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**INTERIM REPORT ON**

**CURRENT STATUS OF THE CLEANUP  
CORRECTIVE ACTION  
WHITE PASS AND YUKON ROUTE  
MAINTENANCE YARD, SKAGWAY, ALASKA**

Submitted to:

White Pass & Yukon Route  
P.O. Box 435  
Skagway, Alaska  
99840

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September 16, 2004

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White Pass & Yukon Route  
P.O. Box 435  
Skagway, Alaska  
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**RE: INTERIM REPORT ON CURRENT STATUS OF THE CLEANUP CORRECTIVE ACTION, WHITE PASS AND YUKON ROUTE MAINTENANCE YARD, SKAGWAY, ALASKA**

Dear Mr. Gary Danielson,

This letter describes the results of the 2004 work program completed to date at the White Pass and Yukon Route Maintenance Yard, henceforth referred to as the “Shops” or the “Site”. The planned work scope was described in our letter to the Alaska Department of Environmental Conservation (ADEC), dated May 6, 2004, entitled “*Response to ADEC Letter Dated February 6, 2004 on Cleanup Corrective Action White Pass and Yukon Route Maintenance Yard, Skagway, Alaska*” (Work Plan).

The Work Plan laid out a four-stage approach to conduct additional Site characterization and risk assessment at the Shops. Stage One of the Work Plan were tasks related to Site monitoring and investigation, implemented in response to the need for additional characterization of the Site identified by ADEC in their February 6<sup>th</sup> letter.

This letter presents the methodologies and results of the Stage One tasks performed during the May/June 2004 field program. It is noted that the test pitting program, included as one of the Stage One tasks, will be conducted in the fall of 2004 in conjunction with a second round of groundwater sampling of select monitoring wells.



## **1.0 INTRODUCTION**

Golder Associates Ltd. (Golder) was onsite at the Shops during the period of May 28 to June 12, 2004. During this time the following Stage One tasks of the Work Plan were completed:

- groundwater monitoring;
- product and surface water monitoring, and
- soil vapor survey.

## **2.0 METHODOLOGY**

### **2.1 Groundwater Monitoring**

As part of the first stage of supplemental work, and further to on-going monitoring efforts, groundwater samples were collected from all Site monitoring wells and analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX), gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO) and volatile organic compounds (VOCs).

The Work Plan indicated that a total of 23 wells (plus two field duplicates) were planned to be sampled during the May/June 2004 field program, as follows:

- MW-1HC, MW-1AHC, MW-2HC, MW-3HC, MW4-HC;
- MW97-1, MW97-2, MW97-6 Medium, MW97-6 Deep, MW97-7 Shallow, MW97-7 Medium, MW97-7 Deep;
- MW98-1, MW98-2;
- MW00-31, MW00-32, MW00-33; and
- Air Sparging (AS) wells AS-2, 4, 6, 8, 10 and 12.

The locations of monitoring wells and AS wells are shown on Figure 1. Groundwater elevations measured during the May/June 2004 field program are presented on Figure 2 and Trichloroethene (TCE) and DRO concentrations are presented in Figures 3 and 4. Groundwater from a number of on-site wells was not included in the Work Plan due to the following:

- MW97-4 and MW97-5 have been paved over;
- MW00-34 was destroyed during the winter of 2001;
- MW00-35 was screened above the water table, and
- MW97-3 has historically contained separate-phase product above the water table.

Sampling of the separate-phase product from MW97-3 was included in the Work Plan. Additionally, two field duplicate samples of groundwater were collected and analyzed for quality control purposes.

All monitoring wells sampled during the May/June 2004 field program have been previously tested. The AS wells AS-2 to AS-12 (even numbers) were part of a former Soil Vapor Extraction (SVE) and AS system at the Shops, which was decommissioned in 2002. The AS wells had not been tested prior to this sampling event.

The AS wells are constructed with short screens completed roughly 50 feet below ground surface. The AS wells were intended primarily for groundwater remediation, and not for groundwater monitoring. While the AS wells are slightly deeper than optimal for monitoring of the chlorinated solvent plume, sampling of these wells in May/June 2004 was conducted to provide some information along the south property boundary.

Monitoring wells were sampled using standard Golder procedures. At most wells, the depth to groundwater and base of the well were initially measured, using a water level meter, in order to calculate the volume of water in the well. In the case of the AS wells, it was not possible to use a water level meter since a piping system is still in place in the well. As such, the volume of water in the AS well was estimated based on the groundwater level in adjacent wells and on installation records.

A peristaltic pump was used to remove water from each well, with ¼" high density polyethylene (HDPE) tubing lowered to the approximate midpoint of each well screen. Approximately three well volumes were removed with the pump set at a moderate flow rate of less than 0.5 Liters per minute (Lpm). Physical parameters consisting of pH, temperature and conductivity were monitored in real time as water was pumped through a flow-through cell. Once three well volumes were removed, or the parameters had stabilized (i.e., changes in pH, temperature and conductivity measurements between three successive readings were less than ten percent), samples were collected in pre-cleaned containers supplied by North Creek Analytical Laboratory (NCA) of Portland, Oregon. The collected samples were stored in coolers with ice and shipped to NCA under standard Golder chain-of-custody (COC) procedures.

## **2.2 Sampling of Product in MW97-3**

The depth of product in MW97-3 was measured with an interface probe on June 2, 2004. The product thickness measured on this date was 0.2 inches, and therefore a product baildown test was not attempted.

Golder collected a sample of the product at the water table in MW97-3 using a disposable bailer. The bailer was lowered to the water table, without allowing it to become fully submerged, in order to collect a sample at the top of the water table that included separate-phase product. The bailer was brought to the surface and emptied into a stainless steel bowl. These steps were repeated until the bowl was nearly full. The contents of the bowl were allowed to settle for a short period, to ensure separation of the product from the water. The product was then sampled by lowering the VOA vials supplied by NCA into the bowl, such that the lip of the vial was at the level of the product and the product seeped into the vial with as little water as possible. Three vials were filled in this manner, and submitted to NCA for analysis of VOCs. Instructions were sent to NCA along with the sample requesting that the laboratory separate the product from the water and analyze just the product.

Upon completion of sampling, the product thickness was measured again, and found to be still 0.2 inches thick.

## **2.3 Sampling of Spring**

In addition to the groundwater monitoring described above, a small spring located at the eastern property boundary (see Figure 1) was sampled on June 5, 2004. The spring is contained in a sunken concrete-lined box that is connected via underground pipes to the City of Skagway storm water system.

To sample the spring, HDPE tubing was snaked into the concrete enclosure via a gap in the boards above the spring. Water was subsequently withdrawn using a peristaltic pump. Since water moves continuously through the spring, waiting for field parameter stabilization was not necessary. The pump was run for a short time and then a sample was collected in pre-cleaned sample containers. The sample was submitted to NCA along with the groundwater samples, and analyzed for BTEX, GRO, DRO, RRO and VOCs.

## 2.4 Soil Vapor Survey

The ADEC letter dated February 6, 2004 indicated the source of elevated chlorinated solvent concentrations in groundwater at MW98-1 and MW-33 needed to be further investigated. Since there are no known specific sources of chlorinated solvents for the above two areas, a soil vapor survey in the area of MW98-1 and MW-33 was conducted to investigate possible source areas and to determine whether further groundwater and/or soil testing is warranted.

Two separate soil vapor surveys were conducted at the Shops in the vicinity of monitoring wells MW98-1 and MW00-33 on June 3 and 4, 2004. For each of the surveys, Golder installed nine soil vapor probes on a 75 foot grid, with the central probe of the grids located adjacent to the monitoring wells referenced above. The location of the probes are shown on Figure 5. In general, the soil vapor probes, each 4 ft long, were driven to 3.3 ft below grade unless obstructions prevented driving the probes to that depth, in which case they were driven to the maximum depth possible. The probe drive tip (at the bottom of the probe) was knocked out using an inner rod inserted into the probe. The probes were then capped with solid rubber stoppers at ground surface until ready for sampling.

In the MW98-1 survey grid, vapor probe VP04-13 was damaged after installation and before sampling, and therefore measurements were not taken at this location during the survey. Vapor probes VP04-15 and VP04-18 on the east and southeast points of the grid were obstructed at 1.2 ft below grade by a concrete slab located beneath a thin layer of gravel. The concrete slab was also encountered, further to the north east, during an excavation conducted in the fall of 1998. While the full lateral extent of the concrete slab is unknown, it is suspected that the slab is the foundation of the former round house.

To conduct the soil vapor survey, soil gas samples were collected from the soil vapor probes in 1-litre Tedlar™ bags using a SKC electric air sampling pump. Air quality parameters including methane (CH<sub>4</sub>), carbon dioxide (CO<sub>2</sub>), oxygen (O<sub>2</sub>), and the lower explosive limit (LEL) were measured with a Landtec GEM 2000, and organic vapor monitor (OVM) readings were measured with a Photovac MODEL photoionization detector (PID). After each sampling event, the Tedlar bags were purged at least twice by filling them with ambient air and then expelling the air.

### **3.0 RESULTS**

#### **3.1 Groundwater**

The results of the May/June 2004 groundwater testing at the Shops are shown in Table 1, alongside historical data in order to assess the change in concentrations over time. Groundwater elevations measured during the May/June 2004 field program are shown in Table 2 and the inferred groundwater flow direction is shown on Figure 2. Figures showing the concentrations of TCE and DRO in groundwater in samples collected during the May/June 2004 field program are presented in Figures 3 and 4, respectively.

Groundwater samples collected during the May/June 2004 field program from down-gradient, off-site wells MW-1HC (deep well installation), MW-1AHC (shallow well installation), and MW-4HC were below the Alaska Department of Environmental Conservation (ADEC) groundwater standards for the parameters analyzed. Detectable concentrations of cis-1,2-Dichloroethene (DCE) and TCE were present in wells MW-1HC and MW-1AHC. TCE was also detected in well MW-4HC. The maximum TCE concentration in the off-site wells was 0.00256 mg/L (2.56 µg/L).

Groundwater samples collected from on-Site monitoring wells MW-2HC, MW97-2, MW97-6M, MW98-1 and MW00-33 exceeded the ADEC standard for TCE of 0.005 mg/L (5 µg/L). The groundwater sample collected from MW00-33 additionally exceeded the ADEC standard for tetrachloroethene (PCE), and the groundwater sample collected from MW97-1 exceeded the ADEC standards for Diesel Range Organics (DRO) and Residual Range Organics (RRO). The ADEC RRO standard was exceeded in one of the two duplicate samples collected from MW97-1 indicating anomalous results (further discussed in section 3.2).

Groundwater samples collected from the other on-site wells had concentrations below the ADEC standards for the parameters analyzed.

During the May/June 2004 field program, groundwater samples were also collected from six of the twelve AS wells (AS-2, 4, 6, 8, 10 and 12) in order to determine the groundwater quality near the south property boundary of the Shops and to assess the potential for off-site migration of the TCE plume. As noted above, the AS wells were designed for the remediation of groundwater with well screens that are slightly deeper than optimal for plume monitoring. Of the groundwater samples collected from the AS wells, two of the six samples, exceeded the ADEC groundwater standard for TCE. The groundwater sample collected from AS-6 had a TCE concentration of 0.00509 mg/L (5.09 µg/L), which was 1.02 times the ADEC standard for TCE. The groundwater

sample collected from AS-2 had a TCE concentration of 0.00762 mg/L (7.62 µg/L), which was 1.52 times the ADEC standard. Groundwater samples collected from the six AS wells had concentrations below the ADEC standards for the other parameters analyzed.

### **3.2 Quality Assurance/Quality Control**

As part of the May/June 2004 field program duplicate groundwater samples were collected from wells MW97-1 and AS-10 for quality assurance and quality control (QA/QC). The results of the duplicate sample analysis are shown in Table 3 along with the calculated relative percent differences (RPD). As shown the calculated RPD values were below the acceptable limit for groundwater of 20 percent. A RPD of the RRO concentrations in the duplicate samples collected from MW97-1 could not be calculated as the concentration of RRO was below the laboratory reporting limit (LRL) of 0.4 mg/L in one of the samples, and above the LRL in the other (3.57 mg/L), which is above the ADEC standard (1.1 mg/L). The RPD exceeds acceptable levels for laboratory QC. The variability between the two samples may be a result of a small quantity of RRO being present in one of the samples, either as a globule or sorbed onto sediment. It is recommended that duplicate groundwater samples from well MW97-1 be analyzed for RRO during the next groundwater sampling event scheduled for Fall 2004.

### **3.3 Product in MW97-3**

On June 2, 2004, the measured product thickness in MW97-3 was 0.2 inches. The product removed from the well was relatively viscous. A sample of product was collected from well MW97-3 and submitted to NCA for VOC analysis. The purpose of the analysis was to determine if there are chlorinated solvents, in particular TCE, in the product that could be significantly contributing to the chlorinated solvent-impacted groundwater. The results of the analysis are presented in Table 4. As shown, the product contained elevated levels of 1,3,5-trimethylbenzene, tert-butylbenzene and tetrachloroethene (PCE). TCE was not detected above the laboratory reporting limit (LRL) in product from MW97-3.

### **3.4 Spring Water**

On June 5, 2004 a sample of surface water was collected from the spring located at the eastern property boundary. Results of the spring water analysis are shown in Table 5. As shown, concentrations of BTEX, petroleum hydrocarbons and VOCs were below the LRL for the parameters analyzed.

### 3.5 Soil Vapor Survey

The natural biodegradation of hydrocarbons by bacterial oxidation consumes oxygen from the soil gas and produces organic degradation intermediates, carbon dioxide, water, and microbial cells. The permeable, sandy soils at the site should provide favorable conditions for microbial degradation. Petroleum and halogenated hydrocarbons released at the Site that are undergoing biodegradation would be expected to be associated with elevated OVM readings and CO<sub>2</sub> concentrations, and below ambient O<sub>2</sub> concentrations within the contamination source areas. For this investigation, a soil gas probe result with an OVM reading greater than 5 ppm, CO<sub>2</sub> concentration greater than 1 percent, and O<sub>2</sub> less than 19 percent was considered to be an indicator of the possible presence of petroleum hydrocarbon and/or chlorinated hydrocarbons near the probe location. It is noted that the biodegradation of naturally occurring organic matter in soil can also result in elevated CO<sub>2</sub> and depleted O<sub>2</sub> concentrations. Table 6 and Figure 5 show the soil gas concentrations obtained during the soil vapor survey.

At MW98-1, a range in soil gas concentrations was noted. At two locations, VP04-12 located at the north east corner of the grid (adjacent to the concrete slab) and VP04-17 located along the south side of the survey area, the O<sub>2</sub> concentrations were low (2.6 percent and 4.8 percent, respectively) and CO<sub>2</sub> concentrations were elevated (8.3 percent and 7.5 percent, respectively). At these locations, the OVM readings were 34 ppm and 0 ppm, respectively. All other soil gas samples were generally indicative of ambient air conditions with the exception of vapor probe VP04-10, in which the CH<sub>4</sub> concentrations was 0.1 percent, with a combustible vapor concentration of one percent of the lower explosive limit (LEL). Note that soil gas measurements from probes VP04-15 and VO04-18 may not reflect subsurface conditions in this area as the probes were obstructed by the concrete slab located 1.2 feet below grade.

The vapor survey was not extended in the vicinity of VP04-12 due to its proximity to the concrete slab. On the north (upgradient groundwater flow direction) side of the concrete slab, confirmatory samples collected during an excavation in 1998 contained diesel range organics (DRO), and were indicative of possible contamination present beneath the slab. As previously discussed, the full lateral extent of the concrete slab is unknown at this time as it is buried under approximately one foot of soil (the gravel depth varies across the Site). It is, however, suspected that the slab is the entire foundation of the former round house (see Figure 5).

The vapor survey was not extended in the vicinity of VP04-17 because of its proximity to the concrete slab, active rail beds and roads. Further test pit investigation in the area of MW98-1 is proposed, as discussed below.

The survey centered on monitoring well MW00-33 indicated no significant areas of concern were located within 75 feet of the well. At three of the soil vapor probes, the concentration of O<sub>2</sub> was in the range of 16.4 to 18.7 percent, with concomitant CO<sub>2</sub> concentrations of 2.0 to 3.8 percent. However, neither CH<sub>4</sub> nor organic vapors were detected in any of the samples. At all other sampling points, O<sub>2</sub> was above 20 percent and CO<sub>2</sub> was below 1.8 percent and was generally indicative of ambient air. The results near MW00-33 indicate further soil investigation in this area is not warranted at this time.

## **4.0 DISCUSSION AND RECOMMENDATIONS**

### **4.1 Groundwater Monitoring and Remediation**

The May/June 2004 monitoring indicated that the TCE groundwater concentrations in off-site wells were below the ADEC standard. Historically, the TCE concentrations have been either slightly above or below the standard at off-site wells. The historical concentrations of TCE in groundwater for five wells (MW-1HC, MW-1AHC, MW-2HC, MW97-1 and MW97-6) are shown in Figure 6. The results shown in Figure 6 suggest that TCE concentrations in groundwater at on-Site wells have decreased slightly, which may be due to natural attenuation processes. The results also show that TCE concentrations are relatively constant over time at the two off-site wells MW-1HC and MW-1AHC.

The historical concentrations of DRO in groundwater for five wells (MW-1HC, MW-1AHC, MW-2HC, MW97-1 and MW97-6) are shown in Figure 7. As shown in Figure 7 the DRO concentrations in groundwater at the two off-site wells MW-1HC and MW-1AHC are relatively constant over time and have never exceeded the ADEC standard. The DRO and RRO concentrations were above standards at on-Site wells; however, the historical data suggests that in most on-Site wells, the concentrations of these parameters are also decreasing with time.

The AS wells, located near the south property boundary, provided useful information on the chlorinated solvent plume delineation. Of the samples collected from the AS wells, the highest TCE concentration in groundwater was measured in the sparge well located at the western end of the line of AS wells. The TCE concentrations in two AS wells (AS-2 and AS-6) were slightly above the ADEC standard.

Additional groundwater monitoring is planned for Fall 2004. Although re-instatement of the SVE/AS system was planned for Summer 2004, the May/June 2004 concentrations in groundwater at the off-site wells were below the ADEC standards, and several on-Site wells appeared to show a decline in TCE concentrations. Therefore, it is proposed that the decision on when to re-instate the SVE/AS system be deferred until after the Fall 2004 monitoring is completed. In addition, the results will be reviewed as to the possible need for additional wells to investigate the migration of the chlorinated solvent plume. It is proposed that, if required, the SVE/AS system and additional monitoring wells be installed either later this year or during the Spring/Summer 2005.

#### **4.2 Product at MW97-3**

Only a thin product layer (0.2 inches) was measured in well MW97-3. Based on the relatively small thickness and viscous nature of the product, it is not considered practical to recover product from this well. Additional monitoring of product thickness in Fall 2004 is proposed. Since TCE was not detected, the product in MW97-3 is unlikely to represent a significant source for the TCE-impacted groundwater plume. It is possible that the product is an indirect, but minor source, of TCE in groundwater since TCE is a biotransformation product of PCE under anaerobic conditions, and since PCE was detected at low levels in the product.

#### **4.3 Soil Vapor**

The results of the soil vapor survey in the vicinity of MW98-1 indicate that soil in this area may be impacted by petroleum hydrocarbon and/or chlorinated hydrocarbons as two of the soil vapor probes (VP04-12 and VP04-17) had elevated levels of CO<sub>2</sub> and depressed levels of O<sub>2</sub> indicating that biodegradation of hydrocarbons may be taking place at these locations.

Based on the results of the soil vapor survey in the vicinity of MW98-1, further soil investigation of this area is recommended and will be incorporated into the test-pitting program scheduled for Fall 2004. Figure 8 shows the approximate locations of the proposed test-pits. As per field observations made during the soil vapor survey, the concrete slab is suspected to be the entire foundation of the former round house. The former round house foundation is expected to be composed of thick, reinforced concrete and therefore it would not be practical to collect soil samples from under the concrete pad at this time. The proposed test-pitting program is designed to delineate the extent of potentially impacted soil beyond the foundation of the roundhouse, and in areas where the soil vapor survey results suggested probable hydrocarbon impacts. Note that the exact location of the test-pits may be modified during the field program if concrete foundations are encountered during excavation.

We trust that this report provides you the information you require at this time. Should you have any further questions or concerns, please do not hesitate to call the undersigned (direct line 604-296-4233).

Yours very truly,

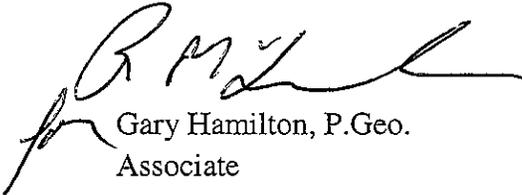
**GOLDER ASSOCIATES LTD.**



Linda Kemp, M.Eng.  
Environmental Engineer (EIT)

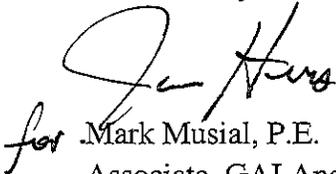


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**TABLE 1**  
**Results of Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location SCN Date QA/QC	STANDARD <sup>1</sup>	MW-1AHC	MW-1AHC	MW-1AHC	MW-1AHC	MW-1AHC	MW-1A HC	MW-1A HC	MW-1A HC	MW-1AHC	MW-1AHC	MW-1AHC	MW-1AHC	MW-1HC	MW-1HC	MW-1HC	MW-1HC	MW-1HC	MW-1 HC	MW-1 HC
		0840-01 23-Aug-97 FDA	A9800524-14 29-Jul-98	A9900238-3 10-Jun-99	A9900715-1 24-Sep-99	A9900854-3 2-Nov-99	P005200-02 6-May-00	P0K0452-02 14-Nov-00	0862-01 28-Jun-01	0886-12 12-Oct-01	0903-01 19-Sep-02	8220-03 15-Sep-03	9029-04 29-May-04	0840-03 23-Aug-97	A9800524-15 29-Jul-98	A9900238-2 10-Jun-99 FDA	A9900715-2 24-Sep-99 FDA	A9900854-2 2-Nov-99	P005200-01 6-May-00	P005488-01 20-May-00 FDA
<b>BTEX</b>																				
Benzene	0.005	-	0.046	0.005	ND (0.001)	ND (0.001)	-	ND (0.0005)	0.000531	ND (0.0003)	0.000618	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	-	-
Ethylbenzene	0.7	-	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	-	-
Toluene	1.0	-	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	-	-
Xylene (total m,p,o)	10.0	-	0.001	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	-	-
<b>Petroleum Hydrocarbons</b>																				
Diesel Range Organics (DRO)	1.5	-	0.84	0.63	ND (0.1)	0.22	ND (0.250)	0.999	0.817	0.510	0.321	0.28	ND (0.320)	-	ND (0.1)	0.15	ND (0.1)	0.11	-	ND (0.250)
Gasoline Range Organics (GRO)	1.3*	-	0.187	ND (0.050)	ND (0.05)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	-	ND (0.05)	ND (0.050)	ND (0.05)	ND (0.05)	ND (0.08)	-
Residual Range Organics (RRO)	1.1	-	-	ND (1)	ND (1.0)	ND (1.0)	ND (0.500)	-	-	-	-	-	ND (0.400)	-	-	ND (1)	ND (1.0)	ND (1.0)	-	ND (0.500)
<b>Volatile Organic Compounds (VOCs)</b>																				
Benzene	0.005	0.0343	0.041	0.0043	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	-
1,1-Dichloroethane	3.65	0.0015	0.0021	0.0013	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	0.0005	ND (0.0005)	ND (0.0005)	ND (0.001)	-
1,1-Dichloroethene	0.007	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	-
cis-1,2-Dichloroethene	0.07	0.0067	0.011	0.0091	0.0016	0.0014	0.00313	0.0047	0.00791	0.00505	0.0086	0.00872	0.00317	ND (0.0005)	ND (0.0005)	0.0034	0.0012	0.0008	0.00179	-
Ethylbenzene	0.7	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	-
Methylene Chloride	0.005	ND (0.0005)	ND (0.005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.0005)	ND (0.005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	-
Naphthalene	0.7	ND (0.0005)	0.006	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.001)	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.0005)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.001)	-
Styrene	0.1	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	-
Tetrachloroethene (PCE)	0.005	0.0045	ND (0.0005)	ND (0.0005)	0.0013	0.0016	0.00191	ND (0.001)	ND (0.001)	ND (0.00027)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	0.0006	0.0014	0.0011	0.0009	0.00116	-
Toluene	1.0	ND (0.0005)	0.0005	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	-
1,1,1-Trichloroethane (TCA)	0.2	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	-
Trichloroethene (TCE)	0.005	0.0038	0.0014	0.0039	0.0032	0.0034	0.00543	0.00199	0.00293	0.00245	0.00222	0.00219	0.00202	ND (0.0005)	0.0008	0.0054	0.0029	0.0022	0.00471	-
Vinyl Chloride	0.002	0.0007	0.0015	0.001	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	-
Total Xylene [Calc.]	10.0	ND (0.0005)	ND (0.0005)	[ND (0.001)]	0.001	[ND (0.001)]	[ND (0.003)]	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)	ND (0.0005)	ND (0.0005)	[ND (0.001)]	ND (0.0005)	[ND (0.001)]	[ND (0.003)]	-

**Notes:**  
 All concentrations are in milligrams per litre (mg/L).  
 ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.  
 \*Standard based on estimated solubility.  
 1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances Pollution Control" Regulations as amended through May 2004.  
 2. Data reported from Analytical Laboratory & Consultants, Oregon Lab Reports #81714 through 81720 and 81126 through 81133 (Aug. 1997); Analytica Alaska Inc. Order A7-09-046 and Analytica Environmental Laboratory Order 97-09-069 (Sept. 1997); Columbia Analytical Services Inc., Anchorage, AK Service Request Orders A9800683 (Sept. 1998), A9800524 (July 1998), A9900271 and A9900238 (June 1999), A9900715 (Sept. 1999), and A9900854 (Nov. 1999); and North Creek Analytical, Portland, OR Files P005200 and P005488 (May 2000), P0K0452 (Nov. 2000), P1J0346 and P1J0528 (Oct. 2001), P2I0604 (Sept. 2002), P3I0738 (Sept. 2003), P4F0112 (June 2004), P4F0225 (June 2004), and P4F0455 (June 2004).

**TABLE 1**  
**Results of Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location SCN Date QA/QC	STANDARD <sup>1</sup>	MW-1 HC	MW1 HC	MW-1 HC	MW-1HC	MW-1HC	MW-1HC	MW-1HC	MW-2HC	MW-2HC	MW-2HC	MW-2HC	MW-2HC	MW-2HC	MW-2HC	MW-2HC	MW-2HC	MW-2HC	MW-2HC
		P0K0452-01 14-Nov-00	0862-02 28-Jun-01 FDA	0862-03 28-Jun-01 FD	0886-11 12-Oct-01	0903-02 19-Sep-02	8220-02 15-Sep-03	9029-03 28-May-04	0839-02 6-Aug-97	A9800524-4 30-Jul-98	A9900271-10 15-Jun-99	A9900854-13 2-Nov-99	P005200-03 8-May-00	P0K0452-03 14-Nov-00	0862-05 28-Jun-01	0886-01 11-Oct-01	0903-12 20-Sep-02	8220-10 16-Sep-03	9029-09 1-Jun-04
<b>BTEX</b>																			
Benzene	0.005	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0003)	0.000729	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)
Ethylbenzene	0.7	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)
Toluene	1.0	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)
Xylene (total m,p,o)	10.0	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)
<b>Petroleum Hydrocarbons</b>																			
Diesel Range Organics (DRO)	1.5	0.321	ND (0.250)	ND (0.250)	ND (0.000156)	ND (0.250)	ND (0.250)	ND (0.320)	-	3.2	2.34	11.8	2.46	1.27	0.832	0.836	0.299	0.684	ND (0.320)
Gasoline Range Organics (GRO)	1.3*	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	-	0.056	ND (0.050)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)
Residual Range Organics (RRO)	1.1	-	-	-	-	-	-	ND (0.400)	-	-	ND (1)	1.8	ND (0.500)	-	-	-	-	-	ND (0.400)
<b>Volatile Organic Compounds (VOCs)</b>																			
Benzene	0.005	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)	0.0007	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)
1,1-Dichloroethane	3.65	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)	0.0234	0.016	0.0018	0.0007	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)
1,1-Dichloroethene	0.007	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	0.0016	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)
cis-1,2-Dichloroethene	0.07	0.00273	0.00387	0.00374	0.0036	0.00432	0.00324	0.00121	0.0271	0.038	0.027	0.0068	0.0283	0.0247	0.0375	0.0379	0.0349	0.0278	0.00751
Ethylbenzene	0.7	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)
Methylene Chloride	0.005	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.0005)	ND (0.005)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)
Naphthalene	0.7	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.0005)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.001)	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)
Styrene	0.1	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)
Tetrachloroethene (PCE)	0.005	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00027)	ND (0.001)	ND (0.001)	ND (0.001)	0.0318	0.0068	0.0027	0.0016	0.00201	0.00113	ND (0.001)	ND (0.00027)	ND (0.001)	ND (0.001)	0.00126
Toluene	1.0	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)
1,1,1-Trichloroethane (TCA)	0.2	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0672	0.021	0.0011	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)
Trichloroethene (TCE)	0.005	0.00331	0.00505	0.00498	0.0056	0.00566	0.00725	0.00256	0.0585	0.027	0.023	0.0016	0.0244	0.00947	0.013	0.0117	0.0164	0.0159	0.00817
Vinyl Chloride	0.002	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)
Total Xylene [Calc.]	10.0	ND (0.003)	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)	ND (0.0005)	ND (0.0005)	[ND (0.001)]	[ND (0.001)]	[ND (0.003)]	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)

**Notes:**  
 All concentrations are in milligrams per litre (mg/L).  
 ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.  
 \*Standard based on estimated solubility.  
 1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances Pollution Control" Regulations as amended through May 2004.  
 2. Data reported from Analytical Laboratory & Consultants, Oregon Lab Reports #81714 through 81720 and 81126 through 81133 (Aug. 1997); Analytica Alaska Inc. Order A7-09-046 and Analytica Environmental Laboratory Order 97-09-069 (Sept. 1997); Columbia Analytical Services Inc., Anchorage, AK Service Request Orders A9800683 (Sept. 1998), A9800524 (July 1998), A9900271 and A9900238 (June 1999), A9900715 (Sept. 1999), and A9900854 (Nov. 1999); and North Creek Analytical, Portland, OR Files P005200 and P005488 (May 2000), P0K0452 (Nov. 2000), P1J0346 and P1J0528 (Oct. 2001), P210604 (Sept. 2002), P310738 (Sept. 2003), P4F0112 (June 2004), P4F0225 (June 2004), and P4F0455 (June 2004).

