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

August 30, 1999
Project EQ-02.1A

#435

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 - Second 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 second quarter 1999 groundwater monitoring and sampling conducted at the site referenced above.

INTERPRETATION OF RESULTS

Groundwater Elevation

The average groundwater elevation at the site decreased approximately 1.61 feet between the first and second quarters 1999, and it remains within the historical range of groundwater elevation. The groundwater elevation data from Well MW-8 was not used in contouring because it is unusually high for an unknown reason, measuring approximately 1.35 feet higher than all other monitoring wells.

Groundwater Flow Direction and Gradient

Between the first and second quarters 1999, the groundwater flow direction reversed from northwesterly to southeasterly and the gradient increased from 0.003 to 0.006.

Analytical Results

During the second quarter 1999, separate phase hydrocarbons (SPH) were measured for the first time in Well MW-8, at a thickness of 0.10 feet. SPH continued to be measured in Well MW-3 at a thickness of 0.30 feet, which is less than the 0.86 feet of SPH measured during first quarter 1999. Overall, the dissolved groundwater concentrations appear stable with no apparent fluctuations outside historical ranges.

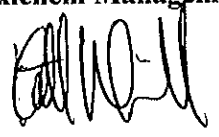
RECOMMENDATIONS AND SCHEDULE FOR FUTURE ACTIONS

1. Implement a SPH bailing program to expedite the removal of SPH from Wells MW-3 and MW-8.
2. Begin measuring natural biodegradation parameters, including dissolved oxygen, oxidation-reduction potential, nitrates, sulfates, and ferrous iron.
3. Implement the proposed soil excavation program, which is tentatively planned for October or November 1999.
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,

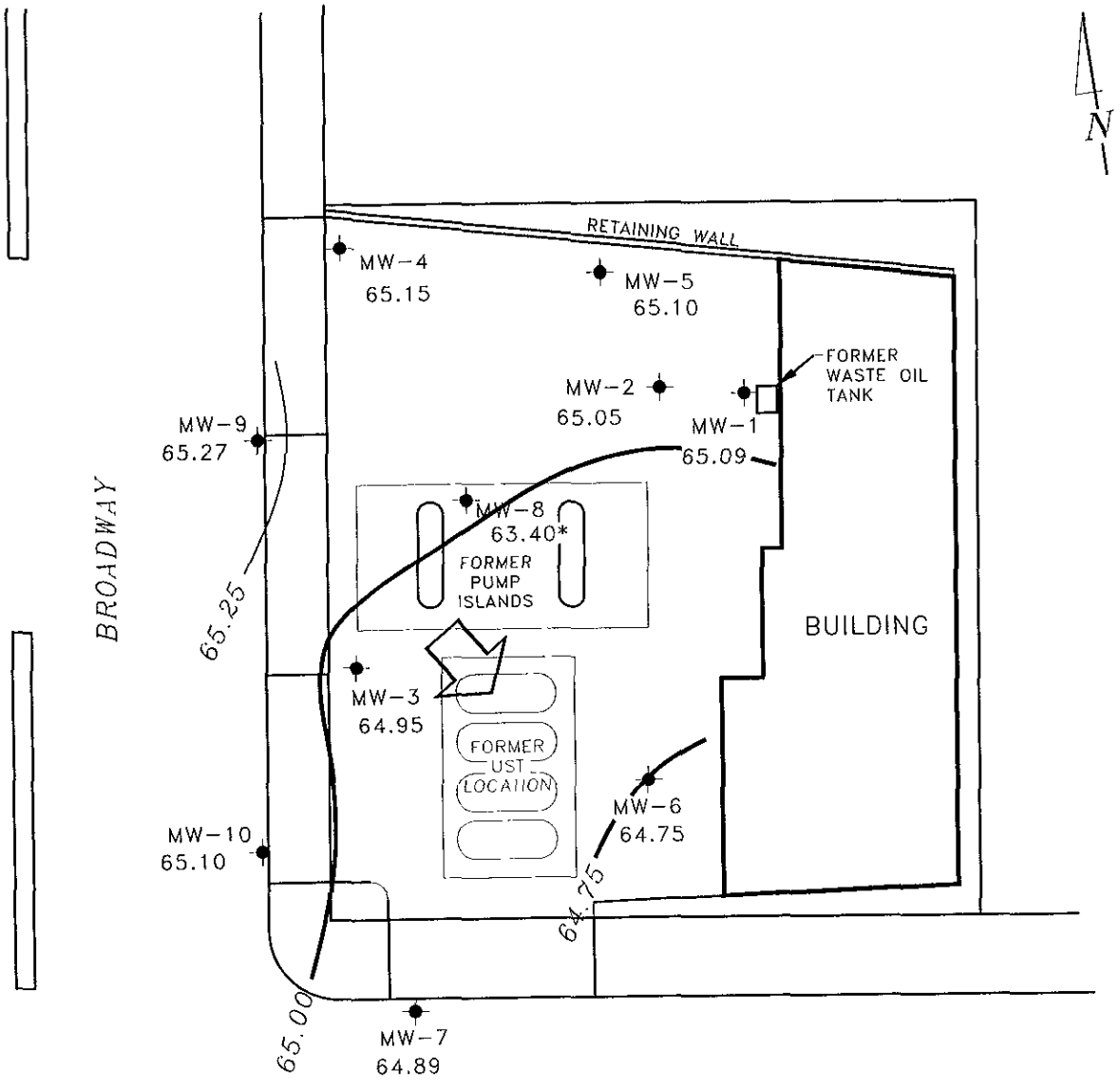
Toxichem Management Systems, Inc.



