



February 21, 2003

Ms. Eva Chu
Hazardous Materials Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

SUBJECT: REQUEST FOR SITE CLOSURE, BP SERVICE STATION #11266, 1541 PARK STREET, ALAMEDA, CALIFORNIA

Dear Ms. Chu:

URS Corporation (URS) has prepared the following request for closure of the subject site on behalf of Group Environmental Management company (a BP affiliate company). This letter includes a brief site history and addresses the six points defining a Low Risk Groundwater Case as laid out in *Supplemental Instructions to State Water Board, December 8, 1995, Interim Guidance on Required Cleanup at Low Risk Fuel Sites* (CRWQCB, January 5, 1996).

SITE HISTORY

A site history is included in the *Baseline Assessment Report* for Site 11266, prepared by EMCON Northwest, Inc. (EMCON) in 1994. Site 11266 is an operating 76-branded service station on the southwest corner of the intersection of Lincoln Avenue and Park Street in Alameda, California (Figure 1). Surrounding properties include a restaurant to the west of the site; a restaurant, shopping center, car dealer, and oil change service garage to the south and southeast of the site; and shopping centers and a restaurant to the north and east of the site. BP has been responsible for site environmental issues since ownership of the site was transferred from Mobil Oil Corporation (Mobil) to BP in 1989.

Site features include a station building and two pump islands with a concrete drive slab and canopy. Existing underground storage tanks (USTs) at the station include one 12,000-gallon and two 10,000-gallon double wall fiberglass tanks installed in 1987. A 1,000-gallon double wall fiberglass waste oil tank was also installed in 1987 (EMCON found conflicting information listing the existing waste oil tank at 600 gallons). The station manager at the time of EMCON's investigation stated that all tanks were equipped with leak detection systems according to the EMCON's report. The station building has three auto repair service bays, each with a hoist and an associated floor drain. Two remote fill drains for the waste oil tank are also located in the service bay area. The floor drains were said by the station manager at the

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time of EMCON's investigation to discharge to the sanitary sewer, and the remote fills to connect to the waste oil UST.

EMCON personnel visited the site on July 8, 1994 (EMCON, 1994). They noted three observation wells in the UST complex area and seven wells on site. Observation wells within the UST complex could not be accessed during the site visit. The concrete surfaces within the auto repair service bays and by the pump islands were reported to be in good condition with few cracks. The asphalt covering the rest of the site was reported to have a significant number of cracks. A groundwater treatment system near the southwest corner of the site appeared to be operating at the time of EMCON's site visit.

Four USTs are reported to have been on site prior to the installation of the current USTs in 1987 (EMCON, 1994). EMCON found conflicting information the capacities of the former USTs. According to the 1987 *Soil Sampling Report* prepared by Kaprelian Engineering, Inc. (KEI), former USTs at the site included one 8,000-gallon, one 6,000-gallon, one 5,000-gallon, and one 250-gallon tank. KEI reported the 8,000-gallon and 6,000-gallon tanks were single wall fiberglass, while the 5,000-gallon and the 250-gallon tanks were of steel construction. Mobil permit application information indicated that the former USTs included one 10,000-gallon fiberglass tank installed in 1979, one 8,000-gallon fiberglass tank installed in 1979, one 6,000-gallon steel tank installed in 1972, and one 285-gallon tank installed in 1952. These appear to be the same USTs referenced by KEI, despite the differences in capacity.

CRITERIA FOR CLOSURE AS A LOW-RISK GROUNDWATER SITE

Supplemental Instructions to State Water Board, December 8, 1995, Interim Guidance on Required Cleanup at Low Risk Fuel Sites (CRWQCB, January 5, 1996) lists six criteria for closure of a low-risk groundwater site. These six criteria are addressed in the following paragraphs.

1. *Leak has been stopped and ongoing sources, including free product, have been removed or remediated*

The suspected source of contamination at Site 11266 is the four USTs removed from the site and replaced in September 1987. An 8,000-gallon fiberglass UST, 6,000-gallon fiberglass UST, 5,000-gallon steel UST, and 250-gallon steel UST were removed. Approximately 400 cubic yards of contaminated soil were also removed. Sampling of the excavation sidewalls detected a maximum of 3,200 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPH-g) and 81 mg/kg benzene in two samples along the east side of the excavation at approximately 11.5 feet below ground surface. It is not clear whether this was ever over-excavated. However, subsequent

investigations did not detect significant contaminant concentrations in site soil. Any soil contamination remaining after UST excavation appears to have been restricted to the east side of the excavation, and has probably attenuated significantly since 1987. Summary data from previous consultants is provided in Appendix A.

The new USTs were tightness tested in October 1987 and reported tight. BP installed new dispensers and product lines at Site 11266 from September through October 1990. The new product lines were leak tested in November 1990 and reported tight. No free product was documented to be present at Site 12266.

2. *The site has been adequately characterized*

The *Baseline Assessment Report* prepared by EMCON documents the extensive site investigation activity between 1987 and 1994, including the following:

- Soil and groundwater sampling associated with UST removal and replacement in October 1987
- Preliminary groundwater investigation, including soil boring and monitoring well construction in 1988)
- Monthly groundwater monitoring from July to December 1988
- Soil boring and groundwater monitoring well in March 1989
- Phase II site assessment in November 1989

Routine groundwater monitoring was conducted at Site 11266 from March 1988 to September 2001 (Table 1).

3. *The dissolved hydrocarbon plume is not migrating*

Groundwater monitoring data from 1988 to the most recent sampling event in September 2001 shows that the dissolved hydrocarbon plume has stabilized and is attenuating (Table 1). TPH-g and benzene, toluene, ethylbenzene and xylene (BTEX) compounds were initially detected in wells MW-1, MW-2, MW-4, and RW-1. Monitoring for methyl tertiary butyl ether (MTBE) began at the site in 1993. TPH-g, BTEX and MTBE were subsequently detected in wells MW-3 and MW-6. Constituent concentrations increased in well MW-2 in 1993, in well MW-6 from 1995 to 1997, and in well MW-3 in 1999. Constituent concentrations in these wells subsequently attenuated. The last four quarters of

monitoring detected acceptable concentrations of TPH-g, BTEX and MTBE in site wells, or concentrations indicating an attenuating trend.

During the first four monitoring events, the following TPH-g and benzene concentrations were detected in site wells:

- MW-1: TPH-g ranged from 15,000 micrograms per liter (ug/L) to 95,000 ug/L; benzene ranged from 280 ug/L to 2,000 ug/L
- MW-2: TPH-g ranged from non-detect to 170 ug/L; benzene ranged from non-detect to 1.4 ug/L.
- MW-4: TPH-g ranged from non-detect to 430 ug/L; benzene ranged from non-detect to 6.2 ug/L.
- RW-1: TPH-g ranged from 660 ug/L to 13,000 ug/L in RW-1; benzene ranged from 13 ug/L to 1,000 ug/L.

MTBE was first detected in site wells in 1993. MTBE concentrations from the first quarter 1993 to the fourth quarter 1993) were as follows:

- MW-1: 220 ug/L to 1,400 ug/L
- MW-2: 23 ug/L to 1,300 ug/L
- MW-3: MTBE not analyzed until third quarter 1995
- MW-4: MTBE not analyzed until third quarter 1995
- MW-5: MTBE not analyzed until third quarter 1995
- MW-6: MTBE not analyzed until third quarter 1994
- RW-1: 315 ug/L to 1,900 ug/L.

Constituent concentrations in well MW-1 have decreased steadily. A moderate spike in TPH-g, BTEX and MTBE was detected in well MW-1 during the first quarter 1994. TPH-g and benzene concentrations declined to 990 ug/L and 24 ug/L, respectively, in the third quarter 2001. MTBE was first detected in well MW-1 during the first quarter 1993 at a concentration of 1,400 ug/L. The MTBE concentration reached its maximum of 68,412 ug/L in the first quarter 1994, and has decreased since to 31.2 ug/L in the third quarter 2001. Concentration trends in well MW-1 are illustrated in Charts 1 and 2. Strong decreasing trends are apparent for TPH-g, benzene and MTBE.

Concentrations of TPH-g and MTBE in MW-2 increased between the first quarter 1993 and approximately the first quarter 1996, reaching maximum concentrations of 3,400 ug/L and 11,000

ug/L, respectively. Concentrations of TPH-g and MTBE subsequently decreased through the last round of monitoring in 2001 to 100 ug/L and 178 ug/L. Benzene was detected at a maximum concentration of 3.1 ug/L in the fourth quarter 1994, and has been detected once since, at a concentration of 1.02 ug/L in the first quarter 2001.

TPH-g, BTEX or MTBE were not detected or were detected at trace levels in well MW-3 until the first quarter of 1999, when TPH-g was detected at 17,000 ug/L; benzene was detected at 8.2 ug/L; and MTBE was detected at 17,000 ug/L. Well MW-3 is located next to a waste oil tank, and the increase in concentrations after years of non-detects indicates a possible spill or other release. This possibility is further supported by the high concentrations of MTBE, which was generally not used at the time the original release was detected (1987). However, annual monitoring of well MW-3 from 1999 to 2001 shows rapid attenuation of all constituents. TPH-g was last detected at 610 ug/L; benzene at 2.97 ug/L; and MTBE at 572 ug/L. Therefore, there is not an ongoing source of contamination at well MW-3. Concentration trends in well MW-3 are illustrated in Charts 3 and 4. The charts show a decreasing trend since the initial TPH-g, benzene and MTBE detections in 1999.

Low or trace concentrations of TPH-g and BTEX were detected in well MW-4 in the fourth quarter 1989. No detections in MW-4 have been recorded since. MTBE has never been detected in well MW-4. Similarly, no detections of TPH-g, BTEX and MTBE have been recorded for well MW-5 since the beginning of monitoring, with the exception of a trace amount of xylene detected in the third quarter 1993.

TPH-g, BTEX or MTBE were not detected in well MW-6 until the third quarter 1995 for TPH-g and BTEX, and the first quarter 1993 for MTBE. An increasing trend occurred from approximately the second quarter 1995 to the third quarter 1997. A decreasing trend then occurred, with TPH-g, benzene and MTBE not detected during semiannual monitoring in 2000 and 2001. No ongoing source of contamination is apparent upgradient or in the vicinity of well MW-6.

TPH-g and benzene reached maximum concentrations of 27,000 ug/L and 2,400 ug/L, respectively, in well RW-1 during the first quarter of 1995; MTBE reached a maximum concentration of 1,400 ug/L in well RW-1 during the third and fourth quarter of 1993. Monitoring of well RW-1 was terminated in 1997 after six quarters of non-detects for TPH-g, BTEX and MTBE.

During the last year of monitoring, the following concentrations were detected in site wells:

- MW-1: TPH-g ranged from 990 ug/L to 1,500 ug/L; benzene ranged from 24 ug/L to 28.2 ug/L; MTBE ranged from 15.2 ug/L to 31.2 ug/L.
- MW-2: TPH-g ranged from 100 ug/L to 270 ug/L; benzene ranged from ND to 1.02; MTBE ranged from 178 ug/L to 341 ug/L.
- MW-3: TPH-g was detected at 610 ug/L; benzene at 2.97 ug/L; and MTBE at 572 ug/L.
- MW-4: TPH-g, benzene and MTBE were not detected.
- MW-5: TPH-g, benzene and MTBE were not detected.
- MW-6: TPH-g, benzene and MTBE were not detected.
- RW-1: Last monitoring in 1997. TPH-g, benzene and MTBE were not detected.

Figure 2 shows the most recent monitoring results and the distribution of analyte detections. No constituents were detected off site (MW-6); no constituents were detected upgradient of the USTs and dispensers (MW-4 and MW-5); and constituent concentrations in downgradient wells are either below the Tier 1 Risk-Based Screening Levels (RBSLs) for groundwater which is not a current or potential drinking water source, or are decreasing. Constituent concentrations are discussed further with respect to the Tier 1 RBSLs in the discussion of criterion 5.

4. *No water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted.*

A water well survey conducted by EMCON in 1990 determined that ten irrigation wells, two industrial wells, one domestic well and one abandoned well existed within 2,000 feet of the site. Four of these wells were located downgradient of the site. Contamination at Site 11266 is restricted to the shallow groundwater zone, which is not likely to be used as a drinking water source. The lateral extent of contamination is limited to the immediate station area. Sensitive receptors are therefore unlikely to be impacted.

5. *The site presents no significant threat to human health*

The concentrations of TPH-g and benzene are currently below Tier 1 RBSLs for groundwater which is not a current or potential drinking water source of 500 ug/L for TPH-g, 46 ug/L for benzene and 1,800 ug/L for MTBE at all locations with the exception of TPH-g in MW-1 and MW-3. As noted previously, the concentrations of TPH-g and benzene show a strong decreasing trend in MW-1 and MW-3. The site therefore presents no significant threat to human health.

6. *The site presents no significant risk to the environment*

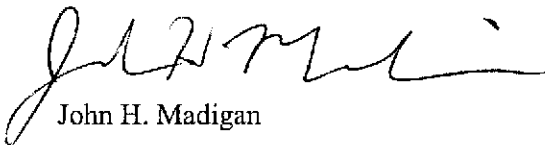
Surface waters, wetlands and other sensitive receptors are not likely to be impacted by contamination at Site 11266, as the extent of contamination is limited both vertically and laterally to the immediate station area, and is attenuating significantly. Also, there are no site specific exposure pathways likely to cause impacts off site. The site therefore presents no significant risk to the environment.

