BP OIL

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BP Oil Company
16400 Southcenter Parkway, Suite 301
Tukwila, Washington 98188
(206) 575-4077

December 15,1993

Ms. Juliet Shin
Alameda Country Health
Care Services Agency,
80 Swan Way, Room 200
Oakland, CA. 94621

RE: BP OIL FACILITY #11116
7197 Village Parkway
Dublin, CA

Dear Ms.Shin:

Attached please find our **GROUNDWATER MONITORING AND SAMPLING REPORT DATED FOR NOVEMBER 3, 1993** for the above referenced facility.

Please call me at (206) 394-5243 with questions regarding this submission.

Respectfully,

Scott T. Hooton
Environmental Resources Management
Group Leader

STH:sc ERM11116

cc: Mr. Eddy So, California Regional Water Quality Control Board, San Francisco Bay Region, 2101 Webster Street, Suite 500, Oakland, Ca 94612

Mr. Brady Nagle, Alisto Engineering, 1777 Oakland Blvd., Suite 200, Walnut Creek, CA 94596

Mr. Robert Merriken, Mobil Oil Corp, 3225 Gallows Road, Fairfax, VA 22037

Site file

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-017-02-002

Prepared for:

BP Oil Company
Environmental Resource Management
16400 Southcenter Parkway, Suite 301
Tukwila, Washington

Prepared by:

Alisto Engineering Group
1777 Oakland Boulevard, Suite 200
Walnut Creek, California

November 3, 1993

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. 10-017-02-002

November 3, 1993

INTRODUCTION

This report presents the results and findings of the August 12, 1993 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 in 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 the 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. The survey data and groundwater elevation measurements collected to date are presented in Table 1.

Groundwater monitoring was performed concurrently with monitoring wells installed for the Unocal Corporation Service Station - 7375 Amador Valley Boulevard and Shell Oil Company Service Station - 7194 Amador Valley Boulevard. The results of groundwater monitoring at the Unocal and Shell site are presented in Tables 2 and 3.

Before sample collection, the well was purged of 3 casing volumes, while recording field readings of pH, temperature, and electrical conductivity. 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 collected for this and previous quarters are summarized in Table 1. Groundwater data was used to prepare the potentiometric surface elevation map shown in Figure 2 The results of groundwater analysis are shown in 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 (ppb)	TPH-D (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	TOG (ppb)	HVOC (ppb)	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<5,000	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<5,000	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	7,500	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<5,000	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<5,000	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<5,000	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<5,000	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<5,000	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<5,000	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<5,000	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-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<5,000	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<5,000	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	6,000	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<5,000	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<5,000	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<5,000	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<5,000	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<5,000	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<5,000	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

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 (ppb)	TPH-D (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	TOG (ppb)	HVOC (ppb)	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<5,000	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<5,000	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<5,000	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<5,000	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<5,000	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<5,000	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<5,000	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<5,000	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<5,000	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<5,000	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
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 (d)	02/10/93	333.41	---	---	---	---	---	---	---	---	---	---	---
AW-4 (d)	05/21/93	333.41	---	---	---	---	---	---	---	---	---	---	---
AW-4 (d)	08/12/93	333.41	---	---	---	---	---	---	---	---	---	---	---

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 (ppb)	TPH-D (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	TOG (ppb)	HVOC (ppb)	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 (e)	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	---	---	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-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	---	---	PACE
QC-1 (e)	02/10/93	---	---	---	12000	---	520	15	13	610	---	---	PACE
AW-6	05/21/93	334.90	7.64	327.26	7900	---	900	ND<12	20	ND<12	---	---	PACE
QC-1 (e)	05/21/93	---	---	---	7500	---	620	ND<10	13	ND<10	---	---	PACE
AW-6	08/12/93	334.90	8.64	326.26	26000	---	450	14	250	48	---	---	PACE
QC-1 (e)	08/12/93	---	---	---	27000	---	510	43	270	42	---	---	PACE

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 (ppb)	TPH-D (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	TOG (ppb)	HVOC (ppb)	LAB
QC-2 (f)	11/10/92	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
QC-2 (f)	02/10/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	05/21/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (f)	08/12/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE

ABBREVIATIONS

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
TOG	Total oil and grease
HVOC	Halogenated volatile organic compounds
ppb	Parts per billion
ND	Not detected above reported detection limit
---	Not analyzed/available
ANA	Anametrix, Inc
SUP	Superior Analytical Laboratory
SEQ	Sequoia Analytical laboratory
PACE	Pace, Inc

NOTES:

(a) Top of casing elevations surveyed in reference to the City of Dublin monument at 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) Well buried.

(e) Blind duplicate.

(f) Travel blank.

