

# **Semi-Annual Groundwater Monitoring Report Second Semi-Annual 2004**

**Former Texaco 21-1079  
1501 Cushman Street  
Fairbanks, Alaska**

187-003-2-1

Prepared for  
Chevron Environmental Management Company

Prepared by  
OASIS Environmental, Inc.  
250 Cushman St., Suite 4G  
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December 16, 2004

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Senior Scientist (OASIS Environmental, Inc)

Date: December 16, 2004  
Event: 2<sup>nd</sup> Semi-Annual 2004

## FORMER TEXACO SEMI-ANNUAL GROUNDWATER MONITORING REPORT

Facility No.:	<u>21-1079</u>	Address:	<u>1501 Cushman Street, Fairbanks, Alaska (Figure 1)</u>
CHEVRON Project Manager:			<u>Robert (Bob) Cochran</u>
Consulting Co./Contact Person:			<u>SECOR International Incorporated/ David Weigner</u>
Consultant Project No.:			<u>77CH.21079.02</u>
Primary Agency/Regulatory ID No.:			<u>Alaska Department of Environmental Conservation</u> <u>Attention: Janice Wieggers</u>

### WORK PERFORMED THIS EVENT (Second Semi-Annual – 2004):

1. Conducted semi-annual groundwater monitoring and sampling.
2. Abandoned wells MW-3, MW-12, MW-14, MW-15, and MW-16. Reported field activities to David Weigner on October 8, 2004.
3. Prepared and submitted second semi-annual groundwater monitoring report.

### WORK PROPOSED FOR NEXT EVENT (First Semi-Annual – 2005):

1. Conduct semi-annual groundwater monitoring and sampling.
2. Prepare and submit semi-annual groundwater monitoring report.

### SEMI-ANNUAL RESULTS SUMMARY

Current Phase of Project:	<u>Monitoring and Sampling</u>
Frequency of Groundwater Sampling:	<u>Semi-Annual</u>
Frequency of Groundwater Monitoring:	<u>Semi-Annual</u>
Is Free Product (FP) Present Onsite:	<u>No</u>
FP Recovered this Event:	<u>NA</u>
Cumulative FP Recovered to Date:	<u>NA</u>
Current Remediation Techniques:	<u>NA</u>
Approximate Depth to Groundwater	<u>13.45 to 14.06 feet</u>
Groundwater Gradient:	<u>Northwest @ 0.003 ft/ft</u>

## **DISCUSSION:**

On September 20, 2004, Oasis Environmental (Oasis) of Fairbanks, Alaska, conducted the second semi-annual groundwater monitoring and sampling event of 2004 (Figure 1). Eight wells were sampled during this event (Figure 2) and one duplicate sample (Duplicate 1) was taken for quality assurance/quality control (QA/QC) purposes. See Table 1 for monitoring well sampling frequency. During the second semi-annual event, groundwater flow was towards the northwest at an approximate gradient of 0.003 ft/ft (Figure 2). This gradient is consistent with historical data. Due to possible well heave and recent monument replacements, well gauging data from MW-6 was not used in the development of the groundwater gradient. Field and laboratory procedures are summarized in Attachment 1. Groundwater sampling field data sheets are included in Attachment 2. Laboratory analytical reports and chain-of-custody documentation are presented in Attachment 3.

Groundwater samples were analyzed for gasoline range organics (GRO) and benzene, toluene, ethylbenzene, and total xylenes (BTEX). GRO was detected in all eight of the samples collected at concentrations ranging from 390 micrograms per liter ( $\mu\text{g/l}$ ) in the sample from MW-13 to 27,000  $\mu\text{g/l}$  in the sample from MW-9. Benzene was detected in three of the eight samples collected at concentrations ranging from 5.1  $\mu\text{g/l}$  in the sample from MW-2, to 120  $\mu\text{g/l}$  in the sample from MW-13. Analytical results for benzene had an elevated baseline during quantitation in the groundwater samples collected from monitoring wells MW-1, MW-4, MW-5, MW-9, and MW-10. Toluene was detected in four of the eight samples collected at concentrations ranging from 4.2  $\mu\text{g/L}$  in the sample from MW-5, to 120  $\mu\text{g/L}$  in the sample from MW-10. Analytical results for toluene had an elevated baseline during quantitation in the groundwater samples collected from monitoring wells MW-4, MW-9, and MW-10. Ethylbenzene was detected in all eight of the samples collected at concentrations ranging from 1.0  $\mu\text{g/L}$  in the sample from MW-13, to 1,100  $\mu\text{g/L}$  in the sample from MW-9. Analytical results for ethylbenzene had an elevated baseline during quantitation in the groundwater samples collected from monitoring wells MW-4, MW-5, MW-9, and MW-10. Xylene (total) was detected in all eight of samples at concentrations ranging from 8.2  $\mu\text{g/L}$  in the sample from MW-13, to 5,900  $\mu\text{g/L}$  in the sample from MW-9. Analytical results for total xylenes had an elevated baseline during quantitation in the groundwater samples collected from monitoring wells MW-4, MW-5, MW-9, and MW-10. GRO and BTEX concentrations are presented in Figure 3. Groundwater analytical and elevation data are summarized in Table 2.

## **ATTACHMENTS:**

- Table 1 – Groundwater Monitoring Schedule
- Table 2 – Groundwater Elevation and Analytical Data
- Figure 1 – Site Location Map
- Figure 2 – Site Plan With Groundwater Elevations and Contours, September 20, 2004
- Figure 3 – Site Plan With Chemical Concentration Data, September 20, 2004
- Attachment 1 - Field and Laboratory Procedures
- Attachment 2 - Field Data Sheets
- Attachment 3 - Laboratory Analytical Reports and Chain-of-Custody Documentation

## **TABLES**

**TABLE 1**  
**Monitoring Well Sampling Frequency**

Former Texaco 21-1079  
1501 Cushman Street  
Fairbanks, Alaska

Well ID	Semi-Annual	Annual
MW-1	X	
MW-2	X	
MW-3		X
MW-4	X	
MW-5	X	
MW-6	X	
MW-7		X
MW-8		X
MW-9	X	
MW-10	X	
MW-11		X
MW-12	Removed from Monitoring and Sampling Program	
MW-13	X	
MW-14	Removed from Monitoring and Sampling Program	
MW-15	Removed from Monitoring and Sampling Program	
MW-16	Removed from Monitoring and Sampling Program	
SW MW-1	Removed from Monitoring and Sampling Program	

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater			Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)	
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)						
MW-1	06/20/94	440.92	15.25	425.67	49,000	--	750	11,000	1,800	10,000	--
	09/27/94		14.83	426.09	52,000	--	810	11,700	2,700	13,400	--
	11/21/94		15.48	425.44	51,000	--	1,100	13,000	3,100	14,000	--
	03/29/95		16.13	424.79	49,000	--	540	14,000	2,400	10,000	--
	06/29/95	440.94	14.45	426.49	58,000	1.8	380	14,000	2,600	13,000	--
	09/18/95		13.12	427.82	24,000	--	55	3,700	1,300	6,900	--
	12/13/95		15.00	425.94	42,000	0.39	290	4,000	16,000	7,700	--
	03/08/96		16.10	424.84	110,000	1.1	620	26,000	3,200	16,000	--
	05/31/96		15.13	425.81	91,500	--	394	20,100	2,370	13,900	--
	09/19/96		15.18	425.76	59,400	--	135	9,700	1,700	10,300	--
	12/11/96	440.96	15.73	425.23	43,600	--	150	8,160	1,560	7,930	--
	03/13/97		--	--	--	--	--	--	--	--	--
	06/18/97		15.40	425.56	37,300	--	<25	3,530	1,490	6,910	--
	09/19/97		14.97	425.99	17,200	--	<25	1,700	919	5,300	--
	12/10/97		15.80	425.16	32,100	--	<50	2,770	1,860	9,460	--
	03/30/98		--	--	16,800	--	14.2	925	980	4,530	--
	03/30/98		16.54	424.42	9,340	--	<25	531	569	2,660	--
	06/08/98		15.94	425.02	7,790	--	<10	408	476	2,390	--
	09/16/98		14.32	426.64	12,200	--	15.3	356	593	3,200	--
	09/16/98		--	--	13,800	--	19.7	469	719	3,680	--
	12/28/98		15.61	425.35	14,300	--	<50	865	855	3,800	--
	12/28/98		--	--	16,300	--	25.2	987	979	4,290	--
	03/13/99		16.54	424.42	9,100	--	<25	351	751	3,260	--
	06/22/99		--	--	--	--	--	--	--	--	--
	09/28/99		14.92	426.04	8,900	--	<20	79	590	2,310	--
	12/15/99		15.84	425.12	8,830	--	8.88	139	505	2,110	--
	03/21/00		16.30	424.66	8,950	--	<10	107	346	1,470	--
	03/21/00		--	--	11,500	--	<5	91.7	340	1,440	--
	06/20/00		13.97	426.99	4,690	--	8.85	19	150	565	--
	09/13/00		12.99	427.97	3,840	--	<5	13.5	147	535	--
	09/13/00		--	--	5,960	--	<5	23	216	848	--
	12/13/00		14.79	426.17	6,290	--	<4.0	24.9	178	631	--
	12/13/00		--	--	5,140	--	<4.0	14.2	125	452	--
	03/20/01		15.64	425.32	6,390	--	<13.2	13.3	218	793	--
	03/20/01		--	--	6,690	--	<14.0	17.2	210	754	--
	06/20/01		14.76	426.20	4,160	--	5.16	6.13	194	756	--
	06/20/01		--	--	6,180	--	2.95	10.7	197	785	--
	09/18/01		14.03	426.93	4,880	--	7.26	7.18	189	706	--
	09/18/01		--	--	5,730	--	7.8	<5.00	186	627	--
	03/25/02		16.12	424.84	5,070	--	7.47	<5.00	151	692	--
	03/25/02 <sup>D</sup>		--	--	5,310	--	5.28	<5.00	170	812	--
	09/15/02		13.02	427.94	4,530	--	3.69	0.738	81.3	424	--
	09/15/02 <sup>D</sup>		--	--	4,030	--	4.19	<5.00	107	394	--
	04/10/03		15.55	425.41	4,800	--	<10	<2.0	72	330	--
	4/10/2003 <sup>D</sup>		--	--	4,900	--	<20	<2.0	73	330	--
	09/05/03		12.56	428.40	2,600	--	<5	0.6	37	160	--
	9/5/2003 <sup>D</sup>		--	--	2,900	--	<10	0.6	42	180	--
	03/03/04		15.85	425.11	3,600	--	<10	<2.0	46	220	--
	3/3/2004 <sup>D</sup>		--	--	3,300	--	<20	<2.0	43	200	--
	<b>09/20/04</b>		<b>15.32</b>	<b>425.64</b>	<b>3,500</b>	--	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>33</b>	<b>170</b>	--
	<b>9/20/04<sup>D</sup></b>		--	--	<b>2,600</b>	--	<b>&lt;10</b>	<b>&lt;2</b>	<b>37</b>	<b>190</b>	--

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
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Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater			Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)				
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)				Benzene (µg/l)	Toluene (µg/l)		
MW-2	06/22/94	439.45	13.61	425.84	37,000	--	11,000	9,300	1,200	4,900	--	
	09/28/94		13.50	425.95	67,000	--	18,800	13,800	1,400	6,700	--	
	11/21/94		14.07	425.38	140,000	--	38,000	33,000	4,000	14,000	--	
	03/29/95		14.73	424.72	110,000	--	29,000	26,000	2,100	10,000	--	
	06/29/95	439.42	13.08	426.34	42,000	--	8,300	8,100	1,100	4,700	--	
	09/19/95		11.75	427.67	26,000	--	5,400	6,100	650	2,300	--	
	12/13/95		13.60	425.82	170,000	--	24,000	29,000	1,300	7,500	--	
	12/13/95		--	--	150,000	--	24,000	28,000	1,300	7,700	--	
	03/08/96		14.70	424.72	91,000	--	18,000	14,000	1,000	5,500	--	
	03/08/96		--	--	100,000	--	22,000	22,000	1,700	9,800	--	
	06/01/96		13.72	425.70	83,900	--	17,100	14,400	1,030	4,970	--	
	06/01/96		--	--	80,100	--	16,600	13,800	1,010	4,850	--	
	09/18/96		13.79	425.63	12,400	--	1,260	1,250	132	925	--	
	12/11/96		14.20	425.22	26,000	--	1,860	5,520	473	3,470	ND	
	12/11/96		--	--	24,800	--	1,900	5,360	459	3,240	--	
	03/13/97		14.59	424.83	741	--	78.8	159	9.54	134	--	
	06/18/97		15.15	424.27	67	--	2.21	6.31	2.93	18.2	--	
	06/18/97		--	--	65.2	--	2.66	7.51	2.45	16.2	--	
	09/19/97		14.28	425.14	<500	--	<0.5	0.797	<0.5	1.45	--	
	12/10/97		13.84	425.58	<500	--	0.529	0.801	1.02	4.72	3.63	
	03/30/98		14.65	424.77	150	--	<0.5	6.84	7.28	53.6	1.05	
	06/09/98		17.12	422.30	<500	--	<0.5	1.49	0.726	3.56	ND	
	09/16/98		14.81	424.61	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	12/28/98		13.19	426.23	<500	--	<1.0	<1.0	<1.0	<2.0	--	
	03/13/99		14.75	424.67	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	06/22/99		15.36	424.06	<500	--	2.03	<0.5	1.20	7.23	--	
	09/28/99		14.29	425.13	63	--	3.14	0.887	4.83	4.90	--	
	09/28/99		13.78	425.64	77	--	3.33	<0.5	5.44	4.85	--	
	12/15/99		14.59	424.83	80.2	--	7.36	<0.5	2.86	4.51	--	
	03/21/00		15.04	424.38	51.6	--	6.48	<0.5	1.48	2.13	--	
	06/20/00		12.77	426.65	<800	--	1.89	<0.5	<0.5	3.02	--	
	09/13/00		11.74	427.68	<500	--	1.69	<0.5	0.807	3.45	--	
	12/13/00		13.59	425.83	1,080	--	5.94	<1.03	56.4	195	--	
	03/20/01		14.39	425.03	427	--	5.07	<0.5	27.2	68.6	--	
	06/20/01		13.58	425.84	147	--	2.03	<0.5	9.99	20.9	--	
	09/18/01		12.83	426.59	431	--	2.51	0.500	26.4	102	--	
	03/25/02		14.97	424.45	1,160	--	3.73	4.87	98.6	315	--	
	09/15/02		11.76	427.66	1,340	--	7.47	<5.00	75.9	319	--	
	04/10/03		13.91	425.51	2,700	--	6.4	<0.5	200	620	--	
	09/05/03		11.28	428.14	1,600	--	4.3	<0.5	110	430	--	
	03/01/04						Well Beneath snowbank, no access					--
	<b>09/20/04</b>		<b>14.03</b>	<b>425.39</b>	<b>2,300</b>	<b>--</b>	<b>5.1</b>	<b>&lt;0.5</b>	<b>150</b>	<b>410</b>	<b>--</b>	

