Gartner Lee Limited

November 18th, 2005

Nunavut Water
Board
MAR 02 2006
Public Registry

Andrew Turner
Committee Bay Resources
Suite 200, 9797-45 Avenue
Edmonton, Alberta
Canada T6E 5V8.

Dear Mr. Turner:

Re: Letter Report – Fuel Spill on Sandspit Lake – Committee Bay, Hayes Camp

As per the request of Mr. Andrew Turner, Committee Bay Project Manger, Gartner Lee Limited (GLL) developed a water quality sampling program in response to a fuel spill on Sandspit Lake, Hayes Camp, Nunavut. This report outlines the events surrounding the fuel spill that occurred on Sandspit Lake, the remedial action that was taken by Committee Bay Resources employees, and the results of the subsequent water quality analyses. All discussion and analysis of water quality results in this report was completed by Chad Davey M.Sc, Environmental Technician of GLL's Whitehorse, Yukon office.

The scope of work conducted as part of this program included:

- Creation of a hydrocarbon surface water sampling program on Sandspit Lake;
- Preparation of a field manual containing sampling instructions and field data sheets; and
- Summarization and reporting of the results from the hydrocarbon surface water sampling on Sandspit Lake.

Background

During a routine inspection of the camp in the evening of July 10th 2005, a small oily sheen was observed on Sandspit Lake adjacent to Hayes Camp. Upon further investigation, the oily sheen appeared to be emanating from a small gully located on the south side of the camp adjacent to the incinerator area. Committee Bay Resources employees' worked diligently to control and then clean-up the spill. Initial remedial actions included the control of the spill by the placement of absorbent matting at the mouth of the gully and the removal to higher ground of fuel drums located adjacent to the top of the gully although there was no evidence of spillage or leakage from these drums or from the incinerator. The following morning, with the spill fully contained, it was reported to the NWT spill hotline and an aggressive clean-up effort was completed. Daily monitoring of the spill area was initiated to ensure any further contamination of Sandspit Lake was mitigated. Although the exact cause and source of the spill is unclear, it was estimated that the volume of diesel fuel spilled was quite small (~40 L).

Methods

In order to assess the potential impact of the diesel spill on the aquatic health of Sandspit Lake and to ensure that the Hayes Camp drinking water was not contaminated, GLL was contacted to prepare a surface water sampling program on Sandspit Lake (Appendix A). It was recommended that sampling for hydrocarbons be conducted at six sites around the perimeter of Sandspit Lake (Figure 1). The sampling program was carried out twice, August 1st and again on September 1st 2005.

GLL arranged for the appropriate bottles and equipment necessary to complete the water quality sampling to be sent to the site. Committee Bay staff collected all the water quality samples along with field measurements of pH and temperature at each of the six sites. Field measurements were collected using a handheld Hanna pH and Temperature probe. The pH was calibrated on site using pH 7 and pH 4 buffer solutions. The water samples were collected using recognized sampling protocols outlined in the field manual supplied by GLL. Appropriate measures were taken to mitigate sample contamination from all sources. Field staff wore disposable latex gloves when sampling. Surface water samples were grab samples taken from the lakeshore.

Surface water samples were collected for hydrocarbon parameters including: light and heavy extractable petroleum hydrocarbons (LEPH/HEPH) and benzene, toluene, ethylbenzene, xylenes along with volatile petroleum hydrocarbons (BTEX &VPH) corrected for polycyclic aromatic hydrocarbons. LEPH/HEPH samples were collected in acid washed 500 mL amber bottles and BTEX & VPH sampled in 125 mL amber bottles containing a copper sulfate preservative. All samples were kept cold, but not allowed to freeze, at all times between sample collection and delivery to the laboratory. Samples were shipped via air cargo from Rankin Inlet, Nunavut to ALS Environmental, a CAEAL accredited environmental laboratory in Calgary, Alberta. Chain of custody forms were prepared and accompanied the samples. A copy of the Chain of Custody is attached to the analytical laboratory report (Attachment B).

Quality Control/Quality Assurance

Quality Control/Quality Assurance protocols are a necessary component to any environmental sampling program. For the purposes of maintaining data quality a number of industry and corporate protocols were applied to this project including field replicates and laboratory duplicates. Field replicate sampling is designed to provide a measure of field variability and the repeatability of sampling. Variability of less than 25 % (relative percent difference – RPD) indicates very low field variability. One replicate sample location was chosen randomly and two samples collected sequentially. The surface sampling for Site A in the August sampling program was taken in replicate. Laboratory duplicates provide a measure of the analytical variability (precision). Laboratory variability of less than 25% is generally considered acceptable.

Results

The results of the two water quality programs are presented in Tables 1, 2, and 3. All samples were found to have non-detectable levels of hydrocarbons in all the parameters tested (Table 2). The surface sample collected on August 1st from Site A was collected in replicate (e.g. two samples collected sequentially) and summarized in Table 3. The two water samples were essentially identical, indicating low field variability (0% RPD). Laboratory precision is also summarized in Table 3 with all parameters showing 0% RPD's for the Site B lab duplicate.

I trust that this summary of the fuel spill and water quality analysis on Sandspit Lake meets your current needs. If you have any questions, or if we can be of further assistance, please do not hesitate to contact me at (867) 633-6474 ext. 40.

Yours very truly,
GARTNER LEE LIMITED

Chad Davey

Chad Davey, M.Sc
Environmental Technician

Attachments: A – Field Manual
B – Lab Results

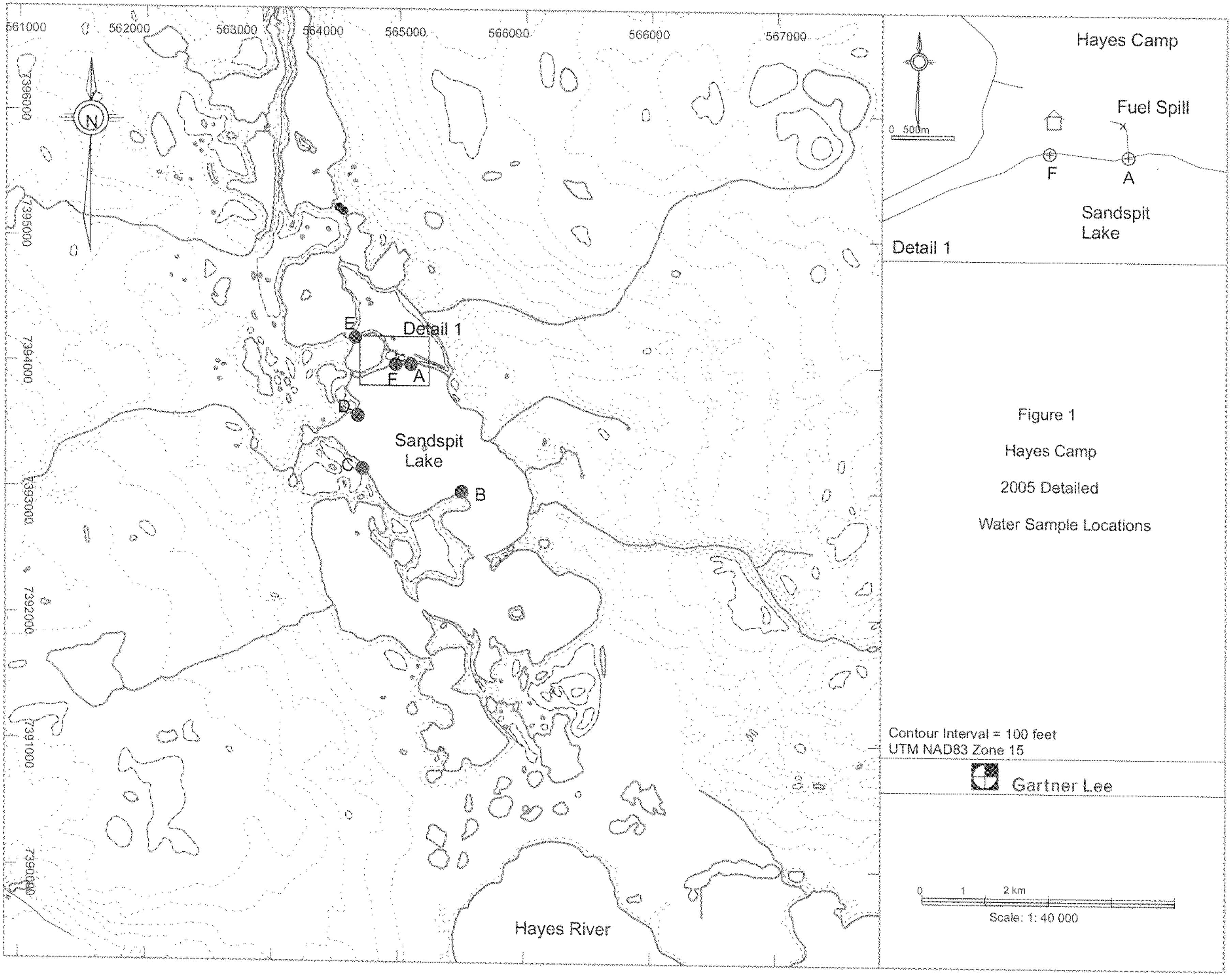

Figure 1

Hayes Camp

2005 Detailed

Water Sample Locations

Contour Interval = 100 feet
UTM NAD83 Zone 15

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Table 1. August 1st and September 1st, 2005 Surface Water Sampling on Sandspit lake

Weather: On August 1st - Sunny, warm, no wind, many mosquito's. September 1st - Partly sunny and cool.

