BP OIL

BP Oil Company
Environmental Remediation Management
295 SW 41st Street
Renton, Washington 98055-4931
(206) 251-0667
Fax No: (206) 251-0736

April 10, 1999

Alameda County Health Care Services Agency
Attention Mr. Amir K. Gholami
1131 Harbor Bay Parkway, STE 250
Alameda, CA 94502-6577

RE: Former BP Oil Site No. 11107
18501 Hesperian Boulevard (at Bockman)
San Lorenzo, CA
STID 780

Dear Mr. Gholami:

This transmits the First Quarter 1999 Groundwater Monitoring report prepared by Blaine Tech Services on behalf of BP. The report summarizes chemical data obtained since 1992, including results associated with groundwater samples recently obtained on 19 January 1999.

Upon review of these data, note that:

1. Well MW-4 was samples for 1,2-Dichloroethane and Ethylene Dibromide by USEPA Method 8010; with neither compound detected.
2. Wells MW-4, MW-5 and MW-6 were tested for ether oxygenates by USEPA Method 8260. With the exception of MTBE, no other ether oxygenates were detected.

Based on these data, a workplan for additional assessment will be forwarded to you.

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

Sincerely,

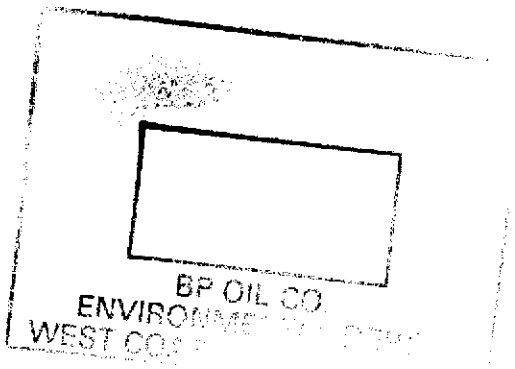
Scott Hooton

attachment

cc: site file
David Camille - Tosco (w/attachement)
Khaled Rahman - Cambria (w/attachment)

BLAINE
TECH SERVICES INC

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



March 29, 1999

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

1st Quarter 1999 Monitoring at 11107

First Quarter 1999 Groundwater Monitoring
BP Service Station Number 11107
18501 Hesperian Boulevard
San Lorenzo, CA

Monitoring Performed on January 19, 1999

Groundwater Sampling Report **990119-K-2**

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.

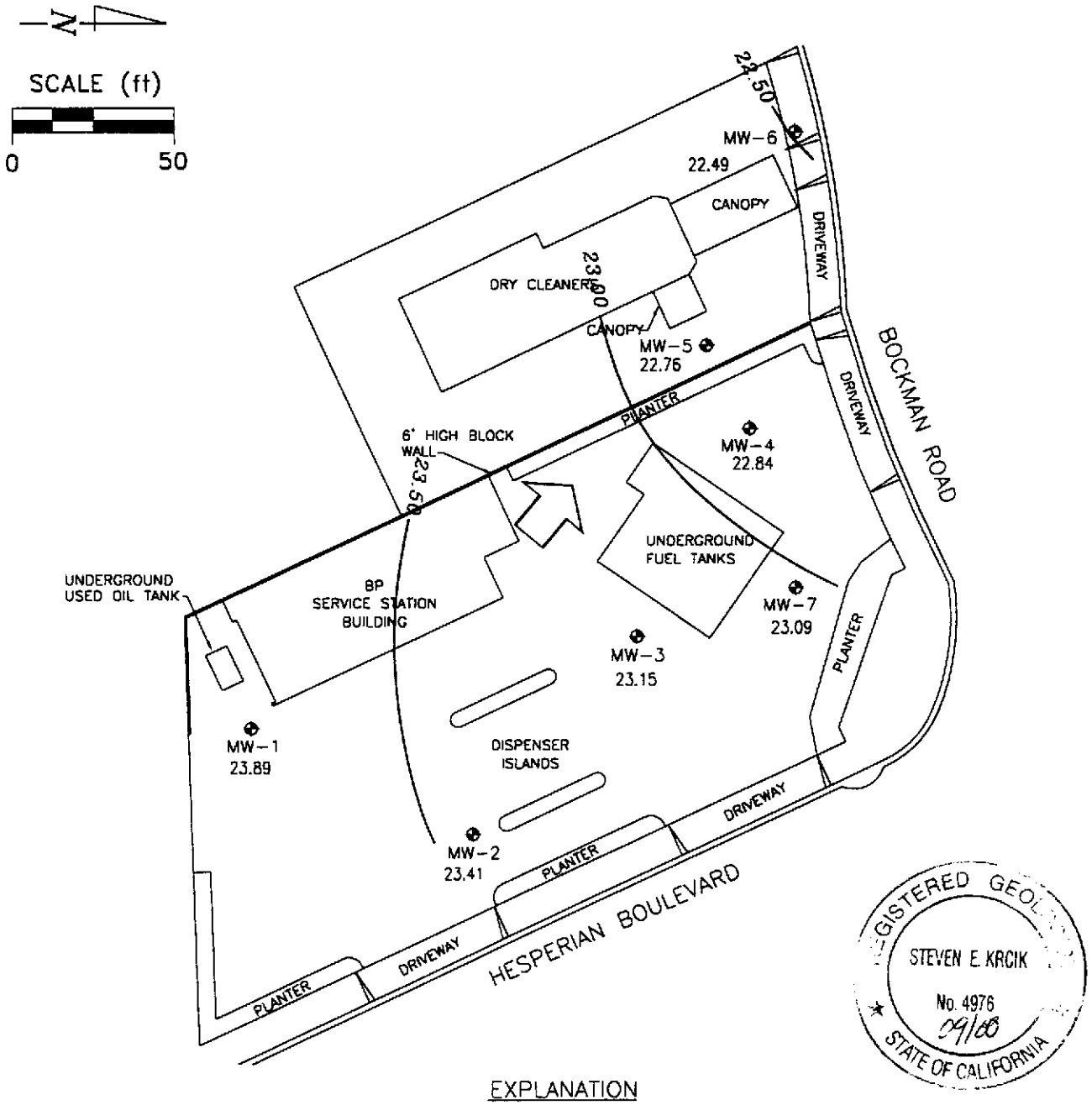
Yours truly,

Francis Thie
Vice President

FPT/ck

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

Professional Engineering Appendix



EXPLANATION

- ⊕ GROUNDWATER MONITORING WELL
- 23.89 GROUNDWATER ELEVATION (FT, MSL)
- 23.00 — GROUNDWATER ELEVATION CONTOUR (FT, MSL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION; APPROXIMATE GRADIENT = 0.005

