

Semi-Annual Groundwater Monitoring Report First 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
Fairbanks, Alaska 99701

June 16, 2004

Carl Benson
Senior Scientist (OASIS Environmental, Inc)

Date: June 16, 2004
Event: 1st Semi-Annual 2004

FORMER TEXACO SEMI-ANNUAL GROUNDWATER MONITORING REPORT

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

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

1. Conducted semi-annual groundwater monitoring and sampling.
2. Prepared and submitted semi-annual groundwater monitoring report.

WORK PROPOSED FOR NEXT EVENT (Second Semi-Annual – 2004):

1. Conduct semi-annual groundwater monitoring and sampling.
2. Prepare and submit semi-annual groundwater monitoring report.
3. Abandon wells SWMW-1, MW-12, MW-14, MW-15, and MW-16.
4. Repair/replace monument at MW-3.

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>13.87 to 15.85 feet</u>
Groundwater Gradient:	<u>Northwest @ 0.002 ft/ft</u>

DISCUSSION:

On March 1 through March 3, 2004, Oasis Environmental (Oasis) of Fairbanks, Alaska, conducted the first semi-annual groundwater monitoring and sampling event of 2004 (Figure 1). Ten 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 first semi-annual event, groundwater flow was towards the northwest at an approximate gradient of 0.002 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-11 and MW-6 were 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 seven of the ten samples collected at concentrations ranging from 3,800 micrograms per liter ($\mu\text{g/l}$) in the sample from MW-4 to 34,000 $\mu\text{g/l}$ in the sample from MW-9. Benzene was detected in two of the ten samples collected at concentrations ranging from 0.6 $\mu\text{g/l}$ in the sample from MW-13, to 340 $\mu\text{g/l}$ in the sample from MW-6. 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-6, MW-9, MW-10, and MW-11. Toluene was detected in five of the ten samples collected at concentrations ranging from 1.0 $\mu\text{g/L}$ in the sample from MW-4, to 180 $\mu\text{g/L}$ in the sample from MW-6. Analytical results for toluene had an elevated baseline during quantitation in the groundwater samples collected from monitoring wells MW-1, MW-5, MW-6, MW-9, MW-10, and MW-11. Ethylbenzene was detected in seven of the ten samples collected at concentrations ranging from 40 $\mu\text{g/L}$ in the sample from MW-11, to 1,400 $\mu\text{g/L}$ in the sample from MW-6. Analytical results for ethylbenzene had an elevated baseline during quantitation in the groundwater samples collected from monitoring wells MW-5, MW-6, MW-9, MW-10, and MW-11. Xylene (total) was detected in seven of the ten samples at concentrations ranging from 76 $\mu\text{g/L}$ in the sample from MW-11, to 7,300 $\mu\text{g/L}$ 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-5, MW-6, MW-9, MW-10, and MW-11. 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, March 1, 2004
- Figure 3 – Site Plan With Chemical Concentration Data, March 3, 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 ¹ (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 ^D		--	--	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 ^D		--	--	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 ^D		--	--	4,900	--	<20	<2.0	73	330	--
09/05/03		12.56	428.40	2,600	--	<5	0.6	37	160	--
9/5/2003 ^D		--	--	2,900	--	<10	0.6	42	180	--
03/03/04		15.85	425.11	3,600	--	<10	<2.0	46	220	--
3/3/2004^D		--	--	3,300	--	<20	<2.0	43	200	--

TABLE 2
Groundwater Elevation and Analytical Data

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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 ¹ (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

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 ¹ (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

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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 ¹ (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 ^D		--	--	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	--

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 ¹ (µg/l)
			Elevation (feet, MSL)	GRO (µg/l)	DRO (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	--

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 ¹ (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 ^D		--	--	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	

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 ¹ (µg/l)		
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)	Benzene (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 ¹ (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 ¹ (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	--

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 ¹ (µg/l)		
			Elevation (feet, MSL)	GRO (µg/l)	DRO (µg/l)	Benzene (µg/l)				Toluene (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	--

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 ¹ (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	--	

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 ¹ (µg/l)
			Elevation (feet, MSL)	GRO (µg/l)	DRO (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	--
	09/14/02		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	410.000	--	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	--

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 ¹ (µg/l)	
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		--	--	--	--	--	--	--	--	--	
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		--	--	--	--	--	--	--	--	--

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 ¹ (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	--	
MW-23 ^D	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 ¹ (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	--

