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

#435

November 4, 1999
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 - Third 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 third quarter 1999 groundwater monitoring and sampling conducted at the site referenced above. This report presents an interpretation of results and recommendations and schedule for future actions.

INTERPRETATION OF RESULTS

Groundwater Elevation

The average groundwater elevation at the site increased approximately 0.81 feet between the second and third quarters 1999, and it remains within the historical range of groundwater elevation.

Groundwater Flow Direction and Gradient

During the third quarter 1999, the groundwater flow direction remained southeasterly at an approximate gradient of 0.006.

Analytical Results

During the third quarter 1999, separate phase hydrocarbons (SPH) continued to be measured in Wells MW-3 and MW-8, at thicknesses of 0.08 and 1.53 feet, respectively. Overall, the dissolved groundwater concentrations appear stable with no apparent fluctuations outside historical ranges.

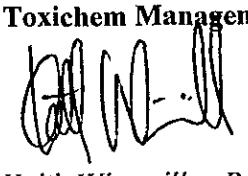
RECOMMENDATIONS AND SCHEDULE FOR FUTURE ACTIONS

1. Continue the SPH bailing program to expedite the removal of SPH from Wells MW-3 and MW-8.
2. Continue measuring natural biodegradation parameters, including dissolved oxygen, oxidation-reduction potential, nitrates, sulfates, and ferrous iron.
3. Implement the proposed soil excavation project, which has been delayed because of property owner delays. The soil excavation project is tentatively planned for December 1999 or January 2000.
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	0.00	NA
MW-1	10/10/1996	520	<400	9.2	53	17	70	22	16**	86.69	23.26	NA	63.43	0.00	NA
MW-1	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	86.69	23.27	NA	63.42	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	NA
MW-2	04/06/1998	20,100	9.5	252	448	430	1,410	<200	NA	85.83	18.00	NA	67.83	0.00	NA
MW-2	06/18/1998	20,000	5,200	240	370	270	790	<50	NA	85.83	19.63	NA	66.20	0.00	NA
MW-2	08/31/1998	72,000	19,000	270	990	630	1,700	<125	NA	85.83	21.01	NA	64.82	0.00	NA
MW-2	12/21/1998	290	13,000	8.7	18	9.7	38	10	29	85.83	21.31	NA	64.52	0.00	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	0.00	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	0.00	NA
MW-2	09/24/1999	6,510	108	1,030	350	183	680	<50.0	NA	85.83	21.82	NA	64.01	0.00	1.0/.80
MW-3	06/28/1996	NA	NA	NA	NA	NA	NA	NA	NA	83.18	19.04	NA	64.14	0.00	NA
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	0.00	NA
MW-3	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.40	NA	19.84	0.00	NA

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-3	12/18/1997	180,000	6,100,000	1,500	16,000	4,600	23,000	<3000	NA	83.18	18.79	NA	64.39	0.00	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-4	06/28/1996	<100	<50	<0.5	<1.0	<1.0	<2.0	NA	NA	83.31	18.83	NA	64.48	0.00	NA
MW-4	10/10/1996	650	<50	3.9	65	22	120	<5.0	NA	83.31	19.84	NA	63.47	0.00	NA
MW-4	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	83.31	19.84	NA	63.47	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	NA
MW-5	10/10/1996	1,800	<50	34	4.7	11	44	21	5.0**	85.41	21.93	NA	63.48	0.00	NA
MW-5	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	85.41	21.96	NA	63.45	0.00	NA
MW-5	12/18/1997	1,200	<50	15	<1.0	15	<1.0	72	NA	85.41	19.81	NA	65.60	0.00	NA
MW-5	04/06/1998	1,000	<50	126	0.5	0.8	1.5	<30	NA	85.41	17.43	NA	67.98	0.00	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	0.00	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	0.00	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	0.00	NA

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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	0.00	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	0.00	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	0.00	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	0.00	NA
MW-6	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	86.09	22.60	NA	63.49	0.00	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	0.00	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	0.00	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	0.00	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	0.00	NA
MW-6	12/21/1998	7,900	930	1,900	510	280	730	150	2.6	86.09	21.74	NA	64.35	0.00	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	0.00	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	0.00	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	0.00	1.0/1.2
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	0.00	NA
MW-7	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	84.11	20.80	NA	63.31	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	NA
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	0.00	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	0.00	1.4/1.6
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	0.00	NA
MW-8	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	84.01	20.44	NA	63.57	0.00	NA

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MW-8	12/18/1997	15,000	630	3,600	1,800	410	930	<600	NA	84.01	19.36	NA	64.65	0.00	NA
MW-8	04/06/1998	32,300	<50	8,230	5,900	718	2,120	<1000	NA	84.01	16.19	NA	67.82	0.00	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	0.00	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	0.00	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	0.00	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-9	10/10/1996	80	520	2.5	13	2.2	13	<5.0	NA	82.17	18.62	NA	63.55	0.00	NA
MW-9	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	63.53	NA	63.53	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	1.0/1.2
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	0.00	NA
MW-10	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	81.83	18.43	NA	63.40	0.00	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	0.00	NA
MW-10	04/06/1998	2,300	<50	224	168	81.4	253	<30	NA	81.83	14.39	NA	67.44	0.00	NA
MW-10	06/18/1998	7,200	320	310	210	83	280	<0.5	NA	81.83	15.11	NA	66.72	0.00	NA
MW-10	08/31/1998	460	120	51	8.2	5.1	10	<5.0	NA	81.83	17.03	NA	64.80	0.00	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	0.00	NA