Ref. 111107bm.dwg
Basemap from Alisto Engineering Group

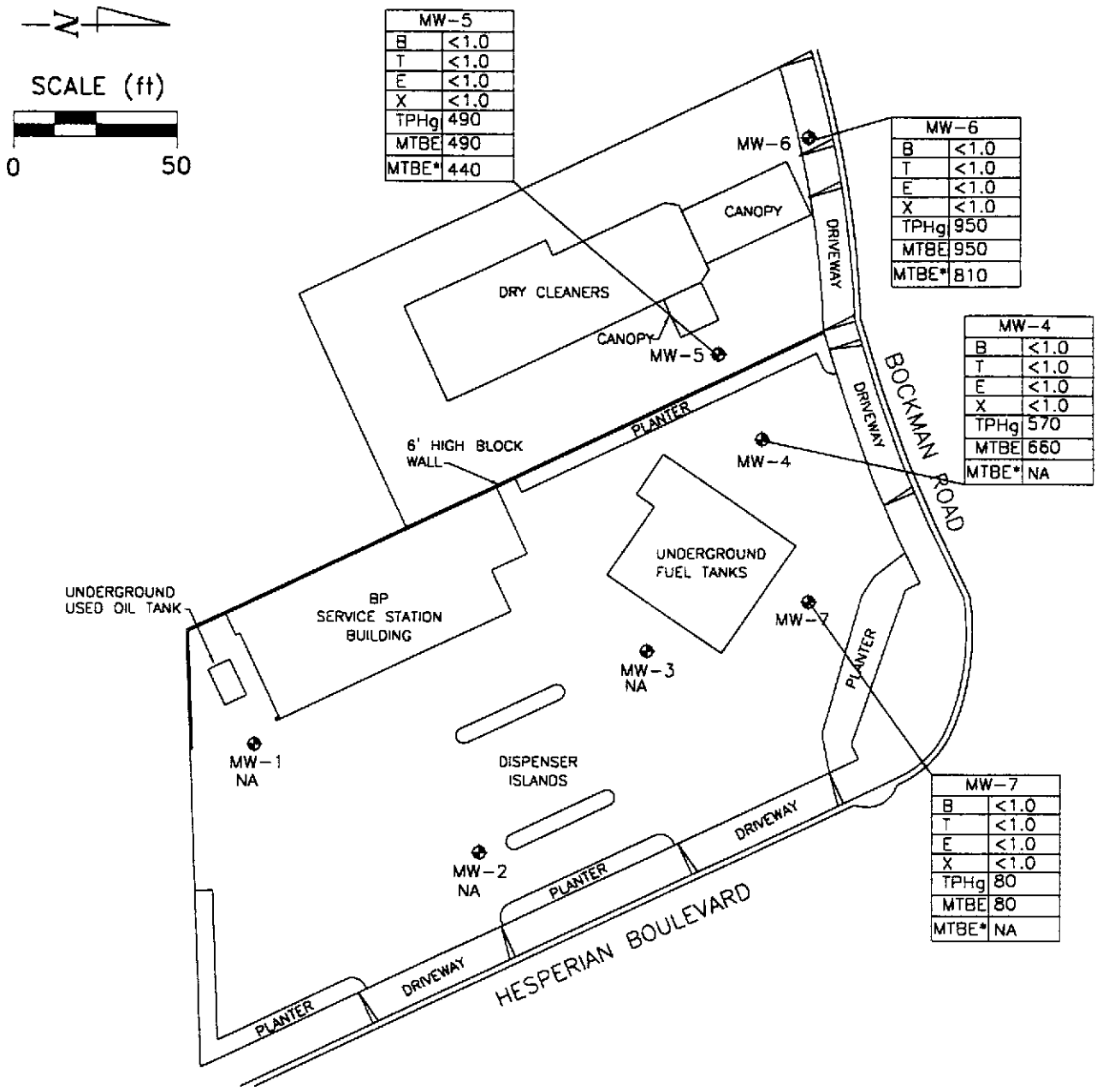
PREPARED BY
RRM
engineering contracting firm

