BP OIL

BP Oil Company
Environmental Resources Management
Building 13, Suite N
295 SW 41st Street
Renton, Washington 98055-4931
(206) 251-0667
Fax No: (206) 251-0736

July 10, 1996

7/25/96

After receiving 5'96 sampling event, review for closure. See if RWQCB has guidelines re. elevated TPHg (any numbers ok?)

ORC will be put into AW-6

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

RE: BP OIL FACILITY #11116
7194 Village Parkway
Dublin CA

Dear Ms. Chu:

Attached please find our **GROUNDWATER MONITORING AND SAMPLING REPORT DATED APRIL 23,1996** for the above referenced facility. Plans for the following quarter include additional groundwater monitoring. Please confirm that the extent of the release in groundwater has been adequately characterized. Yes

If you should have any questions regarding this site, I may be reached at (206) 251-0689.

Respectfully,

Scott T. Hooton
Environmental Resources Management
Corrective Action Manager

STH:sb msword\ERM11116

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

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

Mr. Kyle Christie, ARCO Products Company, 2155 South Bascom Ave. Ste 202, Campbell, CA 95008

Mr. Larry Silva, TOSCO Northwest, 601 Union Street, Suite 2500, Seattle WA 98101

Site File

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-017-05-003

Prepared for:

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

Prepared by:

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

April 23, 1996

Ken Simas
Project Manager

Al Sevilla, P.E.
Principal

REGISTERED PROFESSIONAL ENGINEER
ALBERTO SANCHEZ SEVILLA
26392
Exp. Date 3/31/00
CIVIL
STATE OF CALIFORNIA

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-017-05-003

April 23, 1996

INTRODUCTION

This report presents the results and findings of the February 26, 1996 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.

Groundwater monitoring was performed concurrently at the neighboring Unocal Corporation service station, 7375 Amador Valley Boulevard, and the Arco Products Company service station, 7249 Village Parkway. The results of monitoring at these sites are presented in Tables 2 and 3.

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.

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	06/20/94	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	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
MW-1	05/24/95	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	---	---	---	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	---	---	---	---	---	---	---	---	---	---	---

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 (Feet) (a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	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	---	---	---		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	---	---	---	---	---	---	---	---	---		---	---

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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-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	08/20/94	335.13	7.45	327.68	---	---	---	---	---	---	---	---	---	---	---
MW-3	10/04/94	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	---	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	---	---	---	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	---	---	---	---	---	---	---	---	---	---	---

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	(e)	02/10/93	333.41	---	---	---	---	---	---	---	---	---	---	---	---	---
AW-4	(e)	05/21/93	333.41	---	---	---	---	---	---	---	---	---	---	---	---	---
AW-4	(e)	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	---	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	---	---	---	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	---	---	5.3	ATI
AW-4		02/26/96	333.41	3.85	329.56	---	---	---	---	---	---	---	---	---	---	---

