BP OIL

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

July 10, 1997

Ms Eva Chu
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway Suite 250
Alameda, CA 94502-6577

RE: BP OIL FACILITY #11120
6400 Dublin Blvd
Dublin, CA

Dear Ms Chu:

Attached please find our **GROUNDWATER MONITORING AND SAMPLING REPORT DATED JUNE 3, 1997** for the above referenced facility. Plans for the following quarter include additional groundwater monitoring.

On a final note, please note that BP and Mobil Oil Corporation have an agreement to cooperate in the filing for reimbursement applications to the UST Cleanup Fund. If you become aware of any notices or proposals to withdraw a Letter of Commitment for this site, please give me a call to let me know immediately.

If you should have any questions regarding this site, I may be reached at (425) 251-0689.

Sincerely,

Scott T. Hooton
Environmental Remediation Management

STH:sb msword\ERM11120

cc: Mr. Eddy So, CRWQCB San Francisco Bay Region, 2101 Webster Street , Suite 500, Oakland CA 94612 (without attachment)

Mr. Brady Nagle, Alisto Engineering Group, 1575 Treat Blvd, Ste 201, Walnut Creek, CA 94598

Ms. Tina Berry,TOSCO, 2000 Crow Canyon Place, Suite 400, San Ramon, CA 94583

site file

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11120
6400 Dublin Boulevard
Dublin, California

Project No. 10-170-04-004

Prepared for:

BP Oil Company
Environmental Resources Management
295 S.W. 41st Street
Building 13, Suite N
Renton, Washington

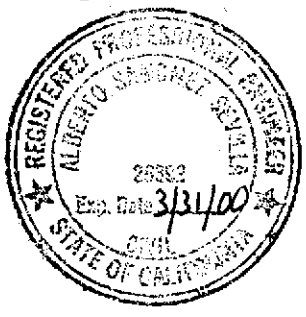
Prepared by:

Alisto Engineering Group
1575 Treat Boulevard, Suite 201
Walnut Creek, California

June 3, 1997

Dale Swain
Project Manager

Al Sevilla, P.E.
Principal



GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11120
6400 Dublin Boulevard
Dublin, California

Project No. 10-170-04-004

June 3, 1997

INTRODUCTION

This report presents the results and findings of the March 27, 1997 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11120, 6400 Dublin Boulevard, Dublin, California. A site vicinity map is shown on Figure 1.

FIELD PROCEDURES

Field activities were performed in accordance with the procedures and guidelines of the Alameda County Health Care Services Agency and the California Regional Water Quality Control Board, San Francisco Bay Region.

Before purging and sampling, the groundwater level in each well was measured from a permanent mark on top of the casing to the nearest 0.01 foot using an electronic sounder. The depth to groundwater and top of casing elevation data were used to calculate the groundwater elevation in each well relative to an arbitrary datum. The survey data and groundwater elevation measurements collected to date are presented in Table 1.

Before sample collection, each well was purged of 3 casing volumes, while recording field readings of pH, temperature, electrical conductivity, and dissolved oxygen. Groundwater samples were collected for laboratory analysis by lowering a bottom-fill, disposable bailer to just below the water level in the well. The samples were transferred from the bailer into laboratory-supplied containers. The water sampling field survey forms are presented in Appendix A.

SAMPLING AND ANALYTICAL RESULTS

The results of monitoring and laboratory analysis of the groundwater samples for this and previous quarters are summarized in Table 1. The potentiometric groundwater elevations as interpreted from the results of this monitoring event are shown on Figure 2. The results of groundwater analysis are shown on Figure 3. The laboratory report and chain of custody record are presented in Appendix B.

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11120
6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

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)	DO (ppm)	LAB
MW-1 (c)	10/27/92	328.96	8.19	320.77	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-1	04/09/93	328.96	4.79	324.17	ND<50	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-1	08/25/93	328.96	6.85	322.11	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-1	11/22/93	328.96	7.38	321.58	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-1	03/07/94	328.96	5.89	323.07	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	4.3	PACE
MW-1	06/09/94	328.96	6.42	322.54	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	8.8	PACE
MW-1	09/12/94	328.96	7.33	321.63	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.8	PACE
MW-1	12/20/94	328.96	6.34	322.62	---	---	---	---	---	---	---	---	---
MW-1	03/16/95	328.96	4.37	324.59	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	5.6	ATI
MW-1	06/28/95	328.96	5.35	323.61	---	---	---	---	---	---	---	---	---
MW-1	09/06/95	328.96	6.44	322.52	ND<50	340	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.4	ATI
MW-1	12/22/95	328.96	6.04	322.92	---	---	---	---	---	---	---	---	---
MW-1	08/20/96	328.96	5.65	323.31	---	---	---	---	---	---	---	---	---
MW-1	08/21/96	328.96	---	---	ND<50	160	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.8	SPL
MW-1	10/31/96	328.96	5.99	322.97	---	---	---	---	---	---	---	---	---
MW-1 (d)	12/02/96	328.96	---	---	---	---	---	---	---	---	---	---	---
MW-1 (d)	03/27/97	328.96	---	---	---	---	---	---	---	---	---	---	---
MW-2	10/27/92	328.50	7.64	320.86	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-2	04/09/93	328.50	4.12	324.38	ND<50	80	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-2	08/25/93	328.50	6.31	322.19	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-2	11/22/93	328.50	7.12	321.38	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-2	03/07/94	328.50	5.60	322.90	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	4.3	PACE
MW-2	06/09/94	328.50	5.91	322.59	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	8.2	PACE
MW-2	09/12/94	328.50	6.87	321.63	ND<50	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.5	PACE
MW-2	12/20/94	328.50	5.86	322.64	---	---	---	---	---	---	---	---	---
MW-2	03/16/95	328.50	3.77	324.73	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	6.6	ATI
MW-2	03/16/95	328.50	3.77	324.73	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	6.6	ATI
MW-2	06/28/95	328.50	4.33	324.17	---	---	---	---	---	---	---	---	---
MW-2	09/06/95	328.50	5.85	322.65	ND<50	210	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.0	ATI
MW-2	12/22/95	328.50	5.50	323.00	---	---	---	---	---	---	---	---	---
MW-2	08/20/96	328.50	5.07	323.43	---	---	---	---	---	---	---	---	---
MW-2	08/21/96	328.50	---	---	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	7.0	SPL
MW-2	10/31/96	328.50	5.44	323.06	---	---	---	---	---	---	---	---	---
MW-2	12/02/96	328.50	5.50	323.00	---	---	---	---	---	---	---	---	---
MW-2	03/27/97	328.50	4.61	323.89	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.8	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11120
6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

