TOXICHEM Management Systems, Inc.
Environmental & Occupational Health Services
1562 44th Avenue
San Francisco, California 94122
(415) 681-8816 / Fax (415) 681-8132

Industrial Hygiene - Exposure Assessment
Quantitative Risk Assessment
Compliance Audits
Real Property Environmental Assessments
Remedial Investigations
Air, Soil, and Groundwater Sampling
Remedial Engineering and Construction
Regulatory Compliance and Negotiation
Litigation Support Services

#435

February 14, 2000
Project EQ-02.1A

Mr. Barney M. Chan
Alameda County Health Care Services Agency
Environmental Protection Division
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Quarterly Monitoring Report - Fourth Quarter 1999**
Former Texaco Service Station
3810 Broadway, Oakland, California

Dear Mr. Chan:

On behalf of Equiva Services LLC, this letter transmits the results of fourth quarter 1999 groundwater monitoring and sampling conducted at the site referenced above. This report presents and interpretation of results and recommendations and schedule for future actions.

INTERPRETATION OF RESULTS

Groundwater Elevation

The average groundwater elevation at the site decreased approximately 0.36 feet between the third and fourth quarters 1999, and it remains within the historical range of groundwater elevation.

Groundwater Flow Direction and Gradient

During the fourth quarter 1999, the groundwater flow direction was southeasterly at an approximate gradient of 0.037.

Analytical Results

During the fourth quarter 1999, separate phase hydrocarbons (SPH) continued to be measured in Wells MW-3 and MW-8, at thicknesses of 0.04 and 0.26 feet, respectively. SPH was also measured in Well MW-2 at a thickness of 0.30 feet. Overall, the dissolved groundwater concentrations appear stable with no apparent fluctuations outside historical ranges.

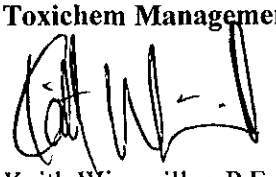
RECOMMENDATIONS AND SCHEDULE FOR FUTURE ACTIONS

1. Implement the proposed soil excavation project, which has been delayed because of property owner delays. The soil excavation project is scheduled to begin on Monday, March 6, 2000 and is expected to last 2 weeks.
2. Temporarily discontinue the SPH bailing program because Wells MW-3 and MW-8 were properly abandoned in February 2000 in anticipation of beginning the excavation project. Replacement monitoring wells will be installed following completion of the excavation project.
3. Continue measuring natural biodegradation parameters, including dissolved oxygen, oxidation-reduction potential, nitrates, sulfates, and ferrous iron.
4. Continue the quarterly groundwater monitoring and sampling program.

If you have any questions regarding this site, please contact me at your convenience at (415) 681-8816.

Sincerely,

Toxichem Management Systems, Inc.



Keith Winemiller, P.E.
Senior Engineer

Enclosure

cc: Ms. Karen Petryna, P.E., Equiva Services LLC, P.O. Box 6249, Carson, CA 90749-6249
Mr. Joe Zadik, 8255 San Leandro Street, Oakland, CA 94621

WELL CONCENTRATIONS
Former Texaco Service Station
3810 Broadway
Oakland, CA

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.O. Readings (ft.)
MW-1	06/28/1996	<100	<50	<0.5	<1.0	<1.0	<2.0	NA	NA	86.69	21.77	NA	64.92	NA	NA
MW-1	10/10/1996	520	<400	9.2	53	17	70	22	16**	86.69	23.26	NA	63.43	NA	NA
MW-1	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	86.69	23.27	NA	63.42	NA	NA
MW-1	12/18/1997	2,200	<50	<3.0	<3.0	<3.0	<3.0	<200	NA	86.69	19.70	NA	66.99	NA	NA
MW-1	04/06/1998	1,600	<50	16.4	0.8	<0.5	<0.5	38.3	NA	86.69	16.88	NA	69.81	NA	NA
MW-1	06/18/1998	330	280	7.8	<0.5	<0.5	<0.5	<0.5	NA	86.69	19.78	NA	66.91	NA	NA
MW-1	08/31/1998	<50	150	1.5	<0.5	<0.5	<0.5	<2.5	NA	86.69	21.71	NA	64.98	NA	NA
MW-1	12/21/1998	130	130	2.3	0.90	<0.5	<0.5	110	13	86.69	22.15	NA	64.54	NA	NA
MW-1	03/24/1999	1,520	305	11.7	<2.50	<2.50	<2.50	21.6	<25.0	86.69	19.55	NA	67.14	NA	NA
MW-1	06/25/1999	231	207	5.29	<0.500	<0.500	<0.500	3.94	1.01	86.69	21.60	NA	65.09	NA	NA
MW-1	09/24/1999	58.6	71.7	6.03	<0.500	<0.500	<0.500	3.70	NA	86.69	22.58	NA	64.11	NA	NA
MW-1	12/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	86.69	22.81	NA	63.88	NA	NA
MW-2	06/28/1996	NA	NA	NA	NA	NA	NA	NA	NA	85.83	22.10	NA	63.73	1.35	NA
MW-2	10/10/1996	99,000	1,800	4,100	9,400	2,300	9,900	390	<25**	85.83	22.36	NA	63.47	NA	NA
MW-2	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	85.83	22.39	NA	63.45	0.01	NA
MW-2	12/18/1997	24,000	4,700	600	1,800	750	2,400	<2,000	NA	85.83	20.19	NA	65.64	NA	NA
MW-2	04/06/1998	20,100	9.5	252	448	430	1,410	<200	NA	85.83	18.00	NA	67.83	NA	NA
MW-2	06/18/1998	20,000	5,200	240	370	270	790	<50	NA	85.83	19.63	NA	66.20	NA	NA
MW-2	08/31/1998	72,000	19,000	270	990	630	1,700	<125	NA	85.83	21.01	NA	64.82	NA	NA
MW-2	12/21/1998	290	13,000	8.7	18	9.7	38	10	29	85.83	21.31	NA	64.52	NA	NA
MW-2	03/24/1999	80,400	5,590	651	1,860	1,120	3,730	<40.0	<100	85.83	19.18	NA	66.65	NA	NA
MW-2	06/25/1999	34,700	12,100	504	1,300	716	2,160	<40.0	NA	85.83	20.78	NA	65.05	NA	NA
MW-2	09/24/1999	6,510	108	1,030	350	183	680	<50.0	NA	85.83	21.82	NA	64.01	NA	1.0/.80
MW-2	12/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	85.83	22.17	21.87	63.90	0.30	2.6
MW-2	01/07/2000	NA	NA	NA	NA	NA	NA	NA	NA	85.83	22.84	22.45	63.30	0.39	NA
MW-3	06/28/1996	NA	NA	NA	NA	NA	NA	NA	NA	83.18	19.04	NA	64.14	NA	NA