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



EXPLANATION

- MONITORING WELL
- 64.75 GROUNDWATER ELEVATION (FT, MSL)
- 65.00 GROUNDWATER ELEVATION CONTOUR (FT, MSL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION; APPROXIMATE GRADIENT = 0.006
- * NOT USED IN CONTOURING

SCALE (ft)

0 30

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

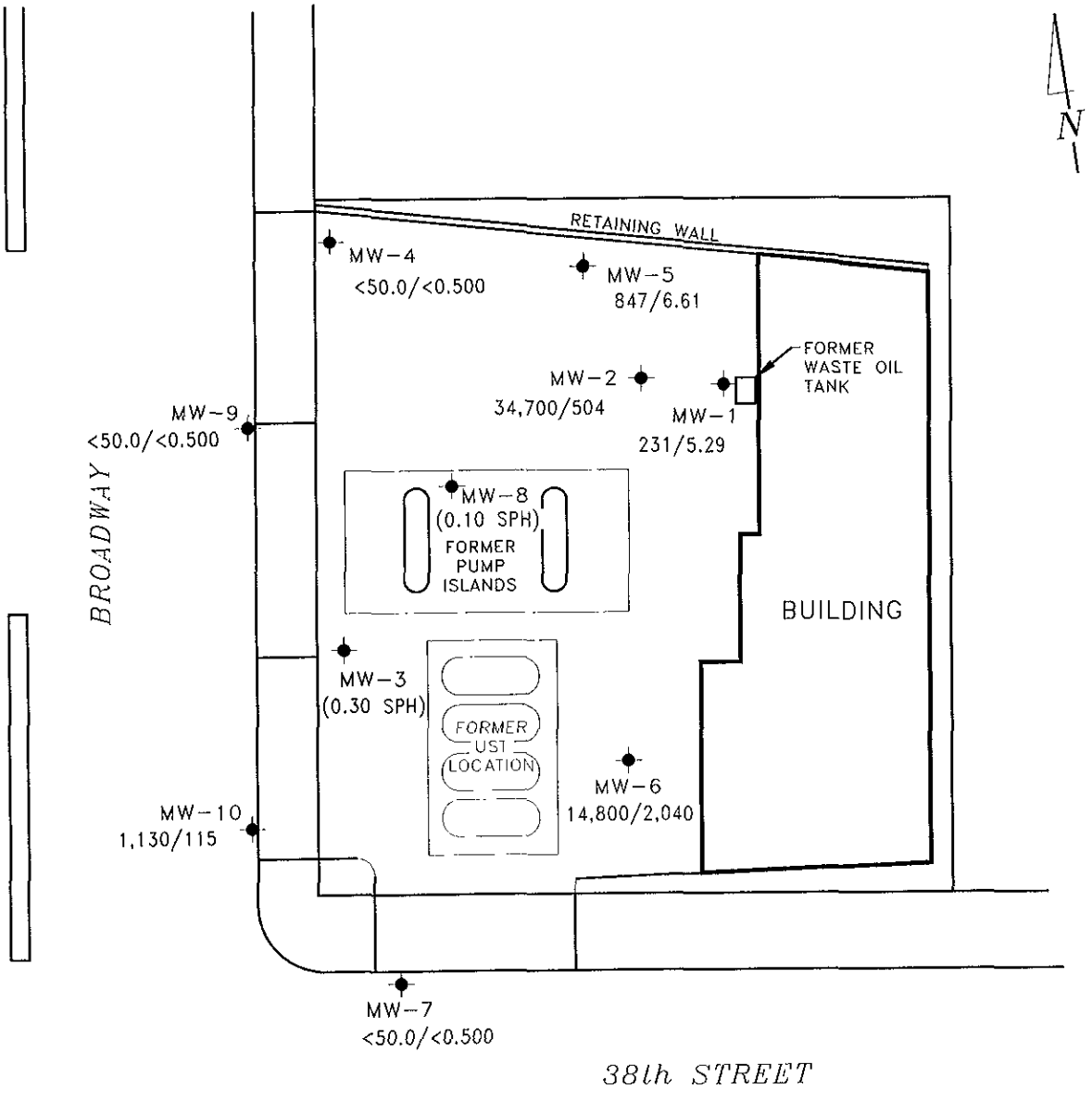
TOXICHEM Management Systems, Inc.
Environmental & Occupational Health Services