Date	Station Name	Easting*	Northing*	Temperature (°C)	pH	Comments
August 1st	Site A	564,095	7,394,015	10.8	6.51	Lakeshore sample taken at mouth of stream containing gully with diesel spill. No oily sheen visiable on water surface.
August 1st	Site B	564,495	7,393,005	9.8	6.54	Water appears to be flowing an azimuth of 220 degrees.
August 1st	Site C	563,710	7,393,183	10.4	6.50	Lakeshore sample taken during calm conditions.
August 1st	Site D	563,673	7,393,603	8.4	6.56	Water appears to be flowing at an azimuth of 330 degrees.
August 1st	Site E	563,655	7,394,222	8.6	6.37	-
August 1st	Site F	563,974	7,394,012	10.7	6.63	Sample taken beside water pump intake hose.
September 1st	Site A	564,095	7,394,620	9.7	6.36	-
September 1st	Site B	563,652	7,394,221	9.4	6.66	-
September 1st	Site C	563,473	7,393,473	9.2	6.71	-
September 1st	Site D	563,660	7,393,610	9.3	6.69	-
September 1st	Site E	563,652	7,394,221	8.8	6.59	-
September 1st	Site F	563,966	7,394,007	9.7	6.36	-
September 1st	Site G	563,882	7,394,128	9.5	6.63	-

** UTM Zone 15,
NAD83*

Note: Some GPS cordinates for the same sites differ in location due to the use of different GPS units.

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Table 2 Surface Water Samples from Sandspit Lake, 2005

Hydrocarbon Analysis (mg/L)

Station	Detection Limits	Site A	Site A	Site B	Site B	Site C	Site C	Site D	Site D	Site E	Site E	Site F	Site F	Site G
Date		8/1/2005	9/1/2005	8/1/2005	9/1/2005	8/1/2005	9/1/2005	8/1/2005	9/1/2005	8/1/2005	9/1/2005	8/1/2005	9/1/2005	9/1/2005
Non-Halogenated Volatiles														
Benzene	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
meta- & para-Xylene	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
ortho-Xylene	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Xylenes	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Volatile Hydrocarbons (VH6-10)	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
VPH	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Polycyclic Aromatic Hydrocarbons														
Acenaphthene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Acenaphthylene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Acridine	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Anthracene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benz(a)anthracene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(a)pyrene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(b)fluoranthene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(g,h,i)perylene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(k)fluoranthene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Chrysene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Dibenz(a,h)anthracene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Fluoranthene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Fluorene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Indeno(1,2,3-c,d)pyrene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Naphthalene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Pyrene	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Quinoline	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Extractable Hydrocarbons														
EPH10-19	0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
EPH19-32	1.0	<1.0	<1.0	<1.1	<1.2	<1.3	<1.4	<1.5	<1.6	<1.7	<1.8	<1.9	<1.8	<1.9
LEPH	0.30	<0.30	<0.30	<0.31	<0.32	<0.33	<0.34	<0.35	<0.36	<0.37	<0.38	<0.39	<0.38	<0.39
HEPH	1.0	<1.0	<1.0	<1.1	<1.2	<1.3	<1.4	<1.5	<1.6	<1.7	<1.8	<1.9	<1.8	<1.9

Italic results exceed CCME Aquatic Life Guidelines

Table 3 Field Replicate and Lab Duplicate Results from Sandspit Lake, 2005

Hydrocarbon Analysis (mg/L)

Field Replicates

Station	Site A	Site A Replicate	RPD
Date	8/1/2005	8/1/2005	(%)
Non-Halogenated Volatiles			
Benzene	<0.00050	<0.00050	0
Ethylbenzene	<0.00050	<0.00050	0
Styrene	<0.00050	<0.00050	0
Toluene	<0.0010	<0.0010	0
meta- & para-Xylene	<0.00050	<0.00050	0
ortho-Xylene	<0.00050	<0.00050	0
Total Xylenes	<0.0010	<0.0010	0
Volatile Hydrocarbons (VH6-10)	<0.10	<0.10	0
VPH	<0.10	<0.10	0
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	<0.000050	<0.000050	0
Acenaphthylene	<0.000050	<0.000050	0
Acridine	<0.000050	<0.000050	0
Anthracene	<0.000050	<0.000050	0
Benz(a)anthracene	<0.000050	<0.000050	0
Benzo(a)pyrene	<0.000050	<0.000050	0
Benzo(b)fluoranthene	<0.000050	<0.000050	0
Benzo(g,h,i)perylene	<0.000050	<0.000050	0
Benzo(k)fluoranthene	<0.000050	<0.000050	0
Chrysene	<0.000050	<0.000050	0
Dibenz(a,h)anthracene	<0.000050	<0.000050	0
Fluoranthene	<0.000050	<0.000050	0
Fluorene	<0.000050	<0.000050	0
Indeno(1,2,3-c,d)pyrene	<0.000050	<0.000050	0
Naphthalene	<0.000050	<0.000050	0
Phenanthrene	<0.000050	<0.000050	0
Pyrene	<0.000050	<0.000050	0
Quinoline	<0.000050	<0.000050	0
Extractable Hydrocarbons			
EPH10-19	<0.30	<0.30	0
EPH19-32	<1.0	<1.0	0
LEPH	<0.30	<0.30	0
HEPH	<1.0	<1.0	0

Lab Dublicates

Station	Site B	Site B	RPD
Date	9/1/2005	QC# 22016	(%)
Non-Halogenated Volatiles			
Benzene	<0.00050	<0.00050	0
Ethylbenzene	<0.00050	<0.00050	0
Styrene	<0.00050	<0.00050	0
Toluene	<0.0010	<0.0010	0
meta- & para-Xylene	<0.00050	<0.00050	0
ortho-Xylene	<0.00050	<0.00050	0
Total Xylenes	<0.0010	<0.0010	0
Volatile Hydrocarbons (VH6-10)	<0.10	<0.10	0
VPH	<0.10	<0.10	0
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	<0.000050	<0.000050	0
Acenaphthylene	<0.000050	<0.000050	0
Acridine	<0.000050	<0.000050	0
Anthracene	<0.000050	<0.000050	0
Benz(a)anthracene	<0.000050	<0.000050	0
Benzo(a)pyrene	<0.000050	<0.000050	0
Benzo(b)fluoranthene	<0.000050	<0.000050	0
Benzo(g,h,i)perylene	<0.000050	<0.000050	0
Benzo(k)fluoranthene	<0.000050	<0.000050	0
Chrysene	<0.000050	<0.000050	0
Dibenz(a,h)anthracene	<0.000050	<0.000050	0
Fluoranthene	<0.000050	<0.000050	0
Fluorene	<0.000050	<0.000050	0
Indeno(1,2,3-c,d)pyrene	<0.000050	<0.000050	0
Naphthalene	<0.000050	<0.000050	0
Phenanthrene	<0.000050	<0.000050	0
Pyrene	<0.000050	<0.000050	0
Quinoline	<0.000050	<0.000050	0
Extractable Hydrocarbons			
EPH10-19	<0.30	<0.30	0
EPH19-32	<1.2	<1.3	0
LEPH	<0.32	<0.33	0
HEPH	<1.2	<1.3	0

Attachments

Attachment A

Field Manual

Sampling Protocol Manual for Diesel Spill at Hayes Camp, Committee Bay

prepared for:
Committee Bay Resources Ltd.

prepared by:
Gartner Lee Limited

in association with:
Gartner Lee Limited

reference:	date:
GLL 50-292	**July 21, 2005**

distribution:
- **1 Committee Bay Resources Ltd**
- **1 Gartner Lee Limited**

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Appendices

1. Introduction

The following Water-Sampling Field Manual is intended to provide Committee Bay Resources Ltd. staff with the guidance necessary to take water samples from the lake closest to Hayes camp where the diesel spill has occurred. The task of ordering and shipping of the appropriate bottle sets, field equipment and coolers has been completed by Gartner Lee Ltd. For the purposes of this manual it is assumed that the samples are taken from the proposed site locations outlined on the map (Appendix A).