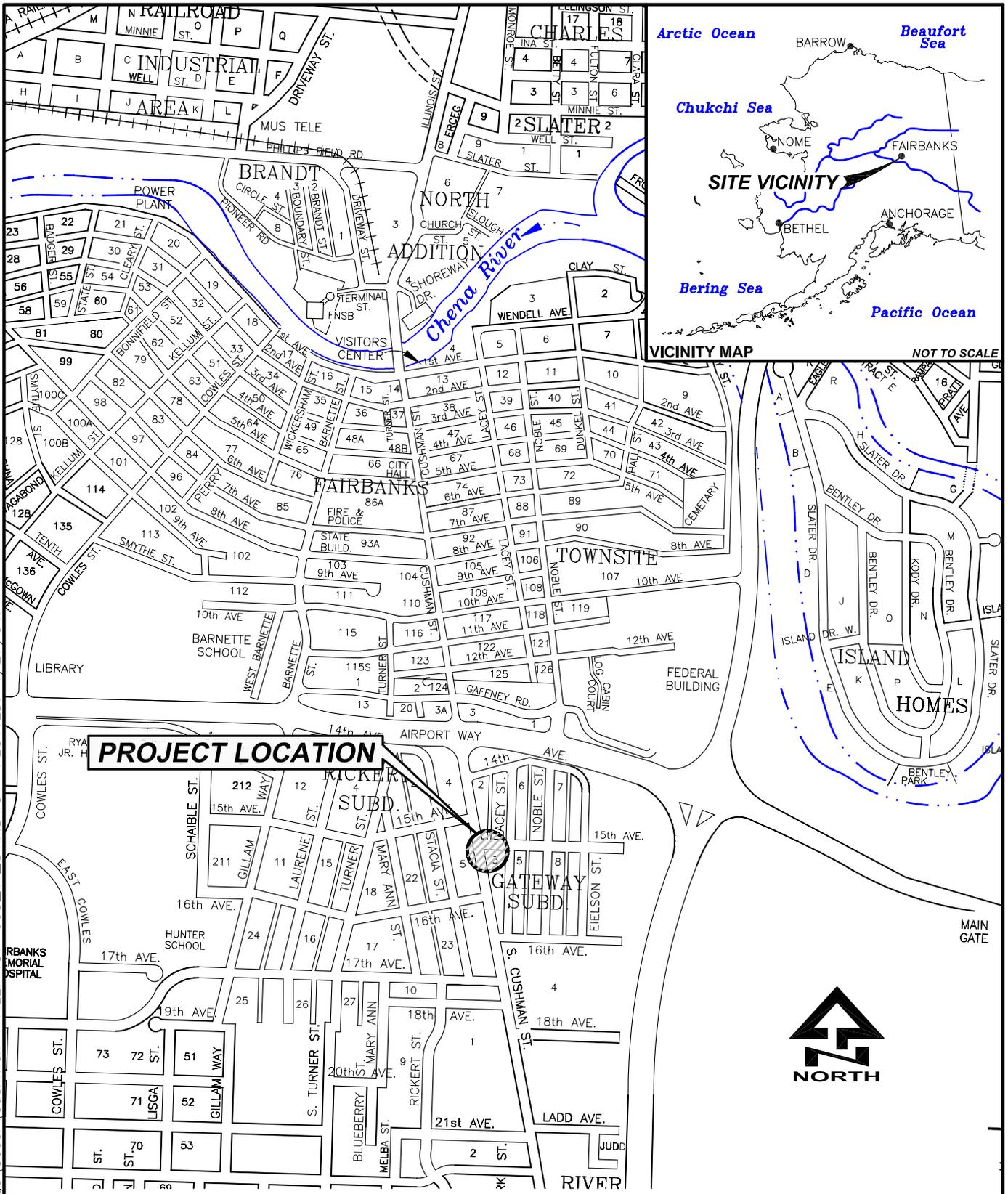
TABLE 2
Groundwater Elevation and Analytical Data

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 ¹ (µg/l)
Definitions:										
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										
Notes:										
¹ = Dissolved lead by EPA method 7421										
^D = Duplicate sample										

FIGURES

PATH: V:\Project Drawings\Secor\Cushman FILE: 187-003_T1_SVM.DWG PLOTTED: 4/27/04



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

NOT TO SCALE

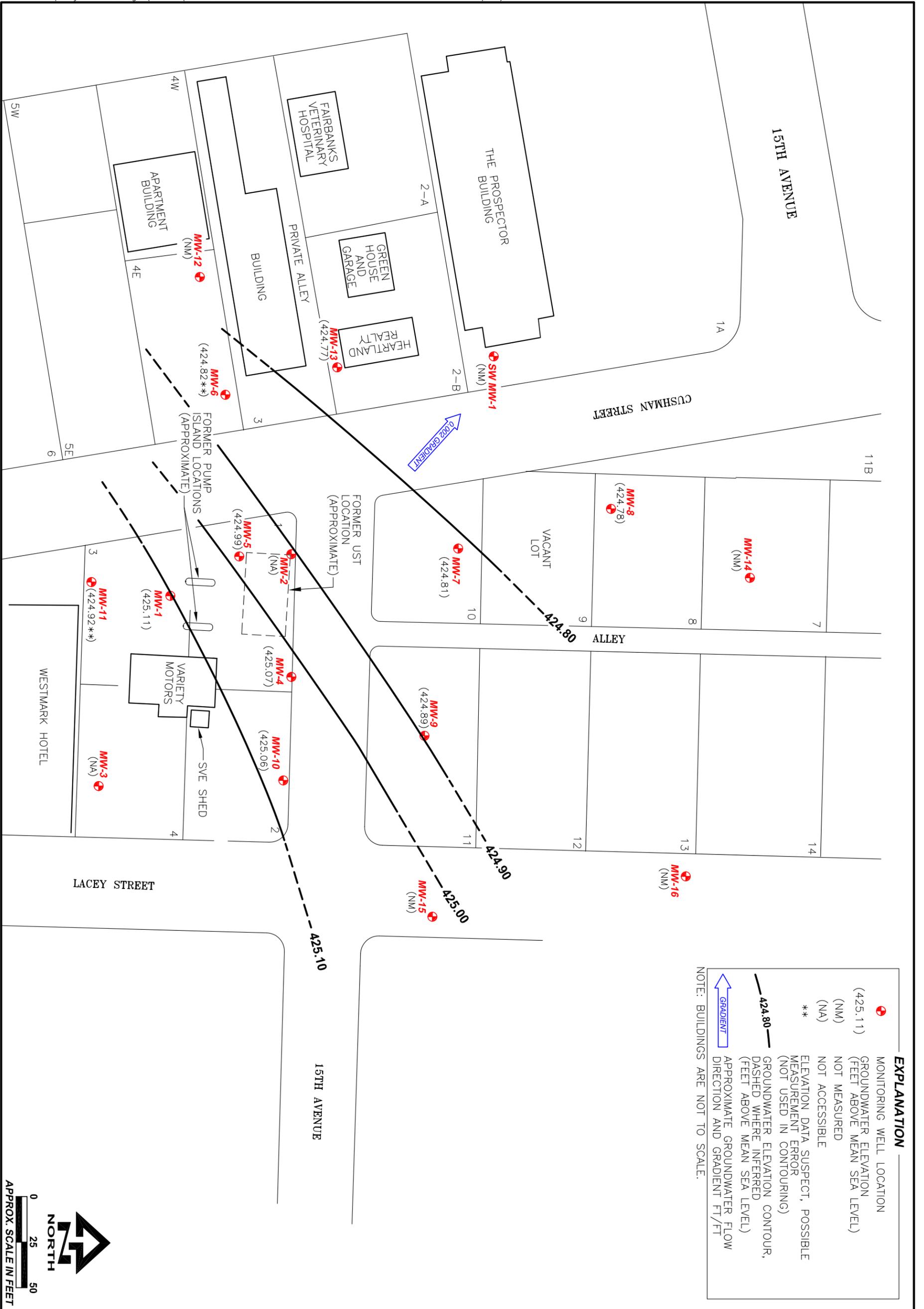
DATE	APRIL 2004
CHKD	C.B.
DRAWN	C.E.H.
PROJ. NO	178-003