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MW-3	10/10/1996	110,000	1,200	6,600	16,000	2,200	12,000	<250	NA	83.18	19.51	NA	63.67	NA	NA
MW-3	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.40	NA	19.84	NA	NA
MW-3	12/18/1997	180,000	6,100,000	1,500	16,000	4,600	23,000	<3,000	NA	83.18	18.79	NA	64.39	NA	NA
MW-3	04/06/1998	NA	NA	NA	NA	NA	NA	NA	NA	83.18	16.58	NA	66.64	0.05	NA
MW-3	06/18/1998	NA	NA	NA	NA	NA	NA	NA	NA	83.18	NA*	NA	NA	>2.0	NA
MW-3	08/31/1998	NA	NA	NA	NA	NA	NA	NA	NA	83.18	19.56	NA	63.68	0.07	NA
MW-3	12/21/1998	NA	NA	NA	NA	NA	NA	NA	NA	83.18	20.23	NA	65.13	2.73	NA
MW-3	03/24/1999	NA	NA	NA	NA	NA	NA	NA	NA	83.18	16.76	15.90	67.11	0.86	NA
MW-3	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	83.18	18.47	18.17	64.95	0.30	NA
MW-3	09/24/1999	NA	NA	NA	NA	NA	NA	NA	NA	83.18	19.43	19.35	63.81	0.08	NA
MW-3	12/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	83.18	19.25	19.21	63.96	0.04	NA
MW-3	01/07/2000	NA	NA	NA	NA	NA	NA	NA	NA	83.18	19.87	19.80	63.37	0.07	NA
MW-4	06/28/1996	<100	<50	<0.5	<1.0	<1.0	<2.0	NA	NA	83.31	18.83	NA	64.48	NA	NA
MW-4	10/10/1996	650	<50	3.9	65	22	120	<5.0	NA	83.31	19.84	NA	63.47	NA	NA
MW-4	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	83.31	19.84	NA	63.47	NA	NA
MW-4	12/18/1997	<50	2,000	<0.5	<0.5	<0.5	<0.5	<30	NA	83.31	17.77	NA	65.54	NA	NA
MW-4	04/06/1998	<50	<50	<0.5	<0.5	<0.5	<0.5	<30	NA	83.31	15.45	NA	67.86	NA	NA
MW-4	06/18/1998	<50	53	<0.5	<0.5	<0.5	<0.5	<0.5	NA	83.31	16.89	NA	66.42	NA	NA
MW-4	08/31/1998	<50	60	<0.5	<0.5	<0.5	<0.5	<2.5	NA	83.31	18.48	NA	64.83	NA	NA
MW-4	12/21/1998	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	83.31	18.80	NA	64.51	NA	NA
MW-4	03/24/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	NA	83.31	16.70	NA	66.61	NA	NA
MW-4	06/25/1999	<50.0	128	<0.500	<0.500	<0.500	<0.500	<2.00	NA	83.31	18.16	NA	65.15	NA	NA
MW-4	09/24/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	83.31	19.12	NA	64.19	NA	NA
MW-4	12/29/1999	<50.0	169	<0.500	<0.500	<0.500	<0.500	<5.00	NA	83.31	19.08	NA	64.23	NA	NA
MW-5	10/10/1996	1,800	<50	34	4.7	11	44	21	5.0**	85.41	21.93	NA	63.48	NA	NA
MW-5	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	85.41	21.96	NA	63.45	NA	NA
MW-5	12/18/1997	1,200	<50	15	<1.0	15	<1.0	72	NA	85.41	19.81	NA	65.60	NA	NA

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MW-5	04/06/1998	1,000	<50	126	0.5	0.8	1.5	<30	NA	85.41	17.43	NA	67.98	NA	NA
MW-5	06/18/1998	110	100	6.9	<0.5	<0.5	<0.5	<0.5	NA	85.41	19.15	NA	66.26	NA	NA
MW-5	08/31/1998	480	120	5.3	<2.5	<2.5	<2.5	<12	NA	85.41	20.46	NA	64.95	NA	NA
MW-5	12/21/1998	270	100	16	2.9	1.3	<1.0	34	<2.0	85.41	20.91	NA	64.50	NA	NA
MW-5	03/24/1999	143	93.3	2.80	<0.500	0.749	<0.500	<2.00	<5.00	85.41	18.74	NA	66.67	NA	NA
MW-5	06/25/1999	847	125	6.61	<0.500	0.611	<0.500	2.69	<2.00	85.41	20.31	NA	65.10	NA	NA
MW-5	09/24/1999	563	94.0	6.00	<2.50	<2.50	<2.50	25.1	NA	85.41	21.36	NA	64.05	NA	NA
MW-5	12/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	85.41	21.41	NA	64.00	NA	NA
MW-6	10/10/1996	45,000	500	8,300	2,900	810	3,100	190	40**	86.09	22.44	NA	63.65	NA	NA
MW-6	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	86.09	22.60	NA	63.49	NA	NA
MW-6	12/18/1997	60,000	1,900	12,000	9,800	1,800	8,600	<2,000	NA	86.09	22.28	NA	63.81	NA	NA
MW-6	04/06/1998	30,500	<50	5,950	3,720	952	3,750	<1,000	NA	86.09	19.90	NA	66.19	NA	NA
MW-6	06/18/1998	23,000	1,100	2,600	540	410	1,300	<250	NA	86.09	20.49	NA	65.60	NA	NA
MW-6	08/31/1998	17,000	1,800	3,400	460	530	1,800	<250	NA	86.09	21.05	NA	65.04	NA	NA
MW-6	12/21/1998	7,900	930	1,900	510	280	730	150	2.6	86.09	21.74	NA	64.35	NA	NA
MW-6	03/24/1999	12,200	763	1,970	327	338	794	<40.0	<50.0	86.09	21.18	NA	64.91	NA	NA
MW-6	06/25/1999	14,800	1,050	2,040	1,080	406	1,430	<40.0	NA	86.09	21.34	NA	64.75	NA	NA
MW-6	09/24/1999	17,200	1,720	2,810	1,330	489	2,340	<50.0	NA	86.09	22.28	NA	63.81	NA	1.0/1.2
MW-6	12/29/1999	14,700	1,480	2,790	974	469	1,720	<500	NA	86.09	24.96	NA	61.13	NA	1.3/1.5
MW-7	10/10/1996	<50	<50	0.6	<0.5	<0.5	<0.5	<5.0	NA	84.11	20.78	NA	63.33	NA	NA
MW-7	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	84.11	20.80	NA	63.31	NA	NA
MW-7	12/18/1997	<50	<50	<0.5	<0.5	<0.5	<0.5	<30	NA	84.11	17.27	NA	66.84	NA	NA
MW-7	04/06/1998	<50	<50	<0.5	<0.5	<0.5	<0.5	<30	NA	84.11	15.91	NA	68.20	NA	NA
MW-7	06/18/1998	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA	84.11	17.95	NA	66.16	NA	NA
MW-7	08/31/1998	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	84.11	19.40	NA	64.71	NA	NA
MW-7	12/21/1998	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	84.11	19.75	NA	64.36	NA	NA
MW-7	03/24/1999	<50.0	51.3	<0.500	<0.500	<0.500	<0.500	<2.00	NA	84.11	17.54	NA	66.57	NA	NA

