CD3 & CD4 Alpine Lakes 2007 Water Quality Monitoring Report





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1.0 Introduction

ConocoPhillips Alaska, Inc. (CPAI) expanded Alpine Facility operations with implementation of the Alpine Satellites Development Plan during the 2004/2005 winter season. Construction included placement of gravel facilities for two new satellite drill sites: CD3 and CD4. The CD3 pad development includes an airstrip and its access road, apron, and taxiway. The CD4 pad development includes an access road, running parallel with the existing Alpine sales pipeline, which connects to the CD2 access road.

During the summer of 2007, Michael Baker Jr., Inc. (Baker) conducted a water quality monitoring program at the request of CPAI to satisfy North Slope Borough zoning stipulations. The program targeted water bodies adjacent to the CD3 and CD4 gravel facilities. Three sampling lakes were identified: M9313 near CD3, and L9323 and L9324 located north and south of CD4, respectively. An overview of the three study lakes relative to Alpine facilities is presented in Figure 1-1.

The water quality monitoring program included in situ sampling of temperature, dissolved oxygen (DO), salinity, and specific conductance. Turbidity was measured ex situ from collected water samples. Additional water samples were collected for laboratory analysis of dissolved hydrocarbons and metals. Two separate sampling events were performed; in July following spring breakup, and in August prior to freeze-up.

This CD3 & CD4 Alpine Lakes Water Quality Monitoring Report presents the field investigation procedures, sampling and analytical methods used, and resulting water quality data and analyses. Laboratory analyses identified targeted constituent concentrations well below state and national recommended water quality criteria and standards.



2.0 Field Methods

Field investigations were conducted at each lake on July 16 and August 8, 2007. Maritime Helicopters provided access to Lake M9313 while Lakes L9323 and L9324 were accessed via the CD4 access road and pad. Each predefined sampling location was identified and confirmed using a hand-held global positioning system (GPS) unit referenced to the North American Datum of 1983 (NAD83).

In situ water quality data and analytical sample collection was performed by a two person team, each in an inflatable kayak, with an attached support raft for transport of the sampling equipment. In situ water quality instruments were provided by TTT Environmental. Analytical sample bottles and storage coolers were provided by Analytica International, Inc. (Analytica). Field surveys were also conducted to identify possible inflow and outflow sources.

All safety precautions, as outlined in the CD3 and CD4 Alpine Lakes Water Quality Sampling proposal, were followed. A travel plan was submitted to Alpine Security in advance of each sampling event. Personnel were equipped with personal flotation devices and a CPAI-provided radio. Measures were taken to avoid animal interaction during all field activities.

Field sampling methods were based on USGS (2006), Ward and Harr (1990), and U.S. Army Corps of Engineers (1987) methods. Assumptions used in this study were that each lake was hydraulically isolated, having no overland inflow or outflow, and that lakes were well-mixed lacking significant stratification. Historic North Slope lake water quality data suggests that wind-induced mixing results in a homogeneous distribution of dissolved constituents throughout the open water season in hydraulically isolated lakes (Moulton 2004). Hydraulic isolation was confirmed with aerial and ground observations of lakes. Well-mixed conditions were confirmed with in situ measurements prior to analytic sample collection. Methods pertaining to sample collection, storage, and transport for laboratory analysis were supplemented with instructions provided by Analytica.

2.1 Sample Location Selection

The sampling locations for Lake M9313 (Figure 2-1) and Lakes L9323 and L9324 (Figure 2-2) are identified in the referenced figures. Lake bathymetry, provided by Larry Moulton, was used to select a single sampling location at each lake (Appendix A). Site selection was based on

maximum depth and relative proximity to gravel facilities. Specific locations were confirmed with depth soundings.

The major assumption of this water quality study is that data collected at specific stations are representative of conditions throughout the water body. Past in situ monitoring of lakes near Alpine facilities (L9313, L9312 and L9310) indicates that hydraulically isolated lakes are well-mixed during open water conditions. The likelihood of homogeneous conditions, which can be verified with in situ measurements, supports the use of single point sampling.





2.2 On Site Water Quality Parameters

In situ water quality was measured at three-foot intervals throughout the water column. Turbidity of three replicate water samples from each lake was measured ex situ. A tabulation of equipment (meters) and associated parameters is presented in Table 2-1.

Meter	Parameter	In/ex situ	Units
	Temperature		°C
V61 20	Conductivity		μS/cm
15130	Specific Conductance (SC)	In citu	μS/cm
	Salinity	in Situ	ppt
	Dissolved exugen (DO)		mg/L
	Dissolved oxygen (DO)		%
Hach 2100P Turbidometer	Turbidity	Ex situ	NTU

Table 2-1 On Site Water Quality Parameters

2.2.1 Instrument Calibration

All meters were calibrated according to the manufacturer's specifications. A summary of calibration procedures is presented below.

Daily: Prior to sampling, a calibration check was performed on the Turbidometer and the YSI 30 using calibration solutions provided by the manufacturer. Meters were recalibrated as per manufacturers' instructions if readings were incorrect. The calibration check was again performed at the end of the day. According to the Hach representative (TTT Environmental), daily calibration of the HQ-40d LDO meter is not required.

Prior To and Following Each Sampling Event: Meters were returned to the manufacturers' representative for complete maintenance servicing performed according to the manufacturers' specifications.



2.3 Laboratory Sample Collection and Analytical Analysis

2.3.1 Sample Collection

Prior to analytic sample collection, in situ sampling was performed to confirm well-mixed water quality constituents within the water column at the sample location. Because no oxycline or thermocline was apparent (Table 3-1 and Table 3-2), a single point sample was collected. In the event of lake stratification, multiple samples would have been collected throughout the water column and combined for laboratory analysis. Samples were collected from mid-depth of the water column using a 500mL stainless steel bomb sampler during the July event. The bomb sampler was given a thorough native-water rinse at each lake prior to sampling to minimize cross contamination of samples.

The bomb sampler was lost in transit to Alpine during the August sampling event. Surface sample collection was performed and deemed adequate given the observed homogenous in situ measurements. Sample vials provided by Analytica were stored in the provided cooler before, during, and after sample collection to maintain adequate storage temperatures.

Field samples were transported to Analytica within two days of collection. The procedures for transport and transfer are described in Appendices B and C as part of the analysis reports submitted by Analytica.

2.3.2 Analytical Analysis

Method 625 – Base/Neutrals and Acids

This method, developed by the U.S. Environmental Protection Agency (EPA), was employed to test for organic compounds present in the study lakes. Samples spiked with three surrogates (flurobiphenyl, terphenyl, and nitrobenzene) are serially extracted at a pH greater than 11 and again at a pH less than 2. The extract is analyzed through a gas chromatographic/mass spectrometer (GC/MS). Qualitative parameters are identified using the retention time and relative abundance of three characteristic masses (m/z). Quantitative analysis is performed using internal standard techniques with a single characteristic m/z.



ADEC AK101 – Gasoline Range Organics (GRO)

This method, developed by the Alaska Department of Environmental Conservation (ADEC), is based on a purge-and-trap extraction gas chromatography (GC) procedure for the detection of volatile fractions such as gasoline. Other nonpetroleum compounds of similar characteristics may be detected with this method. The GC is temperature programmed to facilitate separation of organic compounds detected by a flame ionization detector (FID). Quantification is based on FID response. The recommended bromofluorobenzene surrogate was used.

ADEC AK102 – Diesel Range Organics (DRO)

This method, developed by ADEC, is based on a solvent extraction, gas chromatography (GC) procedure for the detection of semi-volatile petroleum products such as diesels. Other nonpetroleum compounds of similar characteristics may be detected with this method. Samples spiked with a surrogate (o-Terphenyl) are extracted with methylene chloride. The GC is temperature programmed to facilitate separation of organic compounds detected by a flame ionization detector (FID). Quantification is based on FID response compared to a diesel calibration standard.

ADEC AK103 – Residual Range Organics (RRO)

This method, developed by ADEC, was originally designed to measure lubricating or motor oils and other heavy petroleum products in soils. The ADEC *Underground Storage Tanks Procedures Manual* (ADEC 2002) identifies the method as adequate for determining such compounds in solution. The method is an extension of ADEC AK102, employing solvent extractions and gas chromatographs (GC) to identify heavier residual range organics (RRO). Quantification is based on FID response compared to a residuals calibration standard.

SW6010B-ICP-RCRA – Trace Metals

This method, developed by the EPA Office of Solid Waste, employs inductively coupled plasmaatomic emission spectroscopy (ICP-AES) to determine trace elements, including metals, in solution. The Resource Conservation Recovery Act (RCRA) mandates metals testing in public water via the SW6010B method. Elements tested for include arsenic, cadmium, chromium and lead. Quantities are determined from intensities of dispersed element-specific emission spectra lines.

SW7470A – Mercury in Liquid Waste

This EPA method employs a cold-vapor atomic adsorption procedure approved for determining mercury concentration in liquid wastes. The basis of this method is the radiation adsorption characteristics of vaporized mercury. Any mercury within the sample is reduced to the elemental state and aerated from solution. Adsorption is measured as a function of mercury concentration.

Method 1664 – N-Hexane Extractable Materials – Total Petroleum Hydrocarbons (TPH)

Method 1664, developed by the EPA, was used to test for N-Hexane extractable materials (HEM; Oil and Grease) and silica gel treated N-Hexane extractable material (SGT-HEM). Extractable materials that may be determined with this method are relatively non-volatile hydrocarbons, vegetable oils, animal fats, waxes, soaps, greases, and related materials. Though some crude oils and heavy fuel oils contain materials not suited for this test, it is the recommended method for testing of Total Petroleum Hydrocarbons (TPH). The method is based on extraction and gravimetric procedures, including sample acidification, isolation, desiccation, and weighing of HEM and SGT-HEM isolates.

Method 602 and Method 8021B – Aromatic Volatile Organic Compounds (VOC)

Methods 602 and 8021B quantify aromatic VOCs via gas chromatography (GC) and photoionization detection (PID). These methods, developed by the EPA, were used to test trip blanks. Method 8021B captures a broad range of halogenated VOCs as well as aromatics, and was used to test the July trip blanks. Method 602 captures only aromatic VOCs and was used to test the August trip blanks. VOCs are purged from the liquid phase to the vapor phase and captured via a sorbent trap. Aromatics are desorbed onto a gas chromatograph column. The GC separates the aromatics via temperature gradients which are then detected with a PID.

3.0 **Results**

3.1 **Field Conditions**

On July 16, maximum daily temperature and wind velocities were approximately 62°F and 5 to 10 miles per hour (mph). On August 8, maximum daily temperatures approached 57°F with winds of 5 to 15 mph. No surface sheen was observed on any lake during either of the sampling events.

On Site Water Quality Results 3.2

Measured water quality results from the July and August sampling events are tabulated in Table 3-1 and Table 3-2. A summary and comparison of the resulting values are described below.

Location Time	Depth (ft)	Turibidity NTU	Depth (ft)	Temp (⁰ C)	Conductivity (µS/cm)	Specific Conductance (µS/cm)	DO (mg/L)	DO (Percent Saturation)	Salinity (ppt)
			Surface	11.8	536	717	10.15	94.2	0.4
			3.0	11.8	536	717	10.13	94.2	0.4
			6.0	11.8	536	717	10.12	94.1	0.4
M0212			9.0	11.8	536	717	10.11	94.0	0.4
10:25 a.m	24.0	1.66	12.0	11.8	536	717	10.09	93.7	0.4
10.25 a.m.			15.0	11.8	536	717	10.06	93.5	0.4
			18.0	11.8	536	717	10.01	93.0	0.4
			21.0	11.8	536	717	9.92	92.1	0.4
			24.0	11.7	535	717	0.17	1.6	0.4
		1.58	Surface	14.0	75.6	95.9	9.97	97.0	0.0
			4.0	13.9	75.7	96.0	9.95	96.9	0.0
1 0222			7.0	13.9	75.7	96.0	9.94	96.8	0.0
L9323	19.1		10.0	13.9	75.7	96.0	9.92	96.5	0.0
4.05 p.m.			13.0	13.8	75.6	96.1	9.83	95.5	0.0
			16.0	13.7	75.3	96.1	9.73	94.3	0.0
			19.0	13.2	91.0	117.4	0.13	1.3	0.1
			Surface	14.6	57.0	71.1	9.74	96.1	0.0
L9324	10.2	8.64	4.0	14.5	56.8	71.1	9.72	95.6	0.0
5:40 p.m.	10.2	8.64	7.0	14.2	56.7	71.4	9.64	94.5	0.0
			10.0	14.0	56.6	71.6	9.49	92.8	0.0
Notes:									

Table 3-1	July 16	2007 (On Site	Water	Quality	Results
	July 10,	2007 0		vvalci	Quanty	Nesuns

(1) Sample depth is measured from the water surface.

(2) Turbidity was measured using a Hach-2100P Turbidometer

(3) Salinity, conductivity, specific conductance, and temperature were measured using a YSI-30 meter

(4) Dissolved oxygen measurements were obtained using a Hach HQ40d LDO meter

Location Time	Depth (ft)	Turibidity NTU	Depth (ft)	Temp (°C)	Conductivity (µS/cm)	Specific Conductance (µS/cm)	DO (mg/L)	DO (Percent Saturation)	Salinity (ppt)
			Surface	8.9	524	757	10.90	98.7	0.4
			3.0	8.9	524	757	10.90	98.7	0.4
			6.0	8.9	524	756	10.88	98.5	0.4
M0212			9.0	8.9	523	756	10.87	98.4	0.4
M9313	243	1.00	12.0	8.9	523	757	10.87	98.4	0.4
2:00 p.m.			15.0	8.8	523	757	10.87	98.3	0.4
			18.0	8.8	522	757	10.87	98.2	0.4
			21.0	8.7	521	757	10.85	97.8	0.4
			24.0	8.6	520	757	10.83	97.5	0.4
	20.1	1.13	Surface	10.2	72.3	100.7	10.92	102.3	0.0
			3.0	10.2	72.3	100.7	10.89	102.0	0.0
			6.0	10.2	72.3	100.7	10.86	101.8	0.0
L9323			9.0	10.2	72.3	100.7	10.81	101.3	0.0
6:00 p.m.			12.0	10.2	72.3	100.8	10.76	100.8	0.0
			15.0	10.2	72.2	100.7	10.70	100.2	0.0
			18.0	10.2	72.2	100.7	10.49	98.3	0.0
			20.0	10.0	78.2	109.6	0.13	1.2	0.1
			Surface	10.0	61.2	85.7	11.27	104.7	0.0
L9324	0.8	2.71	3.0	10.0	61.2	85.6	11.27	104.7	0.0
7:30 p.m.	9.0	2.71	6.0	9.9	61.0	85.6	11.28	104.5	0.0
			9.0	9.5	60.2	85.6	11.26	103.4	0.0
Notes: Other Other Other (1) Sample depth is measured from the water surface. (2) Turbidity was measured using a Hach-2100P Turbidometer (3) Salinity, conductivity, specific conductance, and temperature were measured using a YSI-30 meter (4) Dissolved oxygen measurements were obtained using a Hach HO40d LDO meter									

Table 3-2 August 8, 2007 On Site Water Quality Results

3.2.1 Specific Conductance

Specific conductance values varied little between July and August samplings. The average specific conductance measured in July was 717 μ S/cm in M9313, 96 μ S/cm in L9323, and 71 μ S/cm in L9324. In August, the average specific conductance was 757 μ S/cm in M9313, 108 μ S/cm in L9323, and 87 μ S/cm in L9324. Lakes M9313, L9323, and L9324 averages increased by 6%, 13%, and 23% respectively. A small increase in specific conductance was observed at the greatest depth in Lake L9323. Values varied by 22% over three feet of depth (July) and 9% over two feet of depth (August).

3.2.2 Dissolved Oxygen

Overall, DO values varied little between lakes. Dissolved oxygen (DO) slightly increased between July and August. In July, the overall average DO was measured at 9.92 milligrams per liter [mg/L] (94.7 %-saturation) while in August the overall average DO was measured at 10.92 mg/L (100.4%). A 100% saturation level is based on standard temperature and pressure conditions. Variation from standard values can result in DO concentrations greater than 100%.

At the greatest depth in Lakes M9313 (July) and L9323 (July and August) a significant drop in dissolved oxygen was observed. This is the result of sampling in lake sediment or within the diffusive boundary layer adjacent to the sediment surface. No significant oxycline or thermocline was apparent within the sampled water columns.

3.2.3 Salinity

Salinity remained consistent between July and August, with the greatest values occurring in Lake M9313 at 0.4 parts per thousand (ppt). Lakes L9323 and L9324 had no notable salinity. No variation in salinity occurred with depth.

3.3 Analytica – Laboratory Findings

Water quality results from laboratory analyses of samples collected in July are tabulated in Table 3-3 through Table 3-5. Results from the August sampling event are tabulated in Table 3-6 through Table 3-8. Analytical results provided by Analytica are presented in Appendix B (July) and Appendix C (August). A summary and comparison of the resulting values are described below.

All of the targeted compounds and metals were non-detectable (ND) in all lakes, for both sampling events, except for low levels of barium and chromium. Barium was detected in all lakes in July and August. Measured concentrations ranged from 0.051 mg/L to 0.25 mg/L; well below the water quality standard of 2 mg/L identified by the EPA (EPA 2006) and adopted in the Alaska Water Quality Standards (ADEC 2006). Barium concentrations increased in all lakes between sampling events by 0.06 mg/L (M9313), 0.002 mg/L (L9323) and 0.004 mg/L (L9324). Chromium was only detected in Lake L9324 in August at a concentration of 0.013 mg/L. This value is below limits identified in the Alaska Water Quality Standards (0.067 -0.1 mg/L).

Trip blanks are a required quality control element for volatile sampling and analysis, and are one of the most critical aspects of a sampling regime. All trip blanks were negative for aromatic VOCs.

Lab Sample Number	Test Method	Analysis	Concentration	Units	PQL	MDL	SS Recovery (%)	LCL	UCL
A0707191-03A	ADEC AK103-RRO	Residual Range Organics	ND	mg/L	0.51	0.21	-	-	-
A0707171-0311	ADEC AR103-RRO	Squalane	0.023	mg/L	0.0051	0.0021	45	50	150
A0707191-03A	ADEC AK102-DRO	Diesel Range Organics	ND	mg/L	0.10	0.0061	-	-	-
110707171 0000	nibilo ninoz bitt	o-Terphenyl	0.026	mg/L	0.00068	0.0038	50.2	50	120
		Acenaphthene	ND	ug/L	5.2	0.47	-	-	-
		Acenaphthylene	ND	ug/L	5.2	0.53	-	-	-
		Anthracene	ND	ug/L	5.2	0.45	-	-	-
		Benzo(a)anthracene	ND	ug/L	5.2	0.35	-	-	-
		Benzo(a)pyrene	ND	ug/L	5.2	0.27	-	-	-
		Benzo(b)fluoranthene	ND	ug/L	5.2	0.30	-	-	-
		Benzo(g,h,1)perylene	ND	ug/L	5.2	0.40	-	-	-
	1)	Benzo(k)fluoranthene	ND	ug/L	5.2	0.39	-	-	-
	625-Base-Neutrals and Acids	Chrysene	ND	ug/L	5.2	0.21	-	-	-
A0707191-03E	by GC/MS - PAH	Dibenzo(a,h)anthracene	ND	ug/L	5.2	0.35	-	-	-
	1 7	Fluoranthene	ND	ug/L	5.2	0.53	-	-	-
		Fluorene	ND	ug/L	5.2	0.49	-	-	-
		Indeno(1,2,3-cd)pyrene	ND	ug/L	5.2	0.23	-	-	-
	1)	Naphthalene	ND	ug/L	10	0.64	-	-	-
	1)	Phenanthrene	ND	ug/L	5.2	0.45	-	-	- 1
	1)	Pyrene	ND	ug/L	5.2	0.41	-	-	-
		2-Fluorobiphenyl	84	ug/L	5.2	0.29	80.7	43	116
	1)	D14-Terphenyl	99	ug/L	5.2	0.12	94.8	33	141
	 /	D5-Nitrobenzene	83	ug/L	5.2	0.21	79.3	35	114
		Arsenic	ND	mg/L	0.10	0.015	-	-	-
	1)	Barium	0.19	mg/L	0.01	0.00016	-	-	-
		Cadmium	ND	mg/L	0.006	0.00051	-	-	- 1
A0707191-03D	SW6010B-ICP-RCRA	Chromium	ND	mg/L	0.01	0.0018	-	-	-
		Lead	ND	mg/L	0.05	0.011	-	-	- 1
	1)	Selenium	ND	mg/L	0.10	0.026	-	-	-
	l/	Silver	ND	mg/L	0.015	0.00066	-	-	-
A0707191-03D	SW7470A - Mercury in Liquid Waste by CVAA - Total Hg	Mercury	ND	mg/L	0.0002	0.00005	-	-	-
A0707191-03B	1664 Hexane Extractable Materials - TPH w/SGT	Hexane-Extractable Material	ND	mg/L	5.2	1.5	-	-	-
		1,2-Dichlorobenzene	ND	ug/L	1.0	0.22	-	<u> </u>	-
		1,3-Dichlorobenzene	ND	ug/L	1.0	0.17	-	-	-
	1)	1,4-Dichlorobenzene	ND	ug/L	1.0	0.21	-	-	-
	602 - Purgeable Aromatics by	Benzene	ND	ug/L	1.0	0.074	-	-	-
A0707191-03C	GC/PID - BTEX &	Chlorobenzene	ND	ug/L	1.0	0.19	-	-	- 1
	Chlorobenzene	Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
	1)	Toluene	ND	ug/L	1.0	0.078	-	-	-
	1)	Xylenes, Total	ND	ug/L	2.0	0.20	-	-	-
	<u> </u>]	p-Bromofluorobenzene	26	ug/L	0.5	0.12	97.6	80	120
A0707191-03C	ADEC AK101-GRO	Gasoline Range Organics	ND	ug/L	100	21	-	<u> </u>	-
A0707171-03C	ADEC ARIOI-ORO	p-Bromofluorobenzene	25	ug/L	1.5	0.5	92.8	50	150
		Benzene	ND	ug/L	1.0	0.074	F -	[-	- T
	Aromatic VOCs by GC/PID	Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
Trip Blank	via method 8021B-BTEX	Toluene	ND	ug/L	1.0	0.078	-	-	-
	Via method 6021B-B1Las	Xylenes, Total	ND	ug/L	2.0	0.200	-	-	-
		p-Bromofluorobenzene	26	ug/L	0.5	0.120	94.9	80	120
Notes: (1) PQL: Practical	Quantification Limit								

Table 3-3 Lake M9313 July 16, 2007 Laboratory Analysis Results

(3) SS Recovery: Spiked Sample Recovery (% of original)(4) LCL: Lower Confidence Limit

(5) UCL: Upper Confidence Limit

(6) Surrogates are italicized

Lab Sample Number	Test Method	Analysis	Concentration	Units	PQL	MDL	SS Recovery (%)	LCL	UCL
A0707191.01A	ADEC AK103 PRO	Residual Range Organics	ND	mg/L	0.51	0.21	-	-	-
A0/0/191-01A	ADEC AR103-RRO	Squalane	0.038	mg/L	0.0051	0.0021	74	50	150
A0707191-01A	ADEC AK102-DRO	Diesel Range Organics	ND	mg/L	0.10	0.0061	-	-	-
110/0/191 0111	TIDEC TIRTICE DIRG	o-Terphenyl	0.034	mg/L	0.00068	0.0038	67.1	50	120
		Acenaphthene	ND	ug/L	5.2	0.47	-	-	-
		Acenaphthylene	ND	ug/L	5.2	0.53	-	-	-
		Anthracene	ND	ug/L	5.2	0.45	-	-	-
		Benzo(a)anthracene	ND	ug/L	5.2	0.35	-	-	-
		Benzo(a)pyrene	ND	ug/L	5.2	0.27	-	-	-
		Benzo(b)fluoranthene	ND	ug/L	5.2	0.30	-	-	-
		Benzo(g,h,i)perylene	ND	ug/L	5.2	0.40	-	-	-
		Benzo(k)fluoranthene	ND	ug/L	5.2	0.39	-	-	-
	625-Base-Neutrals and Acids	Chrysene	ND	ug/L	5.2	0.21	-	-	-
A0707191-01E	by GC/MS - PAH	Dibenzo(a,h)anthracene	ND	ug/L	5.2	0.35	-	-	-
	by define Thin	Fluoranthene	ND	ug/L	5.2	0.53	-	-	-
		Fluorene	ND	ug/L	5.2	0.49	-	-	-
		Indeno(1,2,3-cd)pyrene	ND	ug/L	5.2	0.23	-	-	-
		Naphthalene	ND	ug/L	10	0.64	-	-	-
		Phenanthrene	ND	ug/L	5.2	0.45	-	-	-
		Pyrene	ND	ug/L	5.2	0.41	-	-	-
		2-Fluorobiphenyl	69	ug/L	5.2	0.29	66.7	43	116
		D14-Terphenyl	70	ug/L	5.2	0.12	67.7	33	141
		D5-Nitrobenzene	70	ug/L	5.2	0.21	67.6	35	114
		Arsenic	ND	mg/L	0.10	0.015	-	-	-
		Barium	0.051	mg/L	0.01	0.00016	-	-	-
		Cadmium	ND	mg/L	0.006	0.00051	-	-	-
A0707191-01D	SW6010B-ICP-RCRA	Chromium	ND	mg/L	0.01	0.0018	-	-	-
		Lead	ND	mg/L	0.05	0.011	-	-	-
		Selenium	ND	mg/L	0.10	0.026	-	-	-
		Silver	ND	mg/L	0.015	0.00066	-	-	-
A0707191-01D	SW7470A - Mercury in Liquid Waste by CVAA - Total Hg	Mercury	ND	mg/L	0.0002	0.00005	-	-	-
A0707101.01B	1664 Hexane Extractable	Hexane-Extractable	ND	mg/I	5.1	1.5			
A0/0/191-01B	Materials - TPH w/SGT	Material	ND	mg/L	5.1	1.5	-	-	-
		1,2-Dichlorobenzene	ND	ug/L	1.0	0.22	-	-	-
		1,3-Dichlorobenzene	ND	ug/L	1.0	0.17	-	-	-
		1,4-Dichlorobenzene	ND	ug/L	1.0	0.21	-	-	-
	602 - Purgeable Aromatics by	Benzene	ND	ug/L	1.0	0.074	-	-	-
A0707191-01C	GC/PID - BTEX &	Chlorobenzene	ND	ug/L	1.0	0.19	-	-	-
	Chlorobenzene	Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
		Toluene	ND	ug/L	1.0	0.078	-	-	-
		Xylenes, Total	ND	ug/L	2.0	0.20	-	-	-
		p-Bromofluorobenzene	26	ug/L	0.5	0.12	97.4	80	120
A0707191-01C	ADEC AK101-GRO	Gasoline Range Organics	ND	ug/L	100	21	-	-	-
10/0/101-010	TIDLE TIMIOT-ORO	p-Bromofluorobenzene	26	ug/L	1.5	0.5	94.7	50	150
		Benzene	ND	ug/L	1.0	0.074	-	-	-
	Aromatic VOCs by GC/PID	Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
Trip Blank	via method 8021B-RTFX	Toluene	ND	ug/L	1.0	0.078	-	-	-
	memou 0021D-D1EA	Xylenes, Total	ND	ug/L	2.0	0.200	-	-	-
		p-Bromofluorobenzene	26	ug/L	0.5	0.120	94.9	80	120
Notes:									
 PQL: Practical 	Quantification Limit								

Table 3-4 Lake L9323 July 16, 2007 Laboratory Analysis Results

(2) MDL: Method Detection Limit

(3) SS Recovery: Spiked Sample Recovery (% of original)
(4) LCL: Lower Confidence Limit
(5) UCL: Upper Confidence Limit
(6) Surrogates are italicized

Lab Sample	Test Method	Analysis	Concentration	Units	PQL	MDL	SS Recovery	LCL	UCL
Number							(%)		
A0707191-02A	ADEC AK103-RRO	Residual Range Organics	ND	mg/L	0.52	0.21	-	-	-
		Squalane	0.023	mg/L	0.0052	0.0021	44.9	50	150
A0707191-02A	ADEC AK102-DRO	Diesel Range Organics	1.2	mg/L	0.10	0.0062	-	-	-
		o-Terphenyl	0.033	mg/L	0.00069	0.0038	65	50	120
		Acenaphthene	ND	ug/L	5.3	0.48	-	-	-
		Acenaphtnylene	ND	ug/L	5.5	0.54	-	-	-
		Banzo(a)anthracene	ND	ug/L	5.3	0.40	-	-	-
		Benzo(a)nurane	ND	ug/L	5.3	0.30	-	-	-
		Benzo(h)fluoranthene	ND	ug/L	53	0.23	-	-	-
		Benzo(g h i)pervlene	ND	ug/L	5.3	0.41	-	-	-
		Benzo(k)fluoranthene	ND	ug/L	5.3	0.4	-	-	-
		Chrysene	ND	ug/L	5.3	0.21	-	-	-
A0707191-02E	625-Base-Neutrals and Acids	Dibenzo(a,h)anthracene	ND	ug/L	5.3	0.36	-	-	-
	by GC/MS - PAH	Fluoranthene	ND	ug/L	5.3	0.54	-	-	-
		Fluorene	ND	ug/L	5.3	0.51	-	-	-
		Indeno(1,2,3-cd)pyrene	ND	ug/L	5.3	0.24	-	-	-
		Naphthalene	ND	ug/L	11	0.66	-	-	-
		Phenanthrene	ND	ug/L	5.3	0.46	-	-	-
		Pyrene	ND	ug/L	5.3	0.42	-	-	-
		2-Fluorobiphenyl	95	ug/L	5.3	0.3	89.3	43	116
		D14-Terphenyl	63	ug/L	5.3	0.13	58.8	33	141
		D5-Nitrobenzene	92	ug/L	5.3	0.22	86.3	35	114
		Arsenic	ND	mg/L	0.10	0.015	-	-	-
		Barium	0.054	mg/L	0.01	0.00016	-	-	-
	SW6010B-ICP-RCRA	Cadmium	ND	mg/L	0.006	0.00051	-	-	-
A0707191-02D		Chromium	ND	mg/L	0.01	0.0018	-	-	-
		Lead	ND	mg/L	0.05	0.011	-	-	-
		Selenium	ND	mg/L	0.10	0.026	-	-	-
		Silver	ND	mg/L	0.015	0.00066	-	-	-
A0707191-02D	SW7470A - Mercury in Liquid Waste by CVAA - Total Hg	Mercury	ND	mg/L	0.0002	0.00005	-	-	-
A0707191-02B	1664 Hexane Extractable Materials - TPH w/SGT	Hexane-Extractable Material	ND	mg/L	5.1	1.5	-	-	-
		1,2-Dichlorobenzene	ND	ug/L	1.0	0.22	-	-	-
		1,3-Dichlorobenzene	ND	ug/L	1.0	0.17	-	-	-
		1,4-Dichlorobenzene	ND	ug/L	1.0	0.21	-	-	-
	602 - Purgeable Aromatics by	Benzene	ND	ug/L	1.0	0.074	-	-	-
A0707191-02C	GC/PID - BTEX &	Chlorobenzene	ND	ug/L	1.0	0.19	-	-	-
	Chlorobenzene	Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
		Toluene	ND	ug/L	1.0	0.078	-	-	-
		Xylenes, Total	ND	ug/L	2.0	0.20	-	-	-
		p-Bromofluorobenzene	26	ug/L	0.5	0.12	97.9	80	120
A0707191-02C	ADEC AK101-GRO	Gasoline Range Organics	ND	ug/L	100	21	-	-	-
		p-Bromofluorobenzene	26	ug/L	1.5	0.5	95.2	50	150
		Benzene	ND	ug/L	1.0	0.074	-	-	-
Tria Dianta	Aromatic VOCs by GC/PID	Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
тпр Втапк	via method 8021B-BTEX	Toluene Vedence Tetal	ND	ug/L	1.0	0.078	-	-	-
		Ayienes, 10tal	26	ug/L	2.0	0.200	04.0	-	120
Notes		р-вготојшоговенzене	20	ug/L	0.3	0.120	94.9	80	120
(1) POL · Practical	Quantification Limit								
(1) I QL. I lactical	Detection Limit								
(3) SS Recovery: S	Spiked Sample Recovery (% of	original)							

Table 3-5	Lake L9324 July 16	, 2007 Laboratory	Analysis Results
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(4) LCL: Lower Confidence Limit
(5) UCL: Upper Confidence Limit
(6) *Surrogates* are italicized

Lab Sample Number	Test Method	Analysis	Concentration	Units	PQL	MDL	SS Recovery	LCL	UCL
A 0709454 01E		Residual Range Organics	ND	mg/L	0.52	0.21	-	-	-
A0/08454-01F	ADEC AK103-RRO	Squalane	0.043	mg/L	0.0052	0.0021	83.2	50	150
A0708454 01E	ADEC AK102 DRO	Diesel Range Organics	ND	mg/L	0.1	0.0062	-	-	-
A0708454-01E	ADEC ARIO2-DRO	o-Terphenyl	0.02	mg/L	0.00069	0.0038	38.6	50	120
		Acenaphthene	ND	ug/L	4.8	0.43	-	-	-
		Acenaphthylene	ND	ug/L	4.8	0.49	-	-	-
		Anthracene	ND	ug/L	4.8	0.41	-	-	-
		Benzo(a)anthracene	ND	ug/L	4.8	0.32	-	-	-
		Benzo(a)pyrene	ND	ug/L	4.8	0.25	-	-	-
		Benzo(b)fluoranthene	ND	ug/L	4.8	0.27	-	-	-
		Benzo(g,h,i)perylene	ND	ug/L	4.8	0.37	-	-	-
		Benzo(k)fluoranthene	ND	ug/L	4.8	0.36	-	-	-
	625-Base-Neutrals and Acids	Chrysene	ND	ug/L	4.8	0.19	-	-	-
A0/08454-01A	by GC/MS - PAH	Dibenzo(a,h)anthracene	ND	ug/L	4.8	0.32	-	-	-
	5	Fluoranthene	ND	ug/L	4.8	0.48	-	-	-
		Fluorene	ND	ug/L	4.8	0.45	-	-	-
		Indeno(1,2,3-cd)pyrene	ND	ug/L	4.8	0.21	-	-	-
		Naphthalene	ND	ug/L	9.5	0.59	-	-	-
		Phenanthrene	ND	ug/L	4.8	0.41	-	-	-
		Pyrene	ND	ug/L	4.8	0.38	-	-	-
		2-Fluorobiphenyl	55	ug/L	4.8	0.27	57.5	43	116
		D14-Terphenyl	42	ug/L	4.8	0.11	43.7	33	141
-		D5-Nitrobenzene	68	ug/L	4.8	0.20	71.9	35	114
		Arsenic	ND	mg/L	0.100	0.01500	-	-	-
		Barium	0.25	mg/L	0.010	0.00016	-	-	-
A0708454-01D		Cadmium	ND	mg/L	0.006	0.00051	-	-	-
	SW6010B-ICP-RCRA	Chromium	ND	mg/L	0.010	0.00180	-	-	-
		Lead	ND	mg/L	0.050	0.01100	-	-	-
		Selenium	ND	mg/L	0.100	0.02600	-	-	-
	CW24704 14	Silver	ND	mg/L	0.015	0.00066	-	-	-
A0708454-01D	Sw 7470A - Mercury in Liquid Waste by CVAA - Total Hg	Mercury	ND	mg/L	0.0002	0.00005	-	-	-
A0708454-01B	1664 Hexane Extractable Materials - TPH w/SGT	Hexane-Extractable Material	ND	mg/L	4.8	1.4	-	-	-
		1,2-Dichlorobenzene	ND	ug/L	1.0	0.22	-	-	-
		1,3-Dichlorobenzene	ND	ug/L	1.0	0.17	-	-	-
		1,4-Dichlorobenzene	ND	ug/L	1.0	0.21	-	-	-
	602 - Purgeable Aromatics by	Benzene	ND	ug/L	1.0	0.074	-	-	-
A0708454-01C	GC/PID - BTEX &	Chlorobenzene	ND	ug/L	1.0	0.19	-	-	-
	Chlorobenzene	Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
		Toluene	ND	ug/L	1.0	0.078	-	-	-
		Xylenes, Total	ND	ug/L	2.0	0.20	-	-	-
-		p-Bromofluorobenzene	26	ug/L	0.50	0.12	95.1	80	120
A0708454-01C	ADEC AK101-GRO	Gasoline Range Organics	ND	ug/L	100	21	-	-	-
		p-Bromofluorobenzene	25	ug/L	1.5	0.5	93.6	50	150
		1,2-Dichlorobenzene	ND	ug/L	1.0	0.220	-	-	-
		1,3-Dichlorobenzene	ND	ug/L	1.0	0.170	-	-	-
		1,4-Dichlorobenzene	ND	ug/L	1.0	0.210	-	-	-
	602 - Purgeable Aromatics by	Benzene	ND	ug/L	1.0	0.074	-	-	-
Trip Blank	GC/PID - BTEX	Chlorobenzene	ND	ug/L	1.0	0.190	-	-	-
		Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
		Toluene	ND	ug/L	1.0	0.078	-	-	-
		Xylenes, Total	ND	ug/L	2.0	0.200	-	-	-
		p-Bromofluorobenzene	ND	ug/L	0.5	0.120	91.7	80	120
Notes:	0								

