environmental Services		ORDER NO.					
STREET 22003 -115 Ave		STREET Thuvik		CUSTOMER ORDER NUMBER					
Edmonton, Alta T5S-2N6		ORIGIN Johnson Point		DATE					
DESTINATION Edmonton. Alt Murray/Vine		VEHICLE NUMBER 24 #							
ROUTE Phone (780) 461-9452									
NO. OF SHIPPING UNITS	DG	TRADE NAME	PROPER SHIPPING NAME	HAZARD CLASS	PIN	PACKING GROUP	WEIGHT	RATE	LABELS REQUIRED (OR EXEMPTION)
2		Glycol	10 gal drums Ethylene Glycol						
3		Glycol	45 gal green + white drums						
6		Air Gas	Jet B 45 gal drums (Red) UN # 1813	3.1		2			Placard 3
			5012967						

SHIPPER TO CIRCLE IF PREPAID OR COLLECT
IF NOT INDICATED SHIPMENT WILL MOVE COLLECTPREPAID
COLLECT

TOTAL

DECLARED VALUATION \$

(MAXIMUM LIABILITY OF CARRIER IS \$4.41 PER KG OF
\$2.00 PER LB. UNLESS DECLARED VALUATION STATES OTHERWISE)

RECEIVED subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above named materials are properly classified described packaged marked and labeled and are in proper condition for transportation according to the applicable regulations of the department of transportation.

PER

PLACARDS
REQUIREDSPECIAL
INSTRUCTIONSPLACARDS
OFFERED☒ YES☐ NO - FURNISHED BY CARRIERDRIVER'S
SIGNATURE

SHIPPER

CARRIER

PER

DATE

PER

DATE

3

MEMORANDUM

APPENDIX C:

WATER SAMPLE ANALYTICAL RESULTS

----- Original Message -----

From: [David Das](#)

To: [Emma Pike](#) ; [Brad Thompson](#) ; [Robert Valteau](#)

Cc: [Joel Gowman](#)

Sent: Wednesday, August 16, 2006 8:59 AM

Subject: JP Sumpwater Summary (Wed, Aug 16, 2006 morning)

Hello All:

I received the Maxxam lab data for the sump water samples submitted on Mon, Aug 14, 2006. It is attached for your information. The results are summarized below:

AUG 14 SUBMISSION:

- the grey water sample had mineral oil and grease below 5 mg/L.
- the Sump B (tank farm area) had mineral oil and grease below 5 mg/L, but oil and grease 18 mg/L

PREVIOUS SUBMISSIONS:

The grey water samples previously had oil and grease of 47 mg/L (EBA-Maxxam), 14 mg/L (EBAMaxxam - after confirmation), 66 mg/L (EBA-ALS) and 50 mg/L (AES-ALS). Benzene, toluene and ethylbenzene concentrations were below water licence criteria.

The other Sump (tank farm, referred to as Sump 2 before) water sample had oil and grease concentrations of 4 mg/L (AES-ALS) and 10 mg/L (EBA-ALS). Benzene, toluene and ethylbenzene concentrations were below water licence criteria.

All the lab results are attached in this email. ALS results (for the submission of Aug 14) apparently will be delayed. Hope this helps.

Thanks and best regards.

David Das

<<Sump_final_analysis_A636153-R2006-08-16_08-43-32.pdf>> <<A633090-R2006-07-28_15-11-59.pdf>> <<A633090-R2006-07-28_17-12-19.pdf>> <<c__L417238.PDF>> <<c_L418101.PDF>>

-----Original Message-----

From: Emma Pike [<mailto:pikkee@inac-ainc.gc.ca>]

Sent: Tuesday, August 15, 2006 9:05 PM

To: David Das; Brad Thompson; Robert Valteau

Cc: Joel Gowman

Subject: Re: JP Sumpwater Update (Tues, Aug 15, 2006 afternoon)

We still need the lab results to show the inspector, so no, we can't pump until those results are available and he gives the okay. Good news though for the greywater - just need the paperwork to follow.

We'll have to see what our options are for the tank farm sump -hopefully we'll get more results from EBA shortly?

