BP OIL

ENVIRONMENTAL PROTECTION

98 JUN 22 PM 4:50

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BP Oil Company
Environmental Remediation Management
295 SW 41st Street
Renton, Washington 98055-4931
(425) 251-0667
Fax No: (425) 251-0736

June 19, 1998

with closure of USTs,
- Sample wells MW-1, MW-3 for TPHg, BTEX, MtBE.
- DO HP west of dispenser island (west).

As of 8/19/98 · 21,000 gallons water pumped into Baker Tank - over 1000 cy soil excavated. will dispose GW @ Tosco plant + pump another 20,000 gal in attempt to lower MtBE conc.

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

RE: BP Oil Site No. 11116
Village Parkway (at 7197) and Amador Valley
Dublin, CA

Dear Ms. Chu:

This letter transmits a Groundwater Monitoring and Sampling Report, dated 2 June 1998. A gasoline release was documented at this site during 1988 when a used-oil underground storage tank was replaced by the Mobil Oil Corporation. Mobil Oil performed several iterations of groundwater monitoring and site assessment prior to transferring management of the release to BP in 1992. BP subsequently sold the business and related improvements were sold to the current operator (Tosco Corporation) in 1994, and is continuing to perform groundwater monitoring activities. The UST system passed required precision tightness tests prior to the sale to Tosco. The single-wall-fiberglass fuel tanks are believed to have been installed by Mobil Oil Corporation during 1983. Soil or groundwater data associated with the 1983 tank replacement was not reported to have been obtained when BP acquired the site from Mobil in 1989. The cause and origin of the petroleum release(s) at this site has not – to the best of my knowledge – been established. I understand that the double-walled tanks will be required at this site to comply with 1998 leak prevention requirements in Oakland.

The enclosed groundwater monitoring and sampling report includes laboratory data for samples collected on 22 August 1997. For this quarter, the highest concentration detected at this site were reported in samples obtained from AW-5.

You should note that the current operator plans to remove the UST system in the near future. We are planning to coordinate source removal with that effort. Please call (425) 251-0689 if you have questions.

Sincerely,

Scott Hooton
Environmental Remediation Management

attachment

cc. Brady Nagle - Alisto
CRWQCB, Attention Mr K Graves, 2101 Webster Street, Ste. 500, Oakland, CA 94612
T Berry - Tosco (w/attachment)

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11116
7197 Village Parkway
Dublin, California

Project No. 10-017-07-002

Prepared for:

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

MTBE should be confirmed using 8260

Prepared by:

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

June 2, 1998

Brady Nagle
Project Manager

Al Sevilla, P.E.
Principal

GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11116
7197 Village Parkway
Dublin, California

Project No. 10-017-07-002

June 2, 1998

INTRODUCTION

This report presents the results and findings of the February 23, 1998 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11116, 7197 Village Parkway, 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 in reference to mean sea level. 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.

Groundwater sampling was performed concurrently at the neighboring Arco Products service station, 7249 Village Parkway. The results are presented in Table 2.

SAMPLING AND ANALYTICAL RESULTS

The results of monitoring and laboratory analysis of the groundwater samples collected during this and previous events are summarized in Table 1. The potentiometric groundwater elevation contour map is 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. 11116
7197 VILLAGE PARKWAY, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

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)	HVOC (ug/l)	DO (ppm)	LAB
MW-1	10/12/90	335.17	9.92	325.25	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-1	11/15/90	335.17	10.16	325.01	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-1	12/11/90	335.17	9.97	325.20	---	---	---	---	---	---	---	---	---	---	---
MW-1	02/15/91	335.17	9.89	325.28	ND<50	50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	41 (c)	---	SUP
MW-1	05/14/91	335.17	8.43	326.74	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	7500	ND	---	SUP
MW-1	08/23/91	335.17	9.98	325.19	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	ANA
MW-1	11/13/91	335.17	10.09	325.08	ND<30	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	SEQ
MW-1	02/25/92	335.17	8.28	326.89	ND<30	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	SEQ
MW-1	04/15/92	335.17	8.50	326.67	---	---	---	---	---	---	---	---	---	---	---
MW-1	06/03/92	335.17	9.06	326.11	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-1	08/12/92	335.17	10.01	325.16	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-1	11/10/92	335.17	10.67	324.50	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-1	02/10/93	335.17	5.25	329.92	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	PACE
MW-1	05/21/93	335.17	5.73	329.44	---	---	---	---	---	---	---	---	---	---	---
MW-1	08/12/93	335.17	8.99	326.18	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-1	11/11/93	335.17	9.65	325.52	---	---	---	---	---	---	---	---	---	---	---
MW-1	02/11/94	335.17	8.72	326.45	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	PACE
MW-1	05/17/94	335.17	8.17	327.00	---	---	---	---	---	---	---	---	---	---	---
MW-1	08/20/94	335.17	8.37	326.80	---	---	---	---	---	---	---	---	---	---	---
MW-1	10/04/94	335.17	9.66	325.51	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	6.5	PACE
MW-1 (d)	11/18/94	335.17	8.65	326.52	---	---	---	---	---	---	---	---	---	---	---
MW-1	02/15/95	335.17	6.56	328.61	ND<50 (e)	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
MW-1	05/21/95	335.17	6.80	328.37	---	---	---	---	---	---	---	---	---	---	---
MW-1	08/29/95	335.17	8.72	326.45	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0 (f)	---	---	8.7	ATI
MW-1	11/28/95	335.17	9.54	325.63	---	---	---	---	---	---	---	---	---	---	---
MW-1	02/26/96	335.17	5.60	329.57	---	---	---	---	---	---	---	---	---	---	---
MW-1	05/23/96	335.17	7.13	328.04	---	---	---	---	---	---	---	---	---	---	---
MW-1	08/23/96	335.17	6.71	328.46	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	5.7	SPL
MW-1	12/02/96	335.17	8.58	326.59	---	---	---	---	---	---	---	---	---	---	---
MW-1	05/16/97	335.17	7.78	327.39	---	---	---	---	---	---	---	---	---	---	---
MW-1	08/22/97	335.17	8.80	326.37	---	---	---	---	---	---	---	---	---	---	---
MW-1	02/12/98	335.17	4.40	330.77	---	---	---	---	---	---	---	---	---	---	---
MW-1	04/23/98	335.17	4.31	330.86	---	---	---	---	---	---	---	---	---	---	---

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BP OIL COMPANY SERVICE STATION NO. 11116
7197 VILLAGE PARKWAY, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

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)	HVOC (ug/l)	DO (ppm)	LAB
MW-2	10/12/90	334.58	9.60	324.98	93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-2	11/15/90	334.58	9.68	324.90	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-2	12/11/90	334.58	9.47	325.11	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/15/91	334.58	9.28	325.30	ND<50	60	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	45 (c)	---	SUP
MW-2	05/14/91	334.58	7.74	326.84	130	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	6000	ND	---	SUP
MW-2	08/23/91	334.58	9.81	324.77	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	ANA
MW-2	11/13/91	334.58	9.73	324.85	ND<30	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	SEQ
MW-2	02/25/92	334.58	7.55	327.03	ND<30	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	SEQ
MW-2	04/15/92	334.58	8.00	326.58	---	---	---	---	---	---	---	---	---	---	---
MW-2	06/03/92	334.58	8.56	326.02	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-2	08/12/92	334.58	9.62	324.96	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-2	11/10/92	334.58	10.27	324.31	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-2	02/10/93	334.58	6.46	328.12	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-2	05/21/93	334.58	6.96	327.62	---	---	---	---	---	---	---	---	---	---	---
MW-2	08/12/93	334.58	8.58	326.00	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-2	11/11/93	334.58	9.28	325.30	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/11/94	334.58	8.10	326.48	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-2	05/17/94	334.58	7.71	326.87	---	---	---	---	---	---	---	---	---	---	---
MW-2	06/20/94	334.58	7.93	326.65	---	---	---	---	---	---	---	---	---	---	---
MW-2	10/04/94	334.58	9.27	325.31	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	5.3	PACE
MW-2 (d)	11/18/94	334.58	8.15	326.43	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/15/95	334.58	5.97	328.61	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
MW-2	05/24/95	334.58	6.50	328.08	---	---	---	---	---	---	---	---	---	---	---
MW-2	08/29/95	334.58	8.35	326.23	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0 (f)	---	---	8.7	ATI
MW-2	11/28/95	334.58	9.05	325.53	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/26/96	334.58	4.49	330.09	---	---	---	---	---	---	---	---	---	---	---
MW-2	05/23/96	334.58	6.95	327.63	---	---	---	---	---	---	---	---	---	---	---
MW-2	08/23/96	334.58	6.53	328.05	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	5.3	SPL
MW-2	12/02/96	334.58	8.40	326.18	---	---	---	---	---	---	---	---	---	---	---
MW-2	05/16/97	334.58	7.57	327.01	---	---	---	---	---	---	---	---	---	---	---
MW-2	08/22/97	334.58	8.55	326.03	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/12/98	334.58	4.10	330.48	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/23/98	334.58	4.03	330.55	---	---	---	---	---	---	---	---	---	---	---