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

SITE LOCATION MAP

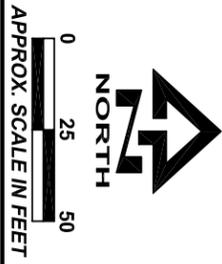
FORMER TEXACO FACILITY No. 211079
 1501 So. CUSHMAN STREET
 FAIRBANKS, ALASKA

FIGURE	1
--------	---



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)
	GROUNDWATER ELEVATION CONTOUR, DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
	APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT FT/FT

NOTE: BUILDINGS ARE NOT TO SCALE.



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



SITE PLAN WITH GROUNDWATER ELEVATIONS AND CONTOURS - MARCH 1, 2004

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

FIGURE
2

PATH: V:\Project Drawings\Secor\Cushman FILE: 003_T1_MAR04_F3.DWG PLOTTED: 4/27/04.

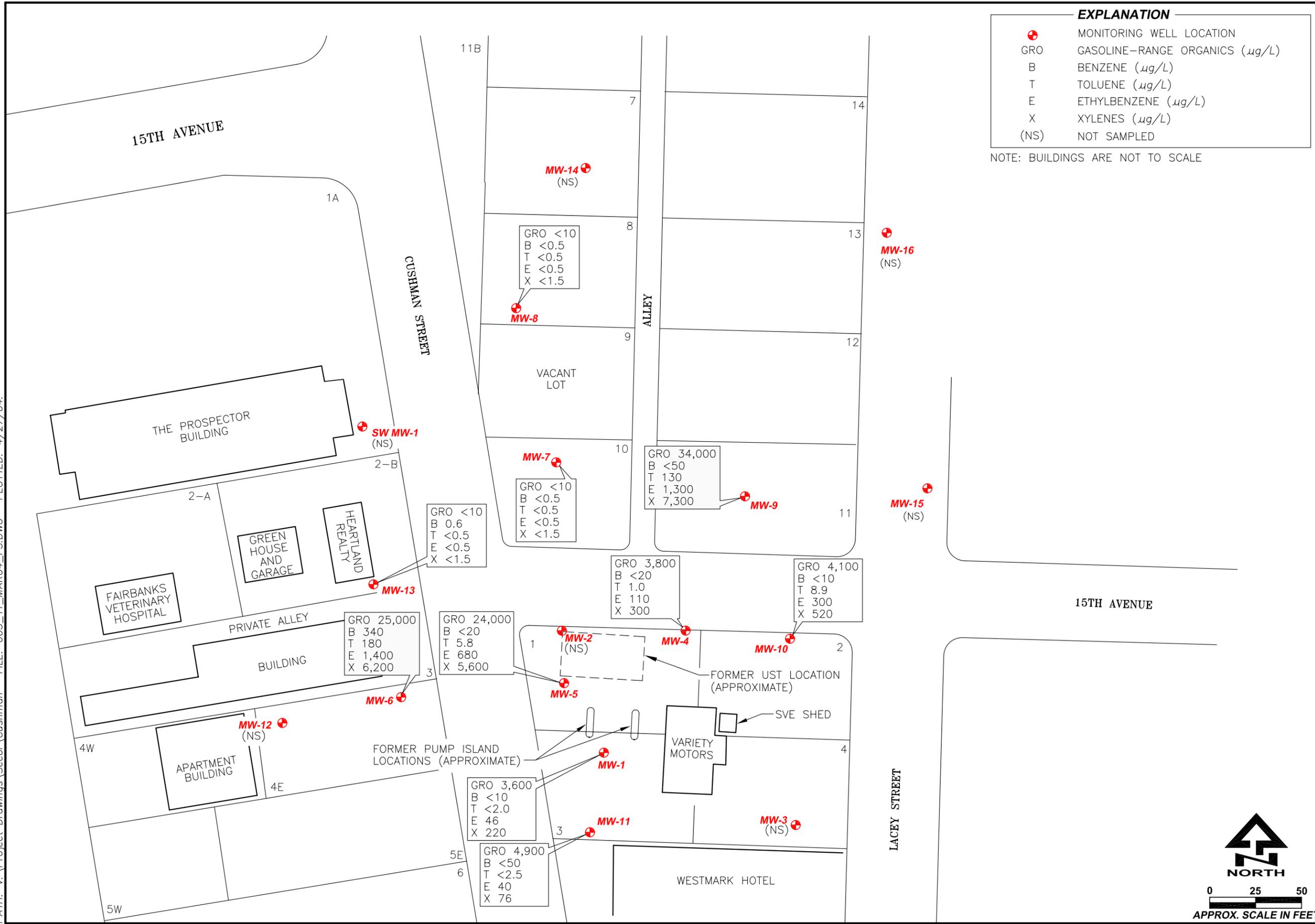


FIGURE
3

**SITE PLAN WITH CHEMICAL CONCENTRATION DATA
MARCH 3, 2004**

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

oasis
ENVIRONMENTAL
807 G STREET, SUITE #250
ANCHORAGE, ALASKA 99501

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



ATTACHMENT 1
FIELD AND LABORATORY PROCEDURES

First Semiannual Groundwater Monitoring Report

Former Texaco Service Station 21-1079

1501 S. Cushman Street

Fairbanks, Alaska

OASIS Project No.: 187-003-2-1

June 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

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

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-3
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-3
 Client: SECOR Date Sample Collected: N/A
 Sampler: Carl Benson Time sampled: _____

