Remedial System Evaluation Report October 2009 through March 2010

Parkwater Railyard Spokane, Washington

for **BNSF Railway Company**

May 20, 2010





Earth Science + Technology

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File No. 0506-117-11

May 20, 2010

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1.0 INTRODUCTION

This document presents an evaluation of the operating soil and groundwater remedial system (remedial system) at the BNSF Parkwater site for the 6-month period from October 2009 through March 2010. The remedial system is located near historic and current fueling operations at the BNSF Railway Company (BNSF) Parkwater Rail Yard Facility (Parkwater) in Spokane, Washington. This document is intended to fulfill the requirements of the Agreed Order as described in the *Interim Action Work Plan* (IAWP) dated September 30, 2009.

Components of this document include: 1) site background; 2) the objectives and a description of the remedial system; 3) a discussion of the remedial system operation for the period between October 2009 and March 2010; 4) remedial system monitoring and vapor sampling results; 5) estimated petroleum hydrocarbon removal rates and volumes; and 6) an overall evaluation of the remedial system effectiveness.

The approximate location of Parkwater is shown in the Vicinity Map, Figure 1. Locations of existing wells, buildings, and other features are shown in Site Plan, Figure 2. The general location of the interim remediation system is shown in SVE and Air Sparge System Diagram, Figure 3. Information provided in the **Site Background** section of this report is discussed in greater detail in *Environmental Site Assessment and Remedial Well Installation Report* (GeoEngineers 2008).

2.0 SITE BACKGROUND

Parkwater is an approximately 130-acre active railyard located at 5202 East Trent Avenue in Spokane, Washington. Parkwater was initially constructed in the early 1900's as the main roundhouse and terminal facility for the Northern Pacific Railroad (Northern Pacific Railroad and Great Northern Railway merged in 1972). Parkwater was the central operations facility for the Northern Pacific Railroad from the early 1910's to 1959, when the roundhouse was demolished. During this time period, Parkwater supported several rail operations including fueling, maintenance, intermodal operations and switching. Parkwater continued to support many of these operations in a lesser capacity from 1959 to 2004, when BNSF opened the new fueling facility in Hauser, Idaho. Presently, Parkwater provides refueling, maintenance and switching operations.

Parkwater is located along an active BNSF east-west main line and is the principal BNSF railyard in the Spokane area. The site measures approximately 1¹/₄ miles (east-west) by ¹/₄ mile (north-south) and includes numerous site buildings and tracks as shown on Figure 2. The site generally is level and situated at about Elevation 1,950 feet, Mean Sea Level Datum (MSL). Parkwater is located about ¹/₂-mile south of the Spokane River and sited above the Spokane Valley-Rathdrum Prairie Aquifer, which is designated as a sole-source aquifer that provides drinking water to area residents and businesses.

The east-central portion of Parkwater, about 500 feet west-southwest of the turntable and between the Materials Storage Building and Western Fruit Express (WFE) Maintenance Facility, historically was used for locomotive fueling. Figure 2 presents the general location of the fueling area.



Several former underground storage tanks (USTs), including a 17,000-gallon and a 25,000-gallon diesel USTs, and an 18,000-gallon waste oil UST were located both south and northwest of the current fueling area. These three USTs were removed in December 1990; the former locations of the two diesel USTS are shown in Figure 3.

Vadose-zone contamination was observed in several borings advanced near the former USTs, as shallow as 12 feet below grade to groundwater. Samples collected from several groundwater monitoring wells located near the former USTs and downgradient (west-northwest) of the USTs have contained detectable concentrations of petroleum hydrocarbons (primarily within the diesel range). Samples from eleven groundwater monitoring wells have contained diesel range petroleum hydrocarbons (DRPH) concentrations exceeding the MTCA Method A cleanup criteria of 500 micrograms per liter (μ g/L) on at least two occasions; these wells include MW-1 through MW-3, MW-5 through MW-9, MW-14, MW-18, and MW-21. Light non-aqueous phase liquid (LNAPL) has been observed on the water table in groundwater monitoring wells MW-2 and MW-3; the thickness of LNAPL has ranged from about 1/16- to $\frac{1}{2}$ -inch; LNAPL has not been observed in other wells. The remedial system was installed to address soil and groundwater impacts at the source area.

3.0 REMEDIAL SYSTEM OBJECTIVES

The purpose of the remedial system is to lower the concentrations of diesel in soil and groundwater near the refueling area. This remedial system focuses on the source area and might not address all contamination related to UST releases. Based on the success of the treatment system, the system might be expanded or new remedial systems of a similar nature might be installed in other portions of the site requiring remediation.

4.0 REMEDIAL SYSTEM DESCRIPTION

Soil vapor extraction (SVE), bioventing and air sparging (AS) enhanced with ozone were deemed appropriate remedial alternatives to address diesel-contaminated soil and groundwater near the former USTs based on the results of the single and multiple well SVE and AS pilot testing discussed in the IAWP (GeoEngineers, 2009). The SVE and AS systems were put into operation as an interim remedial action on March 25, 2009.

The SVE and bioventing system consists of two 15-horsepower (hp) regenerative blowers (blower No. 1 and blower No. 2) connected by a manifold to eight wells (wells VW-1 through VW-6, and groundwater monitoring wells MW-2 and MW-3). Each blower moves from 250 to 410 cubic feet per minute (cfm) under vacuums ranging from 2 to 5 inches of water. Air extracted from the SVE wells passes through two activated carbon filters in series before discharge. The system operates on a dual-piping system, such that wells can be converted from SVE to bioventing (introducing air into the vadose zone) based on monitoring results.

The air sparging system consists of an oxygen concentrator and ozone generation system. Air is pulled through a 7.5-hp rotary screw air compressor with a flow rate of 120 cfm at 12 pounds per square inch gauge (psig). The compressed air passes through a desiccating air dryer to an oxygen concentrator. The oxygen concentrator supplies 75 standard cubic feet per hour (scfh) of oxygen at 50 psig to a 60-gallon storage tank.

Two ozone generators each capable of producing about 4.5 pounds of ozone per day are connected to the air sparge manifold. A separate sparge compressor feeds the manifold with ambient air to act as the carrier gas for the ozone. The solenoid valves are automatically controlled to inject ozone into the subsurface through 11 AS wells (AS-1 through AS-12; there is no AS-8). Only one solenoid valve is open at any time; air and ozone is injected into each well for a period of an hour, before rotating to the next well.

Further details, including remedial system components and design, are included in the IAWP (GeoEngineers, 2009).

5.0 REMEDIAL SYSTEM OPERATION - OCTOBER 2009 TO MARCH 2010

During this progress reporting period, various malfunctions have limited the continuous and efficient operation of the AS and SVE/bioventing systems. These malfunctions and solutions to address the problems are discussed in Sections 5.1 and 5.2. Field assessment and maintenance records are included in Appendix A. Tables A-1 through A-3 summarize the field monitoring data.

5.1. SVE/Bioventing System Operation

Operation of the SVE/bioventing system also was hampered by mechanical malfunctions during this progress reporting period. During routine monitoring in February 2010, metal grinding noises were heard from blower No. 2. A mechanic from Cascade Machinery and Electric Inc. (Cascade) assessed the blower and determined that the fan was worn from coming into contact with fan cover. The fan was replaced, the cover remounted and the blower returned to service on March 22, 2010. On March 26, 2010, the electric motor for blower No. 2 overheated and seized. At the end of this reporting period, blower No. 2 was not operational and blower No. 1 was operating in SVE mode. Despite the malfunctions, at least one SVE blower has been operating on a consistent basis, extracting vapors from the SVE wells. As of March 16, 2010, the run time of the blower system measured 5,786 hours for blower No. 1 and 5,854 hours for blower No. 2.

5.2. AS System Operation

Malfunctions have prevented the AS system from regular operation. In September 2009, a power surge damaged the transformer on the desiccating air dryer. The air dryer was taken to Cascade for service. The AS system was out of service until December 28, 2009 because of difficulties obtaining replacement parts for the dryer.

In October 2009, an ozone leak was detected from ozone generator No. 1. While the system was shut down for air dryer repairs, ozone generator No. 1 was shipped back to the manufacturer for service. The ozone generator was re-installed on December 28, 2009 with the air dryer.

The AS system operated within normal parameters from December 28, 2009 until the week ending February 26, 2010 when another ozone leak caused an automatic system shutdown. The system was brought back on-line on February 26, 2010, but the ozone generators were manually shut down and the system continued sparging using oxygen and ambient air. Investigation to determine the cause of the ozone leak was hampered by a second system shut down, on March 19, 2010, from low air pressure. Repeated attempts to re-start the system have been unsuccessful. The



cause of the low air pressure and the ozone leak are being assessed. Currently, the AS system is not operational.

Malfunctioning equipment and shutdown conditions have limited each of the AS wells to about 621 hours of injection since startup to March 31, 2010. During an unknown fraction of these hours, the wells have been injected with ambient air while the ozone generators were not operating.

6.0 REMEDIATION SYSTEM MONITORING

Weekly monitoring of the remediation system has been conducted since startup on March 25, 2009. Parameters related to performance have been measured from sample ports on each SVE line near the manifold and at the inlet and outlet to the carbon filters. The parameters include: relative volatile organic compounds (VOCs) concentration, oxygen and carbon dioxide concentrations, temperature and pressure/vacuum. Additionally, pressure, temperature, and flow have been recorded from the meters included in both the AS and SVE systems. Parameters were measured to evaluate the effectiveness of the treatment system and to verify that VOCs are not released from the exhaust stack. Figures 4 through 6 present weekly comparisons of the VOC, oxygen, and carbon dioxide concentrations, respectively, measured at each monitoring point. Figure 7 shows the trends in the average VOC, oxygen, and carbon dioxide concentrations as measured at the monitoring points in the SVE lines.

6.1. Monitoring Results

During this reporting period, VOC concentrations measured at individual well ports with a photoionization detector (PID) range between 0 and 45.6 parts per million (ppm). VOC concentrations were measured at concentrations in the range of 0.0 to 2.6 ppm from the combined manifold. Measurements from SVE well VW-6 continues to provide the highest average concentration of VOCs, 13.5 ppm, since May 20, 2009. Measurements from wells VW-1, VW-2, MW-2 and MW-3 have had the lowest average VOC concentrations. The low average concentrations from MW-3 are skewed because the monitoring well is screened into the water table; therefore, the well is shut off when water is observed in the manifold. Since May 20, 2009, VOC readings from the SVE wells have averaged between 3 to 5.5 ppm.

As of the end of this reporting period, the carbon filters are nearly saturated and relatively low VOC measurements, in the range of 0.2 to 19.6 ppm, have been recorded at the exhaust stack monitoring point. An anomalous measurement of 101 ppm was recorded on March 16, 2010. As of May 20, 2009 measurements at the exhaust stack average 2.9 ppm, including the March 16, 2010 outlier. In general, the VOC concentration data suggests a downward trend since system startup, as shown in Figures 4 and 7.

During this reporting period, oxygen, measured as a percentage of the volume of air at individual well ports, ranged from 16.1 percent to 21.3 percent. Average oxygen concentrations for each individual well point were measured in the range of 18 to 20 percent. Since May 7, 2009 average concentrations at the combined manifold ranged between 17.2 and 21.3 percent. In general, oxygen concentration data suggests an upward trend since system startup, as shown in Figures 5 and 7.

During this reporting period, carbon dioxide concentrations, measured as a percentage of the volume of air at individual well ports, ranged between 0 and 3.6 percent. Average Carbon dioxide concentrations for each individual well monitoring point were measured in the range of 0.8 to 2.0 percent. Since May 7, 2009 average concentrations at the combined manifold ranged between 0 and 5 percent. In general, carbon dioxide concentration data suggests a downward trend since system startup, as shown in Figures 6 and 7.

7.0 VAPOR SAMPLING

Vapor samples have been collected from the inlet to the carbon filters and from the exhaust stack downstream from the carbon filters beginning in July 2009 when the remedial system was regularly operating with minimal shutdowns. The purposes of the sampling are to monitor the relative extracted concentrations of petroleum hydrocarbons and VOCs; quantify the removal efficiency of diesel-range hydrocarbons as vapors, and to verify that VOC-impacted vapors are not being released to the atmosphere at concentrations exceeding the air discharge permit. Samples from the carbon filter inlet are collected on a bi-weekly basis and samples from the exhaust stack are collected quarterly. Samples are collected in a 6-liter summa canister and a carbon tube and are analyzed using Method TO-15 for VOCs, including total hydrocarbons (THC) as gasoline, and NIOSH 1550 for THC as diesel. Sample results are summarized in Table 1, Chemical Analytical Results - Vapor Samples.

Samples were collected from a sample port installed in the inlet pipe to the activated carbon filters and from the exhaust stack. Sampling procedures for the NIOSH 1550 analysis consist of collecting about 8 liters of air through the carbon tube at a flow rate of 0.2 liters per minute over a 40-minute period. A composite sample is collected in the summa canisters by using a flow regulator to collect a sample over a 30-minute period.

7.1. Chemical Analytical Results

Ten carbon inlet samples and two exhaust stack samples were collected during this reporting period. THC as diesel was not detected in the samples at concentrations greater than the laboratory method reporting limit. THC as diesel was detected in the exhaust stack sample VP-EX-012710 at a concentration of 13,000 micrograms per cubic meter (μ g/m³). THC as gasoline was detected in the carbon inlet samples at concentrations ranging from 4,380 μ g/m³ to 156,000 μ g/m³. The lowest concentration, 4,380 μ g/m³ was measured on February 12, 2010. THC as gasoline was also detected in samples VP-EX-102209 and VP-EX-102710, obtained from the exhaust port, at concentrations of 27,300 μ g/m³ and 11,000 μ g/m³, respectively. Various other VOCs were detected at generally low concentrations, as summarized in Table 1, in the carbon inlet samples.

7.2. Petroleum Removal Rates

The weight of petroleum hydrocarbons extracted by the SVE system was calculated based on the run time between samples and an average concentration of THC as gasoline from the samples taken at both the beginning and end of the sampling period. The air flow was also measured with one and both blowers operating. The weight of THC as gasoline removed between each sample was calculated by multiplying the average concentrations and run times between samples by the flow



rate and the appropriate unit conversions. This methodology only estimates physical removal of petroleum hydrocarbons in the vapor phase and does not account for treatment by natural attenuation. THC as gasoline and as diesel were used to calculate the hydrocarbon removal as only minimal VOC concentrations have been detected. The following equation was used to calculate the hydrocarbon removal:

 $W = C \times Q \times T \times C$

- W = Weight of THC as gasoline and diesel removed during a given period (grams)
- C = Average vapor concentration of THC as gasoline from samples collected at the beginning and end of the sampling period ($\mu g/m^3$)
- Q = Air flow rate in SCFM
- T = Run time of the blowers during the sample period (hours)
- c = A conversion factor, calculated to be 1.6989×10^{-6}

Through March 16, 2010, approximately 3,016 pounds of THC as gasoline and diesel in the vapor phase have been removed since system startup. Over the approximately 244 days of system operation, startup to the March 16, 2010, the system has averaged about 12.3 pounds per day removed. Assuming a gallon of diesel weighs 7 pounds, about 427 gallons have been removed by the SVE system at a rate of about 1.75 gallons per day. Table 2, Hydrocarbon Removal Calculations summarizes the calculations used to determine the quantity of hydrocarbons removed.

8.0 CONCLUSIONS

The remedial system is successfully removing petroleum hydrocarbons from subsurface soil and groundwater. At least 3,016 pounds of petroleum hydrocarbons have been extracted through the SVE system through March 16, 2010, and as discussed in the December 11, 2009 Remedial System Evaluation Report, this amount likely is under reported because vapor samples were not collected during the intermittent startup period. Typically, removal rates are very high in the first weeks and months of an operating SVE system, which then decrease through the operational period of the remedial system. The data supports this assertion, as we have observed an overall decline in removal rates between since system startup.

Based on field measurements, carbon dioxide concentrations have been observed at percentages above background conditions and oxygen concentrations have been observed at percentages below background conditions, indicating biological degradation of petroleum hydrocarbons continues to be occurring. However, oxygen concentrations have been steadily increasing while carbon dioxide concentrations have been decreasing, which indicates biodegradation activity might be decreasing overall. Coupled with the overall decline in removal rates since startup, further emphasis in the bioventing mode will be conducted in the near future.

Analytical results from groundwater samples collected in wells downgradient from the remedial system indicate petroleum hydrocarbons have not been detected at concentrations greater than MTCA Method A cleanup levels since remedial system startup. Planned activities associated with the remedial system during the next reporting period are to diagnose and repair problems with the AS System.

The next 6-month remedial system evaluation report will encompass the period from April 2010 through September 2010 and be provided in October 2010. A brief update of the remedial systems progress will be provided in the next quarterly progress report in July 2010.

9.0 REFERENCES

- GeoEngineers, Inc., "Environmental Site Assessment and Remedial Well Installation Report, BNSF, Spokane, Washington" GEI File No. 0506-117-05, 2008.
- GeoEngineers, Inc., "Interim Action Work Plan, BNSF, Spokane, Washington" GEI File No. 0506-117-09, 2009.





Table 1

Chemical Analytical Results: Vapor Samples

BNSF Parkwater Railyard

Spokane, Washington

		NIOSH																										
		1550																										
		(µg/m ³) ¹												то-	15 MSV .	Air (µg∕ n	n ³) ²											
Sample ID	Date Collected	THC as Diesel	1,1,1-Trichloroethane	1,2-Dichloroethane	1,3,5-Trimethylbenze	1,2,4 -Trimethylbenzene	2,2,4-Trimethylpentane	2-Butanone (MEK)	2-Propanol	Acetone	Benzene	Carbon Disulfide	Cyclohexane	Dichlorodifluoromethane	Ethanol	Ethylbenzene	Ethyl acetate	Methylene Chloride	Naphthalene	Propylene	THC as Gas	Tetrachloroethene	Tetrahydorfuran	Toluene	Trichloroflouromethane	Total Xylenes	Vinyl acetate	n-Hexane
	-	-	-	-	-	-		-	-			Carbon	Filter Inle	t Sample	S	-	-	-	-		-	-					-	
VP-CI-070909	07/09/09	517,885	7.77	ND	9.49	ND	66.5	15.6	ND	9.90	ND	16.5	27.3	ND	8.81	ND	ND	ND	5.06	24.7	117,000	13.1	6.30	ND	7.42	ND	ND	ND
VP-CI-082709	08/27/09	ND	ND	ND	ND	ND	77.4	10.5	11.2	14.5	ND	13.6	57.7	ND	97.5	ND	20.1	51.9	ND	15.6	64,200	15.9	ND	21.1	8.57	ND	ND	3.94
VP-CI-091109	09/11/09	ND	ND	ND	ND	ND	123	2.88	ND	ND	ND	12.7	45.1	ND	ND	ND	ND	ND	ND	ND	62,500	20.7	ND	ND	9.14	ND	ND	ND
VP-CI-092409	09/24/09	ND	ND	ND	ND	ND	64.1	3.30	ND	13.0	2.66	5.06	14.3	ND	14.9	ND	ND	7.42	ND	7.00	24,400	6.89	3.30	4.98	5.14	ND	ND	7.88
VP-CI-100909	10/09/09	ND	3.83	ND	ND	ND	53.2	ND	12.5	41.8	ND	6.65	17.1	ND	7.66	ND	ND	249	ND	ND	59,900	9.65	ND	3.60	7.42	ND	ND	92.1
VP-CI-102210	10/22/09	ND	ND	ND	ND	ND	68.9	2.97	ND	ND	ND	10.8	14.3	ND	28.3	ND	ND	3.88	ND	ND	75,100	11.0	ND	3.79	5.71	ND	ND	ND
VP-CI-110609	11/06/09	ND	ND	ND	88.5	187	64.1	96.2	216	125	ND	ND	ND	ND	253	ND	ND	ND	ND	ND	156,000	ND	ND	132	ND	413	ND	ND
VP-CI-120309	12/03/09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49,000	ND	ND	ND	ND	ND	ND	ND
VP-CI-121709	12/17/09	ND	ND	ND	ND	ND	9.50	7.20	11.2	23.2	ND	2.60	2.41	ND	9.58	ND	ND	ND	ND	8.22	41,600	4.55	ND	ND	ND	ND	4.65	ND
VP-CI-123109	12/31/09	ND	ND	4.94	ND	ND	7.60	15.3	ND	18.8	ND	2.15	2.66	ND	10.3	3.40	ND	ND	ND	9.80	28,200	ND	ND	3.75	ND	12.8	ND	ND
VP-CI-012710	01/27/10	ND	ND	ND	ND	ND	7.12	3.60	ND	8.21	ND	ND	ND	ND	11.7	ND	ND	ND	ND	ND	49,500	ND	ND	3.49	ND	ND	ND	ND
VP-CI-021210	02/12/10	ND	ND	ND	ND	ND	ND	ND	ND	12.1	ND	ND	ND	8.04	ND	ND	ND	ND	ND	18.4	4,380	ND	ND	ND	ND	ND	ND	ND
VP-CI-022610	02/26/10	ND	ND	ND	ND	ND	ND	ND	ND	29.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16,400	311	ND	ND	ND	ND	ND	ND
VP-CI-031610	03/16/10	ND	ND	ND	ND	ND	9.5	8.69	12.7	23.6	ND	2.66	ND	ND	17.6	ND	ND	ND	ND	15.9	32,900	6.76	ND	ND	4.97	6.18	3.94	ND
		-	1										st Stack	-		1	1	r					1		1	1		
VP-EX-070909	07/09/09	ND	ND	ND	ND	ND	ND	ND	ND	7.49	ND	ND	ND	ND	ND	ND	ND	ND	7.46	ND	699	ND	ND	ND	ND	ND	ND	ND
VP-EX-102209	10/22/09	ND	ND	ND	ND	ND	ND	ND	ND	3.14	ND	3.17	ND	ND	ND	ND	ND	ND	6.92	ND	27,300	ND	ND	2.91	ND	ND	ND	ND
VP-EX-012710	01/27/10	13,000	ND	ND	ND	ND	87.4	ND	ND	9.18	ND	ND	23.8	ND	9.96	ND	ND	ND	ND	7.52	11,000	ND	2.28	ND	6.85	ND	ND	ND

Notes:

¹Concnetration based on a sample volume of about 8 Liters.

²Only analytes with detected concentrations greater than the laboratory reporting limit are included in the table. For a full list of analytes tested, refer to the laboratory report.

Samples submitted to Pace Analytical in Minneapolis, Minnesota.

P:\0\0506117\11\Finals\0ct 2009 - March 2010 0 and M Report\[050611711Tables 0ct 2009 - Mar 2010.xlsx]Table 1



Table 2

Hydrocarbon Removal Calculations

BNSF Parkwater Railyard Spokane, Washington

	THC as	Sample	Period	Run Tin	ne (hrs)	Flow (SCFM)		THC as Gas and	THC as	
	Gas and Diesel			Both Blowers	One Blower	Both Blowers	One Blower	Conversion Factor	Diesel Removed ³	Gas and Diesel Removed	Removal Rate
Sample ID	(µg/m ³)	Start Date	End Date	O perating ¹	Operating ²	O perating ¹	Operating ²	(unitless)	(grams)	(lbs)	(lbs/hr)
VP-CI-070909	634,885	03/25/09	07/09/09	1248	335	636	253	1.69892E-06	947,324	2,089	1.67
VP-CI-082709	64,200	07/09/09	08/27/09	594	160	636	253	1.69892E-06	248,361	548	0.92
VP-CI-091109	62,500	08/27/09	09/11/09	166	45	636	253	1.69892E-06	12,603	28	0.17
VP-CI-092409	24,400	09/11/09	09/24/09	154	89	636	253	1.69892E-06	8,914	20	0.13
VP-CI-100909	59,900	09/24/09	10/09/09	178	0	636	0	1.69892E-06	8,117	18	0.10
VP-CI-102209	75,100	10/09/09	10/22/09	83	108	636	409	1.69892E-06	11,119	25	0.30
VP-CI-110609	156,000	10/22/09	11/06/09	0	359	0	406	1.69892E-06	28,613	63	0.18
VP-CI-120309	49,000	11/06/09	12/03/09	0	647	0	439	1.69892E-06	49,461	109	0.17
VP-CI-121709	41,600	12/03/09	12/17/09	0	320	0	431	1.69892E-06	10,614	23	0.07
VP-CI-123110	28,200	12/17/09	12/31/09	0	337	0	481	1.69892E-06	9,611	21	0.06
VP-CI-012710	49,500	12/31/09	01/27/10	0	643	0	408	1.69892E-06	17,315	38	0.06
VP-CI-021210	4,380	01/27/10	02/12/10	0	386	0	406	1.69892E-06	7,173	16	0.04
VP-CI-022610	16,400	02/12/10	02/26/10	0	167	0	387	1.69892E-06	1,141	3	0.02
VP-CI-031610	32,900	02/26/10	03/16/10	0	399	0	433	1.69892E-06	7,235	16	0.04
Total				2,424	3,994		-		1,367,603	3,016	0.75

Notes:

 $^1\mbox{Run}$ time of both blowers 1 and 2 operating in SVE mode since last sample.

 $^{2}\mathrm{Run}$ time of only one blower operating in SVE mode since last sample.

 3 (THC concentration) x (run rime) x (flow rate) x (conversion factor).

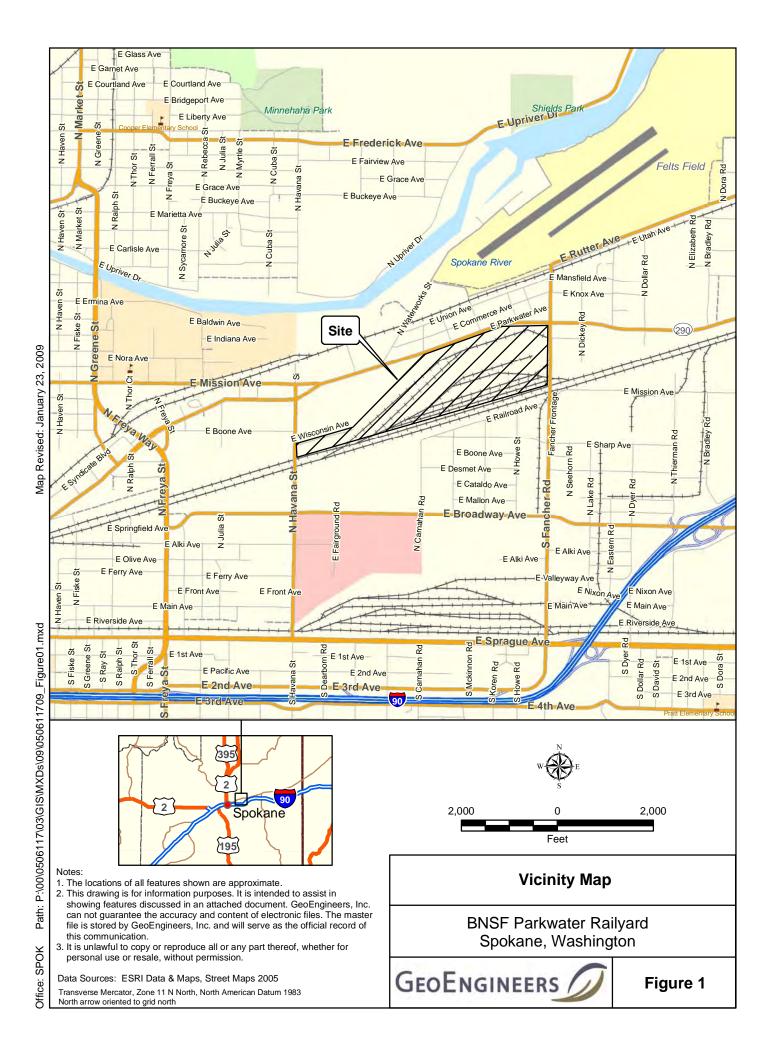
⁴Sample results pending.

SCFM = Standard Cubic Feet per Minute; $\mu g/m^3$ = micrograms per cubic meter; lbs = pounds.

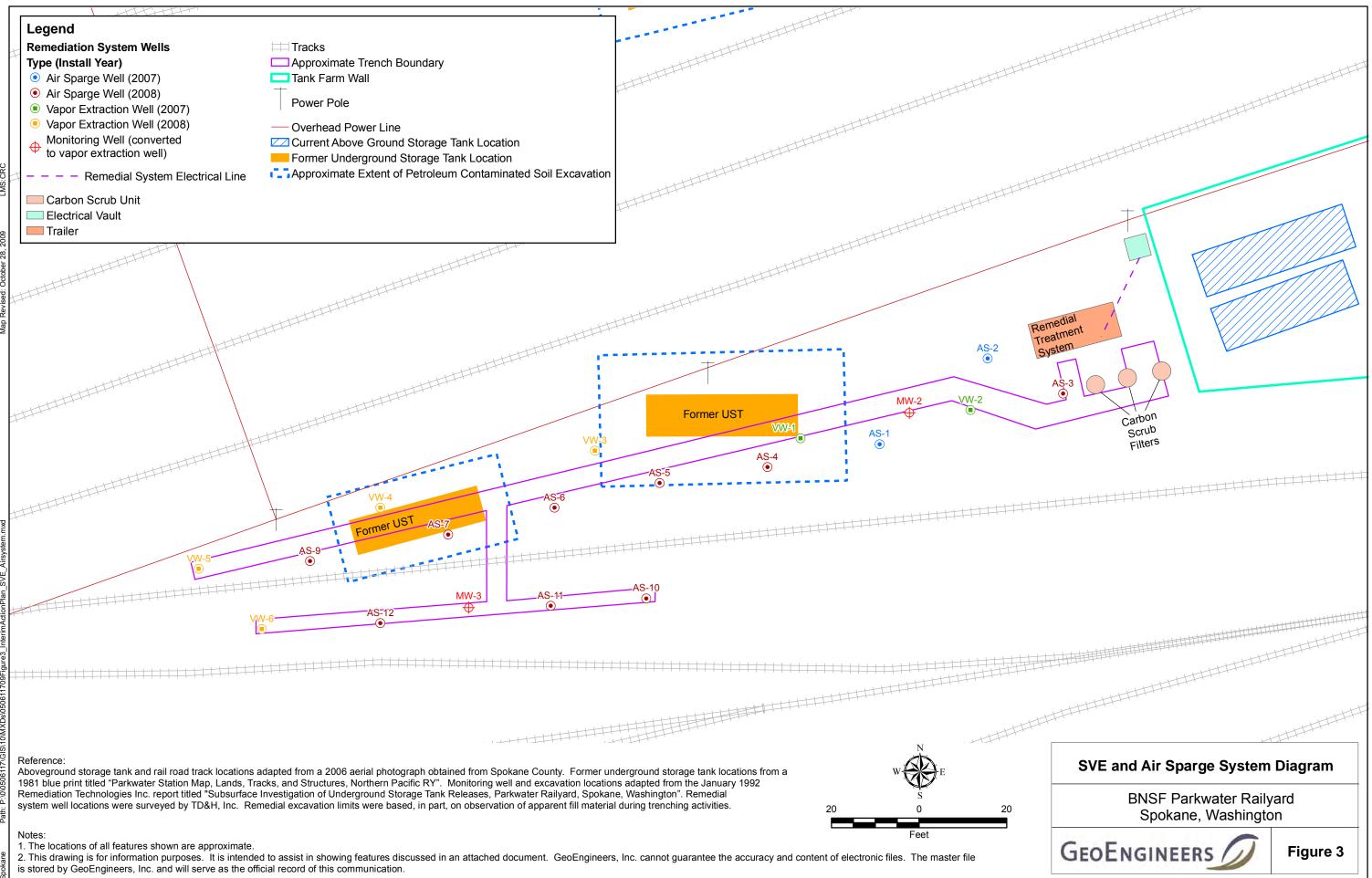
P:\0\0506117\11\Finals\0ct 2009 - March 2010 0 and M Report\[050611711Tables 0ct 2009 - Mar 2010.xlsx]Table 2

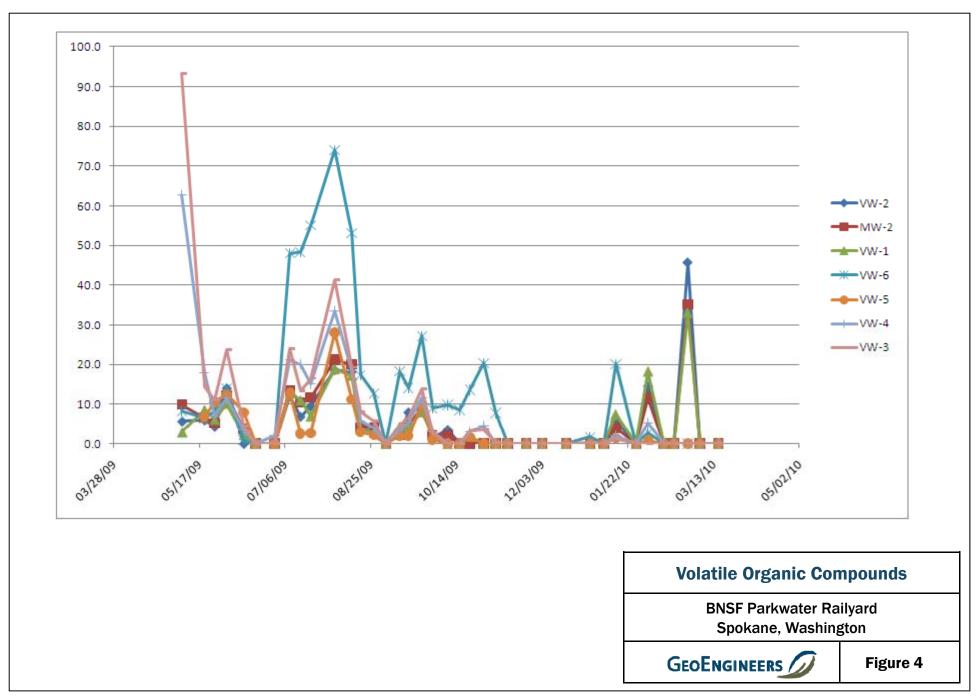


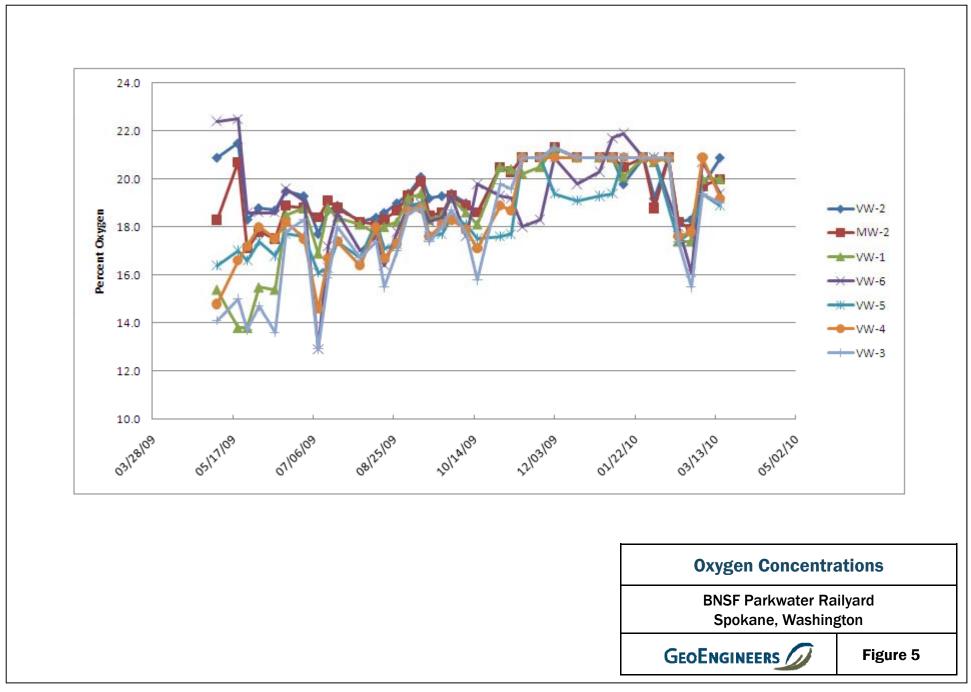


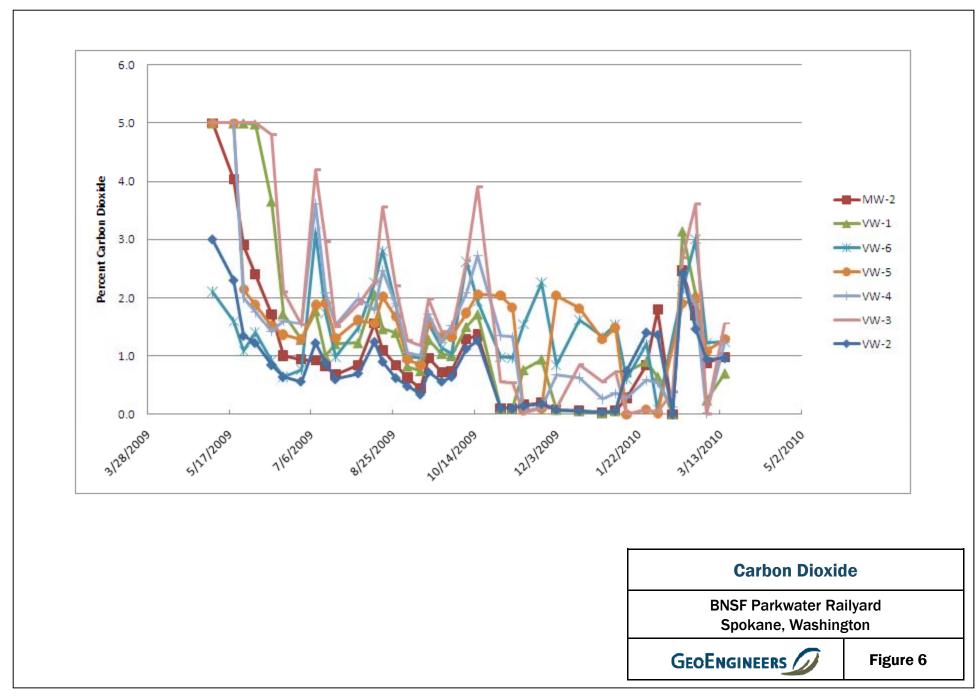


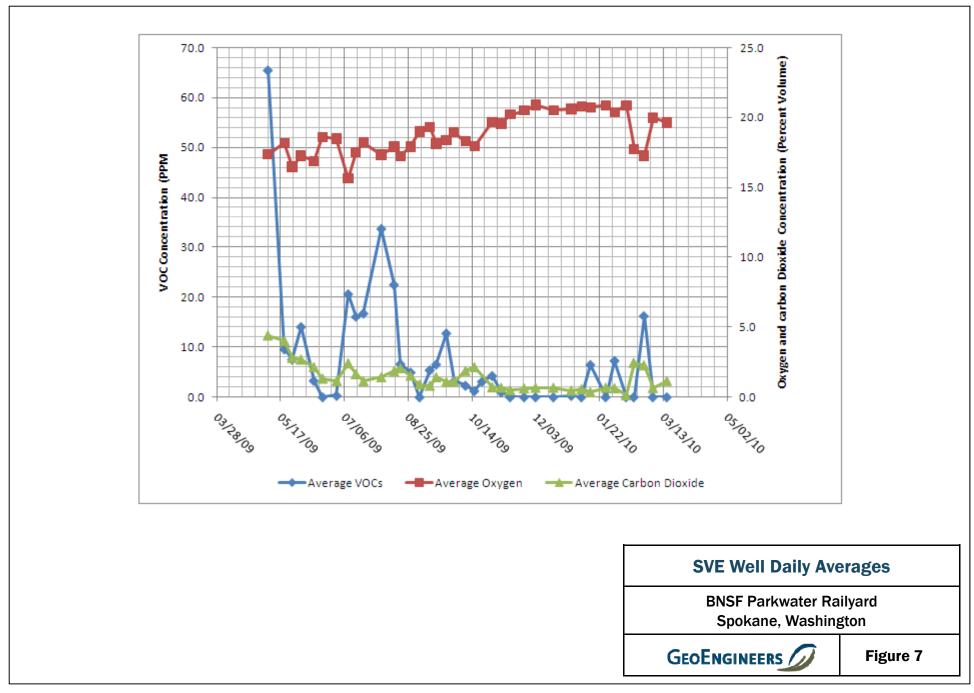
















APPENDIX A FIELD MONITORING AND MAINTENANCE

Field Monitoring

Field monitoring of the air sparge (AS) and soil vapor extraction (SVE) system has been conducted since the installation of monitoring ports on May 7, 2009. Monitoring ports, consisting of ¼ inch ball valves, were installed in each of the PVC pipes between the manifold and the individual SVE wells. Monitoring ports also were installed in the SVE pipe manifold (between the manifold and carbon scrub units) and the exhaust stack from the carbon filters. On June 19, 2009, a monitoring port was installed on the steel pipe stub that connects to the carbon filter inlet hoses to monitor readings at the carbon scrub unit inlets.

Measurements of pressure/vacuum, VOC concentration, and the volume of carbon dioxide and oxygen are measured from each monitoring point using Magnehelic gauges, a photoionization detector, and a 4-gas meter. Pressure, flow, and temperature also are recorded at gauges installed in the AS and SVE systems. Tables A-1 through A-3 summarize the monitoring results for VOCs, oxygen, and carbon dioxide from weekly monitoring events.

Maintenance Log

The following timeline summarizes the malfunctions and maintenance/repairs implemented on the AS and SVE system. This does not include regularly scheduled maintenance performed in accordance with manufacturer recommendations except when such actions were deemed necessary at unscheduled times in an attempt to correct a malfunction.

- 10/16/2009 Replaced fuse in desiccating air dryer. The new fuse blew immediately when the system was restarted. Ozone Generator No. 1 was observed to be leaking ozone. The generator was removed and shipped to the manufacturer, Absolute Ozone, for service.
- 10/20/2009 An electrician visited the site to check the air dryer. He observed the internal transformer in the air dryer was damaged and required service. He believed that a power surge caused the damage. The air dryer was disconnected and taken to Cascade Machinery and Electric Inc (Cascade), a local machinery service company, for repair.
- 12/28/2009 The electrician re-installed the repaired air dryer and added surge protection to prevent power surges from causing future damage. The serviced ozone generator was re-installed and the AS system was re-started. Ozone was observed leaking from the AS well manifold (outside the container box) from the connection of the Teflon tubing to the PVC lines running to the AS wells. The connections were sealed with Teflon and electrical tape to prevent ozone from leaking.
- 2/12/2010 SVE blower No. 2 made metal grinding noise when turned on. The blower was shut off pending assessment of the problem.
- 2/15/2010 Cascade inspected the blower and determined than the aluminum fan was worn down and impacting the cover. A new fan was ordered.



- 2/26/2010 System shut down on arrival because of an ozone alarm. Ozone concentrations elevated immediately after system re-start. Ozone generators were turned off and sparging continued with ambient air mixed with oxygen.
- 3/19/2010 Cascade attempted to install a new fan on blower No. 2 and discovered that one of the bolts to the fan cover was sheared off. The missing bolt caused the fan cover to be loose and probably caused the damage to the fan. Cascade removed the broken bolt from the cover and re-tapped the bolt hole. The AS system was shut down because of a low pressure alarm condition.
- 3/22/2010 Cascade replaced the fan and repaired fan cover on blower No. 2. Attempted to troubleshoot cause of AS system shut down from previous visit. The AS system is shutting down after the final charge of the oxygen tank, used for ozone production, before the AS solenoid valves open and the sparge compressor turns on.
- 3/26/2010 Blower No. 2 was switched on before opening the air intake valve causing the blower to burn out. Blower No. 2 is not operational and has been locked out. Blower No. 1 continues to operate in SVE mode.

Table A-1

Field Data Summary Table - Volatile Organic Compounds

BNSF Parkwater Railyard Spokane, Washington

						Sa	mple Locat	ion					
Date Sampled	VW-2	MW-2	VW-1	MW-3	VW-6	VW-5	VW-4	VW-3	Manifold (PVC)	Inlet (Steel Pipe)	Between Filters ¹	Exhaust Stack ¹	SVE Well Daily Average
05/07/09	5.7	9.9	2.9	21.1	8.3	319.0	62.8	93.3	4400.0		0.0	0.0	65.4
05/20/09	6.0	6.6	8.6		6.5	6.8	17.9	14.4	10.8		0.0	0.0	9.5
05/26/09	4.3	5.1	6.2		8.3	10.6	7.1	11.0	90.8		0.0	0.0	7.5
06/02/09	14.0	12.1	10.2		14.0	12.5	11.6	23.6	13.5		0.0	0.0	14.0
06/12/09	0.0	3.8	2.2		0.8	8.0	3.5	4.6	3.0		0.0	0.0	3.3
06/19/09	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	29.5	0.0	0.0	0.0
06/30/09	0.0	0.0	0.0		0.0	0.0	2.0	0.0	0.0	17.0	0.0	0.0	0.3
07/09/09	12.0	13.5	12.8		48.0	12.9	21.3	23.9	7.7	27.4	0.0	0.0	20.6
07/15/09	6.9	10.4	11.0		48.3	2.5	20.0	13.3	0.0	0.0	0.0	0.0	16.1
07/21/09	9.5	11.7	7.0		55.0	2.7	15.0	16.5	7.7	10.2	0.0	0.0	16.8
08/04/09	18.6	21.2	18.8		74.0	28.0	33.5	41.3	17.5	46.7	0.0	0.0	33.6
08/14/09	18.2	20.0	17.2		53.1	11.3	18.3	19.3	12.0	35.4	0.0	0.0	22.5
08/19/09	4.3	4.2	3.7		17.3	2.9	5.8	8.0	3.4	58.9	0.0	0.0	6.6
08/27/09	2.8	4.2	2.8		12.8	2.1	4.0	5.9	5.4	40.5	0.0	0.0	4.9
09/03/09	0.0	0.0	0.0		0.0	0.0	0.0	0.0	2.4	45.5	0.0	0.0	0.0
09/11/09	2.5	2.2	4.4		18.2	2.0	3.6	4.8	3.8	59.1	0.0	0.0	5.4
09/16/09	8.0	4.8	4.4		14.1	2.0	5.5	6.7	2.1	70.2	0.0	0.0	6.5
09/24/09	9.1	9.2	8.1		27.1	10.1	11.5	13.9	4.2	35.6	22.9	0.2	12.7
09/30/09	1.6	2.2	2.3		9.0	1.0	3.1	2.8	1.9	225.0	19.0	1.1	3.1
10/09/09	3.6	2.0	0.0	3.0	9.8	0.0	0.0	0.0	0.5	308.0	51.9	0.0	2.3
10/16/09	0.0	0.0	0.0	1.2	8.6	0.0	0.0	0.0	0.6	43.5	30.2	0.0	1.2
10/22/09	0.0	0.0	1.8	1.5	13.6	1.6	3.0	3.3	2.6	18.8	11.5	0.0	3.1
10/30/09	0.0	0.0	0.0	5.6	20.3	0.0	4.5	3.5	1.7	47.5	109.0	0.0	4.2
11/06/09	0.0	0.0	0.0	0.0	7.8	0.0	0.0	0.2	1.3	26.5	237.0	0.3	1.0
11/13/09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	33.8	0.0	0.0

						Sa	mple Locat	ion					
Date Sampled	VW-2	MW-2	VW-1	MW-3	VW-6	VW-5	VW-4	VW-3	Manifold (PVC)	Inlet (Steel Pipe)	Between Filters ¹	Exhaust Stack ¹	SVE Well Daily Average
11/24/09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	101.0	555.0	0.0	0.0
12/03/09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.0	896.0	0.0	0.0
12/17/09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	162.0	0.0	0.0
12/31/09	0.0	0.0	0.0	0.2	1.7	0.0	0.0	0.3	0.0	29.2	40.9	0.3	0.3
01/08/10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.7	285.0	0.0	0.0
01/15/10	5.8	4.0	7.5	9.5	20.1	1.4	2.1	1.2	0.5	14.4	115.0	3.2	6.5
01/27/10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.2	90.3	0.0	0.0
02/03/10	14.6	11.7	18.2	4.5	2.8	0.8	5.4	0.0	2.0	16.2	20.4	2.7	7.3
02/12/10	0.0	0.0	0.0				0.0	0.0	0.0	11.1	0.0	0.0	0.0
02/18/10	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.1	51.0	119.0	0.0	0.0
02/26/10	45.6	35.2	33.0		0.0	0.0	0.0	0.0		48.3	21.5	0.1	16.3
03/05/10	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	29.8	20.1	3.1	0.0
03/16/10	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	1.6	68.8	101.0	0.0
Average	5.1	5.1	4.8	3.1	13.5	11.8	6.9	8.2	124.2	49.3	76.6	2.9	7.7

Notes:

Measurements reported in parts per million as measured using a photoionization detector.

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Table A-2

Field Data Summary Table - Percent Oxygen

BNSF Parkwater Railyard Spokane, Washington

						Sa	mple Locat	ion					
Date Sampled	VW-2	MW-2	VW-1	MW-3	VW-6	VW-5	VW-4	VW-3	Manifold (PVC)	Inlet (Steel Pipe)	Between Filters ¹	Exhaust Stack ¹	SVE Well Daily Average
05/07/09	20.9	18.3	15.4	16.5	22.4	16.4	14.8	14.1	17.2		18.4	18.4	17.4
05/20/09	21.5	20.7	13.8		22.5	17.0	16.6	15.0	18.9		16.2	16.4	18.2
05/26/09	18.3	17.1	13.8		18.6	16.6	17.2	13.7	17.6		16.9	16.9	16.5
06/02/09	18.8	17.8	15.5		18.6	17.4	18.0	14.7	17.4		17.4	17.4	17.3
06/12/09	18.7	17.5	15.4		18.6	16.8	17.5	13.6	17.3		17.2	17.4	16.9
06/19/09	19.5	18.9	18.5		19.6	17.7	18.2	17.8	18.4	19.0	18.6	18.3	18.6
06/30/09	19.3	18.8	18.8		19.1	17.6	17.5	18.3	18.4	18.9	18.3	18.4	18.5
07/09/09	17.7	18.4	16.9		12.9	16.1	14.6	12.9	16.0	16.0	16.1	16.1	15.6
07/15/09	18.7	19.1	18.8		17.2	16.3	16.7	15.9	17.5	17.6	17.5	17.5	17.5
07/21/09	18.9	18.8	18.4		18.6	17.4	17.4	18.0	18.2	18.2	18.1	18.2	18.2
08/04/09	18.2	18.2	18.1		17.0	16.7	16.4	16.7	17.4	17.4	17.5	17.4	17.3
08/14/09	18.4	18.1	17.7		17.6	18.2	18.0	17.4	18.4	17.0	17.1	17.1	17.9
08/19/09	18.6	18.3	18.0		16.4	17.1	16.7	15.5	17.4	16.6	16.6	16.6	17.2
08/27/09	19.0	18.7	18.2		17.8	17.3	17.3	17.0	18.0	17.3	17.2	17.2	17.9
09/03/09	19.4	19.3	19.2		18.9	18.8	18.7	18.6	19.0	17.6	17.4	17.4	19.0
09/11/09	20.1	19.9	19.4		19.0	19.0	18.8	18.8	19.8	17.5	17.4	17.2	19.3
09/16/09	19.2	18.5	18.3		18.2	17.6	17.6	17.4	18.2	17.6	17.5	17.2	18.1
09/24/09	19.3	18.6	18.5		18.4	17.7	18.1	18.0	18.3	18.3	17.6	17.6	18.4
09/30/09	19.4	19.3	19.2		19.3	18.4	18.3	18.7	18.5	18.1	17.9	17.8	18.9
10/09/09	19.0	18.9	18.6	18.4	17.6	18.1	17.9	17.7	18.6	17.8	17.2	17.1	18.3
10/16/09	18.6	18.6	18.1	18.0	19.8	17.5	17.1	15.8	17.8	16.6	16.6	16.5	17.9
10/30/09	20.5	20.5	20.5	20.2	19.3	17.6	18.9	19.8	19.9	20.0	19.6	19.3	19.7
11/06/09	20.3	20.3	20.4	20.2	19.2	17.7	18.7	19.6	19.6	19.8	19.4	18.5	19.6
11/13/09	20.9	20.9	20.2	19.1	18.0	20.9	20.9	20.9	20.9	20.9	20.9	20.7	20.2
11/24/09	20.9	20.9	20.5	20.7	18.3	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.5

						Sa	mple Locat	ion					
Date Sampled	VW-2	MW-2	VW-1	MW-3	VW-6	VW-5	VW-4	VW-3	Manifold (PVC)	Inlet (Steel Pipe)	Between Filters ¹	Exhaust Stack ¹	SVE Well Daily Average
12/03/09	21.3	21.3	21.3	20.9	20.9	19.4	20.9	21.3	20.9	21.0	20.9	20.9	20.9
12/17/09	20.9	20.9	20.9	20.9	19.8	19.1	20.9	20.9	20.9	19.5	20.9	20.9	20.5
12/31/09	20.9	20.9	20.9	20.9	20.3	19.3	20.9	20.9	20.9	20.9	20.9	20.9	20.6
01/08/10	20.9	20.9	20.9	20.9	21.7	19.4	20.9	20.9	21.3	20.9	20.9	20.9	20.8
01/15/10	19.8	20.5	20.1	20.9	21.9	20.9	20.9	20.9	20.9	20.4	20.3	20.8	20.7
01/27/10	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.7	20.3	20.9
02/03/10	19.2	18.8	20.7	20.9	20.9	20.9	20.8	20.9	20.9	20.7	20.3	20.1	20.4
02/12/10	20.9	20.9	20.9				20.9	20.9	20.9	20.7	20.5	20.7	20.9
02/18/10	18.2	18.2	17.4		18.0	17.4	17.6	17.4	16.9	16.3	15.8	15.7	17.7
02/26/10	18.3	17.9	17.4		16.1	17.8	17.8	15.5		16.3	16.0	16.0	17.3
03/05/10	19.7	19.7	20.0		20.7	19.4	20.9	19.4	20.9	18.5	18.7	18.6	20.0
03/16/10	20.9	20.0	20.0		19.4	18.9	19.2	19.0	19.1	18.8	18.7	18.7	19.6
Average	19.6	19.3	18.7	20.0	19.0	18.2	18.5	18.0	19.0	18.7	18.4	18.3	18.8

Notes:

Measurements reported in percent oxygen as measured using a 4-gas meter.

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Table A-3

Field Data Summary Table - Percent Carbon Dioxide

BNSF Parkwater Railyard Spokane, Washington

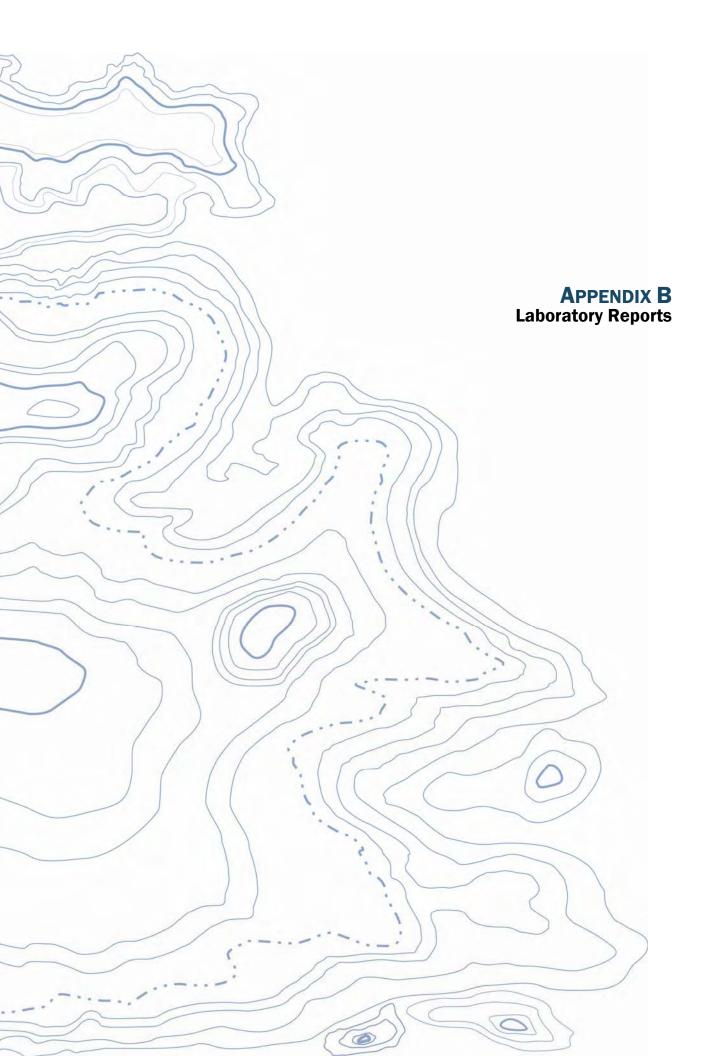
						Sa	mple Locat	ion					
Date Sampled	VW-2	MW-2	VW-1	MW-3	VW-6	VW-5	VW-4	VW-3	Manifold (PVC)	Carbon Inlet (Steel Pipe)	Between Filters ¹	Exhaust Stack ¹	SVE Well Daily Average
05/07/09	3.0	5.0	5.0	5.0	2.1	5.0	5.0	5.0	5.0		5.0	5.0	4.4
05/20/09	2.3	4.0	5.0		1.6	5.0	5.0	5.0	5.0		2.5	3.8	4.0
05/26/09	1.3	2.9	5.0		1.1	2.1	2.0	5.0	2.3		2.2	2.1	2.8
06/02/09	1.2	2.4	5.0		1.4	1.9	1.8	5.0	2.0		2.0	1.9	2.7
06/12/09	0.8	1.7	3.7		0.9	1.5	1.4	4.8	1.6		1.6	1.5	2.1
06/19/09	0.6	1.0	1.7		0.6	1.4	1.6	2.1	1.4	1.6	1.5	1.5	1.3
06/30/09	0.6	0.9	1.3		0.8	1.3	1.6	1.5	1.2	1.4	1.3	1.2	1.1
07/09/09	1.2	0.9	1.8		3.1	1.9	3.6	4.2	2.1	2.2	2.0	2.0	2.4
07/15/09	0.9	0.8	1.0		1.7	1.9	2.1	3.0	1.7	1.7	1.7	1.7	1.6
07/21/09	0.6	0.7	1.2		1.0	1.3	1.5	1.5	1.2	1.2	1.2	1.2	1.1
08/04/09	0.7	0.8	1.2		1.5	1.6	2.0	1.9	1.4	1.4	1.4	1.4	1.4
08/14/09	1.2	1.6	2.1		2.3	1.6	1.8	2.3	1.4	2.4	2.6	2.6	1.8
08/19/09	0.9	1.1	1.5		2.8	2.0	2.5	3.6	2.1	2.6	2.5	2.4	2.0
08/27/09	0.6	0.8	1.4		1.9	1.7	1.9	2.2	1.5	1.8	1.9	1.9	1.5
09/03/09	0.5	0.6	0.8		1.0	0.9	1.1	1.3	1.0	2.2	2.0	2.1	0.9
09/11/09	0.3	0.4	0.7		1.0	0.8	1.0	1.2	0.8	2.1	2.1	2.0	0.8
09/16/09	0.7	1.0	1.3		1.6	1.6	1.7	2.0	1.4	2.1	2.1	1.9	1.4
09/24/09	0.6	0.7	1.0		1.1	1.3	1.2	1.4	1.1	1.8	1.7	1.7	1.1
09/30/09	0.6	0.7	1.0		1.0	1.3	1.5	1.4	1.4	2.0	1.9	1.9	1.1
10/09/09	1.1	1.3	1.5	1.8	2.6	1.7	2.1	2.6	1.7	3.1	2.8	2.8	1.9
10/16/09	1.3	1.4	1.7	2.0	1.9	2.1	2.7	3.9	2.1	3.2	3.2	3.1	2.1
10/30/09	0.1	0.1	0.1	0.2	1.0	2.0	1.3	0.6	0.5	0.7	0.7	0.5	0.7
11/06/09	0.1	0.1	0.1	0.2	1.0	1.8	1.3	0.5	0.4	0.6	0.7	1.2	0.6
11/13/09	0.1	0.2	0.8	1.0	1.5	0.1	0.1	0.0	0.2	0.3	0.4	0.5	0.5

						Sa	ample Locat	ion					
Date Sampled	VW-2	MW-2	VW-1	MW-3	VW-6	VW-5	VW-4	VW-3	Manifold (PVC)	Carbon Inlet (Steel Pipe)	Between Filters ¹	Exhaust Stack ¹	SVE Well Daily Average
11/24/09	0.2	0.2	0.9	0.9	2.3	0.1	0.1	0.1	0.3	0.4	0.5	0.5	0.6
12/03/09	0.1	0.1	0.1	1.2	0.8	2.0	0.7	0.1	0.5	0.8	0.8	0.8	0.6
12/17/09	0.1	0.1	0.1	0.1	1.6	1.8	0.6	0.8	0.5	1.7	0.7	0.6	0.6
12/31/09	0.0	0.0	0.0	0.0	1.3	1.3	0.3	0.6	0.3	0.4	0.5	0.5	0.4
01/08/10	0.1	0.1	0.1	0.1	1.5	1.5	0.4	0.7	0.0	0.5	0.6	0.6	0.5
01/15/10	0.7	0.3	0.7	0.0	0.6	0.0	0.3	0.0	0.2	0.4	0.5	0.3	0.3
01/27/10	1.4	0.8	0.9	0.1	1.2	0.1	0.6	0.1	0.4	1.2	1.1	1.1	0.6
02/03/10	1.4	1.8	0.6	0.4	0.1	0.0	0.5	0.0	0.5	0.6	0.6	0.6	0.6
02/12/10	0.0	0.0	0.0				0.1	0.4	0.4	0.6	0.6	0.6	0.1
02/18/10	2.4	2.5	3.1		2.1	1.9	2.3	2.7	3.2	1.9	4.5	4.4	2.4
02/26/10	1.5	1.7	2.1		3.0	2.0	1.9	3.6		3.5	3.6	3.6	2.2
03/05/10	0.9	0.9	0.2		1.2	1.1	0.0	0.0	0.0	2.0	0.0	2.0	0.6
03/16/10	1.0	1.0	0.7		1.2	1.3	1.2	1.6	1.4	1.9	2.0	1.9	1.1
Average	0.8	1.1	1.5	0.9	1.5	1.6	1.5	2.0	1.3	1.6	1.7	1.8	1.4

Notes:

Measurements reported in percent carbon dioxide as measured using a 4-gas meter.