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)	DO (ppm)	LAB
MW-3	10/27/92	329.36	8.43	320.93	210	ND<50	3	0.7	0.9	30	---	---	PACE
MW-3	04/09/93	329.36	4.90	324.46	400	260	6.1	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	08/25/93	329.36	7.13	322.23	2000	440	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-3	11/22/93	329.36	7.60	321.76	1800	360	ND<2.5	ND<2.5	ND<2.5	ND<2.5	---	---	PACE
MW-3	03/07/94	329.36	6.08	323.28	1300	5000	22	4.0	2.2	3.8	---	3.7	PACE
MW-3	06/09/94	329.36	6.51	322.85	8500	2600	25	8.3	0.5	15	---	7.2	PACE
QC-1 (e)	06/09/94	---	---	---	8800	---	23	6.3	0.5	10	---	---	PACE
MW-3	09/12/94	329.36	7.63	321.73	2100	3200	ND<5.0	ND<5.0	8.8	20	---	7.3	PACE
QC-1 (e)	09/12/94	---	---	---	1800	---	ND<5.0	ND<5.0	8.0	10	---	---	PACE
MW-3	12/20/94	329.36	6.41	322.95	18000	9600	79	28	89	9.3	---	7.3	PACE
QC-1 (e)	12/20/94	---	---	---	17000	---	79	33	80	ND<2.5	---	---	PACE
MW-3	03/16/95	329.36	4.39	324.97	6300	7000	470	ND<5.0	210	9.9	---	5.5	ATI
QC-1 (e)	03/16/95	---	---	---	6300	---	500	ND<5.0	230	13	---	---	ATI
MW-3	06/28/95	329.36	5.50	323.86	9000	3000	ND<10	ND<10	ND<10	ND<20	---	7.4	ATI
QC-1 (e)	06/28/95	---	---	---	8800	---	ND<10	ND<10	ND<10	ND<20	---	---	ATI
MW-3	09/06/95	329.36	6.66	322.70	10000	2800	ND<50	ND<50	ND<50	ND<100	37000	7.1	ATI
QC-1 (e)	09/06/95	---	---	---	9700	---	ND<50	ND<50	ND<50	ND<100	36000	---	ATI
MW-3	12/22/95	329.36	6.31	323.05	9200	2500	ND<50	ND<50	ND<50	ND<100	29000	6.7	ATI
MW-3	08/20/96	329.36	5.87	323.49	---	---	---	---	---	---	---	---	---
MW-3	08/21/96	329.36	---	---	3700	1900	ND<25	ND<50	ND<50	ND<50	4100	6.8	SPL
QC-1 (e)	08/21/96	---	---	---	3500	---	ND<25	ND<50	ND<50	ND<50	4000	---	SPL
MW-3	10/31/96	329.36	6.20	323.16	ND<250	ND<500	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	6.8	SPL
QC-1 (e)	10/31/96	---	---	---	ND<250	---	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	---	---
MW-3	12/02/96	329.36	6.27	323.09	ND<250	50	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	6.4	SPL
QC-1 (e)	12/02/96	---	---	---	ND<250	---	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	---	---
MW-3	03/27/97	329.36	5.39	323.97	470	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	490	6.2	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11120
6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

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)	DO (ppm)	LAB
MW-4	10/27/92	329.45	8.61	320.84	2300	190	23	54	50	320	---	---	PACE
MW-4	04/09/93	329.45	5.25	324.20	1600	500	78	3.5	68	1.0	---	---	PACE
MW-4	08/25/88	329.45	7.32	322.13	1800	380	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-1 (e)	08/25/93	---	---	---	1600	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-4	11/22/93	329.45	7.83	321.62	610	260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-1 (e)	11/22/93	---	---	---	1700	---	ND<2.5	ND<2.5	ND<2.5	ND<2.5	---	---	PACE
MW-4	03/07/94	329.45	6.29	323.16	710	1400	0.5	0.8	ND<0.5	ND<0.5	---	3.8	PACE
QC-1 (e)	03/07/94	---	---	---	1600	---	ND<0.5	ND<0.5	1.4	0.6	---	---	PACE
MW-4	06/09/94	329.45	6.76	322.69	6400	1800	ND<10	ND<10	ND<10	ND<10	---	7.5	PACE
MW-4	09/12/94	329.45	7.83	321.62	2000	2700	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.2	PACE
MW-4	12/20/94	329.45	6.68	322.77	9200	2400	ND<5.0	ND<5.0	ND<5.0	ND<5.0	---	6.1	PACE
MW-4	03/16/95	329.45	4.66	324.79	1400	960	140	ND<2.5	58	14	---	5.5	ATI
MW-4	06/28/95	329.45	5.93	323.52	5000	5400	240	ND<5.0	220	ND<10	---	7.4	ATI
MW-4	09/06/95	329.45	6.83	322.62	4400	4500	ND<13	ND<13	ND<13	ND<25	12000	7.6	ATI
MW-4	12/22/95	329.45	6.42	323.03	3800	4700	15	ND<13	ND<13	ND<25	9200	7.1	ATI
QC-1 (e)	12/22/95	---	---	---	3900	---	16	ND<13	ND<13	ND<25	8600	---	ATI
MW-4	08/20/96	329.45	6.01	323.44	---	---	---	---	---	---	---	---	---
MW-4	08/21/96	329.45	---	---	ND<250	470	ND<12	ND<25	ND<25	ND<25	ND<250	7.7	SPL
MW-4	10/31/96	329.45	6.37	323.08	ND<250	1600	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	7.1	SPL
MW-4	12/02/96	329.45	6.71	322.74	ND<50	13000	ND<5	ND<10	ND<10	ND<10	2200	7.3	SPL
MW-4	03/27/97	329.45	5.70	323.75	8300	1500	44	ND<25	ND<25	ND<25	8000	6.2	SPL
QC-1 (e)	03/27/97	---	---	---	6900	---	51	ND<25	ND<25	ND<25	8500	---	SPL
MW-5	04/09/93	329.60	5.18	324.42	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	08/25/93	329.60	7.28	322.32	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	11/22/93	329.60	7.82	321.78	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	03/07/94	329.60	6.27	323.33	ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	5.7	PACE
MW-5	06/09/94	329.60	6.73	322.87	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.7	PACE
MW-5	09/12/94	329.60	7.78	321.82	ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.2	PACE
MW-5	12/20/94	329.60	6.63	322.97	---	---	---	---	---	---	---	---	---
MW-5	03/16/95	329.60	4.65	324.95	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	4.9	ATI
MW-5	06/28/95	329.60	5.69	323.91	---	---	---	---	---	---	---	---	---
MW-5	09/06/95	329.60	6.82	322.78	ND<50	200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.3	ATI
MW-5	12/22/95	329.60	6.40	323.20	---	---	---	---	---	---	---	---	---
MW-5	08/20/96	329.60	5.98	323.62	---	---	---	---	---	---	---	---	---
MW-5	08/21/96	329.60	---	---	ND<50	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<10	6.9	SPL
MW-5	10/31/96	329.60	6.29	323.31	---	---	---	---	---	---	---	---	---
MW-5	12/02/96	329.60	6.37	323.23	---	---	---	---	---	---	---	---	---
MW-5	03/27/97	329.60	5.33	324.27	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.8	SPL