Well Information

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 23
 b) Water Depth (ft): _____
 Other: Sample Not Collected c) Water Column (ft): 23
Well Inaccessible Due To Snow Cover d) Calc. Purge Vol. (gal): 15.0

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 ₂	Other
							Not Measured	Not Measured	
							Measured	Measured	

Total Volume Purged (Gallons): _____ Free Product (y/n): _____
 Odor: _____ Sheen (y/n): _____

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.)
Monument was lifted by a snowplow this winter. The monument will require repair this spring.

Remarks (well recovery, unusual conditions/observations):
 Good Recovery
Dissolved Oxygen = Not Measured, Temperature = Not Measured

Duplicate Sample ID: None Collected Analyses Requested: None
 Split Sample ID: None Collected

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-11
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-11
 Client: SECOR Date Sample Collected: 3/2/2004
 Sampler: Carl Benson Time sampled: 1800

Well Information

Groundwater: X Casing Diameter (in): 2 a) Well Depth (ft): 17.16
 b) Water Depth (ft): 15.5
 Other: _____ c) Water Column (ft): 1.66
 d) Calc. Purge Vol. (gal): 0.3

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 ₂	Other
1730	0.25	6.75	0.512	2.4	Brown	405	Not	Not	Sheen
1734	0.5	6.72	0.514	2.5	Brown	385	Measured	Measured	Odor
1738	0.75	6.68	0.514	2.4	Brown	337			

Total Volume Purged (Gallons): 1 Free Product (y/n): No
 Odor: Yes Sheen (y/n): Yes

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 = Not Measured, Temperature = Not Measured

Duplicate Sample ID: <u>None Collected</u>	Analyses Requested: <u>GRO using AK101</u> <u>BTEX using EPA 8021B</u>
Split Sample ID: <u>None Collected</u>	

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-6
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-6
 Client: SECOR Date Sample Collected: 3/3/2004
 Sampler: Carl Benson Time sampled: 1000

Well Information

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 22.46
 b) Water Depth (ft): 14.55
 Other: _____ c) Water Column (ft): 7.91
 d) Calc. Purge Vol. (gal): 5.1

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 ₂	Other
940	5	6.81	1.17	2.3	Orange	380	Not	Not	No Odor
945	10	6.92	1.03	2.2	Orange	410	Measured	Measured	No Sheen
950	15	6.94	0.99	2.2	Orange	390			

Total Volume Purged (Gallons): 16 Free Product (y/n): No
 Odor: _____ Sheen (y/n): No

Purge Method (disposable bailer, teflon bailer, **submersible pump**, etc.)
 Dedicated Pump not working anymore. Bailed well instead.

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 = Not Measured, Temperature = Not Measured

Duplicate Sample ID: <u>None Collected</u>	Analyses Requested: <u>GRO using AK101</u> <u>BTEX using EPA 8021B</u>
Split Sample ID: <u>None Collected</u>	

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-13
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-13
 Client: SECOR Date Sample Collected: 3/3/2004
 Sampler: Carl Benson Time sampled: 1115

Well Information

Groundwater: X Casing Diameter (in): 2 a) Well Depth (ft): 17.14
 b) Water Depth (ft): 14.4
 Other: _____ c) Water Column (ft): 2.74
 d) Calc. Purge Vol. (gal): 0.4

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
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 ₂	Other
1040	0.5	6.96	1.13	2.3	Orange	380	Not	Not	No Odor
1044	1	6.95	1.1	2.2	Orange	410	Measured	Measured	No Sheen
1048	1.5	6.98	1.11	2.2	Orange	390			

Total Volume Purged (Gallons): 2 Free Product (y/n): No
 Odor: None 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 = Not Measured, Temperature = Not Measured

Duplicate Sample ID: <u>None Collected</u>	Analyses Requested: <u>GRO using AK101</u> <u>BTEX using EPA 8021B</u>
Split Sample ID: <u>None Collected</u>	

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-8
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-8
 Client: SECOR Date Sample Collected: 3/3/2004
 Sampler: Carl Benson Time sampled: 1230

Well Information

Groundwater: X Casing Diameter (in): 2 a) Well Depth (ft): 17.31
 b) Water Depth (ft): 14.8
 Other: _____ c) Water Column (ft): 2.51
 d) Calc. Purge Vol. (gal): 0.4

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 ₂	Other
1212	0.5	6.99	1.1	2.7	Brown	602	Not	Not	No Odor
1216	1	7	1.1	2.7	Brown	799	Measured	Measured	No Sheen
1220	1.5	7.01	1.13	2.6	Brown	884			

Total Volume Purged (Gallons): 2 Free Product (y/n): No
 Odor: None 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 = Not Measured, Temperature = Not Measured

Duplicate Sample ID: <u>None Collected</u>	Analyses Requested: <u>GRO using AK101</u> <u>BTEX using EPA 8021B</u>
Split Sample ID: <u>None Collected</u>	

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-7
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-7
 Client: SECOR Date Sample Collected: 3/3/2004
 Sampler: Carl Benson Time sampled: 1340