Table 3-6	Lake M9313	August 8, 2007	Laboratory	Analysis Results
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PQL: Practical Quantification Limit
 MDL: Method Detection Limit
 SS Recovery: Spiked Sample Recovery (% of original)
 LCL: Lower Confidence Limit
 UCL: Upper Confidence Limit
 Surrogates are italicized

Lab Sample Number	Test Method	Analysis	Concentration	Units	PQL	MDL	SS Recovery	LCL	UCL
A 0709454 02E		Residual Range Organics	ND	mg/L	0.52	0.21	-	-	-
A0708454-02F	ADEC AK103-RRO	Squalane	0.043	mg/L	0.0052	0.0021	81.8	50	150
A0708454 02E	ADEC AV102 DRO	Diesel Range Organics	ND	mg/L	0.10	0.0062	-	-	-
A0708454-02E	ADEC ARI02-DRO	o-Terphenyl	0.027	mg/L	0.00069	0.0038	52.1	50	120
		Acenaphthene	ND	ug/L	4.8	0.43	-	-	-
		Acenaphthylene	ND	ug/L	4.8	0.49	-	-	-
		Anthracene	ND	ug/L	4.8	0.42	-	-	-
		Benzo(a)anthracene	ND	ug/L	4.8	0.32	-	-	-
		Benzo(a)pyrene	ND	ug/L	4.8	0.25	-	-	-
		Benzo(b)fluoranthene	ND	ug/L	4.8	0.28	-	-	-
		Benzo(g,h,i)perylene	ND	ug/L	4.8	0.37	-	-	-
		Benzo(k)fluoranthene	ND	ug/L	4.8	0.37	-	-	-
	625-Base-Neutrals and Acids	Chrysene	ND	ug/L	4.8	0.19	-	-	-
A0708454-02A	by GC/MS - PAH	Dibenzo(a,h)anthracene	ND	ug/L	4.8	0.32	-	-	-
		Fluoranthene	ND	ug/L	4.8	0.49	-	-	-
		Fluorene	ND	ug/L	4.8	0.46	-	-	-
		Indeno(1,2,3-cd)pyrene	ND	ug/L	4.8	0.22	-	-	-
		Naphthalene	ND	ug/L	9.7	0.60	-	-	-
		Phenanthrene	ND	ug/L	4.8	0.42	-	-	-
		Pyrene	ND	ug/L	4.8	0.38	-	-	-
		2-Fluorobiphenyl	49	ug/L	4.8	0.27	50.8	43	116
		D14-Terphenyl	31	ug/L	4.8	0.11	32.6	33	141
		D5-Nitrobenzene	63	ug/L	4.8	0.20	65.6	35	114
		Arsenic	ND	mg/L	0.10	0.015	-	-	-
		Barium	0.053	mg/L	0.01	0.00016	-	-	-
		Cadmium	ND	mg/L	0.006	0.00051	-	-	-
A0708454-02D	SW6010B-ICP-RCRA	Chromium	ND	mg/L	0.01	0.0018	-	-	-
		Lead	ND	mg/L	0.05	0.011	-	-	-
		Selenium	ND	mg/L	0.10	0.026	-	-	-
		Silver	ND	mg/L	0.015	0.00066	-	-	-
A0708454-02D	SW7470A - Mercury in Liquid Waste by CVAA - Total Hg	Mercury	ND	mg/L	0.0002	0.00005	-	-	-
	1664 Hexane Extractable Materials - TPH w/SGT	Hexane-Extractable Material	ND	mg/L	4.9	1.4	-	-	-
		1,2-Dichlorobenzene	ND	ug/L	1.0	0.22	-	-	-
		1,3-Dichlorobenzene	ND	ug/L	1.0	0.17	-	-	-
		1,4-Dichlorobenzene	ND	ug/L	1.0	0.21	-	-	-
	602 - Purgeable Aromatics by	Benzene	ND	ug/L	1.0	0.074	-	-	-
A0708454-02C	GC/PID - BTEX &	Chlorobenzene	ND	ug/L	1.0	0.19	-	-	-
	Chlorobenzene	Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
		Toluene	ND	ug/L	1.0	0.078	-	-	-
		Xylenes, Total	ND	ug/L	2.0	0.20	-	-	-
		p-Bromofluorobenzene	27	ug/L	0.5	0.12	98.9	80	120
A0709454 02C	ADEC AV101 CRO	Gasoline Range Organics	ND	ug/L	100	21	-	-	-
A0708434-02C	ADEC ARIOI-GRO	p-Bromofluorobenzene	25	ug/L	1.5	0.5	93.8	50	150
		1,2-Dichlorobenzene	ND	ug/L	1.0	0.220	-	-	-
		1,3-Dichlorobenzene	ND	ug/L	1.0	0.170	-	-	-
		1,4-Dichlorobenzene	ND	ug/L	1.0	0.210	-	-	-
	602 Durgooble Arometics In	Benzene	ND	ug/L	1.0	0.074	-	-	-
Trip Blank	GC/PID PTEV	Chlorobenzene	ND	ug/L	1.0	0.190	-	-	-
	UC/FID - DIEA	Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
		Toluene	ND	ug/L	1.0	0.078	-	-	-
		Xylenes, Total	ND	ug/L	2.0	0.200	-	-	-
		p-Bromofluorobenzene	ND	ug/L	0.5	0.120	91.7	80	120

Table 3-7	Lake L9323	August 8, 2007	Laboratory	Analysis Results
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Notes: (1) PQL: Practical Quantification Limit (2) MDL: Method Detection Limit

(3) SS Recovery: Spiked Sample Recovery (% of original)

(4) LCL: Lower Confidence Limit
(5) UCL: Upper Confidence Limit
(6) Surrogates are italicized

Lab Sample Number	Test Method	Analysis	Concentration	Units	PQL	MDL	SS Recovery (%)	LCL	UCL
A0708454-03E	ADEC AK103 PPO	Residual Range Organics	ND	mg/L	0.52	0.21	-	-	-
A0700434-031	ADEC AR105-RRO	Squalane	0.041	mg/L	0.0052	0.0021	79.2	50	150
A0708454-03E	ADEC AK102-DRO	Diesel Range Organics	0.11	mg/L	0.11	0.0064	-	-	-
		o-Terphenyl	0.029	mg/L	0.00072	0.0039	53.9	50	120
		Acenaphthene	ND	ug/L	5.0	0.45	-	-	-
		Acenaphthylene	ND	ug/L	5.0	0.51	-	-	-
		Anthracene	ND	ug/L	5.0	0.44	-	-	-
		Benzo(a)anthracene	ND	ug/L	5.0	0.33	-	-	-
		Benzo(a)pyrene	ND	ug/L	5.0	0.26	-	-	-
		Benzo(b)fluoranthene	ND	ug/L	5.0	0.29	-	-	-
		Benzo(g,h,1)perylene	ND	ug/L	5.0	0.39	-	-	-
		Benzo(k)fluoranthene	ND	ug/L	5.0	0.38	-	-	-
10700454 024	625-Base-Neutrals and Acids	Chrysene	ND	ug/L	5.0	0.20	-	-	-
A0/08454-03A	by GC/MS - PAH	Dibenzo(a,h)anthracene	ND	ug/L	5.0	0.34	-	-	-
		Fluoranthene	ND	ug/L	5.0	0.51	-	-	-
		Fluorene	ND	ug/L	5.0	0.48	-	-	-
		Indeno(1,2,3-cd)pyrene	ND	ug/L	5.0	0.22	-	-	-
		Naphthalene	ND	ug/L	10.0	0.62	-	-	-
		Pnenanthrene	ND	ug/L	5.0	0.45	-	-	-
		2 Elwanshinhawd	ND	ug/L	5.0	0.40	-	-	-
		2-Fluorobiphenyi	30	ug/L	5.0	0.28	30.2	45	141
		D14-1erpnenyl	33 70	ug/L	5.0	0.12	33.2	33 25	141
		D3-Mirobenzene	70	ug/L	5.0	0.21	70.2	33	114
		Arsenic	0.058	mg/L	0.10	0.0015	-	-	-
A0708454-03D		Cadmium	0.058 ND	mg/L	0.01	0.00010	-	-	-
	SW6010B-ICP-RCRA	Chromium	0.013	mg/L	0.000	0.00051	-	-	-
	5 W 0010B-ICI -KEKA	Lead	ND	mg/L	0.01	0.0010	-	-	-
		Selenium	ND	mg/L	0.05	0.026			
		Silver	ND	mg/L	0.015	0.020	-	-	-
	SW7470A - Mercury in	Shiver	112	g/E	0.015	0.00000			
A0708454-03D	Liquid Waste by CVAA - Total Hg	Mercury	ND	mg/L	0.0002	0.00005	-	-	-
A0708454-03B	1664 Hexane Extractable Materials - TPH w/SGT	Hexane-Extractable Material	ND	mg/L	4.8	1.4	-	-	-
		1,2-Dichlorobenzene	ND	ug/L	1.0	0.22	-	-	-
		1,3-Dichlorobenzene	ND	ug/L	1.0	0.17	-	-	-
		1,4-Dichlorobenzene	ND	ug/L	1.0	0.21	-	-	-
	602 - Purgeable Aromatics by	Benzene	ND	ug/L	1.0	0.074	-	-	-
A0708454-03C	GC/PID - BTEX &	Chlorobenzene	ND	ug/L	1.0	0.19	-	-	-
	Chlorobenzene	Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
		Toluene	ND	ug/L	1.0	0.078	-	-	-
		Xylenes, Total	ND	ug/L	2.0	0.20	-	-	-
		p-Bromofluorobenzene	27	ug/L	0.5	0.12	99	80	120
A0708454 02C	ADEC AV101 CRO	Gasoline Range Organics	ND	ug/L	100	21	-	-	-
A0708434-03C	ADEC ARIOI-ORO	p-Bromofluorobenzene	25	ug/L	1.5	0.5	93.1	50	150
		1,2-Dichlorobenzene	ND	ug/L	1.0	0.220	-	-	-
		1,3-Dichlorobenzene	ND	ug/L	1.0	0.170	-	-	-
		1,4-Dichlorobenzene	ND	ug/L	1.0	0.210	-	-	-
	602 - Purgeable Aromatics by	Benzene	ND	ug/L	1.0	0.074	-	-	-
Trip Blank	GC/PID - BTEX	Chlorobenzene	ND	ug/L	1.0	0.190	-	-	-
	COLD DIDI	Ethylbenzene	ND	ug/L	1.0	0.088	-	-	-
		Toluene	ND	ug/L	1.0	0.078	-	-	-
		Xylenes, Total	ND	ug/L	2.0	0.200	-	-	-
		p-Bromofluorobenzene	ND	ug/L	0.5	0.120	91.7	80	120

Table 3-8	Lake L9324 August 8, 2007 Laboratory Analysis Results
-----------	---

Notes: (1) PQL: Practical Quantification Limit (2) MDL: Method Detection Limit

(3) SS Recovery: Spiked Sample Recovery (% of original)

(4) LCL: Lower Confidence Limit
(5) UCL: Upper Confidence Limit
(6) Surrogates are italicized

4.0 Discussion

In situ water quality parameters varied little, both with depth and time, in the three sampled lakes. Differences in temperature, specific conductance, and dissolved oxygen observed at the deepest sampling in Lake L9323 are the result of sampling at or very near lake sediments. Bacterial activity, geothermal output, chemical oxidation, and dissolution of sediments greatly influence water chemistry within this narrow boundary of the lake. These differences do not suggest the presence of stratification within the lakes. Temporal variations in temperature, specific conductance, and dissolved oxygen are within expected ranges and can be attributed to evaporation, precipitation, wind, and biological activity.

Laboratory analysis of lake water samples yielded no evidence of targeted contaminants at any lake, except for trace heavy metals. Small bubbles were observed by Analytica in vials used for volatile organic analysis of Lake L9323 August samples. Detectable concentrations may be lower than actual in-situ values. Observations at L9324 (July and August) and in L9323 (July) suggest no significant error was introduced and sampling was not repeated.

Barium was identified in all sample lakes at concentrations below federal and state water quality standards. Concentrations increased in all lakes between sampling events: 32% in Lake M9313, 4% in L9323, and 2% in L9323. Barium is not uncommon in arctic waters at concentrations similar to those presented here (Guay and Falkner 1998).

A small concentration of chromium was also observed in samples collected at Lake L9324 in August. This value was 0.003 mg/L above the practical quantification limit of 0.01 mg/L, suggesting a minimum increase of 30%. The measured concentration of chromium was also below state water quality standards.

Water quality data of 16 NPRA lakes in September of 2003 were compared to constituent concentrations presented here (Baker 2003). The 2003 study was limited to RRO, DRO, and a suite of metals and polynuclear aromatic hydrocarbons. Analyses yielded RRO and DRO concentrations below their detection limit. Neither barium nor chromium was included in the metals analysis. Cadmium was found at low concentrations (0.003 mg/L) in two of the 16 lakes. Of the aromatic hydrocarbon analytes, naphthalene was the only constituent found above detection limits.

5.0 References

- Alaska Department of Environmental Conservation (ADEC). 2006. Water Quality Standards, 18 AAC 70.
 - _____. 2002. Underground Storage Tanks Procedures. Division of Spill Prevention and Response, Contaminated Sites Program.
- Guay, C.K. and K.K. Falkner. 1998. A survey of dissolved barium in the estuaries of major Arctic rivers and adjacent seas. *Continental Shelf Research* 18:8 859-882.
- Michael Baker Jr., Inc. 2003. ASDP Water Resources 2003 NPRA Lake Monitoring. Prepared for ConocoPhillips Alaska, Inc.
- Moulton, L.L. 2004. Monitoring of Water-Source Lakes in the Alpine Development Project: 1992-2003. January 2004. MJM Research. Prepared for ConocoPhillips Alaska, Inc.
- United States Army Corps of Engineers (USACE). 1987. Reservoir Water Quality Analysis. Engineering Manual EM-1110-2-1201.
- United States Environmental Protection Agency (EPA). 2006. 2006 Edition of the Drinking Water Standards and Health Advisories. EPA 822-R-06-013.
- United States Geological Survey (USGS). 2006. National field manual for the collection of water-quality data. Book 9 Handbooks for Water-Resources Investigations. Chapter A4 Collection of water samples.
- Ward, J.R. and C.A. Harr eds. 1990. Methods for collection and processing surface-water and bed-material samples for physical and chemical analyses. Open-File Report 90-147.

Appendix A Lake Bathymetry



(not to be used for navigation or to direct operation of heavy equipment)





Appendix B July 16, 2007 Laboratory Water Quality Analysis Results



8/8/2007 Michael Baker Jr Inc 1400 W. Benson Blvd. Ste 200 STE 200 Anchorage, AK 99503 Attn: Marc McBroom Analytica International, Inc. 4307 Arctic Blvd. Anchorage, AK 99503 Phone: 907-258-2155 Fax: 907-258-6634

Work Order #: A0707191 Date: 8/8/2007 Work ID: Colville River Study 2007 Date Received: 7/17/2007 Proj #: Colville River Study 2007

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
A0707191-01	Lake 9323	A0707191-02	Lake 9324
A0707191-03	Lake 9313	A0707191-04	Trip Blank

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. Listings of data qualifiers, analytical codes, key dates, and QC relationships are provided at the end of the report.

Sincerely,

X.1

Krissy Plett Project Manager

"The Science of Analysis, The Art of Service"

Analytica Alaska Inc.

Work Order: A0707191

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Methods for the Determination of Metals in Environmental Samples, EPA/600/R-94/111, May 1994.

Guidelines Establishing Test Procedures for the Analysis of Pollutants, 40 CFR, Part 136, 7-1-99 Edition.

Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, December 1996.

Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA 600/4-82-057, July 1982.

USEPA Method 1664, EPA-821-B-94-004b, N-Hexane Extractable Material (HEM) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM) by Extraction and Gravimetry (Oil and Grease and Total Petroleum Hydrocarbons), April 1995.

Method AK101 For the Determination of Gasoline Range Organics, Revision 3.0, 01/31/96.

Method AK102 For the Determination of Diesel Range Organics, Revision 3.0, 01/31/96.

Method AK103 For the Determination of Residual Range Organics, Revision 2.0, 01/31/96.

SAMPLE RECEIPT: Four (4) samples were received on 7/17/2007 12:10:00 PM, at a temperature of 7.2°C, at Analytica-Anchorage. The samples were received in good condition and in order per chain of custody.

The samples were transferred for analysis to Analytica Environmental Laboratories (AEL); 12189 Pennsylvania St. Thornton, CO 80241, where they were received at a temperature of 3.3°C, in good condition and in order per chain of custody on 7/20/2007.

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN A summary of our review is shown below, organized by test:

Test Method: 1664 Hexane Extractable Material - TPH w/SGT - Aqueous

HOLDING TIMES: Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: Insufficient sample was provided to perform a matrix spike and matrix spike duplicate. The laboratory prepared an LCS/LCSD to demonstrate method accuracy and precision.

METHOD BLANK OUTLIERS: There are no method blank outliers.

LCS OUTLIERS: There are no LCS outliers.

Analytica Alaska Inc. Work Order: A0707191 (continued) Test Method: 602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes - Aqueous

HOLDING TIMES: Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: There were no unusual observations.

INITIAL CALIBRATIONS: Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:

Analytica compares the CCVs against the criteria for 8021 in order to evaluate them technically. The recovery ranges required by Method 602 are much wider, and the CCVs all meet Method 602 requirements. Deviations from Method 8021 are shown below, but these are not pertinent from a regulatory perspective. Data are fully usable. Those compounds shown as falling outside the 8021 specification may be quantified somewhat less accurately than others, but all should meet Method 602 quantification accuracy requirements.

RunDate	Data File	Analyte	Recovery LCL	UCL
7/26/2007 2:54:00 PM	07072603.D	1,2-Dichlorobenzene	69.9 80	120
7/27/2007 4:33:00 AM	07072625.D	1,2-Dichlorobenzene	76.7 80	120
CLOSING CONTINUIN	G CALIBRATIONS	5:		
RunDate	Data File	Analyte	Recovery LCL	UCL
7/27/2007 4:33:00 AM	07072625.D	1,2-Dichlorobenzene	76.7 80	120
7/27/2007 6:38:00 PM	07072648.D	1,2-Dichlorobenzene	56.7 80	120
7/27/2007 6:38:00 PM	07072648.D	1,3-Dichlorobenzene	73.2 80	120

INTERNAL STANDARD AREAS: There were no Internal Standard outliers.

SURROGATE RECOVERIES: There were no surrogate outliers.

METHOD BLANK OUTLIERS: There are no method blank outliers.

LCS OUTLIERS:

The LCS and LCSD shown below have one target outside of control windows. This target was not detected in the samples. It is important to point out that this outlier is compared against the Analytica in-house limits, and these recoveries are still in control by Method 602 criteria.

Туре	BatchNumber	Analyte	Recovery	LCL	UCL	Status
LCS	т070731003	1,2-Dichlorobenzene	77.5	80	120	Complete
LCSD	т070731003	1,2-Dichlorobenzene	76.8	80	120	Complete

 $\rm MS/MSD$ and DUP OUTLIERS: The MS and MSD shown below have two targets outside of control windows. These targets were not detected in the samples.

	Type Cl	ient Sample	LabSample	Analyte	Recovery	/ LCL UC	'L Parent	Spik
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Analytica Alaska Inc. Work Order: A0707191

(continued)

Туре	Client	Sample	LabSample	Analyte	Recovery	LCL	UCL	Parent	Spike
MS			A0707191-01C	1,3-Dichlorobenze	ne 77.3	80	120	0.00	10.0
MS			A0707191-01C	1,2-Dichlorobenze	ne 63.9	80	120	0.00	10.0
MSD			A0707191-01C	1,3-Dichlorobenze	ne 77.3	80	120	0.00	10.0
MSD			A0707191-01C	1,2-Dichlorobenze	ne 56.5	80	120	0.00	10.0

Test Method: 625 - Base-Neutrals and Acids by GC/MS - PAH - Aqueous

HOLDING TIMES: Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS: Instrument checks were within method criteria.

INITIAL CALIBRATIONS: Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS: Several targets were recovered out of limits in the opening and continuing CCVs shown below. Since these are elevated recoveries, and the targets were not detected in the samples, there is no impact on the data.

RunDate			Data File	Analyte	Recovery	LCL	UCL
7/27/2007	7:42:00	PM	07072703.D	2-Fluorobiphenyl	120.	80	120
7/27/2007	7:42:00	PM	07072703.D	Acenaphthylene	120.	80	120
7/27/2007	7:42:00	PM	07072703.D	Benzo(g,h,i)perylene	150.	80	120
7/27/2007	7:42:00	PM	07072703.D	D5-Nitrobenzene	124.	80	120
7/27/2007	7:42:00	PM	07072703.D	Dibenzo(a,h)anthracene	141.	80	120
7/27/2007	7:42:00	PM	07072703.D	Indeno(1,2,3-cd)pyrene	140.	80	120

CLOSING CONTINUING	CALIBRATIONS	:			
RunDate	Data File	Analyte	Recovery	LCL	UCL
7/28/2007 7:25:00 AM	07072723.D	Benzo(g,h,i)perylene	122.	80	120
7/28/2007 7:25:00 AM	07072723.D	Dibenzo(a,h)anthracene	121.	80	120

INTERNAL STANDARD AREAS: There were no Internal Standard outliers.

SURROGATE RECOVERIES: One surrogate was recovered out of limits in the batch MSD. However, the spiked sample is not associated with this project.

METHOD BLANK OUTLIERS: There are no method blank outliers.

LCS OUTLIERS:

One target was recovered out of limits in the LCS and LCS Duplicate, as shown below. Since these are elevated recoveries, and this target was not detected in the samples, there is no impact on the data.

Analytica Alaska Inc. Work Order: A0707191 (continued)

there is no impact on the data.

Туре	BatchNumber	Analyte	Recovery	LCL	UCL	Status
LCS	т070725011	Acenaphthylene	211.	48	133	Complete
LCSD	т070725011	Acenaphthylene	214.	48	133	Complete

MS/MSD and DUP OUTLIERS: One target was recovered out of limits in the batch MS/MSD. However, the spiked sample is not associated with this project.

Test Method: ADEC AK101 - GRO - Aqueous

HOLDING TIMES: Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: There were no unusual observations.

INITIAL CALIBRATIONS: Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS: Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS: Closing continuing calibrations were within method criteria or not applicable.

INTERNAL STANDARD AREAS: There were no Internal Standard outliers.

SURROGATE RECOVERIES: There were no surrogate outliers.

METHOD BLANK OUTLIERS: There are no method blank outliers.

LCS OUTLIERS: There are no LCS outliers.

MS/MSD and DUP OUTLIERS: There are no MS/MSD or DUP outliers.

Test Method: ADEC AK102 - DRO - Aqueous

HOLDING TIMES: Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: Insufficient sample was provided to perform a matrix spike and matrix spike duplicate. The laboratory prepared an LCS/LCSD to demonstrate method accuracy and precision.

Analytica Alaska Inc. Work Order: A0707191 (continued)

INITIAL CALIBRATIONS: Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS: Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS: Opening continuing calibrations were within method criteria.

SURROGATE RECOVERIES: The surrogate was recovered outside the acceptance limits in the Method Blank, as shown below. This was confirmed by secondary analysis. The LCS, LCSD and the samples all had acceptable recoveries for this surrogate.

Sample	LabID	Surrogate	Recovery	LCL	UCL
MB	T070724001-MB	o-Terphenyl	42.	60	120 Complete
MB	T070724001-MB	o-Terphenyl	39.	60	120 Rrun

METHOD BLANK OUTLIERS: There are no method blank outliers.

LCS OUTLIERS: The target was recovered slightly low in the LCS Duplicate, as shown below. The LCS gave acceptable recovery for the target. Due to insufficient sample volume, re-extraction and re-analysis was not possible.

Туре	BatchNumber	Analyte	Recovery	LCL	UCL	Status
LCSD	т070724001	Diesel Range Organics	66.7	75	125	Complete

Test Method: ADEC AK103 - RRO - Aqueous

HOLDING TIMES: Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: Insufficient sample was provided to perform a matrix spike and matrix spike duplicate. The laboratory prepared an LCS/LCSD to demonstrate method accuracy and precision.

INITIAL CALIBRATIONS: Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS: Opening continuing calibrations were in control. There were several runs conducted in order to achieve acceptable calibrations for both surrogate and RRO.

CLOSING CONTINUING CALIBRATIONS: Closing continuing calibrations are not required for this analysis.

SURROGATE RECOVERIES:

The surrogate was recovered out of limits in the samples and was slightly low in one LCS shown below. This was confirmed by secondary analysis.

					Analytica Alaska Inc.			
			Work Order: A0707191					
						(continued)		
shown	below.	This	was	confirmed	by	secondary	analysis.	

Sample	LabID	Surrogate	Recovery	LCL	UCL	
	A0707191-02A	Squalane	44.	50	150	Complete
	A0707191-03A	Squalane	45.	50	150	Complete
LCS	T070724011-LCS	Squalane	59.	60	120	Complete
	A0707191-02A	Squalane	39.	50	150	Rrun
	A0707191-02A	Squalane	47.	50	150	Rrun
	A0707191-03A	Squalane	36.	50	150	Rrun
LCS	T070724011-LCS	Squalane	43.	60	120	Rrun

METHOD BLANK OUTLIERS: There are no method blank outliers.

LCS OUTLIERS: There are no LCS outliers.

Test Method: Aromatic VOCs by GC/PID via method 8021B - BTEX - Aqueous

HOLDING TIMES: Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: There were no unusual observations.

INITIAL CALIBRATIONS: Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS: Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS: Closing continuing calibrations were within method criteria or not applicable.

INTERNAL STANDARD AREAS: There were no Internal Standard outliers.

SURROGATE RECOVERIES: There were no surrogate outliers.

METHOD BLANK OUTLIERS: There are no method blank outliers.

LCS OUTLIERS: There are no LCS outliers.

MS/MSD and DUP OUTLIERS: There are no MS/MSD or DUP outliers.

Test Method: SW6010B - ICP - RCRA - Aqueous

Analytica Alaska Inc. Work Order: A0707191 (continued)

HOLDING TIMES: Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: There were no unusual obsrvations.

INSTRUMENT PERFORMANCE CHECKS: Instrument checks were within method criteria.

INITIAL CALIBRATIONS: Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS: Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS: Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS: There are no method blank outliers.

LCS OUTLIERS: There are no LCS outliers.

MS/MSD and DUP OUTLIERS: There are no MS/MSD or DUP outliers.

Test Method: SW7470A - Mercury in Liquid Waste by CVAA - Total Hg - Aqueous

HOLDING TIMES: Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: There were no unusual obsrvations.

INSTRUMENT PERFORMANCE CHECKS: Instrument checks were within method criteria.

INITIAL CALIBRATIONS: Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS: Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS: Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS: There are no method blank outliers.

LCS OUTLIERS:
Case Narrative

Analytica Alaska Inc. Work Order: A0707191 (continued)

LCS OUTLIERS: There are no LCS outliers.

MS/MSD and DUP OUTLIERS: There are no MS/MSD or DUP outliers.

Detailed Ana	lytical Report				Ar	nalytic	a Alaska Iı	nc.			
Workorder (SDG):	A0707191										
Project:	Colville Rive	r Study 20	007								
Client:	Michael Bak	er Jr Inc									
Client Project Numbe	r: Colville Rive	r Study 20	007								
Report Section	: Clien	t Samp	le Re	port							
Client Sample Name:	Lake 932	23									
Matrix:	Aqueous					C	Collection Da	ate:	7/16/2007	4:30:	00PM
The following test was	conducted by: Analytica	Thornton									
Lab Sample Number:	A0707191-01A						Analysis D	ate:	8/2/2007	7 2:24	4:00PM
Prep Date:	7/23/2007						Instrument	:	GC_E		
Analytical Method ID:	ADEC AK103 - RRO						File Name:		0707316	54.D	
Prep Method ID:	3510						Dilution Fa	ictor:	1		
Prep Batch Number:	T070724011										
Report Basis:	As Received						Analyst Ini	tials:	MA		
Sample prep wt./vol:	975.00 ml						Prep Extra	act Vol:	1.00	ml	
Analyte	CASNo	Result	Flags	Units	POL	MDL				י	run #:
Residual Range Organics	n/a	ND		mg/L	0.51	0.21				-	4
<u>Surrogate</u> Squalane	<u>CASNo</u> 111-01-3	<u>Result</u> 0.038	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.0051	<u>M</u> 0.002	IDL <u>Spike</u> 1 0.051	<u>% Recov</u> 74.0	<u>LCL</u> 50	<u>UCL</u> 150	<u>run #:</u> 4
The following test was	conducted by: Analytica	Thornton									
Lab Sample Number:	A0707191-01A						Analysis D	ate:	7/24/200	07 11:	:27:31PM
Prep Date:	7/23/2007						Instrument	:	GC_E		
Analytical Method ID:	ADEC AK102 - DRO						File Name:		0707234	48.D	
Prep Method ID:	3510						Dilution Fa	ictor:	1		
Prep Batch Number:	T070724001										
Report Basis:	As Received						Analyst Ini	tials:	MAG		
Sample prep wt./vol:	975.00 ml						Prep Extra	act Vol:	1.00	ml	
<u>Analyte</u> Diesel Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.10	<u>MDL</u> 0.006	1			ļ	run #: 1
<u>Surrogate</u> o-Terphenyl	<u>CASNo</u> 84-15-1	<u>Result</u> 0.034	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00068	<u>M</u> 0.003	IDL <u>Spike</u> 8 0.051	<u>% Recov</u> 67.1	<u>LCL</u> 50	<u>UCL</u> 120	<u>run #:</u> 1
The following test was	conducted by: Analytica	Thornton									
Lab Sample Number:	A0707191-01E						Analysis D	ate:	7/28/200	07 3:2	20:00AM
Prep Date:	7/23/2007						Instrument	:	MS1BN	A	
Analytical Method ID:	625 - Base-Neutrals and	Acids by G	C/MS - 1	PAH			File Name:		0707271	16.D	
Prep Method ID:	LLE						Dilution Fa	ictor:	1		
Prep Batch Number:	T070725011										
Report Basis:	As Received						Analyst Ini	tials:	SM		
Sample prep wt./vol:	960.00 ml						Prep Extra	act Vol:	2.00	ml	
<u>Analyte</u> Acenaphthene	<u>CASNo</u> 83-32-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.2	<u>MDL</u> 0.47				<u>!</u>	run #: 1
Acenaphthylene	208-96-8	ND		ug/L	5.2	0.53					
Anthracene	120-12-7	ND		ug/L	5.2	0.45					
Benzo(a)anthracene	56-55-3	ND		ug/L	5.2	0.35					
Benzo(a)pyrene	50-32-8	ND		ug/L	5.2	0.27					
Benzo(b)fluoranthene	205-99-2	ND		ug/L	5.2	0.30					
Benzo(g,h,i)perylene	191-24-2	ND		ug/L	5.2	0.40					

Detailed Ana	lytical l	Report				Aı	nalytic	a Alaska I	nc.			
Workorder (SDG):	A0707	191										
Project:	(Colville Ri	iver Study 20	07								
Client:	Ι	Michael B	aker Jr Inc									
Client Project Numbe	r: (Colville Ri	iver Study 20	07								
Report Section	•	Clie	ent Sampl	e Re	port							
Client Sample Name:		Lake)323		I ,							
Matrix:	Aque	eous	010				C	Collection D	ate:	7/16/2007	4:30:	00PM
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID:	A070719 7/23/200 625 - Base LLE	91-01E 7 e-Neutrals a	and Acids by G	C/MS - 1	PAH			Analysis D Instrument File Name Dilution F	Date: :: : actor:	7/28/200 MS1BN 070727 1	07 3:: [A 16.D	20:00AM
Prep Batch Number	T070725	011						Diration		-		
Report Basis: Sample prep wt./vol:	As Receiv 960.00	ved ml						Analyst In Prep Extr	itials: act Vol:	SM 2.00	ml	
<u>Analyte</u> Benzo(k)fluoranthene	2	<u>CASNo</u> 07-08-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.2	<u>MDL</u> 0.39				<u>i</u>	<u>run #:</u> 1
Chrysene	2	18-01-9	ND		ug/L	5.2	0.21					
Dibenzo(a,h)anthracene	5	3-70-3	ND		ug/L	5.2	0.35					
Fluoranthene	2	06-44-0	ND		ug/L	5.2	0.53					
Fluorene	8	6-73-7	ND		ug/L	5.2	0.49					
Indeno(1,2,3-cd)pyrene	1	93-39-5	ND		ug/L	5.2	0.23					
Naphthalene	9	1-20-3	ND		ug/L	10	0.64					
Phenanthrene	8	5-01-8	ND		ug/L	5.2	0.45					
Pyrene	1	29-00-0	ND		ug/L	5.2	0.41					
<u>Surrogate</u> 2-Fluorobiphenyl	3	CASNo 21-60-8	<u>Result</u> 69	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.2	<u>M</u> 0.29	DL <u>Spike</u> 100	<u>% Recov</u> 66.7	<u>v LCL</u> 43	<u>UCL</u> 116	<u>run #:</u> 1
D14-Terphenyl	9	2-94-4D	70		ug/L	5.2	0.12	100	67.7	33	141	
D5-Nitrobenzene	9	8-95-3D	70		ug/L	5.2	0.21	100	67.6	35	114	
The following test was Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID: Prep Batch Number: Report Basis:	conducted A070719 7/25/200 SW6010E 3010_IC T070724 As Receiv	by: Analyti 1-01D 7 8 - ICP - RO P 028 red	ca - Thornton CRA					Analysis E Instrument File Name Dilution Fi Analyst In	Date: :: actor: itials:	7/26/200 ICP_2 E07267. 1	07 5:- A	42:00PM
Sample prep wt./vol:	50.00	ml						Prep Extr	act Vol:	50.00	ml	
<u>Analyte</u> Arsenic	7	<u>CASNo</u> 440-38-2	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.10	<u>MDL</u> 0.015				<u>i</u>	<u>run #:</u> 1
Barium	7	440-39-3	0.051		mg/L	0.010	0.0001	6				
Cadmium	7	440-43-9	ND		mg/L	0.0060	0.0005	1				
Chromium	7	440-47-3	ND		mg/L	0.010	0.0018	8				
Lead	7	439-92-1	ND		mg/L	0.050	0.011					
Selenium	7	784-49-2	ND		mg/L	0.10	0.026)				
Silver	7	440-22-4	ND		mg/L	0.015	0.0006	6				