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater		GRO (µg/l)	DRO (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)
			Elevation (feet, MSL)								
MW-3	06/22/94	439.84	14.25	425.59	ND	--	ND	ND	ND	ND	--
	09/27/94		13.75	426.09	ND	--	1.6	2	ND	1	--
	11/22/94		14.38	425.46	ND	--	1.3	ND	ND	ND	--
	03/29/95		15.07	424.77	ND	--	2.1	2	ND	6	--
	06/29/95	439.93	13.40	426.53	ND	--	0.6	ND	ND	ND	--
	09/18/95		12.08	427.85	ND	--	0.6	ND	ND	ND	--
	12/12/95		14.10	425.83	ND	--	ND	ND	ND	ND	--
	03/08/96		15.12	424.81	ND	ND	ND	ND	ND	ND	--
	05/30/96		14.16	425.77	ND	--	ND	ND	ND	ND	--
	09/18/96		14.20	425.73	ND	--	ND	ND	ND	ND	--
	12/11/96		15.10	424.83	ND	--	ND	ND	ND	ND	--
	03/13/97		15.61	424.32	ND	--	ND	ND	ND	ND	--
	06/18/97		--	--	--	--	--	--	--	--	--
	09/19/97		14.32	425.61	<500	--	<0.5	<0.5	<0.5	1.1	--
	12/10/97		--	--	--	--	--	--	--	--	--
	06/09/98		15.30	424.63	<500	--	<0.5	<0.5	0.592	2.2	--
	06/09/98			439.93	<500	--	<0.5	<0.5	<0.5	1.76	--
	09/16/98		13.69	426.24	178	--	<0.5	5.04	8.05	68.7	--
	12/28/98		15.26	424.67	<500	--	<1.0	<1.0	<1.0	<2.	--
	03/13/99		15.89	424.04	<500	--	<0.5	<0.5	<0.5	<1.0	--
	06/22/99		--	--	--	--	--	--	--	--	--
	09/28/99		14.32	425.61	<500	--	<0.5	<0.5	<0.5	<1.0	--
	12/15/99		--	--	--	--	--	--	--	--	--
	03/21/00		15.04	424.89	<500	--	<0.5	<0.5	<0.5	<0.1	--
	06/20/00		--	--	--	--	--	--	--	--	--
	09/13/00		12.42	427.51	<500	--	<0.5	<0.5	<0.5	<0.1	--
	12/13/00		--	--	--	--	--	--	--	--	--
	03/20/01		15.10	424.83	<500	--	<0.2	<0.5	<0.5	<0.1	--
	06/20/01		--	--	--	--	--	--	--	--	--
	09/18/01		--	--	--	--	--	--	--	--	--
	03/25/02		15.74	424.19	<500	--	<0.200	<0.500	<0.500	<1.00	--
	04/09/03		15.13	424.80	12	--	<0.5	<0.5	<0.5	<1.5	--
09/01/04											
Well beneath snowbank no access											
<b>Well Decommissioned Due to Damage on 8/19/2004</b>											

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

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Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater				Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)						
MW-4	06/20/94	439.23	13.51	425.72	140,000	--	7,700	56,000	4,600	20,000	--
	09/27/94		13.15	426.08	98,000	--	5,510	35,000	3,800	17,800	--
	11/21/94		13.74	425.49	120,000	--	5,200	42,000	5,000	28,000	--
	03/29/95		14.44	424.79	60,000	--	1,000	17,000	2,600	15,000	--
	06/29/95	439.16	12.76	426.40	79,000	1.9	790	20,000	3,300	16,000	--
	09/18/95		11.35	427.81	47,000	--	400	11,000	1,800	12,000	--
	12/13/95		13.30	425.86	87,000	--	450	12,000	2,300	14,000	--
	03/08/96		14.39	424.77	130,000	--	660	33,000	5,300	30,000	--
	05/31/96		13.38	425.78	102,000	--	407	15,900	3,450	22,300	--
	09/19/96		13.45	425.71	92,100	--	332	11,000	3,370	22,200	--
	12/12/96		14.22	424.94	39,800	--	164	3,810	1,330	10,300	--
	03/13/97		14.81	424.35	37,200	--	141	3,150	1,210	10,100	--
	06/18/97		13.81	425.35	33,800	--	<100	2,760	1,270	9,770	--
	09/19/97		13.42	425.74	34,000	--	<100	3,500	1,620	12,300	32.4
	12/10/97		14.33	424.83	38,700	--	50.6	1,820	1,330	11,300	22.4
	03/30/98		15.03	424.13	20,500	--	<50.0	1,270	849	6,660	14.5
	06/09/98		14.34	424.82	18,700	--	<50	771	673	6,530	9.96
	09/16/98		12.74	426.42	29,100	--	33.8	818	1,150	9,450	--
	12/28/98		14.43	424.73	25,900	--	8.03	275	939	7,030	--
	03/13/99		15.02	424.14	13,600	--	<50	122	644	4,820	--
	06/22/99		--	--	--	--	--	--	--	--	--
	09/28/99		13.49	425.67	22,700	--	<40	95	766	4,890	--
	12/15/99		14.29	424.87	17,500	--	22.5	45.4	710	3,700	--
	03/21/00		14.75	424.41	12,500	--	<25	27.6	366	1,990	--
	06/20/00		12.47	426.69	14,900	--	23.5	47.5	395	1,790	--
	09/13/00		11.45	427.71	12,400	--	<10	27.8	386	2,010	--
	12/13/00		13.24	425.92	11,500	--	<10.0	<25.0	442	1,910	--
	03/20/01		14.10	425.06	9,260	--	<4.20	<10	326	1,340	--
	06/20/01		13.27	425.89	7,960	--	12.5	11.4	360	13,910	--
	09/18/01		12.51	426.65	9,650	--	12.9	<10.0	373	1,530	--
	03/25/02		14.65	424.51	8,380	--	9.19	5.36	259	940	--
	03/25/02 <sup>D</sup>		--	--	4,200	--	6.46	<5.00	115	342	--
	09/15/02		11.46	427.70	8,690	--	6.93	<5.00	315	1,170	--
	04/10/03		13.96	425.20	5,600	--	<10	1.3	150	520	--
	09/05/03		10.88	428.28	6,300	--	<20	1.5	170	430	--
	03/03/04		14.09	425.07	3,800	--	<20	1	110	300	--
	<b>09/20/04</b>		<b>13.72</b>	<b>425.44</b>	<b>6,100</b>	<b>--</b>	<b>&lt;20</b>	<b>&lt;2.5</b>	<b>120</b>	<b>280</b>	<b>--</b>

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater			Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)			
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)				Benzene (µg/l)	Toluene (µg/l)	
MW-5	06/22/94	439.90	13.95	426.99	150,000	--	33,000	45,000	3,800	16,000	--
	09/27/94		13.82	427.12	103,000	--	22,800	24,100	2,900	13,900	--
	11/21/94		14.44	426.50	150,000	--	29,000	39,000	5,000	30,000	--
	03/29/95		15.10	425.84	160,000	--	12,000	25,000	5,000	50,000	--
	06/29/95	439.82	13.45	426.37	19,000	--	17,000	37,000	5,200	33,000	--
	09/19/95		12.10	427.72	170,000	--	26,000	48,000	4,000	26,000	--
	12/13/95		13.85	425.97	420,000	--	43,000	60,000	56,000	35,000	--
	03/08/96		14.90	424.92	240,000	2.0	37,000	46,000	3,200	15,000	--
	06/01/96		14.07	425.75	124,000	--	15,400	25,400	2,110	9,890	--
	09/17/96		14.11	425.71	176,000	--	22,400	36,200	2,830	14,400	--
	12/11/96		14.81	425.01	175,000	--	17,200	34,500	3,210	18,200	--
	03/13/97		15.46	424.36	54,000	--	3,120	12,900	986	8,430	--
	06/18/97		14.61	425.21	7,150	--	230	953	259	1,210	--
	09/19/97		14.20	425.62	2,150	--	26.1	402	108	551	4.78
	09/19/97		--	--	3,050	--	<12.5	613	158	769	--
	12/10/97		15.00	424.82	7,700	--	160	427	336	1,940	5.11
	12/10/97		--	--	6,390	--	138	418	340	1,720	5.29
	03/30/98		16.72	423.10	1,690	--	5.89	389	62.0	322	4.62
	06/09/98		15.14	424.68	1,280	--	<5	281	45.2	213	3.11
	09/16/98		13.53	426.29	2,820	--	<12.5	130	141	796	--
	09/16/98		--	--	2,450	--	<10.0	132	145	814	--
	12/28/98		15.09	424.73	3,330	--	2.10	60	218	881	--
	03/13/99		15.67	424.15	4,490	--	26.70	65	391	1,220	--
	03/13/99		--	--	5,370	--	30.00	79	450	1,410	--
	06/22/99		14.72	425.10	5,660	--	30.7	539	207	991	--
	09/28/99		14.18	425.64	8,470	--	<25	52	282	1,460	--
	12/15/99		14.95	424.87	7,580	--	30.5	45.4	411	1,920	--
	12/15/99		--	--	5,900	--	23.8	31.8	307	1,380	--
	03/21/00		15.40	424.42	5,380	--	13.0	70.7	179	708	--
	06/20/00		13.13	426.69	5,470	--	14.3	153	184	875	--
	06/20/00		--	--	4,790	--	14.2	140	171	740	--
	09/13/00		12.16	427.66	9,570	--	11.7	134	380	2,190	--
	12/13/00		13.89	425.93	13,000	--	<10.0	251	576	3,730	--
	03/20/01		14.74	425.08	15,100	--	<21.0	338	637	3,710	--
	06/20/01		13.98	425.84	11,800	--	7.15	325	455	2,900	--
	09/18/01		13.13	426.69	11,500	--	13.0	223	485	3,260	--
	03/25/02		15.30	424.52	9,630	--	5.52	29.1	448	3,240	--
	09/15/02		12.13	427.69	15,300	--	8.98	29.6	577	4,590	--
	04/10/03		14.49	425.33	23,000	--	<10	21	850	6,800	--
	09/05/03		11.64	428.18	18,000	--	30	37	570	4,600	--
	03/03/04		14.83	424.99	24,000	--	<20	5.8	680	5,600	--
	<b>09/20/04</b>		<b>14.37</b>	<b>425.45</b>	<b>20,000</b>	<b>--</b>	<b>&lt;20</b>	<b>4.2</b>	<b>500</b>	<b>4,500</b>	<b>--</b>

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater				Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)						
MW-6	06/20/94	439.39	13.88	425.51	13,000	--	2,300	650	850	2,600	--
	09/28/94		13.44	425.95	9,000	--	2,430	900	700	1,800	--
	11/21/94		14.03	425.36	28,000	--	5,800	7,800	1,600	5,200	--
	03/29/95		14.69	424.70	32,000	--	3,400	7,000	1,700	6,500	--
	06/29/95	439.37	13.06	426.31	4,200	--	230	8	510	960	--
	09/18/95		11.69	427.68	2,400	--	190	17	300	390	--
	12/13/95		13.65	425.72	39,000	--	3,600	7,300	1,200	4,000	--
	03/08/96		14.67	424.70	58,000	--	3,600	17,000	2,100	7,900	--
	05/31/96		13.66	425.71	15,300	--	377	1,020	972	3,380	--
	09/17/96		13.74	425.63	15,400	--	848	2,080	840	2,500	--
	12/12/96		14.55	424.82	31,700	--	2,080	7,240	1,160	3,390	--
	03/13/97		15.10	424.27	22,400	--	773	4,510	1,170	3,950	--
	06/18/97		14.23	425.14	8,060	--	124	50	846	1,680	--
	09/20/97		13.85	425.52	2,460	--	72.4	33.1	387	390	--
	12/10/97		14.63	424.74	5,130	--	728	5,130	1,130	2,640	--
	03/31/98		15.37	424.00	12,200	--	174	638	1,310	3,470	--
	06/08/98		14.77	424.60	4,550	--	64.9	210	665	1,230	--
	09/16/98		13.16	426.21	870	--	14.4	<2.5	173	159	--
	12/29/98		14.70	424.67	16,900	--	249	4,210	1,110	2,710	--
	03/14/99		15.35	424.02	23,000	--	176	4,550	1,820	5,840	--
	06/22/99		14.36	425.01	5,910	--	27.1	<10	769	1,780	--
	09/28/99		13.78	425.59	698	--	9.5	<2.5	117	142	--
	12/16/99		14.59	424.78	4,240	--	102	240	562	964	--
	12/16/99		--	--	4,550	--	97.1	226	522	903	--
	03/21/00		15.04	424.33	10,400	--	59.9	1,410	907	1,910	--
	06/20/00		12.77	426.60	2,990	--	13.5	4.08	407	585	--
	09/13/00		11.80	427.57	439	--	4.20	<0.5	45.7	88.8	--
	12/13/00		13.45	425.92	655	--	8.41	1.03	49	69.5	--
	03/20/01		14.42	424.95	24,900	--	238	2,520	1,770	6,260	--
	04/16/02		--	--	24,600	--	198	1,410	1,680	6,160	--
06/20/01		13.56	425.81	7,540	--	54.3	15.3	967	2,220	--	
09/18/01		12.84	426.53	976	--	13.4	<250	171	233	--	
03/25/02		14.98	424.39	13,800	--	420	78.8	1,410	3,300	--	
09/15/02		11.79	427.58	340	--	4.15	<0.500	11.6	75.5	--	
04/09/03		14.25	425.12	23,000	--	250	830	1,500	5,500	--	
4/9/2003 <sup>D</sup>		--	--	24,000	--	270	950	1,600	5,800	--	
09/05/03		11.34	428.03	1,800	--	23	<0.5	150	380	--	
03/03/04		14.55	424.82	25,000	--	340	180	1,400	6,200	--	
<b>09/20/04</b>		<b>14.06</b>	<b>425.31</b>	<b>3,800</b>	--	<b>94</b>	<b>12</b>	<b>230</b>	<b>700</b>	--	