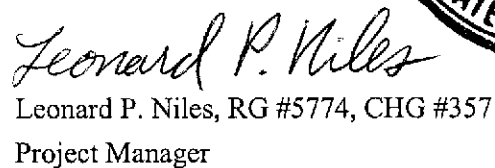
Based on the forgoing information, BP Site 11266 meets the criteria for closure of a Low Risk Groundwater Case site. URS therefore respectfully requests closure of BP Site 11266.

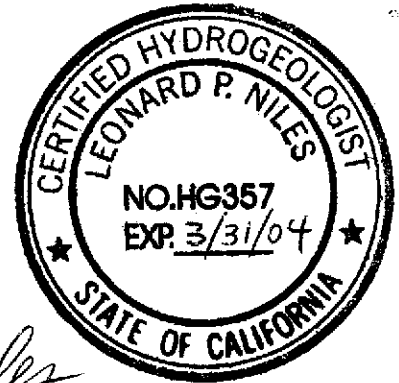
Please call us at (510) 874-3115 if you have questions.

Sincerely,

URS CORPORATION


John H. Madigan
Environmental Engineer


Leonard P. Niles, RG #5774, CHG #357
Project Manager



cc: Mr. Scott Hooton, BP Oil Company



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REFERENCES

California Regional Water Quality Control Board (CRWQCB), 1996. *Memorandum, To: San Francisco Bay Area Agencies Overseeing UST Cleanup and Other Interested Parties, Subject: Regional Board Supplemental Instructions to State Water Board, December 8, 1995, Interim Guidance on Required Cleanup at Low-Risk Fuel Sites.* Oakland, California. January 5.

EMCON Northwest, Inc. (EMCON), 1994. *Baseline Assessment Report, Site 11266, 1541 Park Street, Alameda, California.* December 27.

ATTACHMENTS

Table 1: Summary of Groundwater Monitoring Results

Chart 1: TPH-g and Benzene Concentrations, MW-1

Chart 2: MTBE Concentrations, MW-1

Chart 3: TPH-g and Benzene Concentrations, MW-3

Chart 4: MTBE Concentrations, MW-3

Figure 1: Site Plan

**Figure 2: Groundwater Elevations and Concentrations of Petroleum Hydrocarbons
in Groundwater, Third Quarter 2001 (September 18, 2001)**

Appendix A: Figures and Summary Tables from Previous Consultants

Table 1
Summary of Groundwater Monitoring Results
Former BP Service Station 11266
1541 Park Street, Alameda, California

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	(a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	(b)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-1	3/4/1988	19.19		---	---		95000	2000	5900	1100	10000	---	---	---
MW-1	3/29/1989	19.19		---	---		25000	930	2600	24	3100	---	---	---
MW-1	11/28/1989	19.19		---	---		15000	280	880	340	1200	---	---	---
MW-1	2/13/1991	19.19		---	---		25000	680	2700	1100	3200	---	---	---
MW-1	1/8/1992	19.19		---	---		10000	260	1100	570	2000	---	---	---
MW-1	3/30/1992	19.19		8.15	11.04		5800	290	570	500	1100	---	(h)	PACE
MW-1	7/2/1992	19.19		9.38	9.81		2500	170	60	310	300	---	---	ANA
MW-1	7/22/1992	19.19		9.62	9.57		---	---	---	---	---	---	---	---
MW-1	10/2/1992	19.19		9.98	9.21		4000	86	190	270	350	---	---	ANA
MW-1	12/14/1992	19.19		9.90	9.29		6800	75	540	200	670	---	---	ANA
MW-1	3/24/1993	19.19		8.52	10.67		6400	150	310	370	710	1400	(d)	PACE
MW-1	6/17/1993	19.19		9.37	9.82		3800	110	160	310	480	220	(d)	PACE
MW-1	9/29/1993	19.19		10.80	8.39		1100	22	16	54	110	320	(d)	PACE
MW-1	12/28/1993	19.19		9.27	9.92		1800	26	110	77	300	220	(d)	PACE
MW-1	3/29/1994	19.19		8.77	10.42		22000	990	560	970	2000	68412	(h)	PACE
MW-1	7/7/1994	19.19		9.18	10.01		18000	67	32	250	140	30000	(d)	PACE
MW-1	10/18/1994	19.19		9.85	9.34		270	1.9	0.6	ND<0.5	3.2	---	(h)	PACE
MW-1	2/1/1995	19.19		7.04	12.15		5400	260	350	1100	980	---	---	ATI
MW-1	4/12/1995	19.19		7.74	11.45		13000	260	620	960	2600	---	---	ATI
MW-1	9/13/1995	19.19		9.58	9.61		5800	110	110	510	830	4300	---	ATI
MW-1	1/11/1996	19.19		8.95	10.24		5400	91	130	510	1000	1700	---	ATI
MW-1	4/18/1996	19.19		8.40	10.79		12000	190	420	1100	1560	2100	---	SPL
MW-1	6/28/1996	19.19		9.08	10.11		11000	100	130	670	1180	4600	---	SPL
MW-1	11/5/1996	19.19		9.81	9.38		8800	55	28	520	430	5700	---	SPL
MW-1	1/17/1997	19.19		7.81	11.38		12000	180	160	1200	1650	3200	---	SPL
MW-1	5/1/1997	19.19		9.13	10.06		8600	160	49	950	850	3200	---	SPL
MW-1	7/9/1997	19.19		9.55	9.64		10000	93	27	720	476	4500	---	SPL
MW-1	10/16/1997	19.19		9.77	9.42		2100	71	14	420	194	500	---	SPL
MW-1	1/8/1998	19.19		8.36	10.83		2500	33	21	180	183	1200	---	SPL
MW-1	4/17/1998	19.19		7.48	11.71		14000	140	410	730	1980	2400	---	SPL
MW-1	9/11/1998	19.19		9.30	9.89		7700	65	38	580	880	1700	---	SPL
MW-1	3/9/1999	19.19		6.80	12.39		6300	93	99	510	790	780	(f)	SPL
MW-1	9/23/1999	19.19		8.31	10.88		8500	93	88	910	1900	640	---	SPL
MW-1	3/27/2000	19.19		6.82	12.37		2100	35	6.2	240	120	160	---	PACE
MW-1	9/27/2000	19.19		8.58	10.61		810	13	0.62	43	12	46	---	PACE
MW-1	3/21/2001	19.19		7.47	11.72		1500	28.2	1.68	107	90.5	15.2	---	PACE
MW-1	9/18/2001	19.19		8.95	10.24		990	24	9.57	44.6	62.6	31.2	---	PACE

Table 1
Summary of Groundwater Monitoring Results
Former BP Service Station 11266
1541 Park Street, Alameda, California

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	(a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	(b)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-2	3/4/1988	19.32		---	---		ND	ND	ND	ND	ND	---	---	---
MW-2	3/29/1989	19.32		---	---		ND	1.1	0.78	ND	1.7	---	---	---
MW-2	11/28/1989	19.32		---	---		170	ND	ND	ND	ND	---	---	---
MW-2	2/13/1991	19.32		---	---		150	1.4	ND	ND	0.9	---	---	---
MW-2	1/8/1992	19.32		---	---		ND	1.4	ND	ND	1.1	---	---	---
MW-2	3/30/1992	19.32		9.03	10.29		91	0.7	ND	ND	ND	---	(h)	PACE
MW-2	7/2/1992	19.32		9.96	9.36		150	3.1	0.6	0.6	1.1	---	---	ANA
MW-2	7/22/1992	19.32		10.12	9.20		---	---	---	---	---	---	---	---
MW-2	10/2/1992	19.32		10.42	8.90		56	ND<0.5	0.8	0.8	1.2	---	---	ANA
MW-2	12/14/1992	19.32		10.77	8.55		210	1.5	ND<0.5	0.9	2.7	---	---	ANA
MW-2	3/24/1993	19.32		9.33	9.99		94	0.8	ND<0.5	ND<0.5	0.9	---	---	PACE
QC-1 (c)	3/24/1993	---		---	---		150	1.8	0.6	1.3	1.3	---	---	PACE
MW-2	6/17/1993	19.32		9.91	9.41		ND<50	ND<0.5	ND<0.5	ND<0.5	0.7	23	(d)	PACE
MW-2	9/29/1993	19.32		11.39	7.93		68	ND<0.5	0.9	0.7	1.9	59	(d)	PACE
MW-2	12/28/1993	19.32		9.75	9.57		260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1300	(d)	PACE
QC-1 (c)	12/28/1993	---		---	---		240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1100	(d)	PACE
MW-2	3/29/1994	19.32		9.39	9.93		150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1622	(d),(h)	PACE
QC-1 (c)	3/29/1994	---		---	---		140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1600	(d)	PACE
MW-2	7/7/1994	19.32		9.68	9.64		1100	0.6	1.7	0.6	3.2	2000	(d)	PACE
MW-2	10/18/1994	19.32		10.22	9.10		290	3.1	0.8	ND<0.5	5.1	---	(h)	PACE
MW-2	2/1/1995	19.32		8.03	11.29		100	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	6.0 ATI
MW-2	4/12/1995	19.32		8.71	10.61		1200	ND<1.0	ND<1.0	ND<1.0	ND<2.0	---	---	8.3 ATI
MW-2	9/13/1995	19.32		10.19	9.13		480	ND<2.5	ND<2.5	ND<2.5	ND<5.0	2300	---	7.8 ATI
MW-2	1/11/1996	19.32		9.59	9.73		3400	ND<25	ND<25	ND<25	ND<50	11000	---	5.4 ATI
MW-2	4/18/1996	19.32		9.04	10.28		130	ND<0.5	ND<1	ND<1	ND<1	170	---	5.5 SPL
MW-2	6/28/1996	19.32		9.72	9.60		300	ND<0.5	ND<1	ND<1	ND<1	430	---	4.9 SPL
MW-2	11/5/1996	19.32		10.43	8.89		710	ND<2.5	ND<5.0	ND<5.0	ND<5.0	960	---	5.3 SPL
MW-2	1/17/1997	19.32		8.80	10.52		ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	24	---	5.3 SPL
MW-2	5/1/1997	19.32		10.06	9.26		80	ND<0.5	ND<1.0	ND<1.0	ND<1.0	100	---	5.2 SPL
MW-2	7/9/1997	19.32		10.50	8.82		150	ND<0.5	ND<1.0	ND<1.0	ND<1.0	170	---	4.3 SPL
MW-2	10/16/1997	19.32		10.18	9.14		ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	260	---	5.0 SPL
MW-2	1/8/1998	19.32		9.04	10.28		ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	18	---	4.4 SPL
MW-2	4/17/1998	19.32		8.56	10.76		ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	3.9 SPL
MW-2	9/11/1998	19.32		9.79	9.53		ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	6.1 SPL
MW-2	3/9/1999	19.32		7.93	11.39		200	ND<1.0	ND<1.0	ND<1.0	ND<1.0	190	---	---
MW-2	9/23/1999	19.32		8.52	10.80		<250	ND<5.0	ND<5.0	ND<5.0	ND<5.0	84	---	SPL
MW-2	3/27/2000	19.32		7.98	11.34		200	ND<0.5	ND<0.5	ND<0.5	ND<0.5	490	---	PACE
MW-2	9/27/2000	19.32		8.84	10.48		180	ND<0.5	ND<0.5	ND<0.5	ND<0.5	730	---	PACE
MW-2	3/21/2001	19.32		8.34	10.98		270	1.02	ND<0.5	ND<0.5	ND<1.5	341	---	PACE
MW-2	9/18/2001	19.32		9.29	10.03		100	ND<0.5	ND<0.5	ND<0.5	ND<1.5	178	---	PACE

Table 1
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WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	(a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	(b)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-3	3/4/1988	19.99		---	---		ND	ND	ND	ND	ND	---	---	---
MW-3	3/29/1989	19.99		---	---		ND	ND	ND	ND	ND	---	---	---
MW-3	11/28/1989	19.99		---	---		ND	ND	ND	ND	ND	---	---	---
MW-3	2/13/1991	19.99		---	---		ND	ND	ND	ND	ND	---	---	---
MW-3	1/8/1992	19.99		---	---		ND	ND	ND	ND	ND	---	---	---
MW-3	3/30/1992	19.99		9.71	10.28		ND	ND	ND	ND	ND	---	(h)	---
MW-3	7/2/1992	19.99		10.52	9.47		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	7/22/1992	19.99		10.62	9.37		---	---	---	---	---	---	---	---
MW-3	10/2/1992	19.99		10.86	9.13		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-3	12/14/1992	19.99		10.53	9.46		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-3	3/24/1993	19.99		9.06	10.93		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	6/17/1993	19.99		10.44	9.55		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	9/29/1993	19.99		11.06	8.93		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	12/28/1993	19.99		9.43	10.56		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	3/29/1994	19.99		10.01	9.98		---	---	---	---	---	---	---	---
MW-3	7/7/1994	19.99		10.14	9.85		ND<50	ND<0.5	0.7	ND<0.5	ND<0.5	---	---	PACE
QC-1 (c)	7/7/1994	---		---	---		ND<50	ND<0.5	0.7	ND<0.5	ND<0.5	---	---	PACE
MW-3	10/18/1994	19.99		10.56	9.43		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(h)	3.2
MW-3	2/1/1995	19.99		8.98	11.01		ND<50	ND<0.5	1.0	0.5	1.9	---	5.9	ATI
MW-3	4/12/1995	19.99		9.70	10.29		---	---	---	---	---	---	---	---
MW-3	9/13/1995	19.99		10.70	9.29		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	5.7	ATI
MW-3	1/11/1996	19.99		10.18	9.81		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	5.5	ATI
MW-3	4/18/1996	19.99		9.53	10.46		---	---	---	---	---	---	---	---
MW-3	6/28/1996	19.99		9.21	10.78		ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.3	SPL
MW-3	11/5/1996	19.99		9.94	10.05		---	---	---	---	---	---	---	---
MW-3	1/17/1997	19.99		9.29	10.70		ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.0	SPL
MW-3	5/1/1997	19.99		10.53	9.46		---	---	---	---	---	---	---	---
MW-3	7/9/1997	19.99		10.92	9.07		ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.0	SPL
MW-3	10/16/1997	19.99		11.24	8.75		---	---	---	---	---	---	---	---
MW-3	1/8/1998	19.99		10.12	9.87		---	---	---	---	---	---	---	---
MW-3	4/17/1998	19.99		9.62	10.37		---	---	---	---	---	---	---	---
MW-3	9/11/1998	19.99		10.83	9.16		---	---	---	---	---	---	---	---
MW-3	3/9/1999	19.99		9.00	10.99		17000	8.2	ND<1.0	ND<1.0	5.90	17000	---	SPL
MW-3	9/23/1999	19.99		9.20	10.79		---	---	---	---	---	---	---	---
MW-3	3/27/2000	19.99		9.10	10.89		1200	4.5	1.2	3.0	3.1	2800	---	PACE
MW-3	9/27/2000	19.99		9.96	10.03		---	---	---	---	---	---	---	---
MW-3	3/21/2001	19.99		9.46	10.53		610	2.97	ND<2.5	8.66	7.85	572	---	PACE
MW-3	9/18/2001	19.99		10.13	9.86		---	---	---	---	---	---	---	---