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MW-10	03/24/1999	1330	923	85.9	42.9	29.7	95.2	20.4	<25.0	81.83	15.25	NA	66.58	0.00	NA
MW-10	06/25/1999	1130	167	115	32.6	17.2	36.3	<4.00	NA	81.83	16.82	NA	65.01	0.00	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	0.00	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
#/# = Pre-purge/Post-purge D.O. reading.

Notes:
* Free product could not be accurately measured (>2.0 feet of product in well).
** MTBE confirmation by 8240.

Table 2

Groundwater Analytical Data

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

Former Texaco Service Station
3810 Broadway, Oakland, California

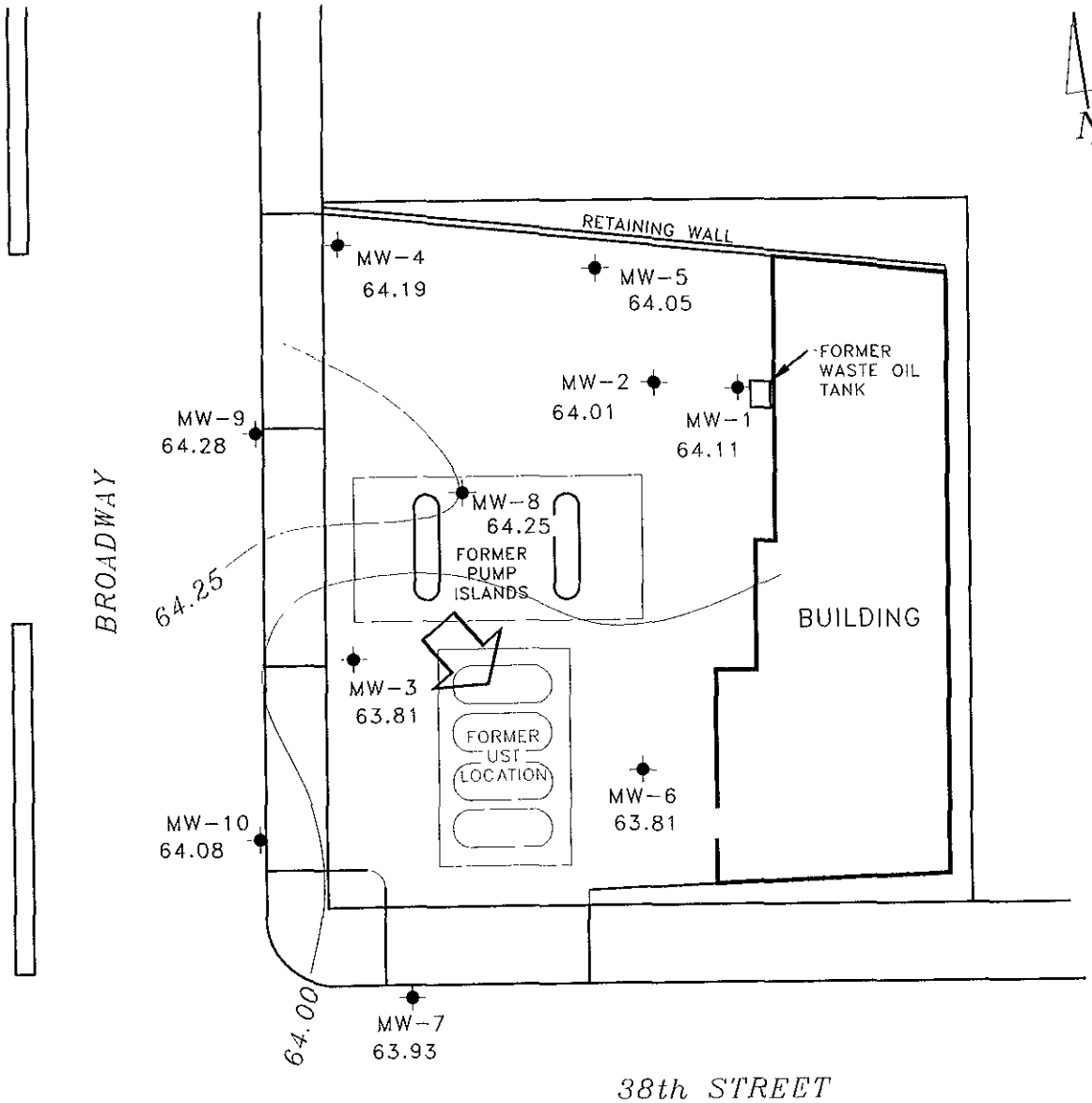
Boring Number	Date Sampled	Ferrous Iron (mg/L)	Nitrate as NO_3 (mg/L)	Sulfate as SO_4 (mg/L)	Dissolved Oxygen Pre-Purge (mg/L)	Dissolved Oxygen Post-Purge (mg/L)	Oxidation/Reduction Potential Pre-Purge (mV)	Oxidation/Reduction Potential Post-Purge (mV)
MW-2	09/14/99	1.10	<0.100	5.13	1.0	0.8	-211	-225
MW-6	09/14/99	0.480	<0.100	5.64	1.0	1 2	-241	-267
MW-7	09/14/99	0.0130	36.5	37.2	1.4	1.6	-102	-78
MW-9	09/14/99	0.0130	2.11	34.8	1.0	1.2	-89	-106

mg/L = Milligrams per liter

MW 3, 8 not sampled due to F.P.