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MW-7	06/25/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	NA	84.11	19.22	NA	64.89	NA	NA
MW-7	09/24/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	84.11	20.18	NA	63.93	NA	1.4/1.6
MW-7	12/29/1999	<50.0	99.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	84.11	20.15	NA	63.96	NA	2.3/1.8
MW-8	10/10/1996	17,000	110	1,300	1,200	64	1,300	110	<5.0**	84.01	20.82	NA	63.19	NA	NA
MW-8	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	84.01	20.44	NA	63.57	NA	NA
MW-8	12/18/1997	15,000	630	3,600	1,800	410	930	<600	NA	84.01	19.36	NA	64.65	NA	NA
MW-8	04/06/1998	32,300	<50	8,230	5,900	718	2,120	<1,000	NA	84.01	16.19	NA	67.82	NA	NA
MW-8	06/18/1998	74,000	<50	5,400	4,500	700	2,200	2,400	NA	84.01	17.75	NA	66.26	NA	NA
MW-8	08/31/1998	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8	12/21/1998	9,600	1,200	2,600	410	220	300	700	<2.0	84.01	19.48	NA	64.53	NA	NA
MW-8	03/24/1999	86,100	2,890	9,890	11,700	1,650	7,130	<200	<250	84.01	17.44	NA	66.57	NA	NA
MW-8	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	84.01	20.69	20.59	63.40	0.10	NA
MW-8	07/01/1999	NA	NA	NA	NA	NA	NA	NA	NA	84.01	20.45	18.56	65.07	1.89	NA
MW-8	09/24/1999	NA	NA	NA	NA	NA	NA	NA	NA	84.01	20.98	19.45	64.25	1.53	NA
MW-8	12/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	84.01	20.25	19.99	63.97	0.26	NA
MW-8	01/07/2000	NA	NA	NA	NA	NA	NA	NA	NA	84.01	21.00	20.60	63.33	0.40	NA
MW-9	10/10/1996	80	520	2.5	13	2.2	13	<5.0	NA	82.17	18.62	NA	63.55	NA	NA
MW-9	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	63.53	NA	63.53	NA	NA
MW-9	12/18/1997	<50	<50	<0.5	<0.5	<0.5	<0.5	<30	NA	82.17	16.42	NA	65.75	NA	NA
MW-9	04/06/1998	<50	<50	<0.5	<0.5	<0.5	<0.5	<30	NA	82.17	14.00	NA	68.17	NA	NA
MW-9	06/18/1998	<50	100	<0.5	<0.5	<0.5	<0.5	<0.5	NA	82.17	15.33	NA	66.84	NA	NA
MW-9	08/31/1998	<50	57	<0.5	<0.5	<0.5	<0.5	<2.5	NA	82.17	17.14	NA	65.03	NA	NA
MW-9	12/21/1998	<50	71	<0.5	<0.5	<0.5	<0.5	<2.5	NA	82.17	17.40	NA	64.77	NA	NA
MW-9	03/24/1999	<50.0	84.0	<0.500	<0.500	<0.500	<0.500	<2.00	NA	82.17	16.22	NA	65.95	NA	NA
MW-9	06/25/1999	<50.0	92.0	<0.500	<0.500	<0.500	<0.500	<2.00	NA	82.17	16.90	NA	65.27	NA	NA
MW-9	09/24/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	82.17	17.89	NA	64.28	NA	1.0/1.2
MW-9	12/29/1999	<50.0	52.8	<0.500	<0.500	<0.500	<0.500	<5.00	NA	82.17	18.01	NA	64.16	NA	3.3/2.7

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MW-10	10/10/1996	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	81.83	18.40	NA	63.43	NA	NA
MW-10	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	81.83	18.43	NA	63.40	NA	NA
MW-10	12/18/1997	350	<50	6.9	0.87	0.88	0.77	<30	NA	81.83	16.18	NA	65.65	NA	NA
MW-10	04/06/1998	2,300	<50	224	168	81.4	253	<30	NA	81.83	14.39	NA	67.44	NA	NA
MW-10	06/18/1998	7,200	320	310	210	83	280	<0.5	NA	81.83	15.11	NA	66.72	NA	NA
MW-10	08/31/1998	460	120	51	8.2	5.1	10	<5.0	NA	81.83	17.03	NA	64.80	NA	NA
MW-10	12/21/1998	120	79	5.5	<1.0	<1.0	<1.0	8.7	<2.0	81.83	17.32	NA	64.51	NA	NA
MW-10	03/24/1999	1,330	923	85.9	42.9	29.7	95.2	20.4	<25.0	81.83	15.25	NA	66.58	NA	NA
MW-10	06/25/1999	1,130	167	115	32.6	17.2	36.3	<4.00	NA	81.83	16.82	NA	65.01	NA	NA
MW-10	09/24/1999	382	76.7	20.0	<1.00	2.21	1.37	8.83	NA	81.83	17.75	NA	64.08	NA	NA
MW-10	12/29/1999	114	107	9.03	<0.500	0.531	<0.500	<5.00	NA	81.83	18.13	NA	63.70	NA	NA

Abbreviations:
TPPH= Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8020
MTBE = methyl-tertiary-butyl ether
TOC = Top of Casing Elevation
SPH = Separate-Phase Hydrocarbons
GW = Groundwater
ug/L = parts per billion
msl = Mean sea level
ft = Feet
<n = Below detection limit
D = Duplicate sample
NA = Not applicable
n/n = Pre-purge/Post-purge D.O. reading.