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WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	(a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	(b)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-4	3/4/1988	20.17		---	---		ND	ND	ND	ND	ND	---	---	---
MW-4	3/29/1989	20.17		---	---		ND	ND	ND	ND	ND	---	---	---
MW-4	11/28/1989	20.17		---	---		430	6.2	0.6	12	3.3	---	---	---
MW-4	2/13/1991	20.17		---	---		ND	ND	ND	ND	ND	---	---	---
MW-4	1/8/1992	20.17		---	---		ND	ND	ND	ND	ND	---	---	---
MW-4	3/30/1992	20.17		8.73	11.44		ND	ND	ND	ND	ND	---	(h)	---
MW-4	7/2/1992	20.17		10.04	10.13		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-4	7/22/1992	20.17		10.26	9.91		---	---	---	---	---	---	---	---
MW-4	10/2/1992	20.17		10.63	9.54		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-4	12/14/1992	20.17		10.02	10.15		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-4	3/24/1993	20.17		9.08	11.09		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	6/17/1993	20.17		10.03	10.14		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	9/29/1993	20.17		10.96	9.21		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	12/28/1993	20.17		9.33	10.84		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	3/29/1994	20.17		9.42	10.75		---	---	---	---	---	---	---	---
MW-4	7/7/1994	20.17		9.82	10.35		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	10/18/1994	20.17		10.36	9.81		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(h)	3.1
MW-4	2/1/1995	20.17		7.50	12.67		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	9.3
MW-4	4/12/1995	20.17		8.21	11.96		---	---	---	---	---	---	---	---
MW-4	9/13/1995	20.17		10.20	9.97		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	4.3
MW-4	1/11/1996	20.17		9.57	10.60		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	5.1
MW-4	4/18/1996	20.17		9.03	11.14		---	---	---	---	---	---	---	---
MW-4	6/28/1996	20.17		8.73	11.44		ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	4.6
MW-4	11/5/1996	20.17		9.47	10.70		---	---	---	---	---	---	---	---
MW-4	1/17/1997	20.17		8.79	11.38		ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	5.4
MW-4	5/1/1997	20.17		10.08	10.09		---	---	---	---	---	---	---	---
MW-4	7/9/1997	20.17		10.52	9.65		ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4.1
MW-4	10/16/1997	20.17		10.85	9.32		---	---	---	---	---	---	---	---
MW-4	1/8/1998	20.17		9.60	10.57		---	---	---	---	---	---	---	---
MW-4	4/17/1998	20.17		9.11	11.06		---	---	---	---	---	---	---	---
MW-4	9/11/1998	20.17		10.32	9.85		---	---	---	---	---	---	---	---
MW-4	3/9/1999	20.17		7.30	12.87		ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---	---
MW-4	9/23/1999	20.17		7.86	12.31		---	---	---	---	---	---	---	---
MW-4	3/27/2000	20.17		7.57	12.60		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---
MW-4	9/27/2000	20.17		9.59	10.58		---	---	---	---	---	---	---	---
MW-4	3/21/2001	20.17		8.14	12.03		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	---	---
MW-4	9/18/2001	20.17		9.74	10.43		---	---	---	---	---	---	---	---

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MW-5	3/4/1988	19.41	---	---	ND	ND	ND	ND	ND	---	---	---
MW-5	3/29/1989	19.41	---	---	ND	ND	ND	ND	ND	---	---	---
MW-5	11/28/1989	19.41	---	---	ND	ND	ND	ND	ND	---	---	---
MW-5	2/13/1991	19.41	---	---	ND	ND	ND	ND	ND	---	---	---
MW-5	1/8/1992	19.41	---	---	ND	ND	ND	ND	ND	---	---	---
MW-5	3/30/1992	19.41	7.85	11.56	ND	ND	ND	ND	ND	---	(h)	PACE
MW-5	7/2/1992	19.41	9.27	10.14	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-5	7/22/1992	19.41	9.55	9.86	---	---	---	---	---	---	---	---
MW-5	10/2/1992	19.41	9.97	9.44	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-5	12/14/1992	19.41	9.14	10.27	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-5	3/24/1993	19.41	8.17	11.24	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	6/17/1993	19.41	8.29	11.12	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-1 (c)	6/17/1993	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	9/29/1993	19.41	10.31	9.10	ND<50	ND<0.5	ND<0.5	ND<0.5	0.6	---	---	PACE
MW-5	12/28/1993	19.41	8.91	10.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	3/29/1994	19.41	8.50	10.91	---	---	---	---	---	---	---	---
MW-5	7/7/1994	19.41	8.99	10.42	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	10/18/1994	19.41	9.61	9.80	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(h)	PACE
MW-5	2/1/1995	19.41	6.55	12.86	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	7.6	ATI
MW-5	4/12/1995	19.41	7.27	12.14	---	---	---	---	---	---	---	---
MW-5	9/13/1995	19.41	9.49	9.92	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	4.9	ATI
MW-5	1/11/1996	19.41	8.82	10.59	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	4.9	ATI
MW-5	4/18/1996	19.41	8.30	11.11	---	---	---	---	---	---	---	---
MW-5	6/28/1996	19.41	8.96	10.45	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.2	SPL
MW-5	11/5/1996	19.41	9.69	9.72	---	---	---	---	---	---	---	---
MW-5	1/17/1997	19.41	9.02	10.39	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.2	SPL
MW-5	5/1/1997	19.41	10.29	9.12	---	---	---	---	---	---	---	---
MW-5	7/9/1997	19.41	10.71	8.70	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.2	SPL
MW-5	10/16/1997	19.41	11.03	8.38	---	---	---	---	---	---	---	---
MW-5	1/8/1998	19.41	10.00	9.41	---	---	---	---	---	---	---	---
MW-5	4/17/1998	19.41	8.73	10.68	---	---	---	---	---	---	---	---
MW-5	9/11/1998	19.41	9.91	9.50	---	---	---	---	---	---	---	---
MW-5	3/9/1999	19.41	6.24	13.17	ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---	SPL
MW-5	9/23/1999	19.41	6.74	12.67	---	---	---	---	---	---	---	---
MW-5	3/27/2000	19.41	6.64	12.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-5	9/27/2000	19.41	8.76	10.65	---	---	---	---	---	---	---	---
MW-5	3/21/2001	19.30	(g) 7.15	12.15	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	---	PACE
MW-5	9/18/2001	19.30	8.85	10.45	---	---	---	---	---	---	---	---

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MW-6	3/4/1988	19.40		---	---		ND	ND	ND	ND	ND	---	---	---
MW-6	3/29/1989	19.40		---	---		ND	ND	ND	ND	ND	---	---	---
MW-6	11/28/1989	19.40		---	---		ND	ND	ND	ND	ND	---	---	---
MW-6	2/13/1991	19.40		---	---		ND	ND	ND	ND	ND	---	---	---
MW-6	1/8/1992	19.40		---	---		ND	ND	ND	ND	ND	---	---	---
MW-6	3/30/1992	19.40		8.86	10.54		ND	ND	ND	ND	ND	---	(h)	PACE
MW-6	7/2/1992	19.40		9.94	9.46		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	7/22/1992	19.40		10.10	9.30		---	---	---	---	---	---	---	---
MW-6	10/2/1992	19.40		10.48	8.92		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	12/14/1992	19.40		10.76	8.64		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	3/24/1993	19.40		9.19	10.21		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	6/17/1993	19.40		9.91	9.49		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	9/29/1993	19.40		11.49	7.91		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	12/28/1993	19.40		9.88	9.52		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	3/29/1994	19.40		9.36	10.04		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	66.3	(h)	PACE
MW-6	7/7/1994	19.40		9.75	9.65		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	38	(d)	PACE
MW-6	10/18/1994	19.40		10.30	9.10		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(h)	PACE
MW-6	2/1/1995	19.40		7.92	11.48		ND<50	ND<0.5	0.9	ND<0.5	1.1	---	---	ATI
MW-6	4/12/1995	19.40		8.41	10.99		220	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
MW-6	9/13/1995	19.40		10.05	9.35		180	ND<1.0	ND<1.0	ND<1.0	ND<2.0	770	---	ATI
MW-6	1/11/1996	19.40		9.52	9.88		670	ND<2.5	ND<2.5	ND<2.5	ND<5.0	2400	---	ATI
MW-6	4/18/1996	19.40		9.03	10.37		560	ND<0.5	ND<1	ND<1	ND<1	860	---	SPL
MW-6	6/28/1996	19.40		8.76	10.64		620	ND<0.5	ND<1	ND<1	ND<1	540	---	SPL
MW-6	11/5/1996	19.40		9.48	9.92		810	ND<5	ND<10	ND<10	ND<10	970	---	SPL
MW-6	1/17/1997	19.40		8.58	10.82		830	ND<0.5	ND<1.0	ND<1.0	ND<1.0	960	---	SPL
MW-6	5/1/1997	19.40		9.92	9.48		780	ND<5	ND<10	ND<10	ND<10	970	---	SPL
MW-6	7/9/1997	19.40		10.33	9.07		990	ND<0.5	ND<1.0	ND<1.0	ND<1.0	1100	---	SPL
MW-6	10/16/1997	19.40		10.66	8.74		ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	750	---	SPL
MW-6	1/8/1998	19.40		8.92	10.48		120	ND<0.5	ND<1.0	ND<1.0	ND<1.0	120	---	SPL
MW-6	4/17/1998	19.40		8.12	11.28		ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	62	---	SPL
MW-6	9/11/1998	19.40		9.31	10.09		ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	59	---	SPL
MW-6	3/9/1999	19.40		7.25	12.15		ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.9/ND<1C	(f)	SPL
MW-6	9/23/1999	19.40		7.79	11.61		ND<250	ND<5.0	ND<5.0	ND<5.0	ND<5.0	20	---	SPL
MW-6	3/27/2000	19.40		7.03	12.37		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-6	9/27/2000	19.40		8.57	10.83		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-6	3/21/2001	19.40		7.47	11.93		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	---	PACE
MW-6	9/18/2001	19.40		9.12	10.28		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	---	PACE

Table 1
Summary of Groundwater Monitoring Results
Former BP Service Station 11266
1541 Park Street, Alameda, California

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
RW-1	7/22/1992	---	9.66	---	13000	1000	3400	380	2800	---	---	ANA
RW-1	10/2/1992	---	10.28	---	---	---	---	---	---	---	---	---
RW-1	12/14/1992	---	23.28	---	---	---	---	---	---	---	---	---
RW-1	3/24/1993	---	8.93	---	660	21	25	8.3	100	315	(d)	PACE
RW-1	6/17/1993	---	9.66	---	850	13	1.0	15	100	390	(d)	PACE
RW-1	9/29/1993	19.27	23.40	-4.13	1200	26	27	11	150	1800	(d)	PACE
QC-1 (c)	9/29/1993	---	---	---	1200	26	28	11	160	1900	(d)	PACE
RW-1	12/28/1993	19.27	9.76	9.51	3500	300	220	180	480	1900	(d)	PACE
RW-1	3/29/1994	19.27	8.93	10.34	12000	640	1700	450	2200	899	(h)	6.3 PACE
RW-1	7/7/1994	19.27	9.45	9.82	7600	530	1100	380	1800	410	(d)	PACE
RW-1	10/18/1994	19.27	10.11	9.16	5300	47	100	150	280	---	(d),(h)	3.4 PACE
QC-1 (c)	10/18/1994	---	---	---	430	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
RW-1	2/1/1995	19.27	8.54	10.73	27000	2400	6100	1800	5300	---	4.5	ATI
QC-1 (c)	2/1/1995	---	---	---	15000	1300	3300	970	2900	---	---	ATI
RW-1	4/12/1995	19.27	8.21	11.06	6200	330	910	350	1500	---	5.2	ATI
QC-1 (c)	4/12/1995	---	---	---	7600	400	1100	440	1900	---	---	ATI
RW-1	9/13/1995	19.27	9.84	9.43	920	140	60	34	110	1200	5.1	ATI
RW-1	1/11/1996	19.27	9.25	10.02	ND<50	0.95	0.61	ND<0.50	2.1	43	5.4	ATI
RW-1	4/18/1996	19.27	8.73	10.54	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.7	SPL
RW-1	6/28/1996	19.27	9.40	9.87	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	4.5	SPL
RW-1	11/5/1996	19.27	10.12	9.15	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.9	SPL
RW-1	1/17/1997	19.27	8.10	11.17	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.8	SPL
RW-1	5/1/1997	19.27	9.43	9.84	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.6	SPL
RW-1	7/9/1997	19.27	10.83	8.44	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.1	SPL
RW-1	10/16/1997	19.27	11.17	8.10	---	---	---	---	---	---	---	---
RW-1	1/8/1998	19.27	10.03	9.24	---	---	---	---	---	---	---	---
RW-1	4/17/1998	19.27	8.79	10.48	---	---	---	---	---	---	---	---
RW-1	9/11/1998	19.27	9.98	9.29	---	---	---	---	---	---	---	---
RW-1	3/9/1999	19.27	7.19	12.08	---	---	---	---	---	---	---	---
RW-1	9/23/1999	19.27	7.63	11.64	---	---	---	---	---	---	---	---
RW-1	3/27/2000	19.27	7.04	12.23	---	---	---	---	---	---	---	---
RW-1	9/27/2000	19.27	8.55	10.72	---	---	---	---	---	---	---	---
RW-1	3/21/2001	19.27	7.48	11.79	---	---	---	---	---	---	---	---
RW-1	9/18/2001	19.27	9.13	10.14	---	---	---	---	---	---	---	---