Reducing conditions

Fairly low D.O. readings



EXPLANATION

- MONITORING WELL
- 63.93 GROUNDWATER ELEVATION (FT, MSL), 9-24-99
- 64.00 GROUNDWATER ELEVATION CONTOUR (FT, MSL), 9-24-99
- APPROXIMATE GROUNDWATER FLOW DIRECTION; APPROXIMATE GRADIENT = 0.006

SCALE (ft)

0 30

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

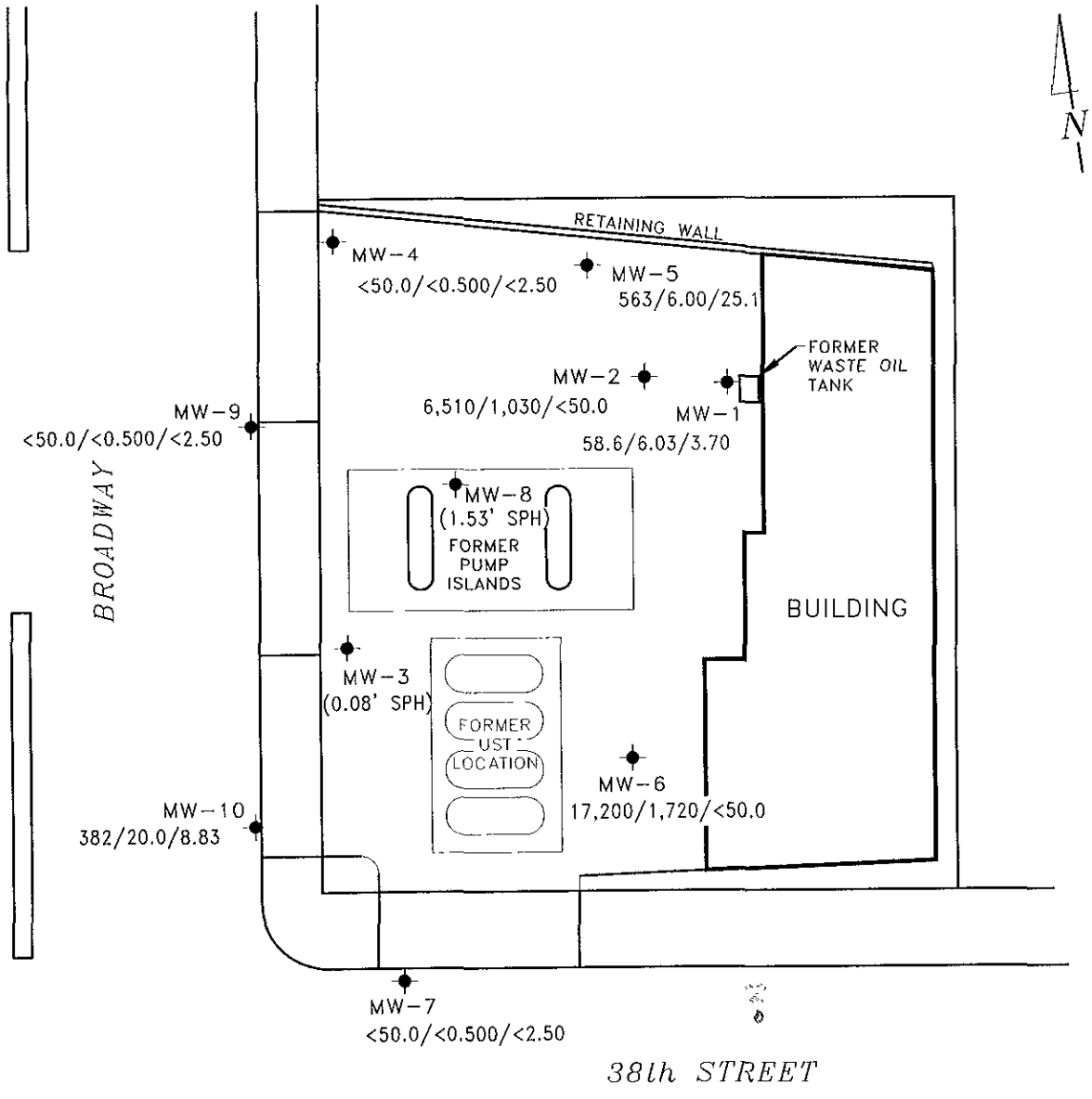
TOXICHEM Management Systems, Inc.
Environmental & Occupational Health Services