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ALISTO PROJECT NO. 10-017

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)	HVOC (ug/l)	DO (ppm)	LAB
MW-3	10/12/90	335.13	10.08	325.05	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-3	11/15/90	335.13	10.12	325.01	76	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
MW-3	12/11/90	335.13	9.92	325.21	---	---	---	---	---	---	---	---	---	---	---
MW-3	02/15/90	335.13	9.84	325.29	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	SUP
MW-3	05/14/91	335.13	8.40	326.73	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	SUP
MW-3	08/23/91	335.13	10.27	324.86	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	ANA
MW-3	11/13/91	335.13	10.27	324.86	ND<30	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	SEQ
MW-3	02/25/92	335.13	8.15	326.98	ND<30	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	ND<5000	ND	---	SEQ
MW-3	04/15/92	335.13	8.63	326.50	---	---	---	---	---	---	---	---	---	---	---
MW-3	06/03/92	335.13	9.18	325.95	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-3	08/12/92	335.13	10.18	324.95	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-3	11/10/92	335.13	10.78	324.35	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	ANA
MW-3	02/10/93	335.13	7.16	327.97	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	ND	---	PACE
MW-3	05/21/93	335.13	7.69	327.44	---	---	---	---	---	---	---	---	---	---	---
MW-3	08/12/93	335.13	9.11	326.02	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-3	11/11/93	335.13	9.78	325.35	---	---	---	---	---	---	---	---	---	---	---
MW-3	02/11/94	335.13	8.60	326.53	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
MW-3	05/17/94	335.13	8.34	326.79	---	---	---	---	---	---	---	---	---	---	---
MW-3	06/20/94	335.13	7.45	327.68	---	---	---	---	---	---	---	---	---	---	---
MW-3	10/01/94	335.13	9.81	325.32	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	7.5	PACE
MW-3 (d)	11/18/94	335.13	8.62	326.51	---	---	---	---	---	---	---	---	---	---	---
MW-3	02/15/95	335.13	6.61	328.52	ND<50 (e)	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
MW-3	05/24/95	335.13	6.83	328.30	---	---	---	---	---	---	---	---	---	---	---
MW-3	08/29/95	335.13	8.88	326.25	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0 (f)	---	---	9.1	ATI
MW-3	11/28/95	335.13	8.57	326.56	---	---	---	---	---	---	---	---	---	---	---
MW-3	02/26/96	335.13	5.15	329.98	---	---	---	---	---	---	---	---	---	---	---
MW-3	05/23/96	335.13	7.26	327.87	---	---	---	---	---	---	---	---	---	---	---
MW-3	08/23/96	335.13	6.84	328.29	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	6.8	SPL
MW-3	12/02/96	335.13	8.61	326.52	---	---	---	---	---	---	---	---	---	---	---
MW-3	05/16/97	335.13	7.93	327.20	---	---	---	---	---	---	---	---	---	---	---
MW-3	08/22/97	335.13	8.97	326.16	---	---	---	---	---	---	---	---	---	---	---
MW-3	02/12/98	335.13	4.22	330.91	---	---	---	---	---	---	---	---	---	---	---
MW-3	02/23/98	335.13	4.13	331.00	---	---	---	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO 11116
7197 VILLAGE PARKWAY, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

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)	HVOC (ug/l)	DO (ppm)	LAB
AW-4	11/15/90	333.41	8.51	324.90	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
AW-4	12/11/90	333.41	9.19	324.22	---	---	---	---	---	---	---	---	---	---	---
AW-4	02/15/91	333.41	8.32	325.09	ND<50	---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	---	---	---	SUP
AW-4	05/14/91	333.41	6.97	326.44	ND<50	---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	---	---	---	SUP
AW-4	08/23/91	333.41	8.59	324.82	ND<50	---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	---	---	---	ANA
AW-4	11/13/91	333.41	8.57	324.84	ND<30	---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	---	---	---	SEQ
AW-4	02/25/92	333.41	6.26	327.15	ND<30	---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	---	---	---	SEQ
AW-4	04/15/92	333.41	7.05	326.36	---	---	---	---	---	---	---	---	---	---	---
AW-4	06/03/92	333.41	7.41	326.00	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
AW-4	08/12/92	333.41	8.45	324.96	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
AW-4	11/10/92	333.41	9.10	324.31	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
AW-4 (g)	02/10/93	333.41	---	---	---	---	---	---	---	---	---	---	---	---	---
AW-4 (g)	05/21/93	333.41	---	---	---	---	---	---	---	---	---	---	---	---	---
AW-4 (g)	08/12/93	333.41	---	---	---	---	---	---	---	---	---	---	---	---	---
AW-4	11/11/93	333.41	8.00	325.41	---	---	---	---	---	---	---	---	---	---	---
AW-4	11/15/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
AW-4	02/11/94	333.41	6.84	326.57	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
AW-4	05/17/94	333.41	6.54	326.87	---	---	---	---	---	---	---	---	---	---	---
AW-4	06/20/94	333.41	5.70	327.71	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	2.0	PACE
AW-4	10/04/94	333.41	8.04	325.37	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	6.1	PACE
AW-4 (d)	11/18/94	333.41	6.80	326.61	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	2.3	PACE
AW-4	02/15/95	333.41	4.91	328.50	ND<50 (e)	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
AW-4	05/24/95	333.41	5.32	328.09	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	4.9	ATI
AW-4	08/29/95	333.41	7.26	326.15	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0 (f)	---	---	9.1	ATI
AW-4	11/28/95	333.41	7.81	325.60	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0 (f)	---	---	5.3	ATI
AW-4	02/26/96	333.41	3.85	329.56	---	---	---	---	---	---	---	---	---	---	---
AW-4	05/23/96	333.41	5.17	328.24	---	---	---	---	---	---	---	---	---	---	---
AW-4	08/23/96	333.41	4.73	328.68	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	5.7	SPL
AW-4	12/02/96	333.41	6.43	326.98	---	---	---	---	---	---	---	---	---	---	---
AW-4	05/16/97	333.41	5.87	327.54	---	---	---	---	---	---	---	---	---	---	---
AW-4	08/22/97	333.41	6.92	326.49	---	---	---	---	---	---	---	---	---	---	---
AW-4	02/12/98	333.41	3.99	329.42	---	---	---	---	---	---	---	---	---	---	---
AW-4	02/23/98	333.41	3.86	329.55	---	---	---	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11116
7197 VILLAGE PARKWAY, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