P:\0\0506117\11\Finals\0ct 2009 - March 2010 0 and M Report\[050611711 0ct 2009 - Mar 2010 App A tables.xlsx]Carbon Dioxide



APPENDIX B LABORATORY REPORTS

Chemical Analytical Data

Chain-of-custody procedures were maintained during the transport of the field samples to the accredited analytical laboratory. The analytical results and quality control records are included in this appendix.

Analytical Data Review

The laboratory maintains an internal quality assurance program as documented in its laboratory quality assurance manual. The laboratory uses a combination of blanks, surrogate recoveries, duplicates, matrix spike recoveries, matrix spike duplicate recoveries, blank spike recoveries and blank spike duplicate recoveries to evaluate the analytical results. The laboratory also uses data quality goals for individual chemicals or groups of chemicals based on the long-term performance of the test methods. The data quality goals were included in the laboratory reports. The laboratory compared each group of samples with the existing data quality goals and noted any exceptions in the laboratory report. Any data quality exceptions documented by the accredited laboratory were reviewed by GeoEngineers and are addressed in the data quality exception section of this appendix.

Data Quality Summary

It is our opinion that the analytical data are of acceptable quality for their intended use.





Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

January 11, 2010

Bruce Williams GeoEngineers,Inc. 523 East Second Ave Spokane, WA 99202

RE: Project: 0506-117-11 Parkwater Pace Project No.: 10119238

Dear Bruce Williams:

Enclosed are the analytical results for sample(s) received by the laboratory between December 19, 2009 and December 24, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Car Doug

Carol Davy

carol.davy@pacelabs.com Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project:0506-117-11ParkwaterPace Project No.:10119238

Minnesota Certification IDs

Alaska Certification #: UST-078 1700 Elm Street SE, Suite 200 Minneapolis, MN 55414 California Certification #: 01155CA Florida/NELAP Certification #: E87605 Illinois Certification #: 200011 Iowa Certification #: 268 Kansas Certification #: E-10167 Louisiana Certification #: E-10167 Louisiana Certification #: LA080009 Maine Certification #: LA080009 Michigan DEQ Certification #: 9909 Minnesota Certification #: 027-053-137 Montana Certification #: MT CERT0092 New Jersey Certification #: MN-002 New York Certification #: 11647 North Carolina Certification #: 530 North Dakota Certification #: R-036 Oregon Certification #: MN200001 Pennsylvania Certification #: 68-00563 Tennessee Certification #: 02818 Washington Certification #: 02818 Washington Certification #: 0754 Wisconsin Certification #: 999407970 Arizona Certification #: AZ-0014

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Pace Project No	0506-117-11 Parkwater b.: 10119238			
Lab ID	Sample ID	Matrix	Date Collected	Date Received
10119238001	VP-CI-121709	Air	12/17/09 12:57	12/19/09 09:32

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SAMPLE ANALYTE COUNT

Project:	0506-117-11	Parkwater	
Pace Project No.:	10119238		

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10119238001	VP-CI-121709	TO-15	CJR	65	PASI-M

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 0506-117-11 Parkwater Pace Project No.: 10119238

Method: TO-15

Description:TO15 MSV AIRClient:GeoEngineers,Inc.Date:January 11, 2010

General Information:

1 sample was analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable): All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-117-11 Parkwater

Pace Project No.: 10119238

Sample: VP-CI-121709	Lab ID: 1011923800	1 Collecte	d: 12/17/0	9 12:57	Received: 12	2/19/09 09:32 M	atrix: Air	
		Report						
Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-	15						
1,1,1-Trichloroethane	ND ppbv	0.65	0.32	1.25		01/08/10 22:05		
1,1,2,2-Tetrachloroethane	ND ppbv	0.65	0.32	1.25		01/08/10 22:05		
1,1,2-Trichloroethane	ND ppbv	0.65	0.32	1.25		01/08/10 22:05		
1,1,2-Trichlorotrifluoroethane	ND ppbv	0.65	0.32	1.25		01/08/10 22:05		
1,1-Dichloroethane	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	75-34-3	
1,1-Dichloroethene	ND ppbv	0.65	0.32	1.25		01/08/10 22:05		
1,2,4-Trichlorobenzene	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	120-82-1	
1,2,4-Trimethylbenzene	ND ppbv	0.64	0.32	1.25		01/08/10 22:05		
1,2-Dibromoethane (EDB)	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	106-93-4	
1,2-Dichlorobenzene	ND ppbv	0.64	0.32	1.25		01/08/10 22:05	95-50-1	
1,2-Dichloroethane	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	107-06-2	
1,2-Dichloropropane	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	78-87-5	
1,3,5-Trimethylbenzene	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	108-67-8	
1.3-Butadiene	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	106-99-0	
1.3-Dichlorobenzene	ND ppbv	0.64	0.32	1.25		01/08/10 22:05	541-73-1	
1,4-Dichlorobenzene	ND ppbv	0.64	0.32	1.25		01/08/10 22:05	106-46-7	
1,4-Dioxane (p-Dioxane)	ND ppbv	0.12	0.062	1.25		01/08/10 22:05		
2,2,4-Trimethylpentane	2.0 ppbv	0.62	0.31	1.25		01/08/10 22:05		
2-Butanone (MEK)	2.4 ppbv	0.69	0.34	1.25		01/08/10 22:05		
2-Hexanone	ND ppbv	0.69	0.34	1.25		01/08/10 22:05		
2-Propanol	4.5 ppbv	0.62	0.31	1.25		01/08/10 22:05		
•	ND ppbv	0.66	0.33	1.25		01/08/10 22:05		
4-Ethyltoluene 4-Methyl-2-pentanone (MIBK)	ND ppbv	0.69	0.34	1.25		01/08/10 22:05		
• • •	9.6 ppbv	0.69	0.34	1.25		01/08/10 22:05		
Acetone	ND ppbv	0.65	0.34	1.25		01/08/10 22:05		
Benzene	ND ppbv	0.64	0.32	1.25		01/08/10 22:05		
Bromodichloromethane	• •	0.65	0.32	1.25		01/08/10 22:05		
Bromoform	ND ppbv	0.64	0.32	1.25		01/08/10 22:05		
Bromomethane	ND ppbv 0.82 ppbv	0.62	0.32	1.25		01/08/10 22:05		
Carbon disulfide		0.62	0.31	1.25		01/08/10 22:05		
Carbon tetrachloride	ND ppbv	0.65	0.32	1.25		01/08/10 22:05		
Chlorobenzene	ND ppbv		0.32	1.25		01/08/10 22:05		
Chloroethane	ND ppbv	0.64		1.25		01/08/10 22:05		
Chloroform	ND ppbv	0.64	0.32			01/08/10 22:05		
Chloromethane	ND ppbv	0.62	0.31	1.25		01/08/10 22:05		
Cyclohexane	0.69 ppbv	0.65	0.32	1.25				
Dibromochloromethane	ND ppbv	0.66	0.33	1.25		01/08/10 22:05		
Dichlorodifluoromethane	ND ppbv	0.64	0.32	1.25		01/08/10 22:05		
Dichlorotetrafluoroethane	ND ppbv	0.71	0.36	1.25		01/08/10 22:05		
Ethanol	5.0 ppbv	0.62	0.31	1.25		01/08/10 22:05		
Ethyl acetate	ND ppbv	0.64	0.32	1.25		01/08/10 22:05		
Ethylbenzene	ND ppbv	0.65	0.32	1.25		01/08/10 22:05		
Hexachloro-1,3-butadiene	ND ppbv	0.62	0.31	1.25		01/08/10 22:05		
lsopropylbenzene (Cumene)	ND ppbv	0.62	0.31	1.25		01/08/10 22:05		
Methyl-tert-butyl ether	ND ppbv	1.2	0.62	1.25		01/08/10 22:05		
Methylene Chloride	ND ppbv	0.65	0.32	1.25		01/08/10 22:05		
Naphthalene	ND ppbv	0.62	0.31	1.25		01/08/10 22:05	91-20-3	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-117-11 Parkwater

Pace Project No.: 10119238

Sample: VP-CI-121709	Lab ID: 101192	38001 Collecter	d: 12/17/0	9 12:57	Received: 12	/19/09 09:32 Ma	atrix: Air	
		Report						
Parameters	Results Units	s Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method	: TO-15						
Propylene	4.7 ppbv	2.5	1.2	1.25		01/08/10 22:05	115-07-1	
Styrene	ND ppbv	0.69	0.34	1.25		01/08/10 22:05	100-42-5	
THC as Gas	9590 ppbv	25.0	12,5	1.25		01/08/10 22:05		
Tetrachloroethene	0.66 ppbv	0.65	0.32	1.25		01/08/10 22:05	127-18-4	
Tetrahydrofuran	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	109-99-9	
Toluene	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	108-88-3	
Trichloroethene	ND ppbv	0.65	0,32	1.25		01/08/10 22:05	79-01-6	
Trichlorofluoromethane	ND ppbv	0.62	0.31	1.25		01/08/10 22:05	75-69-4	
Vinyl acetate	1.3 ppbv	0.69	0.34	1.25		01/08/10 22:05	108-05-4	
Vinyl chloride	ND ppbv	0.64	0.32	1.25		01/08/10 22:05	75-01-4	
Xylene (Total)	ND ppbv	1.9	0.94	1.25		01/08/10 22:05	1330-20-7	
cis-1,2-Dichloroethene	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	156-59-2	
cis-1,3-Dichloropropene	ND ppbv	0.64	0.32	1.25		01/08/10 22:05	10061-01-5	
m&p-Xylene	ND ppbv	1.2	0.62	1.25		01/08/10 22:05	1330-20-7	
n-Heptane	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	142-82-5	
n-Hexane	ND ppbv	0.66	0.33	1.25		01/08/10 22:05	110-54-3	
o-Xylene	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	95-47-6	
trans-1,2-Dichloroethene	ND ppbv	1.2	0.62	1.25		01/08/10 22:05	156-60-5	
trans-1,3-Dichloropropene	ND ppbv	0.65	0.32	1.25		01/08/10 22:05	10061-02-6	

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Project: 0506-117-11 Pace Project No.: 10119238	Parkwater					
				-15		·····
QC Batch: AIR/9602		Analysis Metho				
QC Batch Method: TO-15		Analysis Descri	ption: 10	15 MSV AIR		
Associated Lab Samples: 1011	9238001					
METHOD BLANK: 734954		Matrix: Ai	r			
Associated Lab Samples: 1011	9238001					
		Blank	Reporting			
Parameter	Units	Result	Limit	Analyzed	Qualifiers	
1,1,1-Trichloroethane	ppbv	ND	0.52	01/08/10 18:26		
1,1,2,2-Tetrachloroethane	ppbv	ND	0.52	01/08/10 18:26		
1,1,2-Trichloroethane	ppbv	ND	0.52	01/08/10 18:26		
1,1,2-Trichlorotrifluoroethane	ppbv	ND	0.52	01/08/10 18:26		
1,1-Dichloroethane	ppbv	ND	0.52	01/08/10 18:26		
1,1-Dichloroethene	ppbv	ND	0.52	01/08/10 18:26		
1,2,4-Trichlorobenzene	ppbv	ND	0.52	01/08/10 18:26		
1,2,4-Trimethylbenzene	ppbv	ND	0.51	01/08/10 18:26		
1,2-Dibromoethane (EDB)	ppbv	ND	0.52	01/08/10 18:26		
1,2-Dichlorobenzene	ppbv	ND	0.51	01/08/10 18:26		
1,2-Dichloroethane	ppbv	ND	0.52	01/08/10 18:26		
1,2-Dichloropropane	ppbv	ND	0.52	01/08/10 18:26		
1,3,5-Trimethylbenzene	ppbv	ND	0.52	01/08/10 18:26		
1,3-Butadiene	ppbv	ND	0.52	01/08/10 18:26		
1,3-Dichlorobenzene	ppbv	ND	0,51	01/08/10 18:26		
1,4-Dichlorobenzene	ppbv	ND	0.51	01/08/10 18:26		
1,4-Dioxane (p-Dioxane)	ppbv	ND	0.10	01/08/10 18:26		
2,2,4-Trimethylpentane	ppbv	ND	0.50	01/08/10 18:26		
2-Butanone (MEK)	ppbv	ND	0.55	01/08/10 18:26		
2-Hexanone	ppbv	ND	0.55	01/08/10 18:26		
2-Propanol	ppbv	ND	0.50	01/08/10 18:26		
4-Ethyltoluene	ppbv	ND	0.53	01/08/10 18:26		
4-Methyl-2-pentanone (MIBK)	ppbv	ND	0.55	01/08/10 18:26		
Acetone	ppbv	ND	0.55	01/08/10 18:26		
Benzene	ppbv	ND	0.52	01/08/10 18:26		
Bromodichloromethane	ppbv	ND	0.51 0.52	01/08/10 18:26 01/08/10 18:26		
Bromoform	ppbv	ND ND	0.52	01/08/10 18:26		
Bromomethane	ppbv	ND	0.51	01/08/10 18:26		
Carbon disulfide	ppbv	ND	0.50	01/08/10 18:26		
Carbon tetrachloride	ppbv	ND	0.51	01/08/10 18:26		
Chlorobenzene	ppbv	ND	0.52	01/08/10 18:26		
Chloroethane Chloroform	ррbv ррbv	ND	0.51	01/08/10 18:26		
Chloromethane	ppbv	ND	0.50	01/08/10 18:26		
cis-1,2-Dichloroethene	ppbv	ND	0.52	01/08/10 18:26		
cis-1,3-Dichloropropene		ND	0.51	01/08/10 18:26		
Cyclohexane	ррbv ррbv	ND	0.51	01/08/10 18:26		
Dibromochloromethane	ppbv	ND	0.53	01/08/10 18:26		
Dichlorodifluoromethane	ppbv	ND	0.51	01/08/10 18:26		
Dichlorotetrafluoroethane	ppbv	ND	0.57	01/08/10 18:26		
Ethanol	ppbv	ND	0.50	01/08/10 18:26		
Ethyl acetate	ppbv	ND	0.51	01/08/10 18:26		
Ethylbenzene	ppbv	ND	0.52	01/08/10 18:26		

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Matrix: Air

Project: 0506-117-11 Parkwater

Pace Project No.: 10119238

METHOD BLANK: 734954

Associated Lab Samples: 10119238001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ppbv	ND	0.50	01/08/10 18:26	
Isopropylbenzene (Cumene)	ppbv	ND	0.50	01/08/10 18:26	
m&p-Xylene	ppbv	ND	1.0	01/08/10 18:26	
Methyl-tert-butyl ether	ppbv	ND	1.0	01/08/10 18:26	
Methylene Chloride	ppbv	ND	0.52	01/08/10 18:26	
n-Heptane	ppbv	ND	0.52	01/08/10 18:26	
n-Hexane	ppbv	ND	0.53	01/08/10 18:26	
Naphthalene	ppbv	ND	0.50	01/08/10 18:26	
o-Xylene	ppbv	ND	0.52	01/08/10 18:26	
Propylene	ppbv	ND	2.0	01/08/10 18:26	
Styrene	ppbv	ND	0.55	01/08/10 18:26	
Tetrachloroethene	ppbv	ND	0.52	01/08/10 18:26	
Tetrahydrofuran	ppbv	ND	0.52	01/08/10 18:26	
THC as Gas	ppbv	ND	20.0	01/08/10 18:26	
Toluene	ppbv	ND	0.52	01/08/10 18:26	
trans-1,2-Dichloroethene	ppbv	ND	1.0	01/08/10 18:26	
trans-1,3-Dichloropropene	ppbv	ND	0.52	01/08/10 18:26	
Trichloroethene	ppbv	ND	0.52	01/08/10 18:26	
Trichlorofluoromethane	ppbv	ND	0.50	01/08/10 18:26	
Vinyl acetate	ppbv	ND	0.55	01/08/10 18:26	
Vinyl chloride	ppbv	ND	0.51	01/08/10 18:26	
Xylene (Total)	ppbv	ND	1.5	01/08/10 18:26	

LABORATORY CONTROL SAMPLE: 734955

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ppbv		10	100	60-125	
1,1,2,2-Tetrachloroethane	ppbv	10	11.1	111	57-127	
1,1,2-Trichloroethane	ppbv	10	10.2	102	56-125	
1,1,2-Trichlorotrifluoroethane	ррbv	10	9.1	91	52-133	
1,1-Dichloroethane	ppbv	10	9.7	97	54-127	
1,1-Dichloroethene	ppbv	10	9.6	96	52-129	
1,2,4-Trichlorobenzene	ppbv	10	10	100	30-150	
1,2,4-Trimethylbenzene	ppbv	10	10.1	101	52-145	
1,2-Dibromoethane (EDB)	ppbv	10	11.1	11 1	59-133	
1,2-Dichlorobenzene	ppbv	10	10.0	100	67-135	
1,2-Dichloroethane	ppbv	10	9.8	98	54-125	
1,2-Dichloropropane	ppbv	10	9.8	98	64-125	
1,3,5-Trimethylbenzene	ppbv	10	12.4	124	56-135	
1,3-Butadiene	ppbv	10	9.5	95	55-125	
1,3-Dichlorobenzene	ppbv	10	10.0	100	61-142	
1,4-Dichlorobenzene	ppbv	10	10.2	102	55-142	
1,4-Dioxane (p-Dioxane)	ppbv	10	8.9	89	70-130	
2,2,4-Trimethylpentane	ppbv	10	9.6	96	70-130	
2-Butanone (MEK)	ppbv	10	9.7	97	47-141	

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REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 Parkwater

Pace Project No.: 10119238

LABORATORY CONTROL SAMPLE: 734955

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Hexanone	ppbv	10	9.8	98	41-138	
2-Propanol	ppbv	10	8.1	81	63-125	
-Ethyltoluene	ppbv	10	12.4	124	62-130	
-Methyl-2-pentanone (MIBK)	ppbv	10	9.7	97	53-134	
Acetone	ppbv	10	10.2	102	44- 1 49	
Benzene	ppbv	10	9.7	97	61-126	
Bromodichloromethane	ppbv	10	10.4	104	54-129	
Bromoform	ppbv	10	12.3	123	56-125	
romomethane	ppbv	10	9.6	96	56-128	
arbon disulfide	ppbv	10	9,9	99	58-150	
arbon tetrachloride	ppbv	10	10.2	102	55-125	
hlorobenzene	ppbv	10	10.9	109	48-138	
hloroethane	ppbv	10	9.4	94	56-128	
hloroform	ppbv	10	10	100	55-125	
hloromethane	ppbv	10	8.2	82	50-131	
s-1,2-Dichloroethene	ppbv	10	9.8	98	64-125	
s-1,3-Dichloropropene	ppbv	10	11.0	110	61-132	
vclohexane	ppbv	10	9.6	96	61-130	
bromochloromethane	ppbv	10	11.5	115	51-129	
chlorodifluoromethane	ppbv	10	9.5	95	56-132	
chlorotetrafluoroethane	ppbv	10	9.4	94	48-125	
nanol	ppbv	10	8.8	88	70-130	
vl acetate	ppbv	10	9.5	95	66-149	
ylbenzene	ppbv	10	11.7	117	56-137	
xachloro-1,3-butadiene	ppbv	10	9.9	99	30-150	
propylbenzene (Cumene)	ppbv	10.4	11.8	113	67-134	
p-Xylene	ppbv	20	23.5	117	62-135	
thyl-tert-butyl ether	ppbv	10	9.8	98	59-125	
thylene Chloride	ppbv	10	10.3	103	46-143	
leptane	ppbv	10	9.6	96	64-130	
texane	ppbv	10	10.3	103	61-134	
phthalene	ppbv	10	10.0	100	30-150	
Xylene	ppbv	10	11.8	118	61-134	
pylene	ppbv	10	10	100	62-146	
yrene	ppbv	10	11.8	118	63-134	
trachloroethene	ppbv	10	10.8	108	61-132	
trahydrofuran	ppbv	10	9.7	97	62-137	
IC as Gas	ppbv	700	717	102	61-125	
luene	ppbv	10	10.3	103	57-132	
ans-1,2-Dichloroethene	ppbv	10	9.8	98	52-130	
ans-1,3-Dichloropropene	ppbv	10	11.6	116	61-129	
ichloroethene	ppbv	10	9.3	93	72-147	
ichlorofluoromethane	ppbv	10	9.8	98	58-141	
nyl acetate	ppbv	10	9,9	99	56-131	
nyl chloride	ppbv	10	9.6	96	56-136	
	• •	30	35.3	118	70-130	

Date: 01/11/2010 03:13 PM

REPORT OF LABORATORY ANALYSIS

Page 10 of 11





QUALIFIERS

Project: 0506-117-11 Parkwater Pace Project No.: 10119238

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

Date: 01/11/2010 03:13 PM

REPORT OF LABORATORY ANALYSIS

Page 11 of 11





January 05, 2010

Carol Davy PACE ANALYTICAL 1700 Elm Street SE Minneapolis, MN 55127-

Bureau Veritas Work Order No. 09121166

Reference: 10119238/0506-117-11 PARKWATER

Dear Carol Davy:

Bureau Veritas North America, Inc. received 1 sample on 12/22/2009 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely,

unel for

Karen Coonan Client Services Representative cc:

1/3

CASE NARRATIVE

Date: 05-Jan-10

Client: PACE ANALYTICAL

Project: 10119238/0506-117-11 PARKWATER

Work Order No 09121166

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected.

Please note that a field blank was not identified by the client for this sample set.

The following result has been converted from mg/m3 to ug/m3. Sample -001A: THCs as Diesel = <1,200 ug/m3

ANALYTICAL RESULTS

Date: 05-Jan-10

Client:	PACE ANALYTICAL	,					
Project:	10119238/0506-117-11	PARKW	ATER			Work Order No:	09121166
Sample Identifica	ntion: VP-CI-121709						
Lab Number:	001A					Date Sampled:	12/17/2009
Sample Type	Charcoal Tube					Date Received:	12/22/2009
Analyst	СМІ					Air Volume (L):	8.18
			Analytical Resu	ilts	Reporting Limit	Test	Date
A	Analyte	(µg)	(mg/m³)	(ppm)	(µg)	Method	Analyzed
THCs as Diesel		<10	<1.2		10	NIOSH 1550	12/30/2009

General Notes:

<: Less than the indicated reporting limit (RL).

--: Information not available or not applicable.

Back sections (if applicable) were checked and showed no significant breakthrough unless otherwise noted.

Chain	Chain of Custody								091121100	110	9		Pace	Pace Analytical
Workorde	19238	Workorder Name:	me:	0506-117-11 Parkwater	Parkwate	Ŀ,		Ľ.	Results Requested		1/5/2010	Nertic and and		
Report / Invoice To	roice To		Subcontract To	act To						Requested Analysis	Analysis			
Carol Davy Pace Analy 1700 Elm S Suite 200 Minneapolis Phone (612 Email: caro	Carol Davy Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700 Email: carol.davy@pacelabs.com	χ	BUC	Bureau Verita		P.O. (DIL9238	DIL9238		1957 (1 - 2451 f					
ttem Sam	Sample ID	Collect Date/Time		0 45 0	Matrix	krinne0			Jent				LA L	LAB USE ONLY
/ 1 VP-1	VP-CI-121709	12/17/2009 12:57		10119238001	Air									
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4								_						
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											Con	Comments		
Transfers	Released By		Date/Time	Received By	1 By		0	Date/Time						
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Monday, December 21, 2009 11:06:27 AM

FMT-ALL-C-002rev.00 24March2009

15 of 17

Page 1 of 1

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Volum of Air ORIGINAL	I NLUAN INDU		Sorbant tube in	Additional Comments:											40 + 1 5 1 - I 2 - 9 V	PE Character per box. (A-Z, 0-97,-) PDS MUST BE UNIQUE		8126	1	WA 7207	Address: 523 E 7 A Ave	iny: Crosfinta Exclose	Section A Required Client Information:	T ALE AV I ALY LIVAI WWW.pacelabs.com	Bann Anali tinal [®]
B, 180			South	RELINQUISHED											×.	MEDIA 1 Jada: Bag 1 Liter Summa Can 6 Liter Summ	Valid Media Codes	Project Number, Project Number,	Purchase Order So.: U	Solver Doe of many of C	Copy To: we we we have	Report To: Borris in Liffice and	Section B Required Project Information:		
SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER:			ethen GEL 12/1/19 14	U DATE											3/2/2/ 2111 3			Pace Project Manager/Sales Rep.	-	Address:	Company Name:	Attention:	Section C Invoice Information:	The Chain-of-Cu	AIR:
Lathen			145 - 50 - 50	TIME ACCEPTED BY / AFFILIATION											3-77 4 1 7 50	Canister Pressure (Initial Field) Canister Pressure (Final Field)			01-102		e vertinar 200	41		stody is a LEGAL DOCUMENT. All rel	CHAIN-OF-
DATE Signed (May DD/M)			Er 101 12/14/04 0932	ILIATION DATE TIME											۲	Method: 10,0,3,8,7,6,7,7,4,6,8,7,7,7,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4	Report Level II. X III.		Location of	lean Up ∮	UST T Superfund	Program	010	The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.	CUSTODY / Analytical Request Document
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Samples Arrived within			s 🗆 No 🗇 N/A				
Short Hold Time Analy						······	······
Rush Turn Around Tim							
Sufficient Volume:							
Correct Containers Used	d:					····	
-Pace Containers Us	ed:						
Containers Intact:		1		10.			
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Sample Labels match CC		Yes		12.			
Samples Received:	ICANO.		ARGON TO	and the second	······		
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Person Contacted:			Date/Ti	me:	rield D	ata Required? Y /	N
Comments/ Resolution:	·····				······		
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Project Manager Review	w:			apro	<u> </u>	Date: 12-2109	

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers) A106 Rev.01 (22May2009)



Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700 Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125					•	lumber: 1011 Name: 0506	9238 5-117-11 Parkwater
Lab Sample No: 10119238001 Client Sample ID: VP-CI-12		ProjSampleNum: 10119238001 9 Matrix: Air					cted: 12/17/09 12:57 ived: 12/19/09 9:32
Parameters	Results	Units	Report Limit	DF	Analyzed	CAS	S No. Qualifiers
Air TO-15							
1.1.1-Trichloroethane	ND	ug/m3	3.6	1.25	01/08/10 22:05	CJR 71-5	5-6
1,1,2,2-Tetrachloroethane	ND	ug/m3	4.5	1.25	01/08/10 22:05		
1,1,2-Trichloroethane	ND	ug/m3	3.6	1,25	01/08/10 22:05		0-5
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	5.1	1.25	01/08/10 22:05	CJR 76-13	3-1
1,1-Dichloroethane	ND	ug/m3	2.7	1.25	01/08/10 22:05	CJR 75-34	4-3
1,1-Dichloroethene	ND	ug/m3	2.6	1.25	01/08/10 22:05	CJR 75-35	5-4
1,2,4-Trichlorobenzene	ND	ug/m3	4.9	1.25	01/08/10 22:05	CJR 120-8	82-1
1,2,4-Trimethylbenzene	ND	ug/m3	3.2	1.25	01/08/10 22:05	CJR 95-63	3-6
1,2-Dibromoethane (EDB)	ND	ug/m3	5.1	1.25	01/08/10 22:05	CJR 106-9	93-4
1,2-Dichlorobenzene	ND	ug/m3	3.9	1.25	01/08/10 22:05	CJR 95-50	J-1
1,2-Dichloroethane	ND	ug/m3	2.7	1.25	01/08/10 22:05	CJR 107-0	06-2
1,2-Dichloropropane	ND	ug/m3	3.1	1.25	01/08/10 22:05		7-5
1,3,5-Trimethylbenzene	ND	ug/m3	3.2	1.25	01/08/10 22:05	CJR 108-6	37-8
1,3-Butadiene	ND	ug/m3	1.5	1.25	01/08/10 22:05		
1,3-Dichlorobenzene	ND	ug/m3	3.9	1.25	01/08/10 22:05	CJR 541-7	73-1
1,4-Dichlorobenzene	ND	ug/m3	3.9	1.25	01/08/10 22:05	CJR 106-4	46-7
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.44	1.25	01/08/10 22:05	CJR 123-9	91 -1
2,2,4-Trimethylpentane	9.5	ug/m3	2.9	1.25	01/08/10 22:05		
2-Butanone (MEK)	7.2	ug/m3	2.1	1.25	01/08/10 22:05		
2-Hexanone	ND	ug/m3	2.9	1.25	01/08/10 22:05		
2-Propanol	11.2	ug/m3	1.5	1.25	01/08/10 22:05		
4-Ethyltoluene	ND	ug/m3	3.3	1.25	01/08/10 22:05		
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	2.9	1.25	01/08/10 22:05		
Acetone	23.2	ug/m3	1.7	1.25	01/08/10 22:05		
Benzene	ND	ug/m3	2.1	1.25	01/08/10 22:05		
Bromodichloromethane	ND	ug/m3	4.4	1.25	01/08/10 22:05		
Bromoform	ND	ug/m3	6.8	1.25	01/08/10 22:05		
Bromomethane	ND	ug/m3	2.5	1.25	01/08/10 22:05		
Carbon disulfide	2.6	ug/m3	2	1.25	01/08/10 22:05		
Carbon tetrachloride	ND	ug/m3	4.1	1.25	01/08/10 22:05		
Chlorobenzene	ND	ug/m3	3	1.25	01/08/10 22:05		
Chloroethane	ND	ug/m3	1.7	1.25	01/08/10 22:05		
Chloroform	ND	ug/m3	3.2	1.25	01/08/10 22:05		
Chloromethane	ND	ug/m3	1.3	1.25	01/08/10 22:05		
cis-1,2-Dichloroethene	ND	ug/m3	2.6	1.25	01/08/10 22:05		
cis-1,3-Dichloropropene	ND	ug/m3	3	1.25	01/08/10 22:05		1-01-5
Cyclohexane	2.41	ug/m3	2.3	1.25	01/08/10 22:05		
Dibromochloromethane	ND	ug/m3	5.7	1.25	01/08/10 22:05	CJR 124-4	+0- I

SUPPLEMENTAL REPORT

Date: 1/12/2010

Units Conversion Request

Page 1



ANALYTICAL RESULTS

Client:	GeoEngineers,Inc.					Lab Project Number:	10119238
Phone:	(509)363-3125					Project Name:	0506-117-11 Parkwater
Dichlo	rodifluoromethane	ND	ug/m3	3.2	1.25	01/08/10 22:05 CJR	75-71-8
Dichlo	rotetrafluoroethane	ND	ug/m3	5	1.25	01/08/10 22:05 CJR	76-14-2
Ethan	ol	9.58	ug/m3	1.2	1.25	01/08/10 22:05 CJR	64-17-5
Ethyl a	acetate	ND	ug/m3	2.3	1.25	01/08/10 22:05 CJR	141-78-6
Ethylb	enzene	ND	ug/m3	2.9	1.25	01/08/10 22:05 CJR	100-41-4
Hexad	hloro-1,3-butadiene	ND	ug/m3	6.7	1.25	01/08/10 22:05 CJR	87-68-3
Isopro	pylbenzene (Cumene)	ND	ug/m3	3.1	1.25	01/08/10 22:05 CJR	98-82-8
m&p->	<pre></pre>	ND	ug/m3	5.3	1.25	01/08/10 22:05 CJR	1330-20-7
Methy	lene Chloride	ND	ug/m3	2.3	1.25	01/08/10 22:05 CJR	75-09-2
Methy	I-tert-butyl ether	ND	ug/m3	4.4	1.25	01/08/10 22:05 CJR	1634-04-4
Napht	halene	ND	ug/m3	3.3	1.25	01/08/10 22:05 CJR	91-20-3
n-Hep	tane	ND	ug/m3	2.7	1.25	01/08/10 22:05 CJR	142-82-5
n-Hex	ane	ND	ug/m3	2.4	1.25	01/08/10 22:05 CJR	110-54-3
o-Xyle	ne	ND	ug/m3	2.9	1.25	01/08/10 22:05 CJR	95-47-6
Propy	ene	8.22	ug/m3	4.4	1.25	01/08/10 22:05 CJR	115-07-1
Styrer	e	ND	ug/m3	3	1.25	01/08/10 22:05 CJR	100-42-5
Tetrac	hloroethene	4.55	ug/m3	4.5	1.25	01/08/10 22:05 CJR	127-18-4
Tetrah	iydrofuran	ND	ug/m3	1.9	1.25	01/08/10 22:05 CJR	109-99-9
THC a	is Gas	41600	ug/m3	110	1.25	01/08/10 22:05 CJR	
Tolue	ne	ND	ug/m3	2.5	1.25	01/08/10 22:05 CJR	108-88-3
trans-	1,2-Dichloroethene	ND	ug/m3	4.8	1.25	01/08/10 22:05 CJR	156-60-5
trans-	1,3-Dichloropropene	ND	ug/m3	3	1.25	01/08/10 22:05 CJR	10061-02-6
Trichle	proethene	ND	ug/m3	3.6	1.25	01/08/10 22:05 CJR	79-01-6
Trichle	profluoromethane	ND	ug/m3	3.5	1.25	01/08/10 22:05 CJR	75-69-4
Vinyl a	acetate	4.65	ug/m3	2.5	1.25	01/08/10 22:05 CJR	108-05-4
Vinyl o	chloride	ND	ug/m3	1.7	1.25	01/08/10 22:05 CJR	75-01-4
Xylene	e (Total)	ND	ug/m3	8.4	1.25	01/08/10 22:05 CJR	1330-20-7

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

SUPPLEMENTAL REPORT

Units Conversion Request



Pace Analytical Services, Inc. **1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700** Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125 Lab Project Number: 10119238 Project Name: 0506-117-11 Parkwater

PARAMETER FOOTNOTES

SUPPLEMENTAL REPORT

Units Conversion Request

Page 3



Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

October 28, 2009

Bruce Williams GeoEngineers,Inc. 523 East Second Ave Spokane, WA 99202

RE: Project: 0506-117-10 Parkwater Pace Project No.: 10114487

Dear Bruce Williams:

Enclosed are the analytical results for sample(s) received by the laboratory on October 13, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Care Davy

Carol Davy

carol.davy@pacelabs.com Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Page 1 of 12





Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

CERTIFICATIONS

Project: 0506-117-10 Parkwater Pace Project No.: 10114487

Minnesota Certification IDs

1700 Elm Street SE, Suite 200 Minneapolis, MN 55414 Alaska Certification #: UST-078 Washington Certification #: 0754 Tennessee Certification #: 02818 Pennsylvania Certification #: 68-00563 Oregon Certification #: 68-00563 North Dakota Certification #: 68-00563 North Carolina Certification #: 8-036 North Carolina Certification #: 8-036 New York Certification #: 11647 New Jersey Certification #: 11647 New Jersey Certification #: MN-002 Montana Certification #: MT CERT0092 Minnesota Certification #: 027-053-137 Maine Certification #: 2007029 Louisiana Certification #: LA080009 Louisiana Certification #: 03086 Kansas Certification #: E-10167 Iowa Certification #: 368 Illinois Certification #: 200011 Florida/NELAP Certification #: E87605 California Certification #: 01155CA Arizona Certification #: AZ-0014 Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

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Page 2 of 12

2 of 18



SAMPLE SUMMARY

Project: 0506-117-10 Parkwater Pace Project No.: 10114487

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10114487001	VP-CI-100909	Air	10/09/09 14:07	10/13/09 09:13

REPORT OF LABORATORY ANALYSIS

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3 of 18

Page 3 of 12



SAMPLE ANALYTE COUNT

Project: Pace Project No	0506-117-10 Parkwater 0.: 10114487				
Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10114487001	VP-CI-100909	TO-15	LCW	65	PASI-M

REPORT OF LABORATORY ANALYSIS

Page 4 of 12



face Analytical www.pacelabs.com

PROJECT NARRATIVE

Project: 0506-117-10 Parkwater Pace Project No.: 10114487

Method: TO-15

Description:TO15 MSV AIRClient:GeoEngineers,Inc.Date:October 28, 2009

General Information:

1 sample was analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

QC Batch: AIR/9303

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- BLANK (Lab ID: 703275)
- 1,4-Dioxane (p-Dioxane)
- LCS (Lab ID: 703276)
 - 1,4-Dioxane (p-Dioxane)
- VP-CI-100909 (Lab ID: 10114487001)
 - 1,4-Dioxane (p-Dioxane)

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: AIR/9303

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 703276)
 - Carbon tetrachloride
 - Naphthalene

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 5 of 12





Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

PROJECT NARRATIVE

Project: 0506-117-10 Parkwater Pace Project No.: 10114487

 Method:
 TO-15

 Description:
 TO15 MSV AIR

 Client:
 GeoEngineers,Inc.

 Date:
 October 28, 2009

Analyte Comments:

QC Batch: AIR/9303

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

• VP-CI-100909 (Lab ID: 10114487001)

Methylene Chloride

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 6 of 12





ANALYTICAL RESULTS

Project: 0506-117-10 Parkwater

Pace Project No.: 10114487

Sample: VP-CI-100909	Lab ID:	10114487001	Collecte	d: 10/09/0	9 14:07	Received: 10)/13/09 09:13 M	atrix: Air	
_			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
TO15 MSV AIR	Analytica	I Method: TO-1	5						
1,1,1-Trichloroethane	0.69	opbv	0.65	0.32	1.25		10/28/09 11:57	71-55-6	
1,1,2,2-Tetrachloroethane	ND	opbv	0.65	0.32	1.25		10/28/09 11:57	7 9-34-5	
1,1,2-Trichloroethane	ND	opbv	0.65	0.32	1.25		10/28/09 11:57	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	opbv	0.65	0.32	1.25		10/28/09 11:57	76-13-1	
1,1-Dichloroethane	ND	opbv	0.65	0.32	1.25		10/28/09 11:57	75-34-3	
1,1-Dichloroethene	ND	opbv	0.65	0.32	1.25		10/28/09 11:57	75-35-4	
1,2,4-Trichlorobenzene	ND	opbv	0.65	0.32	1.25		10/28/09 11:57	120-82-1	
1,2,4-Trimethylbenzene	ND	opbv	0.64	0.32	1.25		10/28/09 11:57	95-63-6	
1,2-Dibromoethane (EDB)	ND I	opbv	0.65	0,32	1.25		10/28/09 11:57	106-93-4	
1,2-Dichlorobenzene	ND I	opbv	0.64	0.32	1.25		10/28/09 11:57	95-50-1	
1,2-Dichloroethane	ND I	opbv	0.65	0.32	1.25		10/28/09 11:57	107-06-2	
1,2-Dichloropropane	ND	opbv	0.65	0.32	1.25		10/28/09 11:57		
1,3,5-Trimethylbenzene	ND I	opbv	0.65	0.32	1.25		10/28/09 11:57	108-67-8	
1,3-Butadiene	ND I	opbv	0.65	0.32	1.25		10/28/09 11:57	106-99-0	
1,3-Dichlorobenzene	ND I	opbv	0.64	0.32	1.25		10/28/09 11:57	541-73-1	
1,4-Dichlorobenzene	ND I	opbv	0.64	0.32	1.25		10/28/09 11:57	106-46-7	
1,4-Dioxane (p-Dioxane)	ND I	opbv	0.12	0.062	1.25		10/28/09 10:22	123-91-1	SS
2,2,4-Trimethylpentane	11.2	opbv	0.62	0.31	1.25		10/28/09 11:57	540-84-1	
2-Butanone (MEK)	ND I	opbv	0.69	0.34	1.25		10/28/09 11:57	78-93-3	
2-Hexanone	ND I	opbv	0.69	0.34	1.25		10/28/09 11:57	591-78-6	
2-Propanol	5.0 j	opbv	0.62	0.31	1.25		10/28/09 11:57	67-63-0	
4-Ethyltoluene	ND	opbv	0.66	0.33	1.25		10/28/09 11:57	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND I	opbv	0.69	0.34	1.25		10/28/09 11:57	108-10- 1	
Acetone	17.3	opbv	0.69	0.34	1.25		10/28/09 11:57	67-64-1	
Benzene	ND	opbv	0.65	0.32	1.25		10/28/09 11:57	71-43-2	
Bromodichloromethane	ND j	opbv	0.64	0.32	1.25		10/28/09 11:57	75-27-4	
Bromoform	ND	opbv	0.65	0.32	1.25		10/28/09 11:57	75-25-2	
Bromomethane	ND	opbv	0.64	0.32	1.25		10/28/09 11:57	74-83-9	
Carbon disulfide	2.1	opbv	0.62	0.31	1.25		10/28/09 11:57	75-15-0	
Carbon tetrachloride	ND	pbv	0.64	0.32	1.25		10/28/09 11:57	56-23-5	
Chlorobenzene	ND	opbv	0.65	0.32	1.25		10/28/09 11:57	108-90-7	
Chloroethane	ND	pbv	0.64	0.32	1.25		10/28/09 11:57	75-00-3	
Chloroform	ND	opbv	0.64	0.32	1.25		10/28/09 11:57	67-66-3	
Chloromethane	ND	opbv	0.62	0.31	1.25		10/28/09 11:57	74-87-3	
Cyclohexane	4.9	opbv	0.65	0.32	1.25		10/28/09 11:57	110-82-7	
Dibromochloromethane	ND	opbv	0.66	0.33	1.25		10/28/09 11:57	124-48-1	
Dichlorodifluoromethane	ND		0.64	0.32	1.25		10/28/09 11:57		
Dichlorotetrafluoroethane	ND		0.71	0.36	1.25		10/28/09 11:57		
Ethanol	4.0		0.62	0.31	1.25		10/28/09 11:57	64-17-5	
Ethyl acetate	ND		0.64	0.32	1.25		10/28/09 11:57		
Ethylbenzene	ND		0.65	0.32	1.25		10/28/09 11:57		
Hexachloro-1,3-butadiene	ND		0.62	0.31	1.25		10/28/09 11:57		
Isopropylbenzene (Cumene)	ND		0.62	0.31	1.25		10/28/09 11:57		
Methyl-tert-butyl ether	ND		1.2	0.62	1.25		10/28/09 11:57		
Methylene Chloride	70.5	•	0.65	0.32	1.25		10/28/09 11:57		Е
Naphthalene	ND		0.62	0.31	1.25		10/28/09 11:57		

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-117-10 Parkwater

Pace Project No.: 10114487

Sample: VP-CI-100909	Lab ID: 10	114487001 Collecte	d: 10/09/0	9 14:07	Received: 10	/13/09 09:13 Ma	atrix: Air	
Parameters	Results	Report Units Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Me	ethod: TO-15						
Propylene	ND ppb	/ 2.5	1.2	1.25		10/28/09 11:57	115-07-1	
Styrene	ND ppby	/ 0.69	0.34	1.25		10/28/09 11:57	100-42-5	
THC as Gas	13800 ppb	/ 25.0	12.5	1.25		10/28/09 11:57		
Tetrachloroethene	1.4 ppb	/ 0.65	0.32	1.25		10/28/09 11:57	127 -1 8-4	
Tetrahydrofuran	ND ppby	/ 0.65	0.32	1.25		10/28/09 11:57	109-99-9	
Toluene	0.94 ppb	0.65	0.32	1.25		10/28/09 11:57	108-88-3	
Trichloroethene	ND ppby	/ 0.65	0.32	1.25		10/28/09 11:57	79-01-6	
Trichlorofluoromethane	1.3 ppb		0.31	1.25		10/28/09 11:57	75-69-4	
Vinyl acetate	ND ppb		0.34	1.25		10/28/09 11:57	108-05-4	
Vinyl chloride	ND ppby	/ 0.64	0.32	1.25		10/28/09 11:57	75-01-4	
Xylene (Total)	ND ppby	/ 1.9	0.94	1.25		10/28/09 11:57	1330-20-7	
cis-1,2-Dichloroethene	ND ppby	/ 0.65	0.32	1.25		10/28/09 11:57	156-59-2	
cis-1,3-Dichloropropene	ND ppby	/ 0.64	0.32	1.25		10/28/09 11:57	10061-01-5	
m&p-Xylene	ND ppb		0.62	1.25		10/28/09 11:57	1330-20-7	
n-Heptane	ND ppby	/ 0.65	0.32	1.25		10/28/09 11:57	142-82-5	
n-Hexane	25.7 ppb		0.33	1.25		10/28/09 11:57	110-54-3	
o-Xylene	ND ppby		0.32	1.25		10/28/09 11:57	95-47-6	
trans-1,2-Dichloroethene	ND ppb		0.62	1.25		10/28/09 11:57	156-60-5	
trans-1,3-Dichloropropene	ND ppb		0.32	1.25		10/28/09 11:57	10061-02-6	

Date: 10/28/2009 05:28 PM

REPORT OF LABORATORY ANALYSIS

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Project:	0506-117-10	Parkwater
Pace Project No.:	10114487	

QC Batch: AIR/9303		Analysis Met	hod: TC	D-15	
QC Batch Method: TO-15		Analysis Des	cription: TC	015 MSV AIR	
Associated Lab Samples: 10114	4487001				
METHOD BLANK: 703275		Matrix:	Air		···· ··· ··· ··· ··· ·················
Associated Lab Samples: 10114	4487001				
• • • • • • •		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ppbv	ND	0.52	10/28/09 11:17	
1,1,2,2-Tetrachloroethane	ppbv	ND	0.52	10/28/09 11:17	
1,1,2-Trichloroethane	ppbv	ND	0.52	10/28/09 11:17	
1,1,2-Trichlorotrifluoroethane	ppbv	ND	0.52	10/28/09 11:17	
1,1-Dichloroethane	ppbv	ND	0.52	10/28/09 11:17	
1,1-Dichloroethene	ppbv	ND	0.52	10/28/09 11:17	
1,2,4-Trichlorobenzene	ppbv	ND	0.52	10/28/09 11:17	
1,2,4-Trimethylbenzene	ppbv	ND	0.51	10/28/09 11:17	
1,2-Dibromoethane (EDB)	ppbv	ND	0.52	10/28/09 11:17	
1,2-Dichlorobenzene	ppbv	ND	0.51	10/28/09 11:17	
1,2-Dichloroethane	ppbv	ND	0.52	10/28/09 11:17	
1,2-Dichloropropane	ppbv	ND	0.52	10/28/09 11:17	
1,3,5-Trimethylbenzene	ppbv	ND	0.52	10/28/09 11:17	
1,3-Butadiene	ppbv	ND	0.52	10/28/09 11:17	
1,3-Dichlorobenzene	ppbv	ND	0.51	10/28/09 11:17	
1,4-Dichlorobenzene	ppbv	ND	0.51	10/28/09 11:17	
1,4-Dioxane (p-Dioxane)	ppbv	ND	0.10	10/28/09 09:51	SS
2,2,4-Trimethylpentane	ppbv	ND	0.50	10/28/09 11:17	
2-Butanone (MEK)	ppbv	ND	0.55	10/28/09 11:17	
2-Hexanone	ppbv	ND	0.55	10/28/09 11:17	
2-Propanol	ppbv	ND	0.50	10/28/09 11:17	
4-Ethyltoluene	ppbv	ND	0.53	10/28/09 11:17	
4-Methyl-2-pentanone (MIBK)	ppbv	ND	0.55	10/28/09 11:17	
Acetone	ppbv	ND	0.55	10/28/09 11:17	
Benzene	ppbv	ND	0.52	10/28/09 11:17	
Bromodichloromethane	ppbv	ND	0.51	10/28/09 11:17	
Bromoform	ppbv	ND	0.52	10/28/09 11:17	
Bromomethane	ppbv	ND	0.51	10/28/09 11:17	
Carbon disulfide	ppbv	ND	0.50	10/28/09 11:17	
Carbon tetrachloride	ppbv	ND	0.51	10/28/09 11:17	
			0.50	40/00/00 44 47	

Date: 10/28/2009 05:28 PM

Chlorobenzene

Chloromethane

Cyclohexane

Ethyl acetate

Ethylbenzene

Ethanol

cis-1,2-Dichloroethene

cis-1,3-Dichloropropene

Dibromochloromethane

Dichlorodifluoromethane

Dichlorotetrafluoroethane

Chloroethane

Chloroform

REPORT OF LABORATORY ANALYSIS

ND

ppbv

This report shall not be reproduced, except in full,

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0.57

0.51

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without the written consent of Pace Analytical Services, Inc..





Project: 0506-117-10 Parkwater

Pace Project No.: 10114487

METHOD BLANK: 703275

Matrix: Air

Associated Lab Samples: 10114487001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ppbv	ND	0.50	10/28/09 11:17	
Isopropylbenzene (Cumene)	ppbv	ND	0.50	10/28/09 11:17	
m&p-Xylene	ppbv	ND	1.0	10/28/09 11:17	
Methyl-tert-butyl ether	ppbv	ND	1.0	10/28/09 11:17	
Methylene Chloride	ppbv	ND	0.52	10/28/09 11:17	
n-Heptane	ppbv	/ ND	0.52	10/28/09 11:17	
n-Hexane	ppbv	ND	0.53	10/28/09 11:17	
Naphthalene	ppbv	ND	0.50	10/28/09 11:17	
o-Xylene	ppbv	ND	0.52	10/28/09 11:17	
Propylene	ppbv	ND	2.0	10/28/09 11:17	
Styrene	ppbv	ND	0.55	10/28/09 11:17	
Tetrachloroethene	ppbv	ND	0.52	10/28/09 11:17	
Tetrahydrofuran	ppbv	ND	0.52	10/28/09 11:17	
THC as Gas	ppbv	ND	20.0	10/28/09 11:17	
Toluene	ppbv	ND	· 0.52	10/28/09 11:17	
rans-1,2-Dichloroethene	ppbv	ND	1.0	10/28/09 11:17	
rans-1,3-Dichloropropene	ppbv	ND	0.52	10/28/09 11:17	
Trichloroethene	ppbv	ND	0.52	10/28/09 11:17	
Trichlorofluoromethane	ppbv	ND	0.50	10/28/09 11:17	
√inyl acetate	ppbv	ND	0.55	10/28/09 11:17	
√inyl chloride	ppbv	ND	0.51	10/28/09 11:17	
Xylene (Total)	ppbv	ND	1.5	10/28/09 11:17	

LABORATORY CONTROL SAMPLE: 703276

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ppbv	10.3	9.3	91	60-125	
1,1,2,2-Tetrachloroethane	ppbv	10.2	10.2	100	57-127	
1,1,2-Trichloroethane	ppbv	10.1	8.8	87	56-125	
1,1,2-Trichlorotrifluoroethane	ppbv	9.8	7.8	80	52-133	
1,1-Dichloroethane	ppbv	10	9,4	94	54-127	
1,1-Dichloroethene	ppbv	10	10.9	109	52-129	
1,2,4-Trichlorobenzene	ppbv	9.9	12.7	128	30-150	
1,2,4-Trimethylbenzene	ppbv	9.9	10.9	110	52-145	
1,2-Dibromoethane (EDB)	ppbv	10.4	9.6	92	59-133	
1,2-Dichlorobenzene	ppbv	10.2	11.3	111	67-135	
1,2-Dichloroethane	ppbv	10.9	9.6	88	54-125	
1,2-Dichloropropane	ppbv	10.8	10.5	98	64-125	
1,3,5-Trimethylbenzene	ppbv	9.9	11.1	112	56-135	
1,3-Butadiene	ppbv	10.1	11.1	110	55-125	
1,3-Dichlorobenzene	ppbv	10.5	10.9	104	61-142	
1,4-Dichlorobenzene	ppbv	10.3	10.5	102	55-142	
1,4-Dioxane (p-Dioxane)	ppbv	10	2.4	24	70-130	SS
2,2,4-Trimethylpentane	ppbv	10	8.8	88	70-130	
2-Butanone (MEK)	ppbv	10.3	8.7	84	47-141	

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REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-10 Parkwater

Pace Project No.: 10114487

LABORATORY CONTROL SAMPLE: 703276

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
-Hexanone	ppbv	10.1	8,3	83	41-138	
-Propanol	ppbv	9.5	7.6	80	63-125	
-Ethyltoluene	ppbv	10	9.6	96	62-130	
Methyl-2-pentanone (MIBK)	ppbv	10.2	7.8	76	53-134	
cetone	ppbv	10	6.0	60	44- 1 49	
enzene	ppbv	10.1	11.7	116	61-126	
romodichloromethane	ppbv	10	9.9	99	54-129	
romoform	ppbv	10.2	11.3	111	56-125	
omomethane	ppbv	10. 1	11.5	114	56-128	
arbon disulfide	ppbv	10.3	8.4	82	58-150	
arbon tetrachloride	ppbv	10.1	18.4	182	55-125 l	_3
lorobenzene	ppbv	9.9	9.7	98	48-138	
nloroethane	ppbv	9.9	10.8	109	56-128	
nloroform	ppbv	9.7	11.9	123	55-125	
lloromethane	ppbv	10	11.8	118	50-131	
s-1,2-Dichloroethene	ppbv	10.3	9.6	93	64-125	
-1,3-Dichloropropene	ppbv	10.5	10.7	102	61-132	
clohexane	ppbv	10.2	12.9	127	61-130	
promochloromethane	ppbv	10.5	10.6	101	51-129	
hlorodifluoromethane	ppbv	9.8	8.7	88	56-132	
hlorotetrafluoroethane	ppbv	10	9.9	99	48-125	
anol	ppbv	10	7.0	70	70-130	
yl acetate	ppbv	10.2	9.1	89	66-149	
ylbenzene	ppbv	11	10.9	99	56-137	
xachloro-1,3-butadiene	ppbv	9.8	13.4	136	30-150	
propylbenzene (Cumene)	ppbv	10.4	10.8	104	67-134	
p-Xylene	ppbv	21	21.2	101	62-135	
thyl-tert-butyl ether	ppbv	10	10.5	105	59-125	
thylene Chloride	ppbv	9.8	6.8	70	46-143	
eptane	ppbv	10.3	8.4	81	64-130	
exane	ppbv	10.9	9.8	90	61-134	
phthalene	ppbv	9.5	15.8	166	30-150 1	_3
Kylene	ppbv	10.3	10	97	61-134	
, pylene	ppbv	10.6	7.2	67	62-146	
vrene	ppbv	10	10.2	102	63-134	
rachloroethene	ppbv	10.4	12.7	122	61-132	
rahydrofuran	ppbv	7.5	4.9	65	62-137	
C as Gas	ppbv	700	794	113	61-125	
uene	ppbv	10.4	9.3	89	57-132	
ns-1,2-Dichloroethene	ppbv	10.4	10.8	104	52-130	
ns-1,3-Dichloropropene	ppbv	10.6	10.2	96	61-129	
chloroethene	ppbv	10. 1	10.6	105	72-147	
chlorofluoromethane	ppbv	9.8	11.0	112	58-14 1	
nyl acetate	ppbv	10.3	10.2	99	56-131	
yl chloride	ppbv	10.3	10.3	100	56-136	
ene (Total)	ppbv	31.3	31.2	100	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 0506-117-10 Parkwater Pace Project No.: 10114487

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

- E Analyte concentration exceeded the calibration range. The reported result is estimated.
- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- SS This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

Date: 10/28/2009 05:28 PM

REPORT OF LABORATORY ANALYSIS

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October 20, 2009

Carol Davy PACE ANALYTICAL 1700 Elm Street SE Minneapolis, MN 55127-

Bureau Veritas Work Order No. 09100677

Reference: 0506-117-10 PARKWATER

Dear Carol Davy:

Bureau Veritas North America, Inc. received 1 sample on 10/15/2009 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely, hund for

Karen Coonan Client Services Representative cc:

CASE NARRATIVE

Date: 22-Oct-09

Client:PACE ANALYTICALProject:0506-117-10 PARKWATERWork Order No09100677

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, and 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results.

The industrial hygiene results have not been blank corrected. Please note that a field blank was not identified by the client for this sample set.