BP Service Station No. 11107
18501 Hesperian Boulevard
San Lorenzo, California

GROUNDWATER ELEVATION CONTOUR MAP, JANUARY 19, 1999

FIGURE: **1**

PROJECT: DAC04



EXPLANATION

⊕	GROUNDWATER MONITORING 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
MTBE*	MTBE BY 8260
NA	DATA NOT AVAILABLE

Ref. 111107btex.dwg
Basemap from Alisto Engineering Group

PREPARED BY
RRM
engineering contracting firm

BP Service Station No. 11107
18501 Hesperian Boulevard
San Lorenzo, California

HYDROCARBON CONCENTRATION MAP, JANUARY 19, 1999

FIGURE: **2**

PROJECT: DAC04

Table of
Well Data and
Analytical Results

Table 1 - Summary of Results of Groundwater Sampling

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)	TOG (ug/l)	1,1,1-TCA (ug/l)	PCE (ug/l)	DO (ppm)	LAB
MW-1	11/04/92	41.07	20.78	20.29	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	2.8	ND	---	PACE
QC-1 (c)	11/04/92	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	PACE
MW-1	02/24/94	41.07	20.7	20.37	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	1.5	0.9	---	PACE
MW-1	05/12/94	41.07	18.12	22.95	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	1.0	ND<0.5	7	PACE
MW-1	09/09/94	41.07	21.74	19.33	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND<0.5	ND<0.5	2.3	PACE
MW-1	11/03/94	41.07	20.01	21.06	ND<50	50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND<0.5	ND<0.5	4.3	PACE
MW-1	03/01/95	41.07	17.44	23.63	ND<50	ND<500	ND<50	ND<0.50	ND<0.50	ND<1.0	---	420	0.54	0.3	2.3	ATI
MW-1	06/06/95	41.07	17.55	23.52	---	---	---	---	---	---	---	---	---	---	---	---
MW-1	09/01/95	41.07	18.19	22.88	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	60	---	---	8.8	ATI
MW-1	11/29/95	41.07	18.84	22.23	---	---	---	---	---	---	---	---	---	---	---	---
MW-1	03/23/96	41.07	16.97	24.10	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	---	9.6	SPL
MW-1	09/05/96	41.07	17.74	23.33	110	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	---	3.6	SPL
MW-1	03/11/97	41.07	17.62	23.45	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	---	5.2	SPL
MW-1	12/08/97	41.07	16.30	24.77	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	---	---	---
MW-1	07/08/98	41.07	16.66	24.41	---	---	---	---	---	---	---	---	---	---	---	---
MW-1	12/07/98	41.07	17.80	23.27	---	---	---	---	---	---	---	---	---	---	---	---
MW-1	01/19/99	41.07	17.18	23.89	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	11/04/92	40.56	20.16	20.40	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	PACE
MW-2	02/24/94	40.56	20.12	20.44	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	PACE
MW-2	05/12/94	40.56	17.49	23.07	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	7.4	PACE
MW-2	09/09/94	40.56	21.12	19.44	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	2.1	PACE
MW-2	11/03/94	40.56	19.36	21.20	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	4.2	PACE
MW-2	03/01/95	40.56	16.83	23.73	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	2.2	ATI
MW-2	06/06/95	40.56	16.96	23.60	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	09/01/95	40.56	17.54	23.02	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	---	7.9	ATI
MW-2	11/29/95	40.56	18.19	22.37	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	03/23/96	40.56	16.35	24.21	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	---	8.5	SPL
MW-2	09/05/96	40.56	17.55	23.01	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	---	3.2	SPL
MW-2	03/11/97	40.56	16.95	23.61	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	---	2.9	SPL
MW-2	12/08/97	40.56	16.01	24.55	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	---	3.0	SPL
MW-2	07/08/98	40.56	16.41	24.15	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	12/07/98	40.56	17.15	23.41	---	---	---	---	---	---	---	---	---	---	---	SPL
MW-2	01/19/99	40.56	17.15	23.41	---	---	---	---	---	---	---	---	---	---	---	---

Table 1 - Summary of Results of Groundwater Sampling

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)	TOG (ug/l)	1,1,1-TCA (ug/l)	PCE (ug/l)	DO (ppm)	LAB
MW-3	11/04/92	40.45	20.23	20.22	760	---	3.7	15	1.9	57	---	---	---	---	---	PACE
MW-3	02/24/94	40.45	20.24	20.21	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	PACE
MW-3	05/12/94	40.45	17.61	22.84	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	7.3	PACE
MW-3	09/09/94	40.45	21.22	19.23	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	2	PACE
MW-3	11/03/94	40.45	19.48	20.97	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	3.6	PACE
MW-3	03/01/95	40.45	17.08	23.37	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	1.9	ATI
MW-3	06/06/95	40.45	17.21	23.24	---	---	---	---	---	---	---	---	---	---	---	---
MW-3	09/01/95	40.45	17.69	22.76	200	---	2.7	33	7.2	43	ND<5.0	---	---	---	7.8	ATI
MW-3	09/01/95	40.45	18.29	22.16	---	---	---	---	---	---	---	---	---	---	---	---
MW-3	03/23/96	40.45	16.59	23.86	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	---	7.3	SPL
MW-3	09/05/96	40.45	17.71	22.74	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	---	3.2	SPL
MW-3	03/11/97	40.45	17.17	23.28	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	---	1.5	SPL
MW-3	12/08/97	40.45	16.12	24.33	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	---	1.9	SPL
MW-3	07/08/98	40.45	16.40	24.05	---	---	---	---	---	---	---	---	---	---	---	---
MW-3	12/07/98	40.45	17.32	23.13	---	---	---	---	---	---	---	---	---	---	---	SPL
MW-3	01/19/99	40.45	17.30	23.15	---	---	---	---	---	---	---	---	---	---	---	SPL