It is recommended that Committee Bay Resources Ltd. take two samples at each of the six locations around the lake: one for LEPH/HEPH and one for BTEX & VPH. One additional sample for Oil & Grease should be taken where the diesel contamination is visually detected (oil sheen on lake, or spillage outlet). The analytical parameters of these three samples will yield a reasonable synopsis as to the extent and concentration of the diesel spill contamination within the lake. The parameters included in the analysis are outlined in Table 1.

Table 1. Analytical Parameters

Field Measurements	
pH	temperature
Laboratory Analysis	
LEPH/HEPH	BTEX & VPH
Oil & Grease	

2. Preparatory Work

As in all fieldwork, preparation is key to the effectiveness of a water-sampling program. The following steps should be followed to avoid problems in the field.

2.1 Field Equipment

Prior to departure, prepare a list of required field equipment and then assemble the equipment and check against the list. The list should include:

- pH meter (calibrated) and extra batteries
- pH calibration solution
- Sample bottles
- Sample bottle labels

- Disposable gloves
- Field book
- Cooler(s)
- Frozen ice packs (>4 per cooler)
- Shipping labels with lab address
- Pen, pencil, and permanent marker
- Chain of Custody Forms
- Packing material (bubble wrap, newspaper)
- Packing tape
- Waders/ rubber boots
- Camera
- GPS
- Site Map

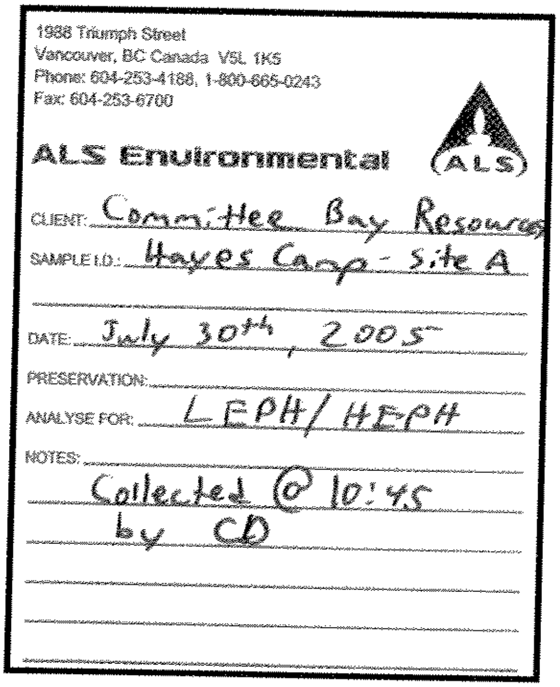
pH meter

The following is a brief description of how to calibrate the pH meter. For a more thorough reference please refer to the instruction supplied by the manufacturer. The pH meter should be calibrated prior to leaving for the field. If you are in the field for more than one day, calibrate the meter at the beginning of each day. Use the two-point calibration procedure.

1. Pour some pH 7.0 and pH 4.0 solution into two separate jars. There should be enough solution to submerge the probe on the end of the meter. It is important to replace the solution in the jars regularly to ensure an accurate pH of the calibration solution.
2. Turn the meter on and hold down the on/off button until the display reads CAL.
3. Release the button. The display will then read pH 7.01 USE.
4. Place the meter in the glass jar containing the pH 7.0 buffer solution, stir gently.
5. Wait until the display reads pH 4.01 USE.
6. Transfer the probe from the pH 7.0 solution, rinsing the electrode to eliminate cross contamination, to the pH 4.0 solution.
7. When the second buffer is recognized, the LCD will display OK for 1 second and the meter will return to normal operation.

Sample Bottles and Labels

It is recommended that extra sample bottles and preservative be on-hand in case of spills or contamination. Label the sample bottles immediately after the sample is taken. Use a permanent marker on the labels in order to avoid smearing if the label becomes wet. The lab will provide blank labels. An example is provided in Figure 1.



1988 Triumph Street
Vancouver, BC Canada V5L 1K5
Phone: 604-253-4188, 1-800-665-0243
Fax: 604-253-6700

ALS Environmental

CLIENT: Committee Bay Resourc
SAMPLE I.D.: Hayes Camp - Site A
DATE: July 30th, 2005
PRESERVATION:
ANALYSE FOR: LEPH/HEPH
NOTES:
Collected @ 10:45
by CD

Figure 1. Sample of Bottle Label

Field Book

Detailed field notes are essential to useful sample results. Once in the field, pencil, rather than pen, should be used to make entries in the field book in order to protect the notes from becoming unreadable when they become wet. Four waterproof field sheets are provided in Appendix B. The sheet includes the following information:

- Date and time.
- Previous and current day weather conditions (temperature, cloudy, raining, windy, sunny etc.).
- Location of sampling site including GPS coordinates (and datum used) as well as identification on site map.
- pH and temperature
- Name of sampler(s).
- Corresponding photo numbers.
- Observations including but not limited to: stream bottom material, erosion areas, springs, algae growth, discoloration of water, turbidity, suspended particles in water, fish or other aquatic life.

Chain of Custody Forms

The chain of custody form identifies all of the samples in cooler and specifies which tests should be performed on each sample by the lab. A chain of custody form must accompany each cooler to the lab. The form allows the client and the lab to track each sample. An example of the form is provided in

Appendix C. Some of the information on the form can be completed prior to departure, such as the Client name and mailing address. The rest of the sheet should not be completed until the samples are ready for shipping. It is essential that exact samples that are in the cooler are on that cooler's accompanying COC.

3. Field Procedure – Lake Shore

The following tasks are described in the order in which they should be performed. Each task is accompanied by a brief protocol. Field measurements such as temperature and pH should always be made first to ensure that any disturbance to the water column caused by sample collection does not affect the field measurements.

In order to take a representative water sample from a lake the sampler should wade into the lake to avoid any sediment contamination of the sample and to a location with sufficient depth (approx 1m), such that bottom material will not interfere with the sample. The sampler should orient themself towards the center of the lake, and then take the sample below the surface of water. If the lake water appears to flow in a certain direction, always sample facing 'upstream'. Follow the specific instructions below for each bottle. For safety reasons, make sure there are two people on site at all times and wear the appropriate safety gear (life jacket, waders).

3.1 Photograph Site

A photographic record of a sampling site is often helpful when considering the results of the laboratory analysis. We recommend taking a couple of pictures at each sampling site, be sure to record the roll number or file number of the photos in the field book.

3.2 Measure pH and temperature

The pH value is a measurement of acidity or alkalinity. A pH of 7 indicates a neutral solution. Acidic solutions have a pH lower than 7 and alkaline solutions have a pH greater than 7. The pH value of a sample once removed from the lake can vary quite quickly. Therefore, it is recommended that pH measurements be made in-lake.

1. Place the probe directly in the lake. Do not stick the probe in the bottom sediments because this will damage the probe and disturb the water column.
2. Turn the meter on and allow at least 30 seconds for the reading to stabilize. If the meter has not been used recently, it may require a few minutes to stabilize.
3. Record the pH and temperature on the field sheet.
4. Rinse the pH meter after each sampling location.

3.3 Collect the LEPH/HEHP

1. Label bottle.
2. Wear disposable rubber/latex gloves.
3. Do not touch the inside of the bottle or the bottle cap.
4. **Do not rinse** the bottle. All bottles provided by the laboratory are acid washed and do not need to be rinsed prior to sampling.
5. Take the sample bottles and wade into the lake at the most accessible point. Ideally, the sampling point should be past the point where wave action affects the lake bottom. Usually this point is not far from shore and can be identified through observation.
6. Face the center of the lake. Ensure that there is minimal disturbance of the lake bottom material which could potentially contaminate the water samples.
7. Hold the bottle well below the neck, plunge the bottle into the water and move it towards the center of the lake until the bottle is full.
8. Cap immediately and secure lid tightly.
9. Place in cooler.

3.4 Collect the BTEX & VPH

The bottles for both BTEX and VPH already have preservative added to them. To avoid loss of preservative during sampling, use the Oil & Grease sample bottle to collect the required volume of water for these samples.

1. Repeat steps 1 – 7 of the LEPH/HEPH procedure with the Oil & Grease sample bottle.
2. Uncap the BTEX or VPH bottle. Do not touch the inside of the bottle or the bottle cap.
3. **Do not rinse** the BTEX and VPH bottles or you will wash way the preservative (***copper sulphate***).
4. Using the water collected in the Oil & Grease bottle, carefully fill the BTEX and VPH sample vials until completely full to the top until a meniscus forms (Figure 2). This is done to ensure no headspace or air bubbles in the sample.
5. Cap immediately and secure lid tightly.
6. Place in cooler.