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BP OIL COMPANY SERVICE STATION NO. 11116
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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
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	(f)	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-5		11/11/93	334.81	9.13	325.68	---	---	---	---	---	---	---	---	---	---	---
AW-5		11/12/93	---	---	---	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	---	---	---	---	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	---	---	---	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	(f)	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	---	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	---	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	---	---	---	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	---	---	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	---	---	8.1	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	---	---	---	---	PACE
QC-1	(f)	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	(f)	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	(f)	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	(f)	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	---	---	---	---	PACE
QC-1	(f)	02/11/94	---	---	---	110000	---	17000	21000	770	10000	---	---	---	---	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	---	---	---	2.1	PACE
QC-1	(f)	06/20/94	---	---	---	41000	---	2800	1400	1900	8900	---	---	---	---	PACE
AW-6		10/04/94	334.90	9.33	325.57	14000	---	2100	77	1000	760	---	---	---	6.1	PACE
QC-1	(f)	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	---	53	1400	1200	4400	---	---	---	---	ATI
QC-1	(f)	02/15/95	---	---	---	25000	---	53	1400	1200	4400	---	---	---	---	ATI
AW-6		05/24/95	334.90	6.87	328.03	14000	---	730	140	570	1100	---	---	---	5.7	ATI
QC-1	(f)	05/24/95	---	---	---	15000	---	750	140	570	1100	---	---	---	---	ATI
AW-6		08/29/95	334.90	8.38	326.52	8300	---	430	ND<10	340	40	---	---	---	8.9	ATI
QC-1	(f)	08/29/95	---	---	---	9400	---	430	12	360	37	---	---	---	---	ATI
AW-6		11/28/95	334.90	9.20	325.70	4700	---	300	13	61	ND<20	3600	---	---	3.0	ATI
QC-1	(f)	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	(f)	02/26/96	---	---	---	3600	---	17	28	100	1050	63	---	---	---	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
QC-2	(g)	11/10/92	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	ANA
QC-2	(g)	02/10/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(g)	05/21/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(g)	08/12/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(g)	11/12/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(g)	02/11/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(g)	06/20/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(g)	10/04/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(g)	11/21/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	PACE
QC-2	(g)	02/15/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
QC-2	(g)	05/24/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
QC-2	(g)	08/29/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	---	ATI
QC-2	(g)	11/28/95	---	---	---	ND<50	---	ND<0.50	1.6	ND<0.50	1.2	ND<5.0	---	---	---	ATI
QC-2	(g)	02/26/96	---	---	---	ND<50	---	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	---	SPL

ABBREVIATIONS

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
TOG	Total oil and grease
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/analyzed/measured
ANA	Anametrix, Inc
SUP	Superior Analytical Laboratory
SEQ	Sequoia Analytical laboratory
PACE	Pace, Inc
ATI	Analytical Technologies, Inc
SPL	SPL, Inc

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) Well buried.

(f) Blind duplicate.

(g) Travel blank.

F:\010 017\017 5 3A WQ2

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 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 (mg/l)	LAB
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 1	11/11/93	336.72	10.17	326.55	---	---	---	---	---	---	---	---	---
MW 1	02/11/94	336.07 (c)	9.72	326.35	---	---	---	---	---	---	---	---	---
MW 1	05/17/94	336.07	9.26	326.81	---	---	---	---	---	---	---	---	---
MW 1	08/25/94	336.07	10.58	325.49	---	---	---	---	---	---	---	---	---
MW 1	11/18/94	336.07	9.69	326.38	---	---	---	---	---	---	---	---	---
MW 1	02/15/95	336.07	7.80	328.27	---	---	---	---	---	---	---	---	---
MW-1	05/24/95	336.07	8.98	327.09	1300	---	28	ND<0.50	15	ND<0.50	---	---	SEQ
MW 1	08/25/95	336.07	9.68	326.39	530	2300	16	ND<0.50	2.2	13	---	---	SEQ
MW-1	11/28/95	336.07	10.45	325.62	650	---	15	ND<0.50	21	6.7	---	---	SEQ
MW 1	02/26/96	336.07	6.45	329.62	1900	---	40	ND<0.50	84	46	110	---	SEQ
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 2	11/11/93	337.36	10.51	326.85	---	---	---	---	---	---	---	---	---
MW 2	02/11/94	336.78 (c)	9.85	326.93	---	---	---	---	---	---	---	---	---
MW 2	05/17/94	336.78	9.31	327.47	---	---	---	---	---	---	---	---	---
MW 2	08/25/94	336.78	10.75	326.03	---	---	---	---	---	---	---	---	---
MW 2	11/18/94	336.78	9.95	326.83	---	---	---	---	---	---	---	---	---
MW-2	02/15/95	336.78	7.58	329.20	---	---	---	---	---	---	---	---	---
MW-2	05/24/95	336.78	8.33	328.45	---	---	---	---	---	---	---	---	---
MW 2	08/25/95	336.78	9.76	327.02	---	---	---	---	---	---	---	---	---
MW 2	11/28/95	336.78	10.65	326.13	---	---	---	---	---	---	---	---	---
MW 2	02/26/96	336.78	6.39	330.39	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	SEQ
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 3	11/11/93	337.53	10.64	326.89	---	---	---	---	---	---	---	---	---
MW 3	02/11/94	336.98 (c)	10.01	326.97	---	---	---	---	---	---	---	---	---
MW 3	05/17/94	336.98	9.49	327.49	---	---	---	---	---	---	---	---	---
MW 3	08/25/94	336.98	10.93	326.05	---	---	---	---	---	---	---	---	---
MW 3	11/18/94	336.98	10.15	326.83	---	---	---	---	---	---	---	---	---
MW 3	02/15/95	336.98	7.62	329.36	---	---	---	---	---	---	---	---	---
MW 3	05/24/95	336.98	8.26	328.72	---	---	---	---	---	---	---	---	---
MW-3	08/25/95	336.98	10.03	326.95	---	---	---	---	---	---	---	---	---
MW 3	11/28/95	336.98	10.85	326.13	---	---	---	---	---	---	---	---	---
MW 3	02/26/96	336.98	6.39	330.59	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	ND<5.0	SEQ