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)	HVOC (ug/l)	DO (ppm)	LAB
AW-5	11/15/90	334.81	9.67	325.14	ND<50		---	1.3	ND<0.5	ND<0.5	1.0	---		---	---	---	ANA
AW-5	12/11/90	334.81	9.44	325.37	---		---	---	---	---	---	---		---	---	---	---
AW-5	02/15/91	334.81	10.00	324.81	ND<50		---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---		---	---	---	SUP
AW-5	05/14/91	334.81	8.64	326.17	ND<50		---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---		---	---	---	SUP
AW-5	08/23/91	334.81	9.58	325.23	ND<50		---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---		---	---	---	ANA
AW-5	11/13/91	334.81	9.80	325.01	100		---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---		---	---	---	SEQ
AW-5	02/25/92	334.81	7.89	326.92	ND<30		---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---		---	---	---	SEQ
AW-5	04/15/92	334.81	8.54	326.27	---		---	---	---	---	---	---		---	---	---	---
AW-5	06/03/92	334.81	8.97	325.84	ND<50		---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	---	---	ANA
AW-5	08/12/92	334.81	9.73	325.08	61		---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	---	---	ANA
AW-5	11/10/92	334.81	10.27	324.54	99		---	ND<0.5	ND<0.5	ND<0.5	0.8	---		---	---	---	ANA
QC-1 (h)	11/10/92	---	---	---	86		---	ND<0.5	ND<0.5	ND<0.5	0.7	---		---	---	---	ANA
AW-5	02/10/93	334.81	7.29	327.52	82		---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	140	(f)	---	---	---	PACE
AW-5	05/21/93	334.81	7.77	327.04	---		---	---	---	---	---	---		---	---	---	---
AW-5	08/12/93	334.81	8.87	325.94	130		---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	---	---	PACE
AW-5	11/11/93	334.81	9.13	325.68	---		---	---	---	---	---	---		---	---	---	---
AW-5	11/11/93	---	---	---	180		---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	---	---	PACE
AW-5	02/11/94	334.81	8.20	326.61	210		---	16	ND<0.5	ND<0.5	ND<0.5	670	(f)	---	---	---	PACE
AW-5	05/17/94	334.81	8.16	326.65	---		---	---	---	---	---	---		---	---	---	---
AW-5	06/20/94	334.81	8.26	326.55	1300		---	0.9	ND<0.5	0.5	2.2	240	(f)	---	---	2.5	PACE
AW-5	10/04/94	334.81	8.70	326.11	670		---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	---	6.0	PACE
AW-5 (d)	11/18/94	334.81	8.20	326.61	640		---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	---	4.1	PACE
QC-1 (h)	11/21/94	---	---	---	660		---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	---	---	PACE
AW-5	02/15/95	334.81	6.65	328.16	220	(e)	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		---	---	---	ATI
AW-5	05/24/95	334.81	7.27	327.54	220	(e)	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		---	---	5.2	ATI
AW-5	08/29/95	334.81	8.70	326.11	190		---	ND<1.0	ND<1.0	ND<1.0	ND<2.0	820	(f)	---	---	8.5	ATI
AW-5	11/28/95	334.81	9.32	325.49	ND<50		---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	700	(f)	---	---	4.1	ATI
AW-5	02/26/96	334.81	7.13	327.68	ND<50		---	ND<0.5	ND<1	ND<1	ND<1	670	(f)	---	---	8.1	SPL
AW-5	05/23/96	334.81	8.58	326.23	60		---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	620		---	---	4.9	SPL
AW-5	08/23/96	334.81	8.18	326.63	520		---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	520		---	---	5.1	SPL
QC-1 (h)	08/23/96	---	---	---	490		---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	280		---	---	---	SPL
AW-5	12/02/96	334.81	7.90	326.91	390		---	ND<0.5	ND<1	ND<1	ND<1	600		---	---	5.6	SPL
QC-1 (h)	12/02/96	---	---	---	360		---	ND<0.5	ND<1	ND<1	ND<1	600		---	---	---	SPL
AW-5	05/16/97	334.81	9.24	325.57	ND<50		---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		---	---	4.9	SPL
QC-1 (h)	05/16/97	---	---	---	ND<50		---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		---	---	---	SPL
AW-5	08/22/97	334.81	10.27	324.54	ND<50		---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		---	---	4.3	SPL
AW-5	02/12/98	334.81	7.57	327.24	---		---	---	---	---	---	---		---	---	---	---
AW-5	02/23/98	334.81	7.45	327.36	5000		---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	5600		---	---	3.8	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
BP OIL COMPANY SERVICE STATION NO. 11116
7197 VILLAGE PARKWAY, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

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)	HVOC (ug/l)	DO (ppm)	LAB
AW-6	11/15/90	334.90	9.58	325.32	230	---	25	ND<0.5	ND<0.5	0.8	---	---	---	---	ANA
AW-6	12/11/90	334.90	9.58	325.32	---	---	---	---	---	---	---	---	---	---	---
AW-6	02/15/91	334.90	9.66	325.24	ND<50	---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	---	---	---	SUP
AW-6	05/14/91	334.90	8.38	326.52	90	---	2	ND<0.3	ND<0.3	ND<0.3	---	---	---	---	SUP
AW-6	08/23/91	334.90	9.61	325.29	57	---	ND<0.5	0.7	1.3	4.6	---	---	---	---	ANA
AW-6	11/13/91	334.90	9.58	325.32	200	---	ND<0.3	ND<0.3	ND<0.3	0.94	---	---	---	---	SEQ
AW-6	02/25/92	334.90	8.00	326.90	19000	---	8000	4700	600	2400	---	---	---	---	SEQ
AW-6	03/05/92	334.90	7.98	326.92	14000	---	5200	2500	550	2200	---	---	---	---	SEQ
AW-6	04/15/92	334.90	8.33	326.57	1100	---	400	ND<3.0	30	ND<3.0	---	---	---	---	SEQ
AW-6	06/03/92	334.90	8.91	325.99	77	---	4.4	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
AW-6	08/12/92	334.90	9.61	325.29	80	---	4.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
AW-6	11/10/92	334.90	10.10	324.80	450	---	120	2.1	4.5	9.7	---	---	---	---	ANA
AW-6	02/10/93	334.90	7.13	327.77	14000	---	610	17	15	720	14000 (f)	---	---	---	PACE
QC-1 (h)	02/10/93	---	---	---	12000	---	520	15	13	610	17000 (f)	---	---	---	PACE
AW-6	05/21/93	334.90	7.64	327.26	7900	---	900	ND<12	20	ND<12	8000 (f)	---	---	---	PACE
QC-1 (h)	05/21/93	---	---	---	7500	---	620	ND<10	13	ND<10	7700 (f)	---	---	---	PACE
AW-6	08/12/93	334.90	8.64	326.26	26000	---	450	14	250	48	---	---	---	---	PACE
QC-1 (h)	08/12/93	---	---	---	27000	---	510	43	270	42	---	---	---	---	PACE
AW-6	11/11/93	334.90	8.67	326.23	---	---	---	---	---	---	---	---	---	---	---
AW-6	11/12/93	---	---	---	62000	---	4600	420	310	1100	---	---	---	---	PACE
QC-1 (h)	11/12/93	---	---	---	63000	---	4100	360	290	1000	---	---	---	---	PACE
AW-6	02/11/94	334.90	8.04	326.86	140000	---	21000	25000	1100	13000	50000 (f)	---	---	---	PACE
QC-1 (h)	02/11/94	---	---	---	110000	---	17000	21000	770	10000	47000 (f)	---	---	---	PACE
AW-6	05/17/94	334.90	7.68	327.22	---	---	---	---	---	---	---	---	---	---	---
AW-6	06/20/94	334.90	7.82	327.08	42000	---	2700	1300	1900	9100	6400 (f)	---	---	2.1	PACE
QC-1 (h)	06/20/94	---	---	---	41000	---	2800	1400	1900	8900	6600 (f)	---	---	---	PACE
AW-6	10/04/94	334.90	9.33	325.57	14000	---	2100	77	1000	760	---	---	---	6.1	PACE
QC-1 (h)	10/04/94	---	---	---	14000	---	2100	77	1100	790	---	---	---	---	PACE
AW-6 (d)	11/18/94	334.90	7.17	327.73	50000	---	550	8500	2500	14000	---	---	---	3.3	PACE
AW-6	02/15/95	334.90	6.19	328.71	25000 (e)	---	53	1400	1200	4400	---	---	---	---	ATI
QC-1 (h)	02/15/95	---	---	---	25000 (e)	---	53	1400	1200	4400	---	---	---	---	ATI
AW-6	05/24/95	334.90	6.87	328.03	14000 (e)	---	730	140	570	1100	---	---	---	5.7	ATI
QC-1 (h)	05/24/95	---	---	---	15000 (e)	---	750	140	570	1100	---	---	---	---	ATI
AW-6	08/29/95	334.90	8.38	326.52	8300	---	430	ND<10	340	40	2600 (f)	---	---	8.9	ATI
QC-1 (h)	08/29/95	---	---	---	9400	---	430	12	360	37	2200 (f)	---	---	---	ATI
AW-6	11/28/95	334.90	9.20	325.70	4700	---	300	13	61	ND<20	3600	---	---	3.0	ATI
QC-1 (h)	11/28/95	---	---	---	5200	---	310	12	78	ND<20	3800	---	---	---	ATI
AW-6	02/26/96	334.90	5.78	329.12	3600	---	17	29	110	1100	68	---	---	8.0	SPL
QC-1 (h)	02/26/96	---	---	---	3600	---	17	28	100	1050	63	---	---	---	SPL
AW-6	05/23/96	334.90	6.94	327.96	1800	---	390	ND<2.5	76	49	560	---	---	5.2	SPL
QC-1 (h)	05/23/96	---	---	---	1800	---	380	ND<2.5	72	44	550	---	---	---	SPL
AW-6	08/23/96	334.90	6.50	328.40	2300	---	54	ND<1.0	ND<1.0	ND<1.0	4240	---	---	6.3	SPL
AW-6	12/02/96	334.90	8.46	326.44	1500	---	27	ND<1	ND<1	ND<1	1700	---	---	7.2	SPL
AW-6	05/16/97	334.90	7.55	327.35	110	---	0.5	ND<1.0	ND<1.0	ND<1.0	33	---	---	4.3	SPL
AW-6	08/22/97	334.90	8.58	326.32	100	---	16	ND<1.0	ND<1.0	3	2900	---	---	6.3	SPL
QC-1 (h)	08/22/97	---	---	---	100	---	18	ND<1.0	ND<1.0	ND<1.0	2500 (i)	---	---	---	SPL
AW-6	02/12/98	334.90	4.50	330.40	---	---	---	---	---	---	---	---	---	---	---
AW-6	02/23/98	334.90	5.02	329.88	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	5.7	SPL
QC-1 (h)	02/23/98	---	---	---	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	---	---	SPL

