ENVIRONMENTAL PROTECTION

00 JAN -3 PM 4:46

S. T. Hooton
Team Leader
Environmental Remediation Management

BP Exploration & Oil Inc.
255 SW 41st Street, Bldg., 13, STE N
Renton, WA 98055-4931
Phone: 425-251-0689
Fax: 425-251-0736

BP OIL

December 28, 1999

Alameda County Health Care Services Agency
Attention Mr. Larry Seto - Sr. Hazardous Materials Specialist
1131 Harbor Bay Parkway, STE 250
Alameda, CA 94502-6577

RE: Former BP Oil Site No. 11270
3255 MeCartney Road (at Island)
Alameda, CA

Dear Mr. Seto:

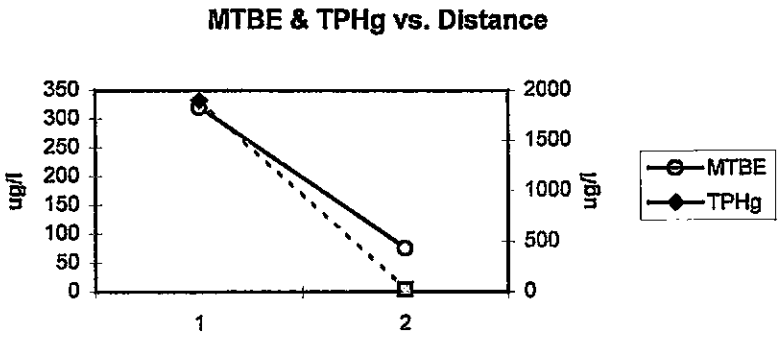
Enclosed find the 2 December 1999 *Fourth Quarter 1999 Groundwater Monitoring* report prepared on behalf of BP by Blaine Tech Services. This also responds to the November 8, 1999 letter from the Alameda County Health Care Services Agency (ACHCSA). BP sold this site to the current operator, Tosco, in 1994. The report summarizes chemical data obtained since 1992, including results associated with samples obtained on 18 October 1999.

BP addresses the concerns raised by the ACHCSA (shown in *italics*) as follows:

- *Determine if there are any downgradient sensitive receptors, and their distance from the site.*

Attached find the completed Sensitive Receptor Survey (SRS). The SRS was included in the *Preliminary Site Assessment Report*, dated January 7, 1993 by Hydro Environmental Technologies, Inc.

- *A graph with concentration vs. distance must be plotted for all contaminants.*

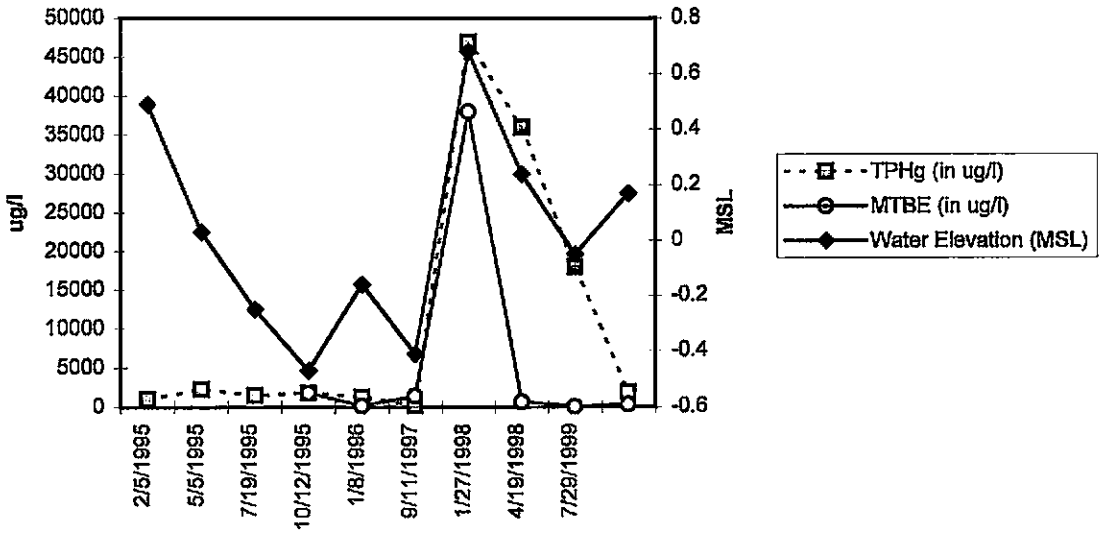


The graph shown above depicts MTBE and TPHg data from wells MW-6 and MW-7 from the Octoner 18, 1999 sampling event. The "1" on the ordinate corresponds to approximately 5 feet from the west edge of the USTs. The "2" on the ordinate corresponds to approximately 25 feet from the west edge of the USTs. Other compounds were not selected because they were detected solely in well MW-6 (with the exception of

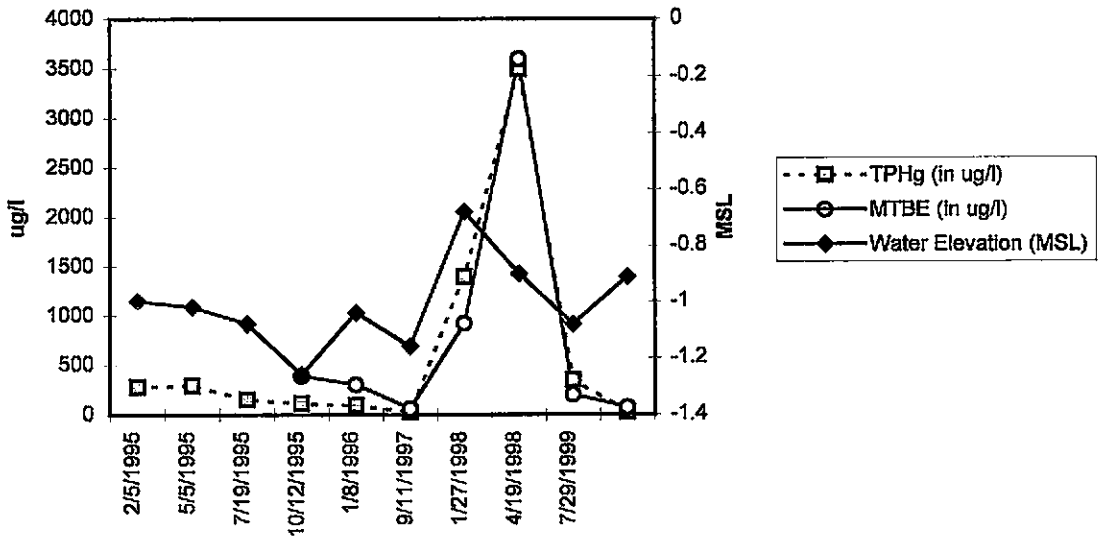
xylenes).