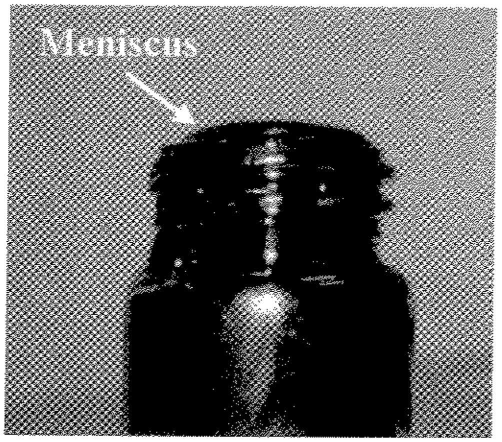


Figure 2: **BTEX/VPH Meniscus**

3.5 Collect the Oil & Grease

Repeat steps 1 – 9 of the LEPH/HEPH procedure. As mentioned earlier, sample for Oil & Grease where contamination is noticeable (oil sheen on lake, or spillage outlet). Make sure you collect part of oil sheen water seen on the surface. Mark the location of the Oil & Grease sample on the map provided (Appendix A).

4. Quality Assurance & Quality Control

A few simple measures can be taken to ensure reliable sampling techniques and results.

- Latex gloves should be worn when collecting samples to both protect the sample collector and to ensure the sample is not contaminated from residue on the sampler from other sites.
- Sample bottles should always be stored with their caps tightly on and should be kept in a clean environment. The inner portion of the bottles and the caps should never be touched other than with sample water and preservative. Once the sample is collected the bottle should be capped immediately.
- Sample bottles should be stored in a cool, clean place prior to leaving for the field and should be kept as clean cool as possible once in the field.
- Samples must never be permitted to get warm. They should be kept in a cool dark place with a temperature of 4°C.

5. Replicates

Replicate samples are used to measure the precision of the sampling method and to test the reproducibility of the field methods. A replicate sample is collected by collecting two samples, one directly after the other, from the same point in the lake. The closer in time and space the samples are taken the better the replicate sample. The location of the replicate samples should be chosen at random. Based on a total of 7 sample locations, 1 of these (do not replicate the Oil & Grease sample) should have replicate samples collected.

6. Timeline

It is imperative to ship the bottles to the lab as soon as possible after sampling. Table 2 outlines the recommend timeline of specific actions that are required to take place in a water quality sampling program. The hold time signifies the acceptable duration of time between the time the sample was taken and analysis.

Table 2. Timeline

Time (Time 0 = sample time)	Action
- 3 weeks	Contact lab, inquire into shipping alternatives, order calibration solution
- 2 weeks	Receive sample bottles from lab
- ~3 days	Prepare field book and field equipment
0	Sample
+24 to +48 hours	Ship sample to lab

7. Storing and Shipping

Shipping arrangements should also be made prior to leaving for the field. Ideally, the shipping method should provide cold storage and reach the lab within the hold time specified for the sample.

Once the samples are collected they should be kept at approximately 4 degrees Celsius until they arrive at the laboratory. The sample bottles should be packed upright in the cooler. Place the ice packs around and on top of the samples and any empty spaces filled with packing material to ensure that the samples remain upright and relatively undisturbed while in transit.

Complete the Chain of Custody form and place it in a watertight plastic bag and taped to the inside of the cooler lid. Each cooler should contain one sheet, which itemizes all the samples in that particular cooler. The cooler should then be sealed with heavy-duty packing tape and a labeled with the address and phone number of the lab and a return address.

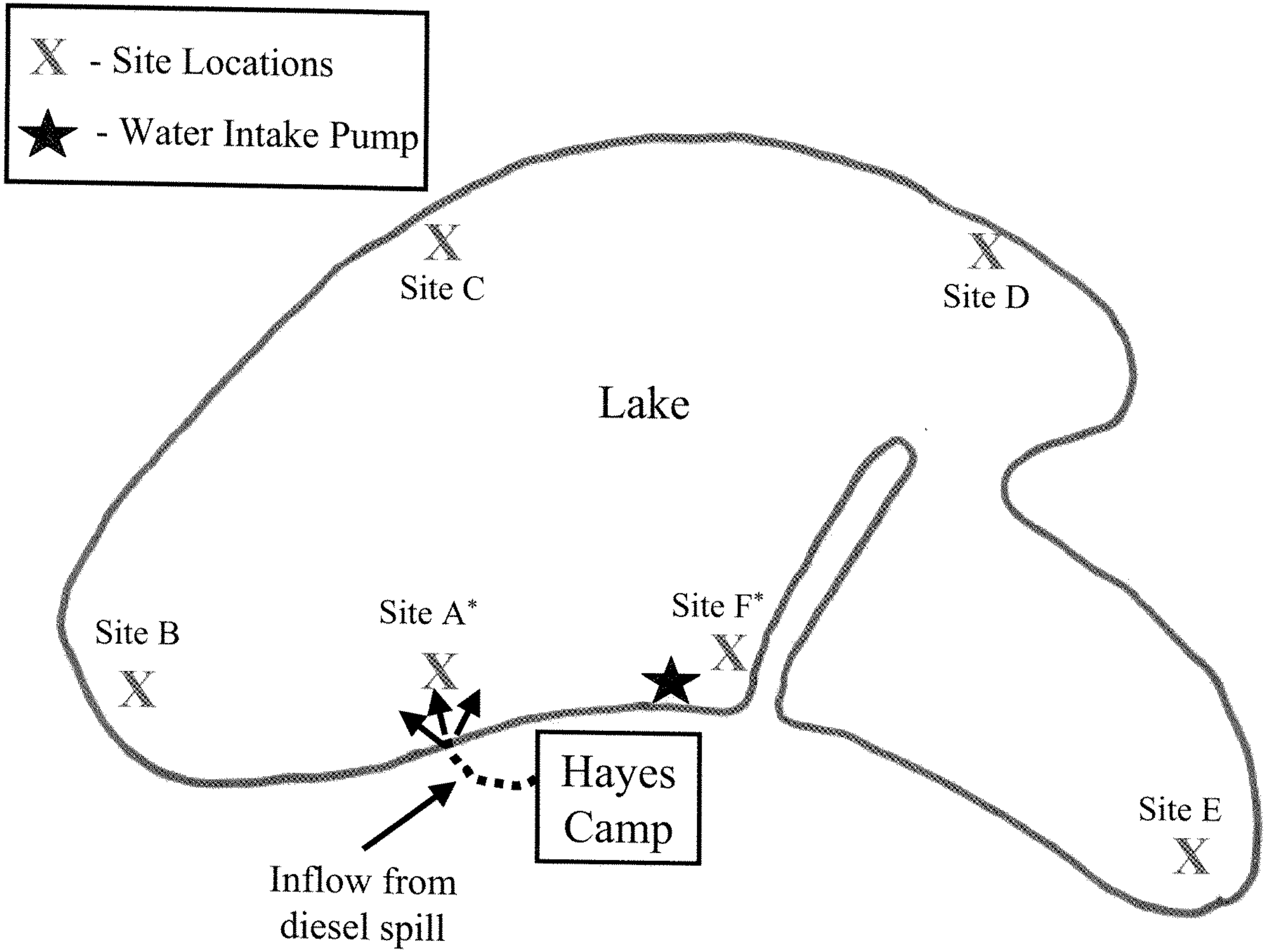
The lab phone number and address are:

ALS Environmental
Attn: Bill Chew
#2 – 21 Highfield Circle SE
Calgary, AB
T2G 5N6
(403) 214-5431

Appendices

Appendix A

Proposed Water Sampling Locations



* Sample immediately where diesel enters the lake and where water is pumped from the lake for sites A and F respectively.