Detailed Ana	lytical Report				An	nalytic	a Alaska Ii	nc.		
Workorder (SDG):	A0707191									
Project:	Colville Riv	er Study 20	07							
Client:	Michael Bal	ker Jr Inc								
Client Project Number	r: Colville Riv	er Study 20	07							
Report Section	: Clier	it Samp	le Re	port						
Client Sample Name:	Lake 93	323		L						
Matrix:	Aqueous					C	Collection D	ate:	7/16/2007	4:30:00PM
Lab Sample Number:	A0707191-01D						Analysis D	ate:	7/27/20	07 8:06:14PM
Prep Date:	7/27/2007						Instrument	:	CVAA_	_1
Analytical Method ID:	SW7470A - Mercury in	n Liquid Was	e by CV	'AA - 1	Fotal Hg		File Name:		B07072	7W.W
Prep Method ID:	7470A						Dilution Fa	actor:	1	
Prep Batch Number:	T070727004									
Report Basis:	As Received						Analyst Ini	tials:	CC	
Sample prep wt./vol:	30.00 ml						Prep Extra	act Vol:	30.00	ml
Analyte Mercury	<u>CASNo</u> 7439-97-6	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00020	<u>MDL</u> 0.0000:	50			<u>run #:</u> 1
The following test was	conducted by: Analytica	- Thornton								
Lab Sample Number:	A0707191-01B						Analysis D	ate:	7/24/20	07 11:00:00AM
Prep Date:	7/24/2007						Instrument	:	SCALE	
Analytical Method ID:	1664 Hexane Extractal	ble Material -	TPH w/	SGT			File Name:			
Prep Method ID:	1664_WG						Dilution Fa	actor:	1	
Prep Batch Number:	T070726007									
Report Basis:	As Received						Analyst Ini	tials:	L. Friedr	nan/G. Yates
Sample prep wt./vol:	980.00 ml						Prep Extra	act Vol:	1.00	ml
<u>Analyte</u> Hexane-Extractable Materi	<u>CASNo</u> al na	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 5.1	<u>MDL</u> 1.5				<u>run #:</u> 1
The following test was	conducted by: Analytica	- Thornton								
Lab Sample Number:	A0707191-01C						Analysis D	ate:	7/27/20	07 3:20:00AM
Prep Date:	7/26/2007						Instrument	:	GC_B	
Analytical Method ID:	602 - Purgeable Aroma	tics by GC/P	ID - BTI	EX & C	hlorobenzo	enes	File Name:		0707262	23.D
Prep Method ID:	P&TWater						Dilution Fa	actor:	1	
Prep Batch Number:	T070731003									
Report Basis:	As Received						Analyst Ini	tials:	RA	
Sample prep wt./vol:	5.00 ml						Prep Extra	act Vol:	5.00	ml
Analyte	CASNo	Result	Flags	<u>Units</u>	<u>PQL</u>	<u>MDL</u>				<u>run #:</u>
1,2-Dichlorobenzene	95-50-1	ND		ug/L	1.0	0.22				1
1,3-Dichlorobenzene	541-73-1	ND		ug/L	1.0	0.17				
1,4-Dichlorobenzene	106-46-7	ND		ug/L	1.0	0.21				
Benzene	71-43-2	ND		ug/L	1.0	0.074				
Chlorobenzene	108-90-7	ND		ug/L	1.0	0.19				
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088				
Toluene	108-88-3	ND		ug/L	1.0	0.078				
Xylenes, Total	1330-20-7	ND		ug/L	2.0	0.20				
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 26	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 0.50	<u>M</u> 0.12	DL <u>Spike</u> 27	<u>% Recov</u> 97.4	<u>v LCL</u> 80	<u>UCL</u> <u>run #:</u> 120 1

Detailed Ana	lytical Report			Anal	ytica Alaska Inc.				
Workorder (SDG):	A0707191								
Project:	Colville R	iver Study 20	007						
Client:	Michael E	Baker Jr Inc							
Client Project Number	r: Colville R	iver Study 20	007						
Report Section	: Cli	ent Samp	le Report						
Client Sample Name:	Lake	9323			7				
Matrix:	Aqueous				Collection Date:	7	/16/2007	4:30:00PM	Λ
Lab Sample Number:	A0707191-01C				Analysis Date:		7/27/20	07 3:20:00)AM
Prep Date:	7/26/2007				Instrument:		GC_B		
Analytical Method ID:	ADEC AK101 - GR	0			File Name:		070726	23.D	
Prep Method ID:	P&TWater				Dilution Factor	:	1		
Prep Batch Number:	T070731004								
Report Basis:	As Received				Analyst Initials	:	RA		
Sample prep wt./vol:	5.00 ml				Prep Extract V	Vol:	5.00	ml	
<u>Analyte</u> Gasoline Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u> <u>Units</u> ug/L	<u>PQL</u> <u>M</u> 100	<u>DL</u> 21			<u>run #</u> 1	<u>:</u>
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 26	<u>Flags</u> <u>Units</u> ug/L	<u>PQL</u> 1.5	<u>MDL</u> <u>Spike</u> <u>%</u> 0.50 27	<u>Recov</u> 94.7	<u>LCL</u> 50	<u>UCL</u> <u>run</u> 150 1	<u>n #:</u>

Detailed Ana	lytical Report				Ar	nalytic	a Alaska Ir	nc.			
Workorder (SDG):	A0707191										
Project:	Colville Rive	r Study 20	07								
Client:	Michael Bak	er Jr Inc									
Client Project Number	r: Colville Rive	er Study 20	07								
Report Section	: Clien	t Samp	le Rej	port							
Client Sample Name:	Lake 93	24									
Matrix:	Aqueous					C	Collection Da	ate:	7/16/2007	6:00:0	D0PM
The following test was	conducted by: Analytica	- Thornton									
Lab Sample Number:	A0707191-02A						Analysis D	ate:	8/2/2007	7 3:13	3:50PM
Prep Date:	7/23/2007						Instrument:		GC E		
Analytical Method ID:	ADEC AK103 - RRO						File Name:		0707316	65.D	
Prep Method ID:	3510						Dilution Fa	ctor:	1		
Prep Batch Number:	T070724011										
Report Basis	As Received						Analyst Ini	tials [.]	MA		
Sample prep wt./vol:	970.00 ml						Prep Extra	act Vol:	1.00	ml	
Analyte	CASNo	Result	Flags	Units	POL	MDL.				,	•un #•
Residual Range Organics	n/a	ND	<u>r ngo</u>	mg/L	0.52	0.21				-	4
<u>Surrogate</u>	CASNo	<u>Result</u>	Flags	Units	<u>POL</u>	M	DL Spike	% Recov	LCL	UCL	<u>run #:</u>
Squalane	111-01-3	0.023		mg/L	0.0052	0.002	1 0.052	44.9	50	150	4 LOW
The following test was	conducted by: Analytica	- Thornton									
Lab Sample Number:	A0707191-02A						Analysis D	ate:	7/25/200	07 12:	17:57AM
Prep Date:	7/23/2007						Instrument:		GC_E		
Analytical Method ID:	ADEC AK102 - DRO						File Name:		0707234	49.D	
Prep Method ID:	3510						Dilution Fa	ctor:	1		
Prep Batch Number:	T070724001										
Report Basis:	As Received						Analyst Ini	tials:	MAG		
Sample prep wt./vol:	970.00 ml						Prep Extra	act Vol:	1.00	ml	
<u>Analyte</u> Diesel Range Organics	<u>CASNo</u> n/a	<u>Result</u> 1.2	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.10	<u>MDL</u> 0.0062	2			1	• un #: 1
<u>Surrogate</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u> 0.00069	<u>M</u>	DL Spike	<u>% Recov</u>	LCL	<u>UCL</u>	<u>run #:</u>
	84-13-1	0.033		mg/L	0.00009	0.0050	0 0.052	03.0	50	120	1
The following test was	conducted by: Analytica	- Thornton							= 100 100		
Lab Sample Number:	A0/07191-02E						Analysis D	ate:	7/28/200 MG1DN	07 3:5	5:00AM
Prep Date:	//23/200/	A side has C					Instrument:		M51BN	A 17 D	
Analytical Method ID:	025 - Base-Neutrais and	Acids by G	C/MS - I	AH			File Name:	ator	1	I / .D	
Prep Method ID.	LLE T070725011						Dilution Fa		1		
Report Basis	As Received						Analyst Ini	tiale	SM		
Sample prep wt /vol	940.00 ml						Pren Extra	nct Vol [.]	2.00	ml	
		D L	E1	T T •/	DOI	MDI	riep Entit		2.00		
Acenaphthene	<u>CASNo</u> 83-32-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.3	<u>MDL</u> 0.48				<u>1</u>	1 1
Acenaphthylene	208-96-8	ND		ug/L	5.3	0.54					
Anthracene	120-12-7	ND		ug/L	5.3	0.46					
Benzo(a)anthracene	56-55-3	ND		ug/L	5.3	0.36					
Benzo(a)pyrene	50-32-8	ND		ug/L	5.3	0.28					
Benzo(b)fluoranthene	205-99-2	ND		ug/L	5.3	0.31					
Benzo(g,h,i)perylene	191-24-2	ND		ug/L	5.3	0.41					

Detailed Ana	lytical l	Report				Aı	nalytic	a Alaska I	nc.			
Workorder (SDG):	A0707	191										
Project:	(Colville Ri	iver Study 20	07								
Client:	Ι	Michael B	aker Jr Inc									
Client Project Numbe	r: (Colville Ri	iver Study 20	07								
Report Section	•	Clie	ent Sampl	e Re	port							
Client Sample Name:		Lake 9	0324		L							
Matrix:	Aque	eous					C	Collection D	ate:	7/16/2007	6:00:0	0PM
Lab Sample Number: Prep Date: Analytical Method ID:	A070719 7/23/200 625 - Base	91-02E 7 e-Neutrals a	and Acids by G	C/MS - 1	PAH			Analysis I Instrument File Name	Date: t: :	7/28/200 MS1BN 0707271)7 3:5 A 17.D	5:00AM
Prep Method ID:	LLE							Dilution F	actor:	1		
Prep Batch Number: Report Basis: Sample prep wt./vol:	T070725 As Receiv 940.00	011 ved ml						Analyst In Prep Extr	itials: act Vol:	SM 2.00	ml	
<u>Analyte</u>		CASNo	Result	Flags	<u>Units</u>	<u>PQL</u>	MDL	I			r	<u>un #:</u>
Benzo(k)fluoranthene	2	07-08-9	ND		ug/L	5.3	0.40					1
Chrysene	2	18-01-9	ND		ug/L	5.3	0.21					
Dibenzo(a,h)anthracene	5	3-70-3	ND		ug/L	5.3	0.36					
Fluoranthene	2	06-44-0	ND		ug/L	5.3	0.54					
Fluorene	8	6-73-7	ND		ug/L	5.3	0.51					
Indeno(1,2,3-cd)pyrene	1	93-39-5	ND		ug/L	5.3	0.24					
Naphthalene	9	1-20-3	ND		ug/L	11	0.66					
Phenanthrene	8	5-01-8	ND		ug/L	5.3	0.46					
Pyrene	1	29-00-0	ND		ug/L	5.3	0.42					
<u>Surrogate</u> 2-Fluorobiphenyl	3	<u>CASNo</u> 21-60-8	<u>Result</u> 95	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.3	<u>M</u> 0.30	DL <u>Spike</u> 110	<u>% Recov</u> 89.3	<u>v</u> <u>LCL</u> 43	<u>UCL</u> 116	<u>run #:</u> 1
D14-Terphenyl	9	2-94-4D	63		ug/L	5.3	0.13	110	58.8	33	141	
D5-Nitrobenzene	9	8-95-3D	92		ug/L	5.3	0.22	110	86.3	35	114	
The following test was Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID: Prep Batch Number:	conducted A070719 7/25/200 SW6010E 3010_IC T070724	by: Analyti 91-02D 7 8 - ICP - RO P 028	ca - Thornton CRA					Analysis I Instrument File Name Dilution F	Date: t: : actor:	7/26/200 ICP_2 E07267. 1)7 5:4 A	7:00PM
Report Basis:	As Receiv	ved						Analyst In	itials:	rm		
Sample prep wt./vol:	50.00	ml						Prep Extr	act Vol:	50.00	ml	
<u>Analyte</u> Arsenic	7	<u>CASNo</u> 440-38-2	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.10	<u>MDL</u> 0.015	;			<u>r</u> ı	un #: 1
Barium	7	440-39-3	0.054		mg/L	0.010	0.0001	6				
Cadmium	7	440-43-9	ND		mg/L	0.0060	0.0005	51				
Chromium	7	440-47-3	ND		mg/L	0.010	0.0018	8				
Lead	7	439-92-1	ND		mg/L	0.050	0.011					
Selenium	7	784-49-2	ND		mg/L	0.10	0.026	5				
Silver	7	440-22-4	ND		mg/L	0.015	0.0006	66				

Detailed Ana	lytical Report				An	alytic	a Alaska I	nc.			
Workorder (SDG):	A0707191										
Project:	Colville R	iver Study 20	07								
Client:	Michael B	aker Jr Inc									
Client Project Number	r: Colville R	iver Study 20	07								
Report Section:	: Clie	ent Sampl	e Re	port							
Client Sample Name:	Lake)324]								
Matrix:	Aqueous					C	collection D	ate:	7/16/2007	6:00:00	PM
Lab Sample Number: Prep Date: Analytical Method ID:	A0707191-02D 7/27/2007 SW7470A - Mercury	in Liquid Wast	e by CV	'AA - 1	Total Hg		Analysis D Instrument File Name:	ate:	7/27/20 CVAA_ B07072	07 8:09 _1 7W.W	:01PM
Prep Method ID:	/4/0A						Dilution Fa	actor:	I		
Prep Batch Number: Report Basis: Sample prep wt./vol:	10/0/2/004 As Received 30.00 ml						Analyst Ini Prep Extra	itials: act Vol:	CC 30.00	ml	
Analyte Mercury	<u>CASNo</u> 7439-97-6	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00020	<u>MDL</u> 0.0000:	50			<u>ru</u>	<u>n #:</u> 1
The following test was	conducted by: Analyti	ca - Thornton									
Lab Sample Number: Prep Date:	A0707191-02B 7/24/2007	. 11 1	TDU	O.C.T.			Analysis D Instrument	ate:	7/24/20 SCALE	07 11:00):00AM
Analytical Method ID:	1664 Hexane Extrac	table Material -	TPH w/	SGI			File Name:				
Prep Method ID:	1664_WG						Dilution Fa	actor:	1		
Prep Batch Number:	1070726007								T T · 1		
Report Basis:	As Received						Analyst Ini	itials:	L. Friedr	nan/G. Ya	ates
Sample prep wt./vol:	9/5.00 ml						Prep Extra	act Vol:	1.00	ml	
<u>Analyte</u> Hexane-Extractable Materi	<u>CASNo</u> ial na	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 5.1	<u>MDL</u> 1.5				<u>ru</u>	<u>n #:</u> 1
The following test was Lab Sample Number	conducted by: Analyti A0707191-02C	ca - Thornton					Analysis D	ate.	7/27/20)7 8.13	·00AM
Prep Date:	7/26/2007						Instrument	:	GC B		
Analytical Method ID:	602 - Purgeable Aron	natics by GC/PI	D - BTH	EX & C	hlorobenzo	enes	File Name:		0707263	31.D	
Prep Method ID:	P&TWater						Dilution Fa	actor:	1		
Prep Batch Number:	T070731003										
Report Basis:	As Received						Analyst Ini	itials:	RA		
Sample prep wt./vol:	5.00 ml						Prep Extra	act Vol:	5.00	ml	
<u>Analyte</u> 1,2-Dichlorobenzene	<u>CASNo</u> 95-50-1	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 1.0	<u>MDL</u> 0.22				<u>ru</u>	<u>n #:</u> 1
1,3-Dichlorobenzene	541-73-1	ND		ug/L	1.0	0.17					
1,4-Dichlorobenzene	106-46-7	ND		ug/L	1.0	0.21					
Benzene	71-43-2	ND		ug/L	1.0	0.074					
Chlorobenzene	108-90-7	ND		ug/L	1.0	0.19					
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088					
Toluene	108-88-3	ND		ug/L	1.0	0.078					
Xylenes, Total	1330-20-7	ND		ug/L	2.0	0.20					
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 26	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 0.50	<u>M</u> 0.12	DL <u>Spike</u> 27	<u>% Recov</u> 97.9	<u>LCL</u> 80	<u>UCL</u> 120	run #: 1

Detailed Ana	lytical Report			Anal	lytica Alaska Ind	.		
Workorder (SDG):	A0707191							
Project:	Colville Riv	ver Study 20	007					
Client:	Michael Ba	ker Jr Inc						
Client Project Number	r: Colville Riv	ver Study 20	007					
Report Section	: Clie	nt Samp	le Report					
Client Sample Name:	Lake 9	324						
Matrix:	Aqueous				Collection Dat	e:	7/16/2007	6:00:00PM
Lab Sample Number:	A0707191-02C				Analysis Dat	te:	7/27/20	007 8:13:00AM
Prep Date:	7/26/2007				Instrument:		GC_B	
Analytical Method ID:	ADEC AK101 - GRO				File Name:		070726	31.D
Prep Method ID:	P&TWater				Dilution Fac	tor:	1	
Prep Batch Number:	T070731004							
Report Basis:	As Received				Analyst Initi	als:	RA	
Sample prep wt./vol:	5.00 ml				Prep Extrac	t Vol:	5.00	ml
<u>Analyte</u> Gasoline Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u> <u>Units</u> ug/L	<u>PQL</u> <u>M</u> 100	<u>IDL</u> 21			<u>run #:</u> 1
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 26	<u>Flags</u> <u>Units</u> ug/L	<u>PQL</u> 1.5	<u>MDL</u> <u>Spike</u> 0.50 27	<u>% Recov</u> 95.2	<u>LCL</u> 50	<u>UCL</u> <u>run #:</u> 150 1

Detailed Ana	lytical Report				Ar	nalytic	a Alaska Iı	nc.			
Workorder (SDG):	A0707191										
Project:	Colville Rive	r Study 20	07								
Client:	Michael Bak	er Jr Inc									
Client Project Number	r: Colville Rive	r Study 20	07								
Report Section	: Clien	t Samp	le Rej	port							
Client Sample Name:	Lake 93	13									
Matrix:	Aqueous					C	Collection Da	ate:	7/16/2007	11:00:	00AM
The following test was	conducted by: Analytica	- Thornton									
Lab Sample Number:	A0707191-03A						Analysis D	ate:	7/31/20	07 6:0)2:37PM
Prep Date:	7/23/2007						Instrument	:	GC_E		
Analytical Method ID:	ADEC AK103 - RRO						File Name:		070731	11.D	
Prep Method ID:	3510						Dilution Fa	ictor:	1		
Prep Batch Number:	T070724011										
Report Basis:	As Received						Analyst Ini	tials:	MA		
Sample prep wt./vol:	975.00 ml						Prep Extra	act Vol:	1.00	ml	
<u>Analyte</u> Residual Range Organics	CASNo n/a	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.51	<u>MDL</u> 0.21				<u>r</u>	r <u>un #:</u> 3
Surrogate	CASNo	Result	Flags	Units	POL	м	DL Snike	% Recov	LCL	UCL	run #•
Squalane	111-01-3	0.023	<u>11225</u>	mg/L	0.0051	0.002	1 0.051	45.0	<u>50</u>	150	3 LOW
The following test was	conducted by: Analytica	- Thornton									
Lab Sample Number:	A0707191-03A						Analysis D	ate:	7/27/20	07 4:1	9:36AM
Prep Date:	7/23/2007						Instrument	:	GC_E		
Analytical Method ID:	ADEC AK102 - DRO						File Name:		070726	23.D	
Prep Method ID:	3510						Dilution Fa	ictor:	1		
Prep Batch Number:	T070724001										
Report Basis:	As Received						Analyst Ini	tials:	MA		
Sample prep wt./vol:	975.00 ml						Prep Extra	act Vol:	1.00	ml	
<u>Analyte</u> Diesel Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.10	<u>MDL</u> 0.006	1			<u>r</u>	r <u>un #:</u> 2
<u>Surrogate</u> o-Terphenyl	<u>CASNo</u> 84-15-1	<u>Result</u> 0.026	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00068	<u>M</u> 0.0038	DL <u>Spike</u> 8 0.051	<u>% Recov</u> 50.2	<u>LCL</u> 50	<u>UCL</u> 120	<u>run #:</u> 2
The following test was	conducted by: Analytica	- Thornton									
Lab Sample Number:	A0707191-03E						Analysis D	ate:	7/28/20	07 4:3	30:00AM
Prep Date:	7/23/2007						Instrument	:	MS1BN	IA	
Analytical Method ID:	625 - Base-Neutrals and	Acids by G	C/MS - I	PAH			File Name:		070727	18.D	
Prep Method ID:	LLE						Dilution Fa	ictor:	1		
Prep Batch Number:	T070725011										
Report Basis:	As Received						Analyst Ini	tials:	SM		
Sample prep wt./vol:	960.00 ml						Prep Extra	act Vol:	2.00	ml	
<u>Analyte</u> Acenaphthene	<u>CASNo</u> 83-32-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.2	<u>MDL</u> 0.47				<u>r</u>	r un #: 1
Acenaphthylene	208-96-8	ND		ug/L	5.2	0.53					
Anthracene	120-12-7	ND		ug/L	5.2	0.45					
Benzo(a)anthracene	56-55-3	ND		ug/L	5.2	0.35					
Benzo(a)pyrene	50-32-8	ND		ug/L	5.2	0.27					
Benzo(b)fluoranthene	205-99-2	ND		ug/L	5.2	0.30					
Benzo(g,h,i)perylene	191-24-2	ND		ug/L	5.2	0.40					

Detailed Ana	Detailed Analytical Report Worder (SDG): A0707191						nalytic	a Alaska I	nc.			
Workorder (SDG):	A0707	191										
Project:	(Colville Ri	iver Study 20	07								
Client:	1	Michael B	aker Jr Inc									
Client Project Numbe	r: (Colville Ri	iver Study 20	07								
Report Section	•	Clie	ent Sampl	e Re	nort							
Client Sample Name:		Lake)) 313		port							
Matrix:	Aque	eous					C	Collection D	Date:	7/16/2007	11:00	:00AM
Lab Sample Number: Pren Date:	A070719	91-03E						Analysis D	Date:	7/28/20 MS1BN	07 4:	30:00AM
Analytical Method ID:	625 - Bas	e-Neutrals a	and Acids by G	C/MS -	РАН			File Name	•	070727	18 D	
Pren Method ID [.]	LLE							Dilution E	actor:	1	10.D	
Pren Batch Number	T070725	011						Dilution	uetor.	1		
Report Basis	As Receiv	ved						Analyst In	itials [.]	SM		
Sample prep wt./vol:	960.00	ml						Prep Extr	act Vol:	2.00	ml	
<u>Analyte</u> Benzo(k)fluoranthene	2	<u>CASNo</u> 07-08-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.2	<u>MDL</u> 0.39				<u> </u>	<u>run #:</u> 1
Chrysene	2	18-01-9	ND		ug/L	5.2	0.21					
Dibenzo(a,h)anthracene	5	3-70-3	ND		ug/L	5.2	0.35					
Fluoranthene	2	06-44-0	ND		ug/L	5.2	0.53					
Fluorene	8	6-73-7	ND		ug/L	5.2	0.49					
Indeno(1,2,3-cd)pyrene	1	93-39-5	ND		ug/L	5.2	0.23					
Naphthalene	9	1-20-3	ND		ug/L	10	0.64					
Phenanthrene	8	5-01-8	ND		ug/L	5.2	0.45					
Pyrene	1	29-00-0	ND		ug/L	5.2	0.41					
Surrogate		CASNo	<u>Result</u>	Flags	<u>Units</u>	<u>PQL</u>	M	DL Spike	<u>% Reco</u>	<u>v LCL</u>	<u>UCL</u>	<u>run #:</u>
2-Fluorobiphenyl	3	21-60-8	84		ug/L	5.2	0.29	100	80.7	43	116	1
D14-Terphenyl	9	2-94-4D	99		ug/L	5.2	0.12	100	94.8	33	141	
D5-Nitrobenzene	9	8-95-3D	83		ug/L	5.2	0.21	100	79.3	35	114	
The following test was	conducted	by: Analyti	ca - Thornton								~	50 0000 6
Lab Sample Number: Prep Date:	A070719 7/25/200	91-03D 17						Analysis L Instrument	Date: t:	ICP_2	07 5:	52:00PM
Analytical Method ID:	SW6010E	B - ICP - RO	CRA					File Name	:	E07267	A	
Prep Method ID:	3010_IC	Р						Dilution Fa	actor:	1		
Prep Batch Number:	T070724	028										
Report Basis:	As Receiv	ved						Analyst In	itials:	rm		
Sample prep wt./vol:	50.00	ml						Prep Extr	act Vol:	50.00	ml	
Analyte Arsenic	7	<u>CASNo</u>	<u>Result</u> ND	<u>Flags</u>	Units	<u>POL</u> 0.10	<u>MDL</u>]	<u>run #:</u>
Barium	י ר	440-30-2	0 10		mg/L	0.010	0.0001	6				1
Cadmium	י ר	440-43-9	0.19 ND		mg/L	0.0060	0.0005	51				
Chromium	י ר	440-47-3	ND		mg/L	0.010	0.001	8				
Lead	י ד	439_92_1	ND		mø/L	0.050	0.011	-				
Selenium	י ד	784-49-2	ND		mg/L	0.10	0.026)				
Silver	י ד	440-22-4	ND		mg/L	0.015	0.0006	6				
	/	10 22-7				0.010	0.0000	-				

Detailed Ana	lytical Report				An	alytic	a Alaska Iı	nc.		
Workorder (SDG):	A0707191									
Project:	Colville Rive	er Study 20	07							
Client:	Michael Bal	ker Jr Inc								
Client Project Number	r: Colville Riv	er Studv 20	07							
Report Section	: Clier	t Samp	le Re	port						
Client Sample Name:	Lake 93									
Matrix:	Aqueous	-				C	collection Da	ate:	7/16/2007	11:00:00AM
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID:	A0707191-03D 7/27/2007 SW7470A - Mercury in 7470A	Liquid Wast	te by CV	'AA - T	°otal Hg		Analysis D Instrument: File Name: Dilution Fa	ate: : : uctor:	7/27/200 CVAA_ B07072 1	07 8:11:30PM 1 7W.W
Prep Batch Number: Report Basis: Sample prep wt./vol:	T070727004 As Received 30.00 ml						Analyst Ini Prep Extra	tials: act Vol:	CC 30.00	ml
Analyte Mercury	<u>CASNo</u> 7439-97-6	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00020	<u>MDL</u> 0.00003	50			<u>run #:</u> 1
The following test was	conducted by: Analytica	- Thornton								
Lab Sample Number: Prep Date: Analytical Method ID:	A0707191-03B 7/24/2007 1664 Hexane Extractab	ble Material -	TPH w/	SGT			Analysis D Instrument: File Name:	ate:	7/24/200 SCALE	07 11:00:00AM
Prep Method ID:	1664_WG						Dilution Fa	ictor:	1	
Prep Batch Number:	T070726007									
Report Basis:	As Received						Analyst Ini	tials:	L. Friedn	nan/G. Yates
Sample prep wt./vol:	970.00 ml						Prep Extra	act Vol:	1.00	ml
<u>Analyte</u> Hexane-Extractable Materi	<u>CASNo</u> ial na	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 5.2	<u>MDL</u> 1.5				<u>run #:</u> 1
The following test was Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID: Prep Batch Number: Report Basis: Sample prep wt./vol:	conducted by: Analytica A0707191-03C 7/26/2007 602 - Purgeable Aroma P&TWater T070731003 As Received 5.00 ml	- Thornton tics by GC/P	ID - BTI	EX & CI	hlorobenzo	enes	Analysis D Instrument: File Name: Dilution Fa Analyst Ini Prep Extra	ate: : actor: tials: act Vol:	7/27/200 GC_B 0707263 1 RA 5.00	07 8:50:00AM 32.D ml
Analyte	CASNo	<u>Result</u>	Flags	<u>Units</u>	<u>PQL</u>	MDL				<u>run #:</u>
1,2-Dichlorobenzene	95-50-1	ND ND		ug/L	1.0	0.22				1
1,3-Dichlorobenzene	541-75-1	ND		ug/L	1.0	0.17				
Benzene	71 43 2	ND		ug/L	1.0	0.21				
Chlorobenzene	108-90-7	ND		ug/L	1.0	0.19				
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088				
Toluene	108-88-3	ND		ug/L	1.0	0.078				
Xylenes, Total	1330-20-7	ND		ug/L	2.0	0.20				
Surrogate p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 26	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 0.50	<u>M</u> 0.12	DL <u>Spike</u> 27	<u>% Recov</u> 97.6	<u>LCL</u> 80	<u>UCL</u> <u>run #:</u> 120 1

Detailed Ana	lytical Report			Analy	rtica Alaska Inc.		
Workorder (SDG):	A0707191						
Project:	Colville Ri	ver Study 20	007				
Client:	Michael Ba	aker Jr Inc					
Client Project Number	r: Colville Ri	ver Study 2	007				
Report Section	: Clie	nt Samp	le Report				
Client Sample Name:	Lake 9	313			1		
Matrix:	Aqueous				Collection Date:	7/16/200	7 11:00:00AM
Lab Sample Number:	A0707191-03C				Analysis Date:	7/27/2	007 8:50:00AM
Prep Date:	7/26/2007				Instrument:	GC_B	
Analytical Method ID:	ADEC AK101 - GRO				File Name:	07072	632.D
Prep Method ID:	P&TWater				Dilution Factor:	1	
Prep Batch Number:	T070731004						
Report Basis:	As Received				Analyst Initials:	RA	
Sample prep wt./vol:	5.00 ml				Prep Extract Vo	1: 5.00	ml
Analyte Gasoline Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u> <u>Units</u> ug/L	<u>PQL</u> <u>MI</u> 100 2	<u>DL</u> 21		<u>run #:</u> 1
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 25	<u>Flags</u> <u>Units</u> ug/L	<u>POL</u> 1.5 0	MDL Spike % Ro .50 27 92	<u>ecov</u> <u>LCL</u> .8 50	<u>UCL</u> <u>run #:</u> 150 1

Detailed Ana	lytical]	Report				Ar	nalytica	a Alaska I	nc.			
Workorder (SDG):	A0707	191										
Project:	(Colville R	liver Study 20	07								
Client:]	Michael H	Baker Jr Inc									
Client Project Number	r: (Colville R	liver Study 20	07 o D oi	novt							
Keport Section	•		ent Sampi	le Ke	port							
Client Sample Name:		Trip l	Blank									
Matrix:	Aqu	eous					С	ollection D	ate:	7/18/2007	6:00:0	D0PM
The following test was	conducted	by: Analyt	ica - Thornton									
Lab Sample Number:	A070719	91-04A						Analysis D	ate:	7/26/20	07 9:0	07:00PM
Prep Date:	7/26/200)7						Instrument	:	GC_B		
Analytical Method ID:	Aromatic	VOCs by	GC/PID via meth	hod 802	1B - BTE	ΞX		File Name:		070726	13.D	
Prep Method ID:	P&TWa	ter						Dilution Fa	ictor:	1		
Prep Batch Number:	T070731	003										
Report Basis:	As Receiv	ved						Analyst Ini	tials:	RA		
Sample prep wt./vol:	5.00	ml						Prep Extra	act Vol:	5.00	ml	
Analyte		CASNo	Result	Flags	<u>Units</u>	<u>PQL</u>	MDL				<u>1</u>	<u>un #:</u>
Benzene	7	1-43-2	ND		ug/L	1.0	0.074					1
Ethylbenzene	1	00-41-4	ND		ug/L	1.0	0.088					
Toluene	1	08-88-3	ND		ug/L	1.0	0.078					
Xylenes, Total	1	330-20-7	ND		ug/L	2.0	0.20					
<u>Surrogate</u> p-Bromofluorobenzene	4	<u>CASNo</u> 60-00-4	<u>Result</u> 26	<u>Flags</u>	<u>Units</u> ug/L	<u>POL</u> 0.50	<u>M</u> 0.12	DL <u>Spike</u> 27	<u>% Recov</u> 94.9	<u>LCL</u> 80	<u>UCL</u> 120	<u>run #:</u> 1

Detailed Ana	lytical Report			Anal	ytica Env	vironn	nental Lab	oratories,	Inc.		
Workorder (SDG):	A0707191										
Project:	Colville Rive	r Study 20	07								
Client:	Michael Bak	er Jr Inc									
Client Project Number	r: Colville Rive	r Study 20	07								
Report Section	: Meth	od Blan	k Re	port							
Client Sample Name:	MB										
Matrix:	Aqueous					С	ollection D	ate:	7/23/2007	11:35:	:00AM
The following test was	conducted by: Analytica -	Thornton									
Lab Sample Number:	T070724011-MB						Analysis D	ate:	8/2/200	7 11:5	5:15AM
Prep Date:	7/23/2007						Instrument	:	GC E	,	
Analytical Method ID:	ADEC AK103 - RRO						File Name:		070731	61.D	
Prep Method ID:	3510						Dilution Fa	actor:	1		
Prep Batch Number:	T070724011										
Report Basis:	As Received						Analyst Ini	tials:	MA		
Sample prep wt./vol:	1,000.00 ml						Prep Extra	act Vol:	1.00	ml	
Analyte Residual Range Organics	<u>CASNo</u>	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/I	<u>PQL</u> 0.50	<u>MDL</u> 0.20				<u>r</u>	<u>run #:</u>
Summe and a		Decelt	Fla an	II:	BOI	0.20 M	DI 6-9-	0/ D		UCI	
Squalane	<u>CASNo</u> 111-01-3	<u>Result</u> 0.035	<u>Flags</u>	mg/L	0.0050	0.0020	<u>DL Spike</u>) 0.050	<u>% Recov</u> 69.1	<u>101</u> 50	<u>UCL</u> 150	<u>run #:</u> 4
The following test was	conducted by: Analytica -	Thornton									
Lab Sample Number:	T070724001-MB						Analysis D	ate:	7/27/20	07 2:4	40:50AM
Prep Date:	7/23/2007						Instrument	:	GC_E		
Analytical Method ID:	ADEC AK102 - DRO						File Name:		070726	21.D	
Prep Method ID:	3510						Dilution Fa	actor:	1		
Prep Batch Number:	T070724001										
Report Basis:	As Received						Analyst Ini	tials:	MA		
Sample prep wt./vol:	1,000.00 ml						Prep Extra	act Vol:	1.00	ml	
<u>Analyte</u> Diesel Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.10	<u>MDL</u> 0.0060)			<u>r</u>	r un #: 2
<u>Surrogate</u> o-Terphenyl	<u>CASNo</u> 84-15-1	<u>Result</u> 0.021	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00067	<u>M</u> 0.0037	DL <u>Spike</u> 7 0.050	<u>% Recov</u> 42.7	<u>LCL</u> 50	<u>UCL</u> 120	<u>run #:</u> 2 LOW
The following test was	conducted by: Analytica.	Thornton									
Lab Sample Number	T070725011-MB						Analysis D	ate.	7/27/20	07 9.2	28·00PM
Prep Date:	7/23/2007						Instrument	:	MS1BN	JA	0.001111
Analytical Method ID:	625 - Base-Neutrals and	Acids by G	C/MS - I	PAH			File Name:		070727	06.D	
Prep Method ID:	LLE						Dilution Fa	actor:	1		
Prep Batch Number:	T070725011										
Report Basis:	As Received						Analyst Ini	tials:	SM		
Sample prep wt./vol:	1,000.00 ml						Prep Extra	act Vol:	2.00	ml	
<u>Analyte</u> Acenaphthene	<u>CASNo</u> 83-32-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.0	<u>MDL</u> 0.45				<u>r</u>	r un #: 1
Acenaphthylene	208-96-8	ND		ug/L	5.0	0.51					
Anthracene	120-12-7	ND		ug/L	5.0	0.44					
Benzo(a)anthracene	56-55-3	ND		ug/L	5.0	0.33					
Benzo(a)pyrene	50-32-8	ND		ug/L	5.0	0.26					
Benzo(b)fluoranthene	205-99-2	ND		ug/L	5.0	0.29					
Benzo(g,h,i)perylene	191-24-2	ND		ug/L	5.0	0.39					

Detailed Ana		Analytica Environmental Laboratories, Inc.									
Workorder (SDG):	A0707191										
Project:	Colville Rive	er Study 20	07								
Client:	Michael Bak	er Jr Inc									
Client Project Number	r: Colville Rive	er Study 20	07								
Report Section	: Meth	od Blan	k Re	nort							
Client Sample Name:	MR			port							
Matrix:	Aqueous					C	Collection D	ate:	7/23/2007	5:35:00	0PM
Lab Sample Number: Prep Date: Analytical Method ID:	T070725011-MB 7/23/2007 625 - Base-Neutrals and	Acids by G	C/MS -]	PAH			Analysis E Instrument File Name	Date: :: :	7/27/20 MS1BN 070727	07 9:28 JA 06.D	3:00PM
Prep Method ID.	LLE T070725011						Dilution Fa	actor.	1		
Report Basis: Sample prep wt./vol:	As Received 1,000.00 ml						Analyst In Prep Extr	itials: act Vol:	SM 2.00	ml	
Analyte	CASNo	Result	Flags	<u>Units</u>	POL	<u>MDL</u>				<u>ru</u>	<u>ın #:</u>
Benzo(k)fluoranthene	207-08-9	ND		ug/L	5.0	0.38					1
Chrysene	218-01-9	ND		ug/L	5.0	0.20					
Dibenzo(a,h)anthracene	53-70-3	ND		ug/L	5.0	0.34					
Fluoranthene	206-44-0	ND		ug/L	5.0	0.51					
Fluorene	86-73-7	ND		ug/L	5.0	0.48					
Indeno(1,2,3-cd)pyrene	193-39-5	ND		ug/L	5.0	0.22					
Naphthalene	91-20-3	ND		ug/L	10	0.62					
Phenanthrene	85-01-8	ND		ug/L	5.0	0.43					
Pyrene	129-00-0	ND		ug/L	5.0	0.40					
<u>Surrogate</u> 2-Fluorobiphenyl	<u>CASNo</u> 321-60-8	<u>Result</u> 85	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.0	<u>M</u> 0.28	DL <u>Spike</u> 100	<u>% Recov</u> 84.7	$\frac{\mathbf{v}}{43}$	<u>UCL</u> 116	<u>run #:</u> 1
D14-Terphenyl	92-94-4D	130		ug/L	5.0	0.12	100	128	33	141	
D5-Nitrobenzene	98-95-3D	87		ug/L	5.0	0.21	100	87.0	35	114	
The following test was	conducted by: Analytica	- Thornton									
Lab Sample Number: Prep Date: Analytical Method ID:	T070724028-MB 7/25/2007 SW6010B - ICP - RCR	A					Analysis D Instrument File Name	Date: :: :	7/26/20 ICP_2 E07267	07 5:27 A	7:00PM
Prep Method ID:	3010_ICP						Dilution Fa	actor:	1		
Prep Batch Number:	T070724028										
Report Basis:	As Received						Analyst In	itials:	rm		
Sample prep wt./vol:	50.00 ml						Prep Extr	act Vol:	50.00	ml	
Analyte Arsenic	<u>CASNo</u> 7440-38-2	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.10	<u>MDL</u> 0.015				<u>ru</u>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Barium	7440-39-3	ND		mg/L	0.010	0.0001	6				
Cadmium	7440-43-9	ND		mg/L	0.0060	0.0005	1				
Chromium	7440-47-3	ND		mg/L	0.010	0.001	8				
Lead	7439-92-1	ND		mg/L	0.050	0.011					
Selenium	7784-49-2	ND		mg/L	0.10	0.026	,				
Silver	7440-22-4	ND		mg/L	0.015	0.0006	6				