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 SAMPLING/ MONITORING	CASING ELEVATION (Feet)	(a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	(b)	TPH-G (ug/l)	TPH-D (ug/l)		B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TOG (mg/l)	LAB
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		---	---		---	---	---	---	---	---	---
MW 4	11/11/93	337.00		10.48	326.52		---	---		---	---	---	---	---	---	---
MW-4	02/11/94	336.43	(c)	10.10	326.33		---	---		---	---	---	---	---	---	---
MW 4	05/17/94	336.43		9.63	326.80		---	---		---	---	---	---	---	---	---
MW 4	08/25/94	336.43		10.94	325.49		---	---		---	---	---	---	---	---	---
MW-4	11/18/94	336.43		10.10	326.33		---	---		---	---	---	---	---	---	---
MW 4	02/15/95	336.43		8.12	328.31		---	---		---	---	---	---	---	---	---
MW 4	05/24/95	336.43		8.68	327.75		---	---		---	---	---	---	---	---	---
MW 4	08/25/95	336.43		10.08	326.35		---	---		---	---	---	---	---	---	---
MW 4	11/28/95	336.43		10.81	325.62		---	---		---	---	---	---	---	---	---
MW 4	02/26/96	336.43		6.75	329.68		ND<50	---		ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	SEQ
MW 5	02/11/94	335.96	(c)	10.08	325.88		---	---		---	---	---	---	---	---	---
MW 5	05/17/94	335.96		9.24	326.72		---	---		---	---	---	---	---	---	---
MW 5	08/25/94	335.96		10.43	325.53		---	---		---	---	---	---	---	---	---
MW 5	11/18/94	335.96		10.09	325.87		---	---		---	---	---	---	---	---	---
MW-5	02/15/95	335.96		7.76	328.20		---	---		---	---	---	---	---	---	---
MW-5	05/24/95	335.96		7.98	327.98		14000	---		2200	ND<0.50	2200	ND<0.50	---	---	SEQ
MW 5	08/25/95	335.96		9.57	326.39		3100	---		43	ND<0.50	590	8.4	---	---	SEQ
MW 5	11/28/95	335.96		10.33	325.63		6400	---		320	ND<0.50	720	ND<0.50	---	---	SEQ
MW 5	02/26/96	335.96		7.15	328.81		2800	1600	(d)	75	ND<0.50	180	ND<0.50	74	---	SEQ

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
ug/l	Micrograms per liter
mg/l	Milligrams per liter
ND	Not detected above reported detection limit
--	Not sampled/analyzed/available
SEQ	Sequoia Analytical Laboratory

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) Top of casing elevations surveyed to the nearest 0.01 foot relative to a brass disc stamped VL-PKAMVY 1997, on the westerly center island of Amador Valley Boulevard and Village Parkway, with an elevation of 337.40 feet above mean sea level.