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
UNOCAL CORPORATION SERVICE STATION
7375 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

WELL ID	DATE OF MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)
MW-1	08/12/92	336.72	11.32	325.40
MW-1	11/10/92	336.72	11.97	324.75
MW-1	02/10/93	336.72	8.63	328.09
MW-1	05/10/93	336.72	9.57	327.15
MW-1	08/12/93	336.72	10.55	326.17
MW-2	08/12/92	337.36	11.48	325.88
MW-2	11/10/92	337.36	12.15	325.21
MW-2	02/10/93	337.36	8.81	328.55
MW-2	05/10/93	337.36	9.75	327.61
MW-2	08/12/93	337.36	10.69	326.67
MW-3	08/12/92	337.53	11.64	325.89
MW-3	11/10/92	337.53	12.33	325.20
MW-3	02/10/93	337.53	8.95	328.58
MW-3	05/10/93	337.53	9.91	327.62
MW-3	08/12/93	337.53	10.89	326.64
MW-4	08/12/92	337.00	11.62	325.38
MW-4	11/10/92	337.00	12.32	324.68
MW-4	02/10/93	337.00	8.94	328.06
MW-4	05/10/93	337.00	9.90	327.10
MW-4	08/12/93	337.00	10.90	326.10

NOTES:

(a) Top of casing elevations surveyed to the nearest 0.01 foot relative to a County of Alameda benchmark with an elevation of 337.40 feet above mean sea level.

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

TABLE 3 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
SHELL OIL COMPANY SERVICE STATION
7194 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

WELL ID	DATE OF MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)
MW-1	08/12/92	334.83	9.15	325.68
MW-1	11/10/92	334.83	10.04	324.79
MW-1	02/10/93	334.83	7.24	327.59
MW-1	05/10/93	334.83	7.78	327.05
MW-1	08/12/93	334.83	8.54	326.29
MW-2	08/12/92	336.96	11.58	325.38
MW-2	11/10/92	336.96	12.05	324.91
MW-2	02/10/93	336.96	9.28	327.68
MW-2	05/10/93	336.96	9.65	327.31
MW-2	08/12/93	336.96	10.70	326.26
MW-3	08/12/92	336.93	10.94	325.99
MW-3	11/10/92	336.93	11.84	325.09
MW-3	02/10/93	336.93	8.82	328.11
MW-3	05/10/93	336.93	8.88	328.05
MW-3	08/12/93	336.93	10.36	326.57
MW-4	08/12/92	337.14	11.36	325.78
MW-4	11/10/92	337.14	12.12	325.02
MW-4	02/10/93	337.14	9.40	327.74
MW-4	05/10/93	337.14	9.54	327.60
MW-4	08/12/93	337.14	10.68	326.46
MW-5	08/12/92	334.96	9.40	325.56
MW-5	11/10/92	334.96	9.65	325.31
MW-5	02/10/93	334.96	7.97	326.99
MW-5	05/10/93	334.96	7.76	327.20
MW-5	08/12/93	334.96	8.75	326.21
MW-6	08/12/92	335.42	9.72	325.70
MW-6	11/10/92	335.42	10.56	324.86
MW-6	02/10/93	335.42	7.65	327.77
MW-6	05/10/93	335.42	8.10	327.32
MW-6	08/12/93	335.42	9.18	326.24
MW-7	08/12/92	333.23	8.65	324.58
MW-7	11/10/92	333.23	8.82	324.41
MW-7	02/10/93	333.23	6.06	327.17
MW-7	05/10/93	333.23	6.65	326.58
MW-7	08/12/93	333.23	6.83	326.40
MW-8	08/12/92	335.80	9.82	325.98
MW-8	11/10/92	335.80	10.41	325.39
MW-8	02/10/93	335.80	7.35	328.45
MW-8	05/10/93	335.80	8.00	327.80
MW-8	08/12/93	335.80	9.00	326.80

TABLE 3 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING
SHELL OIL COMPANY SERVICE STATION
7194 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-017

WELL ID		DATE OF MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)
MW-9		08/12/92	334.57	8.97	325.60
MW-9		11/10/92	334.57	8.97	325.60
MW-9		02/10/93	334.57	7.20	327.37
MW-9		05/10/93	334.57	7.56	327.01
MW-9		08/12/93	334.57	8.25	326.32
MW-11		08/12/92	334.20	8.75	325.45
MW-11		11/10/92	334.20	9.47	324.73
MW-11		02/10/93	334.20	6.79	327.41
MW-11		05/10/93	334.20	7.18	327.02
MW-11		08/12/93	334.20	8.10	326.10
MW-12		08/12/92	332.53	9.83	322.70
MW-12		11/10/92	332.53	8.32	324.21
MW-12		02/10/93	332.53	6.75	325.78
MW-12	(c)	05/10/93	332.53	—	—
MW-12		08/12/93	332.53	6.23	326.30
MW-13		08/12/92	335.64	10.91	324.73
MW-13		11/10/92	335.64	10.69	324.95
MW-13		02/10/93	335.64	7.49	328.15
MW-13		05/10/93	335.64	8.06	327.58
MW-13		08/12/93	335.64	8.73	326.91
RW-1	(d)	08/12/92	—	—	—
RW-1	(d)	11/10/92	—	—	—
RW-1	(d)	08/12/93	—	—	—