GROUNDWATER ELEVATION CONTOUR MAP, SECOND QUARTER, 1999

Former Texaco Service Station
3810 Broadway
Oakland, California

FIGURE: 1

PROJECT: EQ-02



EXPLANATION

- ✦ MONITORING WELL
- <50.0/<0.500 TPPH/BENZENE CONCENTRATION IN GROUNDWATER, IN MICROGRAMS PER LITER
- NA DATA NOT AVAILABLE
- (0.10 SPH) SEPARATE-PHASE HYDROCARBON THICKNESS IN FEET

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 CONCENTRATION MAP, SECOND QUARTER, 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

August 18, 1999

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

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

Monitoring performed on June 25, 1999

Groundwater Monitoring Report **990625-G-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, apprioriate 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/ld

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

cc: Keith Winemiller
Toxichem
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.)
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
MW-1	10/10/1996	520	<400	9.2	53	17	70	22	16**	86.69	23.26	NA	63.43	0.00
MW-1	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	86.69	23.27	NA	63.42	0.00
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
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
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
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
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
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
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
MW-2	06/28/1996	NA	NA	NA	NA	NA	NA	NA	NA	85.83	22.10	NA	63.73	1.35
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
MW-2	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	85.83	22.39	NA	63.45	0.01
MW-2	12/18/1997	24,000	4,700	600	1,800	750	2,400	<2000	NA	85.83	20.19	NA	65.64	0.00
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
MW-2	06/18/1998	20,000	5,200	240	370	270	790	<50	NA	85.83	19.63	NA	66.20	0.00
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
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
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
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
MW-3	06/28/1996	NA	NA	NA	NA	NA	NA	NA	NA	83.18	19.04	NA	64.14	0.00
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
MW-3	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.40	NA	19.84	0.00
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

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.)
MW-3	04/06/1998	NA	NA	NA	NA	NA	NA	NA	NA	83.18	16.58	NA	66.64	0.05
MW-3	06/18/1998	NA	NA	NA	NA	NA	NA	NA	NA	83.18	NA*	NA	NA	>2.0
MW-3	08/31/1998	NA	NA	NA	NA	NA	NA	NA	NA	83.18	19.56	NA	63.68	0.07
MW-3	12/21/1998	NA	NA	NA	NA	NA	NA	NA	NA	83.18	20.23	NA	65.13	2.73
MW-3	03/24/1999	NA	NA	NA	NA	NA	NA	NA	NA	83.18	16.76	15.90	67.11	0.86
MW-3	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	83.18	18.47	18.17	64.95	0.30
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
MW-4	10/10/1996	650	<50	3.9	65	22	120	<5.0	NA	83.31	19.84	NA	63.47	0.00
MW-4	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	83.31	19.84	NA	63.47	0.00
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
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
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
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
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
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
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
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
MW-5	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	85.41	21.96	NA	63.45	0.00
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
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
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
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
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
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
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

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.)
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
MW-6	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	86.09	22.60	NA	63.49	0.00
MW-6	12/18/1997	60,000	1,900	12,000	9,800	1,800	8,600	<2000	NA	86.09	22.28	NA	63.81	0.00
MW-6	04/06/1998	30,500	<50	5,950	3,720	952	3,750	<1000	NA	86.09	19.90	NA	66.19	0.00
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
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
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
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
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
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
MW-7	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	84.11	20.80	NA	63.31	0.00
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
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
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
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
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
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
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
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
MW-8	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	84.01	20.44	NA	63.57	0.00
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
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
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
MW-8	08/31/1998	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