Table 1 - Summary of Results of Groundwater Sampling

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)		TOG (ug/l)	1,1,1-TCA (ug/l)	PCE (ug/l)	DO (ppm)	LAB
MW-4	11/04/92	39.24	19.18	20.06	900	---		150	4.1	0.8	53	---		---	---	---	---	PACE
MW-4	02/24/94	39.24	19.22	20.02	240	---		110	3.8	1.8	11	1400	(d)	---	---	---	---	PACE
QC-1 (c)	02/24/94	---	---	---	310	---		95	5.3	2.2	17	1500	(d)	---	---	---	---	PACE
MW-4	05/12/94	39.24	16.62	22.62	ND<50	---		2.2	1.0	ND<0.5	ND<0.5	860	(d)	---	---	---	7.3	PACE
QC-1 (c)	05/12/94	---	---	---	430	---		2.6	1.3	ND<0.5	ND<0.5	780	(d)	---	---	---	---	PACE
MW-4	09/09/94	39.24	20.27	18.97	240	---		9.1	1.3	0.6	2.5	---		---	---	---	2.2	PACE
QC-1 (c)	09/09/94	---	---	---	57	---		1.7	ND<0.5	ND<0.5	0.5	---		---	---	---	---	PACE
MW-4	11/03/94	39.24	18.46	20.78	250	---		3.1	2.8	1.0	3.3	---		---	---	---	3.2	PACE
QC-1 (c)	11/03/94	---	---	---	110	---		2.4	ND<0.5	ND<0.5	ND<0.5	---		---	---	---	---	PACE
MW-4	03/01/95	39.24	16.15	23.09	8900	---		1800	26	450	400	---		---	---	---	2.0	ATI
QC-1 (c)	03/01/95	---	---	---	7600	---		1700	25	410	370	---		---	---	---	---	ATI
MW-4	06/06/95	39.24	16.28	22.96	3100	---	(e)	530	25	170	85	---		---	---	---	---	ATI
QC-1 (c)	06/06/95	---	---	---	3000	---		530	27	170	92	---		---	---	---	---	ATI
MW-4 (f)	09/01/95	39.24	---	---	---	---		---	---	---	---	---		---	---	---	---	---
MW-4	11/29/95	39.24	17.31	21.93	ND<50	---		1.8	ND<0.50	ND<0.50	ND<1.0	440		---	---	---	3.2	ATI
QC-1 (c)	11/29/95	---	---	---	ND<50	---		1.5	ND<0.50	ND<0.50	ND<1.0	490		---	---	---	---	ATI
MW-4	03/23/96	39.24	15.74	23.50	2700	---		480	ND<25	180	176	13000		---	---	---	7.8	SPL
MW-4	09/05/96	39.24	16.75	22.49	1100	---		ND<12	ND<25	ND<25	ND<25	3200		---	---	---	4.0	SPL
MW-4	03/11/97	39.24	16.10	23.14	2400	---		46	ND<10	66	106	3400		---	---	---	4.0	SPL
MW-4	12/08/97	39.24	15.96	23.28	590	---		11	ND<1.0	ND<1.0	ND<1.0	1200		---	---	---	4.4	SPL
QC-1 (c)	12/08/97	---	---	---	620	---		11	ND<1.0	ND<1.0	ND<1.0	1100		---	---	---	---	SPL
MW-4	07/08/98	39.24	16.28	22.96	1700	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	1200		---	---	---	3.9	SPL
QC-1 (c)	07/08/98	---	---	---	1600	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	1100		---	---	---	---	SPL
MW-4	12/07/98	39.24	16.47	22.77	530	---		ND<2.5	ND<5.0	ND<5.0	ND<5.0	680/910	(h)	---	---	---	---	SPL
MW-4	01/19/99	39.24	16.40	22.84	570	---		ND<1.0	ND<1.0	ND<1.0	ND<1.0	660		---	---	---	---	SPL
MW-5	06/06/95	39.07	16.16	22.91	1100	---	(e)	42	ND<2.5	15	4.0	---		---	---	---	---	ATI
MW-5	09/01/95	39.07	16.63	22.44	1600	---		55	ND<2.5	15	8.0	1200		---	---	---	7.4	ATI
QC-1 (c)	09/01/95	---	---	---	1200	---		64	ND<2.5	14	3.1	---		---	---	---	---	ATI
MW-5	11/29/95	39.07	17.19	21.88	2300	---		140	4.0	36	11	1500		---	---	---	4.1	ATI
MW-5	03/23/96	39.07	15.54	23.53	90	---		2.8	ND<1	ND<1	ND<1	1500		---	---	---	7.5	SPL
MW-5	09/05/96	39.07	16.72	22.35	2300	---		5.1	ND<1.0	ND<1.0	ND<1.0	3300		---	---	---	3.2	SPL
QC-1 (c)	09/05/96	---	---	---	2000	---		4.9	ND<1.0	ND<1.0	ND<1.0	2900		---	---	---	---	SPL
MW-5	03/11/97	39.07	16.12	22.95	470	---		ND<5.0	ND<5.0	ND<5.0	ND<5.0	580		---	---	---	3.0	SPL
QC-1 (c)	03/11/97	---	---	---	460	---		ND<5.0	ND<5.0	ND<5.0	ND<5.0	540		---	---	---	---	SPL
MW-5	12/08/97	39.07	15.85	23.22	370	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	840		---	---	---	3.0	SPL
MW-5	07/08/98	39.07	16.11	22.96	430	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	330		---	---	---	2.5	SPL
MW-5	12/07/98	39.07	16.27	22.80	220	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	290/410	(h)	---	---	---	---	SPL
MW-5	01/19/99	39.07	16.31	22.76	490	---		ND<1.0	ND<1.0	ND<1.0	ND<1.0	490/440	(h)	---	---	---	---	SPL

Table 1 - Summary of Results of Groundwater Sampling

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	TPH-G (b) (ug/l)	TPH-D (ug/l)		B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)		TOG (ug/l)	1,1,1-TCA (ug/l)	PCE (ug/l)	DO (ppm)	LAB
MW-6	03/01/95	38.46	15.66	22.80	270	---		11	ND<0.50	ND<0.50	ND<1.0	---		---	---	---	1.6	ATI
MW-6	06/06/95	38.46	15.82	22.64	220	---	(e)	2.3	ND<0.50	ND<0.50	ND<1.0	---		---	---	---	---	ATI
MW-6	09/01/95	38.46	16.25	22.21	780	---		ND<2.5	ND<2.5	ND<2.5	ND<5.0	2800		---	---	---	7.5	ATI
MW-6	11/29/95	38.46	16.80	21.66	ND<50	---		ND<0.50	ND<0.50	ND<0.50	ND<1.0	1100		---	---	---	3.9	ATI
MW-6	03/23/96	38.46	15.27	23.19	50	---		ND<0.5	ND<1	ND<1	ND<1	910		---	---	---	8.0	SPL
MW-6	09/05/96	38.46	16.30	22.16	4400	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	7400		---	---	---	3.0	SPL
MW-6	03/11/97	38.46	15.75	22.71	1100	---		ND<5.0	ND<5.0	ND<5.0	ND<5.0	2000		---	---	---	3.1	SPL
MW-6	12/08/97	38.46	15.51	22.95	150	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	140		---	---	---	3.4	SPL
MW-6	07/08/98	38.46	15.78	22.68	370	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	250		---	---	---	3.6	SPL
MW-6	12/07/98	38.46	15.95	22.51	440	---		ND<1.0	ND<1.0	ND<1.0	ND<1.0	630/820	(h)	---	---	---	---	---
MW-6	01/19/99	38.46	15.97	22.49	950	---		ND<1.0	ND<1.0	ND<1.0	ND<1.0	950/810	(h)	---	---	---	---	SPL
MW-7	03/01/95	39.50	16.21	23.29	1400	---		14	ND<1.0	14	27	---		---	---	---	1.8	ATI
MW-7	06/06/95	39.50	16.34	23.16	540	---	(e)	5.5	ND<0.50	15	1.1	---		---	---	---	---	ATI
MW-7	09/01/95	39.50	16.74	22.76	190	---		2.8	ND<0.50	5.0	ND<1.0	10		---	---	---	7.5	ATI
MW-7	11/29/95	39.50	17.33	22.17	230	---		31	ND<0.50	3.8	1.9	ND<5.0		---	---	---	4.6	ATI
MW-7	03/23/96	39.50	15.86	23.64	ND<50	---		5.0	ND<1	ND<1	ND<1	330		---	---	---	7.2	SPL
QC-1 (c)	03/23/96	---	---	---	60	---		7.6	ND<1	ND<1	ND<1	360		---	---	---	---	SPL
MW-7	09/05/96	39.50	16.80	22.70	200	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	430		---	---	---	3.1	SPL
MW-7	03/11/97	39.50	18.32	21.18	120	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	140		---	---	---	4.7	SPL
MW-7	12/08/97	39.50	16.02	23.48	240	---		0.8	ND<1.0	ND<1.0	ND<1.0	200		---	---	---	5.2	SPL
MW-7	07/08/98	39.50	16.32	23.18	270	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	170		---	---	---	4.8	SPL
MW-7	12/07/98	39.50	16.43	23.07	100	---		ND<0.5	ND<1.0	ND<1.0	ND<1.0	120		---	---	---	---	SPL
MW-7	01/19/99	39.50	16.41	23.09	80	---		ND<1.0	ND<1.0	ND<1.0	ND<1.0	80		---	---	---	---	SPL