Detailed Ana	lytical Report		Analytica Environmental Laboratories, Inc.									
Workorder (SDG):	A0707191											
Project:	Colville Riv	er Study 20	07									
Client:	Michael Bal	ker Jr Inc										
Client Project Number	r: Colville Riv	er Study 20	07									
Report Section	: Meth	nod Blan	k Re	port								
Client Sample Name:	MB			-								
Matrix:	Aqueous					C	Collection Da	te:	7/27/2007	12:00:00AM		
Lab Sample Number:	T070727004-MB						Analysis Da	ite:	7/27/20	07 7:40:35PM		
Prep Date:	7/27/2007						Instrument:		CVAA_	_1		
Analytical Method ID:	SW7470A - Mercury in	Liquid Wast	te by CV	AA -	Fotal Hg		File Name:		B07072	7W.W		
Prep Method ID:	7470A						Dilution Fac	ctor:	1			
Prep Batch Number:	T070727004											
Report Basis:	As Received						Analyst Init	ials:	CC			
Sample prep wt./vol:	30.00 ml						Prep Extra	ct Vol:	30.00	ml		
Analyte Mercury	<u>CASNo</u> 7439-97-6	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00020	<u>MDL</u> 0.0000	50			<u>run #:</u> 1		
The following test was	conducted by: Analytica	- Thornton										
Lab Sample Number:	T070726007-MB						Analysis Da	ite:	7/24/20	07 11:00:00AM		
Prep Date:	7/24/2007						Instrument:		SCALE			
Analytical Method ID:	1664 Hexane Extractal	ole Material -	TPH w/	SGT			File Name:					
Prep Method ID:	1664_WG						Dilution Fac	ctor:	1			
Prep Batch Number:	T070726007											
Report Basis:	As Received						Analyst Init	ials:	L. Friedr	nan/G. Yates		
Sample prep wt./vol:	1,000.00 ml						Prep Extra	ct Vol:	1.00	ml		
<u>Analyte</u> Hexane-Extractable Materi	al na	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 5.0	<u>MDL</u> 1.5				<u>run #:</u> 1		
The following test was	conducted by: Analytica	- Thornton										
Lab Sample Number:	T070731003-MB						Analysis Da	ite:	7/26/20	07 7:52:00PM		
Prep Date:	7/26/2007						Instrument:		GC_B			
Analytical Method ID:	602 - Purgeable Aroma	tics by GC/P	ID - BTH	EX & C	hlorobenz	enes	File Name:		070726	11.D		
Prep Method ID:	P&TWater						Dilution Fac	ctor:	1			
Prep Batch Number:	T070731003											
Report Basis:	As Received						Analyst Init	ials:	RA			
Sample prep wt./vol:	5.00 ml						Prep Extra	ct Vol:	5.00	ml		
<u>Analyte</u> 1.2-Dichlorobenzene	<u>CASNo</u> 95-50-1	<u>Result</u> ND	<u>Flags</u>	<u>Units</u>	<u>PQL</u> 1.0	<u>MDL</u> 0.22				<u>run #:</u>		
1.3-Dichlorobenzene	541-73-1	ND		ug/L	1.0	0.17				1		
1.4-Dichlorobenzene	106-46-7	ND		ug/L	1.0	0.21						
Benzene	71-43-2	ND		ug/L	1.0	0.074	1					
Chlorobenzene	108-90-7	ND		ug/L	1.0	0.19	1					
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088	3					
Toluene	108-88-3	ND		ug/L	1.0	0.078	3					
Xylenes, Total	1330-20-7	ND		ug/L	2.0	0.20						
Surrogate p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 26	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 0.50	<u>M</u> 0.12	1DL <u>Spike</u> 27	<u>% Reco</u> 96.1	<u>v <u>LCL</u> 80</u>	<u>UCL</u> <u>run #:</u> 120 1		

Detailed Ana	lytical Report			Anal	ytica Env	vironn	nental Labo	oratories,	Inc.	
Workorder (SDG):	A0707191									
Project:	Colville Rive	er Study 20	07							
Client:	Michael Bak	er Jr Inc								
Client Project Number Report Section	r: Colville Rive : Meth	er Study 20 od Blan	007 1k Re	port						
Client Sample Name:	MB									
Matrix:	Aqueous					C	Collection Da	ate:	7/26/2007	12:00:00AM
Lab Sample Number:	T070731004-MB						Analysis D	ate:	7/26/20	007 7:52:00PM
Prep Date:	7/26/2007						Instrument	:	GC_B	
Analytical Method ID:	ADEC AK101 - GRO						File Name:		070726	511.D
Prep Method ID:	P&TWater						Dilution Fa	ictor:	1	
Prep Batch Number:	T070731004									
Report Basis:	As Received						Analyst Ini	tials:	RA	
Sample prep wt./vol:	5.00 ml						Prep Extra	act Vol:	5.00	ml
<u>Analyte</u> Gasoline Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 100	<u>MDL</u> 21				<u>run #:</u> 1
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 25	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 1.5	<u>M</u> 0.50	DL <u>Spike</u> 27	<u>% Recov</u> 90.9	<u>LCL</u> 50	<u>UCL</u> <u>run #:</u> 150 1
The following test was	conducted by: Analytica	- Thornton								
Lab Sample Number:	T070731003-MB						Analysis D	ate:	7/26/20	007 7:52:00PM
Prep Date:	7/26/2007						Instrument	:	GC_B	
Analytical Method ID:	Aromatic VOCs by GC/	PID via met	hod 802	1B - BT	EX		File Name:		070726	511.D
Prep Method ID:	P&TWater						Dilution Fa	ictor:	1	
Prep Batch Number:	T070731003									
Report Basis:	As Received						Analyst Ini	tials:	RA	
Sample prep wt./vol:	5.00 ml						Prep Extra	act Vol:	5.00	ml
Analyte	CASNo	<u>Result</u>	<u>Flags</u>	<u>Units</u>	POL	MDL				<u>run #:</u>
Benzene	71-43-2	ND		ug/L	1.0	0.074	-			1
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088	i			
Totuene Vulenes Total	108-88-3	ND ND		ug/L	1.0	0.078	•			
Ayrenes, Total	1330-20-7			ug/L	2.0	0.20		0/ D	LOI	
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 26	<u>Flags</u>	<u>Units</u> ug/L	0.50	0.12	<u>DL</u> <u>Spike</u> 27	<u>% Recov</u> 96.1	<u>LCL</u> 80	<u>UCL</u> <u>run #:</u> 120 1

Detailed An	alytical Repo	Report Analytica Environmental Laboratories, Inc.								
Workorder (SDG):	A0707191									
Project:	Colvil	le River Stu	ıdy 2007							
Client:	Micha	el Baker Jr	Inc							
Client Project Numb	oer: Colvil	le River Stu	ıdy 2007							
Tests Run at: Workorder (SDG): Project: Project Number:	Analytica Enviro A0707191 Colville River St	onmental Lat	ooratories - Th QUALI	ornton, Cc ΓΥ CON	olorado NTROL	REPOR	Г			
Prep Batch:	T070724001									
Analysis:	ADEC AK102 -	DRO		LCS REI	PORT	MB:		T0707240	01-MB	
)						Prep 1	Date:	7/23/2007		
MB Anal. Date:	7/27/2007 2:40:	:50AM				Units	:	mg/L		
LCS Anal. Date:	7/24/2007 9:46:	:10PM				Matri	x:	Aqueous		
Analyte Name Diesel Range Organi	SampResult ics ND	<u>LCSRes.</u> 1.50	<u>SPLev</u> 2.00		<u>Recov.</u> 75.0			<u>Recov Lim</u> 75 - 125	<u>RPDLim</u>	<u>Flag</u>
Prep Batch:	T070724011									
			LC	S/LCSD]	REPORT	Г				
Analysis:	ADEC AK103 -	RRO				MB: Prep I	Date:	T0707240 7/23/2007	11-MB	
MB Anal. Date:	8/2/2007 11:55:	15AM				Units	:	mg/L		
LCS Anal. Date:	7/31/2007 2:41:	:32PM LCS	D Anal. Date:	7/31/200	7 3:31:4	4PM Matri	X:	Aqueous		
<u>Analyte Name</u> Residual Range Orga	<u>SampResult</u> anics ND	<u>LCSRes.</u> <u>S</u> 1 99 - 2	DRes. <u>SPLev</u>	<u>SPDLev</u> 2.00	<u>Recov.</u> 99.5	<u>SD Recov</u> 108 0	<u>RPD</u> 8 2	<u>Recov Lim</u> 60 - 120	<u>RPDLim</u> 20	<u>Flag</u>

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Detailed An	alytical Repo	rt			Analytica Environmental Laboratories, Inc.							
Workorder (SDG):	A0707191											
Project:	Colvill	e River	Study 20	07								
Client:	Micha	el Baker	Jr Inc									
Client Project Numb	oer: Colvill	e River	Study 20	07								
Tests Run at:	Analytica Enviro	nmental	Laborator	ries - Th	ornton, Co	lorado						
Workorder (SDG): Project: Project Number:	A0707191 Colville River St	udy 2007	7 QI	UALI	ГҮ CON	TROL	REPOR	Г				
Prep Batch:	T070725011											
				LC	S/LCSD F	REPORT						
Analysis:	625 - Base-Neutr	als and A	Acids by C	- C/MS-	PAH		MB:		T0707250	11-MB		
							Prep I	Jate:	7/23/2007			
MB Anal. Date:	7/27/2007 9:28:	00PM		1.5.		10.00	Units		ug/L			
LCS Anal. Date:	7/27/2007 10:03	:00PM L	CSD Ana	I. Date:	7/27/2007	10:38:0	00PM Matri	X:	Aqueous			
Analyte Name	SampResult	LCSRes	<u>SDRes.</u>	<u>SPLev</u>	SPDLev	Recov.	SD Recov	<u>RPD</u>	Recov Lim	<u>RPDLim</u>	<u>Flag</u>	
Naphthalene	ND	46.4	46.7	50.0	50.0	92.8	93.4	0.6	45 - 136	40	1.1	
Acenaphthylene	ND	106	107	50.0	50.0	212.0	214.0	0.9	48 - 133	40 high,hi	gndup	
Acenaphthene	ND	53.8	53.6	50.0	50.0	107.6	107.2	0.4	48 - 121	40		
Fluorene	ND	54.6	54.5	50.0	50.0	109.2	109.0	0.2	58 - 130	40		
Phenanthrene	ND	57.0	56.3	50.0	50.0	114.0	112.6	1.2	54 - 140	40		
Anthracene	ND	56.6	56.1	50.0	50.0	113.2	112.2	0.9	59 - 131	40		
Fluoranthene	ND	52.1	51.0	50.0	50.0	104.2	102.0	2.1	51 - 140	40		
Pyrene	ND	58.2	58.2	50.0	50.0	116.4	116.4	0.0	46 - 135	40		
Benzo(a)anthracene	ND	57.9	58.0	50.0	50.0	115.8	116.0	0.2	58 - 118	40		
Chrysene	ND	59.3	58.6	50.0	50.0	118.6	117.2	1.2	55 - 139	40		
Benzo(b)fluoranthen	e ND	46.4	43.9	50.0	50.0	92.8	87.8	5.5	41 - 133	40		
Benzo(k)fluoranthen	e ND	43.9	42.2	50.0	50.0	87.8	84.4	3.9	60 - 160	40		
Benzo(a)pyrene	ND	43.9	42.0	50.0	50.0	87.8	84.0	4.4	40 - 138	40		
Indeno(1,2,3-cd)pyre	ene ND	47.7	47.1	50.0	50.0	95.4	94.2	1.3	48 - 125	40		
Dibenzo(a,h)anthrac	ene ND	33.5	34.5	50.0	50.0	67.0	69.0	2.9	50 - 129	40		
Benzo(g,h,i)perylene	e ND	55.9	55.6	50.0	50.0	111.8	111.2	0.5	50 - 125	40		

FOOTNOTES TO QC REPORT

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Detailed Analytical Report Analytica Environmental Laboratories, Inc.										
Workorder (SDG):	A0707191									
Project:	Colvil	le River Stu	ıdy 2007							
Client:	Micha	el Baker Jı	·Inc							
Client Project Num	ber: Colvil	le River Stı	ıdy 2007							
Tests Run at:	Analytica Enviro	nmental La	boratories - Thornton,	Colorado						
Workorder (SDG):	A0707191	1 0005								
Project:	Colville River St	udy 2007	OUALITY CO	ONTROL	REPORT					
Project Number.	T070727004		Quinni	SIVINOL						
Prep Batch:	10/0/2/004									
			LCS/LCS	D REPORT						
Analysis:	SW7470A - Mer	cury in Liqu	id Waste by CVAA	- Total Hg	MB:	T07072700)4-MB			
					Prep Date:	7/27/2007				
MB Anal. Date:	7/27/2007 7:40:	35PM			Units:	mg/L				
LCS Anal. Date:	7/27/2007 7:42:	40PM LCS	D Anal. Date: 7/27/2	2007 7:50:24	APM Matrix:	Aqueous				
Analyte Name	SampResult	LCSRes. S	DRes. SPLev SPDL	ev <u>Recov.</u>	SD Recov RPD	Recov Lim	<u>RPDLim</u>	<u>Flag</u>		
Mercury	ND	0.00216 (0.00208 0.00200 0.0	020 108.0	104.0 3.8	80 - 120	20			
	T070724020									
Prep Batch:	10/0/24028									
			LCS I	REPORT						
Analysis:	SW6010B - ICP	- KCRA			MB:	10/0/2402	28-MB			
		00014			Prep Date:	//25/2007				
MB Anal. Date:	7/26/2007 5:27:	00PM			Units:	mg/L				
LCS Anal. Date:	//2//2007 2:57:	00PM			Matrix:	Aqueous				
Analyte Name	SampResult	LCSRes.	<u>SPLev</u>	Recov.		Recov Lim	<u>RPDL1m</u>	<u>Flag</u>		
Arsenic	ND	2.13	2.00	106.5		86 - 116				
Gadmium	ND	2.05	2.00	101.5		70 112				
Chromium	ND	0.0323	0.0300	104.0		79 - 113 86 117				
Lead	ND	0.207	0.200	105.5		83 - 121				
Selenium	ND	2.09	2.00	100.0		87 - 117				
Silver	ND	0.255	0.250	104.5		80 - 127				
		0.200	0.200	102.0		50 12/				

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): A0707191

Project:	Colville River Study 2007
Client:	Michael Baker Jr Inc
Client Project Number:	Colville River Study 2007

FOOTNOTES TO QC REPORT

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Detaneu Al	alytical Report	Analytica Enviro	Analytica Environmental Laboratories, Inc.						
Workorder (SDG):	A0707191								
Project:	Colville River Study 2	2007							
Client:	Michael Baker Jr Inc								
Client Project Num	ber: Colville River Study 2	2007							
Tests Run at:	Analytica Environmental Labora	tories - Thornton, Colorado							
Workorder (SDG)	A0707191								
Project:	Colville River Study 2007		DEDODT						
Project Number:	(QUALITY CONTROL	L REPORT						
Prep Batch:	T070726007								
		LCS/LCSD REPOR	Т						
Analysis:	1664 Hexane Extractable Materi	LCS/LCSD REPOR ial - TPH w/SGT	T MB:	T070726007-MB					
Analysis:	1664 Hexane Extractable Materi	LCS/LCSD REPOR ial - TPH w/SGT	T MB: Prep Date:	T070726007-MB 7/24/2007					
Analysis: MB Anal. Date:	1664 Hexane Extractable Materi 7/24/2007 11:00:00AM	LCS/LCSD REPOR ial - TPH w/SGT	T MB: Prep Date: Units:	T070726007-MB 7/24/2007 mg/L					
Analysis: MB Anal. Date: LCS Anal. Date:	1664 Hexane Extractable Materi 7/24/2007 11:00:00AM 7/24/2007 11:00:00AMLCSD A	LCS/LCSD REPOR ial - TPH w/SGT nal. Date: 7/24/2007 11:00	T MB: Prep Date: Units: :00AM Matrix:	T070726007-MB 7/24/2007 mg/L Aqueous					
Analysis: MB Anal. Date: LCS Anal. Date: <u>Analyte Name</u>	 1664 Hexane Extractable Materi 7/24/2007 11:00:00AM 7/24/2007 11:00:00AMLCSD A <u>SampResult LCSRes. SDRes</u> 	LCS/LCSD REPOR ial - TPH w/SGT nal. Date: 7/24/2007 11:00 es. SPLev SPDLev Recov.	T MB: Prep Date: Units: :00AM Matrix: <u>SD Recov</u> <u>RPD</u>	T070726007-MB 7/24/2007 mg/L Aqueous <u>Recov Lim</u> <u>RPDLim</u>	Flag				

FOOTNOTES TO QC REPORT

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Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Detailed An	Analytical Report Analytica Environmental Laboratories, Inc.										
Workorder (SDG):	A0707191										
Project:	Colvil	le River S	Study 20	07							
Client:	Micha	el Baker	Jr Inc								
Client Project Numb	oer: Colvil	le River S	Study 20	07							
Tests Run at:	Analytica Enviro	onmental	Laborator	ries - Th	ornton, Co	olorado					
Workorder (SDG): Project: Project Number:	A0707191 Colville River St	tudy 2007	, QI	UALI	TY CON	ITROL	REPOR	Т			
Prep Batch:	T070731003										
Analysis:	Aromatic VOCs	by GC/PI	D via me	LC ethod 802	S/LCSD 1 21b - Bte	REPORT EX	MB:		T07073100	03-MB	
							Prep	Date:	7/26/2007		
MB Anal. Date:	7/26/2007 7:52:	:00PM					Units	:	ug/L		
LCS Anal. Date:	7/26/2007 5:23:	:00PM L0	CSD Ana	l. Date:	7/26/200	7 6:00:0	0PM Matri	ix:	Aqueous		
Analyte Name	SampResult	LCSRes	. SDRes.	SPLev	<u>SPDLev</u>	Recov.	SD Recov	<u>RPD</u>	Recov Lim	<u>RPDLim</u>	Flag
Benzene	ND	9.85	9.81	10.0	10.0	98.5	98.1	0.4	80 - 120	20	
Toluene	ND	9.75	9.68	10.0	10.0	97.5	96.8	0.7	80 - 120	20	
Ethylbenzene	ND	9.83	9.79	10.0	10.0	98.3	97.9	0.4	80 - 120	20	
Xylenes, Total	ND	28.8	28.5	30.0	30.0	96.0	95.0	1.0	80 - 120	20	
Prep Batch:	T070731004										
				LC	S/LCSD	REPORT					
Analysis:	ADEC AK101 -	GRO					MB: Prep	Date:	T07073100 7/26/2007	04-MB	
MB Anal. Date:	7/26/2007 7:52:	:00PM					Units	:	ug/L		
LCS Anal. Date:	7/26/2007 6:37:	00PM L	CSD Ana	l. Date:	7/26/200	7 7:14:0	0PM Matri	ix:	Aqueous		
Analyte Name	SampResult	LCSRes	. SDRes.	<u>SPLev</u>	<u>SPDLev</u>	Recov.	SD Recov	<u>RPD</u>	Recov Lim	<u>RPDLim</u>	<u>Flag</u>
Gasoline Range Org	anics ND	497	483	500	500	99.4	96.6	2.9	60 - 120	20	
Prep Batch:	T070731003										
Analysis:	602 - Purgeable	Aromatic	s by GC/I	LC PID - BT	S/LCSD I TEX & Ch	lorobenze	enes MB: Prep	Date:	T07073100 7/26/2007	03-MB	
MB Anal. Date:	7/26/2007 7:52:	:00PM					Units	:	ug/L		
LCS Anal. Date:	7/26/2007 5:23:	00PM L	CSD Ana	l. Date:	7/26/200	7 6:00:0	0PM Matri	ix:	Aqueous		
<u>Analyte Name</u> Benzene	<u>SampResult</u> ND	<u>LCSRes</u> 9.85	. <u>SDRes.</u> 9.81	<u>SPLev</u> 10.0	<u>SPDLev</u> 10.0	<u>Recov.</u> 98.5	<u>SD Recov</u> 98.1	<u>RPD</u> 0.4	<u>Recov Lim</u> 80 - 120	<u>RPDLim</u> 20	<u>Flag</u>
Toluene	ND	9.75	9.68	10.0	10.0	97.5	96.8	0.7	80 - 120	20	
Ethylbenzene	ND	9.83	9.79	10.0	10.0	98.3	97.9	0.4	80 - 120	20	
Xylenes, Total	ND	28.8	28.5	30.0	30.0	96.0	95.0	1.0	80 - 120	20	
1,2-Dichlorobenzene	e ND	7.75	7.68	10.0	10.0	77.5	76.8	0.9	80 - 120	20 low,low	wdup
1,4-Dichlorobenzene	e ND	9.83	9.68	10.0	10.0	98.3	96.8	1.5	80 - 120	20	

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	d Analytical Report Analytica Environmental Laboratories, Inc.										
Workorder (SDG):	A0707191										
Project:	Colvil	le River S	tudy 200)7							
Client:	Micha	ael Baker	Jr Inc								
Client Project Numb	er: Colvil	le River S	tudy 200)7							
Tests Run at: Workorder (SDG): Project: Project Number:	Analytica Enviro A0707191 Colville River S	onmental L tudy 2007	aborator QU	ies - Thor JALITY	nton, Colo	orado FROL	REPOR	Г			
Prep Batch:	T070731003										
Analysis:	602 - Purgeable	Aromatics	by GC/F	LCS/ PID - BTE	LCSD R X & Chlc	EPORT probenzer	nes MB: Prep	Date:	T070731 7/26/200'	003-MB 7	
MB Anal. Date:	7/26/2007 7:52	:00PM					Units		ug/L		
LCS Anal. Date:	7/26/2007 5:23	:00PM LC	SD Anal	l. Date: 7	/26/2007	6:00:00	PM Matri	X:	Aqueous		
Analyte Name	SampResult	LCSRes.	SDRes.	<u>SPLev</u> S	PDLev	Recov.	SD Recov	<u>RPD</u>	Recov Lin	n <u>RPDLim</u>	<u>Flag</u>
1,3-Dichlorobenzene	ND	9.09	8.8/	10.0	10.0	90.9	88./	2.4	80 - 120	20	
Analysis: Samp. Anal. Date:	602 - Purgeable 7/27/2007 3:20	Aromatics :00AM	by GC/F	MS/ PID - BTE	' MSD RE X & Chlc	PORT probenzer	nes Parent Prep I Units	:: Date: :	A070719 7/26/2007 ug/L	1-01C 7	
MS Anal. Date:	1/2//2007 0:23	:00AM MS	SD Anai.	Date: /	/2//200/	/:00:00	JAM Matri	X.	Aqueous		
<u>Analyte Name</u> Benzene	<u>SampResult</u> ND	<u>MSRes.</u> 10.4	<u>MSDR</u> 10.6	<u>SPLev</u> 10.0	<u>SPDLev</u> 10.0	<u>Recov.</u> 104.0	<u>MSD Rec.</u> 106.0	<u>RPD</u> <u>I</u> 1.9	<u>Recov Lim</u> 80 - 120	<u>RPDLim</u> 20	<u>Flag</u>
Toluene	ND	10.2	10.3	10.0	10.0	102.0	103.0	1.0	80 - 120	20	
Ethylbenzene	ND	10.5	10.6	10.0	10.0	105.0	106.0	0.9	80 - 120	20	
Xylenes, Total	ND	30.3	30.5	30.0	30.0	101.0	101.7	0.7	80 - 120	20	
1,2-Dichlorobenzene	ND	6.39	5.65	10.0	10.0	63.9	56.5	12.3	80 - 120	20 lowMS lo	wMSD
1,4-Dichlorobenzene	ND	8.58	8.62	10.0	10.0	85.8	86.2	0.5	80 - 120	20	
1,3-Dichlorobenzene	ND	7.73	7.73	10.0	10.0	77.3	77.3	0.0	80 - 120	20 lowMS lo	wMSD
Chlorobenzene	ND	9.87	10.0	10.0	10.0	98.7	100.0	1.3	80 - 120	20	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): A0707191

Project:	Colville River Study 2007
Client:	Michael Baker Jr Inc
Client Project Number:	Colville River Study 2007

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Detailed Analytical Report

Workorder (SDG):	A0707191
Project:	Colville River Study 2007
Client:	Michael Baker Jr Inc
Client Project Number	: Colville River Study 2007

SURROGATE RECOVERY SUMMARY REPORT

Detailed Ana	lytical Report		Analytica Environmental Laboratories, Inc.			
Workorder (SDG):	A0707191					
Project:	Colville River	Study 2007				
Client:	Michael Baker	Jr Inc				
Client Project Numbe	r: Colville River S	Study 2007				
Test Method:	ADEC AK102 - DRO					
Lab Sample #:	A0707191-01A]	Dilution:	1	
Analysis Date:	7/24/2007 11:27:31PM		(Client Sample:	Lake 9323	
Batch Number:	T070724001]	Data File:	07072348.D	
AnalyteName		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
o-Terphenyl		67	50	120		Complete
Lab Sample #:	A0707191-02A]	Dilution:	1	
Analysis Date:	7/25/2007 12:17:57AM		(Client Sample:	Lake 9324	
Batch Number:	T070724001]	Data File:	07072349.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
o-Terphenyl		65	50	120		Complete
Lab Sample #:	A0707191-03A]	Dilution:	1	
Analysis Date:	7/25/2007 1:08:29AM		(Client Sample:	<u>Lake 9313</u>	
Batch Number:	T070724001]	Data File:	07072350.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl		50	50	120		Rrun
Lab Sample #:	A0707191-03A]	Dilution:	1	
Analysis Date:	7/27/2007 4:19:36AM		(Client Sample:	<u>Lake 9313</u>	
Batch Number:	T070724001]	Data File:	07072623.D	
<u>AnalyteName</u>	1	SSRecov	LCL	UCL	SSFlag	Result Status
o-Terphenyl		50	50	120		Complete
Lab Sample #:	T070724001-MB]	Dilution:	1	
Analysis Date:	7/24/2007 8:55:14PM		(Client Sample:	MB	
Batch Number:	T070724001]	Data File:	07072345.D	
<u>AnalyteName</u>	<u>.</u>	SSRecov	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl		40	60	120	LOW	Rrun
Lab Sample #:	T070724001-MB]	Dilution:	1	
Analysis Date:	7/27/2007 2:40:50AM			Client Sample:	<u>MB</u>	
Batch Number:	T070724001			Data File:	07072621.D	
<u>AnalyteName</u>	<u>1</u>	<u>SSRecov</u>	LCL	UCL	<u>SSFlag</u>	Result Status
o-Terphenyl		43	60	120	LOW	Complete
Lab Sample #:	T070724001-LCS]	Dilution:	1	
Analysis Date:	7/24/2007 9:46:10PM		(Client Sample:	LCS	
Batch Number:	10/0/24001	200	LCL	Data File:	0/0/2346.D	
<u>AnalyteName</u>		<u>SSRecov</u>	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terpnenyl	T05050 1001 1 00D	/4	00	120	1	Complete
Lab Sample #:	T0/0/24001-LCSD		1	Dilution:		
Analysis Date:	//24/200/ 10:36:49PM		1	Client Sample:	<u>LCSD</u> 07072247 D	
Batch Number:	10/0/24001	2 CD		Data File:	0/0/234/.D	Damelt States
<u>AnalyteName</u>	<u>.</u>	<u>63</u>	<u>LCL</u>	<u>UCL</u> 120	<u>551182</u>	<u>Result Status</u>
J -1 Comming	T070704001 L COD	05	00		1	Krun
Lab Sample #:	10/0/24001-LCSD]	Dilution:		
Analysis Date: Batch Number:	T070724001 5:50:08AM		1	Chent Sample:	<u>есэр</u> 07072622 D	
AnglyteName	10/0/24001	SSRecov	LCL		SSFlag	Result Status
Analytervallie	-	SSACCOV	LUL	UCL	BBITIA	Result Status

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Detailed An	alytical Report		Ana	lytica Environ	mental Laboratories	s, Inc.
Workorder (SDG):	A0707191					
Project:	Colville River	Study 2007				
Client:	Michael Baker	Jr Inc				
Client Project Numb	oer: Colville River	Study 2007				
Test Method:	ADEC AK102 - DRO					
Lab Sample #:	T070724001-LCSD		D	ilution:	1	
Analysis Date:	7/27/2007 3:30:08AM		C	lient Sample:	LCSD	
Batch Number:	T070724001		D	ata File:	07072622.D	
<u>AnalyteName</u>		SSRecov	<u>LCL</u>	UCL	SSFlag	<u>Result Status</u>
o-Terphenyl		64	60	120		Complete

Detailed Ana	lytical Report		Analytica Environmental Laboratories, Inc.			
Workorder (SDG):	A0707191					
Project:	Colville River	Study 2007				
Client:	Michael Baker	r Jr Inc				
Client Project Numbe	r: Colville River	Study 2007				
Test Method:	ADEC AK103 - RRO	·				
Lab Sample #:	A0707191-01A		-	Dilution:	1	
Analysis Date:	7/26/2007 4:44:07PM			Client Sample:	<u>Lake 9323</u>	
Batch Number:	T070724011			Data File:	07072609.D	
AnalyteName		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	Result Status
Squalane		40	50	150	LOW	Rrun
Lab Sample #:	A0707191-02A			Dilution:	1	
Analysis Date:	7/26/2007 5:33:43PM			Client Sample:	Lake 9324	
Batch Number:	T070724011			Data File:	07072610.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
Squalane		40	50	150	LOW	Rrun
Lab Sample #:	A0707191-03A			Dilution:	1	
Analysis Date:	7/26/2007 6:23:25PM			Client Sample:	Lake 9313	
Batch Number:	T070724011			Data File:	07072611.D	
AnalyteName		<u>SSRecov</u>	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
Squalane		36	50	150	LOW	Rrun
Lab Sample #:	A0707191-01A			Dilution:	1	
Analysis Date:	7/31/2007 4:22:12PM			Client Sample:	Lake 9323	
Batch Number:	T070724011			Data File:	07073109.D	
AnalyteName		<u>SSRecov</u>	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
Squalane		46	50	150	LOW	Rrun
Lab Sample #:	A0707191-02A		-	Dilution:	1	
Analysis Date:	7/31/2007 5:12:23PM			Client Sample:	Lake 9324	
Batch Number:	10/0/24011	COD		Data File:	0/0/3110.D	
<u>AnalyteName</u>		<u>SSRecov</u>	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
Squalatte	4.0707101.024	40	30	Dilatiana	LOW	Krun
Lab Sample #:	AU/U/191-U3A		-	Dilution:	L alva 0212	
Analysis Date: Batch Number:	7/31/2007 0:02:37PM T070724011		-	Data File:	<u>Lake 9315</u> 07073111 D	
A nalutaNama	10/0/24011	SSDoory	LCI		SSEleg	Docult Status
<u>AnalyteName</u> Squalane		<u>45</u>	<u>LCL</u> 50	<u>UCL</u> 150	<u>SSFIAg</u> LOW	<u>Complete</u>
Lab Sample #	A0707191-01A			Dilution:	1	Complete
Analysis Date:	8/2/2007 2:24:00PM			Client Sample [.]	Lake 9323	
Batch Number:	T070724011			Data File:	07073164.D	
AnalyteName		SSRecov	LCL	UCL	SSFlag	Result Status
Squalane		74	50	150	<u></u>	Complete
Lab Sample #:	A0707191-02A		-	Dilution:	1	<u>F</u>
Analysis Date:	8/2/2007 3:13:50PM		-	Client Sample:	Lake 9324	
Batch Number:	T070724011			Data File:	07073165.D	
<u>AnalyteName</u>		<u>SSReco</u> v	<u>LC</u> L	UCL	<u>SSFlag</u>	<u>Resul</u> t Status
Squalane		45	50	150	LOW	Complete
Lab Sample #:	T070724011-MB			Dilution:	1	
Analysis Date:	7/26/2007 2:14:53PM			Client Sample:	<u>MB</u>	
Batch Number:	T070724011			Data File:	07072606.D	
<u>AnalyteName</u>		SSRecov	<u>LCL</u>	UCL	SSFlag	Result Status

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Detailed Ana	lytical Report		Analytica Environmental Laboratories			
Workorder (SDG):	A0707191					
Project:	Colville River	Study 2007				
Client:	Michael Baker	Jr Inc				
Client Project Numbe	er: Colville River	Study 2007				
Test Method:	ADEC AK103 - RRO					
Lab Sample #:	T070724011-MB		D	vilution:	1	
Analysis Date:	7/26/2007 2:14:53PM		С	lient Sample:	MB	
Batch Number:	T070724011		D	ata File:	07072606.D	
<u>AnalyteName</u>		SSRecov	<u>LCL</u>	UCL	<u>SSFlag</u>	<u>Result Status</u>
Squalane		33	60	120	LOW	Rrun
Lab Sample #:	T070724011-MB		D	vilution:	1	
Analysis Date:	7/31/2007 1:51:19PM		С	lient Sample:	<u>MB</u>	
Batch Number:	T070724011		D	ata File:	07073106.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	SSFlag	Result Status
Squalane		39	60	120	LOW	Rrun
Lab Sample #:	T070724011-MB		D	ilution:	1	
Analysis Date:	8/2/2007 11:55:15AM		C	lient Sample:	<u>MB</u>	
Batch Number:	T070724011		D	ata File:	07073161.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
Squalane		69	60	120		Complete
Lab Sample #:	T070724011-LCS		D	ilution:	1	
Analysis Date:	7/26/2007 3:04:38PM		C	lient Sample:	LCS	
Batch Number:	T070724011		D	ata File:	07072607.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
Squalane		44	60	120	LOW	Rrun
Lab Sample #:	T070724011-LCS		D	ilution:	1	
Analysis Date:	7/31/2007 2:41:32PM		C	lient Sample:	LCS	
Batch Number:	T070724011		D	ata File:	07073107.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
Squalane		47	60	120	LOW	Complete
Lab Sample #:	T070724011-LCSD		D	ilution:	1	
Analysis Date:	7/26/2007 3:54:17PM		C	lient Sample:	LCSD	
Batch Number:	T070724011		D	ata File:	07072608.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
Squalane		42	60	120	LOW	Rrun
Lab Sample #:	T070724011-LCSD		D	vilution:	1	
Analysis Date:	8/2/2007 1:34:19PM		С	lient Sample:	LCSD	
Batch Number:	T070724011		D	ata File:	07073163.D	
AnalyteName		<u>SSRecov</u>	LCL	UCL	<u>SSFlag</u>	Result Status
Squalane		84	60	120		Complete