The following result has been converted from mg/m3 to ug/m3:

Sample -001A: THCs as Diesel = <1300 ug/m3

ANALYTICAL RESULTS

Date:	20-Oct-09
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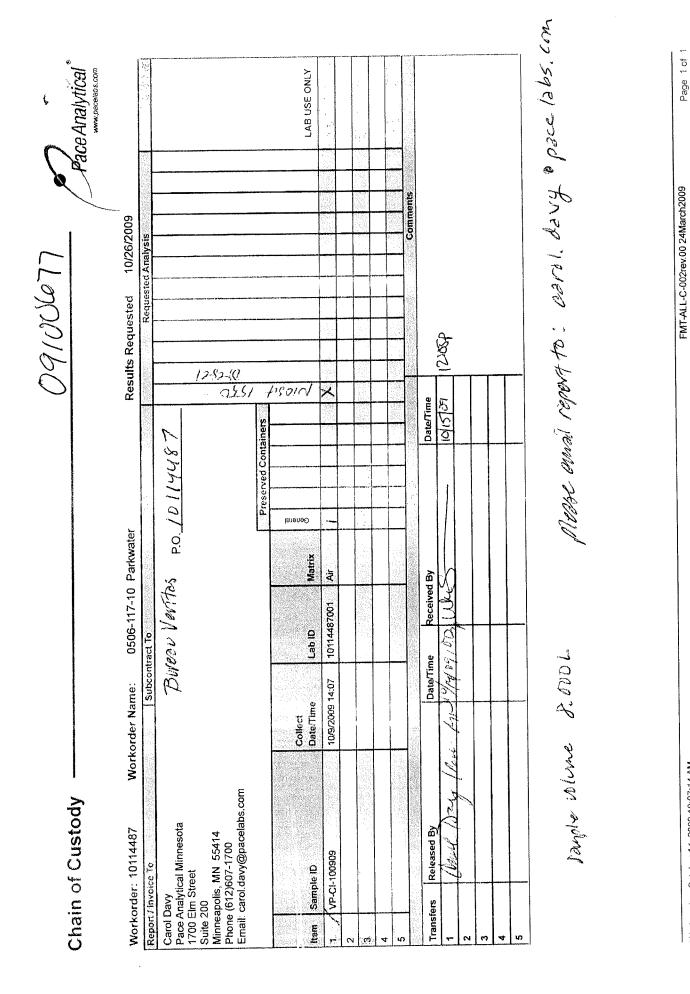
Client:	PACE ANALYTICAL	I.							
Project:	0506-117-10 PARKWA	ATER				Work Order No: 09100677			
Sample Identific:	ation: VP-CI-100909								
Lab Number: 001A						Date Sampled: 10/9/2009			
Sample Type	Charcoal Tube					Date Received: 10/15/2009			
Analyst	CMI					Air Volume (L): 8	3		
			Analytical Res		Reporting Limit	Test	Date		
Analyte (µ		(µg)	(mg/m³)	(ppm)	(µg)	Method	Analyzed		
THCs as Diesel		<10	<1.3		10	NIOSH 1550	10/16/2009		

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General Notes:

<: Less than the indicated reporting limit (RL).

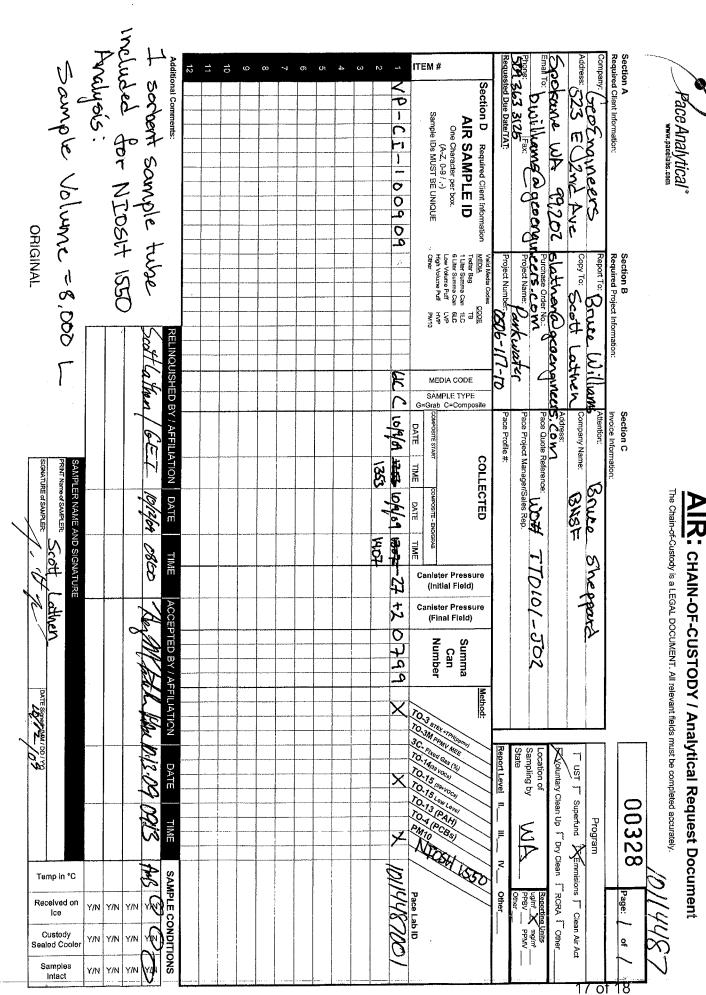
--: Information not available or not applicable. Back sections (if applicable) were checked and showed no significant breakthrough unless otherwise noted.



Wednesday, October 14, 2009 10:07:14 AM

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Page 1 of 1



FC046Rev.00, 21May2009

Pace Analytical Cli	AIR Sample Co	ndition Upon Rec	ceipt		~		
Cli	ent Name: (SEO	ENGINEERS	Projec	t#////998/	\leq		
Courier: Fed Ex DUPS US Custody Seal on Cooler/Box Prese Packing Material: Bubble Wrap	SPS 🗌 Client 🔲 Commei n t: 🔲 yes 🕅 no S	cial 🗌 Pace Other eals intact: 🔲 yes	***	Optional Proj. Due Date: Proj. Name:			
Tracking #: 12 1964 ADO 01	19750 1404	,		Date and Initials of person exami contents:	ning		
1			l		******		
Chain of Custody Present: Chain of Custody Filled Out:	Taves CINO C						
Chain of Custody Relinguished:	Soffes ⊡No ⊡	**************************************			**		
Sampler Name & Signature on COC:				<u>,</u>			
Samples Arrived within Hold Time:		and the second					
Short Hold Time Analysis (<72hr):	Dyes NNO D			<u>▲</u>	4944 444444444444444444444444444444444		
Rush Turn Around Time Requested		The second s					
Sufficient Volume:	Thes Ino I						
Correct Containers Used:	189es []No []			~ <u>~~~~</u> ~~~ <u>~~~</u> ~~~~~~~~~~~~~~~~~~~~~~~	,,		
-Pace Containers Used:	7/ ^{vo} — · · · · · · · · · · · · · · · · · ·						
Containers Intact:	Xyes DNo D						
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Sample Labels match COC:					transferant farmanen		
Samples Received: CA		con Ribe		al de la faite de la constant de la constant de la de la constant de la destant de la constant de la constant d			
Canisters Flow Controllers			Stand Alone G Tedlar Bags				
Sample Number Can ID	Sample Number Can I		Can ID	Sample Number Can ID			
VP-CI-1009090799	88	<u>ک</u>		,			
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			<u></u>				
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	<u> </u>						
Client Notification/ Resolution:				Data Required? Y / N			
Person Contacted:			·····				
Comments/ Resolution:					<u></u>		
and an				4			

					······································		

Project Manager Review :		OIPP)	Date: 1014-04			

Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers) A106 Rev.01 (22May2009)

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ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125				Lab Project Numbe Project Name	r: 10114487 ə: 0506-117-1	0 Parkwater	
Lab Sample No: 10114487001 Client Sample ID: VP-CI-10		Pr	ojSampleNum: Matrix:			te Collected: ´ te Received: ´	10/09/09 14:07 10/13/09 9:13
Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
Air TO-15							
1,1,1-Trichloroethane	3.83	ug/m3	3.6	1.25	10/28/09 11:57 LCW	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4.5	1.25	10/28/09 11:57 LCW	79-34-5	
1,1,2-Trichloroethane	ND	ug/m3	3.6	1.25	10/28/09 11:57 LCW	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	5.1	1.25	10/28/09 11:57 LCW	76-13-1	
1,1-Dichloroethane	ND	ug/m3	2.7	1.25	10/28/09 11:57 LCW	75-34-3	
1,1-Dichloroethene	ND	ug/m3	2.6	1.25	10/28/09 11:57 LCW	75-35-4	
1,2,4-Trichlorobenzene	ND	ug/m3	4.9	1.25	10/28/09 11:57 LCW	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/m3	3.2	1.25	10/28/09 11:57 LCW	95-63-6	
1,2-Dibromoethane (EDB)	ND	ug/m3	5.1	1.25	10/28/09 11:57 LCW	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	3.9	1.25	10/28/09 11:57 LCW	95-50-1	
1,2-Dichloroethane	ND	ug/m3	2.7	1.25	10/28/09 11:57 LCW	107-06-2	
1,2-Dichloropropane	ND	ug/m3	3.1	1.25	10/28/09 11:57 LCW	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/m3	3.2	1.25	10/28/09 11:57 LCW	108-67-8	
1,3-Butadiene	ND	ug/m3	1.5	1.25	10/28/09 11:57 LCW	106-99-0	
1,3-Dichlorobenzene	ND	ug/m3	3.9	1.25	10/28/09 11:57 LCW	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	3.9	1.25	10/28/09 11:57 LCW	106-46-7	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.44	1.25	10/28/09 10:22 LCW	123-91-1	SS
2,2,4-Trimethylpentane	53.2	ug/m3	2.9	1.25	10/28/09 11:57 LCW	540-84-1	
2-Butanone (MEK)	ND	ug/m3	2.1	1.25	10/28/09 11:57 LCW	78-93-3	
2-Hexanone	ND	ug/m3	2.9	1.25	10/28/09 11:57 LCW	591-78-6	
2-Propanol	12.5	ug/m3	1.5	1.25	10/28/09 11:57 LCW	67-63-0	
4-Ethyltoluene	ND	ug/m3	3.3	1.25	10/28/09 11:57 LCW	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	2.9	1.25	10/28/09 11:57 LCW	108-10-1	
Acetone	41.8	ug/m3	1.7	1.25	10/28/09 11:57 LCW	67-64-1	
Benzene	ND	ug/m3	2.1	1.25	10/28/09 11:57 LCW	71-43-2	
Bromodichloromethane	ND	ug/m3	4.4	1.25	10/28/09 11:57 LCW	75-27-4	
Bromoform	ND	ug/m3	6.8	1.25	10/28/09 11:57 LCW	75-25-2	
Bromomethane	ND	ug/m3	2.5	1.25	10/28/09 11:57 LCW	74-83-9	
Carbon disulfide	6.65	ug/m3	2	1.25	10/28/09 11:57 LCW	75-15-0	
Carbon tetrachloride	ND	ug/m3	4.1	1.25	10/28/09 11:57 LCW	56-23-5	
Chlorobenzene	ND	ug/m3	3	1.25	10/28/09 11:57 LCW	108-90-7	

SUPPLEMENTAL REPORT

Date: 10/30/2009

Units Conversion Request



.

ANALYTICAL RESULTS

Client: Phone:	GeoEngineers,Inc. (509)363-3125					Lab Project Number: Project Name:		Parkwater
Chlore	bethane	ND	ug/m3	1.7	1.25	10/28/09 11:57 LCW	75-00-3	
Chloro		ND	ug/m3	3.2	1.25	10/28/09 11:57 LCW	67-66-3	
	omethane	ND	ug/m3	1.3	1.25	10/28/09 11:57 LCW	74-87-3	
	2-Dichloroethene	ND	ug/m3	2.6	1.25	10/28/09 11:57 LCW	156-59-2	
	3-Dichloropropene	ND	ug/m3	3	1.25	10/28/09 11:57 LCW	10061-01-5	
	nexane	17.1	ug/m3	2.3	1.25	10/28/09 11:57 LCW	110-82-7	
,	nochloromethane	ND	ug/m3	5.7	1.25	10/28/09 11:57 LCW	124-48-1	
	rodifluoromethane	ND	ug/m3	3.2	1.25	10/28/09 11:57 LCW	75-71-8	
	rotetrafluoroethane	ND	ug/m3	5	1.25	10/28/09 11:57 LCW	76-14-2	
Ethan	ol	7.66	ug/m3	1.2	1.25	10/28/09 11:57 LCW	64-17-5	
Ethyl a	acetate	ND	ug/m3	2.3	1.25	10/28/09 11:57 LCW	141-78-6	
	enzene	ND	ug/m3	2.9	1.25	10/28/09 11:57 LCW	100-41-4	
	hloro-1,3-butadiene	ND	ug/m3	6.7	1.25	10/28/09 11:57 LCW	87-68-3	
Isopro	pylbenzene (Cumene)	ND	ug/m3	3.1	1.25	10/28/09 11:57 LCW	98-82-8	
m&p->		ND	ug/m3	5.3	1.25	10/28/09 11:57 LCW	1330-20-7	
	lene Chloride	249	ug/m3	2.3	1.25	10/28/09 11:57 LCW	75-09-2	E
	I-tert-butyl ether	ND	ug/m3	4.4	1.25	10/28/09 11:57 LCW	1634-04-4	
-	halene	ND	ug/m3	3.3	1.25	10/28/09 11:57 LCW	91-20-3	
n-Hep		ND	ug/m3	2.7	1.25	10/28/09 11:57 LCW	142-82-5	
n-Hex		92.1	ug/m3	2.4	1.25	10/28/09 11:57 LCW	110-54-3	
o-Xyle	ene	ND	ug/m3	2.9	1.25	10/28/09 11:57 LCW	95-47-6	
Propy	lene	ND	ug/m3	4.4	1.25	10/28/09 11:57 LCW	115-07-1	
Styrer		ND	ug/m3	3	1.25	10/28/09 11:57 LCW	100-42-5	
Tetrac	chloroethene	9.65	ug/m3	4.5	1.25	10/28/09 11:57 LCW	127-18-4	
Tetrah	nydrofuran	ND	ug/m3	1.9	1.25	10/28/09 11:57 LCW	109-99-9	
THC a	as Gas	59900	ug/m3	110	1.25	10/28/09 11:57 LCW		
Tolue	ne	3.6	ug/m3	2.5	1.25	10/28/09 11:57 LCW	108-88-3	
trans-	1,2-Dichloroethene	ND	ug/m3	4.8	1.25	10/28/09 11:57 LCW	156-60-5	
trans-	1,3-Dichloropropene	ND	ug/m3	3	1.25	10/28/09 11:57 LCW	10061-02-6	
Trichle	proethene	ND	ug/m3	3.6	1.25	10/28/09 11:57 LCW	79-01-6	
Trichle	orofluoromethane	7.42	ug/m3	3.5	1.25	10/28/09 11:57 LCW	75-69-4	
Vinyl a	acetate	ND	ug/m3	2.5	1.25	10/28/09 11:57 LCW	108-05-4	
Vinyl	chloride	ND	ug/m3	1.7	1.25	10/28/09 11:57 LCW	75-01-4	
Xylen	e (Total)	ND	ug/m3	8.4	1.25	10/28/09 11:57 LCW	1330-20-7	

SUPPLEMENTAL REPORT

Date: 10/30/2009

Units Conversion Request



ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125 Lab Project Number: 10114487 Project Name: 0506-117-10 Parkwater

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

SUPPLEMENTAL REPORT Units Conversion Request



ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125 Lab Project Number: 10114487 Project Name: 0506-117-10 Parkwater

PARAMETER FOOTNOTES

- ND Not detected at or above adjusted reporting limit
- NC Not Calculable
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- [E] Analyte concentration exceeded the calibration range. The reported result is estimated.
- [SS] This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

SUPPLEMENTAL REPORT Units Conversion Request



Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

November 05, 2009

Bruce Williams GeoEngineers,Inc. 523 East Second Ave Spokane, WA 99202

RE: Project: 0506-117-10 BNSF Parkwater, WA Pace Project No.: 10115347

Dear Bruce Williams:

Enclosed are the analytical results for sample(s) received by the laboratory on October 23, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carlong

Carol Davy

carol.davy@pacelabs.com Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Page 1 of 21





CERTIFICATIONS

Project: 0506-117-10 BNSF Parkwater, WA Pace Project No.: 10115347

Minnesota Certification IDs

1700 Elm Street SE, Suite 200 Minneapolis, MN 55414 Alaska Certification #: UST-078 Washington Certification #: C754 Tennessee Certification #: 02818 Pennsylvania Certification #: 68-00563 Oregon Certification #: MN200001 North Dakota Certification #: R-036 North Carolina Certification #: R-036 New York Certification #: 11647 New Jersey Certification #: MN-002 Montana Certification #: MT CERT0092 Minnesota Certification #: 027-053-137 Maine Certification #: 2007029 Louisiana Certification #: LA080009 Louisiana Certification #: 03086 Kansas Certification #: E-10167 Iowa Certification #: 200011 Florida/NELAP Certification #: E87605 California Certification #: 01155CA Arizona Certification #: AZ-0014 Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 0506-117-10 BNSF Parkwater, WA Pace Project No.: 10115347

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10115347001	VP-CI-102209	Air	10/22/09 11:45	10/23/09 09:09
10115347002	VP-EX-102209	Air	10/22/09 12:26	10/23/09 09:09

REPORT OF LABORATORY ANALYSIS

Page 3 of 21





Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

SAMPLE ANALYTE COUNT

 Project:
 0506-117-10 BNSF Parkwater, WA

 Pace Project No.:
 10115347

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10115347001	VP-CI-102209	TO-15	LCW	68	PASI-M
10115347002	VP-EX-102209	TO-15	LCW	65	PASI-M

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 0506-117-10 BNSF Parkwater, WA Pace Project No.: 10115347

Method:TO-15Description:TO15 MSV AIRClient:GeoEngineers,Inc.Date:November 05, 2009

General Information:

2 samples were analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

QC Batch: AIR/9303

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

• BLANK (Lab ID: 703275)

1,4-Dioxane (p-Dioxane)

- LCS (Lab ID: 703276)
 - 1,4-Dioxane (p-Dioxane)
- VP-EX-102209 (Lab ID: 10115347002)
- 1,4-Dioxane (p-Dioxane)

QC Batch: AIR/9312

IC: The initial calibration for this compound was outside of method control limits. The result is estimated.

• VP-CI-102209 (Lab ID: 10115347001)

THC as Gas

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- BLANK (Lab ID: 704578)
- 1,4-Dioxane (p-Dioxane)
- LCS (Lab ID: 704579)
- 1,4-Dioxane (p-Dioxane)

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: AIR/9303

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

• LCS (Lab ID: 703276)

REPORT OF LABORATORY ANALYSIS

Page 5 of 21

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PROJECT NARRATIVE

Project: 0506-117-10 BNSF Parkwater, WA Pace Project No.: 10115347

Method: TO-15

Description:TO15 MSV AIRClient:GeoEngineers,Inc.Date:November 05, 2009

QC Batch: AIR/9303

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- Carbon tetrachloride
- Naphthalene

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: AIR/9303

D6: The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 704349)
 - Acetone
 - Methylene Chloride
 - THC as Gas
 - n-Hexane

Additional Comments:

Analyte Comments:

QC Batch: AIR/9303

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- DUP (Lab ID: 704349)
 - Acetone
 - Methylene Chloride

QC Batch: AIR/9312

- E: Analyte concentration exceeded the calibration range. The reported result is estimated.
 - VP-CI-102209 (Lab ID: 10115347001)
 - THC as Gas

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 6 of 21





Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.: 10115347

Sample: VP-CI-102209	Lab ID: 1011534	7001 Collected	1: 10/22/0	9 11:45	Received: 10	0/23/09/09:09 Ma	atrix: Air	
		Report		_ =				0
Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
⊤O15 MSV AIR	Analytical Method:	ГО-15						
1,1,1-Trichloroethane	ND ppbv	0.87	0.44	1.68		10/31/09 06:52		
1,1,2,2-Tetrachloroethane	ND ppbv	0.87	0.44	1.68		10/31/09 06:52		
1,1,2-Trichloroethane	ND ppbv	0.87	0.44	1.68		10/31/09 06:52		
1,1,2-Trichlorotrifluoroethane	ND ppbv	0.87	0.44	1,68		10/31/09 06:52		
1,1-Dichloroethane	ND ppbv	0.87	0.44	1.68		10/31/09 06:52		
1,1-Dichloroethene	ND ppbv	0.87	0.44	1.68		10/31/09 06:52		
1,2,4-Trichlorobenzene	ND ppbv	0.87	0.44	1,68		10/31/09 06:52		
1,2,4-Trimethylbenzene	ND ppbv	0.86	0.43	1.68		10/31/09 06:52		
1,2-Dibromoethane (EDB)	ND ppbv	0.87	0.44	1.68		10/31/09 06:52		
1,2-Dichlorobenzene	ND ppbv	0.86	0.43	1.68		10/31/09 06:52	95-50-1	
1,2-Dichloroethane	ND ppbv	0.87	0.44	1.68		10/31/09 06:52	107-06-2	
1,2-Dichloropropane	ND ppbv	0.87	0.44	1.68		10/31/09 06:52	78-87-5	
1,3,5-Trimethylbenzene	ND ppbv	0.87	0.44	1.68		10/31/09 06:52	108-67-8	
1,3-Butadiene	ND ppbv	0.87	0.44	1.68		10/31/09 06:52		
1,3-Dichlorobenzene	ND ppbv	0.86	0.43	1.68		10/31/09 06:52		
1,4-Dichlorobenzene	ND ppbv	0.86	0.43	1.68		10/31/09 06:52		
1,4-Dioxane (p-Dioxane)	ND ppbv	0.12	0.062	1.25		10/28/09 11:24	123-91-1	
2,2,4-Trimethylpentane	14.5 ppbv	0.84	0.42	1.68		10/31/09 06:52	540-84-1	
2-Butanone (MEK)	0.99 ppbv	0.92	0.46	1.68		10/31/09 06:52	78-93-3	
2-Hexanone	ND ppbv	0.92	0.46	1.68		10/31/09 06:52	591-78-6	
2-Propanol	ND ppbv	0.84	0.42	1.68		10/31/09 06:52	67-63-0	
4-Ethyltoluene	ND ppbv	0.89	0.45	1.68		10/31/09 06:52		
4-Methyl-2-pentanone (MIBK)	ND ppbv	0.92	0.46	1.68		10/31/09 06:52	108-10-1	
Acetone	ND ppbv	0.92	0.46	1.68		10/31/09 06:52	67-64-1	
Benzene	ND ppbv	0.87	0.44	1.68		10/31/09 06:52	71-43-2	
Bromodichloromethane	ND ppbv	0.86	0.43	1.68		10/31/09 06:52	75-27-4	
Bromoform	ND ppbv	0.87	0.44	1.68		10/31/09 06:52		
Bromomethane	ND ppbv	0.86	0.43	1.68		10/31/09 06:52		
Carbon disulfide	3.4 ppbv	0.84	0.42	1.68		10/31/09 06:52		
Carbon tetrachloride	ND ppbv	0.86	0.43	1.68		10/31/09 06:52		
Chlorobenzene	ND ppbv	0.87	0.44	1.68		10/31/09 06:52		
Chloroethane	ND ppbv	0.86	0.43	1.68		10/31/09 06:52	75-00-3	
Chloroform	ND ppbv	0.86	0.43	1.68		10/31/09 06:52	67-66-3	
Chloromethane	ND ppbv	0.84	0.42	1.68		10/31/09 06:52	74-87-3	
Cyclohexane	4.1 ppbv	0.87	0.44	1.68		10/31/09 06:52	110-82-7	
Dibromochloromethane	ND ppbv	0.89	0.45	1.68		10/31/09 06:52	124-48-1	
Dichlorodifluoromethane	ND ppbv	0.86	0.43	1.68		10/31/09 06:52	75-71-8	
Dichlorotetrafluoroethane	ND ppbv	0.96	0.48	1.68		10/31/09 06:52	76-14-2	
Ethanol	14.8 ppbv	0.84	0.42	1.68		10/31/09 06:52	64-17-5	
Ethyl acetate	ND ppbv	0.86	0.43	1.68		10/31/09 06:52	141-78-6	
Ethylbenzene	ND ppbv	0.87	0.44	1.68		10/31/09 06:52	100-41-4	
Hexachloro-1,3-butadiene	ND ppbv	0.84	0.42	1.68		10/31/09 06:52	87-68-3	
Isopropylbenzene (Cumene)	ND ppbv	0.84	0.42	1.68		10/31/09 06:52	98-82-8	
Methyl-tert-butyl ether	ND ppbv	1.7	0.84	1.68		10/31/09 06:52	1634-04-4	
Methylene Chloride	1.1 ppbv	0.87	0.44	1.68		10/31/09 06:52	75-09-2	
Naphthalene	ND ppbv	0.84	0.42	1.68		10/31/09 06:52	91-20-3	

Date: 11/05/2009 08:59 AM

REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.: 10115347

Sample: VP-CI-102209	Lab ID: 10	0115347001 Collecte	ed: 10/22/0	9 11:45	Received: 10	/23/09 09:09 M	atrix: Air	
		Report						
Parameters	Results	Units Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical M	ethod: TO-15						
Propylene	ND ppb	v 3.4	1.7	1.68		10/31/09 06:52	115-07-1	
Styrene	ND ppb	v 0.92	0.46	1.68		10/31/09 06:52	100-42-5	
THC as Gas	17300 ppb	v 33.6	16.8	1.68		10/31/09 06:52		E,IC
Tetrachloroethene	1.6 ppb	v 0.87	0.44	1.68		10/31/09 06:52	127-18-4	
Tetrahydrofuran	ND ppb	v 0.87	0.44	1.68		10/31/09 06:52	109-99-9	
Toluene	0.99 ppb	v 0.87	0.44	1.68		10/31/09 06:52	108-88-3	
Trichloroethene	ND ppb	v 0.87	0.44	1.68		10/31/09 06:52	79-01-6	
Trichlorofluoromethane	1.0 ppb	v 0.84	0.42	1.68		10/31/09 06:52	75-69-4	
Vinyl acetate	ND ppb	v 0.92	0.46	1.68		10/31/09 06:52	108-05-4	
Vinyl chloride	ND ppb	v 0.86	0.43	1.68		10/31/09 06:52	75-01-4	
Xylene (Total)	ND ppb	v 2.5	1.3	1.68		10/31/09 06:52	1330-20-7	
cis-1,2-Dichloroethene	ND ppb	v 0.87	0.44	1.68		10/31/09 06:52	156-59-2	
cis-1,3-Dichloropropene	ND ppb	v 0.86	0.43	1.68		10/31/09 06:52	10061-01-5	
m&p-Xylene	ND ppb	v 1.7	0.84	1.68		10/31/09 06:52	1330-20-7	
n-Heptane	ND ppb	v 0.87	0.44	1.68		10/31/09 06:52	142-82-5	
n-Hexane	ND ppb		0.45	1.68		10/31/09 06:52	110-54-3	
o-Xylene	ND ppb	v 0.87	0.44	1.68		10/31/09 06:52	95-47-6	
trans-1,2-Dichloroethene	ND ppb	v 1.7	0.84	1.68		10/31/09 06:52	156-60-5	
trans-1,3-Dichloropropene	ND ppb	v 0.87	0.44	1.68		10/31/09 06:52	10061-02-6	
Toluene-d8 (S)	80 %	75-125		1.25		10/28/09 11:24	2037-26-5	
1,4-Dichlorobenzene-d4 (S)	19 %	64-130		1.25		10/28/09 11:24	3855-82-1	
Hexane-d14 (S)	85 %	65-150		1.25		10/28/09 11:24	110-54-3	

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REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.: 10115347

Sample: VP-EX-102209	Lab ID:	10115347002	Collecte	d: 10/22/0	9 12:26	Received: 10	10/23/09 09:09 Matrix: Air			
_	_		Report		D -	Dura		CAO NI-	O	
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua	
TO15 MSV AIR	Analytical I	Method: TO-15								
1,1,1-Trichloroethane	ND pp	bv	0.72	0.36	1.38		10/28/09 16:09			
1,1,2,2-Tetrachloroethane	ND pp	bv	0.72	0.36	1.38		10/28/09 16:09			
1,1,2-Trichloroethane	ND pp	bv	0.72	0.36	1.38		10/28/09 16:09	79-00-5		
1,1,2-Trichlorotrifluoroethane	ND pp	bv	0.72	0.36	1.38		10/28/09 16:09	76-13-1		
1,1-Dichloroethane	ND pp	bv	0.72	0.36	1.38		10/28/09 16:09	75-34-3		
1,1-Dichloroethene	ND pp	bv	0.72	0.36	1.38		10/28/09 16:09	75-35-4		
1,2,4-Trichlorobenzene	ND pp	bv	0.72	0.36	1.38		10/28/09 16:09	120-82-1		
1,2,4-Trimethylbenzene	ND pp	bv	0.70	0.35	1.38		10/28/09 16:09	95-63-6		
1,2-Dibromoethane (EDB)	ND pp	bv	0.72	0.36	1.38		10/28/09 16:09	106-93-4		
1,2-Dichlorobenzene	ND pp	bv	0.70	0.35	1.38		10/28/09 16:09	95-50-1		
1,2-Dichloroethane	ND pp		0.72	0.36	1.38		10/28/09 16:09	107-06-2		
1,2-Dichloropropane	ND pp	bv	0.72	0.36	1.38		10/28/09 16:09	78-87-5		
1,3,5-Trimethylbenzene	ND pp	bv	0.72	0.36	1.38		10/28/09 16:09	108-67-8		
1,3-Butadiene	ND pp	bv	0.72	0.36	1.38		10/28/09 16:09	106-99-0		
1,3-Dichlorobenzene	ND pp		0.70	0.35	1.38		10/28/09 16:09	541- 7 3-1		
1,4-Dichlorobenzene	ND pp		0.70	0.35	1.38		10/28/09 16:09	106-46-7		
1,4-Dioxane (p-Dioxane)	ND pp		0.14	0.069	1.38		10/28/09 11:55	123-91-1	SS	
2,2,4-Trimethylpentane	ND pp		0.69	0.34	1.38		10/28/09 16:09	540-84-1		
2-Butanone (MEK)	ND pp		0.76	0.38	1.38		10/28/09 16:09	78-93-3		
2-Hexanone	ND pp		0.76	0.38	1.38		10/28/09 16:09	591-78-6		
2-Propanol	ND pp		0.69	0.34	1.38		10/28/09 16:09	67-63-0		
4-Ethyltoluene	ND pp		0,73	0.37	1.38		10/28/09 16:09	622-96-8		
4-Methyl-2-pentanone (MIBK)	ND pp		0.76	0.38	1.38		10/28/09 16:09	108-10-1		
Acetone	1.3 pp		0.76	0.38	1.38		10/28/09 16:09	67-64-1		
Benzene		bv	0,72	0.36	1.38		10/28/09 16:09	71-43-2		
Bromodichloromethane	ND pp		0.70	0.35	1.38		10/28/09 16:09	75-27-4		
Bromoform	ND pp		0.72	0.36	1.38		10/28/09 16:09	75-25-2		
Bromomethane	ND pp		0.70	0.35	1.38		10/28/09 16:09	74-83-9		
Carbon disulfide	1.0 pp		0.69	0.34	1.38		10/28/09 16:09	75-15-0		
Carbon tetrachloride	ND pp		0.70	0.35	1.38		10/28/09 16:09	56-23-5		
Chlorobenzene	ND pp		0.72	0.36	1.38		10/28/09 16:09	108-90-7		
Chloroethane	ND pp		0.70	0.35	1.38		10/28/09 16:09	75-00-3		
Chloroform	ND pp		0.70	0.35	1.38		10/28/09 16:09			
Chloromethane	ND pp		0,69	0.34	1.38		10/28/09 16:09	74-87-3		
Cyclohexane	ND pp		0.72	0.36	1.38		10/28/09 16:09			
Dibromochloromethane	ND pp		0,73	0.37	1.38		10/28/09 16:09	124-48-1		
Dichlorodifluoromethane	ND pr		0.70	0.35	1.38		10/28/09 16:09	75-71-8		
Dichlorotetrafluoroethane	ND pp		0.79	0.39	1.38		10/28/09 16:09			
Ethanol	ND pp		0.69	0.34	1.38		10/28/09 16:09	64-17-5		
Ethyl acetate	ND pp		0.70	0.35	1.38		10/28/09 16:09			
Ethylbenzene	ND pp		0.72	0.36	1.38		10/28/09 16:09	100-41-4		
Hexachloro-1,3-butadiene	ND pr		0.69	0.34	1.38		10/28/09 16:09			
Isopropylbenzene (Cumene)	ND pp		0.69	0.34	1,38		10/28/09 16:09			
Methyl-tert-butyl ether	ND pp		1.4	0.69	1.38		10/28/09 16:09			
Methylene Chloride	ND pr		0.72	0.36	1.38		10/28/09 16:09			
Naphthalene	1.3 pr		0.69	0.34	1.38		10/28/09 16:09			

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REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.: 10115347

Sample: VP-EX-102209	Lab ID:	10115347002	Collected	I: 10/22/0	9 12:26	Received: 10	/23/09 09:09 Ma	atrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical	Method: TO-15	5						
Propylene	ND p	pbv	2.8	1.4	1.38		10/28/09 16:09	115-07-1	
Styrene	ND p	pbv	0.76	0.38	1.38		10/28/09 16:09	100-42-5	
THC as Gas	6280 p	pbv	27.6	13.8	1.38		10/28/09 16:09		
Tetrachloroethene	ND p	pbv	0.72	0.36	1.38		10/28/09 16:09	127-18-4	
Tetrahydrofuran	ND p	pbv	0.72	0.36	1.38		10/28/09 16:09	109-99-9	
Toluene	0.76 p	pbv	0.72	0.36	1.38		10/28/09 16:09	108-88-3	
Trichloroethene	ND p	pbv	0.72	0.36	1.38		10/28/09 16:09	79-01-6	
Trichlorofluoromethane	ND p		0.69	0.34	1.38		10/28/09 16:09	75-69-4	
Vinyl acetate	ND p	pbv	0.76	0.38	1.38		10/28/09 16:09	108-05-4	
Vinyl chloride	ND p		0.70	0.35	1.38		10/28/09 16:09	75-01-4	
Xylene (Total)	ND p	pbv	2.1	1.0	1.38		10/28/09 16:09	1330-20-7	
cis-1,2-Dichloroethene	ND p		0.72	0.36	1.38		10/28/09 16:09	156-59-2	
cis-1,3-Dichloropropene	ND p	pbv	0.70	0.35	1.38		10/28/09 16:09	10061-01-5	
m&p-Xylene	ND p		1.4	0.69	1,38		10/28/09 16:09	1330-20-7	
n-Heptane	ND p	pbv	0.72	0.36	1.38		10/28/09 16:09	142-82-5	
n-Hexane	ND p		0.73	0.37	1.38		10/28/09 16:09	110-54-3	
o-Xylene	ND p	pbv	0.72	0.36	1.38		10/28/09 16:09	95-47-6	
trans-1,2-Dichloroethene	ND p		1.4	0.69	1,38		10/28/09 16:09	156-60-5	
trans-1,3-Dichloropropene	ND p		0.72	0.36	1.38		10/28/09 16:09	10061-02-6	

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REPORT OF LABORATORY ANALYSIS

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Project:	0506-117-10 BNSF Parkwater, WA
Project.	0000*TT*TO DINOT Parkwater, WA

QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Associated Lab Samples: 10115347002 METHOD BLANK: 703275 Matrix: Air
IL TIOD BLAINT, 103213 Wattix, All
Associated Lab Samples: 10115347002
Blank Reporting
Parameter Units Result Limit Analyzed Quali
I,1-Trichloroethane ppbv ND 0.52 10/28/09 11:17
1,2,2-Tetrachloroethane ppbv ND 0.52 10/28/09 11:17
,1,2-Trichloroethane ppbv ND 0.52 10/28/09 11:17
,1,2-Trichlorotrifluoroethane ppbv ND 0.52 10/28/09 11:17
,1-Dichloroethane ppbv ND 0.52 10/28/09 11:17
1-Dichloroethene ppbv ND 0.52 10/28/09 11:17
2,4-Trichlorobenzene ppbv ND 0.52 10/28/09 11:17
2,4-Trimethylbenzene ppbv ND 0.51 10/28/09 11:17
2-Dibromoethane (EDB) ppbv ND 0.52 10/28/09 11:17
2-Dichlorobenzene ppbv ND 0.51 10/28/09 11:17
2-Dichloroethane ppbv ND 0.52 10/28/09 11:17
2-Dichloropropane ppbv ND 0.52 10/28/09 11:17
9,5-Trimethylbenzene ppbv ND 0.52 10/28/09 11:17
-Butadiene ppbv ND 0.52 10/28/09 11:17
3-Dichlorobenzene ppbv ND 0.51 10/28/09 11:17
1-Dichlorobenzene ppbv ND 0.51 10/28/09 11:17
I-Dioxane (p-Dioxane) ppbv ND 0.10 10/28/09 09:51 SS
,4-Trimethylpentane ppbv ND 0.50 10/28/09 11:17
Butanone (MEK) ppbv ND 0.55 10/28/09 11:17
lexanone ppbv ND 0.55 10/28/09 11:17
Propanol ppbv ND 0.50 10/28/09 11:17
Ethyltoluene ppbv ND 0.53 10/28/09 11:17
Methyl-2-pentanone (MIBK) ppbv ND 0.55 10/28/09 11:17
etone ppbv ND 0.55 10/28/09 11:17
Inzene ppbv ND 0.52 10/28/09 11:17
omodichloromethane ppbv ND 0.51 10/28/09 11:17
omoform ppbv ND 0.52 10/28/09 11:17
omomethane ppbv ND 0.51 10/28/09 11:17
arbon disulfide ppbv ND 0.50 10/28/09 11:17
arbon tetrachloride ppbv ND 0.51 10/28/09 11:17
nlorobenzene ppbv ND 0.52 10/28/09 11:17
ND 0.51 10/28/09 11:17
ND 0.51 10/28/09 11:17
nloromethane ppbv ND 0.50 10/28/09 11:17
-1,2-Dichloroethene ppbv ND 0.52 10/28/09 11:17
-1,3-Dichloropropene ppbv ND 0.51 10/28/09 11:17
vclohexane ppbv ND 0.52 10/28/09 11:17
ibromochloromethane ppbv ND 0.53 10/28/09 11:17
chlorodifluoromethane ppbv ND 0.51 10/28/09 11:17
chlorotetrafluoroethane ppbv ND 0.57 10/28/09 11:17
chlorotetrafluoroethane ppbv ND 0.57 10/28/09 11:17 nanol ppbv ND 0.50 10/28/09 11:17
hlorotetrafluoroethane ppbv ND 0.57 10/28/09 11:17

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REPORT OF LABORATORY ANALYSIS





Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.: 10115347

METHOD BLANK: 703275

Matrix: Air

Associated Lab Samples: 10115347002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ppbv	ND	0.50	10/28/09 11:17	
isopropylbenzene (Cumene)	ppbv	ND	0.50	10/28/09 11:17	
m&p-Xylene	ppbv	ND	1.0	10/28/09 11:17	
Methyl-tert-butyl ether	ppbv	ND	1.0	10/28/09 11:17	
Methylene Chloride	ppbv	ND	0.52	10/28/09 11:17	
n-Heptane	ppbv	ND	0.52	10/28/09 11:17	
n-Hexane	ppbv	ND	0.53	10/28/09 11:17	
Naphthalene	ppbv	ND	0.50	10/28/09 11:17	
o-Xylene	ppbv	ND	0.52	10/28/09 11:17	
Propylene	ppbv	ND	2.0	10/28/09 11:17	
Styrene	ppbv	ND	0.55	10/28/09 11:17	
Tetrachloroethene	ppbv	ND	0.52	10/28/09 11:17	
Tetrahydrofuran	ppbv	ND	0.52	10/28/09 11:17	
THC as Gas	ppbv	ND	20.0	10/28/09 11:17	
Toluene	ppbv	ND	0.52	10/28/09 11:17	
trans-1,2-Dichloroethene	ppbv	ND	1.0	10/28/09 11:17	
trans-1,3-Dichloropropene	ppbv	ND	0.52	10/28/09 11:17	
Trichloroethene	ppbv	ND	0.52	10/28/09 11:17	
Trichlorofluoromethane	ppbv	ND	0.50	10/28/09 11:17	
Vinyl acetate	ppbv	ND	0.55	10/28/09 11:17	
Vinyl chloride	ppbv	ND	0.51	10/28/09 11:17	
Xylene (Total)	ppbv	ND	1.5	10/28/09 11:17	

LABORATORY CONTROL SAMPLE: 703276

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ppbv	10.3	9.3		60-125	
1,1,2,2-Tetrachloroethane	ppbv	10.2	10.2	100	57-127	
1,1,2-Trichloroethane	ppbv	10.1	8.8	87	56-125	
1,1,2-Trichlorotrifluoroethane	ppbv	9.8	7.8	80	52-133	
1,1-Dichloroethane	ppbv	10	9,4	94	54-127	
1.1-Dichloroethene	ppbv	10	10.9	109	52-129	
1,2,4-Trichlorobenzene	ppbv	9.9	12.7	128	30-150	
1,2,4-Trimethylbenzene	ppbv	9.9	10.9	110	52-145	
1,2-Dibromoethane (EDB)	ppbv	10.4	9.6	92	59-133	
1.2-Dichlorobenzene	ppbv	10.2	11.3	111	67-135	
1,2-Dichloroethane	ppbv	10.9	9.6	88	54-125	
1,2-Dichloropropane	ppbv	10.8	10.5	98	64-125	
1,3,5-Trimethylbenzene	ppbv	9.9	11.1	112	56-135	
1,3-Butadiene	ppbv	10.1	11.1	110	55-125	
1,3-Dichlorobenzene	ppbv	10.5	10.9	104	61-142	
1.4-Dichlorobenzene	ppbv	10.3	10.5	102	55-142	
1,4-Dioxane (p-Dioxane)	ppbv	10	2.4	24	70-130	SS
2,2,4-Trimethylpentane	ppbv	10	8.8	88	70-130	
2-Butanone (MEK)	ppbv	10.3	8.7	84	47-141	

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REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.:

LABORATORY CONTROL SAMPLE: 703276

10115347

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Hexanone	ppbv	10.1	8.3	83	41-138	
2-Propanol	ppbv	9,5	7.6	80	63-125	
4-Ethyltoluene	ppbv	10	9.6	96	62-130	
4-Methyl-2-pentanone (MIBK)	ppbv	10.2	7.8	76	53-134	
Acetone	ppbv	10	6.0	60	44- 1 49	
Benzene	ppbv	10.1	11.7	116	61-126	
Bromodichloromethane	ppbv	10	9.9	99	54-129	
Bromoform	ppbv	10.2	11.3	111	56-125	
Bromomethane	ppbv	10.1	11.5	1 14	56-128	
Carbon disulfide	ppbv	10.3	8.4	82	58-150	
Carbon tetrachloride	ppbv	10.1	18.4	182	55-125 L	3
Chlorobenzene	ppbv	9.9	9.7	98	48-138	
Chloroethane	ppbv	9.9	10.8	109	56-128	
Chloroform	ppbv	9.7	11.9	123	55-125	
Chloromethane	ppbv	10	11.8	118	50-131	
cis-1,2-Dichloroethene	ppbv	10.3	9.6	93	64-125	
cis-1,3-Dichloropropene	ppbv	10.5	10.7	102	61-132	
Cyclohexane	ppbv	10.2	12.9	127	61-130	
Dibromochloromethane	ppbv	10.5	10.6	101	51-129	
Dichlorodifluoromethane	ppbv	9.8	8.7	88	56-132	
Dichlorotetrafluoroethane	ppbv	10	9.9	99	48-125	
Ethanol	ppbv	10	7.0	70	70-130	
Ethyl acetate	ppbv	10.2	9.1	89	66-149	
Ethylbenzene	ppbv	11	10,9	99	56-137	
Hexachloro-1,3-butadiene	ppbv	9.8	13.4	136	30-150	
Isopropylbenzene (Cumene)	ppbv	10.4	10.8	104	67-134	
m&p-Xylene	ppbv	21	21.2	101	62-135	
Methyl-tert-butyl ether	ppbv	10	10.5	105	59-125	
Methylene Chloride	ppbv	9.8	6.8	70	46-143	
n-Heptane	ppbv	10.3	8.4	81	64-130	
n-Hexane	ppbv	10.9	9.8	90	61-134	
Naphthalene	ppbv	9.5	15.8	166	30-150 L	.3
o-Xylene	ppbv	10.3	10	97	61-134	-
Propylene	ppbv	10.5	7.2	67	62-146	
	ppbv ppbv	10.0	10.2	102	63-134	
Styrene Tetrachloroethene	ppbv	10.4	10.2	122	61-132	
Tetrachioroethene Tetrahydrofuran	ppbv	7,5	4.9	65	62-137	
-		7.5	4.9 794	113	61-125	
THC as Gas	ppbv ppbv	10.4	9.3	89	57-132	
Toluene	••	10.4	10.8	104	52-130	
trans-1,2-Dichloroethene	ppbv	10.4	10.8	96	61-129	
trans-1,3-Dichloropropene	ppbv	10.0	10.2	105	72-147	
Trichloroethene	ppbv	9.8	11.0	103	58-141	
Trichlorofluoromethane	ppbv	9.8 10.3	10.2	99	56-131	
Vinyl acetate	ppbv		10.2	100	56-136	
Vinyl chloride	ppbv	10.3	31.2	100	70-130	
Xylene (Total)	ppbv	31.3	31.2	100	10-130	

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Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.: 10115347

SAMPLE DUPLICATE: 704349

BenzeneppbvNDNDND30BromodichloromethaneppbvNDNDND30BromoformppbvNDNDND30BromomethaneppbvNDND30Carbon disulfideppbvNDND30Carbon tetrachlorideppbvNDND30ChlorobenzeneppbvNDND30ChloroethaneppbvNDND30ChloroformppbvNDND30ChloromethaneppbvNDND30ChloroformppbvNDND30ChlorothaneppbvNDND30ChlorothaneppbvNDND30ChloromethaneppbvNDND30cis-1,2-DichloropropeneppbvNDND30DibromochloromethaneppbvNDND30DibromochloromethaneppbvNDND30DichlorodifluoromethaneppbvNDND30DichlorotetrafluoroethaneppbvNDND30DichlorotetrafluoroethaneppbvNDND30DichlorotetrafluoroethaneppbvNDND30DichlorotetrafluoroethaneppbvNDND30	10115557005 Dup Max Units Result Result RPD RPD Qualifiers
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Dichlorotetrafluoroethane ppbv ND ND 30	
Ethanol ppbv 10.8 11.4 5 30	
Ethyl acetate ppbv ND ND 30	
Ethylbenzene ppbv ND ND 30	
Hexachloro-1,3-butadiene ppbv ND ND 30	
Isopropylbenzene (Cumene) ppbv ND ND 30	
m&p-Xylene ppbv ND ND 30	
Methyl-tert-butyl ether ppbv ND ND 30	

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REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.: 10115347

SAMPLE DUPLICATE: 704349

		10115557005	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
n-Heptane	ppbv	ND	ND		30	1
n-Hexane	ppbv	1.6	10.2	146	30	D6
Naphthalene	ppbv	ND	ND		30	1
o-Xylene	ppbv	ND	ND		30	l i
Propylene	ppbv	ND	ND		30	l
Styrene	ppbv	ND	ND		30	l i
Tetrachloroethene	ppbv	ND	ND		30	l .
Tetrahydrofuran	ppbv	ND	1.4		30	1
THC as Gas	ppbv	205	316	42	30	D6
Toluene	ppbv	ND	ND		30	l .
trans-1,2-Dichloroethene	ppbv	ND	ND		30	l
trans-1,3-Dichloropropene	ppbv	ND	ND		30	l .
Trichloroethene	ppbv	ND	ND		30	1
Trichlorofluoromethane	ppbv	ND	ND		30	l
Vinyl acetate	ppbv	ND	1.1		30	l .
Vinyl chloride	ppbv	ND	ND		30	l .
Xylene (Total)	ppbv	ND	ND		30	I

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REPORT OF LABORATORY ANALYSIS

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	0506-117-10 BNSF 10115347	Parkwater, WA					
•		^_	alvaia Mathas		15		
QC Batch:	AIR/9312		alysis Method				
QC Batch Method:	TO-15	An	alysis Descrip	otion: IO	15 MSV AIR		
Associated Lab Sam	ples: 1011534700)1					
METHOD BLANK:	704578		Matrix: Air	-			
Associated Lab Sam	ples: 1011534700)1					
		В	lank f	Reporting			
Param	eter	Units Ro	əsult	Limit	Analyzed	Qualifiers	
1,1,1-Trichloroethane		pbv	ND	0.52	10/30/09 14:17		
1,1,2,2-Tetrachloroet	hane p	pbv	ND	0.52	10/30/09 14:17		
1,1,2-Trichloroethane	e p	pbv	ND	0.52	10/30/09 14:17		
1,1,2-Trichlorotrifluor	oethane p	pbv	ND	0.52	10/30/09 14:17		
1,1-Dichloroethane	p	pbv	ND	0.52	10/30/09 14:17		
1,1-Dichloroethene		pbv	ND	0.52	10/30/09 14:17		
1,2,4-Trichlorobenze	ne p	pbv	ND	0.52	10/30/09 14:17		
1,2,4-Trimethylbenze	ne p	pbv	ND	0.51	10/30/09 14:17		
1,2-Dibromoethane (EDB) p	pbv	ND	0.52	10/30/09 14:17		
1,2-Dichlorobenzene	p	pbv	ND	0.51	10/30/09 14:17		
1,2-Dichloroethane		pbv	ND	0.52	10/30/09 14:17		
1,2-Dichloropropane		pbv	ND	0.52	10/30/09 14:17		
1,3,5-Trimethylbenze		pbv	ND	0.52	10/30/09 14:17		
1,3-Butadiene		pbv	ND	0.52	10/30/09 14:17		
1,3-Dichlorobenzene		pbv	ND	0.51	10/30/09 14:17		
1,4-Dichlorobenzene		pbv	ND	0.51	10/30/09 14:17		
1,4-Dioxane (p-Dioxa		pbv	ND	0.10	10/28/09 09:51	SS	
2,2,4-Trimethylpenta	•	pbv	ND	0.50	10/30/09 14:17		
2-Butanone (MEK)		pbv	ND	0.55	10/30/09 14:17		
2-Hexanone	ŗ	pbv	ND	0.55	10/30/09 14:17		
2-Propanol	p	pbv	ND	0.50	10/30/09 14:17		
4-Ethyltoluene	p	pbv	ND	0.53	10/30/09 14:17		
4-Methyl-2-pentanon	e (MIBK) p	pbv	ND	0.55	10/30/09 14:17		
Acetone		pbv	ND	0.55	10/30/09 14:17		
Benzene	p	pbv	ND	0.52	10/30/09 14:17		
Bromodichlorometha	ne p	pbv	ND	0.51	10/30/09 14:17		
Bromoform	r.	pbv	ND	0.52	10/30/09 14:17		
Bromomethane	F	pbv	ND	0.51	10/30/09 14:17		
Carbon disulfide	þ	opbv	ND	0,50	10/30/09 14:17		
Carbon tetrachloride	p	opbv	ND	0.51	10/30/09 14:17		
Chlorobenzene	Ŕ	opbv	ND	0.52	10/30/09 14:17		
Chloroethane	Ŕ	opbv	ND	0.51	10/30/09 14:17		
Chloroform	Ŕ	opbv	ND	0.51	10/30/09 14:17		
Chloromethane	r	opbv	ND	0.50	10/30/09 14:17		
cis-1,2-Dichloroether	ne p	opbv	ND	0.52	10/30/09 14:17		
cis-1,3-Dichloroprop	ene p	opbv	ND	0.51	10/30/09 14:17		
Cyclohexane	F	ppbv	ND	0.52	10/30/09 14:17		
Dibromochlorometha	ine p	pbv	ND	0.53	10/30/09 14:17		
Dichlorodifluorometh		pbv	ND	0.51	10/30/09 14:17		
Dichlorotetrafluoroet		ppbv	ND	0.57	10/30/09 14:17		
Ethanol		ppbv	ND	0.50	10/30/09 14:17		
	r	pbv	ND	0.51	10/30/09 14:17		
Ethyl acetate	4	h h h		0101	10/30/09 14:17		

Date: 11/05/2009 08:59 AM

REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.: 10115347

METHOD BLANK: 704578

Matrix: Air

Associated Lab Samples: 10115347001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ppbv	ND	0.50	10/30/09 14:17	
Isopropylbenzene (Cumene)	ppbv	ND	0.50	10/30/09 14:17	
m&p-Xylene	ppbv	ND	1.0	10/30/09 14:17	
Methyl-tert-butyl ether	ppbv	ND	1.0	10/30/09 14:17	
Methylene Chloride	ppbv	ND	0.52	10/30/09 14:17	
n-Heptane	ppbv	ND	0.52	10/30/09 14:17	
n-Hexane	ppbv	ND	0.53	10/30/09 14:17	
Naphthalene	ppbv	ND	0,50	10/30/09 14:17	
o-Xylene	ppbv	ND	0.52	10/30/09 14:17	
Propylene	ppbv	ND	2.0	10/30/09 14:17	
Styrene	ppbv	ND	0.55	10/30/09 14:17	
Tetrachloroethene	ppbv	ND	0.52	10/30/09 14:17	
Tetrahydrofuran	ppbv	ND	0.52	10/30/09 14:17	
THC as Gas	ppbv	ND	20.0	10/30/09 14:17	
Toluene	ppbv	ND	0.52	10/30/09 14:17	
trans-1,2-Dichloroethene	ppbv	ND	1.0	10/30/09 14:17	
trans-1,3-Dichloropropene	ppbv	ND	0.52	10/30/09 14:17	
Trichloroethene	ppbv	ND	0.52	10/30/09 14:17	
Trichlorofluoromethane	ppbv	ND	0.50	10/30/09 14:17	
Vinyl acetate	ppbv	ND	0.55	10/30/09 14:17	
Vinyl chloride	ppbv	ND	0.51	10/30/09 14:17	
Xylene (Total)	ppbv	ND	1.5	10/30/09 14:17	

LABORATORY CONTROL SAMPLE: 704579

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ppbv	10.3	10.9	106	60-125	
1,1,2,2-Tetrachloroethane	ppbv	10.2	10.5	103	57-127	
1,1,2-Trichloroethane	ppbv	10.1	11.3	112	56-125	
1,1,2-Trichlorotrifluoroethane	ppbv	9.8	7,8	79	52-133	
1,1-Dichloroethane	ppbv	10	9.7	97	54-127	
1,1-Dichloroethene	ppbv	10	10.9	109	52-129	
1,2,4-Trichlorobenzene	ppbv	9.9	11.1	112	30-150	
1,2,4-Trimethylbenzene	ppbv	9.9	10.4	106	52-145	
1,2-Dibromoethane (EDB)	ppbv	10.4	9.9	95	59-133	
1,2-Dichlorobenzene	ppbv	10.2	11.2	110	67-135	
1,2-Dichloroethane	ppbv	10.9	10.7	98	54-125	
1,2-Dichloropropane	ppbv	10.8	11.7	108	64-125	
1,3,5-Trimethylbenzene	ppbv	9.9	11.1	113	56-135	
1,3-Butadiene	ppbv	10.1	11.6	115	55-125	
1,3-Dichlorobenzene	ppbv	10.5	10.4	99	61-142	
1,4-Dichlorobenzene	ppbv	10.3	10	97	55-142	
1,4-Dioxane (p-Dioxane)	ppbv	10	2.4	24	70-130 \$	SS
2,2,4-Trimethylpentane	ppbv	10	11.6	116	70-130	
2-Butanone (MEK)	ppbv	10.3	8.8	85	47-141	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.: 10115347

LABORATORY CONTROL SAMPLE: 704579

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Hexanone	ppbv	10.1	8.7	86	41-138	
2-Propanol	ppbv	9.5	9.8	103	63-125	
4-Ethyltoluene	ppbv	10	9,7	97	62-130	
4-Methyl-2-pentanone (MIBK)	ppbv	10.2	8.0	79	53-134	
Acetone	ppbv	10	5.0	50	44-149	
Benzene	ppbv	10.1	12.0	119	61-126	
Bromodichloromethane	ppbv	10	8.9	89	54-129	
Bromoform	ppbv	10.2	10.4	102	56-125	
Bromomethane	ppbv	10.1	11.7	116	56-128	
Carbon disulfide	ppbv	10.3	11.2	109	58-150	
Carbon tetrachloride	ppbv	10.1	9.8	97	55-125	
Chlorobenzene	ppbv	9.9	10.2	103	48-138	
Chloroethane	ppbv	9.9	11.3	114	56-128	
Chloroform	ppbv	9.7	12.0	124	55-125	
Chloromethane	ppbv	10	12.0	120	50-131	
cis-1,2-Dichloroethene	ppbv	10.3	12.6	123	64-125	
cis-1,3-Dichloropropene	ppbv	10.5	11.2	107	61-132	
Cyclohexane	ppbv	10.2	10.4	102	61-130	
Dibromochloromethane	ppbv	10.5	9.4	89	51-129	
Dichlorodifluoromethane	ppbv	9.8	9,5	96	56-132	
Dichlorotetrafluoroethane	ppbv	10	10.2	102	48-125	
Ethanol	ppbv	10	10.4	104	70-130	
Ethyl acetate	ppbv	10.2	12.0	118	66-149	
Ethylbenzene	ppbv	11	10.9	99	56-137	
Hexachloro-1,3-butadiene	ppbv	9.8	10.1	103	30-150	
lsopropylbenzene (Cumene)	ppbv	10.4	10.8	104	67-134	
m&p-Xylene	ppbv	21	21.1	100	62-135	
Methyl-tert-butyl ether	ppbv	10	10.4	104	59-125	
Methylene Chloride	ppbv	9.8	7.3	74	46-143	
n-Heptane	ppbv	10.3	8.7	85	64-130	
n-Hexane	ppbv	10.9	12.7	117	61-134	
Naphthalene	ppbv	9.5	12.9	135	30-150	
o-Xylene	ppbv	10.3	10.3	100	61-134	
Propylene	ppbv	10.6	11.4	108	62-146	
Styrene	ppbv	10	9.3	93	63-134	
Tetrachloroethene	ppbv	10.4	13.1	126	61-132	
Tetrahydrofuran	ppbv	7.5	4.8	64	62-137	
THC as Gas	ppbv	700	686	98	61-125	
Toluene	ppbv	10.4	9.6	92	57-132	
trans-1,2-Dichloroethene	ppbv	10.4	12.1	116	52-130	
trans-1,3-Dichloropropene	ppbv	10.6	10.4	99	61-129	
Trichloroethene	ppbv	10.1	14.3	142	72-147	
Trichlorofluoromethane	ppbv	9.8	10.6	108	58-141	
Vinyl acetate	ppbv	10.3	11.0	107	56-131	
Vinyl chloride	ppbv	10.3	11.3	109	56-136	
Xylene (Total)	ppbv	31.3	31,4	100	70-130	

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Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.: 10115347

SAMPLE	DUPLICATE:	706094

Parameter	Units	10115557004 Result	Dup Result	RPD	Max RPD	Qualifiers
	po		ND			
,1,1-Trichloroethane	ppbv	ND	ND		30	
,1,2,2-Tetrachloroethane	ppbv	ND	ND		30	
,1,2-Trichloroethane	ppbv	ND	ND		30	
,1,2-Trichlorotrifluoroethane	ppbv	ND			30 30	
1-Dichloroethane	ppbv	ND	ND		30 30	
1-Dichloroethene	ppbv		ND			
,2,4-Trichlorobenzene	ppbv	ND	ND		30	
2,4-Trimethylbenzene	ppbv	ND	ND		30	
,2-Dibromoethane (EDB)	ppbv	ND	ND		30	
,2-Dichlorobenzene	ppbv	ND	ND		30	
2-Dichloroethane	ppbv	ND	ND		30	
2-Dichloropropane	ppbv	ND	ND		30	
3,5-Trimethylbenzene	ppbv	ND	ND		30	
3-Butadiene	ppbv	ND	ND		30	
3-Dichlorobenzene	ppbv	ND	ND		30	
4-Dichlorobenzene	ppbv	ND	ND		30	
4-Dioxane (p-Dioxane)	ppbv	0.0	ND	0	30	
2,4-Trimethylpentane	ppbv	ND	ND		30	
Butanone (MEK)	ppbv	2.2	2.2	2	30	
Hexanone	ppbv	ND	ND		30	
Propanol	ppbv	3.4	3.6	4	30	
Ethyltoluene	ppbv	ND	ND		30	
Methyl-2-pentanone (MIBK)	ppbv	ND	ND		30	
etone	ppbv	12.9	13.2	3	30	
nzene	ppbv	ND	ND		30	
omodichloromethane	ppbv	ND	ND		30	
omoform	ppbv	ND	ND		30	
omomethane	ppbv	ND	ND		30	
arbon disulfide	ppbv	ND	ND		30	
arbon tetrachloride	ppbv	ND	ND		30	
nlorobenzene	ppbv	ND	ND		30	
hloroethane	ppbv	ND	ND		30	
hloroform	ppbv	ND	ND		30	
hloromethane	ppbv	ND	ND		30	
s-1,2-Dichloroethene	ppbv	ND	ND		30	
s-1,3-Dichloropropene	ppbv	ND	ND		30	
	ppbv	ND	ND		30	
yclohexane bromochloromethane	• •	ND	ND		30	
	ppbv	ND	ND		30	
chlorodifluoromethane	ppbv	ND	ND		30	
chlorotetrafluoroethane	ppbv	36.0	39.3	9	30	
hanol	ppbv	50.0 ND		9	30	
thyl acetate	ppbv	ND	ND		30 30	
thylbenzene	ppbv		ND			
exachloro-1,3-butadiene	ppbv	ND	ND		30	
opropylbenzene (Cumene)	ppbv	ND	ND		30	
1&p-Xylene	ppbv	ND	ND		30	
lethyl-tert-butyl ether	ppbv	ND	ND		30	
ethylene Chloride	ppbv	ND	ND		30	

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REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-10 BNSF Parkwater, WA

Pace Project No.: 10115347

SAMPLE DUPLICATE: 706094

		10115557004	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
n-Heptane	ppbv	ND	ND		30	
n-Hexane	ppbv	ND	ND		30	
Naphthalene	ppbv	1.3	1.3	3	30	
o-Xylene	ppbv	ND	ND		30	
Propylene	ppbv	ND	ND		30	
Styrene	ppbv	ND	ND		30	
Tetrachloroethene	ppbv	ND	ND		30	
Tetrahydrofuran	ppbv	ND	ND		30	
THC as Gas	ppbv	85.8	83.1	3	30	
Toluene	ppbv	0.91	0.89	2	30	
trans-1,2-Dichloroethene	ppbv	ND	ND		30	
trans-1,3-Dichloropropene	ppbv	ND	ND		30	
Trichloroethene	ppbv	ND	ND		30	
Trichlorofluoromethane	ppbv	ND	ND		30	
Vinyl acetate	ppbv	ND	ND		30	
Vinyl chloride	ppbv	ND	ND		30	
Xylene (Total)	ppbv	ND	ND		30	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 0506-117-10 BNSF Parkwater, WA Pace Project No.: 10115347

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

- D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
- E Analyte concentration exceeded the calibration range. The reported result is estimated.
- IC The initial calibration for this compound was outside of method control limits. The result is estimated.
- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- SS This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

Date: 11/05/2009 08:59 AM

REPORT OF LABORATORY ANALYSIS

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November 02, 2009

Carol Davy PACE ANALYTICAL 1700 Elm Street SE Minneapolis, MN 55127-

Bureau Veritas Work Order No. 09101264

Reference: 10115347/0506-117-10 BNSF PARKWATER, WA

Dear Carol Davy:

Bureau Veritas North America, Inc. received 2 samples on 10/27/2009 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely,

Kauen Comen

Karen Coonan Client Services Representative cc:

CASE NARRATIVE

Date: 02-Nov-09

Client:PACE ANALYTICALProject:10115347/0506-117-10 BNSF PARKWATER, WAWork Order No09101264

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected.