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater				Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)						
MW-7	06/22/94	439.72	13.97	425.75	44,000	--	11,000	6,200	1,600	5,500	--
	09/28/94		13.90	425.82	38,000	--	11,400	5,900	1,800	5,800	--
	11/22/94		14.46	425.26	41,000	--	12,000	8,600	1,900	6,900	--
	03/29/95		15.12	424.60	39,000	--	8,600	6,800	1,600	6,100	--
	06/29/95	439.70	13.45	426.25	18,000	--	5,100	2,500	900	2,600	--
	09/18/95		12.08	427.62	2,700	--	750	5	250	286	--
	12/13/95		14.00	425.70	26,000	--	4,800	530	1,000	3,800	--
	03/08/96		15.10	424.60	25,000	--	5,100	250	960	2,400	--
	06/01/96		14.11	425.59	13,200	--	3,360	38.1	649	1,030	--
	09/18/96		14.19	425.51	15,800	--	4,060	52.6	807	1,120	--
	12/11/96		14.98	424.72	12,300	--	3,340	52.9	715	884	--
	03/13/97		15.52	424.18	13,600	--	3,370	162	785	1,170	--
	06/18/97		14.66	425.04	4,630	--	1,430	<12.5	371	257	--
	09/20/97		14.27	425.43	3,230	--	1,250	<10	305	181	--
	12/10/97		14.95	424.75	2,310	--	818	<10	253	112	--
	03/31/98		15.79	423.91	798	--	280	<2.5	145	12.7	--
	06/09/98		15.19	424.51	473	--	157	1.01	117	7.89	--
	09/16/98		13.57	426.13	264	--	55.3	2.17	42.2	32.3	--
	12/28/98		15.15	424.55	186	--	45.0	1.22	34.3	20.06	--
	03/13/99		15.75	423.95	203	--	61.0	<0.5	42.6	<1.0	--
	03/13/99		--	--	181	--	60.7	<0.5	43.0	<1.0	--
	06/22/99		14.77	424.93	85.9	--	24.3	<0.5	7.5	<1.0	--
	09/28/99		14.19	425.51	119	--	18.6	<0.5	6.2	17.5	--
	09/28/99		--	--	149	--	21.8	0.82	7.3	21.7	--
	12/16/99		14.97	424.73	50.3	--	16.2	<0.5	1.17	<1.0	--
	03/21/00		15.42	424.28	51.6	--	16.3	<0.5	<0.5	<1.0	--
	06/20/00		13.14	426.56	51.6	--	15.6	<0.5	<0.5	<1.0	--
	09/13/00		12.17	427.53	<800	--	4.99	<0.5	<0.5	<1.0	--
	12/13/00		13.92	425.78	<800	--	4.83	<0.5	<0.5	<1.0	--
	03/21/01		14.79	424.91	<500	--	3.09	<0.5	<0.5	<1.0	--
03/21/01		--	--	<500	--	13.5	<0.5	<0.5	<1.0	--	
06/20/01		13.96	425.74	<500	--	7.02	<0.5	<0.5	<1.0	--	
06/20/01		--	--	<500	--	4.74	<0.5	<0.5	<1.0	--	
09/18/01		--	--	--	--	--	--	--	--	--	
03/25/02		15.31	424.39	1,160	--	1.53	<0.500	<0.500	<1.00	--	
04/10/03		14.66	425.04	15	--	0.8	<0.5	<0.5	<0.5	--	
03/03/04		14.89	424.81	<10	--	<0.5	<0.5	<0.5	<1.5	--	

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater				Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)						
MW-8	06/27/95	439.58	13.39	426.19	1,650	0.1	711	1	30	19	--
	09/19/95		12.03	427.55	4,400	--	2,200	15	102	154	--
	12/13/95		13.96	425.62	7,200	2.4	240	ND	2.8	1.7	--
	03/08/96		15.03	424.55	2,600	--	ND	ND	13	3.5	--
	05/31/96		14.03	425.55	1,940	0.478	726	ND	4.42	10.1	--
	09/16/96		14.11	425.47	1,360	--	593	ND	1.07	ND	--
	12/11/96		14.93	424.65	1,310	--	592	0.518	3.09	1.05	--
	03/13/97		15.41	424.17	362	--	126	ND	1.67	ND	--
	06/18/97		14.58	425.00	1,710	--	673	<5.0	<5.0	<10.0	--
	09/20/97		14.19	425.39	114	--	52.9	<0.5	<0.5	<1	--
	12/10/97		14.95	424.63	78.7	--	33.4	<0.5	<0.5	<1	--
	03/20/98		15.72	423.86	--	--	--	--	--	--	--
	06/09/98		15.11	424.47	427	--	299	<2.5	3.02	8.14	--
	09/16/98		13.49	426.09	1,870	--	1,530	<10	36.7	51.7	--
	12/29/98		15.10	424.48	485	--	257	<2.50	<2.50	<5.00	--
	03/14/99		15.68	423.90	<500	--	19	<0.5	<0.5	<1.0	--
	06/22/99		14.70	424.88	1,130	--	534	<10	<10	<20	--
	09/28/99		14.12	425.46	1,400	--	637	<10	<10	<20	--
	12/16/99		14.89	424.69	77.5	--	40.0	<0.5	<0.5	<1.0	--
	03/21/00		15.35	424.23	<500	--	<0.5	<0.5	<0.5	<1.0	--
	06/20/00		13.06	426.52	1,130	--	436	<5.0	5.04	<10.0	--
	09/14/00		12.06	427.52	242	--	106	<0.5	<0.5	<1.0	--
	12/14/00		13.84	425.74	<500	--	<0.2	<0.5	<0.5	<1.0	--
	03/21/01		14.71	424.87	<500	--	<0.2	<0.5	<0.5	<1.0	--
	06/20/01		13.89	425.69	296	--	141	<0.5	<0.5	<1.0	--
	09/18/01		--	--	--	--	--	--	--	--	--
	03/25/02		15.30	424.28	<50	--	<0.200	<0.500	<0.500	<1.00	--
	04/10/03		14.58	425.00	<10	--	<0.5	<0.5	<0.5	<1.5	--
	03/03/04		14.80	424.78	<10	--	<0.5	<0.5	<0.5	<1.5	--

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater				Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)						
MW-9	06/30/95	438.76	12.51	426.25	87,000	--	3,700	2,100	3,800	16,000	--
	09/19/95		11.10	427.66	78,000	--	3,200	37,000	3,100	14,000	--
	12/13/95		13.00	425.76	91,000	--	2,900	18,000	2,300	11,000	--
	03/08/96		14.10	424.66	110,000	--	3,700	34,000	3,600	17,000	--
	03/08/96		--	--	110,000	--	3,800	35,000	3,700	17,000	--
	05/30/96		13.10	425.66	104,000	--	2,530	22,800	3,520	15,900	--
	09/16/96		13.19	425.57	72,400	--	1,670	16,000	2,400	10,900	--
	12/12/96		13.96	424.80	111,000	--	2,290	24,900	4,440	18,300	--
	03/13/97		14.52	424.24	84,700	--	1,620	19,300	2,940	13,800	--
	03/13/97		--	--	79,300	--	1,580	19,100	2,840	13,500	--
	06/18/97		13.66	425.10	74,400	--	1,120	14,700	3,340	14,300	--
	06/18/97		--	--	74,600	--	1,130	14,800	3,240	13,900	--
	09/20/97		13.27	425.49	59,200	--	840	15,900	2,870	12,600	ND
	12/10/97		14.00	424.76	66,800	--	760	16,700	2,990	16,000	ND
	12/10/97		--	--	69,800	--	804	17,000	3,570	16,600	--
	03/30/98		14.80	423.96	57,900	--	508	13,900	2,710	12,500	ND
	06/09/98		14.21	424.55	52,900	--	513	12,000	2,610	12,100	ND
	09/17/98		12.59	426.17	29,700	--	332	5,520	1,300	7,060	--
	12/29/98		14.15	424.61	52,900	--	238	9,920	2,320	12,830	--
	03/13/99		14.78	423.98	56,400	--	272	11,200	3,240	16,700	--
	08/09/99		--	--	56,200	--	110	6,640	2,610	11,800	--
	09/28/99		13.22	425.54	36,300	--	<200	4,610	1,920	9,240	--
	12/15/99		13.98	424.78	45,800	--	<125	6,670	2,530	13,900	--
	03/22/00		14.43	424.33	54,100	--	59.8	4,770	2,050	10,900	--
	06/20/00		12.16	426.60	44,200	--	62	3,540	2,020	10,400	--
	09/14/00		11.20	427.56	41,900	--	34.6	3,450	1,970	10,600	--
	12/14/00		12.94	425.82	26,200	--	<20.0	1,920	1,300	7,290	--
	03/21/01		13.81	424.95	37,700	--	<46.0	2,520	1,980	11,000	--
	06/20/01		12.98	425.78	35,600	--	40.8	2,300	1,830	11,400	--
	09/18/01		12.24	426.52	19,400	--	<20.0	567	1,100	6,010	--
	03/25/02		14.37	424.39	42,400	--	18.9	1,470	2,010	12,500	--
	09/15/02		11.17	427.59	24,500	--	12.5	175	1,280	5,810	--
	04/10/03		13.64	425.12	41,000	--	<50	430	1,700	11,000	--
	09/05/03		10.71	428.05	35,000	--	<50	220	1,500	9,300	--
	03/03/04		13.87	424.89	34,000	--	<50	130	1,300	7,300	--
	<b>09/20/04</b>		<b>13.45</b>	<b>425.31</b>	<b>27,000</b>	<b>--</b>	<b>&lt;50</b>	<b>53</b>	<b>1,100</b>	<b>5,900</b>	<b>--</b>

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater				Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)						
MW-10	06/30/95	439.22	12.78	426.44	23,000	--	21.2	2,500	1,500	7,000	--
	09/19/95		11.45	427.77	13,000	--	21	890	980	3,800	--
	12/12/95		13.30	425.92	19,000	--	88	130	1,400	3,400	--
	03/08/96		14.38	424.84	13,000	--	99	15	1,000	1,800	--
	06/01/96		13.42	425.80	17,400	--	108	49.3	1,230	2,340	--
	09/19/96		13.48	425.74	20,400	--	224	292	1,520	3,610	--
	12/11/96		14.25	424.97	14,300	--	107	53.8	1,150	1,890	--
	03/13/97		14.80	424.42	3,380	--	23.7	ND	462	491	--
	06/10/97		--	--	--	--	--	--	--	--	--
	09/19/97		13.54	425.68	21,300	--	302	1,060	1,860	6,630	--
	12/10/97		14.33	424.89	8,570	--	54.8	25	953	1,300	--
	03/30/98		15.06	424.16	1,680	--	10.9	ND	281	255	--
	06/09/98		14.49	424.73	2,200	--	<20	<2.5	313	230	--
	09/17/98		12.88	426.34	2,200	--	16.7	<5.0	373	347	--
	12/28/98		14.42	424.80	2,950	--	8.29	<1.0	503	481	--
	03/13/99		15.03	424.19	2,000	--	13.3	<5.0	424	443	--
	08/09/99		--	--	13,200	--	61.0	549.0	991	3,470	--
	09/28/99		13.48	425.74	8,170	--	40.0	98.4	836	2,500	--
	12/15/99		14.27	424.95	5,140	--	20.6	2.48	947	988	--
	03/21/00		14.72	424.50	2,430	--	7.78	<5.0	403	378	--
	06/20/00		12.47	426.75	413	--	1.95	0.632	47.5	33.7	--
	09/14/00		11.51	427.71	838	--	<3.3	<2.5	135	92.3	--
	09/14/00		--	--	666	--	<2.75	<2.5	120	80.4	--
	12/14/00		13.23	425.99	3,260	--	<5.0	<2.5	405	285	--
	12/14/00		14.07	425.15	3,030	--	<1.0	<2.5	425	316	--
	03/21/01		--	--	7,150	--	<22.0	<2.5	821	1,130	--
	06/21/01		13.27	425.95	6,040	--	10.1	122	637	1,150	--
	09/18/01		12.53	426.69	6,410	--	13.1	63.0	700	1,070	--
	03/25/02		14.55	424.67	4,140	--	7.88	49.9	524	681	--
	09/15/02		12.46	426.76	1,750	--	2.48	2.16	160	172	--
	04/10/03		13.92	425.30	10,000	--	<20	130	700	1,600	--
	09/05/03		10.97	428.25	3,100	--	<5	14	190	370	--
	03/03/04		14.16	425.06	4,100	--	<10	8.9	300	520	--
	<b>09/20/04</b>		<b>13.71</b>	<b>425.51</b>	<b>13,000</b>	<b>--</b>	<b>&lt;20</b>	<b>120</b>	<b>640</b>	<b>2,000</b>	<b>--</b>

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater		GRO (µg/l)	DRO (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)
			Elevation (feet, MSL)								
MW-11	06/30/95	440.42	13.96	426.46	34,000	14.9	10	102	8,000	28,000	--
	09/18/95		12.60	427.82							--
	12/12/95		--	--							--
	03/08/96		15.55	424.87	35,000	ND	230	12	1,400	2,600	--
	05/30/96		14.55	425.87	17,600	3.4	111	ND	883	2,070	--
	09/17/96		14.64	425.78	37,900	--	224	10.4	1,130	2,450	--
	12/11/96		15.42	425.00	28,800	--	222	ND	892	1,880	--
	03/13/97		16.05	424.37	29,500	--	165	ND	923	2,310	--
	06/18/97		15.16	425.26	--	--	--	--	--	--	--
	09/19/97		14.72	425.70	23,400	--	<100	<100	742	2,060	--
	12/10/97		15.60	424.82	19,600	--	34.2	13.2	667	1,490	--
	03/30/98		16.34	424.08	14,500	--	23.4	ND	301	795	--
	06/09/98		15.74	424.68	14,400	--	<25	<10	352	741	--
	09/15/98		14.12	426.30	12,700	--	<34	<10	319	603	--
	12/28/98		15.75	424.67	9,970	--	<1.0	<1.0	202	357.15	--
	03/13/99		16.34	424.08	9,110	--	53.9	22.0	290	523	--
	06/22/99		15.37	425.05	5,600	--	<30	<7.1	173	303	--
	06/22/99		--	--	5,140	--	<25.5	<7.5	197	342	--
	09/28/99		14.75	425.67	3,150	--	<10	<5.0	82	143	--
	12/15/99		15.63	424.79	8,090	--	<20	<7.5	162	276	--
	03/21/00		16.09	424.33	9,010	--	<5.0	<8.5	128	252	--
	06/21/00		13.84	426.58	8,700	--	19.2	<2.5	126	253	--
	09/14/00		13.08	427.34	5,440	--	<2.97	<2.98	94.0	175	--
	12/14/00		14.63	425.79	10,600	--	<4.0	<10.0	91.1	184	--
	03/21/01		15.49	424.93	12,200	--	<2.00	13.0	157	328	--
	06/20/01		--	--	--	--	--	--	--	--	--
	09/18/01		--	--	--	--	--	--	--	--	--
03/25/02		15.85	424.57	7,830	--	18.2	1.54	92.1	176	--	
04/09/03		15.17	425.25	8,500	--	<20	<5.0	52	100	--	
03/02/04		15.50	424.92	4,900	--	<50	<2.5	40	76	--	
MW-12	06/30/95	439.59	13.29	426.30	67	--	ND	2	2	8	--
	09/20/95		11.95	427.64	ND	--	ND	ND	ND	ND	--
	12/13/95		13.83	425.76	ND	--	ND	ND	ND	ND	--
	03/07/96		14.90	424.69	ND	--	ND	ND	ND	ND	--
	05/31/96		13.90	425.69	ND	--	ND	ND	ND	ND	--
	09/16/96		13.96	425.63	ND	--	ND	ND	ND	ND	--
	12/11/96		14.75	424.84	ND	--	ND	ND	ND	ND	--
	03/13/97		15.31	424.28	ND	--	ND	ND	ND	ND	--
	06/18/97		14.43	425.16	<500	--	<0.5	<0.5	<0.5	<1.0	--
	09/20/97		14.05	425.54	<500	--	<0.5	<0.5	<0.5	<1.0	--
	12/10/97		--	--	--	--	--	--	--	--	--
	03/31/98		15.58	424.01	<500	--	<0.5	<0.5	<0.5	<1.0	--
	09/16/98		13.37	426.22	<500	--	<0.5	<0.5	<0.5	<1.0	--
	03/14/99		15.54	424.05	<500	--	<0.5	<0.5	<0.5	0.59	--
	09/28/99		13.98	425.61	<500	--	<0.5	<0.5	<0.5	1.21	--
	12/15/99		--	--	--	--	--	--	--	--	--
	03/21/00		15.22	424.37	<500	<0.5	<0.5	<0.5	<0.5	<1.0	--
	06/20/00		--	--	--	--	--	--	--	--	--
09/13/00		12.00	427.59	<500	<0.5	<0.5	<0.5	<0.5	<1.0	--	
12/14/00		--	--	--	--	--	--	--	--	--	
03/21/01		14.59	425.00	<500	<0.2	<0.5	<0.5	<0.5	<1.0	--	