Detailed Ana	alytical Report		Ana	lytica Environ	mental Laboratories, Inc.	
Workorder (SDG):	A0707191					
Project:	Colville River	Study 2007				
Client:	Michael Bake	r Jr Inc				
Client Project Numb	er: Colville River	Study 2007				
Test Method:	602 - Purgeable Aron	natics by GC	/PID - BT	EX & Chloro	benzene	
Lab Sample #:	A0707191-01C	2	Di	ilution:	1	
Analysis Date:	7/27/2007 3:20:00AN	1	Cl	lient Sample:	Lake 9323	
Batch Number:	T070731003		Da	ata File:	07072623.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	zene	97	80	120		Complete
Lab Sample #:	A0707191-02C		D	ilution:	1	
Analysis Date:	7/27/2007 8:13:00AN	1	Cl	lient Sample:	<u>Lake 9324</u>	
Batch Number:	T070731003		Da	ata File:	07072631.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenz	zene	98	80	120		Complete
Lab Sample #:	A0707191-03C		D	ilution:	1	
Analysis Date:	7/27/2007 8:50:00AN	1	Cl	lient Sample:	<u>Lake 9313</u>	
Batch Number:	T070731003		Da	ata File:	07072632.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenz	zene	98	80	120		Complete
Lab Sample #:	T070731003-MB		D	ilution:	1	
Analysis Date:	7/26/2007 7:52:00PM	1	Cl	lient Sample:	<u>MB</u>	
Batch Number:	T070731003		Da	ata File:	07072611.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	zene	96	80	120		Complete
Lab Sample #:	T070731003-LCS		D	ilution:	1	
Analysis Date:	7/26/2007 5:23:00PM	1	Cl	lient Sample:	LCS	
Batch Number:	T070731003		Da	ata File:	07072607.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	zene	100	80	120		Complete
Lab Sample #:	T070731003-LCSD		D	ilution:	1	
Analysis Date:	7/26/2007 6:00:00PM	1	Cl	lient Sample:	LCSD	
Batch Number:	T070731003		Da	ata File:	07072608.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenz	zene	100	80	120		Complete
Lab Sample #:	A0707191-01C-MS		D	ilution:	1	
Analysis Date:	7/27/2007 6:23:00AN	1	Cl	lient Sample:	<u>MS</u>	
Batch Number:	T070731003		Da	ata File:	07072628.D	
AnalyteName		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenz	zene	102	80	120		Complete
Lab Sample #:	A0707191-01C-MSD		D	ilution:	1	
Analysis Date:	7/27/2007 7:00:00AN	4	Cl	lient Sample:	MSD 07070(20) D	
Batch Number:	10/0/31003	COD	Da	ata File:	0/0/2629.D	D
<u>AnalyteName</u>		<u>SSRecov</u>	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenz	zene	100	80	120		Complete

Detailed Ana	alytical Report		Analytica Environmental Laboratories, Inc.			
Workorder (SDG):	A0707191					
Project:	Colville River S	Study 2007				
Client:	Michael Baker	Jr Inc				
Client Project Numbe	er: Colville River S	Study 2007				
Test Method:	ADEC AK101 - GRO	-				
Lab Sample #:	A0707191-01C		Di	ilution:	1	
Analysis Date:	7/27/2007 3:20:00AM		Cl	ient Sample:	Lake 9323	
Batch Number:	T070731004		Da	ata File:	07072623.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	zene	95	50	150		Complete
Lab Sample #:	A0707191-02C		Di	ilution:	1	
Analysis Date:	7/27/2007 8:13:00AM		Cl	ient Sample:	Lake 9324	
Batch Number:	T070731004		Da	ata File:	07072631.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	SSFlag	Result Status
p-Bromofluorobenz	zene	95	50	150		Complete
Lab Sample #:	A0707191-03C		Di	ilution:	1	
Analysis Date:	7/27/2007 8:50:00AM		Cl	ient Sample:	Lake 9313	
Batch Number:	T070731004		Da	ata File:	07072632.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenz	zene	93	50	150		Complete
Lab Sample #:	T070731004-MB		Di	ilution:	1	
Analysis Date:	7/26/2007 7:52:00PM		Cl	ient Sample:	MB	
Batch Number:	T070731004		Da	ata File:	07072611.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	zene	91	60	120		Complete
Lab Sample #:	T070731004-LCS		Di	lution:	1	
Analysis Date:	7/26/2007 6:37:00PM		Cl	ient Sample:	LCS	
Batch Number:	T070731004		Da	ata File:	07072609.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	zene	98	60	120		Complete
Lab Sample #:	T070731004-LCSD		Di	ilution:	1	
Analysis Date:	7/26/2007 7:14:00PM		Cl	ient Sample:	LCSD	
Batch Number:	T070731004		Da	ata File:	07072610.D	
<u>AnalyteName</u>	5	SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	ene	97	60	120		Complete

Detailed Ana	lytical Report		Anal	ytica Environ	mental Laborator	ies, Inc.
Workorder (SDG):	A0707191					
Project:	Colville River	Study 2007				
Client:	Michael Bake	r Jr Inc				
Client Project Numbe	er: Colville River	Study 2007				
Test Method:	Aromatic VOCs by G	GC/PID via m	ethod 802	1B - BTEX		
Lab Sample #:	A0707191-04A		Di	ilution:	1	
Analysis Date:	7/26/2007 9:07:00PM	1	Cl	ient Sample:	<u>Trip Blank</u>	
Batch Number:	T070731003		Da	ata File:	07072613.D	
AnalyteName		SSRecov	LCL	UCL	SSFlag	<u>Result Status</u>
p-Bromofluorobenz	ene	95	80	120		Complete
Lab Sample #:	T070731003-MB		Di	ilution:	1	
Analysis Date:	7/26/2007 7:52:00PM	1	Cl	ient Sample:	<u>MB</u>	
Batch Number:	T070731003		Da	ata File:	07072611.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	<u>Result Status</u>
p-Bromofluorobenz	ene	96	80	120		Complete
Lab Sample #:	T070731003-LCS		Di	ilution:	1	
Analysis Date:	7/26/2007 5:23:00PM	1	Cl	ient Sample:	LCS	
Batch Number:	T070731003		Da	ata File:	07072607.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenz	ene	100	80	120		Complete
Lab Sample #:	T070731003-LCSD		Di	ilution:	1	
Analysis Date:	7/26/2007 6:00:00PM	1	Cl	ient Sample:	LCSD	
Batch Number:	T070731003		Da	ata File:	07072608.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	ene	100	80	120		Complete
Lab Sample #:	A0707191-01C-MS		Di	lution:	1	
Analysis Date:	7/27/2007 6:23:00AN	1	Cl	ient Sample:	<u>MS</u>	
Batch Number:	T070731003		Da	ata File:	07072628.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	ene	102	80	120		Complete
Lab Sample #:	A0707191-01C-MSD		Di	ilution:	1	
Analysis Date:	7/27/2007 7:00:00AN	1	Cl	ient Sample:	<u>MSD</u>	
Batch Number:	T070731003		Da	ata File:	07072629.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	<u>Result Status</u>
p-Bromofluorobenz	ene	100	80	120		Complete

Analytica Environmental Laboratories, Inc.

Workorder (SDG):	A0707191						
Project:	Colville River	Study 2007					
Client:	Michael Baker	r Jr Inc					
Client Project Numbe	er: Colville River	Study 2007					
Test Method:	625 - Base-Neutrals a	nd Acids by (GC/MS - I	РАН			
Lab Sample # [.]	J0707127-01F		D	ilution.	1		
Analysis Date:	7/28/2007 12·59·00AN	Л	C	lient Sample [.]	Batch OC		
Batch Number	T070725011		D	ata File:	07072712 D		
AnalytaNama	10/0/25011	SSRecov		UCI	SSFlag		Bosult Status
2-Eluorobinhenvl		<u>63</u>	<u>1CL</u> 43	<u>UCL</u> 116	<u>551 182</u>		<u>Complete</u>
D14-Ternhenvl		41	33	141			Complete
D5-Nitrobenzene		64	35	114			Complete
Lab Sample #:	I0707127-01F	-	D	ilution:	10		compiete
Δ nalysis Date:	$7/28/2007 + 1\cdot34\cdot00 \Delta N$	ſ	C D	lient Sample	Rotch OC		
Batch Number	T070725011	L	D	ata File	07072713 D		
AnalytaNama	1070723011	SSD			SSElag		Docult Status
2 Eluorobinhenvl		<u>63</u>	<u>LCL</u> 13	<u>UCL</u> 116	<u>551182</u>		Drun
D14_Terphenyl		42	33	1/1	III	IDED OLIANT I IMIT	<u>Riun</u>
D14-Terphenyi		64	35	141	UP	NDER QUANT LIMIT	Riun Drup
Lah Sampla #:	A0707101 01E	01	D	ilution:	1		Kiuli
Lab Sample #:	AU/U/191-UIE	r	D C	light Somplay	1 Laka 0222		
Analysis Date.	7/28/2007 5.20.00AN	1		eta Eila:	<u>Lake 9323</u>		
	10/0/23011	CCD			0/0/2/10.D		D
AnalyteName		<u>SSRecov</u> 67	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>		<u>Result Status</u>
2-Fluorobipnenyi		68	43	141			Complete
D14-Terpnenyl		68	25	141			Complete
DJ-INITODELIZELE	A 0.505101 005	08	33	114			Complete
Lab Sample #:	A0707191-02E	-	D	ilution:			
Analysis Date:	//28/200/ 3:55:00AN	1	C.	lient Sample:	Lake 9324		
Batch Number:	10/0/25011		D	ata File:	0/0/2/1/.D		-
AnalyteName		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>		Result Status
2-Fluorobiphenyl		89	43	116			Complete
D14-Terphenyl		59	33	141			Complete
D5-Nitrobenzene		80	35	114			Complete
Lab Sample #:	A0707191-03E		D	ilution:	1		
Analysis Date:	7/28/2007 4:30:00AN	1	C	lient Sample:	<u>Lake 9313</u>		
Batch Number:	1070725011		D	ata File:	07072718.D		
AnalyteName		<u>SSRecov</u>	LCL	UCL	SSFlag		<u>Result Status</u>
2-Fluorobiphenyl		81	43	116			Complete
D14-Terphenyl		95	33	141			Complete
D5-Nitrobenzene		79	35	114			Complete
Lab Sample #:	T070725011-MB		D	ilution:	1		
Analysis Date:	7/27/2007 9:28:00PM		C	lient Sample:	<u>MB</u>		
Batch Number:	T070725011		D	ata File:	07072706.D		
AnalyteName		SSRecov	LCL	UCL	SSFlag		<u>Result Status</u>
2-Fluorobiphenyl		85	43	116			Complete
D14-Terphenyl		128	33	141			Complete
D5-Nitrobenzene		87	35	114			Complete

Analytica	Environmental	Laboratories.	Inc
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Detailed Analytical Report			Analytica Environmental Laboratories, Inc.			
Workorder (SDG):	A0707191					
Project:	Colville River	Study 2007				
Client:	Michael Baker	Jr Inc				
Client Project Numbe	er: Colville River S	Study 2007				
Test Method:	625 - Base-Neutrals an	d Acids by	GC/MS - F	АН		
Lab Sample #:	T070725011-LCS	•	Di	lution:	1	
Analysis Date:	7/27/2007 10:03:00PM		Cli	ient Sample:	LCS	
Batch Number:	T070725011		Da	ta File:	07072707.D	
<u>AnalyteName</u>	1	<u>SSRecov</u>	<u>LCL</u>	UCL	SSFlag	<u>Result Status</u>
2-Fluorobiphenyl		102	43	116		Complete
D14-Terphenyl		119	33	141		Complete
D5-Nitrobenzene		96	35	114		Complete
Lab Sample #:	T070725011-LCSD		Di	lution:	1	
Analysis Date:	7/27/2007 10:38:00PM		Cli	ient Sample:	LCSD	
Batch Number:	T070725011		Da	ta File:	07072708.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
2-Fluorobiphenyl		100	43	116		Complete
D14-Terphenyl		122	33	141		Complete
D5-Nitrobenzene		96	35	114		Complete
Lab Sample #:	J0707127-01F-MS		Di	lution:	1	
Analysis Date:	7/28/2007 2:09:00AM		Cli	ient Sample:	<u>MS</u>	
Batch Number:	T070725011		Da	ta File:	07072714.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
2-Fluorobiphenyl		90	43	116		Complete
D14-Terphenyl		34	33	141		Complete
D5-Nitrobenzene		86	35	114		Complete
Lab Sample #:	J0707127-01F-MSD		Di	lution:	1	
Analysis Date:	7/28/2007 2:44:00AM		Cli	ient Sample:	<u>MSD</u>	
Batch Number:	T070725011		Da	ta File:	07072715.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	SSFlag	<u>Result Status</u>
2-Fluorobiphenyl		86	43	116		Complete
D14-Terphenyl		33	33	141		Complete
D5-Nitrobenzene		84	35	114		Complete
Detailed Analyt	ical Report	Analytica En	vironmental Labor	ratories, Inc.		
--	-------------------------------	-----------------------------------	------------------------	--		
Vorkorder (SDG):	A0707191					
roject:	Colville River Stu	ıdy 2007				
Client:	Michael Baker Jr	Inc				
Client Project Number:	Colville River Stu	ıdy 2007				
	QC	BATCH ASSOCIATIONS - B	BY METHOD BLAN	NK		
Lab Project ID:	75,535	Lab Project Number:	A0707191			
				Prep Date: 7/23/2007		
Lab Method Blank Id: Prep Batch ID:	T070724001-MB					
Mathada	10/0/24001 ADEC AK102 - DI	80				
Method: This Mathad blank and	ADEC AK102 - Di	NO	annlag guiltag on	d dualizatas:		
	Sample preparation batch a	are associated with the following	g samples, spikes, and	a auplicates.		
<u>Samplenum</u>	LCSD	<u>Datarn</u> 07077		7/27/2007 2:20:08 A M		
10/0/24001-LCSD	LCSD	07072	2622.D	7/27/2007 4:10:26 AM		
A0/0/191-03A	Lake 9313	0/0/2	2623.D	7/2//2007 4:19:36AM		
10/0/24001-LCS		07072	2346.D	7/24/2007 9:46:10PM		
A0707191-01A	Lake 9323	07072	2348.D	//24/2007 11:27:31PM		
A0707191-02A	Lake 9324	07072	2349.D	7/25/2007 12:17:57AM		
				Prep Date: 7/23/2007		
Lab Method Blank Id: Prop Patch ID:	T070724011-MB					
Flep Batch ID.	10/0/24011 ADEC AV102 DI	20				
Method:	ADEC AK105 - Ki	XO		d duration to a		
	Sample preparation batch a	are associated with the following	g samples, spikes, and	a applicates.		
<u>Sampleinum</u>	LCSD			$\frac{\text{AllarysisDate}}{2/2/2007} = 1.24.10\text{DM}$		
10/0/24011-LCSD		07073	5163.D	8/2/2007 1:34:19PM		
A0707191-01A	Lake 9323	07073	5164.D	8/2/2007 2:24:00PM		
A0707191-02A	Lake 9324	07073	5165.D	8/2/2007 3:13:50PM		
T070724011-LCS	LCS	07073	5107.D	7/31/2007 2:41:32PM		
T070724011-LCSD	LCSD	07073	3108.D	7/31/2007 3:31:44PM		
A0707191-03A	Lake 9313	07073	5111.D	7/31/2007 6:02:37PM		

Detailed Analyti	cal Report	Analytica Er	vironmental Labora	tories, Inc.
Workorder (SDG): A	.0707191			
Project:	Colville River Stu	ıdy 2007		
Client:	Michael Baker Jr	Inc		
Client Project Number:	Colville River Stu	ıdy 2007		
	QC	BATCH ASSOCIATIONS - I	BY METHOD BLAN	К
Lab Project ID:	75,535	Lab Project Number:	A0707191	
Lab Method Blank Id: Prep Batch ID: Method:	T070724028-MB T070724028 SW6010B - ICP -	RCRA		Prep Date: 7/25/2007
This Method blank and	sample preparation batch	are associated with the following	g samples, spikes, and	duplicates:
SampleNum	ClientSampleName	DataFi	le	AnalysisDate
B0707053-03B-MSD	MSD	E072	77A	7/27/2007 5:12:00PM
T070724028-LCS	LCS	E072	77A	7/27/2007 2:57:00PM
T070724028-LCSD	LCSD	E072	77A	7/27/2007 3:02:00PM
B0707053-03B-MS	MS	E072	77A	7/27/2007 5:07:00PM
B0707053-03B	Batch QC	E072	67A	7/26/2007 6:17:00PM
B0707053-03B-DUP	DUP	E072	67A	7/26/2007 6:22:00PM
B0707053-03B-PDS	PDS	E072	67A	7/26/2007 6:37:00PM
A0707191-01D	Lake 9323	E072	67A	7/26/2007 5:42:00PM
A0707191-02D	Lake 9324	E072	67A	7/26/2007 5:47:00PM
A0707191-03D	Lake 9313	E072	67A	7/26/2007 5:52:00PM
Lab Method Blank Id: Prep Batch ID: Method:	T070725011-MB T070725011 625 - Base-Neutral	s and Acids by GC/MS - PA	Н	Prep Date: 7/23/2007
This Method blank and	sample preparation batch	are associated with the followin	g samples, spikes, and	duplicates:
<u>SampleNum</u>	<u>ClientSampleName</u>	DataFi	le	AnalysisDate
A0707191-02E	Lake 9324	07072	2717.D	7/28/2007 3:55:00AM
A0707191-03E	Lake 9313	07072	2718.D	7/28/2007 4:30:00AM
J0707127-01F-MS	MS	07072	2714.D	7/28/2007 2:09:00AM
J0707127-01F-MSD	MSD	07072	2715.D	7/28/2007 2:44:00AM
A0707191-01E	Lake 9323	07072	2716.D	7/28/2007 3:20:00AM
T070725011-LCS	LCS	07072	2707.D	7/27/2007 10:03:00PM
T070725011-LCSD	LCSD	07072	2708.D	7/27/2007 10:38:00PM
J0707127-01F	Batch QC	07072	2712.D	7/28/2007 12:59:00AM

Detailed Analyti	cal Report	Analytica En	vironmental Labor	atories, Inc.	
Workorder (SDG): A	.0707191				
Project:	Colville River Stu	ıdy 2007			
Client:	Michael Baker Jr	Inc			
Client Project Number:	Colville River Stu	ıdy 2007			
	QC	BATCH ASSOCIATIONS - B	BY METHOD BLAN	NK	
Lab Project ID:	75,535	Lab Project Number:	A0707191		
	T07070(007 ND			Prep Date: 7/24/2007	
Prep Batch ID:	10/0/2600/-MB T070726007				
Method:	1664 Hexane Extra	actable Material - TPH w/SG	T		
This Method blank and	sample preparation batch	are associated with the following	y samples spikes an	d duplicates:	
SampleNum	ClientSampleName	DataFil	le	AnalysisDate	
T070726007-LCS	LCS			7/24/2007_11:00:00AN	1
T070726007-LCSD	LCSD			7/24/2007 11:00:00AN	1
A0707191-01B	Lake 9323			7/24/2007 11:00:00AN	1
A0707191-02B	Lake 9324			7/24/2007 11:00:00AN	1
A0707191-03B	Lake 9313			7/24/2007 11:00:00AM	1
				Prep Date: 7/27/2007	
Lab Method Blank Id:	T070727004-MB				
Prep Batch ID:	T070727004	The second se	T-4-1 II-		
Method:	Sw/4/0A - Mercu	ry in Liquid waste by CVAP	A - Total Hg		
This Method blank and	sample preparation batch	are associated with the following	g samples, spikes, an	d duplicates:	
SampleNum	<u>ClientSampleName</u>	DataFI		AnalysisDate	
F0/0/1/8-01D-PDS	PDS	B070	/2/W.WKS	//2//2007 8:04:04PM	
F0/0/1/8-01D-DUP	DUP	B070	/2/W.WKS	7/27/2007 7:50:04PM	
F0/0/1/8-01D-MS	MS MSD	B070	/2/W.WKS	7/27/2007 7:59:40PM	
F0/0/1/8-01D-MSD	MSD Datable OC	B070	/2/W.WKS	7/27/2007 8:01:48PM	
F0/0/1/8-01D	Batch QC	B070	/2/W.WKS	7/27/2007 7:33:48PM	
10/0/2/004-LCS	LCS	B070	/2/W.WKS	7/27/2007 7:42:40PM	
10/0/2/004-LCSD	LUSD	B070	/2/W.WKS	//2//2007 /:50:24PM	
AU/U/191-01D	Lake 9323	B0707	12/W.WKS	//2//2007 8:00:14PM	
A0/0/191-02D	Lake 9324	B0703	/2/W.WKS	//2//2007 8:09:01PM	
AU/U/191-03D	Lake 9313	B070	/2/W.WKS	//2//2007 8:11:30PM	

Detailed Analyti	cal Report	Analytica Er	vironmental Labora	tories, Inc.
Workorder (SDG): A	0707191			
Project:	Colville River Stu	ıdy 2007		
Client:	Michael Baker Jr	·Inc		
Client Project Number:	Colville River Stu	ıdy 2007		
	QC	BATCH ASSOCIATIONS - E	BY METHOD BLAN	K
Lab Project ID:	75,535	Lab Project Number:	A0707191	
Lab Method Blank Id: Prep Batch ID:	T070731003-MB T070731003			Prep Date: 7/26/2007
Method:	602 - Purgeable Ar	comatics by GC/PID - BTEX	& Chlorobenzenes	
This Method blank and	sample preparation batch	are associated with the following	g samples, spikes, and	duplicates:
SampleNum	<u>ClientSampleName</u>	DataFi	le	AnalysisDate
A0707191-01C-MSD	MSD	07072	2629.D	7/27/2007 7:00:00AM
A0707191-02C	Lake 9324	07072	2631.D	7/27/2007 8:13:00AM
A0707191-03C	Lake 9313	07072	2632.D	7/27/2007 8:50:00AM
A0707191-01C-MS	MS	07072	2628.D	7/27/2007 6:23:00AM
A0707191-01C-MS	MS	07072	2628.D	7/27/2007 6:23:00AM
A0707191-01C-MSD	MSD	07072	2629.D	7/27/2007 7:00:00AM
T070731003-LCSD	LCSD	07072	2608.D	7/26/2007 6:00:00PM
A0707191-04A	Trip Blank	07072	2613.D	7/26/2007 9:07:00PM
A0707191-01C	Lake 9323	07072	2623.D	7/27/2007 3:20:00AM
T070731003-LCS	LCS	07072	2607.D	7/26/2007 5:23:00PM
T070731003-LCS	LCS	07072	2607.D	7/26/2007 5:23:00PM
T070731003-LCSD	LCSD	07072	2608.D	7/26/2007 6:00:00PM
	T070721004 MD			Prep Date: 7/26/2007
Prep Batch ID:	T070731004-MB T070731004			
Method:	ADEC AK101 - G	RO		
This Method blank and	sample preparation batch	are associated with the following	g samples, spikes, and	duplicates:
<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFi</u>	le	AnalysisDate
A0707191-02C	Lake 9324	07072	2631.D	7/27/2007 8:13:00AM
A0707191-03C	Lake 9313	07072	2632.D	7/27/2007 8:50:00AM
T070731004-LCS	LCS	07072	2609.D	7/26/2007 6:37:00PM
T070731004-LCSD	LCSD	07072	2610.D	7/26/2007 7:14:00PM
A0707191-01C	Lake 9323	07072	2623.D	7/27/2007 3:20:00AM

Detailed Analytical Report

Workorder (SDG): A0707191

Project:	Colville River Study 2007
Client:	Michael Baker Jr Inc
Client Project Number:	Colville River Study 2007

DATA FLAGS AND DEFINITIONS

The PQL is the Method Quantitation Limit as defined by USACE.

Reporting Limit: Limit below which results are shown as "ND". This may be the PQL, MDL, or a value between. See the report conventions below.

Result Field:

ND = Not Detected at or above the Reporting Limit

NA = Analyte not applicable (see Case Narrative for discussion)

Qualifier Fields:

LOW = Recovery is below Lower Control Limit

HIGH = Recovery, RPD, or other parameter is above Upper Control Limit

E = Reported concentration is above the instrument calibration upper range

Organic Analysis Flags:

B = Analyte was detected in the laboratory method blank

J = Analyte was detected above MDL or Reporting Limit but below the Quant Limit (PQL)

Inorganic Analysis Flags:

J = Analyte was detected above the Reporting Limit but below the Quant Limit (PQL)

W = Post digestion spike did not meet criteria

S = Reported value determined by the Method of Standard Additions (MSA)

Several ways of defining the limit of detection and quantitation are prevalent in the laboratory industry and may appear in Analytica reports. These include the following:

MRL = "minimum reporting level", from the EPA Safe Drinking Water program (SDW)

PQL = "practical quantitation limit", from SW-846

EQL = "estimated quantitation limit", from SW-846

LOQ = "limit of quantitation", from a number of authoritative sources

In Analytica's work, all of these terms have the same meaning, equivalent to the EPA definition of the MRL. This reporting level is supported by a satisfactory calibration data point which is at that level or lower, and also is supported by a method detection limit (MDL) determined by the procedure in 40CFR. The MDL is lower than the MRL and represents an estimate of the level where positive detections have a 99% probability of being real, but where quantitation accuracy is unknown.

The MRL as defined by Analytica is the lowest demonstrated point of known quantitation accuracy.

The MRL should not be confused with the MCL, which is the EPA-defined "maximum contaminant level" allowed for certain regulated targets under specific regulations, such as the National Primary Drinking Water Regulations. Normally, the MRL is set at a level which is much lower than the MCL in order to ensure that levels are well below those limits. Not all target analytes have MCL levels established.

Other Flags may be applied. See Case Narrative for Description

Analytica Environmental Laboratories, Inc.

Detailed Analytical Report

Workorder (SDG):	A0707191
Project:	Colville River Study 2007
Client:	Michael Baker Jr Inc
Client Project Number:	Colville River Study 2007

REPORTING CONVENTIONS FOR THIS REP	ORT
A0707191	

|--|

TestPkgName	Basis	# Sig Figs	Reporting Limit
1664/1664 (Aqueous) - TPH w/SGT	As Received	2	Report to PQL
6010B/3010A (Aqueous) - RCRA	As Received	2	Report to PQL
602 (Aqueous) - BTEX & Chlorobenzenes	As Received	2	Report to PQL
625 (Aqueous) - PAH	As Received	2	Report to MDL, J qual below PQL
7470A/7470A (Aqueous) - Total Hg	As Received	2	Report to PQL
8021/5030B (Aqueous) - BTEX	As Received	2	Report to PQL
AK101/5030B (Aqueous) - GRO	As Received	2	Report to PQL
AK102/3510C (Aqueous) - DRO	As Received	2	Report to PQL
AK103/3510C (Aqueous) - RRO	As Received	2	Report to PQL

•				Analy	tica (Chain	of C	ustod	y Form			Page 1 of
		12189 Pennsylvania Str Thornton, CO 80241 303-460-8868	eet	4307 Anchor	Arctic Blvd age, AK 999	503	<u>4</u> ج	8 Shaune E heau, AK 99	B01	475 Hall (Fairbanks, AK	99701	Chain of Custody No:
		303-469-5254 303-469-5254		98 90	-258-2155 -258-6634			907-780-66 907-780-667	00	907-456-3 907-456-3	116 125	Sampling Event ID: 7,48:
Client Name & Address: Mich	hael Baker Jr Inc		Proj	ect Nam	ie: Colvi	ille Rive	r Study 2	2007			Report To:	Mr. Marc McBroom, Michael Baker Ir Inc
			Pub	lic Wate	r Syster	m ID#:					Invoice To:	Mr. Marc McBroom,
			PWS	Result	s to STA	ΤĒ	ΥE	S	NO			Michael Baker Jr Inc
Contact Person:			Data	Delivera	ables: Le	evel2 w/	Batch C	õ			P. O. or Con	ntract No: Colville River Study 2007
Phone No:			EDD	: None								To be Completed by Analytica
Fax No:			Requ	Jested T	AT:							•
E-mail:			Resu	ılts Due	Date:						LON AQ	707/41 Quote No: A07050028
Special Instructions:											Lab Notes:	
Lab Bottle Order No:			+				ter					
Sample Description	Date	ne Matrix	of Containers 4/1664 (Aqueous) - TPI	01/5030B (Aqueous) -	02/ AK103 (Aqueous) -) RRO	H (Total Aqueous natic Hydrocarbons)	I RCRA 8 Metals - Wa	X .				
1.AKE 9323	7/10/07 16:	Aqueous	×	×	×	×	×					
LARE 9324	081 4 0 APE	O Aqueous	×	×	×	×	×					
Trip Blank		Aqueous										
LAXE 9313	7/16/07 110	0 haveous	×	×	×	×	×		1			
							-	•				



Cooler Receipt Form

Client: Project:	Michael Baker Jr Colville River Stud	Inc Clie dy 2007	ent Code: 03	0185		Orde	r #: A0707191
Cooler ID: A. <u>Prelimi</u>	1 nary Examination F	Phase:	Date cooler o _l Cooler opene	pened: d by:	7/17/200 mw)7 Signat	ture: <u>MA</u> M
1. Was a	irbill Attached?	N/A	Airbill #:			Carrier Name	: Client
2. Custo	dy Seals?	N/A	How many?	0	Location	:	Seal Name:
3. Seals	intact?	N/A					
4. COC /	Attached?	Yes	Properly Com	pleted?	Yes	Signed by AE	EL employee? Yes
5. Projec	ct Identification from	n custody paper:	Coville	e River Stu	dy 2007		
6. Prese	rvative:			Tempera	ture:	7.2 M/1/	
Designate	d person initial here	e to acknowledge	receipt:			MANN	Date: /////////////
COMMEN	ITS:						/

В.	Log-In Phase: Samples Log-	in Date: 7/18/2007	Log-in By: mw	
1	. Packing Type:			
2	. Were samples in separate bags?	Yes		
3	. Were containers intact?	Yes	Labels agree with COC?	Yes
4	. Number of bottles received:	41	Number of samples received:	4
5	. Correct containers used?	Yes	Correct preservatives added?	N/A
6	. Sufficient sample volume?	N/A		
7	. Bubbles in VOA samples?	N/A		
8	. Was Project manager called and st	tatus discussed?	No	
9	. Was anyone called? No	Who was called?	By whom?	Date:
С	OMMENTS:			

Appendix C August 8, 2007 Laboratory Water Quality Analysis Results



9/25/2007 Michael Baker Jr Inc 1400 W. Benson Blvd. Ste 200 STE 200 Anchorage, AK 99503 Attn: Marc McBroom Analytica International, Inc. 4307 Arctic Blvd. Anchorage, AK 99503 Phone: 907-258-2155 Fax: 907-258-6634

Work Order #: A0708454 Date: 9/25/2007 Work ID: Colville River Study 2007 Date Received: 8/29/2007 Proj #: Colville River Study 2007

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
A0708454-01	M9313	A0708454-02	L9323
A0708454-03	L9324	A0708454-04	Trip Blank

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. Listings of data qualifiers, analytical codes, key dates, and QC relationships are provided at the end of the report.

Sincerely,

K.1

Krissy Plett Project Manager

"The Science of Analysis, The Art of Service"

Case Narrative

Analytica Alaska Inc.

Work Order: A0708454

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Guidelines Establishing Test Procedures for the Analysis of Pollutants, 40 CFR, Part 136, 7-1-99 Edition.

Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, December 1996.

USEPA Method 1664, EPA-821-B-94-004b, N-Hexane Extractable Material (HEM) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM) by Extraction and Gravimetry (Oil and Grease and Total Petroleum Hydrocarbons), April 1995.

Method AK101 For the Determination of Gasoline Range Organics, Revision 3.0, 01/31/96.

Method AK102 For the Determination of Diesel Range Organics, Revision 3.0, 01/31/96.

Method AK103 For the Determination of Residual Range Organics, Revision 2.0, 01/31/96.

SAMPLE RECEIPT: Four samples were received on 8/29/2007 1:38:00 PM at Analytica-Anchorage. The samples were received at a temperature of 5.2°C in oder per Chain of Custody. Comments: Sample L9323 had 5mm bubbles in all VOA vials.

The samples were transferred for analysis to Analytica Environmental Laboratories (AEL); 12189 Pennsylvania St. Thornton, CO 80241 where they were received at a temperature of 3.5°C in good condition and in order per chain of custody.

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN A summary of our review is shown below, organized by test:

All analytical results contained in this report have been reviewed under Analytica's internal quality assurance and quality control program. Any deviations in quality control parameters for specific analyses are noted in the following text. A complete quality assurance report, including laboratory control, matrix spike, and sample duplicate recoveries is kept on file in our office and is available upon request.

All method specifications were met for the following tests:

Test Method: 602 - Purgeable Aromatics by GC/PID - BTEX - Aqueous Test Method: 602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes - Aqueous Test Method: ADEC AK101 - GRO - Aqueous Test Method: SW6010B - ICP - RCRA - Aqueous Test Method: SW7470A - Mercury in Liquid Waste by CVAA - Total Hg - Aqueous

Test Method: 1664 Hexane Extractable Material - TPH w/SGT - Aqueous

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: Insufficient sample was provided to perform a matrix spike and matrix spike duplicate. The laboratory prepared an LCS/LCSD to demonstrate method accuracy and precision.

Case Narrative

Analytica Alaska Inc. Work Order: A0708454 (continued)

Test Method: 625 - Base-Neutrals and Acids by GC/MS - PAH - Aqueous

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: Insufficient sample was provided to perform a matrix spike and matrix spike duplicate. The laboratory prepared an LCS/LCSD to demonstrate method accuracy and precision.

OPENING CONTINUING CALIBRATIONS:

Analytica compares the CCVs against the criteria for 8270 in order to evaluate them technically. The recovery ranges required by Method 625 are much wider, and the CCVS all meet Method 625 requirements. Deviations from Method 8270 are shown below, but these are not pertinent from a regulatory perspective. Data are fully usable. Those compounds shown as falling outside the 8270 specification may be quantified somewhat less accurately than others, but all should meet Method 625 quantification accuracy requirements.

RunDate			Data File	Analyte	Recovery	LCL	UCL
9/20/2007	1:34:00	PM	07092004.D	Acenaphthylene	66.1	80	120
9/20/2007	1:34:00	PM	07092004.D	Benzo(g,h,i)perylene	135.	80	120
9/20/2007	1:34:00	PM	07092004.D	D14-Terphenyl	79.3	80	120
9/20/2007	1:34:00	PM	07092004.D	Dibenzo(a,h)anthracene	144.	80	120
9/20/2007	1:34:00	PM	07092004.D	Indeno(1,2,3-cd)pyrene	130.	80	120
9/20/2007	1:34:00	PM	07092004.D	Pyrene	74.5	80	120

SURROGATE RECOVERIES:

The sample shown below has one surrogate outside of control windows. The LCS and method blank do not show this effect, and this is considered likely to be due to sample matrix.

Sample	LabID	Surrogate	Recovery	LCL	UCL
L9323	A0708454-02A	D14-Terphenyl	32.	33	141 Complete

LCS OUTLIERS:

The LCS and LCSD shown below have a number of targets outside of control windows. None of these targets were detected in the sample. It is important to point out that all of these outliers are against the Analytica in-house limits, and these recoveries are still in control by Method 625 criteria (see Table 6 of Method 625 for details).

Туре	BatchNumber	Analyte	Recovery	LCL	UCL	Status
LCS	т070905022	Acenaphthylene	43.2	48	133	Complete
LCS	т070905022	Dibenzo(a,h)anthracene	158.	50	129	Complete
LCS	т070905022	Benzo(g,h,i)perylene	128.	50	125	Complete
LCSD	т070905022	Dibenzo(a,h)anthracene	148.	50	129	Complete
LCSD	Т070905022	Acenaphthylene	47.1	48	133	Complete

Test Method: ADEC AK102 - DRO - Aqueous

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: Insufficient sample was provided to perform a matrix spike and matrix spike duplicate. The laboratory prepared an LCS/LCSD to demonstrate method accuracy and precision.

SURROGATE RECOVERIES:

The sample shown below has the surrogate outside of control windows. This result was confirmed by reanalysis. The method blank also had slightly low surrogate recovery.

Case Narrative

Analytica Alaska Inc. Work Order: A0708454

(continued)

confirmed by reanalysis. The method blank also had slightly low surrogate recovery. There was insufficient sample for re-extraction and re-analysis.

Sample	LabID	Surrogate	Recovery	LCL	UCL
M9313	A0708454-01E	o-Terphenyl	38.	50	120 Complete
MB	T070907004-MB	o-Terphenyl	52.	60	120 Complete

Test Method: ADEC AK103 - RRO - Aqueous

SAMPLE PREPARATION ISSUES AND OBSERVATIONS: Insufficient sample was provided to perform a matrix spike and matrix spike duplicate. The laboratory prepared an LCS/LCSD to demonstrate method accuracy and precision.