Table 1
Summary of Groundwater Monitoring Results
Former BP Service Station 11266
1541 Park Street, Alameda, California

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
QC-2 (e)	10/2/1992	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
QC-2 (e)	12/14/1992	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
QC-2 (e)	3/24/1993	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	6/17/1993	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	9/29/1993	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	12/28/1993	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	3/29/1994	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	7/7/1994	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	10/18/1994	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (e)	2/1/1995	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	ATI
QC-2 (e)	4/12/1995	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2 (e)	9/13/1995	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
QC-2 (e)	1/11/1996	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
QC-2 (e)	4/18/1996	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	SPL
QC-2 (e)	6/28/1996	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	SPL

ADDITIONAL ANALYSES

Well ID	DATE OF SAMPLING/ MONITORING	Dissolved Lead (ug/l)	LAB
RW-1	3/21/2001	ND<50	PACE
RW-1	9/18/2001	ND<50	PACE

Table 1
Summary of Groundwater Monitoring Results
Former BP Service Station 11266
1541 Park Street, Alameda, California

ABBREVIATIONS:

T	Toluene
TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
---	Not measured/applicable/analyzed
ND	Not detected above reported detection limit
PACE	Pace, Inc.
ANA	Anamatrix, Inc.
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories

Source: The data within this table was provided to URS by BP Group Environmental Management Company and their previous consultants. URS has not verified the accuracy of this information.

NOTES:

- 22.82 feet (City datum).
- (a) Casing elevations surveyed to nearest 0.01 foot above mean sea level, with an assigned elevation of 22.82 feet (City datum).
- (b) Groundwater elevations in feet above mean sea level.
- (c) Blind duplicate.
- (d) A copy of the documentation for this data is included in Appendix C of Alisto report 10-050-07-004.
- (e) Travel blank.
- (f) EPA Methods 8020/8260 used.
- (g) Elevation changed due to well maintenance.
- (h) A copy of the documentation for this data is included in Blaine Tech Services report 010918-R-1. No chromatograms could be located for all samples taken on October 18, 1994. The data for sampling events taken on March 30, 1992 have been destroyed.

Chart 1
TPH-g and Benzene Concentrations, Well MW-1
BP Service Station 11266, Alameda, California

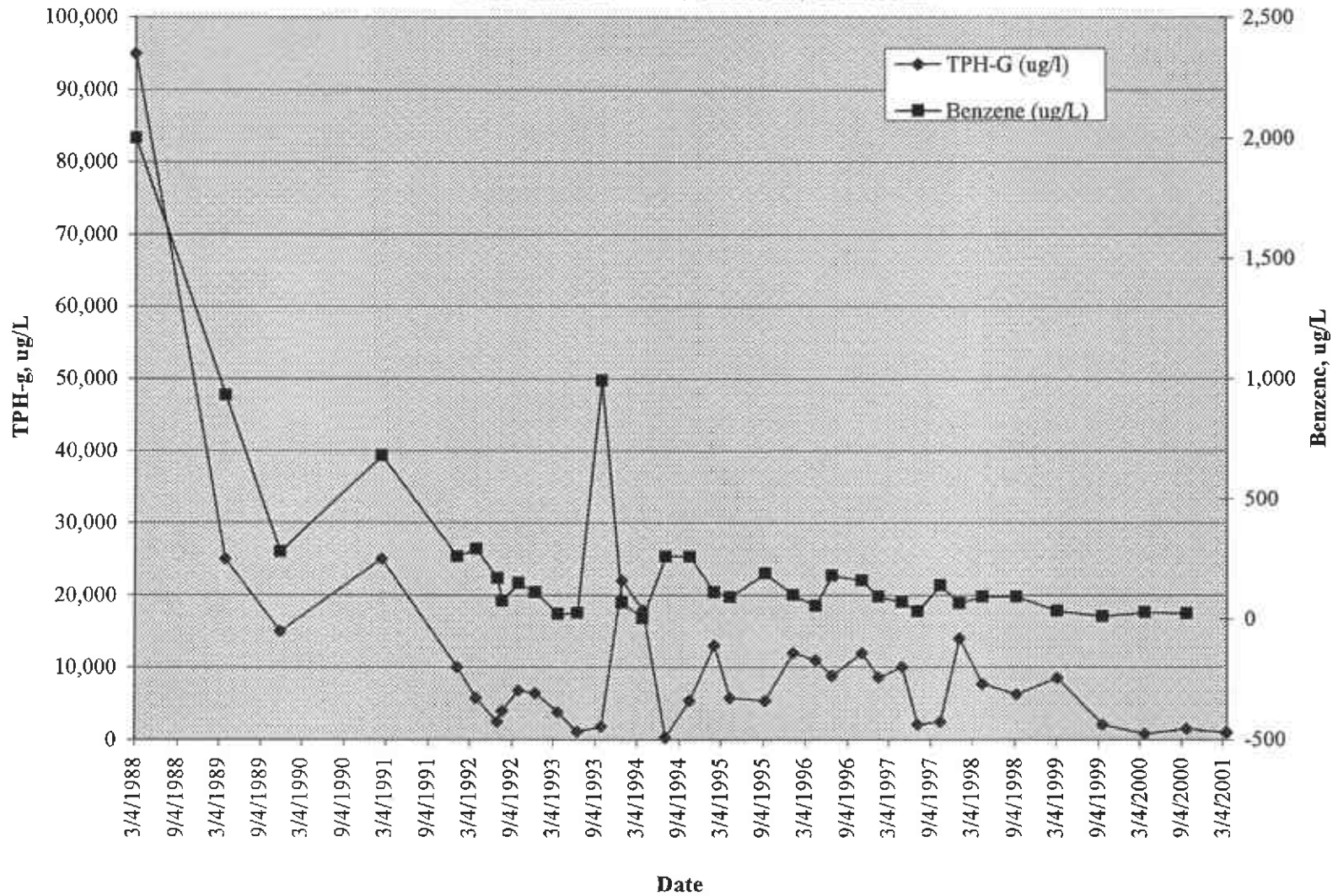


Chart 2
MTBE Concentrations, Well MW-1
BP Service Station 11266, Alameda, California

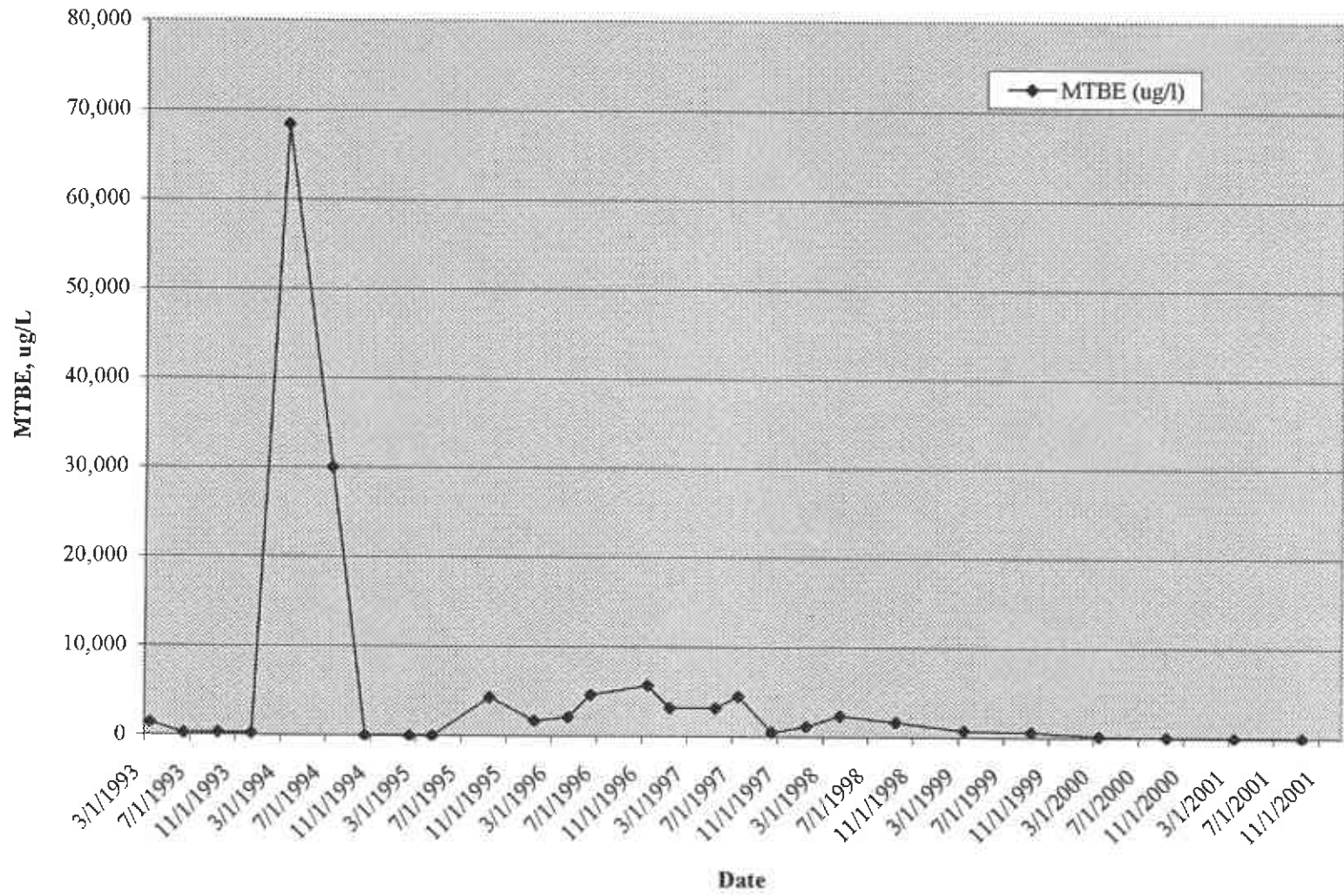


Chart 3
TPH-g and Benzene Concentrations, Well MW-3
Former BP Service Station 11266, Alameda, California