**Well Decommissioned on 8/19/2004**

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater				Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)		
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)	Benzene (µg/l)				Toluene (µg/l)	
MW-13	06/30/95	439.17	12.92	426.25	6,700	--	1,700	790	460	6,900	--
	09/18/95		11.55	427.62	3,200	--	800	3	320	220	--
	12/13/95		13.45	425.72	7,000	--	1,400	ND	390	280	--
	12/13/95		--	--	7,100	--	1,400	0.98	370	260	--
	03/07/96		14.50	424.67	3,700	--	1,200	0.9	190	75	--
	05/31/96		13.56	425.61	10,500	--	2,090	781	578	829	--
	09/16/96		13.62	425.55	18,600	--	1,900	1,420	1,110	2,900	--
	09/16/96		--	--	17,000	--	2,060	1,440	1,050	2,700	--
	12/11/96		14.40	424.77	2,830	--	374	ND	351	217	--
	12/11/96		--	--	2,690	--	356	ND	330	216	--
	03/13/97		14.96	424.21	1,360	--	308	ND	178	ND	--
	03/13/97		--	--	1,960	--	371	ND	230	ND	--
	06/18/97		14.10	425.07	5,440	--	1,430	17.7	578	231	--
	09/19/97		13.70	425.47	4,830	--	751	<5	801	524	--
	09/19/97		--	--	4,800	--	691	<12.5	717	463	--
	12/10/97		14.47	424.70	2,050	--	231	3.5	417	206	--
	03/30/98		15.24	423.93	2,230	--	284	180	310	174	--
	06/08/98		14.66	424.51	5,020	--	619	91.9	697	624	--
	06/08/98		--	--	4,890	--	576	107	653	597	--
	09/15/98		13.02	426.15	1,730	--	99.1	0.636	281	118	--
	12/29/98		14.61	424.56	134	--	9.88	<1.0	14.8	25.9	--
	03/14/99		15.20	423.97	<500	--	7.85	<0.5	<0.5	2.34	--
	06/22/99		--	--	--	--	--	--	--	--	--
	09/28/99		13.64	425.53	1580	--	85.50	<2.5	306	224	--
	12/16/99		14.42	424.75	<50.0	--	7.39	<0.5	1.38	4.10	--
	03/22/00		14.89	424.28	<500	--	4.90	<0.5	<0.5	<1.0	--
	06/20/00		12.63	426.54	335	--	54.2	<0.5	23.3	17.8	--
	09/14/00		11.36	427.81	186	--	12.8	<0.5	14.8	24.3	--
	12/13/00		13.40	425.77	74	--	11.6	<0.5	2.35	7.02	--
	03/21/01		14.27	424.90	<500	--	4.91	<0.5	<0.5	<1.0	--
	06/20/01		13.44	425.73	410	--	40.6	4.17	51	53.1	--
	09/18/01		12.71	426.46	212	--	36.1	<0.500	25.7	23.5	--
	03/25/02		14.84	424.33	<50.0	--	18.1	<0.500	<0.500	<1.00	--
	09/15/02		11.64	427.53	79.9	--	20.0	<0.500	2.82	1.35	--
	04/10/03		14.18	424.99	26	--	9.0	<0.5	<0.5	<1.5	--
	09/05/03		11.18	427.99	180	--	50.0	<0.5	<0.5	7.00	--
	03/03/04		14.40	424.77	<10	--	0.6	<0.5	<0.5	<1.5	--
	<b>09/20/04</b>		<b>13.95</b>	<b>425.22</b>	<b>390</b>	<b>--</b>	<b>120</b>	<b>&lt;0.5</b>	<b>1.0</b>	<b>8.2</b>	<b>--</b>

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater		GRO (µg/l)	DRO (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)	
			Elevation (feet, MSL)									
MW-14	06/30/95	439.26	13.10	426.16	57	0.5	0.7	4	2	8	--	
	09/20/95		11.70	427.56	ND	--	0.6	ND	ND	ND	--	
	12/13/95		13.65	425.61	ND	--	ND	ND	ND	ND	--	
	03/07/96		14.70	424.56	ND	--	ND	ND	ND	ND	--	
	05/31/96		13.71	425.55	ND	--	ND	ND	ND	ND	--	
	09/16/96		13.81	425.45	ND	--	ND	0.626	ND	2.56	--	
	12/11/96		14.59	424.67	ND	--	ND	ND	ND	ND	--	
	03/13/97		15.13	424.13	ND	--	ND	ND	ND	ND	--	
	06/18/97		14.28	424.98	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	09/20/97		13.91	425.35	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	12/10/97		--	--	--	--	--	--	--	--	--	
	03/30/98		15.41	423.85	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	03/30/98		--	--	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	06/08/98		--	--	--	--	--	--	--	--	--	
	09/17/98		13.20	426.06	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	12/29/98		--	--	--	--	--	--	--	--	--	
	03/14/99		15.37	423.89	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	06/22/99		--	--	--	--	--	--	--	--	--	
	09/28/99		13.81	425.45	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	12/15/99		--	--	--	--	--	--	--	--	--	
	03/21/00		15.04	424.22	<500	<0.5	<0.5	<0.5	<0.5	<1.0	--	
	06/20/00		--	--	--	--	--	--	--	--	--	
	09/14/00		11.80	427.46	<500	<0.5	<0.5	<0.5	<0.5	<1.0	--	
	12/14/00		--	--	--	--	--	--	--	--	--	
	03/21/01		14.42	424.84	<500	<0.2	<0.5	<0.5	<0.5	<1.0	--	
	03/21/01		--	--	<500	<0.2	<0.5	<0.5	<0.5	<1.0	--	
06/20/01		--	--	--	--	--	--	--	--	--		
<b>Well Decommissioned on 8/19/2004</b>												
MW-15	09/21/95	437.55	9.80	427.75	ND	--	ND	ND	ND	ND	--	
	12/12/95		11.70	425.85	ND	--	ND	ND	ND	ND	--	
	03/07/96		12.78	424.77	ND	--	ND	ND	ND	ND	--	
	05/31/96		11.80	425.75	ND	--	ND	ND	ND	ND	--	
	09/16/96		11.88	425.67	ND	--	ND	ND	ND	ND	--	
	12/11/96		12.66	424.89	ND	--	ND	ND	ND	ND	--	
	03/13/97		13.20	424.35	ND	--	ND	ND	ND	ND	--	
	06/18/97		12.36	425.19	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	09/19/97		11.65	425.90	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	12/10/97		12.74	424.81	--	--	--	--	--	--	--	
	03/30/98		13.46	424.09	--	--	--	--	--	--	--	
	06/09/98		12.90	424.65	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	09/17/98		11.28	426.27	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	12/29/98		--	--	--	--	--	--	--	--	--	
	03/13/99		13.46	424.09	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	06/22/99		--	--	--	--	--	--	--	--	--	
	09/28/99		11.90	425.65	<500	--	<0.5	<0.5	0.511	2.92	--	
	12/15/99		--	--	--	--	--	--	--	--	--	
	03/21/00		13.13	424.42	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	06/20/00		--	--	--	--	--	--	--	--	--	
	09/14/00		9.91	427.64	<500	--	<0.5	<0.5	<0.5	<1.0	--	
	12/14/00		--	--	--	--	--	--	--	--	--	
	03/21/01		--	--	--	--	--	--	--	--	--	
	<b>Well Decommissioned on 8/19/2004</b>											

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater		GRO (µg/l)	DRO (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)
			Elevation (feet, MSL)								
MW-16	09/21/95	437.96	10.33	427.63	ND	--	ND	ND	ND	ND	--
	12/12/95		12.25	425.71	ND	--	ND	ND	ND	ND	--
	05/30/96		12.30	425.66	ND	--	ND	ND	ND	ND	--
	09/16/96		12.44	425.52	ND	--	ND	ND	ND	ND	--
	12/12/96		13.17	424.79	ND	--	ND	ND	ND	ND	--
	03/13/97		13.72	424.24	ND	--	ND	ND	ND	ND	--
	06/18/97		12.89	425.07	<500	--	<0.5	<0.5	<0.5	<1.0	--
	09/19/97		12.53	425.43	<500	--	<0.5	<0.5	<0.5	1.88	--
	12/10/97		--	--	--	--	--	--	--	--	--
	03/31/98		14.05	423.91	<500	--	<0.5	<0.5	<0.5	<1.0	--
	06/09/98		--	--	--	--	--	--	--	--	--
	09/17/98		11.83	426.13	<500	--	<0.5	<0.5	<0.5	<1.0	--
	12/29/98		--	--	--	--	--	--	--	--	--
	03/13/99		14.16	423.80	<500	--	<0.5	<0.5	<0.5	<1.0	--
	06/22/99		--	--	--	--	--	--	--	--	--
	09/28/99		12.46	425.50	<500	--	<0.5	<0.5	<0.5	<1.0	--
	12/15/99		--	--	--	--	--	--	--	--	--
	03/21/00		13.38	424.58	<500	--	<0.5	<0.5	<0.5	<1.0	--
	06/20/00		--	--	--	--	--	--	--	--	--
	09/14/00		10.42	427.54	<500	--	<0.5	<0.5	<0.5	<1.0	--
12/14/00		--	--	--	--	--	--	--	--	--	
03/21/01		13.20	424.76	<500	--	<0.2	<0.5	<0.5	<1.0	--	
<b>Well Decommissioned on 8/19/2004</b>											
MW-23 <sup>D</sup>	12/13/95	--	--	--	ND	--	ND	0.55	ND	ND	--

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
1501 Cushman St.  
Fairbanks, Alaska

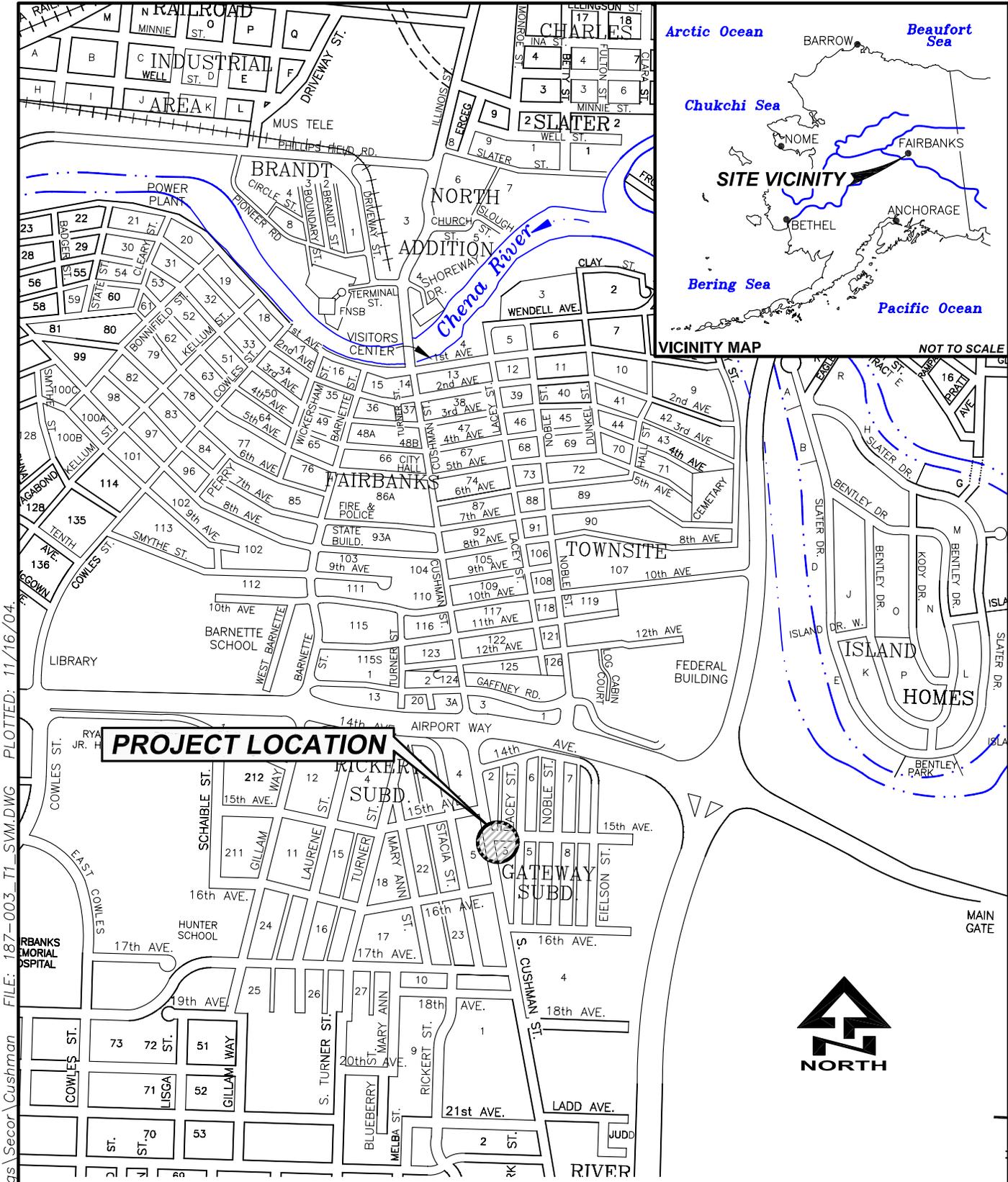
Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater		GRO (µg/l)	DRO (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)
			Elevation (feet, MSL)								
SWMW-1	06/26/95	440.34	14.72	425.62	225	--	114	ND	ND	ND	--
	09/19/95		12.79	427.55	360	--	150	ND	ND	ND	--
	12/13/95		14.68	425.66	ND	--	ND	ND	ND	ND	--
	03/07/96		15.71	424.63	ND	--	ND	ND	ND	ND	--
	06/01/96		14.79	425.55	ND	--	ND	ND	ND	ND	--
	06/01/96		--	--	ND	--	ND	ND	ND	ND	--
	09/16/96		14.84	425.50	ND	--	ND	ND	ND	ND	--
	12/12/96		15.59	424.75	ND	--	ND	ND	ND	ND	--
	03/13/97		--	--	--	--	--	--	--	--	--
	06/18/97		15.31	425.03	<500	--	0.534	<0.5	<0.5	<1.0	--
	09/20/97		14.80	425.54	<500	--	<0.5	<0.5	<0.5	<1.0	--
	12/10/97		15.71	424.63	--	--	--	--	--	--	--
	03/30/98		16.46	423.88	<500	--	<0.5	3.8	<0.5	<1.0	--
	06/09/98		--	--	--	--	--	--	--	--	--
	09/16/98		14.24	426.10	<500	--	<0.5	<0.5	<0.5	<1.0	--
	12/29/98		--	--	--	--	--	--	--	--	--
	03/14/99		16.44	423.90	<500	--	<0.5	<0.5	1.010	3.46	--
	06/22/99		--	--	--	--	--	--	--	--	--
	09/28/99		14.86	425.48	<500	--	<0.5	<0.5	<0.5	<1.0	--
	12/15/99		--	--	--	--	--	--	--	--	--
	03/21/00		16.11	424.23	<500	--	<0.5	<0.5	<0.5	<1.0	--
	06/20/00		--	--	--	--	--	--	--	--	--
	09/14/00		12.85	427.49	<500	--	<0.5	<0.5	<0.5	<1.0	--
	12/14/00		--	--	--	--	--	--	--	--	--
	03/21/01		15.48	424.86	<500	--	<0.2	<0.5	<0.5	<1.0	--
	06/20/01		--	--	--	--	--	--	--	--	--
Trip blank	09/16/96		--	--	ND	--	ND	ND	ND	ND	--
	12/11/96		--	--	ND	--	ND	ND	ND	ND	--
	03/13/97		--	--	ND	--	ND	ND	ND	ND	--
	06/18/97		--	--	<500	--	<0.5	<0.5	<0.5	<1.0	--
	09/18/97		--	--	<500	--	<0.5	<0.5	<0.5	<1.0	--
	12/10/97		--	--	<500	--	<0.5	<0.5	<0.5	<1.0	--
	03/31/98		--	--	<500	--	<0.5	<0.5	<0.5	<1.0	--
	09/28/99		--	--	<500	--	<0.5	<0.5	<0.5	<1.0	--
	12/15/99		--	--	<500	--	<0.5	<0.5	<0.5	<1.0	--
	03/25/02		--	--	<50.0	--	<0.200	<0.500	<0.500	<1.00	--
	04/10/03		--	--	<10	--	<0.5	<0.5	<0.5	<1.5	--
	05/09/03		--	--	<10	--	<0.5	<0.5	<0.5	<1.5	--
	03/03/04		--	--	<10	--	<0.5	<0.5	<0.5	<1.5	--
	<b>09/20/04</b>		--	--	<b>&lt;10</b>	--	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1.5</b>	--