**TABLE 1**  
**Results of Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location SCN Date QA/QC	STANDARD <sup>1</sup>	MW-3HC	MW-3HC	MW-3HC	MW-3HC	MW-3HC	MW-3HC	MW-3HC	MW-4HC	MW-4HC	MW-4HC	MW-4HC	MW-4HC	MW-4HC	MW-4HC	MW-4HC	MW-4HC	MW-4HC	MW-5HC
		0839-01 6-Aug-97	A9800524-13 30-Jul-98	A9900238-6 10-Jun-99	A9900854-6 2-Nov-99	P005200-04 8-May-00	P0K0452-04 14-Nov-00	9030-03 2-Jun-04	0839-04 6-Aug-97	A9800524-16 29-Jul-98	A9900238-1 10-Jun-99	A9900854-1 2-Nov-99	P005200-05 6-May-00	0862-11 29-Jun-01	0885-01 5-Oct-01	0903-03 19-Sep-02	8220-01 15-Sep-03	9029-01 28-May-04	0839-03 6-Aug-97
<b>BTEX</b>																			
Benzene	0.005	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)
Ethylbenzene	0.7	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)
Toluene	1.0	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)
Xylene (total m,p,o)	10.0	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
<b>Petroleum Hydrocarbons</b>																			
Diesel Range Organics (DRO)	1.5	-	0.37	ND (0.1)	ND (0.1)	ND (0.250)	ND (0.250)	ND (0.320)	-	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.250)	ND (0.250)	ND (0.125)	ND (0.250)	ND (0.250)	ND (0.250)	ND (0.320)
Gasoline Range Organics (GRO)	1.3*	-	0.087	ND (0.050)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	-	ND (0.05)	ND (0.050)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.08)
Residual Range Organics (RRO)	1.1	-	-	ND (1)	ND (1.0)	ND (0.500)	-	ND (0.400)	-	-	ND (1)	ND (1.0)	ND (0.500)	-	-	-	-	ND (0.400)	-
<b>Volatile Organic Compounds (VOCs)</b>																			
Benzene	0.005	ND (0.0005)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	0.0008	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)
1,1-Dichloroethane	3.65	ND (0.0005)	0.002	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	0.0006	0.0006	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)
1,1-Dichloroethene	0.007	ND (0.0005)	0.013	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)
cis-1,2-Dichloroethene	0.07	0.0020	0.006	0.0088	0.0067	0.00668	0.00351	0.0011	0.0011	0.0010	ND (0.0005)	0.0006	0.00112	0.00228	0.00152	0.00118	0.00168	ND (0.001)	ND (0.0005)
Ethylbenzene	0.7	ND (0.0005)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)
Methylene Chloride	0.005	ND (0.0005)	ND (0.01)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.0005)	ND (0.005)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.0005)
Naphthalene	0.7	ND (0.0005)	ND (0.004)	ND (0.002)	ND (0.002)	ND (0.001)	ND (0.002)	ND (0.002)	ND (0.0005)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.001)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.0005)
Styrene	0.1	ND (0.0005)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)
Tetrachloroethene (PCE)	0.005	0.0460	0.12	0.014	0.015	0.00938	0.0134	0.00318	0.0011	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.00027)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)
Toluene	1.0	ND (0.0005)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)
1,1,1-Trichloroethane (TCA)	0.2	ND (0.0005)	0.11	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	0.0005	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)
Trichloroethene (TCE)	0.005	0.0124	0.044	0.03	0.015	0.0183	0.0073	0.00179	0.0124	0.0037	ND (0.0005)	0.0014	0.00235	0.00424	0.00228	0.00227	0.00338	0.00211	ND (0.0005)
Vinyl Chloride	0.002	ND (0.0005)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)
Total Xylene [Calc.]	10.0	ND (0.0005)	ND (0.001)	[ND (0.001)]	[ND (0.001)]	[ND (0.003)]	ND (0.003)	ND (0.001)	ND (0.0005)	ND (0.0005)	[ND (0.001)]	[ND (0.001)]	[ND (0.003)]	[ND (0.003)]	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)	ND (0.0005)

**Notes:**

All concentrations are in milligrams per litre (mg/L).

ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.

\*Standard based on estimated solubility.

1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances Pollution Control" Regulations as amended through May 2004.

2. Data reported from Analytical Laboratory & Consultants, Oregon Lab Reports #81714 through 81720 and 81126 through 81133 (Aug. 1997); Analytica Alaska Inc. Order A7-09-046 and Analytica Environmental Laboratory Order 97-09-069 (Sept. 1997); Columbia Analytical Services Inc., Anchorage, AK Service Request Orders A9800683 (Sept. 1998), A9800524 (July 1998), A9900271 and A9900238 (June 1999), A9900715 (Sept. 1999), and A9900854 (Nov. 1999); and North Creek Analytical, Portland, OR Files P005200 and P005488 (May 2000), P0K0452 (Nov. 2000), P1J0346 and P1J0528 (Oct. 2001), P2I0604 (Sept. 2002), P3I0738 (Sept. 2003), P4F0112 (June 2004), P4F0225 (June 2004), and P4F0455 (June 2004).

**TABLE 1**  
**Results of Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location	SCN	Date	QA/QC	STANDARD <sup>1</sup>																			
				MW97-1	MW97-1	MW97-1	MW97-1	MW97-1	MW97-1	MW97-1	MW97-1	MW97-1	MW97-1	MW97-1	MW97-1	MW97-1	MW97-1	MW97-1	MW97-2	MW97-2	MW97-2	MW97-2	
				A709046-01	A9800524-7	A9900271-7	A9900854-10	P005200-06	P0K0452-05	0862-04	0886-09	0886-10	0905-02	0903-03	8221-05	8221-06	9030-06	9030-07	A709046-02	A9800524-11	A9900271-9	A9900854-17	
				6-Sep-97	30-Jul-98	15-Jun-99	2-Nov-99	8-May-00	14-Nov-00	28-Jun-01	11-Oct-01	11-Oct-01	20-Sep-02	20-Sep-02	16-Sep-03	16-Sep-03	3-Jun-04	3-Jun-04	6-Sep-97	30-Jul-98	15-Jun-99	2-Nov-99	
										FDA	FD	FDA	FD	FDA	FD	FDA	FD		FDA	FD	FDA	FD	
<b>BTEX</b>																							
Benzene	0.005	-	0.13	0.045	ND (0.001)	-	0.0148	0.00465	0.00568	0.00468	0.00156	0.00153	0.00239	0.00252	0.00261	0.0026	-	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)		
Ethylbenzene	0.7	-	0.27	0.2	ND (0.001)	-	0.0108	0.0476	0.0603	0.0568	0.0295	0.0274	0.0193	0.0201	0.0117	0.0125	-	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)		
Toluene	1.0	-	0.12	0.046	ND (0.001)	-	0.0981	0.0037	0.00584	0.00479	0.000828	0.000718	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)		
Xylene (total m,p,o)	10.0	-	0.750	0.58	ND (0.001)	-	0.141	0.0257	0.0514	0.0384	0.00277	0.00234	0.00163	0.00193	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)		
<b>Petroleum Hydrocarbons</b>																							
Diesel Range Organics (DRO)	1.5	8.4	1.3	5.04	7.1	4.1	2.82	2.92	2.37	2.64	1.71	1.67	1.07	1.22	2.98	2.96	6.8	0.91	1.87	6.74			
Gasoline Range Organics (GRO)	1.3*	-	3.4	1.8	1.45	0.664	1.36	0.464	1.47	1.19	0.322	0.295	0.315	0.34	ND (0.08)	ND (0.08)	-	0.051	0.06	0.071			
Residual Range Organics (RRO)	1.1	-	-	ND (1)	1.0	ND (0.500)	-	-	-	-	-	-	-	-	3.57	ND (0.400)	-	-	7.5	24.2			
<b>Volatile Organic Compounds (VOCs)</b>																							
Benzene	0.005	0.430	0.17	0.044	0.032	0.0118	0.0113	0.00406	0.00294	0.00294	0.00104	0.00106	ND (0.001)	ND (0.001)	0.00208	0.00212	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)		
1,1-Dichloroethane	3.65	ND (0.05)	0.0082	ND (0.005)	0.0015	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.000214)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.004	0.0009	0.0009	ND (0.0005)		
1,1-Dichloroethene	0.007	ND (0.05)	ND (0.0025)	ND (0.005)	ND (0.0005)	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.000151)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0021	ND (0.0005)	ND (0.0005)	ND (0.0005)		
cis-1,2-Dichloroethene	0.07	ND (0.03)	0.0056	0.016	0.0043	0.00803	ND (0.005)	0.00762	0.00517	0.00528	0.00652	0.00651	0.00593	0.00703	0.00394	0.00425	0.0100	0.021	0.026	0.0073			
Ethylbenzene	0.7	0.450	0.280	0.26	0.11	0.134	0.103	0.0544	0.0619	0.0604	0.0283	0.0288	0.0194	0.0188	0.0108	0.0111	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)			
Methylene Chloride	0.005	0.022	ND (0.005)	ND (0.01)	ND (0.001)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.002)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.001)	ND (0.001)			
Naphthalene	0.7	0.051	0.030	0.038	0.022	0.0321	0.0221	0.00603	0.0108	0.00963	0.00449	0.00463	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.005)	ND (0.002)	ND (0.002)	ND (0.002)			
Styrene	0.1	ND (0.03)	ND (0.0025)	0.0051	ND (0.0005)	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.000154)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.003)	ND (0.0005)	ND (0.0005)	ND (0.0005)			
Tetrachloroethene (PCE)	0.005	ND (0.03)	ND (0.0025)	ND (0.005)	0.0008	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.00027)	ND (0.00027)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.014	0.017	0.0057	0.011			
Toluene	1.0	0.640	0.13	0.051	0.023	0.00697	0.00945	0.00329	0.00333	0.00313	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)		
1,1,1-Trichloroethane (TCA)	0.2	ND (0.05)	ND (0.0025)	ND (0.005)	ND (0.0005)	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.0001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.021	0.025	0.0009	0.0006			
Trichloroethene (TCE)	0.005	ND (0.03)	ND (0.0025)	ND (0.005)	0.0019	0.00341	ND (0.005)	0.00458	0.00163	0.00174	0.00211	0.00203	0.0012	0.00123	0.00193	0.00187	0.016	0.047	0.06	0.0048			
Vinyl Chloride	0.002	ND (0.02)	0.0037	0.015	0.0018	0.00924	ND (0.005)	0.00411	0.00226	0.00225	0.00426	0.00423	0.0043	0.00451	0.00143	0.00138	ND (0.002)	ND (0.0005)	ND (0.0005)	ND (0.0005)			
Total Xylene [Calc.]	10.0	[1.6]	0.770	[0.83]	[0.214]	[0.1948]	0.138	0.02686	0.046	0.0381	ND (0.003)	0.00136	0.00458	0.0045	0.00154	ND (0.001)	[ND (0.002)]	ND (0.0005)	[ND (0.001)]	[ND (0.001)]			

**Notes:**  
 All concentrations are in milligrams per litre (mg/L).  
 ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.  
 \*Standard based on estimated solubility.  
 1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances Pollution Control" Regulations as amended through May 2004.  
 2. Data reported from Analytical Laboratory & Consultants, Oregon Lab Reports #81714 through 81720 and 81126 through 81133 (Aug. 1997); Analytica Alaska Inc. Order A7-09-046 and Analytica Environmental Laboratory Order 97-09-069 (Sept. 1997); Columbia Analytical Services Inc., Anchorage, AK Service Request Orders A9800683 (Sept. 1998), A9800524 (July 1998), A9900271 and A9900238 (June 1999), A9900715 (Sept. 1999), and A9900854 (Nov. 1999); and North Creek Analytical, Portland, OR Files P005200 and P005488 (May 2000), P0K0452 (Nov. 2000), P1J0346 and P1J0528 (Oct. 2001), P210604 (Sept. 2002), P310738 (Sept. 2003), P4F0112 (June 2004), P4F0225 (June 2004), and P4F0455 (June 2004).

**TABLE 1**  
**Results of Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location SCN Date QA/QC	STANDARD <sup>1</sup>	MW97-2	MW97-2	MW97-2	MW97-2	MW97-2	MW97-2	MW97-2	MW97-2	MW97-3	MW97-4	MW97-4	MW97-5	MW97-5	MW97-5	MW97-5	MW97-5	MW97-6M	MW97-6M	MW97-6M
		P005200-07 5-May-00 FDA	P005488-03 20-May-00	P0K0452-06 14-Nov-00	0862-07 29-Jun-01	0885-08 8-Oct-01	0903-09 19-Sep-02	8220-09 16-Sep-03	9030-04 2-Jun-04	A709046-03 6-Sep-97	A709046-04 6-Sep-97	A9800524-9 30-Jul-98	A709046-05 6-Sep-97 FDA	A9800524-8 30-Jul-98 FDA	A9900271-6 15-Jun-99	A9900854-15 2-Nov-99	P005200-08 5-May-00	A709046-07 6-Sep-97	A9800524-3 30-Jul-98	A9900271-11 15-Jun-99
<b>BTEX</b>																				
Benzene	0.005	-	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	-	ND (0.001)	-	0.22	0.36	ND (0.001)	-	-	ND (0.001)	ND (0.001)
Ethylbenzene	0.7	-	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	-	ND (0.001)	-	0.29	0.44	ND (0.001)	-	-	ND (0.001)	ND (0.001)
Toluene	1.0	-	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	-	ND (0.001)	-	0.23	0.3	ND (0.001)	-	-	ND (0.001)	ND (0.001)
Xylene (total m,p,o)	10.0	-	-	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)	-	-	ND (0.001)	-	1.4	2.4	ND (0.001)	-	-	ND (0.001)	ND (0.001)
<b>Petroleum Hydrocarbons</b>																				
Diesel Range Organics (DRO)	1.5	-	3.02	0.327	0.474	0.368	0.441	ND (0.250)	0.508	3.1	1.8	0.74	13	8.2	1.69	6.0	1.56	ND (0.25)	0.22	ND (0.100)
Gasoline Range Organics (GRO)	1.3*	0.238	-	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	-	-	ND (0.05)	-	6.5	7.1	0.142	3.430	-	ND (0.05)	ND (0.050)
Residual Range Organics (RRO)	1.1	-	12.3	-	-	-	-	-	0.956	-	-	-	-	-	ND (1)	54	ND (0.500)	-	-	ND (1)
<b>Volatile Organic Compounds (VOCs)</b>																				
Benzene	0.005	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0058	ND (0.0005)	0.160	0.36	0.35	0.0036	0.162	0.009	ND (0.0005)	ND (0.0005)
1,1-Dichloroethane	3.65	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.0005)	ND (0.025)	ND (0.01)	ND (0.05)	ND (0.0005)	ND (0.01)	ND (0.005)	0.0034	ND (0.0005)
1,1-Dichloroethene	0.007	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.0005)	ND (0.025)	ND (0.01)	ND (0.05)	ND (0.0005)	ND (0.01)	ND (0.005)	0.0014	ND (0.0005)
cis-1,2-Dichloroethene	0.07	0.0183	-	0.0152	0.0244	0.0197	0.0154	0.0157	0.00635	ND (0.003)	0.066	0.0025	0.024	0.045	0.053	0.0009	0.0321	0.017	0.019	0.015
Ethylbenzene	0.7	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0035	ND (0.0005)	0.180	0.31	0.45	0.0066	0.199	0.010	ND (0.0005)	ND (0.0005)
Methylene Chloride	0.005	ND (0.005)	-	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	0.012	0.0023	ND (0.001)	0.037	ND (0.02)	ND (0.1)	ND (0.001)	ND (0.05)	0.0076	ND (0.005)	ND (0.001)
Naphthalene	0.7	ND (0.001)	-	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.005)	0.011	ND (0.002)	0.025	0.043	ND (0.2)	ND (0.002)	0.0205	ND (0.005)	ND (0.002)	ND (0.002)
Styrene	0.1	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.003)	ND (0.003)	ND (0.0005)	0.27	ND (0.01)	ND (0.05)	ND (0.0005)	ND (0.01)	ND (0.003)	ND (0.0005)	ND (0.0005)
Tetrachloroethene (PCE)	0.005	0.0046	-	0.00416	0.00375	0.00323	0.00335	0.00256	0.00183	0.083	0.036	0.01	ND (0.015)	ND (0.01)	ND (0.05)	0.0009	ND (0.01)	0.012	0.011	0.0062
Toluene	1.0	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.015	ND (0.0005)	0.270	0.34	0.26	0.0014	0.0649	0.022	ND (0.0005)	ND (0.0005)
1,1,1-Trichloroethane (TCA)	0.2	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)	0.063	ND (0.005)	ND (0.0005)	ND (0.025)	ND (0.01)	ND (0.05)	ND (0.0005)	ND (0.01)	0.019	0.018	0.0011
Trichloroethene (TCE)	0.005	0.0374	-	0.0185	0.0349	0.0255	0.0372	0.0303	0.0104	0.019	0.013	0.012	ND (0.015)	ND (0.01)	ND (0.05)	0.0006	ND (0.01)	0.030	0.045	0.041
Vinyl Chloride	0.002	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.002)	ND (0.002)	ND (0.0005)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.0005)	ND (0.01)	ND (0.002)	ND (0.0005)	ND (0.0005)
Total Xylene [Calc.]	10.0	[ND (0.003)]	-	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)	[ND (0.002)]	[0.113]	ND (0.0005)	[0.78]	1.8	[2.84]	[0.0201]	[1.042]	[0.042]	ND (0.0005)	[ND (0.001)]

**Notes:**  
 All concentrations are in milligrams per litre (mg/L).  
 ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.  
 \*Standard based on estimated solubility.  
 1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances Pollution Control" Regulations as amended through May 2004.  
 2. Data reported from Analytical Laboratory & Consultants, Oregon Lab Reports #81714 through 81720 and 81126 through 81133 (Aug. 1997); Analytica Alaska Inc. Order A7-09-046 and Analytica Environmental Laboratory Order 97-09-069 (Sept. 1997); Columbia Analytical Services Inc., Anchorage, AK Service Request Orders A9800683 (Sept. 1998), A9800524 (July 1998), A9900271 and A9900238 (June 1999), A9900715 (Sept. 1999), and A9900854 (Nov. 1999); and North Creek Analytical, Portland, OR Files P005200 and P005488 (May 2000), P0K0452 (Nov. 2000), P1J0346 and P1J0528 (Oct. 2001), P210604 (Sept. 2002), P310738 (Sept. 2003), P4F0112 (June 2004), P4F0225 (June 2004), and P4F0455 (June 2004).

**TABLE 1**  
**Results of Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location SCN Date QA/QC	STANDARD <sup>1</sup>	MW97-6M	MW97-6M	MW97-6M	MW97-6M	MW97-6M	MW97-6M	MW97-6M	MW97-6M	MW97-6D	MW97-6D	MW97-6D	MW97-6D	MW97-6D	MW97-6D	MW97-6D	MW97-6D	MW97-6D	MW97-6D	MW97-6D
		A9900854-12 2-Nov-99	P005200-10 8-May-00	P0K0452-07 14-Nov-00	0862-06 29-Jun-01	0886-02 11-Oct-01	0903-10 20-Sep-02	8220-12 16-Sep-03	9029-10 1-Jun-04	A709046-08 6-Sep-97	A9800524-5 30-Jul-98	A9900271-8 15-Jun-99	A9900854-11 2-Nov-99	P005200-09 8-May-00	P0K0452-08 14-Nov-00	0878-06 28-Jul-01	0886-03 11-Oct-01	0903-11 20-Sep-02	8220-11 16-Sep-03	9029-11 1-Jun-04
<b>BTEX</b>																				
Benzene	0.005	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.001)
Ethylbenzene	0.7	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.001)
Toluene	1.0	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.001)
Xylene (total m,p,o)	10.0	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)
<b>Petroleum Hydrocarbons</b>																				
Diesel Range Organics (DRO)	1.5	0.78	ND (0.250)	ND (0.250)	ND (0.250)	ND (0.000156)	ND (0.250)	ND (0.250)	ND (0.320)	ND (0.25)	0.28	ND (0.100)	ND (0.1)	ND (0.250)	ND (0.250)	ND (0.250)	ND (0.000156)	ND (0.250)	ND (0.250)	ND (0.320)
Gasoline Range Organics (GRO)	1.3*	0.066	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	-	ND (0.05)	ND (0.050)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)
Residual Range Organics (RRO)	1.1	ND (1.0)	ND (0.500)	-	-	-	-	-	ND (0.400)	-	-	ND (1)	ND (1.0)	ND (0.500)	-	-	-	-	-	ND (0.400)
<b>Volatile Organic Compounds (VOCs)</b>																				
Benzene	0.005	0.0014	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)	0.0082	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.0005)
1,1-Dichloroethane	3.65	0.0011	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)
1,1-Dichloroethene	0.007	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)
cis-1,2-Dichloroethene	0.07	0.021	0.0203	0.019	0.0241	0.0216	0.0148	0.0139	0.0109	0.015	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000187)	ND (0.001)	ND (0.001)	ND (0.001)
Ethylbenzene	0.7	0.0005	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)	0.0089	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.0005)
Methylene Chloride	0.005	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	0.0049	ND (0.005)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)
Naphthalene	0.7	ND (0.002)	ND (0.001)	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.005)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.001)	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)
Styrene	0.1	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)
Tetrachloroethene (PCE)	0.005	0.0027	0.00395	0.00404	0.00283	0.00248	0.00228	0.00158	0.00227	0.011	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00027)	ND (0.001)	ND (0.001)	ND (0.001)
Toluene	1.0	0.0009	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)	0.020	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.0005)
1,1,1-Trichloroethane (TCA)	0.2	0.0006	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)	0.015	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)
Trichloroethene (TCE)	0.005	0.012	0.0398	0.0241	0.0375	0.0292	0.0361	0.0322	0.0196	0.029	0.0012	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000359)	ND (0.001)	ND (0.001)	ND (0.001)
Vinyl Chloride	0.002	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.002)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)
Total Xylene [Calc.]	10.0	[0.0058]	[ND (0.003)]	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)	[0.038]	ND (0.0005)	[ND (0.001)]	[ND (0.001)]	[ND (0.003)]	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)

**Notes:**

All concentrations are in milligrams per litre (mg/L).

ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.

\*Standard based on estimated solubility.

1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances Pollution Control" Regulations as amended through May 2004.

2. Data reported from Analytical Laboratory & Consultants, Oregon Lab Reports #81714 through 81720 and 81126 through 81133 (Aug. 1997); Analytica Alaska Inc. Order A7-09-046 and Analytica Environmental Laboratory Order 97-09-069 (Sept. 1997); Columbia Analytical Services Inc., Anchorage, AK Service Request Orders A9800683 (Sept. 1998), A9800524 (July 1998), A9900271 and A9900238 (June 1999), A9900715 (Sept. 1999), and A9900854 (Nov. 1999); and North Creek Analytical, Portland, OR Files P005200 and P005488 (May 2000), P0K0452 (Nov. 2000), P1J0346 and P1J0528 (Oct. 2001), P2I0604 (Sept. 2002), P3I0738 (Sept. 2003), P4F0112 (June 2004), P4F0225 (June 2004), and P4F0455 (June 2004).

**TABLE 1**  
**Results of Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location SCN Date QA/QC	STANDARD <sup>1</sup>	MW97-7S	MW97-7S	MW97-7S	MW97-7S	MW97-7S	MW97-7S	MW97-7S	MW97-7S	MW97-7S	MW97-7S	MW97-7S	MW97-7S	MW97-7S	MW97-7S	MW97-7M	MW97-7M	MW97-7M	MW97-7M	MW97-7M
		A709046-09 6-Sep-97	A9800524-6 30-Jul-98	A9900271-1 15-Jun-99 FDA	A9900854-9 2-Nov-99	P005200-13 5-May-00	P0K0452-09 10-Nov-00	0862-12 29-Jun-01	0886-05 11-Oct-01 FDA	0886-06 11-Oct-01 FD	0903-13 20-Sep-02 FDA	0903-14 20-Sep-02 FD	8221-01 16-Sep-03 FDA	8221-02 16-Sep-03 FD	9030-02 2-Jun-04	A709046-10 6-Sep-97	A9800524-2 30-Jul-98	A9900271-3 15-Jun-99	A9900854-8 2-Nov-99	P005200-12 5-May-00
<b>BTEX</b>																				
Benzene	0.005	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-
Ethylbenzene	0.7	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-
Toluene	1.0	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-
Xylene (total m,p,o)	10.0	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.001)	-
<b>Petroleum Hydrocarbons</b>																				
Diesel Range Organics (DRO)	1.5	0.47	0.14	ND (0.100)	0.12	ND (0.250)	ND (0.250)	ND (0.250)	ND (0.000156)	ND (0.000156)	ND (0.250)	ND (0.250)	ND (0.250)	ND (0.250)	0.481	ND (0.25)	0.22	ND (0.100)	ND (0.1)	ND (0.250)
Gasoline Range Organics (GRO)	1.3*	-	ND (0.05)	ND (0.050)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.08)	-	ND (0.05)	ND (0.050)	ND (0.05)	ND (0.08)
Residual Range Organics (RRO)	1.1	-	-	ND (1)	ND (1.0)	ND (0.500)	-	-	-	-	-	-	-	-	ND (0.400)	-	-	ND (1)	ND (1.0)	ND (0.500)
<b>Volatile Organic Compounds (VOCs)</b>																				
Benzene	0.005	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
1,1-Dichloroethane	3.65	ND (0.005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
1,1-Dichloroethene	0.07	ND (0.005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
cis-1,2-Dichloroethene	0.07	ND (0.003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000187)	ND (0.000187)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
Ethylbenzene	0.7	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
Methylene Chloride	0.005	0.0067	ND (0.005)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	0.0080	ND (0.005)	ND (0.001)	ND (0.001)	ND (0.005)
Naphthalene	0.7	ND (0.005)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.001)	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.005)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.001)
Styrene	0.1	ND (0.003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
Tetrachloroethene (PCE)	0.005	0.0020	0.0006	0.0028	0.0022	0.00280	0.00148	0.00198	0.0025	0.00249	0.00204	0.00205	0.00114	0.00106	ND (0.001)	0.0049	0.0014	0.0024	0.0018	0.00234
Toluene	1.0	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
1,1,1-Trichloroethane (TCA)	0.2	ND (0.005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
Trichloroethene (TCE)	0.005	ND (0.003)	ND (0.0005)	0.002	0.0016	0.00271	ND (0.001)	0.0016	0.00226	0.00225	0.00249	0.00258	0.0021	0.002	ND (0.001)	ND (0.003)	0.0012	0.0021	0.0013	0.00280
Vinyl Chloride	0.002	ND (0.002)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.002)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
Total Xylene [Calc.]	10.0	[ND (0.002)]	ND (0.0005)	[ND (0.001)]	[ND (0.001)]	[ND (0.003)]	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.003)	ND (0.003)	ND (0.001)	[ND (0.002)]	ND (0.0005)	[ND (0.001)]	[ND (0.001)]	[ND (0.003)]

**Notes:**  
 All concentrations are in milligrams per litre (mg/L).  
 ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.  
 \*Standard based on estimated solubility.  
 1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances Pollution Control" Regulations as amended through May 2004.  
 2. Data reported from Analytical Laboratory & Consultants, Oregon Lab Reports #81714 through 81720 and 81126 through 81133 (Aug. 1997); Analytica Alaska Inc. Order A7-09-046 and Analytica Environmental Laboratory Order 97-09-069 (Sept. 1997); Columbia Analytical Services Inc., Anchorage, AK Service Request Orders A9800683 (Sept. 1998), A9800524 (July 1998), A9900271 and A9900238 (June 1999), A9900715 (Sept. 1999), and A9900854 (Nov. 1999); and North Creek Analytical, Portland, OR Files P005200 and P005488 (May 2000), P0K0452 (Nov. 2000), P1J0346 and P1J0528 (Oct. 2001), P2I0604 (Sept. 2002), P3I0738 (Sept. 2003), P4F0112 (June 2004), P4F0225 (June 2004), and P4F0455 (June 2004).