WELL CONCENTRATIONS
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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.)
MW-8	12/21/1998	9,600	1200	2,600	410	220	300	700	<2.0	84.01	19.48	NA	64.53	0.00
MW-8	03/24/1999	86100	2890	9890	11700	1650	7130	<200	<250	84.01	17.44	NA	66.57	0.00
MW-8	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	84.01	20.69	20.59	63.40	0.10
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
MW-9	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	63.53	NA	63.53	0.00
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
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
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
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
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
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
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
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
MW-10	11/07/1996	NA	NA	NA	NA	NA	NA	NA	NA	81.83	18.43	NA	63.40	0.00
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
MW-10	04/06/1998	2,300	<50	224	168	81.4	253	<30	NA	81.83	14.39	NA	67.44	0.00
MW-10	06/18/1998	7,200	320	310	210	83	280	<0.5	NA	81.83	15.11	NA	66.72	0.00
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
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
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
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

Abbreviations:

TPPH= Total petroleum hydrocarbons as gasoline by modified EPA Method 8015

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.)

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

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

** MTBE confirmation by 8240.

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

July 29, 1999

Ann Pember
Blaine Tech Services, Inc.
1680 Rogers Ave.
San Jose, CA 95112

RE: Shell Oil Co./P907008

Dear Ann Pember

Enclosed are the results of analyses for sample(s) received by the laboratory on June 28, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

for Scott Forbes
Project Manager

CA ELAP Certificate Number I-2374

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

Blaine Tech Services, Inc.	Project:	Shell Oil Co.	Sampled: 6/25/99
1680 Rogers Ave.	Project Number:	3810 Broadway, Oakland	Received: 6/28/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 7/29/99

ANALYTICAL REPORT FOR P907008

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	P907008-01	Water	6/25/99
MW-2	P907008-02	Water	6/25/99
MW-4	P907008-03	Water	6/25/99
MW-5	P907008-04	Water	6/25/99
MW-6	P907008-05	Water	6/25/99
MW-7	P907008-06	Water	6/25/99
MW-9	P907008-07	Water	6/25/99
MW-10	P907008-08	Water	6/25/99

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1680 Rogers Ave.	Project Number:	3810 Broadway, Oakland	Received. 6/28/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 7/29/99

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-1			**P907008-01**				**Water**	
Gasoline	9070076	7/6/99	7/6/99		50.0	**231**	ug/l	
Benzene	"	"	"		0.500	**5.29**	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.00	**3.94**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*99.0*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*87.0*	"	
MW-2			**P907008-02**				**Water**	
Gasoline	9070076	7/6/99	7/6/99		1000	**34700**	ug/l	
Benzene	"	"	"		10.0	**504**	"	
Toluene	"	"	"		10.0	**1300**	"	
Ethylbenzene	"	"	"		10.0	**716**	"	
Xylenes (total)	"	"	"		10.0	**2160**	"	
Methyl tert-butyl ether	"	"	"		40.0	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*100*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*91.7*	"	
MW-4			**P907008-03**				**Water**	
Gasoline	9070076	7/6/99	7/6/99		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	"	"	"		2.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*104*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*85.0*	"	
MW-5			**P907008-04**				**Water**	
Gasoline	9070076	7/7/99	7/7/99		50.0	**847**	ug/l	
Benzene	"	"	"		0.500	**6.61**	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	**0.611**	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.00	**2.69**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*105*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*93.0*	"	
MW-6			**P907008-05**				**Water**	
Gasoline	9070076	7/6/99	7/6/99		1000	**14800**	ug/l	

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1680 Rogers Ave	Project Number:	3810 Broadway, Oakland	Received: 6/28/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 7/29/99

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-6 (continued)			**P907008-05**				**Water**	
Benzene	9070076	7/6/99	7/6/99		10.0	**2040**	ug/l	
Toluene	"	"	"		10.0	**1080**	"	
Ethylbenzene	"	"	"		10.0	**406**	"	
Xylenes (total)	"	"	"		10.0	**1430**	"	
Methyl tert-butyl ether	"	"	"		40.0	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*98.0*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*84.0*	"	
MW-7			**P907008-06**				**Water**	
Gasoline	9070076	7/6/99	7/6/99		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	"	"	"		2.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*102*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*85.3*	"	
MW-9			**P907008-07**				**Water**	
Gasoline	9070076	7/6/99	7/6/99		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	"	"	"		2.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*104*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*85.0*	"	
MW-10			**P907008-08**				**Water**	
Gasoline	9070076	7/6/99	7/6/99		100	**1130**	ug/l	
Benzene	"	"	"		1.00	**115**	"	
Toluene	"	"	"		1.00	**32.6**	"	
Ethylbenzene	"	"	"		1.00	**17.2**	"	
Xylenes (total)	"	"	"		1.00	**36.3**	"	
Methyl tert-butyl ether	"	"	"		4.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*98.3*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*82.7*	"	