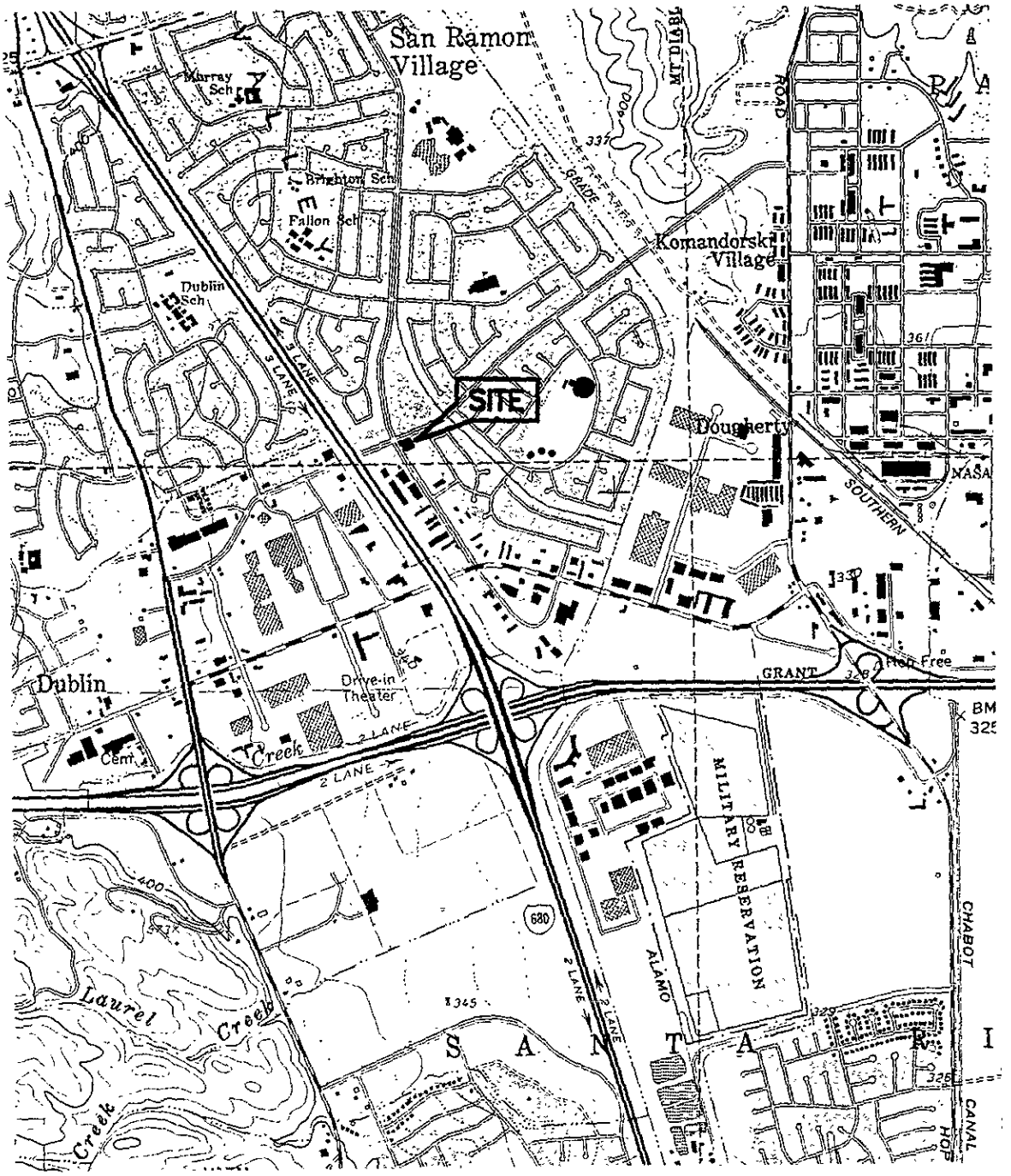
NOTES:

(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) Well inaccessable due to parked car.

(d) Data not available.



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

N

0 1000' 2000'