Appendix B

Field Sheets: Surface Water Sampling Record

Water Quality Sampling

Site:	**Date:**
Station ID:	**Time:**
Sampler (s):	**Weather:**
Photo Record Numbers:	**GPS:**
pH: **Temp:**	
Observations/Comments	

Water Quality Sampling

Site:	Date:
Station ID:	Time:
Sampler (s):	Weather:
Photo Record Numbers:	GPS:
pH: Temp:	
Observations/Comments	

Water Quality Sampling

Site:	**Date:**
Station ID:	**Time:**
Sampler (s):	**Weather:**

Photo Record Numbers:	**GPS:**
pH: **Temp:**	

Observations/Comments

Water Quality Sampling

Site:	**Date:**
Station ID:	**Time:**
Sampler (s):	**Weather:**

Photo Record Numbers:	**GPS:**
pH: **Temp:**	

Observations/Comments

Water Quality Sampling

Site:	**Date:**
Station ID:	**Time:**
Sampler (s):	**Weather:**

Photo Record Numbers:	**GPS:**
pH: **Temp:**	

Observations/Comments

Water Quality Sampling

Site:	**Date:**
Station ID:	**Time:**
Sampler (s):	**Weather:**

Photo Record Numbers:	**GPS:**
pH: **Temp:**	

Observations/Comments

Water Quality Sampling

Site:	**Date:**
Station ID:	**Time:**
Sampler (s):	**Weather:**
Photo Record Numbers:	**GPS:**
pH: **Temp:**	

Observations/Comments

Water Quality Sampling

Site:	**Date:**
Station ID:	**Time:**
Sampler (s):	**Weather:**
Photo Record Numbers:	**GPS:**
pH: **Temp:**	

Observations/Comments

Appendix C

Chain of Custody

ALS Environmental
excellence in analytical testing

ALS

1988 Triumph Street, **Vancouver**, BC Canada V5L 1K5 Tel: 604-253-4188 Toll Free: 1-800-665-0243 Fax: 604-253-6700
#2 -21 Highfield Circle SE, **Calgary**, AB Canada T2G 5N6 Tel: 403-214-5431 Toll Free: 1-866-722-6231 Fax: 403-214-5430
#2 - 8820 100th Street, **Fort St. John**, BC Canada V1J 3W9 Tel: 250-785-8281 Fax: 250-785-8286

Send to

www.alsenviro.com

CHAIN OF CUSTODY FORM

PAGE OF

SEND REPORT TO:

COMPANY: Committee Bay Resourses Ltd c/o Gartner Lee
ADDRESS: 2251 - 2nd Ave
CITY: Whitehorse PROV: YT POSTAL CODE: Y1A 5W1
TEL: 867-633-6474 FAX: 867-633-6321 CONTACT: Leslie Gom
PROJECT NAME AND NO.: 50292 SAMPLER:
QUOTE NO.: PO NO.: ALS CONTACT: Bill Chew
REPORT FORMAT: ☑ HARDCOPY ☐ EMAIL - ADDRESS: lgomm@gartnerlee.com
☐ FAX ☑ EXCEL ☐ PDF ☐ OTHER:

ANALYSIS REQUESTED:

FOR LAB USE ONLY	SAMPLE IDENTIFICATION	DATE / TIME COLLECTED YYYY-MM-DD	TIME	MATRIX	LEPH/HEPH	BTEX + VPH	Oil + Grease	NOTES (sample specific comments, due dates, etc.)
	1- Site A	(Put date + time here)		S/water	X	X		
	2- Site B							
	3- Site C							
	4- Site D							
	5- Site E							
	6- Site F							
	7- Site Oil + Grease						X	

TURN AROUND REQUIRED: ● ROUTINE ○ RUSH SPECIFY DATE: (surcharge may apply)
SEND INVOICE TO: ☑ SAME AS REPORT ☐ DIFFERENT FROM REPORT (provide details below)
INVOICE FORMAT: ☐ HARDCOPY ☐ PDF ☑ FAX
SPECIAL INSTRUCTIONS:

RELINQUISHED BY:	DATE:		RECEIVED BY:	DATE:
	TIME:			TIME:
RELINQUISHED BY:	DATE:		RECEIVED BY:	DATE:
	TIME:			TIME:

FOR LAB USE ONLY

Cooler Seal Intact? ___Yes ___No ___N/A	Sample Temperature: _____ °C Frozen? ___Yes ___No	Cooling Method? ___Icepacks ___Ice ___None

Attachment B

Lab Results

ALS Environmental

CHEMICAL ANALYSIS REPORT

Date:	August 17, 2005
ALS File No.	CC500022
Report On:	50292
Report To:	**Gartner Lee Ltd.** 2251 2nd Ave Whitehorse, YT Y1A 5W1
Attention:	**Ms. Lesley Gomm**
Received:	August 5, 2005

ALS ENVIRONMENTAL
per:

Bill Chew, B.Sc. - Manager, Client Services
Ken Pokolinski, C.H.T - Project Chemist

File No. CC500022

RESULTS OF ANALYSIS - Water

Sample ID	Site E	Site D	Site C	Site B	Site A
Sample Date	05-08-01	05-08-01	05-08-01	05-08-01	05-08-01
Sample Time	09:49	10:19	10:49	11:23	12:34
ALS ID	*1*	*2*	*3*	*4*	*5*
Non-Halogenated Volatiles					
Benzene	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
meta- & para-Xylene	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
ortho-Xylene	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Xylenes	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Volatile Hydrocarbons (VH6-10)	<0.10	<0.10	<0.10	<0.10	<0.10
VPH	<0.10	<0.10	<0.10	<0.10	<0.10
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Acenaphthylene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Acridine	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Anthracene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benz(a)anthracene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(a)pyrene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(b)fluoranthene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(g,h,i)perylene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(k)fluoranthene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Chrysene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Dibenz(a,h)anthracene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Fluoranthene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Fluorene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Indeno(1,2,3-c,d)pyrene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Naphthalene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Pyrene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Quinoline	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Extractable Hydrocarbons					
EPH10-19	<0.30	<0.30	<0.30	<0.30	<0.30
EPH19-32	<1.0	<1.0	<1.0	<1.0	<1.0
LEPH	<0.30	<0.30	<0.30	<0.30	<0.30
HEPH	<1.0	<1.0	<1.0	<1.0	<1.0

Results are expressed as milligrams per litre except where noted.

File No. CC500022

RESULTS OF ANALYSIS - Water

Sample ID	Site A R eplicate	Site F
Sample Date	05-08-01	05-08-01
Sample Time	12:41	12:55
ALS ID	*6*	*7*
Non-Halogenated Volatiles		
Benzene	<0.00050	<0.00050
Ethylbenzene	<0.00050	<0.00050
Styrene	<0.00050	<0.00050
Toluene	<0.0010	<0.0010
meta- & para-Xylene	<0.00050	<0.00050
ortho-Xylene	<0.00050	<0.00050
Total Xylenes	<0.0010	<0.0010
Volatile Hydrocarbons (VH6-10)	<0.10	<0.10
VPH	<0.10	<0.10
Polycyclic Aromatic Hydrocarbons		
Acenaphthene	<0.000050	<0.000050
Acenaphthylene	<0.000050	<0.000050
Acridine	<0.000050	<0.000050
Anthracene	<0.000050	<0.000050
Benz(a)anthracene	<0.000050	<0.000050
Benzo(a)pyrene	<0.000050	<0.000050
Benzo(b)fluoranthene	<0.000050	<0.000050
Benzo(g,h,i)perylene	<0.000050	<0.000050
Benzo(k)fluoranthene	<0.000050	<0.000050
Chrysene	<0.000050	<0.000050
Dibenz(a,h)anthracene	<0.000050	<0.000050
Fluoranthene	<0.000050	<0.000050
Fluorene	<0.000050	<0.000050
Indeno(1,2,3-c,d)pyrene	<0.000050	<0.000050
Naphthalene	<0.000050	<0.000050
Phenanthrene	<0.000050	<0.000050
Pyrene	<0.000050	<0.000050
Quinoline	<0.000050	<0.000050
Extractable Hydrocarbons		
EPH10-19	<0.30	<0.30
EPH19-32	<1.0	<1.0
LEPH	<0.30	<0.30
HEPH	<1.0	<1.0

Results are expressed as milligrams per litre except where noted.

Appendix 1 - QUALITY CONTROL - Replicates

Water	Site B 05-08-01 11:23	Site B QC # 22016
Non-Halogenated Volatiles		
Benzene	<0.00050	<0.00050
Ethylbenzene	<0.00050	<0.00050
Styrene	<0.00050	<0.00050
Toluene	<0.0010	<0.0010
meta- & para-Xylene	<0.00050	<0.00050
ortho-Xylene	<0.00050	<0.00050
Total Xylenes	<0.0010	<0.0010
Volatile Hydrocarbons (VH6-10)	<0.10	<0.10
VPH	<0.10	<0.10

Results are expressed as milligrams per litre except where noted.