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BP OIL COMPANY SERVICE STATION NO. 11120
6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet) (a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-6	04/09/93	329.55	5.37	324.18	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	08/25/93	329.55	7.42	322.13	ND<50	170	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	11/22/93	329.55	7.93	321.62	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	03/07/94	329.55	6.25	323.30	ND<50	90	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	4.2	PACE
MW-6	06/09/94	329.55	6.85	322.70	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.0	PACE
MW-6	09/12/94	329.55	7.91	321.64	ND<50	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	6.7	PACE
MW-6	12/20/94	329.55	6.82	322.73	---	---	---	---	---	---	---	---	---
MW-6	03/16/95	329.55	4.78	324.77	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	6.1	ATI
MW-6	06/28/95	329.55	5.97	323.58	---	---	---	---	---	---	---	---	---
MW-6	09/06/95	329.55	6.94	322.61	ND<50	340	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.2	ATI
MW-6	12/22/95	329.55	6.53	323.02	---	---	---	---	---	---	---	---	---
MW-6	08/20/96	329.55	6.18	323.37	---	---	---	---	---	---	---	---	---
MW-6	08/21/96	329.55	---	---	ND<50	120	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	SPL
MW-6	10/31/96	329.55	6.52	323.03	---	---	---	---	---	---	---	---	---
MW-6	12/02/96	329.55	6.55	323.00	---	---	---	---	---	---	---	---	---
MW-6	03/27/97	329.55	5.50	324.05	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.3	SPL
MW-7	04/09/93	329.49	5.36	324.13	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	08/25/93	329.49	7.44	322.05	ND<50	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	11/22/93	329.49	7.92	321.57	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	03/07/94	329.49	6.20	323.29	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	3.7	PACE
MW-7	06/09/94	329.49	6.89	322.60	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	6.8	PACE
MW-7	09/12/94	329.49	7.87	321.62	ND<50	50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	6.8	PACE
MW-7	12/20/94	329.49	6.77	322.72	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	6.5	PACE
MW-7	03/16/95	329.49	4.77	324.72	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	5.9	ATI
MW-7	06/28/95	329.49	5.94	323.55	ND<50	320	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	7.8	ATI
MW-7	09/06/95	329.49	6.98	322.51	ND<50	240	ND<0.50	ND<0.50	ND<0.50	ND<1.0	8.5	7.5	ATI
MW-7	12/22/95	329.49	6.65	322.84	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	7.2	6.9	ATI
MW-7	08/20/96	329.49	6.22	323.27	---	---	---	---	---	---	---	---	---
MW-7	08/21/96	329.49	---	---	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	SPL
MW-7	10/31/96	329.49	6.56	322.93	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	86	6.8	SPL
MW-7	12/02/96	329.49	6.13	323.36	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	59	7.3	SPL
MW-7	03/27/97	329.49	5.08	324.41	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.6	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11120
6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

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)	DO (ppm)	LAB
QC-2 (f)	08/25/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	11/22/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	03/07/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	06/09/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	09/12/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	12/20/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	03/16/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2 (f)	06/28/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2 (f)	09/06/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
QC-2 (f)	12/22/95	---	---	---	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
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
ND	Not detected above reported detection limit
---	Not analyzed/applicable/measured
PACE	Pace, Inc.
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories

NOTES:

(a) Top of casing elevations surveyed to an arbitrary datum.

(b) Groundwater elevations relative to an arbitrary datum.

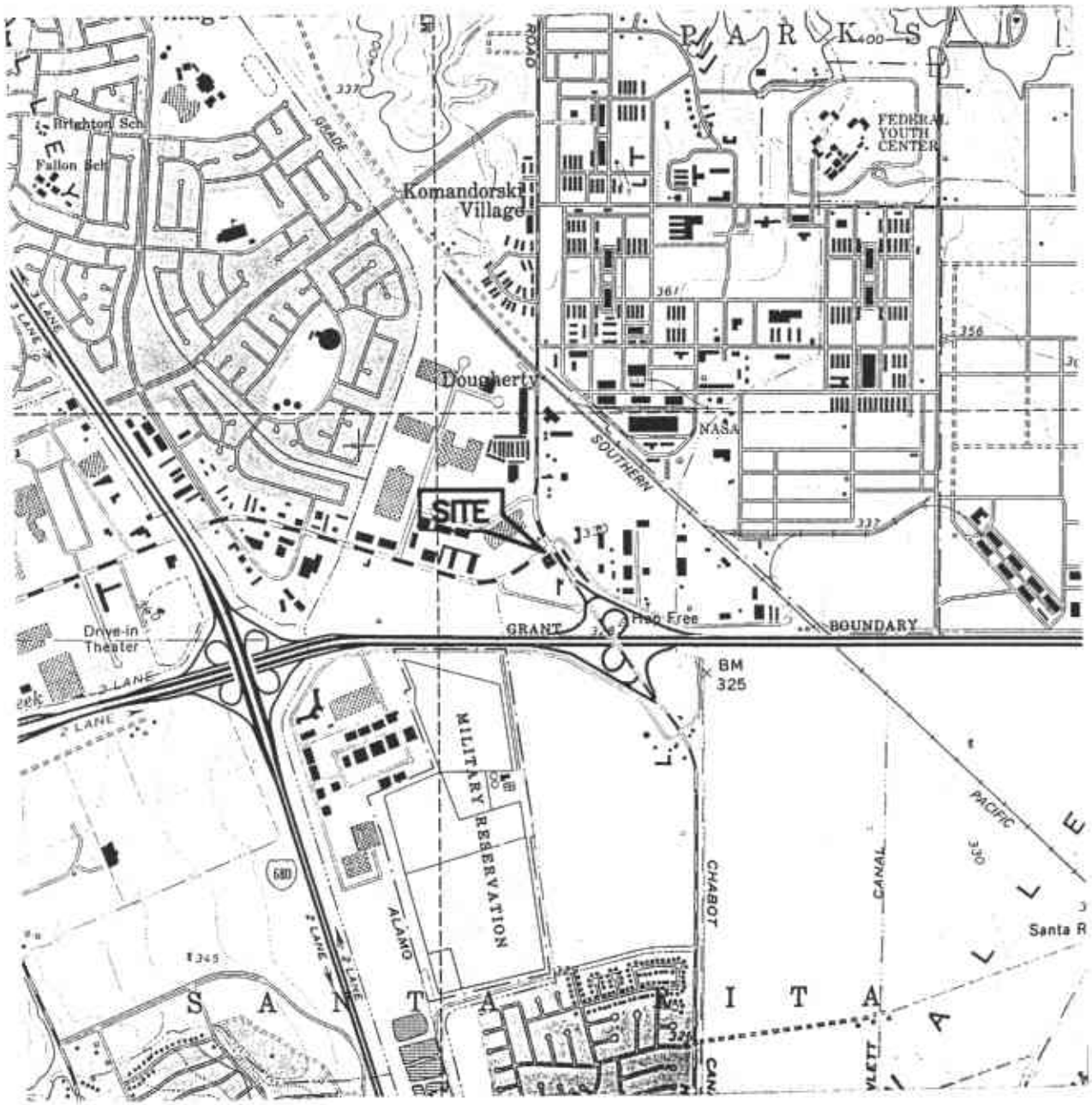
(c) Analysis did not detect total oil and grease and halogenated volatile organic compounds above reported detection limits.

(d) Well inaccessible.

(e) Blind duplicate.

(f) Travel blank.