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BP OIL COMPANY SERVICE STATION NO 11116
7197 VILLAGE PARKWAY, DUBLIN, CALIFORNIA

ALISTO PROJECT NO 10-017

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)	HVOC (ug/l)	DO (ppm)	LAB
QC-2 (j)	11/10/92	---	---	---	ND<50	---	ND<0.5	ND<0 5	ND<0.5	ND<0.5	---	---	---	---	ANA
QC-2 (j)	02/10/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2 (j)	05/21/93	---	---	---	ND<50	---	ND<0.5	ND<0 5	ND<0 5	ND<0.5	---	---	---	---	PACE
QC-2 (j)	08/12/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2 (j)	11/12/93	---	---	---	ND<50	---	ND<0 5	ND<0 5	ND<0 5	ND<0.5	---	---	---	---	PACE
QC-2 (j)	02/11/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2 (j)	06/20/94	---	---	---	ND<50	---	ND<0.5	ND<0 5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2 (j)	10/04/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0 5	ND<0.5	---	---	---	---	PACE
QC-2 (j)	11/21/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2 (j)	02/15/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
QC-2 (j)	05/24/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
QC-2 (j)	08/29/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
QC-2 (j)	11/28/95	---	---	---	ND<50	---	ND<0.50	1.6	ND<0 50	1.2	ND<5.0 (f)	---	---	---	ATI
QC-2 (j)	02/26/96	---	---	---	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	---	SPL
QC-2 (j)	05/23/96	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0 5	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
HVOC	Halogenated volatile organic compounds
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
ND	Not detected above reported detection limit
---	Not applicable/available/analyzed/measured
ANA	Anametrix, Inc
SUP	Superior Analytical Laboratory
SEQ	Sequoia Analytical Laboratory
PACE	Pace, Inc
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories

NOTES:

(a) Top of casing elevations surveyed in reference to the City of Dublin monument at the intersection of Village Parkway and Amador Valley Boulevard, with an elevation of 335.92 feet above mean sea level.

(b) Groundwater elevations in feet above mean sea level.

(c) Methylene chloride.

(d) Groundwater samples collected on November 21, 1994.

(e) MTBE peak present. See historical MTBE documentation in Appendix C of Alisto report 10-017-06-003.

(f) A copy of the documentation for this data is included in Appendix C of Alisto report 10-017-06-003.

(g) Well buried.

(h) Blind duplicate.

(i) Concentration revised by analytical laboratory after correction of incorrect calculation.

(j) Travel blank.

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
ARCO PRODUCTS SERVICE STATION 6041
7249 VILLAGE PARKWAY, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	LAB
MW-1	11/10/92	336.56	11.74	324.82	---	---	---	---	---	---	---
MW-1	02/10/93	336.56	9.66	326.90	---	---	---	---	---	---	---
MW-1	05/10/93	336.56	9.50	327.06	---	---	---	---	---	---	---
MW-1 (c)	08/12/93	336.56	---	---	---	---	---	---	---	---	---
MW-1	11/11/93	336.56	10.70	325.86	---	---	---	---	---	---	---
MW-1	02/11/94	336.56	10.35	326.21	---	---	---	---	---	---	---
MW-1	05/27/94	336.56	10.40	326.16	---	---	---	---	---	---	---
MW-1 (c)	08/25/94	336.56	---	---	---	---	---	---	---	---	---
MW-1	11/18/94	336.56	10.25	326.31	---	---	---	---	---	---	---
MW-1	02/15/95	336.56	8.53	328.03	---	---	---	---	---	---	---
MW-1	05/24/95	336.56	9.00	327.56	---	---	---	---	---	---	---
MW-1	08/25/95	336.56	6.93	329.63	780	2	ND<1	2	2	2500	CAS
MW-1	11/28/95	336.56	11.01	325.55	570	2.2	ND<0.5	1.4	0.9	---	CAS
MW-1	02/26/96	336.56	7.35	329.21	---	---	---	---	---	---	---
MW-1	05/23/96	336.56	8.73	327.83	560	8.5	ND<1	1.1	ND<1	3900	CAS
MW-1	08/23/96	336.56	10.25	326.31	860	ND<1	ND<1	ND<4	2	5600	CAS
MW-1	08/20/97	336.56	10.75	325.81	ND<5000	ND<50	ND<50	ND<50	ND<50	7400	CAS
MW-1	11/21/97	336.56	11.10	325.46	ND<5000	ND<50	ND<50	ND<50	ND<50	8500	CAS
MW-1	02/12/98	336.56	7.05	329.51	---	---	---	---	---	---	---
MW-2	11/10/92	334.80	10.12	324.68	---	---	---	---	---	---	---
MW-2	02/10/93	334.80	7.30	327.50	---	---	---	---	---	---	---
MW-2	05/10/93	334.80	7.40	327.40	---	---	---	---	---	---	---
MW-2 (c)	08/12/93	334.80	---	---	---	---	---	---	---	---	---
MW-2	11/11/93	334.80	9.02	325.78	---	---	---	---	---	---	---
MW-2	02/11/94	334.80	8.59	326.21	---	---	---	---	---	---	---
MW-2	05/27/94	334.80	8.51	326.29	---	---	---	---	---	---	---
MW-2 (c)	08/25/94	334.80	---	---	---	---	---	---	---	---	---
MW-2	11/18/94	334.80	8.70	326.10	---	---	---	---	---	---	---
MW-2	02/15/95	334.80	6.75	328.05	---	---	---	---	---	---	---
MW-2	05/24/95	334.80	6.88	327.92	---	---	---	---	---	---	---
MW-2	08/25/95	334.80	7.91	326.89	150	6	ND<1	1	ND<1	2700	CAS
MW-2	11/28/95	334.80	9.06	325.74	ND<50	ND<0.5	ND<0.5	ND<0.5	0.8	---	CAS
MW-2	02/26/96	334.80	6.65	328.15	---	---	---	---	---	---	---
MW-2	05/23/96	334.80	6.90	327.90	540	140	ND<2.5	13	ND<2.5	4600	CAS
MW-2	08/23/96	334.80	8.45	326.35	180	0.8	2	0.7	2.6	4000	CAS
MW-2	08/20/97	334.80	8.87	325.93	ND<5000	ND<50	ND<50	ND<50	ND<50	3100	CAS
MW-2	11/21/97	334.80	9.28	325.52	ND<2000	ND<20	ND<20	ND<20	ND<20	2600	CAS
MW-2	02/12/98	334.80	5.90	328.90	---	---	---	---	---	---	---