**TABLE 1**  
**Results of Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location SCN Date QA/QC	STANDARD <sup>1</sup>	MW97-7M	MW97-7M	MW97-7M	MW97-7M	MW97-7M	MW97-7M	MW97-7D	MW97-7D	MW97-7D	MW97-7D	MW97-7D	MW97-7D	MW97-7D	MW97-7D	MW97-7D	MW97-7D	MW97-7D	
		P0K0452-10 10-Nov-00	0878-04 27-Jul-01	0886-07 11-Oct-01	0903-15 20-Sep-02	8221-03 16-Sep-03	9029-12 1-Jun-04	A709046-11 6-Sep-97	A9800524-1 30-Jul-98	A9900271-2 15-Jun-99	A9900854-7 2-Nov-99	P005200-11 5-May-00	P0K0452-11 10-Nov-00	0878-05 27-Jul-01	0886-08 11-Oct-01	0905-01 20-Sep-02	8221-04 16-Sep-03	9030-01 1-Jun-04	
<b>BTEX</b>																			
Benzene	0.005	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	
Ethylbenzene	0.7	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	
Toluene	1.0	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	
Xylene (total m,p,o)	10.0	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)	
<b>Petroleum Hydrocarbons</b>																			
Diesel Range Organics (DRO)	1.5	ND (0.250)	0.381	ND (0.000156)	ND (0.250)	ND (0.250)	ND (0.320)	0.34	0.28	ND (0.100)	ND (0.1)	ND (0.250)	ND (0.250)	1.03	ND (0.000156)	ND (0.250)	ND (0.250)	ND (0.320)	
Gasoline Range Organics (GRO)	1.3*	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	-	ND (0.05)	ND (0.050)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	
Residual Range Organics (RRO)	1.1	-	-	-	-	-	ND (0.400)	-	-	ND (1)	ND (1.0)	ND (0.500)	-	-	-	-	-	ND (0.400)	
<b>Volatile Organic Compounds (VOCs)</b>																			
Benzene	0.005	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)	
1,1-Dichloroethane	3.65	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)	
1,1-Dichloroethene	0.007	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)	
cis-1,2-Dichloroethene	0.07	ND (0.001)	ND (0.001)	ND (0.000187)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000187)	ND (0.001)	ND (0.001)	ND (0.001)	
Ethylbenzene	0.7	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)	
Methylene Chloride	0.005	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	0.0083	ND (0.005)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	
Naphthalene	0.7	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.005)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.001)	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)	
Styrene	0.1	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)	
Tetrachloroethene (PCE)	0.005	0.00179	0.00235	0.00251	0.00187	0.00109	ND (0.001)	0.0034	0.0019	0.0018	0.0017	0.00179	0.00143	0.00136	0.00183	0.00131	ND (0.001)	ND (0.001)	
Toluene	1.0	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)	
1,1,1-Trichloroethane (TCA)	0.2	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)	
Trichloroethene (TCE)	0.005	0.00132	0.00242	0.00258	0.00277	0.0023	ND (0.001)	ND (0.003)	0.0008	0.0015	0.0013	0.00208	0.00107	0.00159	0.00186	0.00171	0.00149	ND (0.001)	
Vinyl Chloride	0.002	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.002)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)	
Total Xylene [Calc.]	10.0	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)	[ND (0.002)]	ND (0.0005)	[ND (0.001)]	[ND (0.001)]	[ND (0.003)]	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)	

**Notes:**  
 All concentrations are in milligrams per litre (mg/L).  
 ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.  
 \*Standard based on estimated solubility.  
 1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances Pollution Control" Regulations as amended through May 2004.  
 2. Data reported from Analytical Laboratory & Consultants, Oregon Lab Reports #81714 through 81720 and 81126 through 81133 (Aug. 1997); Analytica Alaska Inc. Order A7-09-046 and Analytica Environmental Laboratory Order 97-09-069 (Sept. 1997); Columbia Analytical Services Inc., Anchorage, AK Service Request Orders A9800683 (Sept. 1998), A9800524 (July 1998), A9900271 and A9900238 (June 1999), A9900715 (Sept. 1999), and A9900854 (Nov. 1999); and North Creek Analytical, Portland, OR Files P005200 and P005488 (May 2000), P0K0452 (Nov. 2000), P1J0346 and P1J0528 (Oct. 2001), P2I0604 (Sept. 2002), P3I0738 (Sept. 2003), P4F0112 (June 2004), P4F0225 (June 2004), and P4F0455 (June 2004).

**TABLE 1**  
**Results of Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location SCN Date QA/QC	STANDARD <sup>1</sup>	MW98-1	MW98-1	MW98-1	MW98-1	MW-98-1	MW98-1	MW98-1	MW98-1	MW98-1	MW98-1	MW98-2	MW98-2	MW98-2	MW-98-2	MW98-2	MW98-2	MW98-2	MW98-2	MW98-2	
		A9800683-1 1-Sep-98	A9900238-5 10-Jun-99	A9900854-5 2-Nov-99	P005200-14 6-May-00	P0K0452-12 14-Nov-00	0862-10 29-Jun-01	0885-07 8-Oct-01	0903-05 19-Sep-02	8220-05 15-Sep-03	9029-08 1-Jun-04	A9900271-5 15-Jun-99	A9900854-4 2-Nov-99	P005200-15 8-May-00	P0K0452-13 10-Nov-00	0878-03 27-Jul-01	0885-03 7-Oct-01	0903-04 19-Sep-02	8220-04 15-Sep-03	9029-02 28-May-04	
<b>BTEX</b>																					
Benzene	0.005	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	
Ethylbenzene	0.7	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	
Toluene	1.0	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	-	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)	
Xylene (total m,p,o)	10.0	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)	
<b>Petroleum Hydrocarbons</b>																					
Diesel Range Organics (DRO)	1.5	-	ND (0.1)	0.41	ND (0.250)	ND (0.250)	ND (0.250)	ND (0.125)	ND (0.250)	ND (0.250)	ND (0.320)	ND (0.100)	ND (0.1)	ND (0.250)	ND (0.250)	ND (0.250)	ND (0.125)	ND (0.250)		ND (0.320)	
Gasoline Range Organics (GRO)	1.3*	-	ND (0.050)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.050)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	
Residual Range Organics (RRO)	1.1	-	ND (1)	ND (1.0)	ND (0.500)	-	-	-	-	-	ND (0.400)	ND (1)	ND (1.0)	ND (0.500)	-	-	-	-	-	ND (0.400)	
<b>Volatile Organic Compounds (VOCs)</b>																					
Benzene	0.005	-	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)	
1,1-Dichloroethane	3.65	-	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)	
1,1-Dichloroethene	0.007	-	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)	
cis-1,2-Dichloroethene	0.07	-	ND (0.0005)	ND (0.0005)	0.00306	0.0327	0.00231	0.0129	0.00439	0.0026	0.00529	ND (0.0005)	0.029	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000187)	ND (0.001)	ND (0.001)	ND (0.001)	
Ethylbenzene	0.7	-	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)	
Methylene Chloride	0.005	-	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.001)	ND (0.001)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	
Naphthalene	0.7	-	ND (0.002)	ND (0.002)	ND (0.001)	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.001)	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)	
Styrene	0.1	-	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)	
Tetrachloroethene (PCE)	0.005	-	ND (0.0005)	ND (0.0005)	ND (0.001)	0.00316	ND (0.001)	ND (0.00027)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	0.0062	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00027)	ND (0.001)	ND (0.001)	ND (0.001)	
Toluene	1.0	-	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)	
1,1,1-Trichloroethane (TCA)	0.2	-	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)	
Trichloroethene (TCE)	0.005	-	0.0019	ND (0.0005)	0.00551	0.0277	0.00532	0.015	0.0107	0.00598	0.0197	ND (0.0005)	0.026	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.000359)	ND (0.001)	ND (0.001)	ND (0.001)	
Vinyl Chloride	0.002	-	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.0005)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.001)	ND (0.001)	
Total Xylene [Calc.]	10.0	-	[ND (0.001)]	[ND (0.001)]	[ND (0.003)]	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)	[ND (0.001)]	[ND (0.001)]	[ND (0.003)]	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)	

**Notes:**

All concentrations are in milligrams per litre (mg/L).

ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.

\*Standard based on estimated solubility.

1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances Pollution Control" Regulations as amended through May 2004.

2. Data reported from Analytical Laboratory & Consultants, Oregon Lab Reports #81714 through 81720 and 81126 through 81133 (Aug. 1997); Analytica Alaska Inc. Order A7-09-046 and Analytica Environmental Laboratory Order 97-09-069 (Sept. 1997); Columbia Analytical Services Inc., Anchorage, AK Service Request Orders A9800683 (Sept. 1998), A9800524 (July 1998), A9900271 and A9900238 (June 1999), A9900715 (Sept. 1999), and A9900854 (Nov. 1999); and North Creek Analytical, Portland, OR Files P005200 and P005488 (May 2000), P0K0452 (Nov. 2000), P1J0346 and P1J0528 (Oct. 2001), P2I0604 (Sept. 2002), P3I0738 (Sept. 2003), P4F0112 (June 2004), P4F0225 (June 2004), and P4F0455 (June 2004).

**TABLE 1**  
**Results of Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location	SCN	Date	QA/QC	MW00-31	MW00-31	MW00-31	MW00-31	MW00-31	MW00-31	MW00-32	MW00-32	MW00-32	MW00-32	MW00-32	MW00-32	MW00-33	MW00-33	MW00-33	MW00-33	MW00-33	MW00-33
				STANDARD <sup>1</sup>	P0K0452-14	0878-02	0885-02	0903-06	8220-06	9029-05	P0K0452-14	0878-01	0885-05	0903-07	8220-07	9029-06	P0K0452-16	0862-13	0885-04	0903-08	8220-08
				10-Nov-00	27-Jul-01	5-Oct-01	19-Sep-02	15-Sep-03	29-May-04	10-Nov-00	27-Jul-01	7-Oct-01	19-Sep-02	15-Sep-03	29-May-04	10-Nov-00	29-Jun-01	7-Oct-01	19-Sep-02	15-Sep-03	1-Jun-04
<b>BTEX</b>																					
Benzene	0.005	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)										
Ethylbenzene	0.7	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)										
Toluene	1.0	ND (0.0005)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0003)	ND (0.0005)	ND (0.0005)	ND (0.0005)										
Xylene (total m,p,o)	10.0	ND (0.001)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.0006)	ND (0.001)	ND (0.001)	ND (0.001)										
<b>Petroleum Hydrocarbons</b>																					
Diesel Range Organics (DRO)	1.5	0.626	ND (0.250)	ND (0.125)	ND (0.250)	ND (0.250)	0.420	1.28	0.381	0.790	ND (0.250)	ND (0.250)	ND (0.320)	ND (0.250)	ND (0.250)	ND (0.125)	ND (0.250)	ND (0.250)	ND (0.250)	ND (0.250)	ND (0.320)
Gasoline Range Organics (GRO)	1.3*	0.137	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	0.0851	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.05)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.08)	ND (0.08)				
Residual Range Organics (RRO)	1.1	-	-	-	-	-	0.583	-	-	-	-	-	ND (0.400)	-	-	-	-	-	-	-	ND (0.400)
<b>Volatile Organic Compounds (VOCs)</b>																					
Benzene	0.005	ND (0.001)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.000121)	ND (0.001)	ND (0.001)	ND (0.001)										
1,1-Dichloroethane	3.65	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.000214)	ND (0.001)	ND (0.001)	ND (0.001)										
1,1-Dichloroethene	0.007	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.000151)	ND (0.001)	ND (0.001)	ND (0.001)										
cis-1,2-Dichloroethene	0.07	ND (0.001)	ND (0.001)	ND (0.000187)	ND (0.001)	ND (0.000187)	ND (0.001)	ND (0.000187)	ND (0.001)	ND (0.001)	ND (0.001)										
Ethylbenzene	0.7	ND (0.001)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.000143)	ND (0.001)	ND (0.001)	ND (0.001)										
Methylene Chloride	0.005	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)										
Naphthalene	0.7	ND (0.002)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.000104)	ND (0.002)	ND (0.002)	ND (0.002)										
Styrene	0.1	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.000154)	ND (0.001)	ND (0.001)	ND (0.001)										
Tetrachloroethene (PCE)	0.005	ND (0.001)	ND (0.001)	ND (0.00027)	ND (0.001)	ND (0.00027)	ND (0.001)	ND (0.00027)	0.00429	0.00227	0.00508										
Toluene	1.0	ND (0.001)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.000115)	ND (0.001)	ND (0.001)	ND (0.001)										
1,1,1-Trichloroethane (TCA)	0.2	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.0001)	ND (0.001)	ND (0.001)	ND (0.001)										
Trichloroethene (TCE)	0.005	ND (0.001)	ND (0.001)	ND (0.000359)	ND (0.001)	ND (0.000359)	ND (0.001)	ND (0.000359)	0.0158	0.0338	0.0338										
Vinyl Chloride	0.002	ND (0.001)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.00031)	ND (0.001)	ND (0.00031)	0.0156	0.0102	0.0106										
Total Xylene [Calc.]	10.0	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)	ND (0.003)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.000353)	ND (0.003)	ND (0.003)	ND (0.001)						

**Notes:**  
 All concentrations are in milligrams per litre (mg/L).  
 ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.  
 \*Standard based on estimated solubility.  
 1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances Pollution Control" Regulations as amended through May 2004.  
 2. Data reported from Analytical Laboratory & Consultants, Oregon Lab Reports #81714 through 81720 and 81126 through 81133 (Aug. 1997); Analytica Alaska Inc. Order A7-09-046 and Analytica Environmental Laboratory Order 97-09-069 (Sept. 1997); Columbia Analytical Services Inc., Anchorage, AK Service Request Orders A9800683 (Sept. 1998), A9800524 (July 1998), A9900271 and A9900238 (June 1999), A9900715 (Sept. 1999), and A9900854 (Nov. 1999); and North Creek Analytical, Portland, OR Files P005200 and P005488 (May 2000), P0K0452 (Nov. 2000), P1J0346 and P1J0528 (Oct. 2001), P210604 (Sept. 2002), P310738 (Sept. 2003), P4F0112 (June 2004), P4F0225 (June 2004), and P4F0455 (June 2004).

**TABLE 1**  
**Results of Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location SCN Date QA/QC	STANDARD <sup>1</sup>	MW00-34	MW00-34	MW00-34	MW00-35	MW00-35	MW00-35	AS-2	AS-4	AS-6	AS-8	AS-10	AS-10	AS-12
		P0K0452-17 14-Nov-00	0862-09 29-Jun-01	0885-06 7-Oct-01	P0K0452-18 14-Nov-00	0862-08 29-Jun-01	0886-04 11-Oct-01	9030-08 4-Jun-04	9030-09 4-Jun-04	9030-10 4-Jun-04	9030-11 4-Jun-04	9031-01 9-Jun-04 FDA	9031-02 9-Jun-04 FD	9031-03 9-Jun-04
<b>BTEX</b>														
Benzene	0.005	ND (0.0005)	ND (0.0005)	ND (0.0003)	0.0779	0.0335	0.0268	ND (0.0005)	ND (0.0005)	ND (0.0005)				
Ethylbenzene	0.7	ND (0.0005)	ND (0.0005)	ND (0.0003)	0.0611	0.106	0.09	ND (0.0005)	ND (0.0005)	ND (0.0005)				
Toluene	1.0	ND (0.0005)	ND (0.0005)	ND (0.0003)	0.19	0.0247	0.0227	ND (0.0005)	ND (0.0005)	ND (0.0005)				
Xylene (total m,p,o)	10.0	ND (0.001)	ND (0.001)	ND (0.0006)	0.761	0.222	0.335	ND (0.001)	ND (0.001)	ND (0.001)				
<b>Petroleum Hydrocarbons</b>														
Diesel Range Organics (DRO)	1.5	ND (0.250)	ND (0.250)	ND (0.125)	5.15	3.25	3.49	ND (0.320)	ND (0.320)	ND (0.320)				
Gasoline Range Organics (GRO)	1.3*	ND (0.08)	ND (0.08)	0.0977	5.34	2.06	4.07	ND (0.08)	ND (0.08)	ND (0.08)				
Residual Range Organics (RRO)	1.1	-	-	-	-	-	-	ND (0.400)	ND (0.400)	ND (0.400)				
<b>Volatile Organic Compounds (VOCs)</b>														
Benzene	0.005	ND (0.001)	ND (0.001)	ND (0.000121)	0.0599	0.0281	0.0258	ND (0.001)	ND (0.001)	ND (0.001)				
1,1-Dichloroethane	3.65	ND (0.001)	ND (0.001)	ND (0.000214)	ND (0.005)	ND (0.002)	ND (0.000428)	ND (0.001)	ND (0.001)	ND (0.001)				
1,1-Dichloroethene	0.07	ND (0.001)	ND (0.001)	ND (0.000151)	ND (0.005)	ND (0.002)	ND (0.000302)	ND (0.001)	ND (0.001)	ND (0.001)				
cis-1,2-Dichloroethene	0.07	0.0197	0.0303	0.0222	0.00655	0.0137	0.0073	0.0046	0.00222	0.00257	ND (0.001)	0.0012	0.0013	ND (0.001)
Ethylbenzene	0.7	ND (0.001)	ND (0.001)	ND (0.000143)	0.204	0.118	0.118	ND (0.001)	ND (0.001)	ND (0.001)				
Methylene Chloride	0.005	ND (0.005)	ND (0.005)	ND (0.002)	ND (0.025)	ND (0.01)	ND (0.004)	ND (0.005)	ND (0.005)	ND (0.005)				
Naphthalene	0.7	ND (0.002)	ND (0.002)	ND (0.000104)	0.0545	0.0361	0.0443	ND (0.002)	ND (0.002)	ND (0.002)				
Styrene	0.1	ND (0.001)	ND (0.001)	ND (0.000154)	ND (0.005)	ND (0.002)	ND (0.000308)	ND (0.001)	ND (0.001)	ND (0.001)				
Tetrachloroethene (PCE)	0.005	0.00469	0.0056	0.00437	ND (0.005)	ND (0.002)	ND (0.00054)	ND (0.001)	ND (0.001)	ND (0.001)				
Toluene	1.0	ND (0.001)	ND (0.001)	ND (0.000115)	0.0492	0.0219	0.0268	ND (0.001)	ND (0.001)	ND (0.001)				
1,1,1-Trichloroethane (TCA)	0.2	ND (0.001)	ND (0.001)	ND (0.0001)	ND (0.005)	ND (0.002)	ND (0.0002)	ND (0.001)	ND (0.001)	ND (0.001)				
Trichloroethene (TCE)	0.005	0.0278	0.0578	0.0354	ND (0.005)	0.0028	ND (0.000718)	0.00762	0.00427	0.00509	ND (0.001)	0.00283	0.00287	0.00141
Vinyl Chloride	0.002	ND (0.001)	ND (0.001)	ND (0.00031)	0.0052	0.00778	0.00392	ND (0.001)	ND (0.001)	ND (0.001)				
Total Xylene [Calc.]	10.0	ND (0.003)	ND (0.003)	ND (0.000353)	0.763	0.2625	0.441	ND (0.001)	ND (0.001)	ND (0.001)				

**Notes:**

All concentrations are in milligrams per litre (mg/L).

ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.

\*Standard based on estimated solubility.

1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances Pollution Control" Regulations as amended through May 2004.
2. Data reported from Analytical Laboratory & Consultants, Oregon Lab Reports #81714 through 81720 and 81126 through 81133 (Aug. 1997); Analytica Alaska Inc. Order A7-09-046 and Analytica Environmental Laboratory Order 97-09-069 (Sept. 1997); Columbia Analytical Services Inc., Anchorage, AK Service Request Orders A9800683 (Sept. 1998), A9800524 (July 1998), A9900271 and A9900238 (June 1999), A9900715 (Sept. 1999), and A9900854 (Nov. 1999); and North Creek Analytical, Portland, OR Files P005200 and P005488 (May 2000), P0K0452 (Nov. 2000), P1J0346 and P1J0528 (Oct. 2001), P2I0604 (Sept. 2002), P3I0738 (Sept. 2003), P4F0112 (June 2004), P4F0225 (June 2004), and P4F0455 (June 2004).

**TABLE 2**  
**Water Level Elevations**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass & Yukon Route**

Monitoring Well Location	TOC Elevation (ft) <sup>(2)</sup>	Depth to Water (ft) <sup>(3)</sup>	Water Table Elevation (ft)
MW-1A <sup>HC</sup>	69.17	6.82	62.35
MW-1 <sup>HC</sup>	68.93	10.53	58.40
MW-2 <sup>HC</sup>	76.94	10.07	66.87
MW-3 <sup>HC</sup>	75.14	5.53	69.61
MW-4 <sup>HC</sup>	-	6.43	-
MW97-1	74.72	9.81	64.91
MW97-2	77.02	8.97	68.05
MW97-6M	76.80	10.40	66.40
MW97-6D	76.82	12.22	64.60
MW97-7S	74.24	9.12	65.12
MW97-7M	73.65	8.76	64.89
MW97-7D	73.61	8.96	64.65
MW98-1	76.64	8.78	67.86
MW98-2	87.22	11.63	75.59
MW00-31	88.46	15.17	73.29
MW00-32	83.98	11.71	72.27
MW00-33	83.36	11.61	71.75

**Notes:**

1. 0.2 inch layer of product was detected at MW97-3
2. TOC = Top of Well Casing
3. Depth to Water Measured from TOC
4. Water level measurements recorded during May/June groundwater sampling program

**TABLE 3**  
**QA/QC Results for Chemical Analysis - Groundwater**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location	SCN	STANDARD <sup>1</sup>	MW97-1	MW97-1	RPD	IAS 10	IAS 10	RPD
			9030-06	9030-07	%	9031-01	9031-02	%
Date			3-Jun-04	3-Jun-04		9-Jun-04	9-Jun-04	
QA/QC			FDA	FD		FDA	FD	
<b>BTEX</b>								
Benzene		<b>0.005</b>	0.00261	0.0026	0.38	ND (0.0005)	ND (0.0005)	nc
Ethylbenzene		<b>0.7</b>	0.0117	0.0125	6.61	ND (0.0005)	ND (0.0005)	nc
Toluene		<b>1.0</b>	ND (0.0005)	ND (0.0005)	nc	ND (0.0005)	ND (0.0005)	nc
Xylene (total m,p,o)		<b>10.0</b>	ND (0.001)	ND (0.001)	nc	ND (0.001)	ND (0.001)	nc
<b>Petroleum Hydrocarbons</b>								
Diesel Range Organics (DRO)		<b>1.5</b>	<b>2.98</b>	<b>2.96</b>	0.67	ND (0.320)	ND (0.320)	nc
Gasoline Range Organics (GRO)		<b>1.3*</b>	ND (0.08)	ND (0.08)	nc	ND (0.08)	ND (0.08)	nc
Residual Range Organics (RRO)		<b>1.1</b>	<b>3.57</b>	ND (0.400)	nc	ND (0.400)	ND (0.400)	nc
<b>Volatile Organic Compounds (VOCs)</b>								
Benzene		<b>0.005</b>	0.00208	0.00212	1.90	ND (0.001)	ND (0.001)	nc
1,1-Dichloroethane		<b>3.65</b>	ND (0.001)	ND (0.001)	nc	ND (0.001)	ND (0.001)	nc
1,1-Dichloroethene		<b>0.007</b>	ND (0.001)	ND (0.001)	nc	ND (0.001)	ND (0.001)	nc
cis-1,2-Dichloroethene		<b>0.07</b>	0.00394	0.00425	7.57	0.0012	0.0013	8.00
Ethylbenzene		<b>0.7</b>	0.0108	0.0111	2.74	ND (0.001)	ND (0.001)	nc
Methylene Chloride		<b>0.005</b>	ND (0.005)	ND (0.005)	nc	ND (0.005)	ND (0.005)	nc
Naphthalene		<b>0.7</b>	ND (0.002)	ND (0.002)	nc	ND (0.002)	ND (0.002)	nc
Styrene		<b>0.1</b>	ND (0.001)	ND (0.001)	nc	ND (0.001)	ND (0.001)	nc
Tetrachloroethene (PCE)		<b>0.005</b>	ND (0.001)	ND (0.001)	nc	ND (0.001)	ND (0.001)	nc
Toluene		<b>1.0</b>	ND (0.001)	ND (0.001)	nc	ND (0.001)	ND (0.001)	nc
1,1,1-Trichloroethane (TCA)		<b>0.2</b>	ND (0.001)	ND (0.001)	nc	ND (0.001)	ND (0.001)	nc
Trichloroethene (TCE)		<b>0.005</b>	0.00193	0.00187	3.16	0.00283	0.00287	1.40
Vinyl Chloride		<b>0.002</b>	0.00143	0.00138	3.56	ND (0.001)	ND (0.001)	nc
Total Xylene [Calc.]		<b>10.0</b>	0.00154	ND (0.001)	nc	ND (0.001)	ND (0.001)	nc

**Notes:**

All concentrations are in milligrams per litre (mg/L).

ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.

RPD - Relative Percent Difference

nc - not calculated as one or both concentrations were below the MRL

\*Standard based on estimated solubility.

1. Table C of "18 AAC 75, Articles 3 and 9, Oil and Other Hazardous Substances

Pollution Control" Regulations as amended through May 2004.

2. Data reported from North Creek Analytical, Portland OR File P4F0225 (June 2004).

**TABLE 4**  
Results of Chemical Analysis - Product in MW97-3  
Maintenance Yard Shops, Skagway, AK  
White Pass Yukon Route

Location SCN Date	MW97-3 (Product) 9030-05 2-Jun-04
<b><i>Volatile Organic Compounds (VOCs)</i></b>	
1,1,1,2-Tetrachloroethane	ND (10)
1,1,1-Trichloroethane (TCA)	ND (10)
1,1,2,2-Tetrachloroethane	ND (10)
1,1,2-Trichloroethane	ND (10)
1,1-Dichloroethane	ND (10)
1,1-Dichloroethene	ND (10)
1,1-Dichloropropene	ND (10)
1,2,3-Trichlorobenzene	ND (10)
1,2,3-Trichloropropane	ND (10)
1,2,4-Trichlorobenzene	ND (10)
1,2,4-Trimethylbenzene	ND (10)
1,2-Dibromo-3-chloropropane	ND (50)
1,2-Dibromoethane	ND (10)
1,2-Dichlorobenzene	ND (10)
1,2-Dichloroethane	ND (10)
1,2-Dichloropropane	ND (10)
1,3,5-Trimethylbenzene	19.2
1,3-Dichlorobenzene	ND (10)
1,3-Dichloropropane	ND (10)
1,4-Dichlorobenzene	ND (10)
2,2-Dichloropropane	ND (10)
2-Butanone	ND (100)
2-Chlorotoluene	ND (10)
2-Hexanone	ND (100)
4-Chlorotoluene	ND (10)
4-Methyl-2-pentanone	ND (50)
Acetone	ND (250)
Benzene	ND (10)
Bromobenzene	ND (10)
Bromochloromethane	ND (10)
Bromodichloromethane	ND (10)
Bromoform	ND (10)
Bromomethane	ND (50)
Carbon disulfide	ND (100)
Carbon tetrachloride	ND (10)
Chlorobenzene	ND (10)
Chloroethane	ND (10)
Chloroform	ND (10)
Chloromethane	ND (50)
cis-1,2-Dichloroethene	ND (10)
cis-1,3-Dichloropropene	ND (10)
Dibromochloromethane	ND (10)
Dibromomethane	ND (10)
Dichlorodifluoromethane	ND (50)
Ethylbenzene	ND (10)
Hexachlorobutadiene	ND (20)
Isopropylbenzene	ND (20)
m,p-Xylene	ND (20)
Methyl tert-butyl ether	ND (10)
Methylene chloride	ND (50)
n-Butylbenzene	ND (50)
n-Propylbenzene	ND (10)
Naphthalene	ND (20)
o-Xylene	ND (10)
p-Isopropyltoluene	ND (20)
sec-Butylbenzene	ND (10)
Styrene	ND (10)
tert-Butylbenzene	10.2
Tetrachloroethene (PCE)	15.6
Toluene	ND (10)
trans-1,2-Dichloroethene	ND (10)
trans-1,3-Dichloropropene	ND (10)
Trichloroethene (TCE)	ND (10)
Trichlorofluoromethane	ND (10)
Vinyl chloride	ND (10)
Total Xylene [Calc.]	ND(20)

**Notes:**

All concentrations are in milligrams per kilogram (mg/kg).

ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.

Data reported from North Creek Analytical, Portland OR File P4F0225 (June 2004).

**TABLE 5**  
**Results of Chemical Analysis - Spring**  
**Maintenance Yard Shops, Skagway, AK**  
**White Pass Yukon Route**

Location SCN Date	Spring 9030-12 5-Jun-04
<b>BTEX</b>	
Benzene	ND (0.0005)
Ethylbenzene	ND (0.0005)
Toluene	ND (0.0005)
Xylene (total m,p,o)	ND (0.001)
<b>Petroleum Hydrocarbons</b>	
Diesel Range Organics (DRO)	ND (0.32)
Gasoline Range Organics (GRO)	ND (0.08)
Residual Range Organics (RRO)	ND (0.4)
<b>Volatile Organic Compounds (VOCs)</b>	
1,1,1,2-Tetrachloroethane	ND (0.001)
1,1,1-Trichloroethane (TCA)	ND (0.001)
1,1,2,2-Tetrachloroethane	ND (0.001)
1,1,2-Trichloroethane	ND (0.001)
1,1-Dichloroethane	ND (0.001)
1,1-Dichloroethene	ND (0.001)
1,1-Dichloropropene	ND (0.001)
1,2,3-Trichlorobenzene	ND (0.001)
1,2,3-Trichloropropane	ND (0.001)
1,2,4-Trichlorobenzene	ND (0.001)
1,2,4-Trimethylbenzene	ND (0.001)
1,2-Dibromo-3-chloropropane	ND (0.005)
1,2-Dibromoethane	ND (0.001)
1,2-Dichlorobenzene	ND (0.001)
1,2-Dichloroethane	ND (0.001)
1,2-Dichloropropane	ND (0.001)
1,3,5-Trimethylbenzene	ND (0.001)
1,3-Dichlorobenzene	ND (0.001)
1,3-Dichloropropane	ND (0.001)
1,4-Dichlorobenzene	ND (0.001)
2,2-Dichloropropane	ND (0.001)
2-Butanone	ND (0.01)
2-Chlorotoluene	ND (0.001)
2-Hexanone	ND (0.01)
4-Chlorotoluene	ND (0.001)
4-Methyl-2-pentanone	ND (0.005)
Acetone	ND (0.025)
Benzene	ND (0.001)
Bromobenzene	ND (0.001)
Bromochloromethane	ND (0.001)
Bromodichloromethane	ND (0.001)
Bromoform	ND (0.001)
Bromomethane	ND (0.005)
Carbon disulfide	ND (0.01)
Carbon tetrachloride	ND (0.001)
Chlorobenzene	ND (0.001)
Chloroethane	ND (0.001)
Chloroform	ND (0.001)
Chloromethane	ND (0.005)
cis-1,2-Dichloroethene	ND (0.001)
cis-1,3-Dichloropropene	ND (0.001)
Dibromochloromethane	ND (0.001)
Dibromomethane	ND (0.001)
Dichlorodifluoromethane	ND (0.005)
Ethylbenzene	ND (0.001)
Hexachlorobutadiene	ND (0.002)
Isopropylbenzene	ND (0.002)
m,p-Xylene	ND (0.002)
Methyl tert-butyl ether	ND (0.001)
Methylene chloride	ND (0.005)
n-Butylbenzene	ND (0.005)
n-Propylbenzene	ND (0.001)
Naphthalene	ND (0.002)
o-Xylene	ND (0.001)
p-Isopropyltoluene	ND (0.002)
sec-Butylbenzene	ND (0.001)
Styrene	ND (0.001)
tert-Butylbenzene	ND (0.001)
Tetrachloroethene (PCE)	ND (0.001)
Toluene	ND (0.001)
trans-1,2-Dichloroethene	ND (0.001)
trans-1,3-Dichloropropene	ND (0.001)
Trichloroethene (TCE)	ND (0.001)
Trichlorofluoromethane	ND (0.001)
Vinyl chloride	ND (0.001)
Total Xylene [Calc.]	ND(0.003)

**Notes:**

All concentrations are in milligrams per litre (mg/L).

ND (10) - Not detected at concentrations above laboratory reporting limit (LRL) shown in parentheses.

Data reported from North Creek Analytical, Portland OR File P4F0225 (June 2004).

**TABLE 6**  
**Soil Vapour Survey Results**  
**Shops - White Pass Yukon Route, Skagway AK**

		CH <sub>4</sub> (%)	CO <sub>2</sub> (%)	O <sub>2</sub> (%)	LEL (%)	OVM (ppm)	Barometric Pressure (in. Hg)
MW00-33	VP04-1	0	0.7	20.9	0	0	29.98
June 3, 2004	VP04-2	0	1.1	20.5	0	0	
	VP04-3	0	3.8	16.8	0	0	
	VP04-4	0	2	16.4	0	0	
	VP04-5	0	0.8	20.9	0	0	
	VP04-6	0	3.4	18.7	0	0	
	VP04-7	0	1.3	20.1	0	0	
	VP04-8	0	0.4	21.1	0	0	
	VP04-9	0	1.8	20.1	0	0	
MW98-1	VP04-10	0.1	0.8	21.3	1	0	29.64
June 4, 2004	VP04-11	0	2.1	19.2	0	0	
	VP04-12	0.1	8.3	2.6	1	34	
	VP04-13 <sup>a</sup>	-	-	-	-	-	
	VP04-14	0	2.2	19.8	0	0	
	VP04-15 <sup>b</sup>	0	0	21.9	0	0	
	VP04-16	0	3	18.8	0	0	
	VP04-17	0	7.5	4.8	0	0	
	VP04-18 <sup>b</sup>	0	0	20.8	0	0	

**Notes:**

Vapor Probe volume estimated @ 0.2 L, purged approximately 0.3 L @ 1 Lpm.

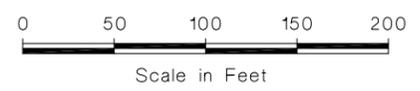
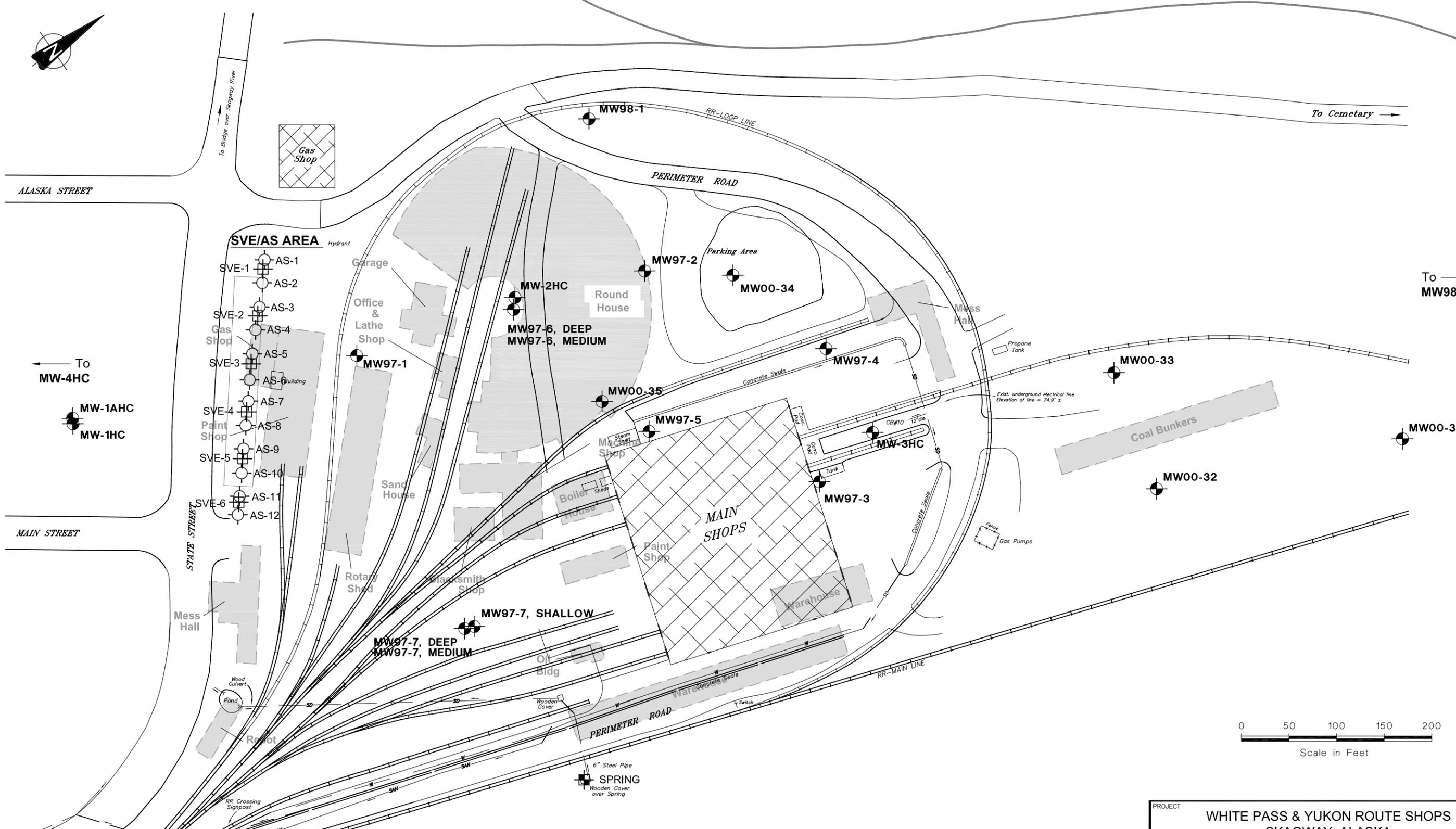
Organic Vapor content measured with Photovac PID; all other parameters measured with Landtec GEM 2000.

Vapor survey conducted at ambient temperature.

(a) VP04-13 was damaged after installation; no measurements taken during survey.

(b) Probe encountered concrete slab at 1.2 feet below grade.

SKAGWAY RIVER



REVISION DATE: 04/09/10 8:48am By: jkownacki  
 CADD FILE: N:\Bur-Graphics\Projects\1400\Older than 98\96-1412-853B\8300-10.dwg

**LEGEND:**

MW98-1	MONITORING WELL LOCATION BY GOLDER ASSOCIATES	AS-1	AIR SPARGING WELL LOCATION
MW-1HC	MONITORING WELL LOCATION BY HART CROWSER	SVE-2	SOIL VAPOUR EXTRACTION WELL LOCATION
SPRING	SPRING WATER SAMPLE LOCATION (JUNE 2004)		FORMER BUILDING OUTLINE

REFERENCE: BASEMAP FROM "SITE PLAN WHYTE PASS YARD SKAGWAY, ALASKA," BY UNDERHILL GEOMATICS LTD. NOV, 2000.

PROJECT				WHITE PASS & YUKON ROUTE SHOPS SKAGWAY, ALASKA			
TITLE				LOCATIONS OF MONITORING WELLS AND SVE/AS SYSTEM			
PROJECT No. 96-1412-853B		FILE No.		8300-10			
DESIGN	LK	02SEP04	SCALE	AS SHOWN	REV.		
CADD	JK	02SEP04					<b>FIGURE 1</b>
CHECK	LK	03SEP04					
REVIEW							

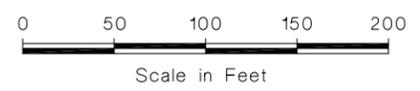
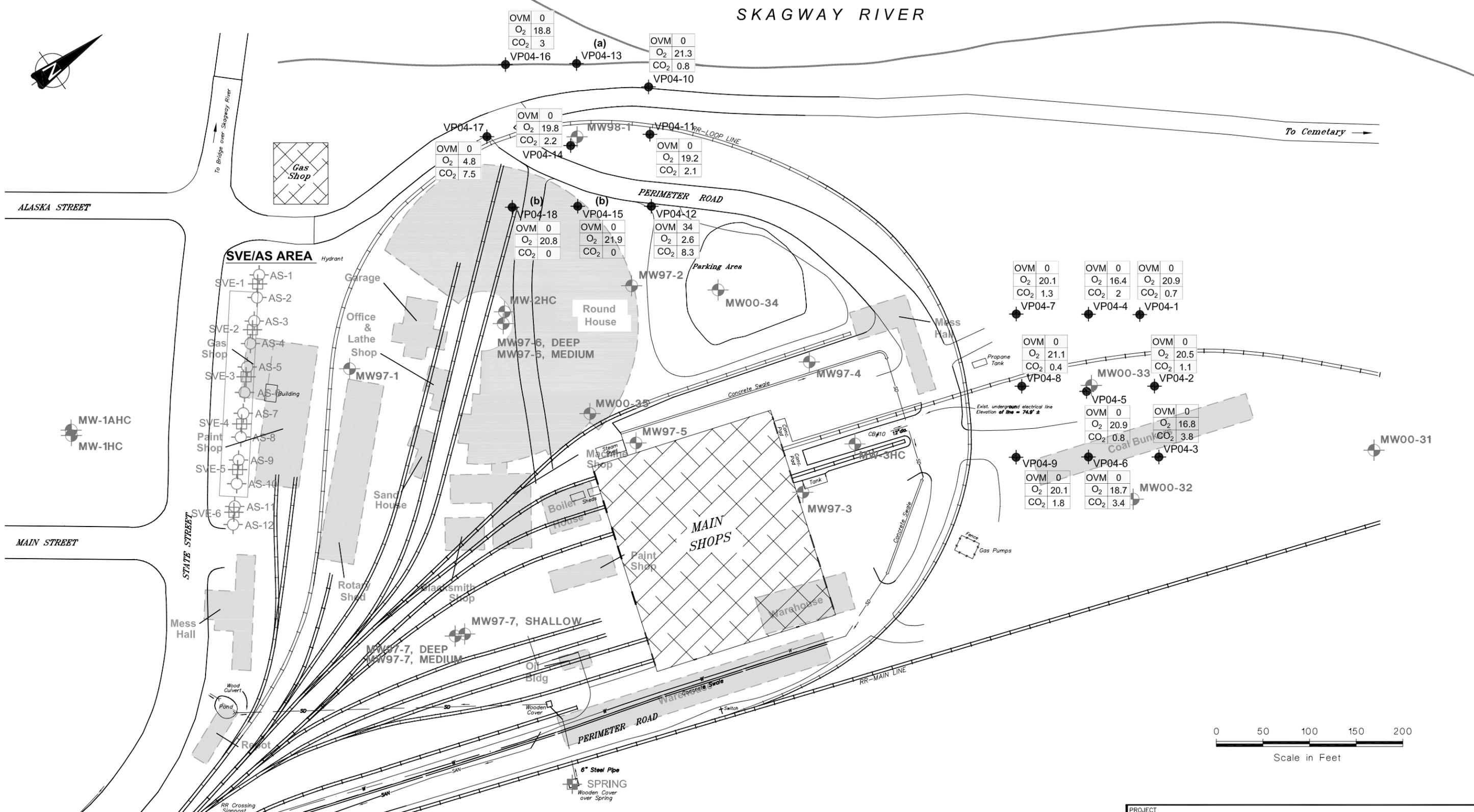








REVISION DATE: 04/09/2 1:41pm By: jkownacki  
 CADD FILE: N:\Bur-Graphics\Projects\1400\Older than 98\96-1412-853B\8300-10.dwg



- LEGEND:**
- MW98-1 MONITORING WELL LOCATION BY GOLDER ASSOCIATES
  - MW-1HC MONITORING WELL LOCATION BY HART CROWSER
  - VP04-3 SOIL VAPOR PROBE LOCATION
  - AS-1 AIR SPARGING WELL LOCATION
  - SVE-2 SOIL VAPOUR EXTRACTION WELL LOCATION
  - SPRING SPRING WATER SAMPLE LOCATION
  - FORMER BUILDING OUTLINE

OVM 0  
O<sub>2</sub> 20.1  
CO<sub>2</sub> 1.8

OVM VALUES EXPRESSED IN PPM  
O<sub>2</sub> AND CO<sub>2</sub> VALUES EXPRESSED IN %

(a) NO MEASUREMENTS TAKEN DUE TO DAMAGED PROBE  
(b) PROBE ENCOUNTERED CONCRETE SLAB

REFERENCE: BASEMAP FROM "SITE PLAN WHYTE PASS YARD SKAGWAY, ALASKA," BY UNDERHILL GEOMATICS LTD. NOV, 2000.

PROJECT				WHITE PASS & YUKON ROUTE SHOPS SKAGWAY, ALASKA			
TITLE				SOIL VAPOR SURVEY LOCATIONS OF VAPOR PROBES			
PROJECT No. 96-1412-853B		FILE No.		8300-10			
DESIGN	LK	02SEP04	SCALE	AS SHOWN	REV.		
CADD	JK	02SEP04					<b>FIGURE 5</b>
CHECK	LK	03SEP04					
REVIEW							

Figure 6 Concentration of TCE in Groundwater over Time

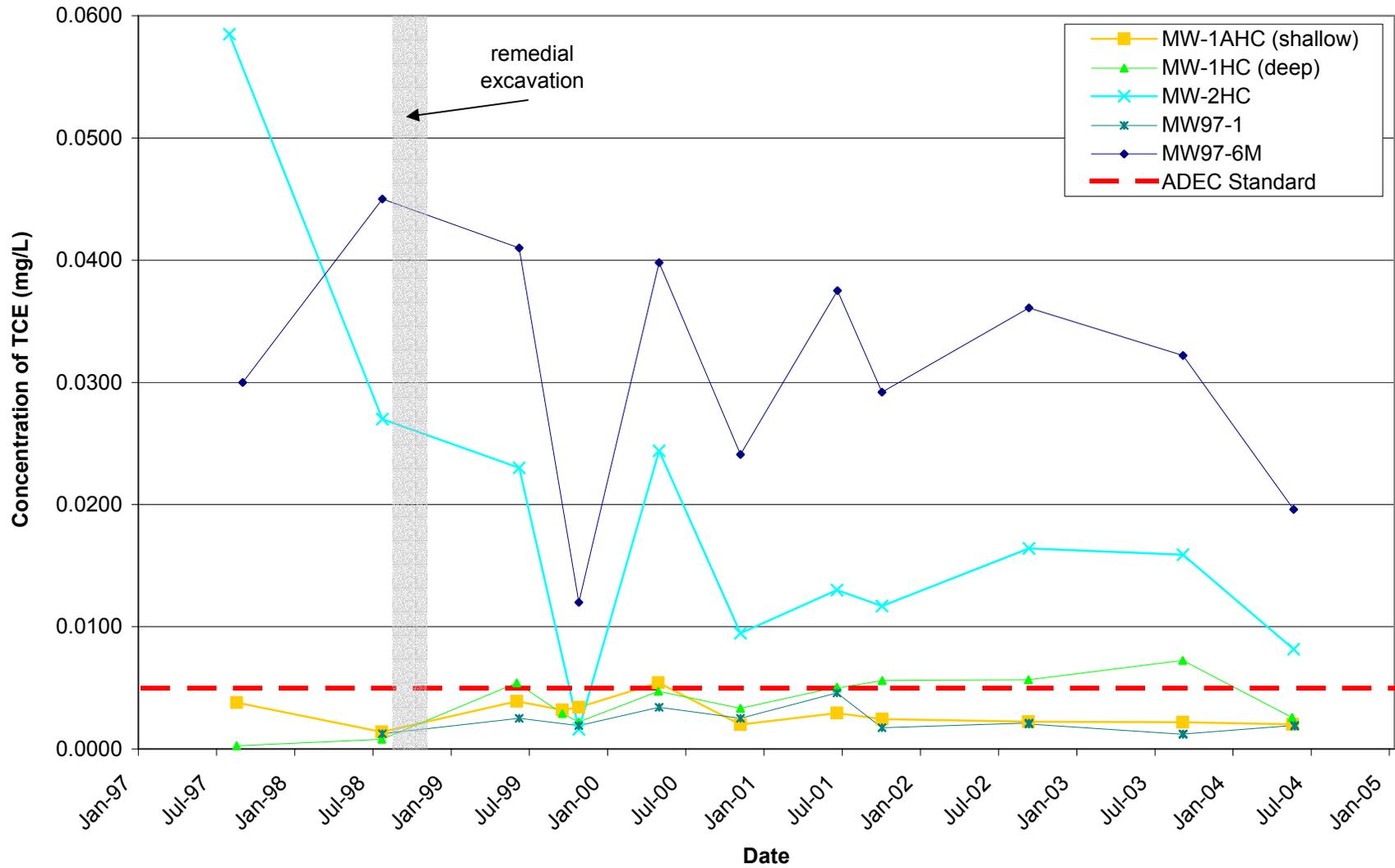
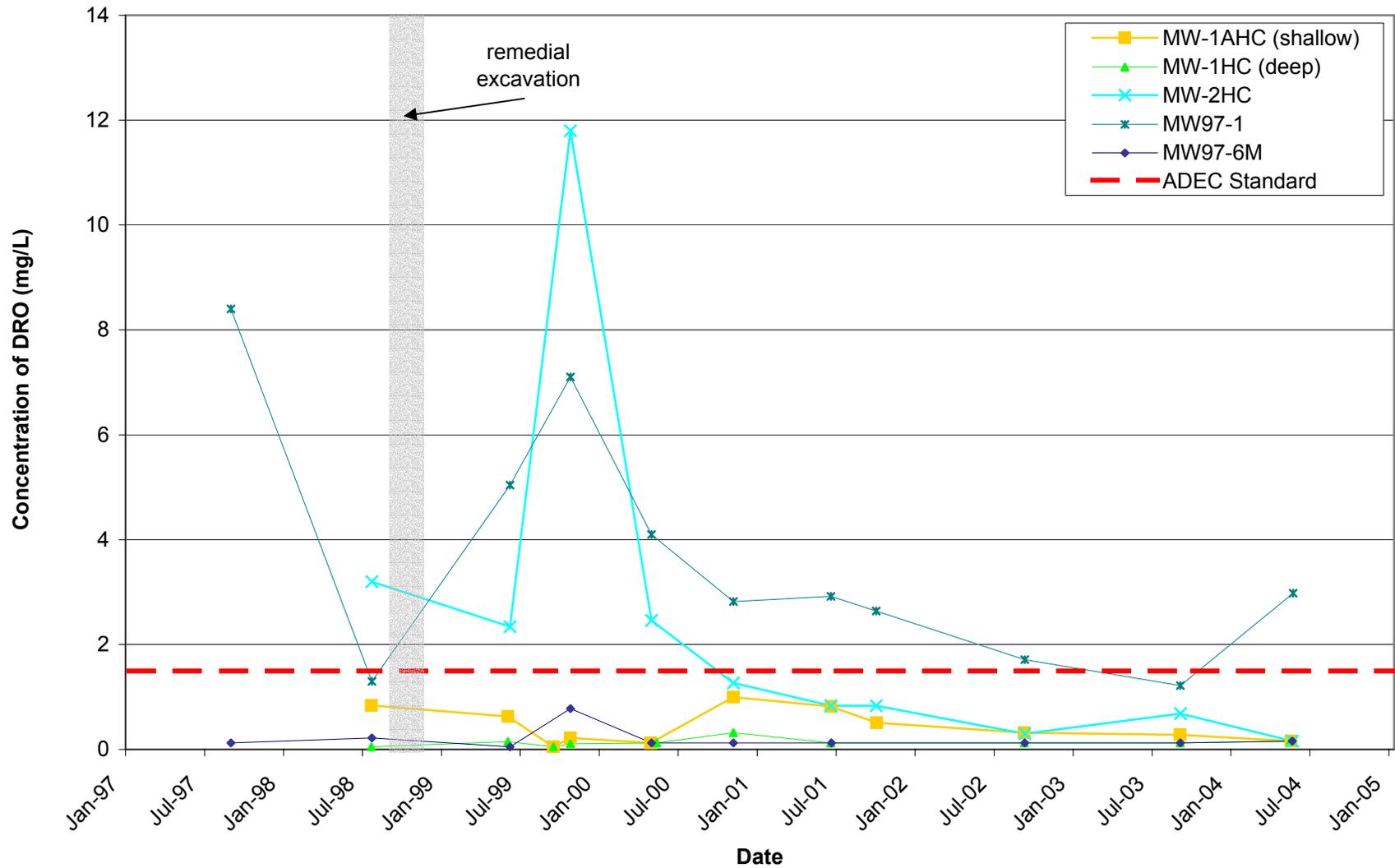


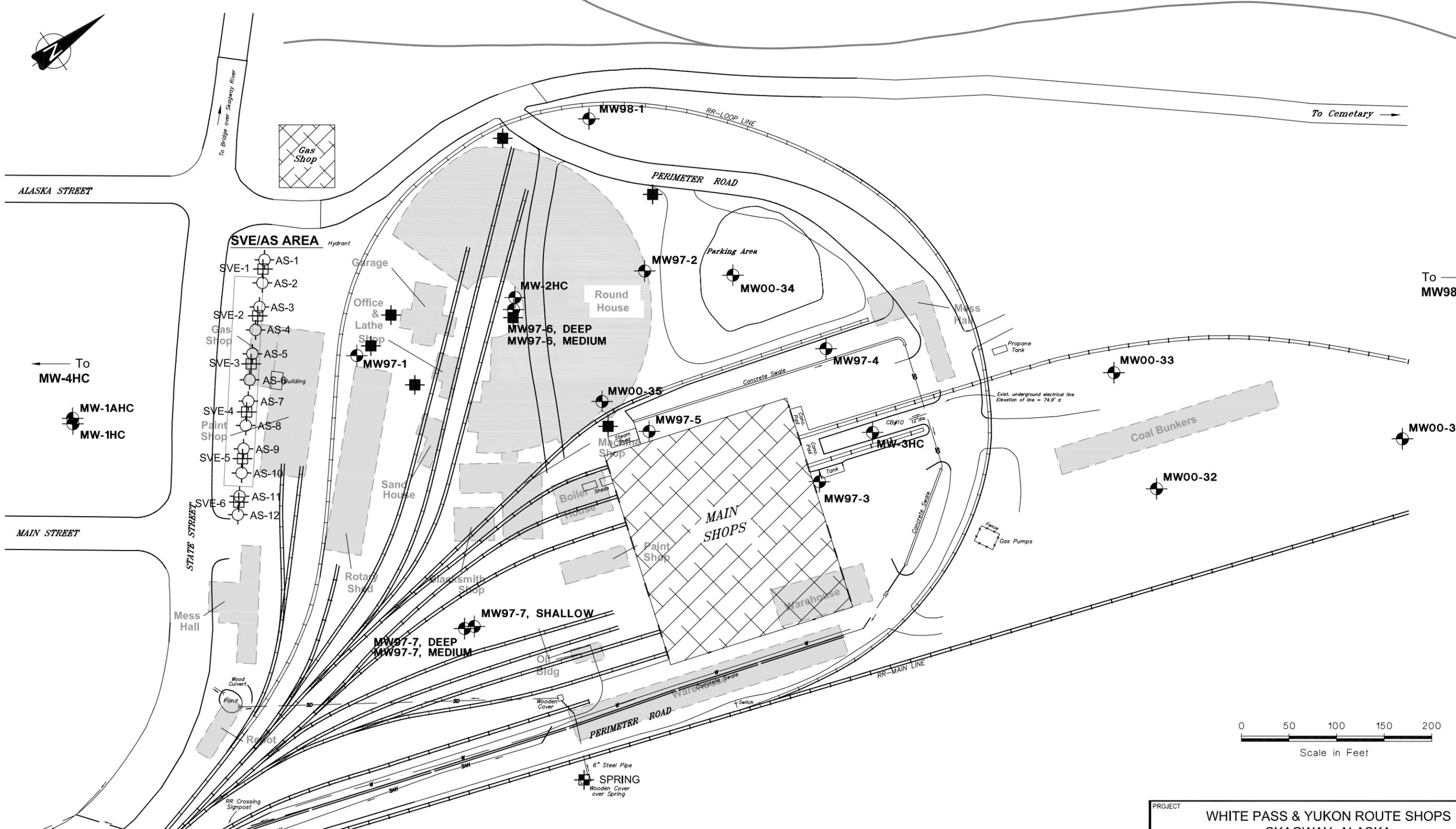
Figure 7 Concentration of DRO in Groundwater over Time



SKAGWAY RIVER



REVISION DATE: 04/09/10 8:48am By: jkownacki  
 CADD FILE: N:\Bur-Graphics\Projects\1400\Older than 98\96-1412-853B\8300-10.dwg



LEGEND:

- MW98-1** MONITORING WELL LOCATION BY GOLDER ASSOCIATES
- MW-1HC** MONITORING WELL LOCATION BY HART CROWSER
- SPRING** SPRING WATER SAMPLE LOCATION (JUNE 2004)
- AS-1** AIR SPARGING WELL LOCATION
- SVE-2** SOIL VAPOUR EXTRACTION WELL LOCATION
- FORMER BUILDING OUTLINE**
- PROPOSED TEST PIT LOCATIONS (APPROXIMATE)**

REFERENCE: BASEMAP FROM "SITE PLAN WHYTE PASS YARD SKAGWAY, ALASKA," BY UNDERHILL GEOMATICS LTD. NOV, 2000.