F:\01\10-170\170-4-4.WQ2



SOURCE:
USGS MAP, DUBLIN QUADRANGLE, CALIFORNIA, 7.5 MINUTE SERIES, 1961, PHOTOREVISED 1980.

N

0 1000' 2000'

FIGURE 1

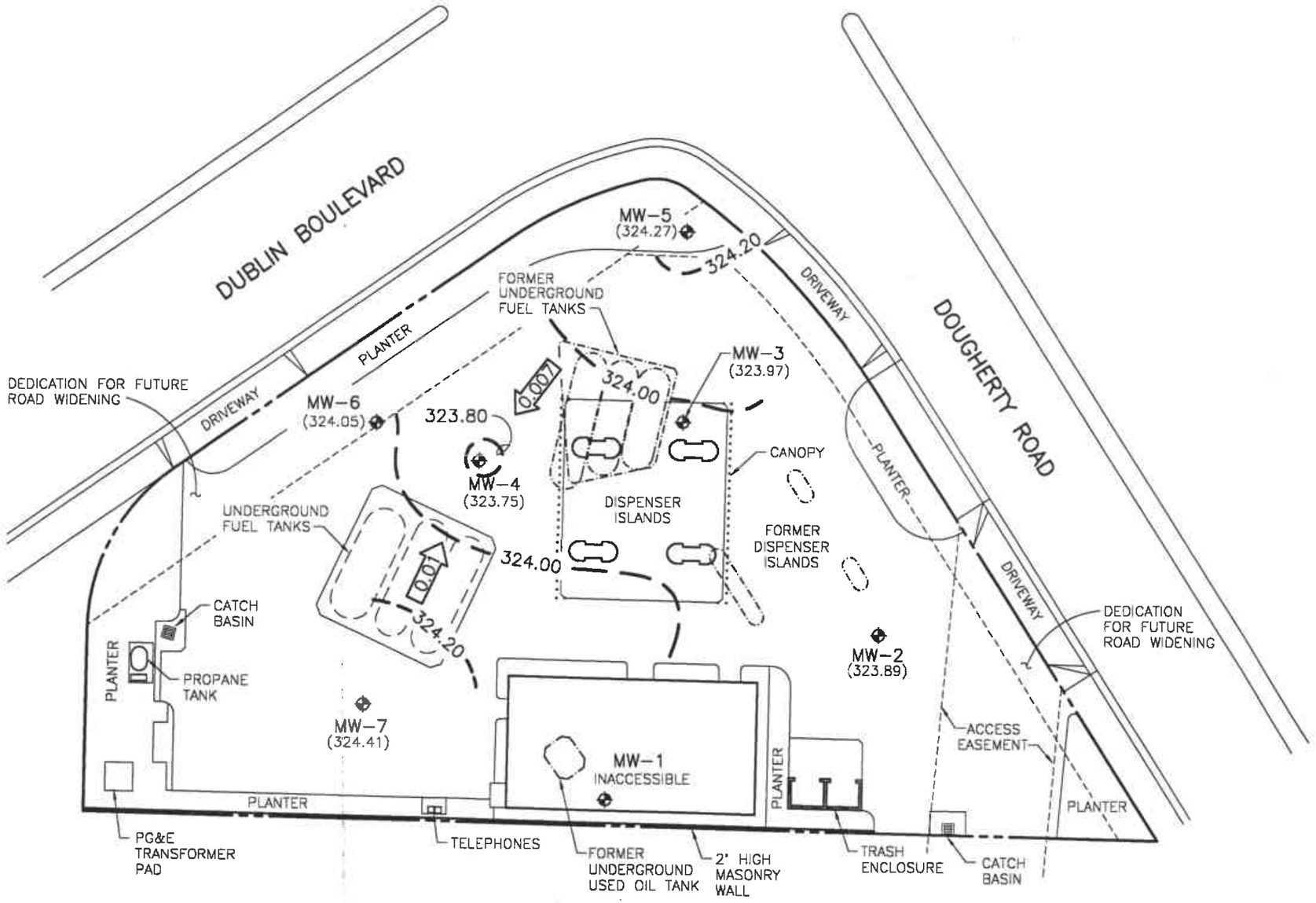
SITE VICINITY MAP

BP OIL SERVICE STATION NO. 11120
6400 DUBLIN BOULEVARD
DUBLIN, CALIFORNIA

PROJECT NO. 10-170

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10170DS---DWG 10-6-93 MW 1-1



N

0 30 60

SCALE IN FEET

LEGEND

- ◆ GROUNDWATER MONITORING WELL
- (323.75) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 323.80 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–0.20 FOOT)
- 0.01 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2

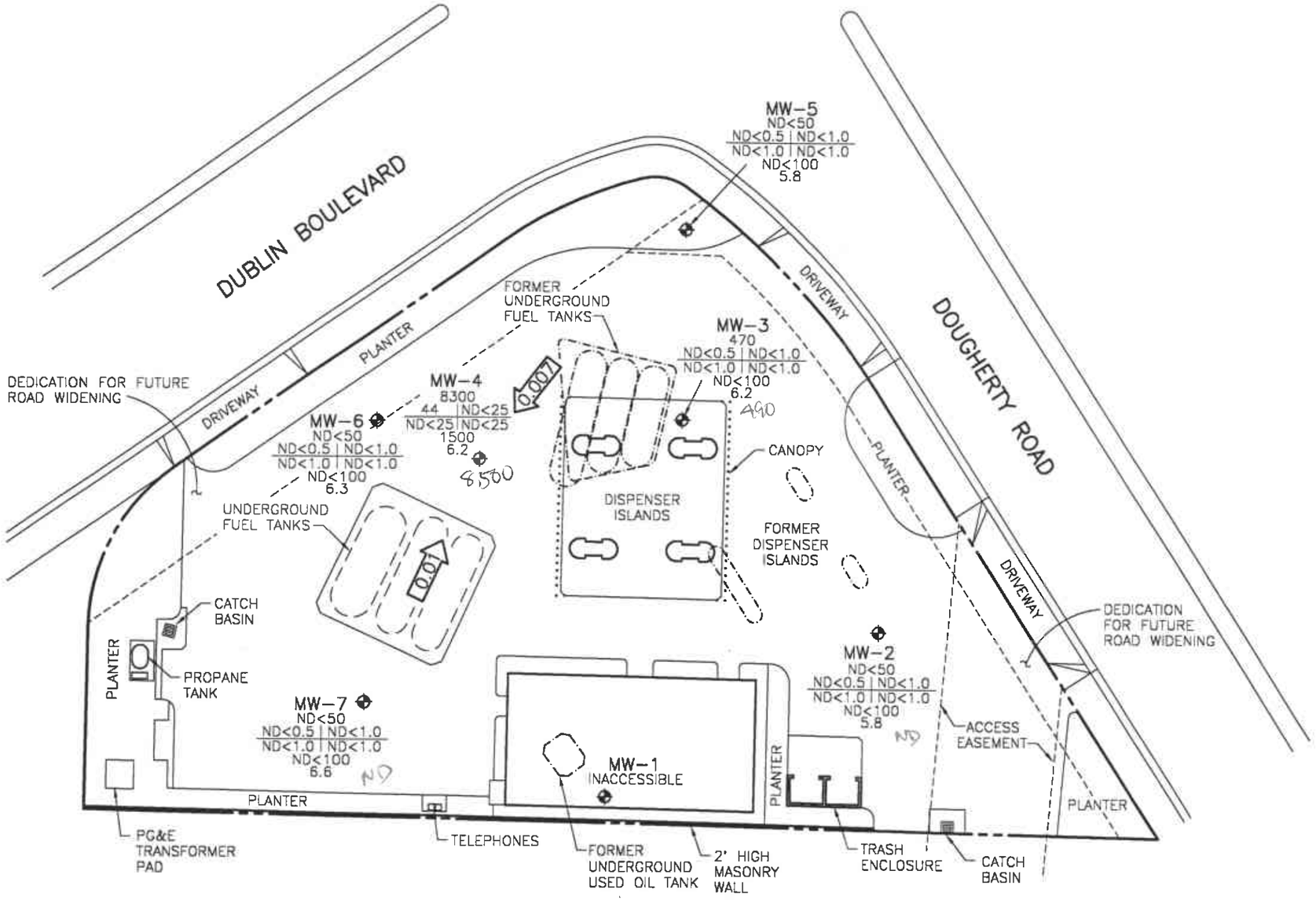
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