GROUNDWATER ELEVATION CONTOUR MAP, SEPTEMBER 24, 1999

Former Texaco Service Station
3810 Broadway
Oakland, California

FIGURE: 1

PROJECT: EQ-02



EXPLANATION

✦	MONITORING WELL
<50.0/<0.500/<2.50	TPPH/BENZENE CONCENTRATION IN GROUNDWATER, IN MICROGRAMS PER LITER, 9-24-99 / MtBE BY EPA METHOD 8260, IF AVAILABLE
NA	DATA NOT AVAILABLE
(0.08' SPH)	SEPARATE-PHASE HYDROCARBON THICKNESS IN FEET, 9-24-99

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, SEPTEMBER 24, 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

October 28, 1999

Karen Petryna
Equiva Services LLC
P O. Box 6249
Carson, CA 90749-6249

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

Monitoring performed on September 24, 1999

Groundwater Monitoring Report **990924-P-1**

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/ek

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

Sequoia Analytical

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

October 18, 1999

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

RE: Equiva 3800 Broadway/M909867

Dear Leah Davis

Enclosed are the results of analyses for sample(s) received by the laboratory on September 27, 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

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

Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 9/24/99
1680 Rogers Avenue	Project Number:	3800 Broadway	Received: 9/27/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 10/18/99

ANALYTICAL REPORT FOR M909867

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-7	M909867-01	Water	9/24/99
MW-10	M909867-02	Water	9/24/99
MW-9	M909867-03	Water	9/24/99
MW-4	M909867-04	Water	9/24/99
MW-5	M909867-05	Water	9/24/99
MW-1	M909867-06	Water	9/24/99
MW-2	M909867-07	Water	9/24/99
MW-6	M909867-08	Water	9/24/99

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 9/24/99
1680 Rogers Avenue	Project Number:	3800 Broadway	Received: 9/27/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 10/18/99

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-7			**M909867-01**				**Water**	
Diesel Range Hydrocarbons	9100087	10/4/99	10/7/99		0.0500	ND	mg/l	
Surrogate: n-Pentacosane	"	"	"	*50.0-150*		*79.0*	%	
MW-10			**M909867-02**				**Water**	
Diesel Range Hydrocarbons	9100087	10/4/99	10/7/99		0.0500	**0.0767**	mg/l	1
Surrogate: n-Pentacosane	"	"	"	*50 0-150*		*82.1*	%	
MW-9			**M909867-03**				**Water**	
Diesel Range Hydrocarbons	9100087	10/4/99	10/7/99		0.0500	ND	mg/l	
Surrogate n-Pentacosane	"	"	"	*50.0-150*		*74.1*	%	
MW-4			**M909867-04**				**Water**	
Diesel Range Hydrocarbons	9100087	10/4/99	10/7/99		0.0500	ND	mg/l	
Surrogate: n-Pentacosane	"	"	"	*50.0-150*		*81.8*	%	
MW-5			**M909867-05**				**Water**	
Diesel Range Hydrocarbons	9100087	10/4/99	10/7/99		0.0500	**0.0940**	mg/l	1
Surrogate: n-Pentacosane	"	"	"	*50.0-150*		*74 5*	%	
MW-1			**M909867-06**				**Water**	
Diesel Range Hydrocarbons	9100245	10/8/99	10/12/99		0.0500	**0.0717**	mg/l	1
Surrogate: n-Pentacosane	"	"	"	*50.0-150*		*93.3*	%	
MW-2			**M909867-07**				**Water**	
Diesel Range Hydrocarbons	9100087	10/4/99	10/7/99		0.0500	**0.108**	mg/l	1
Surrogate: n-Pentacosane	"	"	"	*50.0-150*		*85.1*	%	
MW-6			**M909867-08**				**Water**	
Diesel Range Hydrocarbons	9100087	10/4/99	10/7/99		0.0500	**1.72**	mg/l	1
Surrogate: n-Pentacosane	"	"	"	*50 0-150*		*87.1*	%	

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 9/24/99
1680 Rogers Avenue	Project Number:	3800 Broadway	Received: 9/27/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 10/18/99

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-7			**M909867-01**				**Water**	
Ferrous Iron	9090884	9/29/99	10/1/99	EPA 6010A	0.0100	**0.0130**	mg/l	
MW-9			**M909867-03**				**Water**	
Ferrous Iron	9090884	9/29/99	10/1/99	EPA 6010A	0.0100	**0.0130**	mg/l	
MW-2			**M909867-07**				**Water**	
Ferrous Iron	9090884	9/29/99	10/1/99	EPA 6010A	0.0100	**1.10**	mg/l	
MW-6			**M909867-08**				**Water**	
Ferrous Iron	9090884	9/29/99	10/1/99	EPA 6010A	0.0100	**0.480**	mg/l	

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 9/24/99
1680 Rogers Avenue	Project Number:	3800 Broadway	Received: 9/27/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 10/18/99