PROJECT				WHITE PASS & YUKON ROUTE SHOPS SKAGWAY, ALASKA			
TITLE				<b>LOCATIONS OF PROPOSED TESTPITS</b>			
PROJECT No. 96-1412-853B		FILE No. 8300-10		DESIGN LK 02SEP04		SCALE AS SHOWN REV. -	
CADD JK 02SEP04		CHECK LK 03SEP04		<b>FIGURE 8</b>			



**APPENDIX I**  
**LABORATORY CHEMISTRY REPORTS**



**Seattle** 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223  
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 541.383.9310 fax 541.382.7588

Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/11/04 16:56

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
9029-01	P4F0112-01	Water	05/28/04 12:00	06/02/04 12:00
9029-02	P4F0112-02	Water	05/28/04 12:00	06/02/04 12:00
9029-03	P4F0112-03	Water	05/28/04 12:00	06/02/04 12:00
9029-04	P4F0112-04	Water	05/29/04 12:00	06/02/04 12:00
9029-05	P4F0112-05	Water	05/29/04 12:00	06/02/04 12:00
9029-06	P4F0112-06	Water	05/29/04 12:00	06/02/04 12:00
9029-07	P4F0112-07	Water	06/01/04 12:00	06/02/04 12:00
9029-08	P4F0112-08	Water	06/01/04 12:00	06/02/04 12:00
9029-09	P4F0112-09	Water	06/01/04 12:00	06/02/04 12:00
9029-10	P4F0112-10	Water	06/01/04 12:00	06/02/04 12:00
9029-11	P4F0112-11	Water	06/01/04 12:00	06/02/04 12:00
9029-12	P4F0112-12	Water	06/01/04 12:00	06/02/04 12:00

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Crystal Jones, Project Manager

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Golder Associates - Canada  
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Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/11/04 16:56

**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-01 (P4F0112-01) Water</b>						Sampled: 05/28/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/04/04	4060224	
<i>Surr: 4-BFB (FID)</i>	84.4 %	60-120							
<b>9029-01 (P4F0112-01RE1) Water</b>						Sampled: 05/28/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (PID)</i>	98.2 %	60-120							
<b>9029-02 (P4F0112-02) Water</b>						Sampled: 05/28/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/04/04	4060224	
<i>Surr: 4-BFB (FID)</i>	84.8 %	60-120							
<b>9029-02 (P4F0112-02RE1) Water</b>						Sampled: 05/28/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (PID)</i>	108 %	60-120							
<b>9029-03 (P4F0112-03) Water</b>						Sampled: 05/28/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/04/04	4060224	
<i>Surr: 4-BFB (FID)</i>	95.2 %	60-120							

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/11/04 16:56

**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B  
 North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-03 (P4F0112-03RE1) Water</b>						Sampled: 05/28/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (PID)</i>	71.6 %	60-120							
<b>9029-04 (P4F0112-04) Water</b>						Sampled: 05/29/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/05/04	4060224	
<i>Surr: 4-BFB (FID)</i>	83.4 %	60-120							
<b>9029-04 (P4F0112-04RE1) Water</b>						Sampled: 05/29/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (PID)</i>	109 %	60-120							
<b>9029-05 (P4F0112-05) Water</b>						Sampled: 05/29/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/05/04	4060224	
<i>Surr: 4-BFB (FID)</i>	90.8 %	60-120							
<b>9029-05 (P4F0112-05RE1) Water</b>						Sampled: 05/29/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (PID)</i>	110 %	60-120							

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Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/11/04 16:56

**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B  
 North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-06 (P4F0112-06) Water</b>						Sampled: 05/29/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/05/04	4060224	
<i>Surr: 4-BFB (FID)</i>	91.8 %	60-120							
<b>9029-06 (P4F0112-06RE1) Water</b>						Sampled: 05/29/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (PID)</i>	106 %	60-120							
<b>9029-07 (P4F0112-07) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/05/04	4060224	
<i>Surr: 4-BFB (FID)</i>	79.0 %	60-120							
<b>9029-07 (P4F0112-07RE1) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (PID)</i>	119 %	60-120							
<b>9029-08 (P4F0112-08) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/05/04	4060224	
<i>Surr: 4-BFB (FID)</i>	98.8 %	60-120							

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Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

Reported:  
 06/11/04 16:56

**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B  
 North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-08 (P4F0112-08RE1) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (PID)</i>	<i>104 %</i>	<i>60-120</i>							
<b>9029-09 (P4F0112-09) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/05/04	4060224	
<i>Surr: 4-BFB (FID)</i>	<i>93.0 %</i>	<i>60-120</i>							
<b>9029-09 (P4F0112-09RE1) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (PID)</i>	<i>106 %</i>	<i>60-120</i>							
<b>9029-10 (P4F0112-10) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/05/04	4060224	
<i>Surr: 4-BFB (FID)</i>	<i>96.2 %</i>	<i>60-120</i>							
<b>9029-10 (P4F0112-10RE1) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (PID)</i>	<i>107 %</i>	<i>60-120</i>							

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/11/04 16:56
--	--	-----------------------------

**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B  
 North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-11 (P4F0112-11) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/05/04	4060224	
Surr: 4-BFB (FID)	94.4 %	60-120							
<b>9029-11 (P4F0112-11RE1) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	107 %	60-120							
<b>9029-12 (P4F0112-12) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/04/04	06/05/04	4060224	
Surr: 4-BFB (FID)	95.8 %	60-120							
<b>9029-12 (P4F0112-12RE1) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Benzene	ND	0.500	ug/l	1	AK101/8021B	06/08/04	06/08/04	4060330	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	108 %	60-120							

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Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/11/04 16:56
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**Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103  
 North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-01 (P4F0112-01) Water</b>						Sampled: 05/28/04		Received: 06/02/04	
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/03/04	06/03/04	4060136	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	74.2 %	50-150							
Surr: Triacontane	66.2 %	50-150							
<b>9029-02 (P4F0112-02) Water</b>						Sampled: 05/28/04		Received: 06/02/04	
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/03/04	06/03/04	4060136	<b>A-01</b>
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	25.0 %	50-150							
Surr: Triacontane	25.9 %	50-150							
<b>9029-03 (P4F0112-03) Water</b>						Sampled: 05/28/04		Received: 06/02/04	
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/03/04	06/03/04	4060136	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	87.5 %	50-150							
Surr: Triacontane	78.8 %	50-150							
<b>9029-04 (P4F0112-04) Water</b>						Sampled: 05/29/04		Received: 06/02/04	
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/03/04	06/03/04	4060136	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	77.1 %	50-150							
Surr: Triacontane	67.5 %	50-150							
<b>9029-05 (P4F0112-05) Water</b>						Sampled: 05/29/04		Received: 06/02/04	
Diesel Range Organics	<b>0.420</b>	0.320	mg/l	1	AK102/103	06/03/04	06/03/04	4060136	D-03, D-15
Residual Range Organics	<b>0.583</b>	0.400	"	"	"	"	"	"	D-03, D-15
Surr: 1-Chlorooctadecane	96.9 %	50-150							
Surr: Triacontane	86.4 %	50-150							

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 541.383.9310 fax 541.382.7588

Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/11/04 16:56
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**Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103  
 North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-06 (P4F0112-06) Water</b>						Sampled: 05/29/04 Received: 06/02/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/03/04	06/03/04	4060136	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	91.9 %	50-150							
Surr: Triacontane	78.3 %	50-150							
<b>9029-07 (P4F0112-07) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/03/04	06/03/04	4060136	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	65.4 %	50-150							
Surr: Triacontane	60.7 %	50-150							
<b>9029-08 (P4F0112-08) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/03/04	06/04/04	4060136	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	71.1 %	50-150							
Surr: Triacontane	61.2 %	50-150							
<b>9029-09 (P4F0112-09) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/03/04	06/04/04	4060136	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	89.8 %	50-150							
Surr: Triacontane	83.6 %	50-150							
<b>9029-10 (P4F0112-10) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/03/04	06/04/04	4060136	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	70.8 %	50-150							
Surr: Triacontane	64.5 %	50-150							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/11/04 16:56

**Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-11 (P4F0112-11) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/03/04	06/04/04	4060136	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
<i>Surr: 1-Chlorooctadecane</i>	93.2 %	50-150							
<i>Surr: Triacontane</i>	84.1 %	50-150							
<b>9029-12 (P4F0112-12) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/03/04	06/04/04	4060136	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
<i>Surr: 1-Chlorooctadecane</i>	63.0 %	50-150							
<i>Surr: Triacontane</i>	62.0 %	50-150							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
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**9029-01 (P4F0112-01) Water**

Sampled: 05/28/04 Received: 06/02/04

Acetone	ND	25.0	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-01 (P4F0112-01) Water</b>						Sampled: 05/28/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>2.11</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	106 %	75-120							
Surr: 1,2-DCA-d4	120 %	77-129							
Surr: Dibromofluoromethane	111 %	80-121							
Surr: Toluene-d8	111 %	80-120							

North Creek Analytical - Portland

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-02 (P4F0112-02) Water</b>						<b>Sampled: 05/28/04 Received: 06/02/04</b>			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

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Crystal Jones, Project Manager

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Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-02 (P4F0112-02) Water</b>						Sampled: 05/28/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	96.5 %	75-120							
Surr: 1,2-DCA-d4	111 %	77-129							
Surr: Dibromofluoromethane	102 %	80-121							
Surr: Toluene-d8	103 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

Reported:  
 06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-03 (P4F0112-03) Water</b>						Sampled: 05/28/04 Received: 06/02/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>1.21</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-03 (P4F0112-03) Water</b>						Sampled: 05/28/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>2.56</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	<i>95.5 %</i>	<i>75-120</i>							
<i>Surr: 1,2-DCA-d4</i>	<i>111 %</i>	<i>77-129</i>							
<i>Surr: Dibromofluoromethane</i>	<i>102 %</i>	<i>80-121</i>							
<i>Surr: Toluene-d8</i>	<i>102 %</i>	<i>80-120</i>							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting		Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
		Limit								
<b>9029-04 (P4F0112-04) Water</b>						Sampled: 05/29/04 Received: 06/02/04				
Acetone	ND	25.0		ug/l	I	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00		"	"	"	"	"	"	
Bromobenzene	ND	1.00		"	"	"	"	"	"	
Bromochloromethane	ND	1.00		"	"	"	"	"	"	
Bromodichloromethane	ND	1.00		"	"	"	"	"	"	
Bromoform	ND	1.00		"	"	"	"	"	"	
Bromomethane	ND	5.00		"	"	"	"	"	"	
2-Butanone	ND	10.0		"	"	"	"	"	"	
n-Butylbenzene	ND	5.00		"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00		"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00		"	"	"	"	"	"	
Carbon disulfide	ND	10.0		"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00		"	"	"	"	"	"	
Chlorobenzene	ND	1.00		"	"	"	"	"	"	
Chloroethane	ND	1.00		"	"	"	"	"	"	
Chloroform	ND	1.00		"	"	"	"	"	"	
Chloromethane	ND	5.00		"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00		"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00		"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00		"	"	"	"	"	"	
Dibromochloromethane	ND	1.00		"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00		"	"	"	"	"	"	
Dibromomethane	ND	1.00		"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00		"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00		"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00		"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00		"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>3.17</b>	1.00		"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00		"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00		"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00		"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00		"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00		"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00		"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-04 (P4F0112-04) Water</b>						Sampled: 05/29/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>2.02</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	95.5 %	75-120							
Surr: 1,2-DCA-d4	108 %	77-129							
Surr: Dibromofluoromethane	103 %	80-121							
Surr: Toluene-d8	102 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/11/04 16:56
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**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting		Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
		Limit								
<b>9029-05 (P4F0112-05) Water</b>						Sampled: 05/29/04 Received: 06/02/04				
Acetone	ND	25.0		ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00		"	"	"	"	"	"	
Bromobenzene	ND	1.00		"	"	"	"	"	"	
Bromochloromethane	ND	1.00		"	"	"	"	"	"	
Bromodichloromethane	ND	1.00		"	"	"	"	"	"	
Bromoform	ND	1.00		"	"	"	"	"	"	
Bromomethane	ND	5.00		"	"	"	"	"	"	
2-Butanone	ND	10.0		"	"	"	"	"	"	
n-Butylbenzene	ND	5.00		"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00		"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00		"	"	"	"	"	"	
Carbon disulfide	ND	10.0		"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00		"	"	"	"	"	"	
Chlorobenzene	ND	1.00		"	"	"	"	"	"	
Chloroethane	ND	1.00		"	"	"	"	"	"	
Chloroform	ND	1.00		"	"	"	"	"	"	
Chloromethane	ND	5.00		"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00		"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00		"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00		"	"	"	"	"	"	
Dibromochloromethane	ND	1.00		"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00		"	"	"	"	"	"	
Dibromomethane	ND	1.00		"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00		"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00		"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00		"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00		"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00		"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00		"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00		"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00		"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00		"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00		"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00		"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-05 (P4F0112-05) Water</b>						Sampled: 05/29/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	93.5 %	75-120							
Surr: 1,2-DCA-d4	108 %	77-129							
Surr: Dibromofluoromethane	101 %	80-121							
Surr: Toluene-d8	102 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting		Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
		Limit								
<b>9029-06 (P4F0112-06) Water</b>						Sampled: 05/29/04 Received: 06/02/04				
Acetone	ND	25.0		ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00		"	"	"	"	"	"	
Bromobenzene	ND	1.00		"	"	"	"	"	"	
Bromochloromethane	ND	1.00		"	"	"	"	"	"	
Bromodichloromethane	ND	1.00		"	"	"	"	"	"	
Bromoform	ND	1.00		"	"	"	"	"	"	
Bromomethane	ND	5.00		"	"	"	"	"	"	
2-Butanone	ND	10.0		"	"	"	"	"	"	
n-Butylbenzene	ND	5.00		"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00		"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00		"	"	"	"	"	"	
Carbon disulfide	ND	10.0		"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00		"	"	"	"	"	"	
Chlorobenzene	ND	1.00		"	"	"	"	"	"	
Chloroethane	ND	1.00		"	"	"	"	"	"	
Chloroform	ND	1.00		"	"	"	"	"	"	
Chloromethane	ND	5.00		"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00		"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00		"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00		"	"	"	"	"	"	
Dibromochloromethane	ND	1.00		"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00		"	"	"	"	"	"	
Dibromomethane	ND	1.00		"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00		"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00		"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00		"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00		"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00		"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00		"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00		"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00		"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00		"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00		"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00		"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

Reported:  
 06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-06 (P4F0112-06) Water</b>						Sampled: 05/29/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	96.0 %	75-120							
Surr: 1,2-DCA-d4	112 %	77-129							
Surr: Dibromofluoromethane	104 %	80-121							
Surr: Toluene-d8	103 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-07 (P4F0112-07) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>5.47</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-07 (P4F0112-07) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>5.08</b>	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>10.6</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	<i>94.0 %</i>	<i>75-120</i>							
<i>Surr: 1,2-DCA-d4</i>	<i>112 %</i>	<i>77-129</i>							
<i>Surr: Dibromofluoromethane</i>	<i>104 %</i>	<i>80-121</i>							
<i>Surr: Toluene-d8</i>	<i>104 %</i>	<i>80-120</i>							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

Reported:  
 06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-08 (P4F0112-08) Water</b>						<b>Sampled: 06/01/04 Received: 06/02/04</b>			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>5.29</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-08 (P4F0112-08) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>19.7</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	<i>94.0 %</i>	<i>75-120</i>							
<i>Surr: 1,2-DCA-d4</i>	<i>112 %</i>	<i>77-129</i>							
<i>Surr: Dibromofluoromethane</i>	<i>104 %</i>	<i>80-121</i>							
<i>Surr: Toluene-d8</i>	<i>104 %</i>	<i>80-120</i>							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-09 (P4F0112-09) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>7.51</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-09 (P4F0112-09) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>1.26</b>	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>8.17</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	95.0 %	75-120							
Surr: 1,2-DCA-d4	110 %	77-129							
Surr: Dibromofluoromethane	104 %	80-121							
Surr: Toluene-d8	102 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Environmental Laboratory Network

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-10 (P4F0112-10) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>10.9</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-10 (P4F0112-10) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>2.27</b>	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>19.6</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	93.5 %	75-120							
Surr: 1,2-DCA-d4	106 %	77-129							
Surr: Dibromofluoromethane	104 %	80-121							
Surr: Toluene-d8	102 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-11 (P4F0112-11) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-11 (P4F0112-11) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	95.5 %	75-120							
Surr: 1,2-DCA-d4	109 %	77-129							
Surr: Dibromofluoromethane	104 %	80-121							
Surr: Toluene-d8	102 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting		Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
		Limit								
<b>9029-12 (P4F0112-12) Water</b>						Sampled: 06/01/04 Received: 06/02/04				
Acetone	ND	25.0		ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Benzene	ND	1.00		"	"	"	"	"	"	
Bromobenzene	ND	1.00		"	"	"	"	"	"	
Bromochloromethane	ND	1.00		"	"	"	"	"	"	
Bromodichloromethane	ND	1.00		"	"	"	"	"	"	
Bromoform	ND	1.00		"	"	"	"	"	"	
Bromomethane	ND	5.00		"	"	"	"	"	"	
2-Butanone	ND	10.0		"	"	"	"	"	"	
n-Butylbenzene	ND	5.00		"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00		"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00		"	"	"	"	"	"	
Carbon disulfide	ND	10.0		"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00		"	"	"	"	"	"	
Chlorobenzene	ND	1.00		"	"	"	"	"	"	
Chloroethane	ND	1.00		"	"	"	"	"	"	
Chloroform	ND	1.00		"	"	"	"	"	"	
Chloromethane	ND	5.00		"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00		"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00		"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00		"	"	"	"	"	"	
Dibromochloromethane	ND	1.00		"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00		"	"	"	"	"	"	
Dibromomethane	ND	1.00		"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00		"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00		"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00		"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00		"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00		"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00		"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00		"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00		"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00		"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00		"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00		"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9029-12 (P4F0112-12) Water</b>						Sampled: 06/01/04 Received: 06/02/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/04/04	06/04/04	4060196	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	94.0 %	75-120							
Surr: 1,2-DCA-d4	110 %	77-129							
Surr: Dibromofluoromethane	102 %	80-121							
Surr: Toluene-d8	104 %	80-120							

North Creek Analytical - Portland

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/11/04 16:56
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**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060224 - EPA 5030B**

**Blank (4060224-BLK1)** Prepared & Analyzed: 06/04/04

Gasoline Range Organics	ND	80.0	ug/l							
Surr: 4-BFB (FID)	49.1		"	50.0		98.2	60-120			

**LCS (4060224-BS2)** Prepared & Analyzed: 06/04/04

Gasoline Range Organics	1170	80.0	ug/l	1000		117	60-120			
Surr: 4-BFB (FID)	53.9		"	50.0		108	60-120			

**Duplicate (4060224-DUP1)** Source: P4F0079-01 Prepared & Analyzed: 06/04/04

Gasoline Range Organics	ND	80.0	ug/l		ND			NA	50	
Surr: 4-BFB (FID)	49.1		"	50.0		98.2	60-120			

**Duplicate (4060224-DUP2)** Source: P4F0112-02 Prepared & Analyzed: 06/04/04

Gasoline Range Organics	ND	80.0	ug/l		ND			NA	50	
Surr: 4-BFB (FID)	47.1		"	50.0		94.2	60-120			

**Batch 4060330 - EPA 5030B**

**Blank (4060330-BLK1)** Prepared & Analyzed: 06/08/04

Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	54.0		"	50.0		108	60-120			

**LCS (4060330-BS1)** Prepared & Analyzed: 06/08/04

Benzene	55.4	0.500	ug/l	50.0		111	70-130			
Toluene	57.5	0.500	"	50.0		115	76-129			
Ethylbenzene	52.5	0.500	"	50.0		105	82-130			
Xylenes (total)	176	1.00	"	150		117	76-130			
Surr: 4-BFB (PID)	57.1		"	50.0		114	60-120			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	<b>Reported:</b> 06/11/04 16:56
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**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060330 - EPA 5030B**

**LCS Dup (4060330-BSD1)**

Prepared & Analyzed: 06/08/04

Benzene	55.4	0.500	ug/l	50.0	111	70-130	0.00	20		
Toluene	57.8	0.500	"	50.0	116	76-129	0.520	20		
Ethylbenzene	52.8	0.500	"	50.0	106	82-130	0.570	20		
Xylenes (total)	177	1.00	"	150	118	76-130	0.567	20		
<i>Surr: 4-BFB (PID)</i>	<i>57.0</i>		<i>"</i>	<i>50.0</i>	<i>114</i>	<i>60-120</i>				

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/11/04 16:56
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**Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103 - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060136 - EPA 3510 Fuels**

**Blank (4060136-BLK1)**

Prepared & Analyzed: 06/03/04

Diesel Range Organics	ND	0.400	mg/l							
Residual Range Organics	ND	0.500	"							
Surr: 1-Chlorooctadecane	0.458		"	0.480		95.4	50-150			
Surr: Triacontane	0.447		"	0.496		90.1	50-150			

**LCS (4060136-BS1)**

Prepared: 06/03/04 Analyzed: 06/10/04

Diesel Range Organics	5.60	0.400	mg/l	5.04		111	75-125			
Residual Range Organics	3.59	0.500	"	3.02		119	60-120			
Surr: 1-Chlorooctadecane	0.366		"	0.480		76.2	50-150			
Surr: Triacontane	0.557		"	0.496		112	50-150			

**LCS Dup (4060136-BSD1)**

Prepared: 06/03/04 Analyzed: 06/10/04

Diesel Range Organics	5.23	0.400	mg/l	5.04		104	75-125	6.83	20	
Residual Range Organics	3.41	0.500	"	3.02		113	60-120	5.14	20	
Surr: 1-Chlorooctadecane	0.386		"	0.480		80.4	50-150			
Surr: Triacontane	0.553		"	0.496		111	50-150			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
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 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Notes
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**Batch 4060196 - EPA 5030B**

Prepared & Analyzed: 06/04/04

**Blank (4060196-BLK1)**

Acetone	ND	25.0	ug/l							
Benzene	ND	1.00	"							
Bromobenzene	ND	1.00	"							
Bromochloromethane	ND	1.00	"							
Bromodichloromethane	ND	1.00	"							
Bromoform	ND	1.00	"							
Bromomethane	ND	5.00	"							
2-Butanone	ND	10.0	"							
n-Butylbenzene	ND	5.00	"							
sec-Butylbenzene	ND	1.00	"							
tert-Butylbenzene	ND	1.00	"							
Carbon disulfide	ND	10.0	"							
Carbon tetrachloride	ND	1.00	"							
Chlorobenzene	ND	1.00	"							
Chloroethane	ND	1.00	"							
Chloroform	ND	1.00	"							
Chloromethane	ND	5.00	"							
2-Chlorotoluene	ND	1.00	"							
4-Chlorotoluene	ND	1.00	"							
1,2-Dibromo-3-chloropropane	ND	5.00	"							
Dibromochloromethane	ND	1.00	"							
1,2-Dibromoethane	ND	1.00	"							
Dibromomethane	ND	1.00	"							
1,2-Dichlorobenzene	ND	1.00	"							
1,3-Dichlorobenzene	ND	1.00	"							
1,4-Dichlorobenzene	ND	1.00	"							
Dichlorodifluoromethane	ND	5.00	"							
1,1-Dichloroethane	ND	1.00	"							
1,2-Dichloroethane	ND	1.00	"							
1,1-Dichloroethene	ND	1.00	"							
cis-1,2-Dichloroethene	ND	1.00	"							
trans-1,2-Dichloroethene	ND	1.00	"							
1,2-Dichloropropane	ND	1.00	"							
1,3-Dichloropropane	ND	1.00	"							
2,2-Dichloropropane	ND	1.00	"							
1,1-Dichloropropene	ND	1.00	"							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/11/04 16:56
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**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060196 - EPA 5030B**

**Blank (4060196-BLK1)**

Prepared & Analyzed: 06/04/04

cis-1,3-Dichloropropene	ND	1.00	ug/l							
trans-1,3-Dichloropropene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
Hexachlorobutadiene	ND	2.00	"							
2-Hexanone	ND	10.0	"							
Isopropylbenzene	ND	2.00	"							
p-Isopropyltoluene	ND	2.00	"							
4-Methyl-2-pentanone	ND	5.00	"							
Methyl tert-butyl ether	ND	1.00	"							
Methylene chloride	ND	5.00	"							
Naphthalene	ND	2.00	"							
n-Propylbenzene	ND	1.00	"							
Styrene	ND	1.00	"							
1,1,1,2-Tetrachloroethane	ND	1.00	"							
1,1,2,2-Tetrachloroethane	ND	1.00	"							
Tetrachloroethene	ND	1.00	"							
Toluene	ND	1.00	"							
1,2,3-Trichlorobenzene	ND	1.00	"							
1,2,4-Trichlorobenzene	ND	1.00	"							
1,1,1-Trichloroethane	ND	1.00	"							
1,1,2-Trichloroethane	ND	1.00	"							
Trichloroethene	ND	1.00	"							
Trichlorofluoromethane	ND	1.00	"							
1,2,3-Trichloropropane	ND	1.00	"							
1,2,4-Trimethylbenzene	ND	1.00	"							
1,3,5-Trimethylbenzene	ND	1.00	"							
Vinyl chloride	ND	1.00	"							
o-Xylene	ND	1.00	"							
m,p-Xylene	ND	2.00	"							
Surr: 4-BFB	18.8		"	20.0		94.0	75-120			
Surr: 1,2-DCA-d4	21.4		"	20.0		107	77-129			
Surr: Dibromofluoromethane	20.5		"	20.0		102	80-121			
Surr: Toluene-d8	20.4		"	20.0		102	80-120			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/11/04 16:56

**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	RPD RPD	RPD RPD	Notes
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**Batch 4060196 - EPA 5030B**

**LCS (4060196-BS1)**

Prepared & Analyzed: 06/04/04

Benzene	21.0	1.00	ug/l	20.0		105	80-120		
Chlorobenzene	21.6	1.00	"	20.0		108	80-124		
1,1-Dichloroethene	19.5	1.00	"	20.0		97.5	78-120		
Toluene	20.7	1.00	"	20.0		104	80-124		
Trichloroethene	22.3	1.00	"	20.0		112	80-132		
Surr: 4-BFB	19.7		"	20.0		98.5	75-120		
Surr: 1,2-DCA-d4	21.0		"	20.0		105	77-129		
Surr: Dibromofluoromethane	21.4		"	20.0		107	80-121		
Surr: Toluene-d8	20.8		"	20.0		104	80-120		