Well Information

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 23.2
 b) Water Depth (ft): 14.89
 Other: _____ c) Water Column (ft): 8.31
 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 ₂	Other
1329	5.5	7.29	0.97	2.9	Brown	243	Not	Not	No Odor
1332	11	7.28	0.95	2.9	Brown	115	Measured	Measured	No Sheen
1325	16.5	7.24	0.92	2.8	Brown	90			

Total Volume Purged (Gallons): 17 Free Product (y/n): No
 Odor: None 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 = Not Measured, Temperature = Not Measured

Duplicate Sample ID: <u>None Collected</u>	Analyses Requested: <u>GRO using AK101</u> <u>BTEX using EPA 8021B</u>
Split Sample ID: <u>None Collected</u>	

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-10
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-10
 Client: SECOR Date Sample Collected: 3/3/2004
 Sampler: Carl Benson Time sampled: 1445

Well Information

Groundwater: X Casing Diameter (in): 2 a) Well Depth (ft): 16.65
 b) Water Depth (ft): 14.16
 Other: _____ c) Water Column (ft): 2.49
 d) Calc. Purge Vol. (gal): 0.4

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 ₂	Other
1435	0.5	7.1	0.62	1.8	Brown	388	Not	Not	Odor
1438	1	7.1	0.627	1.8	Brown	0.38	Measured	Measured	No Sheen
1440	1.5	7.15	0.628	1.8	Brown	377			

Total Volume Purged (Gallons): 2 Free Product (y/n): No
 Odor: Yes 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 = Not Measured, Temperature = Not Measured

Duplicate Sample ID: <u>None Collected</u>	Analyses Requested: <u>GRO using AK101</u> <u>BTEX using EPA 8021B</u>
Split Sample ID: <u>None Collected</u>	

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-4
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-4
 Client: SECOR Date Sample Collected: 3/3/2004
 Sampler: Carl Benson Time sampled: 1700

Well Information

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 22.06
 b) Water Depth (ft): 14.09
 Other: _____ c) Water Column (ft): 7.97
 d) Calc. Purge Vol. (gal): 5.2

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 ₂	Other
1649	5	6.81	0.584	2.8	Brown	271	Not	Not	Odor
1653	10	6.82	0.543	2.8	Brown	28	Measured	Measured	No Sheen
1657	15	6.9	0.522	2.8	Clear	21			

Total Volume Purged (Gallons): _____ Free Product (y/n): No
 Odor: Yes 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 = Not Measured, Temperature = Not Measured

Duplicate Sample ID: <u>None Collected</u>	Analyses Requested: <u>GRO using AK101</u> <u>BTEX using EPA 8021B</u>
Split Sample ID: <u>None Collected</u>	

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-9
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-9
 Client: SECOR Date Sample Collected: 3/3/2004
 Sampler: Carl Benson Time sampled: 1600

Well Information

Groundwater: X Casing Diameter (in): 2 a) Well Depth (ft): 17.55
 b) Water Depth (ft): 13.87
 Other: _____ c) Water Column (ft): 3.68
 d) Calc. Purge Vol. (gal): 0.6

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 ₂	Other
1547	1.25	7.15	0.609	3.8	Brown	298	Not	Not	Odor
1551	2.5	7.14	0.599	3.7	Brown	999	Measured	Measured	No Sheen
1555	3.75	7.14	0.599	3.7	Brown	999			

Total Volume Purged (Gallons): 4 Free Product (y/n): No
 Odor: Yes 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 = Not Measured, Temperature = Not Measured

Duplicate Sample ID: <u>None Collected</u>	Analyses Requested: <u>GRO using AK101</u> <u>BTEX using EPA 8021B</u>
Split Sample ID: <u>None Collected</u>	

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-2
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-2
 Client: SECOR Date Sample Collected: N/A
 Sampler: Carl Benson Time sampled: _____

Well Information

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 23
 b) Water Depth (ft): _____
 Other: Sample Not Collected c) Water Column (ft): 23
Well Inaccessible Due To Snow Cover d) Calc. Purge Vol. (gal): 15.0

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 ₂	Other
							Not	Not	
							Measured	Measured	

Total Volume Purged (Gallons): _____ Free Product (y/n): _____
 Odor: _____ Sheen (y/n): _____

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 = Not Measured, Temperature = Not Measured

Duplicate Sample ID: None Collected Analyses Requested: None
 Split Sample ID: None Collected

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-5
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-5
 Client: SECOR Date Sample Collected: 3/3/2004
 Sampler: Carl Benson Time sampled: 1830

Well Information

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 20.4
 b) Water Depth (ft): 14.83
 Other: _____ c) Water Column (ft): 5.57
 d) Calc. Purge Vol. (gal): 3.6

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 ₂	Other
1817	3.5	6.85	0.675	2.7	Clear	73	Not	Not	Odor
1821	7	6.84	0.63	2.7	Clear	14	Measured	Measured	No Sheen
1825	10.5	6.88	0.61	2.7	Clear	15			

Total Volume Purged (Gallons): 12 Free Product (y/n): No
 Odor: Yes 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 = Not Measured, Temperature = Not Measured

Duplicate Sample ID: <u>None Collected</u>	Analyses Requested: <u>GRO using AK101</u> <u>BTEX using EPA 8021B</u>
Split Sample ID: <u>None Collected</u>	

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

GROUNDWATER SAMPLE DATA SHEET

Project Number: 77CH.21079.02 Sample Location (ie. MW1): MW-1
 Project Name: 1501 Cushman Street Sample ID (ie. MW-1): MW-1
 Client: SECOR Date Sample Collected: 3/3/2004
 Sampler: Carl Benson Time sampled: 1915

Well Information

Groundwater: X Casing Diameter (in): 4 a) Well Depth (ft): 21.28
 b) Water Depth (ft): 15.85
 Other: _____ c) Water Column (ft): 5.43
 d) Calc. Purge Vol. (gal): 3.5