Table 1 - Summary of Results of Groundwater Sampling

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)	TOG (ug/l)	1,1,1-TCA (ug/l)	PCE (ug/l)	DO (ppm)	LAB
QC-2 (g)	11/04/92	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	PACE
QC-2 (g)	11/04/92	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	PACE
QC-2 (g)	03/01/95	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<1.0	---	---	---	---	---	PACE
QC-2 (g)	05/12/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	PACE
QC-2 (g)	09/09/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	PACE
QC-2 (g)	11/03/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	PACE
QC-2 (g)	06/06/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	---	ATI
QC-2 (g)	09/01/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	---	---	ATI
QC-2 (g)	11/29/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	---	---	ATI
QC-2 (g)	03/23/96	---	---	---	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	---	---	SPL

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
TOG	Total oil and grease
1,1,1-TCA	1,1,1-Trichloroethane
PCE	Tetrachloroethene
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
ND	Not detected above reported detection limit
---	Not measured/analyzed/applicable
PACE	Pace, Inc.
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories

NOTES:

(a) Top of casing elevations surveyed relative to an established benchmark with an elevation of 39.95 feet above mean sea level.

(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 10-060-07-001.

(e) MTBE peak present. See documentation in Appendix C of Alisto report 10-060-07-001.

(f) Well inaccessible.

(g) Travel blank.

(h) EPA methods 8020/8260 used

Analytical Appendix

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

February 3, 1999

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

The following report contains analytical results for the sample(s) received at Southern Petroleum Laboratories (SPL) on January 25, 1999. The sample(s) was assigned to Certificate of Analysis No. (s) 9901A26 and analyzed for all parameters as listed on the chain of custody.

Your samples for this project were received at SPL, Inc. at 14° Celsius. As per Doug Sanders of Blaine Tech Services the laboratory proceeded with the analyses on the chain of custody.

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: 99-01-A26

Approved for Release by:

Sonia West
Sonia West, Senior Project Manager

2-3-99
Date

Greg Grandits
Laboratory Director

Cynthia Schreiner
Quality Assurance Officer

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

Certificate of Analysis No. H9-9901A26-01

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

P.O.#
N/A , COC#107250
DATE: 02/02/99

PROJECT: #11107, 18501 Wesperian Blvd.
SITE: San Lorenzo, CA
SAMPLED BY: Blaine Tech Services
SAMPLE ID: A

PROJECT NO: 990119-K2
MATRIX: WATER
DATE SAMPLED: 01/19/99
DATE RECEIVED: 01/25/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	80	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	110		
4-Bromofluorobenzene	107		
Method 8020A ***			
Analyzed by: LJ			
Date: 01/27/99			
Gasoline Range Organics	0.080	0.050 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	80		
4-Bromofluorobenzene	100		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 01/27/99 03:25:00			

(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. H9-9901A26-02

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

P.O.#
N/A , COC#107250
DATE: 02/02/99

PROJECT: #11107, 18501 Wesperian Blvd. **PROJECT NO:** 990119-K2
SITE: San Lorenzo, CA **MATRIX:** WATER
SAMPLED BY: Blaine Tech Services **DATE SAMPLED:** 01/19/99
SAMPLE ID: B **DATE RECEIVED:** 01/25/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	950	5.0 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	107		
4-Bromofluorobenzene	103		
Method 8020A ***			
Analyzed by: LJ			
Date: 01/27/99			
Gasoline Range Organics	0.95	0.050 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	83		
4-Bromofluorobenzene	100		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 01/27/99 03:52:00			

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

Certificate of Analysis No. H9-9901A26-02

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

P.O.#
N/A , COC#107250
02/02/99

PROJECT: #11107, 18501 Wesperian Blvd. **PROJECT NO:** 990119-K2
SITE: San Lorenzo, CA **MATRIX:** WATER
SAMPLED BY: Blaine Tech Services **DATE SAMPLED:** 01/19/99
SAMPLE ID: B **DATE RECEIVED:** 01/25/99

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Methyl t-Butyl Ether	810	50	ug/L
Di-isopropyl Ether	ND	10	ug/L
tert-Butyl Ethyl Ether	ND	10	ug/L
tert-Amyl Methyl Ether	ND	10	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	96	80	120
Toluene-d8	50 ug/L	104	88	110
4-Bromofluorobenzene	50 ug/L	108	86	115

ANALYZED BY: LT DATE/TIME: 01/29/99 23:01:00
METHOD: 8260 Water, Volatile Organics
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9901A26-03

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

P.O.# N/A , COC#107250
DATE: 02/02/99

PROJECT: #11107, 18501 Wesperian Blvd.
SITE: San Lorenzo, CA
SAMPLED BY: Blaine Tech Services
SAMPLE ID: C

PROJECT NO: 990119-K2
MATRIX: WATER
DATE SAMPLED: 01/19/99
DATE RECEIVED: 01/25/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	490	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	110		
4-Bromofluorobenzene	103		
Method 8020A ***			
Analyzed by: LJ			
Date: 01/27/99			
Gasoline Range Organics	0.49	0.050 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	80		
4-Bromofluorobenzene	100		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 01/27/99 04:19:00			