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San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 7/29/99

Total Petroleum Hydrocarbons as Diesel & others by EPA 8015M
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-1			**P907008-01**				**Water**	
Diesel (C10-C24)	9070078	7/6/99	7/13/99		0.0500	**0.207**	mg/l	1
Surrogate: o-Terphenyl	"	"	"	*50.0-150*		*59.6*	%	
MW-2			**P907008-02**				**Water**	
Diesel (C10-C24)	9070294	7/15/99	7/21/99		0.200	**12.1**	mg/l	1,2
Surrogate: o-Terphenyl	"	"	"	*50.0-150*		*73.6*	%	
MW-4			**P907008-03**				**Water**	
Diesel (C10-C24)	9070294	7/15/99	7/21/99		0.0500	**0.128**	mg/l	1,2
Surrogate: o-Terphenyl	"	"	"	*50.0-150*		*61.4*	%	
MW-5			**P907008-04**				**Water**	
Diesel (C10-C24)	9070078	7/6/99	7/13/99		0.0500	**0.125**	mg/l	1
Surrogate: o-Terphenyl	"	"	"	*50.0-150*		*50.0*	%	
MW-6			**P907008-05**				**Water**	
Diesel (C10-C24)	9070294	7/15/99	7/21/99		0.0500	**1.05**	mg/l	2,3,4,5
Surrogate: o-Terphenyl	"	"	"	*50.0-150*		*92.2*	%	
MW-7			**P907008-06**				**Water**	
Diesel (C10-C24)	9070078	7/6/99	7/13/99		0.0500	ND	mg/l	
Surrogate: o-Terphenyl	"	"	"	*50.0-150*		*53.9*	%	
MW-9			**P907008-07**				**Water**	
Diesel (C10-C24)	9070078	7/6/99	7/13/99		0.0500	**0.0920**	mg/l	1
Surrogate: o-Terphenyl	"	"	"	*50.0-150*		*58.3*	%	
MW-10			**P907008-08**				**Water**	
Diesel (C10-C24)	9070078	7/6/99	7/13/99		0.0500	**0.167**	mg/l	1
Surrogate: o-Terphenyl	"	"	"	*50.0-150*		*55.3*	%	

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1680 Rogers Ave.	Project Number:	3810 Broadway, Oakland	Received: 6/28/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 7/29/99

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-1			**P907008-01**				**Water**	**6,7**
Methyl tert-butyl ether	9070119	7/9/99	7/9/99		1.00	**1.01**	ug/l	
Surrogate: Dibromofluoromethane	"	"	"	*86.0-118*		*104*	%	
MW-5			**P907008-04**				**Water**	**6,7**
Methyl tert-butyl ether	9070119	7/9/99	7/9/99		2.00	ND	ug/l	
Surrogate: Dibromofluoromethane	"	"	"	*86.0-118*		*109*	%	

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1680 Rogers Ave.	Project Number:	3810 Broadway, Oakland	Received: 6/28/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 7/29/99

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: 9070076	**Date Prepared: 7/6/99**					**Extraction Method: EPA 5030 waters**				
Blank	**9070076-BLK1**									
Gasoline	7/6/99			**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**	"	**2.00**				
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*301*	"	*65.0-135*	*100*			
Surrogate: 4-Bromofluorobenzene	"	*300*		*264*	"	*65.0-135*	*88.0*			
Blank	**9070076-BLK2**									
Gasoline	7/7/99			**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**	"	**2.00**				
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*310*	"	*65.0-135*	*103*			
Surrogate: 4-Bromofluorobenzene	"	*300*		*273*	"	*65.0-135*	*91.0*			
LCS	**9070076-BS1**									
Benzene	7/6/99	100		90.0	ug/l	65.0-135	90.0			
Toluene	"	100		91.6	"	65.0-135	91.6			
Ethylbenzene	"	100		91.1	"	65.0-135	91.1			
Xylenes (total)	"	300		278	"	65.0-135	92.7			
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*302*	"	*65.0-135*	*101*			
LCS	**9070076-BS2**									
Gasoline	7/7/99	1000		1020	ug/l	65.0-135	102			
Surrogate: 4-Bromofluorobenzene	"	*300*		*283*	"	*65.0-135*	*94.3*			
Matrix Spike	**9070076-MS1**	**P907008-01**								
Benzene	7/6/99	100	5.29	94.2	ug/l	65.0-135	**88.9**			
Toluene	"	100	ND	91.8	"	65.0-135	**91.8**			
Ethylbenzene	"	100	ND	90.3	"	65.0-135	**90.3**			
Xylenes (total)	"	300	ND	274	"	65.0-135	**91.3**			
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*303*	"	*65.0-135*	*101*			
Matrix Spike Dup	**9070076-MSD1**	**P907008-01**								
Benzene	7/6/99	100	5.29	94.4	ug/l	65.0-135	**89.1**	20.0	**0.225**	
Toluene	"	100	ND	92.3	"	65.0-135	**92.3**	20.0	**0.543**	