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
ARCO PRODUCTS SERVICE STATION 6041
7249 VILLAGE PARKWAY, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	LAB
MW-3	11/10/92	335.53	10.72	324.81	---	---	---	---	---	---	---
MW-3	02/10/93	335.53	7.87	327.66	---	---	---	---	---	---	---
MW-3	05/10/93	335.53	9.91	325.62	---	---	---	---	---	---	---
MW-3 (c)	08/12/93	335.53	---	---	---	---	---	---	---	---	---
MW-3	11/11/93	335.53	9.81	325.72	---	---	---	---	---	---	---
MW-3	02/11/94	335.53	9.60	325.93	---	---	---	---	---	---	---
MW-3	05/27/94	335.53	9.51	326.02	---	---	---	---	---	---	---
MW-3 (c)	08/25/94	335.53	---	---	---	---	---	---	---	---	---
MW-3	11/18/94	335.53	9.79	325.74	---	---	---	---	---	---	---
MW-3	02/15/95	335.53	8.55	326.98	---	---	---	---	---	---	---
MW-3	05/24/95	335.53	8.17	327.36	---	---	---	---	---	---	---
MW-3	08/25/95	335.53	9.27	326.26	210	3.6	ND<0.5	2.9	0.6	20000	CAS
MW-3	11/28/95	335.53	9.91	325.62	81	1.5	ND<0.5	1.4	ND<0.5	15000	CAS
MW-3	02/26/96	335.53	8.42	327.11	---	---	---	---	---	---	---
MW-3	05/23/96	335.53	7.70	327.83	6500	690	ND<10	120	14	8600	CAS
MW-3	08/23/96	335.53	9.25	326.28	1700	85	2.1	61	5.3	11000	CAS
MW-3	08/20/97	335.53	9.73	325.80	ND<5000	ND<50	ND<50	ND<50	ND<50	7700	CAS
MW-3	11/21/97	335.53	10.10	325.43	ND<5000	ND<50	ND<50	ND<50	ND<50	9700	CAS
MW-3	02/12/98	335.53	6.68	328.85	---	---	---	---	---	---	---
MW-4	11/10/92	334.22	9.58	324.64	---	---	---	---	---	---	---
MW-4	02/10/93	334.22	6.80	327.42	---	---	---	---	---	---	---
MW-4	05/10/93	334.22	9.90	324.32	---	---	---	---	---	---	---
MW-4 (c)	08/12/93	334.22	---	---	---	---	---	---	---	---	---
MW-4	11/11/93	334.22	8.48	325.74	---	---	---	---	---	---	---
MW-4	02/11/94	334.22	8.15	326.07	---	---	---	---	---	---	---
MW-4	05/27/94	334.22	7.83	326.39	---	---	---	---	---	---	---
MW-4 (c)	08/25/94	334.22	---	---	---	---	---	---	---	---	---
MW-4	11/18/94	334.22	8.31	325.91	---	---	---	---	---	---	---
MW-4	02/15/95	334.22	7.85	326.37	---	---	---	---	---	---	---
MW-4	05/24/95	334.22	6.68	327.54	---	---	---	---	---	---	---
MW-4	08/25/95	334.22	6.93	327.29	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	CAS
MW-4	11/28/95	334.22	8.21	326.01	---	---	---	---	---	---	---
MW-4	02/26/96	334.22	6.65	327.57	---	---	---	---	---	---	---
MW-4	05/23/96	334.22	6.47	327.75	---	---	---	---	---	---	---
MW-4	08/23/96	334.22	7.66	326.56	---	---	---	---	---	---	---
MW-4	08/20/97	334.22	8.32	325.90	---	---	---	---	---	---	---
MW-4	11/21/97	334.22	8.65	325.57	---	---	---	---	---	---	---
MW-4	02/12/98	334.22	6.35	327.87	---	---	---	---	---	---	---

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
ARCO PRODUCTS SERVICE STATION 6041
7249 VILLAGE PARKWAY, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	LAB
MW-5	11/10/92	335.87	11.02	324.85	---	---	---	---	---	---	---
MW-5	02/10/93	335.87	8.00	327.87	---	---	---	---	---	---	---
MW-5	05/10/93	335.87	8.64	327.23	---	---	---	---	---	---	---
MW-5 (c)	08/12/93	335.87	---	---	---	---	---	---	---	---	---
MW-5	11/11/93	335.87	10.09	325.78	---	---	---	---	---	---	---
MW-5	02/11/94	335.87	9.63	326.24	---	---	---	---	---	---	---
MW-5	05/27/94	335.87	9.60	326.27	---	---	---	---	---	---	---
MW-5 (c)	08/25/94	335.87	---	---	---	---	---	---	---	---	---
MW-5	11/18/94	335.87	9.65	326.22	---	---	---	---	---	---	---
MW-5	02/15/95	335.87	7.80	328.07	---	---	---	---	---	---	---
MW-5	05/24/95	335.87	8.10	327.77	---	---	---	---	---	---	---
MW-5	08/25/95	335.87	9.43	326.44	---	---	---	---	---	---	---
MW-5	11/28/95	335.87	10.12	325.75	---	---	---	---	---	---	---
MW-5	02/26/96	335.87	6.73	329.14	---	---	---	---	---	---	---
MW-5	05/23/96	335.87	7.87	328.00	---	---	---	---	---	---	---
MW-5	08/23/96	335.87	9.46	326.41	---	---	---	---	---	---	---
MW-5	08/20/97	335.87	9.92	325.95	---	---	---	---	---	---	---
MW-5	11/21/97	335.87	10.18	325.69	---	---	---	---	---	---	---
MW-5	02/12/98	335.87	6.45	329.42	---	---	---	---	---	---	---
MW-6	11/10/92	335.84	11.03	324.81	---	---	---	---	---	---	---
MW-6	02/10/93	335.84	8.22	327.62	---	---	---	---	---	---	---
MW-6	05/10/93	335.84	8.85	326.99	---	---	---	---	---	---	---
MW-6 (c)	08/12/93	335.84	---	---	---	---	---	---	---	---	---
MW-6	11/11/93	335.84	10.02	325.82	---	---	---	---	---	---	---
MW-6	02/11/94	335.84	9.66	326.18	---	---	---	---	---	---	---
MW-6	05/27/94	335.84	9.69	326.15	---	---	---	---	---	---	---
MW-6 (c)	08/25/94	335.84	---	---	---	---	---	---	---	---	---
MW-6	11/18/94	335.84	9.54	326.30	---	---	---	---	---	---	---
MW-6	02/15/95	335.84	7.81	328.03	---	---	---	---	---	---	---
MW-6	05/24/95	335.84	8.35	327.49	---	---	---	---	---	---	---
MW-6	08/25/95	335.84	9.71	326.13	---	---	---	---	---	---	---
MW-6	11/28/95	335.84	10.28	325.56	---	---	---	---	---	---	---
MW-6	02/26/96	335.84	6.60	329.24	---	---	---	---	---	---	---
MW-6	05/23/96	335.84	8.05	327.79	---	---	---	---	---	---	---
MW-6	08/23/96	335.84	9.58	326.26	---	---	---	---	---	---	---
MW-6	08/20/97	335.84	9.98	325.86	---	---	---	---	---	---	---
MW-6	11/21/97	335.84	10.31	325.53	---	---	---	---	---	---	---
MW-6	02/12/98	335.84	3.15	332.69	---	---	---	---	---	---	---

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
ARCO PRODUCTS SERVICE STATION 6041
7249 VILLAGE PARKWAY, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	LAB
VW-2	08/20/97	---	9.16	---	---	---	---	---	---	---	---
VW-2	11/21/97	---	8.27	---	ND<200	3	ND<2	ND<2	ND<2	180	CAS
VW-2	02/12/98	---	6.65	---	---	---	---	---	---	---	---

ABBREVIATIONS

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
ug/l	Micrograms per liter
---	Not analyzed/measured/applicable/available
ND	Not detected above reported detection limit
CAS	Columbia Analytical Services, Inc.