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 ₂	Other
1907	3.5	6.92	0.467	2.7	Brown	62	Not	Not	Odor
1911	7	6.9	0.48	2.4	Clear	29	Measured	Measured	No Sheen
1915	10.5	6.95	0.49	2.3	Clear	17			

Total Volume Purged (Gallons): 12 Free Product (y/n): No
 Odor: Yes 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 = Not Measured, Temperature = Not Measured

Duplicate Sample ID: <u>Duplicate 2 @ 1815</u>	Analyses Requested: <u>GRO using AK101</u> <u>BTEX using EPA 8021B</u>
Split Sample ID: <u>None Collected</u>	

Signed: Carl Benson Date: 3/4/2004
 Signed/reviewer: _____ Date: _____

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

First Semiannual Groundwater Monitoring Report
Former Texaco Service Station 21-1079
1501 S. Cushman Street
Fairbanks, Alaska
OASIS Project No.: 187-003-2-1
June 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 887399. Samples arrived at the laboratory on Saturday, March 06, 2004. The PO# for this group is 99011184 and the release number is COCHRAN.

<u>Client Description</u>	<u>Lancaster Labs Number</u>
MW-11 Grab Water Sample	4229858
MW-6 Grab Water Sample	4229859
MW-13 Grab Water Sample	4229860
MW-8 Grab Water Sample	4229861
MW-7 Grab Water Sample	4229862
MW-10 Grab Water Sample	4229863
MW-9 Grab Water Sample	4229864
MW-4 Grab Water Sample	4229865
MW-5 Grab Water Sample	4229866
MW-1 Grab Water Sample	4229867
Duplicate-1 Grab Water Sample	4229868
Purge Grab Water Sample	4229869
Trip Blank Water Sample	4229870

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

Attn: Mr. Brian Silva
Attn: Carl Benson

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

Respectfully Submitted,



Victoria M. Martell
Chemist



Analysis Report

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Lancaster Laboratories Sample No. WW 4229858

MW-11 Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/02/2004 18:00 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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.	4,900.	50.	ug/l	5
05879	BTEX					
02161	Benzene	71-43-2	N.D.	50.	ug/l	5
02164	Toluene	108-88-3	N.D.	2.5	ug/l	5
02166	Ethylbenzene	100-41-4	40.	2.5	ug/l	5
02171	Total Xylenes	1330-20-7	76.	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	03/11/2004 22:04	Martha L Seidel	5
05879	BTEX	SW-846 8021B	1	03/11/2004 22:04	Martha L Seidel	5
01146	GC VOA Water Prep	SW-846 5030B	1	03/11/2004 22:04	Martha L Seidel	n.a.



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Lancaster Laboratories Sample No. WW 4229859

MW-6 Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/03/2004 10:00 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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.	25,000.	250.	ug/l	25
05879	BTEX					
02161	Benzene	71-43-2	340.	13.	ug/l	25
02164	Toluene	108-88-3	180.	13.	ug/l	25
02166	Ethylbenzene	100-41-4	1,400.	13.	ug/l	25
02171	Total Xylenes	1330-20-7	6,200.	38.	ug/l	25

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	03/12/2004 00:16	Martha L Seidel	25
05879	BTEX	SW-846 8021B	1	03/12/2004 00:16	Martha L Seidel	25
01146	GC VOA Water Prep	SW-846 5030B	1	03/12/2004 00:16	Martha L Seidel	n.a.

Lancaster Laboratories Sample No. WW 4229860

MW-13 Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/03/2004 11:15 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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.	N.D.	10.	ug/l	1
05879	BTEX					
02161	Benzene	71-43-2	0.6	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 The analysis was performed from a previously opened vial and the results are therefore estimated.	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		Analyst	Dilution Factor
			Trial#	Date and Time		
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	03/11/2004 17:08	Martha L Seidel	1
05879	BTEX	SW-846 8021B	1	03/11/2004 17:08	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/11/2004 17:08	Martha L Seidel	n.a.



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Lancaster Laboratories Sample No. WW 4229861

MW-8 Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/03/2004 12:30 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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.	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 The analysis was performed from a previously opened vial and the results are therefore estimated.	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	03/11/2004 17:41	Martha L Seidel	1
05879	BTEX	SW-846 8021B	1	03/11/2004 17:41	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/11/2004 17:41	Martha L Seidel	n.a.



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Lancaster Laboratories Sample No. WW 4229862

MW-7 Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/03/2004 13:40 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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.	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	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	03/11/2004 18:13	Martha L Seidel	1
05879	BTEX	SW-846 8021B	1	03/11/2004 18:13	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/11/2004 18:13	Martha L Seidel	n.a.



Analysis Report

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Lancaster Laboratories Sample No. WW 4229863

MW-10 Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/03/2004 14:45 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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.	4,100.	50.	ug/l	5
05879	BTEX					
02161	Benzene	71-43-2	N.D.	10.	ug/l	5
02164	Toluene	108-88-3	8.9	2.5	ug/l	5
02166	Ethylbenzene	100-41-4	300.	2.5	ug/l	5
02171	Total Xylenes	1330-20-7	520.	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	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	03/11/2004 22:37	Martha L Seidel	5
05879	BTEX	SW-846 8021B	1	03/11/2004 22:37	Martha L Seidel	5
01146	GC VOA Water Prep	SW-846 5030B	1	03/11/2004 22:37	Martha L Seidel	n.a.



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Lancaster Laboratories Sample No. WW 4229864

MW-9 Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/03/2004 16:00 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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.	34,000.	100.	ug/l	10
05879	BTEX					
02161	Benzene	71-43-2	N.D.	50.	ug/l	10
02164	Toluene	108-88-3	130.	5.0	ug/l	10
02166	Ethylbenzene	100-41-4	1,300.	5.0	ug/l	10
02171	Total Xylenes	1330-20-7	7,300.	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		Analyst	Dilution Factor
			Trial#	Date and Time		
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	03/11/2004 23:10	Martha L Seidel	10
05879	BTEX	SW-846 8021B	1	03/11/2004 23:10	Martha L Seidel	10
01146	GC VOA Water Prep	SW-846 5030B	1	03/11/2004 23:10	Martha L Seidel	n.a.