Detailed Ana	lytical Report	Analytica Alaska Inc.									
Workorder (SDG):	A0708454										
Project:	Colville Rive	r Study 20	07								
Client:	Michael Bak	er Jr Inc									
Client Project Number	r: Colville Rive	r Study 20	07								
Report Section	: Clien	t Samp	le Rej	port							
Client Sample Name:	M9313										
Matrix:	Aqueous					C	Collection Da	ate:	8/28/2007	2:00:	00PM
The following test was	conducted by: Analytica -	Thornton									
Lab Sample Number:	A0708454-01F						Analysis Da	ate:	9/11/20	07 1::	54:50AM
Prep Date:	9/4/2007						Instrument:		GC_E		
Analytical Method ID:	ADEC AK103 - RRO						File Name:		070910	19.D	
Prep Method ID:	3510						Dilution Fa	ctor:	1		
Prep Batch Number:	T070907005										
Report Basis:	As Received						Analyst Ini	tials:	MA		
Sample prep wt./vol:	960.00 ml						Prep Extra	act Vol:	1.00	ml	
Analyte	CASNo	Result	Flags	Units	POL	MDL				1	run #:
Residual Range Organics	n/a	ND		mg/L	0.52	0.21				•	2
<u>Surrogate</u> Squalane	<u>CASNo</u> 111-01-3	<u>Result</u> 0.043	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.0052	<u>M</u> 0.002	IDL <u>Spike</u> 1 0.052	<u>% Recov</u> 83.2	<u>LCL</u> 50	<u>UCL</u> 150	<u>run #:</u> 2
The following test was	conducted by: Analytica -	Thornton									
Lab Sample Number:	A0708454-01E						Analysis D	ate:	9/10/20	07 4:	02:39PM
Prep Date: 9/4/2007							Instrument:		GC_E		
Analytical Method ID:	thod ID: ADEC AK102 - DRO				File Name:			0709100)7.D		
Prep Method ID:	3510						Dilution Fa	ctor:	1		
Prep Batch Number:	T070907004										
Report Basis:	As Received						Analyst Ini	tials:	MA		
Sample prep wt./vol:	960.00 ml						Prep Extra	act Vol:	1.00	ml	
<u>Analyte</u> Diesel Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.10	<u>MDL</u> 0.0062	2			<u>]</u>	run #: 2
<u>Surrogate</u> o-Terphenyl	<u>CASNo</u> 84-15-1	<u>Result</u> 0.020	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00069	<u>M</u> 0.003	IDL <u>Spike</u> 8 0.052	<u>% Recov</u> 38.6	<u>LCL</u> 50	<u>UCL</u> 120	<u>run #:</u> 2 LOW
The following test was	conducted by: Analytica -	· Thornton									
Lab Sample Number:	A0708454-01A						Analysis D	ate:	9/20/20	07 7:	16:00PM
Prep Date:	8/31/2007						Instrument:		MS1BN	A	
Analytical Method ID:	625 - Base-Neutrals and	Acids by G	C/MS - 1	PAH			File Name:		070920	13.D	
Prep Method ID:	LLE						Dilution Fa	ctor:	1		
Prep Batch Number:	T070905022										
Report Basis:	As Received						Analyst Ini	tials:	sm		
Sample prep wt./vol:	1,050.00 ml						Prep Extra	act Vol:	2.00	ml	
Analyte Acenaphthene	<u>CASNo</u> 83-32-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 4.8	<u>MDL</u> 0.43				1	run #: 1
Acenaphthylene	208-96-8	ND		ug/L	4.8	0.49					
Anthracene	120-12-7	ND		ug/L	4.8	0.41					
Benzo(a)anthracene	56-55-3	ND		ug/L	4.8	0.32					
Benzo(a)pyrene	50-32-8	ND		ug/L	4.8	0.25					
Benzo(b)fluoranthene	205-99-2	ND		ug/L	4.8	0.27					
Benzo(g,h,i)perylene	191-24-2	ND		ug/L	4.8	0.37					

Detailed Ana	Detailed Analytical Report						Analytica Alaska Inc.						
Workorder (SDG):	A0708454												
Project:	Colville Rive	r Study 20	07										
Client:	Michael Bak	er Jr Inc											
Client Project Numbe	r: Colville Rive	r Study 20	07										
Report Section	: Clien	t Samp	le Re	port									
Client Sample Name:	M0313	I -											
Matrix:	Aqueous					C	Collection D	ate:	8/28/2007	2:00:00PM			
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID: Prep Batch Number:	A0708454-01A 8/31/2007 625 - Base-Neutrals and LLE T070905022	Acids by G	C/MS - I	РАН			Analysis D Instrument File Name: Dilution Fa	ate: : actor:	9/20/20 MS1BN 070920 1	07 7:16:00PM NA 13.D			
Report Basis: Sample prep wt./vol:	As Received 1,050.00 ml						Analyst Ini Prep Extra	itials: act Vol:	sm 2.00	ml			
<u>Analyte</u> Benzo(k)fluoranthene	<u>CASNo</u> 207-08-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 4.8	<u>MDL</u> 0.36	Ĩ			<u>run #:</u> 1			
Chrysene	218-01-9	ND		ug/L	4.8	0.19							
Dibenzo(a,h)anthracene	53-70-3	ND		ug/L	4.8	0.32							
Fluoranthene	206-44-0	ND		ug/L	4.8	0.48							
Fluorene	86-73-7	ND		ug/L	4.8	0.45							
Indeno(1,2,3-cd)pyrene	193-39-5	ND		ug/L	4.8	0.21							
Naphthalene	91-20-3	ND		ug/L	9.5	0.59							
Phenanthrene	85-01-8	ND		ug/L	4.8	0.41							
Pyrene	129-00-0	ND		ug/L	4.8	0.38							
<u>Surrogate</u> 2-Fluorobiphenyl	<u>CASNo</u> 321-60-8	<u>Result</u> 55	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 4.8	<u>M</u> 0.27	IDL <u>Spike</u> 95	<u>% Recov</u> 57.5	<u>LCL</u> 43	<u>UCL</u> <u>run #:</u> 116 1			
D14-Terphenyl	92-94-4D	42		ug/L	4.8	0.11	95	43.7	33	141			
D5-Nitrobenzene	98-95-3D	68		ug/L	4.8	0.20	95	71.9	35	114			
The following test was Lab Sample Number: Prep Date: Analytical Method ID:	conducted by: Analytica A0708454-01D 9/10/2007 SW6010B - ICP - RCR.	- Thornton A					Analysis D Instrument File Name:	ate:	9/11/20 ICP_2 E09117	07 12:18:00PM			
Prep Method ID:	3010_ICP						Dilution Fa	actor:	1				
Prep Batch Number:	T070910011												
Report Basis:	As Received						Analyst Ini	itials:	rm				
Sample prep wt./vol:	50.00 ml						Prep Extra	act Vol:	50.00	ml			
Analyte Arsenic	<u>CASNo</u> 7440-38-2	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.10	<u>MDL</u> 0.015	;			<u>run #:</u> 1			
Barium	7440-39-3	0.25		mg/L	0.010	0.0001	6						
Cadmium	7440-43-9	ND		mg/L	0.0060	0.0005	51						
Chromium	7440-47-3	ND		mg/L	0.010	0.001	8						
Lead	7439-92-1	ND		mg/L	0.050	0.011							
Selenium	7784-49-2	ND		mg/L	0.10	0.026	5						
Silver	7440-22-4	ND		mg/L	0.015	0.0006	66						

Detailed Ana	lytical Report				An	alytic	a Alaska Ir	nc.		
Workorder (SDG):	A0708454									
Project:	Colville Rive	r Study 20	07							
Client:	Michael Bak	er Jr Inc								
Client Project Number	r: Colville Rive	r Study 20	07							
Report Section	: Clien	t Samp	le Re	port						
Client Sample Name:	M9313]							
Matrix:	Aqueous					С	Collection Da	ate:	8/28/2007	2:00:00PM
Lab Sample Number: Prep Date: Analytical Method ID:	A0708454-01D 9/14/2007 SW7470A - Mercury in 7470A	Liquid Was	te by CV	'AA - T	fotal Hg		Analysis Da Instrument: File Name:	ate:	9/14/200 CVAA_ B070914	07 5:37:58PM 1 4W.W
Prep Method ID.	7470A T070014007						Dilution Fa		1	
Report Basis: Sample prep wt./vol:	As Received 30.00 ml						Analyst Ini Prep Extra	tials: act Vol:	DL 30.00	ml
Analyte Mercury	<u>CASNo</u> 7439-97-6	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00020	<u>MDL</u> 0.00005	50			<u>run #:</u> 1
The following test was	conducted by: Analytica	- Thornton								
Lab Sample Number: Prep Date: Analytical Method ID:	A0708454-01B 9/11/2007 1664 Hexane Extractab	le Material -	TPH w/	SGT			Analysis Da Instrument: File Name:	ate:	9/11/200 SCALE	07 11:00:00AM
Prep Method ID:	1664_WG						Dilution Fa	ctor:	1	
Prep Batch Number: Report Basis: Sample prep wt./vol:	T070911025 As Received 1,040.00 ml						Analyst Ini Prep Extra	tials: act Vol:	L. Friedn 1.00	nan/G. Yates ml
<u>Analyte</u> Hexane-Extractable Mater	<u>CASNo</u> ial na	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 4.8	<u>MDL</u> 1.4				<u>run #:</u> 1
The following test was	conducted by: Analytica	- Thornton								
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID:	A0708454-01C 9/10/2007 602 - Purgeable Aromat P&TWater	ics by GC/P	ID - BTI	EX & Cl	hlorobenze	enes	Analysis Da Instrument: File Name: Dilution Fa	ate: ctor:	9/11/200 GC_B 0709102 1	07 8:42:00AM 26.D
Prep Batch Number: Report Basis:	T070919008 As Received						Analyst Ini	tials:	RA	
Sample prep wt./vol:	5.00 ml						Prep Extra	act Vol:	5.00	ml
<u>Analyte</u> 1,2-Dichlorobenzene	<u>CASNo</u> 95-50-1	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 1.0	<u>MDL</u> 0.22				<u>run #:</u> 1
1,3-Dichlorobenzene	541-73-1	ND		ug/L	1.0	0.17				
1,4-Dichlorobenzene	106-46-7	ND		ug/L	1.0	0.21				
Benzene	71-43-2	ND		ug/L	1.0	0.074				
Chlorobenzene	108-90-7	ND		ug/L	1.0	0.19				
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088				
Toluene	108-88-3	ND		ug/L	1.0	0.078				
Xylenes, Total	1330-20-7	ND		ug/L	2.0	0.20				
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 26	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 0.50	<u>M</u> 0.12	DL <u>Spike</u> 27	<u>% Recov</u> 95.1	<u>LCL</u> 80	<u>UCL</u> <u>run #:</u> 120 1

Detailed Analytical Report

Analytica Alaska Inc.

Workorder (SDG):	A0708454				2			
Project:	Colville Rive	er Study 200	7					
Client:	Michael Bak	er Jr Inc						
Client Project Number Report Section	r: Colville Rive Colville Rive	er Study 200 It Sample	o7 e Report					
Client Sample Name:	M9313							
Matrix:	Aqueous				Collection Dat	e:	8/28/2007	2:00:00PM
Lab Sample Number:	A0708454-01C				Analysis Dat	te:	9/11/20	07 8:42:00AM
Prep Date:	9/10/2007				Instrument:		GC_B	
Analytical Method ID:	ADEC AK101 - GRO				File Name:		0709102	26.D
Prep Method ID:	P&TWater				Dilution Fac	tor:	1	
Prep Batch Number:	T070919007							
Report Basis:	As Received				Analyst Initi	als:	RA	
Sample prep wt./vol:	5.00 ml				Prep Extrac	et Vol:	5.00	ml
<u>Analyte</u> Gasoline Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u> <u>Units</u> ug/L	<u>PQL</u> 100	<u>MDL</u> 21			<u>run #:</u> 1
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 25	<u>Flags</u> <u>Units</u> ug/L	<u>PQL</u> 1.5	<u>MDL</u> <u>Spike</u> 0.50 27	<u>% Recov</u> 93.6	<u>LCL</u> 50	<u>UCL</u> <u>run #:</u> 150 1

Detailed Ana	lytical Report	Analytica Alaska Inc.									
Workorder (SDG):	A0708454										
Project:	Colville Rive	r Study 20	07								
Client:	Michael Bak	er Jr Inc									
Client Project Number	r: Colville Rive	r Study 20	07								
Report Section	: Clien	t Samp	le Rej	port							
Client Sample Name:	L9323										
Matrix:	Aqueous					C	Collection Da	ate:	8/28/2007	6:00:0	00PM
The following test was	conducted by: Analytica -	Thornton									
Lab Sample Number:	A0708454-02F						Analysis D	ate:	9/11/200)7 2:4	43:58AM
Prep Date:	9/4/2007						Instrument	:	GC_E		
Analytical Method ID:	ADEC AK103 - RRO						File Name:		0709102	20.D	
Prep Method ID:	3510						Dilution Fa	actor:	1		
Prep Batch Number:	T070907005										
Report Basis:	As Received						Analyst Ini	itials:	MA		
Sample prep wt./vol:	960.00 ml						Prep Extra	act Vol:	1.00	ml	
Analyte	CASNo	Result	Flags	Units	POL	MDL				т	run #:
Residual Range Organics	n/a	ND	<u>1 10_5</u>	mg/L	0.52	0.21				-	2
<u>Surrogate</u> Squalane	<u>CASNo</u> 111-01-3	<u>Result</u> 0.043	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.0052	<u>M</u> 0.002	DL <u>Spike</u> 1 0.052	<u>% Recov</u> 81.8	<u>LCL</u> 50	<u>UCL</u> 150	<u>run #:</u> 2
The following test was	conducted by: Analytica -	Thornton									
Lab Sample Number:	A0708454-02E						Analysis D	ate:	9/8/2007	7 2:39	9:08AM
Prep Date: 9/4/2007							Instrument	:	GC_E		
Analytical Method ID:	ADEC AK102 - DRO				File Name:			0709071	5.D		
Prep Method ID:	3510						Dilution Fa	actor:	1		
Prep Batch Number:	T070907004										
Report Basis:	As Received						Analyst Ini	itials:	MAG		
Sample prep wt./vol:	960.00 ml						Prep Extra	act Vol:	1.00	ml	
<u>Analyte</u> Diesel Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.10	<u>MDL</u> 0.0062	2			<u>1</u>	r un #: 1
Surrogate o-Terphenyl	<u>CASNo</u> 84-15-1	<u>Result</u> 0.027	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00069	<u>M</u> 0.003	IDL <u>Spike</u> 8 0.052	<u>% Recov</u> 52.1	<u>LCL</u> 50	<u>UCL</u> 120	<u>run #:</u> 1
The following test was	conducted by: Analytica -	- Thornton									
Lab Sample Number:	A0708454-02A						Analysis D	ate:	9/20/200)7 7::	53:00PM
Prep Date:	8/31/2007						Instrument	:	MS1BN	Α	
Analytical Method ID:	625 - Base-Neutrals and	Acids by G	C/MS - I	РАН			File Name:		0709201	4.D	
Prep Method ID:	LLE						Dilution Fa	actor:	1		
Prep Batch Number:	T070905022										
Report Basis:	As Received						Analyst Ini	itials:	sm		
Sample prep wt./vol:	1,035.00 ml						Prep Extra	act Vol:	2.00	ml	
<u>Analyte</u> Acenaphthene	<u>CASNo</u> 83-32-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 4.8	<u>MDL</u> 0.43				<u>1</u>	r un #: 1
Acenaphthylene	208-96-8	ND		ug/L	4.8	0.49					
Anthracene	120-12-7	ND		ug/L	4.8	0.42					
Benzo(a)anthracene	56-55-3	ND		ug/L	4.8	0.32					
Benzo(a)pyrene	50-32-8	ND		ug/L	4.8	0.25					
Benzo(b)fluoranthene	205-99-2	ND		ug/L	4.8	0.28					
Benzo(g,h,i)perylene	191-24-2	ND		ug/L	4.8	0.37					

Detailed Ana	Detailed Analytical Report						Analytica Alaska Inc.								
Workorder (SDG):	A0708454														
Project:	Colville Rive	er Study 20	007												
Client:	Michael Bak	er Jr Inc													
Client Project Numbe	er: Colville Rive	er Study 20	007												
Report Section	: Clien	t Samp	le Re	port											
Client Sample Name:	1.9323	I]												
Matrix:	Aqueous					C	Collection D	ate:	8/28/2007	6:00:0	00PM				
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID: Prep Batch Number:	A0708454-02A 8/31/2007 625 - Base-Neutrals and LLE T070905022	l Acids by G	C/MS -]	РАН			Analysis D Instrument File Name: Dilution Fa	Date: : : actor:	9/20/20 MS1BN 070920 1	07 7:5 JA 14.D	53:00PM				
Report Basis: Sample prep wt./vol:	As Received 1,035.00 ml						Analyst Ini Prep Extra	itials: act Vol:	sm 2.00	ml					
<u>Analyte</u> Benzo(k)fluoranthene	<u>CASNo</u> 207-08-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 4.8	<u>MDL</u> 0.37				<u>r</u>	• un #: 1				
Chrysene	218-01-9	ND		ug/L	4.8	0.19									
Dibenzo(a,h)anthracene	53-70-3	ND		ug/L	4.8	0.32									
Fluoranthene	206-44-0	ND		ug/L	4.8	0.49									
Fluorene	86-73-7	ND		ug/L	4.8	0.46									
Indeno(1,2,3-cd)pyrene	193-39-5	ND		ug/L	4.8	0.22									
Naphthalene	91-20-3	ND		ug/L	9.7	0.60									
Phenanthrene	85-01-8	ND		ug/L	4.8	0.42									
Pyrene	129-00-0	ND		ug/L	4.8	0.38									
<u>Surrogate</u> 2-Fluorobiphenyl	<u>CASNo</u> 321-60-8	<u>Result</u> 49	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 4.8	<u>M</u> 0.27	IDL <u>Spike</u> 97	<u>% Recov</u> 50.8	$\frac{LCL}{43}$	<u>UCL</u> 116	<u>run #:</u> 1				
D14-Terphenyl	92-94-4D	31		ug/L	4.8	0.11	97	32.6	33	141	LOW				
D5-Nitrobenzene	98-95-3D	63		ug/L	4.8	0.20	97	65.6	35	114					
The following test was	conducted by: Analytica	- Thornton													
Lab Sample Number: Prep Date: Analytical Method ID:	A0708454-02D 9/10/2007 SW6010B - ICP - RCR	А					Analysis D Instrument File Name:	ate:	9/11/20 ICP_2 E09117	07 12:: A	23:00PM				
Prep Method ID:	3010_ICP						Dilution Fa	actor:	1						
Prep Batch Number:	T070910011														
Report Basis: Sample prep wt /vol:	As Received 50.00 ml						Analyst Ini Pren Extra	itials: act Vol:	rm 50.00	ml					
Sample prep wi./voi.	50.00 mi	-					TTep LAU		50.00	1111					
<u>Analyte</u> Arsenic	<u>CASNo</u> 7440-38-2	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.10	<u>MDL</u> 0.015	5			<u>r</u>	• un #: 1				
Barium	7440-39-3	0.053		mg/L	0.010	0.0001	.6								
Cadmium	7440-43-9	ND		mg/L	0.0060	0.0005	01								
Chromium	7440-47-3	ND		mg/L	0.010	0.001	8								
Lead	7439-92-1	ND		mg/L	0.050	0.011									
Selenium	7784-49-2	ND		mg/L	0.10	0.026)								
Silver	7440-22-4	ND		mg/L	0.015	0.0006	6								

Detailed Ana	lytical Report				An	alytic	a Alaska I	nc.			
Workorder (SDG):	A0708454										
Project:	Colville Rive	r Study 20	07								
Client:	Michael Bak	er Jr Inc									
Client Project Number	r: Colville Rive	r Study 20	07								
Report Section	: Clien	t Samp	le Re	port							
Client Sample Name:	L9323										
Matrix:	Aqueous					С	ollection D	ate:	8/28/2007	6:00:0	0PM
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID:	A0708454-02D 9/14/2007 SW7470A - Mercury in 7470A	Liquid Was	te by CV	'AA - T	otal Hg		Analysis D Instrument File Name: Dilution Fa	ate: : actor:	9/14/200 CVAA_ B070914 1	07 5:4: 1 4W.W	5:10PM
Prep Batch Number: Report Basis: Sample prep wt./vol:	T070914007 As Received 30.00 ml						Analyst Ini Prep Extra	itials: act Vol:	DL 30.00	ml	
<u>Analyte</u> Mercury	<u>CASNo</u> 7439-97-6	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00020	<u>MDL</u> 0.00005	50			<u>rı</u>	<u>ın #:</u> 1
The following test was	conducted by: Analytica -	- Thornton									
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID:	A0708454-02B 9/11/2007 1664 Hexane Extractabl 1664_WG	le Material -	TPH w/	SGT			Analysis D Instrument File Name: Dilution Fa	eate: : actor:	9/11/200 SCALE 1	07 11:0	0:00AM
Prep Batch Number: Report Basis: Sample prep wt./vol:	1070911025 As Received 1,030.00						Analyst Ini Prep Extra	itials: act Vol:	L. Friedn 1.00	nan/G. Y ml	ates
<u>Analyte</u> Hexane-Extractable Materi	<u>CASNo</u> ial na	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 4.9	<u>MDL</u> 1.4				<u>rı</u>	<u>in #:</u> 1
The following test was Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID: Prep Batch Number:	conducted by: Analytica A0708454-02C 9/10/2007 602 - Purgeable Aromati P&TWater T070919008	- Thornton	ID - BTI	EX & Ch	nlorobenze	enes	Analysis D Instrument File Name: Dilution Fa	Pate:	9/11/200 GC_B 0709102 1	07 9:19 27.D	9:00AM
Report Basis: Sample prep wt./vol:	As Received 5.00 ml						Analyst Ini Prep Extra	itials: act Vol:	RA 5.00	ml	
Analyte 1,2-Dichlorobenzene	<u>CASNo</u> 95-50-1	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 1.0	<u>MDL</u> 0.22	1			<u>rı</u>	<u>ın #:</u> 1
1,3-Dichlorobenzene	541-73-1	ND		ug/L	1.0	0.17					
1,4-Dichlorobenzene	106-46-7	ND		ug/L	1.0	0.21					
Benzene	71-43-2	ND		ug/L	1.0	0.074					
Chlorobenzene	108-90-7	ND		ug/L	1.0	0.19					
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088					
Toluene	108-88-3	ND		ug/L	1.0	0.078					
Xylenes, Total	1330-20-7	ND		ug/L	2.0	0.20					
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 27	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 0.50	<u>M</u> 0.12	DL <u>Spike</u> 27	<u>% Recov</u> 98.9	<u>LCL</u> 80	<u>UCL</u> 120	<u>run #:</u> 1

Detailed Analytical Report

Analytica Alaska Inc.

Workorder (SDG):	A0708454							
Project:	Colville Rive	er Study 200)7					
Client:	Michael Bak	er Jr Inc						
Client Project Number Report Section	r: Colville Rive : Clien	er Study 200 t Sample	o7 e Report					
Client Sample Name:	L9323							
Matrix:	Aqueous				Collection Date:		8/28/2007	6:00:00PM
Lab Sample Number:	A0708454-02C				Analysis Date:	:	9/11/20	07 9:19:00AM
Prep Date:	9/10/2007				Instrument:		GC_B	
Analytical Method ID:	ADEC AK101 - GRO				File Name:		070910	27.D
Prep Method ID:	P&TWater				Dilution Facto	r:	1	
Prep Batch Number:	T070919007							
Report Basis:	As Received				Analyst Initial	s:	RA	
Sample prep wt./vol:	5.00 ml				Prep Extract	Vol:	5.00	ml
<u>Analyte</u> Gasoline Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u> <u>Units</u> ug/L	<u>PQL</u> 100	<u>MDL</u> 21			<u>run #:</u> 1
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 25	<u>Flags</u> <u>Units</u> ug/L	<u>PQL</u> 1.5	<u>MDL</u> <u>Spike</u> <u>9</u> 0.50 27	<u>% Recov</u> 93.8	<u>LCL</u> 50	<u>UCL</u> <u>run #:</u> 150 1

Detailed Ana	lytical Report				Ar	nalytic	a Alaska Ir	nc.			
Workorder (SDG):	A0708454										
Project:	Colville Rive	r Study 20	07								
Client:	Michael Bak	er Jr Inc									
Client Project Number	r: Colville Rive	r Study 20	07								
Report Section	: Clien	t Samp	le Rej	port							
Client Sample Name:	L9324										
Matrix:	Aqueous					C	Collection Da	ite:	8/28/2007	7:30:0	00PM
The following test was	conducted by: Analytica -	- Thornton									
Lab Sample Number:	A0708454-03F						Analysis Da	ate:	9/11/200)7 3:3	3:13AM
Prep Date:	9/4/2007						Instrument:		GC_E		
Analytical Method ID:	ADEC AK103 - RRO						File Name:		0709102	21.D	
Prep Method ID:	3510						Dilution Fa	ctor:	1		
Prep Batch Number:	T070907005										
Report Basis:	As Received						Analyst Init	tials:	MA		
Sample prep wt./vol:	960.00 ml						Prep Extra	et Vol:	1.00	ml	
<u>Analyte</u> Residual Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.52	<u>MDL</u> 0.21				<u>r</u>	<u>un #:</u> 2
<u>Surrogate</u> Squalane	<u>CASNo</u> 111-01-3	<u>Result</u> 0.041	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.0052	<u>M</u> 0.002	IDL <u>Spike</u> 1 0.052	<u>% Recov</u> 79.2	<u>LCL</u> 50	<u>UCL</u> 150	<u>run #:</u> 2
The following test was	conducted by: Analytica -	Thornton									
Lab Sample Number:	A0708454-03E						Analysis Da	ate:	9/8/2007	7 3:28	:03AM
Prep Date:	9/4/2007						Instrument:		GC_E		
Analytical Method ID:	ADEC AK102 - DRO						File Name:		0709071	6.D	
Prep Method ID:	3510						Dilution Fa	ctor:	1		
Prep Batch Number:	T070907004										
Report Basis:	As Received						Analyst Init	tials:	MAG		
Sample prep wt./vol:	930.00 ml						Prep Extra	et Vol:	1.00	ml	
<u>Analyte</u> Diesel Range Organics	<u>CASNo</u> n/a	<u>Result</u> 0.11	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.11	<u>MDL</u> 0.0064	4			<u>r</u>	un #: 1
Surrogate o-Terphenyl	<u>CASNo</u> 84-15-1	<u>Result</u> 0.029	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00072	<u>M</u> 0.003	<u>IDL</u> <u>Spike</u> 9 0.054	<u>% Recov</u> 53.9	<u>LCL</u> 50	<u>UCL</u> 120	<u>run #:</u> 1
The following test was	conducted by: Analytica -	- Thornton									
Lab Sample Number:	A0708454-03A						Analysis Da	ate:	9/20/200)7 8:3	1:00PM
Prep Date:	8/31/2007						Instrument:		MS1BN	A	
Analytical Method ID:	625 - Base-Neutrals and	Acids by G	C/MS - I	PAH			File Name:		0709201	5.D	
Prep Method ID:	LLE						Dilution Fa	ctor:	1		
Prep Batch Number:	T070905022										
Report Basis:	As Received						Analyst Init	tials:	sm		
Sample prep wt./vol:	1,000.00 ml						Prep Extra	et Vol:	2.00	ml	
<u>Analyte</u> Acenaphthene	<u>CASNo</u> 83-32-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.0	<u>MDL</u> 0.45				<u>r</u>	un #: 1
Acenaphthylene	208-96-8	ND		ug/L	5.0	0.51					
Anthracene	120-12-7	ND		ug/L	5.0	0.44					
Benzo(a)anthracene	56-55-3	ND		ug/L	5.0	0.33					
Benzo(a)pyrene	50-32-8	ND		ug/L	5.0	0.26					
Benzo(b)fluoranthene	205-99-2	ND		ug/L	5.0	0.29					
Benzo(g,h,i)perylene	191-24-2	ND		ug/L	5.0	0.39					

Detailed Ana	lytical Report				Aı	nalytic	a Alaska I	nc.		
Workorder (SDG):										
Project:	Colville Rive	r Study 20	007							
Client:	Michael Bak	er Jr Inc								
Client Project Numbe	r: Colville Rive	r Study 20	007							
Report Section	: Clien	t Samp	le Re	port						
Client Sample Name:	L9324	1								
Matrix:	Aqueous					C	collection D	ate:	8/28/2007	7:30:00PM
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID: Prep Batch Number:	A0708454-03A 8/31/2007 625 - Base-Neutrals and LLE T070905022	Acids by G	C/MS -]	PAH			Analysis D Instrument File Name: Dilution Fa	ate: : actor:	9/20/20 MS1BN 070920 1	07 8:31:00PM IA 15.D
Report Basis: Sample prep wt./vol:	As Received 1,000.00 ml						Analyst Ini Prep Extra	tials: act Vol:	sm 2.00	ml
<u>Analyte</u> Benzo(k)fluoranthene	<u>CASNo</u> 207-08-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.0	<u>MDL</u> 0.38	1			<u>run #:</u> 1
Chrysene	218-01-9	ND		ug/L	5.0	0.20				
Dibenzo(a,h)anthracene	53-70-3	ND		ug/L	5.0	0.34				
Fluoranthene	206-44-0	ND		ug/L	5.0	0.51				
Fluorene	86-73-7	ND		ug/L	5.0	0.48				
Indeno(1,2,3-cd)pyrene	193-39-5	ND		ug/L	5.0	0.22				
Naphthalene	91-20-3	ND		ug/L	10	0.62				
Phenanthrene	85-01-8	ND		ug/L	5.0	0.43				
Pyrene	129-00-0	ND		ug/L	5.0	0.40				
<u>Surrogate</u> 2-Fluorobiphenyl	<u>CASNo</u> 321-60-8	<u>Result</u> 56	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.0	<u>M</u> 0.28	DL <u>Spike</u> 100	<u>% Recov</u> 56.2	<u>LCL</u> 43	<u>UCL</u> <u>run #:</u> 116 1
D14-Terphenyl	92-94-4D	33		ug/L	5.0	0.12	100	33.2	33	141
D5-Nitrobenzene	98-95-3D	70		ug/L	5.0	0.21	100	70.2	35	114
The following test was	conducted by: Analytica	- Thornton					Analysis D	ate.	9/11/20	07 12·28·00PM
Prep Date: Analytical Method ID:	9/10/2007 SW6010B - ICP - RCR	A					Instrument File Name:		ICP_2 E09117	A
Prep Method ID [.]	3010 ICP						Dilution Fa	nctor.	1	
Prep Batch Number	T070910011						21141101111		-	
Report Basis:	As Received						Analyst Ini	tials:	rm	
Sample prep wt./vol:	50.00 ml						Prep Extra	act Vol:	50.00	ml
<u>Analyte</u> Arsenic	<u>CASNo</u> 7440-38-2	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.10	<u>MDL</u> 0.015				<u>run #:</u> 1
Barium	7440-39-3	0.058		mg/L	0.010	0.0001	6			
Cadmium	7440-43-9	ND		mg/L	0.0060	0.0005	1			
Chromium	7440-47-3	0.013		mg/L	0.010	0.0018	3			
Lead	7439-92-1	ND		mg/L	0.050	0.011				
Selenium	7784-49-2	ND		mg/L	0.10	0.026				
Silver	7440-22-4	ND		mg/L	0.015	0.0006	6			

Detailed Ana	lytical Report				An	nalytic	a Alaska I	nc.			
Workorder (SDG):	der (SDG): A0708454										
Project:	Colville Rive	er Study 20	07								
Client:	Michael Bak	er Jr Inc									
Client Project Number	r: Colville Rive	er Study 20	07								
Report Section	: Clien	t Samp	le Re	port							
Client Sample Name:	L9324	-									
Matrix:	Aqueous					С	collection D	ate:	8/28/2007	7:30:00PM	
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID:	A0708454-03D 9/14/2007 SW7470A - Mercury in 7470A	Liquid Was	te by CV	'AA - T	`otal Hg		Analysis D Instrument File Name: Dilution Fa	Date: : : actor:	9/14/200 CVAA_ B070914 1	07 5:47:19PM 1 4W.W	1
Prep Batch Number: Report Basis: Sample prep wt./vol:	T070914007 As Received 30.00 ml						Analyst Ini Prep Extra	itials: act Vol:	DL 30.00	ml	
<u>Analyte</u> Mercury	<u>CASNo</u> 7439-97-6	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00020	<u>MDL</u> 0.00005	50			<u>run #:</u> 1	
The following test was	conducted by: Analytica	- Thornton									
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID:	A0708454-03B 9/11/2007 1664 Hexane Extractab 1664_WG	le Material -	TPH w/	SGT			Analysis D Instrument File Name: Dilution Fa	Pate: : : actor:	9/11/200 SCALE 1	07 11:00:00A	М
Prep Batch Number: Report Basis: Sample prep wt./vol:	T070911025 As Received 1,040.00 ml						Analyst Ini Prep Extra	itials: act Vol:	L. Friedn 1.00	nan/G. Yates ml	
<u>Analyte</u> Hexane-Extractable Materi	<u>CASNo</u> ial na	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 4.8	<u>MDL</u> 1.4				<u>run #:</u> 1	
The following test was Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID: Prep Batch Number:	conducted by: Analytica A0708454-03C 9/10/2007 602 - Purgeable Aromat P&TWater T070919008	- Thornton ics by GC/P	ID - BTI	EX & CI	hlorobenzo	enes	Analysis D Instrument File Name: Dilution Fa	Date: : : actor:	9/11/200 GC_B 0709102 1	07 9:56:00AN 28.D	М
Report Basis: Sample prep wt./vol:	As Received 5.00 ml						Analyst Ini Prep Extra	itials: act Vol:	RA 5.00	ml	
<u>Analyte</u> 1,2-Dichlorobenzene	<u>CASNo</u> 95-50-1	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 1.0	<u>MDL</u> 0.22				<u>run #:</u> 1	
1,3-Dichlorobenzene	541-73-1	ND		ug/L	1.0	0.17					
1,4-Dichlorobenzene	106-46-7	ND		ug/L	1.0	0.21					
Benzene	71-43-2	ND		ug/L	1.0	0.074					
Chlorobenzene	p baten Number: 10/0914007 mple prep wt./vol: 30.00 ml $Prep Extract Vol: 30.00 ml$ $\frac{bxte}{rarry}$ $\frac{CASNn}{7339:97.6}$ $\frac{Result}{ND}$ $\frac{Flags}{Ingl}$ $\frac{Inits}{mgl}$ $\frac{POL}{0.00020}$ $\frac{MDL}{0.00020}$ $\frac{MDL}{II}$ $\frac{Prep Extract Vol: 30.00 ml$ II $\frac{1}{I}$ $\frac{1}{$										
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088					
Toluene	108-88-3	ND		ug/L	1.0	0.078					
Xylenes, Total	1330-20-7	ND		ug/L	2.0	0.20					
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 27	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 0.50	<u>M</u> 0.12	DL Spike 27	<u>% Recov</u> 99.0	<u>LCL</u> 80	<u>UCL</u> <u>run #:</u> 120 1	

Detailed Analytical Report

Analytica Alaska Inc.