**TABLE 2**  
**Groundwater Elevation and Analytical Data**

Former Texaco 21-1079  
 1501 Cushman St.  
 Fairbanks, Alaska

Sample ID	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	Dissolved Lead <sup>1</sup> (µg/l)
<u>Definitions:</u>										
MSL = Mean sea level										
TOC = Top of casing elevation										
GRO = Gasoline-range organics										
DRO = Diesel-range organics										
µg/l = micrograms per liter										
"--" = Not applicable or not available										
"<" = Not detected above laboratory method reporting limit shown										
ND = Not detected above laboratory method reporting limit										
<u>Notes:</u>										
<sup>1</sup> = Dissolved lead by EPA method 7421										
<sup>D</sup> = Duplicate sample										

## **FIGURES**



PATH: V:\Project Drawings\Secor\Cushman FILE: 187-003\_T1\_SVM.DWG PLOTTED: 11/16/04

SOURCE: CITY MAP.DWG PROVIDED BY THE NORTH STAR WEB SITE. DATE UNKNOWN.

NOT TO SCALE

DATE	NOV. 2004
CHKD	C.B.
DRAWN	C.E.H.
PROJ. NO	178-003



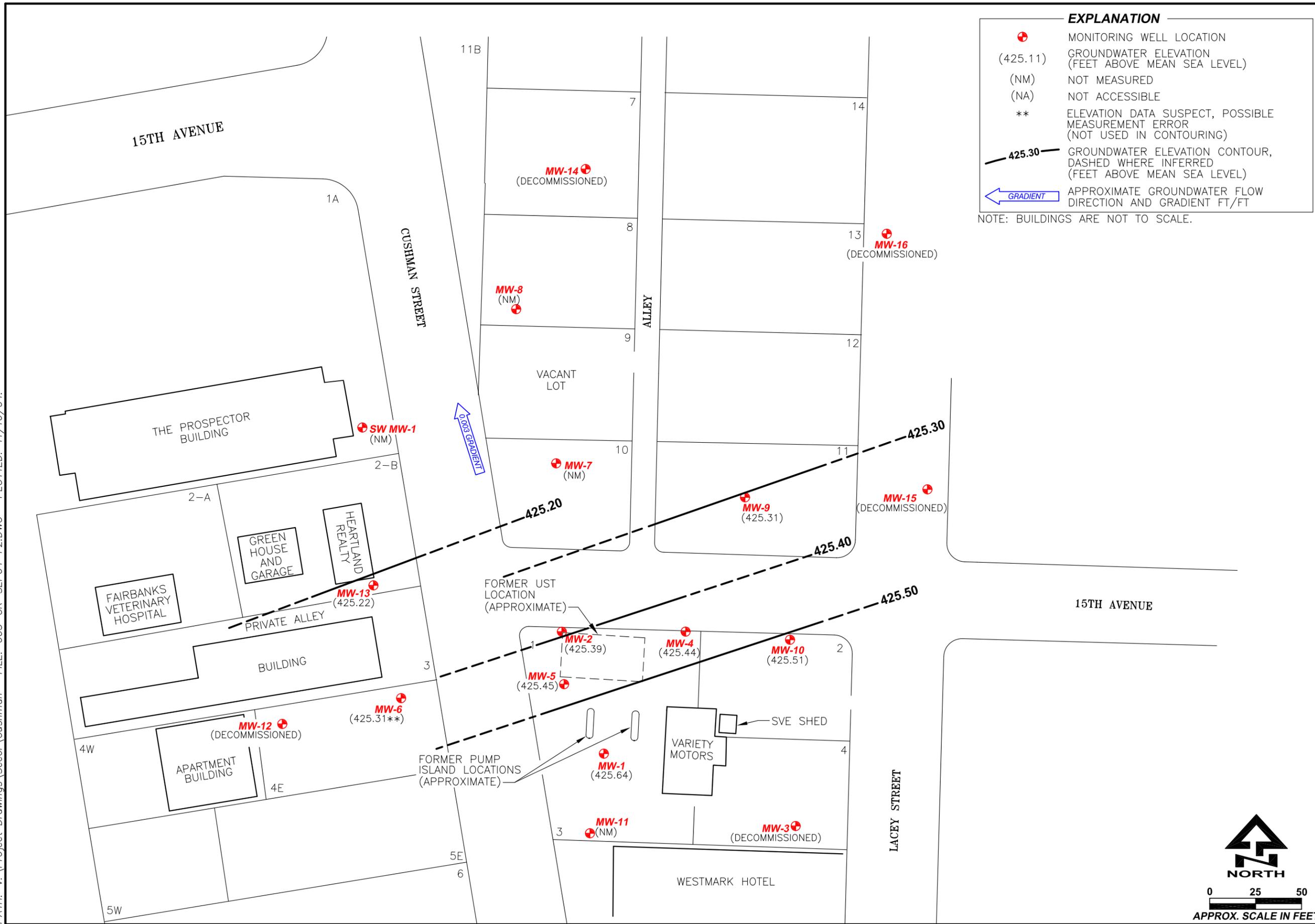
**OASIS ENVIRONMENTAL**  
 807 G STREET, SUITE #250  
 ANCHORAGE, ALASKA 99501

**SITE LOCATION MAP**

FORMER TEXACO FACILITY No. 211079  
 1501 So. CUSHMAN STREET  
 FAIRBANKS, ALASKA

FIGURE	1
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PATH: V:\Project Drawings\Secor\Cushman FILE: 003-CR-SEP04-F2.DWG PLOTTED: 11/16/04.



**EXPLANATION**

- ⊕ MONITORING WELL LOCATION
- (425.11) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- (NM) NOT MEASURED
- (NA) NOT ACCESSIBLE
- \*\* ELEVATION DATA SUSPECT, POSSIBLE MEASUREMENT ERROR (NOT USED IN CONTOURING)
- 425.30 --- GROUNDWATER ELEVATION CONTOUR, DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
- ← GRADIENT APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT FT/FT

NOTE: BUILDINGS ARE NOT TO SCALE.

FIGURE 2

**SITE PLAN WITH GROUNDWATER ELEVATIONS AND CONTOURS - SEPTEMBER 20, 2004**

FORMER TEXACO FACILITY No. 211079  
1501 So. CUSHMAN STREET  
FAIRBANKS, ALASKA

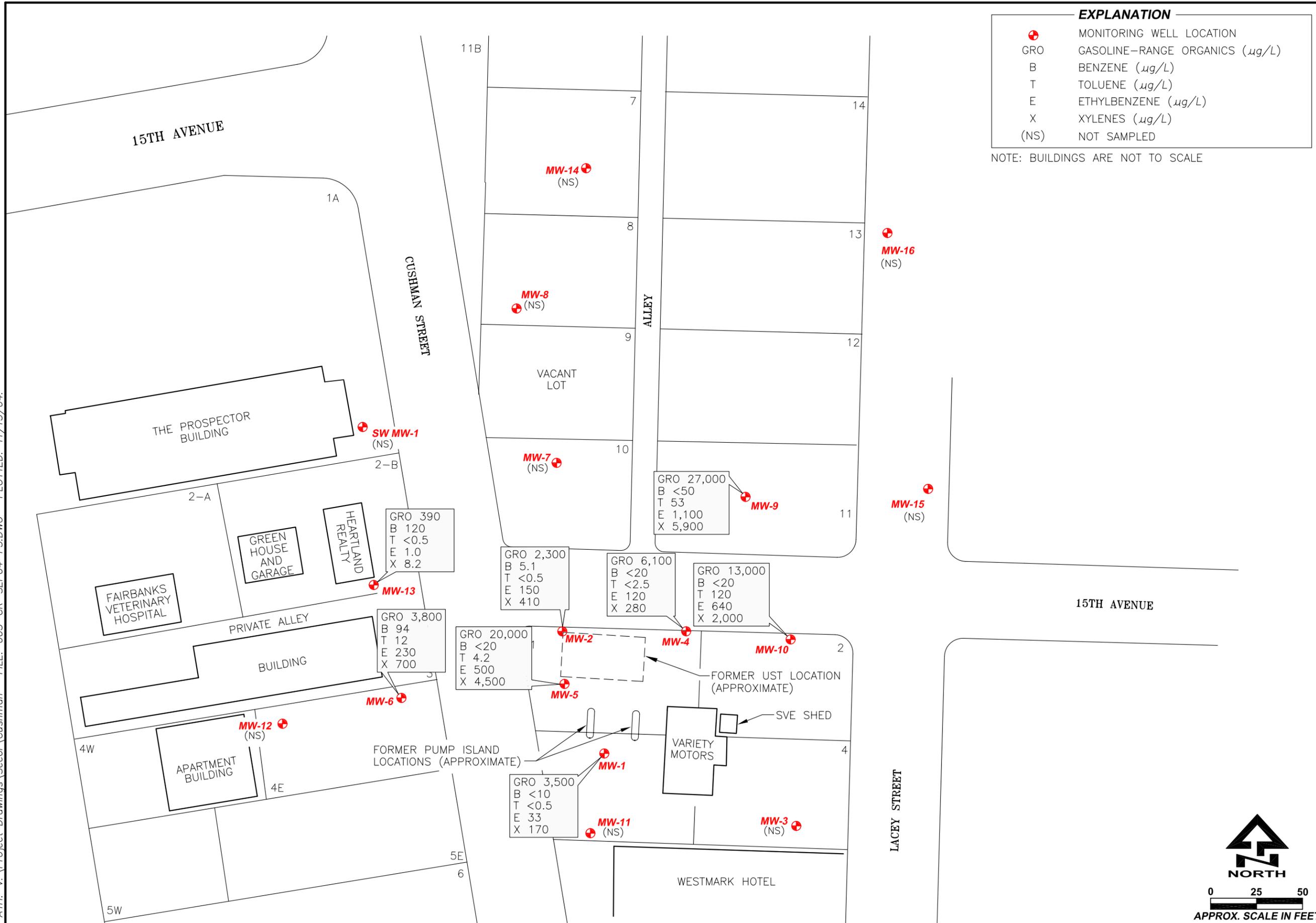
**Oasis**  
ENVIRONMENTAL  
807 G STREET, SUITE #250  
ANCHORAGE, ALASKA 99501

DATE NOV. 2004  
CHKD C.B.  
DRAWN C.E.H.  
PROJ. NO. 187-003

**NORTH**

0 25 50  
APPROX. SCALE IN FEET

PATH: V:\Project Drawings\Secor\Cushman FILE: 003-CR-SEP04-F3.DWG PLOTTED: 11/15/04.



EXPLANATION	
+	MONITORING WELL LOCATION
GRO	GASOLINE-RANGE ORGANICS ( $\mu\text{g/L}$ )
B	BENZENE ( $\mu\text{g/L}$ )
T	TOLUENE ( $\mu\text{g/L}$ )
E	ETHYLBENZENE ( $\mu\text{g/L}$ )
X	XYLENES ( $\mu\text{g/L}$ )
(NS)	NOT SAMPLED

NOTE: BUILDINGS ARE NOT TO SCALE

FIGURE  
3

**SITE PLAN WITH CHEMICAL CONCENTRATION DATA  
SEPTEMBER 20, 2004**

FORMER TEXACO FACILITY No. 211079  
1501 So. CUSHMAN STREET  
FAIRBANKS, ALASKA

**Oasis**  
ENVIRONMENTAL  
807 G STREET, SUITE #250  
ANCHORAGE, ALASKA 99501

**NORTH**  
0 25 50  
APPROX. SCALE IN FEET

DATE	NOV. 2004
CHKD	C.B.
DRAWN	C.E.H.
PROJ. NO	187-003

**ATTACHMENT 1**  
**FIELD AND LABORATORY PROCEDURES**  
Second Semiannual Groundwater Monitoring Report  
Former Texaco Service Station 21-1079  
1501 S. Cushman Street  
Fairbanks, Alaska  
OASIS Project No.: 187-003-2-1  
December 16, 2004

## **Sampling Procedures**

Groundwater samples are collected from monitoring wells at the site using groundwater sampling procedures summarized in the OASIS Quality Assurance Program Plan (QAPP) on file with the Alaska Department of Environmental Conservation (ADEC). The sampling procedure for each well includes gauging the well for water level and the presence of separate phase hydrocarbon (SPH) using a decontaminated oil-water interface probe. Wells not containing SPH are tested for dissolved oxygen and temperature using a submersible probe prior to purging. After the collection of dissolved oxygen and temperature measurements, wells not containing SPH are purged of three casing volumes of water using new disposable polyethylene bailers or dedicated 12-Volt purge pumps. Water quality parameters including temperature, pH, electrical conductivity, and turbidity are measured for each purge casing volume and are recorded on groundwater sample field data sheets presented in Attachment 2. The equipment and purging method used at each well for each sampling event are noted on the attached field data sheets.