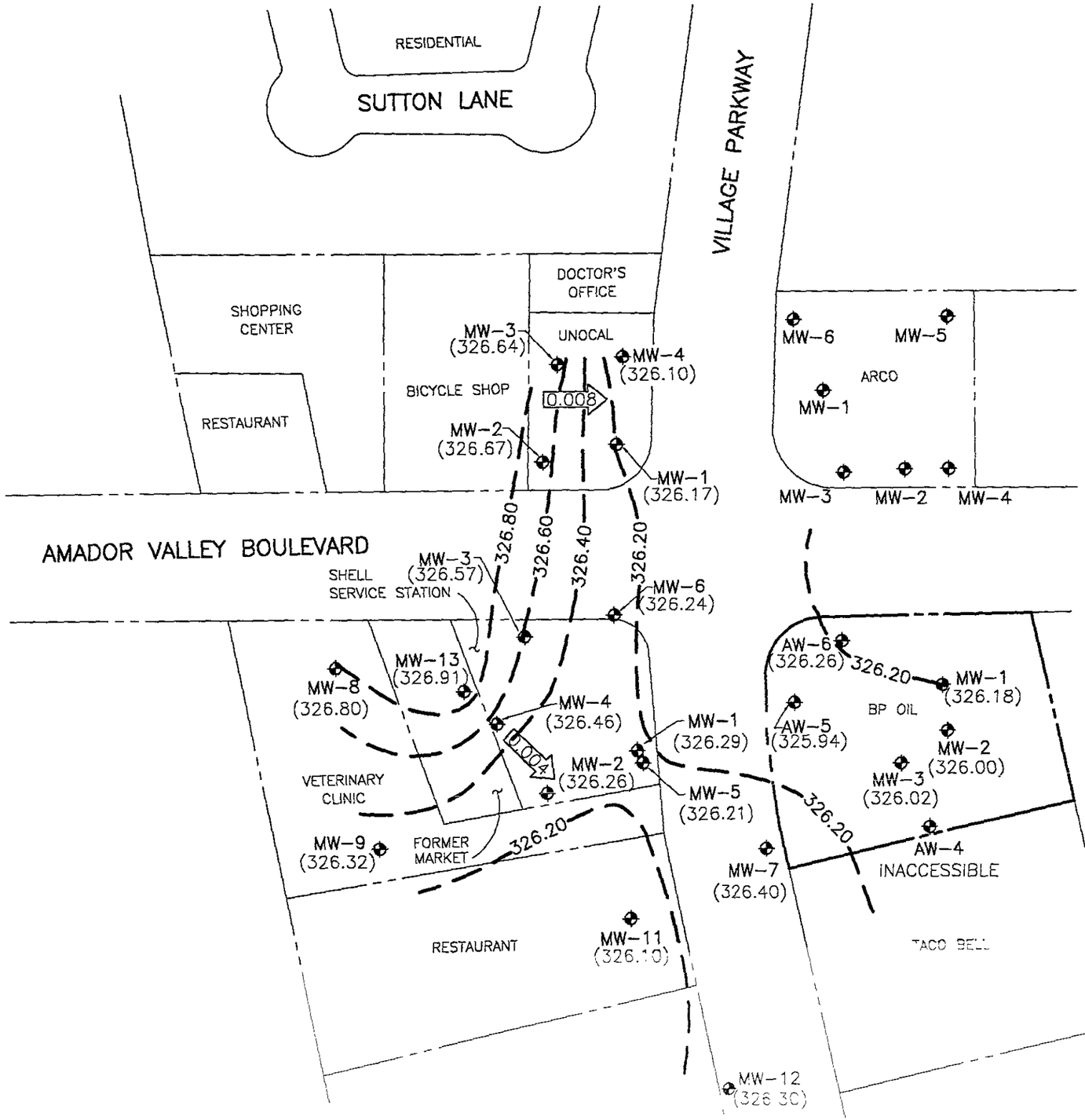
FIGURE 1

SITE VICINITY MAP

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

PROJECT NO. 10-017

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



LEGEND

- GROUNDWATER MONITORING WELL
- (326.17) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 326.20 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–0.20 FOOT)
- 0.004 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2

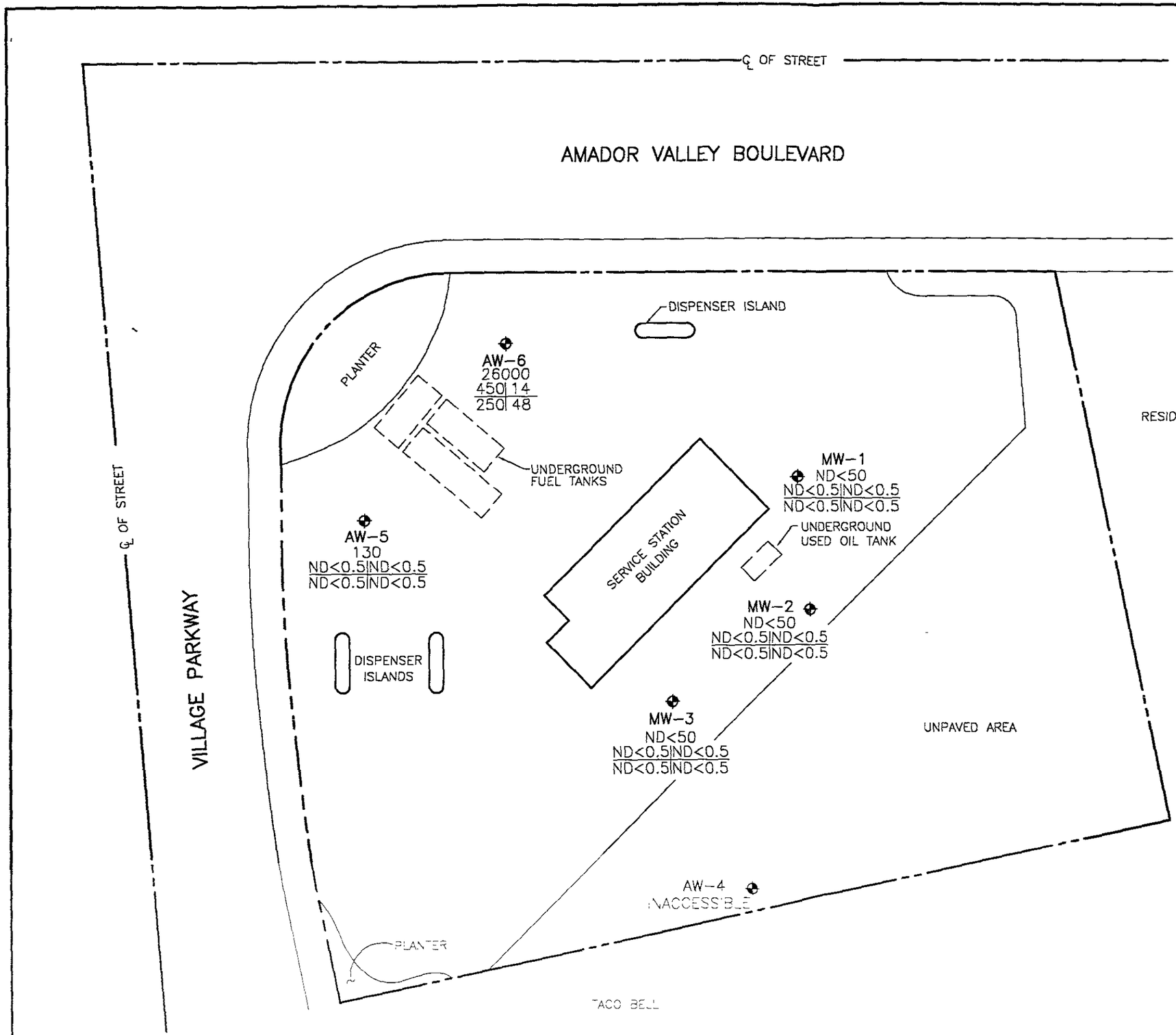
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