Workorder (SDG): Project:	A0708454 Colville Rive	r Study 2007	,	-				
Client: Client Project Number Report Section	Michael Bak r: Colville Rive : Clien	er Jr Inc r Study 2007 t Sample	Report					
Client Sample Name:	L9324				1			
Matrix:	Aqueous				Collection Da	ite:	8/28/2007	7:30:00PM
Lab Sample Number: Prep Date: Analytical Method ID:	A0708454-03C 9/10/2007 ADEC AK101 - GRO				Analysis Da Instrument: File Name:	ate:	9/11/200 GC_B 0709102	07 9:56:00AM 28.D
Prep Method ID: Prep Batch Number:	P&TWater T070919007				Dilution Fa	ctor:	1	
Report Basis: Sample prep wt./vol:	As Received 5.00 ml				Analyst Init Prep Extra	ials: ct Vol:	RA 5.00	ml
<u>Analyte</u> Gasoline Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u> <u>Units</u> ug/L	<u>PQL</u> <u>MI</u> 100 2	<u>DL</u> 21			<u>run #:</u> 1
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> <u>1</u> 25	<u>Flags</u> <u>Units</u> ug/L	<u>POL</u> 1.5 0.	<u>MDL</u> <u>Spike</u> .50 27	<u>% Recov</u> 93.1	<u>LCL</u> 50	<u>UCL</u> <u>run #:</u> 150 1

Detailed Ana	lytical	Report				Ar	nalytic	a Alaska Iı	nc.			
Workorder (SDG):	A070	8454										
Project:		Colville I	River Study 200)7								
Client:		Michael	Baker Jr Inc									
Client Project Number	r:	Colville I	River Study 200)7								
Report Section		Cl	ient Sampl	e Re	port							
Client Sample Name:		Trip	Blank]								
Matrix:	Aq	ueous					С	ollection Da	ate:	8/28/2007	2:00:	00PM
The following test was	conducte	d by: Analy	rtica - Thornton									
Lab Sample Number:	A07084	454-04A						Analysis D	ate:	9/11/20	07 7:2	28:00AM
Prep Date:	9/10/20	007						Instrument		GC_B		
Analytical Method ID:	602 - Pu	irgeable Arc	omatics by GC/PI	D - BTI	EX			File Name:		070910	24.D	
Prep Method ID:	P&TW	ater					Dilution Fa	ctor:	1			
Prep Batch Number:	T07091	9008										
Report Basis:	As Rece	eived						Analyst Ini	tials:	RA		
Sample prep wt./vol:	5.00	ml						Prep Extra	act Vol:	5.00	ml	
<u>Analyte</u> 1,2-Dichlorobenzene		<u>CASNo</u> 95-50-1	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 1.0	<u>MDL</u> 0.22				<u>1</u>	r un #: 1
1,3-Dichlorobenzene		541-73-1	ND		ug/L	1.0	0.17					
1,4-Dichlorobenzene		106-46-7	ND		ug/L	1.0	0.21					
Benzene		71-43-2	ND		ug/L	1.0	0.074					
Chlorobenzene		108-90-7	ND		ug/L	1.0	0.19					
Ethylbenzene		100-41-4	ND		ug/L	1.0	0.088					
Toluene		108-88-3	ND		ug/L	1.0	0.078					
Xylenes, Total		1330-20-7	ND		ug/L	2.0	0.20					
<u>Surrogate</u> p-Bromofluorobenzene		<u>CASNo</u> 460-00-4	<u>Result</u> 25	<u>Flags</u>	<u>Units</u> ug/L	<u>POL</u> 0.50	<u>M</u> 0.12	DL <u>Spike</u> 27	<u>% Recov</u> 91.7	<u>LCL</u> 80	<u>UCL</u> 120	<u>run #:</u> 1

Detailed Ana	lytical Report			Anal	ytica En	vironn	nental Labo	oratories,	Inc.		
Workorder (SDG):	A0708454										
Project:	Colville Rive	r Study 20	07								
Client:	Michael Bak	er Jr Inc									
Client Project Number	r: Colville Rive	r Study 20	07								
Report Section	: Meth	od Blan	k Re	port							
Client Sample Name:	MB			•							
Matrix:	Aqueous					C	Collection Da	ate:	9/4/2007	12:00:0	0AM
The following test was	conducted by Analytica	Thornton									
Lab Sample Number:	T070907005-MB						Analysis D	ate:	9/10/20	07 11:	26:45PM
Prep Date:	9/4/2007						Instrument:		GC E	0, 11.	
Analytical Method ID:	ADEC AK103 - RRO						File Name:		070910	16.D	
Prep Method ID:	3510						Dilution Fa	ctor:	1		
Prep Batch Number:	T070907005										
Report Basis:	As Received						Analyst Ini	tials:	MA		
Sample prep wt./vol:	1,000.00 ml						Prep Extra	act Vol:	1.00	ml	
<u>Analyte</u> Residual Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.50	<u>MDL</u> 0.20				<u>r</u>	.un #: 2
<u>Surrogate</u> Squalane	<u>CASNo</u> 111-01-3	<u>Result</u> 0.050	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.0050	<u>M</u> 0.002	(DL <u>Spike</u> 0 0.050	<u>% Recov</u> 99.7	<u>LCL</u> 50	<u>UCL</u> 150	<u>run #:</u> 2
The following test was	conducted by: Analytica -	Thornton									
Lab Sample Number:	T070907004-MB						Analysis D	ate:	9/7/200	7 8:54	4:22PM
Prep Date:	9/4/2007						Instrument:		GC_E		
Analytical Method ID:	ADEC AK102 - DRO						File Name:		070907	08.D	
Prep Method ID:	3510						Dilution Fa	ctor:	1		
Prep Batch Number:	T070907004										
Report Basis:	As Received						Analyst Ini	tials:	MAG		
Sample prep wt./vol:	1,000.00 ml						Prep Extra	act Vol:	1.00	ml	
<u>Analyte</u> Diesel Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.10	<u>MDL</u> 0.006	0			<u>r</u>	·un #: 1
<u>Surrogate</u> o-Terphenyl	<u>CASNo</u> 84-15-1	<u>Result</u> 0.026	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00067	<u>M</u> 0.003	DL <u>Spike</u> 7 0.050	<u>% Recov</u> 52.3	<u>LCL</u> 50	<u>UCL</u> 120	<u>run #:</u> 1
The following test was	conducted by: Analytica	Thornton									
Lab Sample Number:	T070905022-MB						Analysis D	ate:	9/17/20	07 7:0	02:00PM
Prep Date:	8/31/2007						Instrument:		MS1BN	JA	
Analytical Method ID:	625 - Base-Neutrals and	Acids by G	C/MS - I	PAH			File Name:		070917	16.D	
Prep Method ID:	LLE						Dilution Fa	ctor:	1		
Prep Batch Number:	T070905022										
Report Basis:	As Received						Analyst Ini	tials:	sm		
Sample prep wt./vol:	1,000.00 ml						Prep Extra	act Vol:	2.00	ml	
<u>Analyte</u> Acenaphthene	<u>CASNo</u> 83-32-9	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.0	<u>MDL</u> 0.45				<u>r</u>	·un #: 1
Acenaphthylene	208-96-8	ND		ug/L	5.0	0.51					
Anthracene	120-12-7	ND		ug/L	5.0	0.44					
Benzo(a)anthracene	56-55-3	ND		ug/L	5.0	0.33					
Benzo(a)pyrene	50-32-8	ND		ug/L	5.0	0.26					
Benzo(b)fluoranthene	205-99-2	ND		ug/L	5.0	0.29					
Benzo(g,h,i)perylene	191-24-2	ND		ug/L	5.0	0.39					

Detailed Ana	lytical Report			Anal	ytica En	vironn	nental Lab	oratories,	Inc.		
Workorder (SDG):	A0708454										
Project:	Colville Rive	er Study 20	07								
Client:	Michael Bak	ker Jr Inc									
Client Project Numbe	r: Colville Rive	er Study 20	07								
Report Section	: Meth	od Blan	k Re	port							
Client Sample Name:	MB										
Matrix:	Aqueous					С	ollection D	ate:	8/31/2007	12:00	:00AM
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID: Prep Batch Number:	T070905022-MB 8/31/2007 625 - Base-Neutrals and LLE T070905022	l Acids by GC	C/MS - P	AH			Analysis D Instrument File Name: Dilution Fa	ate: : actor:	9/17/20 MS1B1 070917 1	007 7: NA /16.D	02:00PM
Report Basis: Sample prep wt./vol:	As Received 1,000.00 ml						Analyst Ini Prep Extra	tials: act Vol:	sm 2.00	ml	
Analvte	CASNo	Result	Flags	Units	POL	MDL					run #:
Benzo(k)fluoranthene	207-08-9	ND		ug/L	5.0	0.38					1
Chrysene	218-01-9	ND		ug/L	5.0	0.20					
Dibenzo(a,h)anthracene	53-70-3	ND		ug/L	5.0	0.34					
Fluoranthene	206-44-0	ND		ug/L	5.0	0.51					
Fluorene	86-73-7	ND		ug/L	5.0	0.48					
Indeno(1,2,3-cd)pyrene	193-39-5	ND		ug/L	5.0	0.22					
Naphthalene	91-20-3	ND		ug/L	10	0.62					
Phenanthrene	85-01-8	ND		ug/L	5.0	0.43					
Pyrene	129-00-0	ND		ug/L	5.0	0.40					
<u>Surrogate</u> 2-Fluorobiphenyl	<u>CASNo</u> 321-60-8	<u>Result</u> 54	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 5.0	<u>M</u> 0.28	DL <u>Spike</u> 100	<u>% Recov</u> 54.0	<u>v LCL</u> 43	<u>UCL</u> 116	<u>run #:</u> 1
D14-Terphenyl	92-94-4D	140		ug/L	5.0	0.12	100	140	33	141	
D5-Nitrobenzene	98-95-3D	59		ug/L	5.0	0.21	100	58.6	35	114	
The following test was	conducted by: Analytica	- Thornton									
Lab Sample Number: Prep Date: Analytical Method ID: Prep Method ID:	T070910011-MB 9/10/2007 SW6010B - ICP - RCR 3010_ICP	A					Analysis D Instrument File Name: Dilution Fa	ate: : actor:	9/11/20 ICP_2 E09117 1	007 12 7A	:03:00PM
Prep Batch Number:	T070910011										
Report Basis:	As Received						Analyst Ini	tials:	rm		
Sample prep wt./vol:	50.00 ml						Prep Extra	act Vol:	50.00	ml	
<u>Analyte</u> Arsenic	<u>CASNo</u> 7440-38-2	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>POL</u> 0.10	<u>MDL</u> 0.015					run #: 1
Barium	7440-39-3	ND		mg/L	0.010	0.0001	6				
Cadmium	7440-43-9	ND		mg/L	0.0060	0.0005	1				
Chromium	7440-47-3	ND		mg/L	0.010	0.0018	3				
Lead	7439-92-1	ND		mg/L	0.050	0.011					
Selenium	7784-49-2	ND		mg/L	0.10	0.026					
Silver	7440-22-4	ND		mg/L	0.015	0.0006	6				

Detailed Ana	lytical Report			Ana	lytica En	vironn	nental Labo	oratories,	Inc.		
Workorder (SDG):	A0708454										
Project:	Colville R	iver Study 20	07								
Client:	Michael B	aker Jr Inc									
Client Project Number	r: Colville R	iver Study 20	07								
Report Section	: Me	thod Blan	k Re	port							
Client Sample Name:	MB			•							
Matrix:	Aqueous					С	Collection Da	ate:	9/14/2007	12:00:0)0AM
Lab Sample Number: Prep Date:	T070914007-MB 9/14/2007						Analysis Da Instrument	ate:	9/14/200 CVAA)7 5:1 1	6:18PM
Analytical Method ID:	SW7470A - Mercury	in Liquid Wast	e by CV	AA -	Fotal Hg		File Name:		B07091	4W.W	
Prep Method ID:	7470A		2		C C		Dilution Fa	ctor:	1		
Prep Batch Number:	T070914007										
Report Basis:	As Received						Analyst Init	tials:	DL		
Sample prep wt./vol:	30.00 ml						Prep Extra	ct Vol:	30.00	ml	
<u>Analyte</u> Mercury	<u>CASNo</u> 7439-97-6	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 0.00020	<u>MDL</u> 0.00005	50			<u>rı</u>	un #: 1
The following test was	conducted by: Analyt	ica - Thornton									
Lab Sample Number:	T070911025-MB						Analysis Da	ate:	9/11/200	07 11:0	00:00AM
Prep Date:	9/11/2007						Instrument:		SCALE		
Analytical Method ID:	1664 Hexane Extrac	table Material -	TPH w/	SGT			File Name:				
Prep Method ID:	1664_WG						Dilution Fa	ctor:	1		
Prep Batch Number:	T070911025										
Report Basis:	As Received						Analyst Init	tials:	L. Friedn	nan/G. Y	ates
Sample prep wt./vol:	1,000.00 ml						Prep Extra	ict Vol:	1.00	ml	
<u>Analyte</u> Hexane-Extractable Materi	<u>CASNo</u> ial na	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> mg/L	<u>PQL</u> 5.0	<u>MDL</u> 1.5				<u>rı</u>	un #: 1
The following test was	conducted by: Analyt	ica - Thornton									
Lab Sample Number:	T070919008-MB						Analysis Da	ate:	9/11/200	07 6:52	2:00AM
Prep Date:	9/10/2007						Instrument:		GC_B		
Analytical Method ID:	602 - Purgeable Aron	natics by GC/PI	D - BTH	EX & C	hlorobenz	enes	File Name:		0709102	23.D	
Prep Method ID:	P&TWater						Dilution Fa	ctor:	1		
Prep Batch Number:	T070919008										
Report Basis:	As Received						Analyst Init	tials:	RA		
Sample prep wt./vol:	5.00 ml						Prep Extra	ict Vol:	5.00	ml	
<u>Analyte</u> 1,2-Dichlorobenzene	<u>CASNo</u> 95-50-1	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 1.0	<u>MDL</u> 0.22				<u>rı</u>	un #: 1
1,3-Dichlorobenzene	541-73-1	ND		ug/L	1.0	0.17					
1,4-Dichlorobenzene	106-46-7	ND		ug/L	1.0	0.21					
Benzene	71-43-2	ND		ug/L	1.0	0.074	ļ				
Chlorobenzene	108-90-7	ND		ug/L	1.0	0.19					
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088					
Toluene	108-88-3	ND		ug/L	1.0	0.078					
Xylenes, Total	1330-20-7	ND		ug/L	2.0	0.20					
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	Result 26	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 0.50	<u>M</u> 0.12	DL <u>Spike</u> 27	<u>% Recov</u> 95.0	<u>LCL</u> 80	<u>UCL</u> 120	<u>run #:</u> 1

Detailed Ana	lytical Report			Analy	rtica En	vironn	nental Labo	oratories, I	nc.		
Workorder (SDG):	A0708454										
Project:	Colville River	Study 200	7								
Client:	Michael Bake	er Jr Inc									
Client Project Number	r: Colville River	Study 200	7								
Report Section	: Metho	od Blanl	k Re	port							
Client Sample Name:	MB					Ľ					
Matuin							ollection D	ate: Q	/10/2007	12.00.00AM	
Matrix:	Aqueous							itte.)	10/2007	12.00.007	
Lab Sample Number:	T070919008-MB						Analysis D	ate:	9/11/20	07 6:52:00AN	Л
Prep Date:	9/10/2007						Instrument		GC_B		
Analytical Method ID:	602 - Purgeable Aromati	cs by GC/PIL) - BTE	EX			File Name:		070910	23.D	
Prep Method ID:	P&TWater						Dilution Fa	ctor:	1		
Prep Batch Number:	T070919008										
Report Basis:	As Received						Analyst Ini	tials:	RA		
Sample prep wt./vol:	5.00 ml						Prep Extra	act Vol:	5.00	ml	
Analyte	CASNo	Result	<u>Flags</u>	<u>Units</u>	PQL	MDL				<u>run #:</u>	
1,2-Dichlorobenzene	95-50-1	ND		ug/L	1.0	0.22				1	
1,3-Dichlorobenzene	541-73-1	ND		ug/L	1.0	0.17					
1,4-Dichlorobenzene	106-46-7	ND		ug/L	1.0	0.21					
Benzene	71-43-2	ND		ug/L	1.0	0.074					
Chlorobenzene	108-90-7	ND		ug/L	1.0	0.19					
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088					
Toluene	108-88-3	ND		ug/L	1.0	0.078					
Xylenes, Total	1330-20-7	ND		ug/L	2.0	0.20					
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 26	<u>Flags</u>	<u>Units</u> ug/L	<u>PQL</u> 0.50	<u>M</u> 0.12	DL Spike 27	<u>% Recov</u> 95.0	<u>LCL</u> 80	<u>UCL</u> <u>run #:</u> 120 1	
The fellowing test was	conducted by: Analytica	Thornton		-							
Lab Sample Number:	T070010007-MB	THOTHON					Analysis D	ata:	0/11/20	07 6.52.00 4 1	Л
Pren Date:	9/10/2007						Instrument	ale.	GC B	07 0.32.00AN	11
Analytical Method ID [.]	ADEC AK101 - GRO						File Name		070910	23 D	
Prep Method ID [.]	P&TWater						Dilution Fa	ctor.	1		
Pren Batch Number	T070919007						Diración i a		-		
Report Basis	As Received						Analyst Ini	tials [.]	RA		
Sample prep wt./vol:	5.00 ml						Prep Extra	act Vol:	5.00	ml	
<u>Analyte</u> Gasoline Range Organics	<u>CASNo</u> n/a	<u>Result</u> ND	<u>Flags</u>	<u>Units</u> ug/L	<u>POL</u> 100	<u>MDL</u> 21	-			<u>run #:</u> 1	
<u>Surrogate</u> p-Bromofluorobenzene	<u>CASNo</u> 460-00-4	<u>Result</u> 26	<u>Flags</u>	<u>Units</u> ug/L	POL 1.5	<u>M</u> 0.50	DL <u>Spike</u> 27	<u>% Recov</u> 96.5	<u>LCL</u> 50	<u>UCL</u> <u>run #:</u> 150 1	

Detailed An	alytical Rep	ort			Analytica	Environ	mental Lab	oratori	es, Inc.		
Workorder (SDG):	A0708454										
Project:	Colvi	lle River S	Study 20	07							
Client:	Mich	ael Baker	Jr Inc								
Client Project Numb	oer: Colvi	lle River S	Study 20	07							
Tests Run at: Workorder (SDG): Project: Project Number:	Analytica Envir A0708454 Colville River S	onmental 1 Study 2007	Laborator ' QI	ries - Th UALI	ornton, Co ΓΥ CON	lorado TROL	REPOR	Т			
Prep Batch:	T070907004										
				10	'S/LCSD I	REDUB1	-				
Analysis:	ADEC AK102 ·	- DRO			.5/10501	UT OKI	MB: Prep	Date:	T0709070 9/4/2007	04-MB	
MB Anal. Date:	9/7/2007 8:54:	22PM					Units	:	mg/L		
LCS Anal. Date:	9/7/2007 9:43:	43PM LO	CSD Ana	l. Date:	9/7/2007	10:33:04	APM Matri	x:	Aqueous		
<u>Analyte Name</u> Diesel Range Organi	SampResult ics ND	<u>LCSRes</u> 1.53	<u>. SDRes.</u> 1.61	<u>SPLev</u> 2.00	<u>SPDLev</u> 2.00	<u>Recov.</u> 76.5	<u>SD Recov</u> 80.5	<u>RPD</u> 5.1	<u>Recov Lim</u> 75 - 125	<u>RPDLim</u> 20	<u>Flag</u>
Prep Batch:	T070907005										
				LC	S/LCSD F	REPORT					
Analysis:	ADEC AK103 -	- RRO					MB: Prep	Date:	T0709070 9/4/2007)5-MB	
MB Anal. Date:	9/10/2007 11:2	6:45PM					Units	:	mg/L		
LCS Anal. Date:	9/11/2007 12:1	6:28AML(CSD Ana	l. Date:	9/11/2007	7 1:05:3	3AM Matri	x:	Aqueous		
Analyte Name Residual Range Orga	<u>SampResult</u> anics ND	<u>LCSRes</u> 2.15	<u>.</u> <u>SDRes.</u> 2.05	<u>SPLev</u> 2.00	SPDLev 2.00	<u>Recov.</u> 107.5	<u>SD Recov</u> 102.5	<u>RPD</u> 4.8	<u>Recov Lim</u> 60 - 120	<u>RPDLim</u> 20	<u>Flag</u>

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed Analytical Report				Analytica Environmental Laboratories, Inc.								
Workorder (SDG):	A07084	454										
Project:	(Colville River	· Study 20	07								
Client:	Ν	Michael Bake	er Jr Inc									
Client Project Numl	ber: (Colville River	• Study 20	007								
Tests Run at:	Analytica E	Environmenta	l Laborato	ries - Th	ornton, Co	lorado						
Workorder (SDG): Project:	A0708454 Colville Ri	ver Study 200)7		TV CON	ΤΡΟΙ		г				
Project Number:	T 0 T 000 T 0 T											
Prep Batch:	1070905022											
				LC	S/LCSD F	REPORT	ſ					
Analysis:	625 - Base-	Neutrals and	Acids by	GC/MS -	PAH		MB:		T07090502	22-MB		
							Prep	Date:	8/31/2007			
MB Anal. Date:	9/17/2007	7:02:00PM					Units	:	ug/L			
LCS Anal. Date:	9/17/2007	7:38:00PM 1	LCSD Ana	al. Date:	9/17/2007	8:15:0	0PM Matri	x:	Aqueous			
Analyte Name	<u>SampRe</u>	esult LCSR	es. SDRes.	SPLev	<u>SPDLev</u>	Recov.	SD Recov	<u>RPD</u>	Recov Lim	RPDLim	Flag	
Naphthalene	Ν	D 23.7	27.7	50.0	50.0	47.4	55.4	15.6	45 - 136	40		
Acenaphthylene	N	D 21.6	23.6	50.0	50.0	43.2	47.2	8.8	48 - 133	40 low,low	dup	
Acenaphthene	N	D 30.8	32.9	50.0	50.0	61.6	65.8	6.6	48 - 121	40		
Fluorene	N	D 35.0	35.4	50.0	50.0	70.0	70.8	1.1	58 - 130	40		
Phenanthrene	N	D 38.6	38.0	50.0	50.0	77.2	76.0	1.6	54 - 140	40		
Anthracene	N	D 37.4	36.8	50.0	50.0	74.8	73.6	1.6	59 - 131	40		
Fluoranthene	N	D 31.1	29.4	50.0	50.0	62.2	58.8	5.6	51 - 140	40		
Pyrene	N	D 53.5	62.0	50.0	50.0	107.0	124.0	14.7	46 - 135	40		
Benzo(a)anthracene	N	ID 42.6	44.8	50.0	50.0	85.2	89.6	5.0	58 - 118	40		
Chrysene	N	ID 45.3	47.0	50.0	50.0	90.6	94.0	3.7	55 - 139	40		
Benzo(b)fluoranther	ne N	D 38.9	39.9	50.0	50.0	77.8	79.8	2.5	41 - 133	40		
Benzo(k)fluoranther	ne N	D 42.1	43.9	50.0	50.0	84.2	87.8	4.2	60 - 160	40		
Benzo(a)pyrene	N	D 43.9	44.2	50.0	50.0	87.8	88.4	0.7	40 - 138	40		
Indeno(1,2,3-cd)pyr	ene N	D 61.1	58.7	50.0	50.0	122.2	117.4	4.0	48 - 125	40		
Dibenzo(a,h)anthrac	ene N	D 79.1	74.2	50.0	50.0	158.2	148.4	6.4	50 - 129	40 high,hig	hdup	
Benzo(g,h,1)perylene	e N	D 64.2	62.0	50.0	50.0	128.4	124.0	3.5	50 - 125	40 high		

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed An		Analytica Environmental Laboratories, Inc.								
Workorder (SDG):	A0708454									
Project:	Colville Ri	ver Study 200)7							
Client:	Michael Ba	aker Jr Inc								
Client Project Num	ber: Colville Ri	ver Study 200)7							
Tests Run at:	Analytica Environme	ntal Laborator	ies - Tho	rnton, Col	orado					
Workorder (SDG): Project: Project Number:	A0708454 Colville River Study	2007 QU	JALIT	Y CON	TROL	REPORT				
Prep Batch:	T070914007									
Analysis:	SW7470A - Mercury	in Liquid Was	LCS ste by CV	S/LCSD R VAA - To	EPORT tal Hg	ſ MB: Prep Da	ıte:	T07091400 9/14/2007	07-MB	
MB Anal Date	9/14/2007 5.16.18P	M				Units [.]		mg/L		
LCS Anal. Date:	9/14/2007 5:18:27PM	M LCSD Anal	. Date:	9/14/2007	5:20:3	1PM Matrix:		Aqueous		
<u>Analyte Name</u> Mercury	SampResult <u>LC</u> ND 0.	<u>SRes.</u> <u>SDRes.</u> 00191 0.00190	<u>SPLev</u> 0.00200	<u>SPDLev</u>) 0.0020	<u>Recov.</u> 95.5	<u>SD Recov</u> <u>H</u> 95.0 (<u>RPD</u>).5	<u>Recov Lim</u> 80 - 120	<u>RPDLim</u> 20	Flag
Prep Batch:	T070910011									
Analysis:	SW6010B - ICP - RC	SA	AMPLE	DUPLIC	ATE RE	EPORT Base San Prep Da	mple	:A0708454- 9/10/2007	03D	
Samp. Anal. Date: DUP Anal. Date:	9/11/2007 12:28:00P 9/11/2007 12:33:00P	M M				Units: Matrix:		mg/L Aqueous		
Analyte Name	SampResult	DUPRes.	RPD	RPDLir	n l	Flag				
Arsenic	ND	ND	0.0	20	_	-				
Barium	0.0578	0.0569	1.6	20						
Cadmium	ND	ND	0.0	20						
Chromium	0.0130	ND	0.0	20						
Lead	ND	ND	0.0	20						
Selenium	ND	ND	0.0	20						
Silver	ND	ND	0.0	20						
			LCS	S/LCSD R	EPORT	ſ				
Analysis:	SW6010B - ICP - RC	CRA				MB: Prep Da	ite:	T07091001 9/10/2007	1-MB	
MB Anal. Date:	9/11/2007 12:03:00P	М				Units:		mg/L		
LCS Anal. Date:	9/11/2007 12:08:00P	MLCSD Anal	l. Date:	9/11/2007	12:13:0	00PM Matrix:		Aqueous		
<u>Analyte Name</u> Arsenic	SampResult LC ND 2.	<u>SRes.</u> <u>SDRes.</u> 02 2.04	<u>SPLev</u> 2.00	<u>SPDLev</u> 2.00	<u>Recov.</u> 101.0	<u>SD Recov</u> <u>H</u> 102.0	<u>RPD</u> 1.0	<u>Recov Lim</u> 86 - 116	<u>RPDLim</u> 20	<u>Flag</u>
Barium	ND 1.	99 2.03	2.00	2.00	99.5	101.5	2.0	86 - 116	20	
Cadmium	ND 0.	0411 0.0416	0.0500	0.0500	82.2	83.2	1.2	79 - 113	20	
Chromium	ND 0.1	210 0.212	0.200	0.200	105.0	106.0 ().9	86 - 117	20	
Lead	ND 0	511 0.525	0.500	0.500	102.2	105.0	2.7	83 - 121	20	
Selenium	ND 2.	01 2.05	2.00	2.00	100.5	102.5 2	2.0	87 - 117	20	

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Detailed Analytical Report			Analytica Environmental Laboratories, Inc.							
Workorder (SDG):	A0708454									
Project:	Colville F	River Study 2	007							
Client:	Michael I	Baker Jr Inc								
Client Project Num	ber: Colville F	River Study 2	007							
Tests Run at:	Analytica Environm	ental Laborato	ories - Tho	nton, Colo	orado					
Workorder (SDG): Project: Project Number:	A0708454 Colville River Study	y 2007 Q	UALIT	Y CONT	[ROL]	REPOR'	Т			
Prep Batch:	T070910011									
			LCS	/LCSD RI	EPORT					
Analysis:	SW6010B - ICP - R	CRA				MB: Prep	Date:	T070910 9/10/200	011-MB 7	
MB Anal. Date:	9/11/2007 12:03:00	PM				Units	:	mg/L		
LCS Anal. Date:	9/11/2007 12:08:00	PMLCSD An	al. Date: 9	9/11/2007	12:13:00	OPM Matri	x:	Aqueous		
<u>Analyte Name</u> Silver	<u>SampResult</u> <u>L</u> ND (<u>CSRes.</u> <u>SDRes</u> 0.274 0.277	<u>. SPLev</u> <u>8</u> 0.250	<u>SPDLev</u> 1 0.250	<u>Recov.</u> 109.6	<u>SD Recov</u> 110.8	<u>RPD</u> 1.1	<u>Recov Lir</u> 80 - 127	m <u>RPDLim</u> 20	<u>Flag</u>
			MS	/MSD RE	PORT					
Analysis:	SW6010B - ICP - R	CRA				Paren Prep	t: Date:	A070845 9/10/200	54-03D 7	
Samp. Anal. Date: MS Anal. Date:	9/11/2007 12:28:00 9/11/2007 12:38:00	PM PMMSD Ana	l. Date: 9	9/11/2007	12:43:00	Units OPM Matri	: x:	mg/L Aqueous		
Analyte Name	<u>SampResult</u> <u>M</u>	ISRes. MSE	Res SPLev	<u>SPDLev</u>	Recov.	MSD Rec.	<u>RPD</u>	Recov Lim	<u>RPDLim</u>	Flag
Arsenic	ND 2	2.05 2.04	2.00	2.00	102.5	102.0	0.5	75 - 125	20	
Barium	0.0578 2	2.12 2.09	2.00	2.00	103.1	101.6	1.4	75 - 125	20	
Cadmium	ND (0.0412 0.040	7 0.0500	0.0500	82.4	81.4	1.2	75 - 125	20	
Chromium	0.0130 0	0.215 0.212	0.200	0.200	101.0	99.5	1.4	75 - 125	20	
Lead	ND (0.517 0.509	0.500	0.500	103.4	101.8	1.6	75 - 125	20	
Selenium	ND 2	2.06 2.05	2.00	2.00	103.0	102.5	0.5	75 - 125	20	
Silver	ND (0.277 0.277	0.250	0.250	110.8	110.8	0.0	75 - 125	20	
POST DIGESTION SPIKE REPORT										
Analysis:	SW6010B - ICP - R	CRA				Base Prep	Sample Date:	e:A070845 9/10/200	54-03D 7	
Samp. Anal. Date: PDS Anal. Date:	9/11/2007 12:28:00 9/11/2007 12:48:00	PM PM				Units Matri	: x:	mg/L Aqueous		
<u>Analyte Name</u> Arsenic	<u>SampResult</u> ND	<u>PDSRes.</u> 1.91	<u>SPLev</u> <u>F</u> 2.00	<u>Recov.</u> 95.5	<u>Reco</u> 7:	<u>ov Lim</u> 5 - 116		<u>Flag</u>		
Barium	0.0578	1.95	2.00	94.7	7:	5 - 116				
Cadmium	ND	0.0387	0.0500	78.4	7	5 - 113				
Chromium	0.0130	0.200	0.200	93.3	7:	5 - 117				
Lead	ND	0.486	0.500	97.2	7:	5 - 121				
Selenium	ND	1.94	2.00	96.7	7:	5 - 117				

Detailed Analytical Report				Analytica Environmental Laboratories, Inc.								
Workorder (SDG):	A070)8454										
Project:		Colville Riv	ver Study 2	007								
Client:		Michael Ba	ker Jr Inc									
Client Project Num	ber:	Colville Riv	ver Study 2	007								
Tests Run at:	Analytica	a Environmen	ntal Laborato	ories - The	ornton, Colorad	lo						
Workorder (SDG): Project: Project Number:	A070845 Colville	A0708454 Colville River Study 2007 QUALITY CONTROL REPORT										
Prep Batch:	T070910	011										
			PC	DST DIG	ESTION SPIK	KE REPO	RT					
Analysis:	SW6010	B - ICP - RC	'RA				Base Sample Prep Date:	e:A0708454-03D 9/10/2007				
Samp. Anal. Date:	9/11/200	7 12:28:00PM	М				Units:	mg/L				
PDS Anal. Date:	9/11/200	7 12:48:00PM	М				Matrix:	Aqueous				
			_									
Analyte Name	Sam	pResult	PDSRes.	<u>SPLev</u>	Recov.	<u>Recov Li</u>	<u>m</u>	Flag				
Silver		ND	0.00522	0.250	1.5	/5 - 1.	27	lowPDS				
				SERIAI	DILUTION	REPORT	,					
Analysis:	SW6010	B - ICP - RC	'RA				Base Sample	e:A0708454-03D				
							Prep Date:	9/10/2007				
Samp. Anal. Date:	9/11/20	07 12:28:001	PM				Units:	mg/L				
SER DIL. Date:	9/11/200	7 1:26:00PM	Л				Matrix:	Aqueous				
<u>Analyte Name</u> Arsenic	Sam	p <u>Result</u> ND	<u>PQL.</u> 0.10	<u>MDL.</u> 0.015	<u>SerialRes.</u> ND	<u>SerPQL</u> 0.50	<u>. RPD</u>	<u>Flag</u>				
Barium		0.0578	0.0100	0.00016	0.0622	0.050	7.3					
Cadmium		ND	0.0060	0.00051	ND	0.030						
Chromium		0.0130	0.0100	0.0018	0.0698	0.050	137.2	Note 4				
Lead		ND	0.050	0.011	ND	0.25						
Selenium		ND	0.10	0.026	ND	0.50						
Silver		ND	0.015	0.00066	ND	0.075						
				FO	OTNOTES TO	QC REPC	DRT					

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed An	rt	Analytica Environmental Laboratories, Inc.									
Workorder (SDG):	A0708454										
Project:	Colvill	e River St	tudy 20	07							
Client:	Micha	el Baker J	Ir Inc								
Client Project Numl	oer: Colvill	e River St	tudy 20	07							
Tests Run at:	Analytica Enviro	nmental L	aborator	ies - Th	ornton, Co	lorado					
Workorder (SDG):	A0708454										
Project: Project Number:	Colville River St	udy 2007	QI	JALI	TY CON	TROL	REPOR	Г			
Prep Batch:	T070911025										
				LC	S/LCSD I	REPORT	Γ				
Analysis:	1664 Hexane Ex	tractable N	Aaterial	- TPH w	/SGT		MB:		T07091102	25-MB	
							Prep l	Date:	9/11/2007		
MB Anal. Date:	9/11/2007 11:00	00AM					Units	:	mg/L		
LCS Anal. Date:	9/11/2007 11:00	00AMLC	SD Ana	l. Date:	9/11/2007	7 11:00:0	00AM Matri	x:	Aqueous		
Analyte Name	SampResult	LCSRes.	SDRes.	SPLev	SPDLev	Recov.	SD Recov	<u>RPD</u>	Recov Lim	<u>RPDLim</u>	Flag
Hexane-Extractable	Material ND	16.9	15.1	20.0	20.0	84.5	75.5	11.3	66 - 114	20	

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

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Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.
Detailed An	alytical Repo	ort			Analytica	Environ	mental Lab	oratorie	es, Inc.		
Workorder (SDG):	A0708454										
Project:	Colvil	lle River S	tudy 20	07							
Client:	Micha	ael Baker	Jr Inc								
Client Project Num	ber: Colvil	lle River S	tudy 200	07							
Tests Run at:	Analytica Enviro	onmental L	aborator	ries - Th	ornton, Co	lorado					
Workorder (SDG):	A0708454	1 2007									
Project: Project Number:	Colville River S	tudy 2007	QU	UALII	FY CON	TROL	REPOR	Г			
Prep Batch:	T070919007										
				LC	S/LCSD F	REPORT	1				
Analysis:	ADEC AK101 -	GRO					MB:		T07091900	07-MB	
							Prep 1	Date:	9/10/2007		
MB Anal. Date:	9/11/2007 6:52	:00AM					Units	:	ug/L		
LCS Anal. Date:	9/11/2007 5:38	:00AM LC	CSD Ana	l. Date:	9/11/2007	6:15:00	OAM Matri	x:	Aqueous		
Analyte Name	SampResult	LCSRes.	SDRes.	SPLev	SPDLev	Recov.	SD Recov	<u>RPD</u>	Recov Lim	<u>RPDLim</u>	Flag
Gasoline Range Org	anics ND	452	499	500	500	90.4	99.8	9.9	60 - 120	20	
Prep Batch:	T070919008										
				LC	S/LCSD F	REPORT					
Analysis:	602 - Purgeable	Aromatics	by GC/I	PID - BT	ΈX		MB:		T07091900	08-MB	
							Prep 1	Date:	9/10/2007		
MB Anal. Date:	9/11/2007 6:52	:00AM					Units	:	ug/L		
LCS Anal. Date:	9/11/2007 1:55	:00AM LC	CSD Ana	l. Date:	9/11/2007	2:32:00	OAM Matri	X:	Aqueous		
Analyte Name	<u>SampResult</u>	LCSRes.	SDRes.	SPLev	SPDLev	Recov.	SD Recov	<u>RPD</u>	Recov Lim	<u>RPDLim</u>	<u>Flag</u>
Benzene	ND	12.0	11.9	10.0	10.0	120.0	119.0	0.8	80 - 120	20	
Toluene	ND	11.9	11.5	10.0	10.0	119.0	115.0	3.4	80 - 120	20	
Ethylbenzene	ND	11.4	11.5	10.0	10.0	114.0	115.0	0.9	80 - 120	20	
Xylenes, Total	ND	35.2	34.4	30.0	30.0	117.3	114.7	2.3	80 - 120	20	
1,2-Dichlorobenzen	e ND	10.2	9.91	10.0	10.0	102.0	99.1	2.9	80 - 120	20	
1,4-Dichlorobenzen	e ND	9.98	9.56	10.0	10.0	99.8	95.6	4.3	80 - 120	20	
Chlorobenzene		10.2	9.74	10.0	10.0	102.0	97.4	4.0	80 - 120	20	
Chlorobenzene	ND	11.0	11.1	10.0	10.0	118.0	111.0	0.1	80 - 120	20	
Prep Batch	T070919008										
				10	SI CONT	Грарт					
Analysis	602 - Purgeable	Aromatics	hv GC/I	בר דא - תוכ	ы сор F ТЕХ & Chl	orohenze	nes MR·		T07091900)8-MR	
2 mary 515.	in angenoic	- in contactions	5, 50/1	וע שנ			Pren l	Date:	9/10/2007	50 IND	
MB Anal. Date:	9/11/2007 6:52	:00AM					Units	:	ug/L		
LCS Anal. Date:	9/11/2007 1:55	:00AM LC	CSD Ana	l. Date:	9/11/2007	2:32:00	OAM Matri	x:	Aqueous		
Analyte Name	SampResult	LCSRes	SDRes	SPLev	SPDI ev	Recov.	SD Recov	RPD	Recov Lim	RPDLim	Flag
Benzene	ND	12.0	11.9	10.0	10.0	120.0	119.0	0.8	80 - 120	20	
Toluene	ND	11.9	11.5	10.0	10.0	119.0	115.0	3.4	80 - 120	20	