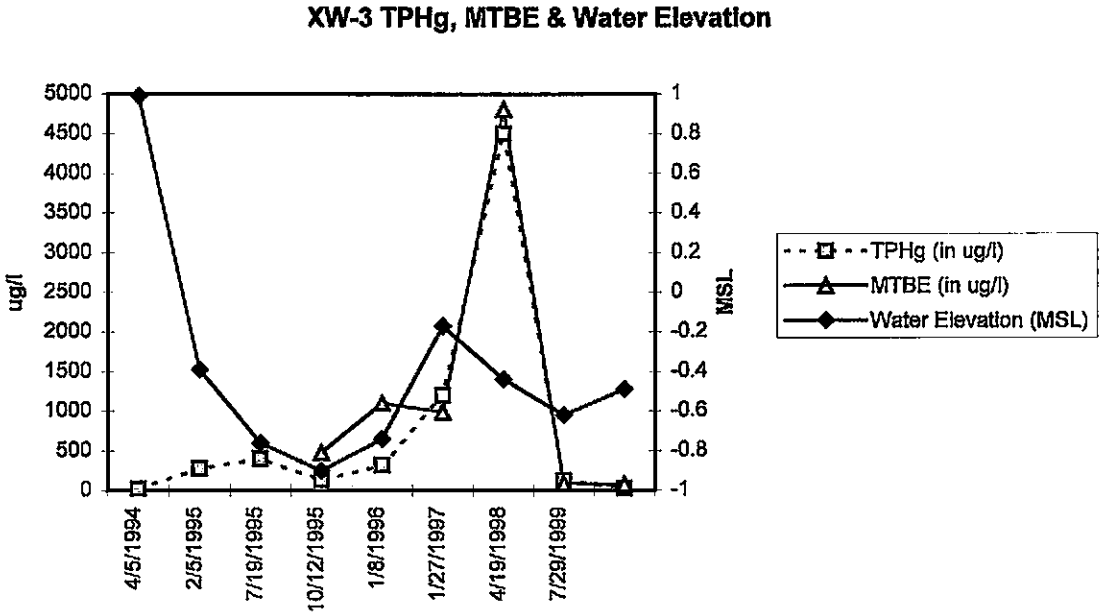
- *A graph of concentration vs. time must be plotted for all contaminants*

MW-6 TPHg, MTBE & Water Elevation



MW-7 TPHg, MTBE & Water Elevation





Other compounds were not selected because they appear to be isolated in occurrence.

- *Proof that the MTBE plume has stabilized. Further investigation may be necessary.*

I believe that the MTBE versus time graphs shown above resolve this concern.

You should also note that the monitoring wells have been previously sampled for total dissolved solids (TDS). I believe that you can agree that the TDS concentrations show that groundwater in the vicinity of the site should not be considered to be of present or future beneficial use. You will note that the averaged TDS concentrations (including upgradient well XW-1) are over two times higher than the 3,000 mg/l TDS ceiling that defines a present or future beneficial use aquifer. It seems reasonable, then, to conclude that the petroleum release at this site has not affected groundwater with a present or future beneficial use.

The UST system at site was upgraded by Tosco last year. Since MTBE concentration data obtained since that time shows lower concentrations, a finding for "no further action" and "case closure" seems consistent with water quality objectives in the basin plan. If, on the other hand, the ACHSA finds that further activities are warranted, please let me know. This information is relevant to BP's efforts to reconcile contractual issues with the current operator.

Please contact me at (425) 251-0689 if you have questions.

Sincerely,

Scott Hooton

attachments

cc: site file
D. Camille - Tosco (w/attachments)

Who prepared this survey? 259 1970

SENSITIVE RECEPTORS SURVEY
Site Survey and Literature Research

Store No: 11270
Location: 3255 McCartney Rd.
City/State Alameda, CA

I. Provide answers to the following questions:

a. Is a public water supply well within 2500 ft? (y/(n))
If yes, Distance (ft)_____

b. Is a private water supply well within 1000 ft? (y/(n))
If yes, Distance (ft)_____

c. Is a subway within 1000 ft? (y/(n))
If yes, Distance (ft)_____

d. Is a basement within 1000 ft? (y/(n))
If yes, Distance (ft)_____

e. Is a School within 1000 ft? (y/(n))
If yes, Distance (ft)_____

f. Is a surface body of water within 1000 ft? ((y)/n)
If yes, Distance (ft) 500 Lagoon

II. Describe type of local water supply:

Public
*Supplier's Name East Bay Municipal District 891-0615
*Supplier's Source American/Mokulumne River-Folsom
*Distance to Site 90 mi
Private _____

III. Aquifer Classification, if available:

_____ Class I: Special Ground Waters
Irreplaceable Drinking Water Sources
Ecologically Vital
N/A

_____ Class II: Current and Potential Drinking Water

_____ Class III: Not Potential Source of Drinking Water

IV. Describe observation wells, if any:

Number 4
Free Product _____ (y/(n))

V. Signature of Preparer Henry Hurdmans Date 11-4-92

BLAINE
TECH SERVICES INC.