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San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 7/29/99

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*
Matrix Spike Dup (continued)	**9070076-MSD1**		**P907008-01**							
Ethylbenzene	7/6/99	100	ND	90.5	ug/l	65.0-135	**90.5**	20.0	**0.221**	
Xylenes (total)	"	300	ND	275	"	65.0-135	**91.7**	20.0	**0.437**	
Surrogate a,a,a-Trifluorotoluene	"	*300*		*306*	"	*65.0-135*	*102*			

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San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 7/29/99

Total Petroleum Hydrocarbons as Diesel & others by EPA 8015M/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: 9070078	**Date Prepared: 7/6/99**					**Extraction Method: EPA 3520B**				
Blank	**9070078-BLK1**									
Diesel (C10-C24)	7/7/99			**ND**	mg/l	**0.0500**				
Surrogate: o-Terphenyl	"	*0.100*		*0.106*	"	*50.0-150*	*106*			
LCS	**9070078-BS1**									
Diesel (C10-C24)	7/7/99	1.00		0.782	mg/l	50.0-150	78.2			
Surrogate: o-Terphenyl	"	*0.100*		*0.0887*	"	*50.0-150*	*88.7*			
LCS Dup	**9070078-BSD1**									
Diesel (C10-C24)	7/7/99	1.00		0.911	mg/l	50.0-150	91.1	20.0	15.2	
Surrogate: o-Terphenyl	"	*0.100*		*0.0916*	"	*50.0-150*	*91.6*			
Batch: 9070294	**Date Prepared: 7/15/99**					**Extraction Method: EPA 3520B**				
Blank	**9070294-BLK1**									
Diesel (C10-C24)	7/21/99			**ND**	mg/l	**0.0500**				
Surrogate: o-Terphenyl	"	*0.100*		*0.0981*	"	*50.0-150*	*98.1*			
LCS	**9070294-BS1**									
Diesel (C10-C24)	7/21/99	1.00		0.685	mg/l	50.0-150	68.5			
Surrogate: o-Terphenyl	"	*0.100*		*0.0873*	"	*50.0-150*	*87.3*			
LCS Dup	**9070294-BSD1**									
Diesel (C10-C24)	7/21/99	1.00		0.778	mg/l	50.0-150	77.8	20.0	12.7	
Surrogate: o-Terphenyl	"	*0.100*		*0.0986*	"	*50.0-150*	*98.6*			

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Volatile Organic Compounds by EPA Method 8260B/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: 9070119	**Date Prepared: 7/7/99**					**Extraction Method: EPA 5030 waters**				
Blank	**9070119-BLK1**									
Methyl tert-butyl ether	7/7/99			**ND**	ug/l	**0.500**				
Surrogate: Dibromofluoromethane	"	*5.00*		*4.85*	"	*86.0-118*	*97.0*			
Blank	**9070119-BLK2**									
Methyl tert-butyl ether	7/8/99			**ND**	ug/l	**0.500**				
Surrogate: Dibromofluoromethane	"	*5.00*		*5.14*	"	*86.0-118*	*103*			
Blank	**9070119-BLK3**									
Methyl tert-butyl ether	7/9/99			**ND**	ug/l	**0.500**				
Surrogate: Dibromofluoromethane	"	*5.00*		*5.02*	"	*86.0-118*	*100*			
LCS	**9070119-BS1**									
Methyl tert-butyl ether	7/7/99	5.00		5.36	ug/l	72.7-119	107			
Surrogate: Dibromofluoromethane	"	*5.00*		*4.86*	"	*86.0-118*	*97.2*			
LCS	**9070119-BS2**									
Methyl tert-butyl ether	7/8/99	5.00		5.22	ug/l	72.7-119	104			
Surrogate: Dibromofluoromethane	"	*5.00*		*5.31*	"	*86.0-118*	*106*			
LCS	**9070119-BS3**									
Methyl tert-butyl ether	7/9/99	5.00		5.22	ug/l	72.7-119	104			
Surrogate: Dibromofluoromethane	"	*5.00*		*5.33*	"	*86.0-118*	*107*			
Matrix Spike	**9070119-MS1**		**P907060-01**							
Methyl tert-butyl ether	7/7/99	5.00	ND	5.28	ug/l	72.7-119	**106**			
Surrogate: Dibromofluoromethane	"	*5.00*		*4.88*	"	*86.0-118*	*97.6*			
Matrix Spike Dup	**9070119-MSD1**		**P907060-01**							
Methyl tert-butyl ether	7/7/99	5.00	ND	5.34	ug/l	72.7-119	**107**	20.0	**0.939**	
Surrogate: Dibromofluoromethane	"	*5.00*		*4.83*	"	*86.0-118*	*96.6*			