Look forward to the lab results soon,

Emma

Emma Pike, Project Manager

Contaminants and Remediation Directorate, DIAND Ph (867) 669-2756 Fx (867) 669-2721

>>> "Robert Valteau" <arctices@ssimicro.com> 08/15/06 5:54 PM >>>

JP Sumpwater Update (Tues, Aug 15, 2006 afternoon)I'm glad to see the grey water sump so low. Can we now pump?

The tank farm site has previously tested OK. Don't know how it could possibly go up. I'd like approval to pump it too. There is no floating product, and mineral oil & grease passes, as do your previous BTEX readings right David?

Regards to all.

Bob

----- Original Message -----

From: David Das
To: David Das ; Brad Thompson
Cc: Emma Pike ; Joel Gowman ; Robert Valteau
Sent: Tuesday, August 15, 2006 4:43 PM
Subject: JP Sumpwater Update (Tues, Aug 15, 2006 afternoon)
Hi Brad:

Good afternoon. I just want to update you all on the preliminary sump water results:

(A) I received a verbal confirmation from Maxxam that

- the mineral oil and grease for both (a) greywater (treated) and (b) sump B (tank farm area) is below 5 mg/L.

- The total oil and grease of sump water B (tank farm) is now 18 mg/L (previously reported to be 10 mg/L to EBA and 4 mg/L to AES, right Bob ?), seems to have gone up a bit

(B) It seems for some reason ALS lab in Vancouver hasn't received the samples yet that were handed over to Randy (of ALS-YK) Mon (Aug 14) morning.

Thanks.

David Das



Your Project #: 1740199
Site: JOHNSON POINT
Your C.O.C. #: 136393

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

Report Date: 2006/08/16

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A636153
Received: 2006/08/14, 12:20

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mineral Oil and Grease	2	N/A	2006/08/15	EENVSOP-00121 V.1	EPA 1664
Oil and Grease (Gravimetric, n-Hexane) @	1	N/A	2006/08/15	EDM SOP-0051	Gravimetric

(1)

Encryption Key  Jeremy Wakaruk
16 Aug 2006 08:45:03 -06:00

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

JEREMY WAKARUK, BSc., Senior Project Manager
Email: jwakaruk@maxxamanalytics.com
Phone# (780) 465-1212 Ext:223

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.



Maxxam Job #: A636153
Report Date: 2006/08/16

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: 1740199
Site Reference: JOHNSON POINT
Sampler Initials: MH

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		C37028	C37029		
Sampling Date		2006/08/12	2006/08/12		
COC Number		136393	136393		
	Units	GREYWATER (TREATED)	SUMP-B	RDL	QC Batch

OIL & GREASE					
Oil & Grease (mineral/synthetic)	mg/L	<5	<5	5	1233681
Misc. Organics					
Extractable (n-Hex.) Oil and grease	mg/L		18	10	1233683
RDL = Reportable Detection Limit					



Maxxam Job #: A636153
Report Date: 2006/08/16

EBA ENGINEERING CONSULTANTS LTD.
Client Project #: 1740199
Site Reference: JOHNSON POINT
Sampler Initials: MH

RESULTS OF CHEMICAL ANALYSES OF WATER Comments

Sample C37028-01 Mineral Oil and Grease: Detection limits adjusted based on sample volume available. Results obtained using 250mL of sample; Total Mineral Oil and Grease = 2mg/L

Sample C37029-01 Mineral Oil and Grease: Detection limits adjusted based on sample volume available. Results obtained using 250mL of sample; Total Mineral Oil and Grease = <2mg/L

Sample C37029-01 Oil and Grease (Gravimetric, n-Hexane): Detection limits adjusted based on sample volume available.

Results relate only to the items tested.