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-7			**M909867-01**				**Water**	
Nitrate as NO3	9090925	9/29/99	9/29/99	EPA 300 0	1.00	**36.5**	mg/l	
Sulfate as SO4	"	"	"	EPA 300.0	5.00	**37.2**	"	
MW-9			**M909867-03**				**Water**	
Nitrate as NO3	9100023	9/30/99	9/30/99	EPA 300.0	0.100	**2.11**	mg/l	
Sulfate as SO4	9090925	9/29/99	9/29/99	EPA 300.0	5.00	**34.8**	"	
MW-2			**M909867-07**				**Water**	
Nitrate as NO3	9100023	9/30/99	9/30/99	EPA 300.0	0.100	ND	mg/l	
Sulfate as SO4	9090925	9/29/99	9/29/99	EPA 300.0	5.00	**5.13**	"	
MW-6			**M909867-08**				**Water**	
Nitrate as NO3	9090925	9/29/99	9/29/99	EPA 300.0	1.00	ND	mg/l	
Sulfate as SO4	"	"	9/30/99	EPA 300.0	5.00	**5.64**	"	

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 9/24/99
1680 Rogers Avenue	Project Number:	3800 Broadway	Received. 9/27/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 10/18/99

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-7			**M909867-01**				**Water**	
Gasoline	9100086	10/6/99	10/6/99		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	"	"	"		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65 0-135*		*115*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*82.3*	"	
MW-10			**M909867-02**				**Water**	
Gasoline	9100086	10/6/99	10/6/99		100	**382**	ug/l	
Benzene	"	"	"		1.00	**20.0**	"	
Toluene	"	"	"		1.00	ND	"	
Ethylbenzene	"	"	"		1.00	**2.21**	"	
Xylenes (total)	"	"	"		1.00	**1.37**	"	
Methyl tert-butyl ether	"	"	"		5.00	**8.83**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65 0-135*		*109*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65 0-135*		*93.3*	"	
MW-9			**M909867-03**				**Water**	
Gasoline	9100086	10/6/99	10/6/99		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	"	"	"		2.50	ND	"	
Surrogate. a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*109*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*96.3*	"	
MW-4			**M909867-04**				**Water**	
Gasoline	9100086	10/6/99	10/6/99		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	"	"	"		2.50	ND	"	
Surrogate. a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*109*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*95.0*	"	
MW-5			**M909867-05**				**Water**	
Gasoline	9100086	10/6/99	10/6/99		250	**563**	ug/l	

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 9/24/99
1680 Rogers Avenue	Project Number:	3800 Broadway	Received: 9/27/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 10/18/99

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-5 (continued)			**M909867-05**				**Water**	
Benzene	9100086	10/6/99	10/6/99		2.50	**6.00**	ug/l	
Toluene	"	"	"		2.50	ND	"	
Ethylbenzene	"	"	"		2.50	ND	"	
Xylenes (total)	"	"	"		2.50	ND	"	
Methyl tert-butyl ether	"	"	"		12.5	**25.1**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65 0-135*		*106*	*%*	
Surrogate 4-Bromofluorobenzene	"	"	"	*65.0-135*		*97 0*	"	
MW-1			**M909867-06**				**Water**	
Gasoline	9100086	10/6/99	10/6/99		50.0	**58.6**	ug/l	
Benzene	"	"	"		0.500	**6.03**	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	**3.70**	"	2
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*108*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*99 3*	"	
MW-2			**M909867-07**				**Water**	
Gasoline	9100085	10/6/99	10/6/99		1000	**6510**	ug/l	
Benzene	"	"	"		10.0	**1030**	"	
Toluene	"	"	"		10.0	**350**	"	
Ethylbenzene	"	"	"		10 0	**183**	"	
Xylenes (total)	"	"	"		10.0	**680**	"	
Methyl tert-butyl ether	"	"	"		50.0	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*98.0*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*94.0*	"	
MW-6			**M909867-08**				**Water**	
Gasoline	9100085	10/6/99	10/6/99		1000	**17200**	ug/l	
Benzene	"	"	"		10.0	**2810**	"	
Toluene	"	"	"		10.0	**1330**	"	
Ethylbenzene	"	"	"		10.0	**489**	"	
Xylenes (total)	"	"	"		10.0	**2340**	"	
Methyl tert-butyl ether	"	"	"		50.0	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65 0-135*		*96.7*	*%*	
Surrogate 4-Bromofluorobenzene	"	"	"	*65 0-135*		*96.0*	"	

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 9/24/99
1680 Rogers Avenue	Project Number:	3800 Broadway	Received: 9/27/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 10/18/99