File No. CC500022

Appendix 1 - QUALITY CONTROL - Spikes

Water

	Result	Target	Units	DL	ALSQC#	Method
Non-Halogenated Volatiles						
Benzene	0.0539	0.0500	mg/L	0.0005	22727	a
Ethylbenzene	0.0576	0.0500	mg/L	0.0005	22727	a
Styrene	0.0549	0.0500	mg/L	0.0005	22727	a
Toluene	0.0587	0.0500	mg/L	0.001	22727	a
ortho-Xylene	0.0549	0.0500	mg/L	0.005	22727	a
Volatile Hydrocarbons (VH6-10)	0.32	0.27	mg/L	0.1	22695	b
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.00381	0.00400	mg/L	0.00005	22469	c
Acenaphthene	0.00360	0.00400	mg/L	0.00005	22528	c
Acenaphthylene	0.00399	0.00400	mg/L	0.00005	22469	c
Acenaphthylene	0.00375	0.00400	mg/L	0.00005	22528	c
Acridine	0.00370	0.00400	mg/L	0.00005	22469	c
Acridine	0.00355	0.00400	mg/L	0.00005	22528	c
Anthracene	0.00383	0.00400	mg/L	0.00005	22469	c
Anthracene	0.00363	0.00400	mg/L	0.00005	22528	c
Benz(a)anthracene	0.00380	0.00400	mg/L	0.00005	22469	c
Benz(a)anthracene	0.00353	0.00400	mg/L	0.00005	22528	c
Benzo(a)pyrene	0.00396	0.00400	mg/L	0.00005	22469	c
Benzo(a)pyrene	0.00370	0.00400	mg/L	0.00005	22528	c
Benzo(b)fluoranthene	0.00373	0.00400	mg/L	0.00005	22469	c
Benzo(b)fluoranthene	0.00353	0.00400	mg/L	0.00005	22528	c
Benzo(g,h,i)perylene	0.00356	0.00400	mg/L	0.00005	22469	c
Benzo(g,h,i)perylene	0.00316	0.00400	mg/L	0.00005	22528	c
Benzo(k)fluoranthene	0.00391	0.00400	mg/L	0.00005	22469	c
Benzo(k)fluoranthene	0.00375	0.00400	mg/L	0.00005	22528	c
Chrysene	0.00378	0.00400	mg/L	0.00005	22469	c
Chrysene	0.00348	0.00400	mg/L	0.00005	22528	c
Dibenz(a,h)anthracene	0.00375	0.00400	mg/L	0.00005	22469	c
Dibenz(a,h)anthracene	0.00354	0.00400	mg/L	0.00005	22528	c
Fluoranthene	0.00383	0.00400	mg/L	0.00005	22469	c
Fluoranthene	0.00364	0.00400	mg/L	0.00005	22528	c
Fluorene	0.00365	0.00400	mg/L	0.00005	22469	c
Fluorene	0.00343	0.00400	mg/L	0.00005	22528	c
Indeno(1,2,3-c,d)pyrene	0.00385	0.00400	mg/L	0.00005	22469	c

Methods:
a = WA_VOC_P&T_MS
b = WA_VPH_P&T_FID
c = WA_PAH_Ext_MS

File No. CC500022

Appendix 1 - QUALITY CONTROL - Spikes

Water

	Result	Target	Units	DL	ALSQC#	Method
Polycyclic Aromatic Hydrocarbons						
Indeno(1,2,3-c,d)pyrene	0.00359	0.00400	mg/L	0.00005	22528	a
Naphthalene	0.096	0.100	mg/L	0.001	22346	b
Naphthalene	0.00382	0.00400	mg/L	0.00005	22469	a
Naphthalene	0.094	0.100	mg/L	0.001	22519	b
Naphthalene	0.00344	0.00400	mg/L	0.00005	22528	a
Phenanthrene	0.097	0.100	mg/L	0.001	22346	b
Phenanthrene	0.00381	0.00400	mg/L	0.00005	22469	a
Phenanthrene	0.107	0.100	mg/L	0.001	22519	b
Phenanthrene	0.00358	0.00400	mg/L	0.00005	22528	a
Pyrene	0.100	0.100	mg/L	0.001	22346	b
Pyrene	0.00369	0.00400	mg/L	0.00005	22469	a
Pyrene	0.120	0.100	mg/L	0.001	22519	b
Pyrene	0.00347	0.00400	mg/L	0.00005	22528	a
Quinoline	0.00378	0.00400	mg/L	0.00005	22469	a
Quinoline	0.00342	0.00400	mg/L	0.00005	22528	a
Extractable Hydrocarbons						
Decane (nC10)	0.086	0.100	mg/L	0.001	22346	b
Decane (nC10)	0.095	0.100	mg/L	0.001	22519	b
Dodecane (nC12)	0.094	0.100	mg/L	0.001	22346	b
Dodecane (nC12)	0.108	0.100	mg/L	0.001	22519	b
Dotriacontane (nC32)	0.100	0.100	mg/L	0.001	22346	b
Dotriacontane (nC32)	0.107	0.100	mg/L	0.001	22519	b
Eicosane (nC20)	0.098	0.100	mg/L	0.001	22346	b
Eicosane (nC20)	0.112	0.100	mg/L	0.001	22519	b
EPH10-19	2.68	3.20	mg/L	0.3	22347	b
EPH10-19	2.90	3.20	mg/L	0.3	22520	b
Hexadecane (nC16)	0.097	0.100	mg/L	0.001	22346	b
Hexadecane (nC16)	0.111	0.100	mg/L	0.001	22519	b
Nonadecane (nC19)	0.098	0.100	mg/L	0.001	22346	b
Nonadecane (nC19)	0.111	0.100	mg/L	0.001	22519	b
Triacontane (nC30)	0.100	0.100	mg/L	0.001	22346	b
Triacontane (nC30)	0.107	0.100	mg/L	0.001	22519	b

Methods:
a = WA_PAH_Ext_MS
b = WA_CSR_EPH_Ext_FID

Appendix 1 - QUALITY CONTROL - Blanks

Water

	Result	Target	Units	DL	ALSQC#	Method
Non-Halogenated Volatiles						
Benzene	<0.00050	<0.00050	mg/L	0.0005	22726	a
Ethylbenzene	<0.00050	<0.00050	mg/L	0.0005	22726	a
Styrene	<0.00050	<0.00050	mg/L	0.0005	22726	a
Toluene	<0.00100	<0.00100	mg/L	0.001	22726	a
meta- & para-Xylene	<0.00050	<0.00050	mg/L	0.0005	22726	a
ortho-Xylene	<0.00050	<0.00050	mg/L	0.0005	22726	a
Volatile Hydrocarbons (VH6-10)	<0.10	<0.10	mg/L	0.1	22694	b
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Acenaphthene	<0.000050	<0.000050	mg/L	0.00005	22527	c
Acenaphthylene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Acenaphthylene	<0.000050	<0.000050	mg/L	0.00005	22527	c
Acridine	<0.000050	<0.000050	mg/L	0.00005	22468	c
Acridine	<0.000050	<0.000050	mg/L	0.00005	22527	c
Anthracene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Anthracene	<0.000050	<0.000050	mg/L	0.00005	22527	c
Benz(a)anthracene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Benz(a)anthracene	<0.000050	<0.000050	mg/L	0.00005	22527	c
Benzo(a)pyrene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Benzo(a)pyrene	<0.000050	<0.000050	mg/L	0.00005	22527	c
Benzo(b)fluoranthene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Benzo(b)fluoranthene	<0.000050	<0.000050	mg/L	0.00005	22527	c
Benzo(g,h,i)perylene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Benzo(g,h,i)perylene	<0.000050	<0.000050	mg/L	0.00005	22527	c
Benzo(k)fluoranthene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Benzo(k)fluoranthene	<0.000050	<0.000050	mg/L	0.00005	22527	c
Chrysene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Chrysene	<0.000050	<0.000050	mg/L	0.00005	22527	c
Dibenz(a,h)anthracene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Dibenz(a,h)anthracene	<0.000050	<0.000050	mg/L	0.00005	22527	c
Fluoranthene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Fluoranthene	<0.000050	<0.000050	mg/L	0.00005	22527	c
Fluorene	<0.000050	<0.000050	mg/L	0.00005	22468	c
Fluorene	<0.000050	<0.000050	mg/L	0.00005	22527	c

Methods:
a = WA_VOC_P&T_MS
b = WA_VPH_P&T_FID
c = WA_PAH_Ext_MS

Appendix 1 - QUALITY CONTROL - Blanks

Water

	Result	Target	Units	DL	ALSQC#	Method
Polycyclic Aromatic Hydrocarbons						
Indeno(1,2,3-c,d)pyrene	<0.000050	<0.000050	mg/L	0.00005	22468	a
Indeno(1,2,3-c,d)pyrene	<0.000050	<0.000050	mg/L	0.00005	22527	a
Naphthalene	<0.000050	<0.000050	mg/L	0.00005	22468	a
Naphthalene	<0.000050	<0.000050	mg/L	0.00005	22527	a
Phenanthrene	<0.000050	<0.000050	mg/L	0.00005	22468	a
Phenanthrene	<0.000050	<0.000050	mg/L	0.00005	22527	a
Pyrene	<0.000050	<0.000050	mg/L	0.00005	22468	a
Pyrene	<0.000050	<0.000050	mg/L	0.00005	22527	a
Quinoline	<0.000050	<0.000050	mg/L	0.00005	22468	a
Quinoline	<0.000050	<0.000050	mg/L	0.00005	22527	a
Extractable Hydrocarbons						
EPH10-19	<0.30	<0.30	mg/L	0.3	22345	b
EPH10-19	<0.30	<0.30	mg/L	0.3	22518	b
EPH19-32	<1.0	<1.0	mg/L	1	22345	b
EPH19-32	<1.0	<1.0	mg/L	1	22518	b

Methods:
a = WA_PAH_Ext_MS
b = WA_CSR_EPH_Ext_FID

Appendix 2 - METHODOLOGY

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

Volatile Organic Compounds in Water

This procedure involves the purge and trap extraction of the sample prior to analysis for specific Volatile Organic Compounds (VOC) by capillary column gas chromatography with mass spectrometric detection (GC/MS). The VOC analysis are carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Method 8260, published by the United States Environmental Protection Agency (EPA).