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

December 2, 1999

Scott Hooton
BP Oil Company
295 SW 41st Street, Bldg. 13, Suite N
Renton, WA 98055-4931

4th Quarter 1999 Monitoring at 11270

Fourth Quarter 1999 Groundwater Monitoring
BP Service Station Number 11270
3255 Mecartney Rd.
Alameda, CA

Monitoring Performed on October 18, 1999

Groundwater Sampling Report **991018-F-1**

This report covers the routine monitoring of groundwater wells at this BP facility. Blaine Tech Services, Inc.'s work at the site includes inspection, gauging, evacuation, purgewater containment, sample collection and sample handling 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, the appropriate calculated purge volume, elapsed evacuation time, total volume of water removed, and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater is, likewise, collected and transported to Seaport Petroleum Corporation for disposal.

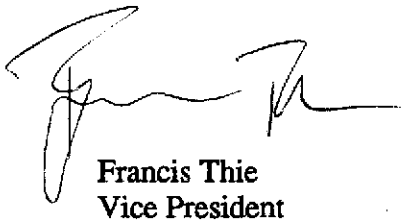
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The **Professional Engineering Appendix** contains a **Groundwater Elevation Map** and a **Dissolved Petroleum Hydrocarbon Concentration Map.**

At a minimum, Blaine Tech Services, Inc. field personnel are certified upon 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,

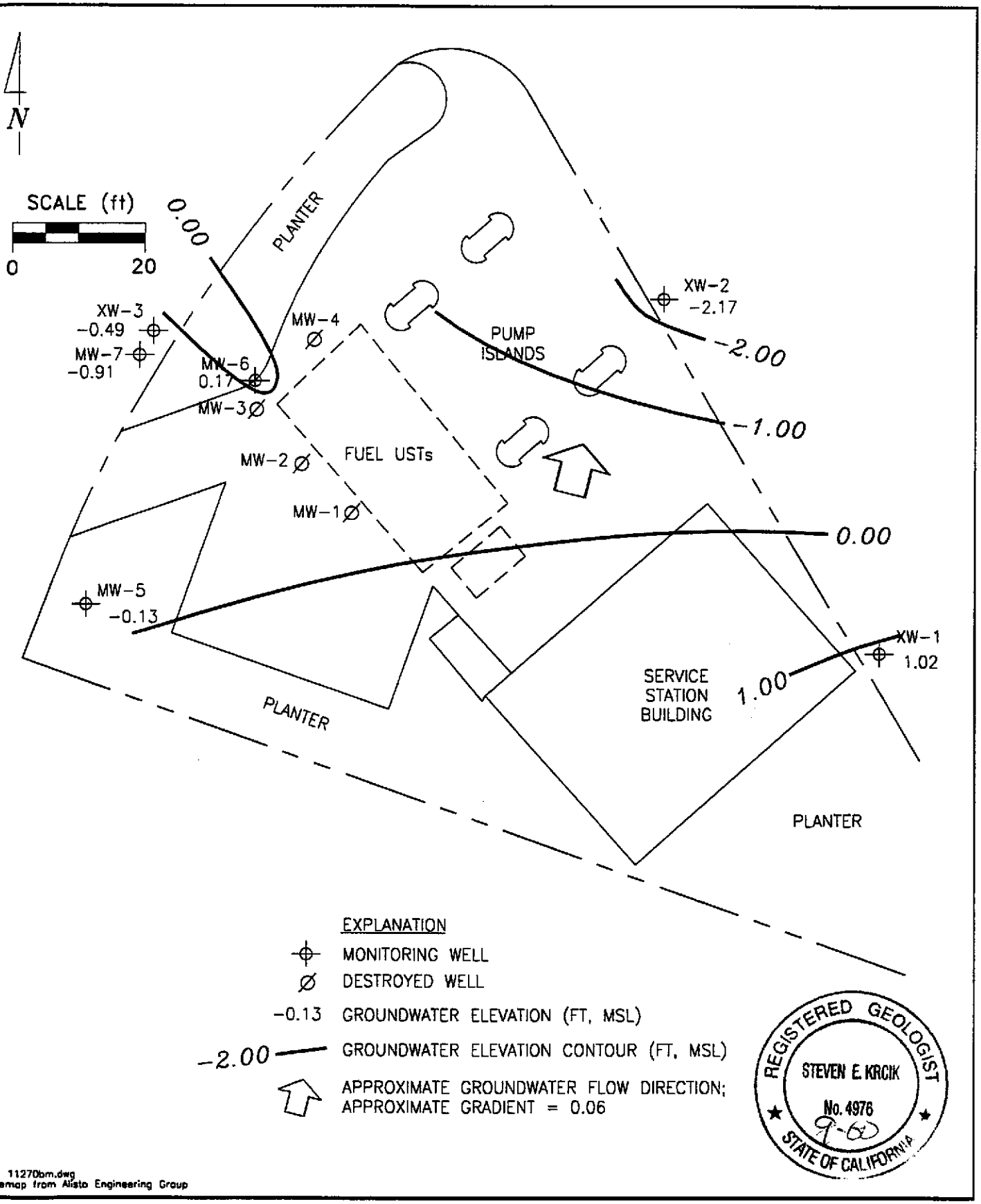


Francis Thie
Vice President

FPT/cm

attachments: Professional Engineering Appendix
Cumulative Table of Well Data and Analytical Results
Analytical Appendix
Field Data Sheets

Professional Engineering Appendix



EXPLANATION

- MONITORING WELL
- DESTROYED WELL
- -0.13 GROUNDWATER ELEVATION (FT, MSL)
- -2.00 GROUNDWATER ELEVATION CONTOUR (FT, MSL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION; APPROXIMATE GRADIENT = 0.06