AUGUST 12, 1993

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

PROJECT NO. 10–017

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



N

0 30 60

SCALE IN FEET

LEGEND

◆	GROUNDWATER MONITORING WELL
TPH–G B | T E | X	CONCENTRATION OF CONSTITUENTS IN PARTS PER BILLION
TPH–G	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
ND	NOT DETECTED ABOVE REPORTED DETECTION LIMIT

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

AUGUST 12, 1993

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

10-017-02-002

ALISTO ENGINEERING GROUP
GROUNDWATER MONITORING

Client: BP
Alisto Project No: 10-017
Service Station No: 11116

Date: 8/12/93
Field Personnel: LCB
Site Address: Dublin, Ca

FIELD ACTIVITY:

___ Groundwater Monitoring
X Groundwater Sampling
___ Well Development

QUALITY CONTROL SAMPLES:

AW-6 QC-1 Sample Duplicate (Well ID)
X QC-2 Trip Blank
___ QC-3 Rinsate Blank

Well ID	Well Diam	Order Measured/ Sampled	Total Depth	Depth to Water	Depth to Product	Product Thick-ness	Comments
MW-1	2"	1	25.80	8.99	Ø	Ø	
MW-2	↓	2	25.45	8.58	↓	↓	
MW-3	↓	3	26.00	9.11	↓	↓	
AW-4		6					Cannot locate, Buried during excavation work
AW-5	4"	4	32.94	8.8.7	Ø	Ø	
AW-6	4"	5	16.81	8.64	↓	↓	

Notes:

FORM: FS2/121592

ALISTO ENGINEERING GROUP
Groundwater Development and Sampling Form

Client: BP
Alisto Project No: 10-017
Service Station No: 11116

Date: 8/12/93
Field Personnel: LCB
Address: Dublin, Ca

Well ID: MW-1 Field Activity: ___Well Development X Well Sampling ___Product Bailing

Casing Diameter:

X 2 Inch (0.16 Gal/foot)
___3 Inch (0.37 Gal/foot)
___4 Inch (0.65 Gal/Foot)
___4.5 Inch (0.83 Gal/foot)
___6 Inch (1.47 Gal/foot)

Purge Method:

X Pump (dispos. Poly Tubing)
___Disposable Bailers
___Other
___1.66 PVC Standard Bailer
___3.50 PVC Standard Bailer

Well Data:

Ø Depth to Product
Ø Product Thickness
8.99 Depth to Water

Sampling Method:

X Disposable Bailer
___Pump

Decontamination Method:

X Triple Rinse (Liquinox)
___Steam Cleaned

Calculated Purge Volume

25.80 (Total Depth of Well) - 8.99 (Depth to Water) = 16.81 ft (Water Column) X .16 (Conversion Factor) Gal/Ft = 2.69 Gal (Casing Vol) X 3 (Vols to Purge) = 8.07 (Total Volume)

Well Development/Sampling Parameters

Time	Temp °F	pH	Cond. (umhos /cm)	Purge Vol (Gal)	Comments/ Turbidity
			X1000		
1133	77.6	7.40	3.37	1.75	Clear
1136	76.0	7.50	3.43	3.75	
1138	74.7	7.51	3.55	5.50	
1140	74.3	7.53	3.57	6.25	
1142	74.0	7.49	3.55	8.25	

Analysis Required	Container Type	Preserv.
X TPH-G/BTEX	VOA	HCL
X TPH-Diesel	Amber Liter	Solvent Rinsed
X EPA 601	VOA	
X TOG 5520BF	Amber Liter	H_2SO_4

Began 1130 Stop 1142 Sampled 1147

FORM FS3/121592

ALISTO ENGINEERING GROUP
Groundwater Development and Sampling Form

Client: BP
Alisto Project No: 10-017
Service Station No: 11116

Date: 8/12/93
Field Personnel: LCB
Address: Dublin, CA

Well ID: MW-2 Field Activity: ___Well Development X Well Sampling ___Product Bailing

Casing Diameter:

X 2 Inch (0.16 Gal/foot)
___3 Inch (0.37 Gal/foot)
___4 Inch (0.65 Gal/Foot)
___4.5 Inch (0.83 Gal/foot)
___6 Inch (1.47 Gal/foot)

Purge Method:

X Pump (dispos. Poly Tubing)
___Disposable Bailers
___Other
___1.66 PVC Standard Bailer
___3.50 PVC Standard Bailer