(d) Unidentified hydrocarbon <C15 considered to be gasoline and not diesel.

F:\010 017\017 5 3B.WQ2

TABLE 3 - 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 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-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	---	---	---	---	---	---	---

TABLE 3 - 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 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-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	---	---	---	---	---	---	---

TABLE 3 - 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 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 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	---	---	---	---	---	---	---

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/applicable/measured
ND	Not detected above reported detection limit
CAS	Columbia Analytical Services, Inc.

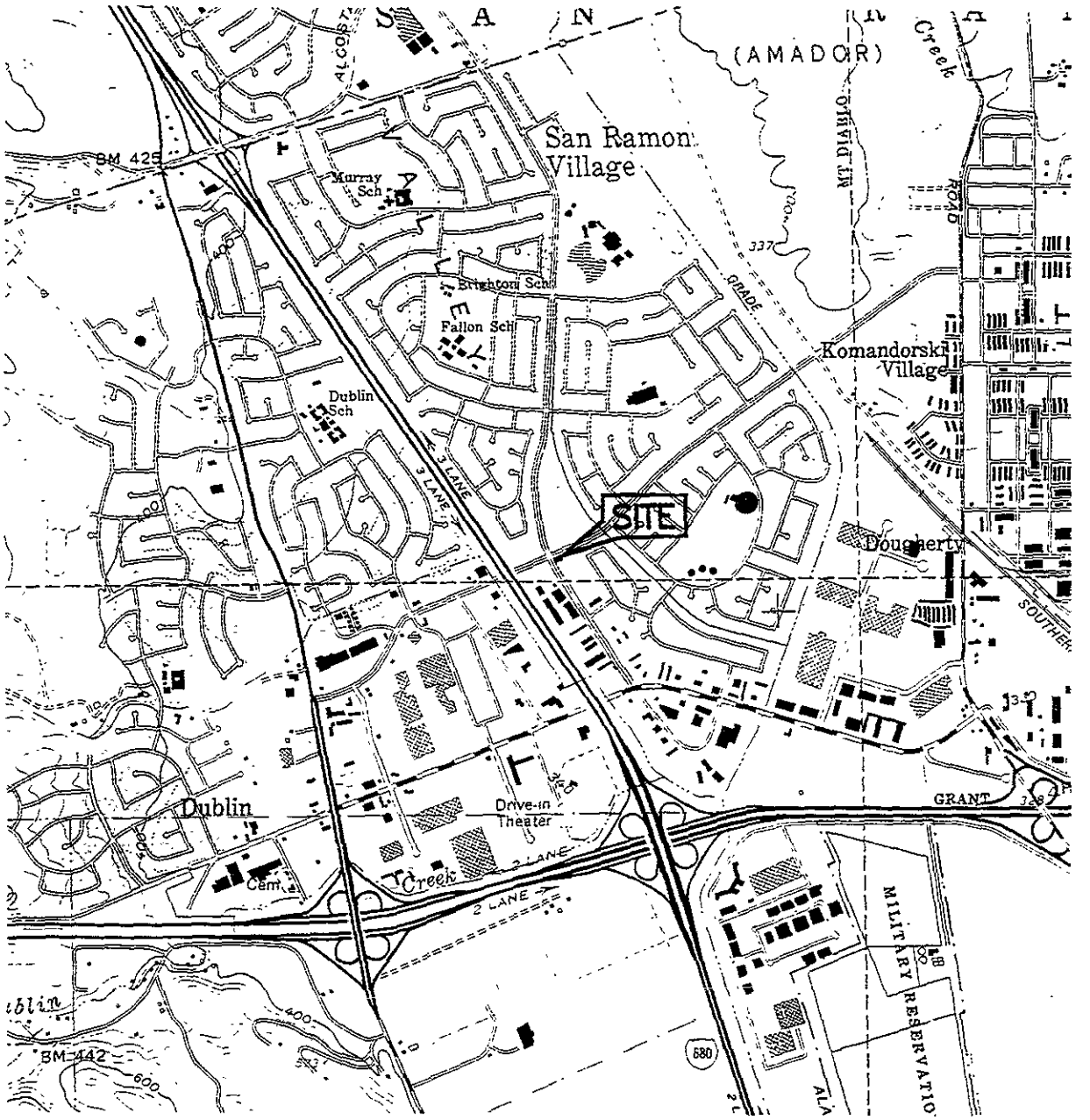
NOTES:

(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.

I:\10 01\017 5 3D\WQ2



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

N

0 1000' 2000'

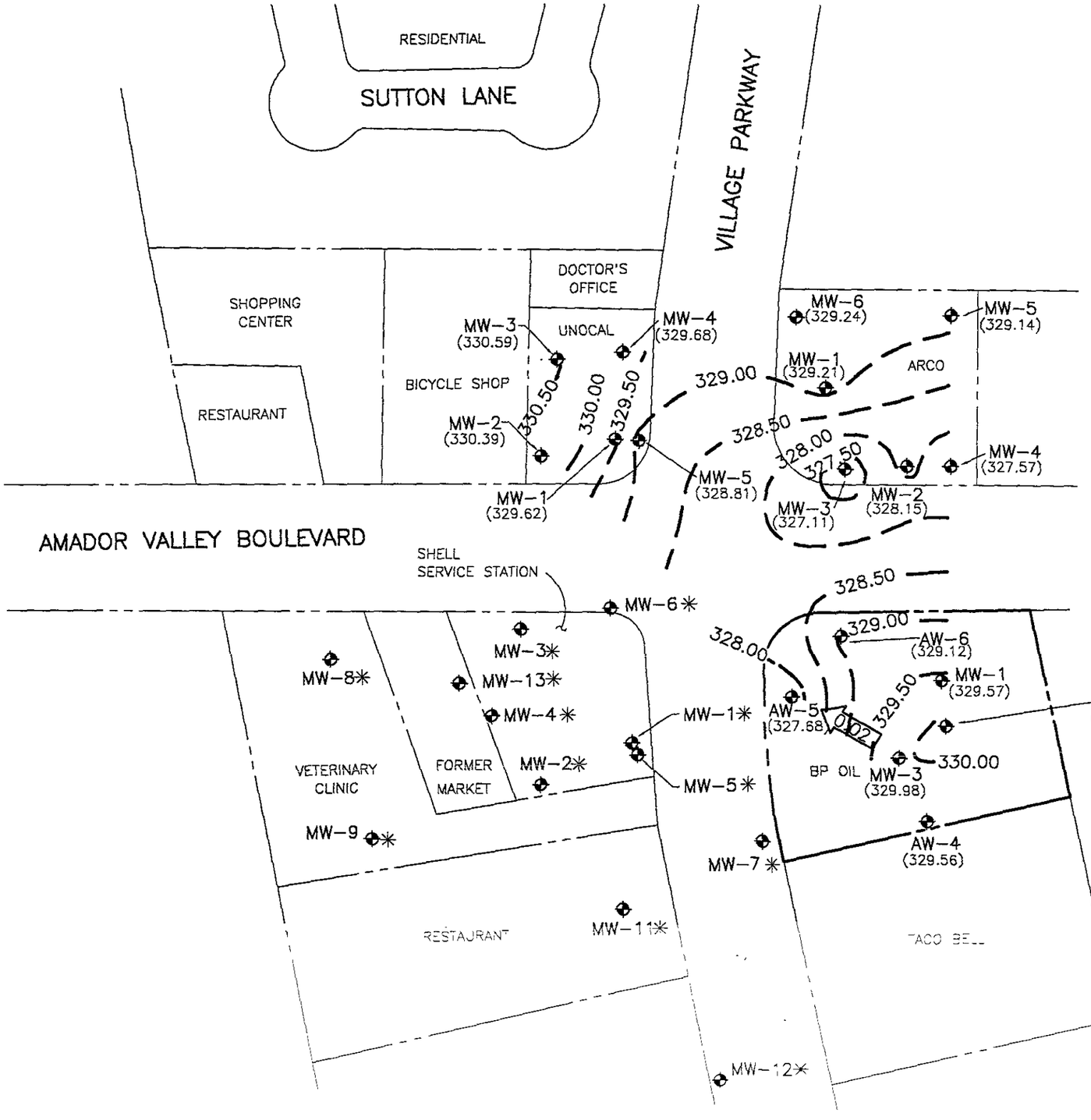
FIGURE 1

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