REGISTERED GEOLOGIST
STEVEN E. KRCIK
No. 4976
STATE OF CALIFORNIA

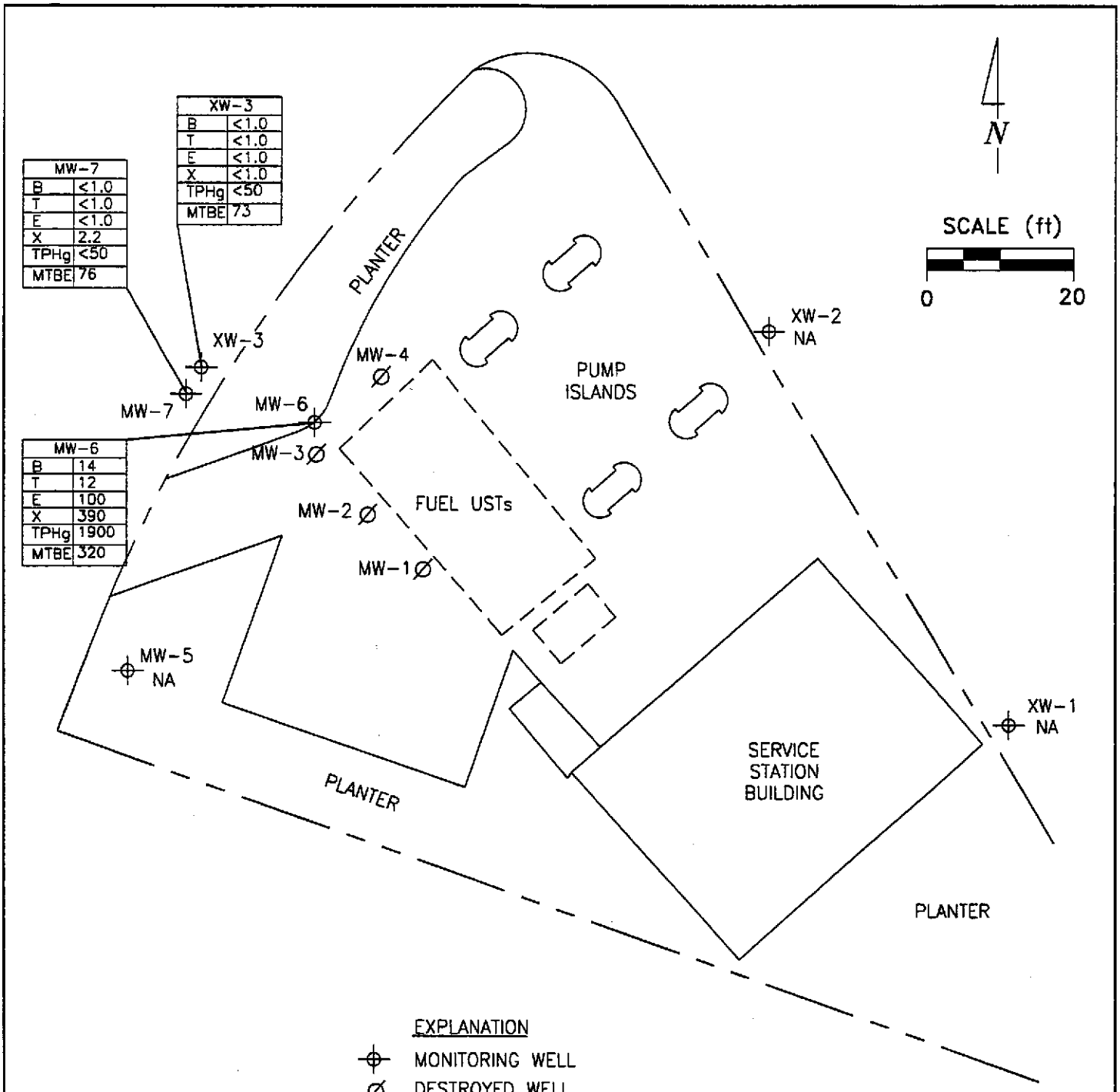
Ref. 11270bm.dwg
Basemap from Alisto Engineering Group

PREPARED BY
RRM
engineering contracting firm

BP Oil Service Station No. 11270
3255 Mecartney Road
Alameda, California

GROUNDWATER ELEVATION CONTOUR MAP, OCTOBER 18, 1999

FIGURE: 1
PROJECT: DAC04



EXPLANATION

⊕	MONITORING WELL
Ø	DESTROYED WELL
TPHg	TOTAL PETROLEUM HYDROCARBON CALCULATED AS GASOLINE IN PARTS PER BILLION (ppb)
B	BENZENE, ppb
T	TOLUENE, ppb
E	ETHYLBENZENE, ppb
X	XYLENE, ppb
MTBE	METHYL-TERT-BUTYL-ETHER, ppb
NA	DATA NOT AVAILABLE