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: 9100087	**Date Prepared: 10/4/99**					**Extraction Method: EPA 3520B**				
Blank	**9100087-BLK1**									
Diesel Range Hydrocarbons	10/7/99			**ND**	mg/l	**0.0500**				
Surrogate: n-Pentacosane	"	*0.100*		*0.0809*	"	*50.0-150*	*80.9*			
LCS	**9100087-BS1**									
Diesel Range Hydrocarbons	10/7/99	1.00		0.774	mg/l	60.0-140	77.4			
Surrogate: n-Pentacosane	"	*0.100*		*0.0832*	"	*50.0-150*	*83.2*			
LCS Dup	**9100087-BSD1**									
Diesel Range Hydrocarbons	10/7/99	1.00		0.732	mg/l	60.0-140	73.2	50.0	5.58	
Surrogate: n-Pentacosane	"	*0.100*		*0.0777*	"	*50.0-150*	*77.7*			
Batch: 9100245	**Date Prepared: 10/8/99**					**Extraction Method: EPA 3520B**				
Blank	**9100245-BLK1**									
Diesel Range Hydrocarbons	10/12/99			**ND**	mg/l	**0.0500**				
Surrogate: n-Pentacosane	"	*0.100*		*0.0915*	"	*50.0-150*	*91.5*			
LCS	**9100245-BS1**									
Diesel Range Hydrocarbons	10/12/99	1.00		0.739	mg/l	60.0-140	73.9			
Surrogate: n-Pentacosane	"	*0.100*		*0.0853*	"	*50.0-150*	*85.3*			
LCS Dup	**9100245-BSD1**									
Diesel Range Hydrocarbons	10/12/99	1.00		0.875	mg/l	60.0-140	87.5	50.0	16.9	
Surrogate: n-Pentacosane	"	*0.100*		*0.0974*	"	*50.0-150*	*97.4*			

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 9/24/99
1680 Rogers Avenue	Project Number:	3800 Broadway	Received: 9/27/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 10/18/99

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: 9090884	**Date Prepared: 9/29/99**					**Extraction Method: EPA 3005A**				
Blank	**9090884-BLK1**									
Ferrous Iron	10/1/99			**ND**	mg/l	**0.0100**				
LCS	**9090884-BS1**									
Ferrous Iron	10/1/99	1.00		1.00	mg/l	80.0-120	100			
Matrix Spike	**9090884-MS1**		**M909804-01**							
Ferrous Iron	10/1/99	1.00	0.0440	1.10	mg/l	80.0-120	**106**			
Matrix Spike Dup	**9090884-MSD1**		**M909804-01**							
Ferrous Iron	10/1/99	1.00	0.0440	1.10	mg/l	80.0-120	**106**	20.0	**0**	

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 9/24/99
1680 Rogers Avenue	Project Number:	3800 Broadway	Received: 9/27/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 10/18/99

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: 9090925	**Date Prepared: 9/29/99**				**Extraction Method: General Preparation**					
Blank	**9090925-BLK1**									
Nitrate as NO3	9/29/99			**ND**	mg/l	**1.00**				
Sulfate as SO4	"			**ND**	"	**0.500**				
LCS	**9090925-BS1**									
Nitrate as NO3	9/29/99	10.0		9.43	mg/l	80.0-120	94.3			
Sulfate as SO4	"	10.0		9.65	"	80.0-120	96.5			
Matrix Spike	**9090925-MS1**		**M909914-01**							
Nitrate as NO3	9/29/99	100	24.8	122	mg/l	75.0-125	**97.2**			
Sulfate as SO4	"	100	41.5	140	"	75.0-125	**98.5**			
Matrix Spike Dup	**9090925-MSD1**		**M909914-01**							
Nitrate as NO3	9/29/99	100	24.8	121	mg/l	75.0-125	**96.2**	20.0	**1.03**	
Sulfate as SO4	"	100	41.5	138	"	75.0-125	**96.5**	20.0	**2.05**	
Batch: 9100023	**Date Prepared: 9/30/99**				**Extraction Method: General Preparation**					
Blank	**9100023-BLK1**									
Nitrate as NO3	9/30/99			**ND**	mg/l	**1.00**				
LCS	**9100023-BS1**									
Nitrate as NO3	9/30/99	10 0		9.57	mg/l	80.0-120	95.7			
Matrix Spike	**9100023-MS1**		**M909AAU-01**							
Nitrate as NO3	9/30/99	100	5.97	97.6	mg/l	75.0-125	**91.6**			
Matrix Spike Dup	**9100023-MSD1**		**M909AAU-01**							
Nitrate as NO3	9/30/99	100	5.97	98.5	mg/l	75.0-125	**92.5**	20.0	**0.978**	

Sequoia Analytical

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

Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 9/24/99
1680 Rogers Avenue	Project Number:	3800 Broadway	Received: 9/27/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 10/18/99