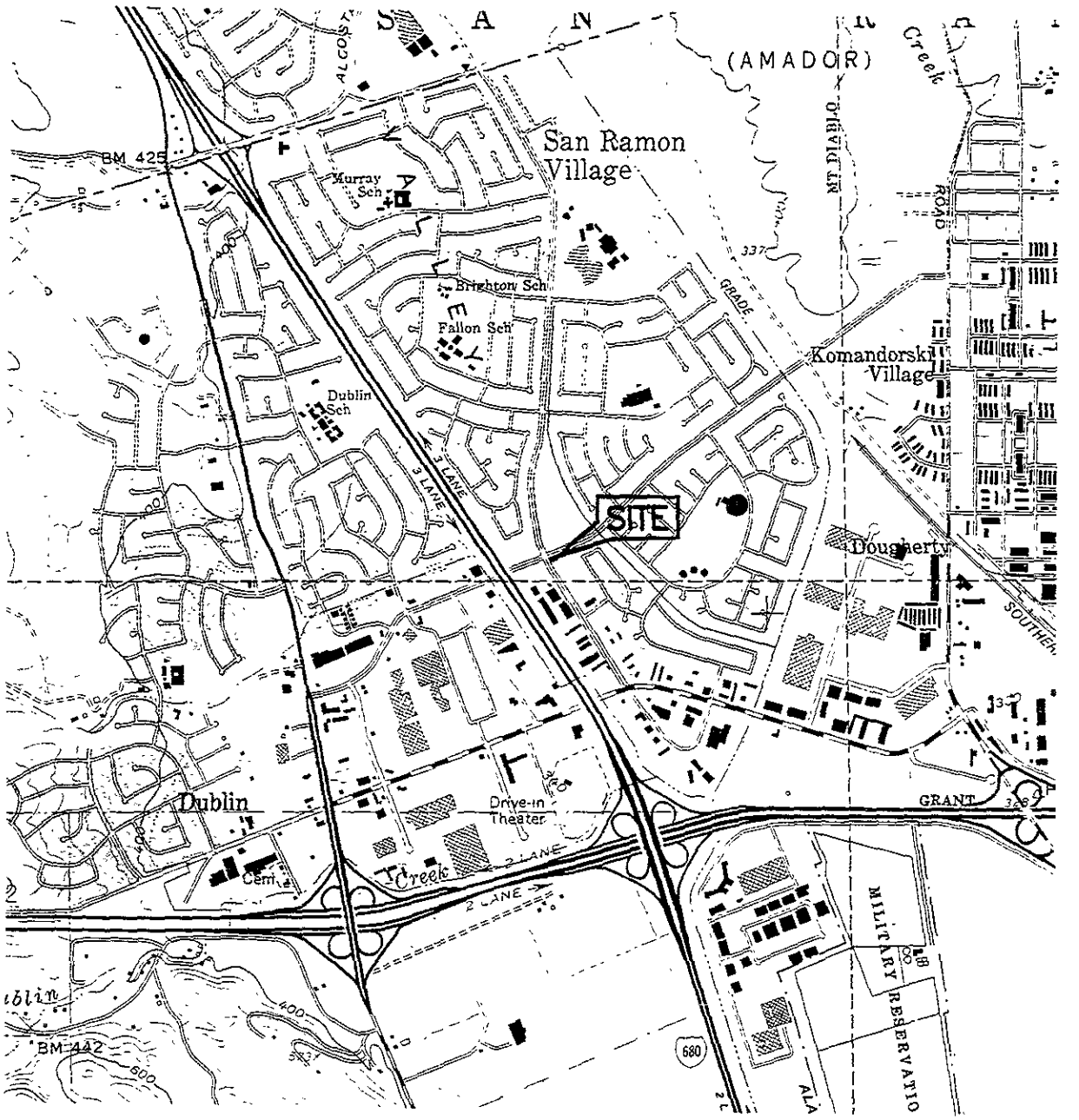
NOTES:

(a) Top of casing elevations surveyed to the nearest 0.01 foot above mean sea level.

(b) Groundwater elevations in feet above mean sea level.

(c) Data not available.

F:\0\10-01\ARCO WQ2



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

N

0 1000' 2000'

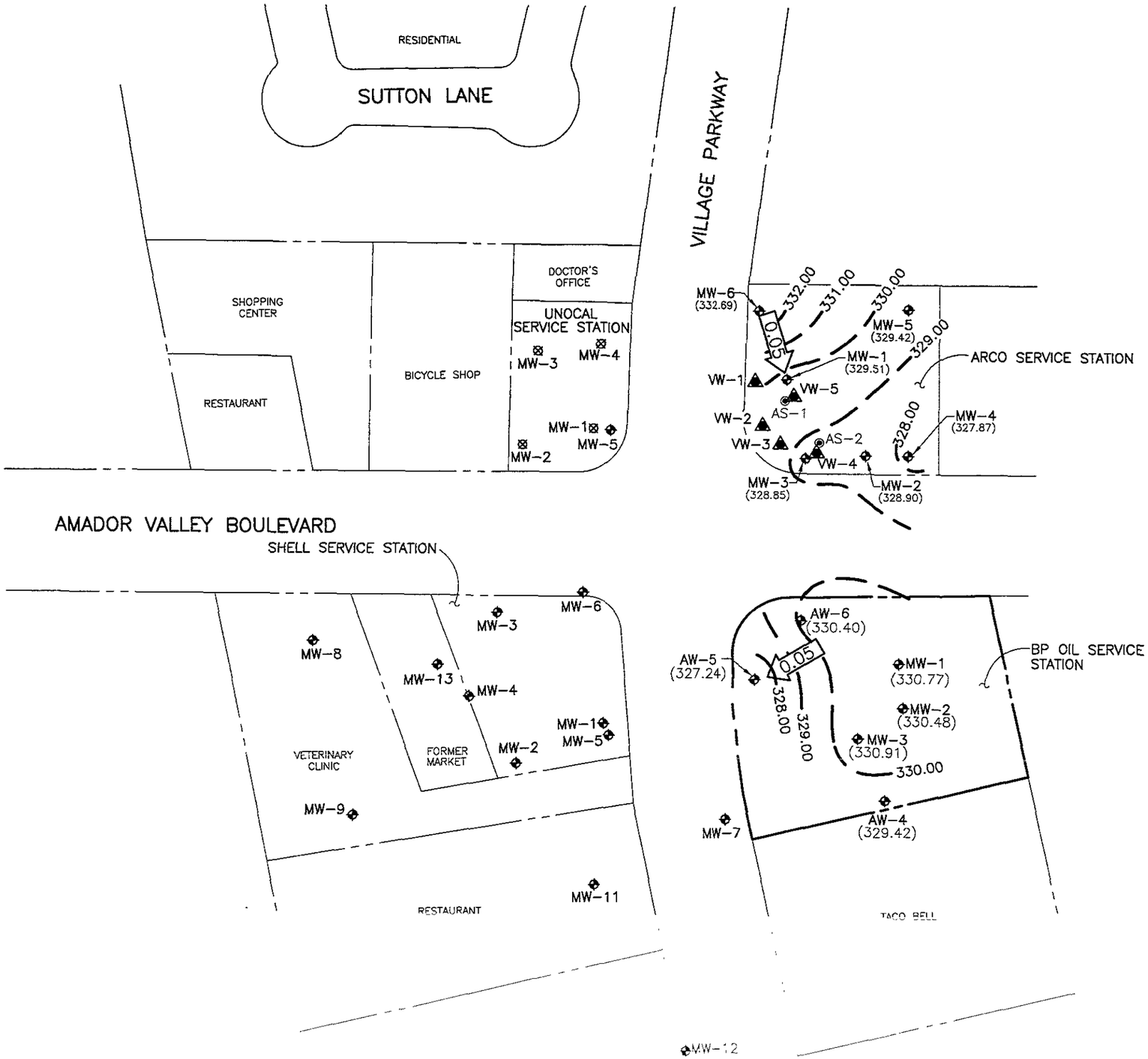
FIGURE 1

SITE VICINITY MAP

BP OIL SERVICE STATION NO. 11116
7197 VILLAGE PARKWAY
DUBLIN, CALIFORNIA

PROJECT NO. 10-017

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



N

0 100 200

SCALE IN FEET

LEGEND

- ◆ GROUNDWATER MONITORING WELL
- ▲ VAPOR EXTRACTION WELL
- ◉ AIR SPARGING POINT
- ⊠ DESTROYED WELL
- (329.42) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 330.00 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–1.00 FOOT)
- 0.05 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

NOTES:

1. Potentiometric groundwater elevation contours were generated with Quicksurf using the Kriging method with a spherical variogram on a triangulated grid surface.
2. Groundwater elevations not availble for Shell and Unocal Service Station wells.