Ref. 11270btex.dwg
Basemap from Alisto Engineering Group

PREPARED BY
RRM
engineering contracting firm

BP Oil Service Station No. 11270
3255 Mecartney Road
Alameda, California

HYDROCARBON CONCENTRATION MAP, OCTOBER 18, 1999

FIGURE: 2
PROJECT: DAC04

Table of
Well Data and
Analytical Results

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)		TDS (mg/l)	DO (ppm)	LAB
MW-1	(c)	10/29/92	7.49	7.28	0.21	---	---	---	---	---	---	---		---	---	---
MW-1	(c)	06/21/93	7.49	5.40	2.09	---	---	---	---	---	---	---		---	---	---
MW-1		04/05/94	7.49	5.64	1.85	1700	---	20	1.1	3.9	7.6	---		---	---	PACE
MW-1		07/28/94	7.49	6.22	1.27	---	---	---	---	---	---	---		---	---	PACE
MW-1		10/26/94	7.49	6.40	1.09	---	---	---	---	---	---	---		---	---	---
MW-1	(d)	02/05/95	---	---	---	---	---	---	---	---	---	---		---	---	---
MW-2		10/29/92	7.07	6.84	0.23	2500	3900	140	ND<10	65	22	---		---	---	---
MW-2		06/21/93	7.07	5.49	1.58	720	770	12	1.5	11	12	---		---	---	---
MW-2		04/05/94	7.07	5.40	1.67	420	1300	ND<0.5	ND<0.5	ND<0.5	4	4500	(e)	---	1.8	PACE
MW-2		07/28/94	7.07	5.97	1.10	---	---	---	---	---	---	---		---	---	PACE
MW-2		10/26/94	7.07	6.10	0.97	---	---	---	---	---	---	---		---	---	---
MW-2	(d)	02/05/95	---	---	---	---	---	---	---	---	---	---		---	---	---
MW-3	(c)	10/29/92	7.08	7.14	-0.06	---	---	---	---	---	---	---		---	---	---
MW-3	(c)	06/21/93	7.08	5.84	1.24	---	---	---	---	---	---	---		---	---	---
MW-3		04/05/94	7.08	5.83	1.25	990	4300	3.2	ND<0.5	ND<0.5	1.3	790	(e)	---	---	PACE
MW-3		07/28/94	7.08	6.32	0.76	---	---	---	---	---	---	---		---	---	PACE
MW-3		10/26/94	7.08	6.42	0.66	---	---	---	---	---	---	---		---	---	---
MW-3	(d)	02/05/95	---	---	---	---	---	---	---	---	---	---		---	---	---
MW-4		10/29/92	7.13	6.90	0.23	2600	---	250	2.5	74	6.6	---		---	---	---
MW-4		06/21/93	7.13	5.54	1.59	1400	1100	24	2.9	2.6	7.9	---		---	---	---
MW-4		04/05/94	7.13	5.46	1.67	930	940	33	0.8	ND<0.5	2.8	8700	(e)	---	2.7	PACE
MW-4		07/28/94	7.13	6.02	1.11	2400	1400	19	1.8	0.5	8	---		---	6.7	PACE
QC-1	(f)	07/28/94	---	---	---	2300	---	19	1.7	0.5	7.4	---		---	---	PACE
MW-4		10/26/94	7.13	6.13	1.00	---	---	---	---	---	---	---		---	---	---
MW-4	(d)	02/05/95	---	---	---	---	---	---	---	---	---	---		---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (mg/l)	DO (ppm)	LAB
MW-5		06/21/93	8.36	7.44	0.92	ND<50	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---
MW-5		04/05/94	8.36	7.42	0.94	ND<50	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	2.5	PACE
QC-1	(f)	04/05/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-5		07/28/94	8.36	7.88	0.48	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	7.4	PACE
MW-5		10/26/94	8.36	7.92	0.44	ND<50	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	5.5	PACE
QC-1	(f)	10/26/94	---	---	---	ND<50	---	ND<0.5	0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-5		02/05/95	8.36	7.83	0.53	ND<50	ND<500	ND<0.25	ND<0.25	ND<0.25	ND<0.50	---	---	---	ATI
QC-1	(f)	02/05/95	---	---	---	ND<50	---	ND<0.25	ND<0.25	ND<0.25	ND<0.50	---	---	---	ATI
MW-5		05/05/95	8.36	9.00	-0.64	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	3.1	ATI
MW-5		07/19/95	8.36	9.03	-0.67	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	14700	4.6	ATI
MW-5		10/12/95	8.36	9.15	-0.79	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	8490	4.3	ATI
MW-5		01/08/96	8.36	9.04	-0.68	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	10000	4.9	ATI
MW-5		09/11/97	8.36	8.90	-0.54	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4	SPL
MW-5		01/27/98	8.36	8.27	0.09	---	---	---	---	---	---	---	---	---	---
MW-5		04/19/98	8.36	8.60	-0.24	---	---	---	---	---	---	---	---	---	---
MW-5		07/29/99	8.36	8.85	-0.49	---	---	---	---	---	---	---	---	---	---
MW-5		10/18/99	8.36	8.49	-0.13	---	---	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)		TDS (mg/l)	DO (ppm)	LAB
MW-6		02/05/95	6.88	6.39	0.49	1000	1000	7.6	19	9.1	96	---	(g)	---	5	ATI
MW-6		05/05/95	6.88	6.85	0.03	2300	---	49	9	130	46	---		---	3.3	ATI
QC-1	(f)	05/05/95	---	---	---	2400	---	49	9.2	140	48	---		---	---	ATI
MW-6		07/19/95	6.88	7.13	-0.25	1500	---	84	3.3	28	24	---	(g)	818	3.7	ATI
QC-1	(f)	07/19/95	---	---	---	1500	---	89	3.8	30	26	---	(g)	---	---	ATI
MW-6		10/12/95	6.88	7.35	-0.47	1800	---	38	13	38	86	2500		868	4.1	ATI
QC-1	(f)	10/12/95	---	---	---	1100	---	33	7	18	44	2200		---	---	ATI
MW-6		01/08/96	6.88	7.04	-0.16	1300	---	31	4.7	60	53	170		474	4.2	ATI
QC-1	(f)	01/08/96	---	---	---	1000	---	27	4	49	44	150		---	---	ATI
MW-6		09/11/97	6.88	7.29	-0.41	ND<250	---	8.5	ND<5.0	11	6	1400		---	3.5	SPL
QC-1	(f)	09/11/97	---	---	---	210	---	8.7	ND<5.0	14	8	1400		---	---	SPL
MW-6		01/27/98	6.88	6.20	0.68	47000	---	350	150	360	690	38000		---	4.6	SPL
QC-1	(f)	01/27/98	---	---	---	51000	---	290	120	300	580	35000		---	---	SPL
MW-6		04/19/98	6.88	6.64	0.24	36000	---	40	510	140	10500	660		---	4	SPL
QC-1	(f)	04/19/98	---	---	---	24000	---	20	360	81	7100	480		---	---	SPL
MW-6		07/29/99	6.88	6.93	-0.05	18000	---	10	4.0	18	210	96		---	---	SPL
MW-6		10/18/99	6.88	6.71	0.17	1900	---	14	12	100	390	320		---	---	SPL