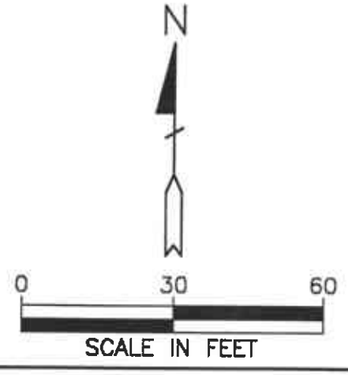
MARCH 27, 1997

BP OIL SERVICE STATION NO. 11120
6400 DUBLIN BOULEVARD
DUBLIN, CALIFORNIA

PROJECT NO. 10–170

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA





LEGEND

◆	GROUNDWATER MONITORING WELL
TPH-G / B / T / E / X / TPH-D / DO	CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER, EXCEPT DISSOLVED OXYGEN, WHICH IS IN PARTS PER MILLION
TPH-G	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
TPH-D	TOTAL PETROLEUM HYDROCARBONS AS DIESEL
DO	DISSOLVED OXYGEN
ND	NOT DETECTED ABOVE REPORTED DETECTION LIMIT
0.01	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

ppb MTBE

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

MARCH 27, 1997

BP OIL SERVICE STATION NO. 11120
6400 DUBLIN BOULEVARD
DUBLIN, CALIFORNIA

PROJECT NO. 10-170

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10170D-11.DWG 5-8-97 DDM 1=30

APPENDIX A

WATER SAMPLING FIELD SURVEY FORMS

ALISTO

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK CA 94598 (510) 295-1650 FAX 295-1823

Field Report / Sampling Data Sheet

Project No. 10-170-04-~~003~~ 004 TY
Address I-580 & Dougherty
Contract No. G797391
Station No. BP 11120

Date: 3/27/97
Day: M T W (TH) F
City: Dublin
Sampler: LCS

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS: Semi=August/Feb
MW-1	N/S	2"	—	—	~~Ø~~	—	~~Semi~~ Cannot Locate
MW-2	S-1	2"	25.00	4.61	Ø	0942	~~Semi~~
MW-3	S-5	2"	20.00	5.39		1000	
MW-4	S-6	2"	20.00	5.70		1002	QC-1 (S-7) From this well
MW-5	S-2	2"	25.00	5.33		0950	~~Semi~~
MW-6	S-3	4"	25.00	5.50		0953	~~Semi~~
MW-7	S-4	2"	20.25	5.08	✓	0956	

FIELD INSTRUMENT CALIBRATION DATA

pH METER Jun 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 0932 WEATHER Clear
D.O. METER Jun ZERO d.O. SOLUTION _____ BAROMETRIC PRESSURE 760 TEMP 63
CONDUCTIVITY METER Jun 10,000 _____ TURBIDITY METER _____ 5.0 NTU _____ OTHER X
LEAK DETECTOR : _____ ALARM MODE X NON ALARM MODE

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-2	4.61	2"	OK	Ø	Y (N)	3	1022	73.9	7.42	2.22ms	5.5
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		72.9	7.21	1.87ms	
25.00 - 4.61 = 20.39	X .16 = 3.26	X3 = 9.78				10	1030	72.6	7.11	1.83ms	5.8

Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Baller(s)___ OSys Port
Comments:

O EPA 601 ____
(X) TPH-G/BTEX Hcl
(X) TPH Diesel Hcl
O TOG 5520 ___
TIME/SAMPLE ID: 1033

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
MW-5	5.33	2"	OK	Ø	Y (N)	4	1048	72.8	7.81	1.61ms	5.7
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.			7		71.9	7.63	1.70ms	
25 - 5.33 = 19.67	X .16 = 3.15	X3 = 9.45				10	1054	71.4	7.59	1.33ms	5.8

Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Baller(s)___ OSys Port
Comments:

O EPA 601 ____
(X) TPH-G/BTEX Hcl
(X) TPH Diesel Hcl
O TOG 5520 ___
TIME/SAMPLE ID: 1100

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

April 10, 1997

Mr. Scott Hooton
BP OIL COMPANY
295 SW 41st St, Bldg 13, Ste N
Renton, WA 98055

The following report contains analytical results for samples received at Southern Petroleum Laboratories (SPL) on April 2, 1997. The samples were assigned to Certificate of Analysis No. 9704110 and analyzed for all parameters as listed on the chain of custody.

There were no analytical problems encountered with this group of samples and all quality control data was within acceptance limits.

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

Ed Fry
Project Manager

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

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 97-04-110

Approved for Release by:

Ed Fry, Project Manager

Date: 4/10/97

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer

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

Certificate of Analysis No. H9-9704110-01

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-1

PROJECT NO: 10-170-4-B4yms
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	80		
Method 8020A***			
Analyzed by: JN			
Date: 04/08/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	97		
California LUFT Manual			
Analyzed by: JN			
Date: 04/05/97 10:38:00			
Diesel Range Organics	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
n-Pentacosane	68		
California LUFT Manual for Diesel			
Analyzed by: RR			
Date: 04/04/97 07:04:00			

ND - Not detected. (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. H9-9704110-02

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-2

PROJECT NO: 10-170-4-BTEXMS
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	77		
Method 8020A***			
Analyzed by: JN			
Date: 04/08/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: JN			
Date: 04/05/97 09:42:00			
Diesel Range Organics	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
n-Pentacosane	62		
California LUFT Manual for Diesel			
Analyzed by: RR			
Date: 04/04/97 07:50:00			

ND - Not detected. (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. H9-9704110-01

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.#
G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-1

PROJECT NO: 10-170-4-#4Yas
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
California TPH-D Extraction Method 3510B ***	04/03/97		
Analyzed by: DR			
Date: 04/03/97 08:00:00			

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. H9-9704110-02

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.#
G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-2

PROJECT NO: 10-170-4-84 yrs
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
California TPH-D Extraction Method 3510B *** Analyzed by: DR Date: 04/03/97 08:00:00	04/03/97		