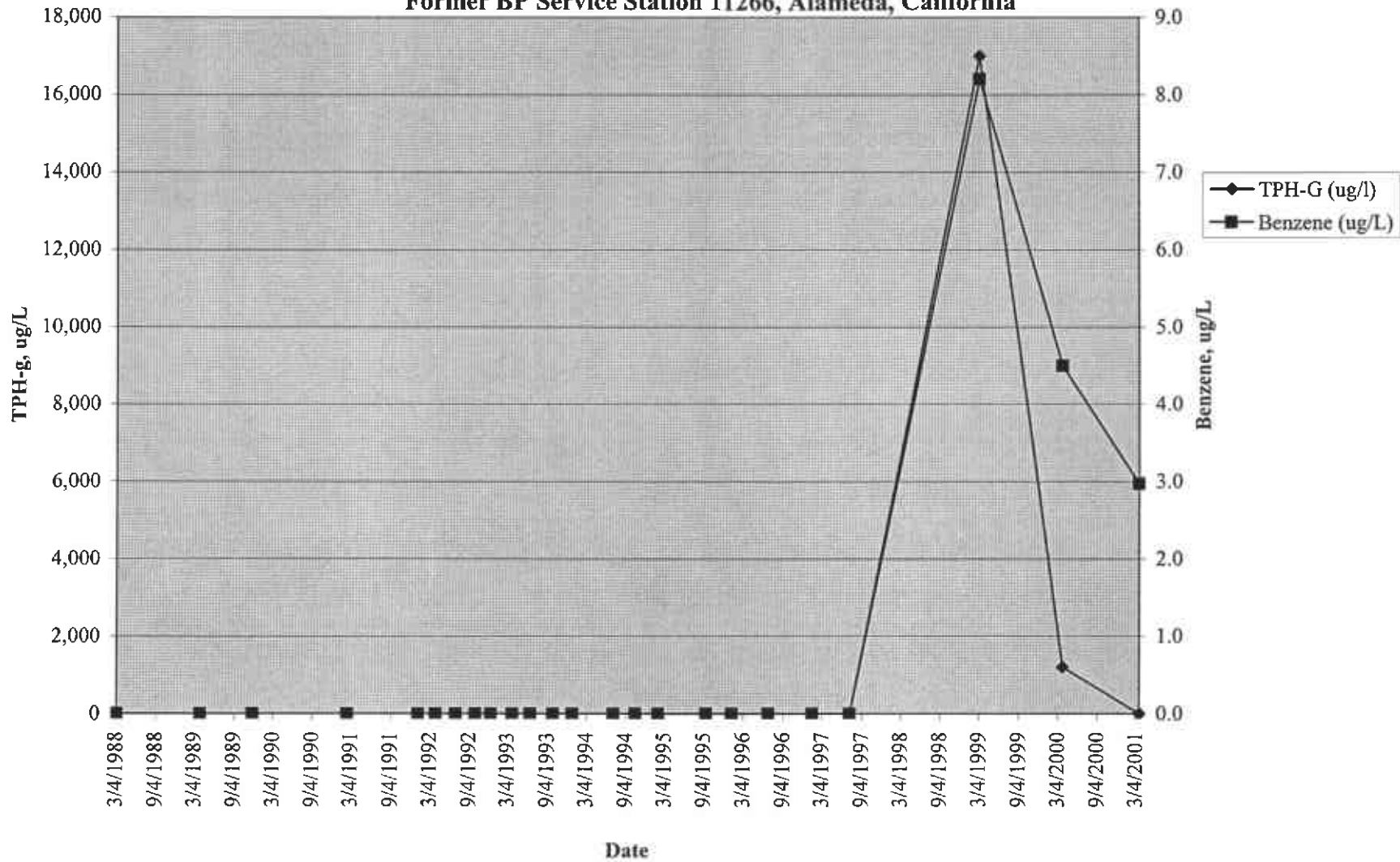
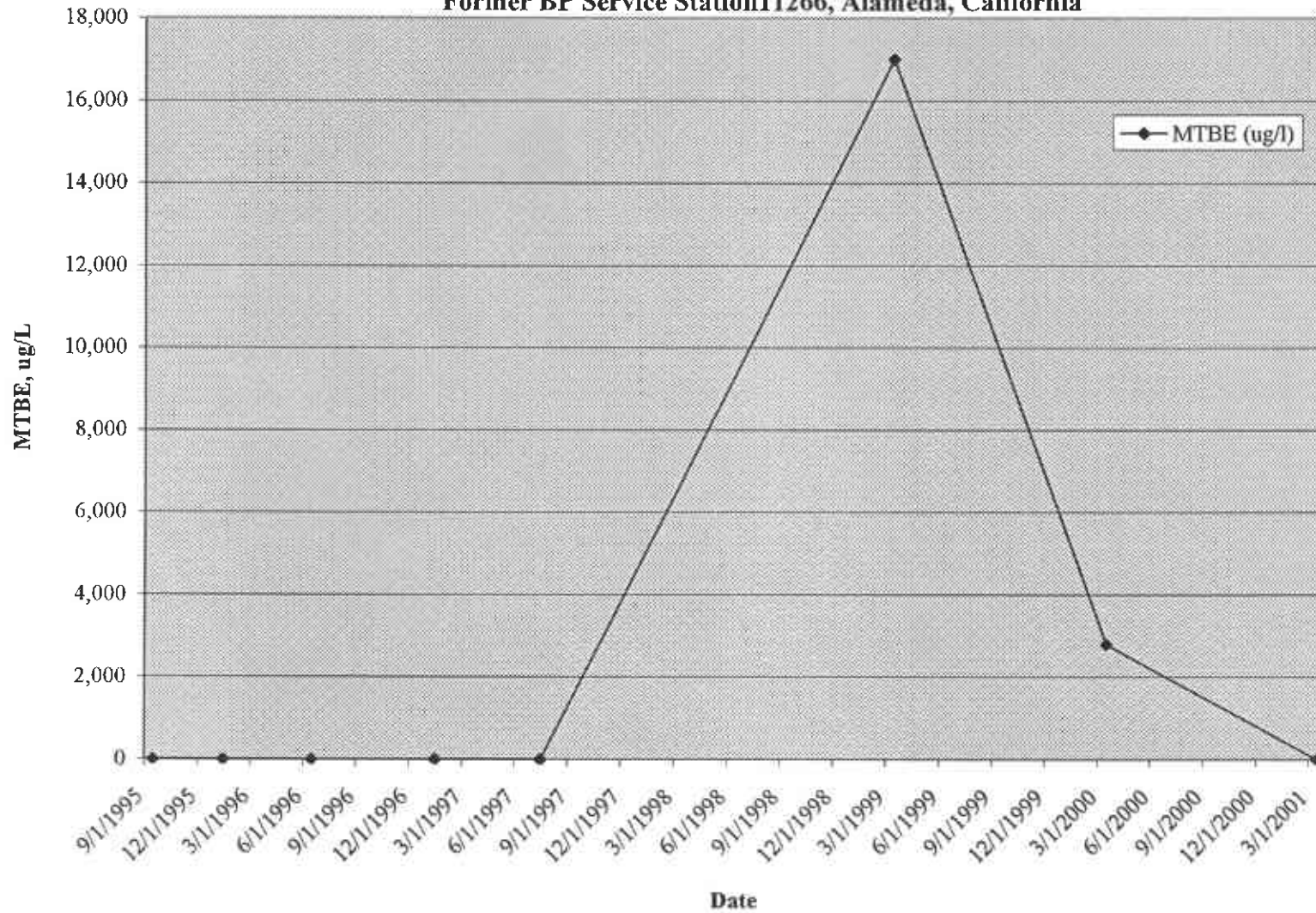
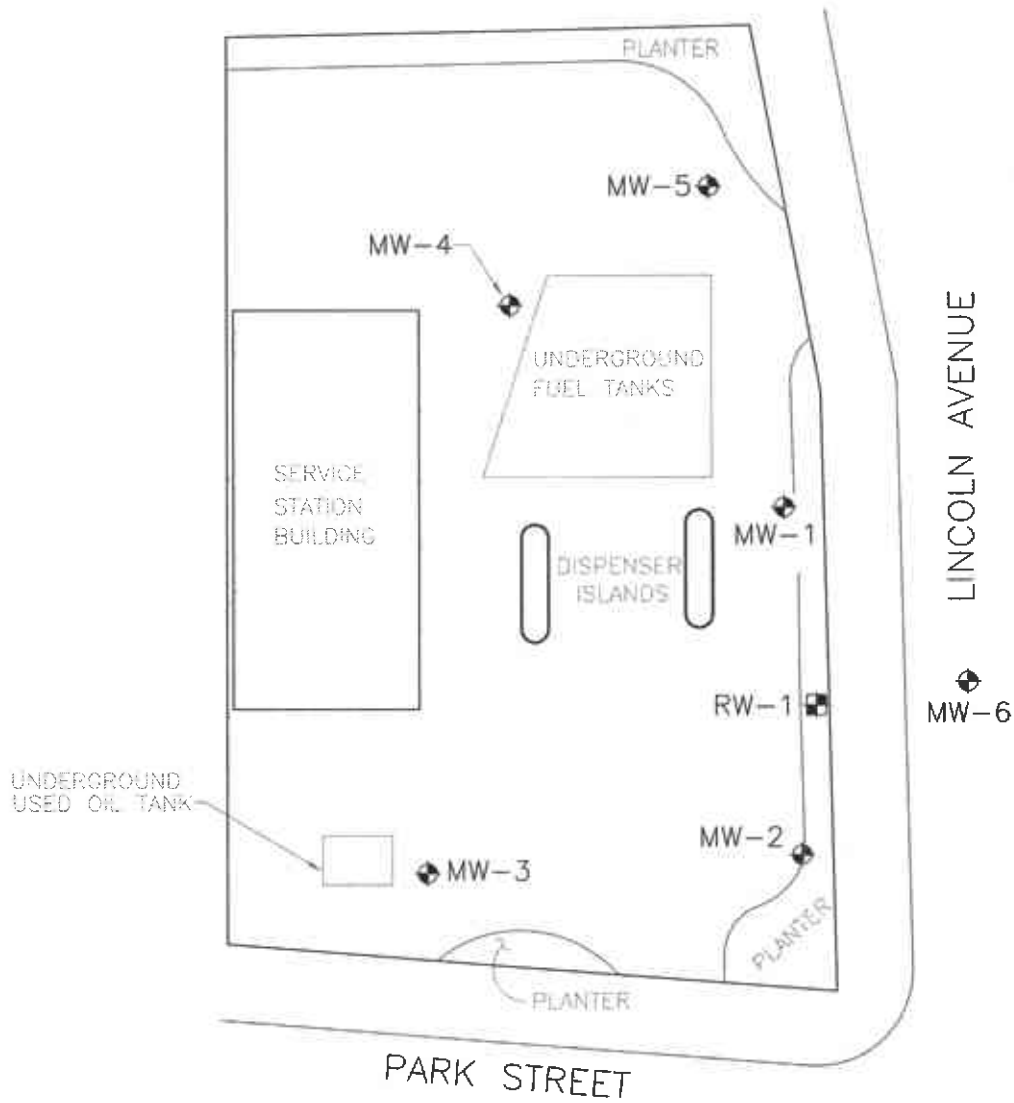


Chart 4
MTBE Concentrations, Well MW-3
Former BP Service Station 11266, Alameda, California



X:\v_enn\waste\BP_GEM\Site\RMH_Sites\BP_Heritage\11256\Reports\Monitoring\Ch. 3_2002\1_saha-map.dwg

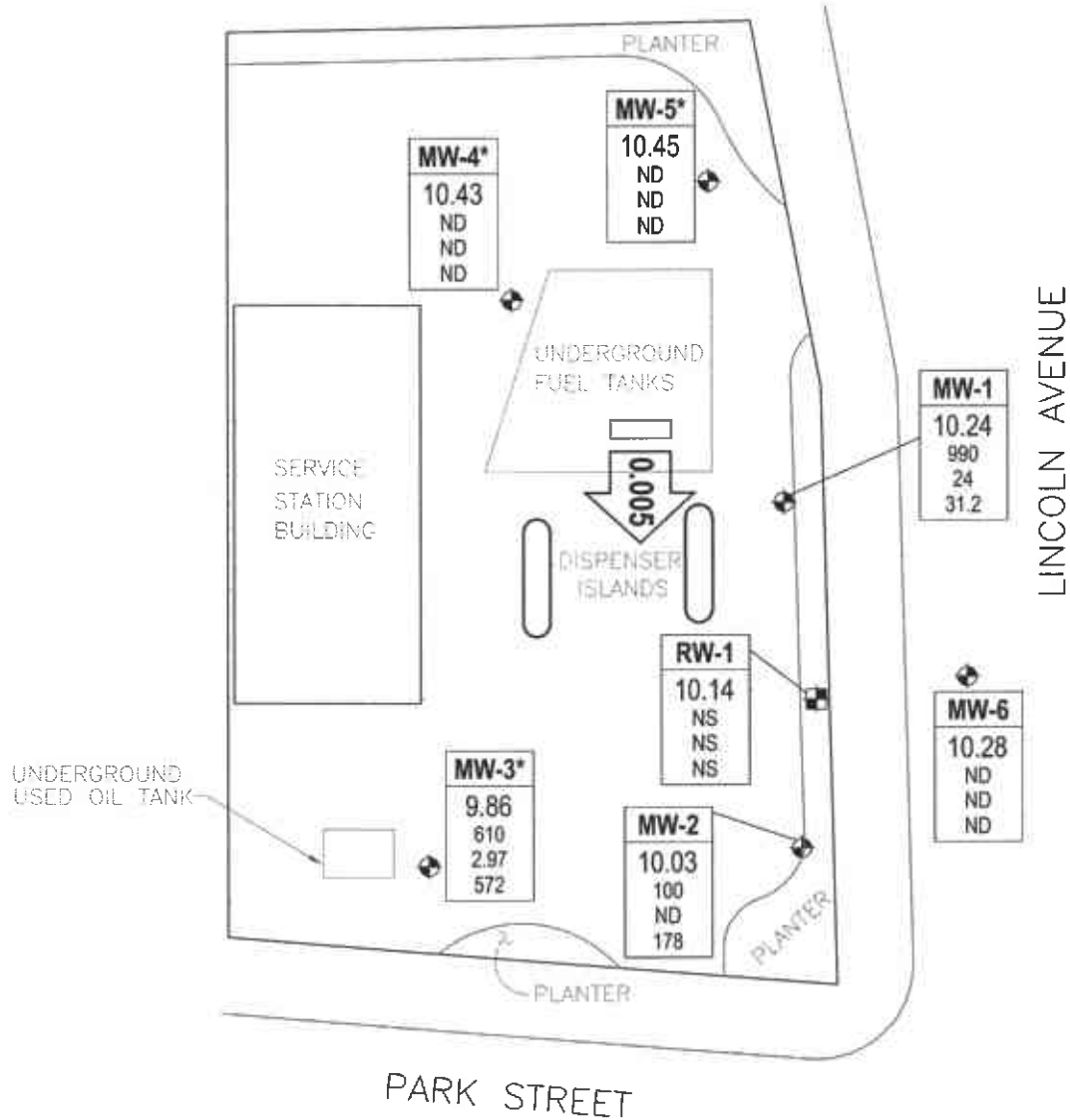


LEGEND

- ⊕ GROUNDWATER MONITORING WELL
- ⊞ GROUNDWATER RECOVERY WELL



URS	Project No. 38485933	SITE MAP	FIGURE 1
	Former BP Service Station #11266 1541 Park Street Alameda, California		



LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- | |
|---------|
| Well |
| ELEV |
| TPH-g |
| Benzene |
| MTBE |

 WELL DESIGNATION
- | |
|---------|
| ELEV |
| TPH-g |
| Benzene |
| MTBE |

 GROUNDWATER ELEVATION (FT/MSL)
- | |
|---------|
| TPH-g |
| Benzene |
| MTBE |

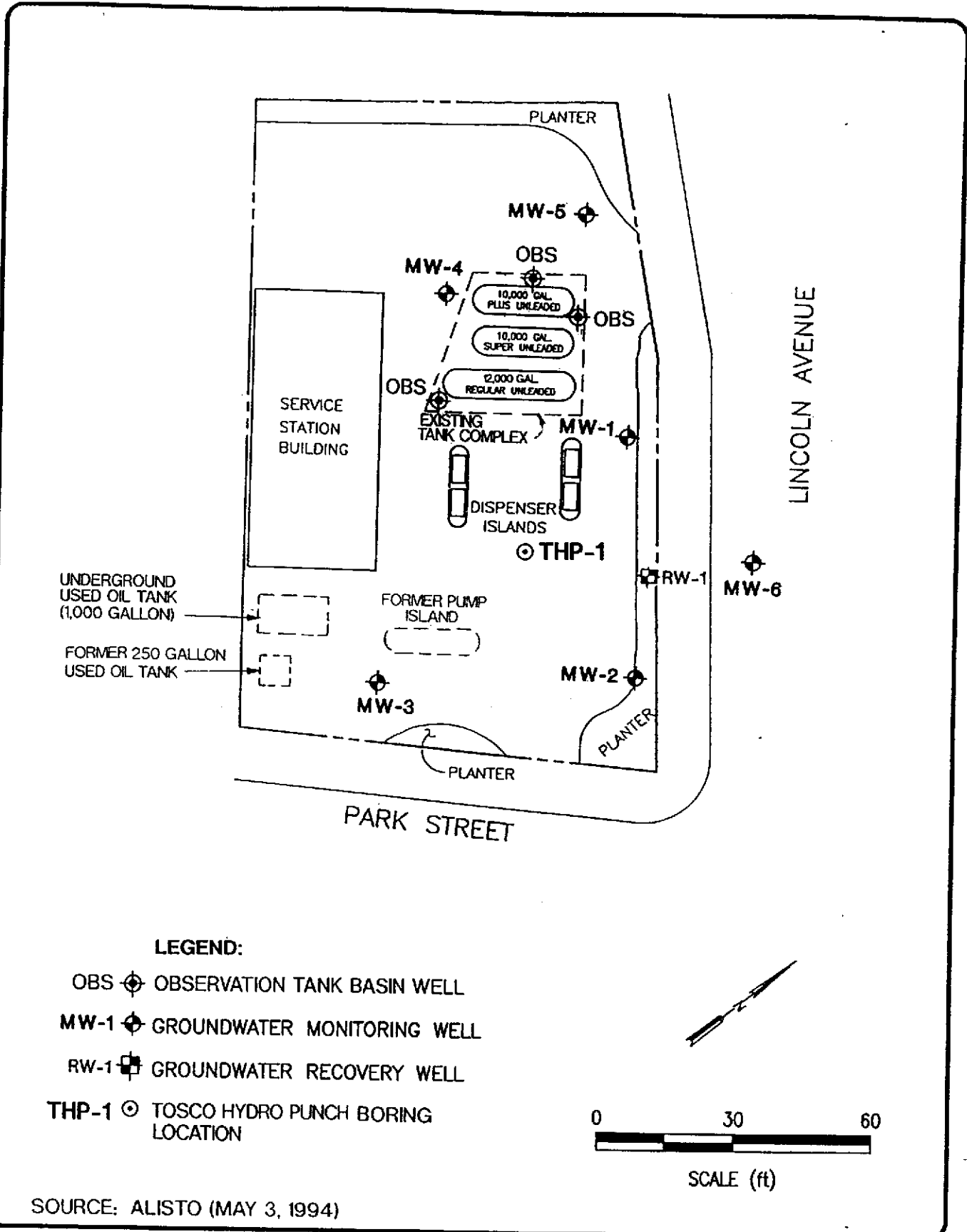
 TPH-g, BENZENE AND MTBE CONCENTRATIONS (µg/L)
- NS NOT SAMPLED
- * NOT SAMPLED ON 9/18/01
MOST RECENT DATA USED (3/21/02)
- APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT (SOURCE: RRM, 9/18/01)



	Project No. 38485933	GROUNDWATER ELEVATIONS AND CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER Third Quarter 2001 (September 18, 2001)	FIGURE 2
	Former BP Service Station #11266 1541 Park Street Alameda, California		

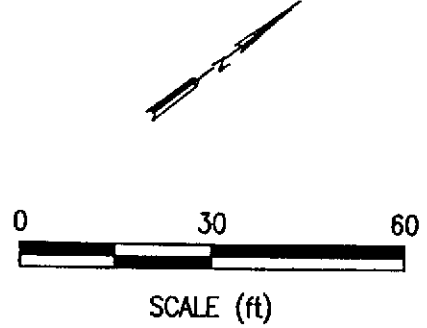
APPENDIX A

FIGURES AND SUMMARY TABLES FROM PREVIOUS CONSULTANTS



LEGEND:

- OBS ⊕ OBSERVATION TANK BASIN WELL
- MW-1 ⊕ GROUNDWATER MONITORING WELL
- RW-1 ⊕ GROUNDWATER RECOVERY WELL
- THP-1 ⊙ TOSCO HYDRO PUNCH BORING LOCATION



SOURCE: ALISTO (MAY 3, 1994)



DATE 12-20-94
 OWN. MLP
 REV. _____
 APPR. _____
 PROJECT NO. _____
 0952-136.03

Figure A-1
 TOSCO #11266
 1541 PARK STREET
 ALAMEDA, CALIFORNIA
SITE PLAN

Table A-1

Site Number 11266
1541 Park Street, Alameda, California

Soil Sample Results of Analyses (ppm)

Sample Number	Depth (feet)	Date Collected	California DHS LUFT Method TPH-G	California DHS LUFT Method Hydrocarbon Scan			BTEX EPA Method 5030/8020			
			TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Total Xylenes	
THP1-S-6.5-7*	6.5-7	11/01/94	nd	nd	nd	nd	nd	nd	nd	
THP1-S-10-10.5	10-10.5	11/01/94	nd	nd	nd	nd	nd	nd	nd	

Groundwater Sample Results of Analyses (ppb)

Sample Number	Depth to Water (feet)	Date Sampled	California DHS LUFT Method TPH-G	California DHS LUFT Method Hydrocarbon Scan			BTEX EPA Method 5030/8020			
			TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Total Xylenes	
THP1-W	n/a	11/01/94	3,000**	nd	nd	0.8	1	nd	1	
MW-3	10.79	11/02/94	nd	nd	nd	nd	nd	nd	nd	
BLK-W	n/a	11/01/94	nd	—	—	nd	nd	nd	nd	

NOTE: TPH-G = Total petroleum hydrocarbons as gasoline.
 TPH-D = Total petroleum hydrocarbons as diesel.
 TPH-O = Total petroleum hydrocarbons as oil.
 nd = Not detected at or above method reporting limit.
 n/a = Not applicable.
 — = Not analyzed.

TW = Tosco well.
 TB = Tosco boring.
 TD = Tosco dispenser soil sample.
 THP = Tosco HydroPunch.
 SGP = Soil gas probe.
 BLK = Tosco HydroPunch equipment blank sample.
 * = THP1 is referred to as HP1 on the lab reports.
 ** = Discrete peaks not typical of gasoline noted in lab report (Attachment D).



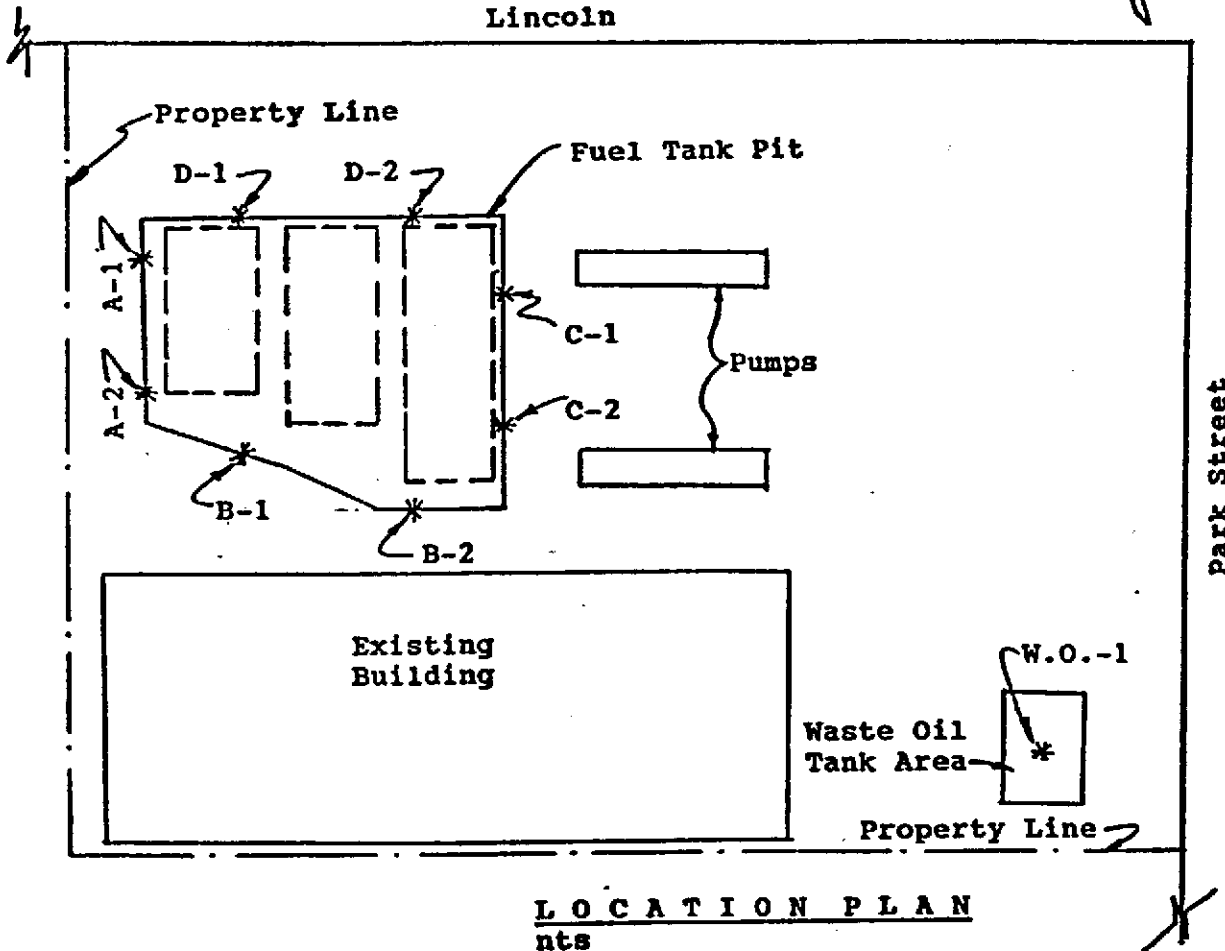
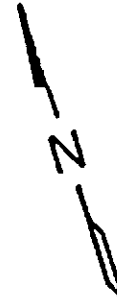
KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 676-9100 (707) 746-6915