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1680 Rogers Ave.	Project Number:	3810 Broadway, Oakland	Received: 6/28/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 7/29/99

Notes and Definitions

#	Note
1	Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
2	This sample was extracted outside of the EPA recommended holding time.
3	Hydrocarbon pattern in sample appears to be weathered.
4	Results in the diesel organics range are elevated due to overlap from higher boiling point hydrocarbons.
5	Results in the diesel organics range are elevated due to overlap from lower boiling point hydrocarbons.
6	Sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
7	The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.
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

P907008

BLAINE
TECH SERVICES INC.

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

CHAIN OF CUSTODY 990625-62

CLIENT: Equiva - Karen Petryna

SITE: 3810 Broadway

Oakland, CA

LAB: Segaco

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	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	6/25/99	1407	W	5	Mixed	X	X		X			MTBE confirmation by 8260.			P907008-01
MW-2		1502				X	X		X						-02
MW-4		1231				X	X		X						-03
MW-5		1351				X	X		X						-04
MW-6		1426				X	X		X						-05
MW-7		1309				X	X		X			COOLER CUSTODY SEALS INTACT ☐	NOT INTACT ☐		-06
MW-9		1333				X	X		X			COOLER TEMPERATURE 19 °C			-07
MW-10	↓	1445	↓	↓	↓	X	X		X						-08

SAMPLING COMPLETED: DATE 6/25/99 TIME 1515

SAMPLING PERFORMED BY:

RESULTS NEEDED NO LATER THAN

		DATE	TIME		DATE	TIME
RELEASED BY		6/28/99	9:02	RECEIVED BY	6/28/99	9:02
RELEASED BY		6/28/99	1130	RECEIVED BY	6/28/99	1130
RELEASED BY		6/29/99		RECEIVED BY	6-29.	1250

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #
	6-29	1500	

Melanie 6/29/99 17:00

WELL GAUGING DATA

Project # 990625-GZ Date 6/25/99 Client Equiva

Site 3510 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-1	2					21.60	28.83	TOC	
MW-2	2					20.78	33.73		
MW-3	2	Odor	18.17	0.30	100+	18.47	34.44		
MW-4	2					18.16	35.00		
MW-5	2					20.31	33.42		
MW-6	2					21.34	32.64		
MW-7	2					19.22	33.84		
MW-8	2	Odor	20.59	0.10		20.69	33.48		
MW-9	2					16.90	34.08		
MW-10	2					16.82	33.45	↓	
→	Emptied Skimmer - 100mL FP								

EQUIVA WELL MONITORING DATA SHEET

Project #: 990625-G2	Job # 618571071
Sampler: MB	Date: 6/25/99
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 28.83	Depth to Water: 21.60
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
1358	67.6	6.9	1080	>200	1.5	
1400	67.3	6.8	1070	>200	3.0	
1402	66.9	6.7	1070	>200	4.0	

Did well dewater? Yes (No) Gallons actually evacuated: 4.0

Sampling Time: 1407 Sampling Date: 6/25/99

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 #: 990625-G2	Job # 61857107I
Sampler: MG	Date: 6/25/99
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 33.73	Depth to Water: 20.78
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 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 6.3 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1451	68.1	6.6	1570	>200	2.5	Odor, Sheen
1454	68.2	6.5	1550	>200	5.0	
1457	68.0	6.5	1560	>200	7.0	

Did well dewater? Yes (No)		Gallons actually evacuated: 7	
Sampling Time: 1502		Sampling Date: 6/25/99	
Sample I.D.: MW-2		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 #: 990625-G2	Job # 61857107I
Sampler: MC	Date: 6/25/99
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 34.44	Depth to Water: 18.47
Depth to Free Product: 18.17	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 3 (Specified Volumes) = ___ Gals. (Calculated Volume)

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
		Emptied Skimmer ≈			100 mL FP	
		Pumped well for ~ 45 min. ≈			60 gallons	
		by Service Station Systems				