**Matrix Spike (4060196-MS1)**

Source: P4F0112-01

Prepared & Analyzed: 06/04/04

Benzene	21.4	1.00	ug/l	20.0	ND	107	80-124		
Chlorobenzene	21.6	1.00	"	20.0	ND	108	72.9-134		
1,1-Dichloroethene	21.1	1.00	"	20.0	ND	106	79.3-127		
Toluene	20.7	1.00	"	20.0	ND	104	79.7-131		
Trichloroethene	24.1	1.00	"	20.0	2.11	110	68.4-130		
Surr: 4-BFB	19.9		"	20.0		99.5	75-120		
Surr: 1,2-DCA-d4	21.3		"	20.0		106	77-129		
Surr: Dibromofluoromethane	21.0		"	20.0		105	80-121		
Surr: Toluene-d8	20.5		"	20.0		102	80-120		

**Matrix Spike Dup (4060196-MSD1)**

Source: P4F0112-01

Prepared & Analyzed: 06/04/04

Benzene	22.6	1.00	ug/l	20.0	ND	113	80-124	5.45	25
Chlorobenzene	22.3	1.00	"	20.0	ND	112	72.9-134	3.19	25
1,1-Dichloroethene	21.8	1.00	"	20.0	ND	109	79.3-127	3.26	25
Toluene	21.7	1.00	"	20.0	ND	108	79.7-131	4.72	25
Trichloroethene	25.5	1.00	"	20.0	2.11	117	68.4-130	5.65	25
Surr: 4-BFB	20.3		"	20.0		102	75-120		
Surr: 1,2-DCA-d4	21.3		"	20.0		106	77-129		
Surr: Dibromofluoromethane	21.5		"	20.0		108	80-121		
Surr: Toluene-d8	21.0		"	20.0		105	80-120		

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Crystal Jones, Project Manager

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Page 39 of 40



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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/11/04 16:56

**Notes and Definitions**

- A-01 Sample results may be biased low due to a problem with the extraction equipment. Insufficient sample for re-extraction.
- D-03 The hydrocarbon concentration result in this sample is partially due to an individual peak(s) eluting in the diesel/motor oil carbon range.
- D-15 Detected hydrocarbons have non-petroleum peaks or elution pattern that suggests the presence of biogenic interference.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
- wet Sample results reported on a wet weight basis (as received)
- RPD Relative Percent Difference

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Crystal Jones, Project Manager

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# CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST



500 - 4260 Still Creek Drive  
 Burnaby, British Columbia, Canada V5C 6C6  
 Telephone (604) 298-6623 Fax (604) 298-5253

Project Number: **96-1412-853 B**  
 Short Title: **White Pass Shops**  
 Golder Contact: **Gary Hamilton**  
 Golder E-mail Address: **ghamilton@golder.com**  
 Laboratory Name: **NSCA**  
 Address: **9405 SW Niabous Ave Beaverton OR 97008**  
 Telephone/Fax: **503-906-9200**  
 Contact: **C. Jones**

Office the final reports should be sent to:

500-4260 Still Creek Dr.  
 Burnaby, B.C.  
 V5C 6C6  
 Tel: (604) 298-6623;  
 Fax: (604) 298-5253

202 - 2790 Gladwin Road  
 Abbotsford, B.C.  
 V2T 4S8  
 Tel: (604) 850-8786  
 Fax: (604) 850-8756

220 - 174 Wilson Street  
 Victoria, B.C.  
 V9A 7N6  
 Tel: (250) 881-7372  
 Fax: (250) 881-7470

Sample Control Number (SCN)	Sample Location	Sample Depth (m)	Sample Matrix (over)	Date Sampled (D/M/Y)	Time Sampled (HH:MM)	Sample Type (over)	QAQC Code (over)	Related SCN (over)	Analyses Required				Remarks (over)	
									Number of Containers	VEC	GR0	RPO		RTX
9029-01	MW-4	-	W	28/05/04	1630	D	-	-	8	✓	✓	✓	✓	RUSH
9029-02	MW28-2	-	-	↓	1700	-	-	-	8	✓	✓	✓	✓	
9029-03	MW-1HC	-	-	29/05/04	1800	-	-	-	8	✓	✓	✓	✓	
9029-04	MW-1AHC	-	-	↓	1930	-	-	-	8	✓	✓	✓	✓	
9029-05	MW00-31	-	-	↓	1815	-	-	-	8	✓	✓	✓	✓	
9029-06	MW00-32	-	-	↓	1600	-	-	-	8	✓	✓	✓	✓	
9029-07	MW00-33	-	-	01/06/04	9:40	-	-	-	8	✓	✓	✓	✓	
9029-08	MW08-1	-	-	↓	10:50	-	-	-	8	✓	✓	✓	✓	
9029-09	MW24-C	-	-	↓	11:30	-	-	-	8	✓	✓	✓	✓	
9029-10	MW97-6H	-	-	↓	2:10	-	-	-	8	✓	✓	✓	✓	
9029-11	MW97-6D	-	-	↓	3:10	-	-	-	8	✓	✓	✓	✓	
9029-12	MW97-7M	-	-	↓	4:30	-	-	-	8	✓	✓	✓	✓	

Relinquished by: *[Signature]* Date: **01-06-04** Time: **4:15** Company: **Golder**

Relinquished by: *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_ Company: \_\_\_\_\_

Method of Shipment: \_\_\_\_\_ Waybill No.: \_\_\_\_\_

Shipped by: \_\_\_\_\_ Shipment Condition: \_\_\_\_\_ Temp (°C) \_\_\_\_\_ Cooler opened by: \_\_\_\_\_ Date \_\_\_\_\_

Comments: **For ice.**

WHITE: Golder Copy    YELLOW: Lab Copy    PINK: Lab Returns with Final Report

Instructions

Sample Control Number – Include chain-of-custody form number as prefix.

Sample Matrix – Soil, Water, Air, Refuse, Sludge.

Sample Type – Discrete, Composite, Grab.

QA/QC Code - FD = Field duplicate (homogenized)

FR = Field replicate (unhomogenized)

FB = Field blank

TB = Travel blank

Related SCN – Note associated sample control number for field duplicates or related composite sample control number for discrete samples.

Remarks – Note any special instructions for analytical lab.

Comments: Note any general comments for this set of samples. If samples are time sensitive, please provide the lab with the earliest time of sampling. I.e.: Earliest sample time: time, date



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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/22/04 15:56

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
9030-01	P4F0225-01	Water	06/01/04 12:00	06/07/04 09:30
9030-02	P4F0225-02	Water	06/02/04 12:00	06/07/04 09:30
9030-03	P4F0225-03	Water	06/02/04 12:00	06/07/04 09:30
9030-04	P4F0225-04	Water	06/02/04 12:00	06/07/04 09:30
9030-05	P4F0225-05	Other wet	06/02/04 12:00	06/07/04 09:30
9030-06	P4F0225-06	Water	06/03/04 12:00	06/07/04 09:30
9030-07	P4F0225-07	Water	06/03/04 12:00	06/07/04 09:30
9030-08	P4F0225-08	Water	06/04/04 12:00	06/07/04 09:30
9030-09	P4F0225-09	Water	06/04/04 12:00	06/07/04 09:30
9030-10	P4F0225-10	Water	06/04/04 12:00	06/07/04 09:30
9030-11	P4F0225-11	Water	06/04/04 12:00	06/07/04 09:30
9030-12	P4F0225-12	Water	06/05/04 12:00	06/07/04 09:30

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/22/04 15:56

**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
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**9030-01 (P4F0225-01RE1) Water**

Sampled: 06/01/04 Received: 06/07/04

Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/12/04	06/12/04	4060520	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (FID)</i>	85.6 %	60-120							
<i>Surr: 4-BFB (PID)</i>	107 %	60-120							

**9030-02 (P4F0225-02RE1) Water**

Sampled: 06/02/04 Received: 06/07/04

Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/12/04	06/12/04	4060520	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (FID)</i>	72.0 %	60-120							
<i>Surr: 4-BFB (PID)</i>	90.2 %	60-120							

**9030-03 (P4F0225-03RE1) Water**

Sampled: 06/02/04 Received: 06/07/04

Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/12/04	06/12/04	4060520	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (FID)</i>	89.8 %	60-120							
<i>Surr: 4-BFB (PID)</i>	112 %	60-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	<b>Reported:</b> 06/22/04 15:56
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**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-04 (P4F0225-04RE1) Water</b>						Sampled: 06/02/04 Received: 06/07/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/12/04	06/12/04	4060520	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (FID)	103 %	60-120							
Surr: 4-BFB (PID)	110 %	60-120							
<b>9030-06 (P4F0225-06RE1) Water</b>						Sampled: 06/03/04 Received: 06/07/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/12/04	06/12/04	4060520	
<b>Benzene</b>	<b>2.61</b>	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>11.7</b>	0.500	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>1.54</b>	1.00	"	"	"	"	"	"	
Surr: 4-BFB (FID)	102 %	60-120							
Surr: 4-BFB (PID)	110 %	60-120							
<b>9030-07 (P4F0225-07RE1) Water</b>						Sampled: 06/03/04 Received: 06/07/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/12/04	06/12/04	4060520	
<b>Benzene</b>	<b>2.60</b>	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>12.5</b>	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (FID)	99.4 %	60-120							
Surr: 4-BFB (PID)	112 %	60-120							

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/22/04 15:56

**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-08 (P4F0225-08RE1) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/12/04	06/12/04	4060520	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (FID)</i>	<i>90.0 %</i>	<i>60-120</i>							
<i>Surr: 4-BFB (PID)</i>	<i>112 %</i>	<i>60-120</i>							
<b>9030-09 (P4F0225-09RE1) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/12/04	06/12/04	4060520	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (FID)</i>	<i>91.0 %</i>	<i>60-120</i>							
<i>Surr: 4-BFB (PID)</i>	<i>110 %</i>	<i>60-120</i>							
<b>9030-10 (P4F0225-10RE1) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/12/04	06/12/04	4060520	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (FID)</i>	<i>90.4 %</i>	<i>60-120</i>							
<i>Surr: 4-BFB (PID)</i>	<i>112 %</i>	<i>60-120</i>							

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Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/22/04 15:56

**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
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**9030-11 (P4F0225-11RE1) Water**

Sampled: 06/04/04 Received: 06/07/04

Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/12/04	06/13/04	4060520	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	

*Surr: 4-BFB (FID)* 85.2 % 60-120

*Surr: 4-BFB (PID)* 104 % 60-120

**9030-12 (P4F0225-12RE1) Water**

Sampled: 06/05/04 Received: 06/07/04

Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/12/04	06/13/04	4060520	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	

*Surr: 4-BFB (FID)* 86.8 % 60-120

*Surr: 4-BFB (PID)* 108 % 60-120

North Creek Analytical - Portland

Crystal Jones, Project Manager

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 541.383.9310 fax 541.382.7588

Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
--	--	-----------------------------

**Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103 Low Volume  
 North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-01 (P4F0225-01) Water</b>						Sampled: 06/01/04 Received: 06/07/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/08/04	06/10/04	4060303	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	95.8 %	50-150							
Surr: Triacontane	111 %	50-150							
<b>9030-02 (P4F0225-02) Water</b>						Sampled: 06/02/04 Received: 06/07/04			
Diesel Range Organics	0.481	0.320	mg/l	1	AK102/103	06/08/04	06/10/04	4060303	A-01
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	78.6 %	50-150							
Surr: Triacontane	92.2 %	50-150							
<b>9030-03 (P4F0225-03) Water</b>						Sampled: 06/02/04 Received: 06/07/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/08/04	06/10/04	4060303	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	101 %	50-150							
Surr: Triacontane	106 %	50-150							
<b>9030-04 (P4F0225-04) Water</b>						Sampled: 06/02/04 Received: 06/07/04			
Diesel Range Organics	0.508	0.320	mg/l	1	AK102/103	06/08/04	06/10/04	4060303	A-02
Residual Range Organics	0.956	0.400	"	"	"	"	"	"	A-02
Surr: 1-Chlorooctadecane	101 %	50-150							
Surr: Triacontane	94.5 %	50-150							
<b>9030-06 (P4F0225-06) Water</b>						Sampled: 06/03/04 Received: 06/07/04			
Diesel Range Organics	2.98	0.320	mg/l	1	AK102/103	06/08/04	06/10/04	4060303	D-17
Residual Range Organics	3.57	0.400	"	"	"	"	"	"	D-15
Surr: 1-Chlorooctadecane	58.1 %	50-150							
Surr: Triacontane	71.8 %	50-150							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103 Low Volume  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-07 (P4F0225-07) Water</b>						Sampled: 06/03/04 Received: 06/07/04			
Diesel Range Organics	2.96	0.320	mg/l	1	AK102/103	06/08/04	06/11/04	4060303	D-17
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	98.2 %	50-150							
Surr: Triacontane	110 %	50-150							
<b>9030-08 (P4F0225-08) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/08/04	06/11/04	4060303	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	85.9 %	50-150							
Surr: Triacontane	106 %	50-150							
<b>9030-09 (P4F0225-09) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/08/04	06/11/04	4060303	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	108 %	50-150							
Surr: Triacontane	129 %	50-150							
<b>9030-10 (P4F0225-10) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/08/04	06/11/04	4060303	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	80.7 %	50-150							
Surr: Triacontane	102 %	50-150							
<b>9030-11 (P4F0225-11) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/08/04	06/11/04	4060303	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	95.8 %	50-150							
Surr: Triacontane	117 %	50-150							

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Crystal Jones, Project Manager

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Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/22/04 15:56

**Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103 Low Volume  
 North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-12 (P4F0225-12) Water</b>						Sampled: 06/05/04 Received: 06/07/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/08/04	06/11/04	4060303	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
<i>Surr: 1-Chlorooctadecane</i>	72.1 %	50-150							
<i>Surr: Triacontane</i>	96.0 %	50-150							

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Golder Associates - Canada  
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 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

Reported:  
 06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-01 (P4F0225-01) Water</b>						Sampled: 06/01/04 Received: 06/07/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-01 (P4F0225-01) Water</b>						Sampled: 06/01/04 Received: 06/07/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	84.0 %	75-120							
Surr: 1,2-DCA-d4	91.5 %	77-129							
Surr: Dibromofluoromethane	96.0 %	80-121							
Surr: Toluene-d8	89.0 %	80-120							

North Creek Analytical - Portland

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-02 (P4F0225-02) Water</b>						Sampled: 06/02/04 Received: 06/07/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

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Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-02 (P4F0225-02) Water</b>						Sampled: 06/02/04 Received: 06/07/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	88.5 %	75-120							
Surr: 1,2-DCA-d4	91.5 %	77-129							
Surr: Dibromofluoromethane	96.5 %	80-121							
Surr: Toluene-d8	92.0 %	80-120							

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-03 (P4F0225-03) Water</b>						Sampled: 06/02/04 Received: 06/07/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>1.10</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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 541.383.9310 fax 541.382.7588

Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting		Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
		Limit								
<b>9030-03 (P4F0225-03) Water</b>						Sampled: 06/02/04 Received: 06/07/04				
trans-1,3-Dichloropropene	ND	1.00		ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Ethylbenzene	ND	1.00		"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00		"	"	"	"	"	"	
2-Hexanone	ND	10.0		"	"	"	"	"	"	
Isopropylbenzene	ND	2.00		"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00		"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00		"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00		"	"	"	"	"	"	
Methylene chloride	ND	5.00		"	"	"	"	"	"	
Naphthalene	ND	2.00		"	"	"	"	"	"	
n-Propylbenzene	ND	1.00		"	"	"	"	"	"	
Styrene	ND	1.00		"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00		"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00		"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>3.18</b>	1.00		"	"	"	"	"	"	
Toluene	ND	1.00		"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00		"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00		"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>1.79</b>	1.00		"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00		"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00		"	"	"	"	"	"	
Vinyl chloride	ND	1.00		"	"	"	"	"	"	
o-Xylene	ND	1.00		"	"	"	"	"	"	
m,p-Xylene	ND	2.00		"	"	"	"	"	"	
Surr: 4-BFB	88.0 %	75-120								
Surr: 1,2-DCA-d4	96.0 %	77-129								
Surr: Dibromofluoromethane	99.0 %	80-121								
Surr: Toluene-d8	91.5 %	80-120								

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-04 (P4F0225-04) Water</b>						Sampled: 06/02/04 Received: 06/07/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>6.35</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-04 (P4F0225-04) Water</b>						Sampled: 06/02/04 Received: 06/07/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>1.83</b>	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>10.4</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	89.5 %	75-120							
Surr: 1,2-DCA-d4	95.0 %	77-129							
Surr: Dibromofluoromethane	100 %	80-121							
Surr: Toluene-d8	93.5 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-05 (P4F0225-05) Other wet</b>						Sampled: 06/02/04 Received: 06/07/04		<b>R-05</b>	
Acetone	ND	250000	ug/kg wet	10	EPA 8260B	06/14/04	06/21/04	4060580	
Benzene	ND	10000	"	"	"	"	"	"	
Bromobenzene	ND	10000	"	"	"	"	"	"	
Bromochloromethane	ND	10000	"	"	"	"	"	"	
Bromodichloromethane	ND	10000	"	"	"	"	"	"	
Bromoform	ND	10000	"	"	"	"	"	"	
Bromomethane	ND	50000	"	"	"	"	"	"	
2-Butanone	ND	100000	"	"	"	"	"	"	
n-Butylbenzene	ND	50000	"	"	"	"	"	"	
sec-Butylbenzene	ND	10000	"	"	"	"	"	"	
<b>tert-Butylbenzene</b>	<b>10200</b>	10000	"	"	"	"	"	"	
Carbon disulfide	ND	100000	"	"	"	"	"	"	
Carbon tetrachloride	ND	10000	"	"	"	"	"	"	
Chlorobenzene	ND	10000	"	"	"	"	"	"	
Chloroethane	ND	10000	"	"	"	"	"	"	
Chloroform	ND	10000	"	"	"	"	"	"	
Chloromethane	ND	50000	"	"	"	"	"	"	
2-Chlorotoluene	ND	10000	"	"	"	"	"	"	
4-Chlorotoluene	ND	10000	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	50000	"	"	"	"	"	"	
Dibromochloromethane	ND	10000	"	"	"	"	"	"	
1,2-Dibromoethane	ND	10000	"	"	"	"	"	"	
Dibromomethane	ND	10000	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	10000	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	10000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10000	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	50000	"	"	"	"	"	"	
1,1-Dichloroethane	ND	10000	"	"	"	"	"	"	
1,2-Dichloroethane	ND	10000	"	"	"	"	"	"	
1,1-Dichloroethene	ND	10000	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	10000	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	10000	"	"	"	"	"	"	
1,2-Dichloropropane	ND	10000	"	"	"	"	"	"	
1,3-Dichloropropane	ND	10000	"	"	"	"	"	"	
2,2-Dichloropropane	ND	10000	"	"	"	"	"	"	
1,1-Dichloropropene	ND	10000	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	10000	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes	
<b>9030-05 (P4F0225-05) Other wet</b>						Sampled: 06/02/04		Received: 06/07/04		<b>R-05</b>
trans-1,3-Dichloropropene	ND	10000	ug/kg wet	10	EPA 8260B	06/14/04	06/21/04	4060580		
Ethylbenzene	ND	10000	"	"	"	"	"	"		
Hexachlorobutadiene	ND	20000	"	"	"	"	"	"		
2-Hexanone	ND	100000	"	"	"	"	"	"		
Isopropylbenzene	ND	20000	"	"	"	"	"	"		
p-Isopropyltoluene	ND	20000	"	"	"	"	"	"		
4-Methyl-2-pentanone	ND	50000	"	"	"	"	"	"		
Methyl tert-butyl ether	ND	10000	"	"	"	"	"	"		
Methylene chloride	ND	50000	"	"	"	"	"	"		
Naphthalene	ND	20000	"	"	"	"	"	"		
n-Propylbenzene	ND	10000	"	"	"	"	"	"		
Styrene	ND	10000	"	"	"	"	"	"		
1,1,1,2-Tetrachloroethane	ND	10000	"	"	"	"	"	"		
1,1,2,2-Tetrachloroethane	ND	10000	"	"	"	"	"	"		
<b>Tetrachloroethene</b>	<b>15600</b>	10000	"	"	"	"	"	"		
Toluene	ND	10000	"	"	"	"	"	"		
1,2,3-Trichlorobenzene	ND	10000	"	"	"	"	"	"		
1,2,4-Trichlorobenzene	ND	10000	"	"	"	"	"	"		
1,1,1-Trichloroethane	ND	10000	"	"	"	"	"	"		
1,1,2-Trichloroethane	ND	10000	"	"	"	"	"	"		
Trichloroethene	ND	10000	"	"	"	"	"	"		
Trichlorofluoromethane	ND	10000	"	"	"	"	"	"		
1,2,3-Trichloropropane	ND	10000	"	"	"	"	"	"		
1,2,4-Trimethylbenzene	ND	10000	"	"	"	"	"	"		
<b>1,3,5-Trimethylbenzene</b>	<b>19200</b>	10000	"	"	"	"	"	"		
Vinyl chloride	ND	10000	"	"	"	"	"	"		
o-Xylene	ND	10000	"	"	"	"	"	"		
m,p-Xylene	ND	20000	"	"	"	"	"	"		
<i>Surr: 4-BFB</i>	<i>83.5 %</i>	<i>42.6-130</i>								
<i>Surr: 1,2-DCA-d4</i>	<i>124 %</i>	<i>57.3-144</i>								
<i>Surr: Dibromofluoromethane</i>	<i>99.0 %</i>	<i>45.5-130</i>								
<i>Surr: Toluene-d8</i>	<i>91.5 %</i>	<i>42.1-144</i>								

North Creek Analytical - Portland

Crystal Jones, Project Manager

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North Creek Analytical, Inc.  
Environmental Laboratory Network



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541.383.9310 fax 541.382.7588

Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-06 (P4F0225-06) Water</b>						Sampled: 06/03/04 Received: 06/07/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
<b>Benzene</b>	<b>2.08</b>	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>3.94</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Environmental Laboratory Network



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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-06 (P4F0225-06) Water</b>						Sampled: 06/03/04 Received: 06/07/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
<b>Ethylbenzene</b>	<b>10.8</b>	1.00	"	"	"	"	"	"	"
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	"
2-Hexanone	ND	10.0	"	"	"	"	"	"	"
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	"
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	"
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	"
Methylene chloride	ND	5.00	"	"	"	"	"	"	"
Naphthalene	ND	2.00	"	"	"	"	"	"	"
<b>n-Propylbenzene</b>	<b>2.17</b>	1.00	"	"	"	"	"	"	"
Styrene	ND	1.00	"	"	"	"	"	"	"
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	"
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	"
Toluene	ND	1.00	"	"	"	"	"	"	"
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	"
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	"
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	"
<b>Trichloroethene</b>	<b>1.93</b>	1.00	"	"	"	"	"	"	"
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	"
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	"
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	"
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	"
<b>Vinyl chloride</b>	<b>1.43</b>	1.00	"	"	"	"	"	"	"
o-Xylene	ND	1.00	"	"	"	"	"	"	"
m,p-Xylene	ND	2.00	"	"	"	"	"	"	"
Surr: 4-BFB	90.5 %	75-120							
Surr: 1,2-DCA-d4	90.0 %	77-129							
Surr: Dibromofluoromethane	95.5 %	80-121							
Surr: Toluene-d8	83.5 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-07 (P4F0225-07) Water</b>						Sampled: 06/03/04 Received: 06/07/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
<b>Benzene</b>	<b>2.12</b>	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>4.25</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-07 (P4F0225-07) Water</b>						Sampled: 06/03/04 Received: 06/07/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
<b>Ethylbenzene</b>	<b>11.1</b>	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
<b>n-Propylbenzene</b>	<b>2.25</b>	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>1.87</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
<b>Vinyl chloride</b>	<b>1.38</b>	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	92.5 %	75-120							
Surr: 1,2-DCA-d4	92.0 %	77-129							
Surr: Dibromofluoromethane	95.5 %	80-121							
Surr: Toluene-d8	86.5 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-08 (P4F0225-08) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>4.60</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

Reported:  
 06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-08 (P4F0225-08) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>7.62</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	88.5 %	75-120							
Surr: 1,2-DCA-d4	88.5 %	77-129							
Surr: Dibromofluoromethane	93.0 %	80-121							
Surr: Toluene-d8	90.0 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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 541.383.9310 fax 541.382.7588

Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-09 (P4F0225-09) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>2.22</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-09 (P4F0225-09) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>4.27</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	88.5 %	75-120							
Surr: 1,2-DCA-d4	90.0 %	77-129							
Surr: Dibromofluoromethane	95.0 %	80-121							
Surr: Toluene-d8	90.5 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-10 (P4F0225-10) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>2.57</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting		Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
		Limit								
<b>9030-10 (P4F0225-10) Water</b>						Sampled: 06/04/04 Received: 06/07/04				
trans-1,3-Dichloropropene	ND	1.00		ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Ethylbenzene	ND	1.00		"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00		"	"	"	"	"	"	
2-Hexanone	ND	10.0		"	"	"	"	"	"	
Isopropylbenzene	ND	2.00		"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00		"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00		"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00		"	"	"	"	"	"	
Methylene chloride	ND	5.00		"	"	"	"	"	"	
Naphthalene	ND	2.00		"	"	"	"	"	"	
n-Propylbenzene	ND	1.00		"	"	"	"	"	"	
Styrene	ND	1.00		"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00		"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00		"	"	"	"	"	"	
Tetrachloroethene	ND	1.00		"	"	"	"	"	"	
Toluene	ND	1.00		"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00		"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00		"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>5.09</b>	1.00		"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00		"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00		"	"	"	"	"	"	
Vinyl chloride	ND	1.00		"	"	"	"	"	"	
o-Xylene	ND	1.00		"	"	"	"	"	"	
m,p-Xylene	ND	2.00		"	"	"	"	"	"	
Surr: 4-BFB	89.0 %	75-120								
Surr: 1,2-DCA-d4	93.5 %	77-129								
Surr: Dibromofluoromethane	98.0 %	80-121								
Surr: Toluene-d8	90.5 %	80-120								

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-11 (P4F0225-11) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

**Reported:**  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-11 (P4F0225-11) Water</b>						Sampled: 06/04/04 Received: 06/07/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	<i>88.0 %</i>	<i>75-120</i>							
<i>Surr: 1,2-DCA-d4</i>	<i>91.0 %</i>	<i>77-129</i>							
<i>Surr: Dibromofluoromethane</i>	<i>96.5 %</i>	<i>80-121</i>							
<i>Surr: Toluene-d8</i>	<i>91.0 %</i>	<i>80-120</i>							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-12 (P4F0225-12) Water</b>						Sampled: 06/05/04 Received: 06/07/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B  
 North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9030-12 (P4F0225-12) Water</b>						Sampled: 06/05/04 Received: 06/07/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/10/04	06/10/04	4060429	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	85.5 %	75-120							
Surr: 1,2-DCA-d4	90.0 %	77-129							
Surr: Dibromofluoromethane	95.5 %	80-121							
Surr: Toluene-d8	91.0 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060520 - EPA 5030B**

<b>Blank (4060520-BLK1)</b>				Prepared & Analyzed: 06/12/04						
Gasoline Range Organics	ND	80.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (FID)	42.3		"	50.0		84.6	60-120			
Surr: 4-BFB (PID)	55.1		"	50.0		110	60-120			

<b>LCS (4060520-BS1)</b>				Prepared & Analyzed: 06/12/04						
Benzene	56.1	0.500	ug/l	50.0		112	70-130			
Toluene	58.4	0.500	"	50.0		117	76-129			
Ethylbenzene	53.5	0.500	"	50.0		107	82-130			
Xylenes (total)	179	1.00	"	150		119	76-130			
Surr: 4-BFB (FID)	44.5		"	50.0		89.0	60-120			
Surr: 4-BFB (PID)	57.6		"	50.0		115	60-120			

<b>LCS (4060520-BS2)</b>				Prepared & Analyzed: 06/12/04						
Gasoline Range Organics	807	80.0	ug/l	1000		80.7	60-120			
Surr: 4-BFB (FID)	50.5		"	50.0		101	60-120			
Surr: 4-BFB (PID)	59.2		"	50.0		118	60-120			

<b>Duplicate (4060520-DUP1)</b>				Source: P4F0225-01RE1 Prepared & Analyzed: 06/12/04						
Gasoline Range Organics	ND	80.0	ug/l		ND			NA	50	
Benzene	ND	0.500	"		ND			NA	0	
Toluene	ND	0.500	"		ND			NA	0	
Ethylbenzene	ND	0.500	"		0.137				0	
Xylenes (total)	ND	1.00	"		ND			NA	0	
Surr: 4-BFB (FID)	42.8		"	50.0		85.6	60-120			
Surr: 4-BFB (PID)	53.3		"	50.0		107	60-120			