Analysis Report

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Lancaster Laboratories Sample No. WW 4229865

MW-4 Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/03/2004 17:00 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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.	3,800.	50.	ug/l	5
05879	BTEX					
02161	Benzene	71-43-2	N.D.	20.	ug/l	1
02164	Toluene	108-88-3	1.0	0.5	ug/l	1
02166	Ethylbenzene	100-41-4	110.	0.5	ug/l	1
02171	Total Xylenes The analysis was performed from a previously opened vial and the results are therefore estimated.	1330-20-7	300.	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 Date and Time	Analyst	Dilution Factor
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	03/12/2004 01:54	Linda C Pape	5
05879	BTEX	SW-846 8021B	1	03/11/2004 18:46	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/11/2004 18:46	Linda C Pape	n.a.



Analysis Report

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Lancaster Laboratories Sample No. WW 4229866

MW-5 Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/03/2004 18:30 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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.	24,000.	100.	ug/l	10
05879	BTEX					
02161	Benzene	71-43-2	N.D.	20.	ug/l	10
02164	Toluene	108-88-3	5.8	5.0	ug/l	10
02166	Ethylbenzene	100-41-4	680.	5.0	ug/l	10
02171	Total Xylenes	1330-20-7	5,600.	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		Analyst	Dilution Factor
			Trial#	Date and Time		
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	03/11/2004 23:43	Martha L Seidel	10
05879	BTEX	SW-846 8021B	1	03/11/2004 23:43	Martha L Seidel	10
01146	GC VOA Water Prep	SW-846 5030B	1	03/11/2004 23:43	Martha L Seidel	n.a.



Analysis Report

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Lancaster Laboratories Sample No. WW 4229867

MW-1 Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/03/2004 19:15 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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
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	46.	0.5	ug/l	1
02171	Total Xylenes	1330-20-7	220.	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	Analysis			Dilution Factor
			Trial#	Date and Time	Analyst	
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	03/11/2004 19:19	Martha L Seidel	1
05879	BTEX	SW-846 8021B	1	03/11/2004 19:19	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/11/2004 19:19	Martha L Seidel	n.a.



Analysis Report

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Lancaster Laboratories Sample No. WW 4229868

Duplicate-1 Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/03/2004 19:30 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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.	3,300.	10.	ug/l	1
05879	BTEX					
02161	Benzene	71-43-2	N.D.	20.	ug/l	1
02164	Toluene	108-88-3	N.D.	2.0	ug/l	1
02166	Ethylbenzene	100-41-4	43.	0.5	ug/l	1
02171	Total Xylenes	1330-20-7	200.	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	Analysis			Dilution Factor
			Trial#	Date and Time	Analyst	
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	03/11/2004 19:52	Martha L Seidel	1
05879	BTEX	SW-846 8021B	1	03/11/2004 19:52	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/11/2004 19:52	Martha L Seidel	n.a.



Analysis Report

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Lancaster Laboratories Sample No. WW 4229869

Purge Grab Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/03/2004 19:45 by CB

Account Number: 10869

Submitted: 03/06/2004 10:25

ChevronTexaco

Reported: 03/16/2004 at 15:29

6001 Bollinger Canyon Rd L4310

Discard: 04/16/2004

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 176F. Test flame extinguished at 156F. Flash point was determined using Pensky Martens closed cup apparatus.	n.a.	No Flash Observed		Degrees F	1
00612	SGT-HEM (TPH) The matrix spike and matrix spike duplicate analyzed on the batch associated with this sample had recoveries of 74% and 55%. The acceptance window for this analysis is 64% to 132%. The blank and LCS analyzed with the sample were within specifications.	n.a.	3,900.	1,600.	ug/l	1
05879	BTEX					
02161	Benzene	71-43-2	41.	0.5	ug/l	1
02164	Toluene	108-88-3	22.	0.5	ug/l	1
02166	Ethylbenzene	100-41-4	280.	0.5	ug/l	1
02171	Total Xylenes	1330-20-7	1,700.	15.	ug/l	10

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	03/12/2004 18:10	Justin M Bowers	1
00612	SGT-HEM (TPH)	EPA 1664A	1	03/12/2004 09:00	Yolunder Y Bunch	1
05879	BTEX	SW-846 8021B	1	03/09/2004 10:31	Todd T Smythe	1
05879	BTEX	SW-846 8021B	1	03/09/2004 16:04	Todd T Smythe	10
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2004 10:31	Todd T Smythe	n.a.



Analysis Report

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Lancaster Laboratories Sample No. WW 4229870

Trip Blank Water Sample

Facility# 211079

1501 S. Cushman St. - Fairbanks, AK

Collected: 03/02/2004

through 03/03/2004

Submitted: 03/06/2004 10:25

Reported: 03/16/2004 at 15:29

Discard: 04/16/2004

Account Number: 10869

ChevronTexaco

6001 Bollinger Canyon Rd L4310

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.	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	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01440	Alaska AK101 GRO (waters)	AK101 GRO	1	03/11/2004 16:35	Martha L Seidel	1
05879	BTEX	SW-846 8021B	1	03/11/2004 16:35	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/11/2004 16:35	Martha L Seidel	n.a.