FIGURE 2

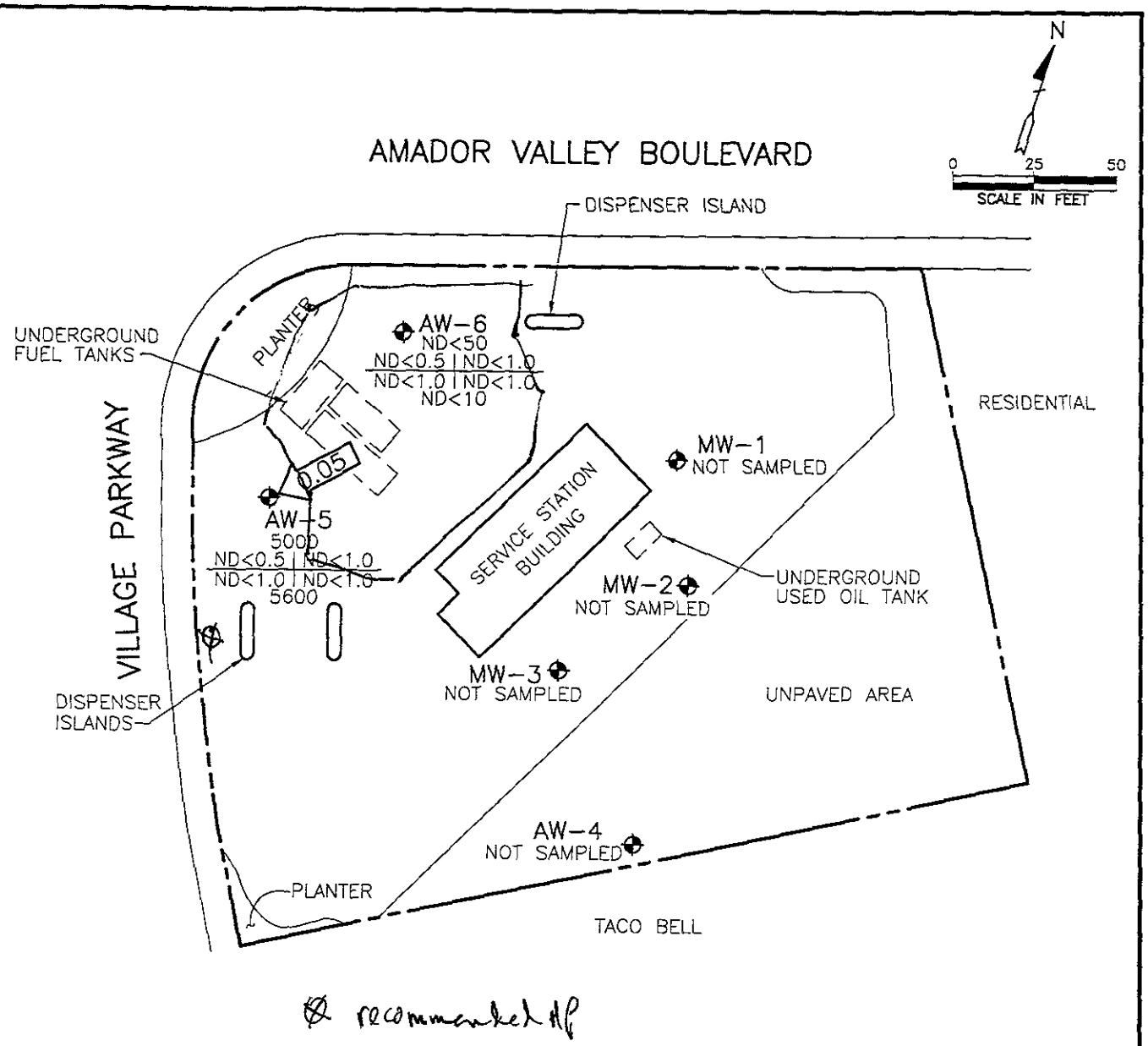
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

FEBRUARY 12, 1998

BP OIL SERVICE STATION NO. 11116
7197 VILLAGE PARKWAY
DUBLIN, CALIFORNIA

PROJECT NO. 10–017

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



recommended MP

LEGEND

⊕	GROUNDWATER MONITORING WELL
TPH-G / B | T / E | X / MTBE	CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER
TPH-G	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
MTBE	METHYL TERT BUTYL ETHER
ND	NOT DETECTED ABOVE REPORTED DETECTION LIMIT
0.05	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

FEBRUARY 23, 1998

BP OIL SERVICE STATION NO. 11116
7197 VILLAGE PARKWAY
DUBLIN, CALIFORNIA

PROJECT NO. 10-017

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

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. 10-017-07-002 Date: 2/23/98
Address 7197 Village Parkway Day: (M) T W TH F
Contract No. H176927 /KS City: Dublin
Station No. BP 11116 Sampler: LR

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS:
MW-1	NS	2"	25.80'	4.31	Ø	1410	NS Monument Damage (Base has been Seperated from Mon
MW-2	↓	2"	25.45'	4.03	↓	1417	NS
MW-3	↓	2"	25.90'	4.13	↓	1420	NS Monument Damage (Base has been Seperated from Mon.
AW-4	↓	4"	34.15'	3.86	↓	1424	NS
AW-5	S-1	4"	32.90'	7.45	↓	1430	Semi-annual
AW-6	S-2	4"	16.50'	4.50	↓	1433	ORC Well Semi-Annual QC-1 (S-3) From this well BM

FIELD INSTRUMENT CALIBRATION DATA

pH METER Ion 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED (Y) N TIME 0830 WEATHER Rain

D.O. METER Ion ZERO d.O. SOLUTION ____ BAROMETRIC PRESSURE 760 TEMP 56

CONDUCTIVITY METER Ion 10,000 ____ TURBIDITY METER ____ 5.0 NTU ____ OTHER X

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
AW-5	7.45	4"	OK	Ø	Y (N)	17	1501	60.7	7.33	1.60ms	3.4
Total Depth	Water Level	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.		34		61.6	7.16	1.87ms	
32.90-7.45=25.45		x.65=	16.54	x3=	49.62	50	1542	62.1	7.10	1.89ms	3.8

Purge Method X Surface Pump O Disp.Tube O Winch O Disp. Bailer(s) ___ O Sys Port
Comments:

O EPA 601 ____ O TPH-G/BTEX ____ O TPH Diesel ____ O TOG 5520 ____
TIME/SAMPLE ID: 1550

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.
AW-6	4.50	4"	OK	Ø	Y (N)	8	1601	58.1	7.47	1.11ms	5.3
Total Depth	Water Level	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.		16		60.7	7.29	1.22ms	
16.50-4.50=12.00		x.65=	7.80	x3=	23.40	24	1630	61.1	7.23	1.22ms	5.7

Purge Method X Surface Pump O Disp.Tube O Winch O Disp. Bailer(s) ___ O Sys Port
Comments:

O EPA 601 ____ O TPH-G/BTEX ____ O TPH Diesel ____ O TOG 5520 ____
TIME/SAMPLE ID: 1636

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

March 6, 1998

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

The following report contains analytical results for the sample(s) received at Southern Petroleum Laboratories (SPL) on February 25, 1998. The sample(s) was assigned to Certificate of Analysis No.(s) 9802B96 and analyzed for all parameters as listed on the chain of custody.

Any data flag or quality control exception associated with this report will be footnoted in the analytical results 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

Joel Grice
Project Manager

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

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 98-02-B96

Approved for Release by:

Joel Grice, Project Manager Date: 3/6/98

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. H9-9802B96-01

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

P.O.# H176927, COC#090231
DATE: 03/05/98

PROJECT: #11116, N/A
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-1

PROJECT NO: 10-017-07/002
MATRIX: WATER
DATE SAMPLED: 02/23/98
DATE RECEIVED: 02/25/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	5600	1000 P	ug/L
Benzene	ND	0.5 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
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: LJ/			
Date: 03/01/98			
Gasoline Range Organics	5.0	1.2 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	79		
4-Bromofluorobenzene	95		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 03/02/98 10:04:00			

(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. H9-9802B96-02

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

P.O.# H176927, COC#090231
DATE: 03/05/98

PROJECT: #11116, N/A
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-2

PROJECT NO: 10-017-07/002
MATRIX: WATER
DATE SAMPLED: 02/23/98
DATE RECEIVED: 02/25/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	ug/L
Benzene	ND	0.5 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
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: LJ/			
Date: 03/02/98			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	77		
4-Bromofluorobenzene	93		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/28/98 08:08:00			

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. H9-9802B96-03

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

P.O.# H176927, COC#090231
DATE: 03/05/98

PROJECT: #11116, N/A
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-3

PROJECT NO: 10-017-07/002
MATRIX: WATER
DATE SAMPLED: 02/23/98
DATE RECEIVED: 02/25/98

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	ug/L
Benzene	ND	0.5 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
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	97		
Method 8020A***			
Analyzed by: LJ/			
Date: 02/28/98			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	77		
4-Bromofluorobenzene	93		
California LUFT Manual for Gasoline			
Analyzed by: LJ/			
Date: 02/28/98 08:33:00			

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

QUALITY CONTROL

DOCUMENTATION

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

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Batch Id: VARE980301104110

Units: µg/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	44	88.0	72 - 128
Benzene	ND	50	46	92.0	61 - 119
Toluene	ND	50	47	94.0	65 - 125
EthylBenzene	ND	50	45	90.0	70 - 118
O Xylene	ND	50	46	92.0	72 - 117
M & P Xylene	ND	100	93	93.0	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	18	90.0	18	90.0	0	20	39 - 150
BENZENE	ND	20	16	80.0	17	85.0	6.06	21	32 - 164
TOLUENE	ND	20	16	80.0	17	85.0	6.06	20	38 - 159
ETHYLBENZENE	ND	20	17	85.0	16	80.0	6.06	19	52 - 142
O XYLENE	ND	20	17	85.0	17	85.0	0	18	53 - 143
M & P XYLENE	ND	40	33	82.5	33	82.5	0	17	53 - 144