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. H9-9704110-03

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-3

PROJECT NO: 10-170-4-34 yrs
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	80		
Method 8020A***			
Analyzed by: JN			
Date: 04/08/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	93		
California LUFT Manual			
Analyzed by: JN			
Date: 04/05/97 11:06:00			
Diesel Range Organics	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
n-Pentacosane	64		
California LUFT Manual for Diesel			
Analyzed by: RR			
Date: 04/04/97 08:36:00			

ND - Not detected. (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. H9-9704110-03

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-3

PROJECT NO: 10-170-4-94yms
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
California TPH-D Extraction Method 3510B *** Analyzed by: DR Date: 04/03/97 08:00:00	04/03/97		

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. H9-9704110-04

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.#
G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-4

PROJECT NO: 10-170-4-74 yms
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	90		
Method 8020A***			
Analyzed by: JN			
Date: 04/08/97			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	97		
California LUFT Manual			
Analyzed by: JN			
Date: 04/05/97 11:34:00			
Diesel Range Organics	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
n-Pentacosane	64		
California LUFT Manual for Diesel			
Analyzed by: RR			
Date: 04/04/97 09:21:00			

ND - Not detected. (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. H9-9704110-04

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-4

PROJECT NO: 10-170-4-#4 yrs
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
California TPH-D Extraction Method 3510B *** Analyzed by: DR Date: 04/03/97 08:00:00	04/03/97		

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

Certificate of Analysis No. H9-9704110-05

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-5

PROJECT NO: 10-170-4-14yrs
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	490	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	80		
Method 8020A***			
Analyzed by: JN			
Date: 04/08/97			
Total Petroleum Hydrocarbons-Gasoline	0.47	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	97		
California LUFT Manual			
Analyzed by: JN			
Date: 04/05/97 10:10:00			
Diesel Range Organics	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
n-Pentacosane	50		
California LUFT Manual for Diesel			
Analyzed by: RR			
Date: 04/04/97 10:07:00			

(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.

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PHONE (713)660-0901

Certificate of Analysis No. H9-9704110-05

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.#
G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-5

PROJECT NO: 10-170-4-34yms
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
California TPH-D Extraction Method 3510B *** Analyzed by: DR Date: 04/03/97 08:00:00	04/03/97		

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.

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PHONE (713)660-0901

Certificate of Analysis No. H9-9704110-06

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-6

PROJECT NO: 10-170-4-3 4 yrs
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	8000	250 P	µg/L
Benzene	44	12 P	µg/L
Toluene	ND	25 P	µg/L
Ethylbenzene	ND	25 P	µg/L
Total Xylene	ND	25 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	87		
4-Bromofluorobenzene	80		
Method 8020A***			
Analyzed by: JN			
Date: 04/08/97			
Total Petroleum Hydrocarbons-Gasoline	8.3	0.5 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	97		
California LUFT Manual			
Analyzed by: JN			
Date: 04/06/97 12:03:00			
Diesel Range Organics	1.5	0.1 P	mg/L
Surrogate	**% Recovery**		
n-Pentacosane	54		
California LUFT Manual for Diesel			
Analyzed by: APR			
Date: 04/07/97 06:15:00			

(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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PHONE (713)660-0901

Certificate of Analysis No. H9-9704110-06

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.#
G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-6

PROJECT NO: 10-170-4-54 yms
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
California TPH-D Extraction Method 3510B *** Analyzed by: DR Date: 04/03/97 08:00:00	04/03/97		

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.

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

Certificate of Analysis No. H9-9704110-07

BP Oil Company
295 SW 41st St, Bldg 13,Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.# G 797391 , COC#083347
DATE: 04/10/97

PROJECT: BP Oil #11120
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-7

PROJECT NO: 10-170-4-#4yms
MATRIX: WATER
DATE SAMPLED: 03/27/97
DATE RECEIVED: 04/02/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	8500	250 P	µg/L
Benzene	51	12 P	µg/L
Toluene	ND	25 P	µg/L
Ethylbenzene	ND	25 P	µg/L
Total Xylene	ND	25 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	88		
4-Bromofluorobenzene	79		
Method 8020A***			
Analyzed by: JN			
Date: 04/08/97			
Total Petroleum Hydrocarbons-Gasoline	6.9	0.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	87		
4-Bromofluorobenzene	100		
California LUFT Manual			
Analyzed by: JN			
Date: 04/06/97 12:31:00			

(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

SURROGATE RECOVERY SUMMARY **PAGE 1**
04/10/97 13:00:21

Method 8020A* BATCH#:HP_N970405172900**
WORK ORDER: 9704110-01A **CLIENT SAMPLE ID:** S-1

	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	28	93	43- 135

Method 8020A* BATCH#:HP_N970405172900**
WORK ORDER: 9704110-02A **CLIENT SAMPLE ID:** S-2

1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	28	93	43- 135

Method 8020A* BATCH#:HP_N970405172900**
WORK ORDER: 9704110-03A **CLIENT SAMPLE ID:** S-3

1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	29	97	43- 135

Method 8020A* BATCH#:HP_N970405172900**
WORK ORDER: 9704110-04A **CLIENT SAMPLE ID:** S-4

1,4-Difluorobenzene	30	28	93	70- 131
4-Bromofluorobenzene	30	28	93	43- 135

Method 8020A* BATCH#:HP_N970405172900**
WORK ORDER: 9704110-05A **CLIENT SAMPLE ID:** S-5

1,4-Difluorobenzene	30	28	93	70- 131
4-Bromofluorobenzene	30	28	93	43- 135

Method 8020A* BATCH#:HP_N970405172900**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	28	27.7	70- 131
4-Bromofluorobenzene	30	29	28.5	43- 135

Method 8020A* BATCH#:HP_N970405172900**
WORK ORDER: LCS **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	29	96.7	70- 131
4-Bromofluorobenzene	30	28	93.3	43- 135

Method 8020A* BATCH#:HP_N970405172900**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:** 9704110-02A

1,4-DIFLUOROBENZENE	30	29	97	70- 131

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	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-BROMOFLUOROBENZENE	30	28	93	43- 135

Method 8020A* BATCH#:HP_N970405172900**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9704110-02A

1,4-Difluorobenzene	30	29	97	70- 131
4-Bromofluorobenzene	30	28	93	43- 135

California LUFT Manual BATCH#:HP_N970405175700
WORK ORDER: 9704110-01A **CLIENT SAMPLE ID:**S-1

1,4-Difluorobenzene	30	27	90	50- 150
4-Bromofluorobenzene	30	29	97	50- 150

California LUFT Manual BATCH#:HP_N970405175700
WORK ORDER: 9704110-02A **CLIENT SAMPLE ID:**S-2

1,4-Difluorobenzene	30	27	90	50- 150
4-Bromofluorobenzene	30	28	93	50- 150

California LUFT Manual BATCH#:HP_N970405175700
WORK ORDER: 9704110-03A **CLIENT SAMPLE ID:**S-3

1,4-Difluorobenzene	30	27	90	50- 150
4-Bromofluorobenzene	30	28	93	50- 150

California LUFT Manual BATCH#:HP_N970405175700
WORK ORDER: 9704110-04A **CLIENT SAMPLE ID:**S-4