North Creek Analytical - Portland

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060520 - EPA 5030B**

Duplicate (4060520-DUP2)	Source: P4F0225-11RE1			Prepared: 06/12/04		Analyzed: 06/13/04	
Gasoline Range Organics	ND	80.0	ug/l		ND		NA 50
Benzene	ND	0.500	"		ND		NA 0
Toluene	ND	0.500	"		ND		NA 0
Ethylbenzene	ND	0.500	"		ND		NA 0
Xylenes (total)	ND	1.00	"		ND		NA 0
Surr: 4-BFB (FID)	41.3		"	50.0		82.6	60-120
Surr: 4-BFB (PID)	51.5		"	50.0		103	60-120

Matrix Spike (4060520-MS1)	Source: P4F0225-02RE1			Prepared & Analyzed: 06/12/04			
Benzene	52.6	0.500	ug/l	50.0	ND	105	65-144
Toluene	54.2	0.500	"	50.0	ND	108	68-139
Ethylbenzene	49.2	0.500	"	50.0	ND	98.4	69-144
Xylenes (total)	161	1.00	"	150	ND	107	60-144
Surr: 4-BFB (FID)	44.0		"	50.0		88.0	60-120
Surr: 4-BFB (PID)	55.2		"	50.0		110	60-120

Matrix Spike Dup (4060520-MSD1)	Source: P4F0225-02RE1			Prepared & Analyzed: 06/12/04					
Benzene	52.7	0.500	ug/l	50.0	ND	105	65-144	0.190	20
Toluene	54.3	0.500	"	50.0	ND	109	68-139	0.184	20
Ethylbenzene	49.5	0.500	"	50.0	ND	99.0	69-144	0.608	20
Xylenes (total)	162	1.00	"	150	ND	108	60-144	0.619	20
Surr: 4-BFB (FID)	43.5		"	50.0		87.0	60-120		
Surr: 4-BFB (PID)	55.6		"	50.0		111	60-120		

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103 Low Volume - Quality**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060303 - EPA 3510 Fuels**

**Blank (4060303-BLK1)** Prepared: 06/08/04 Analyzed: 06/10/04

Diesel Range Organics	ND	0.400	mg/l							
Residual Range Organics	ND	0.500	"							
<i>Surr: 1-Chlorooctadecane</i>	0.456		"	0.480		95.0	50-150			
<i>Surr: Triacontane</i>	0.581		"	0.496		117	50-150			

**LCS (4060303-BS1)** Prepared: 06/08/04 Analyzed: 06/10/04

Diesel Range Organics	5.79	0.400	mg/l	5.04		115	75-125			
Residual Range Organics	3.51	0.500	"	3.02		116	60-120			
<i>Surr: 1-Chlorooctadecane</i>	0.487		"	0.480		101	50-150			
<i>Surr: Triacontane</i>	0.584		"	0.496		118	50-150			

**LCS Dup (4060303-BSD1)** Prepared: 06/08/04 Analyzed: 06/10/04

Diesel Range Organics	5.89	0.400	mg/l	5.04		117	75-125	1.71	20	
Residual Range Organics	3.49	0.500	"	3.02		116	60-120	0.571	20	
<i>Surr: 1-Chlorooctadecane</i>	0.403		"	0.480		84.0	50-150			
<i>Surr: Triacontane</i>	0.542		"	0.496		109	50-150			

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Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060429 - EPA 5030B**

Blank (4060429-BLK1)				Prepared & Analyzed: 06/10/04						
Acetone	ND	25.0	ug/l							
Benzene	ND	1.00	"							
Bromobenzene	ND	1.00	"							
Bromochloromethane	ND	1.00	"							
Bromodichloromethane	ND	1.00	"							
Bromoform	ND	1.00	"							
Bromomethane	ND	5.00	"							
2-Butanone	ND	10.0	"							
n-Butylbenzene	ND	5.00	"							
sec-Butylbenzene	ND	1.00	"							
tert-Butylbenzene	ND	1.00	"							
Carbon disulfide	ND	10.0	"							
Carbon tetrachloride	ND	1.00	"							
Chlorobenzene	ND	1.00	"							
Chloroethane	ND	1.00	"							
Chloroform	ND	1.00	"							
Chloromethane	ND	5.00	"							
2-Chlorotoluene	ND	1.00	"							
4-Chlorotoluene	ND	1.00	"							
1,2-Dibromo-3-chloropropane	ND	5.00	"							
Dibromochloromethane	ND	1.00	"							
1,2-Dibromoethane	ND	1.00	"							
Dibromomethane	ND	1.00	"							
1,2-Dichlorobenzene	ND	1.00	"							
1,3-Dichlorobenzene	ND	1.00	"							
1,4-Dichlorobenzene	ND	1.00	"							
Dichlorodifluoromethane	ND	5.00	"							
1,1-Dichloroethane	ND	1.00	"							
1,2-Dichloroethane	ND	1.00	"							
1,1-Dichloroethene	ND	1.00	"							
cis-1,2-Dichloroethene	ND	1.00	"							
trans-1,2-Dichloroethene	ND	1.00	"							
1,2-Dichloropropane	ND	1.00	"							
1,3-Dichloropropane	ND	1.00	"							
2,2-Dichloropropane	ND	1.00	"							
1,1-Dichloropropene	ND	1.00	"							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060429 - EPA 5030B**

**Blank (4060429-BLK1)** Prepared & Analyzed: 06/10/04

cis-1,3-Dichloropropene	ND	1.00	ug/l							
trans-1,3-Dichloropropene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
Hexachlorobutadiene	ND	2.00	"							
2-Hexanone	ND	10.0	"							
Isopropylbenzene	ND	2.00	"							
p-Isopropyltoluene	ND	2.00	"							
4-Methyl-2-pentanone	ND	5.00	"							
Methyl tert-butyl ether	ND	1.00	"							
Methylene chloride	ND	5.00	"							
Naphthalene	ND	2.00	"							
n-Propylbenzene	ND	1.00	"							
Styrene	ND	1.00	"							
1,1,1,2-Tetrachloroethane	ND	1.00	"							
1,1,2,2-Tetrachloroethane	ND	1.00	"							
Tetrachloroethene	ND	1.00	"							
Toluene	ND	1.00	"							
1,2,3-Trichlorobenzene	ND	1.00	"							
1,2,4-Trichlorobenzene	ND	1.00	"							
1,1,1-Trichloroethane	ND	1.00	"							
1,1,2-Trichloroethane	ND	1.00	"							
Trichloroethene	ND	1.00	"							
Trichlorofluoromethane	ND	1.00	"							
1,2,3-Trichloropropane	ND	1.00	"							
1,2,4-Trimethylbenzene	ND	1.00	"							
1,3,5-Trimethylbenzene	ND	1.00	"							
Vinyl chloride	ND	1.00	"							
o-Xylene	ND	1.00	"							
m,p-Xylene	ND	2.00	"							
Surr: 4-BFB	17.9		"	20.0		89.5	75-120			
Surr: 1,2-DCA-d4	18.2		"	20.0		91.0	77-129			
Surr: Dibromofluoromethane	18.7		"	20.0		93.5	80-121			
Surr: Toluene-d8	18.3		"	20.0		91.5	80-120			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Environmental Laboratory Network



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541.383.9310 fax 541.382.7588

Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060429 - EPA 5030B**

<b>LCS (4060429-BS1)</b>				Prepared & Analyzed: 06/10/04						
Benzene	20.5	1.00	ug/l	20.0	102	80-120				
Chlorobenzene	20.6	1.00	"	20.0	103	80-124				
1,1-Dichloroethene	19.1	1.00	"	20.0	95.5	78-120				
Toluene	20.7	1.00	"	20.0	104	80-124				
Trichloroethene	19.6	1.00	"	20.0	98.0	80-132				
Surr: 4-BFB	19.0		"	20.0	95.0	75-120				
Surr: 1,2-DCA-d4	18.1		"	20.0	90.5	77-129				
Surr: Dibromofluoromethane	18.6		"	20.0	93.0	80-121				
Surr: Toluene-d8	18.6		"	20.0	93.0	80-120				

<b>Matrix Spike (4060429-MS1)</b>				Source: P4F0225-01 Prepared & Analyzed: 06/10/04						
Benzene	20.8	1.00	ug/l	20.0	ND	104	80-124			
Chlorobenzene	20.6	1.00	"	20.0	ND	103	72.9-134			
1,1-Dichloroethene	20.4	1.00	"	20.0	ND	102	79.3-127			
Toluene	20.9	1.00	"	20.0	ND	104	79.7-131			
Trichloroethene	18.0	1.00	"	20.0	ND	90.0	68.4-130			
Surr: 4-BFB	19.5		"	20.0	97.5	75-120				
Surr: 1,2-DCA-d4	18.6		"	20.0	93.0	77-129				
Surr: Dibromofluoromethane	20.5		"	20.0	102	80-121				
Surr: Toluene-d8	19.4		"	20.0	97.0	80-120				

<b>Matrix Spike Dup (4060429-MSD1)</b>				Source: P4F0225-01 Prepared & Analyzed: 06/10/04						
Benzene	21.1	1.00	ug/l	20.0	ND	106	80-124	1.43	25	
Chlorobenzene	20.6	1.00	"	20.0	ND	103	72.9-134	0.00	25	
1,1-Dichloroethene	20.7	1.00	"	20.0	ND	104	79.3-127	1.46	25	
Toluene	21.0	1.00	"	20.0	ND	105	79.7-131	0.477	25	
Trichloroethene	18.0	1.00	"	20.0	ND	90.0	68.4-130	0.00	25	
Surr: 4-BFB	19.0		"	20.0	95.0	75-120				
Surr: 1,2-DCA-d4	19.2		"	20.0	96.0	77-129				
Surr: Dibromofluoromethane	20.6		"	20.0	103	80-121				
Surr: Toluene-d8	19.0		"	20.0	95.0	80-120				

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limit	RPD RPD	Limit	Notes
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**Batch 4060580 - EPA 5035**

**Blank (4060580-BLK1)**

Prepared & Analyzed: 06/14/04

Acetone	ND	2500	ug/kg							
Benzene	ND	100	"							
Bromobenzene	ND	100	"							
Bromochloromethane	ND	100	"							
Bromodichloromethane	ND	100	"							
Bromoform	ND	100	"							
Bromomethane	ND	500	"							
2-Butanone	ND	1000	"							
n-Butylbenzene	ND	500	"							
sec-Butylbenzene	ND	100	"							
tert-Butylbenzene	ND	100	"							
Carbon disulfide	ND	1000	"							
Carbon tetrachloride	ND	100	"							
Chlorobenzene	ND	100	"							
Chloroethane	ND	100	"							
Chloroform	ND	100	"							
Chloromethane	ND	500	"							
2-Chlorotoluene	ND	100	"							
4-Chlorotoluene	ND	100	"							
1,2-Dibromo-3-chloropropane	ND	500	"							
Dibromochloromethane	ND	100	"							
1,2-Dibromoethane	ND	100	"							
Dibromomethane	ND	100	"							
1,2-Dichlorobenzene	ND	100	"							
1,3-Dichlorobenzene	ND	100	"							
1,4-Dichlorobenzene	ND	100	"							
Dichlorodifluoromethane	ND	500	"							
1,1-Dichloroethane	ND	100	"							
1,2-Dichloroethane	ND	100	"							
1,1-Dichloroethene	ND	100	"							
cis-1,2-Dichloroethene	ND	100	"							
trans-1,2-Dichloroethene	ND	100	"							
1,2-Dichloropropane	ND	100	"							
1,3-Dichloropropane	ND	100	"							
2,2-Dichloropropane	ND	100	"							
1,1-Dichloropropene	ND	100	"							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853B Project Manager: Gary Hamilton	Reported: 06/22/04 15:56
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**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060580 - EPA 5035**

**Blank (4060580-BLK1)**

Prepared & Analyzed: 06/14/04

cis-1,3-Dichloropropene	ND	100	ug/kg							
trans-1,3-Dichloropropene	ND	100	"							
Ethylbenzene	ND	100	"							
Hexachlorobutadiene	ND	200	"							
2-Hexanone	ND	1000	"							
Isopropylbenzene	ND	200	"							
p-Isopropyltoluene	ND	200	"							
4-Methyl-2-pentanone	ND	500	"							
Methyl tert-butyl ether	ND	100	"							
Methylene chloride	ND	500	"							
Naphthalene	ND	200	"							
n-Propylbenzene	ND	100	"							
Styrene	ND	100	"							
1,1,1,2-Tetrachloroethane	ND	100	"							
1,1,2,2-Tetrachloroethane	ND	100	"							
Tetrachloroethene	ND	100	"							
Toluene	ND	100	"							
1,2,3-Trichlorobenzene	ND	100	"							
1,2,4-Trichlorobenzene	ND	100	"							
1,1,1-Trichloroethane	ND	100	"							
1,1,2-Trichloroethane	ND	100	"							
Trichloroethene	ND	100	"							
Trichlorofluoromethane	ND	100	"							
1,2,3-Trichloropropane	ND	100	"							
1,2,4-Trimethylbenzene	ND	100	"							
1,3,5-Trimethylbenzene	ND	100	"							
Vinyl chloride	ND	100	"							
o-Xylene	ND	100	"							
m,p-Xylene	ND	200	"							
Surr: 4-BFB	1700		"	2000		85.0	42.6-130			
Surr: 1,2-DCA-d4	2860		"	2000		143	57.3-144			
Surr: Dibromofluoromethane	2490		"	2000		124	45.5-130			
Surr: Toluene-d8	2400		"	2000		120	42.1-144			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853B  
Project Manager: Gary Hamilton

Reported:  
06/22/04 15:56

**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	RPD RPD	RPD RPD	Notes
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**Batch 4060580 - EPA 5035**

**LCS (4060580-BS1)**

Prepared: 06/14/04 Analyzed: 06/15/04

Benzene	2040	100	ug/kg	2000		102	81.9-125		
Chlorobenzene	1860	100	"	2000		93.0	79.2-125		
1,1-Dichloroethene	1840	100	"	2000		92.0	66.1-125		
Toluene	1970	100	"	2000		98.5	80-125		
Trichloroethene	1940	100	"	2000		97.0	76-125		
Surr: 4-BFB	1620		"	2000		81.0	42.6-130		
Surr: 1,2-DCA-d4	2640		"	2000		132	57.3-144		
Surr: Dibromofluoromethane	2410		"	2000		120	45.5-130		
Surr: Toluene-d8	2280		"	2000		114	42.1-144		

**Matrix Spike (4060580-MS1)**

Source: P4F0456-01

Prepared & Analyzed: 06/14/04

Benzene	2410	100	ug/kg dry	2360	ND	102	68.5-125		
Chlorobenzene	2270	100	"	2360	ND	96.2	65.9-125		
1,1-Dichloroethene	2170	100	"	2360	ND	91.9	55.8-125		
Toluene	2370	100	"	2360	ND	100	70.3-125		
Trichloroethene	2410	100	"	2360	ND	102	65.5-125		
Surr: 4-BFB	1970		"	2360		83.5	42.6-130		
Surr: 1,2-DCA-d4	3210		"	2360		136	57.3-144		
Surr: Dibromofluoromethane	2860		"	2360		121	45.5-130		
Surr: Toluene-d8	2740		"	2360		116	42.1-144		

**Matrix Spike Dup (4060580-MSD1)**

Source: P4F0456-01

Prepared & Analyzed: 06/14/04

Benzene	2430	100	ug/kg dry	2360	ND	103	68.5-125	0.826	25
Chlorobenzene	2240	100	"	2360	ND	94.9	65.9-125	1.33	25
1,1-Dichloroethene	2220	100	"	2360	ND	94.1	55.8-125	2.28	25
Toluene	2360	100	"	2360	ND	100	70.3-125	0.423	25
Trichloroethene	2400	100	"	2360	ND	102	65.5-125	0.416	25
Surr: 4-BFB	1870		"	2360		79.2	42.6-130		
Surr: 1,2-DCA-d4	3080		"	2360		131	57.3-144		
Surr: Dibromofluoromethane	2860		"	2360		121	45.5-130		
Surr: Toluene-d8	2630		"	2360		111	42.1-144		

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Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853B  
 Project Manager: Gary Hamilton

**Reported:**  
 06/22/04 15:56

**Notes and Definitions**

- A-01 Detected hydrocarbons appear to be due to mineral spirits or similar product.
- A-02 The hydrocarbon concentration appears to be due to single peak(s) eluting in this range.
- D-15 Detected hydrocarbons have non-petroleum peaks or elution pattern that suggests the presence of biogenic interference.
- D-17 Detected hydrocarbons in the diesel range do not have a distinct diesel pattern and may be due to heavily weathered diesel or possibly biogenic interference.
- R-05 Reporting limits raised due to dilution necessary for analysis. Sample contains high levels of reported analyte, non-target analyte, and/or matrix interference.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
- wet Sample results reported on a wet weight basis (as received)
- RPD Relative Percent Difference

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# CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST



500 - 4260 Still Creek Drive  
 Burnaby, British Columbia, Canada V5C 6C6  
 Telephone (604) 298-6623 Fax (604) 298-5253

Project Number: 96-1412-853B  
 Short Title: WHITE PASS SPDS  
 Laboratory Name: NORTH CREEK ANALYTICAL  
 Address: 9405 SW ANIBUS AVE, BOWENTON OR, 97004  
 Telephone/Fax: 503-906-9200  
 Contact: CRYSTAL JONES  
 Golder Contact: Gary Hamilton  
 Golder E-mail Address: ghamilton@golder.com

Office the final reports should be sent to:  
 500-4260 Still Creek Dr.  
 Burnaby, B.C.  
 V5C 6C6  
 Tel: (604) 298-6623;  
 Fax: (604) 298-5253

202 - 2790 Gladwin Road  
 Abbotsford, B.C.  
 V2T 4S8  
 Tel: (604) 850-8786  
 Fax: (604) 850-8756

220 - 174 Wilson Street  
 Victoria, B.C.  
 V9A 7N6  
 Tel: (250) 881-7372  
 Fax: (250) 881-7470

Sample Control Number (SCN)	Sample Location	Sa. #	Sample Depth (m)	Sample Matrix (over)	Date Sampled (D / M / Y)	Time Sampled (HH:MM)	Sample Type (over)	QAQC Code (over)	Related SCN (over)	Number of Containers	Analyses Required		Remarks (over)
											DRD	GRD	
9030-01	MW97-7A	1		GW	01/06/04	5:30	D			8	✓	✓	
9030-02	MW97-7B	2			02/06/04	09:45	D			8	✓	✓	
9030-03	MW97-7C	3			02/06/04	11:00				8	✓	✓	
9030-04	MW97-7D	4			02/06/04	12:10				8	✓	✓	
9030-05	MW97-7E	5			02/06/04	12:30				3	✓	✓	NS-see instra... of sample.
9030-06	MW97-7F	6		GW	03/06/04	9:50		FA 9030-07		8	✓	✓	
9030-07	MW97-7G	6			03/06/04	9:50		FD 9030-06		8	✓	✓	
9030-08	AS-11	AS-2			04/06/04	11:15				8	✓	✓	
9030-09	AS-9	AS-4			04/06/04	1:00				8	✓	✓	
9030-10	AS-7	AS-6			04/06/04	4:00				8	✓	✓	
9030-11	AS-5	AS-8			04/06/04	5:25				8	✓	✓	
9030-12	SPRING	11		SW	05/06/04	10:45				8	✓	✓	

Relinquished by: Signature *[Signature]* Date: 05-06-04 Company: Golder  
 Relinquished by: Signature *[Signature]* Date: \_\_\_\_\_ Company: \_\_\_\_\_  
 Method of Shipment: \_\_\_\_\_  
 Shipped by: \_\_\_\_\_  
 Waybill No.: \_\_\_\_\_  
 Shipment Condition: \_\_\_\_\_ Seal Intact: \_\_\_\_\_  
 Received for Lab by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Temp (°C): \_\_\_\_\_ Cooler opened by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Received by: Signature \_\_\_\_\_ Date: \_\_\_\_\_ Company: \_\_\_\_\_  
 Received by: Signature \_\_\_\_\_ Date: \_\_\_\_\_ Company: \_\_\_\_\_

Sampler's Signature: *[Signature]*  
 Sample Storage (°C): ambient

Comments: NOTE: 9030-05 = free product

WHITE: Golder Copy    YELLOW: Lab Copy    PINK: Lab Returns with Final Report

**Instructions**

Sample Control Number – Include chain-of-custody form number as prefix.

Sample Matrix – Soil, Water, Air, Refuse, Sludge.

Sample Type – Discrete, Composite, Grab.

QA/QC Code - FD = Field duplicate (homogenized)

FR = Field replicate (unhomogenized)

FB = Field blank

TB = Travel blank

Related SCN – Note associated sample control number for field duplicates or related composite sample control number for discrete samples.

Remarks – Note any special instructions for analytical lab.

Comments: Note any general comments for this set of samples. If samples are time sensitive, please provide the lab with the earliest time of sampling. I.e.: Earliest sample time: time, date



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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853 Project Manager: Gary Hamilton	<b>Reported:</b> 06/28/04 15:04
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**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
9031-01	P4F0455-01	Water	06/09/04 12:00	06/11/04 14:45
9031-02	P4F0455-02	Water	06/09/04 12:00	06/11/04 14:45
9031-03	P4F0455-03	Water	06/09/04 12:00	06/11/04 14:45
<del>9031-04</del>	<del>P4F0455-04</del>	<del>Water</del>	<del>06/10/04 12:00</del>	<del>06/11/04 14:45</del>
<del>9031-05</del>	<del>P4F0455-05</del>	<del>Water</del>	<del>06/10/04 12:00</del>	<del>06/11/04 14:45</del>
<del>9031-06</del>	<del>P4F0455-06</del>	<del>Water</del>	<del>06/10/04 12:00</del>	<del>06/11/04 14:45</del>

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853  
 Project Manager: Gary Hamilton

**Reported:**  
 06/28/04 15:04

**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B  
 North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9031-01 (P4F0455-01) Water</b>						Sampled: 06/09/04 Received: 06/11/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/14/04	06/15/04	4060527	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (PID)</i>	<i>113 %</i>	<i>60-120</i>							
<b>9031-02 (P4F0455-02) Water</b>						Sampled: 06/09/04 Received: 06/11/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/14/04	06/15/04	4060527	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (FID)</i>	<i>92.0 %</i>	<i>60-120</i>							
<i>Surr: 4-BFB (PID)</i>	<i>116 %</i>	<i>60-120</i>							
<b>9031-03 (P4F0455-03) Water</b>						Sampled: 06/09/04 Received: 06/11/04			
Gasoline Range Organics	ND	80.0	ug/l	1	AK101/8021B	06/14/04	06/15/04	4060527	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
<i>Surr: 4-BFB (FID)</i>	<i>91.6 %</i>	<i>60-120</i>							
<i>Surr: 4-BFB (PID)</i>	<i>112 %</i>	<i>60-120</i>							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853  
 Project Manager: Gary Hamilton

Reported:  
 06/28/04 15:04

**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9031-04 (P4F0455-04RE2) Water</b>						Sampled: 06/10/04 Received: 06/11/04			
<b>Gasoline Range Organics</b>	<b>117</b>	80.0	ug/l	1	AK101/8021B	06/16/04	06/18/04	4060668	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	<b>1.13</b>	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (FID)	66.4 %	60-120							
Surr: 4-BFB (PID)	68.4 %	60-120							
<b>9031-05 (P4F0455-05) Water</b>						Sampled: 06/10/04 Received: 06/11/04			
<b>Gasoline Range Organics</b>	<b>483</b>	80.0	ug/l	1	AK101/8021B	06/14/04	06/15/04	4060527	
Benzene	<b>0.739</b>	0.500	"	"	"	"	"	"	
Toluene	<b>0.535</b>	0.500	"	"	"	"	"	"	
Ethylbenzene	<b>21.3</b>	0.500	"	"	"	"	"	"	
Xylenes (total)	<b>118</b>	1.00	"	"	"	"	"	"	
Surr: 4-BFB (FID)	142 %	60-120							S-09
Surr: 4-BFB (PID)	125 %	60-120							S-09
<b>9031-06 (P4F0455-06) Water</b>						Sampled: 06/10/04 Received: 06/11/04			
<b>Gasoline Range Organics</b>	ND	80.0	ug/l	1	AK101/8021B	06/14/04	06/15/04	4060527	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (FID)	97.4 %	60-120							
Surr: 4-BFB (PID)	115 %	60-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
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Project: N/A  
Project Number: 96-1412-853  
Project Manager: Gary Hamilton

**Reported:**  
06/28/04 15:04

**Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103 Low Volume  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9031-01 (P4F0455-01RE1) Water</b>						Sampled: 06/09/04 Received: 06/11/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/16/04	06/16/04	4060656	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	82.8 %	50-150							
Surr: Triacontane	94.2 %	50-150							
<b>9031-02 (P4F0455-02RE1) Water</b>						Sampled: 06/09/04 Received: 06/11/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/16/04	06/16/04	4060656	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	93.2 %	50-150							
Surr: Triacontane	111 %	50-150							
<b>9031-03 (P4F0455-03RE1) Water</b>						Sampled: 06/09/04 Received: 06/11/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/16/04	06/16/04	4060656	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	81.0 %	50-150							
Surr: Triacontane	93.7 %	50-150							
<b>9031-04 (P4F0455-04RE1) Water</b>						Sampled: 06/10/04 Received: 06/11/04			
Diesel Range Organics	<b>1.83</b>	0.320	mg/l	1	AK102/103	06/16/04	06/16/04	4060656	D-15
Residual Range Organics	<b>1.74</b>	0.400	"	"	"	"	"	"	D-15
Surr: 1-Chlorooctadecane	68.5 %	50-150							
Surr: Triacontane	68.0 %	50-150							
<b>9031-05 (P4F0455-05RE1) Water</b>						Sampled: 06/10/04 Received: 06/11/04			
Diesel Range Organics	<b>3.47</b>	0.320	mg/l	1	AK102/103	06/16/04	06/16/04	4060656	A-01
Residual Range Organics	<b>0.541</b>	0.400	"	"	"	"	"	"	D-15
Surr: 1-Chlorooctadecane	76.0 %	50-150							
Surr: Triacontane	94.5 %	50-150							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853 Project Manager: Gary Hamilton	Reported: 06/28/04 15:04
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**Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103 Low Volume  
 North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9031-06 (P4E0455-06RE1) Water</b>						Sampled: 06/10/04 Received: 06/11/04			
Diesel Range Organics	ND	0.320	mg/l	1	AK102/103	06/16/04	06/16/04	4060656	
Residual Range Organics	ND	0.400	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	89.1 %	50-150							
Surr: Triacontane	96.7 %	50-150							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
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Project: N/A  
Project Number: 96-1412-853  
Project Manager: Gary Hamilton

**Reported:**  
06/28/04 15:04

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9031-01 (P4F0455-01) Water</b>						Sampled: 06/09/04 Received: 06/11/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/18/04	06/18/04	4060813	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>1.20</b>	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853  
Project Manager: Gary Hamilton

Reported:  
06/28/04 15:04

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9031-01 (P4F0455-01) Water</b>						Sampled: 06/09/04 Received: 06/11/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/18/04	06/18/04	4060813	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>2.83</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	<i>94.5 %</i>	<i>75-120</i>							
<i>Surr: 1,2-DCA-d4</i>	<i>103 %</i>	<i>77-129</i>							
<i>Surr: Dibromofluoromethane</i>	<i>110 %</i>	<i>80-121</i>							
<i>Surr: Toluene-d8</i>	<i>104 %</i>	<i>80-120</i>							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853  
Project Manager: Gary Hamilton

**Reported:**  
06/28/04 15:04

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting		Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
		Limit								
<b>9031-02 (P4F0455-02) Water</b>						Sampled: 06/09/04 Received: 06/11/04				
Acetone	ND	25.0		ug/l	1	EPA 8260B	06/18/04	06/18/04	4060813	
Benzene	ND	1.00		"	"	"	"	"	"	
Bromobenzene	ND	1.00		"	"	"	"	"	"	
Bromochloromethane	ND	1.00		"	"	"	"	"	"	
Bromodichloromethane	ND	1.00		"	"	"	"	"	"	
Bromoform	ND	1.00		"	"	"	"	"	"	
Bromomethane	ND	5.00		"	"	"	"	"	"	
2-Butanone	ND	10.0		"	"	"	"	"	"	
n-Butylbenzene	ND	5.00		"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00		"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00		"	"	"	"	"	"	
Carbon disulfide	ND	10.0		"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00		"	"	"	"	"	"	
Chlorobenzene	ND	1.00		"	"	"	"	"	"	
Chloroethane	ND	1.00		"	"	"	"	"	"	
Chloroform	ND	1.00		"	"	"	"	"	"	
Chloromethane	ND	5.00		"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00		"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00		"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00		"	"	"	"	"	"	
Dibromochloromethane	ND	1.00		"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00		"	"	"	"	"	"	
Dibromomethane	ND	1.00		"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00		"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00		"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00		"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00		"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00		"	"	"	"	"	"	
<b>cis-1,2-Dichloroethene</b>	<b>1.30</b>	1.00		"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00		"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00		"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00		"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00		"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00		"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00		"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853  
Project Manager: Gary Hamilton