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WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)		TDS (mg/l)	DO (ppm)	LAB
MW-7	02/05/95	6.62	7.62	-1.00	280	ND<500	ND<0.25	ND<0.25	ND<0.25	ND<0.50	---	(g)	---	5.1	ATI
MW-7	05/05/95	6.62	7.64	-1.02	290	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		---	3.6	ATI
MW-7	07/19/95	6.62	7.70	-1.08	150	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	(g)	12100	4.6	ATI
MW-7	10/12/95	6.62	7.88	-1.26	110	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	390		14000	4.7	ATI
MW-7	01/08/96	6.62	7.66	-1.04	90	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	300		12060	4.9	ATI
MW-7	09/11/97	6.62	7.78	-1.16	ND<50	---	ND<2.5	ND<5.0	ND<5.0	ND<5.0	63		---	3.8	SPL
MW-7	01/27/98	6.62	7.30	-0.68	1400	---	7.7	ND<1.0	ND<1.0	ND<1.0	920		---	4.4	SPL
MW-7	04/19/98	6.62	7.52	-0.90	3500	---	15	7.7	11	19.3	3600		---	4.7	SPL
MW-7	07/29/99	6.62	7.70	-1.08	350	---	ND<5.0	ND<5.0	ND<5.0	ND<5.0	200		---	---	SPL
MW-7	10/18/99	6.62	7.53	-0.91	ND<50	---	ND<1.0	ND<1.0	ND<1.0	2.2	76		---	---	SPL
XW-1	06/21/93	---	---	---	---	---	---	---	---	---	---		---	---	---
XW-1	04/05/94	---	5.36	---	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	3	PACE
XW-1	07/28/94	---	5.92	---	---	---	---	---	---	---	---		---	---	PACE
XW-1	10/26/94	---	6.05	---	---	---	---	---	---	---	---		---	---	---
XW-1	02/05/95	7.49	5.82	1.67	ND<50	ND<500	ND<0.25	ND<0.25	ND<0.25	ND<0.50	---		---	4.9	ATI
XW-1	05/05/95	7.49	5.57	1.92	---	---	---	---	---	---	---		---	---	---
XW-1	07/19/95	7.49	6.12	1.37	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		1680	4.3	ATI
XW-1	10/12/95	7.49	6.82	0.67	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0		1150	3.8	ATI
XW-1	01/08/96	7.49	6.11	1.38	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0		1300	4.7	ATI
XW-1	09/11/97	7.49	6.57	0.92	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		---	3.3	SPL
XW-1	01/27/98	7.49	5.27	2.22	---	---	---	---	---	---	---		---	---	---
XW-1	04/19/98	7.49	5.24	2.25	---	---	---	---	---	---	---		---	---	---
XW-1	07/29/99	7.49	6.30	1.19	---	---	---	---	---	---	---		---	---	---
XW-1	10/18/99	7.49	6.47	1.02	---	---	---	---	---	---	---		---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)		TDS (mg/l)	DO (ppm)	LAB
XW-2	06/21/93	7.48	5.89	1.59	---	---	---	---	---	---	---		---	---	---
XW-2	04/05/94	7.48	5.77	1.71	ND<50	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	3	PACE
XW-2	07/28/94	7.48	6.25	1.23	---	---	---	---	---	---	---		---	---	PACE
XW-2	10/26/94	7.48	6.39	1.09	---	---	---	---	---	---	---		---	---	---
XW-2	02/05/95	7.48	5.62	1.86	ND<50	ND<500	ND<0.25	0.38	ND<0.25	ND<0.50	---		---	5.2	ATI
XW-2	05/05/95	7.48	5.66	1.82	---	---	---	---	---	---	---		---	---	---
XW-2	07/19/95	7.48	6.8	0.68	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		4750	3.9	ATI
XW-2	10/12/95	7.48	7.21	0.27	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0		3630	4.3	ATI
XW-2	01/08/96	7.48	6.79	0.69	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0		3440	4.2	ATI
XW-2	09/11/97	7.48	6.86	0.62	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		---	3.6	SPL
XW-2	01/27/98	7.48	5.88	1.60	---	---	---	---	---	---	---		---	---	---
XW-2	04/19/98	7.48	5.42	2.06	---	---	---	---	---	---	---		---	---	---
XW-2	07/29/99	7.48	9.97	-2.49	---	---	---	---	---	---	---		---	---	---
XW-2	10/18/99	7.48	9.65	-2.17	---	---	---	---	---	---	---		---	---	---
XW-3	06/21/93	6.84	5.85	0.99	---	---	---	---	---	---	---		---	---	---
XW-3	04/05/94	6.84	5.85	0.99	ND<50	150	ND<0.5	0.7	ND<0.5	ND<0.5	---		---	3.1	PACE
XW-3	07/28/94	6.84	6.28	0.56	---	---	---	---	---	---	---		---	---	PACE
XW-3	10/26/94	6.84	6.4	0.44	---	---	---	---	---	---	---		---	---	---
XW-3	02/05/95	6.84	7.23	-0.39	280	ND<500	ND<0.50	ND<0.50	0.63	ND<1.0	---	(g)	---	4.9	ATI
XW-3	05/05/95	6.84	7.43	-0.59	---	---	---	---	---	---	---		---	---	---
XW-3	07/19/95	6.84	7.6	-0.76	400	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		10400	4.3	ATI
XW-3	10/12/95	6.84	7.74	-0.90	130	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	480	(e)	8430	4.7	ATI
XW-3	01/08/96	6.84	7.58	-0.74	320	---	ND<2.5	ND<2.5	ND<2.5	ND<5.0	1100		10000	4.4	ATI
XW-3	01/27/98	6.84	7.01	-0.17	1200	---	2.8	ND<1.0	ND<1.0	ND<1.0	990		---	4.3	SPL
XW-3	04/19/98	6.84	7.28	-0.44	4500	---	ND<2.5	ND<5.0	ND<5.0	ND<5.0	4800		---	4.3	SPL
XW-3	07/29/99	6.84	7.46	-0.62	ND<250	---	ND<5.0	ND<5.0	ND<5.0	ND<5.0	90		---	---	SPL
XW-3	10/18/99	6.84	7.33	-0.49	ND<50	---	ND<1.0	ND<1.0	ND<1.0	ND<1.0	73		---	---	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (mg/l)	DO (ppm)	LAB
QC-2	(h)	04/05/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2	(h)	07/28/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2	(h)	10/26/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2	(h)	02/05/95	---	---	---	ND<50	---	ND<0.25	ND<0.25	ND<0.25	ND<0.50	---	---	---	ATI
QC-2	(h)	05/05/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	ATI
QC-2	(h)	07/19/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	ATI
QC-2	(h)	10/12/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	ATI
QC-2	(h)	01/08/96	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	ATI