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

Certificate of Analysis No. H9-9901A26-03

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

P.O.#
N/A , COC#107250
02/02/99

PROJECT: #11107, 18501 Wesperian Blvd.
SITE: San Lorenzo, CA
SAMPLED BY: Blaine Tech Services
SAMPLE ID: C

PROJECT NO: 990119-K2
MATRIX: WATER
DATE SAMPLED: 01/19/99
DATE RECEIVED: 01/25/99

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Methyl t-Butyl Ether	440	50	ug/L
Di-isopropyl Ether	ND	10	ug/L
tert-Butyl Ethyl Ether	ND	10	ug/L
tert-Amyl Methyl Ether	ND	10	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	98	80	120
Toluene-d8	50 ug/L	106	88	110
4-Bromofluorobenzene	50 ug/L	106	86	115

ANALYZED BY: LT DATE/TIME: 01/29/99 22:35:00
METHOD: 8260 Water, Volatile Organics
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS:

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. H9-9901A26-04

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

P.O.# N/A , COC#107250
DATE: 02/02/99

PROJECT: #11107, 18501 Wesperian Blvd.
SITE: San Lorenzo, CA
SAMPLED BY: Blaine Tech Services
SAMPLE ID: D

PROJECT NO: 990119-K2
MATRIX: WATER
DATE SAMPLED: 01/19/99
DATE RECEIVED: 01/25/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	660	5.0 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	107		
4-Bromofluorobenzene	107		
Method 8020A ***			
Analyzed by: LJ			
Date: 01/28/99			
Gasoline Range Organics	0.57	0.050 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	83		
4-Bromofluorobenzene	100		
California LUFT Manual for Gasoline			
Analyzed by: LJ			
Date: 01/27/99 04:45:00			

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

Certificate of Analysis No. H9-9901A26-04

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

P.O.#
N/A , COC#107250
02/02/99

PROJECT: #11107, 18501 Wesperian Blvd.
SITE: San Lorenzo, CA
SAMPLED BY: Blaine Tech Services
SAMPLE ID: D

PROJECT NO: 990119-K2
MATRIX: WATER
DATE SAMPLED: 01/19/99
DATE RECEIVED: 01/25/99

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
1,2-Dibromoethane	ND	0.5	ug/L
1,2-Dichloroethane	ND	0.5	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
Fluorobenzene	30 ug/L	117	66	124

ANALYZED BY: YN DATE/TIME: 01/26/99 21:54:00
METHOD: 8021B, Volatile Organic [SW-846]
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS:

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

QUALITY CONTROL

DOCUMENTATION

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL Contract:

Lab Code: Case No.: 9901906 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: MW-19

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	500	0	540	108	61-145
Trichloroethene	500	0	490	98	71-120
Benzene	500	1100	1600	100	76-127
Toluene	500	0	500	100	76-125
Chlorobenzene	500	0	470	94	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	500	100	8	14	61-145
Trichloroethene	50	460	92	6	14	71-120
Benzene	50	1500	80	22*	11	76-127
Toluene	50	460	92	8	13	76-125
Chlorobenzene	50	430	86	9	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits due to matrix interference

RPD: 1 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

SPL Houston Labs

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: METHSPIKE-8260W/1X
Level: LOW
Data Type: MS DATA
SpikeList File: 8260_water.spk
Sublist File: 8260_lcs.sub
Method File: /var/chem/l.i/l990201.b/l8260aw.m
Misc Info: L032W1//L032CW1

Client SDG: l990201
Fraction: VOA
Client Smp ID: LCS
Operator: LT
SampleType: METHSPIKE
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
8 1,1-Dichloroethene	50	49	98.00	61-145
29 Trichloroethene	50	47	94.00	71-120
25 Benzene	50	51	102.00	76-127
37 Toluene	50	47	94.00	76-125
45 Chlorobenzene	50	46	92.00	75-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 21 1,2-Dichloroethane	50	49	98.00	80-120
$ 36 Toluene-d8	50	52	104.00	88-110
$ 56 Bromofluorobenzene	50	52	104.00	86-115

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL Contract:

Lab Code: Case No.: 9901795 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: SEHB-MW-17

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	25000	0	21000	84	61-145
Trichloroethene	25000	0	20000	80	71-120
Benzene	25000	44000	55000	44*	76-127
Toluene	25000	0	20000	80	76-125
Chlorobenzene	25000	0	20000	80	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	25000	21000	84	0	14	61-145
Trichloroethene	25000	21000	84	5	14	71-120
Benzene	25000	57000	52*	17*	11	76-127
Toluene	25000	21000	84	5	13	76-125
Chlorobenzene	25000	21000	84	5	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits due to matrix interference

RPD: 1 out of 5 outside limits
Spike Recovery: 2 out of 10 outside limits

SPL Houston Labs

RECOVERY REPORT

Client Name: Client SDG: l990129
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: METHSPIKE-8260W/1X
Level: LOW Operator: LT
Data Type: MS DATA SampleType: METHSPIKE
SpikeList File: 8260_water.spk Quant Type: ISTD
Sublist File: 8260_lcs.sub
Method File: /var/chem/l.i/l990129.b/l8260aw.m
Misc Info: L029W1//L029CW1

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
8 1,1-Dichloroethene	50	41	82.00	61-145
29 Trichloroethene	50	43	86.00	71-120
25 Benzene	50	44	88.00	76-127
37 Toluene	50	42	84.00	76-125
45 Chlorobenzene	50	42	84.00	75-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 21 1,2-Dichloroethane	50	50	100.00	80-120
$ 36 Toluene-d8	50	52	104.00	88-110
$ 56 Bromofluorobenzene	50	52	104.00	86-115

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8880 INTERCHANGE DRIVE
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PHONE (713) 660-0901

SPL Blank QC Report

Matrix: Aqueous
Sample ID: VLBLK1
Batch: L990129104642

Reported on: 02/02/99 16:00
Analyzed on: 01/29/99 16:10
Analyst: LT

METHSPIKE 8260/8240 L029B01

Compound	Result	Detection Limit	Units
Methyl t-Butyl Ether	ND	10	ug/L
Di-isopropyl Ether	ND	10	ug/L
tert-Butyl Ethyl Ether	ND	10	ug/L
tert-Amyl Methyl Ether	ND	10	ug/L

Surrogate	Result	QC Criteria	Units
1,2-Dichloroethane-d4	96	80-120	% Recovery
Toluene-d8	104	88-110	% Recovery
Bromofluorobenzene	104	86-115	% Recovery

Samples in Batch 9901A26-02 9901A26-03

Notes

ND - Not detected.