The following result has been converted from mg/m3 to ug/m3. Sample -001A: THCs as Diesel = <1300 ug/m3 Sample -002A: THCs as Diesel = <1200 ug/m3

ANALYTI	CAL RESULTS					Date:	02-Nov-09
Client: Project:	PACE ANALYTICAL 10115347/0506-117-10	BNSF PA	RKWATER	, WA		Work Order No:	09101264
Sample Identifica	tion: VP-CI-102209						
Lab Number:	001A					Date Sampled:	10/22/2009
Sample Type	Charcoal Tube					Date Received:	10/27/2009
Analyst	CCR					Air Volume (L):	8
-			Analytical Res	ults	Reporting Limit	Test	Date
A	nalyte	(µg)	(mg/m ³)	(ppm)	(µg)	Method	Analyzed
THCs as Diesel		<10	<1.3	•.•.	10	NIOSH 1550	10/29/2009
Sample Identificat	tion: VP-EX-102209						
Lab Number:	002A					Date Sampled:	10/22/2009
Sample Type	Charcoal Tube					Date Received:	10/27/2009
Analyst	CCR					Air Volume (L):	8.057
		2	Analytical Res	ults	Reporting Limit	Test	Date
A	nalyte	(µg)	(mg/m ³)	(ppm)	(μg)	Method	Analyzed
THCs as Diesel		<10	<1.2		10	NIOSH 1550	10/29/2009

General Notes:

<: Less than the indicated reporting limit (RL).
--: Information not available or not applicable.
Back sections (if applicable) were checked and showed no significant breakthrough unless otherwise noted.

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Workorder: 10115347	Workorder Name:)506-117-10	0506-117-10 BNSF Parkwater, WA	kwater, WA		Results Requested	lested	11/5/2009		
Report / Invoice To	Su	Subcontract To	116 	1.1.4.1.88.20.20.20.20.20.20	· · · · · · · · · · · · · · · · · · ·			Requested Analysis	Analysis	A A TANKA A ANALASI A	
Carol Davy Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700 Email: carol.davy@pacelabs.com	BUNTAU VA	i ve	lenta	0 a	10.10115347	242	1292 (C - 0451				
tem Sample ID	Collect DateTime	<u></u>	1	Matrix	Ceneral Ceneral	Preserved Containers	<i>#\$\$10</i>			<u>د</u>	LAB USE ONLY
VP-CI-102209	10/22/2009 11:45	1	10115347001	Air							
VP-EX-102209	10/22/2009 12:26		10115347002	Air	1		X				
									Comments	ts	
Transfers Released By	Dar	Date/Time	Received By	d By		Date/Time	æ	0110	Contro 1	Marta 1	<u> </u>
Parel Bar	- Marcho 6	923/05/1820	10 0121	Varace		1221	6000, 50	lime	Mark and I have	1 instal)
			\$ 	>		x		NC I	Covol. Asvy apacelabs. com	Bpaceli	abs. com
									2		

Friday, October 23, 2009 10:45:29 AM

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FMT-ALL-C-002rev.00 24March2009

Face Analytical *		The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.	Salecal Dod	HIC: CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.	/ Analyt ant fields must	ical Kequ be completed acc	est Doc ^{urately.}	cument ///√	747
	Section B Required Project Information:	Section C Invoice Information:				00	00699	Page:	ot
Company: GEOGRALINELTS Address: 573 DE 2nd AUT	Reporto: Bruce William	Attention: Bruce She Company Name: RNSI-	opend			F Super	Program Superfund K Emmisions I Clean Air Act	nisionis T C	ean Air Act
COKON INA 932		Address:			L.,	Voluntary Clean Up TDry Clean TRCRA TOther	p 「Dry Clear	n T.RCRA	f Other
man un	Purchase Order No.: C.D.W Project Name: D. J. K. N.C.H.W	Pace Quote Reference: WBH 77	1C-1010	-Jo2	St S C	Location of Sampling by State	AW		Reporting-Units ug/m ¹ mg/m ² PPBV PPMV
	Project Number SD6-117-10	Pace Profile #;			<u>କ</u>	Report Level II.X		1	
Section D Required Client Information AIR SAMPLE ID One Character per box. (A.2, 0.91,-) Sample IDs MUST BE UNIQUE	Valid Media Codes MEDIA MEDIA Arediar Bag 1 Law Summa Can 1LC 1 Law Summa Can 1LC Law Volume Part High Volume Part High Volume Part Other	COLLECTED CONFOCITE - ENDINE	Canister Pressure (initial Field) Canister Pressure (Final Field)	Summa Can Number	Method: Met	10.13 18 19.1 10.13 18 19.1 10.12 18.002 10.12 18.002	150 PH	Pace L	di da Di da
1 VF-CT-1 02 209		9 1115 10/24/09 1145	-29 -1	243	x	x	X	0/1/539	202
× P - E × - 1 0 2 2 0 9	→ →	Ú 1135 J (22	-71 -12-	84 7	×	>	×		8
10 0									
12									
Additional Comments:	KELINQUISHED			AUCEPTED BY TAFFIL ATION				LAG 2 2 2	
A Livericol Turk	2 		(m)	HI JAN	1		1	N/A	N/A
I In cludic w/ each sample	sample							N/A	N/A
Ter NTOSH 1550	ß							N/X	N/A
	8,000 L 8,057 L OHIGINAI	SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLERS COLL- SIGANTURE OF SAMPLER	ATURE	La Da	DATE Signed (MMA DD	60/2		C° nl qmeT Received on Ice	Custody Sealed Cooler

FC046Rev.00, 21May2009

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1700 Elm Street SE, Suite 200, Minneapolis, MN 55414

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	king Material: []] But		•		•	() NO	Proj. Name:
	cking #: <u>12 F64</u>				Diner	- r	Date and Initials of person examin contents: 10 - 20 - 09 74
Trac	cking #: 12 F-69	<u>nvo [</u> .	59/41/816		Comments:		contents: <u>10 - 20 - 09 74</u>
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amp	le Labels match COC:	****					
amp	les Received: 2c	ANS.	2FC'S, 6	CHARCO	m Tubes		
	Canisters	-/	Flow Contr		Stand Alo	ne G	Tedlar Bags
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Ν Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers) A106 Rev.01 (22May2009) of this form will be sent to the North Carolina



ANALYTICAL RESULTS

	eoEngineers,Inc. 509)363-3125				L	•	Number: 10115347 ct Name: 0506-117-10	BNSF Parkwater,
Lab Sample No Client Sample I			Pro	ijSampleNum: Matrix:			Date Collected: 10/2 Date Received: 10/2	
		Report Limit	Results	Report Limit	Results			
Parameters		ppbv	ppbv	ug/m3	ug/m3	DF	Analyzed	CAS No.
Air TO-15								
1,1,1-Trich	nloroethane	0.87	ND	4.8	ND	1.68	10/31/09 6:52 LCW	71-55-6
1,1,2,2-Te	trachloroethane	0.87	ND	6.1	ND	1.68	10/31/09 6:52 LCW	79-34-5
1,1,2-Trich	nloroethane	0.87	ND	4.8	ND	1.68	10/31/09 6:52 LCW	79-00-5
1,1,2-Trich	nlorotrifluoroethane	0.87	ND	6.8	ND	1.68	10/31/09 6:52 LCW	76-13-1
1,1-Dichlo	roethane	0.87	ND	3.6	ND	1.68	10/31/09 6:52 LCW	75-34-3
1,1-Dichlo	roethene	0.87	ND	3.5	ND	1.68	10/31/09 6:52 LCW	75-35-4
1,2,4-Trich	nlorobenzene	0.87	ND	6.6	ND	1.68	10/31/09 6:52 LCW	120-82-1
1,2,4-Trim	ethylbenzene	0.86	ND	4.3	ND	1.68	10/31/09 6:52 LCW	95-63-6
1,2-Dibron	noethane (EDB)	0.87	ND	6.8	ND	1.68	10/31/09 6:52 LCW	106-93-4
1,2-Dichlo	robenzene	0.86	ND	5.3	ND	1.68	10/31/09 6:52 LCW	95-50-1
1,2-Dichlo	roethane	0.87	ND	3.6	ND	1.68	10/31/09 6:52 LCW	107-06-2
1,2-Dichlo	ropropane	0.87	ND	4.1	ND	1.68	10/31/09 6:52 LCW	78-87-5
1,3,5-Trim	ethylbenzene	0.87	ND	4.3	ND	1,68	10/31/09 6:52 LCW	108-67-8
1,3-Butadi	ene	0.87	ND	2	ND	1.68	10/31/09 6:52 LCW	106-99-0
1,3-Dichlo	robenzene	0.86	ND	5.3	ND	1.68	10/31/09 6:52 LCW	541-73-1
1,4-Dichlo	robenzene	0.86	ND	5.3	ND	1.68	10/31/09 6:52 LCW	106-46-7
1,4-Dioxar	ne (p-Dioxane)	0.12	ND	0.44	ND	1.25	10/28/09 11:24 LCW	123-91-1
2,2,4-Trim	ethylpentane	0.84	14.5	4	68.9	1.68	10/31/09 6:52 LCW	540-84-1
2-Butanon	e (MEK)	0.92	0.99	2.8	2.97	1.68	10/31/09 6:52 LCW	78-93-3
2-Hexanor	пе	0.92	ND	3.8	ND	1.68	10/31/09 6:52 LCW	591-78-6
2-Propano)	0.84	ND	2.1	ND	1.68	10/31/09 6:52 LCW	67-63-0
4-Ethyltolu	iene	0,89	ND	4.4	ND	1.68	10/31/09 6:52 LCW	622-96-8
4-Methyl-2	-pentanone (MIBK)	0.92	ND	3.8	ND	1.68	10/31/09 6:52 LCW	108-10 -1
Acetone		0.92	ND	2.2	ND	1.68	10/31/09 6:52 LCW	67-64-1
Benzene		0.87	ND	2.8	ND	1.68	10/31/09 6:52 LCW	71-43-2
Bromodich	loromethane	0,86	ND	5.9	ND	1.68	10/31/09 6:52 LCW	75-27-4
Bromoform	n	0.87	ND	9.1	ND	1.68	10/31/09 6:52 LCW	75-25-2
Bromomet	hane	0.86	ND	3.4	ND	1.68	10/31/09 6:52 LCW	74-83-9
Carbon dis	sulfide	0.84	3.4	2.7	10.8	1.68	10/31/09 6:52 LCW	75-15-0
Carbon tet	trachloride	0.86	ND	5.5	ND	1.68	10/31/09 6:52 LCW	56-23-5
Chloroben	zene	0.87	ND	4.1	ND	1.68	10/31/09 6:52 LCW	108-90-7
Chloroetha	ane	0.86	ND	2.3	ND	1.68	10/31/09 6:52 LCW	75-00-3
Chloroform	n	0.86	ND	4.3	ND	1.68	10/31/09 6:52 LCW	67-66-3
Chloromet	hane	0.84	ND	1.8	ND	1.68	10/31/09 6:52 LCW	74-87-3
cis-1,2-Dic	chloroethene	0.87	ND	3.5	ND	1.68	10/31/09 6:52 LCW	156-59-2
cis-1,3-Dic	hloropropene	0.86	ND	4	ND	1.68	10/31/09 6:52 LCW	10061-01-5
Cyclohexa	ne	0,87	4.1	3	14.3	1.68	10/31/09 6:52 LCW	110-82-7
Dibromoch	loromethane	0.89	ND	7.7	ND	1.68	10/31/09 6:52 LCW	124-48-1
Dichlorodif	fluoromethane	0.86	ND	4.3	ND	1.68	10/31/09 6:52 LCW	75-71-8
Dichlorotet	trafluoroethane	0.96	ND	6.8	ND	1.68	10/31/09 6:52 LCW	76-14-2
Ethanol		0.84	14.8	1.6	28.3	1.68	10/31/09 6:52 LCW	64-17-5

SUPPLEMENTAL REPORT

Units Conversion Request



ANALYTICAL RESULTS

Client: GeoEngineers,Inc.				La	ab Project I	Number: 10115347	
Phone: (509)363-3125					Projec	t Name: 0506-117-10 Bl	NSF Parkwater,
Ethyl acetate	0.86	ND	3.2	ND	1.68	10/31/09 6:52 LCW	141-78-6
Ethylbenzene	0.87	ND	3.8	ND	1.68	10/31/09 6:52 LCW	100-41-4
Hexachloro-1,3-butadiene	0.84	ND	9.1	ND	1.68	10/31/09 6:52 LCW	87-68-3
lsopropylbenzene (Cumene)	0.84	ND	4.2	ND	1.68	10/31/09 6:52 LCW	98-82-8
m&p-Xylene	1.7	ND	7.5	ND	1.68	10/31/09 6:52 LCW	1330-20-7
Methylene Chloride	0.87	1.1	3.1	3.88	1.68	10/31/09 6:52 LCW	75-09-2
Methyl-tert-butyl ether	1.7	ND	6.2	ND	1.68	10/31/09 6:52 LCW	1634-04-4
Naphthalene	0.84	ND	4.5	ND	1.68	10/31/09 6:52 LCW	91-20-3
n-Heptane	0.87	ND	3.6	ND	1.68	10/31/09 6:52 LCW	142-82-5
n-Hexane	0.89	ND	3.2	ND	1.68	10/31/09 6:52 LCW	110-54-3
o-Xylene	0.87	ND	3.8	ND	1.68	10/31/09 6:52 LCW	95-47-6
Propylene	3.4	ND	5.9	ND	1.68	10/31/09 6:52 LCW	115-07-1
Styrene	0.92	ND	4	ND	1.68	10/31/09 6:52 LCW	100-42-5
Tetrachloroethene	0.87	1.6	6	11	1.68	10/31/09 6:52 LCW	127-18-4
Tetrahydrofuran	0.87	ND	2.6	ND	1.68	10/31/09 6:52 LCW	109-99-9
THC as Gas	33.6	17300	150	75100	1.68	10/31/09 6:52 LCW	
Toluene	0.87	0.99	3.3	3.79	1.68	10/31/09 6:52 LCW	108-88-3
trans-1,2-Dichloroethene	1.7	ND	6.9	ND	1,68	10/31/09 6:52 LCW	156-60-5
trans-1,3-Dichloropropene	0.87	ND	4	ND	1.68	10/31/09 6:52 LCW	10061-02-6
Trichloroethene	0.87	ND	4.8	ND	1.68	10/31/09 6:52 LCW	79-01-6
Trichlorofluoromethane	0.84	1.0	4.8	5.71	1.68	10/31/09 6:52 LCW	75-69-4
Vinyl acetate	0.92	ND	3.3	ND	1.68	10/31/09 6:52 LCW	108-05-4
Vinyl chloride	0.86	ND	2.2	ND	1.68	10/31/09 6:52 LCW	75-01-4
Xylene (Total)	2.5	ND	11	ND	1.68	10/31/09 6:52 LCW	1330-20-7



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ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125				La	•	Number: 10115347 ct Name: 0506-117-10 E	NSF Parkwater,
Lab Sample No: 1011534700 Client Sample ID: VP-EX-		Pro	ojSampleNum: 10 Matrix: A			Date Collected: 10/22 Date Received: 10/23	
Parameters	Report Limit ppbv	Results ppbv	Report Limit ug/m3	Results ug/m3	DF	Analyzed	CAS No.
Air TO-15							
1,1,1-Trichloroethane	0.72	ND	4	ND	1.38	10/28/09 16:09 LCW	71-55-6
1,1,2,2-Tetrachloroethane	0.72	ND	5	ND	1.38	10/28/09 16:09 LCW	79-34-5
1,1,2-Trichloroethane	0.72	ND	4	ND	1.38	10/28/09 16:09 LCW	79-00-5
1,1,2-Trichlorotrifluoroethane	0.72	ND	5.6	ND	1.38	10/28/09 16:09 LCW	76-13-1
1,1-Dichloroethane	0.72	ND	3	ND	1.38	10/28/09 16:09 LCW	75-34-3
1,1-Dichloroethene	0.72	ND	2.9	ND	1.38	10/28/09 16:09 LCW	75-35-4
1,2,4-Trichlorobenzene	0.72	ND	5.4	ND	1.38	10/28/09 16:09 LCW	120-82-1
1,2,4-Trimethylbenzene	0.7	ND	3.5	ND	1.38	10/28/09 16:09 LCW	95-63-6
1,2-Dibromoethane (EDB)	0.72	ND	5.6	ND	1.38	10/28/09 16:09 LCW	106-93-4
1.2-Dichlorobenzene	0.7	ND	4.3	ND	1.38	10/28/09 16:09 LCW	95-50-1
1,2-Dichloroethane	0.72	ND	3	ND	1.38	10/28/09 16:09 LCW	107-06-2
1,2-Dichloropropane	0.72	ND	3.4	ND	1.38	10/28/09 16:09 LCW	78-87-5
1,3,5-Trimethylbenzene	0.72	ND	3.6	ND	1.38	10/28/09 16:09 LCW	108-67-8
1,3-Butadiene	0.72	ND	1.6	ND	1.38	10/28/09 16:09 LCW	106-99-0
1,3-Dichlorobenzene	0.7	ND	4.3	ND	1.38	10/28/09 16:09 LCW	541-73-1
1,4-Dichlorobenzene	0.7	ND	4.3	ND	1.38	10/28/09 16:09 LCW	106-46-7
1,4-Dioxane (p-Dioxane)	0.14	ND	0.51	ND	1.38	10/28/09 11:55 LCW	123-91-1
2,2,4-Trimethylpentane	0.69	ND	3.3	ND	1.38	10/28/09 16:09 LCW	540-84-1
2-Butanone (MEK)	0.76	ND	2.3	ND	1.38	10/28/09 16:09 LCW	78-93-3
2-Hexanone	0.76	ND	3,2	ND	1.38	10/28/09 16:09 LCW	591-78-6
2-Propanol	0.69	ND	1.7	ND	1.38	10/28/09 16:09 LCW	67-63-0
4-Ethyltoluene	0.73	ND	3.6	ND	1.38	10/28/09 16:09 LCW	622-96-8
4-Methyl-2-pentanone (MIBK)	0.76	ND	3.2	ND	1.38	10/28/09 16:09 LCW	108-10-1
Acetone	0.76	1.3	1.8	3.14	1.38	10/28/09 16:09 LCW	67-64-1
Benzene	0.72	ND	2.3	ND	1.38	10/28/09 16:09 LCW	71-43-2
Bromodichloromethane	0.7	ND	4.8	ND	1.38	10/28/09 16:09 LCW	75-27-4
Bromoform	0.72	ND	7.6	ND	1.38	10/28/09 16:09 LCW	75-25-2
Bromomethane	0.7	ND	2.8	ND	1.38	10/28/09 16:09 LCW	74-83-9
Carbon disulfide	0.69	1.0	2.2	3.17	1.38	10/28/09 16:09 LCW	75-15-0
Carbon tetrachloride	0.7	ND	4.5	ND	1.38	10/28/09 16:09 LCW	56-23-5
Chlorobenzene	0.72	ND	3.4	ND	1.38	10/28/09 16:09 LCW	108-90-7
Chloroethane	0.7	ND	1.9	ND	1.38	10/28/09 16:09 LCW	75-00-3
Chloroform	0.7	ND	3.5	ND	1.38	10/28/09 16:09 LCW	67-66-3
Chloromethane	0.69	ND	1.4	ND	1.38	10/28/09 16:09 LCW	74-87-3
cis-1,2-Dichloroethene	0.72	ND	2.9	ND	1,38	10/28/09 16:09 LCW	156-59-2
cis-1,3-Dichloropropene	0.7	ND	3.2	ND	1.38	10/28/09 16:09 LCW	10061-01-5
Cyclohexane	0.72	ND	2.5	ND	1.38	10/28/09 16:09 LCW	110-82-7
Dibromochloromethane	0.72	ND	6.3	ND	1.38	10/28/09 16:09 LCW	124-48-1
Dichlorodifluoromethane	0.7	ND	3.5	ND	1.38	10/28/09 16:09 LCW	75-71-8
Dichlorotetrafluoroethane	0.79	ND	5.6	ND	1.38	10/28/09 16:09 LCW	76-14-2
Ethanol	0.69	ND	1.3	ND	1.38	10/28/09 16:09 LCW	64-17-5

SUPPLEMENTAL REPORT

Units Conversion Request



ANALYTICAL RESULTS

Client: Phone:	GeoEngineers,Inc. (509)363-3125				La	•	Number: 10115347 ct Name: 0506-117-10 Bl	NSF Parkwater,
	(<i>'</i> ,	0.7	ND	2.6	ND	1.38	10/28/09 16:09 LCW	141-78-6
	acetate penzene	0.72	ND	3.2	ND	1.38	10/28/09 16:09 LCW	100-41-4
	chloro-1,3-butadiene	0.72	ND	7.5	ND	1.38	10/28/09 16:09 LCW	87-68-3
		0.69	ND	3,4	ND	1.38	10/28/09 16:09 LCW	98-82-8
•	pylbenzene (Cumene)	1.4	ND	6.2	ND	1.38	10/28/09 16:09 LCW	1330-20-7
	Xylene	0.72	ND	2.5	ND	1.38	10/28/09 16:09 LCW	75-09-2
	/lene Chloride		ND	2.3 5.1	ND	1.38	10/28/09 16:09 LCW	1634-04-4
	/l-tert-butyl ether	1.4		3.7 3.7	6.92	1.38	10/28/09 16:09 LCW	91-20-3
•	thalene	0.69	1.3		0.92 ND	1.38	10/28/09 16:09 LCW	142-82-5
n-Hep		0.72	ND	3	ND	1.38	10/28/09 16:09 LCW	110-54-3
n-He>		0.73	ND	2.6			10/28/09 16:09 LCW	95-47-6
o-Xyle		0.72	ND	3.2	ND	1.38		
Propy	lene	2.8	ND	4.9	ND	1.38	10/28/09 16:09 LCW	115-07-1
Styre	ne	0.76	ND	3.3	ND	1.38	10/28/09 16:09 LCW	100-42-5
Tetra	chloroethene	0.72	ND	5	ND	1.38	10/28/09 16:09 LCW	127-18-4
Tetra	hydrofuran	0.72	ND	2.2	ND	1.38	10/28/09 16:09 LCW	109-99-9
THC	as Gas	27.6	6280	120	27300	1.38	10/28/09 16:09 LCW	
Tolue	ne	0.72	0.76	2.8	2.91	1.38	10/28/09 16:09 LCW	108-88-3
trans-	1,2-Dichloroethene	1.4	ND	5.6	ND	1.38	10/28/09 16:09 LCW	156-60-5
trans-	1,3-Dichloropropene	0.72	ND	3.3	ND	1.38	10/28/09 16:09 LCW	10061-02-6
Trichl	oroethene	0.72	ND	3.9	ND	1.38	10/28/09 16:09 LCW	79-01-6
Trichl	orofluoromethane	0.69	ND	3.9	ND	1.38	10/28/09 16:09 LCW	75-69-4
Vinvl	acetate	0.76	ND	2.7	ND	1.38	10/28/09 16:09 LCW	108-05-4
,	chloride	0.7	ND	1.8	ND	1.38	10/28/09 16:09 LCW	75-01-4
	e (Total)	2.1	ND	9.3	ND	1.38	10/28/09 16:09 LCW	1330-20-7



Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

November 20, 2009

Bruce Williams GeoEngineers,Inc. 523 East Second Ave Spokane, WA 99202

RE: Project: 0506-117-10 Parkwater Pace Project No.: 10116526

Dear Bruce Williams:

Enclosed are the analytical results for sample(s) received by the laboratory on November 07, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

This report contains data that were produced by a subcontracted laboratory that performed fields of testing that do not require certification.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Oard Davy

Carol Davy

carol.davy@pacelabs.com Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Page 1 of 12



'ace Analytical www.pacelabs.com

CERTIFICATIONS

Project: 0506-117-10 Parkwater Pace Project No.: 10116526

Minnesota Certification IDs

1700 Elm Street SE, Suite 200 Minneapolis, MN 55414 Alaska Certification #: UST-078 Washington Certification #: 0754 Tennessee Certification #: 02818 Pennsylvania Certification #: 68-00563 Oregon Certification #: MN200001 North Dakota Certification #: R-036 North Carolina Certification #: R-036 New York Certification #: 11647 New Jersey Certification #: MN-002 Montana Certification #: MT CERT0092 Minnesota Certification #: 027-053-137 Maine Certification #: 2007029 Louisiana Certification #: LA080009 Louisiana Certification #: 03086 Kansas Certification #: E-10167 lowa Certification #: 200011 Florida/NELAP Certification #: E87605 California Certification #: 01155CA Arizona Certification #: AZ-0014 Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

Page 2 of 12





SAMPLE SUMMARY

Project:0506-117-10 ParkwaterPace Project No.:10116526

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10116526001	VP-CI-110609	Air	11/06/09 11:13	11/07/09 09:40

REPORT OF LABORATORY ANALYSIS

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Page 3 of 12



SAMPLE ANALYTE COUNT

Project: 0506-117-10 Parkwater Pace Project No.: 10116526

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10116526001	VP-CI-110609	TO-15	DB1	65	PASI-M

REPORT OF LABORATORY ANALYSIS

Page 4 of 12



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PROJECT NARRATIVE

Project: 0506-117-10 Parkwater

Pace Project No.: 10116526

Method: TO-15 Description: TO15 MSV AIR Client: GeoEngineers,Inc.

Date: November 20, 2009

General Information:

1 sample was analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low. • VP-CI-110609 (Lab ID: 10116526001)

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

QC Batch: AIR/9400

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- LCS (Lab ID: 715898)
- 2-Propanol
- VP-CI-110609 (Lab ID: 10116526001)
 - 2-Propanol

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: AIR/9400

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 715898)
 - 1,2-Dichlorobenzene
 - 4-Ethyltoluene
 - Bromoform
 - cis-1,3-Dichloropropene
 - trans-1,3-Dichloropropene

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 0506-117-10 Parkwater Pace Project No.: 10116526

Method:TO-15Description:TO15 MSV AIRClient:GeoEngineers,Inc.Date:November 20, 2009

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-117-10 Parkwater

Pace Project No.: 10116526

Sample: VP-CI-110609	Lab ID:	10116526001	Collected	: 11/06/0	9 11:13	Received: 11	/07/09 09:40 M	atrix: Air	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical I	Method: TO-15							
1,1,1-Trichloroethane	ND pp	obv	13.9	7.0	26.8		11/19/09 10:57		
1,1,2,2-Tetrachloroethane	ND pp	obv	13.9	7,0	26.8		11/19/09 10:57		
1,1,2-Trichloroethane	ND pp	obv	13.9	7.0	26.8		11/19/09 10:57		
1,1,2-Trichlorotrifluoroethane	ND pp	obv	13.9	7.0	26.8		11/19/09 10:57		
1,1-Dichloroethane	ND pp	bv	13.9	7.0	26.8		11/19/09 10:57		
1,1-Dichloroethene	ND pp	obv	13.9	7.0	26.8		11/19/09 10:57		
1,2,4-Trichlorobenzene	ND pp		13.9	7.0	26.8		11/19/09 10:57	120-82-1	
1,2,4-Trimethylbenzene	37.4 pp	obv	13.7	6.8	26.8		11/19/09 10:57	95-63-6	
1,2-Dibromoethane (EDB)	ND pp	obv	13.9	7.0	26.8		11/19/09 10:57	106-93-4	
1,2-Dichlorobenzene	ND pp	obv	13.7	6.8	26.8		11/19/09 10:57	95-50-1	
1,2-Dichloroethane	ND pp	obv	13.9	7.0	26.8		11/19/09 10:57	107-06-2	
1,2-Dichloropropane	ND pp	bv	13.9	7.0	26.8		11/19/09 10:57	78-87-5	
1,3,5-Trimethylbenzene	17.7 pp	bv	13.9	7.0	26.8		11/19/09 10:57	108-67-8	
1,3-Butadiene	ND pp	bv	13.9	7.0	26.8		11/19/09 10:57	106-99-0	
1,3-Dichlorobenzene	ND pp	bv	13. 7	6.8	26.8		11/19/09 10:57	541-73-1	
1,4-Dichlorobenzene	ND pp		13.7	6.8	26.8		11/19/09 10:57	106-46-7	
1,4-Dioxane (p-Dioxane)	ND pp		5,4	2.7	26.8		11/19/09 10:57	123-91-1	L2
2,2,4-Trimethylpentane	13.5 pp		13.4	6.7	26.8		11/19/09 10:57	540-84-1	
2-Butanone (MEK)	32.1 pp		14.7	7.4	26.8		11/19/09 10:57	78-93-3	
2-Hexanone	ND pp		14.7	7.4	26.8		11/19/09 10:57	591-78-6	
2-Propanol	86.6 pp		13.4	6.7	26.8		11/19/09 10:57	67-63-0	SS
4-Ethyltoluene	ND pp		14.2	7.1	26.8		11/19/09 10:57		
4-Methyl-2-pentanone (MIBK)	ND pp		14.7	7.4	26.8		11/19/09 10:57	108-10-1	
Acetone	51.6 pp		14.7	7.4	26.8		11/19/09 10:57		
Benzene	ND pp		13.9	7.0	26.8		11/19/09 10:57		
Bromodichloromethane	ND pp		13.7	6.8	26.8		11/19/09 10:57		
Bromoform	ND pp		13.9	7.0	26.8		11/19/09 10:57		
Bromomethane	ND pp		13.7	6.8	26.8		11/19/09 10:57		
Carbon disulfide	ND pp		13.4	6.7	26.8		11/19/09 10:57		
Carbon tetrachloride	ND pp		13.7	6.8	26.8		11/19/09 10:57		
Chlorobenzene	ND pp		13.9	7.0	26.8		11/19/09 10:57		
Chloroethane	ND pp		13.7	6.8	26.8		11/19/09 10:57		
Chloroform	ND pp		13.7	6.8	26.8		11/19/09 10:57		
Chloromethane	ND pp		13.4	6.7	26.8		11/19/09 10:57		
			13.4	7.0	26.8		11/19/09 10:57		
Cyclohexane	ND pp		13.9	7.0	26.8		11/19/09 10:57		
Dibromochloromethane	ND pp		14.2	6.8	26.8		11/19/09 10:57		
Dichlorodifluoromethane	ND pp						11/19/09 10:57		
Dichlorotetrafluoroethane	ND pp		15.3	7.6	26.8		11/19/09 10:57		
Ethanol	132 pp		13.4	6.7	26.8				
Ethyl acetate	ND pp		13.7	6.8	26.8		11/19/09 10:57		
Ethylbenzene	ND pp		13.9	7.0	26.8		11/19/09 10:57		
Hexachloro-1,3-butadiene	ND pp		13.4	6.7	26.8		11/19/09 10:57		
Isopropylbenzene (Cumene)	ND pp		13.4	6.7	26.8		11/19/09 10:57		
Methyl-tert-butyl ether	ND pp		26.8	13.4	26.8		11/19/09 10:57		
Methylene Chloride	ND pp		13.9	7.0	26.8		11/19/09 10:57		
Naphthalene	ND pp	vdc	13.4	6.7	26.8		11/19/09 10:57	91-20-3	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-117-10 Parkwater

Pace Project No.: 10116526

Sample: VP-CI-110609	Lab ID: 10	0116526001 Co	ollected	: 11/06/09	9 11:13	Received: 11	/07/09 09:40 Ma	atrix: Air	
_		Rep							- ·
Parameters	Results	Units Lin	nit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Me	ethod: TO-15							
Propylene	ND ppb	v	53.6	26.8	26.8		11/19/09 10:57	115-07-1	
Styrene	ND ppb	v	14.7	7.4	26.8		11/19/09 10:57	100-42-5	
THC as Gas	36000 ppb [,]	v	536	268	26.8		11/19/09 10:57		
Tetrachloroethene	ND ppb	v	13.9	7.0	26.8		11/19/09 10:57	127-18-4	
Tetrahydrofuran	ND ppb	v	13.9	7.0	26.8		11/19/09 10:57	109-99-9	
Toluene	34.5 ppb [,]	v	13.9	7.0	26.8		11/19/09 10:57	108-88-3	
Trichloroethene	ND ppb	v	13.9	7.0	26.8		11/19/09 10:57	79-01-6	
Trichlorofluoromethane	ND ppb	v	13.4	6.7	26.8		11/19/09 10:57	75-69-4	
Vinyl acetate	ND ppb	v	14.7	7.4	26.8		11/19/09 10:57	108-05-4	
Vinyl chloride	ND ppb	v	13.7	6.8	26.8		11/19/09 10:57	75-01-4	
Xylene (Total)	93.6 ppb	v	40.2	20.1	26.8		11/19/09 10:57	1330-20-7	
cis-1,2-Dichloroethene	ND ppb	v	13.9	7.0	26.8		11/19/09 10:57	156-59-2	
cis-1,3-Dichloropropene	ND ppb	v	13.7	6.8	26.8		11/19/09 10:57	10061-01-5	
m&p-Xylene	65.6 ppb [,]	v .	26.8	13.4	26.8		11/19/09 10:57	1330-20-7	
n-Heptane	ND ppb	v	13.9	7.0	26.8		11/19/09 10:57	142-82-5	
n-Hexane	ND ppb		14.2	7.1	26.8		11/19/09 10:57	110-54-3	
o-Xylene	27.9 ppb	v	13.9	7.0	26.8		11/19/09 10:57	95-47-6	
trans-1,2-Dichloroethene	ND ppb		26.8	13.4	26.8		11/19/09 10:57	156-60-5	
trans-1,3-Dichloropropene	ND ppb		13.9	7.0	26.8		11/19/09 10:57	10061-02-6	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project:	0506-117-10 Parkwater
Pace Project No.:	10116526
OO Deteb	AUD/0400

QC Batch: AIR/9400		Analysis Meth		D-15	
QC Batch Method: TO-15		Analysis Desc	ription: TO	D15 MSV AIR	
Associated Lab Samples: 10116	6526001				
METHOD BLANK: 715897	, , ,	Matrix: A	Air	······································	
Associated Lab Samples: 10116	6526001				
,		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ppbv		0,52	11/18/09 21:43	
1,1,2,2-Tetrachloroethane	ppbv	ND	0.52	11/18/09 21:43	
1,1,2-Trichloroethane	ppbv	ND	0.52	11/18/09 21:43	
1,1,2-Trichlorotrifluoroethane	ppbv	ND	0.52	11/18/09 21:43	
1,1-Dichloroethane	ppbv	ND	0.52	11/18/09 21:43	
1,1-Dichloroethene	ppbv	ND	0.52	11/18/09 21:43	
1,2,4-Trichlorobenzene	ppbv	ND	0.52	11/18/09 21:43	
1,2,4-Trimethylbenzene	ppbv	ND	0.51	11/18/09 21:43	
1,2-Dibromoethane (EDB)	ppbv	ND	0.52	11/18/09 21:43	
1,2-Dichlorobenzene	ppbv	ND	0.51	11/18/09 21:43	
1,2-Dichloroethane	ppbv	ND	0.52	11/18/09 21:43	
1,2-Dichloropropane	ppbv	ND	0.52	11/18/09 21:43	
1,3,5-Trimethylbenzene	ppbv	ND	0.52	11/18/09 21:43	
1,3-Butadiene	ppbv	ND	0.52	11/18/09 21:43	
1,3-Dichlorobenzene	ppbv	ND	0.51	11/18/09 21:43	
1,4-Dichlorobenzene	ppbv	ND	0.51	11/18/09 21:43	
1,4-Dioxane (p-Dioxane)	ppbv	ND	0.20	11/18/09 21:43	
2,2,4-Trimethylpentane	ppbv	ND	0.50	11/18/09 21:43	
2-Butanone (MEK)	ppbv	ND	0.55	11/18/09 21:43	
2-Hexanone	ppbv	ND	0.55	11/18/09 21:43	
2-Propanol	ppbv	ND	0.50	11/18/09 21:43	
4-Ethyltoluene	ppbv	ND	0.53	11/18/09 21:43	
4-Methyl-2-pentanone (MIBK)	ppbv	ND	0.55	11/18/09 21:43	
Acetone	ppbv	ND	0.55	11/18/09 21:43	
Benzene	ppbv	ND	0.52	11/18/09 21:43	
Bromodichloromethane	ppbv	ND	0.51	11/18/09 21:43	
Bromoform	ppbv	ND	0.52	11/18/09 21:43	
Bromomethane	ppbv	ND	0.51	11/18/09 21:43	
Carbon disulfide	ppbv	ND	0.50	11/18/09 21:43	
Carbon tetrachloride	ppbv	ND	0.51	11/18/09 21:43	
Chlorobenzene	ppbv	ND	0.52	11/18/09 21:43	
Chloroethane	ppbv ppbv	ND	0.51	11/18/09 21:43	
Chloroform	ppbv	ND	0.51	11/18/09 21:43	
Chloromethane	ppbv	ND	0.50	11/18/09 21:43	
cis-1,2-Dichloroethene	ppbv	ND	0.52	11/18/09 21:43	
cis-1,3-Dichloropropene	ppbv	ND	0.52	11/18/09 21:43	
Cyclohexane	ppbv	ND	0.52	11/18/09 21:43	
Dibromochloromethane	ppbv	ND	0.53	11/18/09 21:43	
Dichlorodifluoromethane	ppbv	ND	0.51	11/18/09 21:43	
Dichlorotetrafluoroethane	ppbv	ND	0.57	11/18/09 21:43	
Ethanol	ppbv	ND	0.50	11/18/09 21:43	
Euranu Ethiot t- t-	hhna		0.50	11/18/00 21:43	

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Ethyl acetate

Ethylbenzene

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ND

ND

ppbv

ppbv

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0.51 11/18/09 21:43

0.52 11/18/09 21:43

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QUALITY CONTROL DATA

Project: 0506-117-10 Parkwater

Pace Project No.: 10116526

METHOD BLANK: 715897

Matrix: Air

Associated Lab Samples: 10116526001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ppbv	ND	0.50	11/18/09 21:43	
Isopropylbenzene (Cumene)	ppbv	ND	0.50	11/18/09 21:43	
m&p-Xylene	ppbv	ND	1.0	11/18/09 21:43	
Methyl-tert-butyl ether	ppbv	ND	1.0	11/18/09 21:43	
Methylene Chloride	ppbv	ND	0.52	11/18/09 21:43	
n-Heptane	ppbv	ND	0.52	11/18/09 21:43	
n-Hexane	ppbv	ND	0.53	11/18/09 21:43	
Naphthalene	ppbv	ND	0.50	11/18/09 21:43	
o-Xylene	ppbv	ND	0.52	11/18/09 21:43	
Propylene	ppbv	ND	2.0	11/18/09 21:43	
Styrene	ppbv	ND	0.55	11/18/09 21:43	
Tetrachloroethene	ppbv	ND	0.52	11/18/09 21:43	
Tetrahydrofuran	ppbv	ND	0.52	11/18/09 21:43	
THC as Gas	ppbv	ND	20.0	11/18/09 21:43	
Toluene	ppbv	ND	0.52	11/18/09 21:43	
trans-1,2-Dichloroethene	ppbv	ND	1.0	11/18/09 21:43	
trans-1,3-Dichloropropene	ppbv	ND	0.52	11/18/09 21:43	
Trichloroethene	ppbv	ND	0.52	11/18/09 21:43	
Trichlorofluoromethane	ppbv	ND	0.50	11/18/09 21:43	
Vinyl acetate	ppbv	ND	0.55	11/18/09 21:43	
Vinyl chloride	ppbv	ND	0.51	11/18/09 21:43	
Xylene (Total)	ppbv	ND	1.5	11/18/09 21:43	

LABORATORY CONTROL SAMPLE: 715898

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1-Trichloroethane	ppbv	10.3	11.4	110	60-125	
1,1,2,2-Tetrachloroethane	ppbv	10.2	12.6	124	57-127	
1,1,2-Trichloroethane	ppbv	10.1	10.7	106	56-125	
1,1,2-Trichlorotrifluoroethane	ppbv	9.8	6.8	70	52-133	
1,1-Dichloroethane	ppbv	10	9.0	90	54-127	
1,1-Dichloroethene	ppbv	10	11.9	119	52-129	
1,2,4-Trichlorobenzene	ppbv	9.9	10.3	104	30-150	
1,2,4-Trimethylbenzene	ppbv	9.9	14.4	145	52-145	
1,2-Dibromoethane (EDB)	ppbv	10.4	12.2	117	59-133	
1,2-Dichlorobenzene	ppbv	10.2	14.2	140	67-135 l	_3
1,2-Dichloroethane	ppbv	10.9	11.9	109	54-125	
1,2-Dichloropropane	ppbv	10.8	13.1	121	64-125	
1,3,5-Trimethylbenzene	ppbv	9.9	13.1	132	56-135	
1,3-Butadiene	ppbv	10.1	10.7	106	55-125	
1,3-Dichlorobenzene	ppbv	10.5	13.7	130	61-142	
1,4-Dichlorobenzene	ppbv	10.3	12.2	119	55-142	
1,4-Dioxane (p-Dioxane)	ppbv	10	5.9	59	70-130 I	_2
2,2,4-Trimethylpentane	ppbv	10	8.4	84	70-130	
2-Butanone (MEK)	ppbv	10.3	9.6	93	47-141	

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QUALITY CONTROL DATA

Project: 0506-117-10 Parkwater

Pace Project No.: 10116526

LABORATORY CONTROL SAMPLE: 715898

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qua	alifiers
2-Hexanone	ppbv		10.6	104	41-138	
2-Propanol	ppbv	9.5	14.6	154	63-125 SS	
4-Ethyltoluene	ppbv	10	14.4	1 44	62-130 L3	
4-Methyl-2-pentanone (MIBK)	ppbv	10.2	11.9	117	53-134	
Acetone	ppbv	10	9.1	91	44-149	
Benzene	ppbv	10.1	10.4	103	61-126	
Bromodichloromethane	ppbv	10	11.4	114	54-129	
Bromoform	ppbv	10.2	13.2	130	56-125 L3	
Bromomethane	ppbv	10.1	9.7	96	56-128	
Carbon disulfide	ppbv	10.3	9,4	92	58-150	
Carbon tetrachloride	ppbv	10.1	9.5	94	55-125	
Chlorobenzene	ppbv	9.9	11.4	115	48-138	
Chloroethane	ppbv	9.9	9.2	93	56-128	
Chloroform	ppbv	9.7	10.4	108	55-125	
Chloromethane	ppbv	10	11.2	112	50-131	
cis-1,2-Dichloroethene	ppbv	10.3	11.8	115	64-125	
sis-1,3-Dichloropropene	ppbv	10.5	15.7	149	61-132 L3	
Cyclohexane	ppbv	10.2	12.9	127	61-130	
Dibromochloromethane	ppbv	10.5	12.4	118	51-129	
Dichlorodifluoromethane	ppbv	9.8	7.8	80	56-132	
Dichlorotetrafluoroethane	ppbv	10	8.8	88	48-125	
thanol	ppbv	10	12.1	121	70-130	
thyl acetate	ppbv	10.2	12.2	120	66-149	
thylbenzene	ppbv	11	12.4	113	56-137	
lexachloro-1,3-butadiene	ppbv	9.8	9.8	100	30-150	
sopropylbenzene (Cumene)	ppbv	10.4	12.8	123	67-134	
n&p-Xylene	ppbv	21	23.5	112	62-135	
1ethyl-tert-butyl ether	ppbv	10	9.7	97	59-125	
Aethylene Chloride	ppbv	9.8	6.0	62	46~143	
-Heptane	ppbv	10.3	10.7	104	64-130	
-Hexane	ppbv	10.9	9.4	86	61-134	
laphthalene	ppbv	9.5	10.2	107	30-150	
-Xylene	ppbv	10.3	12.2	118	61-134	
ropylene	ppbv	10.6	12.4	117	62-146	
Styrene	ppbv	10	11.0	110	63-134	
Fetrachloroethene	ppbv	10.4	11.3	109	61-132	
etrahydrofuran	ppbv	7.5	5.2	69	62-137	
HC as Gas	ppbv	700	860	123	61-125	
oluene	ppbv	10.4	9.4	90	57-132	
rans-1,2-Dichloroethene	ppbv	10.4	10.8	103	52-130	
rans-1,3-Dichloropropene	ppbv	10.6	14.5	137	61-129 L3	
Frichloroethene	ppbv	10.1	13.3	131	72-147	
Frichlorofluoromethane	ppbv	9.8	10.8	111	58-141	
√inyl acetate	ppbv	10.3	10.5	101	56-131	
/inyl chloride	ppbv	10.3	10	97	56-136	
(ylene (Total)	ppbv	31.3	35.6	114	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 0506-117-10 Parkwater Pace Project No.: 10116526

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

- L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- SS This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

Date: 11/20/2009 06:20 PM

REPORT OF LABORATORY ANALYSIS

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November 17, 2009

Carol Davy PACE ANALYTICAL 1700 Elm Street SE Minneapolis, MN 55127-

Bureau Veritas Work Order No. 09110495

Reference: 0506-117-10 PARKWATER

Dear Carol Davy:

Bureau Veritas North America, Inc. received 1 sample on 11/10/2009 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely,

Lacea Cooner

Karen Coonan Client Services Representative cc:

1/3

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CASE NARRATIVE

Date: 18-Nov-09

Client:PACE ANALYTICALProject:0506-117-10 PARKWATERWork Order No09110495

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected.

The industrial hygiene results have not been blank corrected. Please note that a field blank was not identified by the client for this sample set.

The following result has been converted from mg/m3 to ug/m3. Sample -001A: THCs as Diesel = <1300 ug/m3

ANALYTICAL RESULTS

Client:	PACE ANALYTICAL						
Project:	0506-117-10 PARKWA	ATER				Work Order No: 0	9110495
Sample Identifica	ition: VP-CI-110609						
Lab Number:	001A					Date Sampled: 1	1/6/2009
Sample Type	Charcoal Tube					Date Received: 1	1/10/2009
Analyst	CCR					Air Volume (L): 8	
		,	Analytical Res		Reporting Limit	Test	Date
P	Analyte	(µg)	(mg/m³)	(ppm)	(119)	Method	Analyzed
THCs as Diesel		<10	<1.3	++	10	NIOSH 1550	11/16/2009

General Notes:

<: Less than the indicated reporting limit (RL).

--: Information not available or not applicable. Back sections (if applicable) were checked and showed no significant breakthrough unless otherwise noted.

Date: 17-Nov-09

Chí	Chain of Custody				50110495	× s		Pace Analytical
Worl	16526	Workorder Name:	. IO 1	Parkwater	Results	Results Requested 11	11/20/2009	
Repo	Report / Invoice To	Subcontract	tract To	The second of the second s		Requested Analysis	nalysis	いたが、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、
Carol Dav Pace Anal 1700 Elm Suite 200 Minneapo Phone (61 Email: car	Carol Davy Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700 Email: carol.davy@pacelabs.com	Bureau Venn	setnan .	P.O. 10116526	1252-1-2451 225			
				Preserved Containers		,		
ltom	Symple ID	Collect Date/Time	Lab (D	אנייעל, איינעל, איינעל,	T			LAB USE ONLY
	VP-CI-110609	11/6/2009 11:13	10116526001	Air				
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4 S								
							Comments	
Transfers	sfers Released Bx	Date/Time	te Received By	By	Date/Time			
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Sample volume 8.0002

Monday. November 09, 2009 9:31:15 AM

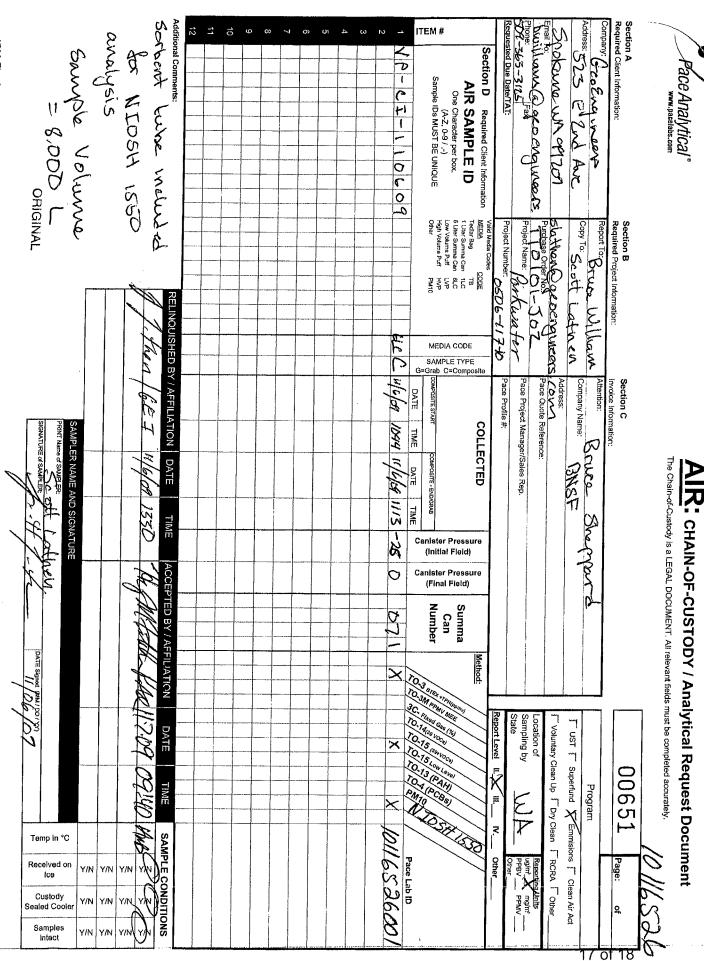
16 of 18

FMT-ALL-C-002rev.00 24March2009

Page 1 of 1

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1700 Elm Street SE, Suite 200, Minneapolis, MN 55414



Courier: Fed Ex X UPS USF Custody Seal on Cooler/Box Present Packing Material: Bubble Wrap Tracking #: 12 F64 A00 44 90	:: 🗌 yes 🕅 no Se Bubble Bags 🗌 None	e Aother		Optional Proj. Due Date: Proj. Name: Date and Initials of person examin contents://^
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Chain of Custody Filled Out:				
Chain of Custody Relinquished:				
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ufficient Volume:	Yes DNO DN	And the second se	19-19-19-19-19-19-19-19-19-19-19-19-19-1	an a
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VP-CI-11009 0071	152			
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ent Notification/ Resolution:				vata Required? Y / N
Person Contacted:	Date/1	Time:		
mments/ Resolution:				3011

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Pace Analytical Services, Inc. 17 00 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.6444 Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125					•	umber: 10116526 Name: 0506-117-	10 Parkwater
Lab Sample No: 10116526001		Pr	ojSampleNum:	101165	26001	Date Collected:	11/06/09 11:13
Client Sample ID: VP-CI-11			Matrix:			Date Received:	
Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
Air TO-15							
1,1,1-Trichloroethane	ND	ug/m3	77	26.8	11/19/09 10:57 [DB1 71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/m3	97	26.8	11/19/09 10:57 [DB1 79-34-5	
1,1,2-Trichloroethane	ND	ug/m3	77	26.8	11/19/09 10:57 [DB1 79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	110	26.8	11/19/09 10:57 [DB1 76-13-1	
1,1-Dichloroethane	ND	ug/m3	57	26.8	11/19/09 10:57 [DB1 75-34-3	
1,1-Dichloroethene	ND	ug/m3	56	26.8	11/19/09 10:57 [DB1 75-35-4	
1,2,4-Trichlorobenzene	ND	ug/m3	100	26.8	11/19/09 10:57 [DB1 120-82-1	
1,2,4-Trimethylbenzene	187	ug/m3	68	26.8	11/19/09 10:57 [DB1 95-63-6	
1,2-Dibromoethane (EDB)	ND	ug/m3	110	26.8	11/19/09 10:57 [DB1 106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	84	26.8	11/19/09 10:57 [OB1 95-50-1	
1,2-Dichloroethane	ND	ug/m3	57	26.8	11/19/09 10:57 [DB1 107-06-2	
1,2-Dichloropropane	ND	ug/m3	65	26.8	11/19/09 10:57 [DB1 78-87-5	
1,3,5-Trimethylbenzene	88.5	ug/m3	69	26.8	11/19/09 10:57	DB1 108-67-8	
1,3-Butadiene	ND	ug/m3	31	26.8	11/19/09 10:57 [DB1 106-99-0	
1,3-Dichlorobenzene	ND	ug/m3	84	26.8	11/19/09 10:57 [DB1 541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	84	26.8	11/19/09 10:57 [DB1 106-46-7	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	20	26.8	11/19/09 10:57 [DB1 123-91-1	L2
2,2,4-Trimethylpentane	64.1	ug/m3	64	26,8	11/19/09 10:57 [DB1 540-84-1	
2-Butanone (MEK)	96.2	ug/m3	44	26.8	11/19/09 10:57	DB1 78-93-3	
2-Hexanone	ND	ug/m3	61	26.8	11/19/09 10:57		
2-Propanol	216	ug/m3	33	26.8	11/19/09 10:57		SS
4-Ethyltoluene	ND	ug/m3	71	26.8	11/19/09 10:57		
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	61	26.8	11/19/09 10:57		
Acetone	125	ug/m3	35	26.8	11/19/09 10:57		
Benzene	ND	ug/m3	45	26.8	11/19/09 10:57		
Bromodichloromethane	ND	ug/m3	93	26.8	11/19/09 10:57		
Bromoform	ND	ug/m3	150	26.8	11/19/09 10:57		
Bromomethane	ND	ug/m3	54	26.8	11/19/09 10:57 I		
Carbon disulfide	ND	ug/m3	42	26.8	11/19/09 10:57		
Carbon tetrachloride	ND	ug/m3	88	26.8	11/19/09 10:57		
Chlorobenzene	ND	ug/m3	65	26.8	11/19/09 10:57		
Chloroethane	ND	ug/m3	37	26.8	11/19/09 10:57		
Chloroform	ND	ug/m3	68	26.8	11/19/09 10:57		
Chloromethane	ND	ug/m3	28	26.8	11/19/09 10:57		
cis-1,2-Dichloroethene	ND	ug/m3	20 56	26.8	11/19/09 10:57		
	ND	ug/m3	63	26.8	11/19/09 10:57		5
cis-1,3-Dichloropropene	ND	ug/m3 ug/m3	49	26.8	11/19/09 10:57		-
Cyclohexane		ug/mo	-10	20.0	10100010.07		

SUPPLEMENTAL REPORT

Date: 11/20/2009

Units Conversion Request

Page 1

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Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.6444 Fax: 612.607.6444