Table 2

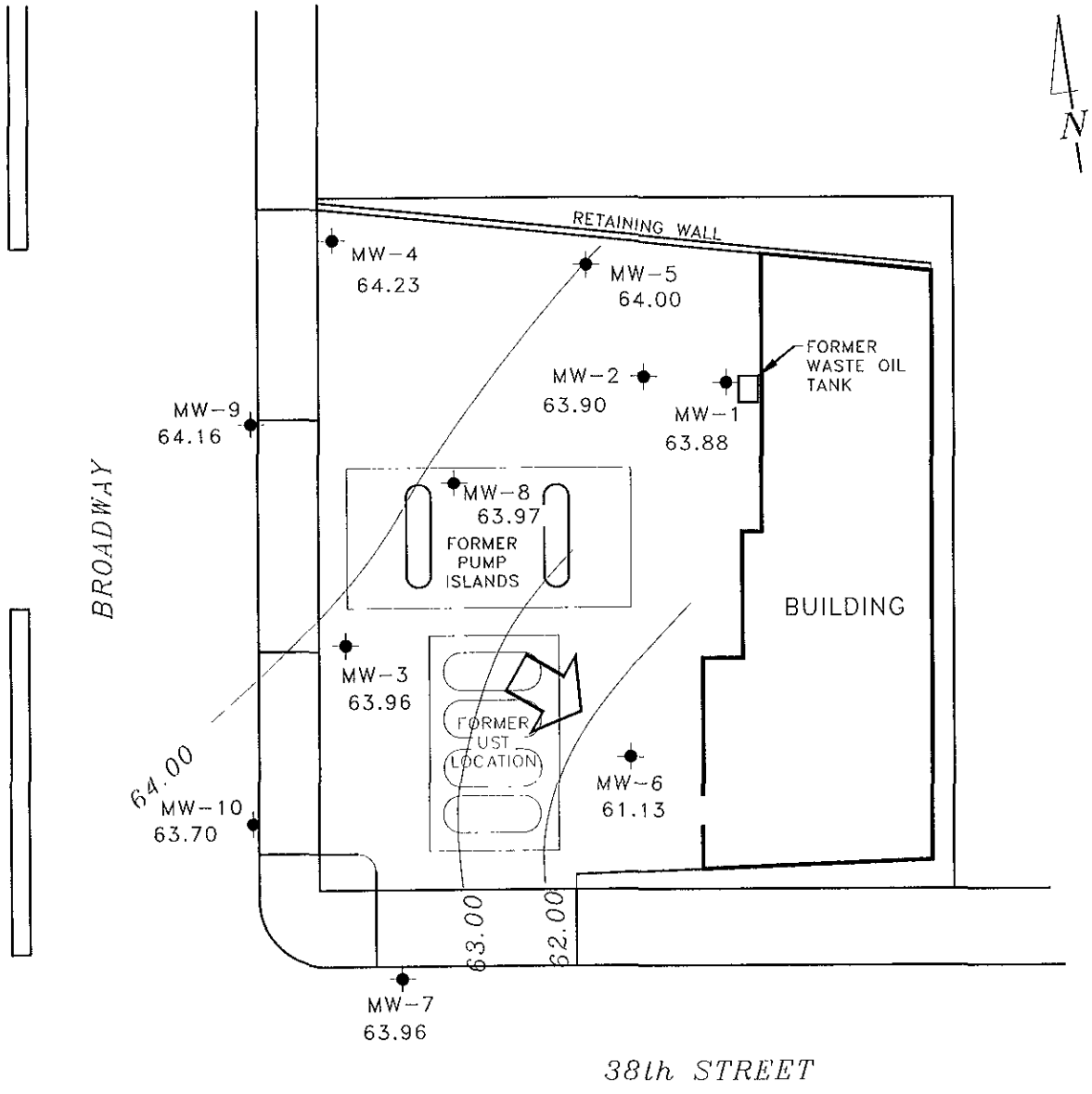
Groundwater Analytical Data

Ferrous Iron, Nitrate, Sulfate, Dissolved Oxygen, and Oxidation/Reduction Potential

Former Texaco Service Station
3810 Broadway, Oakland, California

Boring Number	Date Sampled	Ferrous Iron (mg/L)	Nitrate as NO_3 (mg/L)	Sulfate as SO_4 (mg/L)	Dissolved Oxygen Pre-Purge (mg/L)	Dissolved Oxygen Post-Purge (mg/L)	Oxidation/Reduction Potential Pre-Purge (mV)	Oxidation/Reduction Potential Post-Purge (mV)
MW-2	09/14/99	1.10	<0.100	5.13	1.0	0.8	-211	-225
	12/29/99	NA	NA	NA	2.6	NA	NA	NA
MW-6	09/14/99	0.480	<0.100	5.64	1.0	1.2	-241	-267
	12/29/99	2.30	<1.00	<5.00	1.3	1.5	-163	-235
MW-7	09/14/99	0.0130	36.5	37.2	1 4	1.6	-102	-78
	12/29/99	0.0108	22 3	27.1	2.3	1.8	-12	62
MW-9	09/14/99	0 0130	2.11	34 8	1.0	1 2	-89	-106
	12/29/99	0.200	4.81	29 5	3.3	2.7	0	10

mg/L = Milligrams per liter



EXPLANATION

- MONITORING WELL
- 63.88 GROUNDWATER ELEVATION (FT, MSL), 12-29-99
- 64.00 GROUNDWATER ELEVATION CONTOUR (FT, MSL), 12-29-99
- APPROXIMATE GROUNDWATER FLOW DIRECTION; APPROXIMATE GRADIENT = 0.037

SCALE (ft)

0 30

Reference EQ-02 1A/BR-0A DWG
Basemap from Remediation Risk Management, Inc

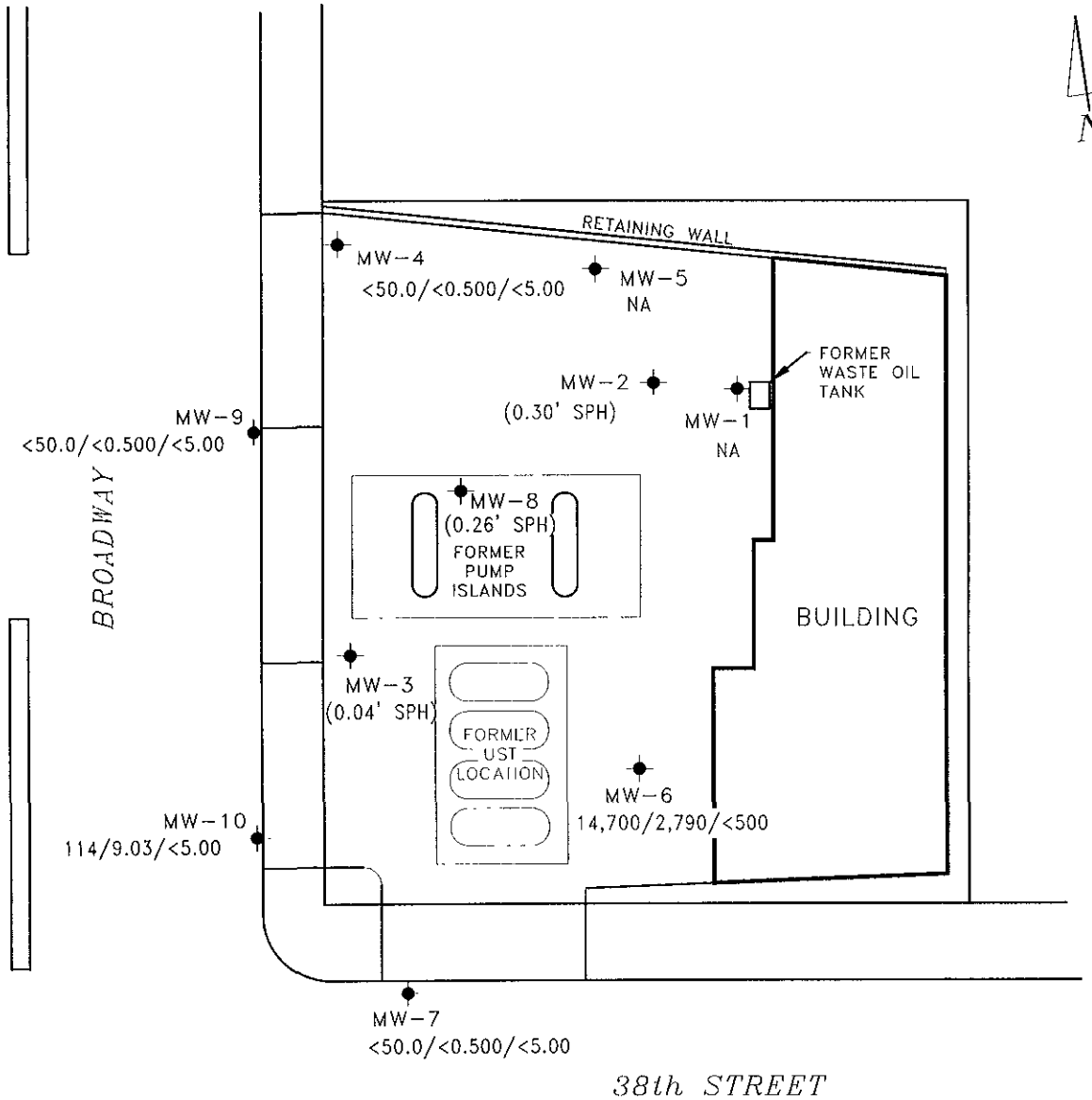
TOXICHEM Management Systems, Inc.
Environmental & Occupational Health Services

GROUNDWATER ELEVATION CONTOUR MAP, DECEMBER 29, 1999

Former Texaco Service Station
3810 Broadway
Oakland, California

FIGURE: 1

PROJECT: EQ-02



EXPLANATION

- ✦ MONITORING WELL
- <50.0/<0.500/<5.00 TPPH/BENZENE CONCENTRATION IN GROUNDWATER, IN MICROGRAMS PER LITER, 12-29-99 MtBE BY EPA METHOD 8260, IF AVAILABLE
- NA DATA NOT AVAILABLE
- (0.04' SPH) SEPARATE-PHASE HYDROCARBON THICKNESS IN FEET, 12-29-99

SCALE (ft)

0 30

Reference EQ-02 1A/BR-0A DWG
Basemap from Remediation Risk Management, Inc.