Samples are collected using clean, laboratory-supplied containers and are preserved by acidification with hydrochloric acid and stored in coolers at  $4^{\circ} \pm 2^{\circ}$  C. The sample coolers are then delivered under chain-of-custody procedures, and laboratory-prescribed packaging protocols, to Lancaster Laboratories in Lancaster, Pennsylvania.

## **Laboratory Procedures**

Groundwater samples were analyzed for gasoline range hydrocarbons (GRO), and benzene, toluene, ethylbenzene, xylenes (BTEX) by Alaska Method AK101.

## **Purge and Rinsate Water Disposal**

Purge water generated during well sampling and equipment cleaning is pumped into DOT approved 55-gallon drums onsite for temporary storage. The purge water drums are sampled and a composite sample is prepared and delivered with the groundwater samples to Lancaster Laboratories under the name "Purge." Results of the composite purge water sample analysis are delivered to the local waste water treatment plant for review and acceptance. Upon acceptance of the analytical results, purge water is transported to the Golden Heart Utilities facility in Fairbanks for supervised disposal.

**ATTACHMENT 2**  
**FIELD DATA SHEETS**

Second Semiannual Groundwater Monitoring Report  
Former Texaco Service Station 21-1079  
1501 S. Cushman Street  
Fairbanks, Alaska  
OASIS Project No.: 187-003-2-1  
December 16, 2004

### GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH21079 Sample Location (ie. MW1): MW-1  
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-1  
 Client: SECOR Date Sample Collected: 9/20/2004  
 Sampler: Carl Benson Time sampled: 1630

#### Well Information

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 21.28  
 b) Water Depth (ft): 15.32  
 Other: \_\_\_\_\_ c) Water Column (ft): 5.96  
 d) Calc. Purge Vol. (gal): 3.9

#### Calculating Purge Volume

Well Casing Diameter	Multiply c) by:
2	0.16
4	0.65
6	1.47

**Example 1- purging only well casing volume**  
 2-inch casing and 6-foot water column  
 One Purge Volume= 0.16 X 6 = 0.96 gallons water

Sand Pack Diameter	Multiply c) by:
8	0.71
10	1
12	1.28

Note: assuming sand pack has 29% porosity  
**Example 2- purging well casing and sand pack volume**  
 2-inch casing, 8-inch sand pack, and 6-foot water column  
 One Purge Volume= (0.16 X 6) + (0.71 X 6) = 5.22 gallons water

#### FIELD MEASUREMENTS

Time	Volume (gallons)	pH	Conductivity (mS)	Temperature (F)	Color	Turbidity	Redox	Dissolved O <sub>2</sub>	Other
1619	4	6.69	0.485	4.4	Brown	141	-	-	Odor
1623	8	6.67	0.487	4.3	Clear	0	-	-	No Sheen
1627	12	6.67	0.488	4.3	Clear	0	-	-	

Total Volume Purged (Gallons): 12 Free Product (y/n): No  
 Odor: Petroleum-Hydrocarbon-like odor Sheen (y/n): No

Purge Method (disposable bailer, teflon bailer, **submersible pump**, etc.)

Sample Method (disposable bailer, teflon bailer, **submersible pump**, etc.)

Well Integrity (condition of casing, flush mount sealing properly, cement seal intact, etc.)  
 Good

Remarks (well recovery, unusual conditions/observations):  
 Good Recovery

**Dissolved Oxygen = mg/L, Temperature = C**

Duplicate Sample ID: Duplicate = Duplicate 1 @ 1700 Analyses Requested: GRO using AK101  
BTEX using EPA 8021B

Signed: Carl Benson Date: 9/22/2004

Signed/reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

**GROUNDWATER SAMPLE DATA SHEET**

Project Number: 77CH21079 Sample Location (ie. MW1): MW-2  
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-2  
 Client: SECOR Date Sample Collected: 9/20/2004  
 Sampler: Carl Benson Time sampled: 1500

**Well Information**

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 23  
 b) Water Depth (ft): 14.03  
 Other: \_\_\_\_\_ c) Water Column (ft): 8.97  
 d) Calc. Purge Vol. (gal): 5.8

**Calculating Purge Volume**

Well Casing Diameter	Multiply c) by:
2	0.16
4	0.65
6	1.47

Sand Pack Diameter	Multiply c) by:
8	0.71
10	1
12	1.28

Note: assuming sand pack has 29% porosity  
**Example 1- purging only well casing volume**  
 2-inch casing and 6-foot water column  
 One Purge Volume= 0.16 X 6 = 0.96 gallons water  
**Example 2- purging well casing and sand pack volume**  
 2-inch casing, 8-inch sand pack, and 6-foot water column  
 One Purge Volume= (0.16 X 6) + (0.71 X 6) = 5.22 gallons water

**FIELD MEASUREMENTS**

Time	Volume (gallons)	pH	Conductivity (mS)	Temperature (F)	Color	Turbidity	Redox	Dissolved O <sub>2</sub>	Other
1450	6	6.85	1.01	3.7	Brown	0	-	-	Odor
1455	12	6.69	0.673	3.2	Clear	0	-	-	No Sheen
1459	18	6.69	0.616	3.2	Clear	0	-	-	

Total Volume Purged (Gallons): 18 Free Product (y/n): No  
 Odor: Petroleum Hydrocarbon like odor Sheen (y/n): No

Purge Method (disposable bailer, teflon bailer, **submersible pump**, etc.)

Sample Method (disposable bailer, teflon bailer, **submersible pump**, etc.)

Well Integrity (condition of casing, flush mount sealing properly, cement seal intact, etc.)  
 Good

Remarks (well recovery, unusual conditions/observations):  
 Good Recovery

**Dissolved Oxygen = mg/L, Temperature = C**

Duplicate Sample ID: None Collected Analyses Requested: GRO using AK101  
BTEX using EPA 8021B

Signed: Carl Benson Date: 9/22/2004

Signed/reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

**GROUNDWATER SAMPLE DATA SHEET**

Project Number: 77CH21079 Sample Location (ie. MW1): MW-4  
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-4  
 Client: SECOR Date Sample Collected: 9/20/2004  
 Sampler: Carl Benson Time sampled: 1115

**Well Information**

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 22.06  
 b) Water Depth (ft): 13.72  
 Other: \_\_\_\_\_ c) Water Column (ft): 8.34  
 d) Calc. Purge Vol. (gal): 5.4

**Calculating Purge Volume**

Well Casing Diameter	Multiply c) by:
2	0.16
4	0.65
6	1.47

Sand Pack Diameter	Multiply c) by:
8	0.71
10	1
12	1.28

Note: assuming sand pack has 29% porosity  
**Example 1- purging only well casing volume**  
 2-inch casing and 6-foot water column  
 One Purge Volume= 0.16 X 6 = 0.96 gallons water  
**Example 2- purging well casing and sand pack volume**  
 2-inch casing, 8-inch sand pack, and 6-foot water column  
 One Purge Volume= (0.16 X 6) + (0.71 X 6) = 5.22 gallons water

**FIELD MEASUREMENTS**

Time	Volume (gallons)	pH	Conductivity (mS)	Temperature (F)	Color	Turbidity	Redox	Dissolved O <sub>2</sub>	Other
1100	5.5	6.73	0.484	4.2	Clear	0	-	-	
1105	11	6.83	0.46	4	Clear	0	-	-	Odor
1110	16.5	6.96	0.458	4	Clear	0	-	-	No
									Sheen

Total Volume Purged (Gallons): 17 Free Product (y/n): No  
 Odor: Petroleum-Hydrocarbon-like odor Sheen (y/n): No

Purge Method (disposable bailer, teflon bailer, **submersible pump**, etc.)

Sample Method (disposable bailer, teflon bailer, **submersible pump**, etc.)

Well Integrity (condition of casing, flush mount sealing properly, cement seal intact, etc.)  
 Good

Remarks (well recovery, unusual conditions/observations):  
 Good Recovery

**Dissolved Oxygen = mg/L, Temperature = C**

Duplicate Sample ID: None Collected Analyses Requested: GRO using AK101  
BTEX using EPA 8021B

Signed: Carl Benson Date: 9/22/2004  
 Signed/reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

### GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH21079 Sample Location (ie. MW1): MW-5  
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-5  
 Client: SECOR Date Sample Collected: 9/20/2004  
 Sampler: Carl Benson Time sampled: 1545

#### Well Information

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 20.4  
 b) Water Depth (ft): 14.37  
 Other: \_\_\_\_\_ c) Water Column (ft): 6.03  
 d) Calc. Purge Vol. (gal): 3.9

#### Calculating Purge Volume

Well Casing Diameter	Multiply c) by:
2	0.16
4	0.65
6	1.47

Sand Pack Diameter	Multiply c) by:
8	0.71
10	1
12	1.28

Note: assuming sand pack has 29% porosity

**Example 1- purging only well casing volume**  
 2-inch casing and 6-foot water column  
 One Purge Volume= 0.16 X 6 = 0.96 gallons water

**Example 2- purging well casing and sand pack volume**  
 2-inch casing, 8-inch sand pack, and 6-foot water column  
 One Purge Volume= (0.16 X 6) + (0.71 X 6) = 5.22 gallons water

#### FIELD MEASUREMENTS

Time	Volume (gallons)	pH	Conductivity (mS)	Temperature (F)	Color	Turbidity	Redox	Dissolved O <sub>2</sub>	Other
1535	4	6.57	0.552	3.7	Clear	0	-	-	Odor
1538	8	6.45	0.535	3.6	Clear	0	-	-	No Sheen
1542	12	6.46	0.54	3.2	Clear	0	-	-	

Total Volume Purged (Gallons): 12 Free Product (y/n): No  
 Odor: Petroleum-Hydrocarbon-like odor Sheen (y/n): No

Purge Method (disposable bailer, teflon bailer, **submersible pump**, etc.)

Sample Method (disposable bailer, teflon bailer, **submersible pump**, etc.)

Well Integrity (condition of casing, flush mount sealing properly, cement seal intact, etc.)  
 Good

Remarks (well recovery, unusual conditions/observations):  
 Good Recovery

**Dissolved Oxygen = mg/L, Temperature = C**

Duplicate Sample ID: None Collected Analyses Requested: GRO using AK101  
BTEX using EPA 8021B

Signed: Carl Benson Date: 9/22/2004  
 Signed/reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

### GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH21079 Sample Location (ie. MW1): MW-6  
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-6  
 Client: SECOR Date Sample Collected: 9/20/2004  
 Sampler: Carl Benson Time sampled: 850

#### Well Information

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 22.46  
 b) Water Depth (ft): 14.06  
 Other: \_\_\_\_\_ c) Water Column (ft): 8.4  
 d) Calc. Purge Vol. (gal): 5.5

#### Calculating Purge Volume

Well Casing Diameter	Multiply c) by:
2	0.16
4	0.65
6	1.47

**Example 1- purging only well casing volume**  
 2-inch casing and 6-foot water column  
 One Purge Volume= 0.16 X 6 = 0.96 gallons water

Sand Pack Diameter	Multiply c) by:
8	0.71
10	1
12	1.28

Note: assuming sand pack has 29% porosity  
**Example 2- purging well casing and sand pack volume**  
 2-inch casing, 8-inch sand pack, and 6-foot water column  
 One Purge Volume= (0.16 X 6) + (0.71 X 6) = 5.22 gallons water

#### FIELD MEASUREMENTS

Time	Volume (gallons)	pH	Conductivity (mS)	Temperature (F)	Color	Turbidity	Redox	Dissolved O <sub>2</sub>	Other
835	5	6.44	0.99	2.9	Orange	506	-	-	Odor
840	10	6.83	0.751	2.5	Orange	14	-	-	No
845	15	6.89	0.689	2.6	Clear	0	-	-	Sheen

Total Volume Purged (Gallons): 15 Free Product (y/n): No  
 Odor: Faint Petroleum Hydrocarbon-Like Odor Sheen (y/n): No

Purge Method (disposable bailer, teflon bailer, **submersible pump**, etc.)

Sample Method (disposable bailer, teflon bailer, **submersible pump**, etc.)

Well Integrity (condition of casing, flush mount sealing properly, cement seal intact, etc.)  
 Good

Remarks (well recovery, unusual conditions/observations):  
 Good Recovery

**Dissolved Oxygen = mg/L, Temperature = C**

Duplicate Sample ID: None Collected Analyses Requested: GRO using AK101  
BTEX using EPA 8021B

Signed: Carl Benson Date: 9/22/2004  
 Signed/reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

**GROUNDWATER SAMPLE DATA SHEET**

Project Number: 77CH21079 Sample Location (ie. MW1): MW-9  
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-9  
 Client: SECOR Date Sample Collected: 9/20/2004  
 Sampler: Carl Benson Time sampled: 1345

**Well Information**

Groundwater: X Casing Diameter (in): 2 a) Well Depth (ft): 17.55  
 b) Water Depth (ft): 13.45  
 Other: \_\_\_\_\_ c) Water Column (ft): 4.1  
 d) Calc. Purge Vol. (gal): 0.7

**Calculating Purge Volume**

Well Casing Diameter	Multiply c) by:
2	0.16
4	0.65
6	1.47

Sand Pack Diameter	Multiply c) by:
8	0.71
10	1
12	1.28

Note: assuming sand pack has 29% porosity

**Example 1- purging only well casing volume**  
 2-inch casing and 6-foot water column  
 One Purge Volume= 0.16 X 6 = 0.96 gallons water

**Example 2- purging well casing and sand pack volume**  
 2-inch casing, 8-inch sand pack, and 6-foot water column  
 One Purge Volume= (0.16 X 6) + (0.71 X 6) = 5.22 gallons water

**FIELD MEASUREMENTS**

Time	Volume (gallons)	pH	Conductivity (mS)	Temperature (F)	Color	Turbidity	Redox	Dissolved O <sub>2</sub>	Other
1334	1	7.26	0.561	4.5	Brown	634	-	-	Odor
1337	2	6.99	0.549	4.1	Brown	999	-	-	No Sheen
1340	3	7.07	0.545	4	Brown	999	-	-	Silty

Total Volume Purged (Gallons): 3 Free Product (y/n): No  
 Odor: Petroleum Hydrocarbon-Like Odor Sheen (y/n): No

Purge Method (**disposable bailer**, teflon bailer, submersible pump, etc.)

Sample Method (**disposable bailer**, teflon bailer, submersible pump, etc.)