LOCATION PLAN
nts

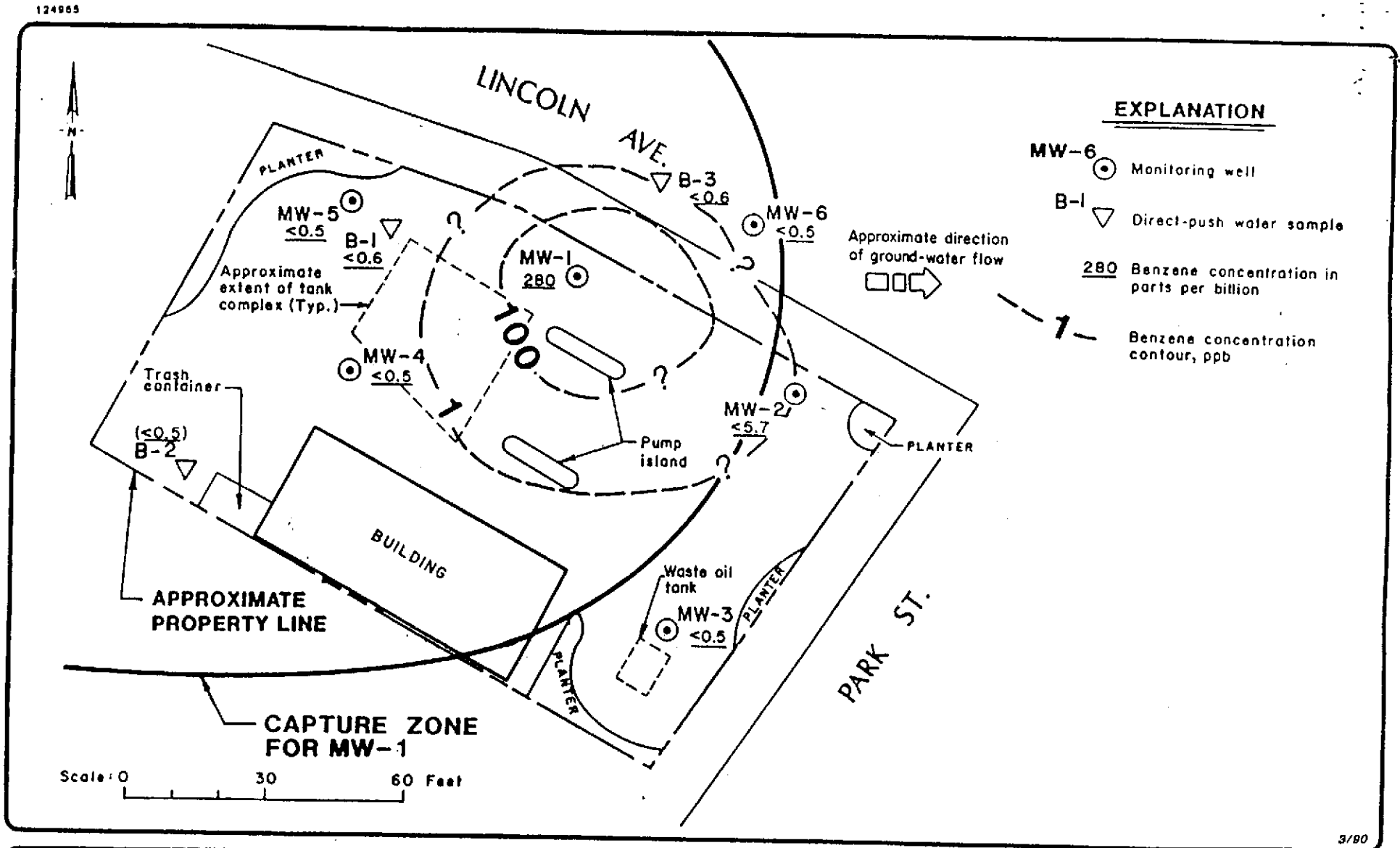
* Sample Location

MOBIL Service Station
1541 Park Street
Alameda, California

Source: KEI, October 12, 1987

Figure C-1

COPY TO BP



EMCON
Associates

BP OIL CORPORATION
SERVICE STATION No. 11266
SITE ASSESSMENT
ALAMEDA, CALIFORNIA

DISSOLVED BENZENE CONCENTRATION CONTOURS
AND CAPTURE ZONE

FIGURE

6

PROJECT NO.
C90-04.06

TABLE 1
SUMMARY OF LABORATORY ANALYSES
(all analyses in parts per million)

<u>Sample #</u>	<u>Type</u>	<u>Depth</u>	<u>Total Hydrocarbon</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylene</u>
A1	soil	11.5'	<1.0	<0.1	<0.1	<0.1
A2	Soil	11.5'	<1.0	<0.1	<0.1	<0.1
B1	soil	11.5'	<1.0	<0.1	<0.1	<0.1
B2	soil	11.5'	340	<0.1	<0.1	8.6
C1	soil	11.5'	3200	81	42	450
C2	soil	11.5'	490	2.6	13	180
D1	soil	11.5'	<1.0	<0.1	<0.1	<0.1
D2	soil	11.5'	75	0.3	6.1	40
W.O-1*	soil	7.5'	<10	-----	-----	-----
W-1	water	12'	530	6.3	66	200

* TOG = 150 ppm

Source: KEI, October 12, 1987

Table C-1

COPY TO BP

KEI-J87-097SD
September 29, 1987
Page 2

<u>Composite Sample</u>	<u>Hydrocarbons (ppm)</u>	<u>Benzene (ppm)</u>	<u>Toluene (ppm)</u>	<u>Xylene (ppm)</u>
Comp A	10	<0.1	0.2	7.3
Comp B	2.9	<0.1	0.5	2.3
Comp C	9.4	0.1	0.2	6.5
Comp D	20	0.2	0.3	7.5

Based on these analyses, the low level contaminants in the soil will not pose any impact to the environment. The THC levels in the soil are considered to be non-hazardous by the Regional Water Quality Control Board. Therefore, no further sampling is necessary and the soil may be disposed of at any Class III disposal site.

Also please find enclosed a copy of the Oakland Scavenger Customer warranty signed by our office for the disposal of the soil to Durham Road Landfill in Oakland, California.

A copy of this report should be sent to the Alameda County Department of Environmental Health.

Should you have any questions on this report, please do not hesitate to contact me at (415) 676-9100 or (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.



Mardo Kaprealian

Attachment: Laboratory Results
Chain of Custody
Customer Warranty

cc: J. Keith

Source: KEI, September 29, 1987

Table C-2

COPY TO BP

TABLE - 1

Results of Soil Analyses - Parts Per Million (ppm)

<u>Sample Number</u>	<u>Depth (feet)</u>	<u>TPH</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylene</u>	<u>Ethylbenzene</u>
MW-1	10	2.4	0.1	0.2	0.7	<0.1
MW-2	10	<1.0	<0.1	<0.1	<0.1	<0.1
MW-3	10	<1.0	<0.1	<0.1	<0.1	<0.1

Results of Water Analyses - parts per billion (ppb)

<u>Sample Number</u>	<u>Depth (feet)</u>	<u>TPH</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylene</u>	<u>Ethylbenzene</u>
MW-1	9.50	95,000	2000	5900	10,000	1100
MW-2	10.208	<50	<0.5	<0.5	<0.5	<0.5
MW-3+	10.667	<50	<0.5	<0.5	<0.5	<0.5

* TPH = Total Petroleum Hydrocarbon

+ MW-3 (water) had TPH diesel <50 ppb; TOG <50 ppb; EPA 601 and 602 constituents all non-detectable.

KEI-P87-0907.QR2
 January 31, 1989

TABLE 2
 SUMMARY OF LABORATORY ANALYSES
 (All results in ppb)

<u>Date</u>	<u>Well #</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl-benzene</u>
12/28/88	MW-1	9.88	2,800	40	7.1	110	2.3
	MW-2	10.67	<50	<0.5	<0.5	0.6	<0.5
	MW-3*	10.96	<50	<0.5	<0.5	<0.5	<0.5
10/12/88	MW-1	10.58	14,000	180	420	7.50	110
	MW-2	11.00	<50	<0.5	<0.5	<0.5	<0.5
	MW-3	11.40	<50	<0.5	<0.5	<0.5	<0.5
2/17/88	MW-1	9.50	95,000	2,000	5,900	10,000	1,100
	MW-2	10.21	<50	<0.5	<0.5	<0.5	<0.5
	MW-3	10.67	<50	<0.5	<0.5	<0.5	<0.5

*TDS - 1200 mg/l

KEI-P87-0907.R4
April 19, 1989

TABLE 2

SUMMARY OF LABORATORY ANALYSES
SOIL

(Results in ppm)
(Collected on March 22, 1989)

<u>Sample Number</u>	<u>Depth (feet)</u>	<u>TPH</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethylbenzene</u>
MW4	5	ND	ND	ND	ND	ND
MW4	10	ND	ND	ND	ND	ND
MW5	6	ND	ND	ND	ND	ND
MW5	10	ND	ND	ND	ND	ND
MW6	5	ND	ND	ND	ND	ND
MW6	10	ND	ND	ND	ND	ND
Detection Limits		1.0	0.05	0.1	0.1	0.1

SUMMARY OF LABORATORY ANALYSES
WATER

(Results in ppb)
(Collected on March 29, 1989)

<u>Sample Number</u>	<u>Depth (feet)</u>	<u>TPH</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethylbenzene</u>
MW1	8.93	25,000	930	2,600	3,100	24
MW2	9.77	ND	1.1	0.78	1.7	ND
MW3	10.28	ND	ND	ND	ND	ND
MW4	9.30	ND	ND	ND	ND	ND
MW5	8.33	ND	ND	ND	ND	ND
MW6	9.28	ND	ND	ND	ND	ND
Detection Limits		50.0	0.5	0.5	0.5	0.5

TPH = total petroleum hydrocarbon as gasoline.

ND = Non-detectable.

Table 1

SUMMARY OF GROUND-WATER ELEVATION AND CHEMISTRY DATA ($\mu\text{g/l}$, ppb)

Well	Sample Date	Depth to Ground Water (ft)	Top-of-Casing Elevation (ft-msl)	Ground-Water Elevation (ft-msl)	TPH Gas	Benzene	Toluene	Xylenes	Ethylbenzene
MW-1	11/28/89	9.77	22.63	12.86	15,000	280	880	1,200	340
MW-2	11/28/89	10.25	22.75	12.50	170 ¹	<5.7 ²	<1	<3	<1
MW-3	11/28/89	10.72	23.45	12.73	<50	<0.5	<1	<3	<1
MW-4	11/28/89	10.41	23.63	13.22	<50 ¹	<0.5	<1	<3	<1
MW-5	11/28/89	9.83	22.87	13.04	<50	<0.5	<1	<3	<1
MW-6	11/28/89	10.30	22.85	12.55	<50	<0.5	<1	<3	<1
B-1*	11/15/89	NM	--	--	3	<0.6	2	<0.8	0.6
B-2*	11/15/89	NM	--	--	3	<0.6	2	<0.8	1
B-3*	11/15/89	NM	--	--	14	<0.6	1	<0.8	13
B-4	11/15/89	NM	--	--	12	<0.6	5	<0.8	<0.6
B-5	11/15/89	NM	--	--	4	<0.6	2	<0.8	<0.6

1. An unknown, discrete, volatile, non-fuel hydrocarbon was observed.

2. Raised detection limit due to unknown volatile component.

* Direct push ground-water samples

NM = Not measured

KEI-J90-0907.R2
October 16, 1990

TABLE 1
SUMMARY OF LABORATORY ANALYSES
(Collected on September 21, 1990)

<u>Sample</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl-benzene</u>	<u>Organic Lead</u>
Comp A	ND	ND	ND	ND	ND	ND
Detection Limits	1.0	0.0050	0.0050	0.0050	0.0050	0.050

ND = Non-detectable.

Results in parts per million (ppm), unless otherwise indicated.

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER TREATMENT SYSTEM OPERATION
 BP OIL COMPANY SERVICE STATION NO. 11266
 1541 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-050

Sample	Date	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	LEAD (ppb)	MEK (ppb)	Acetone (ppb)	MTBE (ppb)	LAB
I-1	02/04/93	200	—	220	720	110	470	—	—	—	—	PAC
I-1	03/03/93	—	—	120	360	42	970	ND<100	—	—	—	PAC
I-1	04/12/93	—	—	19	30	ND<5.0	180	ND<3	130	51	—	PAC
I-1	05/17/93	—	—	ND<5.0	ND<5.0	ND<5.0	55	57	ND<50	ND<50	—	PAC
I-1	06/14/93	ND<50	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	24	ND<50	ND<50	—	PAC
I-1	07/26/93	—	—	ND<5.0	ND<5.0	ND<5.0	44	26	ND<50	ND<50	—	PAC
I-1	08/17/93	—	—	ND<5.0	ND<5.0	ND<5.0	44	ND<3	96	ND<50	—	PAC
I-1	09/28/93	—	730	49	29	14	97	ND<3	—	—	900	PAC
A-1	02/04/93	140	—	5	14	8	6	—	—	—	—	PAC
A-1	03/03/93	—	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<100	—	—	—	PAC
A-1	04/12/93	—	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<3	ND<50	ND<50	—	PAC
A-1	05/17/93	—	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	4	ND<50	ND<50	—	PAC
A-1	06/14/93	—	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<3	ND<50	ND<50	—	PAC
A-1	07/26/93	—	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<3	ND<50	ND<50	—	PAC
A-1	08/17/93	—	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<3	ND<50	ND<50	—	PAC
A-1	09/28/93	—	580	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<3	—	—	880	PAC
E-1	02/04/93	ND<50	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	—	—	—	—	PAC
E-1	03/03/93	—	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<100	—	—	—	PAC
E-1	04/12/93	—	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<3	ND<50	ND<50	—	PAC
E-1	05/17/93	—	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	12	ND<50	ND<50	—	PAC
E-1	06/14/93	ND<50	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<3	ND<50	ND<50	—	PAC
E-1	07/26/93	—	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<3	ND<50	ND<50	—	PAC
E-1	08/17/93	—	—	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<3	ND<50	ND<50	—	PAC
E-1	09/28/93	—	460	ND<5.0	ND<5.0	ND<5.0	ND<5.0	10	—	—	730	PAC

ABBREVIATIONS:

- TPH-D Total petroleum hydrocarbons as diesel
- B Benzene
- T Toluene
- E Ethylbenzene
- X Total xylenes
- MEK 2-Butanone
- MTBE Methyl tertiary butyl ether
- ppb Parts per billion
- ND Not detected above reported detection limits
- PAC Paca, Inc.