- (329.98) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 330.00 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL--0.50 FOOT)
- 0.02 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT
- * DATA NOT AVAILABLE FOR SHELL SITE

FIGURE 2

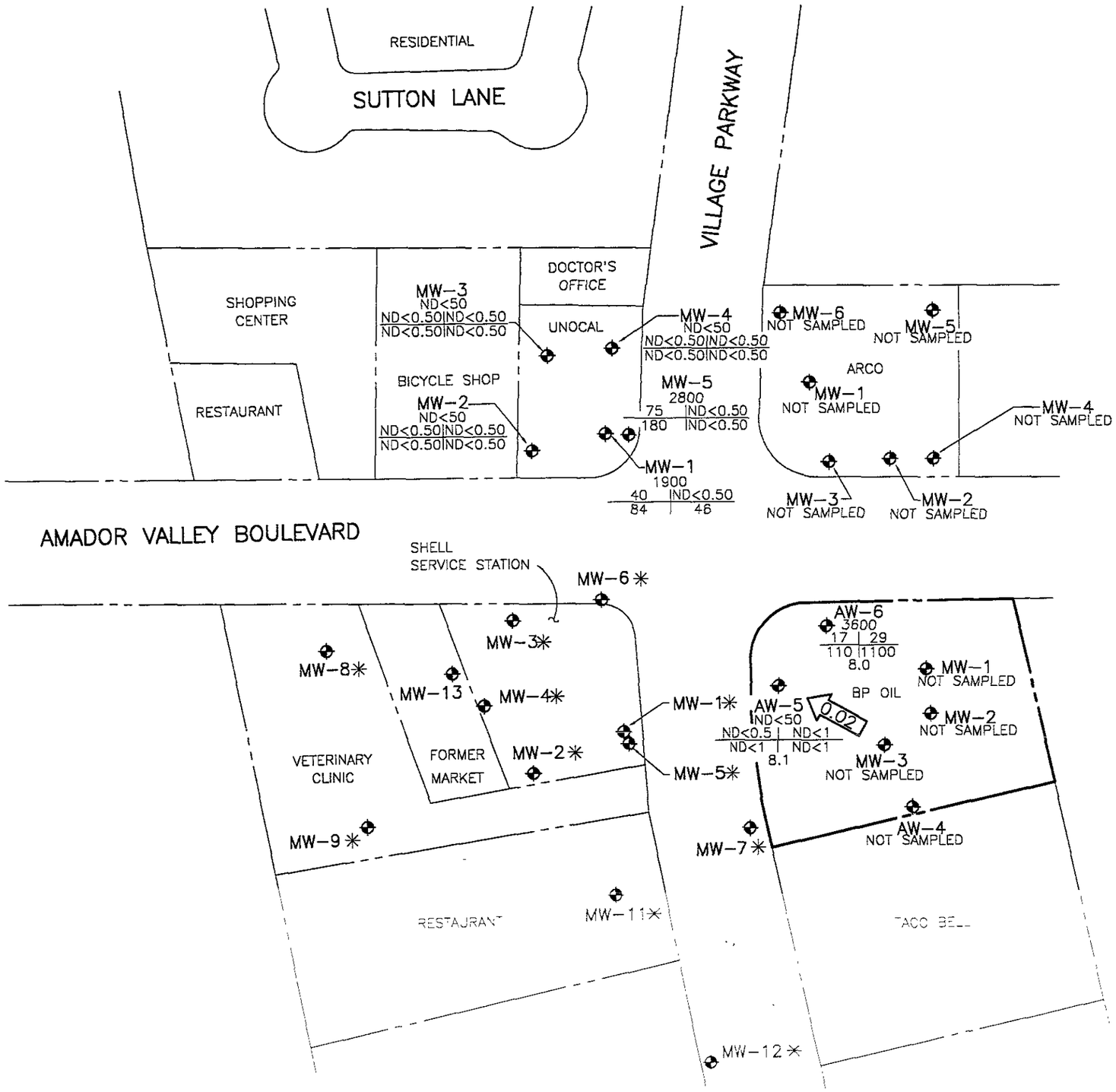
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