ANALYTICAL RESULTS

Client:	GeoEngineers,Inc.					Lab Project Number:	10116526
Phone:	(509)363-3125					Project Name:	0506-117-10 Parkwater
Dibror	nochloromethane	ND	ug/m3	120	26.8	11/19/09 10:57 DB1	124-48-1
Dichlo	rodifluoromethane	ND	ug/m3	69	26.8	11/19/09 10:57 DB1	75-71-8
Dichlo	rotetrafluoroethane	ND	ug/m3	110	26.8	11/19/09 10:57 DB1	76-14-2
Ethan	ol	253	ug/m3	26	26.8	11/19/09 10:57 DB1	64-17-5
Ethyl a	acetate	ND	ug/m3	50	26.8	11/19/09 10:57 DB1	141-78-6
Ethylb	enzene	ND	ug/m3	61	26.8	11/19/09 10:57 DB1	100-41-4
Hexac	hloro-1,3-butadiene	ND	ug/m3	150	26.8	11/19/09 10:57 DB1	87-68-3
Isopro	pylbenzene (Cumene)	ND	ug/m3	67	26.8	11/19/09 10:57 DB1	98-82-8
m&p-ን	(ylene	290	ug/m3	120	26.8	11/19/09 10:57 DB1	1330-20-7
Methy	lene Chloride	ND	ug/m3	49	26.8	11/19/09 10:57 DB1	75-09-2
Methy	l-tert-butyl ether	ND	ug/m3	98	26.8	11/19/09 10:57 DB1	1634-04-4
Naphtl	nalene	ND	ug/m3	71	26.8	11/19/09 10:57 DB1	91-20-3
n-Hept	lane	ND	ug/m3	58	26.8	11/19/09 10:57 DB1	142-82-5
n-Hexa	ane	ND	ug/m3	51	26.8	11/19/09 10:57 DB1	110-54-3
o-Xyle	ne	123	ug/m3	61	26.8	11/19/09 10:57 DB1	95-47-6
Propyl	ene	ND	ug/m3	94	26.8	11/19/09 10:57 DB1	115-07-1
Styren	e	ND	ug/m3	64	26.8	11/19/09 10:57 DB1	100-42-5
Tetrac	hloroethene	ND	ug/m3	96	26.8	11/19/09 10:57 DB1	127-18-4
Tetrah	ydrofuran	ND	ug/m3	42	26.8	11/19/09 10:57 DB1	109-99-9
THC a	s Gas	156000	ug/m3	2300	26.8	11/19/09 10:57 DB1	
Toluer	e	132	ug/m3	53	26.8	11/19/09 10:57 DB1	108-88-3
trans-1	,2-Dichloroethene	ND	ug/m3	110	26.8	11/19/09 10:57 DB1	156-60-5
trans-1	,3-Dichloropropene	ND	ug/m3	64	26.8	11/19/09 10:57 DB1	10061-02-6
Trichlo	roethene	ND	ug/m3	76	26.8	11/19/09 10:57 DB1	79-01-6
	rofluoromethane	ND	ug/m3	77	26.8	11/19/09 10:57 DB1	75-69-4
Vinyl a	cetate	ND	ug/m3	53	26.8	11/19/09 10:57 DB1	108-05-4
Vinyl c	hloride	ND	ug/m3	36	26.8	11/19/09 10:57 DB1	75-01-4
Xylene	(Total)	413	ug/m3	180	26,8	11/19/09 10:57 DB1	1330-20-7

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

Date: 11/20/2009

SUPPLEMENTAL REPORT

Units Conversion Request



Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.6444 Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125 Lab Project Number: 10116526 Project Name: 0506-117-10 Parkwater

PARAMETER FOOTNOTES

ND Not detected at or above adjusted reporting limit

NC Not Calculable

- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- [SS] This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.
- [L2] Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

Units Conversion Request



December 22, 2009

John Haney GeoEngineers,Inc. 523 East Second Ave Spokane, WA 99202

RE: Project: 0506-117-11 Parkwater Pace Project No.: 10118258

Dear John Haney:

Enclosed are the analytical results for sample(s) received by the laboratory on December 04, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Caro Darg-

Carol Davy

carol.davy@pacelabs.com Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Page 1 of 11



°ace Analytical www.pacelabs.com

CERTIFICATIONS

Project: 0506-117-11 Parkwater Pace Project No.: 10118258

Minnesota Certification IDs

1700 Elm Street SE, Suite 200 Minneapolis, MN 55414 Alaska Certification #: UST-078 Washington Certification #: 0754 Tennessee Certification #: 02818 Pennsylvania Certification #: 68-00563 Oregon Certification #: MN200001 North Dakota Certification #: R-036 North Carolina Certification #: R-036 North Carolina Certification #: 11647 New Jersey Certification #: 11647 New Jersey Certification #: MN-002 Montana Certification #: MT CERT0092

Minnesota Certification #: 027-053-137 Maine Certification #: 2007029 Louisiana Certification #: LA080009 Louisiana Certification #: LA08009 Kansas Certification #: E-10167 Iowa Certification #: 368 Illinois Certification #: 200011 Florida/NELAP Certification #: E87605 California Certification #: 01155CA Arizona Certification #: 01155CA Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

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Page 2 of 11



SAMPLE SUMMARY

Project: Pace Project No	0506-117-11 Parkwater b.: 10118258			
Lab ID	Sample ID	Matrix	Date Collected	Date Received
10118258001	VP-CI-120309	Air	12/03/09 10:01	12/04/09 09:07

REPORT OF LABORATORY ANALYSIS

Page 3 of 11





SAMPLE ANALYTE COUNT

Project: Pace Project No	0506-117-11 Parkwater .: 10118258				
Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10118258001	VP-CI-120309		CJR	65	PASI-M

REPORT OF LABORATORY ANALYSIS

Page 4 of 11





PROJECT NARRATIVE

Project: 0506-117-11 Parkwater

Pace Project No.: 10118258

Method: TO-15

Description:TO15 MSV AIRClient:GeoEngineers,Inc.Date:December 22, 2009

General Information:

1 sample was analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: AIR/9503

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 727324)
 - 1,1,2-Trichloroethane

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: AIR/9503

- D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
 - VP-CI-120309 (Lab ID: 10118258001)
 - Dichlorodifluoromethane

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 5 of 11





ANALYTICAL RESULTS

Project: 0506-117-11 Parkwater

Pace Project No.: 10118258

Sample: VP-CI-120309	Lab ID:	10118258001	Collecte	d: 12/03/0	9 10:01	Received: 12	/04/09 09:07 M	atrix: Air	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
TO15 MSV AIR	Analytical	Method: TO-1	5						
1,1,1-Trichloroethane	ND p	pbv	13.9	7.0	26.8		12/17/09 05:42	71-55-6	
1,1,2,2-Tetrachloroethane	ND p	pbv	13.9	7.0	26.8		12/17/09 05:42	79-34-5	
1,1,2-Trichloroethane	ND p	pbv	13.9	7.0	26.8		12/17/09 05:42	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND p	pbv	13.9	7.0	26,8		12/17/09 05:42	76-13-1	
1,1-Dichloroethane	ND p	pbv	13.9	7.0	26.8		12/17/09 05:42	75-34-3	
1,1-Dichloroethene	ND p	pbv	13.9	7.0	26,8		12/17/09 05:42	75-35-4	
1,2,4-Trichlorobenzene	ND p		13.9	7.0	26.8		12/17/09 05:42	120-82-1	
1,2,4-Trimethylbenzene	ND p	pbv	13.7	6.8	26.8		12/17/09 05:42	95-63-6	
1,2-Dibromoethane (EDB)	ND p	pbv	13.9	7.0	26.8		12/17/09 05:42	106-93-4	
1,2-Dichlorobenzene	ND p	pbv	13.7	6.8	26.8		12/17/09 05:42	95-50-1	
2-Dichloroethane	ND p	pbv	13.9	7.0	26.8		12/17/09 05:42	107-06-2	
1,2-Dichloropropane	ND p	pbv	13.9	7.0	26.8		12/17/09 05:42	78-87-5	
I,3,5-Trimethylbenzene	ND p	pbv	13.9	7.0	26.8		12/17/09 05:42	108-67-8	
1,3-Butadiene	ND p	pbv	13.9	7.0	26.8		12/17/09 05:42	106-99-0	
,3-Dichlorobenzene	ND p	pbv	13.7	6.8	26.8		12/17/09 05:42	541-73-1	
,4-Dichlorobenzene	ND p	obv	13.7	6.8	26.8		12/17/09 05:42		
,4-Dioxane (p-Dioxane)	ND p	obv	2.7	1.3	26.8		12/17/09 05:42	123-91-1	
2,4-Trimethylpentane	ND p	obv	13.4	6.7	26.8		12/17/09 05:42	540-84-1	
-Butanone (MEK)	ND p	obv	14.7	7.4	26.8		12/17/09 05:42	78-93-3	
-Hexanone	ND p	obv	14.7	7.4	26.8		12/17/09 05:42	591-78-6	
2-Propanol	ND p	obv	13.4	6.7	26.8		12/17/09 05:42	67-63-0	
-Ethyltoluene	ND p	obv	14.2	7.1	26.8		12/17/09 05:42	622-96-8	
-Methyl-2-pentanone (MIBK)	ND p	obv	14.7	7.4	26.8		12/17/09 05:42	108-10-1	
Acetone	ND p	obv	14.7	7.4	26.8		12/17/09 05:42		
Benzene	ND p	obv	13.9	7.0	26.8		12/17/09 05:42	71-43-2	
Bromodichloromethane	ND p	obv	13.7	6.8	26.8		12/17/09 05:42	75-27-4	
Bromoform	ND p	obv	13.9	7.0	26.8		12/17/09 05:42	75-25-2	
Iromomethane	ND p	obv	13.7	6,8	26.8		12/17/09 05:42	74-83-9	
Carbon disulfide	ND pp	obv	13.4	6.7	26.8		12/17/09 05:42	75-15-0	
arbon tetrachloride	ND pp	obv	13.7	6.8	26.8		12/17/09 05:42	56-23-5	
Chlorobenzene	ND pp	obv	13.9	7.0	26.8		12/17/09 05:42	108-90-7	
Chloroethane	ND pr	obv	13.7	6.8	26.8		12/17/09 05:42	75-00-3	
Chloroform	ND pp	bv	13.7	6,8	26.8		12/17/09 05:42	67-66-3	
Chloromethane	ND pp	bv	13.4	6.7	26.8		12/17/09 05:42	74-87-3	
Syclohexane	ND pp	bv	13.9	7.0	26,8		12/17/09 05:42	110-82-7	
Dibromochloromethane	ND pp		14.2	7.1	26.8		12/17/09 05:42		
Dichlorodifluoromethane	ND pp	bv	13,7	6.8	26.8		12/17/09 05:42	75-71-8	D3
Pichlorotetrafluoroethane	ND pp		15.3	7.6	26.8		12/17/09 05:42		
thanol	ND pp		13.4	6.7	26.8		12/17/09 05:42		
thyl acetate	ND pp		13.7	6,8	26.8		12/17/09 05:42		
thylbenzene	ND pp		13.9	7.0	26.8		12/17/09 05:42		
lexachloro-1,3-butadiene	ND pp		13.4	6.7	26.8		12/17/09 05:42		
sopropylbenzene (Cumene)	ND pp		13.4	6.7	26.8		12/17/09 05:42		
1ethyl-tert-butyl ether	ND pp		26.8	13.4	26.8		12/17/09 05:42		
1ethylene Chloride	ND pp		13,9	7,0	26.8		12/17/09 05:42		
laphthalene	ND pp		13.4	6.7	26.8		12/17/09 05:42		

Date: 12/22/2009 03:25 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-117-11 Parkwater

Pace Project No.: 10118258

Sample: VP-CI-120309	Lab ID: 1	0118258001	Collecte	d: 12/03/0	9 10:01	Received: 12/	/04/09 09:07 M	atrix: Air	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical M	ethod: TO-15							
Propylene	ND ppb	v	53.6	26.8	26.8		12/17/09 05:42	115-07-1	
Styrene	ND ppb	v	14.7	7.4	26.8		12/17/09 05:42	100-42-5	
THC as Gas	11300 ppb	v	536	268	26.8		12/17/09 05:42		
Tetrachloroethene	ND ppb	v	13.9	7.0	26.8		12/17/09 05:42	127-18-4	
Tetrahydrofuran	ND ppb	v	13.9	7.0	26.8		12/17/09 05:42	109-99-9	
Toluene	ND ppb	v	13.9	7.0	26.8		12/17/09 05:42	108-88-3	
Trichloroethene	ND ppb	v	13.9	7.0	26,8		12/17/09 05:42	79-01-6	
Trichlorofluoromethane	ND ppb	v	13.4	6.7	26.8		12/17/09 05:42	75-69-4	
Vinyl acetate	ND ppb	v	14.7	7.4	26.8		12/17/09 05:42	108-05-4	
Vinyl chloride	ND ppb	v	13.7	6.8	26.8		12/17/09 05:42	75-01-4	
Xylene (Total)	ND ppb	v	40.2	20.1	26.8		12/17/09 05:42	1330-20-7	
cis-1,2-Dichloroethene	ND ppb	v	13.9	7.0	26.8		12/17/09 05:42	156-59-2	
cis-1,3-Dichloropropene	ND ppb	v	13.7	6.8	26.8		12/17/09 05:42	10061-01-5	
m&p-Xylene	ND ppb [,]	v	26.8	13.4	26.8		12/17/09 05:42	1330-20-7	
n-Heptane	ND ppb	v	13.9	7,0	26.8		12/17/09 05:42	142-82-5	
n-Hexane	ND ppb		14.2	7.1	26.8		12/17/09 05:42	110-54-3	
o-Xylene	ND ppb		13.9	7.0	26.8		12/17/09 05:42	95-47-6	
trans-1,2-Dichloroethene	ND ppb		26.8	13.4	26.8		12/17/09 05:42		
trans-1,3-Dichloropropene	ND ppb		13.9	7.0	26.8		12/17/09 05:42		

Date: 12/22/2009 03:25 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

TO-15

TO15 MSV AIR

Analysis Method:

Analysis Description:

0506-117-11 Parkwater Project:

ce Project No.:	10118
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Pa

258

QC Batch:	AIR/9503
QC Batch Method:	TO-15

Associated Lab Samples: 10118258001

METHOD BLANK: 727323 Matrix: Air Associated Lab Samples: 10118258001 Blank Reporting Parameter Units Result Limit Analyzed Qualifiers 1,1,1-Trichloroethane ppbv ND 0.52 12/16/09 20:18 1,1,2,2-Tetrachloroethane ppbv ND 0.52 12/16/09 20:18 ND 1,1,2-Trichloroethane ppbv 0.52 12/16/09 20:18 ND 1.1.2-Trichlorotrifluoroethane 0.52 ppbv 12/16/09 20:18 1.1-Dichloroethane ND 0.52 12/16/09 20:18 ppbv 1.1-Dichloroethene ND ppbv 0.52 12/16/09 20:18 1,2,4-Trichlorobenzene ND ppbv 0.52 12/16/09 20:18 1,2,4-Trimethylbenzene ppbv ND 0.51 12/16/09 20:18 1,2-Dibromoethane (EDB) ppby ND 0.52 12/16/09 20:18 1,2-Dichlorobenzene ppbv ND 0.51 12/16/09 20:18 1,2-Dichloroethane ND ppbv 0.52 12/16/09 20:18 1,2-Dichloropropane ppbv ND 0.52 12/16/09 20:18 1,3,5-Trimethylbenzene ppbv ND 0.52 12/16/09 20:18 1.3-Butadiene ppbv ND 0.52 12/16/09 20:18 1,3-Dichlorobenzene ppbv ND 0.51 12/16/09 20:18 1,4-Dichlorobenzene ppbv ND 0.51 12/16/09 20:18 1,4-Dioxane (p-Dioxane) ppbv ND 0.10 12/16/09 20:18 2,2,4-Trimethylpentane ppbv ND 0.50 12/16/09 20:18 2-Butanone (MEK) ND 0.55 ppbv 12/16/09 20:18 2-Hexanone ppbv ND 0.55 12/16/09 20:18 2-Propanol ND 0.50 12/16/09 20:18 ppbv ppbv 4-Ethyltoluene ND 0.53 12/16/09 20:18 4-Methyl-2-pentanone (MIBK) ppbv ND 0.55 12/16/09 20:18 Acetone ppbv ND 0.55 12/16/09 20:18 0.52 12/16/09 20:18 Benzene ppbv ND Bromodichloromethane ppbv ND 0.51 12/16/09 20:18 Bromoform ppbv ND 0.52 12/16/09 20:18 ppbv Bromomethane ND 0.51 12/16/09 20:18 Carbon disulfide ppbv ND 0.50 12/16/09 20:18 Carbon tetrachloride ND ppbv 0.51 12/16/09 20:18 Chlorobenzene ppbv ND 0.52 12/16/09 20:18 Chloroethane ND 0.51 12/16/09 20:18 ppbv Chloroform ND 0.51 12/16/09 20:18 ppbv Chloromethane ppbv ND 0.50 12/16/09 20:18 ppbv cis-1,2-Dichloroethene ND 0.52 12/16/09 20:18 ppbv cis-1,3-Dichloropropene ND 0.51 12/16/09 20:18 Cyclohexane 12/16/09 20:18 ppbv ND 0.52 Dibromochloromethane ND 0.53 12/16/09 20:18 ppbv Dichlorodifluoromethane ppbv ND 0.51 12/16/09 20:18 Dichlorotetrafluoroethane ppbv ND 0.57 12/16/09 20:18

Date: 12/22/2009 03:25 PM

ppbv

ppbv

ppbv

Ethanol

Ethyl acetate

Ethylbenzene

REPORT OF LABORATORY ANALYSIS

0.50

0.51

0.52

12/16/09 20:18

12/16/09 20:18

12/16/09 20:18

ND

ND

ND





QUALITY CONTROL DATA

Project: 0506-117-11 Parkwater

Pace Project No.: 10118258

METHOD BLANK: 727323

Matrix: Air

Associated Lab Samples: 10118258001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ppbv		0.50	12/16/09 20:18	
Isopropylbenzene (Cumene)	ppbv	ND	0.50	12/16/09 20:18	
m&p-Xylene	ppbv	ND	1.0	12/16/09 20:18	
Methyl-tert-butyl ether	ppbv	ND	1.0	12/16/09 20:18	
Methylene Chloride	ppbv	ND	0.52	12/16/09 20:18	
n-Heptane	ppbv	ND	0.52	12/16/09 20:18	
n-Hexane	ppbv	ND	0.53	12/16/09 20:18	
Naphthalene	ppbv	ND	0.50	12/16/09 20:18	
o-Xylene	ppbv	ND	0.52	12/16/09 20:18	
Propylene	ppbv	ND	2.0	12/16/09 20:18	
Styrene	ppbv	ND	0.55	12/16/09 20:18	
Tetrachloroethene	ppbv	ND	0.52	12/16/09 20:18	
Tetrahydrofuran	ppbv	ND	0.52	12/16/09 20:18	
THC as Gas	ppbv	ND	20.0	12/16/09 20:18	
Toluene	ppbv	ND	0.52	12/16/09 20:18	
trans-1,2-Dichloroethene	ppbv	ND	1.0	12/16/09 20:18	
trans-1,3-Dichloropropene	ppbv	ND	0.52	12/16/09 20:18	
Trichloroethene	ppbv	ND	0.52	12/16/09 20:18	
Trichlorofluoromethane	ppbv	ND	0.50	12/16/09 20:18	
Vinyl acetate	ppbv	ND	0.55	12/16/09 20:18	
Vinyl chloride	ppbv	ND	0.51	12/16/09 20:18	
Xylene (Total)	ppbv	ND	1.5	12/16/09 20:18	

LABORATORY CONTROL SAMPLE: 727324

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ppbv		10.4	104	60-125	
1,1,2,2-Tetrachloroethane	ppbv	10	11.0	110	57-127	
1,1,2-Trichloroethane	ppbv	10	12.6	126	56-125	L3
1,1,2-Trichlorotrifluoroethane	ppbv	10	9.6	96	52-133	
1,1-Dichloroethane	ppbv	10	9.8	98	54-127	
1,1-Dichloroethene	ppbv	10	10.0	100	52-129	
1,2,4-Trichlorobenzene	ppbv	10	10.4	104	30-150	
1,2,4-Trimethylbenzene	ppbv	10	10.7	107	52-145	
1,2-Dibromoethane (EDB)	ppbv	10	10.8	108	59-133	
1,2-Dichlorobenzene	ppbv	10	10.8	108	67-135	
1,2-Dichloroethane	ppbv	10	10.5	105	54-125	
1,2-Dichloropropane	ppbv	10	11.0	110	64-125	
1,3,5-Trimethylbenzene	ppbv	10	11.1	111	56-135	
1,3-Butadiene	ppbv	10	9.8	98	55-125	
1,3-Dichlorobenzene	ppbv	10	10.7	107	61-142	
1,4-Dichlorobenzene	ppbv	10	11.7	117	55-142	
1,4-Dioxane (p-Dioxane)	ppbv	10	11.6	116	70-130	
2,2,4-Trimethylpentane	ppbv	10	11.2	112	70-130	
2-Butanone (MEK)	ppbv	10	10.2	102	47-141	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 0506-117-11 Parkwater

Pace Project No.: 10118258

LABORATORY CONTROL SAMPLE: 727324

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Hexanone	ppbv	10	10.5	105	41-138	
2-Propanol	ppbv	10	10.2	102	63-125	
4-Ethyltoluene	ppbv	10	10.8	108	62-130	
4-Methyl-2-pentanone (MIBK)	ppbv	10	10.4	104	53-134	
Acetone	ppbv	10	10.9	109	44-149	
Benzene	ppbv	10	10.7	107	61-126	
Bromodichloromethane	ppbv	10	11.1	111	54-129	
Bromoform	ppbv	10	10.7	107	56-125	
Bromomethane	ppbv	10	9,4	94	56-128	
Carbon disulfide	ppby	10	9.9	99	58-150	
Carbon tetrachloride	ppbv	10	10	100	55-125	
Chlorobenzene	ppbv	10	13.1	131	48-138	
Chloroethane	ppbv	10	9.7	97	56-128	
Chloroform	ppbv	10	10.1	101	55-125	
Chloromethane	ppbv	10	9.2	92	50-131	
cis-1,2-Dichloroethene	ppbv	10	10.1	101	64-125	
cis-1,3-Dichloropropene	ppbv	10	10.7	107	61-132	
Cyclohexane	ppbv	10	10.9	109	61-130	
Dibromochloromethane	ppbv	10	10.7	107	51-129	
Dichlorodifluoromethane	ppbv	10	9.2	92	56-132	
Dichlorotetrafluoroethane	ppbv	10	9.7	97	48-125	
Ethanol	ppbv	10	11.8	118	70-130	
Ethyl acetate	ppbv	10	10.5	105	66-149	
Ethylbenzene	ppbv	10	10.8	108	56-137	
Hexachloro-1,3-butadiene	ppbv	10	10.5	105	30-150	
sopropylbenzene (Cumene)	ppbv	10.4	10.8	104	67-134	
n&p-Xylene	ppbv	20	22.0	110	62-135	
Methyl-tert-butyl ether	ppbv	10	10.0	100	59-125	
Methylene Chloride	ppbv	10	11.4	114	46-143	
-Heptane	ppbv	10	11.3	113	64-130	
n-Hexane	ppbv	10	8.4	84	61-134	
Naphthalene	ppbv	10	10.5	105	30-150	
-Xylene	ppbv	10	10.5	103	61-134	
Propylene	ppbv ppbv	10	11,4	113	62-146	
Styrene	ppbv	10	11.0	110	63-134	
Tetrachloroethene	ppbv	10	12.6	126	61-132	
Fetrahydrofuran	ppbv	10	12.0	120	62-137	
THC as Gas	ppbv	700	681	97	61-125	
roluene		10	10.6	97 106	57-132	
rans-1,2-Dichloroethene	ppbv ppbv	10	9.8	98	57-132 52-130	
	• •	10	9.8 10.4	98 104	52-130 61-129	
rans-1,3-Dichloropropene	ppbv	10	9.1	91	72-147	
Trichloroethene Trichloroflucromethane	ppbv	10		91 97		
Trichlorofluoromethane	ppbv		9.7		58-141 56-131	
Vinyl acetate	ppbv	10	10.8	108		
Vinyl chloride	ppbv	10	9.6	96	56-136 70 130	
Kylene (Total)	ppbv	30	33.3	111	70-130	

Date: 12/22/2009 03:25 PM

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 0506-117-11 Parkwater Pace Project No.: 10118258

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

- D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

Date: 12/22/2009 03:25 PM

REPORT OF LABORATORY ANALYSIS

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December 15, 2009

Carol Davy PACE ANALYTICAL 1700 Elm Street SE Minneapolis, MN 55127-

Bureau Veritas Work Order No. 09120425

Reference: 10118258/0506-117-11 PARKWATER

Dear Carol Davy:

Bureau Veritas North America, Inc. received 1 sample on 12/8/2009 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely,

Karea Coonka

Karen Coonan Client Services Representative cc:

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CASE NARRATIVE

Date: 16-Dec-09

Client: PACE ANALYTICAL

Project: 10118258/0506-117-11 PARKWATER

Work Order No 09120425

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected.

The following result has been converted from mg/m3 to ug/m3. Sample -001A: THCs as Diesel = <1200 ug/m3

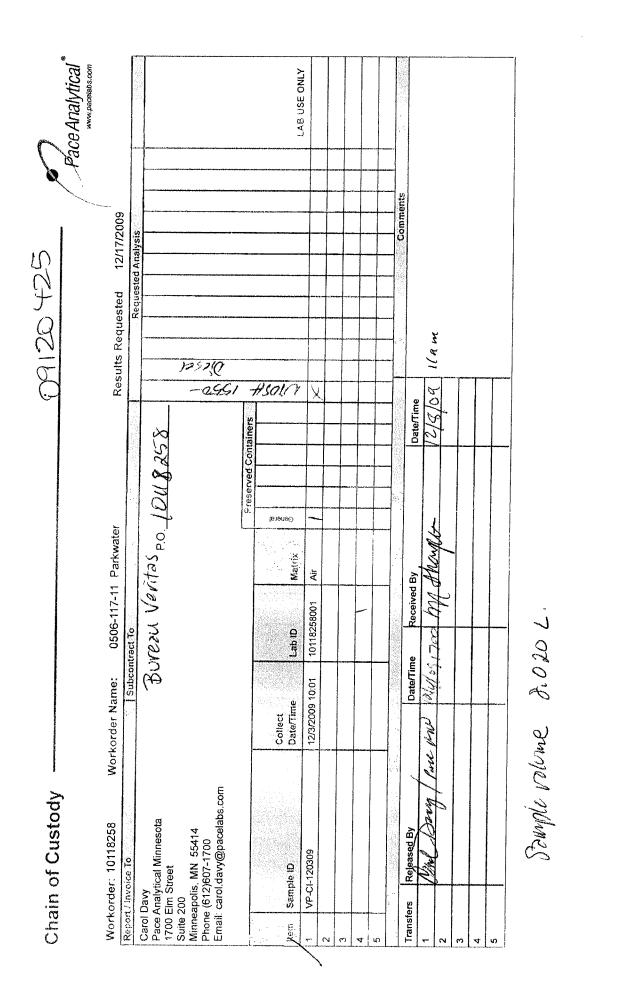
ANALYTICAL RESULTS

Date:	15-Dec-09
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THCs as Diesel		<10	<1.2		10	NIOSH 1550	12/11/200	
Analyte		(µg)	(mg/m³)	(ppm)	Limit (µg)	Test Method	Date Analyzed	
			Analytical Res	ults	Reporting			
Analyst	СМІ					Air Volume (L): 8	.02	
Sample Type	Charcoal Tube					Date Received: 1	2/8/2009	
Lab Number:	001A					Date Sampled: 1	2/3/2009	
Sample Identifica	tion: VP-CI-120309							
Project:	10118258/0506-117-11	PARKWATER				Work Order No: 09120425		
Client:	PACE ANALYTICAI							

General Notes:

<: Less than the indicated reporting limit (RL).
-: Information not available or not applicable.
Back sections (if applicable) were checked and showed no significant breakthrough unless otherwise noted.



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Friday. December 04, 2009 4:19:14 PM

AIR: CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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FC046Rev.00, 21May2009

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Project Manager Review:	· · · · · · ·		· · · · · · · · · · · · · · · · · · ·	<u>Ann</u>		Date: 12-7-08

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Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers) A106 Rev.01 (22May2009)



Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700 Fax: 612.607.6444

ANALYTICAL RESULTS

Lab Sample No: 10118258001 ProjSampleNum: 10118258001 Date Collected: 120309 10:31 Client Sample ID: VP-CI-120309 Mattix: Air Date Collected: 120309 10:31 Parameters Results Units Report Limit DF Analyzed CAS No. Quailliers Air To 15	Client: GeoEngineers,Inc. Phone: (509)363-3125					Lab Project Num Project Na	nber: 10118258 ame: 0506-117-	11 Parkwater
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1,2-Dichloroethane ND ug/L 0.057 26.8 12/17/09 5:42 CJR 107-06-2 1,2-Dichloropropane ND ug/L 0.065 26.8 12/17/09 5:42 CJR 78-87-5 1,3-Strimethylbenzene ND ug/L 0.069 26.8 12/17/09 5:42 CJR 108-67-8 1,3-Bichlorobenzene ND ug/L 0.031 26.8 12/17/09 5:42 CJR 106-99-0 1,4-Dicklorobenzene ND ug/L 0.084 26.8 12/17/09 5:42 CJR 106-46-7 1,4-Dicklorobenzene ND ug/L 0.084 26.8 12/17/09 5:42 CJR 540-84-1 2,4-Timethylpentane ND ug/L 0.064 26.8 12/17/09 5:42 CJR 540-84-1 2-Hexanone MD ug/L 0.061 26.8 12/17/09 5:42 CJR 591-78-6 2-Propanol ND ug/L 0.061 26.8 12/17/09 5:42 CJR 67-63-0 4-Ethyltoluene ND ug/L 0.071 26.8 12/17/09 5:42 CJR 67-64-1	1,2-Dibromoethane (EDB)	ND	ug/L	0.11	26.8	12/17/09 5:42 CJ	R 106-93-4	
1,2-Dichloropropane ND ug/L 0.065 26.8 12/17/09 5:42 CJR 78-87-5 1,3,5-Trimethylbenzene ND ug/L 0.069 26.8 12/17/09 5:42 CJR 108-67-8 1,3-Butadiene ND ug/L 0.031 26.8 12/17/09 5:42 CJR 541-73-1 1,4-Dichlorobenzene ND ug/L 0.084 26.8 12/17/09 5:42 CJR 64-6-7 1,4-Dichlorobenzene ND ug/L 0.084 26.8 12/17/09 5:42 CJR 64-64-7 1,4-Dioxane (p-Dioxane) ND ug/L 0.064 26.8 12/17/09 5:42 CJR 64-64-7 2,4-Trimethylpentane ND ug/L 0.064 26.8 12/17/09 5:42 CJR 640-84-1 2-Propanol ND ug/L 0.061 26.8 12/17/09 5:42 CJR 67-63-0 4-Ethyltoluene ND ug/L 0.061 26.8 12/17/09 5:42 CJR 67-64-1 Benzene ND ug/L	1,2-Dichlorobenzene	ND	ug/L	0.084		12/17/09 5:42 CJ	R 95-50-1	
1,3,5-Trimethybenzene ND ug/L 0.069 26.8 12/17/09 5:42 CJR 108-67-8 1,3-Butadiene ND ug/L 0.031 26.8 12/17/09 5:42 CJR 106-99-0 1,3-Dichlorobenzene ND ug/L 0.084 26.8 12/17/09 5:42 CJR 541-73-1 1,4-Dichlorobenzene ND ug/L 0.084 26.8 12/17/09 5:42 CJR 164-66-7 1,4-Dichlorobenzene ND ug/L 0.064 26.8 12/17/09 5:42 CJR 78-93-3 2,4-Trimethylpentane ND ug/L 0.064 26.8 12/17/09 5:42 CJR 78-93-3 2-Hexanone ND ug/L 0.061 26.8 12/17/09 5:42 CJR 67-63-0 4-Ethyltoluene ND ug/L 0.031 26.8 12/17/09 5:42 CJR 67-64-1 Benzene ND ug/L 0.061 26.8 12/17/09 5:42 CJR 76-44-1 Benzene ND ug/L 0.053 26.8 12/17/09 5:42 CJR 75-25-2 Bromodichlor	1,2-Dichloroethane	ND	ug/L			12/17/09 5:42 CJ	R 107-06-2	
1,3-Butadiene ND ug/L 0.031 26.8 12/17/09 5.42 CJR 106-99-0 1,3-Dichlorobenzene ND ug/L 0.084 26.8 12/17/09 5.42 CJR 541-73-1 1,4-Dichlorobenzene ND ug/L 0.084 26.8 12/17/09 5.42 CJR 106-64-7 1,4-Dickane (p-Dioxane) ND ug/L 0.0099 26.8 12/17/09 5.42 CJR 78-93-3 2,4-trimethylpentane ND ug/L 0.064 26.8 12/17/09 5.42 CJR 591-78-6 2-Butanone (MEK) ND ug/L 0.061 26.8 12/17/09 5.42 CJR 62-96-8 2-Propanol ND ug/L 0.061 26.8 12/17/09 5.42 CJR 62-96-8 4-Ethyltoluene ND ug/L 0.033 26.8 12/17/09 5.42 CJR 62-96-8 4-Methyl-2-pentanone (MIBK) ND ug/L 0.035 26.8 12/17/09 5.42 CJR 67-64-1 Bromodichloromethane ND ug/L 0.045 26.8 12/17/09 5.42 CJR 75-27-4 <td></td> <td>ND</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		ND						
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1,4-DichlorobenzeneNDug/L0.08426.812/17/095:42CJR106-46-71,4-Dioxane (p-Dioxane)NDug/L0.009926.812/17/095:42CJR123-91-12,2,4-TrimethylpentaneNDug/L0.06426.812/17/095:42CJR78-93-32-HexanoneNDug/L0.06126.812/17/095:42CJR78-93-32-HexanoneNDug/L0.06126.812/17/095:42CJR69-662-PropanolNDug/L0.03326.812/17/095:42CJR622-96-84-EthyltolueneNDug/L0.06126.812/17/095:42CJR622-96-84-Methyl-2-pentanone (MIBK)NDug/L0.06126.812/17/095:42CJR67-64-1BenzeneNDug/L0.03526.812/17/095:42CJR75-27-4BromodichloromethaneNDug/L0.04526.812/17/095:42CJR75-25-2BromomethaneNDug/L0.06426.812/17/095:42CJR75-25-2BromomethaneNDug/L0.06526.812/17/095:42CJR75-55-2BromomethaneNDug/L0.06526.812/17/095:42CJR75-60-3Carbon tetrachlorideNDug/L0.06526.812/17/095:42CJR76-0-3ChlorobenzeneND <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
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2-Butanone (MEK)NDug/L0.04426.812/17/09 5:42CJR78-93-32-HexanoneNDug/L0.06126.812/17/09 5:42CJR591-78-62-PropanolNDug/L0.03326.812/17/09 5:42CJR67-63-04-EthyltolueneNDug/L0.07126.812/17/09 5:42CJR622-96-84-Methyl-2-pentanone (MIBK)NDug/L0.06126.812/17/09 5:42CJR67-64-1AcetoneNDug/L0.03526.812/17/09 5:42CJR67-64-1BenzeneNDug/L0.04526.812/17/09 5:42CJR75-27-4BromodichloromethaneNDug/L0.05426.812/17/09 5:42CJR75-25-2BromodormNDug/L0.05426.812/17/09 5:42CJR75-25-2BromotethaneNDug/L0.05426.812/17/09 5:42CJR75-25-2BromotethaneNDug/L0.05426.812/17/09 5:42CJR75-25-2BromotethaneNDug/L0.05426.812/17/09 5:42CJR75-25-2BromotethaneNDug/L0.05626.812/17/09 5:42CJR75-25-2Carbon disulfideNDug/L0.08826.812/17/09 5:42CJR75-05-0Carbon tetrachlorideNDug/L0.08826.812/17/09 5:42CJR75-00-3ChlorobenzeneNDug/L </td <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>			-					
2-HexanoneNDug/L0.06126.812/17/09 5:42CJR591-78-62-PropanolNDug/L0.03326.812/17/09 5:42CJR67-63-04-EthyltolueneNDug/L0.07126.812/17/09 5:42CJR622-96-84-Methyl-2-pentanone (MIBK)NDug/L0.06126.812/17/09 5:42CJR67-64-1AcetoneNDug/L0.04526.812/17/09 5:42CJR67-64-1BenzeneNDug/L0.09326.812/17/09 5:42CJR75-27-4BromodichloromethaneNDug/L0.05426.812/17/09 5:42CJR75-27-4BromoformNDug/L0.05426.812/17/09 5:42CJR75-27-4BromoformNDug/L0.05426.812/17/09 5:42CJR75-25-2BromonethaneNDug/L0.05426.812/17/09 5:42CJR75-15-0Carbon disulfideNDug/L0.06526.812/17/09 5:42CJR75-15-0ChlorobenzeneNDug/L0.08626.812/17/09 5:42CJR75-00-3ChloroformNDug/L0.06526.812/17/09 5:42CJR76-6-3ChloroethaneNDug/L0.02826.812/17/09 5:42CJR74-87-3ChloroethaneNDug/L0.02826.812/17/09 5:42CJR74-87-3ChloroethaneNDug/L0.026<			-					
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4-EthyltolueneNDug/L0.07126.812/17/09 5:42CJR622-96-84-Methyl-2-pentanone (MIBK)NDug/L0.06126.812/17/09 5:42CJR108-10-1AcetoneNDug/L0.03526.812/17/09 5:42CJR67-64-1BenzeneNDug/L0.04526.812/17/09 5:42CJR71-43-2BromodichloromethaneNDug/L0.09326.812/17/09 5:42CJR75-27-4BromoformNDug/L0.05426.812/17/09 5:42CJR75-25-2BromomethaneNDug/L0.05426.812/17/09 5:42CJR75-15-0Carbon disulfideNDug/L0.04526.812/17/09 5:42CJR75-15-0Carbon tetrachlorideNDug/L0.06526.812/17/09 5:42CJR75-00-3ChlorobenzeneNDug/L0.06826.812/17/09 5:42CJR75-00-3ChloroformNDug/L0.02826.812/17/09 5:42CJR74-87-3ChloroformNDug/L0.06626.812/17/09 5:42CJR74-87-3Cis-1,2-DichloroetheneNDug/L0.06326.812/17/09 5:42CJR74-87-3cis-1,3-DichloropropeneNDug/L0.06326.812/17/09 5:42CJR76-59-2cis-1,3-DichloropropeneNDug/L0.06326.812/17/09 5:42CJR10661-01-5Cyclohe			-					
4-Methyl-2-pentanone (MIBK)NDug/L0.06126.812/17/09 5:42CJR108-10-1AcetoneNDug/L0.03526.812/17/09 5:42CJR67-64-1BenzeneNDug/L0.04526.812/17/09 5:42CJR71-43-2BromodichloromethaneNDug/L0.09326.812/17/09 5:42CJR75-27-4BromoformNDug/L0.1526.812/17/09 5:42CJR75-25-2BromomethaneNDug/L0.05426.812/17/09 5:42CJR75-25-2BromodisulfideNDug/L0.05426.812/17/09 5:42CJR75-15-0Carbon disulfideNDug/L0.08826.812/17/09 5:42CJR56-23-5ChlorobenzeneNDug/L0.06526.812/17/09 5:42CJR75-00-3ChloroformNDug/L0.06826.812/17/09 5:42CJR75-00-3ChloroformNDug/L0.06826.812/17/09 5:42CJR67-66-3ChloroformNDug/L0.02826.812/17/09 5:42CJR74-87-3cis-1,2-DichloropropeneNDug/L0.05626.812/17/09 5:42CJR75-25-2cis-1,3-DichloropropeneNDug/L0.06326.812/17/09 5:42CJR75-00-3cis-1,3-DichloropropeneNDug/L0.06626.812/17/09 5:42CJR74-87-3cis-1,3-Dichloroprope	,							
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ChloroformNDug/L0.06826.812/17/09 5:42CJR67-66-3ChloromethaneNDug/L0.02826.812/17/09 5:42CJR74-87-3cis-1,2-DichloroetheneNDug/L0.05626.812/17/09 5:42CJR156-59-2cis-1,3-DichloropropeneNDug/L0.06326.812/17/09 5:42CJR10061-01-5CyclohexaneNDug/L0.04926.812/17/09 5:42CJR110-82-7			-					
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cis-1,3-DichloropropeneNDug/L0.06326.812/17/095:42CJR10061-01-5CyclohexaneNDug/L0.04926.812/17/095:42CJR110-82-7			-					
Cyclohexane ND ug/L 0.049 26.8 12/17/09 5:42 CJR 110-82-7			-					5
•			-			12/17/09 5:42 CJ		
	Dibromochloromethane	ND	ug/L	0.12	26.8	12/17/09 5:42 CJ	R 124-48-1	

SUPPLEMENTAL REPORT

Date: 12/22/2009

Units Conversion Request

Page 1



Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.6444 Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc.					Lab Project Number:	
Phone: (509)363-3125					Project Name:	0506-117-11 Parkwater
Dichlorodifluoromethane	ND	ug/L	0.069	26.8	12/17/09 5:42 CJR	75-71-8 D3
Dichlorotetrafluoroethane	ND	ug/L	0.11	26.8	12/17/09 5:42 CJR	76-14-2
Ethanol	ND	ug/L	0.026	26.8	12/17/09 5:42 CJR	64-17-5
Ethyl acetate	ND	ug/L	0.05	26.8	12/17/09 5:42 CJR	141-78-6
Ethylbenzene	ND	ug/L	0.061	26.8	12/17/09 5:42 CJR	100-41-4
Hexachloro-1,3-butadiene	ND	ug/L	0.15	26.8	12/17/09 5:42 CJR	87-68-3
Isopropylbenzene (Cumene)	ND	ug/L	0.067	26.8	12/17/09 5:42 CJR	98-82-8
m&p-Xylene	ND	ug/L	0.12	26.8	12/17/09 5:42 CJR	1330-20-7
Methylene Chloride	ND	ug/L	0.049	26.8	12/17/09 5:42 CJR	75-09-2
Methyl-tert-butyl ether	ND	ug/L	0.098	26.8	12/17/09 5:42 CJR	1634-04-4
Naphthalene	ND	ug/L	0.071	26.8	12/17/09 5:42 CJR	91-20-3
n-Heptane	ND	ug/L	0.058	26.8	12/17/09 5:42 CJR	142-82-5
n-Hexane	ND	ug/L	0.051	26.8	12/17/09 5:42 CJR	110-54-3
o-Xylene	ND	ug/L	0.061	26.8	12/17/09 5:42 CJR	95-47-6
Propylene	ND	ug/L	0.094	26.8	12/17/09 5:42 CJR	115-07-1
Styrene	ND	ug/L	0.064	26.8	12/17/09 5:42 CJR	100-42-5
Tetrachloroethene	ND	ug/L	0.096	26.8	12/17/09 5:42 CJR	127-18-4
Tetrahydrofuran	ND	ug/L	0.042	26.8	12/17/09 5:42 CJR	109-99-9
THC as Gas	49	ug/L	2.3	26.8	12/17/09 5:42 CJR	
Toluene	ND	ug/L	0.053	26.8	12/17/09 5:42 CJR	108-88-3
trans-1,2-Dichloroethene	ND	ug/L	0,11	26.8	12/17/09 5:42 CJR	156-60-5
trans-1,3-Dichloropropene	ND	ug/L	0.064	26.8	12/17/09 5:42 CJR	10061-02-6
Trichloroethene	ND	ug/L	0.076	26.8	12/17/09 5:42 CJR	79-01-6
Trichlorofluoromethane	ND	ug/L	0.077	26.8	12/17/09 5:42 CJR	75-69-4
Vinyl acetate	ND	ug/L	0.053	26.8	12/17/09 5:42 CJR	108-05-4
Vinyl chloride	ND	ug/L	0.036	26.8	12/17/09 5:42 CJR	75-01-4
Xylene (Total)	ND	ug/L	0.18	26.8	12/17/09 5:42 CJR	1330-20-7

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

SUPPLEMENTAL REPORT

Units Conversion Request



Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.6444 Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125 Lab Project Number: 10118258 Project Name: 0506-117-11 Parkwater

PARAMETER FOOTNOTES

- ND Not detected at or above adjusted reporting limit
- NC Not Calculable
- ${\tt J}$ Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- [D3] Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

SUPPLEMENTAL REPORT

Units Conversion Request



Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

January 15, 2010

Bruce Williams GeoEngineers,Inc. 523 East Second Ave Spokane, WA 99202

RE: Project: 0506-117-11 Parkwater Pace Project No.: 10119878

Dear Bruce Williams:

Enclosed are the analytical results for sample(s) received by the laboratory on January 05, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Caro Doug-

Carol Davy

carol.davy@pacelabs.com Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Page 1 of 13





Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

CERTIFICATIONS

Project: 0506-117-11 Parkwater Pace Project No.: 10119878

Minnesota Certification IDs

1700 Elm Street SE, Suite 200 Minneapolis, MN 55414 Alaska Certification #: UST-078 Washington Certification #: C754 Tennessee Certification #: 02818 Pennsylvania Certification #: 68-00563 Oregon Certification #: MN200001 North Dakota Certification #: R-036 North Carolina Certification #: R-036 North Carolina Certification #: 11647 New Jersey Certification #: 11647 New Jersey Certification #: MN-002 Montana Certification #: MT CERT0092 Minnesota Certification #: 027-053-137 Michigan DEQ Certification #: 9909 Maine Certification #: 2007029 Louisiana Certification #: LA080009 Louisiana Certification #: 03086 Kansas Certification #: E-10167 Iowa Certification #: E-10167 Iowa Certification #: 200011 Florida/NELAP Certification #: E87605 California Certification #: 01155CA Arizona Certification #: AZ-0014 Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project:0506-117-11 ParkwaterPace Project No.:10119878

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10119878001	VP-CI-123109	Air	12/31/09 11:18	01/05/10 09:11

REPORT OF LABORATORY ANALYSIS

Page 3 of 13





SAMPLE ANALYTE COUNT

Project: 0506-117-11 Parkwater Pace Project No.: 10119878

Lab ID	Sample ID	Method	Analysts	Analytes Reported Labora	tory
10119878001	VP-CI-123109	TO-15	CJR	65 PASI-	М

REPORT OF LABORATORY ANALYSIS

Page 4 of 13



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PROJECT NARRATIVE

Project: 0506-117-11 Parkwater Pace Project No.: 10119878

Method: TO-15

Description:TO15 MSV AIRClient:GeoEngineers,Inc.Date:January 15, 2010

General Information:

1 sample was analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: AIR/9627

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in

- associated samples. Results unaffected by high bias.
 - LCS (Lab ID: 736371)
 - Bromoform

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 5 of 13



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Project: 0506-117-11 Parkwater

Pace Project No.: 10119878

Sample: VP-CI-123109	Lab ID: 1	0119878001 Collect	ed: 12/31/0	9 11:18	Received: 01	I/05/10 09:11 M	atrix: Air	
		Report			_			
Parameters	Results	Units Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical M	ethod: TO-15						
1,1,1-Trichloroethane	ND ppb	ov 0.70	0.35	1.34		01/13/10 16:00	71-55-6	
1,1,2,2-Tetrachloroethane	ND ppb	ov 0.70	0.35	1.34		01/13/10 16:00		
1,1,2-Trichloroethane	ND ppb	ov 0.70	0.35	1.34		01/13/10 16:00	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND ppb	ov 0.70	0.35	1.34		01/13/10 16:00	76-13-1	
1,1-Dichloroethane	ND ppb	ov 0.70	0.35	1.34		01/13/10 16:00	75-34-3	
1,1-Dichloroethene	ND ppb	ov 0.70	0.35	1.34		01/13/10 16:00	75-35-4	
1,2,4-Trichlorobenzene	ND ppb	ov 0.70	0.35	1.34		01/13/10 16:00	120-82-1	
1,2,4-Trimethylbenzene	ND ppb	ov 0.68	0.34	1.34		01/13/10 16:00	95-63-6	
1,2-Dibromoethane (EDB)	ND ppb	ov 0.70	0.35	1.34		01/13/10 16:00	106-93-4	
1,2-Dichlorobenzene	ND ppb	ov 0.68	0.34	1.34		01/13/10 16:00	95-50-1	
1,2-Dichloroethane	1.2 ppb	v 0.70	0.35	1.34		01/13/10 16:00	107-06-2	
1,2-Dichloropropane	ND ppb	ov 0.70	0.35	1.34		01/13/10 16:00	78-87-5	
1,3,5-Trimethylbenzene	ND ppb	ov 0.70	0.35	1.34		01/13/10 16:00	108-67-8	
1,3-Butadiene	ND ppb		0.35	1,34		01/13/10 16:00	106-99-0	
1,3-Dichlorobenzene	ND ppb		0.34	1.34		01/13/10 16:00	541-73-1	
1.4-Dichlorobenzene	ND ppb		0.34	1.34		01/13/10 16:00	106-46-7	
1,4-Dioxane (p-Dioxane)	ND ppb		0.067	1.34		01/13/10 16:00	123-91-1	
2,2,4-Trimethylpentane	1.6 ppb		0.34	1.34		01/13/10 16:00	540-84-1	
2-Butanone (MEK)	5.1 ppb		0.37	1.34		01/13/10 16:00		
2-Hexanone	ND ppb		0.37	1.34		01/13/10 16:00	591-78-6	
2-Propanol	ND ppb		0.34	1.34		01/13/10 16:00	67-63-0	
4-Ethyltoluene	ND ppb		0.36	1.34		01/13/10 16:00		
4-Methyl-2-pentanone (MIBK)	ND ppb		0.37	1.34		01/13/10 16:00		
Acetone	7.8 ppb		0.37	1.34		01/13/10 16:00	67-64-1	
Benzene	ND ppb		0.35	1.34		01/13/10 16:00		
Bromodichloromethane	ND ppb		0.34	1.34		01/13/10 16:00		
Bromoform	ND ppb		0.35	1.34		01/13/10 16:00		
Bromomethane	ND ppb		0.34	1.34		01/13/10 16:00		
Carbon disulfide	0.68 ppb		0.34	1.34		01/13/10 16:00		
Carbon tetrachloride	ND ppb		0.34	1.34		01/13/10 16:00		
Chlorobenzene	ND ppb		0.35	1.34		01/13/10 16:00		
Chloroethane	ND ppb		0.34	1.34		01/13/10 16:00		
Chloroform	ND ppb		0.34	1.34		01/13/10 16:00		
Chloromethane	ND ppb		0.34	1.34		01/13/10 16:00		
Cyclohexane	0.76 ppb		0.35	1.34		01/13/10 16:00		
Dibromochloromethane	ND ppb		0.36	1.34		01/13/10 16:00		
Dichlorodifluoromethane	ND ppb		0.34	1.34		01/13/10 16:00		
Dichlorotetrafluoroethane	ND ppb		0.38	1.34		01/13/10 16:00		
Ethanol	5.4 ppb		0.34	1.34		01/13/10 16:00		
Ethyl acetate	ND ppb		0.34	1.34		01/13/10 16:00		
Ethylbenzene	0.77 ppb		0.34	1.34		01/13/10 16:00		
Hexachloro-1,3-butadiene	ND ppb		0.33	1.34		01/13/10 16:00		
			0.34	1.34		01/13/10 16:00		
Isopropylbenzene (Cumene) Mothyl tort butyl other	ND ppb		0.34	1.34		01/13/10 16:00		
Methyl-tert-butyl ether	ND ppb		0.07	1.34 1.34		01/13/10 16:00		
Methylene Chloride	ND ppb	0.70	0.55	1.34 1.3 4		01/13/10 16:00		

Date: 01/15/2010 10:47 AM

REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 Parkwater

Pace Project No.: 10119878

Sample: VP-CI-123109	Lab ID: 10	119878001 Collected	d: 12/31/0	9 1 1 :18	Received: 01	/05/10 09:11 Ma	atrix: Air	
Parameters	Results	Report Units Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Met	thod: TO-15						
Propylene	5.6 ppbv	2.7	1.3	1.34		01/13/10 16:00	115-07-1	
Styrene	ND ppbv	0.74	0.37	1.34		01/13/10 16:00	100-42-5	
THC as Gas	6 4 90 ppbv	26.8	13.4	1.34		01/13/10 16:00		
Tetrachloroethene	ND ppbv	0.70	0.35	1.34		01/13/10 16:00	127-18-4	
Tetrahydrofuran	ND ppbv	0.70	0.35	1.34		01/13/10 16:00	109-99-9	
Toluene	0.98 ppbv	0.70	0.35	1.34		01/13/10 16:00	108-88-3	
Trichloroethene	ND ppbv	0.70	0.35	1.34		01/13/10 16:00	79-01-6	
Trichlorofluoromethane	ND ppbv	0.67	0.34	1.34		01/13/10 16:00	75-69-4	
Vinyl acetate	ND ppbv	0.74	0.37	1.34		01/13/10 16:00	108-05-4	
Vinyl chloride	ND ppbv	0.68	0.34	1.34		01/13/10 16:00	75-01-4	
Xylene (Total)	2.9 ppbv	2.0	1.0	1.34		01/13/10 16:00	1330-20-7	
cis-1,2-Dichloroethene	ND ppbv	0.70	0.35	1.34		01/13/10 16:00	156-59-2	
cis-1,3-Dichloropropene	ND ppbv	0.68	0.34	1.34		01/13/10 16:00	10061-01-5	
m&p-Xylene	2.9 ppbv	1.3	0.67	1.34		01/13/10 16:00	1330-20-7	
n-Heptane	ND ppbv	0.70	0.35	1.34		01/13/10 16:00	142-82-5	
n-Hexane	ND ppbv	0.71	0.36	1.34		01/13/10 16:00	110-54-3	
o-Xylene	ND ppbv	0.70	0.35	1.34		01/13/10 16:00	95-47-6	
trans-1,2-Dichloroethene	ND ppbv	1.3	0.67	1.34		01/13/10 16:00	156-60-5	
trans-1,3-Dichloropropene	ND ppbv	0.70	0.35	1.34		01/13/10 16:00	10061-02-6	

Date: 01/15/2010 10:47 AM

REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 Parkwater

2-Propanol

Acetone

Benzene

Bromoform Bromomethane

Carbon disulfide

Chlorobenzene Chloroethane

Chloromethane

Cyclohexane

Ethyl acetate

Ethylbenzene

Ethanol

cis-1,2-Dichloroethene

cis-1,3-Dichloropropene

Dibromochloromethane

Dichlorodifluoromethane

Dichlorotetrafluoroethane

Date: 01/15/2010 10:47 AM

Chloroform

Carbon tetrachloride

4-Ethyltoluene

4-Methyl-2-pentanone (MIBK)

Bromodichloromethane

ppbv

ppbv

ppbv

ppbv

ppbv

ppbv

ppbv

ppbv

ppbv

ppbv ppbv

ppbv

ppbv

ppbv

ppbv

ppbv

ppbv

ppbv

ppbv

ppbv

Pace Project No.: 10119878					
QC Batch: AIR/9627		Analysis Meth	nod: TC)-15	
QC Batch Method: TO-15		Analysis Desc	cription: TC	015 MSV AIR	
	9878001	,			
METHOD BLANK: 736370		Matrix:	Air		
Associated Lab Samples: 1011	9878001				
		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
			0.52	01/13/10 10:55	
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	ppbv	ND	0.52	01/13/10 10:55	
1,1,2-Trichloroethane	ppbv ppbv	ND	0.52	01/13/10 10:55	
1,1,2-Trichlorotrifluoroethane	ppbv	ND	0.52	01/13/10 10:55	
1.1-Dichloroethane	ppbv	ND	0.52	01/13/10 10:55	
1,1-Dichloroethene	ppbv	ND	0.52	01/13/10 10:55	
1,2,4-Trichlorobenzene	ppbv	ND	0.52	01/13/10 10:55	
1,2,4-Trimethylbenzene	ppbv	ND	0.51	01/13/10 10:55	
1,2-Dibromoethane (EDB)	ppbv	ND	0.52	01/13/10 10:55	
1,2-Dichlorobenzene	ppbv	ND	0.51	01/13/10 10:55	
1,2-Dichloroethane	ppbv	ND	0.52	01/13/10 10:55	
1,2-Dichloropropane	ppbv	ND	0.52	01/13/10 10:55	
1,3,5-Trimethylbenzene	ppbv	ND	0.52	01/13/10 10:55	
1,3-Butadiene	ppbv	ND	0.52	01/13/10 10:55	
1,3-Dichlorobenzene	ppbv	ND	0.51	01/13/10 10:55	
1,4-Dichlorobenzene	ppbv	ND	0.51	01/13/10 10:55	
1,4-Dioxane (p-Dioxane)	ppbv	ND	0.10	01/13/10 10:55	
2,2,4-Trimethylpentane	ppbv	ND	0.50	01/13/10 10:55	
2-Butanone (MEK)	ppbv	ND	0.55	01/13/10 10:55	
2-Hexanone	ppbv	ND	0.55	01/13/10 10:55	

ND

0.50 01/13/10 10:55

0.53 01/13/10 10:55

0.55 01/13/10 10:55

0.55 01/13/10 10:55

0.52 01/13/10 10:55

0.51 01/13/10 10:55

0.52 01/13/10 10:55

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0.53 01/13/10 10:55

0.51 01/13/10 10:55

0.57 01/13/10 10:55

01/13/10 10:55

01/13/10 10:55

0.52

0.51

	REPORT OF LABORAT	ORY A	NALYSIS
ppbv	ND	0.52	01/13/10 10:55
ppbv	ND	0.51	01/13/10 10:55
ppbv	ND	0.50	01/13/10 10:55





Project: 0506-117-11 Parkwater

Pace Project No.: 10119878

METHOD BLANK: 736370

Matrix: Air

Associated Lab Samples: 10119878001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ppbv	ND	0.50	01/13/10 10:55	
Isopropylbenzene (Cumene)	ppbv	ND	0.50	01/13/10 10:55	
m&p-Xylene	ppbv	ND	1.0	01/13/10 10:55	
Methyl-tert-butyl ether	ppbv	ND	1.0	01/13/10 10:55	
Methylene Chloride	ppbv	ND	0.52	01/13/10 10:55	
n-Heptane	ppbv	ND	0.52	01/13/10 10:55	
n-Hexane	ppbv	ND	0.53	01/13/10 10:55	
Naphthalene	ppbv	ND	0.50	01/13/10 10:55	
o-Xylene	ppbv	ND	0.52	01/13/10 10:55	
Propylene	ppbv	ND	2.0	01/13/10 10:55	
Styrene	ppbv	ND	0.55	01/13/10 10:55	
Tetrachloroethene	ppbv	ND	0.52	01/13/10 10:55	
Tetrahydrofuran	ppbv	ND	0.52	01/13/10 10:55	
THC as Gas	ppbv	ND	20.0	01/13/10 10:55	
Toluene	ppbv	ND	0.52	01/13/10 10:55	
trans-1,2-Dichloroethene	ppbv	ND	1.0	01/13/10 10:55	
trans-1,3-Dichloropropene	ppbv	ND	0,52	01/13/10 10:55	
Trichloroethene	ppbv	ND	0.52	01/13/10 10:55	
Trichlorofluoromethane	ppbv	ND	0.50	01/13/10 10:55	
Vinyl acetate	ppbv	ND	0.55	01/13/10 10:55	
Vinyl chloride	ppbv	ND	0.51	01/13/10 10:55	
Xylene (Total)	ppbv	ND	1.5	01/13/10 10:55	

LABORATORY CONTROL SAMPLE: 736371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ppbv		10.8	108	60-125	
1,1,2,2-Tetrachloroethane	ppbv	10	12.3	123	57-127	
1,1,2-Trichloroethane	ppbv	10	11.5	115	56-125	
1,1,2-Trichlorotrifluoroethane	ppbv	10	10.2	102	52-133	
1,1-Dichloroethane	ppbv	10	10.3	103	54-127	
1,1-Dichloroethene	ppbv	10	10.2	102	52-129	
1,2,4-Trichlorobenzene	ppbv	10	11.5	115	30-150	
1,2,4-Trimethylbenzene	ppbv	10	11.5	115	52-145	
1,2-Dibromoethane (EDB)	ppbv	10	12.4	124	59-133	
1,2-Dichlorobenzene	ppbv	10	11.4	114	67-135	
1,2-Dichloroethane	ppbv	10	10.3	103	54-125	
1,2-Dichloropropane	ppbv	10	10.9	109	64-125	
1,3,5-Trimethylbenzene	ppbv	10	10.8	108	56-135	
1,3-Butadiene	ppbv	10	10.4	104	55-125	
1,3-Dichlorobenzene	ppbv	10	11.4	114	61-142	
1,4-Dichlorobenzene	ppbv	10	11.2	112	55-142	
1,4-Dioxane (p-Dioxane)	ppbv	10	12.3	123	70-130	
2,2,4-Trimethylpentane	ppbv	10	10.3	103	70-130	
2-Butanone (MEK)	ppbv	10	9.3	93	47-141	