TOXICHEM Management Systems, Inc.
Environmental & Occupational Health Services

TPPH/BENZENE/MtBE CONCENTRATION MAP, DECEMBER 29, 1999

Former Texaco Service Station
3810 Broadway
Oakland, California

FIGURE: 2

PROJECT: EQ-02

BLAINE
TECH SERVICES INC

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
(408) 573-7771 FAX
(408) 573-0555 PHONE

February 1, 2000

Karen Petryna
Equiva Services LLC
P O. Box 7869
Burbank, CA 91510-7869

Fourth Quarter 1999 Groundwater Monitoring at
Former Texaco Service Station
3810 Broadway
Oakland, CA

Monitoring performed on December 29, 1999 &
January 7, 2000

Groundwater Monitoring Report **991229-U-2**

This report covers the routine monitoring of groundwater wells at this Former Texaco facility In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc field personnel are certified on completion of a forty hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

Deidre Kerwin
Operations Manager

DK/jh

attachments: Cumulative Table of WELL CONCENTRATIONS
Certified Analytical Report
Field Data Sheets

cc: Keith Winemiller
Toxichem Management Systems, Inc.
1562 44th Avenue
San Francisco, CA 94122

WELL CONCENTRATIONS
Former Texaco Service Station
3810 Broadway
Oakland, CA

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.O. Readings (ft.)

Notes:

* Free product could not be accurately measured (>2.0 feet of product in well).

** MTBE confirmation by 8240.

Sequoia Analytical

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FAX (408) 782-6308

January 19, 2000

Leah Davis
Blaine Tech Services (Shell)
1680 Rogers Avenue
San Jose, CA 95112

RE: Equiva 3800 Broadway, Oakland/M912999

Dear Leah Davis

Enclosed are the results of analyses for sample(s) received by the laboratory on December 29, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kayvan Kimyai
Project Manager D.M.

CA ELAP Certificate Number 1210

Sequoia Analytical

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FAX (408) 782-6308

Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received: 12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 1/19/00

ANALYTICAL REPORT FOR M912999

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-4	M912999-01	Water	1/10/00
MW-4	M912999-01	Water	12/29/99
MW-6	M912999-02	Water	1/10/00
MW-6	M912999-02	Water	12/29/99
MW-7	M912999-03	Water	1/10/00
MW-7	M912999-03	Water	12/29/99
MW-9	M912999-04	Water	1/10/00
MW-9	M912999-04	Water	12/29/99
MW-10	M912999-05	Water	1/10/00
MW-10	M912999-05	Water	12/29/99

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled:	12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received:	12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported:	1/19/00

Diesel Hydrocarbons (C9-C24) by DHS LUFT
Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-4			**M912999-01**				**Water**	
Diesel Range Hydrocarbons	0010297	1/11/00	1/14/00		0.0500	**0.169**	mg/l	1
Surrogate: n-Pentacosane	"	"	"	*50.0-150*		*101*	%	
MW-6			**M912999-02**				**Water**	
Diesel Range Hydrocarbons	0010297	1/11/00	1/14/00		0.0500	**1.48**	mg/l	1
Surrogate: n-Pentacosane	"	"	"	*50.0-150*		*100*	%	
MW-7			**M912999-03**				**Water**	
Diesel Range Hydrocarbons	0010297	1/11/00	1/14/00		0.0500	**0.0990**	mg/l	1
Surrogate: n-Pentacosane	"	"	"	*50.0-150*		*95.4*	%	
MW-9			**M912999-04**				**Water**	
Diesel Range Hydrocarbons	0010297	1/11/00	1/14/00		0.0500	**0.0528**	mg/l	1
Surrogate: n-Pentacosane	"	"	"	*50.0-150*		*94.8*	%	
MW-10			**M912999-05**				**Water**	
Diesel Range Hydrocarbons	0010297	1/11/00	1/14/00		0.0500	**0.107**	mg/l	1
Surrogate: n-Pentacosane	"	"	"	*50.0-150*		*97.8*	%	

Sequoia Analytical

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Blaine Tech Services (Shell)	Project.	Equiva	Sampled:	12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received:	12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported:	1/19/00

Total Metals by EPA 6000/7000 Series Methods
Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
MW-6			**M912999-02**				**Water**	
Ferrous Iron	0010159	1/3/00	1/5/00	EPA 6010A	0.0100	**2.30**	mg/l	
MW-7			**M912999-03**				**Water**	
Ferrous Iron	0010159	1/3/00	1/5/00	EPA 6010A	0.0100	**0.0108**	mg/l	
MW-9			**M912999-04**				**Water**	
Ferrous Iron	0010159	1/3/00	1/5/00	EPA 6010A	0.0100	**0.0200**	mg/l	

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received: 12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 1/19/00

Anions by EPA Method 300.0
Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
MW-6			**M912999-02**				**Water**	
Nitrate as NO3	0010076	12/30/99	12/30/99	EPA 300.0	1.00	ND	mg/l	D
Sulfate as SO4	"	"	"	EPA 300.0	5.00	ND	"	D
MW-7			**M912999-03**				**Water**	
Nitrate as NO3	0010076	12/30/99	12/30/99	EPA 300 0	1.00	**22.3**	mg/l	D
Sulfate as SO4	"	"	"	EPA 300.0	5.00	**27.1**	"	D
MW-9			**M912999-04**				**Water**	
Nitrate as NO3	0010076	12/30/99	12/30/99	EPA 300.0	1.00	**4.81**	mg/l	D
Sulfate as SO4	"	"	"	EPA 300.0	5.00	**29.5**	"	D

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Blaine Tech Services (Shell)	Project	Equiva	Sampled:	12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received:	12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported:	1/19/00