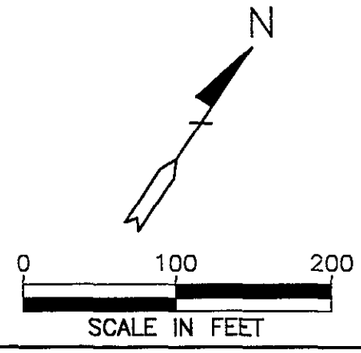
FEBRUARY 26, 1996

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
TPH-G / B | T / E | X / DO	CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER, EXCEPT DISSOLVED OXYGEN, WHICH IS IN PARTS PER MILLION
TPH-G	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
DO	DISSOLVED OXYGEN
ND	NOT DETECTED ABOVE REPORTED DETECTION LIMIT
0.02	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT
*	DATA NOT AVAILABLE FOR SHELL SITE

FIGURE 3

CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

FEBRUARY 26, 1996

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. 10-017-05-003 Date: 1/26/96
Address 7197 Village Parkway Day: (M) T W TH F
Contract No. G602087 City: Dublin
Station No. BP 11116 Sampler: DC

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME SAMPLED	COMMENTS:
MW-1	not	2"	Nm	5.60	Ø	1430	Not sampled as of 1/16/96
MW-2	not	2"		4.49		1432	Not sampled as of 1/16/96
MW-3	not	2"		5.15		1437	Not sampled as of 1/16/96
AW-4	not	4"	↓	3.85'		1444	Not sampled as of 1/16/96
AW-5	5-1	4"	32.50	7.13'		1450	
AW-6	5-2	4"	16.50	5.78'	↓	1456	

FIELD INSTRUMENT CALIBRATION DATA

pH METER Hydac 4.00 ✓ 7.00 ✓ 10.00 ___ TEMPERATURE COMPENSATED (Y) N TIME 1515 WEATHER Sunny

D.O. METER ICm ZERO d.O. SOLUTION ✓ BAROMETRIC PRESSURE 760 TEMP 60°F

CONDUCTIVITY METER Hydac 10,000 ✓ TURBIDITY METER ___ 5.0 NTU ___ OTHER ___

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
AW-5	7.13	4"	OK	Ø	Y (N)	30	1527	66.9	7.38	1.95	8.2
						40	1532	67.9	7.44	2.05	
						50.25	1535	69.7	7.49	1.97	8.1

Total Depth - Water Level= x Well Vol Factor= x#vol. to Purge PurgeVol.
32.90 7.13 = 25.77 x .65 = 16.75 x 3 = 50.25

Purge Method X Surface Pump ODisp Tube OWinch ODisp. Baller(s)___ OSys Port

Comments:

O EPA 601___
X TPH-G/BTEX Hc
O TPH Diesel___
O TOG 5520___
TIME/SAMPLE ID
1540 / 5-1

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp °F	pH	E.C.	D.O.
AW-6	5.78	4"	OK	Ø	Y (N)	7	1547	61.4	7.99	1.39	7.6
						14	1552	65.1	7.97	0.62	
						21	1602	64.7	7.93	0.59	8.0