Well Integrity (condition of casing, flush mount sealing properly, cement seal intact, etc.)  
 Good

Remarks (well recovery, unusual conditions/observations):  
 Good Recovery

**Dissolved Oxygen = mg/L, Temperature = C**

Duplicate Sample ID: None Collected Analyses Requested: GRO using AK101  
BTEX using EPA 8021B

Signed: Carl Benson Date: 9/22/2004

Signed/reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

### GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH21079 Sample Location (ie. MW1): MW-10  
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-10  
 Client: SECOR Date Sample Collected: 9/20/2004  
 Sampler: Carl Benson Time sampled: 1230

#### Well Information

Groundwater: X Casing Diameter (in): 2 a) Well Depth (ft): 16.65  
 b) Water Depth (ft): 13.71  
 Other: \_\_\_\_\_ c) Water Column (ft): 2.94  
 d) Calc. Purge Vol. (gal): 0.5

#### Calculating Purge Volume

Well Casing Diameter	Multiply c) by:
2	0.16
4	0.65
6	1.47

**Example 1- purging only well casing volume**  
 2-inch casing and 6-foot water column  
 One Purge Volume= 0.16 X 6 = 0.96 gallons water

Sand Pack Diameter	Multiply c) by:
8	0.71
10	1
12	1.28

Note: assuming sand pack has 29% porosity  
**Example 2- purging well casing and sand pack volume**  
 2-inch casing, 8-inch sand pack, and 6-foot water column  
 One Purge Volume= (0.16 X 6) + (0.71 X 6) = 5.22 gallons water

#### FIELD MEASUREMENTS

Time	Volume (gallons)	pH	Conductivity (mS)	Temperature (F)	Color	Turbidity	Redox	Dissolved O <sub>2</sub>	Other
1218	0.5	7.21	0.634	5.6	Orange		-	-	Odor
1222	1	7.12	0.577	5.2	Brown		-	-	No
1225	1.5	7.14	0.555	5	Brown		-	-	Sheen

Total Volume Purged (Gallons): 1.5 Free Product (y/n): No  
 Odor: Petroleum-Hydrocarbon like odor Sheen (y/n): No

Purge Method (**disposable bailer**, teflon bailer, submersible pump, etc.)

Sample Method (**disposable bailer**, teflon bailer, submersible pump, etc.)

Well Integrity (condition of casing, flush mount sealing properly, cement seal intact, etc.)  
 Good

Remarks (well recovery, unusual conditions/observations):  
 Good Recovery

**Dissolved Oxygen = mg/L, Temperature = C**

Duplicate Sample ID: None Collected Analyses Requested: GRO using AK101  
BTEX using EPA 8021B

Signed: Carl Benson Date: 9/22/2004  
 Signed/reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

### GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH21079 Sample Location (ie. MW1): MW-13  
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-13  
 Client: SECOR Date Sample Collected: 9/20/2004  
 Sampler: Carl Benson Time sampled: 1015

#### Well Information

Groundwater: X Casing Diameter (in): 2 a) Well Depth (ft): 17.14  
 b) Water Depth (ft): 13.95  
 Other: \_\_\_\_\_ c) Water Column (ft): 3.19  
 d) Calc. Purge Vol. (gal): 0.5

#### Calculating Purge Volume

Well Casing Diameter	Multiply c) by:
2	0.16
4	0.65
6	1.47

Sand Pack Diameter	Multiply c) by:
8	0.71
10	1
12	1.28

Note: assuming sand pack has 29% porosity

**Example 1- purging only well casing volume**  
 2-inch casing and 6-foot water column  
 One Purge Volume= 0.16 X 6 = 0.96 gallons water

**Example 2- purging well casing and sand pack volume**  
 2-inch casing, 8-inch sand pack, and 6-foot water column  
 One Purge Volume= (0.16 X 6) + (0.71 X 6) = 5.22 gallons water

#### FIELD MEASUREMENTS

Time	Volume (gallons)	pH	Conductivity (mS)	Temperature (F)	Color	Turbidity	Redox	Dissolved O <sub>2</sub>	Other
955	0.5	6.95	1.18	4	Brown	115	-	-	Odor
959	1	7.1	1.16	3.7	Brown	170	-	-	No Sheen
1005	1.5	7.11	1.13	3.7	Brown	113	-	-	

Total Volume Purged (Gallons): 1.5 Free Product (y/n): No  
 Odor: Faint Petroleum Hydrocarbon-Like Odor Sheen (y/n): No

Purge Method (**disposable bailer**, teflon bailer, submersible pump, etc.)

Sample Method (**disposable bailer**, teflon bailer, submersible pump, etc.)

Well Integrity (condition of casing, flush mount sealing properly, cement seal intact, etc.)  
 Good

Remarks (well recovery, unusual conditions/observations):  
 Good Recovery

**Dissolved Oxygen = mg/L, Temperature = C**

Duplicate Sample ID: None Collected Analyses Requested: GRO using AK101  
BTEX using EPA 8021B

Signed: Carl Benson Date: 9/22/2004  
 Signed/reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

**ATTACHMENT 3**  
**LABORATORY ANALYTICAL REPORTS**  
**AND CHAIN-OF-CUSTODY DOCUMENTATION**

Second Semiannual Groundwater Monitoring Report  
Former Texaco Service Station 21-1079  
1501 S. Cushman Street  
Fairbanks, Alaska  
OASIS Project No.: 187-003-2-1  
December 16, 2004

## ANALYTICAL RESULTS

Prepared for:

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

925-842-8582

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

## SAMPLE GROUP

The sample group for this submittal is 913142. Samples arrived at the laboratory on Wednesday, September 22, 2004. The PO# for this group is 99011184 and the release number is COCHRAN.

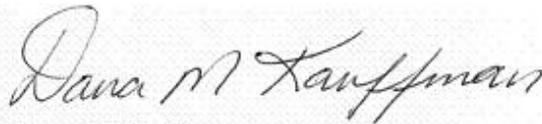
<u>Client Description</u>	<u>Lancaster Labs Number</u>
MW-6 Grab Water Sample	4358111
MW-13 Grab Water Sample	4358112
MW-4 Grab Water Sample	4358113
MW-10 Grab Water Sample	4358114
MW-9 Grab Water Sample	4358115
MW-2 Grab Water Sample	4358116
MW-5 Grab Water Sample	4358117
Duplicate-1 Grab Water Sample	4358118
Purge Grab Water Sample	4358119
MW-1 Grab Water Sample	4358120
Trip_Blank Water Sample	4358121

1 COPY TO      SECOR International, Inc.  
ELECTRONIC    Oasis Environmental  
COPY TO

Attn: David Weigner  
Attn: Carl Benson

Questions? Contact your Client Services Representative  
Teresa L Cunningham at (717) 656-2300.

Respectfully Submitted,



Dana M. Kauffman  
Group Leader



# Analysis Report

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Lancaster Laboratories Sample No. WW 4358111

**MW-6 Grab Water Sample**

Facility# 211079

1501 S Cushman St. - Fairbanks, AK

Collected: 09/20/2004 08:50 by CB

Account Number: 10869

Submitted: 09/22/2004 09:15

ChevronTexaco

Reported: 09/30/2004 at 10:28

6001 Bollinger Canyon Rd L4310

Discard: 10/31/2004

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01440	Alaska AK101 GRO (waters)					
01442	Alaska AK101 GRO (waters) The gasoline calibration verification standard that was analyzed prior to this sample was outside of specifications (biased high) for the surrogate trifluorotoluene. Since all other quality control standards and sample surrogates are within specifications there is no impact on the results.	n.a.	3,800.	10.	ug/l	1
05879	BTEX					
02161	Benzene	71-43-2	94.	0.5	ug/l	1
02164	Toluene	108-88-3	12.	0.5	ug/l	1
02166	Ethylbenzene	100-41-4	230.	0.5	ug/l	1
02171	Total Xylenes	1330-20-7	700.	1.5	ug/l	1

State of Alaska Lab Certification No. UST-061

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis			Dilution Factor
			Trial#	Date and Time	Analyst	
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	09/23/2004 15:17	Linda C Pape	1
05879	BTEX	SW-846 8021B	1	09/23/2004 15:17	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2004 15:17	Linda C Pape	n.a.

**Lancaster Laboratories Sample No. WW 4358112**
**MW-13 Grab Water Sample**
**Facility# 211079**
**1501 S Cushman St. - Fairbanks, AK**

Collected: 09/20/2004 10:15 by CB

Account Number: 10869

Submitted: 09/22/2004 09:15

ChevronTexaco

Reported: 09/30/2004 at 10:28

6001 Bollinger Canyon Rd L4310

Discard: 10/31/2004

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01440	Alaska AK101 GRO (waters)						
01442	Alaska AK101 GRO (waters) The gasoline calibration verification standard that was analyzed prior to this sample was outside of specifications (biased high) for the surrogate trifluorotoluene. Since all other quality control standards and sample surrogates are within specifications there is no impact on the results.	n.a.	390.		10.	ug/l	1
05879	BTEX						
02161	Benzene	71-43-2	120.		0.5	ug/l	1
02164	Toluene	108-88-3	N.D.		0.5	ug/l	1
02166	Ethylbenzene	100-41-4	1.0		0.5	ug/l	1
02171	Total Xylenes	1330-20-7	8.2		1.5	ug/l	1

State of Alaska Lab Certification No. UST-061

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis			Dilution Factor
			Trial#	Date and Time	Analyst	
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	09/23/2004 15:49	Linda C Pape	1
05879	BTEX	SW-846 8021B	1	09/23/2004 15:49	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2004 15:49	Linda C Pape	n.a.



# Analysis Report

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Lancaster Laboratories Sample No. WW 4358113

**MW-4 Grab Water Sample**

Facility# 211079

1501 S Cushman St. - Fairbanks, AK

Collected: 09/20/2004 11:15 by CB

Account Number: 10869

Submitted: 09/22/2004 09:15

ChevronTexaco

Reported: 09/30/2004 at 10:28

6001 Bollinger Canyon Rd L4310

Discard: 10/31/2004

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01440	Alaska AK101 GRO (waters)					
01442	Alaska AK101 GRO (waters)	n.a.	6,100.	50.	ug/l	5
	The gasoline calibration verification standard that was analyzed prior to this sample was outside of specifications (biased high) for the surrogate trifluorotoluene. Since all other quality control standards and sample surrogates are within specifications there is no impact on the results.					
05879	BTEX					
02161	Benzene	71-43-2	N.D.	20.	ug/l	5
02164	Toluene	108-88-3	N.D.	2.5	ug/l	5
02166	Ethylbenzene	100-41-4	120.	2.5	ug/l	5
02171	Total Xylenes	1330-20-7	280.	7.5	ug/l	5
	Due to the nature of the sample matrix, normal reporting limits were not attained for benzene and toluene.					

State of Alaska Lab Certification No. UST-061

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	09/23/2004 16:22	Linda C Pape	5
05879	BTEX	SW-846 8021B	1	09/23/2004 16:22	Linda C Pape	5
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2004 16:22	Linda C Pape	n.a.



# Analysis Report

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Lancaster Laboratories Sample No. WW 4358114

**MW-10 Grab Water Sample**

Facility# 211079

1501 S Cushman St. - Fairbanks, AK

Collected: 09/20/2004 12:30 by CB

Account Number: 10869

Submitted: 09/22/2004 09:15

ChevronTexaco

Reported: 09/30/2004 at 10:28

6001 Bollinger Canyon Rd L4310

Discard: 10/31/2004

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01440	Alaska AK101 GRO (waters)					
01442	Alaska AK101 GRO (waters)	n.a.	13,000.	50.	ug/l	5
	The gasoline calibration verification standard that was analyzed prior to this sample was outside of specifications (biased high) for the surrogate trifluorotoluene. Since all other quality control standards and sample surrogates are within specifications there is no impact on the results.					
05879	BTEX					
02161	Benzene	71-43-2	N.D.	20.	ug/l	5
02164	Toluene	108-88-3	120.	2.5	ug/l	5
02166	Ethylbenzene	100-41-4	640.	2.5	ug/l	5
02171	Total Xylenes	1330-20-7	2,000.	7.5	ug/l	5
	Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for benzene. The presence or concentration of this compound cannot be determined due to the presence of this interferent.					

State of Alaska Lab Certification No. UST-061

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	09/23/2004 16:55	Linda C Pape	5
05879	BTEX	SW-846 8021B	1	09/23/2004 16:55	Linda C Pape	5
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2004 16:55	Linda C Pape	n.a.



# Analysis Report

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Lancaster Laboratories Sample No. WW 4358115

**MW-9 Grab Water Sample**

Facility# 211079

1501 S Cushman St. - Fairbanks, AK

Collected: 09/20/2004 13:45 by CB

Account Number: 10869

Submitted: 09/22/2004 09:15

ChevronTexaco

Reported: 09/30/2004 at 10:29

6001 Bollinger Canyon Rd L4310

Discard: 10/31/2004

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01440	Alaska AK101 GRO (waters)					
01442	Alaska AK101 GRO (waters)	n.a.	27,000.	100.	ug/l	10
05879	BTEX					
02161	Benzene	71-43-2	N.D.	50.	ug/l	5
02164	Toluene	108-88-3	53.	2.5	ug/l	5
02166	Ethylbenzene	100-41-4	1,100.	2.5	ug/l	5
02171	Total Xylenes	1330-20-7	5,900.	15.	ug/l	10
Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for benzene. The presence or concentration of this compound cannot be determined due to the presence of this interferent.						

State of Alaska Lab Certification No. UST-061

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis			Dilution Factor
			Trial#	Date and Time	Analyst	
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	09/24/2004 09:43	Linda C Pape	10
05879	BTEX	SW-846 8021B	1	09/23/2004 17:28	Linda C Pape	5
05879	BTEX	SW-846 8021B	1	09/24/2004 09:43	Linda C Pape	10
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2004 17:28	Linda C Pape	n.a.

**Lancaster Laboratories Sample No. WW 4358116**
**MW-2 Grab Water Sample**
**Facility# 211079**
**1501 S Cushman St. - Fairbanks, AK**

Collected: 09/20/2004 15:00 by CB

Account Number: 10869

Submitted: 09/22/2004 09:15

ChevronTexaco

Reported: 09/30/2004 at 10:29

6001 Bollinger Canyon Rd L4310

Discard: 10/31/2004

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01440	Alaska AK101 GRO (waters)						
01442	Alaska AK101 GRO (waters) The gasoline calibration verification standard that was analyzed prior to this sample was outside of specifications (biased high) for the surrogate trifluorotoluene. Since all other quality control standards and sample surrogates are within specifications there is no impact on the results.	n.a.	2,300.		10.	ug/l	1
05879	BTEX						
02161	Benzene	71-43-2	5.1		0.5	ug/l	1
02164	Toluene	108-88-3	N.D.		0.5	ug/l	1
02166	Ethylbenzene	100-41-4	150.		0.5	ug/l	1
02171	Total Xylenes	1330-20-7	410.		1.5	ug/l	1

State of Alaska Lab Certification No. UST-061

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis			Dilution Factor
			Trial#	Date and Time	Analyst	
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	09/23/2004 18:00	Linda C Pape	1
05879	BTEX	SW-846 8021B	1	09/23/2004 18:00	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2004 18:00	Linda C Pape	n.a.