Well Data:

Ø Depth to Product
Ø Product Thickness
8.58 Depth to Water

Sampling Method:

X Disposable Bailer
___Pump

Decontamination Method:

X Triple Rinse (Liquinox)
___Steam Cleaned

Calculated Purge Volume

25.45 (Total Depth of Well) - 8.58 (Depth to Water) = 16.87 ft (Water Column) X .16 (Conversion Factor) Gal/Ft = 2.70 Gal (Casing Vol) X 3 (Vols to Purge) = 8.10 (Total Volume)

Well Development/Sampling Parameters

Time	Temp °F	pH	Cond. (umhos /cm)	Purge Vol (Gal)	Comments/ Turbidity	Analysis Required	Container Type	Preserv.
			X1000					
1151	76.2	7.88	4.16	1.75	Clear	X TPH-G/BTEX	VOA	HCL
1153	75.0	7.75	4.06	3.75		X TPH-Diesel	Amber Liter	Solvent Rinsed
1156	73.9	7.68	4.19	5.50		X EPA 601	VOA	
1158	73.6	7.63	4.21	6.25		X TOG 5520BF	Amber Liter	H_2SO_4
1200	73.4	7.59	4.17	8.25				

Begun 1149 Stop 1200 Sampled 1204

FORM FS3/121592

ALISTO ENGINEERING GROUP
Groundwater Development and Sampling Form

Client: BP
Alisto Project No: 10-017
Service Station No: 11116

Date: 8/12/93
Field Personnel: LCB
Address: Dublin, Ca

Well ID: MW-3 Field Activity: ___Well Development X Well Sampling ___Product Bailing

Casing Diameter:
- X 2 Inch (0.16 Gal/foot)
- ___3 Inch (0.37 Gal/foot)
- ___4 Inch (0.65 Gal/Foot)
- ___4.5 Inch (0.83 Gal/foot)
- ___6 Inch (1.47 Gal/foot)

Purge Method:
- X Pump (dispos. Poly Tubing)
- ___Disposable Bailers
- ___Other
- ___1.66 PVC Standard Bailer
- ___3.50 PVC Standard Bailer

Well Data:
- Ø Depth to Product
- Ø Product Thickness
- 9.11 Depth to Water

Sampling Method:
- X Disposable Bailer
- ___Pump

Decontamination Method:
- X Triple Rinse (Liquinox)
- ___ Steam Cleaned

Calculated Purge Volume

26.00 (Total Depth of Well) - 9.11 (Depth to Water) = 16.89 ft (Water Column) X .16 (Conversion Factor) Gal/Ft = 2.70 Gal (Casing Vol) X 3 (Vols to Purge) = 8.10 (Total Volume)

Well Development/Sampling Parameters

Time	Temp °F	pH	Cond. (umhos /cm)	Purge Vol (Gal)	Comments/ Turbidity	Analysis Required	Container Type	Preserv.
			X1000					
1208	75.4	7.71	4.38	1.75	Clear	X TPH-G/BTEX	VOA	HCL
1210	75.2	7.55	4.30	3.75		X TPH-Diesel	Amber Liter	Solvent Rinsed
1212	73.9	7.45	4.27	5.50		X EPA 601	VOA	
1214	73.4	7.42	4.23	6.50		X TOG 5520BF	Amber Liter	H_2SO_4
1215	73.1	7.37	4.18	8.25				

Begin 1206 Stop 1215 Sampled 1218

FORM: FS3/121592

ALISTO ENGINEERING GROUP
Groundwater Development and Sampling Form

Client: BP
Alisto Project No: 10-017
Service Station No: 11116

Date: 8/12/93
Field Personnel: LCB
Address: Dublin, Ca

Well ID: AW-5 Field Activity: ___Well Development X Well Sampling ___Product Bailing

Casing Diameter:

___2 Inch (0.16 Gal/foot)
___3 Inch (0.37 Gal/foot)
X 4 Inch (0.65 Gal/Foot)
___4.5 Inch (0.83 Gal/foot)
___6 Inch (1.47 Gal/foot)

Purge Method:

X Pump (dispos. Poly Tubing)
___Disposable Bailers
___Other
___1.66 PVC Standard Bailer
___3.50 PVC Standard Bailer

Well Data:

Ø Depth to Product
Ø Product Thickness
8.87 Depth to Water

Sampling Method:

X Disposable Bailer
___Pump

Decontamination Method:

X Triple Rinse (Liquinox)
___ Steam Cleaned

Calculated Purge Volume

32.94 (Total Depth of Well) - 8.87 (Depth to Water) = 24.07 ft (Water Column) X .65 Gal/Ft (Conversion Factor) = 15.65 Gal (Casing Vol) X 3 (Vols to Purge) = 46.95 (Total Volume)

Well Development/Sampling Parameters

Time	Temp °F	pH	Cond. (umhos /cm)	Purge Vol (Gal)	Comments/ Turbidity	Analysis Required	Container Type	Preserv.
1245	75.1	7.88	X1000 1.20	9	clear	X TPH-G/BTEX	VOA	HCL
1250	73.6	7.81	1.24	19		TPH-Diesel	Amber Liter	Solvent Rinsed
1255	73.3	7.75	1.24	28		EPA 601	VOA	
1300	72.9	7.70	1.23	37		TOG 5520BF	Amber Liter	H_2SO_4
1305	72.6	7.66	1.23	47				