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-4			**M912999-01**				**Water**	
Purgeable Hydrocarbons as Gasoline	0010042	1/10/00	1/10/00		50 0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70 0-130*		*110*	%	
MW-6			**M912999-02**				**Water**	
Purgeable Hydrocarbons as Gasoline	0010049	1/11/00	1/11/00		5000	**14700**	ug/l	2,D
Benzene	"	"	"		50.0	**2790**	"	D
Toluene	"	"	"		50.0	**974**	"	D
Ethylbenzene	"	"	"		50.0	**469**	"	D
Xylenes (total)	"	"	"		50.0	**1720**	"	D
Methyl tert-butyl ether	"	"	"		500	ND	"	D
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70.0-130*		*111*	%	
MW-7			**M912999-03**				**Water**	
Purgeable Hydrocarbons as Gasoline	0010049	1/11/00	1/11/00		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70 0-130*		*87 4*	%	
MW-9			**M912999-04**				**Water**	
Purgeable Hydrocarbons as Gasoline	0010049	1/11/00	1/11/00		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70.0-130*		*101*	%	
MW-10			**M912999-05**				**Water**	
Purgeable Hydrocarbons as Gasoline	0010049	1/11/00	1/11/00		50.0	**114**	ug/l	3
Benzene	"	"	"		0.500	**9.03**	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	**0.531**	"	
Xylenes (total)	"	"	"		0.500	ND	"	

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received: 12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 1/19/00

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-10 (continued)			**M912999-05**				**Water**	
Methyl tert-butyl ether	0010049	1/11/00	1/11/00		5.00	ND	ug/l	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70 0-130*		*81 7*	*%*	

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received: 12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 1/19/00

Diesel Hydrocarbons (C9-C24) by DHS LUFT/Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0010297	**Date Prepared: 1/11/00**					**Extraction Method: EPA 3520B**				
Blank	**0010297-BLK1**									
Diesel Range Hydrocarbons	1/14/00			**ND**	mg/l	**0.0500**				
Surrogate: n-Pentacosane	"	*0.100*		*0.0952*	"	*50.0-150*	*95.2*			
LCS	**0010297-BS1**									
Diesel Range Hydrocarbons	1/14/00	1.00		0.816	mg/l	60.0-140	81.6			
Surrogate: n-Pentacosane	"	*0.100*		*0.0922*	"	*50.0-150*	*92.2*			
LCS Dup	**0010297-BSD1**									
Diesel Range Hydrocarbons	1/14/00	1.00		0.924	mg/l	60.0-140	92.4	50.0	12.4	
Surrogate: n-Pentacosane	"	*0.100*		*0.101*	"	*50.0-150*	*101*			

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received 12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported. 1/19/00

Total Metals by EPA 6000/7000 Series Methods/Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0010159	**Date Prepared: 1/3/00**					**Extraction Method: EPA 3020A**				
Blank	**0010159-BLK1**									
Ferrous Iron	1/5/00			**ND**	mg/l	**0.0100**				
LCS	**0010159-BS1**									
Ferrous Iron	1/5/00	1.00		1.00	mg/l	80.0-120	100			
Matrix Spike	**0010159-MS1**		**M912AAH-03**							
Ferrous Iron	1/5/00	1.00	0.200	1.20	mg/l	80.0-120	**100**			
Matrix Spike Dup	**0010159-MSD1**		**M912AAH-03**							
Ferrous Iron	1/5/00	1.00	0.200	1.20	mg/l	80.0-120	**100**	20.0	**0**	

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received: 12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 1/19/00

Anions by EPA Method 300.0/Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0010076	**Date Prepared: 12/30/99**					**Extraction Method: General Preparation**				
Blank	**0010076-BLK1**									
Nitrate as NO3	12/30/99			**ND**	mg/l	**0.100**				
Sulfate as SO4	"			**ND**	"	**0.500**				
LCS	**0010076-BS1**									
Nitrate as NO3	12/30/99	10.0		9.83	mg/l	80.0-120	98.3			
Sulfate as SO4	"	10.0		9.67	"	80.0-120	96.7			
Matrix Spike	**0010076-MS1**		**M912AAJ-15**							
Nitrate as NO3	12/30/99	100	6.81	106	mg/l	75.0-125	**99.2**			
Sulfate as SO4	"	100	28.7	131	"	75.0-125	**102**			
Matrix Spike Dup	**0010076-MSD1**		**M912AAJ-15**							
Nitrate as NO3	12/30/99	100	6.81	106	mg/l	75.0-125	**99.2**	20.0	**0**	
Sulfate as SO4	"	100	28.7	130	"	75.0-125	**101**	20.0	**0.985**	

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received: 12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 1/19/00

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0010042	**Date Prepared: 1/10/00**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**0010042-BLK1**									
Purgeable Hydrocarbons as Gasoline	1/10/00			**ND**	ug/l	**50.0**				
Benzene	"			**ND**	"	**0.500**				
Toluene	"			**ND**	"	**0.500**				
Ethylbenzene	"			**ND**	"	**0.500**				
Xylenes (total)	"			**ND**	"	**0.500**				
Methyl tert-butyl ether	"			**ND**	"	**5.00**				
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.1*	"	*70.0-130*	*101*			
LCS	**0010042-BS1**									
Benzene	1/10/00	10.0		8.63	ug/l	70.0-130	86.3			
Toluene	"	10.0		8.51	"	70.0-130	85.1			
Ethylbenzene	"	10.0		8.75	"	70.0-130	87.5			
Xylenes (total)	"	30.0		26.0	"	70.0-130	86.7			
Surrogate a,a,a-Trifluorotoluene	"	*10.0*		*10.3*	"	*70.0-130*	*103*			
LCS	**0010042-BS2**									
Purgeable Hydrocarbons as Gasoline	1/10/00	250		208	ug/l	70.0-130	83.2			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.86*	"	*70.0-130*	*98.6*			
Matrix Spike	**0010042-MS1**		**M912999-01**							
Purgeable Hydrocarbons as Gasoline	1/10/00	250	ND	243	ug/l	60.0-140	**97.2**			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.92*	"	*70.0-130*	*99.2*			
Matrix Spike Dup	**0010042-MSD1**		**M912999-01**							
Purgeable Hydrocarbons as Gasoline	1/10/00	250	ND	242	ug/l	60.0-140	**96.8**	25.0	**0.412**	
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.60*	"	*70.0-130*	*96.0*			
Batch: 0010049	**Date Prepared: 1/11/00**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**0010049-BLK1**									
Purgeable Hydrocarbons as Gasoline	1/11/00			**ND**	ug/l	**50.0**				
Benzene	"			**ND**	"	**0.500**				
Toluene	"			**ND**	"	**0.500**				
Ethylbenzene	"			**ND**	"	**0.500**				
Xylenes (total)	"			**ND**	"	**0.500**				
Methyl tert-butyl ether	"			**ND**	"	**5.00**				
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.4*	"	*70.0-130*	*104*			
LCS	**0010049-BS1**									
Benzene	1/11/00	10.0		8.85	ug/l	70.0-130	88.5			
Toluene	"	10.0		8.71	"	70.0-130	87.1			

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308

Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received: 12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 1/19/00