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9100085	**Date Prepared: 10/6/99**					**Extraction Method: EPA 5030 waters**				
Blank	**9100085-BLK1**									
Gasoline	10/6/99			**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**	"	**2.50**				
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*296*	"	*65 0-135*	*98.7*			
Surrogate: 4-Bromofluorobenzene	"	*300*		*276*	"	*65 0-135*	*92.0*			
LCS	**9100085-BS1**									
Gasoline	10/6/99	1000		1080	ug/l	65.0-135	108			
Surrogate: 4-Bromofluorobenzene	"	*300*		*295*	"	*65 0-135*	*98.3*			
Matrix Spike	**9100085-MS1**		**P910091-01**							
Gasoline	10/6/99	1000	54.8	1110	ug/l	65.0-135	**106**			
Surrogate: 4-Bromofluorobenzene	"	*300*		*296*	"	*65.0-135*	*98.7*			
Matrix Spike Dup	**9100085-MSD1**		**P910091-01**							
Gasoline	10/6/99	1000	54.8	1090	ug/l	65.0-135	**104**	20.0	**1.90**	
Surrogate: 4-Bromofluorobenzene	"	*300*		*297*	"	*65 0-135*	*99.0*			
Batch: 9100086	**Date Prepared: 10/6/99**					**Extraction Method: EPA 5030 waters**				
Blank	**9100086-BLK1**									
Gasoline	10/6/99			**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**	"	**2.50**				
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*313*	"	*65.0-135*	*104*			
Surrogate: 4-Bromofluorobenzene	"	*300*		*283*	"	*65.0-135*	*94.3*			
LCS	**9100086-BS1**									
Gasoline	10/6/99	1000		823	ug/l	65.0-135	82.3			
Surrogate: 4-Bromofluorobenzene	"	*300*		*285*	"	*65 0-135*	*95 0*			
Matrix Spike	**9100086-MS1**		**M909867-01**							
Gasoline	10/6/99	1000	ND	995	ug/l	65.0-135	**99.5**			
Surrogate: 4-Bromofluorobenzene	"	*300*		*289*	"	*65 0-135*	*96.3*			

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 9/24/99
1680 Rogers Avenue	Project Number:	3800 Broadway	Received: 9/27/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 10/18/99

Notes and Definitions

#	Note
1	Chromatogram Pattern: Unidentified Hydrocarbons C9-C24
2	Results between the primary and confirmation columns varied by greater than 40% RPD.
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 990924-P1

CLIENT: Equiva - Karen Petryna

SITE: 3800 Broadway

Oakland, CA

M909867

LAB

DHS #

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

☐ EPA ☐ LIA ☐ OTHER ☐ RWQCB REGION

SPECIAL INSTRUCTIONS

Send invoice to Equiva

Incident # 93995026

Send report to Blaine Tech Services

Attn: Ann Pember

SAMPLE I.D.		MATRIX S = SOIL W = H2O	CONTAINERS TOTAL	C = COMPOSITE ALL CONTAINERS	CONDUCT ANALYSIS TO DETECT: 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-7	9:20	W	7		X	X		X			X	X				
MW-10	9:45		5													
MW-9	10:12		7								X	X				
MW-4	10:45		5													
MW-5	11:10		5													
MW-1	11:35		5													
MW-2	12:05		7							1	X	X				
MW-6	12:30		7								X	X				

SAMPLING COMPLETED	DATE	TIME
	9/27/99	13:00

SAMPLING PERFORMED BY: Paul Shanna

RESULTS NEEDED NO LATER THAN

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	9/27	9:15		9/27/99	9:15
	9/27/99			9/27/99	1224

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #

WELL GAUGING DATA

Project # 990924-P1 Date 9-24-99 Client Texaco

Site 3500 Broadway, Oakland

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					22.58	28.82		
MW-2						21.82	33.75		
MW-4						19.12	35.00		
MW-MW3			19.35	.08	Vacuum Truck	19.43	~~35.00~~		
MW-5						21.36	33.41		
MW-6						22.28	32.64		
MW-7						20.18	33.85		
MW-8			19.45	1.53	Vacuum Truck	20.98	—		
MW-9						17.89	34.10		
MW-10						17.75	33.45		

EQUIVA WELL MONITORING DATA SHEET

Project #: 990924-P1	Job # 618571071
Sampler: PAul	Date: 9-24-99
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 28.82	Depth to Water: 22.58
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: ____

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

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
11:26	66.8	6.7	1089	7200	1	
11:28	67.2	6.7	1121	7200	2	
11:30	66.4	6.6	1148	7200	3	

Did well dewater? Yes (~~No~~)		Gallons actually evacuated: 3	
Sampling Time: 11:35		Sampling Date: 9-24-99	
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

Project #: 990924-P1	Job # 618571071
Sampler: Pat-1	Date: 9-24-99
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 33.75	Depth to Water: 21.82
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: ____

1.9	X	3	=	5.7 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
11:52	67.0	6.4	874.	7700	2	
11:56	66.8	6.3	869.	7200	4	
12:00	66.6	6.3	852.	7200	6	

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

Sampling Time: 12:05 Sampling Date: 9-24-99

Sample I.D.: MW-2 Laboratory: (Sequoia) BC Other ____

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

D.O. (if req'd):	Pre-purge:	1.0 mg/L	Post-purge:	.80	mg/L
O.R.P. (if req'd):	Pre-purge:	-211 mV	Post-purge:	-225	mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 990924-P1	Job # 618571071
Sampler: Paul	Date: 9-24-99
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 35.00	Depth to Water: 19.12
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 Case Volume (Gals.)	X	Specified Volumes	=	Calculated Volume
2.5	X	3	=	7.5 Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
10:32	67.4	6.9	406.	36	2.5	
10:36	67.2	6.8	421.	21	5.0	
10:40	66.8	6.8	459.	19	7.5	

Did well dewater? Yes (No)		Gallons actually evacuated: 7.5	
Sampling Time: 10:45		Sampling Date: 9-24-99	
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 #: 990924-P1	Job # 618571071
Sampler: Paul	Date: 9-24-99
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 33.41	Depth to Water: 21.36
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	radius² * 0 163