Begin 1240 Stop 1305 1310

FORM: FS3/121592

ALISTO ENGINEERING GROUP
Groundwater Development and Sampling Form

Client: BP
Alisto Project No: 10-017
Service Station No: 11116

Date: 8/12/93
Field Personnel: LCB
Address: Dublin, CA

Well ID: AW-6 Field Activity: ___Well Development X Well Sampling ___Product Bailing

Casing Diameter:

___2 Inch (0.16 Gal/foot)
___3 Inch (0.37 Gal/foot)
X 4 Inch (0.65 Gal/Foot)
___4.5 Inch (0.83 Gal/foot)
___6 Inch (1.47 Gal/foot)

Purge Method:

X Pump (dispos. Poly Tubing)
___Disposable Bailers
___Other
___1.66 PVC Standard Bailer
___3.50 PVC Standard Bailer

Well Data:

Ø Depth to Product
Ø Product Thickness
8.64 Depth to Water

Sampling Method:

X Disposable Bailer
___Pump

Decontamination Method:

X Triple Rinse (Liquinox)
___ Steam Cleaned

Calculated Purge Volume

16.81 (Total Depth of Well) - 8.64 (Depth to Water) = 8.17 ft (Water Column) X .65 Gal/Ft (Conversion Factor) = 5.31 Gal (Casing Vol) X 3 (Vols to Purge) = 15.93 (Total Volume)

Well Development/Sampling Parameters

Time	Temp °F	pH	Cond. (umhos /cm)	Purge Vol (Gal)	Comments/ Turbidity	Analysis Required	Container Type	Preserv.
1222	75.7	7.87	2.45 X1000	3	Clear	X TPH-G/BTEX	VOA	HCL
1224	75.5	7.74	1.88	6		TPH-Diesel	Amber Liter	Solvent Rinsed
1226	76.5	7.70	1.15	9		EPA 601	VOA	
1228	76.0	7.66	1.13	13		TOG 5520BF	Amber Liter	H_2SO_4
1230	75.7	7.62	1.11	16	✓			

Begin 1220 Stop 1230 Sampled 1235

QC-1 Taken from this well

FORM FS3/121592

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

pace INCORPORATED
THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS

Alisto Engineering Group
1777 Oakland Blvd., Ste. 200
Walnut Creek, CA 94596

August 23, 1993
PACE Project Number: 430812512

Attn: Mr. Bill Howell

Client Reference: BP Station # 11116

PACE Sample Number:			70 0130336	
Date Collected:			08/12/93	
Date Received:			08/12/93	
			QC-2	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/18/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	08/18/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/18/93
Benzene	ug/L	0.5	ND	08/18/93
Toluene	ug/L	0.5	ND	08/18/93
Ethylbenzene	ug/L	0.5	ND	08/18/93
Xylenes, Total	ug/L	0.5	ND	08/18/93

11 Digital Drive
Novato CA 94949
TEL 415 883 6100
FAX 415 883 2673

REPORT OF LABORATORY ANALYSIS

August 23, 1993
PACE Project Number: 430812512

Client Reference: BP Station # 11116

PACE Sample Number:			70 0130344	
Date Collected:			08/12/93	
Date Received:			08/12/93	
Client Sample ID:			MW-1	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/18/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	08/18/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/18/93
Benzene	ug/L	0.5	ND	08/18/93
Toluene	ug/L	0.5	ND	08/18/93
Ethylbenzene	ug/L	0.5	ND	08/18/93
Xylenes, Total	ug/L	0.5	ND	08/18/93

1 Digital Drive
Novato, CA 94949
TEL 415 883 6100
FAX 415 883 2673

REPORT OF LABORATORY ANALYSIS

August 23, 1993
PACE Project Number: 430812512

Client Reference: BP Station # 11116

PACE Sample Number:			70 0130352	
Date Collected:			08/12/93	
Date Received:			08/12/93	
Client Sample ID:			MW-2	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/18/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	08/18/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/18/93
Benzene	ug/L	0.5	ND	08/18/93
Toluene	ug/L	0.5	ND	08/18/93
Ethylbenzene	ug/L	0.5	ND	08/18/93
Xylenes, Total	ug/L	0.5	ND	08/18/93

1, Digital Drive
Novato, CA 94949
TEL 415 883 6100
FAX 415 883 2673

Mr. Bill Howell
Page 4

August 23, 1993
PACE Project Number: 430812512

Client Reference: BP Station # 11116

PACE Sample Number:			70 0130360	
Date Collected:			08/12/93	
Date Received:			08/12/93	
Client Sample ID:			MW-3	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/18/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	08/18/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/18/93
Benzene	ug/L	0.5	ND	08/18/93
Toluene	ug/L	0.5	ND	08/18/93
Ethylbenzene	ug/L	0.5	ND	08/18/93
Xylenes, Total	ug/L	0.5	ND	08/18/93

11 Digital Drive
Novato CA 94949
TEL 415 883 6100
FAX 415 883 2573

Mr. Bill Howell
Page 5

August 23, 1993
PACE Project Number: 430812512

Client Reference: BP Station # 11116

PACE Sample Number:			70 0130379	
Date Collected:			08/12/93	
Date Received:			08/12/93	
Client Sample ID:			AW-5	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/18/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	130	08/18/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/18/93
Benzene	ug/L	0.5	ND	08/18/93
Toluene	ug/L	0.5	ND	08/18/93
Ethylbenzene	ug/L	0.5	ND	08/18/93
Xylenes, Total	ug/L	0.5	ND	08/18/93