Analyst: LJ/
Sequence Date: 03/01/98
SPL ID of sample spiked: 9802B96-02A
Sample File ID: E_B4253.TX0
Method Blank File ID:
Blank Spike File ID: E_B4231.TX0
Matrix Spike File ID: E_B4240.TX0
Matrix Spike Duplicate File ID: E_B4241.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):

9802D12-04A 9802B61-04A 9802B95-03A 9802B95-04A
9802B95-05A 9802B95-06A 9802B96-01A 9802B96-02A
9802C28-02A 9802C28-04A 9802D12-01A 9802D12-02A

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

** SPL BATCH QUALITY CONTROL REPORT **

METHOD 8020

Matrix: Aqueous

Batch Id: VARE980302105800

Units: µg/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	46	92.0	72 - 128
Benzene	ND	50	48	96.0	61 - 119
Toluene	ND	50	48	96.0	65 - 125
EthylBenzene	ND	50	47	94.0	70 - 118
O Xylene	ND	50	47	94.0	72 - 117
M & P Xylene	ND	100	96	96.0	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	20.0	19.6	98.0	21.2	106	7.84	20	39 - 150
BENZENE	ND	20.0	16.5	82.5	17.6	88.0	6.45	21	32 - 164
TOLUENE	ND	20.0	16.1	80.5	17.6	88.0	8.90	20	38 - 159
ETHYLBENZENE	ND	20.0	16.8	84.0	18.1	90.5	7.45	19	52 - 142
O XYLENE	ND	20.0	17.0	85.0	18.2	91.0	6.82	18	53 - 143
M & P XYLENE	ND	40.0	33.4	83.5	35.7	89.2	6.60	17	53 - 144

Analyst: LJ/

Sequence Date: 03/02/98

SPL ID of sample spiked: 9802C11-01A

Sample File ID: E_C1014.TX0

Method Blank File ID:

Blank Spike File ID: E_C1003.TX0

Matrix Spike File ID: E_C1007.TX0

Matrix Spike Duplicate File ID: E_C1008.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):

9802B97-04A *9802B97-05A* *9802B97-06A* *9802B96-02A*
9802C11-01A 9802C11-03A 9802C11-05A 9802B97-07A
9802D12-06A *9802D12-05A* *9802C11-02A*

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

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Matrix: Aqueous
Batch Id: VARE980227204600
Units: µg/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	44	88.0	72 - 128
Benzene	ND	50	49	98.0	61 - 119
Toluene	ND	50	49	98.0	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	430	20	430	NC	420	NC	NC	20	39 - 150
BENZENE	1.7	20	18	81.5	17	76.5	6.33	21	32 - 164
TOLUENE	ND	20	16	80.0	16	80.0	0	20	38 - 159
ETHYLBENZENE	ND	20	16	80.0	16	80.0	0	19	52 - 142
O XYLENE	ND	20	17	85.0	17	85.0	0	18	53 - 143
M & P XYLENE	ND	40	33	82.5	32	80.0	3.08	17	53 - 144

Analyst: LJ/
Sequence Date: 02/27/98
SPL ID of sample spiked: 9802B95-01A
Sample File ID: E_B4203.TX0
Method Blank File ID:
Blank Spike File ID: E_B4196.TX0
Matrix Spike File ID: E_B4198.TX0
Matrix Spike Duplicate File ID: E_B4199.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):

9802D12-07A 9802B95-03A 9802B95-04A 9802B95-05A
9802B95-06A 9802B96-01A 9802B96-03A 9802B97-01A
9802B97-02A 9802B97-03A 9802B97-04A 9802B95-01A
9802B95-02A 9802D12-01A 9802D12-03A

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

** SPL BATCH QUALITY CONTROL REPORT **

California LUFT Manual for Gasoline

Batch Id: VARE980302013201

Matrix: Aqueous

Units: mg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Gasoline Range Organics	ND	1.0	1.02	102	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	0.86	95.6	0.51	56.7	51.1 *	36	36 - 160

Analyst: LJ/

Sequence Date: 03/02/98

SPL ID of sample spiked: 9802C11-02A

Sample File ID: EEC1012.TX0

Method Blank File ID:

Blank Spike File ID: EEB4268.TX0

Matrix Spike File ID: EEC1009.TX0

Matrix Spike Duplicate File ID: EEC1010.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): 9802B96-01A 9802B95-05A 9802B95-06A

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

** SPL BATCH QUALITY CONTROL REPORT **

California LUFT Manual for Gasoline

Batch Id: VARE980227211200

Matrix: Aqueous

Units: mg/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Gasoline Range Organics	ND	1.0	1.1	110	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	0.70	77.8	0.78	86.7	10.8	36	36 - 160

Analyst: LJ/

Sequence Date: 02/27/98

SPL ID of sample spiked: 9802B95-02A

Sample File ID: EEB4204.TX0

Method Blank File ID:

Blank Spike File ID: EEB4197.TX0

Matrix Spike File ID: EEB4200.TX0

Matrix Spike Duplicate File ID: EEB4201.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): 9802B96-02A 9802B96-03A 9802B97-01A 9802B97-02A 9802B97-03A 9802B95-01A 9802B95-02A 9802B95-03A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
2/25/98	1000

SPL Sample ID:
9802B96

			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:		5° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	884847253 53	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	2/25/98

9802 B96

BP

CHAIN OF CUSTODY

No. 090231

Page 1 of 1

CONSULTANT'S NAME: Allisto Engineering	CONSULTANT'S ADDRESS: 1575 Treat Blvd #201 W.C. Ca 94598		
BP SITE NUMBER: 11116	BP SITE FACILITY ADDRESS: Dublin, Ca		CONSULTANT PROJECT NUMBER: 10-017-07/002
CONSULTANT PROJECT MANAGER: Brady Nagle	PHONE NUMBER: (510) 295-1650	FAX NUMBER: 295-1823	CONSULTANT CONTRACT NUMBER: H176927
BP CONTACT: Scott Hooton	BP ADDRESS: Renton, WA	PHONE NUMBER: —	FAX NO: —
LAB CONTACT: SPL	LABORATORY ADDRESS: Texas	PHONE NUMBER: —	FAX NO: —
BP CONTACT REQUESTING RUSH TAT (Print BP Contact Name)	RUSH REQUESTED OF (Print Consultant Contact Name) / DATE/TIME	SHIPMENT DATE: 2-24-98	SHIPMENT METHOD: Fed EX

TAT [ ] 24 Hours [ ] 48 Hours [ ] 72 Hours [X] Standard 7 or 14 Days

AIRBILL NUMBER: 3848472353

SAMPLE DESCRIPTION	COLLECTION DATE	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPH-G BTEX	MTBE								COMMENTS
S-1	2/23/98		W	3	HCL		X	X								
S-2	↓		↓	↓	↓		↓	↓								
S-3	↓		↓	↓	↓		↓	↓								
																intact 1.0 5c

SAMPLED BY (Please Print Name)

SAMPLED BY (Signature)

ADDITIONAL COMMENTS: Fed Ex 3848472353

RELINQUISHED BY / AFFILIATION (Print Name / Signature)	DATE	TIME	ACCEPTED BY / AFFILIATION (Print Name / Signature)	DATE	TIME
[signature]	2/24/98	1500	P. Yelton	2/24/98	1500
P. Yelton	2/24/98	1500	[signature]	2/25/98	1000

CEV 167 (A 2/94) PKG 50

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

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

BP Site Number:	11116
ERM Contract:	H176927
Sampling Date:	2/23/98
Matrix Description:	Water
Date Final Report Received:	3/12/98
Laboratory & Location:	SPL, Houston, Texas

		Yes	No	N/A
1.	Is BP contract release number consistent with analytical report?	_X_	____	____
2.	Was report submitted within the specified timeframe?	_X_	____	____
3.	Does report agree with the COC?	_X_	____	____
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?	See Below	____	____
10.	Are LCS results acceptable using laboratory criteria?	_X_	____	____

MS/MSD recovery and relative % difference for MTBE in one of three matrix spikes was not calculated due to sample exceeding spike by a factor of 4 or more. MS/MSD relative % difference value for TPH-G in one of two matrix spikes was outside QC range due to matrix interference. MS/MSD limits are advisory only; as stated in SW-846, Section 8.7 to 8.8, if the MS/MSD results fall outside the advisable ranges, a laboratory control samples (LCS) must be analyzed and fall within those ranges. LCS results are within quality control limits.

Data Validation Completed by: Brady Nagle

(signature): _____

Date: 6/1/98