Recommended Holding Time:
Sample: 7 days Extract: NA
Reference: BCMELP
For more detail see ALS Environmental "Collection & Sampling Guide"

Calculation of Total Xylenes

Total Xylenes is the sum of the concentrations of the ortho, meta, and para Xylene isomers. Results below detection limit (DL) are treated as zero. The DL for Total Xylenes is set to a value no less than the square root of the sum of the squares of the DLs of the individual Xylenes.

Volatile Hydrocarbons in Water

This procedure involves the purge and trap extraction of the sample prior to analysis for Volatile Hydrocarbons (VH6-10) by capillary column gas chromatography with flame-ionization detection (GC/FID). The VH analysis is carried out in accordance with the British Columbia Ministry of Environment, Lands and Parks (BCMELP) Analytical Method for Contaminated Sites "Volatile Hydrocarbons in Water by GC/FID" (Version 2.1, July 1999).

Recommended Holding Time:
Sample: 7 days Extract: NA
Reference: BCMELP
For more detail see ALS Environmental "Collection & Sampling Guide"

Volatile Petroleum Hydrocarbons (VPH) in Water

These results are determined according to the British Columbia Ministry of Environment, Lands, and Parks Analytical Method for Contaminated Sites "Calculation of Volatile Petroleum Hydrocarbons in Solids or Water" (Version 2.1, July 20, 1999). According to this method, the concentrations of specific Monocyclic Aromatic Hydrocarbons (Benzene, Toluene, Ethylbenzene, and Xylenes) are subtracted from the collective concentration of Volatile Hydrocarbons (VH) that elute between n-hexane (nC6) and n-decane (nC10). Analysis of Volatile Hydrocarbons adheres to all prescribed elements of BCMELP method "Volatile Hydrocarbons in Water by GC/FID" (Version 2.1, July 20, 1999).

Recommended Holding Time: Not Applicable

Polycyclic Aromatic Hydrocarbons in Water

This analysis is carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Methods 3510, 3630 & 8270, published by the United States Environmental Protection Agency (EPA). The procedure involves extraction of the entire water sample with dichloromethane. The extract is then solvent exchanged to toluene prior to analysis by capillary column gas chromatography with mass spectrometric detection (GC/MS).

Recommended Holding Time:
Sample: 7 days Extract: 40 days
Reference: EPA
For more detail see ALS Environmental "Collection & Sampling Guide"

Extractable Hydrocarbons in Water

This analysis is carried out in accordance with the British Columbia Ministry of Environment, Lands and Parks (BCMELP) Analytical Method for Contaminated Sites "Extractable Petroleum Hydrocarbons in Water by GC/FID" (Version 2.1, July 1999). The procedure involves extraction of the entire water sample with dichloromethane. The extract is then solvent exchanged to toluene and analysed by capillary column gas chromatography with flame ionization detection (GC/FID). EPH results include Polycyclic Aromatic Hydrocarbons (PAH) and are therefore not equivalent to Light and Heavy Extractable Petroleum Hydrocarbons (LEPH/HEPH).

Recommended Holding Time:
Sample: 7 days Extract: 40 days
Reference: BCMELP
For more detail see ALS Environmental "Collection & Sampling Guide"

Light and Heavy Extractable Petroleum Hydrocarbons in Water

These results are determined according to the British Columbia Ministry of Environment, Lands, and Parks Analytical Method for Contaminated Sites "Calculation of Light and Heavy Extractable Petroleum Hydrocarbons in Solids or Water". According to this method, LEPH and HEPH are calculated by subtracting selected Polynuclear Aromatic Hydrocarbon results from Extractable Petroleum Hydrocarbon results. To calculate LEPH, the individual results for Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene, and Phenanthrene are subtracted from EPH(C10-19). To calculate HEPH, the individual results for Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene are subtracted from EPH(C19-32). Analysis of Extractable Petroleum Hydrocarbons adheres to all prescribed elements of the BCMELP method "Extractable Petroleum Hydrocarbons in Water by GC/FID" (Version 2.1, July 20, 1999).

Appendix 2 - METHODOLOGY - Continued

Recommended Holding Time: Not Applicable

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

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End of Report

ALS Environmental

CHEMICAL ANALYSIS REPORT

Date:	September 13, 2005
ALS File No.	CC500137
Report On:	Committee Bay
Report To:	**Gartner Lee Ltd.** 2251 2nd Ave Whitehorse, YT Y1A 5W1
Attention:	**Ms. Lesley Gomm**
Received:	September 6, 2005

ALS ENVIRONMENTAL
per:

Ken Pokolinski, C.H.T - Project Chemist
Monica Gibson, M.Sc. - Project Chemist

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A Campbell Brothers Limited Company

File No. CC500137

RESULTS OF ANALYSIS - Water

Sample ID	Site A	Site B	Site C	Site D	Site E
Sample Date	05-09-01	05-09-01	05-09-01	05-09-01	05-09-01
Sample Time	14:07	16:20	16:26	16:30	14:25
ALS ID	*1*	*2*	*3*	*4*	*5*
Non-Halogenated Volatiles					
Benzene	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
meta- & para-Xylene	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
ortho-Xylene	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Xylenes	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Volatile Hydrocarbons (VH6-10)	<0.10	<0.10	<0.10	<0.10	<0.10
VPH	<0.10	<0.10	<0.10	<0.10	<0.10
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Acenaphthylene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Acridine	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Anthracene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benz(a)anthracene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(a)pyrene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(b)fluoranthene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(g,h,i)perylene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Benzo(k)fluoranthene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Chrysene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Dibenz(a,h)anthracene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Fluoranthene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Fluorene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Indeno(1,2,3-c,d)pyrene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Naphthalene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Pyrene	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Quinoline	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Extractable Hydrocarbons					
EPH10-19	<0.30	<0.30	<0.30	<0.30	<0.30
EPH19-32	<1.0	<1.0	<1.0	<1.0	<1.0
LEPH	<0.30	<0.30	<0.30	<0.30	<0.30
HEPH	<1.0	<1.0	<1.0	<1.0	<1.0

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

RESULTS OF ANALYSIS - Water

Sample ID	Site F	Site G
Sample Date	05-09-01	05-09-01
Sample Time	14:00	14:15
ALS ID	*6*	*7*
Non-Halogenated Volatiles		
Benzene	<0.00050	<0.00050
Ethylbenzene	<0.00050	<0.00050
Styrene	<0.00050	<0.00050
Toluene	<0.0010	<0.0010
meta- & para-Xylene	<0.00050	<0.00050
ortho-Xylene	<0.00050	<0.00050
Total Xylenes	<0.0010	<0.0010
Volatile Hydrocarbons (VH6-10)	<0.10	<0.10
VPH	<0.10	<0.10
Polycyclic Aromatic Hydrocarbons		
Acenaphthene	<0.000050	<0.000050
Acenaphthylene	<0.000050	<0.000050
Acridine	<0.000050	<0.000050
Anthracene	<0.000050	<0.000050
Benz(a)anthracene	<0.000050	<0.000050
Benzo(a)pyrene	<0.000050	<0.000050
Benzo(b)fluoranthene	<0.000050	<0.000050
Benzo(g,h,i)perylene	<0.000050	<0.000050
Benzo(k)fluoranthene	<0.000050	<0.000050
Chrysene	<0.000050	<0.000050
Dibenz(a,h)anthracene	<0.000050	<0.000050
Fluoranthene	<0.000050	<0.000050
Fluorene	<0.000050	<0.000050
Indeno(1,2,3-c,d)pyrene	<0.000050	<0.000050
Naphthalene	<0.000050	<0.000050
Phenanthrene	<0.000050	<0.000050
Pyrene	<0.000050	<0.000050
Quinoline	<0.000050	<0.000050
Extractable Hydrocarbons		
EPH10-19	<0.30	<0.30
EPH19-32	<1.0	<1.0
LEPH	<0.30	<0.30
HEPH	<1.0	<1.0