10-050A.WQ1

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11266
 1541 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-050

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-1	03/04/88	19.19	---	---	95000	2000	5900	1100	10000	---	---
MW-1	03/29/89	19.19	---	---	25000	930	2600	24	3100	---	---
MW-1	11/28/89	19.19	---	---	15000	280	880	340	1200	---	---
MW-1	02/13/91	19.19	---	---	25000	680	2700	1100	3200	---	---
MW-1	01/08/92	19.19	---	---	10000	260	1100	570	2000	---	---
MW-1	03/30/92	19.19	8.15	11.04	5800	290	570	500	1100	---	PACE
MW-1	07/02/92	19.19	9.38	9.81	2500	170	60	310	300	---	ANA
MW-1	07/22/92	19.19	9.62	9.57	---	---	---	---	---	---	---
MW-1	10/02/92	19.19	9.98	9.21	4000	86	190	270	350	---	ANA
QC-1 (c)	10/02/92	---	---	---	3600	89	180	270	340	---	ANA
MW-1	12/14/92	19.19	9.90	9.29	6800	75	540	200	670	---	ANA
QC-1 (c)	12/14/92	---	---	---	5900	68	480	190	600	---	ANA
MW-1	03/24/93	19.19	8.52	10.67	6400	150	310	370	710	---	PACE
MW-1	06/17/93	19.19	9.37	9.82	3800	110	160	310	480	---	PACE
MW-1	09/29/93	19.19	10.80	8.39	1100	22	16	54	110	---	PACE
MW-1	12/28/93	19.19	9.27	9.92	1800	26	110	77	300	---	PACE
MW-1	03/29/94	19.19	8.77	10.42	22000	990	560	970	2000	3.1	PACE
MW-1	07/07/94	19.19	9.18	10.01	18000	67	32	250	140	---	PACE
MW-2	03/04/88	19.32	---	---	ND	ND	ND	ND	ND	---	---
MW-2	03/29/89	19.32	---	---	ND	1.1	0.78	ND	1.7	---	---
MW-2	11/28/89	19.32	---	---	170	ND	ND	ND	ND	---	---
MW-2	02/13/91	19.32	---	---	150	1.4	ND	ND	0.9	---	---
MW-2	01/08/92	19.32	---	---	ND	1.4	ND	ND	1.1	---	---
MW-2	03/30/92	19.32	9.03	10.29	91	0.7	ND	ND	ND	---	PACE
MW-2	07/02/92	19.32	9.96	9.36	150	3.1	0.6	0.6	1.1	---	ANA
MW-2	07/22/92	19.32	10.12	9.20	---	---	---	---	---	---	---
MW-2	10/02/92	19.32	10.42	8.90	56	ND<0.5	0.8	0.8	1.2	---	ANA
MW-2	12/14/92	19.32	10.77	8.55	210	1.5	ND<0.5	0.9	2.7	---	ANA
MW-2	03/24/93	19.32	9.33	9.99	94	0.8	ND<0.5	ND<0.5	0.9	---	PACE
QC-1 (c)	03/24/93	---	---	---	150	1.8	0.6	1.3	1.3	---	PACE
MW-2	06/17/93	19.32	9.91	9.41	ND<50	ND<0.5	ND<0.5	ND<0.5	0.7	---	PACE
MW-2	09/29/93	19.32	11.39	7.93	68	ND<0.5	0.9	0.7	1.9	---	PACE
MW-2	12/28/93	19.32	9.75	9.57	260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
QC-1 (c)	12/28/93	---	---	---	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-2	03/29/94	19.32	9.39	9.93	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.9	PACE
QC-1 (c)	03/29/94	---	---	---	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-2	07/07/94	19.32	9.68	9.64	1100	0.6	1.7	0.6	3.2	---	PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11266
 1541 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-050

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-3	03/04/88	19.99	---	---	ND	ND	ND	ND	ND	---	---
MW-3	03/29/89	19.99	---	---	ND	ND	ND	ND	ND	---	---
MW-3	11/28/89	19.99	---	---	ND	ND	ND	ND	ND	---	---
MW-3	02/13/91	19.99	---	---	ND	ND	ND	ND	ND	---	---
MW-3	01/08/92	19.99	---	---	ND	ND	ND	ND	ND	---	---
MW-3	03/30/92	19.99	9.71	10.28	ND	ND	ND	ND	ND	---	PACE
MW-3	07/02/92	19.99	10.52	9.47	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
MW-3	07/22/92	19.99	10.62	9.37	---	---	---	---	---	---	---
MW-3	10/02/92	19.99	10.88	9.13	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
MW-3	12/14/92	19.99	10.53	9.46	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
MW-3	03/24/93	19.99	9.06	10.93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-3	06/17/93	19.99	10.44	9.55	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-3	09/29/93	19.99	11.06	8.93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-3	12/28/93	19.99	9.43	10.56	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-3	03/29/94	19.99	10.01	9.98	---	---	---	---	ND<0.5	---	---
MW-3	07/07/94	19.99	10.14	9.85	ND<50	ND<0.5	0.7	ND<0.5	ND<0.5	---	PACE
QC-1 (c)	07/07/94	---	---	---	ND<50	ND<0.5	0.7	ND<0.5	ND<0.5	---	PACE
MW-4	03/04/88	20.17	---	---	ND	ND	ND	ND	ND	---	---
MW-4	03/29/89	20.17	---	---	ND	ND	ND	ND	ND	---	---
MW-4	11/28/89	20.17	---	---	430	6.2	0.6	12	3.3	---	---
MW-4	02/13/91	20.17	---	---	ND	ND	ND	ND	ND	---	---
MW-4	01/08/92	20.17	---	---	ND	ND	ND	ND	ND	---	---
MW-4	03/30/92	20.17	8.73	11.44	ND	ND	ND	ND	ND	---	PACE
MW-4	07/02/92	20.17	10.04	10.13	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
MW-4	07/22/92	20.17	10.26	9.91	---	---	---	---	---	---	---
MW-4	10/02/92	20.17	10.63	9.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
MW-4	12/14/92	20.17	10.02	10.15	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
MW-4	03/24/93	20.17	9.08	11.09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-4	06/17/93	20.17	10.03	10.14	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-4	09/29/93	20.17	10.96	9.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-4	12/28/93	20.17	9.33	10.84	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
MW-4	03/29/94	20.17	9.42	10.75	---	---	---	---	---	---	---
MW-4	07/07/94	20.17	9.82	10.35	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11266
 1541 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-050

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
MW-5	03/04/88	19.41	--	--							
MW-5	03/29/89	19.41	--	--	ND	ND	ND	ND	ND	--	--
MW-5	11/28/89	19.41	--	--	ND	ND	ND	ND	ND	--	--
MW-5	02/13/91	19.41	--	--	ND	ND	ND	ND	ND	--	--
MW-5	01/08/92	19.41	--	--	ND	ND	ND	ND	ND	--	--
MW-5	03/30/92	19.41	7.85	11.56	ND	ND	ND	ND	ND	--	--
MW-5	07/02/92	19.41	9.27	10.14	ND	ND	ND	ND	ND	--	PACE
MW-5	07/22/92	19.41	9.55	9.86	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-5	10/02/92	19.41	9.97	9.44	--	--	--	--	--	--	--
MW-5	12/14/92	19.41	9.14	10.27	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-5	03/24/93	19.41	8.17	11.24	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-5	06/17/93	19.41	8.29	11.12	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
QC-1 (c)	06/17/93	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-5	09/29/93	19.41	10.31	9.10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-5	12/28/93	19.41	8.91	10.50	ND<50	ND<0.5	ND<0.5	ND<0.5	0.6	--	PACE
MW-5	03/29/94	19.41	8.50	10.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-5	07/07/94	19.41	8.99	10.42	--	--	--	--	--	--	--
					ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-6	03/04/88	19.40	--	--							
MW-6	03/29/89	19.40	--	--	ND	ND	ND	ND	ND	--	--
MW-6	11/28/89	19.40	--	--	ND	ND	ND	ND	ND	--	--
MW-6	02/13/91	19.40	--	--	ND	ND	ND	ND	ND	--	--
MW-6	01/08/92	19.40	--	--	ND	ND	ND	ND	ND	--	--
MW-6	03/30/92	19.40	8.86	10.54	ND	ND	ND	ND	ND	--	--
MW-6	07/02/92	19.40	9.94	9.46	ND	ND	ND	ND	ND	--	PACE
MW-6	07/22/92	19.40	10.10	9.30	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-6	10/02/92	19.40	10.48	8.92	--	--	--	--	--	--	--
MW-6	12/14/92	19.40	10.76	8.64	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-6	03/24/93	19.40	9.19	10.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	ANA
MW-6	06/17/93	19.40	9.91	9.49	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-6	09/29/93	19.40	11.49	7.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-6	12/28/93	19.40	9.88	9.52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-6	03/29/94	19.40	9.36	10.04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE
MW-6	07/07/94	19.40	9.75	9.65	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.0	PACE
					ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	PACE

02-Sep-94

Source: Alisto, September 2, 1994

Table C-9
 Page 3 of 4

PAGE 3

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11266
 1541 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-050

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	DO (ppm)	LAB
RW-1	07/22/92	---	9.66	---	13000	1000	3400	380	2800	---	ANA
RW-1	10/02/92	---	10.28	---	---	---	---	---	---	---	---
RW-1	12/14/92	---	23.28	---	---	---	---	---	---	---	---
RW-1	03/24/93	---	8.93	---	660	21	25	8.3	100	---	PACE
RW-1	06/17/93	---	9.66	---	850	13	1.0	15	100	---	PACE
RW-1	09/29/93	19.27	23.40	-4.13	1200	26	27	11	150	---	PACE
QC-1 (c)	09/29/93	---	---	---	1200	26	28	11	160	---	PACE
RW-1	12/28/93	19.27	9.76	9.51	3500	300	220	180	480	---	PACE
RW-1	03/29/94	19.27	8.93	10.34	12000	640	1700	450	2200	6.3	PACE
RW-1	07/07/94	19.27	9.45	9.82	7600	530	1100	380	1800	---	PACE
QC-2 (d)	10/02/92	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
QC-2 (d)	12/14/92	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ANA
QC-2 (d)	03/24/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
QC-2 (d)	06/17/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
QC-2 (d)	09/29/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
QC-2 (d)	12/28/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
QC-2 (d)	03/29/94	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE
QC-2 (d)	07/07/94	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	PACE

ABBREVIATIONS:

TPH-G Total petroleum hydrocarbons as gasoline
 B Benzene
 T Toluene
 E Ethylbenzene
 X Total xylenes
 DO Dissolved Oxygen
 ppb Parts per billion
 ppm Parts per million
 --- Not measured/available/analyzed
 ND Not detected above reported detection limit
 PACE Pace, Inc.
 ANA Anamatrix, Inc.

NOTES:

- (a) Casing elevations surveyed to nearest 0.01 foot above mean sea level, with an assigned elevation of 22.82 feet (City datum).
 (b) Groundwater elevations in feet above mean sea level.
 (c) Blind duplicate.
 (d) Travel blank.

RECEIVED

NOV 18 1994

Per. *[Signature]*



November 17, 1994

NOV 21 1994

Mike Noll
EMCON Northwest
18912 N. Creek Pkwy
Bothell, WA 98011

Re: TOSCO #11266/Project #0952-136.02

Dear Mike:

Enclosed are the results of the samples submitted to our lab on November 3, 1994. For your reference, these analyses have been assigned our service request number L943424.

All analyses were performed in accordance with our laboratory's quality assurance program. Golden State / CAS is certified for environmental analyses by the California Department of Health Services (Certificate # 1296/Expiration - December 1994).

Please call if you have any questions.

Respectfully submitted,

Golden State / CAS Laboratories, Inc.

Dr. B. Gene Bennett
Laboratory Director

GB/kr

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON Northwest
 Project: Tosco #11266/#0952-136.02
 Sample Matrix: Water

Service Request: L943424
 Date Collected: 11/1/94
 Date Received: 11/3/94
 Date Extracted: NA

BTEX and TPH as Gasoline
 EPA Methods 5030/8020/Modified 8015/California DHS LUFT Method

Analyte:	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH as Gasoline
Units:	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)
Method Reporting Limit:	0.5	0.5	0.5	0.5	50

Sample Name	Lab Code	Date Analyzed	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethylbenzene µg/L (ppb)	Total Xylenes µg/L (ppb)	TPH as Gasoline µg/L (ppb)
11266-HP1-W	L943424-001	11/5/94	0.8	1	ND	1	*3000
11266-BLK-W	L943424-002	11/5/94	ND	ND	ND	ND	ND
ethod Blank	L943424-MB	11/4/94	ND	ND	ND	ND	ND

NA Not Applicable
 ND None Detected at or above the method reporting limit.
 * Chromatogram fingerprint contains discrete peaks which are not consistent with gasoline.

Approved By: *[Signature]* Date: 11-17-97

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON Northwest
Project: Tosco #11266/#0952-136.02
Sample Matrix: Water

Service Request: L943424
Date Collected: 11/1/94
Date Received: 11/3/94
Date Extracted: 11/8/94

Hydrocarbon Scan
California DHS LUFT Method

Analyte:	Mineral Spirits	Jet Fuel	Kerosene	Diesel	Hydraulic Oil
Units:	mg/L (ppm)	mg/L (ppm)	mg/L (ppm)	mg/L (ppm)	mg/L (ppm)
Method Reporting Limit:	1	1	1	1	5

Sample Name	Lab Code	Date Analyzed					
11266-HP1-W	L943424-001	11/11/94	ND	ND	ND	ND	ND
Method Blank	L943424-MB	11/10/94	ND	ND	ND	ND	ND

ND None Detected at or above the method reporting limit.

Approved By: Paula Lewis Date: 11-17-94

0004

SAbbg_2/090794

L943424.XLS - 801Scw 11/17/94

Page No.:

6925 CANOGA AVENUE

CANOGA PARK, CA 91303

818 587-5550

FAX 818 587-5555

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: EMCON Northwest
Project: Tosco #11266/#0952-136.02
Sample Matrix: Water

Service Request: L943424
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
Halogenated Volatile Organic Compounds
EPA Methods 5030/8010

Sample Name	Lab Code	Percent Recovery 4-Bromofluorobenzene
11266-HP1-W	L943424-001	94
Method Blank	L943424-MB	110

CAS Acceptance Limits: 50-130

NA Not Applicable

Approved By: *[Signature]*

Date: 11-17-97

0006