Date: 01/15/2010 10:47 AM

REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 Parkwater

Pace Project No.: 10119878

LABORATORY CONTROL SAMPLE: 736371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Hexanone	ppbv	10	10.4	104	41-138	
2-Propanol	ppbv	10	11.2	112	63-125	
4-Ethyltoluene	ppbv	10	10.8	108	62-130	
4-Methyl-2-pentanone (MIBK)	ppbv	10	10.3	103	53-134	
Acetone	ppbv	10	11.2	112	44-149	
Benzene	ppbv	10	10.7	107	61-126	
Bromodichloromethane	ppbv	10	11 .1	111	54-129	
Bromoform	ppbv	10	12.9	129	56-125 L	3
Bromomethane	ppbv	10	10.4	104	56-128	
Carbon disulfide	ppbv	10	10.9	109	58-150	
Carbon tetrachloride	ppbv	10	10.6	106	55-125	
Chlorobenzene	ppbv	10	12.3	123	48-138	
Chloroethane	ppbv	10	10,4	104	56-128	
Chloroform	ppbv	10	10.5	105	55-125	
Chloromethane	vdqq	10	9.7	97	50-131	
cis-1,2-Dichloroethene	ppbv	10	10.8	108	64-125	
cis-1,3-Dichloropropene	ppbv	10	11.9	119	61-132	
Cyclohexane	ppbv	10	10	100	61-130	
Dibromochloromethane	ppbv	10	12.5	125	51-129	
Dichlorodifluoromethane	ppbv	10	10.3	103	56-132	
Dichlorotetrafluoroethane	ppbv	10	10.5	105	48-125	
thanol	ppbv	10	11.1	111	70-130	
thyl acetate	ppbv	10	10.3	103	66-149	
thylbenzene	ppbv	10	12.6	126	56-137	
exachloro-1,3-butadiene	ppbv	10	11.5	115	30-150	
sopropylbenzene (Cumene)	ppbv	10.4	10.9	105	67-134	
n&p-Xylene	ppbv	20	26.0	130	62-135	
tethyl-tert-butyl ether	ppbv	10	11.1	100	59-125	
1ethylene Chloride	ppbv	10	10.6	106	46-143	
-Heptane	ppbv	10	9,9	99	64-130	
-Hexane	ppbv	10	8.0	80	61-134	
laphthalene	ppbv	10	11.2	112	30-150	
-Xylene	ppbv	10	12.9	129	61-134	
ropylene	ppbv	10	10.9	123	62-146	
ityrene	ppbv	10	13.0	130	63-134	
etrachloroethene	ppbv	10	11.9	119	61-132	
etrahydrofuran	ppbv	10	10.2	102	62-137	
HC as Gas	ppbv	700	737	102	61-125	
oluene	ppbv	10	11.4	105	57-132	
ans-1,2-Dichloroethene	ppbv	10	10.6	106	52-132	
ans-1,2-Dichloropropene	ppbv	10	10.0	100	61-129	
Trichloroethene	• •	10	10.3	103	72-147	
Trichlorofluoromethane	ppbv	10	10.3	103	58-141	
/inyl acetate	ppbv ppbv	10	10.1	101	56-131	
		10	10.4	104	56-131	
/inyl chloride	ppbv	30	38.9	130	70-130	
(ylene (Total)	ppbv	30	30.9	130	10-130	

Date: 01/15/2010 10:47 AM

REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 Parkwater

Pace Project No.: 10119878

SAMPLE DUPLICATE: 736591

		10119987005	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
1,1,1-Trichloroethane	ppbv	ND	0.78		30	
1,1,2,2-Tetrachloroethane	ppbv	ND	ND		30	
1,1,2-Trichloroethane	ppbv	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ppbv	ND	ND		30	
1,1-Dichloroethane	ppbv	ND	ND		30	
1,1-Dichloroethene	ppbv	ND	ND		30	
1,2,4-Trichlorobenzene	ppbv	ND	ND		30	
1,2,4-Trimethylbenzene	ppbv	ND	ND		30	
1,2-Dibromoethane (EDB)	ppbv	ND	ND		30	
1,2-Dichlorobenzene	ppbv	ND	ND		30	
1,2-Dichloroethane	ppbv	ND	ND		30	
1,2-Dichloropropane	ppbv	ND	ND		30	
1,3,5-Trimethylbenzene	ppbv	ND	ND		30	
1,3-Butadiene	ppbv	ND	ND		30	
1,3-Dichlorobenzene	ppbv	ND	ND		30	
1,4-Dichlorobenzene	ppbv	ND	ND		30	
1,4-Dioxane (p-Dioxane)	ppbv	ND	ND		30	
2,2,4-Trimethylpentane	ppbv	ND	ND		30	
2-Butanone (MEK)	ppbv	1.6	1.6	2	30	
2-Hexanone	ppbv ppbv	ND	ND	4	30	
2-Propanol	ppbv ppbv	1.0	1.1	6	30	
4-Ethyltoluene	ppbv	ND	ND	0	30	
4-Methyl-2-pentanone (MIBK)	ppbv	ND	ND		30	
Acetone	ppbv	2.7	2.9	6	30	
Benzene	ppbv ppbv	ND	ND	0	30	
Bromodichloromethane	ppbv	ND	ND		30	
Bromoform	ppbv	ND	ND		30	
Bromomethane	ppbv	ND	ND		30	
Carbon disulfide	ppbv	ND	ND		30	
Carbon tetrachloride	ppbv ppbv	ND	ND		30	
Chlorobenzene	ppbv	ND	ND		30	
Chloroethane	ppbv	ND	ND		30	
Chloroform	ppbv	ND	ND		30	
Chloromethane	••	ND	ND		30	
	ppbv	ND	ND		30	
cis-1,2-Dichloroethene	ppbv	ND	ND		30	
cis-1,3-Dichloropropene Cyclohexane	ppbv ppbv	ND	ND		30	
Dibromochloromethane	ppbv	ND	ND		30	
Dichlorodifluoromethane	ppbv	ND	ND		30 30	
Dichlorotetrafluoroethane	ppbv	ND	ND		30 30	
Ethanol		ND	ND		30	
Ethyl acetate	ppbv ppbv	ND	ND		30	
Ethylbenzene	ppbv	ND	ND		30 30	
Hexachloro-1,3-butadiene	ppbv	ND	ND		30	
Isopropylbenzene (Cumene)	ppbv	ND	ND		30	
m&p-Xylene	ppbv	ND	ND		30	
Methyl-tert-butyl ether	ppbv	ND	ND		30	
Methylene Chloride	ppbv	ND	ND		30	
	hhna				50	

Date: 01/15/2010 10:47 AM

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Project: 0506-117-11 Parkwater

Pace Project No.: 10119878

SAMPLE DUPLICATE: 736591

		10119987005	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
n-Heptane	ppbv	ND	ND		30	
n-Hexane	ppbv	0.83	0.89	7	30	
Naphthalene	ppbv	ND	ND		30	
o-Xylene	ppbv	ND	ND		30	
Propylene	ppbv	ND	ND		30	
Styrene	ppbv	ND	ND		30	
Tetrachloroethene	ppbv	ND	ND		30	
Tetrahydrofuran	ppbv	ND	ND		30	
THC as Gas	ppbv	ND	ND		30	
Toluene	ppbv	ND	ND		30	
trans-1,2-Dichloroethene	ppbv	ND	ND		30	
trans-1,3-Dichloropropene	ppbv	ND	ND		30	
Trichloroethene	ppbv	10.8	11,6	7	30	
Trichlorofluoromethane	ppbv	ND	ND		30	
Vinyl acetate	ppbv	ND	ND		30	
Vinyl chloride	ppbv	ND	ND		30	
Xylene (Total)	ppbv	ND	ND		30	

Date: 01/15/2010 10:47 AM

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QUALIFIERS

Project: 0506-117-11 Parkwater Pace Project No.: 10119878

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

Date: 01/15/2010 10:47 AM

REPORT OF LABORATORY ANALYSIS

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January 13, 2010

Carol Davy PACE ANALYTICAL 1700 Elm Street SE Minneapolis, MN 55127-

Bureau Veritas Work Order No. 10010139

Reference: 10119878/0506-117-11 PARKWATER

Dear Carol Davy:

Bureau Veritas North America, Inc. received 1 sample on 1/7/2010 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely,

Meth Muultor

Karen Coonan Client Services Representative cc:

4 of 19

CASE NARRATIVE

Date: 13-Jan-10

Client:PACE ANALYTICALProject:10119878/0506-117-11 PARKWATERWork Order No10010139

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected.

Please note that a field blank was not identified by the client for this sample set.

The following results have been converted from mg/m3 to ug/m3. Sample -001A: THCs as Diesel = <1,300 ug/m3

Date: 13-Jan-10

Client:	PACE ANALYTICAL	,							
Project:	10119878/0506-117-11	PARKW	ATER			Work Order No: 1	0010139		
Sample Identific:	ation: VP-CI-123109								
Lab Number:	001A					Date Sampled: 1	2/31/2009		
Sample Type	Charcoal Tube					Date Received: 1/7/2010 Air Volume (L): 8			
Analyst	CCR								
			Analytical Res	ults	Reporting Limit	Test	Date		
	Analyte (µg) (mg/r		(mg/m ³)	(ppm)	(Method	Analyzed		
THCs as Diesel		<10	<1.3		10	NIOSH 1550	01/08/2010		
									

General Notes:

<: Less than the indicated reporting limit (RL),
-: Information not available or not applicable.
Back sections (if applicable) were checked and showed no significant breakthrough unless otherwise noted.

Norkorder	Workorder: 10119878	Workorder Name:	ame:	0506-117-11	06-117-11 Parkwater		9 2 2	Results Requested	1/18/2010	wmw.pacelabs.com	Celabs.co
Report / Invoice To	ice To		Subcontract To	ict To				Requested	Requested Analysis		1947 - 1948 S.
Caroi Davy Pace Analytical Minneso 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700 Email: carol.davy@pace	Carci Davy Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700 Email: carol.davy@pacelabs.com		e.	Burren Verritos	N	P.O. / D // GSTF	1292) \$2 (225)				
ltem Sample ID	le ID	Collect Date/Time		Lab ID	Matrix	General				LAB USE ONLY	E ONLY
1 VP-CI 2 3	VP-CL-123109	12/31/2009 11:18		10119878001	Air						
5											
教育部であります。		部で産いたら、ない							Comments		
Transfers	Released By		Date/Time	111	1 By		Date/Time				
- 2 6	C Ward 1000	1.21.2	12/10	1000	114035	654	0/-1-1	(au co.0)			
5											

FMT-ALL-C-002rev.00 24March2009

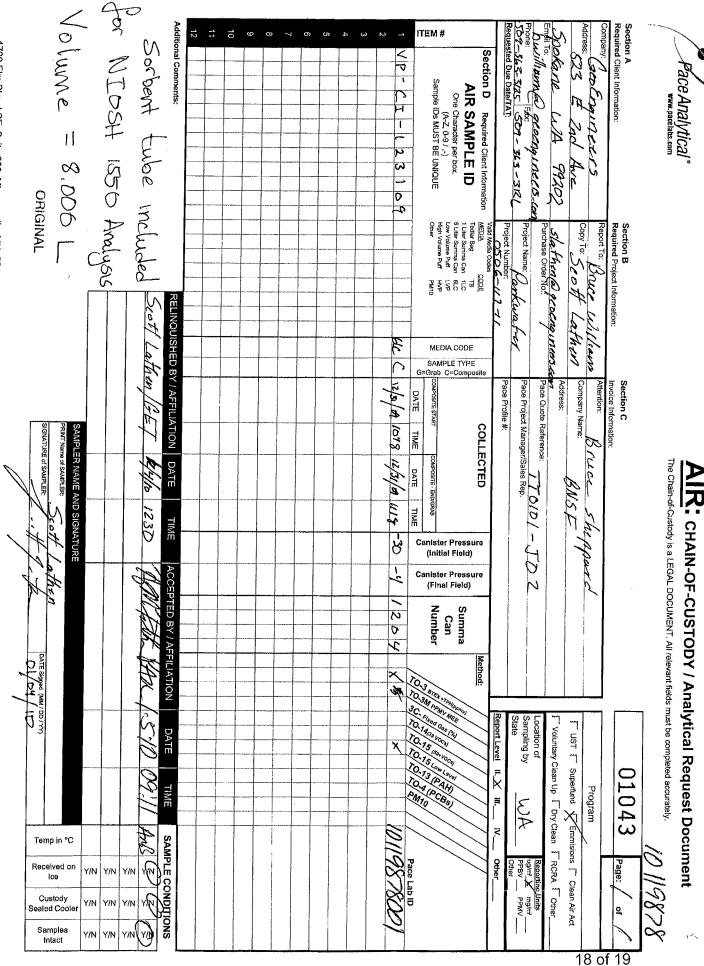
Tuesday, January 05, 2010 4 45 54 PM

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FC046Rev.00, 21May2009

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414



Pace Analytical [®] Clier	AIR Sample Con nt Name: <u>Geod</u>	dition Upon Receip	ot oject # <i>10119878</i>
Courier: 🔲 Fed Ex 🕅 UPS 🗍 USPS Custody Seal on Cooler/Box Present:	6 🗌 Client 🔲 Commercia	al 🗌 Pace Other	
Packing Material: Bubble Wrap	X Bubble Bags 🗌 None	Other	Date and Initials of several several biological
Tracking #: 12 F64 A00 019	208 5043	Comments:	Date and Initials of person examining contents:
Chain of Custody Present:	Yes No N.	A 1.	
Chain of Custody Filled Out:			
Chain of Custody Relinquished:		4 3.	
Sampler Name & Signature on COC:	to □N//	4.	
Samples Arrived within Hold Time:	Yes 🗆 No 🗆 N/A	5.	
Short Hold Time Analysis (<72hr):		6.	
Rush Turn Around Time Requested:		7.	
Sufficient Volume:		8.	
Correct Containers Used:	₩ ØYes □No □N/A	9.	
-Pace Containers Used:	OPres DNo DN/A		
Containers Intact:	Yes DNO DN/A	10.	
Media: HR CAN, C	HARCOM TUBE)	11.	
Sample Labels match COC:		12.	
Samples Received: ICAN,	IFC, ICHARCON	AL TUBE	
Canisters	Flow Controllers	Stand Alone G	Tedlar Bags
	mple Number Can ID	Sample Number Car	ID Sample Number Can ID
VP-CI-123109 1204			
	·····		
			· · · · · · · · · · · · · · · · · · ·
		······································	
			· · · · · · · · · · · · · · · · · · ·
Client Notification/ Resolution:	-		Field Data Required? Y / N
Person Contacted:	Date/T	ime:	
Comments/ Resolution:	······································		

nan an			
Project Manager Review:		Nach	Date: 1-3-10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers) A106 Rev.01 (22May2009)

-



Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700 Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125					Lab Project I Projec			11 Parkwater
Lab Sample No:10119878001Client Sample ID:VP-CI-123	3109	Pr	ojSampleNum: Matrix;		78001			12/31/09 11:18 01/05/10 9:11
Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air TO-15								
1,1,1-Trichloroethane	ND	ug/m3	3.9	1.34	01/13/10 16:00	CJR	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4.9	1.34	01/13/10 16:00		79-34-5	
1,1,2-Trichloroethane	ND	ug/m3	3.9	1.34	01/13/10 16:00	CJR	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	5.5	1.34	01/13/10 16:00	CJR	76-13-1	
1,1-Dichloroethane	ND	ug/m3	2.9	1.34	01/13/10 16:00	CJR	75-34-3	
1,1-Dichloroethene	ND	ug/m3	2.8	1.34	01/13/10 16:00	CJR	75-35-4	
1,2,4-Trichlorobenzene	ND	ug/m3	5.3	1.34	01/13/10 16:00	CJR	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/m3	3.4	1.34	01/13/10 16:00	CJR	95-63-6	
1,2-Dibromoethane (EDB)	ND	ug/m3	5.5	1.34	01/13/10 16:00	CJR	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	4.2	1.34	01/13/10 16:00	CJR	95-50-1	
1,2-Dichloroethane	4.94	ug/m3	2.9	1.34	01/13/10 16:00	CJR	107-06-2	
1,2-Dichloropropane	ND	ug/m3	3.3	1.34	01/13/10 16:00		78-87-5	
1,3,5-Trimethylbenzene	ND	ug/m3	3.5	1.34	01/13/10 16:00		108-67-8	
1,3-Butadiene	ND	ug/m3	1.6	1.34	01/13/10 16:00		106-99-0	
1,3-Dichlorobenzene	ND	ug/m3	4.2	1.34	01/13/10 16:00		541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	4.2	1.34	01/13/10 16:00		106-46-7	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.48	1.34	01/13/10 16:00		123-91-1	
2,2,4-Trimethylpentane	7.6	ug/m3	3.2	1.34	01/13/10 16:00		540-84-1	
2-Butanone (MEK)	15.3	ug/m3	2.2	1.34	01/13/10 16:00		78-93-3	
2-Hexanone	ND	ug/m3	3.1	1.34	01/13/10 16:00		591-78-6	
2-Propanol	ND	ug/m3	1.7	1.34	01/13/10 16:00		67-63-0	
4-Ethyltoluene	ND	ug/m3	3.5	1.34	01/13/10 16:00		622-96-8	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	3.1	1.34	01/13/10 16:00		108-10-1	
Acetone	18.8	ug/m3	1.8	1.34	01/13/10 16:00		67-64-1	
Benzene	ND	ug/m3	2.3	1.34	01/13/10 16:00		71-43-2	
Bromodichloromethane	ND	ug/m3	4.6	1.34	01/13/10 16:00		75-27-4	
Bromoform	ND	ug/m3	7.4	1.34	01/13/10 16:00		75-25-2	
Bromomethane	ND	ug/m3	2.7	1.34	01/13/10 16:00		74-83-9	
Carbon disulfide	2.15 ND	ug/m3	2.1	1.34	01/13/10 16:00		75-15-0	
Carbon tetrachloride	ND	ug/m3	4.3	1.34	01/13/10 16:00		56-23-5	
Chlorobenzene		ug/m3	3.3	1.34	01/13/10 16:00		108-90-7	
Chloroethane		ug/m3	1.8 2.4	1.34 1.34	01/13/10 16:00		75-00-3 67-66-3	
Chloroform	ND	ug/m3	3.4 1.4	1.34 1.34	01/13/10 16:00 01/13/10 16:00		67-66-3 74-87-3	
Chloromethane	ND ND	ug/m3	1.4 2.8	1.34 1.34	01/13/10 16:00		74-87-3 156-59-2	
cis-1,2-Dichloroethene	ND	ug/m3 ug/m3	2.8 3.1	1.34 1.34	01/13/10 16:00		10061-01-	5
cis-1,3-Dichloropropene		•			01/13/10 16:00		110-82-7	
Cyclohexane Dibromochloromethane	2.66 ND	ug/m3 ug/m3	2.4 6.1	1.34 1.34	01/13/10 16:00		124-48-1	
Distriction of the that is		ug/mo	0.1	1,04	01/13/10 10.00	UJK	124-40-1	

SUPPLEMENTAL REPORT

Date: 1/15/2010

Units Conversion Request

Page 1



Pace Analytical Services, Inc. **17 00 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700** Fax: 612.607.6444

ANALYTICAL RESULTS

Client:	GeoEngineers,Inc.					Lab Project Number:	10119878 0506-117-11 Parkwater
Phone:	(509)363-3125					1	
Dichlo	rodifluoromethane	ND	ug/m3	3.4	1.34	01/13/10 16:00 CJR	75-71-8
Dichlo	rotetrafluoroethane	ND	ug/m3	5.4	1.34	01/13/10 16:00 CJR	76-14-2
Ethan	l	10.3	ug/m3	1.3	1.34	01/13/10 16:00 CJR	64-17-5
Ethyl a	acetate	ND	ug/m3	2.5	1.34	01/13/10 16:00 CJR	141-78-6
Ethylb	enzene	3.4	ug/m3	3.1	1.34	01/13/10 16:00 CJR	100-41-4
Hexac	hloro-1,3-butadiene	ND	ug/m3	7.3	1.34	01/13/10 16:00 CJR	87-68-3
lsopro	pylbenzene (Cumene)	ND	ug/m3	3.3	1.34	01/13/10 16:00 CJR	98-82-8
m&p->	(ylene	12.8	ug/m3	5.7	1.34	01/13/10 16:00 CJR	1330-20-7
Methy	lene Chloride	ND	ug/m3	2.5	1.34	01/13/10 16:00 CJR	75-09-2
Methy	I-tert-butyl ether	ND	ug/m3	4.8	1.34	01/13/10 16:00 CJR	1634-04-4
Napht	halene	ND	ug/m3	3.6	1.34	01/13/10 16:00 CJR	91-20-3
n-Hep	tane	ND	ug/m3	2.9	1.34	01/13/10 16:00 CJR	142-82-5
n-Hexa	ane	ND	ug/m3	2.5	1,34	01/13/10 16:00 CJR	110-54-3
o-Xyle	ne	ND	ug/m3	3.1	1.34	01/13/10 16:00 CJR	95-47-6
Propyl	ene	9.8	ug/m3	4.7	1.34	01/13/10 16:00 CJR	115-07-1
Styren	е	ND	ug/m3	3.2	1.34	01/13/10 16:00 CJR	100-42-5
Tetrac	hloroethene	ND	ug/m3	4.8	1.34	01/13/10 16:00 CJR	127-18-4
Tetrah	ydrofuran	ND	ug/m3	2.1	1.34	01/13/10 16:00 CJR	109-99-9
THC a	s Gas	28200	ug/m3	120	1.34	01/13/10 16:00 CJR	
Toluer	ıe	3.75	ug/m3	2.7	1.34	01/13/10 16:00 CJR	108-88-3
trans-1	1,2-Dichloroethene	ND	ug/m3	5,2	1.34	01/13/10 16:00 CJR	156-60-5
trans-1	1,3-Dichloropropene	ND	ug/m3	3.2	1.34	01/13/10 16:00 CJR	10061-02-6
Trichlo	proethene	ND	ug/m3	3.8	1.34	01/13/10 16:00 CJR	79-01-6
Trichlo	profluoromethane	ND	ug/m3	3.8	1.34	01/13/10 16:00 CJR	75-69-4
Vinyl a	acetate	ND	ug/m3	2.6	1.34	01/13/10 16:00 CJR	108-05-4
Vinyl c	chloride	ND	ug/m3	1.8	1.34	01/13/10 16:00 CJR	75-01-4
Xylene	e (Total)	12.8	ug/m3	8.8	1.34	01/13/10 16:00 CJR	1330-20-7

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

SUPPLEMENTAL REPORT

Units Conversion Request



Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700 Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125 Lab Project Number: 10119878 Project Name: 0506-117-11 Parkwater

PARAMETER FOOTNOTES

SUPPLEMENTAL REPORT

Units Conversion Request



Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

February 11, 2010

Bruce Williams GeoEngineers,Inc. 523 East Second Ave Spokane, WA 99202

RE: Project: 0506-117-11 Parkwater Pace Project No.: 10121444

Dear Bruce Williams:

Enclosed are the analytical results for sample(s) received by the laboratory on January 29, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carl Darg

Carol Davy

carol.davy@pacelabs.com Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Page 1 of 15





Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

CERTIFICATIONS

Project: 0506-117-11 Parkwater Pace Project No.: 10121444

Minnesota Certification IDs

1700 Elm Street SE, Suite 200 Minneapolis, MN 55414 Alaska Certification #: UST-078 Washington Certification #: C754 Tennessee Certification #: 02818 Pennsylvania Certification #: 68-00563 Oregon Certification #: MN200001 North Dakota Certification #: R-036 North Carolina Certification #: 530 New York Certification #: 11647 New Jersey Certification #: 11647 New Jersey Certification #: MN-002 Montana Certification #: MT CERT0092 Minnesota Certification #: 027-053-137 Michigan DEQ Certification #: 9909 Maine Certification #: 2007029 Louisiana Certification #: LA080009 Louisiana Certification #: 03086 Kansas Certification #: 03086 Illinois Certification #: 200011 Florida/NELAP Certification #: E87605 California Certification #: 01155CA Arizona Certification #: AZ-0014 Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project:0506-117-11ParkwaterPace Project No.:10121444

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10121444001	VP-EX-012710	Air	01/27/10 12:06	01/29/10 09:08
10121444002	VP-CI-012710	Air	01/27/10 11:33	01/29/10 09:08

REPORT OF LABORATORY ANALYSIS

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,





SAMPLE ANALYTE COUNT

Project:0506-117-11ParkwaterPace Project No.:10121444

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10121444001	VP-EX-012710	TO-15	CJR	65	PASI-M
10121444002	VP-CI-012710	TO-15	CJR	65	PASI-M

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 0506-117-11 Parkwater Pace Project No.: 10121444

Method: TO-15

Description: TO15 MSV AIR Client: GeoEngineers,Inc. Date: February 11, 2010

General Information:

2 samples were analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

QC Batch: AIR/9762

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- DUP (Lab ID: 746268)
- Naphthalene
- LCS (Lab ID: 746124)
 - Methylene Chloride
 - Naphthalene

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: AIR/9762

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

• LCS (Lab ID: 746124)

trans-1,3-Dichloropropene

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 5 of 15





Project: 0506-117-11 Parkwater

Pace Project No.: 10121444

Sample: VP-EX-012710	Lab ID: 101214440	01 Collected	d: 01/27/1	0 12:06	Received: 0'	1/29/10 09:08 M	atrix: Air	
_		Report		_	_			
Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO	-15						
1,1,1-Trichloroethane	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	71-55-6	
1,1,2,2-Tetrachloroethane	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	79-34-5	
1,1,2-Trichloroethane	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	76-13-1	
1,1-Dichloroethane	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	75-34-3	
1,1-Dichloroethene	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	75-35-4	
1,2,4-Trichlorobenzene	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	120-82-1	
1,2,4-Trimethylbenzene	ND ppbv	0.70	0.35	1.38		02/09/10 17:16	95-63-6	
1,2-Dibromoethane (EDB)	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	106-93-4	
1,2-Dichlorobenzene	ND ppbv	0.70	0.35	1.38		02/09/10 17:16	95-50-1	
1,2-Dichloroethane	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	107-06-2	
1,2-Dichloropropane	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	78-87-5	
1,3,5-Trimethylbenzene	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	108-67-8	
1,3-Butadiene	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	106-99-0	
1,3-Dichlorobenzene	ND ppbv	0.70	0.35	1,38		02/09/10 17:16	541-73-1	
1,4-Dichlorobenzene	ND ppbv	0.70	0.35	1.38		02/09/10 17:16	106-46-7	
1,4-Dioxane (p-Dioxane)	ND ppbv	0.14	0.069	1.38		02/09/10 17:16	123-91-1	
2,2,4-Trimethylpentane	18.4 ppbv	0.69	0.34	1.38		02/09/10 17:16	540-84-1	
2-Butanone (MEK)	ND ppbv	0.76	0.38	1.38		02/09/10 17:16	78-93-3	
2-Hexanone	ND ppbv	0.76	0.38	1.38		02/09/10 17:16	591-78-6	
2-Propanol	ND ppbv	0,69	0.34	1.38		02/09/10 17:16	67-63-0	
4-Ethyltoluene	ND ppbv	0.73	0.37	1.38		02/09/10 17:16	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND ppbv	0.76	0.38	1.38		02/09/10 17:16	108-10-1	
Acetone	3.8 ppbv	0.76	0.38	1.38		02/09/10 17:16	67-64-1	
Benzene	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	71-43-2	
Bromodichloromethane	ND ppbv	0.70	0.35	1.38		02/09/10 17:16	75-27-4	
Bromoform	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	75-25-2	
Bromomethane	ND ppbv	0.70	0.35	1.38		02/09/10 17:16	74-83-9	
Carbon disulfide	ND ppbv	0.69	0.34	1.38		02/09/10 17:16	75-15-0	
Carbon tetrachloride	ND ppbv	0.70	0.35	1.38		02/09/10 17:16	56-23-5	
Chlorobenzene	ND ppbv	0.72	0.36	1.38		02/09/10 17:16	108-90-7	
Chloroethane	ND ppbv	0.70	0.35	1.38		02/09/10 17:16	75-00-3	
Chloroform	ND ppbv	0.70	0.35	1.38		02/09/10 17:16	67-66-3	
Chloromethane	ND ppbv	0.69	0.34	1.38		02/09/10 17:16	74-87-3	
Cyclohexane	6.8 ppbv	0.72	0.36	1.38		02/09/10 17:16	110-82-7	
Dibromochloromethane	ND ppbv	0.73	0.37	1.38		02/09/10 17:16	124-48-1	
Dichlorodifluoromethane	ND ppbv	0.70	0.35	1.38		02/09/10 17:16	75-71-8	
Dichlorotetrafluoroethane	ND ppbv	0.79	0.39	1.38		02/09/10 17:16		
Ethanol	5.2 ppbv	0.69	0.34	1.38		02/09/10 17:16		
Ethyl acetate	ND ppbv	0.70	0.35	1.38		02/09/10 17:16		
Ethylbenzene	ND ppbv	0.72	0,36	1.38		02/09/10 17:16		
Hexachloro-1,3-butadiene	ND ppbv	0.69	0.34	1.38		02/09/10 17:16		
Isopropylbenzene (Cumene)	ND ppbv	0.69	0.34	1.38		02/09/10 17:16		
Methyl-tert-butyl ether	ND ppbv	1.4	0.69	1.38		02/09/10 17:16		
Methylene Chloride	ND ppbv	0.72	0.36	1.38		02/09/10 17:16		
Naphthalene	ND ppbv	0.69	0.34	1.38		02/09/10 17:16		

Date: 02/11/2010 11:14 AM

REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 Parkwater

Pace Project No.: 10121444

Sample: VP-EX-012710	Lab ID: 10121444001 Collected			: 01/27/10 12:06		Received: 01/29/10 09:08 Matrix: Air				
- <i>i</i>	Report									
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR	Analytica	5								
Propylene	4.3 ppbv		2.8	1.4	1.38		02/09/10 17:16	115-07-1		
Styrene	ND ppbv		0.76	0.38	1.38		02/09/10 17:16	100-42-5		
THC as Gas	2540 ppbv		27.6	13.8	1.38		02/09/10 17:16			
Tetrachloroethene	ND ppbv		0.72	0.36	1.38		02/09/10 17:16	127-18-4		
Tetrahydrofuran	0.76 ppbv		0.72	0.36	1.38		02/09/10 17:16	109-99-9		
Toluene	ND ppbv		0.72	0.36	1.38		02/09/10 17:16	108-88-3		
Trichloroethene	ND ppbv		0.72	0.36	1.38		02/09/10 17:16	79-01-6		
Trichlorofluoromethane	1.2 ppbv		0.69	0.34	1.38		02/09/10 17:16	75-69-4		
Vinyl acetate	ND ppbv		0.76	0.38	1.38		02/09/10 17:16	108-05-4		
Vinyl chloride	ND p	opbv	0.70	0.35	1.38		02/09/10 17:16	75-01-4		
Xylene (Total)	ND ppbv		2.1	1.0	1.38		02/09/10 17:16	1330-20-7		
cis-1,2-Dichloroethene	ND p	opbv	0.72	0.36	1.38		02/09/10 17:16	156-59-2		
cis-1,3-Dichloropropene	ND p	opbv	0.70	0.35	1.38		02/09/10 17:16	10061-01-5		
m&p-Xylene	ND p	opbv	1.4	0.69	1.38		02/09/10 17:16	1330-20-7		
n-Heptane	ND p	opby	0.72	0.36	1.38		02/09/10 17:16	142-82-5		
n-Hexane	ND p	opby	0.73	0.37	1.38		02/09/10 17:16	110-54-3		
o-Xylene	ND ppbv		0.72	0.36	1.38		02/09/10 17:16	95-47-6		
trans-1,2-Dichloroethene	ND ppbv		1.4	0.69	1.38		02/09/10 17:16	156-60-5		
trans-1,3-Dichloropropene	ND p	pbv	0.72	0.36	1.38		02/09/10 17:16	10061-02-6		

Date: 02/11/2010 11:14 AM

REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 Parkwater

Pace Project No.: 10121444

Sample: VP-CI-012710	Lab ID: 1012144400	2 Collecter	Collected: 01/27/10 11:33			Received: 01/29/10 09:08 Matrix: Air			
Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua	
TO15 MSV AIR	Analytical Method: TO-	15							
1,1,1-Trichloroethane	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	71-55-6		
1,1,2,2-Tetrachloroethane	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	79-34-5		
1,1,2-Trichloroethane	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	79-00-5		
1,1,2-Trichlorotrifluoroethane	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	76-13-1		
1,1-Dichloroethane	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	75-34-3		
1,1-Dichloroethene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46			
1,2,4-Trichlorobenzene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	120-82-1		
1,2,4-Trimethylbenzene	ND ppbv	0.64	0.32	1.25		02/09/10 17:46	95-63-6		
1,2-Dibromoethane (EDB)	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	106-93-4		
1,2-Dichlorobenzene	ND ppbv	0.64	0.32	1.25		02/09/10 17:46	95-50-1		
1,2-Dichloroethane	ND ppbv	0.65	0.32	1,25		02/09/10 17:46	107-06-2		
1,2-Dichloropropane	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	78-87-5		
1,3,5-Trimethylbenzene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	108-67-8		
1,3-Butadiene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	106-99-0		
1,3-Dichlorobenzene	ND ppbv	0.64	0.32	1.25		02/09/10 17:46	541-73-1		
1,4-Dichlorobenzene	ND ppbv	0.64	0.32	1.25		02/09/10 17:46	106-46-7		
1,4-Dioxane (p-Dioxane)	ND ppbv	0.12	0.062	1.25		02/09/10 17:46	123-91-1		
2,2,4-Trimethylpentane	1.5 ppbv	0.62	0.31	1.25		02/09/10 17:46	540-84-1		
2-Butanone (MEK)	1.2 ppbv	0.69	0.34	1.25		02/09/10 17:46	78-93-3		
2-Hexanone	ND ppbv	0.69	0.34	1.25		02/09/10 17:46	591-78-6		
2-Propanol	ND ppbv	0.62	0.31	1.25		02/09/10 17:46	67-63-0		
4-Ethyltoluene	ND ppbv	0.66	0.33	1.25		02/09/10 17:46	622-96-8		
4-Methyl-2-pentanone (MIBK)	ND ppbv	0.69	0.34	1.25		02/09/10 17:46	108-10-1		
Acetone	3.4 ppbv	0.69	0.34	1.25		02/09/10 17:46	67-64-1		
Benzene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	71-43-2		
Bromodichloromethane	ND ppbv	0.64	0.32	1.25		02/09/10 17:46	75-27-4		
Bromoform	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	75-25-2		
Bromomethane	ND ppbv	0,64	0.32	1.25		02/09/10 17:46	74-83-9		
Carbon disulfide	ND ppbv	0.62	0.31	1.25		02/09/10 17:46	75-15-0		
Carbon tetrachloride	ND ppbv	0.64	0.32	1.25		02/09/10 17:46	56-23-5		
Chlorobenzene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	108-90-7		
Chloroethane	ND ppbv	0.64	0.32	1.25		02/09/10 17:46	75-00-3		
Chloroform	ND ppbv	0.64	0.32	1.25		02/09/10 17:46	67-66-3		
Chloromethane	ND ppbv	0.62	0.31	1.25		02/09/10 17:46	74-87-3		
Cyclohexane	ND ppbv	0,65	0.32	1,25		02/09/10 17:46	110-82-7		
Dibromochloromethane	ND ppbv	0.66	0.33	1.25		02/09/10 17:46	124-48-1		
Dichlorodifluoromethane	ND ppbv	0.64	0.32	1.25		02/09/10 17:46	75-71-8		
Dichlorotetrafluoroethane	ND ppbv	0.71	0.36	1.25		02/09/10 17:46			
Ethanol	6.1 ppbv	0.62	0.31	1.25		02/09/10 17:46	64-17-5		
Ethyl acetate	ND ppbv	0.64	0.32	1.25		02/09/10 17:46			
Ethylbenzene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46			
Hexachloro-1,3-butadiene	ND ppbv	0.62	0.31	1.25		02/09/10 17:46			
Isopropylbenzene (Cumene)	ND ppbv	0.62	0.31	1.25		02/09/10 17:46			
Methyl-tert-butyl ether	ND ppbv	1.2	0.62	1.25		02/09/10 17:46			
Methylene Chloride	ND ppbv	0.65	0.32	1.25		02/09/10 17:46			
Naphthalene	ND ppbv	0.62	0.31	1.25		02/09/10 17:46			

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-117-11 Parkwater

Pace Project No.: 10121444

Sample: VP-CI-012710	Lab ID: 10121444002	Collecte	d: 01/2 7 /1	0 11:33	Received: 01	I/29/10 09:08 M	atrix: Air	
		Report						
Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-1	5						
Propylene	ND ppbv	2.5	1.2	1,25		02/09/10 17:46	115-0 7 -1	
Styrene	ND ppbv	0.69	0.34	1.25		02/09/10 17:46	100-42-5	
THC as Gas	11400 ppbv	25.0	12.5	1.25		02/09/10 17:46		
Tetrachloroethene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	127-18-4	
Tetrahydrofuran	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	109-99-9	
Toluene	0.91 ppbv	0.65	0.32	1.25		02/09/10 17:46	108-88-3	
Trichloroethene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	79-01-6	
Trichlorofluoromethane	ND ppbv	0.62	0.31	1.25		02/09/10 17:46	75-69-4	
Vinyl acetate	ND ppbv	0.69	0.34	1.25		02/09/10 17:46	108-05-4	
Vinyl chloride	ND ppbv	0.64	0.32	1.25		02/09/10 17:46	75-01-4	
Xylene (Total)	ND ppbv	1.9	0.94	1.25		02/09/10 17:46	1330-20-7	
cis-1,2-Dichloroethene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	156-59-2	
cis-1,3-Dichloropropene	ND ppbv	0.64	0.32	1.25		02/09/10 17:46	10061-01-5	
m&p-Xylene	ND ppbv	1.2	0.62	1.25		02/09/10 17:46	1330-20-7	
n-Heptane	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	142-82-5	
n-Hexane	ND ppbv	0.66	0.33	1.25		02/09/10 17:46	110-54-3	
o-Xylene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	95-47-6	
trans-1,2-Dichloroethene	ND ppbv	1.2	0.62	1.25		02/09/10 17:46	156-60-5	
trans-1,3-Dichloropropene	ND ppbv	0.65	0.32	1.25		02/09/10 17:46	10061-02-6	

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REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 Parkwater

Pace Project No.: 10121444

QC Batch:	AIR/9762	Analysis Method:	TO-15
QC Batch Method:	TO-15	Analysis Description:	TO15 MSV AIR
Associated Lab Sam	ples: 10121444001, 10121444002		
METHOD BLANK:	746123	Matrix: Air	·

Associated Lab Samples: 10121444001, 10121444002

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ppbv	ND	0.52	02/09/10 10:26	
1,1,2,2-Tetrachloroethane	ppbv	ND	0.52	02/09/10 10:26	
1,1,2-Trichloroethane	ppbv	ND	0.52	02/09/10 10:26	
,1,2-Trichlorotrifluoroethane	ppbv	ND	0.52	02/09/10 10:26	
,1-Dichloroethane	ppbv	ND	0.52	02/09/10 10:26	
,1-Dichloroethene	ppbv	ND	0.52	02/09/10 10:26	
,2,4-Trichlorobenzene	ppbv	ND	0.52	02/09/10 10:26	
2,4-Trimethylbenzene	ppbv	ND	0.51	02/09/10 10:26	
2-Dibromoethane (EDB)	ppbv	ND	0.52	02/09/10 10:26	
2-Dichlorobenzene	ppbv	ND	0.51	02/09/10 10:26	
2-Dichloroethane	ppbv	ND	0.52	02/09/10 10:26	
2-Dichloropropane	ppbv	ND	0.52	02/09/10 10:26	
3,5-Trimethylbenzene	ppbv	ND	0.52	02/09/10 10:26	
3-Butadiene	ppbv	ND	0.52	02/09/10 10:26	
3-Dichlorobenzene	ppbv	ND	0.51	02/09/10 10:26	
4-Dichlorobenzene	ppbv	ND	0.51	02/09/10 10:26	
4-Dioxane (p-Dioxane)	ppbv	ND	0.10	02/09/10 10:26	
2,4-Trimethylpentane	ppbv	ND	0.50	02/09/10 10:26	
Butanone (MEK)	ppbv	ND	0.55	02/09/10 10:26	
Hexanone	ppbv	ND	0.55	02/09/10 10:26	
Propanol	ppbv	ND	0.50	02/09/10 10:26	
thyltoluene	ppbv	ND	0.53	02/09/10 10:26	
Methyl-2-pentanone (MIBK)	ppbv	ND	0.55	02/09/10 10:26	
etone	ppbv	ND	0.55	02/09/10 10:26	
nzene	ppbv	ND	0.52	02/09/10 10:26	
omodichloromethane	ppbv	ND	0.51	02/09/10 10:26	
omoform	ppbv	ND	0.52	02/09/10 10:26	
omomethane	ppbv	ND	0.51	02/09/10 10:26	
rbon disulfide	ppbv	ND	0.50	02/09/10 10:26	
rbon tetrachloride	ppbv	ND	0.51	02/09/10 10:26	
lorobenzene	ppbv	ND	0.52	02/09/10 10:26	
nloroethane	ppbv	ND	0.51	02/09/10 10:26	
nloroform	ppbv	ND	0.51	02/09/10 10:26	
nloromethane	ppbv	ND	0.50	02/09/10 10:26	
s-1,2-Dichloroethene	ppbv	ND	0.52	02/09/10 10:26	
s-1,3-Dichloropropene	ppbv	ND	0.51	02/09/10 10:26	
clohexane	ppbv	ND	0.52	02/09/10 10:26	
bromochloromethane	ppbv	ND	0.53	02/09/10 10:26	
chlorodifluoromethane	ppbv	ND	0.51	02/09/10 10:26	
chlorotetrafluoroethane	ppbv	ND	0.57	02/09/10 10:26	
hanol	ppbv	ND	0.50	02/09/10 10:26	
hyl acetate	ppbv	ND	0.51	02/09/10 10:26	
nylbenzene	ppbv	ND	0.52	02/09/10 10:26	

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Project: 0506-117-11 Parkwater

Pace Project No.: 10121444

METHOD BLANK: 746123

Matrix: Air

Associated Lab Samples: 10121444001, 10121444002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ppbv		0,50	02/09/10 10:26	··· · · · · · · ·
Isopropylbenzene (Cumene)	ppbv	ND	0.50	02/09/10 10:26	
m&p-Xylene	ppbv	ND	1.0	02/09/10 10:26	
Methyl-tert-butyl ether	ppbv	ND	1.0	02/09/10 10:26	
Methylene Chloride	ppbv	ND	0.52	02/09/10 10:26	
n-Heptane	ppbv	ND	0.52	02/09/10 10:26	
n-Hexane	ppbv	ND	0.53	02/09/10 10:26	
Naphthalene	ppbv	ND	0.50	02/09/10 10:26	
o-Xylene	ppbv	ND	0.52	02/09/10 10:26	
Propylene	ppbv	ND	2.0	02/09/10 10:26	
Styrene	ppbv	ND	0.55	02/09/10 10:26	
Tetrachloroethene	ppbv	ND	0.52	02/09/10 10:26	
Tetrahydrofuran	ppbv	ND	0.52	02/09/10 10:26	
THC as Gas	ppbv	ND	20.0	02/09/10 10:26	
Toluene	ppbv	ND	0.52	02/09/10 10:26	
trans-1,2-Dichloroethene	ppbv	ND	1.0	02/09/10 10:26	
trans-1,3-Dichloropropene	ppbv	ND	0.52	02/09/10 10:26	
Trichloroethene	ppbv	ND	0.52	02/09/10 10:26	
Trichlorofluoromethane	ppbv	ND	0.50	02/09/10 10:26	
Vinyl acetate	ppbv	ND	0.55	02/09/10 10:26	
Vinyl chloride	ppbv	ND	0.51	02/09/10 10:26	
Xylene (Total)	ppbv	ND	1.5	02/09/10 10:26	

LABORATORY CONTROL SAMPLE: 746124

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ppbv	10	8.6	86	60-125	
1,1,2,2-Tetrachloroethane	ppbv	10	10.1	101	57-127	
1,1,2-Trichloroethane	ppbv	10	9.3	93	56-125	
1,1,2-Trichlorotrifluoroethane	ppbv	10	7.7	77	52-133	
1,1-Dichloroethane	ppbv	10	8.3	83	54-127	
1,1-Dichloroethene	ppbv	10	7.9	79	52-129	
1,2,4-Trichlorobenzene	ppbv	10	17.6	176	30-150 C	υ
1,2,4-Trimethylbenzene	ppbv	10	10.2	102	52-145	
1,2-Dibromoethane (EDB)	ppbv	10	9.2	92	59-133	
1,2-Dichlorobenzene	ppbv	10	12.6	126	67-135	
1,2-Dichloroethane	ppbv	10	8.3	83	54-125	
1,2-Dichloropropane	ppbv	10	9.5	95	64-125	
1,3,5-Trimethylbenzene	ppbv	10	11.8	118	56-135	
1,3-Butadiene	ppbv	10	8.4	84	55-125	
1,3-Dichlorobenzene	ppbv	10	12.2	122	61-142	
1,4-Dichlorobenzene	ppbv	10	11.4	1 14	55-142	
1,4-Dioxane (p-Dioxane)	ppbv	10	10.5	105	70-130	
2,2,4-Trimethylpentane	ppbv	10	9.2	92	70-130	
2-Butanone (MEK)	ppbv	10	9.7	97	47-141	

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Project: 0506-117-11 Parkwater

Pace Project No.: 10121444

LABORATORY CONTROL SAMPLE: 746124

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Hexanone	ppbv	10	10.2	102	41-138	
2-Propanol	ppbv	10	9.1	91	63-125	
4-Ethyltoluene	ppbv	10	12.0	120	62-130	
4-Methyl-2-pentanone (MIBK)	ppbv	10	10.8	108	53-134	
Acetone	ppbv	10	1 1.7	117	44-149	
Benzene	ppbv	10	9.0	90	61-126	
Bromodichloromethane	ppbv	10	8.8	88	54-129	
Bromoform	ppbv	10	10.4	104	56-125	
Bromomethane	ppbv	10	8.1	81	56-128	
Carbon disulfide	ppbv	10	8.6	86	58-150	
Carbon tetrachloride	ppbv	10	7.7	77	55-125	
Chlorobenzene	ppbv	10	9.4	94	48-138	
Chloroethane	ppbv	10	8.2	82	56-128	
Chloroform	ppbv	10	7.9	79	55-125	
Chloromethane	ppbv	10	7.9	79	50-131	
cis-1,2-Dichloroethene	ppbv	10	8.6	86	64-125	
cis-1,3-Dichloropropene	ppbv	10	11.2	112	61-132	
Cyclohexane	ppbv	10	8.6	86	61-130	
Dibromochloromethane	ppbv	10	9.2	92	51-129	
Dichlorodifluoromethane	ppbv	10	7.5	75	56-132	
Dichlorotetrafluoroethane	ppbv	10	7.8	78	48-125	
Ethanol	ppbv	10	12.3	123	70-130	
Ethyl acetate	ppbv	10	9.4	94	66-149	
Ethylbenzene	ppbv	10	10.3	103	56-137	
Hexachloro-1,3-butadiene	ppbv	10	18.3	183	30-150 (CU
sopropylbenzene (Cumene)	ppbv	10,4	10.3	99	67-134	
m&p-Xylene	ppbv	20	19.6	98	62-135	
Methyl-tert-butyl ether	ppbv	10	11.5	115	59-125	
Methylene Chloride	ppbv	10	18.7	187	46-143 (сн
n-Heptane	ppbv	10	9.3	93	64-130	
n-Hexane	ppbv	10	8.6	86	61-134	
Naphthalene	ppbv	10	17.8	178	30-150	СН
p-Xylene	ppbv	10	10.4	104	61-134	
Propylene	ppbv	10	11.8	118	62-146	
Styrene	ppbv	10	12.1	121	63-134	
Tetrachloroethene	ppbv	10	8.1	81	61-132	
Tetrahydrofuran	ppbv	10	9,9	99	62-137	
THC as Gas	ppbv	700	740	106	61-125	
Toluene	ppbv	10	10	100	57-132	
rans-1,2-Dichloroethene	ppbv	10	8.6	86	52-130	
rans-1,3-Dichloropropene	ppbv	10	13.0	130	61-129	_3
Trichloroethene	ppbv	10	8.7	87	72-147	
Trichlorofluoromethane	ppbv	10	7.4	74	58-141	
Vinvl acetate	ppbv	10	9.8	98	56-131	
Vinyl chloride	ppbv	10	11.1	111	56-136	
Xylene (Total)	ppbv	30	30.0	100	70-130	

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Project: 0506-117-11 Parkwater

Pace Project No.: 10121444

SAMPLE DUPLICATE: 746268

		10121337001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD Qualifi	ers
1,1,1-Trichloroethane	ppbv				30	,
1,1,2,2-Tetrachloroethane	ppbv	ND	ND		30	
1,1,2-Trichloroethane	ppbv	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ppbv	ND	ND		30	
1,1-Dichloroethane	ppbv	ND	ND		30	
1,1-Dichloroethene	ppbv	ND	ND		30	
1,2,4-Trichlorobenzene	ppbv	ND	ND		30	
1,2,4-Trimethylbenzene	ppbv	1.2	1.2	0	30	
I,2-Dibromoethane (EDB)	ppbv	ND	ND	Ŭ	30	
,2-Dichlorobenzene	ppbv	ND	ND		30	
,2-Dichloroethane	ppbv	ND	ND		30	
,2-Dichloropropane	ppbv	ND	ND		30	
,3,5-Trimethylbenzene	ppbv	ND	ND		30	
,3-Butadiene	ppbv	ND	ND		30	
,3-Dichlorobenzene	ppbv	ND	ND		30	
,4-Dichlorobenzene	ppbv	ND	ND		30	
,4-Dioxane (p-Dioxane)	ppbv	ND	ND		30	
		ND	ND		30	
2,4-Trimethylpentane	ppbv	0.78	.71J		30	
-Butanone (MEK)	ppbv	ND				
-Hexanone	ppbv	24.8	ND	2	30	
Propanol	ppbv		25.4	3	30	
Ethyltoluene	ppbv	ND	ND		30	
Methyl-2-pentanone (MIBK)	ppbv	ND	ND	10	30	
etone	ppbv	8.0	7.2	10	30	
enzene	ppbv	ND	ND		30	
omodichloromethane	ppbv	ND	ND		30	
omoform	ppbv	ND	ND		30	
romomethane	ppbv	ND	ND		30	
arbon disulfide	ppbv	ND	ND		30	
arbon tetrachloride	ppbv	ND	ND		30	
hlorobenzene	ppbv	ND	ND		30	
hloroethane	ppbv	ND	ND		30	
hloroform	ppbv	ND	ND		30	
hloromethane	ppbv	ND	ND		30	
s-1,2-Dichloroethene	ppbv	ND	ND		30	
s-1,3-Dichloropropene	ppbv	ND	ND		30	
yclohexane	ppbv	ND	ND		30	
bromochloromethane	ppbv	ND	ND		30	
ichlorodifluoromethane	ppbv	ND	ND		30	
chlorotetrafluoroethane	ppbv	ND	ND		30	
hanol	ppbv	3.6	3.6	0	30	
hyl acetate	ppbv	ND	ND		30	
thylbenzene	ppbv	ND	ND		30	
exachloro-1,3-butadiene	ppbv	· ND	ND		30	
opropylbenzene (Cumene)	ppbv	ND	ND		30	
1&p-Xylene	ppbv	ND	ND		30	
1ethyl-tert-butyl ether	ppbv	ND	ND		30	
Aethylene Chloride	ppbv	ND	ND		30	

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REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 Parkwater

Pace Project No.: 10121444

SAMPLE DUPLICATE: 746268

		10121337001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
n-Heptane	ppbv	ND	ND		3	0
n-Hexane	ppbv	ND	ND		3	0
Naphthalene	ppbv	0.74	0.74	0	3	0 CH
o-Xylene	ppbv	ND	ND		3	0
Propylene	ppbv	ND	ND		3	0
Styrene	ppbv	ND	ND		3	0
Tetrachloroethene	ppbv	ND	ND		3	0
Tetrahydrofuran	ppbv	0.76	0.71	7	3	0
THC as Gas	ppbv	ND	16.9J		3	0
Toluene	ppbv	ND	ND		3	0
trans-1,2-Dichloroethene	ppbv	ND	ND		3	0
trans-1,3-Dichloropropene	ppbv	ND	ND		3	0
Trichloroethene	ppbv	ND	ND		Э	0
Trichlorofluoromethane	ppbv	ND	ND		З	0
Vinyl acetate	ppbv	ND	ND		3	0
Vinyl chloride	ppbv	ND	ND		3	0
Xylene (Total)	ppbv	ND	NÐ		3	0

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QUALIFIERS

Project: 0506-117-11 Parkwater Pace Project No.: 10121444

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

- CH The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- CU The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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February 09, 2010

Carol Davy PACE ANALYTICAL 1700 Elm Street SE Minneapolis, MN 55127-

Bureau Veritas Work Order No. 10020134

Reference: 10121444/0506-117-11 PARKWATER

Dear Carol Davy:

Bureau Veritas North America, Inc. received 2 samples on 2/2/2010 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely,

Mund for

Karen Coonan Client Services Representative cc:

CASE NARRATIVE

Date: 09-Feb-10

Client:PACE ANALYTICALProject:10121444/0506-117-11 PARKWATERWork Order No10020134

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected.

Please note that a field blank was not identified by the client for this sample set.

The following results have been converted from mg/m3 to ug/m3. Sample -001A: THCs as Diesel = 13,000 ug/m3 Sample -002A: THCs as Diesel = <1,200 ug/m3

ANALYTI	CAL RESULTS	5				Date:	09-Feb-10
Client:	PACE ANALYTICAI	_					
Project:	10121444/0506-117-11	PARKW	ATER			Work Order No:	10020134
Sample Identifica	ation: VP-EX-012710						
Lab Number:	001A					Date Sampled:	1/27/2010
Sample Type	Charcoal Tube					Date Received:	2/2/2010
Analyst	CCR					Air Volume (L):	8
			Analytical Resu	lts	Reporting Limit	Test	Date
Analyte		(µg) (mg/m³) (ppm)		(μg)	Method	Analyzed	
THCs as Diesel		110	13	~	10	NIOSH 1550	02/05/2010
Sample Identifica	tion: VP-CI-012710						
Lab Number:	002A					Date Sampled:	1/27/2010
Sample Type	Charcoal Tube					Date Received:	2/2/2010
Analyst	CCR					Air Volume (L):	8.06
A	Analyte	(μg)	Analytical Resul (mg/m³)	ts (ppm)	Reporting Limit (µg)	Test Method	Date Analyzed
THCs as Diesel		<10	<1.2		10	NIOSH 1550	02/05/2010

General Notes:

<: Less than the indicated reporting limit (RL).

--: Information not available or not applicable.

Back sections (if applicable) were checked and showed no significant breakthrough unless otherwise noted.