1 Digital Drive
Novato CA 94949
TEL 415 883 6100
FAX 415 883 2673

Mr. Bill Howell
Page 6

August 23, 1993
PACE Project Number: 430812512

Client Reference: BP Station # 11116

PACE Sample Number:			70 0130387	
Date Collected:			08/12/93	
Date Received:			08/12/93	
Client Sample ID:			QC-1	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/18/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	1200	27000	08/18/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/18/93
Benzene	ug/L	12	510	08/18/93
Toluene	ug/L	12	43	08/18/93
Ethylbenzene	ug/L	12	270	08/18/93
Xylenes, Total	ug/L	12	42	08/18/93

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Novato CA 94949
TEL 415 883 6100
FAX 415 883 2673

REPORT OF LABORATORY ANALYSIS

August 23, 1993
PACE Project Number: 430812512

Client Reference: BP Station # 11116

PACE Sample Number:			70 0130395	
Date Collected:			08/12/93	
Date Received:			08/12/93	
Client Sample ID:			AW-6	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	08/18/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	1200	26000	08/18/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	08/18/93
Benzene	ug/L	12	450	08/18/93
Toluene	ug/L	12	14	08/18/93
Ethylbenzene	ug/L	12	250	08/18/93
Xylenes, Total	ug/L	12	48	08/18/93

These data have been reviewed and are approved for release.

Darrell C. Cain
Regional Director

1 Digital Drive
Novato, CA 94949
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FAX 415 883 2673

Mr. Bill Howell | FOOTNOTES | August 23, 1993
Page 8 | for pages 1 through 7 | PACE Project Number: 430812512

Client Reference: BP Station # 11116

MDL Method Detection Limit
ND Not detected at or above the MDL.

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Mr. Bill Howell
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QUALITY CONTROL DATA

August 23, 1993
PACE Project Number: 430812512

Client Reference: BP Station # 11116

PURGEABLE FUELS AND AROMATICS
Batch: 70 23791
Samples: 70 0130336, 70 0130344, 70 0130352, 70 0130360, 70 0130379
70 0130387, 70 0130395

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Purgeable Fuels, as Gasoline (EPA 8015M	ug/L	50	1000	110%	105%	4%
Benzene	ug/L	0.5	40.0	101%	99%	2%
Toluene	ug/L	0.5	40.0	104%	100%	3%
Ethylbenzene	ug/L	0.5	40.0	101%	94%	7%
Xylenes, Total	ug/L	0.5	120	116%	108%	7%

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FOOTNOTES
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August 23, 1993
PACE Project Number: 430812512

Client Reference: BP Station # 11116

MDL	Method Detection Limit
ND	Not detected at or above the MDL.
RPD	Relative Percent Difference

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4308 12.512

№ 0203

B.P. OIL COMPANY

16400 Southcenter Parkway, Suite 301, Tukwila, WA 98188

CHAIN OF CUSTODY

pace INCORPORATED THE ASSURANCE OF QUALITY

☒ Novato, CA, 11 Digital Drive, 94949
Phone: (415) 883-6100 Fax: (415) 883-2673

☐ Huntington Beach, CA, 5702 Bolsa Avenue, 92649
Phone: (714) 892-2565 Fax: (714) 890-4032

Consultant's Name: Alisto Engineering	Consultant Project #: 10-017-02/002a		Page 1 of 1
Address: 1777 Oakland Blvd #200, Walnut Creek, Ca			
Project Contact: Bill Howell	Phone #: (510)295-1650	Fax #: 295-1823	Contract ~~Consultant Work Order~~ #: F955408
Sampled by (print): Larry Buenaventa	Sampler's Signature:		B.P. Site Location #: 11116
Shipment Method: Courier	Airbill #:	Shipment Date:	B.P. Site Location: Dublin

TAT ☐ 24 hr ☐ 48 hr ☐ 72 hr ☒ Standard (10 day)

ANALYSIS REQUIRED

Sample Condition as Received
Temperature ° C: _____
Cooler #: _____
Inbound Seal Yes No
Outbound Seal Yes No

Sample Description	Collection Date/Time	Matrix Soil Water	Prsv	# of Cont	PACE Sample #	TPH/GAS/BTEX EPA 8015/8020	TPH/Diesel EPA 8015	TRPH EPA 418.1	HVOC 8010	TOG (5520)								COMMENTS
QC-2	8/12/93	W	HCl VOAs	2	13033.6	X												
MW-1				8	13034.4		X		X	X								Hold Analysis on TPH-D, TOG, & HVOCs until notified
MW-2				8	13035.2		X		X	X								
MW-3				8	13036.0		X		X	X								
AW-5				3	13037.9													
QC-1					13038.7													
AW-6					13039.5													

Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
	8/12/93	1500		8/12	1520
	8/12	1635	PACE	8/12/93	1855

Additional Comments:
Per Bill Howell RUN gs/btx ONLY ON All samples. Do NOT RUN TPH-D, TOG OR 8010 (JB 8/13)