1,4-Difluorobenzene	30	27	90	50- 150
4-Bromofluorobenzene	30	29	97	50- 150

California LUFT Manual BATCH#:HP_N970405175700
WORK ORDER: 9704110-05A **CLIENT SAMPLE ID:**S-5

1,4-Difluorobenzene	30	27	90	50- 150
4-Bromofluorobenzene	30	29	97	50- 150

California LUFT Manual BATCH#:HP_N970405175700
WORK ORDER: 9704110-06A **CLIENT SAMPLE ID:**S-6

1,4-Difluorobenzene	30	27.0000	90	50- 150
4-Bromofluorobenzene	30	29.0000	97	50- 150

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	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
California LUFT Manual		**BATCH#:**HP_N970405175700		
WORK ORDER: 9704110-07A		**CLIENT SAMPLE ID:**S-7		
1,4-Difluorobenzene	30	26.0000	87	50- 150
4-Bromofluorobenzene	30	30.0000	100	50- 150
California LUFT Manual		**BATCH#:**HP_N970405175700		
WORK ORDER: Method Blank		**CLIENT SAMPLE ID:**		
1,4-Difluorobenzene	30	27	27.1	50- 150
4-Bromofluorobenzene	30	29	29.0	50- 150
California LUFT Manual		**BATCH#:**HP_N970405175700		
WORK ORDER: LCS		**CLIENT SAMPLE ID:**		
1,4-Difluorobenzene	30	30	100	50- 150
4-Bromofluorobenzene	30	30	100	50- 150
California LUFT Manual		**BATCH#:**HP_N970405175700		
WORK ORDER: Matrix Spike		**CLIENT SAMPLE ID:**9704110-05A		
1,4-Difluorobenzene	30	32	107	50- 150
4-Bromofluorobenzene	30	28	93	50- 150
California LUFT Manual		**BATCH#:**HP_N970405175700		
WORK ORDER: Matrix Spike Dup.		**CLIENT SAMPLE ID:**9704110-05A		
1,4-Difluorobenzene	30	32	107	50- 150
4-Bromofluorobenzene	30	28	93	50- 150
California LUFT Manual for Diesel		**BATCH#:**HP_T970404110901		
WORK ORDER: 9704110-01B		**CLIENT SAMPLE ID:**S-1		
n-Pentacosane	50	34	68	20- 150
California LUFT Manual for Diesel		**BATCH#:**HP_T970404110901		
WORK ORDER: 9704110-02B		**CLIENT SAMPLE ID:**S-2		
n-Pentacosane	50	31	62	20- 150
California LUFT Manual for Diesel		**BATCH#:**HP_T970404110901		
WORK ORDER: 9704110-03B		**CLIENT SAMPLE ID:**S-3		
n-Pentacosane	50	32	64	20- 150

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	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
California LUFT Manual for Diesel BATCH#:HP_T970404110901				
WORK ORDER: 9704110-04B **CLIENT SAMPLE ID:** S-4				
n-Pentacosane	50	32	64	20- 150
California LUFT Manual for Diesel BATCH#:HP_T970404110901				
WORK ORDER: 9704110-05B **CLIENT SAMPLE ID:** S-5				
n-Pentacosane	50	25	50	20- 150
California LUFT Manual for Diesel BATCH#:HP_T970404110901				
WORK ORDER: 9704110-06B **CLIENT SAMPLE ID:** S-6				
n-Pentacosane	50	57	114	20- 150
California LUFT Manual for Diesel BATCH#:HP_T970404110901				
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**				
n-Pentacosane	50	46		-
Method 8020A* ** BATCH#:HP_U970407225100				
WORK ORDER: 9704110-01A **CLIENT SAMPLE ID:** S-1				
1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	24	80	43- 135
Method 8020A* ** BATCH#:HP_U970407225100				
WORK ORDER: 9704110-02A **CLIENT SAMPLE ID:** S-2				
1,4-Difluorobenzene	30	28	93	70- 131
4-Bromofluorobenzene	30	23	77	43- 135
Method 8020A* ** BATCH#:HP_U970407225100				
WORK ORDER: 9704110-03A **CLIENT SAMPLE ID:** S-3				
1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	24	80	43- 135
Method 8020A* ** BATCH#:HP_U970407225100				
WORK ORDER: 9704110-04A **CLIENT SAMPLE ID:** S-4				
1,4-Difluorobenzene	30	28	93	70- 131
4-Bromofluorobenzene	30	27	90	43- 135

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	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS

Method 8020A* BATCH#:HP_U970407225100**
WORK ORDER: 9704110-05A **CLIENT SAMPLE ID:** S-5

1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	24	80	43- 135

Method 8020A* BATCH#:HP_U970407225100**
WORK ORDER: 9704110-06A **CLIENT SAMPLE ID:** S-6

1,4-Difluorobenzene	30	26.0000	87	70- 131
4-Bromofluorobenzene	30	24.0000	80	43- 135

Method 8020A* BATCH#:HP_U970407225100**
WORK ORDER: 9704110-07A **CLIENT SAMPLE ID:** S-7

1,4-Difluorobenzene	30	26.4000	88	70- 131
4-Bromofluorobenzene	30	23.6000	79	43- 135

Method 8020A* BATCH#:HP_U970407225100**
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	26	26.1	70- 131
4-Bromofluorobenzene	30	26	25.8	43- 135

Method 8020A* BATCH#:HP_U970407225100**
WORK ORDER: LCS **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	30	100	70- 131
4-Bromofluorobenzene	30	29	96.7	43- 135

Method 8020A* BATCH#:HP_U970407225100**
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:** 9704110-04A

1,4-DIFLUOROBENZENE	30	29	97	70- 131
4-BROMOFLUOROBENZENE	30	25	83	43- 135

Method 8020A* BATCH#:HP_U970407225100**
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:** 9704110-04A

1,4-Difluorobenzene	30	27	90	70- 131
4-Bromofluorobenzene	30	25	83	43- 135

California LUFT Manual BATCH#:HP_U970407231700
WORK ORDER: Method Blank **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	31	30.9	50- 150

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	AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
4-Bromofluorobenzene	30	88	87.6	50- 150

California LUFT Manual **BATCH#:**HP_U970407231700
WORK ORDER: LCS **CLIENT SAMPLE ID:**

1,4-Difluorobenzene	30	37	123	50- 150
4-Bromofluorobenzene	30	39	130	50- 150

California LUFT Manual **BATCH#:**HP_U970407231700
WORK ORDER: Matrix Spike **CLIENT SAMPLE ID:**9704111-06A

1,4-Difluorobenzene	30	38	127	50- 150
4-Bromofluorobenzene	30	45	150	50- 150

California LUFT Manual **BATCH#:**HP_U970407231700
WORK ORDER: Matrix Spike Dup. **CLIENT SAMPLE ID:**9704111-06A

1,4-Difluorobenzene	30	39	130	50- 150
4-Bromofluorobenzene	30	43	143	50- 150

« = Recovery outside of control limits
*** = Methods for Chemical Analysis of Water & Wastes,1983,EPA**
**** = Standard Methods for Examination of Water & Wastewater,17th**
***** = Test Methods for Evaluating Solid Waste,EPA SW846,3rd**