ABBREVIATIONS:

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

NOTES:

(a) Casing elevations surveyed to nearest 0.01 foot relative to an arbitrary datum.

(b) Groundwater elevations in feet above an arbritary datum.

(c) Not sampled due to inadequate recharge.

(d) Wells destroyed by HETI on January 18 and 19, 1995.

(e) A copy of the documentation for this data is included in Appendix C of Alisto report 10-206-04-001.

(f) Blind duplicate.

(g) MTBE peak present. See documentation for this data included in Appendix C of Alisto report 10-206-04-001.

(h) Travel blank.

Analytical Appendix

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

November 1, 1999

Mr. Scot Hooton
BP OIL COMPANY
295 SW 41 Street Bldg. 13, Ste N
Renton, WA 98055

The following report contains analytical results for the sample(s) received at Southern Petroleum Laboratories (SPL) on October 20, 1999. The sample(s) was assigned to Certificate of Analysis No. (s) 9910644 and analyzed for all parameters as listed on the chain of custody.

Upon receipt of your samples it was found that the sample collection date/time was not listed on the chain of custody. Your samples were logged in per the sample bottle labels.

Any data flags or quality control exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

Sonia West
Senior Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 99-10-644

Approved for Release by:

Sonia West
Sonia West, Senior Project Manager

11-1-99
Date

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9910644-01

BP Oil Company
295 SW 41 Street Bldg.13,SteN
Renton, WA 98055
ATTN: Scott Hooton

P.O.# N/A , COC#118657
DATE: 10/29/99

PROJECT: #11270, 3255 Mecartney Road
SITE:
SAMPLED BY: Blaine Tech Services
SAMPLE ID: Y

PROJECT NO: 991018-F1
MATRIX: WATER
DATE SAMPLED: 10/18/99 09:23:00
DATE RECEIVED: 10/20/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	73	1.0 P	ug/L
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	100		
Method 8020A ***			
Analyzed by: LJ			
Date: 10/29/99			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	93		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 10/29/99 06:20:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
SPL California License # 1903

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9910644-02

BP Oil Company
295 SW 41 Street Bldg.13,SteN
Renton, WA 98055
ATTN: Scott Hooton

P.O.# N/A , COC#118657
DATE: 10/29/99

PROJECT: #11270, 3255 Mecartney Road
SITE:
SAMPLED BY: Blaine Tech Services
SAMPLE ID: H

PROJECT NO: 991018-F1
MATRIX: WATER
DATE SAMPLED: 10/18/99 10:10:00
DATE RECEIVED: 10/20/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	320	1.0 P	ug/L
BENZENE	14	1.0 P	ug/L
TOLUENE	12	1.0 P	ug/L
ETHYLBENZENE	100	1.0 P	ug/L
TOTAL XYLENE	390	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	516		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	110		
Method 8020A ***			
Analyzed by: LJ			
Date: 10/29/99			
Gasoline Range Organics	1.9	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	97		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 10/29/99 06:51:00			

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
SPL California License # 1903

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9910644-03

BP Oil Company
295 SW 41 Street Bldg.13,SteN
Renton, WA 98055
ATTN: Scott Hooton

P.O.# N/A , COC#118657
DATE: 10/29/99

PROJECT: #11270, 3255 Mecartney Road
SITE:
SAMPLED BY: Blaine Tech Services
SAMPLE ID: O

PROJECT NO: 991018-F1
MATRIX: WATER
DATE SAMPLED: 10/18/99 09:43:00
DATE RECEIVED: 10/20/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	76	1.0 P	ug/L
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	2.2	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	2.2		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	100		
Method 8020A ***			
Analyzed by: LJ			
Date: 10/29/99			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	97		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 10/29/99 07:23:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
SPL California License # 1903

QUALITY CONTROL

DOCUMENTATION

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Matrix: Aqueous
Units: ug/L

Batch Id: HP_S991028202400

L A B O R A T O R Y C O N T R O L S A M P L E

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	40	80.0	72 - 128
Benzene	ND	50	43	86.0	61 - 119
Toluene	ND	50	48	96.0	65 - 125
EthylBenzene	ND	50	50	100	70 - 118
O Xylene	ND	50	51	102	72 - 117
M & P Xylene	ND	100	95	95.0	72 - 116

M A T R I X S P I K E S

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	20	100	20	100	0	20	39 - 150
BENZENE	ND	20	18	90.0	18	90.0	0	21	32 - 164
TOLUENE	ND	20	19	95.0	18	90.0	5.41	20	38 - 159
ETHYLBENZENE	ND	20	19	95.0	18	90.0	5.41	19	52 - 142
O XYLENE	ND	20	20	100	20	100	0	18	53 - 143
M & P XYLENE	ND	40	34	85.0	32	80.0	6.06	17	53 - 144

Analyst: LJ/
Sequence Date: 10/28/99
SPL ID of sample spiked: 99100517-01
Sample File ID: S_J4130.TX0
Method Blank File ID:
Blank Spike File ID: S_J4123.TX0
Matrix Spike File ID: S_J4125.TX0
Matrix Spike Duplicate File ID: S_J4126.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9910644-02A 9910644-03A 9910566-02A 9910639-05A 9910639-04A 9910639-06A 9910644-01A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **

California LUFT Manual for Gasoline

Matrix: Aqueous

Batch Id: HP_S991028220300

Units: mg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Gasoline Range Organics	ND	1.0	0.81	81.0	64 - 131

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
GASOLINE RANGE ORGANICS	0.21	0.90	0.94	81.1	1.0	87.8	7.93	36	36 - 160

Analyst: LJ/

Sequence Date: 10/28/99

SPL ID of sample spiked: 99100320-02

Sample File ID: SSJ4131.TX0

Method Blank File ID:

Blank Spike File ID: SSJ4124.TX0

Matrix Spike File ID: SSJ4127.TX0

Matrix Spike Duplicate File ID: SSJ4128.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)

« = Data outside Method Specification limits.