Did well dewater? Yes No	Gallons actually evacuated:		
Sampling Time:	Sampling Date: ~~6/25/99~~		
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 #: 990625-G2	Job # 61857107I
Sampler: MG	Date: 6/25/99
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 35.00	Depth to Water: 18.16
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: ___

2.7 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 8.1 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1220	67.0	6.7	470	>200	3	
1223	66.4	6.8	450	>200	6	
1226	66.2	6.8	490	>200	9	

Did well dewater? Yes (No)		Gallons actually evacuated: 9	
Sampling Time: 1231		Sampling Date: 6/25/99	
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 #: 990625-G2	Job # 61857107I
Sampler: MG	Date: 6/25/99
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 33.42	Depth to Water: 20.31
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 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 6.3 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1340	68.2	6.5	1760	>200	2.5	Odor
1343	67.8	6.4	1760	>200	5.0	
1346	67.3	6.5	1740	>200	7.0	

Did well dewater? Yes (No)		Gallons actually evacuated: 7	
Sampling Time: 1351		Sampling Date: 6/25/99	
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 #: 940625-G2	Job # 61857107I
Sampler: MS	Date: 6/25/99
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 32.65	Depth to Water: 21.34
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: ___

1.8 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 5.4 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1415	68.7	6.5	1130	>200	2.0	Odor
1418	68.4	6.5	1130	>200	4.0	
1421	68.1	6.4	1140	>200	6.0	

Did well dewater? Yes (No)	Gallons actually evacuated: 6
Sampling Time: 1426	Sampling Date: 6/25/99
Sample I.D.: MW-6	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 #: 990625-G2	Job # 61857107I
Sampler: MC	Date: 6/25/99
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 33.84	Depth to Water: 19.22
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	X	3	=	6.9 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1255	67.0	6.7	540	>200	2.5	
1300	67.0	6.7	530	>200	5.0	
1304	66.8	6.7	530	>200	7.0	

Did well dewater? Yes (No)		Gallons actually evacuated: 7	
Sampling Time: 1309		Sampling Date: 6/25/99	
Sample I.D.: MW-7		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 #: 990625-62	Job # 61857021
Sampler: MC	Date: 6/25/99
Well I.D.: MW-8	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 33.48	Depth to Water: 20.69
Depth to Free Product: 20.59	Thickness of Free Product (feet): 0.10
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 Sample - FP well				

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 #: 990625-G2	Job # 61857107I
Sampler: MG	Date: 6/25/99
Well I.D.: MW-9	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 34.08	Depth to Water: 16.90
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: ___

2.7 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 8.1 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1320	68.4	6.8	470	>200	3	
1324	67.8	6.7	470	>200	6	
1328	67.5	6.7	460	>200	9	

Did well dewater? Yes (No)		Gallons actually evacuated: 9	
Sampling Time: 1333		Sampling Date: 6/25/99	
Sample I.D.: MW-9		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 #: 990625-G2	Job # 61857107I
Sampler: MB	Date: 6/25/99
Well I.D.: MW-10	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 33.45	Depth to Water: 16.82
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: ___

2.7 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 8.1 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1433	68.9	6.6	1040	>200	3	Odor
1436	68.5	6.6	1010	>200	6	
1440	68.3	6.6	1000	>200	9	

Did well dewater? Yes (No)		Gallons actually evacuated: 9	
Sampling Time: 1445		Sampling Date: 6/25/99	
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

WELL HEAD INSPECTION CHECKLIST AND REPAIR ORDER

Client Equiva Site # 618571071 Inspection date: 6/25/99

Site address 3810 Broadway Inspected by: MB

Oakland, CA BTS Event # 990625-62

1. Lid on the box? Yes No	5. Water standing in the well box?	7. Can cap be pulled loose?
2. Lid whole?	5a. Standing above well top?	8. Can cap seal out water?
3. Lid secure?	5b. Standing below well top?	9. Padlock present?
4. Lid seal intact?	5c. Water even with top of well cap?	10. Padlock found locked?
	6. Well cap/plug present?	11. Padlock functional?

☐ Check box if *no deficiences* were found. Note below deficiencies you were able to correct.

Well I.D.	Deficiency	Corrective Action Taken
MW-1	5a	Bailed H_2O
MW-7	5a	" "

Note below all deficiences that could not be corrected and *still need to be corrected.*

Well I.D.	Persisting Deficiency	BTS Office assigns or defers Correction to:	Date assigned	Date corrected
MW-10	No well lid. Needs lid w/ 2 9/16" bolts, 0.72' lid Made by SMI well in street **Safety Hazard**	well box Replaced 7/1/99		

Office review and assignments made by _____ date _____