Quality Control Summary

 Client Name: ChevronTexaco
 Reported: 03/16/04 at 03:30 PM

Group Number: 887399

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: 04069A15A	Sample number(s): 4229869							
Benzene	N.D.	0.5	ug/l	94	96	79-123	2	30
Toluene	N.D.	0.5	ug/l	101	103	82-119	2	30
Ethylbenzene	N.D.	0.5	ug/l	102	101	81-119	2	30
Batch number: 04069A15B	Sample number(s): 4229869							
Total Xylenes	N.D.	1.5	ug/l	108	104	82-120	4	30
Batch number: 04070A51B	Sample number(s): 4229858-4229868, 4229870							
Alaska AK101 GRO (waters)	N.D.	10.	ug/l	98	101	60-120	3	20
Benzene	N.D.	0.5	ug/l	91	96	79-123	6	30
Toluene	N.D.	0.5	ug/l	97	101	82-119	5	30
Ethylbenzene	N.D.	0.5	ug/l	97	103	81-119	6	30
Total Xylenes	N.D.	1.5	ug/l	100	106	82-120	6	30
Batch number: 04071807901A	Sample number(s): 4229869							
SGT-HEM (TPH)	2.2	1.6	mg/l	84		66-114		
Batch number: 04072043001A	Sample number(s): 4229869							
Flash Point for Liquids				99	99	97-103	0	2

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>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 04069A15A	Sample number(s): 4229869							
Benzene	116		67-136					
Toluene	113		78-129					
Ethylbenzene	118		75-133					
Batch number: 04069A15B	Sample number(s): 4229869							
Total Xylenes	112		86-132					
Batch number: 04071807901A	Sample number(s): 4229869							
SGT-HEM (TPH)	74	55*	64-132	26*	23	N.D.	2.1	38* (1) 24

Surrogate Quality Control

*- 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: 03/16/04 at 03:30 PM

Group Number: 887399

Surrogate Quality Control

Analysis Name: BTEX
Batch number: 04069A15A
Trifluorotoluene-P

4229869	100
Blank	101
LCS	98
LCSD	100
MS	99

Limits: 66-136

Analysis Name: Master Scan for SW846
Batch number: 04069A15B
Trifluorotoluene-P

Blank	101
LCS	98
LCSD	100
MS	99

Limits: 66-136

Analysis Name: BTEX
Batch number: 04070A51B
Trifluorotoluene-F Trifluorotoluene-P

4229858	100	103
4229859	101	103
4229860	103	104
4229861	102	103
4229862	102	101
4229863	99	104
4229864	104	106
4229865	103	90
4229866	103	103
4229867	109	105
4229868	105	105
4229870	106	104
Blank	103	104
LCS	103	105
LCSD	107	105

Limits: 60-120 66-136

*- 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.

Chevron Generic Analysis Request/Chain of Custody



For Lancaster Laboratories use only
 Acct. #: 10869 Sample #: 4229858-70 SCR#: 1187364
 # 887399

Facility #: 211079
 Site Address: 1501 S. Cushman
 Chevron PM: Bob Cushman Lead Consultant: SECOR
 Consultant/Office: SECOR / Surveillance
 Consultant Prj. Mgr.: Brian Silva
 Consultant Phone #: (916)861-0400 Fax #: _____
 Sampler: Carl Benson
 Service Order #: 77CH21079-03 Non SAR: _____

Matrix: Potable NPDES
 Soil Water Oil Air

Sample Identification	Date Collected	Time Collected	Grab	Composite
MW-11	3/2/04	1800	X	
MW-6	3/3/04	1000	X	
MW-13	3/3/04	1115	X	
MW-8	3/3/04	1230	X	
MW-7	3/3/04	1340	X	
MW-10	3/3/04	1445	X	
MW-9	3/3/04	1600	X	
MW-4	3/3/04	1700	X	
MW-5	3/3/04	1830	X	
MW-1	3/3/04	1915	X	
Duplicate -1	3/3/04	1930	X	
Purge	3/3/04	1945	X	
Trap Blank	-	-	X	

Total Number of Containers: 3
 BTEX + MTBE 8021 8260 Naphth
 8260 full scan
 _____ Oxygenates
 _____ TPH G
 _____ TPH D Extended Rng. Silica Gel Cleanup
 Lead Total Diss. Method _____
 VPH/EPH
 NWTPH H ClCD quantification

Preservation Codes
 H = HCl T = Thiosulfate
 N = HNO₃ B = NaOH
 S = H₂SO₄ O = Other
 J value reporting needed
 Must meet lowest detection limits possible for 8260 compounds
 8021 MTBE Confirmation
 Confirm MTBE + Naphthalene
 Confirm highest hit by 8260
 Confirm all hits by 8260
 Run _____ oxy's on highest hit
 Run _____ oxy's on all hits

Turnaround Time Requested (TAT) (please circle)
 STD 72 hour 72 hour 48 hour
 24 hour 4 day 5 day
 Data Package Options (please circle if required)
 Type I - Full Type VI (Raw Data) WIP (RWQCB) Other: _____
 Relinquished by: Carl Benson Date: 3/18/04 Time: 4:15
 Relinquished by: Carl Benson Date: 3/18/04 Time: 0:00
 Relinquished by: Denny Miller Date: 3/16/04 Time: 16:00
 Relinquished by: _____ Date: _____ Time: _____
 Received by: Denny Miller Date: 3/16/04 Time: 10:25
 Received by: _____ Date: _____ Time: _____
 Received by: _____ Date: _____ Time: _____
 Received by: _____ Date: _____ Time: _____
 Relinquished by Commercial Carrier: UPS Other: _____
 Temperature Upon Receipt: 3, 5, 2, 5 C°
 Custody Seals Intact? Yes No

Explanation of Symbols and Abbreviations

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

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	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.		
>	greater than		
J	estimated value – The result falls within the Method Detection Limit (MDL) and Limit of Quantitation (LOQ).		
ppm	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.		
ppb	parts per billion		
Dry weight basis	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	
A	TIC is a possible aldol-condensation product	B	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	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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