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

Sampling Method: Bailer✓ Extraction Port Other: ____

1.9 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 5.7 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
10:58	67.4	6.4	1674	>200	2	
10:01	67.2	6.3	1592	7200	4	
11:04	66.8	6.3	1589	7200	6	

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

Sampling Time: 11:10 Sampling Date: 9-24-99

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 #: 990924-P1	Job # 61857107 1
Sampler: PA-1	Date: 9-24-99
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 32.64	Depth to Water: 22.28
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: ___

1.6 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 4.9 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
12:17	67.2	6.7	1264	720	1.5	
12:19	67.0	6.5	1179	720	3.0	
12:23	66.8	6.5	1151	720	5.0	

Did well dewater? Yes (No)		Gallons actually evacuated: 5.0	
Sampling Time: 12:30		Sampling Date: 9-24-99	
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: 1.0 mg/L	Post-purge:	1.2 mg/L
O.R.P. (if req'd):	Pre-purge: -241 mV	Post-purge:	-267 mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 990924-P1	Job # 618571071
Sampler: Paul	Date: 9-24-99
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 33.85	Depth to Water: 20.18
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: ____

2.1	X	3	=	6.5 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
9:06	65.4	6.4	546	>200	2	
9:09	65.2	6.5	559	>200	4	
9:12	64.8	6.5	576	>200	6.5	

Did well dewater? Yes (No) Gallons actually evacuated: 6.5

Sampling Time: 9:20 Sampling Date: 9-24-99

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):	1.4	mg/L	(Post-purge):	1.6	mg/L
O.R.P. (if req'd):	(Pre-purge):	-102	mV	(Post-purge):	-78	mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 990924-P1	Job # 618571071
Sampler: Paul	Date: 9-24-99
Well I.D.: MW-9	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 34.10	Depth to Water: 17.89
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	X	3	=	7.5 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
9:58	67.2	6.7	460.	7200	2.5	
10:02	67.0	6.6	439.	7200	5.0	
10:06	66.6	6.6	422.	7200	7.5	

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

Sampling Time: 10:12 Sampling Date: 9-24-99

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:	1.0	mg/L	Post-purge:	1.2	mg/L
O.R.P. (if req'd):	Pre-purge:	-89	mV	Post-purge:	-106	mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 990924-P1	Job # 618571071
Sampler: PAL	Date: 9-24-99
Well I.D.: MW-10	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 33.45	Depth to Water: 17.75
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 Case Volume (Gals.)		Specified Volumes		Calculated Volume
2.5	X	3	=	7.5 Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
9:32	66.2	6.5	850	7200	2.5	
9:35	65.8	6.4	869	7200	5.0	
9:40	65.4	6.4	896	7200	7.5	

Did well dewater? Yes (No)		Gallons actually evacuated: 7.5	
Sampling Time: 9:45		Sampling Date: 9-24-99	
Sample I.D.: MW-10		Laboratory: (Sequoia) BC Other____	
Analyzed for: (TPH-G BTEX MTBE TPH-D) Other: X			
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

TEXACO WELL MONITORING DATA SHEET

Project #: 990924-P1	Texaco ID#: 6185710 71
Sampler: PA-1	Date: 10 9-24-99
Well I.D.: MW-3	Well Diameter: 2 3 4 6 8 ___
Total Well Depth:	Depth to Water: 19.43
Depth to Free Product: 19.35	Thickness of Free Product: .08

All Measurements are referenced to TOC. Meter used is Myron L pDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius^2 * 0.164

Purge Method:
- S.S. Bailer
- Teflon Bailer
- Middleburg
- Electric Submersible
- Extraction Pump
- Other: _____

Sampling Method:
- S.S. Bailer
- Teflon Bailer
- Extraction Port
- Other: _____

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

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
	Vacuum			Truck		
	Pumped			Well	Appox	
		45 min				

Did well dewater? Yes / No	Gallons actually evacuated:
Sampling Time:	Sampling Date:
Sample I.D.:	Laboratory: Sequoia
Analyzed for: Tph-G BTEX Tph-D	Other:
Equipment Blank I.D.:	Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 990924-P1	Texaco ID#: 6185710 71
Sampler: Paul	Date: 9-24-99
Well I.D.: MW-8	Well Diameter: 2 3 4 6 8 ___
Total Well Depth:	Depth to Water: 20.98
Depth to Free Product: 19.45	Thickness of Free Product: 1.53

All Measurements are referenced to TOC. Meter used is Myron L pDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius^2 * 0.164

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

Sampling Method: S.S. Bailer / Teflon Bailer / Extraction Port / Other: _____

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

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
	Vacuum			Truck		
	Pumped			Well	dry	
	Approx			1	hour	

Did well dewater? Yes No Gallons actually evacuated:

Sampling Time: Sampling Date:

Sample I.D.: Laboratory: Sequoia

Analyzed for: Tph-G BTEX Tph-D Other:

Equipment Blank I.D.: Analyzed for same as primary sample