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SPL Blank QC Report

Matrix: Aqueous
Sample ID: VLBLK
Batch: L990201104642

Reported on: 02/02/99 16:00
Analyzed on: 02/01/99 14:58
Analyst: LT

METHOD 8260/8240 L032B01

Compound	Result	Detection Limit	Units
Methyl t-Butyl Ether	ND	10	ug/L
Di-isopropyl Ether	ND	10	ug/L
tert-Butyl Ethyl Ether	ND	10	ug/L
tert-Amyl Methyl Ether	ND	10	ug/L

Surrogate	Result	QC Criteria	Units
1,2-Dichloroethane-d4	98	80-120	% Recovery
Toluene-d8	106	88-110	% Recovery
Bromofluorobenzene	104	86-115	% Recovery

Samples in Batch 9901A26-02 9901A26-03

Notes
ND - Not detected.

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** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Matrix: Aqueous
Units: ug/L

Batch Id: VARE990127072500

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	48	96.0	72 - 128
Benzene	ND	50	48	96.0	61 - 119
Toluene	ND	50	48	96.0	65 - 125
EthylBenzene	ND	50	49	98.0	70 - 118
O Xylene	ND	50	48	96.0	72 - 117
M & P Xylene	ND	100	97	97.0	72 - 116

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
MTBE	280	20	280	NC	310	NC	NC	20	39 - 150
BENZENE	ND	20	21	105	21	105	0	21	32 - 164
TOLUENE	ND	20	22	110	21	105	4.65	20	38 - 159
ETHYLBENZENE	ND	20	23	115	22	110	4.44	19	52 - 142
O XYLENE	ND	20	23	115	22	110	4.44	18	53 - 143
M & P XYLENE	ND	40	45	112	44	110	1.80	17	53 - 144

Analyst: LJ
Sequence Date: 01/27/99
SPL ID of sample spiked: 9901A27-05A
Sample File ID: E_A4110.TX0
Method Blank File ID:
Blank Spike File ID: E_A4103.TX0
Matrix Spike File ID: E_A4105.TX0
Matrix Spike Duplicate File ID: E_A4106.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):

9901A27-04A 9901A27-06A 9901A31-03A 9901A27-01A
9901A26-03A 9901A23-08A 9901A23-10A 9901A23-05A
9901A23-06A 9901A23-07A 9901962-02A 9901A26-02A
9901A19-02A 9901A27-05A 9901A27-06A 9901A27-02A
9901A27-03A

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** SPL BATCH QUALITY CONTROL REPORT **

METHOD 8020

Matrix: Aqueous

Batch Id: VARE990128002900

Units: ug/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
MTBE	ND	50	47	94.0	72 - 128
Benzene	ND	50	47	94.0	61 - 119
Toluene	ND	50	48	96.0	65 - 125
EthylBenzene	ND	50	48	96.0	70 - 118
O Xylene	ND	50	48	96.0	72 - 117
M & P Xylene	ND	100	97	97.0	72 - 116

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
MTBE	ND	20	25	125	25	125	0	20	39 - 150
BENZENE	ND	20	21	105	21	105	0	21	32 - 164
TOLUENE	ND	20	20	100	20	100	0	20	38 - 159
ETHYLBENZENE	ND	20	20	100	20	100	0	19	52 - 142
O XYLENE	ND	20	21	105	22	110	4.65	18	53 - 143
M & P XYLENE	ND	40	40	100	40	100	0	17	53 - 144

Analyst: LJ

Sequence Date: 01/28/99

SPL ID of sample spiked: 9901A19-03A

Sample File ID: E_A4144.TX0

Method Blank File ID:

Blank Spike File ID: E_A4137.TX0

Matrix Spike File ID: E_A4139.TX0

Matrix Spike Duplicate File ID: E_A4140.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):

9901A19-07A 9901A19-08A 9901A19-09A 9901A19-10A
9901A19-11A 9901A19-12A 9901A19-01A 9901A19-05A
9901A19-13A 9901A19-14A 9901A43-01A 9901A19-03A
9901A19-04A 9901A26-04A 9901A19-06A

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** SPL BATCH QUALITY CONTROL REPORT **

California LUFT Manual for Gasoline

Matrix: Aqueous
Units: mg/L

Batch Id: VARE990126164300

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	0.97	97.0	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	ND	0.90	0.74	82.2	0.64	71.1	14.5	36	36 - 160

Analyst: LJ
Sequence Date: 01/26/99
SPL ID of sample spiked: 9901A23-02A
Sample File ID: EEA4077.TX0
Method Blank File ID:
Blank Spike File ID: EEA4070.TX0
Matrix Spike File ID: EEA4073.TX0
Matrix Spike Duplicate File ID: EEA4074.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):

9901A23-05A 9901A23-06A 9901A23-07A 9901A23-09A
9901A26-01A 9901A26-02A 9901A26-03A 9901A26-04A
9901A23-01A 9901A23-02A 9901A23-03A 9901A23-04A

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** SPL BATCH QUALITY CONTROL REPORT **
Method 8021B ***

Matrix: Aqueous
Units: ug/L

Batch Id: HP_F990126165100

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
1,2-Dibromoethane	ND	20	17	85.0	50 - 150
1,2-Dichloroethane	ND	20	18	90.0	79 - 121

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
1,2-DIBROMOETHANE	ND	20	22	110	20	100	9.52	33	67 - 135
1,2-DICHLOROETHANE	ND	20	23	115	21	105	9.09	13	75 - 123

Analyst: YN
Sequence Date: 01/26/99
SPL ID of sample spiked: 9901977-03B
Sample File ID: F_A4020.TX0
Method Blank File ID:
Blank Spike File ID: F_A4013.TX0
Matrix Spike File ID: F_A4015.TX0
Matrix Spike Duplicate File ID: F_A4016.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 Historical limits 1st Qtr.'97
(***) = Source: SPL Historical Limits 1st Qtr.'97