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = [(<1> - <2>) / <3>] x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical data (1st Q '97)

(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9910644-01A 9910644-02A 9910644-03A 9910639-04A 9910639-05A 9910639-06A

9910644

CHAIN OF CUSTODY

No. 118657

Page 1 of 1

CONSULTANT'S NAME: Blaine Tech Services	CONSULTANT'S ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112		
BP SITE NUMBER: 11270	BP SITE / FACILITY ADDRESS: 3255 Mecartney Road		CONSULTANT PROJECT NUMBER: 991018 F1
CONSULTANT PROJECT MANGER: Morgan Hargrave	PHONE NUMBER: (408) 573-0555 X218	FAX NUMBER: (408) 573-7771	CONSULTANT CONTRACT NUMBER:
BP CONTACT: Scott Hooton	BP ADDRESS: 295 SW 41st St., Renton, WA	PHONE NUMBER: (425) 251-0689	FAX NO.: (425) 251-0736
LAB CONTACT: SPL - Sonia West	LABORATORY ADDRESS: P.O. Box 20807, Houston, WA	PHONE NUMBER: (800) 969-6775	FAX NO.: (713) 660-8975
BP CONTACT REQUESTING RUSH TAT (Print BP Contact Name)	RUSH REQUESTED OF (Print Consultant Contact Name)	DATE/TIME	SHIPMENT DATE / SHIPMENT METHOD

TAT: ☐ 24 Hours ☐ 48 Hours ☐ 72 Hours ☑ Standard 7 or 14 Days

AIRBILL NUMBER: 814377888256

ANALYSIS REQUIRED

SAMPLE DESCRIPTION	COLLECTION DATE	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPHg	TPHd	BTEX	MTBE 8020	MTBE 8260	COMMENTS
Y	10-8-99	923	W	3	40		X		X	X		
H	↓	1010	W	3	|		X		X	X		
O	↓	943	W	3	↓		X		X	X		

SAMPLED BY (Please Print Name): Mike Stewart

SAMPLED BY (Signature):

ADDITIONAL COMMENTS: 3

RELINQUISHED BY / AFFILIATION (Print Name / Signature)	DATE	TIME	ACCEPTED BY / AFFILIATION (Print Name / Signature)	DATE	TIME
Mike Stewart /	10/19/99	9:30 Am			
			D Kelly	10/20	1000

CLV-16722-A (2/97)
PKG/50

DISTRIBUTION: WHITE - ORIGINAL (WITH DATA) YELLOW - BP PINK - LAB BLUE - CONSULTANT FIELD STAFF

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
10/20/99	10:00

SPL Sample ID:
99106044

			Yes	No
1	Chain-of-Custody (COC) form is present.		✓	
2	COC is properly completed.		✓	
3	If no, Non-Conformance Worksheet has been completed.			
4	Custody seals are present on the shipping container.			✓
5	If yes, custody seals are intact.			
6	All samples are tagged or labeled.		✓	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		✓	
9	Temperature of samples upon arrival:		3 C	
10	Method of sample delivery to SPL:	**SPL Delivery**		
		Client Delivery		
		FedEx Delivery (airbill #)	814372888256	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
Donna Dell	10/20

Field
Data
Sheets

WELL GAUGING DATA

Project # 991018 F1 Date 10-18-99 Client BP

Site 3255 Mecartney RD. Alameda 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	Well ID
MW-5	4					8.49	14.71	TOC	S
MW-6	4					6.71	14.87		H
MW-7	2					7.53	14.73		O
XW-1	2					6.47	15.55		R
XW-2	2					9.65	14.25		T
XW-3	2					7.33	13.71		Y

BP WELL MONITORING DATA SHEET

Project #: 9910181 F1	Station # 11270
Sampler: Mike S.	Date: 10-18-99
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 13.71	Depth to Water: 7.33
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
- X Disposable Bailer
- Middleburg
- Electric Submersible
- Extraction Pump
- Other: ____

Sampling Method:
- Bailer
- X Disposable Bailer
- Extraction Port
- Other: ____

1.0	x	3	=	3.0 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
915	65.5	6.7	>10,000	1	
917	65.9	6.8	>10,000	2	
919	65.7	6.7	>10,000	3	

Did well dewater? Yes (No)		Gallons actually evacuated: 3.0		
Sampling Time: 923		Sampling Date: 10-18-99		
Sample I.D. (Blind): Y		Laboratory: (SPL)	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

BP WELL MONITORING DATA SHEET

Project #: 991018 F1	Station # 11270
Sampler: Mike S.	Date: 10-18-99
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 14.73	Depth to Water: 7.53
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
- (X) Disposable Bailer
- Middleburg
- Electric Submersible
- Extraction Pump
- Other: _____

Sampling Method:
- Bailer
- (X) Disposable Bailer
- Extraction Port
- Other: _____

1.1	X	3	=	3.3 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
935	67.1	6.5	>10,000	2	
937	67.0	6.5	>10,000	3	
939	67.3	6.5	>10,000	4	

Did well dewater? Yes (No)		Gallons actually evacuated: 4	
Sampling Time: 943		Sampling Date: 10-18-99	
Sample I.D. (Blind): 0		Laboratory: (SPL)	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