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
LCS (continued)	**0010049-BS1**									
Ethylbenzene	1/11/00	10.0		9.02	ug/l	70.0-130	90.2			
Xylenes (total)	"	30.0		26.7	"	70.0-130	89.0			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.5*	"	*70.0-130*	*105*			
LCS	**0010049-BS2**									
Purgeable Hydrocarbons as Gasoline	1/11/00	250		243	ug/l	70.0-130	97.2			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.4*	"	*70.0-130*	*104*			
Matrix Spike	**0010049-MS1**		**M912999-04**							
Benzene	1/11/00	10.0	ND	8.50	ug/l	60.0-140	**85.0**			
Toluene	"	10.0	ND	8.28	"	60.0-140	**82.8**			
Ethylbenzene	"	10.0	ND	8.60	"	60.0-140	**86.0**			
Xylenes (total)	"	30.0	ND	25.5	"	60.0-140	**85.0**			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*8.57*	"	*70.0-130*	*85.7*			
Matrix Spike Dup	**0010049-MSD1**		**M912999-04**							
Benzene	1/11/00	10.0	ND	7.34	ug/l	60.0-140	**73.4**	25.0	**14.6**	
Toluene	"	10.0	ND	7.17	"	60.0-140	**71.7**	25.0	**14.4**	
Ethylbenzene	"	10.0	ND	7.29	"	60.0-140	**72.9**	25.0	**16.5**	
Xylenes (total)	"	30.0	ND	21.8	"	60.0-140	**72.7**	25.0	**15.6**	
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.39*	"	*70.0-130*	*93.9*			

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled:	12/29/99 to 1/10/00
1680 Rogers Avenue	Project Number:	3800 Broadway, Oakland	Received:	12/29/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported:	1/19/00

Notes and Definitions

#	Note
D	Data reported from a dilution.
1	Chromatogram Pattern: Unidentified Hydrocarbons C9-C24
2	Chromatogram Pattern: Gasoline C6-C12
3	Chromatogram Pattern: Unidentified Hydrocarbons C6-C12
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

BLAINE
TECH SERVICES INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF CUSTODY

CLIENT: Equiva - Karen Petryna

SITE: 3800 Broadway

Oakland, CA

99122442

LAB

DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

☐ EPA ☐ RWQCB REGION ____

☐ LIA

☐ OTHER

SPECIAL INSTRUCTIONS

Send invoice to Equiva

Incident # 93995026

Send report to Blaine Tech Services

Attn: Ann Pember

C = COMPOSITE ALL CONTAINERS

CONDUCT ANALYSIS TO DETECT

SAMPLE I.D.			MATRIX S = SOIL W = H2O	CONTAINERS TOTAL	C	TPH - gas, BTEX	MTBE by 8020	MTBE by 8260	TPH - diesel	Oxygenates by 8260	1,2-DCA & EDB by 8010	Nitrate Sulfate	Ferrous Iron	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-4	12-29-99	13:44	W	1		X			X								
MW-6		14:45		2								X	X				
MW-7		11:30		3								X	X				
MW-9		12:55		4								X	X				
MW-10		12:14		5													

MA12999

SAMPLING COMPLETED	DATE	TIME
	12-29-99	1435

SAMPLING PERFORMED BY: Sanjiv

RESULTS NEEDED NO LATER THAN

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	12-29-99	16:10		12-29	1618
				12/29	1712

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	

BLAINE
TECH SERVICES INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF CUSTODY

CLIENT: Equiva - Karen Petryna

SITE: 3800 Broadway
Oakland, CA

991229-U2

CONDUCT ANALYSIS TO DETECT

LAB: SEQ   DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

☐ EPA   ☐ RWQCB REGION
☐ LIA
☐ OTHER   M912999

SPECIAL INSTRUCTIONS
Send invoice to Equiva
Incident # 93995026
Send report to Blaine Tech Services
Attn: Ann Pember

SAMPLE I.D.	Date	Time	MATRIX S = SOIL W = H2O	CONTAINERS TOTAL	C = COMPOSITE ALL CONTAINERS	TPH - gas, BTEX	MTBE by 8020	MTBE by 8260	TPH - diesel	Oxygenates by 8260	1,2-DCA & EDB by 8010	Nitrate Sulfate	Ferrous Iron	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-4	12-29-99	13:44	W			X	X		X								
MW-6	↓	14:45	↓			↓	X		↓			X	X				
MW-7	↓	11:30	↓			↓	X		↓			X	X	Confirm MTBE by 8260			
MW-9	↓	12:55	↓			↓	X		↓			X	X				
MW-10	↓	12:14	↓			↓			X								

SAMPLING COMPLETED: DATE 12-29-99 TIME 1435
SAMPLING PERFORMED BY: Sanjiv
RESULTS NEEDED NO LATER THAN:

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
S. [signature]	12-29-99	16:10	[signature]	12-29	1610

SHIPPED VIA: | DATE SENT: | TIME SENT: | COOLER #:

WELL GAUGING DATA

Project # 000107R-1 Date 1-7-00 Client Equiva

Site 3800 Broadway Oakland, CA

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-2	2	odor	22.45	.39		22.84	-		
MW-3	2	odor	19.80	.07		19.87	-		
MW-8	2	odor	20.60	.40		21.00	-		
*	Met with Service Station Systems								
	Vac. Truck to purge wells after								
	gauging SPH								

WELL GAUGING DATA

Project # 991229-42 Date 12-30-99 Client 618521071

Site 3800 Broadway, Oakland, CC

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	2					22.81	30.42	TOC	
MW-2	2		21.87	.30	—	22.17			
MW-3	2		19.21	.04	—	19.25			
MW-4	2					19.08	34.57		
MW-5	2					21.41	33.00		
MW-6	2					24.96	31.63		
MW-7	2					20.15	33.12		
MW-8	2		19.99	.26	—	20.25			
MW-9	2					18.01	33.82		
MW-10	2					18.13	32.51		

EQUIVA WELL MONITORING DATA SHEET

Project #: 991229-U2	Job # 618571071
Sampler: Sanjiv	Date: 12-30-99
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 30.42	Depth to Water: 22.81
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0 16	5"	1.02
3"	0.37	6"	1 47
4"	0.65	Other	radius^2 * 0 163

Purge Method: (Bailer) Middleburg / Electric Submersible / Extraction Pump / Other: ___

Sampling Method: (Bailer) Extraction Port / Other: ___

1.2 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 3.6 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
8:40	58.7	7.3	1109	>200	2	
8:41	60.3	6.8	1096	>200	3	
8:42	62.1	6.7	1099	>200	4	

Did well dewater? Yes (No) Gallons actually evacuated: 4

Sampling Time: 8:50 Sampling Date: 12-30-99

Sample I.D.: MW-1 Laboratory: (Sequoia) BC Other ___

Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

EQUIVA WELL MONITORING DATA SHEET

BTS #: 991229-42	Site: 61857 1071
Sampler: Sanjiv	Date: 12-29-99
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth:	Depth to Water: 22.17
Depth to Free Product: 21.87	Thickness of Free Product (feet): .30
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
Other_____

Sampling Method: Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: _____

_____(Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
	No Bail					

Did well dewater? Yes No		Gallons actually evacuated:	
Sampling Time:		Sampling Date:	
Sample I.D.:		Laboratory: Sequoia Columbia Other_____	
Analyzed for: TPH-G BTEX MTBE TPH-D		Other:	
EB I.D. (if applicable): @ Time		Duplicate I.D. (if applicable):	
Analyzed for: TPH-G BTEX MTBE TPH-D		Other:	
D.O. (if req'd):	Pre-purge: 2.6 mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge: mV	Post-purge:	mV

EQUIVA WELL MONITORING DATA SHEET

BTS #: 991229-U2	Site: 6185/1071
Sampler: Sanjiv	Date: 12-30-99
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth:	Depth to Water: 19.25
Depth to Free Product: 19.21	Thickness of Free Product (feet): .04
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
Other_____