SAMPLES IN BATCH(SPL ID): 9901A26-04B

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

9901A26

BP

CHAIN OF CUSTODY

No. 107250

Page 1 of 1

CONSULTANT'S NAME: BlaineTech Services	CONSULTANT'S ADDRESS: 1680 Rogers Ave San Jose, CA
BP SITE NUMBER: 11107	BP SITE / FACILITY ADDRESS: 18501 Hesperian Blvd San Lorenzo, CA
CONSULTANT PROJECT NUMBER: 990119-K2	
CONSULTANT PROJECT MANGER:	PHONE NUMBER:
FAX NUMBER:	CONSULTANT CONTRACT NUMBER:
BP CONTACT:	BP ADDRESS:
PHONE NUMBER:	FAX NO.:
LAB CONTACT:	LABORATORY ADDRESS:
PHONE NUMBER:	FAX NO.:
BP CONTACT REQUESTING RUSH TAT (Print BP Contact Name):	RUSH REQUESTED OF (Print Consultant Contact Name):
DATE/TIME:	SHIPMENT DATE:
SHIPMENT METHOD:	AIRBILL NUMBER:

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

ANALYSIS REQUIRED

SAMPLE DESCRIPTION	COLLECTION DATE	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPH-g	BTEX	MTBE	[illegible]	[illegible]						COMMENTS
A	1/19/99		W	3			X	X	X								
B	↓		W	6			X	X	X		X						
C			W	6			X	X	X		X						
D			W	9			X	X	X	X							

SAMPLED BY (Please Print Name): Mark Spandler

SAMPLED BY (Signature): [signature]

ADDITIONAL COMMENTS: 14°C

RELINQUISHED BY / AFFILIATION (Print Name / Signature)	DATE	TIME	ACCEPTED BY /AFFILIATION (Print Name / Signature)	DATE	TIME
Mark Spandler [signature]	1/21/99	1547			
			Randy Tornell / [signature]	1-25-99	10:00

LV-16722-A (2/97)
KG/50

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

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
1-25-99	1000

SPL Sample ID:
9901A26

			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:		14 C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	804039486121	
		Other:		
11	Method of sample disposal:	SPL Disposal	—	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	1-25-99

Field
Data
Sheets

WELL GAUGING DATA

Project # 990119-K2 Date 1/19/99 Client BP

Site 18501 Hesperian Blvd San Lorenzo

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	2					17.18	24.98	TOC	
MW-2	2					17.15	24.90		
MW-3	2					17.70	25.10		
MW-4	2					16.40	25.19		
MW-5	2					16.31	24.50		
MW-6	2					15.97	24.89		
MW-7	2					16.41	24.44		

WELL MONITORING DATA SHEET

Project #: 990119-K2	Client: BP
Sampler: Mark	Start Date: 11/19/99
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 25.19	Depth to Water: 16.40
Before: After:	Before: After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

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

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

1.4 (Gals.) X 3 = 4.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1432	67.4	7.2	914	>200	1.5	
1434	67.9	7.2	911	>200	3.0	
1436	68.3	7.1	913	>200	4.25	

Did well dewater? Yes (No)	Gallons actually evacuated: 4.25
Sampling Time: 1440	Sampling Date: 11/19/99
Sample I.D.: D	Laboratory: SPL
Analyzed for: (TPH-G BTEX MTBE) TPH-D	Other: (8010, 8260)
Equipment Blank I.D.: @ Time	Duplicate I.D.:
Analyzed for: TPH-G BTEX MTBE TPH-D	Other:

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

WELL MONITORING DATA SHEET

Project #: 990119-K2	Client: BP
Sampler: Mark	Start Date: 1/19/99
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 24.50	Depth to Water: 16.31
Before: After:	Before: After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method: Bailer / Disposable Bailer * / Middleburg / Electric Submersible / Extraction Pump / Other: ___

Sampling Method: Bailer / Disposable Bailer X / Extraction Port / Other: ___

1.3 (Gals.) X 3 = 3.9 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1416	67.3	7.1	908	>200	1.25	
1418	67.8	7.1	909	>200	2.75	
1420	68.0	7.0	903	>200	4.0	

Did well dewater? Yes (No)	Gallons actually evacuated: 4.0
Sampling Time: 1425	Sampling Date: 1/19/99
Sample I.D.: C	Laboratory: SPL
Analyzed for: (TPH-G BTEX MTBE) TPH-D	(Other:) 8260
Equipment Blank I.D.: @ Time	Duplicate I.D.:
Analyzed for: TPH-G BTEX MTBE TPH-D	Other:

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

WELL MONITORING DATA SHEET

Project #: 990119-K2	Client: BP
Sampler: Mark	Start Date: 11/19/99
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 24.89	Depth to Water: 13.97
Before: After:	Before: After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

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

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

1.44 (Gals.) X 3 = 4.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1359	67.7	7.1	902	>200	1.5	
1401	67.9	7.0	906	>200	3.0	
1403	67.9	7.0	910	>200	4.25	

Did well dewater? Yes (No)	Gallons actually evacuated: 4.25
Sampling Time: 1410	Sampling Date: 11/19/99
Sample I.D.: 6	Laboratory: STL
Analyzed for: (TPH-G BTEX MTBE) TPH-D (Other) 8240	
Equipment Blank I.D.: @ Time	Duplicate I.D.:
Analyzed for: TPH-G BTEX MTBE TPH-D	Other:

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

WELL MONITORING DATA SHEET

Project #: 990119-K2	Client: BP
Sampler: Mark	Start Date: 1/19/99
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 24.44	Depth to Water: 10.41
Before: After:	Before: After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

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

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

1.3 (Gals.) X 3 = 3.9 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1341	69.3	7.4	897	>200	1.25	
1343	69.3	7.3	896	>200	2.75	
1345	68.7	7.1	894	>200	4.0	

Did well dewater? Yes (No)	Gallons actually evacuated: 4.0
Sampling Time: 1350	Sampling Date: 1/19/99
Sample I.D.: A	Laboratory: SPL
Analyzed for: (TPH-G BTEX MTBE) TPH-D	Other:
Equipment Blank I.D.: @ Time	Duplicate I.D.:
Analyzed for: TPH-G BTEX MTBE TPH-D	Other:

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