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

Appendix 1 - QUALITY CONTROL - Spikes

Water

	Result	Target	Units	DL	ALSQC#	Method
Non-Halogenated Volatiles						
Benzene	0.0471	0.0500	mg/L	0.0005	24231	a
Ethylbenzene	0.0609	0.0500	mg/L	0.0005	24231	a
Toluene	0.0623	0.0500	mg/L	0.001	24231	a
ortho-Xylene	0.0644	0.0500	mg/L	0.0005	24231	a
Volatile Hydrocarbons (VH6-10)	0.33	0.27	mg/L	0.1	24233	b
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.00375	0.00400	mg/L	0.00005	24204	c
Acenaphthylene	0.00370	0.00400	mg/L	0.00005	24204	c
Acridine	0.00367	0.00400	mg/L	0.00005	24204	c
Anthracene	0.00365	0.00400	mg/L	0.00005	24204	c
Benz(a)anthracene	0.00368	0.00400	mg/L	0.00005	24204	c
Benzo(a)pyrene	0.00367	0.00400	mg/L	0.00005	24204	c
Benzo(b)fluoranthene	0.00382	0.00400	mg/L	0.00005	24204	c
Benzo(g,h,i)perylene	0.00356	0.00400	mg/L	0.00005	24204	c
Benzo(k)fluoranthene	0.00381	0.00400	mg/L	0.00005	24204	c
Chrysene	0.00365	0.00400	mg/L	0.00005	24204	c
Dibenz(a,h)anthracene	0.00374	0.00400	mg/L	0.00005	24204	c
Fluoranthene	0.00366	0.00400	mg/L	0.00005	24204	c
Fluorene	0.00367	0.00400	mg/L	0.00005	24204	c
Indeno(1,2,3-c,d)pyrene	0.00364	0.00400	mg/L	0.00005	24204	c
Naphthalene	0.00364	0.00400	mg/L	0.00005	24204	c
Phenanthrene	0.00370	0.00400	mg/L	0.00005	24204	c
Pyrene	0.00368	0.00400	mg/L	0.00005	24204	c
Quinoline	0.00366	0.00400	mg/L	0.00005	24204	c
Extractable Hydrocarbons						
EPH10-19	3.21	3.20	mg/L	0.3	24141	d

Methods:
a = WA_BETX_P&T_MS
b = WA_VPH_P&T_FID
c = WA_PAH_Ext_MS
d = WA_CSR_EPH_Ext_FID

Appendix 1 - QUALITY CONTROL - Blanks

Water

	Result	Target	Units	DL	ALSQC#	Method
Non-Halogenated Volatiles						
Benzene	<0.00050	<0.00050	mg/L	0.0005	24232	a
Ethylbenzene	<0.00050	<0.00050	mg/L	0.0005	24232	a
Toluene	<0.00100	<0.00100	mg/L	0.001	24232	a
meta- & para-Xylene	<0.00050	<0.00050	mg/L	0.0005	24232	a
ortho-Xylene	<0.00050	<0.00050	mg/L	0.0005	24232	a
Volatile Hydrocarbons (VH6-10)	<0.10	<0.10	mg/L	0.1	24230	b
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Acenaphthylene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Acridine	<0.000050	<0.000050	mg/L	0.00005	24203	c
Anthracene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Benz(a)anthracene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Benzo(a)pyrene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Benzo(b)fluoranthene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Benzo(g,h,i)perylene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Benzo(k)fluoranthene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Chrysene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Dibenz(a,h)anthracene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Fluoranthene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Fluorene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Indeno(1,2,3-c,d)pyrene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Naphthalene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Phenanthrene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Pyrene	<0.000050	<0.000050	mg/L	0.00005	24203	c
Quinoline	<0.000050	<0.000050	mg/L	0.00005	24203	c
Extractable Hydrocarbons						
EPH10-19	<0.30	<0.30	mg/L	0.3	24139	d
EPH19-32	<1.0	<1.0	mg/L	1	24139	d

Methods:

a = WA_BETX_P&T_MS
b = WA_VPH_P&T_FID
c = WA_PAH_Ext_MS
d = WA_CSR_EPH_Ext_FID

Appendix 2 - METHODOLOGY

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

Volatile Organic Compounds in Water

This procedure involves the purge and trap extraction of the sample priorto analysis for specific Volatile Organic Compounds (VOC) by capillary column gaschromatography with mass spectrometric detection (GC/MS). The VOC analysis arecarried out using procedures adapted from "Test Methods for Evaluating SolidWaste" SW-846, Method 8260, published by the United States Environmental Protection Agency (EPA).

Recommended Holding Time:
Sample: 7 days Extract: NA
Reference: BCMELP
For more detail see ALS Environmental "Collection & Sampling Guide"

Calculation of Total Xylenes

Total Xylenes is the sum of the concentrations of the ortho, meta, andpara Xylene isomers. Results below detection limit (DL) are treated aszero. The DL for Total Xylenes is set to a value no less than the sum of the DLs of the individual Xylenes.

Volatile Hydrocarbons in Water

This procedure involves the purge and trap extraction of the sample priorto analysis for Volatile Hydrocarbons (VH6-10) by capillary column gaschromatography with flame-ionization detection (GC/FID). The VH analysis iscarried out in accordance with the British Columbia Ministry of Environment, Landsand Parks (BCMELP) Analytical Method for Contaminated Sites "Volatile Hydrocarbonsin Water by GC/FID" (Version 2.1, July 1999).

Recommended Holding Time:
Sample: 7 days Extract: NA
Reference: BCMELP
For more detail see ALS Environmental "Collection & Sampling Guide"

Volatile Petroleum Hydrocarbons (VPH) in Water

These results are determined according to the British Columbia Ministry ofEnvironment, Lands, and Parks Analytical Method for Contaminated Sites"Calculation of Volatile Petroleum Hydrocarbons in Solids or Water" (Version 2.1, July 20, 1999). According to this method, the concentrations of specific Monocyclic Aromatic Hydrocarbons (Benzene, Toluene, Ethylbenzene, and Xylenes) are subtracted from the collective concentrationof Volatile Hydrocarbons (VH) that elute between n-hexane (nC6) andn-decane (nC10). Analysis of Volatile Hydrocarbons adheres to all prescribed elements of BCMELP method "Volatile Hydrocarbons in Water byGC/FID" (Version 2.1, July 20, 1999).

Recommended Holding Time: Not Applicable

Polycyclic Aromatic Hydrocarbons in Water

This analysis is carried out using procedures adapted from "Test Methodsfor Evaluating Solid Waste" SW-846, Methods 3510, 3630 & 8270, published bythe United States Environmental Protection Agency (EPA). The procedureinvolves extraction of the entire water sample with dichloromethane. The extract is then solvent exchanged to toluene prior to analysis by capillary column gas chromatography with mass spectrometric detection (GC/MS).

Recommended Holding Time:
Sample: 7 days Extract: 40 days
Reference: EPA
For more detail see ALS Environmental "Collection & Sampling Guide"

Extractable Hydrocarbons in Water

This analysis is carried out in accordance with the British ColumbiaMinistry of Environment, Lands and Parks (BCMELP) Analytical Method forContaminated Sites "Extractable Petroleum Hydrocarbons in Water by GC/FID"(Version 2.1, July 1999). The procedure involves extraction of the entire water sample with dichloromethane. The extract is then solvent exchanged to toluene and analysed by capillary column gas chromatography with flame ionization detection (GC/FID). EPH results include Polycyclic AromaticHydrocarbons (PAH) and are therefore not equivalent to Light and HeavyExtractable Petroleum Hydrocarbons (LEPH/HEPH).

Recommended Holding Time:
Sample: 7 days Extract: 40 days
Reference: BCMELP
For more detail see ALS Environmental "Collection & Sampling Guide"

Light and Heavy Extractable Petroleum Hydrocarbons in Water

These results are determined according to the British Columbia Ministry ofEnvironment, Lands, and Parks Analytical Method for Contaminated Sites"Calculation of Light and Heavy Extractable Petroleum Hydrocarbons inSolids or Water". According to this method, LEPH and HEPH are calculated by subtracting selected Polynuclear Aromatic Hydrocarbon results from Extractable Petroleum Hydrocarbon results. To calculate LEPH, theindividual results for Acenaphthene, Acridine, Anthracene, Fluorene,Naphthalene, and Phenanthrene are subtracted from EPH(C10-19). To calculate HEPH, the individual results for Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene are subtracted from EPH(C19-32). Analysis of Extractable Petroleum Hydrocarbons adheres to all prescribed elements of the BCMELP method "Extractable Petroleum Hydrocarbons in Waterby GC/FID" (Version 2.1, July 20, 1999).

Appendix 2 - METHODOLOGY - Continued

Recommended Holding Time: Not Applicable

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

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End of Report