Sampling Method: Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: _____

_____(Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
	Na	Bail				

Did well dewater? Yes No — Gallons actually evacuated:

Sampling Time: — Sampling Date:

Sample I.D.: — Laboratory: Sequoia Columbia Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

EB I.D. (if applicable): @ Time — Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 99129-42	Job # 6185710 71
Sampler: Sanjiv	Date: 12-29-99
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 34.57	Depth to Water: 19.08
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0 16	5"	1 02
3"	0 37	6"	1.47
4"	0.65	Other	radius^2 * 0.163

Purge Method: (Bailer) Middleburg Electric Submersible Extraction Pump Other: ____

Sampling Method: (Bailer) Extraction Port Other: ____

2.4 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 7.2 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
13:35	66.9	7.2	426	>200	3	
13:37	67.3	7.1	424	>200	5	
13:39	67.8	7.2	431	>200	7.5	

Did well dewater? Yes (No) Gallons actually evacuated: 7.5

Sampling Time: 13:44 Sampling Date: 12-29-99

Sample I.D.: MW-4 Laboratory: (Sequoia) BC Other ____

Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 991229-42	Job # 618571071
Sampler: Sanjiv	Date: 12-30-99
Well I.D.: ~~MW-5~~ MW-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 33.00	Depth to Water: 21.41
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius^2 * 0.163

Purge Method: Bailer / Middleburg / Electric Submersible / Extraction Pump / Other: ____

Sampling Method: Bailer / Extraction Port / Other: ____

1.85 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 5.5 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
9:10	59.5	6.6	1721	>200	2	
9:11	59.1	6.5	1722	>200	4	
9:12	61.1	6.5	1707	>200	5.5	

Did well dewater? Yes (No)		Gallons actually evacuated: 5.5	
Sampling Time: 9:20		Sampling Date: 12-30-99	
Sample I.D.: MW-5		Laboratory: (Sequoia) BC Other____	
Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) Other:			
D.O. (if req'd):	Pre-purge:	mg/L	Post-purge: mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge: mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 99129-42	Job # 618571071
Sampler: Sanjiv	Date: 12-29-99
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 31.63	Depth to Water: 24.96
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0 37	6"	1.47
4"	0.65	Other	radius^2 * 0.163

Purge Method: Bailer, Middleburg, Electric Submersible, Extraction Pump, Other: ____

Sampling Method: Bailer, Extraction Port, Other: ____

1.0 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 3 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
14:35	65.4	6.8	1035	>200	1	
14:36	64.9	6.7	1041	>200	2	
14:37	64.4	6.6	1049	>200	3	

Did well dewater? Yes (No) Gallons actually evacuated: 3

Sampling Time: 14:45 Sampling Date: 12-29-99

Sample I.D.: MW-6 Laboratory: (Sequoia) BC Other ____

Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) Other: Nitrate, Sulfate, Ferrous iron

D.O. (if req'd):	Pre-purge:	1.3 mg/L	Post-purge:	1.5 mg/L
O.R.P. (if req'd):	Pre-purge:	-163 mV	Post-purge:	-235 mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 99129-42	Job # 61857071
Sampler: Sanjiv	Date: 12-29-99
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 33.12	Depth to Water: 20.15
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius^2 * 0.163

Purge Method: (Bailer) Middleburg Electric Submersible Extraction Pump Other: ____

Sampling Method: (Bailer) Extraction Port Other: ____

2.0	X	3	=	6.0 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
11:16	62.5	8.3	626	>200	2	
11:18	62.8	7.7	557	>200	4	
11:20	61.8	7.4	563	>200	6	

Did well dewater? Yes (No) Gallons actually evacuated: 6

Sampling Time: 11:30 Sampling Date: 12-29-99

Sample I.D.: MW-7 Laboratory: (Sequoia) BC Other ____

Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) Other: — Nitrate, Sulfate, Ferrous iron

D.O. (if req'd):	Pre-purge:	~~3~~ 2.3 mg/L	Post-purge:	1.8 mg/L
O.R.P. (if req'd):	Pre-purge:	-12 mV	Post-purge:	62 mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 12999-42	Job # 618571071
Sampler: Sanjiv	Date: 12-30-99
Well I.D.: MW-8	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth:	Depth to Water: 20.25
Depth to Free Product: 19.99	Thickness of Free Product (feet): .26
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1 02
3"	0 37	6"	1 47
4"	0.65	Other	radius^2 * 0.163

Purge Method: Bailer / Middleburg / Electric Submersible / Extraction Pump / Other: _____

Sampling Method: Bailer / Extraction Port / Other: _____

_____ (1 Case Volume (Gals.)) X _____ (Specified Volumes) = _____ (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
	NO		bail			

Did well dewater? Yes No	Gallons actually evacuated:		
Sampling Time:	Sampling Date:		
Sample I.D.:	Laboratory: Sequoia BC Other_____		
Analyzed for: TPH-G BTEX MTBE TPH-D Other:			
D.O. (if req'd): Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 991229-42	Job # 61857107
Sampler: Sanjit	Date: 12-29-99
Well I.D.: MW-9	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 33.82	Depth to Water: 18.01
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1 02
3"	0 37	6"	1.47
4"	0.65	Other	radius^2 * 0.163

Purge Method: (Bailer) Middleburg / Electric Submersible / Extraction Pump / Other: ___

Sampling Method: (Bailer) Extraction Port / Other: ___

2.5 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 7.5 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
12:45	68.7	7.4	558	>200	3	
12:47	68.0	7.3	453	>200	6	
12:49	68.2	7.3	451	>200	8	

Did well dewater? Yes (No) Gallons actually evacuated: 8

Sampling Time: ~~MW-9~~ 12:55 Sampling Date: 12-29-99

Sample I.D.: MW-9 Laboratory: (Sequoia) BC Other ___

Analyzed for: (TPH-G) (BTEX) (MTBE) ~~TPH-D~~ Other: Nitrate, Sulfate, Ferrous Iron

D.O. (if req'd):	Pre-purge:	3.3 mg/L	Post-purge:	2.7 mg/L	
O.R.P. (if req'd):	Pre-purge:	9 mV	Post-purge:	10 mV	

EQUIVA WELL MONITORING DATA SHEET

Project #: 991229-42	Job # 618571071
Sampler: Sanjiv	Date: 12-29-99
Well I.D.: MW-10	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 32.51	Depth to Water: 18.13
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius^2 * 0.163

Purge Method: Bailer, Middleburg, Electric Submersible, Extraction Pump, Other: ___

Sampling Method: Bailer, Extraction Port, Other: ___

2.3 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 6.9 Gals. (Calculated Volume)

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
12:05	65.4	7.1	775	>200	3	
12:08	65.7	7.0	743	>200	5	
12:11	65.3	7.0	731	>200	7	

Did well dewater? Yes (No)		Gallons actually evacuated: 7	
Sampling Time: 12:14		Sampling Date: 12-29-99	
Sample I.D.: MW-10		Laboratory: (Sequoia) BC Other ___	
Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D)		Other:	
D.O. (if req'd):	Pre-purge: ___ mg/L	Post-purge: ___	mg/L
O.R.P. (if req'd):	Pre-purge: ___ mV	Post-purge: ___	mV