				0032	1 1 0 1 1 0	היורנוס	VP-EK-DIDTIO = 8.0034 VP-CI-DIDTIO = 8.0034		
									5
									0 4
10:07AM	2/2/10	24	Marga	Z		1 8	2		NN
	Date/ Time		eu by	-2/732D	22AN 17-9/1 2	nes Tha	Mare Do		-
and a second	7		ed Rv		Date/Time		Released By	Transfers	7
	-								ۍ ا
									4
			, is	1.					ω
		-	Air	10121444002	1/27/2010 11:33	1/	VP-CI-012710		N
			Air	10121444001	1/27/2010 12:06		VP-EX-012710	_d∧ −E	5
LABUSEONLY	N165	Genera:	Matrix	Lat D	Collect Date/Time	00		Item Sample ID	1 a
	11 27	Preserved Containers							
) i e5e1						om	Minneapolis, MN 55414 Phone (612)607-1700 Email: carol.davy@pacelabs.com	hinneapolis hone (612 mail: carol	צתש
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Results Requested 2/11/2010	Resu	lter	0506-117-11 Parkwater	me: 0506-117-	Workorder Name:	Workoi	Workorder: 10121444	Workorder: 101 Report / Invoice To	2 5
10020134 Pace Analytical mm.peocebs.com							Chain of Custody	Shain	0

Friday, January 29, 2010 1:36 35 PM

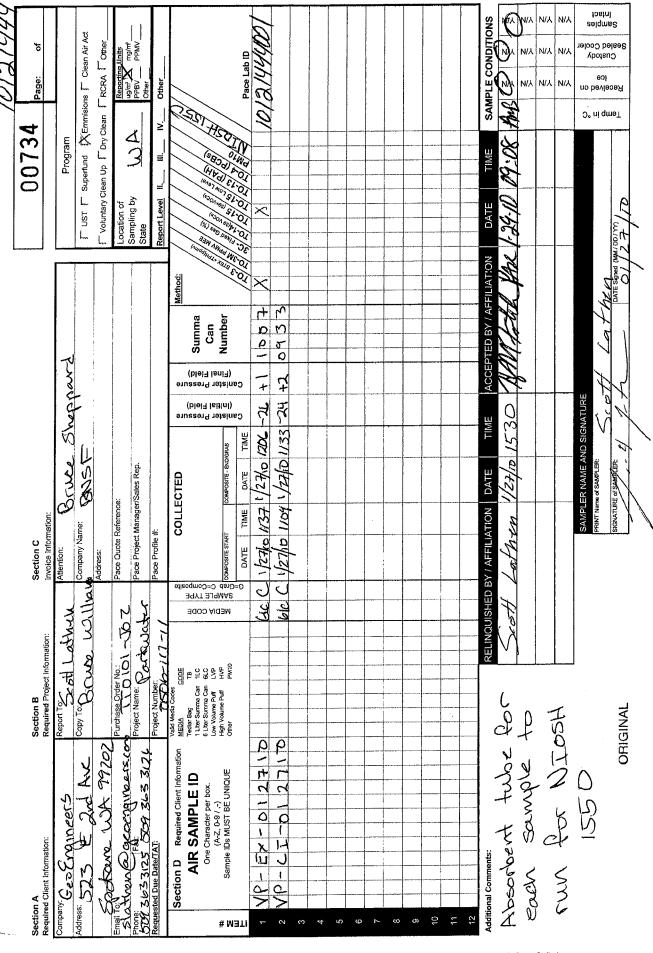
FMT-ALL-C-002rev.00 24March2009

Page 1 of 1

19 of 21

Face Analytical*

AIR: CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



FC046Rev.00, 21May2009

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414

20 of 21

Server y		AIR Sar	nple Con	dition Upon Re	eceipt		
Pace Analytica	[/] Clier	nt Name:	BEOEN	CINEER S	_ Proje	ect #/0/2/444	/
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Sample Labels match COC:	A.C.				~		++++++++++++++++++++++++++++++++++++++
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Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers) A106 Rev.01 (22May2009)



Pace Analytical Services, Inc. **17 00 Elm Street – Suite 200 Minneapolis, MiN 55414 Phone: 612.607.1700** Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125					Lab Project Numbe Project Name	r: 10121444 ə: 0506-117-11 Parkwater
Lab Sample No: 10121444001 Client Sample ID: VP-EX-01	2710	Pro	ojSampleNum: Matrix:			te Collected: 01/27/10 12:06 te Received: 01/29/10 9:08
Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No. Qualifiers
Air TO-15						
1,1,1-Trichloroethane	ND	ug/m3	4	1.38	02/09/10 17:16 CJR	71-55-6
1,1,2,2-Tetrachloroethane	ND	ug/m3	5	1.38	02/09/10 17:16 CJR	79-34-5
1,1,2-Trichloroethane	ND	ug/m3	4	1.38	02/09/10 17:16 CJR	79-00-5
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	5.6	1.38	02/09/10 17:16 CJR	76-13-1
1,1-Dichloroethane	ND	ug/m3	3	1.38	02/09/10 17:16 CJR	75-34-3
1,1-Dichloroethene	ND	ug/m3	2.9	1.38	02/09/10 17:16 CJR	75-35-4
1,2,4-Trichlorobenzene	ND	ug/m3	5.4	1.38	02/09/10 17:16 CJR	120-82-1
1,2,4-Trimethylbenzene	ND	ug/m3	3.5	1.38	02/09/10 17:16 CJR	95-63-6
1,2-Dibromoethane (EDB)	ND	ug/m3	5.6	1.38	02/09/10 17:16 CJR	106-93-4
1,2-Dichlorobenzene	ND	ug/m3	4.3	1.38	02/09/10 17:16 CJR	95-50-1
1,2-Dichloroethane	ND	ug/m3	3	1.38	02/09/10 17:16 CJR	107-06-2
1,2-Dichloropropane	ND	ug/m3	3.4	1.38	02/09/10 17:16 CJR	78-87-5
1,3,5-Trimethylbenzene	ND	ug/m3	3.6	1.38	02/09/10 17:16 CJR	108-67-8
1,3-Butadiene	ND	ug/m3	1.6	1.38	02/09/10 17:16 CJR	106-99-0
1,3-Dichlorobenzene	ND	ug/m3	4.3	1.38	02/09/10 17:16 CJR	541-73-1
1,4-Dichlorobenzene	ND	ug/m3	4.3	1.38	02/09/10 17:16 CJR	106-46-7
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.51	1.38	02/09/10 17:16 CJR	123-91-1
2,2,4-Trimethylpentane	87.4	ug/m3	3.3	1.38	02/09/10 17:16 CJR	540-84-1
2-Butanone (MEK)	ND	ug/m3	2.3	1.38	02/09/10 17:16 CJR	78-93-3
2-Hexanone	ND	ug/m3	3.2	1.38	02/09/10 17:16 CJR	591-78-6
2-Propanol	ND	ug/m3	1.7	1.38	02/09/10 17:16 CJR	67-63-0
4-Ethyltoluene	ND	ug/m3	3.6	1.38	02/09/10 17:16 CJR	622-96-8
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	3.2	1.38	02/09/10 17:16 CJR	108-10-1
Acetone	9.18	ug/m3	1.8	1.38	02/09/10 17:16 CJR	67-64-1
Benzene	ND	ug/m3	2.3	1.38	02/09/10 17:16 CJR	71-43-2
Bromodichloromethane	ND	ug/m3	4.8	1.38	02/09/10 17:16 CJR	75-27-4
Bromoform	ND	ug/m3	7.6	1.38	02/09/10 17:16 CJR 02/09/10 17:16 CJR	75-25-2 74-83-9
Bromomethane	ND	ug/m3	2.8 2.2	1.38	02/09/10 17:16 CJR	74-63-9 75-15-0
Carbon disulfide		ug/m3		1.38 1.38	02/09/10 17:16 CJR	56-23-5
Carbon tetrachloride	ND ND	ug/m3	4.5		02/09/10 17:16 CJR	108-90-7
Chlorobenzene	ND	ug/m3	3.4	1.38	02/09/10 17:16 CJR	75-00-3
Chloroethane		ug/m3 ug/m3	1.9 3.5	1 <i>.</i> 38 1.38	02/09/10 17:16 CJR	67-66-3
Chloroform Chloromethane	ND ND	ug/m3 ug/m3	3.5 1.4	1.38	02/09/10 17:16 CJR	74-87-3
	ND	ug/m3 ug/m3	2.9	1.38	02/09/10 17:16 CJR	156-59-2
cis-1,2-Dichloroethene cis-1,3-Dichloropropene	ND	ug/m3 ug/m3	2.9 3.2	1.38	02/09/10 17:16 CJR	10061-01-5
	23.8	ug/m3 ug/m3	2.5	1.38	02/09/10 17:16 CJR	110-82-7
Cyclohexane Dibromochloromethane	23.0 ND	ug/m3 ug/m3	2.5 6.3	1.30	02/09/10 17:16 CJR	124-48-1
Dipromocnioromethane	ND	ug/mo	0,0	1.50	02/08/10 17.10 UJR	124-40-1

SUPPLEMENTAL REPORT

Date: 2/11/2010

Units Conversion Request

Page 1



Pace Analytical Services, Inc. **1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700** Fax: 612.607.6444

ANALYTICAL RESULTS

Client:	GeoEngineers,Inc.					Lab Project Number:	
Phone:	(509)363-3125					Project Name:	0506-117-11 Parkwater
Dichlo	rodifluoromethane	ND	ug/m3	3.5	1.38	02/09/10 17:16 CJR	75-71-8
Dichlo	rotetrafluoroethane	ND	ug/m3	5.6	1.38	02/09/10 17:16 CJR	76-14-2
Ethan	bl	9.96	ug/m3	1.3	1.38	02/09/10 17:16 CJR	64-17-5
Ethyl a	acetate	ND	ug/m3	2.6	1.38	02/09/10 17:16 CJR	141-78-6
Ethylb	enzene	ND	ug/m3	3.2	1,38	02/09/10 17:16 CJR	100-41-4
Hexad	hloro-1,3-butadiene	ND	ug/m3	7.5	1.38	02/09/10 17:16 CJR	87-68-3
Isopro	pylbenzene (Cumene)	ND	ug/m3	3.4	1.38	02/09/10 17:16 CJR	98-82-8
m&p->	(ylene	ND	ug/m3	6.2	1.38	02/09/10 17:16 CJR	1330-20-7
Methy	lene Chloride	ND	ug/m3	2.5	1.38	02/09/10 17:16 CJR	75-09-2
Methy	l-tert-butyl ether	ND	ug/m3	5.1	1.38	02/09/10 17:16 CJR	1634-04-4
Napht	halene	ND	ug/m3	3.7	1.38	02/09/10 17:16 CJR	91-20-3
n-Hep	tane	ND	ug/m3	3	1.38	02/09/10 17:16 CJR	142-82-5
n-Hex	ane	ND	ug/m3	2.6	1.38	02/09/10 17:16 CJR	110-54-3
o-Xyle	ne	ND	ug/m3	3.2	1.38	02/09/10 17:16 CJR	95-47-6
Propyl	ene	7.52	ug/m3	4.9	1.38	02/09/10 17:16 CJR	115-07-1
Styren	e	ND	ug/m3	3.3	1.38	02/09/10 17:16 CJR	100-42-5
Tetrac	hloroethene	ND	ug/m3	5	1.38	02/09/10 17:16 CJR	127-18-4
Tetrah	ydrofuran	2.28	ug/m3	2.2	1.38	02/09/10 17:16 CJR	109-99-9
THC a	s Gas	11000	ug/m3	120	1.38	02/09/10 17:16 CJR	
Toluer	ne	ND	ug/m3	2.8	1.38	02/09/10 17:16 CJR	108-88-3
trans-	1,2-Dichloroethene	ND	ug/m3	5.6	1.38	02/09/10 17:16 CJR	156-60-5
trans-	1,3-Dichloropropene	ND	ug/m3	3.3	1.38	02/09/10 17:16 CJR	10061-02-6
Trichlo	proethene	ND	ug/m3	3.9	1.38	02/09/10 17:16 CJR	79-01-6
Trichle	profluoromethane	6.85	ug/m3	3.9	1.38	02/09/10 17:16 CJR	75-69-4
Vinyl a	acetate	ND	ug/m3	2.7	1.38	02/09/10 17:16 CJR	108-05-4
Vinyl o	hloride	ND	ug/m3	1.8	1.38	02/09/10 17:16 CJR	75-01-4
Xylene	e (Total)	ND	ug/m3	9.3	1.38	02/09/10 17:16 CJR	1330-20-7

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

SUPPLEMENTAL REPORT

Units Conversion Request

Page 2



Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MiN 55414 Phone: 612.607.1700 Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125					Lab Project N Projec		:: 10121444 :: 0506-117-1	1 Parkwater
Lab Sample No: 10121444002 Client Sample ID: VP-CI-01		Pr	ojSampleNum: Matrix:		44002			01/27/10 11:33 01/29/10 9:08
Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air TO-15								
1,1,1-Trichloroethane	ND	ug/m3	3.6	1.25	02/09/10 17:46	CJR	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4.5	1.25	02/09/10 17:46	CJR	79-34-5	
1,1,2-Trichloroethane	ND	ug/m3	3.6	1.25	02/09/10 17:46	CJR	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	5.1	1.25	02/09/10 17:46	CJR	76-13-1	
1,1-Dichloroethane	ND	ug/m3	2.7	1.25	02/09/10 17:46	CJR	75-34-3	
1,1-Dichloroethene	ND	ug/m3	2.6	1.25	02/09/10 17:46	CJR	75-35-4	
1,2,4-Trichlorobenzene	ND	ug/m3	4.9	1,25	02/09/10 17:46	CJR	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/m3	3.2	1.25	02/09/10 17:46	CJR	95-63-6	
1,2-Dibromoethane (EDB)	ND	ug/m3	5.1	1.25	02/09/10 17:46	CJR	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	3.9	1.25	02/09/10 17:46	CJR	95-50-1	
1,2-Dichloroethane	ND	ug/m3	2.7	1.25	02/09/10 17:46	CJR	107-06-2	
1,2-Dichloropropane	ND	ug/m3	3.1	1.25	02/09/10 17:46	CJR	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/m3	3.2	1.25	02/09/10 17:46		108-67-8	
1,3-Butadiene	ND	ug/m3	1.5	1.25	02/09/10 17:46		106-99-0	
1,3-Dichlorobenzene	ND	ug/m3	3.9	1.25	02/09/10 17:46		541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	3.9	1.25	02/09/10 17:46		106-46-7	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.44	1.25	02/09/10 17:46		123-91-1	
2,2,4-Trimethylpentane	7.12	ug/m3	2.9	1.25	02/09/10 17:46		540-84-1	
2-Butanone (MEK)	3.6	ug/m3	2.1	1.25	02/09/10 17:46		78-93-3	
2-Hexanone	ND	ug/m3	2.9	1.25	02/09/10 17:46		591-78-6	
2-Propanol	ND	ug/m3	1.5	1.25	02/09/10 17:46		67-63-0	
4-Ethyltoluene	ND	ug/m3	3.3	1.25	02/09/10 17:46		622-96-8	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	2.9	1.25	02/09/10 17:46		108-10-1	
Acetone	8.21	ug/m3	1.7	1.25	02/09/10 17:46		67-64-1	
Benzene	ND	ug/m3	2.1	1.25	02/09/10 17:46		71-43-2	
Bromodichloromethane	ND	ug/m3	4.4	1.25	02/09/10 17:46		75-27-4 75-25-2	
Bromoform Bromomethane	ND ND	ug/m3 ug/m3	6.8 2.5	1.25 1.25	02/09/10 17:46 02/09/10 17:46		75-25-2 74-83-9	
Carbon disulfide	ND	ug/m3	2.5	1.25	02/09/10 17:46		74-03-9 75-15-0	
Carbon tetrachloride	ND	ug/m3 ug/m3	2 4.1	1.25	02/09/10 17:46		56-23-5	
Chlorobenzene	ND	ug/m3	3	1.25	02/09/10 17:46		108-90-7	
Chloroethane	ND	ug/m3	1.7	1.25	02/09/10 17:46		75-00-3	
Chloroform	ND	ug/m3	3.2	1.25	02/09/10 17:46		67-66-3	
Chloromethane	ND	ug/m3 ug/m3	1.3	1.25	02/09/10 17:46		74-87-3	
cis-1,2-Dichloroethene	ND	ug/m3 ug/m3	2.6	1.25	02/09/10 17:46		156-59-2	
cis-1,3-Dichloropropene	ND	ug/m3 ug/m3	3	1.25	02/09/10 17:46		10061-01-5	5
Cyclohexane	ND	ug/m3	2.3	1.25	02/09/10 17:40		110-82-7	, ,
Dibromochloromethane	ND	ug/m3	2.3 5.7	1.25	02/09/10 17:46		124-48-1	
		agrino			32.00.10 11.10			

SUPPLEMENTAL REPORT

Date: 2/11/2010

Units Conversion Request



Pace Analytical Services, Inc. **17 00 EIm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.670** Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Lab Project	ot Number:	10121444
Phone: (509)363-3125 Proj	ect Name:	0506-117-11 Parkwater
Dichlorodifluoromethane ND ug/m3 3.2 1.25 02/09/10 17:4	46 CJR	75-71-8
Dichlorotetrafluoroethane ND ug/m3 5 1.25 02/09/10 17:4	46 CJR	76-14-2
Ethanol 11.7 ug/m3 1.2 1.25 02/09/10 17:4	46 CJR	64-17-5
Ethyl acetate ND ug/m3 2.3 1.25 02/09/10 17:4	46 CJR	141-78-6
Ethylbenzene ND ug/m3 2.9 1.25 02/09/10 17:4	46 CJR	100-41-4
Hexachloro-1,3-butadiene ND ug/m3 6.7 1.25 02/09/10 17:4	46 CJR	87-68-3
Isopropylbenzene (Cumene) ND ug/m3 3.1 1.25 02/09/10 17:4	46 CJR	98-82-8
m&p-Xylene ND ug/m3 5.3 1.25 02/09/10 17:4	46 CJR	1330-20-7
Methylene Chloride ND ug/m3 2.3 1.25 02/09/10 17:4	46 CJR	75-09-2
Methyl-tert-butyl ether ND ug/m3 4.4 1.25 02/09/10 17:4	46 CJR	1634-04-4
Naphthalene ND ug/m3 3.3 1.25 02/09/10 17:4	46 CJR	91-20-3
n-Heptane ND ug/m3 2.7 1.25 02/09/10 17:4	46 CJR	142-82-5
n-Hexane ND ug/m3 2.4 1.25 02/09/10 17:4	46 CJR	110-54-3
o-Xylene ND ug/m3 2.9 1.25 02/09/10 17:4	46 CJR	95-47-6
Propylene ND ug/m3 4.4 1.25 02/09/10 17:4	46 CJR	115-07-1
Styrene ND ug/m3 3 1.25 02/09/10 17:4	46 CJR	100-42-5
Tetrachloroethene ND ug/m3 4.5 1.25 02/09/10 17:4	46 CJR	127-18-4
Tetrahydrofuran ND ug/m3 1.9 1.25 02/09/10 17:4	46 CJR	109-99-9
THC as Gas 49500 ug/m3 110 1.25 02/09/10 17:4	46 CJR	
Toluene 3.49 ug/m3 2.5 1.25 02/09/10 17:4	46 CJR	108-88-3
trans-1,2-Dichloroethene ND ug/m3 4.8 1.25 02/09/10 17:4	46 CJR	156-60-5
trans-1,3-Dichloropropene ND ug/m3 3 1.25 02/09/10 17:4	46 CJR	10061-02-6
Trichloroethene ND ug/m3 3.6 1.25 02/09/10 17:4	46 CJR	79-01-6
Trichlorofluoromethane ND ug/m3 3.5 1.25 02/09/10 17:4	46 CJR	75-69-4
Vinyl acetate ND ug/m3 2.5 1.25 02/09/10 17:4	46 CJR	108-05-4
Vinyl chloride ND ug/m3 1.7 1.25 02/09/10 17:4	46 CJR	75-01-4
Xylene (Total) ND ug/m3 8.4 1.25 02/09/10 17:4	46 CJR	1330-20-7

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

SUPPLEMENTAL REPORT

Units Conversion Request



Pace Analytical Services, Inc. **1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700** Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125 Lab Project Number: 10121444 Project Name: 0506-117-11 Parkwater

PARAMETER FOOTNOTES

SUPPLEMENTAL REPORT

Units Conversion Request

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Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

March 01, 2010

Bruce Williams GeoEngineers,Inc. 523 East Second Ave Spokane, WA 99202

RE: Project: 0506-47-71 PARKWATER Pace Project No.: 10122515

Dear Bruce Williams:

Enclosed are the analytical results for sample(s) received by the laboratory on February 17, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Caro Doug-

Carol Davy

carol.davy@pacelabs.com Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Page 1 of 11



⁸ace Analytical www.pacelabs.com

Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

CERTIFICATIONS

 Project:
 0506-47-71 PARKWATER

 Pace Project No.:
 10122515

Minnesota Certification IDs

1700 Elm Street SE, Suite 200 Minneapolis, MN 55414 Alaska Certification #: UST-078 Washington Certification #: C754 Tennessee Certification #: 02818 Pennsylvania Certification #: 68-00563 Oregon Certification #: MN200001 North Dakota Certification #: R-036 North Carolina Certification #: R-036 North Carolina Certification #: 530 New York Certification #: 11647 New Jersey Certification #: 11647 New Jersey Certification #: MN-002 Montana Certification #: MT CERT0092 Minnesota Certification #: 027-053-137

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REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 0506-47-71 PARKWATER Pace Project No.: 10122515

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10122515001	VP-CI-021210	Air	02/12/10 12:46	02/17/10 10:00

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SAMPLE ANALYTE COUNT

Project:	0506-47-71 PARKWATER
Pace Project No.:	10122515
1	· · · · · · · · · · · · · · · · · · ·

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10122515001	VP-CI-021210	TO-15	LCW	65	PASI-M

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PROJECT NARRATIVE

Project: 0506-47-71 PARKWATER

Pace Project No.: 10122515

Method: TO-15

Description:TO15 MSV AIRClient:GeoEngineers,Inc.Date:March 01, 2010

General Information:

1 sample was analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: AIR/9837

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 753422)
 - 1,2-Dichloroethane
 - · 2-Propanol
 - Bromoform
 - Carbon tetrachloride

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-47-71 PARKWATER

Pace Project No.: 10122515

Sample: VP-CI-021210	Lab ID: 10	122515001 Collecte	d: 02/12/1	0 12:46	Received: 02	2/17/10 10:00 Ma	atrix: Air	
		Report		DE	Demand	A see to see al	040 N-	0
Parameters	Results	Units Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Me	thod: TO-15						
1,1,1-Trichloroethane	ND ppbv	1.0	0.51	1.97		02/26/10 13:22		
1,1,2,2-Tetrachloroethane	ND ppby	1.0	0.51	1.97		02/26/10 13:22		
1,1,2-Trichloroethane	ND ppbv		0.51	1.97		02/26/10 13:22		
1,1,2-Trichlorotrifluoroethane	ND ppbv	1.0	0.51	1,97		02/26/10 13:22		
1,1-Dichloroethane	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	75-34-3	
1,1-Dichloroethene	ND ppbv	1.0	0.51	1.97		02/26/10 13:22		
1,2,4-Trichlorobenzene	ND ppbv		0.51	1.97		02/26/10 13:22	120-82-1	
1,2,4-Trimethylbenzene	ND ppbv	1.0	0.50	1.97		02/26/10 13:22	95-63-6	
1,2-Dibromoethane (EDB)	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	106-93-4	
1,2-Dichlorobenzene	ND ppbv	1.0	0.50	1.97		02/26/10 13:22	95-50-1	
1,2-Dichloroethane	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	107-06-2	
1,2-Dichloropropane	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	78-87-5	
1,3,5-Trimethylbenzene	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	108-67-8	
1,3-Butadiene	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	106-99-0	
1,3-Dichlorobenzene	ND ppbv	1.0	0.50	1.97		02/26/10 13:22	541-73-1	
1,4-Dichlorobenzene	ND ppbv	1.0	0.50	1.97		02/26/10 13:22	106-46-7	
1,4-Dioxane (p-Dioxane)	ND ppbv	0.39	0.20	1.97		02/26/10 13:22	123-91-1	
2,2,4-Trimethylpentane	ND ppbv	0.98	0.49	1.97		02/26/10 13:22	540-84-1	
2-Butanone (MEK)	ND ppbv	1.1	0.54	1,97		02/26/10 13:22	78-93-3	
2-Hexanone	ND ppbv	1.1	0.54	1.97		02/26/10 13:22	591-78-6	
2-Propanol	ND ppbv	0.98	0.49	1,97		02/26/10 13:22	67-63-0	
4-Ethyltoluene	ND ppbv	1.0	0.52	1.97		02/26/10 13:22	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND ppbv	1.1	0.54	1.97		02/26/10 13:22	108-10-1	
Acetone	5.0 ppbv	1.1	0.54	1.97		02/26/10 13:22	67-64-1	
Benzene	ND ppbv	1.0	0.51	1,97		02/26/10 13:22	71-43-2	
Bromodichloromethane	ND ppbv	1.0	0.50	1.97		02/26/10 13:22	75-27-4	
Bromoform	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	75-25-2	
Bromomethane	ND ppbv	1.0	0.50	1.97		02/26/10 13:22	74-83-9	
Carbon disulfide	ND ppbv	0.98	0.49	1.97		02/26/10 13:22	75-15-0	
Carbon tetrachloride	ND ppbv	1.0	0.50	1.97		02/26/10 13:22	56-23-5	
Chlorobenzene	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	108-90-7	
Chloroethane	ND ppbv	1.0	0.50	1.97		02/26/10 13:22	75-00-3	
Chloroform	ND ppbv	1.0	0.50	1.97		02/26/10 13:22	67-66-3	
Chloromethane	ND ppbv	0.98	0.49	1.97		02/26/10 13:22	74-87-3	
Cyclohexane	ND ppbv		0.51	1.97		02/26/10 13:22	110-82-7	
Dibromochloromethane	ND ppbv	1.0	0.52	1.97		02/26/10 13:22	124-48-1	
Dichlorodifluoromethane	1.6 ppbv		0.50	1.97		02/26/10 13:22	75-71-8	
Dichlorotetrafluoroethane	ND ppbv		0.56	1.97		02/26/10 13:22		
Ethanol	ND ppbv		0.49	1.97		02/26/10 13:22	64-17-5	
Ethyl acetate	ND ppbv		0.50	1.97		02/26/10 13:22		
Ethylbenzene	ND ppbv		0.51	1.97		02/26/10 13:22		
Hexachloro-1,3-butadiene	ND ppbv		0.49	1.97		02/26/10 13:22		
Isopropylbenzene (Cumene)	ND ppbv		0.49	1.97		02/26/10 13:22		
Methyl-tert-butyl ether	ND ppbv		0.98	1.97		02/26/10 13:22		
Methylene Chloride	ND ppbv		0.51	1.97		02/26/10 13:22		
Naphthalene	ND ppbv		0.49	1.97		02/26/10 13:22		

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ANALYTICAL RESULTS

Project: 0506-47-71 PARKWATER

Pace Project No.: 10122515

Sample: VP-CI-021210	Lab ID: 101225	15001 Collected	d: 02/12/1	0 12:46	Received: 02	2/17/10 10:00 M	atrix: Air	·····
Parameters	Results Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method:	TO-15						
Propylene	10.5 ppbv	3.9	2.0	1.97		02/26/10 13:22	115-07-1	
Styrene	ND ppbv	1.1	0.54	1.97		02/26/10 13:22	100-42-5	
THC as Gas	1010 ppbv	39.4	19.7	1.97		02/26/10 13:22		
Tetrachloroethene	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	127-18-4	
Tetrahydrofuran	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	109-99-9	
Toluene	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	108-88-3	
Trichloroethene	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	79-01-6	
Trichlorofluoromethane	ND ppbv	0.98	0.49	1.97		02/26/10 13:22	75-69-4	
Vinyl acetate	ND ppbv	1.1	0.54	1.97		02/26/10 13:22	108-05-4	
Vinyl chloride	ND ppbv	1.0	0.50	1.97		02/26/10 13:22	75-01-4	
Xylene (Total)	ND ppbv	3.0	1.5	1.97		02/26/10 13:22	1330-20-7	
cis-1,2-Dichloroethene	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	156-59-2	
cis-1,3-Dichloropropene	ND ppbv	1.0	0.50	1.97		02/26/10 13:22	10061-01-5	
m&p-Xylene	ND ppbv	2.0	0.98	1.97		02/26/10 13:22	1330-20-7	
n-Heptane	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	142-82-5	
n-Hexane	ND ppbv	1.0	0.52	1.97		02/26/10 13:22	110-54-3	
o-Xylene	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	95-47-6	
trans-1,2-Dichloroethene	ND ppbv	2.0	0.98	1.97		02/26/10 13:22	156-60-5	
trans-1,3-Dichloropropene	ND ppbv	1.0	0.51	1.97		02/26/10 13:22	10061-02-6	

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Project: 0506-47-71 PARKWATER

_			
Pace	Projec	ct No 1	

No.: 10122515

Pace Project No.: 10122515						
QC Batch: AIR/9837		Analysis Meth	nod: TC	D-15	·	
QC Batch Method: TO-15		Analysis Des	cription: TC	015 MSV AIR		
	2515001					
·						
METHOD BLANK: 753421		Matrix:	Air			
Associated Lab Samples: 10122	2515001					
_		Blank	Reporting			
Parameter	Units	Result	Limit	Analyzed	Qualifiers	
1,1,1-Trichloroethane	ppbv	ND	0.52	02/26/10 10:32		
1,1,2,2-Tetrachloroethane	ppbv	ND	0.52	02/26/10 10:32		
1,1,2-Trichloroethane	ppbv	ND	0.52	02/26/10 10:32		
1,1,2-Trichlorotrifluoroethane	ppbv	ND	0.52	02/26/10 10:32		
1,1-Dichloroethane	ppbv	ND	0.52	02/26/10 10:32		
1,1-Dichloroethene	ppbv	ND	0.52	02/26/10 10:32		
1,2,4-Trichlorobenzene	ppbv	ND	0.52	02/26/10 10:32		
1,2,4-Trimethylbenzene	ppbv	ND	0.51	02/26/10 10:32		
1,2-Dibromoethane (EDB)	ppbv	ND	0.52	02/26/10 10:32		
1,2-Dichlorobenzene	ppbv	ND	0.51	02/26/10 10:32		
1,2-Dichloroethane	ppbv	ND	0.52	02/26/10 10:32		
I,2-Dichloropropane	ppbv	ND	0.52	02/26/10 10:32		
,3,5-Trimethylbenzene	ppbv	ND	0.52	02/26/10 10:32		
,3-Butadiene	ppbv	ND	0.52	02/26/10 10:32		
,3-Dichlorobenzene	ppbv	ND	0.51	02/26/10 10:32		
,4-Dichlorobenzene	ppbv	ND	0.51	02/26/10 10:32		
,4-Dioxane (p-Dioxane)	ppbv	ND	0.20	02/26/10 10:32		
2,2,4-Trimethylpentane	ppbv	ND	0.50	02/26/10 10:32		
P-Butanone (MEK)	ppbv	ND	0.55	02/26/10 10:32		
-Hexanone	ppbv	ND	0.55	02/26/10 10:32		
-Propanol	ppbv	ND	0.50	02/26/10 10:32		
-Ethyltoluene	ppbv	ND	0.53	02/26/10 10:32		
- I-Methyl-2-pentanone (MIBK)	ppbv	ND	0.55	02/26/10 10:32		
Acetone	ppbv	ND	0.55	02/26/10 10:32		
Benzene	ppbv	ND	0.52	02/26/10 10:32		
Bromodichloromethane	ppbv	ND	0.51	02/26/10 10:32		
Bromoform	ppbv	ND	0.52	02/26/10 10:32		
Bromomethane	ppbv	ND	0.51	02/26/10 10:32		
Carbon disulfide	ppbv	ND	0.50	02/26/10 10:32		
Carbon tetrachloride	ppbv	ND	0.51	02/26/10 10:32		
Chlorobenzene	ppbv	ND	0.52	02/26/10 10:32		
Chloroethane	ppbv	ND	0.51	02/26/10 10:32		
Chloroform	ppbv	ND	0.51	02/26/10 10:32		
Chloromethane	ppbv	ND	0.50	02/26/10 10:32		
is-1,2-Dichloroethene	ppbv	ND	0.52	02/26/10 10:32		
is-1,3-Dichloropropene	ppbv	ND	0.51	02/26/10 10:32		
Cyclohexane	ppbv	ND	0.52	02/26/10 10:32		
Dibromochloromethane	ppbv	ND	0.53	02/26/10 10:32		
Dichlorodifluoromethane	ppbv	ND	0.51	02/26/10 10:32		
Dichlorotetrafluoroethane	ppbv	ND	0.57	02/26/10 10:32		
Ethanol	ppbv	ND	0.50	02/26/10 10:32		
Ethyl acetate	ppbv	ND	0.51	02/26/10 10:32		
Ethylbenzene	ppbv	ND	0.52	02/26/10 10:32		

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Project: 0506-47-71 PARKWATER

Pace Project No.: 10122515

METHOD BLANK: 753421

Matrix: Air

Associated Lab Samples: 10122515001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ppbv	ND	0.50	02/26/10 10:32	
Isopropylbenzene (Cumene)	ppbv	ND	0.50	02/26/10 10:32	
m&p-Xylene	ppbv	ND	1.0	02/26/10 10:32	
Methyl-tert-butyl ether	ppbv	ND	1.0	02/26/10 10:32	
Methylene Chloride	ppbv	ND	0.52	02/26/10 10:32	
n-Heptane	ppbv	ND	0.52	02/26/10 10:32	
n-Hexane	ppbv	ND	0.53	02/26/10 10:32	
Naphthalene	ppbv	ND	0.50	02/26/10 10:32	
o-Xylene	ppbv	ND	0.52	02/26/10 10:32	
Propylene	ppbv	ND	2.0	02/26/10 10:32	
Styrene	ppbv	ND	0.55	02/26/10 10:32	
Tetrachloroethene	ppbv	ND	0.52	02/26/10 10:32	
Tetrahydrofuran	ppbv	ND	0.52	02/26/10 10:32	
THC as Gas	ppbv	ND	20.0	02/26/10 10:32	
Toluene	ppbv	ND	0.52	02/26/10 10:32	
trans-1,2-Dichloroethene	ppbv	ND	1.0	02/26/10 10:32	
trans-1,3-Dichloropropene	ppbv	ND	0.52	02/26/10 10:32	
Trichloroethene	ppbv	ND	0.52	02/26/10 10:32	
Trichlorofluoromethane	ppbv	ND	0.50	02/26/10 10:32	
Vinyl acetate	ppbv	ND	0.55	02/26/10 10:32	
Vinyl chloride	ppbv	ND	0.51	02/26/10 10:32	
Xylene (Total)	ppbv	ND	1.5	02/26/10 10:32	

LABORATORY CONTROL SAMPLE: 753422

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifier
1,1,1-Trichloroethane	ppbv	10	12.2	122	60-125
1,1,2,2-Tetrachloroethane	ppbv	10	11.6	116	57-127
1,1,2-Trichloroethane	ppbv	10	11.3	113	56-125
1,1,2-Trichlorotrifluoroethane	ppbv	10	10.6	106	52-133
1,1-Dichloroethane	ppbv	10	10.9	109	54-127
1,1-Dichloroethene	ppbv	10	11.6	116	52-129
1,2,4-Trichlorobenzene	ppbv	10	16.4	164	30-150 CU
1,2,4-Trimethylbenzene	ppbv	10	12.6	126	52-145
1,2-Dibromoethane (EDB)	ppbv	10	11.7	117	59-133
1,2-Dichlorobenzene	ppbv	10	12.9	129	67-135
1,2-Dichloroethane	ppbv	10	13.0	130	54-125 L3
1,2-Dichloropropane	ppbv	10	10.1	101	64-125
1,3,5-Trimethylbenzene	ppbv	10	12.0	120	56-135
1,3-Butadiene	ppbv	10	10.5	105	55-125
1,3-Dichlorobenzene	ppbv	10	12.2	122	61-142
1,4-Dichlorobenzene	ppbv	10	12.3	123	55-142
1,4-Dioxane (p-Dioxane)	ppbv	10	10.1	101	70-130
2,2,4-Trimethylpentane	ppbv	10	10.1	101	70-130
2-Butanone (MEK)	ppbv	10	11.6	116	47-141

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REPORT OF LABORATORY ANALYSIS

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Project: 0506-47-71 PARKWATER

Pace Project No.: 10122515

LABORATORY CONTROL SAMPLE: 753422

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifi	ers
2-Hexanone	ppbv	10	11.9	119	41-138	
2-Propanol	ppbv	10	12.6	126	63-125 L3	
4-Ethyltoluene	ppbv	10	12.8	128	62-130	
4-Methyl-2-pentanone (MIBK)	ppbv	10	12.4	124	53-134	
Acetone	ppbv	10	11.0	110	44-149	
Benzene	ppbv	10	10.1	101	61-126	
Bromodichloromethane	ppbv	10	12.2	122	54-129	
Bromoform	ppbv	10	12.8	128	56-125 L3	
Bromomethane	ppbv	10	10.8	108	56-128	
Carbon disulfide	ppbv	10	10.1	101	58-150	
Carbon tetrachloride	ppbv	10	12.6	126	55-125 L3	
Chlorobenzene	ppbv	10	10.7	107	48-138	
Chloroethane	ppbv	10	9.9	99	56-128	
Chloroform	ppbv	10	11.9	119	55-125	
Chloromethane	ppbv	10	10.5	105	50-131	
cis-1,2-Dichloroethene	ppbv	10	10.7	107	64-125	
cis-1,3-Dichloropropene	ppbv	10	11.4	114	61-132	
Cyclohexane	ppbv	10	10.2	102	61-130	
Dibromochloromethane	ppbv	10	12.1	121	51-129	
Dichlorodifluoromethane	ppbv	10	12.2	122	56-132	
Dichlorotetrafluoroethane	ppbv	10	11.2	112	48-125	
Ethanol	ppbv	10	10.1	101	70-130	
Ethyl acetate	ppbv	10	12.5	125	66-149	
Ethylbenzene	ppbv	10	11.4	114	56-137	
Hexachloro-1,3-butadiene	ppbv	10	20.5	205	30-150 CU	
sopropylbenzene (Cumene)	ppbv	10.4	11.6	112	67-134	
n&p-Xylene	ppbv	20	22.9	115	62-135	
Methyl-tert-butyl ether	ppbv	10	11.1	111	59-125	
Methylene Chloride	ppbv ppbv	10	12.1	121	46-143	
n-Heptane	ppbv	10	10.9	109	64-130	
h-Hexane	ppbv	10	9.2	92	61-134	
Naphthalene	ppbv	10	16.3	163	30-150 CU	
o-Xylene	ppbv	10	11.8	118	61-134	
Propylene	ppbv ppbv	10	9.4	94	62-146	
Styrene	ppbv	10	12.4	124	63-134	
Tetrachloroethene	ppbv ppbv	10	12.9	124	61-132	
Tetrahydrofuran	ppbv	10	11.1	111	62-137	
THC as Gas	ppbv	700	599	86	61-125	
Toluene	ppbv	10	10.2	102	57-132	
rans-1,2-Dichloroethene	ppbv	10	10.2	102	52-130	
trans-1,3-Dichloropropene	ppbv	10	12.2	103	61-129	
Trichloroethene	ppbv	10	10.2	102	72-147	
Trichlorofluoromethane	ppbv	10	12.5	102	58-141	
Vinyl acetate	ppbv	10	12.5	123	56-131	
Vinyl chloride	ppbv	10	12.9	129	56-136	
,	••	30	34.7	116	70-130	
Xylene (Total)	ppbv	30	34.1	110	104130	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 0506-47-71 PARKWATER Pace Project No.: 10122515

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

- CU The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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REPORT OF LABORATORY ANALYSIS

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February 25, 2010

Carol Davy PACE ANALYTICAL 1700 Elm Street SE Minneapolis, MN 55127-

Bureau Veritas Work Order No. 10020866

Reference: 0506-47-71 PARKWATER

Dear Carol Davy:

Bureau Veritas North America, Inc. received 1 sample on 2/18/2010 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely,

Lacea Comen

Karen Coonan Client Services Representative cc:

CASE NARRATIVE

Date: 25-Feb-10

Client:PACE ANALYTICALProject:0506-47-71 PARKWATERWork Order No10020866

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected.

Please note that a field blank was not identified by the client for this sample set.

The following results have been converted from mg/m3 to ug/m3. Sample -001A: THCs as Diesel = <1300 ug/m3

ANALYTICAL RESULTS

Date: 25-Feb-10

THCs as Diesel		<10	<1.3	~~	10	NIOSH 1550	02/23/2010
	Analyte	(µg)	(mg/m³)	(ppm)	Limit (µg)	Method	Date Analyzed
			Analytical Res	ults	Reporting	Test	D-4-
Analyst	CCR					Date Received: 2/18/2010 Air Volume (L): 8	
Sample Type	Charcoal Tube						
Lab Number:	001A					Date Sampled:	2/12/2010
Sample Identific	ation: VP-CI-021210						
Project:	0506-47-71 PARKWAT	TER				Work Order No:	10020866
Client:	PACE ANALYTICAL						

General Notes:

<: Less than the indicated reporting limit (RL).
--: Information not available or not applicable.
Back sections (if applicable) were checked and showed no significant breakthrough unless otherwise noted.

Chain of Custody						2 L	10000001	200	Pace Analytical	tical "
Workorder: 10122515	Workorder Name:		0506-47-71 PARKWATER	ARKWATER		Results Requested		3/2/2010		
Carol Davy Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700 Email: carol davy@pacelabs.com	ε	Birreau Ve	leritas	P.O. /0/22515	0122515 Preserved Containers	P. 3, DF 0. EST 419				
ttem Sample (D	Collect Date/Time	ę	Fab ID	General		$\infty 1 N$			LAB USE ONLY	ONLY
1 //P-CI-021210 2 3 4 4	2/12/20	2/12/2010 12.46 101	10122515001	Air /		X				
								Comments		
Transfers Released By		Date/Time	Received By	λ	Date/Time 2/18/10 1	Date/Time 2/18/10 10:15 M				
0 4 6										
Volume of air Publ	ar P.	70								*

FMT-ALL-C-002rev.00 24March2009

Wednesday, February 17, 2010 2:52:27 PM

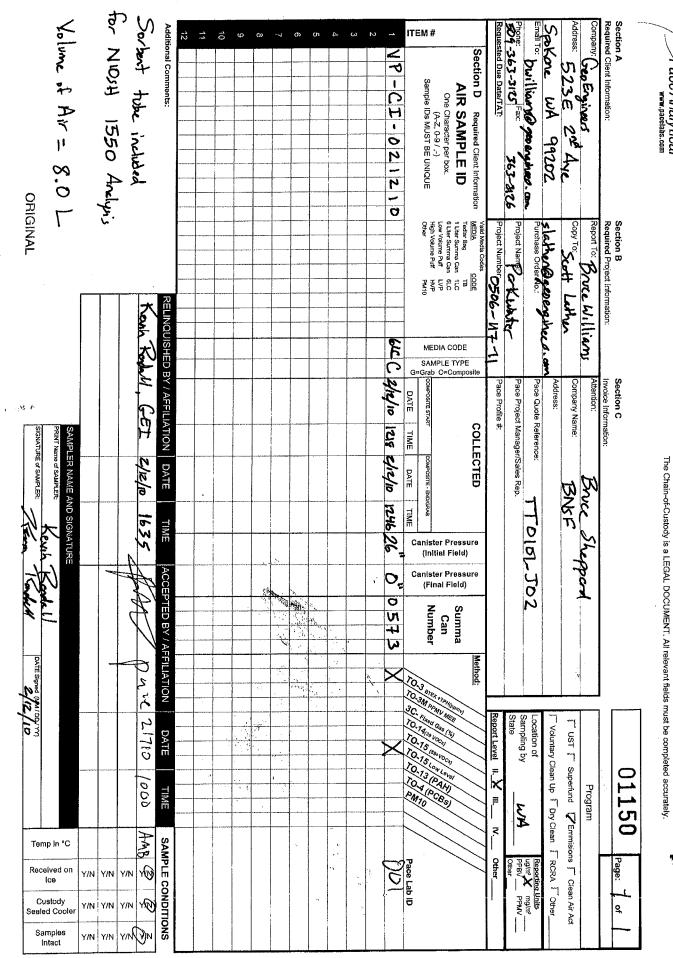
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FC046Rev.00, 21May2009

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414



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Pace Analytical" www.pacetabs.com

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

0/22515

1	_ ai	AIR Sar	nple Conc	lition Upon Re	eceipt	1012251	ζ	
/ Pace Analytic	<i>cal</i> Cli	ent Name:	Geo	Engineer	^ج Proje	ct #		
Courier: Courier: Courier:	/ UPS [] U / Box Prese	SPS 🗌 Client 🗌	Commercial	Pace Other_	no	Optional Proj. Due Date:		
Packing Material: \square Bi Tracking #: $\frac{2F6}{2F6}$						Proj. Name: Date and Initials of person exam	-latan	
Tracking #:	14000	1 (5) 5 0665		Comments:			<u>1v</u>	
Chain of Custody Present	:	[]Ye	s ⊡No ⊡N/A	1.				
Chain of Custody Filled O	ut:	12 Yes	s ⊡No □N/A	2.		an da		
Chain of Custody Relinqui	ished:	[2]Yes	3 🗆 No 🖾 N/A	3.		4 44 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	,	
Sampler Name & Signatur	re on COC:	ZIY 05	INo ⊡N/A	4.	************			
Samples Arrived within Ho	old Time:		: □No □N/A	T	*****		*****	
Short Hold Time Analysi	s (<72hr):	[]Yes		6.		*** *********************************		
Rush Turn Around Time		ستهيد فيشرون فيقتون أن حجب بينين فيتصوب من فرائد في الم		7.				
Sufficient Volume:				***	*****	99		
Correct Containers Used:		13 Yes		9.	******	######################################		
-Pace Containers Used	l:							
Containers Intact:		/ Yes		10.			andel and an angle and a state of a	
Media:(Air C	un lair sti	k	11.	***	**********		
Sample Labels match COC		6		······································		n ber de stad met en en en en an de en an de en an de geste de ante de ante de geben ad an europe personnen en		
Samples Received:								
Canisters	3	Flow Contr	ollers	Stand Alor	ne G	Tedlar Bags		
Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID	Sample Number Can ID	 	
VP-CI-021240	573		46					
		•••••						

Client Notification/ Resolu	ution:				Field	Data Required? Y / N		
Person Contacted:				ime:		-		
Comments/ Resolution:							·	
****	- 4					·		

							,	
Project Manager Review						Date:		

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers) A106 Rev.01 (22May2009) ١.



Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700 Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125					Lab Project Numbe Project Name	r: 10122515 e: 0506-47-71 PARKWATER
Lab Sample No: 10122515001 Client Sample ID: VP-CI-021	210	Pro	ojSampleNum: Matrix:			e Collected: 02/12/10 12:46 e Received: 02/17/10 10:00
Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No. Qualifiers
Air TO-15						
1,1,1-Trichloroethane	ND	ug/m3	5.5	1.97	02/26/10 13:22 LCW	71-55-6
1,1,2,2-Tetrachloroethane	ND	ug/m3	7	1.97	02/26/10 13:22 LCW	79-34-5
1,1,2-Trichloroethane	ND	ug/m3	5.5	1.97	02/26/10 13:22 LCW	79-00-5
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	7.8	1.97	02/26/10 13:22 LCW	76-13-1
1,1-Dichloroethane	ND	ug/m3	4.1	1.97	02/26/10 13:22 LCW	75-34-3
1,1-Dichloroethene	ND	ug/m3	4	1.97	02/26/10 13:22 LCW	75-35-4
1,2,4-Trichlorobenzene	ND	ug/m3	7.5	1.97	02/26/10 13:22 LCW	120-82-1
1,2,4-Trimethylbenzene	ND	ug/m3	5	1.97	02/26/10 13:22 LCW	95-63-6
1,2-Dibromoethane (EDB)	ND	ug/m3	7.8	1.97	02/26/10 13:22 LCW	106-93-4
1,2-Dichlorobenzene	ND	ug/m3	6.1	1.97	02/26/10 13:22 LCW	95-50-1
1,2-Dichloroethane	ND	ug/m3	4.1	1.97	02/26/10 13:22 LCW	107-06-2
1,2-Dichloropropane	ND	ug/m3	4.7	1.97	02/26/10 13:22 LCW	78-87-5
1,3,5-Trimethylbenzene	ND	ug/m3	5	1.97	02/26/10 13:22 LCW	108-67-8
1,3-Butadiene	ND	ug/m3	2.2	1.97	02/26/10 13:22 LCW	106-99-0
1,3-Dichlorobenzene	ND	ug/m3	6.1	1.97	02/26/10 13:22 LCW	541-73-1
1,4-Dichlorobenzene	ND	ug/m3	6.1	1.97	02/26/10 13:22 LCW	106-46-7
1,4-Dioxane (p-Dioxane)	ND	ug/m3	1.4	1.97	02/26/10 13:22 LCW	123-91-1
2,2,4-Trimethylpentane	ND	ug/m3	4.7	1.97	02/26/10 13:22 LCW	540-84-1
2-Butanone (MEK)	ND	ug/m3	3.3	1.97	02/26/10 13:22 LCW	78-93-3
2-Hexanone	ND	ug/m3	4.6	1.97	02/26/10 13:22 LCW	591-78-6
2-Propanol	ND	ug/m3	2.4	1.97	02/26/10 13:22 LCW	67-63-0
4-Ethyltoluene	ND	ug/m3	5	1.97	02/26/10 13:22 LCW	622-96-8
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	4.6	1.97	02/26/10 13:22 LCW	108-10-1
Acetone	12.1	ug/m3	2.7	1.97	02/26/10 13:22 LCW	67-64-1
Benzene	ND	ug/m3	3.2	1.97	02/26/10 13:22 LCW	71-43-2
Bromodichloromethane	ND	ug/m3	6.8	1.97	02/26/10 13:22 LCW	75-27-4
Bromoform	ND	ug/m3	11	1.97	02/26/10 13:22 LCW	75-25-2
Bromomethane	ND	ug/m3	3.9	1.97	02/26/10 13:22 LCW	74-83-9
Carbon disulfide	ND	ug/m3	3.1	1.97	02/26/10 13:22 LCW	75-15-0
Carbon tetrachloride	ND	ug/m3	6.4	1.97	02/26/10 13:22 LCW	56-23-5
Chlorobenzene	ND	ug/m3	4.7	1.97	02/26/10 13:22 LCW	108-90-7
Chloroethane	ND	ug/m3	2.7	1.97	02/26/10 13:22 LCW	75-00-3
Chloroform	ND	ug/m3	5	1.97	02/26/10 13:22 LCW	67-66-3
Chloromethane	ND	ug/m3	2.1	1.97	02/26/10 13:22 LCW	74-87-3
cis-1,2-Dichloroethene	ND	ug/m3	4	1.97	02/26/10 13:22 LCW	156-59-2
cis-1,3-Dichloropropene	ND	ug/m3	4.6	1.97	02/26/10 13:22 LCW	10061-01-5
Cyclohexane	ND	ug/m3	3.5	1.97	02/26/10 13:22 LCW	110-82-7
Dibromochloromethane	ND	ug/m3	8.7	1.97	02/26/10 13:22 LCW	124-48-1

SUPPLEMENTAL REPORT

Date: 3/1/2010

Units Conversion Request

Page 1



Pace Analytical Services, Inc. **1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700** Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125					Lab Project Number: Project Name:	10122515 0506-47-71 PARKWATER
	0.04	0	F	4.07	02/26/10 13:22 LCW	75-71-8
Dichlorodifluoromethane	8.04	ug/m3	5	1.97		
Dichlorotetrafluoroethane	ND	ug/m3	7.8	1.97	02/26/10 13:22 LCW	76-14-2
Ethanol	ND	ug/m3	1.9	1.97	02/26/10 13:22 LCW	64-17-5
Ethyl acetate	ND	ug/m3	3.7	1.97	02/26/10 13:22 LCW	141-78-6
Ethylbenzene	ND	ug/m3	4.4	1.97	02/26/10 13:22 LCW	100-41-4
Hexachloro-1,3-butadiene	ND	ug/m3	11	1.97	02/26/10 13:22 LCW	87-68-3
Isopropylbenzene (Cumene)	ND	ug/m3	4.9	1.97	02/26/10 13:22 LCW	98-82-8
m&p-Xylene	ND	ug/m3	8.8	1.97	02/26/10 13:22 LCW	1330-20-7
Methylene Chloride	ND	ug/m3	3.5	1.97	02/26/10 13:22 LCW	75-09-2
Methyl-tert-butyl ether	ND	ug/m3	7.3	1.97	02/26/10 13:22 LCW	1634-04-4
Naphthalene	ND	ug/m3	5.2	1.97	02/26/10 13:22 LCW	91-20-3
n-Heptane	ND	ug/m3	4.2	1.97	02/26/10 13:22 LCW	142-82-5
n-Hexane	ND	ug/m3	3.6	1.97	02/26/10 13:22 LCW	110-54-3
o-Xylene	ND	ug/m3	4,4	1.97	02/26/10 13:22 LCW	95-47-6
Propylene	18.4	ug/m3	6.8	1.97	02/26/10 13:22 LCW	115-07-1
Styrene	ND	ug/m3	4.8	1.97	02/26/10 13:22 LCW	100-42-5
Tetrachloroethene	ND	ug/m3	6.9	1.97	02/26/10 13:22 LCW	127-18-4
Tetrahydrofuran	ND	ug/m3	3	1.97	02/26/10 13:22 LCW	109-99-9
THC as Gas	4380	ug/m3	170	1.97	02/26/10 13:22 LCW	
Toluene	ND	ug/m3	3.8	1.97	02/26/10 13:22 LCW	108-88-3
trans-1,2-Dichloroethene	ND	ug/m3	8.1	1.97	02/26/10 13:22 LCW	156-60-5
trans-1,3-Dichloropropene	ND	ug/m3	4.6	1.97	02/26/10 13:22 LCW	10061-02-6
Trichloroethene	ND	ug/m3	5.5	1.97	02/26/10 13:22 LCW	79-01-6
Trichlorofluoromethane	ND	ug/m3	5.6	1.97	02/26/10 13:22 LCW	75-69-4
Vinyl acetate	ND	ug/m3	3.9	1.97	02/26/10 13:22 LCW	108-05-4
Vinyl chloride	ND	ug/m3	2.6	1.97	02/26/10 13:22 LCW	75-01-4
Xylene (Total)	ND	ug/m3	13	1.97	02/26/10 13:22 LCW	1330-20-7
Agione (Fotal)		ugnito	10	1.07	02,20,10,10.22, 2000	1000 20 7

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

SUPPLEMENTAL REPORT

Units Conversion Request



Pace Analytical Services, Inc. **1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700** Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125 Lab Project Number: 10122515 Project Name: 0506-47-71 PARKWATER

PARAMETER FOOTNOTES

SUPPLEMENTAL REPORT

Units Conversion Request



Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

March 17, 2010

Bruce Williams GeoEngineers,Inc. 523 East Second Ave Spokane, WA 99202

RE: Project: 0506-117-11 Parkwater Pace Project No.: 10123333

Dear Bruce Williams:

Enclosed are the analytical results for sample(s) received by the laboratory on March 02, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Oard Davy

Carol Davy

carol.davy@pacelabs.com Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

CERTIFICATIONS

Project: 0506-117-11 Parkwater Pace Project No.: 10123333

Minnesota Certification IDs

1700 Elm Street SE, Suite 200 Minneapolis, MN 55414 Alaska Certification #: UST-078 Washington Certification #: 02818 Pennsylvania Certification #: 68-00563 Oregon Certification #: 68-00563 North Dakota Certification #: R-036 North Carolina Certification #: S30 New York Certification #: 11647 New Jersey Certification #: 11647 New Jersey Certification #: MN-002 Montana Certification #: MT CERT0092 Minnesota Certification #: 027-053-137

Michigan DEQ Certification #: 9909 Maine Certification #: 2007029 Louisiana Certification #: LA080009 Louisiana Certification #: 03086 Kansas Certification #: E-10167 Iowa Certification #: 368 Illinois Certification #: 200011 Florida/NELAP Certification #: E87605 California Certification #: 01155CA Arizona Certification #: 01155CA Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project:0506-117-11ParkwaterPace Project No.:10123333

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10123333001	VP-CI-022610	Air	02/26/10 12:22	03/02/10 09:50

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 0506-117-11 Parkwater Pace Project No.: 10123333

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10123333001	VP-CI-022610	TO-15	CJR	65	PASI-M

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 0506-117-11 Parkwater Pace Project No.: 10123333

Method: TO-15

Description: TO15 MSV AIR Client: GeoEngineers,Inc. Date: March 17, 2010

General Information:

1 sample was analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: AIR/9903

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 759409)
 - 1,2,4-Trichlorobenzene
 - · Hexachloro-1,3-butadiene
 - Naphthalene

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-117-11 Parkwater

Pace Project No.: 10123333

Sample: VP-CI-022610	Lab ID: 10123333	3001 Collecte	d: 02/26/10	0 12:22	Received: 03	3/02/10 09:50 M	atrix: Air	
		Report	MD		Decement	Antinal	CARNE	0
Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: T	O-15						
1,1,1-Trichloroethane	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
1,1,2,2-Tetrachloroethane	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
1,1,2-Trichloroethane	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
1,1,2-Trichlorotrifluoroethane	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
1,1-Dichloroethane	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
1,1-Dichloroethene	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
1,2,4-Trichlorobenzene	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
1,2,4-Trimethylbenzene	ND ppbv	6.8	3.4	13.4		03/15/10 19:54		
1,2-Dibromoethane (EDB)	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
1,2-Dichlorobenzene	ND ppbv	6.8	3.4	13.4		03/15/10 19:54		
1,2-Dichloroethane	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
1,2-Dichloropropane	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
1,3,5-Trimethylbenzene	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
1,3-Butadiene	ND ppbv	7.0	3.5	13.4		03/15/10 19:54	106-99-0	
1,3-Dichlorobenzene	ND ppbv	6.8	3.4	13.4		03/15/10 19:54		
1,4-Dichlorobenzene	ND ppbv	6.8	3.4	13.4		03/15/10 19:54		
1,4-Dioxane (p-Dioxane)	ND ppbv	1.3	0.67	13.4		03/15/10 19:54		
2,2,4-Trimethylpentane	ND ppbv	6.7	3.4	13.4		03/15/10 19:54	540-84-1	
2-Butanone (MEK)	ND ppbv	7.4	3.7	13.4		03/15/10 19:54	78-93-3	
2-Hexanone	ND ppbv	7.4	3.7	13.4		03/15/10 19:54		
2-Propanol	ND ppbv	6.7	3.4	13.4		03/15/10 19:54		
4-Ethyltoluene	ND ppbv	7.1	3.6	13.4		03/15/10 19:54	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND ppbv	7.4	3.7	13.4		03/15/10 19:54		
Acetone	12.3 ppbv	7.4	3.7	13.4		03/15/10 19:54	67-64-1	
Benzene	ND ppbv	7.0	3.5	13.4		03/15/10 19:54	71-43-2	
Bromodichloromethane	ND ppbv	6.8	3.4	13.4		03/15/10 19:54	75-27-4	
Bromoform	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
Bromomethane	ND ppbv	6.8	3.4	13.4		03/15/10 19:54	74-83-9	
Carbon disulfide	ND ppbv	6.7	3.4	13.4		03/15/10 19:54	75-15-0	
Carbon tetrachloride	ND ppbv	6.8	3.4	13.4		03/15/10 19:54	56-23-5	
Chlorobenzene	ND ppbv	7.0	3.5	13.4		03/15/10 19:54	108-90-7	
Chloroethane	ND ppbv	6.8	3.4	13.4		03/15/10 19:54	75-00-3	
Chloroform	ND ppbv	6.8	3.4	13.4		03/15/10 19:54	67-66-3	
Chloromethane	ND ppbv	6.7	3.4	13.4		03/15/10 19:54	74-87-3	
Cyclohexane	ND ppbv	7.0	3.5	13.4		03/15/10 19:54	110-82-7	
Dibromochloromethane	ND ppbv	7.1	3.6	13.4		03/15/10 19:54	124-48-1	
Dichlorodifluoromethane	ND ppbv	6.8	3.4	13.4		03/15/10 19:54	75-71-8	
Dichlorotetrafluoroethane	ND ppbv	7.6	3.8	13.4		03/15/10 19:54	76-14-2	
Ethanol	ND ppbv	6.7	3.4	13.4		03/15/10 19:54	64-17-5	
Ethyl acetate	ND ppbv	6.8	3.4	13.4		03/15/10 19:54	141-78-6	
Ethylbenzene	ND ppbv	7.0	3.5	13.4		03/15/10 19:54		
Hexachloro-1,3-butadiene	ND ppbv	6.7	3,4	13.4		03/15/10 19:54	87-68-3	
Isopropylbenzene (Cumene)	ND ppbv	6.7	3.4	13.4		03/15/10 19:54		
Methyl-tert-butyl ether	ND ppbv	13.4	6.7	13.4		03/15/10 19:54	1634-04-4	
Methylene Chloride	ND ppbv	7.0	3.5	13.4		03/15/10 19:54	75-09-2	
Naphthalene	ND ppbv	6.7	3,4	13.4		03/15/10 19:54		

Date: 03/17/2010 05:52 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-117-11 Parkwater

Pace Project No.: 10123333

Sample: VP-CI-022610	Lab ID:	10123333001	Collecter	d: 02/26/10) 12:22	Received: 03	/02/10 09:50 Ma	atrix: Air	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical	Method: TO-1	5						
Propylene	ND pp	obv	26.8	13.4	13.4		03/15/10 19:54	115-07-1	
Styrene	ND pr	obv	7.4	3.7	13.4		03/15/10 19:54	100-42-5	
THC as Gas	3770 pp	obv	268	134	13.4		03/15/10 19:54		
Tetrachloroethene	45.1 pp	obv	7.0	3.5	13,4		03/15/10 19:54	127-18-4	
Tetrahydrofuran	ND pr	obv	7.0	3.5	13.4		03/15/10 19:54	109-99-9	
Toluene	ND pr	obv	7.0	3.5	13.4		03/15/10 19:54	108-88-3	
Trichloroethene	ND pr	obv	7.0	3.5	13.4		03/15/10 19:54	79-01-6	
Trichlorofluoromethane	ND pr	obv	6.7	3.4	13.4		03/15/10 19:54	75-69-4	
Vinyl acetate	ND pp	obv	7.4	3.7	13.4		03/15/10 19:54	108-05-4	
Vinyl chloride	ND pp	obv	6.8	3.4	13.4		03/15/10 19:54	75-01-4	
Xylene (Total)	ND pp	obv	20.1	10.0	13.4		03/15/10 19:54	1330-20-7	
cis-1,2-Dichloroethene	ND pp	obv	7.0	3.5	13.4		03/15/10 19:54	156-59-2	
cis-1,3-Dichloropropene	ND pp	obv	6.8	3.4	13.4		03/15/10 19:54	10061-01-5	
m&p-Xylene	ND pr	obv	13.4	6.7	13.4		03/15/10 19:54	1330-20-7	
n-Heptane	ND pr	obv	7.0	3.5	13.4		03/15/10 19:54	142-82-5	
n-Hexane	ND pr	obv	7.1	3.6	13.4		03/15/10 19:54	110-54-3	
o-Xylene	ND pr	obv	7.0	3.5	13.4		03/15/10 19:54	95-47-6	
trans-1,2-Dichloroethene	ND pr		13.4	6.7	13.4		03/15/10 19:54	156-60-5	
trans-1,3-Dichloropropene	ND pp		7.0	3.5	13.4		03/15/10 19:54	10061-02-6	