EBA ENGINEERING CONSULTANTS LTD.
Attention: DAVID DAS
Client Project #: 1740199
P.O. #:
Site Reference: JOHNSON POINT

Quality Assurance Report
Maxxam Job Number: EA636153

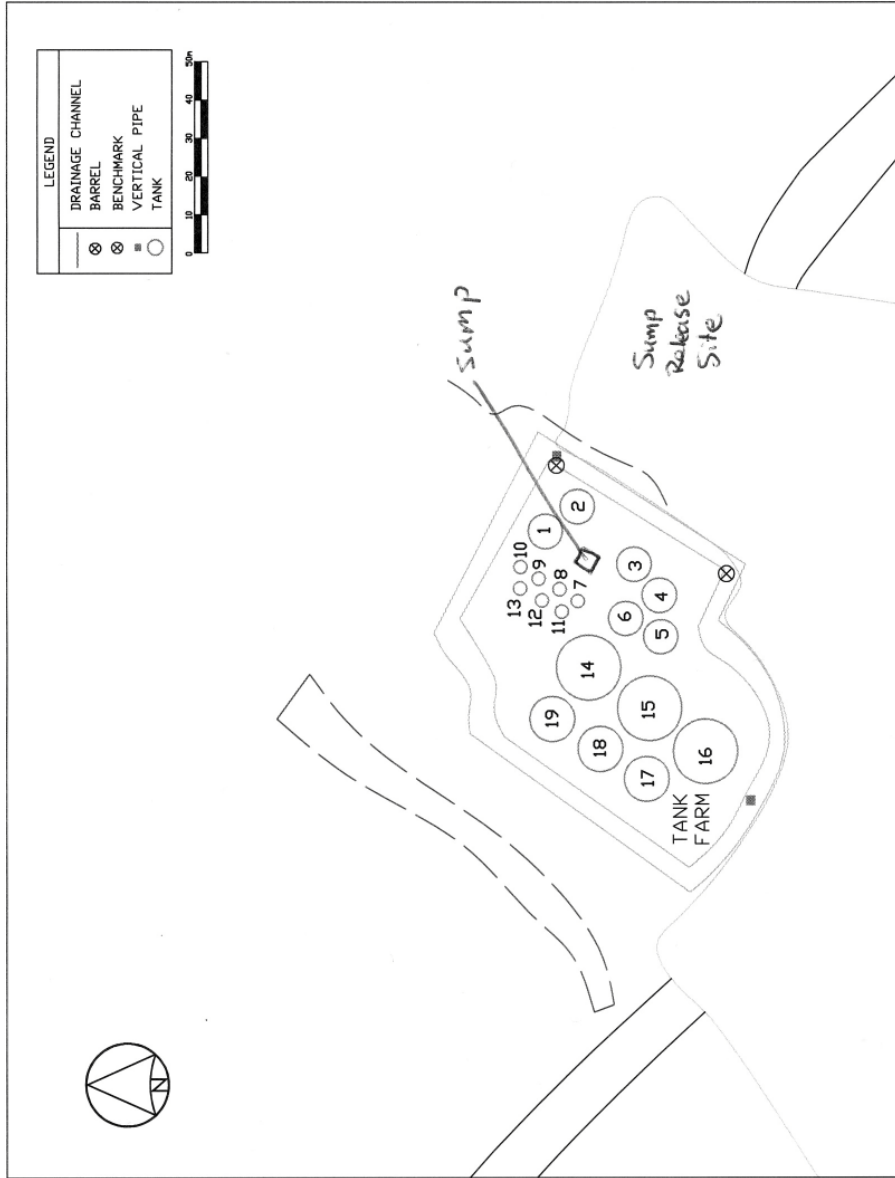
QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1233681 AP4	Calibration Check	Oil & Grease (mineral/synthetic)	2006/08/15		84	%	N/A
	BLANK	Oil & Grease (mineral/synthetic)	2006/08/15	<2		mg/L	
1233683 AP4	Calibration Check	Extractable (n-Hex.) Oil and grease	2006/08/15		84	%	N/A
	BLANK	Extractable (n-Hex.) Oil and grease	2006/08/15	<2		mg/L	

N/A = Not Applicable

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332
Edmonton: 9619 - 42 Avenue T6E 5R2 Telephone(780) 465-1212 FAX(780) 450-4187

APPENDIX D:

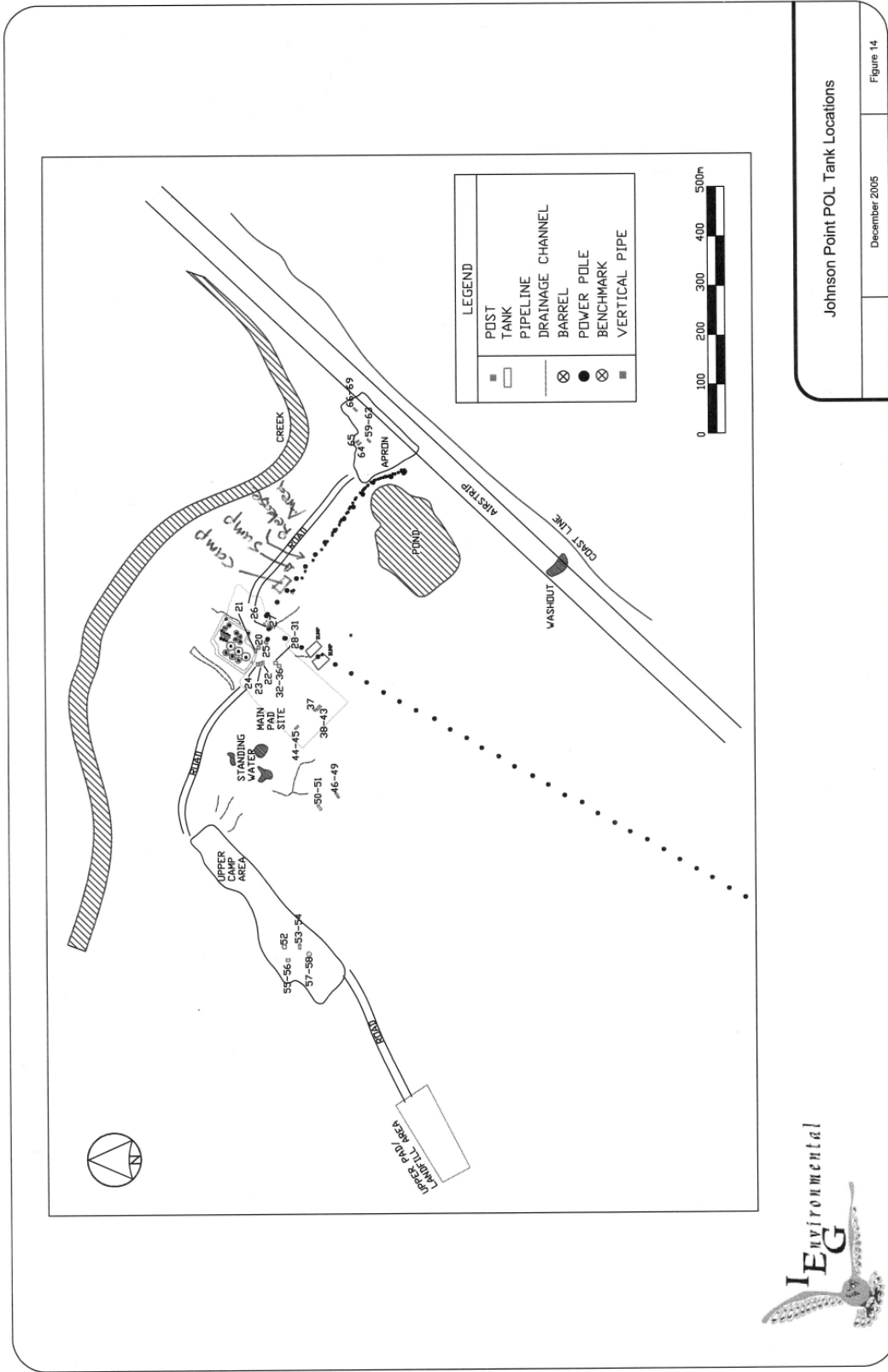
LOCATION OF WASTEWATER RELEASE



Johnson Point Area 4

December 2005

Figure 7



Johnson Point POL Tank Locations

APPENDIX

APPENDIX G ENVIRONMENTAL REPORT – 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.