Detailed Analytical Report					Analytica Environmental Laboratories, Inc.						
Workorder (SDG):	A0708454										
Project:	Colvi	lle River S	tudy 20	07							
Client:	Mich	ael Baker	Jr Inc								
Client Project Numł	oer: Colvi	lle River S	tudy 20	07							
Tests Run at:	Analytica Envir	onmental I	aborato	ries - Th	ornton, Col	orado					
Workorder (SDG):	A0708454										
Project:	Colville River S	Study 2007						г			
Project Number:			Q	UALI	I Y CON	IKOL	REPOR	1			
Prep Batch:	T070919008										
Analysis: MB Anal. Date:	602 - Purgeable 9/11/2007 6:52	Aromatics 2:00AM	by GC/I	LC PID - BT	S/LCSD F TEX & Chl	EPORT orobenze	enes MB: Prep D Units	Date:	T07091900 9/10/2007 ug/L	08-MB	
LCS Anal. Date:	9/11/2007 1:55	5:00AM LC	CSD Ana	l. Date:	9/11/2007	2:32:0	0AM Matri	X:	Aqueous		
Analyte Name	<u>SampResult</u>	LCSRes.	SDRes.	SPLev	SPDLev	Recov.	SD Recov	<u>RPD</u>	Recov Lim	<u>RPDLim</u>	Flag
Ethylbenzene	ND	11.4	11.5	10.0	10.0	114.0	115.0	0.9	80 - 120	20	
Xylenes, Total	ND	35.2	34.4	30.0	30.0	117.3	114.7	2.3	80 - 120	20	
1,2-Dichlorobenzene	e ND	10.2	9.91	10.0	10.0	102.0	99.1	2.9	80 - 120	20	
1,4-Dichlorobenzene	e ND	9.98	9.56	10.0	10.0	99.8	95.6	4.3	80 - 120	20	
1,3-Dichlorobenzene	e ND	10.2	9.74	10.0	10.0	102.0	97.4	4.6	80 - 120	20	
										• •	

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

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Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG):	A0708454
Project:	Colville River Study 2007
Client:	Michael Baker Jr Inc
Client Project Number:	Colville River Study 2007

SURROGATE RECOVERY SUMMARY REPORT

Test Method:	ADEC AK102 - DRO)				
Lab Sample #:	A0708454-01E		Di	lution:	1	
Analysis Date:	9/8/2007 1:50:01AM		Cli	ient Sample:	<u>M9313</u>	
Batch Number:	T070907004		Da	ta File:	07090714.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl		46	50	120	LOW	Rrun
Lab Sample #:	A0708454-02E		Di	lution:	1	
Analysis Date:	9/8/2007 2:39:08AM		Cli	ient Sample:	<u>L9323</u>	
Batch Number:	T070907004		Da	ta File:	07090715.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	<u>Result Status</u>
o-Terphenyl		52	50	120		Complete
Lab Sample #:	A0708454-03E		Di	lution:	1	
Analysis Date:	9/8/2007 3:28:03AM		Cli	ient Sample:	<u>L9324</u>	
Batch Number:	T070907004		Da	ta File:	07090716.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	<u>Result Status</u>
o-Terphenyl		54	50	120		Complete
Lab Sample #:	A0708454-01E		Di	lution:	1	
Analysis Date:	9/10/2007 4:02:39PM	1	Cli	ient Sample:	<u>M9313</u>	
Batch Number:	T070907004		Da	ta File:	07091007.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	<u>Result Status</u>
o-Terphenyl		39	50	120	LOW	Complete
Lab Sample #:	T070907004-MB		Di	lution:	1	
Analysis Date:	9/7/2007 8:54:22PM		Cli	ient Sample:	<u>MB</u>	
Batch Number:	T070907004		Da	ta File:	07090708.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	<u>Result Status</u>
o-Terphenyl		52	60	120	LOW	Complete
Lab Sample #:	T070907004-LCS		Di	lution:	1	
Analysis Date:	9/7/2007 9:43:43PM		Cli	ient Sample:	LCS	
Batch Number:	T070907004		Da	ta File:	07090709.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	<u>Result Status</u>
o-Terphenyl		64	60	120		Complete
Lab Sample #:	T070907004-LCSD		Di	lution:	1	
Analysis Date:	9/7/2007 10:33:04PM		Cli	ient Sample:	LCSD	
Batch Number:	T070907004		Da	ta File:	07090710.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	Result Status
o-Terphenyl		66	60	120		Complete

Detailed Analytical Report			Analytica Environmental Laboratories, Inc.				
Workorder (SDG):	A0708454						
Project:	Colville River	Study 2007					
Client:	Michael Bake	r Jr Inc					
Client Project Numbe	er: Colville River	Study 2007					
Test Method:	ADEC AK103 - RRO)					
Lab Sample #:	A0708454-01F		Γ	Dilution:	1		
Analysis Date:	9/8/2007 1:15:52PM		C	Client Sample:	<u>M9313</u>		
Batch Number:	T070907005		Γ	Data File:	07090728.D		
<u>AnalyteName</u> Squalane		<u>SSRecov</u> 95	<u>LCL</u> 50	<u>UCL</u> 150	<u>SSFlag</u>	<u>Result Status</u> Rrun	
Lab Sample #:	A0708454-02F		Γ	Dilution:	1		
Analysis Date:	9/8/2007 2:05:11PM		C	Client Sample:	<u>L9323</u>		
Batch Number:	T070907005		Γ	Data File:	07090729.D		
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>	
Squalane		87	50	150		Rrun	
Lab Sample #:	A0708454-03F		Γ	Dilution:	1		
Analysis Date:	9/8/2007 2:54:30PM		C	Client Sample:	<u>L9324</u>		
Batch Number:	10/090/005	66 D	L	Data File:	07090730.D		
<u>AnalyteName</u>		<u>SSRecov</u> 93	<u>LCL</u> 50	<u>UCL</u> 150	<u>SSFlag</u>	<u>Result Status</u>	
Squalatte	A0709454 01E	75	<u> </u>	130	1	Krun	
Lau Sample #. Analysis Date:	AU/08434-01F 0/11/2007 1.54.50AN	Л	Ĺ	lient Sample	I M0313		
Batch Number	T070907005	1	Г	Data File	07091019 D		
AnalyteName	10/0/07000	SSRecov		UCL	SSFlag	Result Status	
Squalane		83	<u>101</u> 50	150	<u>oor ng</u>	Complete	
Lab Sample #:	A0708454-02F		Γ	Dilution:	1	<u> </u>	
Analysis Date:	9/11/2007 2:43:58AN	1	C	Client Sample:	<u>L9323</u>		
Batch Number:	T070907005		Γ	Data File:	07091020.D		
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	SSFlag	Result Status	
Squalane		82	50	150		Complete	
Lab Sample #:	A0708454-03F		Γ	Dilution:	1		
Analysis Date:	9/11/2007 3:33:13AN	1	C	Client Sample:	<u>L9324</u>		
Batch Number:	T070907005		Γ	Data File:	07091021.D		
AnalyteName		<u>SSRecov</u>	LCL	UCL	<u>SSFlag</u>	Result Status	
Squalane		79	50	150		Complete	
Lab Sample #:	T070907005-MB		Γ	Dilution:	1		
Analysis Date:	9/8/2007 10:48:15AM	L	(T	Client Sample:	<u>MB</u> 07000725 D		
Batch Number:	10/090/005	CCD		Data File:	0/090/25.D	David Charles	
<u>AnalyteName</u>		<u>55Kecov</u> 106	<u>LCL</u> 60	<u>UCL</u> 120	<u>SSFlag</u>	Result Status	
Lab Sampla #:	T070007005 MD	100	<u> </u>	120	1	Kiuli	
Lao Sample #. Analysis Date:	9/10/2007 11·26·45PM	Л	Ĺ	lient Sample [.]	MR		
Batch Number	T070907005	V1	Г	Data File	07091016 D		
AnalyteName	10/0/07000	SSRecov		UCL	SSFlag	Result Status	
Squalane		100	60	120	<u>BOT ME</u>	Complete	
Lab Sample #:	T070907005-LCS		Γ	Dilution:	1	<u> </u>	
Analysis Date:	9/8/2007 11:37:23AM	[C	Client Sample:	LCS		
Batch Number:	T070907005		Ε	Data File:	07090726.D		
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	Result Status	

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Detailed Ana	alytical Report		Ana	lytica Environ	mental Laboratories, Inc.	
Workorder (SDG):	A0708454			-		
Project:	Colville River	Study 2007				
Client:	Michael Bake	r Jr Inc				
Client Project Numb	er: Colville River	Study 2007				
Test Method:	ADEC AK103 - RRO	J				
Lab Sample #:	T070907005-LCS		D	ilution:	1	
Analysis Date:	9/8/2007 11:37:23AM		C	lient Sample:	LCS	
Batch Number:	T070907005		D	ata File:	07090726.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
Squalane		116	60	120		Rrun
Lab Sample #:	T070907005-LCS		D	ilution:	1	
Analysis Date:	9/11/2007 12:16:28AN	Ν	C	lient Sample:	LCS	
Batch Number:	T070907005		D	ata File:	07091017.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	Result Status
Squalane		112	60	120		Complete
Lab Sample #:	T070907005-LCSD		D	ilution:	1	
Analysis Date:	9/8/2007 12:26:38PM		C	lient Sample:	LCSD	
Batch Number:	T070907005		D	ata File:	07090727.D	
<u>AnalyteName</u>		SSRecov	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
Squalane		112	60	120		Rrun
Lab Sample #:	T070907005-LCSD		D	ilution:	1	
Analysis Date:	9/11/2007 1:05:33AN	1	C	lient Sample:	LCSD	
Batch Number:	T070907005		D	ata File:	07091018.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
Squalane		101	60	120		Complete
Test Method:	602 - Purgeable Aron	natics by GC/	PID - BT	EX		
Lab Sample #:	A0708454-04A		D	ilution:	1	
Analysis Date:	9/11/2007 7:28:00AN	1	C	lient Sample:	<u>Trip Blank</u>	
Batch Number:	T070919008		D	ata File:	07091024.D	
<u>AnalyteName</u>		<u>SSRecov</u>	LCL	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenz	zene	92	80	120		Complete
Lab Sample #:	T070919008-MB	_	D	ilution:	1	
Analysis Date:	9/11/2007 6:52:00AN	1	C	lient Sample:	<u>MB</u>	
Batch Number:	10/0919008	~ ~ ~	D	ata File:	0/091023.D	
<u>AnalyteName</u>		<u>SSRecov</u>	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenz	zene	95	80	120		Complete
Lab Sample #:	1070919008-LCS		D	ilution:		
Analysis Date:	9/11/2007 1:55:00AN	1	C.	lient Sample:	<u>LCS</u> 07001015 D	
Batch Number:	10/0919008	CCD	D	ata File:	0/091015.D	
<u>AnalyteName</u>		SSRecov 05	LCL	<u>UCL</u> 120	<u>55Flag</u>	<u>Result Status</u>
p-Bromofluorobenz	TO70010000 L COD	73	80	120	1	Complete
Lab Sample #:	10/0919008-LCSD	۸.	D	light Second		
Analysis Date: Batah Number:	9/11/2007 2:32:00AN	1		nem Sample:	<u>LCSD</u> 07001016 D	
	10/0919008	SSDacar				D
n-Bromofluoroben	zene	<u>87</u>	<u>LCL</u> 80	<u>UCL</u> 120	<u>551182</u>	<u>Complete</u>
p-biomonuolobellz		07	00	120		Complete

Detailed Ana	lytical Report		Anal	ytica Environ	mental Laboratories, Inc.	
Workorder (SDG):	A0708454					
Project:	Colville River	Study 2007				
Client:	Michael Baker	Jr Inc				
Client Project Numbe	er: Colville River	Study 2007				
Test Method:	602 - Purgeable Arom	atics by GC	PID - BTI	EX & Chloro	benzene	
Lab Sample #:	A0708454-01C		Di	lution:	1	
Analysis Date:	9/11/2007 8:42:00AM	[Cl	ient Sample:	<u>M9313</u>	
Batch Number:	T070919008		Da	ata File:	07091026.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	ene	95	80	120		Complete
Lab Sample #:	A0708454-02C		Di	lution:	1	
Analysis Date:	9/11/2007 9:19:00AM	[Cl	ient Sample:	<u>L9323</u>	
Batch Number:	T070919008		Da	ata File:	07091027.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	Result Status
p-Bromofluorobenz	ene	99	80	120		Complete
Lab Sample #:	A0708454-03C		Di	lution:	1	
Analysis Date:	9/11/2007 9:56:00AM	[Cl	ient Sample:	<u>L9324</u>	
Batch Number:	T070919008		Da	ata File:	07091028.D	
AnalyteName		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	ene	99	80	120		Complete
Lab Sample #:	T070919008-MB		Di	lution:	1	
Analysis Date:	9/11/2007 6:52:00AM	[Cl	ient Sample:	MB	
Batch Number:	T070919008		Da	ata File:	07091023.D	
AnalyteName		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	ene	95	80	120		Complete
Lab Sample #:	T070919008-LCS		Di	lution:	1	
Analysis Date:	9/11/2007 1:55:00AM	[Cl	ient Sample:	LCS	
Batch Number:	T070919008		Da	ata File:	07091015.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	ene	95	80	120		Complete
Lab Sample #:	T070919008-LCSD		Di	lution:	1	
Analysis Date:	9/11/2007 2:32:00AM	[Cl	ient Sample:	LCSD	
Batch Number:	T070919008		Da	ata File:	07091016.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenz	ene	87	80	120		Complete

Detailed Ana	alytical Report		Anal	ytica Environ	mental Laboratories, Inc.	
Workorder (SDG):	A0708454					
Project:	Colville River	Study 2007				
Client:	Michael Baker	r Jr Inc				
Client Project Numb	er: Colville River	Study 2007				
Test Method:	ADEC AK101 - GRO	•				
Lab Sample #:	A0708454-01C		Di	lution:	1	
Analysis Date:	9/11/2007 8:42:00AM	1	Cl	ient Sample:	<u>M9313</u>	
Batch Number:	T070919007		Da	ata File:	07091026.D	
<u>AnalyteName</u> p-Bromofluorobenz	rene	SSRecov 94	<u>LCL</u> 50	<u>UCL</u> 150	<u>SSFlag</u>	<u>Result Status</u>
Lab Sample #:	A0708454 02C	71	Di	lution	1	Complete
Analysis Date:	A0708434-02C	ſ	Cl	ient Sample:	1 0323	
Batch Number	T070919007	L	Da	ata File	07091027 D	
AnalyteName	10/0919007	SSRecov	LCL	UCL	SSFlag	Result Status
p-Bromofluorobenz	ene	<u>94</u>	<u>101</u> 50	<u>150</u>	<u></u>	<u>Complete</u>
Lab Sample #	A0708454-03C		Di	lution.	1	Compiere
Analysis Date:	9/11/2007 9:56:00AN	ſ	Cl	ient Sample:	L9324	
Batch Number:	T070919007	-	Da	ata File:	07091028.D	
AnalyteName		SSRecov	LCL	UCL	SSFlag	Result Status
p-Bromofluorobenz	zene	93	50	150		Complete
Lab Sample #:	T070919007-MB		Di	lution:	1	
Analysis Date:	9/11/2007 6:52:00AM	1	Cl	ient Sample:	<u>MB</u>	
Batch Number:	T070919007		Da	ata File:	07091023.D	
AnalyteName		SSRecov	LCL	UCL	SSFlag	Result Status
p-Bromofluorobenz	ene	97	60	120		Complete
Lab Sample #:	T070919007-LCS		Di	lution:	1	
Analysis Date:	9/11/2007 5:38:00AM	1	Cl	ient Sample:	LCS	
Batch Number:	T070919007		Da	ata File:	07091021.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	Result Status
p-Bromofluorobenz	ene	99	60	120		Complete
Lab Sample #:	T070919007-LCSD		Di	lution:	1	
Analysis Date:	9/11/2007 6:15:00AM	1	Cl	ient Sample:	LCSD	
Batch Number:	T070919007		Da	ata File:	07091022.D	
<u>AnalyteName</u>		<u>SSRecov</u>	LCL	UCL	<u>SSFlag</u>	Result Status
p-Bromofluorobenz	ene	117	60	120		Complete

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG):	A0708454					
Project:	Colville River	Study 2007				
Client:	Michael Bake	r Jr Inc				
Client Project Numb	er: Colville River	Study 2007				
Test Method:	625 - Base-Neutrals a	nd Acids by (GC/MS - I	РАН		
Lab Sample #:	A0708454-01A		Di	lution:	1	
Analysis Date:	9/20/2007 7:16:00PM	1	Cl	ient Sample:	M9313	
Batch Number:	T070905022		Da	ata File:	07092013.D	
AnalyteName		SSRecov	LCL	UCL	SSFlag	Result Status
2-Fluorobiphenvl		58	43	116		Complete
D14-Terphenyl		44	33	141		Complete
D5-Nitrobenzene		72	35	114		Complete
Lab Sample #:	A0708454-02A		Di	lution:	1	
Analysis Date:	9/20/2007 7:53:00PM	1	Cl	ient Sample:	L9323	
Batch Number:	T070905022		Da	ata File:	07092014.D	
AnalvteName		SSRecov	LCL	UCL	SSFlag	Result Status
2-Fluorobiphenyl		51	43	116		Complete
D14-Terphenyl		33	33	141		Complete
D5-Nitrobenzene		66	35	114		Complete
Lab Sample #:	A0708454-03A		Di	lution:	1	•
Analysis Date:	9/20/2007 8:31:00PM	1	Cl	ient Sample:	L9324	
Batch Number:	T070905022		Da	ata File:	07092015.D	
AnalyteName		SSRecov	LCL	UCL	SSFlag	<u>Result Status</u>
2-Fluorobiphenyl		56	43	116		Complete
D14-Terphenyl		33	33	141		Complete
D5-Nitrobenzene		70	35	114		Complete
Lab Sample #:	T070905022-MB		Di	lution:	1	
Analysis Date:	9/17/2007 7:02:00PM	1	Cl	ient Sample:	<u>MB</u>	
Batch Number:	T070905022		Da	ata File:	07091716.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	<u>Result Status</u>
2-Fluorobiphenyl		54	43	116		Complete
D14-Terphenyl		140	33	141		Complete
D5-Nitrobenzene		59	35	114		Complete
Lab Sample #:	T070905022-LCS		Di	lution:	1	
Analysis Date:	9/17/2007 7:38:00PM	1	Cl	ient Sample:	LCS	
Batch Number:	T070905022		Da	ata File:	07091717.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	<u>Result Status</u>
2-Fluorobiphenyl		56	43	116		Complete
D14-Terphenyl		102	33	141		Complete
D5-Nitrobenzene		53	35	114		Complete
Lab Sample #:	T070905022-LCSD		Di	lution:	1	
Analysis Date:	9/17/2007 8:15:00PM	1	Cl	ient Sample:	LCSD	
Batch Number:	T070905022		Da	ata File:	07091718.D	
<u>AnalyteName</u>		SSRecov	LCL	UCL	SSFlag	Result Status
2-Fluorobiphenyl		61	43	116		Complete
D14-Terphenyl		93	33	141		Complete
D5-Nitrobenzene		59	35	114		Complete

Detailed Analyt	ical Report	ort Analytica Environmental Laboratories, Inc.			
orkorder (SDG):	A0708454				
oject:	Colville River St	udy 2007			
ent:	Michael Baker J	r Inc			
ent Project Number:	Colville River St	udy 2007			
	QC	C BATCH ASSOCIATIONS -	BY METHOD BLANI	X	
Lab Project ID:	77,702	Lab Project Number:	A0708454		
				Prep Date: 8/31/2007	
Lab Method Blank Id: Prop Patch ID:	T070905022-MB				
Method	10/0905022 625 - Base-Neutra	ls and Acids by GC/MS - PA	ч		
Method: This Mathod blank and	sample propertion batch	are associated with the following	na complex spikes and	duplicator	
SomeloNum	ClientSempleNeme	are associated with the followin	ig samples, spikes, and	Analysis Date	
	<u>UnentSampleName</u>		1717 D	0/17/2007 7·28·00DM	
10/0903022-LCS		0709	1/1/.D	0/17/2007 0.15.00DM	
1070905022-LCSD	M0313	0709	2012 D	9/1//2007 0.13.00PM	
A0708454-01A	M9313	0709	2013.D	9/20/2007 7:52:00PM	
A0708454-02A	L9323	0709	2014.D	9/20/2007 7.55.00FW	
A0708454-03A	L9324	0709	2015.D	9/20/2007 8.31.00PM	
				Prep Date: 9/4/2007	
Lab Method Blank Id: Prep Batch ID:	T070907004-MB				
Flep Batch ID.	10/090/004 ADEC AV102 F	NP.O			
Method:	ADEC AKI02 - L	VKO		4	
I his Method blank and	sample preparation batch	are associated with the followin	ig samples, spikes, and	duplicates:	
SampleNum	<u>ClientSampleName</u>	DataF	<u>11e</u>	AnalysisDate	
1070907004-LCS	LCS	0709	0709.D	9/7/2007 9:43:43PM	
T070907004-LCSD	LCSD	0709	0710.D	9/7/2007 10:33:04PM	
A0708454-02E	L9323	0709	0715.D	9/8/2007 2:39:08AM	
A0708454-03E	L9324	0709	0716.D	9/8/2007 3:28:03AM	
A0708454-01E	M9313	0709	91007.D	9/10/2007 4:02:39PM	
				Prep Date: 9/4/2007	
Lab Method Blank Id: Pren Batch ID:	T070907005-MB				
Mathad:	10/090/005 ADEC AK 103 - P	RO			
This Method blank and	sample preparation batch	are accordated with the following	a complex chikes and	dunlicates:	
SamleNum	ClientSampleName	are associated with the followin	ile	AnalysisDate	
	<u>Unentsampletvame</u>		1017 D	9/11/2007 12.16.28 MM	
10/090/003-LCS		0709	1017.D	9/11/2007 12.10.20AM	
10/090/005-LCSD	LC5D M0212	0709	1018.D	9/11/2007 1:05:55AM	
AU/08454-01F	MI9313	0709	1019.D	9/11/2007 1:54:50AM	
A0708454-02F	L9323	0709	1020.D	9/11/2007 2:43:58AM	
A0708454-03F	L9324	0709	1021.D	9/11/2007 3:33:13AM	

Detailed Analyti	ical Report	Analytica Env	Analytica Environmental Laboratories, Inc.						
Workorder (SDG): A	0708454								
Project:	Colville River Stu	ıdy 2007							
Client:	Michael Baker Jr	Inc							
Client Project Number:	Colville River Stu	ıdy 2007							
	QC	BATCH ASSOCIATIONS - BY	Y METHOD BLANK	ζ.					
Lab Project ID:	77,702	Lab Project Number:	A0708454						
				Prep Date: 9/10/2007					
Lab Method Blank Id:	T070910011-MB								
Prep Batch ID:	T070910011								
Method:	SW0010B - ICP -								
This Method blank and	sample preparation batch	are associated with the following	samples, spikes, and	duplicates:					
<u>SampleNum</u>	<u>ClientSampleName</u>	DataFile		AnalysisDate					
A0708454-01D	M9313	E09117	7A	9/11/2007 12:18:00PM					
A0708454-02D	L9323	E0911'	7A	9/11/2007 12:23:00PM					
A0708454-03D	L9324	E0911	7A	9/11/2007 12:28:00PM					
T070910011-LCS	LCS	E0911'	7A	9/11/2007 12:08:00PM					
T070910011-LCSD	LCSD	E0911'	7A	9/11/2007 12:13:00PM					
A0708454-03D-DUP	DUP	E0911	7A	9/11/2007 12:33:00PM					
A0708454-03D-MS	MS	E09117	7A	9/11/2007 12:38:00PM					
A0708454-03D-MSD	MSD	E0911	7A	9/11/2007 12:43:00PM					
A0708454-03D-PDS	PDS	E09117	7A	9/11/2007 12:48:00PM					
				Prep Date: 9/11/2007					
Lab Method Blank Id:	T070911025-MB								
Prep Batch ID:	1070911025	a stable Material TDU/9/7	7						
Method:	1664 Hexane Extra	actable Material - TPH W/SGI							
This Method blank and	sample preparation batch	are associated with the following	samples, spikes, and	duplicates:					
<u>SampleNum</u>	<u>ClientSampleName</u>	DataFile	<u>-</u>	AnalysisDate					
A0708454-01B	M9313			9/11/2007 11:00:00AM					
A0708454-02B	L9323			9/11/2007 11:00:00AM					
A0708454-03B	L9324			9/11/2007 11:00:00AM					
T070911025-LCS	LCS			9/11/2007 11:00:00AM					
T070911025-LCSD	LCSD			9/11/2007 11:00:00AM					

Detailed Ana	Ana	
rkorder (SDG)	10708454	

Analytica Environmental Laboratories, Inc.

Workorder (SDG):	A0708454
Project:	Colville River Study 2007
Client:	Michael Baker Jr Inc
Client Project Number:	Colville River Study 2007

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID:	77,702	Lab Project Number:	A0708454		
Lab Method Blank Id: Prep Batch ID:	T070914007-MB T070914007			Prep Date:	9/14/2007
Method:	SW7470A - Mercur	ry in Liquid Waste by CVAA	- Total Hg		
This Method blank and	sample preparation batch a	re associated with the following	samples, spikes, and du	plicates:	
<u>SampleNum</u>	<u>ClientSampleName</u>	DataFile		<u>AnalysisDat</u>	<u>e</u>
A0708454-01D	M9313	B0709	14W.WKS	9/14/2007	5:37:58PM
A0708454-02D	L9323	B0709	14W.WKS	9/14/2007	5:45:10PM
A0708454-03D	L9324	B0709	14W.WKS	9/14/2007	5:47:19PM
F0709072-01A	Batch QC	B0709	14W.WKS	9/14/2007	5:23:19PM
T070914007-LCS	LCS	B0709	14W.WKS	9/14/2007	5:18:27PM
T070914007-LCSD	LCSD	B0709	14W.WKS	9/14/2007	5:20:31PM
F0709072-01A-DUP	DUP	B0709	14W.WKS	9/14/2007	5:26:43PM
F0709072-01A-MS	MS	B0709	14W.WKS	9/14/2007	5:28:49PM
F0709072-01A-MSD	MSD	B0709	14W.WKS	9/14/2007	5:30:57PM
				Prep Date:	9/10/2007
Lab Method Blank Id: Prep Batch ID:	T070919007-MB				
	10/091900/ ADEC AK101 - GE	20			
Method: This Mathad blank and	ADDC AKIOI - OF	re acception with the fellowing	complex children and du	nliaataa	
	ClientServelsNerve	DetaFil	samples, spikes, and du	AnalysisDat	9
<u>SampleINUM</u>	<u>MO212</u>		2)))(D	0/11/2007	<u>~</u>
A0708454-01C	M9313	070910)26.D	9/11/2007	0.42.00AW
A0708454-02C	L9323	070910)27.D	9/11/2007	9.19.00AM
10/091900/-LCS		070910	J21.D	9/11/2007	5:58:00AM
10/0919007-LCSD	LUSD	070910)22.D	9/11/2007	0:15:00AM
A0708454-03C	L9324	070910)28.D	9/11/2007	9:56:00AM

Detailed Analy	tical Report	Analytica Environmental Laboratories, Inc.
Workorder (SDG):	A0708454	
Project:	Colville River Study 2007	
Client:	Michael Baker Jr Inc	
Client Project Number:	Colville River Study 2007	
	QC BATCH AS	SOCIATIONS - BY METHOD BLANK

Lab Project ID:	77,702	Lab Project Number:	A0708454		
				Prep Date:	9/10/2007
Lab Method Blank Id:	T070919008-MB				
Prep Batch ID:	T070919008				
Method:	602 - Purgeable An	comatics by GC/PID - BTEX	& Chlorobenzenes		
This Method blank and	sample preparation batch	are associated with the followin	g samples, spikes, and	l duplicates:	
SampleNum	<u>ClientSampleName</u>	DataFi	le	AnalysisDate	<u>2</u>
A0708454-03C	L9324	0709	1028.D	9/11/2007	9:56:00AM
A0708454-04A	Trip Blank	0709	1024.D	9/11/2007	7:28:00AM
T070919008-LCS	LCS	0709	1015.D	9/11/2007	1:55:00AM
T070919008-LCS	LCS	0709	1015.D	9/11/2007	1:55:00AM
T070919008-LCSD	LCSD	0709	1016.D	9/11/2007	2:32:00AM
T070919008-LCSD	LCSD	0709	1016.D	9/11/2007	2:32:00AM
A0708454-02C	L9323	0709	1027.D	9/11/2007	9:19:00AM
A0708454-01C	M9313	0709	1026.D	9/11/2007	8:42:00AM

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Detailed Analytical Report

Workorder (SDG):	A0708454
Project:	Colville River Study 2007
Client:	Michael Baker Jr Inc
Client Project Number:	: Colville River Study 2007

DATA FLAGS AND DEFINITIONS

The PQL is the Method Quantitation Limit as defined by USACE.

Reporting Limit: Limit below which results are shown as "ND". This may be the PQL, MDL, or a value between. See the report conventions below.

Result Field:

ND = Not Detected at or above the Reporting Limit

NA = Analyte not applicable (see Case Narrative for discussion)

Qualifier Fields:

LOW = Recovery is below Lower Control Limit

HIGH = Recovery, RPD, or other parameter is above Upper Control Limit

E = Reported concentration is above the instrument calibration upper range

Organic Analysis Flags:

B = Analyte was detected in the laboratory method blank

J = Analyte was detected above MDL or Reporting Limit but below the Quant Limit (PQL)

Inorganic Analysis Flags:

J = Analyte was detected above the Reporting Limit but below the Quant Limit (PQL)

W = Post digestion spike did not meet criteria

S = Reported value determined by the Method of Standard Additions (MSA)

Several ways of defining the limit of detection and quantitation are prevalent in the laboratory industry and may appear in Analytica reports. These include the following:

MRL = "minimum reporting level", from the EPA Safe Drinking Water program (SDW)

PQL = "practical quantitation limit", from SW-846

EQL = "estimated quantitation limit", from SW-846

LOQ = "limit of quantitation", from a number of authoritative sources

In Analytica's work, all of these terms have the same meaning, equivalent to the EPA definition of the MRL. This reporting level is supported by a satisfactory calibration data point which is at that level or lower, and also is supported by a method detection limit (MDL) determined by the procedure in 40CFR. The MDL is lower than the MRL and represents an estimate of the level where positive detections have a 99% probability of being real, but where quantitation accuracy is unknown.

The MRL as defined by Analytica is the lowest demonstrated point of known quantitation accuracy.

The MRL should not be confused with the MCL, which is the EPA-defined "maximum contaminant level" allowed for certain regulated targets under specific regulations, such as the National Primary Drinking Water Regulations. Normally, the MRL is set at a level which is much lower than the MCL in order to ensure that levels are well below those limits. Not all target analytes have MCL levels established.

Other Flags may be applied. See Case Narrative for Description

Analytica Environmental Laboratories, Inc.

Detailed Analytical Report

Workorder (SDG):	A0708454
Project:	Colville River Study 2007
Client:	Michael Baker Jr Inc
Client Project Number:	Colville River Study 2007

REPORTING CONVENTIONS FOR THIS REPORT A0708454						
TestPkgName	<u>Basis</u>	<u># Sig Figs</u>	Reporting Limit			
1664/1664 (Aqueous) - TPH w/SGT	As Received	2	Report to PQL			
6010B/3010A (Aqueous) - RCRA	As Received	2	Report to PQL			
602 (Aqueous) - BTEX	As Received	2	Report to PQL			
602 (Aqueous) - BTEX & Chlorobenzenes	As Received	2	Report to PQL			
625 (Aqueous) - PAH	As Received	2	Report to MDL, J qual below PQL			
7470A/7470A (Aqueous) - Total Hg	As Received	2	Report to PQL			
AK101/5030B (Aqueous) - GRO	As Received	2	Report to PQL			
AK102/3510C (Aqueous) - DRO	As Received	2	Report to PQL			
AK103/3510C (Aqueous) - RRO	As Received	2	Report to PQL			

>		12189 Pennsylvan Thornton, CO 8 303-469-886 303-469-826	ia Street 0241 14	Analy 4307 Anchor 907	tica C Arctic Blvd. Arctic Blvd. Ar258-2155 7-258-6634	hain	ور چچ	Istody 8 Shaune Drive eau, AK 99801 07-780-6668 07-780-6670	Form	475 F Fairbanks 907-4	Hall St. 56-3116		Pa Chain of Custody No:
Glient Name & Address: M	1ichael Baker Jr Ir	31	Pro	oject Narr	1e: Colvi	lle River	Study 2	007			Repo	ort To:	Mr. Marc McBroom,
			Pu	blic Wate	r Systen	n D#:					Invo	To.	Mr Mar Mabra
			PW	/S Results	s to STA	Ë	YE	0	N			ce to.	Michael Baker Jr Inc
Contact Person:			Dat	a Delivera	ables: Le	vel2 w/ I	Batch Q	5				2	•••
Phone No:			E	D: None							т. С	or Con	tract No: Colville River Study 2007
Fax No:			Rec	uested T	AT:								To be Completed by Analytica
E-mail:			Res	ults Due	Date:						LGN:	A070	0 8 45 4 Quote No: A07050028
Special Instructions:											Lab N	lotes	
Lab Bottle Order No:								_					
			Containers 64 (Aqueous) - TPH	030B (Aqueous) -	AK103 (Aqueous) - IO	otal Aqueous Hydrocarbo n s)	eous) - BTEX						
Sample Description	Date T Sampled Sa	ime Matrix mpled	No. of Cor 1664/1664	W/SG1 AK101/503 GRO	AK102/ AK DRO RRO	TAqH (Tota Aromatic H	602 (Aqueo						Comments
193/3	X128 14	$\Delta ', \alpha Aqueous$	×	×	×	×			_				
47323	8/28 18	Aqueous	×	×	×	×				+			
-7324	61 208	Aqueous	×	×	×	×						_	
Trip Blank	8/24 14	Aqueous					×			+			
								-		ŀ		F	
enadustied By:	$\mathcal{B} \mathcal{I} \mathcal{I} \mathcal{G}$ Date $\mathcal{B} \mathcal{I} \mathcal{I} \mathcal{G}$	Time Rec $1:38$ K Time Rec $1:38$ K $1/2:00$	veived By:	F			Date Date	Time 13:38 Time	Chain-o Location	f-Custody n Rovd/Te	Ti Seal: amp on A	o be Cor Intac Vrrival	mpleted by Analytica ct Broken Absent
ane of Sampler: (printed)	Date	Time Rec	eived By:				Date	Time	Thermo	meter ID#	TR JUN		C ANC 7-1 C FAI C
									Shipping	g Method	Tracking) Numbe	" client



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Client: Michael Baker Jr Inc Project: Colville River Study 2007	Client Code: 0	30185		Örder #:	A0708454
Cooler ID: 1					
A. Preliminary Examination Phase:	Date cooler o Cooler opene	opened: a ed by: a	3/29/2007 (p	Signature:	Don
1. Was airbill Attached? N/A	Airbill #:		С	arrier Name: Cl	; ient
2. Custody Seals? N/A	How many?	ο ι	ocation:	Seal	Name:
3. Seals intact? N/A					
4. COC Attached? Yes	Properly Con	npleted?	Yes s	igned by AEL emr	lovee? Yes
5. Project Identification from custody	paper: Colvill	e River Stud	ý	- ,	
6. Preservative:		Temperatu	re: 5.2 deg.C		
D. J. s. J. D.					
B. Log-In Phase: Samples Log-in	n Date: 8/30/2007	Log-in By:	dc		
1. Packing Type:					
2. Were samples in separate bags?	Yes				
3. Were containers intact?	Yes	Labels agre	e with COC?	Yes	
4. Number of bottles received:	44	Number of s	amples received:	4	
5. Correct containers used?	Yes	Correct pres	ervatives added?	N/A	
6. Sufficient sample volume?	N/A				
7. Bubbles in VOA samples?	N/A				
8. Was Project manager called and stat	us discussed?	No			
9. Was anyone called? No	Who was called?	·····	By whom	?	Date:
COMMENTS:					