# Analysis Report

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Lancaster Laboratories Sample No. WW 4358117

**MW-5 Grab Water Sample**

Facility# 211079

1501 S Cushman St. - Fairbanks, AK

Collected: 09/20/2004 15:45 by CB

Account Number: 10869

Submitted: 09/22/2004 09:15

ChevronTexaco

Reported: 09/30/2004 at 10:29

6001 Bollinger Canyon Rd L4310

Discard: 10/31/2004

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01440	Alaska AK101 GRO (waters)					
01442	Alaska AK101 GRO (waters) The analysis was performed from a previously opened vial and the results are therefore estimated.	n.a.	20,000.	100.	ug/l	10
05879	BTEX					
02161	Benzene	71-43-2	N.D.	20.	ug/l	1
02164	Toluene	108-88-3	4.2	0.5	ug/l	1
02166	Ethylbenzene	100-41-4	500.	5.0	ug/l	10
02171	Total Xylenes	1330-20-7	4,500.	15.	ug/l	10

Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for benzene. The presence or concentration of this compound cannot be determined due to the presence of this interferent.

The analysis for ethylbenzene and total xylenes was performed from a previously opened vial and the results are therefore estimated.

State of Alaska Lab Certification No. UST-061

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	09/24/2004 10:49	Linda C Pape	10
05879	BTEX	SW-846 8021B	1	09/23/2004 18:33	Linda C Pape	1
05879	BTEX	SW-846 8021B	1	09/24/2004 10:49	Linda C Pape	10
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2004 18:33	Linda C Pape	n.a.



# Analysis Report

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Lancaster Laboratories Sample No. WW 4358118

**Duplicate-1 Grab Water Sample**

Facility# 211079

1501 S Cushman St. - Fairbanks, AK

Collected: 09/20/2004 17:00 by CB

Account Number: 10869

Submitted: 09/22/2004 09:15

ChevronTexaco

Reported: 09/30/2004 at 10:29

6001 Bollinger Canyon Rd L4310

Discard: 10/31/2004

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01440	Alaska AK101 GRO (waters)					
01442	Alaska AK101 GRO (waters)	n.a.	3,600.	10.	ug/l	1
The gasoline calibration verification standard that was analyzed prior to this sample was outside of specifications (biased high) for the surrogate trifluorotoluene. Since all other quality control standards and sample surrogates are within specifications there is no impact on the results.						
05879	BTEX					
02161	Benzene	71-43-2	N.D.	10.	ug/l	1
02164	Toluene	108-88-3	N.D.	2.0	ug/l	1
02166	Ethylbenzene	100-41-4	37.	0.5	ug/l	1
02171	Total Xylenes	1330-20-7	190.	1.5	ug/l	1
Due to the presence of interferences near their retention time, normal reporting limits were not attained for benzene and toluene. The presence or concentration of these compounds cannot be determined below the reporting limits due to the presence of these interferences.						

State of Alaska Lab Certification No. UST-061

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	09/23/2004 19:06	Linda C Pape	1
05879	BTEX	SW-846 8021B	1	09/23/2004 19:06	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2004 19:06	Linda C Pape	n.a.



# Analysis Report

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Lancaster Laboratories Sample No. WW 4358119

**Purge Grab Water Sample**

Facility# 211079

1501 S Cushman St. - Fairbanks, AK

Collected: 09/20/2004 17:30 by CB

Account Number: 10869

Submitted: 09/22/2004 09:15

ChevronTexaco

Reported: 09/30/2004 at 10:29

6001 Bollinger Canyon Rd L4310

Discard: 10/31/2004

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00430	Flash Point for Liquids No flash observed below 169F. Test flame extinguished at 149F. Flash point was determined using Pensky Martens closed cup apparatus.	n.a.	No Flash Observed		Degrees F	1
08079	HEM (oil & grease) The matrix spike analyzed on the batch associated with this sample had a recovery of 66%. The acceptance window for this analysis is 79% to 114%. The blank and LCS analyzed with this sample were within specifications.	n.a.	N.D.	1,400.	ug/l	1
05879	BTEX					
02161	Benzene	71-43-2	N.D.	2.5	ug/l	5
02164	Toluene	108-88-3	4.8	2.5	ug/l	5
02166	Ethylbenzene	100-41-4	190.	2.5	ug/l	5
02171	Total Xylenes	1330-20-7	1,200.	7.5	ug/l	5

State of Alaska Lab Certification No. UST-061

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00430	Flash Point for Liquids	ASTM D 93-90	1	09/27/2004 08:20	Susan A Engle	1
08079	HEM (oil & grease)	EPA 1664A	1	09/28/2004 08:15	Yolunder Y Bunch	1
05879	BTEX	SW-846 8021B	1	09/23/2004 21:24	Michael F Barrow	5
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2004 21:24	Michael F Barrow	n.a.



# Analysis Report

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Page 1 of 1

Lancaster Laboratories Sample No. WW 4358120

**MW-1 Grab Water Sample**

Facility# 211079

1501 S Cushman St. - Fairbanks, AK

Collected: 09/20/2004 16:30 by CB

Account Number: 10869

Submitted: 09/22/2004 09:15

ChevronTexaco

Reported: 09/30/2004 at 10:29

6001 Bollinger Canyon Rd L4310

Discard: 10/31/2004

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received	Units	Dilution Factor
				Method Detection Limit		
01440	Alaska AK101 GRO (waters)					
01442	Alaska AK101 GRO (waters)	n.a.	3,500.	10.	ug/l	1
05879	BTEX					
02161	Benzene	71-43-2	N.D.	10.	ug/l	1
02164	Toluene	108-88-3	N.D.	0.5	ug/l	1
02166	Ethylbenzene	100-41-4	33.	0.5	ug/l	1
02171	Total Xylenes	1330-20-7	170.	1.5	ug/l	1
Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for benzene. The presence or concentration of this compound cannot be determined due to the presence of this interferent.						

State of Alaska Lab Certification No. UST-061

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis	Analyst	Dilution
				Date and Time		Factor
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	09/24/2004 11:55	Linda C Pape	1
05879	BTEX	SW-846 8021B	1	09/24/2004 11:55	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/24/2004 11:55	Linda C Pape	n.a.

Lancaster Laboratories Sample No. WW 4358121

**Trip Blank Water Sample**

Facility# 211079

1501 S Cushman St. - Fairbanks, AK

Collected: 09/20/2004

Account Number: 10869

Submitted: 09/22/2004 09:15

ChevronTexaco

Reported: 09/30/2004 at 10:29

6001 Bollinger Canyon Rd L4310

Discard: 10/31/2004

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01440	Alaska AK101 GRO (waters)						
01442	Alaska AK101 GRO (waters) The gasoline calibration verification standard that was analyzed prior to this sample was outside of specifications (biased high) for the surrogate trifluorotoluene. Since all other quality control standards and sample surrogates are within specifications there is no impact on the results.	n.a.	N.D.	10.		ug/l	1
05879	BTEX						
02161	Benzene	71-43-2	N.D.	0.5		ug/l	1
02164	Toluene	108-88-3	N.D.	0.5		ug/l	1
02166	Ethylbenzene	100-41-4	N.D.	0.5		ug/l	1
02171	Total Xylenes	1330-20-7	N.D.	1.5		ug/l	1

State of Alaska Lab Certification No. UST-061

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis			Dilution Factor
			Trial#	Date and Time	Analyst	
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	09/23/2004 14:44	Linda C Pape	1
05879	BTEX	SW-846 8021B	1	09/23/2004 14:44	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2004 14:44	Linda C Pape	n.a.

## Quality Control Summary

 Client Name: ChevronTexaco  
 Reported: 09/30/04 at 10:29 AM

Group Number: 913142

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

### Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 04267A20B	Sample number(s): 4358119							
Benzene	N.D.	0.5	ug/l	96		79-123		
Toluene	N.D.	0.5	ug/l	98		82-119		
Ethylbenzene	N.D.	0.5	ug/l	98		81-119		
Total Xylenes	N.D.	1.5	ug/l	99		82-120		
Batch number: 04267A51A	Sample number(s): 4358111-4358118,4358121							
Alaska AK101 GRO (waters)	N.D.	10.	ug/l	116	119	60-120	2	20
Benzene	N.D.	0.5	ug/l	104	103	79-123	2	30
Toluene	N.D.	0.5	ug/l	106	103	82-119	2	30
Ethylbenzene	N.D.	0.5	ug/l	105	103	81-119	2	30
Total Xylenes	N.D.	1.5	ug/l	107	104	82-120	2	30
Batch number: 04267A51B	Sample number(s): 4358115,4358117,4358120							
Alaska AK101 GRO (waters)	N.D.	10.	ug/l	116	119	60-120	2	20
Benzene	N.D.	0.5	ug/l	104	103	79-123	2	30
Toluene	N.D.	0.5	ug/l	106	103	82-119	2	30
Ethylbenzene	N.D.	0.5	ug/l	105	103	81-119	2	30
Total Xylenes	N.D.	1.5	ug/l	107	104	82-120	2	30
Batch number: 04271043001A	Sample number(s): 4358119							
Flash Point for Liquids				99	100	97-103	1	2
Batch number: 04272807901A	Sample number(s): 4358119							
HEM (oil & grease)	2.5	1.4	mg/l	90		79-114		

### Sample Matrix Quality Control

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 04267A20B	Sample number(s): 4358119								
Benzene	111	104	78-131	7	20				
Toluene	110	103	78-129	7	30				
Ethylbenzene	110	101	75-133	8	30				
Total Xylenes	110	102	86-132	8	30				
Batch number: 04267A51A	Sample number(s): 4358111-4358118,4358121								
Benzene	(2)		78-131						
Toluene	102		78-129						
Ethylbenzene	100		75-133						
Total Xylenes	101		86-132						

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

## Quality Control Summary

 Client Name: ChevronTexaco  
 Reported: 09/30/04 at 10:29 AM

Group Number: 913142

### Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 04267A51B	Sample number(s): 4358115, 4358117, 4358120								
Benzene			78-131						
Toluene	102		78-129						
Ethylbenzene	100		75-133						
Total Xylenes	101		86-132						
Batch number: 04272807901A	Sample number(s): 4358119								
HEM (oil & grease)	66*		79-114			N.D.	2.3	294* (1)	18

### Surrogate Quality Control

 Analysis Name: BTEX  
 Batch number: 04267A20B  
 Trifluorotoluene-P

4358119	116
Blank	123
LCS	121
MS	120
MSD	121

Limits: 72-128

 Analysis Name: BTEX  
 Batch number: 04267A51A  
 Trifluorotoluene-F                      Trifluorotoluene-P

4358111	115	106
4358112	113	103
4358113	114	103
4358114	114	104
4358115		104
4358116	105	99
4358117		104
4358118	120	101
4358121	112	101
Blank	110	102
LCS	114	100
LCSD	78	101
MS	112	102

Limits: 60-120                      72-128

 Analysis Name: BTEX  
 Batch number: 04267A51B  
 Trifluorotoluene-F                      Trifluorotoluene-P

4358115	108	
4358117	111	
4358120	118	103
Blank	110	97

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 09/30/04 at 10:29 AM

Group Number: 913142

### Surrogate Quality Control

LCS	114	100
LCSD	78	101
MS	112	102

---

Limits:           60-120                               72-128

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Acct. #: 10809 Sample #: 4358111-21

For Lancaster Laboratories use only  
SCR#: 119432C

Facility #: 211079

Site Address: 1501 S. Cushman, Fairbury, NE

Chevron PM: Bob DeBruin Lead Consultant: SEB

Consultant/Office: Sear Services

Consultant Prj. Mgr.: David Weigner

Consultant Phone #: 916 861-0400 Fax #: 916 861-0430

Sampler: Carl Benson

Service Order #:  Non SAR:

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix		Soil	Water	Oil <input type="checkbox"/> Air <input type="checkbox"/>	Total Number of Containers	Preservative Codes		Comments / Remarks
					<input type="checkbox"/> Potable	<input type="checkbox"/> NPDES					8021 MTBE Confirmation	Confirm MTBE + Naphthalene	
MW-6	9/22/04	0850	X		X					8260 full scan	AK101-6120		Also email results to Carl Benson or other Environmentals CarlB@caseairio.com
MW-13	9/22/04	1015	X		X						137Ex-SW8021B		
MW-4	9/22/04	1115	X		X						Flash Point		
MW-10	9/22/04	1230	X		X						Oil Storage - NEM		
MW-2	9/22/04	1345	X		X								
MW-5	9/22/04	1500	X		X								
Duplicate-1	9/22/04	1545	X		X								
Purge	9/22/04	1700	X		X								
MW-1	9/22/04	1730	X		X								
Tip Blank	9/22/04	1630	X		X								

Turnaround Time Requested (TAT) (please circle)  
 24 hour  4 day  5 day

Data Package Options (please circle if required)  
 QC Summary  Type I - Full  
 Type VI (Raw Data)  Disk/EEDD  
 WIP (RWQCB)  Standard Format  
 Disk  Other: \_\_\_\_\_

Relinquished by: [Signature] Date: 9/31/04 Time: \_\_\_\_\_  
 Relinquished by: [Signature] Date: 9/30/04 Time: \_\_\_\_\_  
 Relinquished by Commercial Carrier: \_\_\_\_\_  
 UPS  FedEx  Other  \_\_\_\_\_  
 Temperature Upon Receipt: 25 °C  
 Received by: [Signature] Date: 9/20/04 Time: \_\_\_\_\_  
 Received by: [Signature] Date: 9/20/04 Time: \_\_\_\_\_  
 Received by: [Signature] Date: 9/20/04 Time: \_\_\_\_\_  
 Custody Seals Intact?  Yes  No

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>N.D.</b>	none detected	<b>BMQL</b>	Below Minimum Quantitation Level
<b>TNTC</b>	Too Numerous To Count	<b>MPN</b>	Most Probable Number
<b>IU</b>	International Units	<b>CP Units</b>	cobalt-chloroplatinate units
<b>umhos/cm</b>	micromhos/cm	<b>NTU</b>	nephelometric turbidity units
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>ug</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>ml</b>	milliliter(s)	<b>l</b>	liter(s)
<b>m3</b>	cubic meter(s)	<b>ul</b>	microliter(s)
<b>&lt;</b>	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
<b>&gt;</b>	greater than		
<b>J</b>	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

## U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
<b>A</b>	TIC is a possible aldol-condensation product	<b>B</b>	Value is $<$ CRDL, but $\geq$ IDL
<b>B</b>	Analyte was also detected in the blank	<b>E</b>	Estimated due to interference
<b>C</b>	Pesticide result confirmed by GC/MS	<b>M</b>	Duplicate injection precision not met
<b>D</b>	Compound quantitated on a diluted sample	<b>N</b>	Spike sample not within control limits
<b>E</b>	Concentration exceeds the calibration range of the instrument	<b>S</b>	Method of standard additions (MSA) used for calculation
<b>N</b>	Presumptive evidence of a compound (TICs only)	<b>U</b>	Compound was not detected
<b>P</b>	Concentration difference between primary and confirmation columns $>25\%$	<b>W</b>	Post digestion spike out of control limits
<b>U</b>	Compound was not detected	<b>*</b>	Duplicate analysis not within control limits
<b>X,Y,Z</b>	Defined in case narrative	<b>+</b>	Correlation coefficient for MSA $<0.995$

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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