**Reported:**  
06/28/04 15:04

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9031-02 (P4F0455-02) Water</b>						Sampled: 06/09/04 Received: 06/11/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/18/04	06/18/04	4060813	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>2.87</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	<i>95.0 %</i>	<i>75-120</i>							
<i>Surr: 1,2-DCA-d4</i>	<i>97.5 %</i>	<i>77-129</i>							
<i>Surr: Dibromofluoromethane</i>	<i>109 %</i>	<i>80-121</i>							
<i>Surr: Toluene-d8</i>	<i>98.5 %</i>	<i>80-120</i>							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853  
Project Manager: Gary Hamilton

Reported:  
06/28/04 15:04

**Volatile Organic Compounds per EPA Method 8260B  
North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9031-03 (P4F0455-03) Water</b>						Sampled: 06/09/04 Received: 06/11/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/18/04	06/18/04	4060813	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853  
Project Manager: Gary Hamilton

**Reported:**  
06/28/04 15:04

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9031-03 (P4F0455-03) Water</b>						Sampled: 06/09/04 Received: 06/11/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/18/04	06/18/04	4060813	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
<b>Trichloroethene</b>	<b>1.41</b>	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	<i>92.0 %</i>	<i>75-120</i>							
<i>Surr: 1,2-DCA-d4</i>	<i>100 %</i>	<i>77-129</i>							
<i>Surr: Dibromofluoromethane</i>	<i>109 %</i>	<i>80-121</i>							
<i>Surr: Toluene-d8</i>	<i>98.0 %</i>	<i>80-120</i>							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
 500-4260 Still Creek Drive  
 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853  
 Project Manager: Gary Hamilton

**Reported:**  
 06/28/04 15:04

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9031-04 (P4F0455-04) Water</b>						Sampled: 06/10/04 Received: 06/11/04			
Acetone	ND	25.0	ug/l	1	EPA 8260B	06/18/04	06/18/04	4060813	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
<b>sec-Butylbenzene</b>	<b>1.67</b>	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853  
Project Manager: Gary Hamilton

Reported:  
06/28/04 15:04

**Volatile Organic Compounds per EPA Method 8260B**  
**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>9031-06 (P4F0455-06) Water</b>						Sampled: 06/10/04 Received: 06/11/04			
trans-1,3-Dichloropropene	ND	1.00	ug/l	1	EPA 8260B	06/18/04	06/19/04	4060813	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	100 %	75-120							
Surr: 1,2-DCA-d4	108 %	77-129							
Surr: Dibromofluoromethane	117 %	80-121							
Surr: Toluene-d8	99.5 %	80-120							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853 Project Manager: Gary Hamilton	Reported: 06/28/04 15:04
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**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060527 - EPA 5030B**

<b>Blank (4060527-BLK1)</b>			Prepared & Analyzed: 06/14/04							
Gasoline Range Organics	ND	80.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (FID)	44.5		"	50.0		89.0	60-120			
Surr: 4-BFB (PID)	57.9		"	50.0		116	60-120			

<b>LCS (4060527-BS1)</b>			Prepared & Analyzed: 06/14/04							
Gasoline Range Organics	857	80.0	ug/l	1000		85.7	60-120			
Surr: 4-BFB (FID)	56.2		"	50.0		112	60-120			
Surr: 4-BFB (PID)	61.1		"	50.0		122	60-120			S-03

<b>LCS (4060527-BS2)</b>			Prepared & Analyzed: 06/14/04							
Benzene	55.4	0.500	ug/l	50.0		111	70-130			
Toluene	58.5	0.500	"	50.0		117	76-129			
Ethylbenzene	54.4	0.500	"	50.0		109	82-130			
Xylenes (total)	182	1.00	"	150		121	76-130			
Surr: 4-BFB (FID)	46.1		"	50.0		92.2	60-120			
Surr: 4-BFB (PID)	59.5		"	50.0		119	60-120			

<b>LCS Dup (4060527-BSD1)</b>			Prepared & Analyzed: 06/14/04							
Gasoline Range Organics	802	80.0	ug/l	1000		80.2	60-120	6.63	20	
Surr: 4-BFB (FID)	53.2		"	50.0		106	60-120			
Surr: 4-BFB (PID)	61.6		"	50.0		123	60-120			S-03

<b>Duplicate (4060527-DUP1)</b>			Source: P4F0361-02		Prepared & Analyzed: 06/14/04					
Gasoline Range Organics	ND	80.0	ug/l		ND			NA	50	
Surr: 4-BFB (FID)	50.9		"	50.0		102	60-120			
Surr: 4-BFB (PID)	54.5		"	50.0		109	60-120			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853  
Project Manager: Gary Hamilton

**Reported:**  
06/28/04 15:04

**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060527 - EPA 5030B**

<b>Duplicate (4060527-DUP2)</b>		<b>Source: P4F0366-01</b>			<b>Prepared: 06/14/04 Analyzed: 06/15/04</b>	
Gasoline Range Organics	ND	80.0	ug/l	ND	NA	50
Surr: 4-BFB (FID)	45.8	"	"	50.0	91.6	60-120
Surr: 4-BFB (PID)	56.1	"	"	50.0	112	60-120
<b>Matrix Spike (4060527-MS1)</b>		<b>Source: P4F0361-01</b>			<b>Prepared &amp; Analyzed: 06/14/04</b>	
Benzene	58.7	0.500	ug/l	50.0	1.07	115 65-144
Toluene	59.5	0.500	"	50.0	0.575	118 68-139
Ethylbenzene	78.8	0.500	"	50.0	32.1	93.4 69-144
Xylenes (total)	176	1.00	"	150	2.04	116 60-144
Surr: 4-BFB (FID)	60.4	"	"	50.0	121	60-120 S-03
Surr: 4-BFB (PID)	63.8	"	"	50.0	128	60-120 S-03

<b>Matrix Spike Dup (4060527-MSD1)</b>		<b>Source: P4F0361-01</b>			<b>Prepared &amp; Analyzed: 06/14/04</b>	
Benzene	56.0	0.500	ug/l	50.0	1.07	110 65-144 4.71 20
Toluene	56.5	0.500	"	50.0	0.575	112 68-139 5.17 20
Ethylbenzene	75.9	0.500	"	50.0	32.1	87.6 69-144 3.75 20
Xylenes (total)	168	1.00	"	150	2.04	111 60-144 4.65 20
Surr: 4-BFB (FID)	59.0	"	"	50.0	118	60-120
Surr: 4-BFB (PID)	62.0	"	"	50.0	124	60-120 S-03

**Batch 4060642 - EPA 5030B**

<b>Blank (4060642-BLK1)</b>					<b>Prepared &amp; Analyzed: 06/15/04</b>	
Gasoline Range Organics	ND	80.0	ug/l			
Benzene	ND	0.500	"			
Toluene	ND	0.500	"			
Ethylbenzene	ND	0.500	"			
Xylenes (total)	ND	1.00	"			
Surr: 4-BFB (FID)	48.2	"	"	50.0	96.4	60-120
Surr: 4-BFB (PID)	59.7	"	"	50.0	119	60-120

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853 Project Manager: Gary Hamilton	Reported: 06/28/04 15:04
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**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060642 - EPA 5030B**

<b>LCS (4060642-BS1)</b>				Prepared & Analyzed: 06/15/04						
Gasoline Range Organics	760	80.0	ug/l	1000		76.0	60-120			
Surr: 4-BFB (FID)	54.6		"	50.0		109	60-120			
Surr: 4-BFB (PID)	63.1		"	50.0		126	60-120			S-09

<b>LCS (4060642-BS2)</b>				Prepared & Analyzed: 06/15/04						
Benzene	54.4	0.500	ug/l	50.0		109	70-130			
Toluene	57.2	0.500	"	50.0		114	76-129			
Ethylbenzene	51.9	0.500	"	50.0		104	82-130			
Xylenes (total)	174	1.00	"	150		116	76-130			
Surr: 4-BFB (FID)	48.5		"	50.0		97.0	60-120			
Surr: 4-BFB (PID)	62.1		"	50.0		124	60-120			S-09

<b>LCS Dup (4060642-BSD1)</b>				Prepared & Analyzed: 06/15/04						
Gasoline Range Organics	848	80.0	ug/l	1000		84.8	60-120	10.9	20	
Surr: 4-BFB (FID)	58.1		"	50.0		116	60-120			
Surr: 4-BFB (PID)	63.3		"	50.0		127	60-120			S-09

<b>Duplicate (4060642-DUP1)</b>				Source: P4F0439-01		Prepared & Analyzed: 06/15/04				
Gasoline Range Organics	ND	80.0	ug/l		ND			NA	50	
Surr: 4-BFB (FID)	46.0		"	50.0		92.0	60-120			
Surr: 4-BFB (PID)	52.8		"	50.0		106	60-120			

<b>Duplicate (4060642-DUP2)</b>				Source: P4F0492-07		Prepared: 06/15/04 Analyzed: 06/16/04				
Gasoline Range Organics	ND	80.0	ug/l		ND			NA	50	
Surr: 4-BFB (FID)	42.8		"	50.0		85.6	60-120			
Surr: 4-BFB (PID)	53.4		"	50.0		107	60-120			

<b>Matrix Spike (4060642-MS1)</b>				Source: P4F0494-01		Prepared & Analyzed: 06/15/04				
Benzene	55.6	0.500	ug/l	50.0	3.50	104	65-144			
Toluene	57.0	0.500	"	50.0	9.49	95.0	68-139			
Ethylbenzene	56.6	0.500	"	50.0	12.7	87.8	69-144			
Xylenes (total)	177	1.00	"	150	3.38	116	60-144			
Surr: 4-BFB (FID)	67.8		"	50.0		136	60-120			S-03
Surr: 4-BFB (PID)	63.8		"	50.0		128	60-120			S-03

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Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853 Project Manager: Gary Hamilton	Reported: 06/28/04 15:04
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**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060642 - EPA 5030B**

Matrix Spike Dup (4060642-MSD1)	Source: P4F0494-01			Prepared & Analyzed: 06/15/04						
Benzene	54.2	0.500	ug/l	50.0	3.50	101	65-144	2.55	20	
Toluene	51.1	0.500	"	50.0	9.49	83.2	68-139	10.9	20	
Ethylbenzene	52.8	0.500	"	50.0	12.7	80.2	69-144	6.95	20	
Xylenes (total)	149	1.00	"	150	3.38	97.1	60-144	17.2	20	
Surr: 4-BFB (FID)	65.4		"	50.0		131	60-120			S-03
Surr: 4-BFB (PID)	62.1		"	50.0		124	60-120			S-03

**Batch 4060668 - EPA 5030B**

Blank (4060668-BLK1)	Prepared: 06/16/04 Analyzed: 06/17/04									
Gasoline Range Organics	ND	80.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (FID)	47.0		"	50.0		94.0	60-120			
Surr: 4-BFB (PID)	58.0		"	50.0		116	60-120			

LCS (4060668-BS1)	Prepared: 06/16/04 Analyzed: 06/17/04									
Gasoline Range Organics	828	80.0	ug/l	1000		82.8	60-120			
Surr: 4-BFB (FID)	54.2		"	50.0		108	60-120			
Surr: 4-BFB (PID)	63.2		"	50.0		126	60-120			S-03

LCS (4060668-BS2)	Prepared: 06/16/04 Analyzed: 06/17/04									
Benzene	44.7	0.500	ug/l	50.0		89.4	70-130			
Toluene	42.1	0.500	"	50.0		84.2	76-129			
Ethylbenzene	42.8	0.500	"	50.0		85.6	82-130			
Xylenes (total)	130	1.00	"	150		86.7	76-130			
Surr: 4-BFB (FID)	47.4		"	50.0		94.8	60-120			
Surr: 4-BFB (PID)	60.0		"	50.0		120	60-120			

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853 Project Manager: Gary Hamilton	Reported: 06/28/04 15:04
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**Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060668 - EPA 5030B**

<b>LCS Dup (4060668-bsd1)</b>				Prepared: 06/16/04 Analyzed: 06/17/04						
Gasoline Range Organics	923	80.0	ug/l	1000		92.3	60-120	10.9	20	
Surr: 4-BFB (FID)	57.7		"	50.0		115	60-120			
Surr: 4-BFB (PID)	63.1		"	50.0		126	60-120			S-03

<b>Duplicate (4060668-DUP1)</b>				Source: P4F0566-01		Prepared: 06/16/04 Analyzed: 06/18/04				
Gasoline Range Organics	ND	80.0	ug/l		ND			NA	50	
Surr: 4-BFB (FID)	43.9		"	50.0		87.8	60-120			
Surr: 4-BFB (PID)	54.7		"	50.0		109	60-120			

<b>Duplicate (4060668-DUP2)</b>				Source: P4F0567-01		Prepared: 06/16/04 Analyzed: 06/18/04				
Gasoline Range Organics	4460	80.0	ug/l		ND				50	
Surr: 4-BFB (FID)	70.7		"	50.0		141	60-120			S-09
Surr: 4-BFB (PID)	64.8		"	50.0		130	60-120			S-09

<b>Matrix Spike (4060668-MS1)</b>				Source: P4F0545-03		Prepared: 06/16/04 Analyzed: 06/17/04				
Benzene	44.5	0.500	ug/l	50.0	ND	89.0	65-144			
Toluene	41.1	0.500	"	50.0	ND	82.2	68-139			
Ethylbenzene	38.9	0.500	"	50.0	0.223	77.4	69-144			
Xylenes (total)	97.5	1.00	"	150	ND	65.0	60-144			
Surr: 4-BFB (FID)	39.0		"	50.0		78.0	60-120			
Surr: 4-BFB (PID)	49.4		"	50.0		98.8	60-120			

<b>Matrix Spike Dup (4060668-MSD1)</b>				Source: P4F0545-03		Prepared: 06/16/04 Analyzed: 06/17/04				
Benzene	44.8	0.500	ug/l	50.0	ND	89.6	65-144	0.672	20	
Toluene	41.4	0.500	"	50.0	ND	82.8	68-139	0.727	20	
Ethylbenzene	41.9	0.500	"	50.0	0.223	83.4	69-144	7.43	20	
Xylenes (total)	124	1.00	"	150	ND	82.7	60-144	23.9	20	Q-01
Surr: 4-BFB (FID)	45.2		"	50.0		90.4	60-120			
Surr: 4-BFB (PID)	57.3		"	50.0		115	60-120			

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853 Project Manager: Gary Hamilton	Reported: 06/28/04 15:04
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**Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103 Low Volume - Quality**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060656 - EPA 3510 Fuels**

**Blank (4060656-BLK1)** Prepared & Analyzed: 06/16/04

Diesel Range Organics	ND	0.400	mg/l							
Residual Range Organics	ND	0.500	"							
<i>Surr: 1-Chlorooctadecane</i>	<i>0.387</i>		"	<i>0.480</i>		<i>80.6</i>	<i>50-150</i>			
<i>Surr: Triacontane</i>	<i>0.471</i>		"	<i>0.496</i>		<i>95.0</i>	<i>50-150</i>			

**LCS (4060656-BS1)** Prepared: 06/16/04 Analyzed: 06/17/04

Diesel Range Organics	4.23	0.400	mg/l	5.04		83.9	75-125			
Residual Range Organics	2.59	0.500	"	3.02		85.8	60-120			
<i>Surr: 1-Chlorooctadecane</i>	<i>0.336</i>		"	<i>0.480</i>		<i>70.0</i>	<i>50-150</i>			
<i>Surr: Triacontane</i>	<i>0.463</i>		"	<i>0.496</i>		<i>93.3</i>	<i>50-150</i>			

**LCS Dup (4060656-BSD1)** Prepared & Analyzed: 06/16/04

Diesel Range Organics	4.48	0.400	mg/l	5.04		88.9	75-125	5.74	20	
Residual Range Organics	3.12	0.500	"	3.02		103	60-120	18.6	20	
<i>Surr: 1-Chlorooctadecane</i>	<i>0.370</i>		"	<i>0.480</i>		<i>77.1</i>	<i>50-150</i>			
<i>Surr: Triacontane</i>	<i>0.486</i>		"	<i>0.496</i>		<i>98.0</i>	<i>50-150</i>			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada  
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 Burnaby, BC/CAN V5C6C6

Project: N/A  
 Project Number: 96-1412-853  
 Project Manager: Gary Hamilton

Reported:  
 06/28/04 15:04

**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060813 - EPA 5030B**

Prepared & Analyzed: 06/18/04

**Blank (4060813-BLK1)**

Acetone	ND	25.0	ug/l
Benzene	ND	1.00	"
Bromobenzene	ND	1.00	"
Bromochloromethane	ND	1.00	"
Bromodichloromethane	ND	1.00	"
Bromoform	ND	1.00	"
Bromomethane	ND	5.00	"
2-Butanone	ND	10.0	"
n-Butylbenzene	ND	5.00	"
sec-Butylbenzene	ND	1.00	"
tert-Butylbenzene	ND	1.00	"
Carbon disulfide	ND	10.0	"
Carbon tetrachloride	ND	1.00	"
Chlorobenzene	ND	1.00	"
Chloroethane	ND	1.00	"
Chloroform	ND	1.00	"
Chloromethane	ND	5.00	"
2-Chlorotoluene	ND	1.00	"
4-Chlorotoluene	ND	1.00	"
1,2-Dibromo-3-chloropropane	ND	5.00	"
Dibromochloromethane	ND	1.00	"
1,2-Dibromoethane	ND	1.00	"
Dibromomethane	ND	1.00	"
1,2-Dichlorobenzene	ND	1.00	"
1,3-Dichlorobenzene	ND	1.00	"
1,4-Dichlorobenzene	ND	1.00	"
Dichlorodifluoromethane	ND	5.00	"
1,1-Dichloroethane	ND	1.00	"
1,2-Dichloroethane	ND	1.00	"
1,1-Dichloroethene	ND	1.00	"
cis-1,2-Dichloroethene	ND	1.00	"
trans-1,2-Dichloroethene	ND	1.00	"
1,2-Dichloropropane	ND	1.00	"
1,3-Dichloropropane	ND	1.00	"
2,2-Dichloropropane	ND	1.00	"
1,1-Dichloropropene	ND	1.00	"

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Golder Associates - Canada 500-4260 Still Creek Drive Burnaby, BC/CAN V5C6C6	Project: N/A Project Number: 96-1412-853 Project Manager: Gary Hamilton	Reported: 06/28/04 15:04
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**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060813 - EPA 5030B**

**Blank (4060813-BLK1)** Prepared & Analyzed: 06/18/04

cis-1,3-Dichloropropene	ND	1.00	ug/l							
trans-1,3-Dichloropropene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
Hexachlorobutadiene	ND	2.00	"							
2-Hexanone	ND	10.0	"							
Isopropylbenzene	ND	2.00	"							
p-Isopropyltoluene	ND	2.00	"							
4-Methyl-2-pentanone	ND	5.00	"							
Methyl tert-butyl ether	ND	1.00	"							
Methylene chloride	ND	5.00	"							
Naphthalene	ND	2.00	"							
n-Propylbenzene	ND	1.00	"							
Styrene	ND	1.00	"							
1,1,1,2-Tetrachloroethane	ND	1.00	"							
1,1,2,2-Tetrachloroethane	ND	1.00	"							
Tetrachloroethene	ND	1.00	"							
Toluene	ND	1.00	"							
1,2,3-Trichlorobenzene	ND	1.00	"							
1,2,4-Trichlorobenzene	ND	1.00	"							
1,1,1-Trichloroethane	ND	1.00	"							
1,1,2-Trichloroethane	ND	1.00	"							
Trichloroethene	ND	1.00	"							
Trichlorofluoromethane	ND	1.00	"							
1,2,3-Trichloropropane	ND	1.00	"							
1,2,4-Trimethylbenzene	ND	1.00	"							
1,3,5-Trimethylbenzene	ND	1.00	"							
Vinyl chloride	ND	1.00	"							
o-Xylene	ND	1.00	"							
m,p-Xylene	ND	2.00	"							
Surr: 4-BFB	20.3		"	20.0		102	75-120			
Surr: 1,2-DCA-d4	20.9		"	20.0		104	77-129			
Surr: Dibromofluoromethane	21.7		"	20.0		108	80-121			
Surr: Toluene-d8	20.8		"	20.0		104	80-120			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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North Creek Analytical, Inc.  
Environmental Laboratory Network



**Seattle** 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223  
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**Spokane** East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
509.924.9200 fax 509.924.9290  
**Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
503.906.9200 fax 503.906.9210  
**Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
541.383.9310 fax 541.382.7588

Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853  
Project Manager: Gary Hamilton

**Reported:**  
06/28/04 15:04

**Volatile Organic Compounds per EPA Method 8260B - Quality Control**

**North Creek Analytical - Portland**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4060813 - EPA 5030B**

**LCS (4060813-BS1)**

Prepared & Analyzed: 06/18/04

Benzene	21.4	1.00	ug/l	20.0		107	80-120			
Chlorobenzene	22.0	1.00	"	20.0		110	80-124			
1,1-Dichloroethene	19.5	1.00	"	20.0		97.5	78-120			
Toluene	22.4	1.00	"	20.0		112	80-124			
Trichloroethene	19.6	1.00	"	20.0		98.0	80-132			
Surr: 4-BFB	21.2		"	20.0		106	75-120			
Surr: 1,2-DCA-d4	20.4		"	20.0		102	77-129			
Surr: Dibromofluoromethane	22.1		"	20.0		110	80-121			
Surr: Toluene-d8	21.2		"	20.0		106	80-120			

**Matrix Spike (4060813-MS1)**

Source: P4F0455-01

Prepared & Analyzed: 06/18/04

Benzene	21.5	1.00	ug/l	20.0	ND	108	80-124			
Chlorobenzene	21.3	1.00	"	20.0	ND	106	72.9-134			
1,1-Dichloroethene	21.1	1.00	"	20.0	ND	106	79.3-127			
Toluene	21.2	1.00	"	20.0	ND	106	79.7-131			
Trichloroethene	20.9	1.00	"	20.0	2.83	90.4	68.4-130			
Surr: 4-BFB	20.0		"	20.0		100	75-120			
Surr: 1,2-DCA-d4	20.0		"	20.0		100	77-129			
Surr: Dibromofluoromethane	22.0		"	20.0		110	80-121			
Surr: Toluene-d8	20.6		"	20.0		103	80-120			

**Matrix Spike Dup (4060813-MSD1)**

Source: P4F0455-01

Prepared & Analyzed: 06/18/04

Benzene	21.6	1.00	ug/l	20.0	ND	108	80-124	0.464	25	
Chlorobenzene	21.4	1.00	"	20.0	ND	107	72.9-134	0.468	25	
1,1-Dichloroethene	21.8	1.00	"	20.0	ND	109	79.3-127	3.26	25	
Toluene	21.5	1.00	"	20.0	ND	108	79.7-131	1.41	25	
Trichloroethene	21.1	1.00	"	20.0	2.83	91.4	68.4-130	0.952	25	
Surr: 4-BFB	19.9		"	20.0		99.5	75-120			
Surr: 1,2-DCA-d4	20.2		"	20.0		101	77-129			
Surr: Dibromofluoromethane	22.5		"	20.0		112	80-121			
Surr: Toluene-d8	20.5		"	20.0		102	80-120			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Environmental Laboratory Network

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541.383.9310 fax 541.382.7588

Golder Associates - Canada  
500-4260 Still Creek Drive  
Burnaby, BC/CAN V5C6C6

Project: N/A  
Project Number: 96-1412-853  
Project Manager: Gary Hamilton

**Reported:**  
06/28/04 15:04

**Notes and Definitions**

- A-01 Detected hydrocarbons appear to be due to a light, diesel-range product such as kerosene or jet fuel, biogenic interference and heavily weathered diesel.
- D-15 Detected hydrocarbons have non-petroleum peaks or elution pattern that suggests the presence of biogenic interference.
- Q-01 The matrix spike recovery, and/or RPD, for this QC sample is outside of established control limits. Failure of a matrix spike QC sample does not represent an out-of-control condition for the batch.
- S-03 Surrogate recovery is outside of NCA established control limits.
- S-09 Surrogate recovery is outside control limits due to matrix interference.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
- wet Sample results reported on a wet weight basis (as received)
- RPD Relative Percent Difference

North Creek Analytical - Portland

Crystal Jones, Project Manager

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North Creek Analytical, Inc.  
Environmental Laboratory Network



CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST



500 - 4260 Still Creek Drive  
 Burnaby, British Columbia, Canada V5C 6C6  
 Telephone (604) 298-6623 Fax (604) 298-5253

Project Number: 96-1412-853  
 Short Title: White Pass Shops  
 Laboratory Name: NCA  
 Address: 4405 SW Nimbus Ave, Beaverton, OR 97005  
 Telephone/Fax: 503-906-9200  
 Contact: C. Jones  
 Golder Contact: Gary Hamilton  
 Golder E-mail Address: @golder.com

Office the final reports should be sent to:  
 500-4260 Still Creek Dr. Burnaby, B.C. V5C 6C6  
 Tel: (604) 298-6623; Fax: (604) 298-5253  
 202 - 2790 Gladwin Road Abbotsford, B.C. V2T 4S8  
 Tel: (604) 850-8786 Fax: (604) 850-8756  
 220 - 174 Wilson Street Victoria, B.C. V9A 7N6  
 Tel: (250) 881-7372 Fax: (250) 881-7470

Sample Control Number (SCN)	Sample Location	Sa. #	Sample Depth (m)	Sample Matrix (over)	Date Sampled (D / M / Y)	Time Sampled (HH:MM)	Sample Type (over)	QAQC Code (over)	Related SCN (over)	Number of Containers	Analyses Required	Remarks (over)
9031-01	<del>IAS-3</del>	<del>1</del>	AS-10	gw	09-06-04	11:20	Δ	FDA	9031-02	8	RRO, GRO, BTEX, VOC	RUSH
9031-02	<del>IAS-3</del>	<del>2</del>	AS-10		09-06-04	11:20	Δ	FD	9031-01	8		
9031-03	<del>IAS-1</del>	<del>3</del>	AS-12		09-06-04	3:40	Δ			8		
9031-04	<del>HW00-29</del>	<del>4</del>			10-06-04	9:30	Δ			8		
9031-05	<del>HW00-28</del>	<del>5</del>			10-06-04	10:05	Δ			8		
9031-06	<del>HW00-12</del>	<del>6</del>			10-06-04	10:15	Δ			8		
-07												
-08												
-09												
-10												
-11												
-12												

Sampler's Signature: [Signature] Date: 10-06-04 Time: 11:20 Received by: Signature \_\_\_\_\_ Date \_\_\_\_\_ Company \_\_\_\_\_  
 Sample Storage (°C): on ice Relinquished by: Signature [Signature] Date \_\_\_\_\_ Time \_\_\_\_\_ Received by: Signature \_\_\_\_\_ Date \_\_\_\_\_ Company \_\_\_\_\_  
 Comments: \_\_\_\_\_ Method of Shipment: \_\_\_\_\_ Waybill No.: \_\_\_\_\_ Received for Lab by: \_\_\_\_\_ Date \_\_\_\_\_  
 Shipped by: \_\_\_\_\_ Shipment Condition: \_\_\_\_\_ Seal Intact: \_\_\_\_\_ Temp (°C) \_\_\_\_\_ Cooler opened by: \_\_\_\_\_ Date \_\_\_\_\_

WHITE: Golder Copy YELLOW: Lab Copy PINK: Lab Returns with Final Report

**Instructions**

Sample Control Number – Include chain-of-custody form number as prefix.

Sample Matrix – Soil, Water, Air, Refuse, Sludge.

Sample Type – Discrete, Composite, Grab.

QA/QC Code - FD = Field duplicate (homogenized)

FR = Field replicate (unhomogenized)

FB = Field blank

TB = Travel blank

Related SCN – Note associated sample control number for field duplicates or related composite sample control number for discrete samples.

Remarks – Note any special instructions for analytical lab.

Comments: Note any general comments for this set of samples. If samples are time sensitive, please provide the lab with the earliest time of sampling. I.e.: Earliest sample time: time, date