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REPORT OF LABORATORY ANALYSIS

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Project:	0506-117-11	Parkwater
Deep Droject No.	10100000	

QC Batch: AIR/9903		Analysis Metho	od: TC	D-15		
QC Batch Method: TO-15		Analysis Desc	ription: TC	015 MSV AIR		
	3333001		•			
METHOD BLANK: 759408		Matrix: A	Air			
	2000004	Matrix, 7				
Associated Lab Samples: 10123	3333001	Plank	Departing			
Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers	
				03/15/10 13:36		
1,1,1-Trichloroethane	ppbv	ND	0.52			
1,1,2,2-Tetrachloroethane	ppbv	ND	0.52	03/15/10 13:36		
1,1,2-Trichloroethane	ppbv	ND	0.52	03/15/10 13:36 03/15/10 13:36		
1,1,2-Trichlorotrifluoroethane	ppbv	ND	0.52			
1,1-Dichloroethane	ppbv	ND	0.52	03/15/10 13:36		
1,1-Dichloroethene	ppbv	ND	0.52	03/15/10 13:36		
1,2,4-Trichlorobenzene	ppbv	ND	0.52	03/15/10 13:36		
1,2,4-Trimethylbenzene	ppbv	ND	0.51	03/15/10 13:36		
1,2-Dibromoethane (EDB)	ppbv	ND	0.52	03/15/10 13:36		
1,2-Dichlorobenzene	ppbv	ND	0.51	03/15/10 13:36 03/15/10 13:36		
1,2-Dichloroethane	ppbv	ND ND	0.52 0.52	03/15/10 13:36		
1,2-Dichloropropane	ppbv					
1,3,5-Trimethylbenzene	ppbv	ND	0.52	03/15/10 13:36		
1,3-Butadiene	ppbv	ND	0.52	03/15/10 13:36		
1,3-Dichlorobenzene	ppbv	ND	0.51	03/15/10 13:36		
1,4-Dichlorobenzene	ppbv	ND	0.51	03/15/10 13:36 03/15/10 13:36		
1,4-Dioxane (p-Dioxane)	ppbv	ND	0.10	03/15/10 13:36		
2,2,4-Trimethylpentane	ppbv	ND ND	0.50	03/15/10 13:36		
2-Butanone (MEK)	ppbv		0.55 0.55			
2-Hexanone	ppbv	ND	0.55	03/15/10 13:36		
2-Propanol	ppbv	ND ND	0.50	03/15/10 13:36 03/15/10 13:36		
4-Ethyltoluene	ppbv	ND	0.55	03/15/10 13:36		
4-Methyl-2-pentanone (MIBK) Acetone	ppbv ppbv	ND	0.55	03/15/10 13:36		
Benzene	ppbv	ND	0.52	03/15/10 13:36		
Bromodichloromethane	ppbv	ND	0.52	03/15/10 13:36		
Bromoform	ppbv	ND	0.52	03/15/10 13:36		
Bromomethane	ppbv	ND	0.51	03/15/10 13:36		
Carbon disulfide	ppbv	ND	0.50	03/15/10 13:36		
Carbon tetrachloride	ppbv	ND	0.51	03/15/10 13:36		
Chlorobenzene	ppbv	ND	0.52	03/15/10 13:36		
Chloroethane	ppbv	ND	0.51	03/15/10 13:36		
Chloroform	, , , F	ND	0.51			
Chloromethane	ppov ppbv	ND	0.50	03/15/10 13:36		
cis-1,2-Dichloroethene	ppbv	ND	0.52	03/15/10 13:36		
cis-1,3-Dichloropropene	ppbv	ND	0.51	03/15/10 13:36		
Cyclohexane	ppbv	ND	0.52	03/15/10 13:36		
Dibromochloromethane	ppbv	ND	0.53	03/15/10 13:36		
Dichlorodifluoromethane	ppbv	ND	0.51	03/15/10 13:36		
Dichlorotetrafluoroethane	ppbv	ND	0.57	03/15/10 13:36		
Ethanol	ppbv ppbv	ND	0.50	03/15/10 13:36		
Ethyl acetate	ppbv	ND	0.51	03/15/10 13:36		
Ethylbenzene	ppbv	ND	0.52	03/15/10 13:36		
						Page 8
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REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 Parkwater

Pace Project No.: 10123333

METHOD BLANK: 759408

Matrix: Air

Associated Lab Samples: 10123333001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifier
Hexachloro-1,3-butadiene	ppbv		0,50	03/15/10 13:36	
lsopropylbenzene (Cumene)	ppbv	ND	0.50	03/15/10 13:36	
m&p-Xylene	ppbv	ND	1.0	03/15/10 13:36	
Methyl-tert-butyl ether	ppbv	ND	1.0	03/15/10 13:36	
Methylene Chloride	ppbv	ND	0.52	03/15/10 13:36	
n-Heptane	ppbv	ND	0.52	03/15/10 13:36	
n-Hexane	ppbv	ND	0.53	03/15/10 13:36	
Naphthalene	ppbv	ND	0.50	03/15/10 13:36	
o-Xylene	ppbv	ND	0.52	03/15/10 13:36	
Propylene	ppbv	ND	2.0	03/15/10 13:36	
Styrene	ppbv	ND	0.55	03/15/10 13:36	
Tetrachloroethene	ppbv	ND	0.52	03/15/10 13:36	
Tetrahydrofuran	ppbv	ND	0.52	03/15/10 13:36	
THC as Gas	ppbv	ND	20,0	03/15/10 13:36	
Toluene	ppbv	ND	0.52	03/15/10 13:36	
trans-1,2-Dichloroethene	ppbv	ND	1.0	03/15/10 13:36	
trans-1,3-Dichloropropene	ppbv	ND	0.52	03/15/10 13:36	
Trichloroethene	ppbv	ND	0.52	03/15/10 13:36	
Trichlorofluoromethane	ppbv	ND	0.50	03/15/10 13:36	
Vinyl acetate	ppbv	ND	0.55	03/15/10 13:36	
Vinyl chloride	ppbv	ND	0.51	03/15/10 13:36	
Xylene (Total)	ppbv	ND	1.5	03/15/10 13:36	

LABORATORY CONTROL SAMPLE: 759409

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
1,1,1-Trichloroethane	ppbv		9.2	92	60-125
1,1,2,2-Tetrachloroethane	ppbv	10	9.4	94	57-127
1,1,2-Trichloroethane	ppbv	10	9.4	94	56-125
1,1,2-Trichlorotrifluoroethane	ppbv	10	9.9	99	52-133
1,1-Dichloroethane	ppbv	10	10.0	100	54-127
1,1-Dichloroethene	ppbv	10	1 0.1	101	52-129
1,2,4-Trichlorobenzene	ppbv	10	26.9	269	30-150 L3
1,2,4-Trimethylbenzene	ppbv	10	9.0	90	52-145
1,2-Dibromoethane (EDB)	ppbv	10	9.2	92	59-133
1,2-Dichlorobenzene	ppbv	10	9.2	92	67-135
1,2-Dichloroethane	ppbv	10	9.6	96	54-125
1,2-Dichloropropane	ppbv	10	9.2	92	64-125
1,3,5-Trimethylbenzene	ppbv	10	9.1	91	56-135
1,3-Butadiene	ppbv	10	10.0	100	55-125
1,3-Dichlorobenzene	ppbv	10	9.1	91	61-142
1,4-Dichlorobenzene	ppbv	10	9.2	92	55-142
1,4-Dioxane (p-Dioxane)	ppbv	10	9.5	95	70-130
2,2,4-Trimethylpentane	ppbv	10	9.5	95	70-130
2-Butanone (MEK)	ppbv	10	9.7	97	47-141

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REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 Parkwater

Pace Project No.: 10123333

LABORATORY CONTROL SAMPLE: 759409

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Hexanone	ppbv	10	9.5	95	41-138	
2-Propanol	ppbv	10	10.5	105	63-125	
4-Ethyltoluene	ppbv	10	9.2	92	62-130	
4-Methyl-2-pentanone (MIBK)	ppbv	10	9.6	96	53-134	
Acetone	рръл	10	10.3	103	44-149	
Benzene	ppbv	10	9.5	95	61-126	
Bromodichloromethane	ppbv	10	9.4	94	54-129	
Bromoform	ppbv	10	9.1	91	56-125	
Bromomethane	ppbv	10	9,6	96	56-128	
Carbon disulfide	ppbv	10	10.0	100	58-150	
Carbon tetrachloride	ppbv	10	9.3	93	55-125	
Chlorobenzene	ppbv	10	9.1	91	48-138	
Chloroethane	ppbv	10	9.9	99	56-128	
Chloroform	ppbv	10	10.1	101	55-125	
Chloromethane	ppbv	10	10.3	103	50-131	
cis-1,2-Dichloroethene	ppbv	10	10.0	100	64-125	
cis-1,3-Dichloropropene	ppbv	10	9.2	92	61-132	
Cyclohexane	ppbv	10	10	100	61-130	
Dibromochloromethane	ppbv	10	9.1	91	51-129	
Dichlorodifluoromethane	ppbv	10	9.5	95	56-132	
	ppbv	10	9.0 10.0	100	48-125	
Dichlorotetrafluoroethane		10	10.5	100	70-130	
thanol	ppbv			103	66-149	
thyl acetate	ppbv	10	10.3	92	56-137	
thylbenzene	ppbv	10	9.2 35.3	353	30-150 L	0
lexachloro-1,3-butadiene	ppbv	10				3
sopropylbenzene (Cumene)	ppbv	10.4	9.3	89	67-134	
n&p-Xylene	ppbv	20	18.5	92	62-135	
Aethyl-tert-butyl ether	ppbv	10	9.0	90	59-125	
/lethylene Chloride	ppbv	10	10.2	102	46-143	
-Heptane	ppbv	10	9,6	96	64-130	
n-Hexane	ppbv	10	9.9	99	61-134	_
Japhthalene	ppbv	10	30.0	300	30-150 L	3
-Xylene	ppbv	10	9.2	92	61-134	
Propylene	ppbv	10	9.6	96	62-146	
Styrene	ppbv	10	9.2	92	63-134	
etrachloroethene	ppbv	10	9.0	90	61-132	
Fetrahydrofuran	ppbv	10	9.6	96	62-137	
HC as Gas	ppbv	700	685	98	61-125	
Toluene	ppbv	10	9.3	93	57-132	
rans-1,2-Dichloroethene	ppbv	10	9.9	99	52-130	
rans-1,3-Dichloropropene	ppbv	10	9.2	92	61-129	
Trichloroethene	ppbv	10	9.1	91	72-147	
Trichlorofluoromethane	ppbv	10	9,9	99	58-141	
Vinyl acetate	ppbv	10	9.8	98	56-131	
Vinyl chloride	ppbv	10	9,9	99	56-136	
Xylene (Total)	ppbv	30	27.7	92	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 0506-117-11 Parkwater Pace Project No.: 10123333

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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REPORT OF LABORATORY ANALYSIS

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March 10, 2010

Carol Davy PACE ANALYTICAL 1700 Elm Street SE Minneapolis, MN 55127-

Bureau Veritas Work Order No. 10030189

Reference: 0506-117-11 PARKWATER

Dear Carol Davy:

Bureau Veritas North America, Inc. received 1 sample on 3/3/2010 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely,

Nan Karen Coonan

Client Services Representative cc:

CASE NARRATIVE

Date: 10-Mar-10

Client:PACE ANALYTICALProject:0506-117-11 PARKWATERWork Order No10030189

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected.

Please note that a field blank was not identified by the client for this sample set.

The following results have been converted from mg/m3 to ug/m3. Sample -001A: THCs as Diesel = 1300 ug/m3

ANALYTICAL RESULTS

Date: 10-mar-10	Date:	10-Mar-10
-----------------	-------	-----------

Client: Project:	PACE ANALYTICAL 0506-117-11 PARKWA	TER			×	Work Order No:	10030189
Sample Identifica	ntion: PWEFF-022610						
Lab Number:	001A					Date Sampled:	2/26/2010
Sample Type	Charcoal Tube					Date Received:	3/3/2010
Analyst	CCR					Air Volume (L):	8
	<u></u>		Analytical Resu	ılts	Reporting Limit	Test	Date
	Analyte	(µg)	(mg/m³)	(ppm)	(μg)	Method	Analyzed
THCs as Diesel		<10	<1.3		10	NIOSH 1550	03/05/2010

General Notes:

<: Less than the indicated reporting limit (RL).
--: Information not available or not applicable.
Back sections (if applicable) were checked and showed no significant breakthrough unless otherwise noted.

.

Results Requested 3/15/2010	Date/Time Received By Date/Time /?///////////////////////////////////	BUYLOU VENTES P.O. 1012333 Collect Date/Time Lable Matrix Content State State Dickscl 2226/2010 12.22 1012333001 Air 1 Matrix Content State S	Results Requested
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Tuesday, March 02, 2010 2:21 00 PM

FMT-ALL-C-002rev.00 24March2009 3/3/10 Page 1 of 1

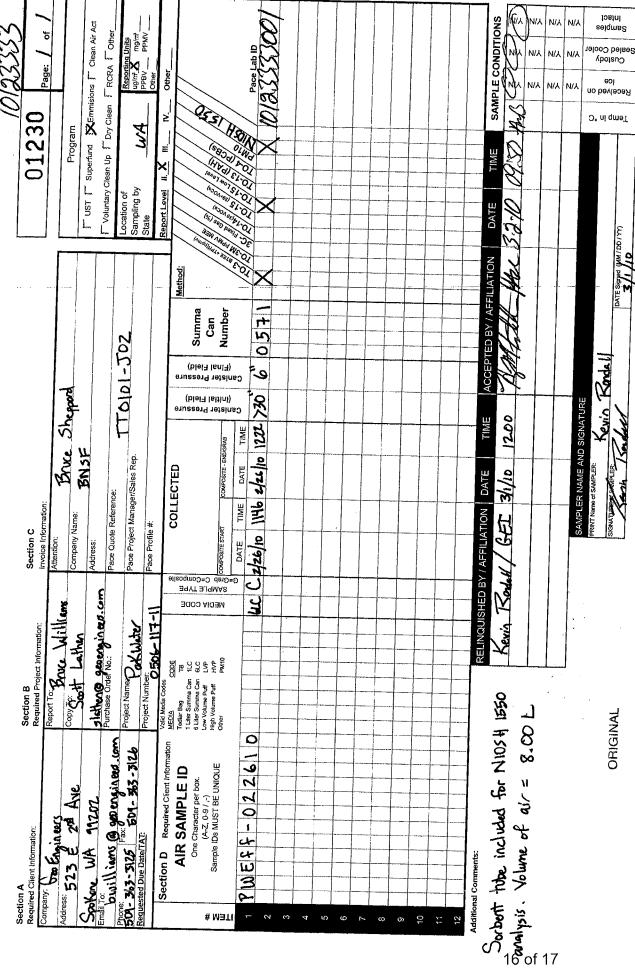
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AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



1700 Elm Street SE, Suite 200, Minneapolis, MN 55414

FC046Rev.00, 21May2009

Pa	ourier: XI Fed Ex [ustody Seal on Cool acking Material: [] acking #:_ <u>87073</u>	er/Box Pres Bubble Wra	p A Bubble Bags	no Sea	ıls intact: 🗌 yes	r s [] no	Optional Proj. Due Date: Proj. Name: Date and Initials of person examining contents: 3 · 2 · 0 · 7
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llen	t Notification/ Resolu	ution:		l			
	Person Contacted:			Date/Ti	ne:	Field D	ata Required? Y / N
Com	ments/ Resolution:						
							an di kanang dama sana ang akang sikang sikan di pada ang ang kang ang pang pang pang kang di kang sang sang s

с. К.С.

> Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers) A106 Rev.01 (22May2009)



ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125					•	mber: 10123333 lame: 0506-117-′	1 Parkwater
Lab Sample No: 10123333001 Client Sample ID: VP-CI-02		Pr	ojSampleNum: Matrix:		33001	Date Collected: Date Received:	
Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
Air TO-15							
1,1,1-Trichloroethane	ND	ug/m3	39	13,4	03/15/10 19:54 C	JR 71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/m3	49	13.4	03/15/10 19:54 C		
1,1,2-Trichloroethane	ND	ug/m3	39	13.4	03/15/10 19:54 C		
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	55	13.4	03/15/10 19:54 C	JR 76-13-1	
1,1-Dichloroethane	ND	ug/m3	29	13.4	03/15/10 19:54 C	JR 75-34-3	
1,1-Dichloroethene	ND	ug/m3	28	13.4	03/15/10 19:54 C	JR 75-35-4	
1,2,4-Trichlorobenzene	ND	ug/m3	53	13.4	03/15/10 19:54 C	JR 120-82-1	
1,2,4-Trimethylbenzene	ND	ug/m3	34	13.4	03/15/10 19:54 C	JR 95-63-6	
1,2-Dibromoethane (EDB)	ND	ug/m3	55	13.4	03/15/10 19:54 C	JR 106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	42	13.4	03/15/10 19:54 C	JR 95-50-1	
1,2-Dichloroethane	ND	ug/m3	29	13.4	03/15/10 19:54 C	JR 107-06-2	
1,2-Dichloropropane	ND	ug/m3	33	13.4	03/15/10 19:54 C	JR 78-87-5	
1,3,5-Trimethylbenzene	ND	ug/m3	35	13.4	03/15/10 19:54 C	JR 108-67-8	
1,3-Butadiene	ND	ug/m3	16	13.4	03/15/10 19:54 C	JR 106-99-0	
1,3-Dichlorobenzene	ND	ug/m3	42	13.4	03/15/10 19:54 C	JR 541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	42	13.4	03/15/10 19:54 C		
1,4-Dioxane (p-Dioxane)	ND	ug/m3	4.8	13.4	03/15/10 19:54 C		
2,2,4-Trimethylpentane	ND	ug/m3	32	13.4	03/15/10 19:54 C		
2-Butanone (MEK)	ND	ug/m3	22	13.4	03/15/10 19:54 C		
2-Hexanone	ND	ug/m3	31	13.4	03/15/10 19:54 C		
2-Propanol	ND	ug/m3	17	13,4	03/15/10 19:54 C		
4-Ethyltoluene	ND	ug/m3	35	13.4	03/15/10 19:54 C		
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	31	13.4	03/15/10 19:54 C		
Acetone	29.7	ug/m3	18	13.4	03/15/10 19:54 C		
Benzene	ND	ug/m3	23	13.4	03/15/10 19:54 C		
Bromodichloromethane	ND	ug/m3	46	13.4	03/15/10 19:54 C		
Bromoform	ND	ug/m3	74	13.4	03/15/10 19:54 C		
Bromomethane	ND	ug/m3	27	13.4	03/15/10 19:54 C		
Carbon disulfide	ND ND	ug/m3	21 43	13.4 13.4	03/15/10 19:54 C		
Carbon tetrachloride		ug/m3			03/15/10 19:54 C		
Chlorobenzene Chloroethane	ND	ug/m3	33	13.4	03/15/10 19:54 C		
Chloroform	ND ND	ug/m3 ug/m3	18 34	13.4 13.4	03/15/10 19:54 C		
Chloromethane	ND	ug/m3 ug/m3	34 14	13.4 13.4	03/15/10 19:54 C		
cis-1,2-Dichloroethene	ND	ug/m3 ug/m3	28	13.4 13.4	03/15/10 19:54 C		
cis-1,3-Dichloropropene	ND	ug/m3	20 31	13.4	03/15/10 19:54 C		
Cyclohexane	ND	ug/m3	24	13.4	03/15/10 19:54 C		
Dibromochloromethane	ND	ug/m3	61	13.4	03/15/10 19:54 C		
Distonicionariana		agrino	0.	т. с . т	00/10/10 10:04 00		

SUPPLEMENTAL REPORT

Date: 3/17/2010

Units Conversion Request



Pace Analytical Services, Inc. **1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.644** Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc.					Lab Project Number:	
Phone: (509)363-3125					Project Name:	0506-117-11 Parkwater
Dichlorodifluoromethane	ND	ug/m3	34	13.4	03/15/10 19:54 CJR	75-71-8
Dichlorotetrafluoroethane	ND	ug/m3	54	13.4	03/15/10 19:54 CJR	76-14-2
Ethanol	ND	ug/m3	13	13.4	03/15/10 19:54 CJR	64-17-5
Ethyl acetate	ND	ug/m3	25	13.4	03/15/10 19:54 CJR	141-78-6
Ethylbenzene	ND	ug/m3	31	13.4	03/15/10 19:54 CJR	100-41-4
Hexachloro-1,3-butadiene	ND	ug/m3	73	13.4	03/15/10 19:54 CJR	87-68-3
Isopropylbenzene (Cumene) ND	ug/m3	33	13.4	03/15/10 19:54 CJR	98-82-8
m&p-Xylene	ND	ug/m3	59	13.4	03/15/10 19:54 CJR	1330-20-7
Methylene Chloride	ND	ug/m3	25	13.4	03/15/10 19:54 CJR	75-09-2
Methyl-tert-butyl ether	ND	ug/m3	49	13.4	03/15/10 19:54 CJR	1634-04-4
Naphthalene	ND	ug/m3	36	13.4	03/15/10 19:54 CJR	91-20-3
n-Heptane	ND	ug/m3	29	13.4	03/15/10 19:54 CJR	142-82-5
n-Hexane	ND	ug/m3	25	13.4	03/15/10 19:54 CJR	110-54-3
o-Xylene	ND	ug/m3	31	13.4	03/15/10 19:54 CJR	95-47-6
Propylene	ND	ug/m3	47	13.4	03/15/10 19:54 CJR	115-07-1
Styrene	ND	ug/m3	32	13.4	03/15/10 19:54 CJR	100-42-5
Tetrachloroethene	311	ug/m3	48	13.4	03/15/10 19:54 CJR	127-18-4
Tetrahydrofuran	ND	ug/m3	21	13.4	03/15/10 19:54 CJR	109-99-9
THC as Gas	16400	ug/m3	1200	13.4	03/15/10 19:54 CJR	
Toluene	ND	ug/m3	27	13.4	03/15/10 19:54 CJR	108-88-3
trans-1,2-Dichloroethene	ND	ug/m3	54	13.4	03/15/10 19:54 CJR	156-60-5
trans-1,3-Dichloropropene	ND	ug/m3	32	13.4	03/15/10 19:54 CJR	10061-02-6
Trichloroethene	ND	ug/m3	38	13.4	03/15/10 19:54 CJR	79-01-6
Trichlorofluoromethane	ND	ug/m3	38	13.4	03/15/10 19:54 CJR	75-69-4
Vinyl acetate	ND	ug/m3	26	13.4	03/15/10 19:54 CJR	108-05-4
Vinyl chloride	ND	ug/m3	18	13.4	03/15/10 19:54 CJR	75-01-4
Xylene (Total)	ND	ug/m3	89	13.4	03/15/10 19:54 CJR	1330-20-7

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

Date: 3/17/2010

SUPPLEMENTAL REPORT Units Conversion Request



Pace Analytical Services, Irc. **1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.644**4

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125 Lab Project Number: 10123333 Project Name: 0506-117-11 Parkwater

PARAMETER FOOTNOTES

Date: 3/17/2010

SUPPLEMENTAL REPORT

Units Conversion Request



Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

April 01, 2010

John Haney GeoEngineers,Inc. 523 East Second Ave Spokane, WA 99202

RE: Project: 0506-117-11 BNSF-Parkwater Pace Project No.: 10124382

Dear John Haney:

Enclosed are the analytical results for sample(s) received by the laboratory on March 17, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Care Davy

Carol Davy

carol.davy@pacelabs.com Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

CERTIFICATIONS

Project: 0506-117-11 BNSF-Parkwater Pace Project No.: 10124382

Minnesota Certification IDs

1700 Elm Street SE, Suite 200 Minneapolis, MN 55414 Alaska Certification #: UST-078 Washington Certification #: 0754 Tennessee Certification #: 07818 Pennsylvania Certification #: 68-00563 Oregon Certification #: 68-00563 North Dakota Certification #: 8-036 North Carolina Certification #: 8-036 North Carolina Certification #: 11647 New Jersey Certification #: 11647 New Jersey Certification #: MN-002 Montana Certification #: MT CERT0092 Minnesota Certification #: 027-053-137

Michigan DEQ Certification #: 9909 Maine Certification #: 2007029 Louisiana Certification #: LA080009 Louisiana Certification #: 03086 Kansas Certification #: 610167 Iowa Certification #: 368 Illinois Certification #: 200011 Florida/NELAP Certification #: E87605 California Certification #: 01155CA Arizona Certification #: 01155CA Visconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project:0506-117-11BNSF-ParkwaterPace Project No.:10124382

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10124382001	VP-CI-031610	Air	03/16/10 10:04	03/17/10 10:10

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 0506-117-11 BNSF-Parkwater Pace Project No.: 10124382

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10124382001	VP-CI-031610	TO-15	LCW	65	PASI-M

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 0506-117-11 BNSF-Parkwater

Pace Project No.: 10124382

Method:TO-15Description:TO15 MSV AIRClient:GeoEngineers,Inc.Date:April 01, 2010

General Information:

1 sample was analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable): All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: AIR/9977

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 765883)
 - 1,2,4-Trichlorobenzene
 - · Hexachloro-1,3-butadiene

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-117-11 BNSF-Parkwater

Pace Project No.: 10124382

Sample: VP-CI-031610	Lab ID: 101243820	01 Collecte	d: 03/16/1	0 10:04	Received: 00	3/17/10 10:10 Ma	atrix: Air	
		Report						
Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO	-15						
1,1,1-Trichloroethane	ND ppbv	0.70	0.35	1.34		03/29/10 20:06		
1,1,2,2-Tetrachloroethane	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	79-34-5	
1,1,2-Trichloroethane	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND ppbv	0.70	0.35	1.34		03/29/10 20:06		
1,1-Dichloroethane	ND ppbv	0,70	0.35	1.34		03/29/10 20:06	75-34-3	
1,1-Dichloroethene	ND ppbv	0.70	0.35	1.34		03/29/10 20:06		
1,2,4-Trichlorobenzene	ND ppbv	0,70	0.35	1.34		03/29/10 20:06	120-82-1	
1,2,4-Trimethylbenzene	ND ppbv	0.68	0.34	1.34		03/29/10 20:06		
1,2-Dibromoethane (EDB)	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	106-93-4	
1,2-Dichlorobenzene	ND ppbv	0.68	0.34	1.34		03/29/10 20:06	95-50-1	
1,2-Dichloroethane	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	107-06-2	
1,2-Dichloropropane	ND ppbv	0,70	0.35	1.34		03/29/10 20:06	78-87-5	
1,3,5-Trimethylbenzene	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	108-67-8	
1,3-Butadiene	ND ppbv	0,70	0.35	1.34		03/29/10 20:06	106-99-0	
1,3-Dichlorobenzene	ND ppbv	0.68	0.34	1.34		03/29/10 20:06	541-73-1	
1,4-Dichlorobenzene	ND ppbv	0.68	0.34	1.34		03/29/10 20:06	106-46-7	
1,4-Dioxane (p-Dioxane)	ND ppbv	0.27	0,13	1.34		03/29/10 20:06	123-91-1	
2,2,4-Trimethylpentane	2.0 ppbv	0.67	0.34	1.34		03/29/10 20:06	540-84-1	
2-Butanone (MEK)	2.9 ppbv	0.74	0.37	1.34		03/29/10 20:06	78-93-3	
2-Hexanone	ND ppbv	0.74	0.37	1.34		03/29/10 20:06	591-78-6	
2-Propanol	5.1 ppbv	0.67	0.34	1.34		03/29/10 20:06		
4-Ethyltoluene	ND ppbv	0.71	0.36	1.34		03/29/10 20:06	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND ppbv	0.74	0.37	1.34		03/29/10 20:06	108-10-1	
Acetone	9.8 ppbv	0.74	0.37	1.34		03/29/10 20:06	67-64-1	
Benzene	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	71-43-2	
Bromodichloromethane	ND ppbv	0.68	0.34	1.34		03/29/10 20:06	75-27-4	
Bromoform	ND ppbv	0.70	0.35	1.34		03/29/10 20:06		
Bromomethane	ND ppbv	0.68	0.34	1.34		03/29/10 20:06		
Carbon disulfide	0.84 ppbv	0.67	0.34	1.34		03/29/10 20:06		
Carbon tetrachloride	ND ppbv	0.68	0.34	1.34		03/29/10 20:06		
Chlorobenzene	ND ppbv	0.70	0.35	1.34		03/29/10 20:06		
Chloroethane	ND ppbv	0.68	0.34	1.34		03/29/10 20:06		
Chloroform	ND ppbv	0.68	0.34	1.34		03/29/10 20:06		
Chloromethane	ND ppbv	0.67	0.34	1.34		03/29/10 20:06		
Cyclohexane	ND ppbv	0.70	0.35	1.34		03/29/10 20:06		
Dibromochloromethane	ND ppbv	0.71	0.36	1.34		03/29/10 20:06		
Dichlorodifluoromethane	ND ppbv	0.68	0.34	1.34		03/29/10 20:06		
Dichlorotetrafluoroethane	ND ppbv	0.76	0.38	1.34		03/29/10 20:06		
Ethanol	9.2 ppbv	0.67	0.34	1.34		03/29/10 20:06		
Ethyl acetate	ND ppbv	0.68	0.34	1.34		03/29/10 20:06		
•	ND ppbv	0.00	0.34	1.34		03/29/10 20:06		
Ethylbenzene		0.70	0.33	1.34		03/29/10 20:06		
Hexachloro-1,3-butadiene	ND ppbv	0.67	0.34	1.34		03/29/10 20:06		
Isopropylbenzene (Cumene)	ND ppbv			1.34		03/29/10 20:06		
Methyl-tert-butyl ether	ND ppbv	1.3	0.67			03/29/10 20:06		
Methylene Chloride	ND ppbv	0.70	0.35	1.34				
Naphthalene	ND ppbv	0.67	0.34	1.34		03/29/10 20:06	91-20-3	

Date: 04/01/2010 02:41 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0506-117-11 BNSF-Parkwater

Pace Project No.: 10124382

Sample: VP-CI-031610	Lab ID: 10124	382001 Collected	d: 03/16/1	0 10:04	Received: 03	/17/10 10:10 Ma	atrix: Air	
		Report						
Parameters	Results Uni	ts Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Metho	d: TO-15						
Propylene	9.1 ppbv	2.7	1.3	1.34		03/29/10 20:06	115-07-1	
Styrene	ND ppbv	0.74	0.37	1.34		03/29/10 20:06	100-42-5	
THC as Gas	7570 ppbv	26.8	13.4	1.34		03/29/10 20:06		
Tetrachloroethene	0.98 ppbv	0.70	0.35	1.34		03/29/10 20:06	127-18-4	
Tetrahydrofuran	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	109-99-9	
Toluene	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	108-88-3	
Trichloroethene	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	79-01-6	
Trichlorofluoromethane	0.87 ppbv	0.67	0.34	1.34		03/29/10 20:06	75-69-4	
Vinyl acetate	1.1 ppbv	0.74	0.37	1.34		03/29/10 20:06	108-05-4	
Vinyl chloride	ND ppbv	0.68	0.34	1.34		03/29/10 20:06	75-01-4	
Xylene (Total)	ND ppbv	2.0	1.0	1.34		03/29/10 20:06	1330-20-7	
cis-1,2-Dichloroethene	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	156-59-2	
cis-1,3-Dichloropropene	ND ppbv	0.68	0.34	1.34		03/29/10 20:06	10061-01-5	
m&p-Xylene	1.4 ppbv	1.3	0.67	1,34		03/29/10 20:06	1330-20-7	
n-Heptane	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	142-82-5	
n-Hexane	ND ppbv	0.71	0.36	1.34		03/29/10 20:06	110-54-3	
o-Xylene	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	95-47-6	
trans-1,2-Dichloroethene	ND ppbv	1.3	0.67	1.34		03/29/10 20:06	156-60-5	
trans-1,3-Dichloropropene	ND ppbv	0.70	0.35	1.34		03/29/10 20:06	10061-02-6	

Date: 04/01/2010 02:41 PM

REPORT OF LABORATORY ANALYSIS

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TO-15

TO15 MSV AIR

Drojact	0506 117 11	BNSF-Parkwater
Project:	0000-11/-11	

Pace Project No.: 10124382

METHOD BLANK: 765882

QC Batch: AIR/9977

Mathada TO 45

QC Batch Method: TO-15

Associated Lab Samples: 10124382001

Matrix: Air

Analysis Description:

Analysis Method:

Associated L	ah Samalaa	4040400004
Associated L	ab Samples	10124382001

Parameter ,1-Trichloroethane ,2,2-Tetrachloroethane	Units	Result	Limit	Analyzed	Duglifierg
1				Analyzeu	Qualifiers
,2,2-Tetrachloroethane	ppbv	ND	0.52	03/29/10 14:31	
	ppbv	ND	0.52	03/29/10 14:31	
,2-Trichloroethane	ppbv	ND	0.52	03/29/10 14:31	
,2-Trichlorotrifluoroethane	ppbv	ND	0.52	03/29/10 14:31	
-Dichloroethane	ppbv	ND	0.52	03/29/10 14:31	
-Dichloroethene	ppbv	ND	0.52	03/29/10 14:31	
2,4-Trichlorobenzene	ppbv	ND	0.52	03/29/10 14:31	
2,4-Trimethylbenzene	ppbv	ND	0.51	03/29/10 14:31	
2-Dibromoethane (EDB)	ppbv	ND	0.52	03/29/10 14:31	
-Dichlorobenzene	ppbv	ND	0.51	03/29/10 14:31	
2-Dichloroethane	ppbv	ND	0.52	03/29/10 14:31	
P-Dichloropropane	ppbv	ND	0.52	03/29/10 14:31	
5-Trimethylbenzene	ppbv	ND	0.52	03/29/10 14:31	
-Butadiene	ppbv	ND	0.52	03/29/10 14:31	
-Dichlorobenzene	ppbv	ND	0.51	03/29/10 14:31	
-Dichlorobenzene	ppbv	ND	0.51	03/29/10 14:31	
-Dioxane (p-Dioxane)	ppbv	ND	0.20	03/29/10 14:31	
4-Trimethylpentane	ppbv	ND	0.50	03/29/10 14:31	
Butanone (MEK)	ppbv	ND	0.55	03/29/10 14:31	
lexanone	ppbv	ND	0.55	03/29/10 14:31	
Propanol	ppby	ND	0.50	03/29/10 14:31	
Ethyltoluene	ppbv	ND	0.53	03/29/10 14:31	
/lethyl-2-pentanone (MIBK)	ppbv	ND	0.55	03/29/10 14:31	
etone	ppbv	ND	0.55	03/29/10 14:31	
nzene	ppbv	ND	0.52	03/29/10 14:31	
omodichloromethane	ppbv	ND	0.51	03/29/10 14:31	
omoform	ppbv	ND	0.52	03/29/10 14:31	
omomethane	ppbv	ND	0.51	03/29/10 14:31	
rbon disulfide	ppbv	ND	0.50	03/29/10 14:31	
rbon tetrachloride	ppbv	ND	0.51	03/29/10 14:31	
lorobenzene	ppbv	ND	0.52	03/29/10 14:31	
loroethane	ppbv	ND	0.51	03/29/10 14:31	
loroform	ppbv	ND	0.51	03/29/10 14:31	
loromethane	ppbv	ND	0.50	03/29/10 14:31	
-1,2-Dichloroethene	ppbv	ND	0.52	03/29/10 14:31	
-1,3-Dichloropropene	ppbv	ND	0.51	03/29/10 14:31	
clohexane	ppbv	ND	0.52	03/29/10 14:31	
promochloromethane	ppbv	ND	0.53	03/29/10 14:31	
chlorodifluoromethane	ppbv	ND	0.51	03/29/10 14:31	
chlorotetrafluoroethane	ppbv	ND	0.57	03/29/10 14:31	
nanol	ppbv	ND	0.50	03/29/10 14:31	
nyl acetate	ppbv	ND	0.51	03/29/10 14:31	
ylbenzene	ppbv	ND	0.52	03/29/10 14:31	

Date: 04/01/2010 02:41 PM

REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 BNSF-Parkwater

Pace Project No.: 101243

.: 10124382

METHOD BLANK: 765882	·····	Matrix	: Air		
Associated Lab Samples: 1012	4382001				
		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ppbv	ND	0.50	03/29/10 14:31	<u></u>
Isopropylbenzene (Cumene)	ppbv	ND	0.50	03/29/10 14:31	
m&p-Xylene	ppbv	ND	1.0	03/29/10 14:31	
Methyl-tert-butyl ether	ppbv	ND	1.0	03/29/10 14:31	
Methylene Chloride	ppbv	ND	0.52	03/29/10 14:31	
n-Heptane	ppbv	ND	0.52	03/29/10 14:31	
n-Hexane	ppbv	ND	0.53	03/29/10 14:31	
Naphthalene	ppbv	ND	0.50	03/29/10 14:31	
o-Xylene	ppbv	ND	0.52	03/29/10 14:31	
Propylene	ppbv	ND	2.0	03/29/10 14:31	
Styrene	ppbv	ND	0,55	03/29/10 14:31	
Tetrachloroethene	ppbv	ND	0.52	03/29/10 14:31	
Tetrahydrofuran	ppbv	ND	0.52	03/29/10 14:31	
THC as Gas	ppbv	ND	20.0	03/29/10 14:31	
Toluene	ppbv	ND	0.52	03/29/10 14:31	
trans-1,2-Dichloroethene	ppbv	ND	1.0	03/29/10 14:31	
trans-1,3-Dichloropropene	ppbv	ND	0.52	03/29/10 14:31	
Trichloroethene	ppbv	ND	0.52	03/29/10 14:31	
Trichlorofluoromethane	ppbv	ND	0.50	03/29/10 14:31	
Vinyl acetate	ppbv	ND	0.55	03/29/10 14:31	
Vinyl chloride	ppbv	ND	0.51	03/29/10 14:31	
Xylene (Total)	ppbv	ND	1.5	03/29/10 14:31	

LABORATORY CONTROL SAMPLE: 765883

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ppbv		9.2	92	60-125	
1,1,2,2-Tetrachloroethane	ppbv	10	9.7	97	57-127	
1,1,2-Trichloroethane	ppbv	10	9.5	95	56-125	
1,1,2-Trichlorotrifluoroethane	ppbv	10	8.6	86	52-133	
1,1-Dichloroethane	ppbv	10	9.8	98	54-127	
1,1-Dichloroethene	ppbv	10	8.5	85	52-129	
1,2,4-Trichlorobenzene	ppbv	10	16.3	163	30-150 L	3
1,2,4-Trimethylbenzene	ppbv	10	10	100	52-145	
1,2-Dibromoethane (EDB)	ppbv	10	8.6	86	59-133	
1,2-Dichlorobenzene	ppbv	10	10.4	104	67-135	
1,2-Dichloroethane	ppbv	10	9.3	93	54-125	
1,2-Dichloropropane	ppbv	10	8.7	87	64-125	
1,3,5-Trimethylbenzene	ppbv	10	9.6	96	56-135	
1,3-Butadiene	ppbv	10	8.3	83	55-125	
1,3-Dichlorobenzene	ppbv	10	10.1	101	61-142	
1,4-Dichlorobenzene	ppbv	10	10.1	101	55-142	
1,4-Dioxane (p-Dioxane)	ppbv	10	11.3	113	70-130	
2,2,4-Trimethylpentane	ppbv	10	9.0	90	70-130	
2-Butanone (MEK)	ppbv	10	9.0	90	47-141	

Date: 04/01/2010 02:41 PM

REPORT OF LABORATORY ANALYSIS

Page 9 of 13





Project: 0506-117-11 BNSF-Parkwater

Pace Project No.: 10124382

LABORATORY CONTROL SAMPLE: 765883

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Hexanone		10	9.6	96	41-138	
2-Propanol	ppbv	10	8.4	84	63-125	
4-Ethyltoluene	ppbv	10	10,3	103	62-130	
4-Methyl-2-pentanone (MIBK)	ppbv	10	9.1	91	53-134	
Acetone	ppbv	10	8.8	88	44-149	
Benzene	ppbv	10	9.0	90	61-126	
Bromodichloromethane	ppbv	10	9.2	92	54-129	
Bromoform	ppbv	10	9.6	96	56-125	
Bromomethane	ppbv	10	9.2	92	56-128	
Carbon disulfide	ppbv	10	8.5	85	58-150	
Carbon tetrachloride	ppbv	10	9.3	93	55-125	
Chlorobenzene	ppbv	10	9.3	93	48-138	
Chloroethane	ppbv	10	9.3 8.6	93 86	40-130 56-128	
Chloroform	ppbv	10	9,3	93	55-125	
Chloromethane	ppbv	10	9.3 10.1	101	50-131	
cis-1,2-Dichloroethene	ppbv	10	9,1	91	64-125	
	••	10	9.1	91	61-132	
cis-1,3-Dichloropropene	ppbv			91 104	61-132	
	ppbv	10	10.4 9.3	93	51-130	
Dibromochloromethane	ppbv	10				
Pichlorodifluoromethane	ppbv	10	9.5	95	56-132	
Dichlorotetrafluoroethane	ppbv	10	9.2	92	48-125	
thanol	ppbv	10	8.6	86	70-130	
thyl acetate	ppbv	10	8.0	80	66-149	
thylbenzene	ppbv	10	9.4	94	56-137	
exachloro-1,3-butadiene	ppbv	10	18.7	187	30-150 L	.3
opropylbenzene (Cumene)	ppbv	10.4	9.5	91	67-134	
n&p-Xylene	ppbv	20	19.0	95	62-135	
lethyl-tert-butyl ether	ppbv	10	8.8	88	59-125	
lethylene Chloride	ppbv	10	7.6	76	46-143	
-Heptane	ppbv	10	8.5	85	64-130	
-Hexane	ppbv	10	10.9	109	61-134	
laphthalene	ppbv	10	18.7	187	30-150 C	0
-Xylene	ppbv	10	9.5	95	61-134	
ropylene	ppbv	10	7.9	79	62-146	
tyrene	ppbv	10	9.6	96	63-134	
etrachloroethene	ppbv	10	8.9	89	61-132	
etrahydrofuran	ppbv	10	8.5	85	62-137	
HC as Gas	ppbv	700	718	103	61-125	
oluene	ppbv	10	9.2	92	57-132	
ans-1,2-Dichloroethene	ppbv	10	8.5	85	52-130	
ans-1,3-Dichloropropene	ppbv	10	9.5	95	61-129	
richloroethene	ppbv	10	10.5	105	72-147	
richlorofluoromethane	ppbv	10	8.9	89	58-141	
/inyl acetate	ppbv	10	8.5	85	56-131	
/inyl chloride	ppbv	10	9.0	90	56-136	
(ylene (Total)	ppbv	30	28.5	95	70-130	

Date: 04/01/2010 02:41 PM

REPORT OF LABORATORY ANALYSIS

Page 10 of 13





Project: 0506-117-11 BNSF-Parkwater

Pace Project No.: 10124382

SAMPLE DUPLICATE: 767693

Parameter	Units	10124383002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ppbv		ND		30	
1,1,2,2-Tetrachloroethane	ppbv	ND	ND		30	
1,1,2-Trichloroethane	ppbv	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ppbv	ND	ND		30	
I,1-Dichloroethane	ppbv	ND	ND		30	
I,1-Dichloroethene	ppbv	ND	ND		30	
,2,4-Trichlorobenzene	ppbv	ND	ND		30	
,2,4-Trimethylbenzene	ppbv	ND	.45J		30	
,2-Dibromoethane (EDB)	ppbv	ND	ND		30	
,2-Dichlorobenzene	ppbv	ND	ND		30	
,2-Dichloroethane	ppbv	ND	ND		30	
,2-Dichloropropane	ppbv	ND	ND		30	
,3,5-Trimethylbenzene	ppbv	ND	ND		30	
,3-Butadiene	ppbv	ND	ND		30	
,3-Dichlorobenzene	ppbv	ND	ND		30	
,3-Dichlorobenzene	ppbv	ND	ND		30	
,4-Dioxane (p-Dioxane)	ppbv	ND	ND		30	
	••	42.7	39.8	7	30	
2,2,4-Trimethylpentane	ppbv	2.8	2.6	8	30	
-Butanone (MEK)	ppbv	ND	ND	0	30	
-Hexanone	ppbv	ND	ND		30 30	
-Propanol	ppbv	ND	ND		30	
-Ethyltoluene	ppbv	ND			30	
-Methyl-2-pentanone (MIBK)	ppbv	10.5	ND	10	30	
cetone	ppbv		9.3	13		
Senzene	ppbv	ND	.61J		30	
Bromodichloromethane	ppbv	ND	ND		30	
Bromoform	ppbv	ND	ND		30	
Bromomethane	ppbv	ND	ND		30	
Carbon disulfide	ppbv	ND	ND		30	
Carbon tetrachloride	ppbv	ND	ND		30	
Chlorobenzene	ppbv	ND	ND		30	
Chloroethane	ppbv	ND	ND		30	
Chloroform	ppbv	ND	ND		30	
Chloromethane	ppbv	ND	ND		30	
is-1,2-Dichloroethene	ppbv	ND	ND		30	
is-1,3-Dichloropropene	ppbv	ND	ND		30	
Cyclohexane	ppbv	12.4	11.3	10	30	
Dibromochloromethane	ppbv	ND	ND		30	
Dichlorodifluoromethane	ppbv	ND	ND		30	
Dichlorotetrafluoroethane	ppbv	ND	ND		30	
thanol	ppbv	0.86	ND		30	
thyl acetate	ppbv	ND	ND		30	
thylbenzene	ppbv	2.0	1.8	6	30	
lexachloro-1,3-butadiene	ppbv	ND	ND		30	
sopropylbenzene (Cumene)	ppbv	ND	ND		30	
n&p-Xylene	ppbv	7.9	7.8	2	30	
Methyl-tert-butyl ether	ppbv	ND	ND		30	
Vethylene Chloride	ppbv	ND	ND		30	

Date: 04/01/2010 02:41 PM

REPORT OF LABORATORY ANALYSIS

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Project: 0506-117-11 BNSF-Parkwater

Pace Project No.: 10124382

SAMPLE DUPLICATE: 767693

		10124383002	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
n-Heptane	ppbv	2.3	2.2	5	30	
n-Hexane	ppbv	2.0	1.9	4	30	
Naphthalene	ppbv	ND	ND		30	
o-Xylene	ppbv	1.9	1.8	5	30	
Propylene	ppbv	ND	ND		30	
Styrene	ppbv	ND	ND		30	
Tetrachloroethene	ppbv	ND	ND		30	
Tetrahydrofuran	ppbv	ND	ND		30	
THC as Gas	ppbv	472	422	11	30	
Toluene	ppbv	16.1	15.6	3	30	
trans-1,2-Dichloroethene	ppbv	ND	ND		30	
trans-1,3-Dichloropropene	ppbv	ND	ND		30	
Trichloroethene	ppbv	ND	ND		30	
Trichlorofluoromethane	ppbv	ND	ND		30	
Vinyl acetate	ppbv	ND	ND		30	
Vinyl chloride	ppbv	ND	ND		30	
Xylene (Total)	ppbv	9.9	9.6	2	30	

Date: 04/01/2010 02:41 PM

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 0506-117-11 BNSF-Parkwater Pace Project No.: 10124382

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

- CU The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

Date: 04/01/2010 02:41 PM

REPORT OF LABORATORY ANALYSIS

Page 13 of 13

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March 24, 2010

Carol Davy PACE ANALYTICAL 1700 Elm Street SE Minneapolis, MN 55127-

Bureau Veritas Work Order No. 10030954

Reference: 10124382/0506-117-11 BNSF-PARKWATER

Dear Carol Davy:

Bureau Veritas North America, Inc. received 1 sample on 3/18/2010 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely,

Harea Cooner

Karen Coonan Client Services Representative cc:

Main: (248) 344.1770 Fax: (248) 344.2655 www.us.bureauveritas.com

CASE NARRATIVE

Date: 25-Mar-10

Client: PACE ANALYTICAL

Project: 10124382/0506-117-11 BNSF-PARKWATER

Work Order No 10030954

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected.

Please note that a field blank was not identified by the client for this sample set.

The following result has been converted from mg/m3 to ug/m3.

Sample -001A: THCs as Diesel = <1300 ug/m3

ANALYTICAL RESULTS

Date: 24-Mar-10

PACE ANALYTICAL										
10124382/0506-117-11	BNSF-PA	ARKWATER			Work Order No: 1	0030954				
tion: VP-CI-031610										
001A					Date Sampled: 3	/16/2010				
Charcoal Tube					Date Received: 3	/18/2010				
СМІ					Air Volume (L): 8			Air Volume (L): 8		
		Analytical Res	ults	Reporting	Test	Date				
nalyte	(µg)	(mg/m³)	(ppm)	(μg)	Method	Analyzed				
	<10	<1.3		10	NIOSH 1550	03/23/2010				
	10124382/0506-117-11 tion: VP-CI-031610 001A Charcoal Tube CMI	10124382/0506-117-11 BNSF-PA tion: VP-CI-031610 001A Charcoal Tube CMI	10124382/0506-117-11 BNSF-PARKWATER tion: VP-CI-031610 001A Charcoal Tube CMI Analytical Rest snalyte (µg) (mg/m³)	10124382/0506-117-11 BNSF-PARKWATER tion: VP-CI-031610 001A Charcoal Tube CMI Analytical Results snalyte (µg) (mg/m³) (ppm)	10124382/0506-117-11 BNSF-PARKWATER tion: VP-CI-031610 001A 001A Charcoal Tube CMI Analytical Results Reporting Limit (µg) (mg/m³) (ppm) (µg)	10124382/0506-117-11 BNSF-PARKWATER Work Order No: 1 tion: VP-CI-031610 Date Sampled: 3 001A Date Sampled: 3 Charcoal Tube Date Received: 3 CMI Air Volume (L): 8 Analytical Results Reporting Limit Test (µg) (mg/m³) (µg) (µg)				

General Notes:

<: Less than the indicated reporting limit (RL).
-: Information not available or not applicable.
Back sections (if applicable) were checked and showed no significant breakthrough unless otherwise noted.

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	1530				Minneapolis, MN 55414 Phone (612)607-1700 Email: carol.davy@pacelabs.com	Eng
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Pace Analytical					Chain of Custody –	ç
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Page 1 of 1



AIR: CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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1700 Eim Street SE, Suite 200, Minneapolis, MN 55414

FC046Rev.00, 21May2009

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Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700 Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125					Lab Project Numbe Project Nam		BNSF-Parkwater
Lab Sample No: 10124382001 Client Sample ID: VP-CI-03	1610	Pro	ojSampleNum: Matrix:			ite Collected: 0 ite Received: 0	
Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
Air TO-15							
1,1,1-Trichloroethane	ND	ug/m3	3.9	1.34	03/29/10 20:06 LCW	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4.9	1.34	03/29/10 20:06 LCW	79-34-5	
1,1,2-Trichloroethane	ND	ug/m3	3.9	1.34	03/29/10 20:06 LCW	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	5.5	1.34	03/29/10 20:06 LCW	76-13-1	
1,1-Dichloroethane	ND	ug/m3	2.9	1.34	03/29/10 20:06 LCW	75-34-3	
1,1-Dichloroethene	ND	ug/m3	2.8	1.34	03/29/10 20:06 LCW	75-35-4	
1,2,4-Trichlorobenzene	ND	ug/m3	5.3	1.34	03/29/10 20:06 LCW		
1,2,4-Trimethylbenzene	ND	ug/m3	3.4	1.34	03/29/10 20:06 LCW		
1,2-Dibromoethane (EDB)	ND	ug/m3	5.5	1.34	03/29/10 20:06 LCW		
1,2-Dichlorobenzene	ND	ug/m3	4.2	1.34	03/29/10 20:06 LCW		
1,2-Dichloroethane	ND	ug/m3	2.9	1.34	03/29/10 20:06 LCW		
1,2-Dichloropropane	ND	ug/m3	3.3	1.34	03/29/10 20:06 LCW		
1,3,5-Trimethylbenzene	ND	ug/m3	3.5	1.34	03/29/10 20:06 LCW		
1,3-Butadiene	ND	ug/m3	1.6	1.34	03/29/10 20:06 LCW		
1,3-Dichlorobenzene	ND	ug/m3	4.2	1.34	03/29/10 20:06 LCW		
1,4-Dichlorobenzene	ND	ug/m3	4.2	1.34	03/29/10 20:06 LCW 03/29/10 20:06 LCW		
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.99	1.34 1.34	03/29/10 20:06 LCW		
2,2,4-Trimethylpentane	9.5	ug/m3	3.2 2.2	1.34	03/29/10 20:06 LCW		
2-Butanone (MEK)	8,69 ND	ug/m3 ug/m3	3.1	1.34	03/29/10 20:06 LCW		
2-Hexanone	12.7	ug/m3	1.7	1.34	03/29/10 20:06 LCW		
2-Propanol	ND	ug/m3	3.5	1.34	03/29/10 20:06 LCW		
4-Ethyltoluene 4-Methyl-2-pentanone (MIBK)	ND	ug/m3	3.1	1.34	03/29/10 20:06 LCW		
Acetone	23.7	ug/m3	1.8	1.34	03/29/10 20:06 LCW		
Benzene	ND	ug/m3	2.3	1.34	03/29/10 20:06 LCW		
Bromodichloromethane	ND	ug/m3	4.6	1.34	03/29/10 20:06 LCW		
Bromoform	ND	ug/m3	7.4	1.34	03/29/10 20:06 LCW		
Bromomethane	ND	ug/m3	2.7	1.34	03/29/10 20:06 LCW	74-83-9	
Carbon disulfide	2.66	ug/m3	2.1	1.34	03/29/10 20:06 LCW	75-15-0	
Carbon tetrachloride	ND	ug/m3	4.3	1.34	03/29/10 20:06 LCW	56-23-5	
Chlorobenzene	ND	ug/m3	3.3	1.34	03/29/10 20:06 LCW	/ 108-90-7	
Chloroethane	ND	ug/m3	1.8	1.34	03/29/10 20:06 LCW	/ 75-00-3	
Chloroform	ND	ug/m3	3.4	1.34	03/29/10 20:06 LCW	/ 67-66-3	
Chloromethane	ND	ug/m3	1.4	1.34	03/29/10 20:06 LCW	/ 74-87-3	
cis-1,2-Dichloroethene	ND	ug/m3	2.8	1.34	03/29/10 20:06 LCW		
cis-1,3-Dichloropropene	ND	ug/m3	3.1	1.34	03/29/10 20:06 LCW		
Cyclohexane	ND	ug/m3	2.4	1,34	03/29/10 20:06 LCW		
Dibromochloromethane	ND	ug/m3	6.1	1.34	03/29/10 20:06 LCW	/ 124-48-1	

SUPPLEMENTAL REPORT

Date: 4/1/2010

Units Conversion Request



ANALYTICAL RESULTS

	Engineers,Inc. 9)363-3125					Lab Project Number: Project Name:	10124382 0506-117-11 BNSF-Parkwater
Dichlorodiflue		ND	ua/m2	3.4	1.34	03/29/10 20:06 LCW	75-71-8
			ug/m3				76-14-2
Dichlorotetra	fluoroethane	ND	ug/m3	5.4	1.34	03/29/10 20:06 LCW	
Ethanol		17.6	ug/m3	1.3	1.34	03/29/10 20:06 LCW	64-17-5
Ethyl acetate		ND	ug/m3	2.5	1.34	03/29/10 20:06 LCW	141-78-6
Ethylbenzene	e	ND	ug/m3	3.1	1.34	03/29/10 20:06 LCW	100-41-4
Hexachloro-1	1,3-butadiene	ND	ug/m3	7.3	1.34	03/29/10 20:06 LCW	87-68-3
Isopropylben	zene (Cumene)	ND	ug/m3	3.3	1.34	03/29/10 20:06 LCW	98-82-8
m&p-Xylene		6.18	ug/m3	5.7	1.34	03/29/10 20:06 LCW	1330-20-7
Methylene C	hloride	ND	ug/m3	2.5	1.34	03/29/10 20:06 LCW	75-09-2
Methyl-tert-b	utyl ether	ND	ug/m3	4.8	1.34	03/29/10 20:06 LCW	1634-04-4
Naphthalene		ND	ug/m3	3.6	1.34	03/29/10 20:06 LCW	91-20-3
n-Heptane		ND	ug/m3	2.9	1.34	03/29/10 20:06 LCW	142-82-5
n-Hexane		ND	ug/m3	2.5	1.34	03/29/10 20:06 LCW	110-54-3
o-Xylene		ND	ug/m3	3.1	1.34	03/29/10 20:06 LCW	95-47-6
Propylene		15.9	ug/m3	4.7	1.34	03/29/10 20:06 LCW	115-07-1
Styrene		ND	ug/m3	3.2	1.34	03/29/10 20:06 LCW	100-42-5
Tetrachloroe	thene	6.76	ug/m3	4.8	1.34	03/29/10 20:06 LCW	127-18-4
Tetrahydrofu	ran	ND	ug/m3	2.1	1.34	03/29/10 20:06 LCW	109-99-9
THC as Gas		32900	ug/m3	120	1.34	03/29/10 20:06 LCW	
Toluene		ND	ug/m3	2.7	1.34	03/29/10 20:06 LCW	108-88-3
trans-1,2-Dic	hloroethene	ND	ug/m3	5.2	1.34	03/29/10 20:06 LCW	156-60-5
	hloropropene	ND	ug/m3	3.2	1.34	03/29/10 20:06 LCW	10061-02-6
Trichloroethe		ND	ug/m3	3.8	1.34	03/29/10 20:06 LCW	79-01-6
Trichlorofluor		4.97	ug/m3	3.8	1.34	03/29/10 20:06 LCW	75-69-4
Vinyl acetate		3.94	ug/m3	2.6	1.34	03/29/10 20:06 LCW	108-05-4
Vinyl chloride		ND	ug/m3	1.8	1.34	03/29/10 20:06 LCW	75-01-4
•		ND	ug/m3	8.8	1.34	03/29/10 20:06 LCW	1330-20-7
Xylene (Tota	17	NU	ug/mo	0.0	1.04	00/20/10/20:00 2000	1000 20-1

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

SUPPLEMENTAL REPORT

Units Conversion Request



Pace Analytical Services, Inc. 1700 Elm Street – Suite 200 Minneapolis, MN 55414 Phone: 612.607.1700 Fax: 612.607.6444

ANALYTICAL RESULTS

Client: GeoEngineers,Inc. Phone: (509)363-3125 Lab Project Number: 10124382 Project Name: 0506-117-11 BNSF-Parkwater

PARAMETER FOOTNOTES

SUPPLEMENTAL REPORT

Units Conversion Request

Have we delivered World Class Client Service? Please let us know by visiting **www.geoengineers.com/feedback**.