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** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020***

Matrix: Aqueous
Units: µg/L

Batch Id: HP_U970407225100

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	20 - 110
Benzene	ND	50	47	94.0	62 - 121
Toluene	ND	50	51	102	66 - 136
Ethyl_Benzene	ND	50	54	108	70 - 136
O-Xylene	ND	50	53	106	74 - 134
M and P Xylene	ND	100	100	100	77 - 140

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	20	100	19	95.0	5.13	20	39 - 150
BENZENE	ND	20	20	100	19	95.0	5.13	25	39 - 150
TOLUENE	ND	20	19	95.0	19	95.0	0	26	56 - 134
ETHYL_BENZENE	ND	20	20	100	20	100	0	38	61 - 128
O-XYLENE	ND	20	20	100	20	100	0	29	40 - 130
M AND P XYLENE	ND	40	39	97.5	39	97.5	0	20	43 - 152

Analyst: JN
Sequence Date: 04/07/97
SPL ID of sample spiked: 9704110-04A
Sample File ID: U_D7532.TX0
Method Blank File ID:
Blank Spike File ID: U_D7524.TX0
Matrix Spike File ID: U_D7527.TX0
Matrix Spike Duplicate File ID: U_D7528.TX0

* = Values Outside QC Range. « = 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 (4th Q '95)
(***) = Source: SPL-Houston Historical Data (3rd Q '96)

SAMPLES IN BATCH(SPL ID): 9704110-03A 9704110-05A 9704110-06A 9704110-07A 9703F78-01A 9703F78-02A 9704110-04A 9704111-06A 9704110-01A 9704110-02A

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8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
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** SPL BATCH QUALITY CONTROL REPORT **
CA LUFT

Matrix: Aqueous
Units: mg/L

Batch Id: HP_N970405175700

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons-Gas	ND	1.0	1.1	110	50 - 150

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
PETROLEUM HYDROCARBONS-GAS	ND	0.9	1.2	133	1.2	133	0	50	50 - 150

Analyst: JN
Sequence Date: 04/05/97
SPL ID of sample spiked: 9704110-02A
Sample File ID: NND7171.TX0
Method Blank File ID:
Blank Spike File ID: NND7165.TX0
Matrix Spike File ID: NND7168.TX0
Matrix Spike Duplicate File ID: NND7169.TX0

* = Values Outside QC Range. « = 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: Temporary Limits
(***) = Source: Temporary Limits

SAMPLES IN BATCH(SPL ID):

9704110-04A 9704110-06A 9704110-07A 9704112-01A
9704112-02A 9704112-03A 9703F80-01A 9703F55-08A
9704112-04A 9704112-05A 9704112-06A 9704111-01A
9704111-02A 9704111-03A 9704110-02A 9704110-05A
9704110-01A 9704110-03A

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

** SPL BATCH QUALITY CONTROL REPORT ** PAGE

California LUFT Manual

Matrix: Aqueous Batch Id: HP_T970404110901

Units: mg/L

B L A N K 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
DIESEL RANGE ORGANICS	ND	5.0	5.15	103	5.42	108	4.74	43	20 - 130

Analyst: RR

Sequence Date: 04/04/97

Method Blank File ID:

Sample File ID:

Blank Spike File ID: T_D7003.TX0

Matrix Spike File ID:

Matrix Spike Duplicate File ID:

* = Values Outside QC Range. « = 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

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

(**) = Source: SPL-Temporary Limits

SAMPLES IN BATCH(SPL ID): 9704110-06B 9704110-01B 9704110-02B 9704110-03B 9704110-04B 9704110-05B

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

9704110

BP

CHAIN OF CUSTODY

No.083347 Page 1 of 1

CONSULTANT'S NAME: Alisto Engineering	ADDRESS: 1575 Treat Blvd #201	CITY: W.C.	STATE: Ca	ZIP CODE: 94598	
BP SITE NUMBER: 11120	BP CORNER ADDRESS/CITY: Dublin, Ca			CONSULTANT PROJECT NUMBER: 10-170-4-84 yrs	
CONSULTANT PROJECT MANAGER: Brady Nagle	PHONE NUMBER: (510) 295-1650	FAX NUMBER: 295-1823		CONSULTANT CONTRACT NUMBER: C797391	
BP CONTACT: Scott Hooton	BP ADDRESS: Renton, WA	PHONE NUMBER: –		FAX NO.: –	
LAB CONTACT: SPL	LABORATORY ADDRESS: Texas	PHONE NUMBER: –		FAX NO.: –	
SAMPLED BY (Please Print Name): Larry Buenvenida	SAMPLED BY (Signature): [signature]		SHIPMENT DATE: 4-1-97	SHIPMENT METHOD: Fed EX	AIRBILL NUMBER: 38484 70430

TAT: ☐ 24 Hours ☐ 48 Hours ☐ 1 Week ☒ Standard 2 Weeks

ANALYSIS REQUIRED

SAMPLE DESCRIPTION	COLLECTION DATE / COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPH-G	BTEX	TPH-D								COMMENTS
S-1	3/27/97	W	4	Hcl		X	X	X								
S-2	↓	↓	↓	↓		↓	↓	↓								
S-3	↓	↓	↓	↓		↓	↓	↓								
S-4	↓	↓	↓	↓		↓	↓	↓								
S-5	↓	↓	↓	↓		↓	↓	↓								
S-6	↓	↓	↓	↓		↓	↓	↓								
S-7	↓	↓	3	↓		↓	↓									
																intact ROI 4C

MKAL 4/1/97

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
[signature]	3/28/97		P. Ycelton	4/1/97	0800	
P. Ycelton	4/1/97	1530	[signature]	4/2/97	1000	

CLV-16722
PKG/50

Distribution: White - Original (with Data)
Yellow - BP
Pink - Lab
Blue - Consultant Field Staff

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
4/2/97	1330

SPL Sample ID:
9704110

			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:		4C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	384847043O	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	4/2/97

BP EXPLORATION & OIL, INC.
ENVIRONMENTAL REMEDIATION MANAGEMENT
DATA REVIEW CHECKLIST

BP Site Number: No. 11120
ERM Contact: Scott Hooton
Sampling Date: March 21, 1997
Matrix Description: Water
Date Final Report Received: 4/16/97
Laboratory & Location: Houston

		Yes	No	NA
1.	Is BP contract release number consistent with analytical report?	X		
2.	Was report submitted within the specified timeframe?	Y		
3.	Does report agree with the COC?	Y		
4.	Are units consistent with the given matrix?	X		
5.	Were any target analytes/compounds detected in blanks (i.e., trip or equipment)?			X
6.	Are duplicate water samples within 30 %?	X		
7.	Are holding times met?	X		
8.	Are surrogates within limits using laboratory criteria?	X		
9.	Are MS/MSD acceptable using laboratory criteria?	X		
10.	Are LCS results acceptable using laboratory criteria?	X		

Notes:

Data Validation Completed by (print): Dale, Susan
(signature):
Date: 5/29/97