Total Depth Water Level= x Well Vol Factor= x#vol. to Purge PurgeVol.
16.50 - 5.78 = 10.72 x .65 = 6.96 x 3 = 20.90

Purge Method X Surface Pump ODisp Tube OWinch ODisp. Baller(s)___ OSys Port

Comments: QC-1 from this well (5-3)

O EPA 601___
X TPH-G/BTEX Hc
O TPH Diesel___
O TOG 5520___
TIME/SAMPLE ID
1610 / 5-2

ALISTO

Field Report / Sampling Data Sheet

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

Project No. 10-017-05-003 Date: 2/26/96
Address 7197 Village Parkway Day: (M) T W TH F
Contract No. G602087 City: Dublin
Station No. BP 11116 Sampler: DC

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence Y N	Gal.	Time	Temp *F	pH	E.C.	D.O.
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge	PurgeVol.								
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Baller(s)__ OSys Port											
Comments:											

- EPA 601____
- TPH-G/BTEX__
- TPH Diesel____
- TOG 5520 __

TIME/SAMPLE ID

* conductivity readings are in X 1000 µS/cm units

* installed 5 ORCs in AW-6 DO reading was 7.9 ppm prior to installing them

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: 96 - 02 - C52

Approved for release by:

M. Scott Sample Date: 3/8/96

M. Scott Sample, Laboratory Director

Ed Fry Date: 3/7/96

Ed Fry, Project Manager

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

Certificate of Analysis No. H9-9602C52-01

Alisto Engineering
1575 Treat Blvd.
Walnut Creek, CA 94598
ATTN: Bill Howell

P.O.# G602087 , COC#061534
DATE: 03/06/96

PROJECT: BP Oil #11116
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-1

PROJECT NO: 10-017-05-003
MATRIX: WATER
DATE SAMPLED: 02/26/96 15:40:00
DATE RECEIVED: 02/28/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	670	50 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1 P	µg/L
Ethylbenzene	ND	1 P	µg/L
Total Xylene	ND	1 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	51 «		
METHOD 8020***			
Analyzed by: VHZ			
Date: 03/06/96			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	54		
CA LUFT - Gasoline			
Analyzed by: VHZ			
Date: 03/05/96 06:50:00			

(P) - Practical Quantitation Limit ND - Not detected.
« - Recovery beyond control limits.

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. H9-9602C52-02

Alisto Engineering
1575 Treat Blvd.
Walnut Creek, CA 94598
ATTN: Bill Howell

P.O.# G602087 , COC#061534
DATE: 03/06/96

PROJECT: BP Oil #11116
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-2

PROJECT NO: 10-017-05-003
MATRIX: WATER
DATE SAMPLED: 02/26/96 16:10:00
DATE RECEIVED: 02/28/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	68	50 P	µg/L
Benzene	17	2.5 P	µg/L
Toluene	29	5 P	µg/L
Ethylbenzene	110	5 P	µg/L
Total Xylene	1100	5 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	93		
4-Bromofluorobenzene	131		
METHOD 8020***			
Analyzed by: VHZ			
Date: 03/05/96			
Total Petroleum Hydrocarbons-Gasoline	3.6	0.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	110		
4-Bromofluorobenzene	CI		
CA LUFT - Gasoline			
Analyzed by: VHZ			
Date: 03/05/96 07:43:00			

(P) - Practical Quantitation Limit CI - Coeluting interference.

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. H9-9602C52-03

Alisto Engineering
1575 Treat Blvd.
Walnut Creek, CA 94598
ATTN: Bill Howell

P.O.# G602087 , COC#061534
DATE: 03/06/96

PROJECT: BP Oil #11116
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-3

PROJECT NO: 10-017-05-003
MATRIX: WATER
DATE SAMPLED: 02/26/96
DATE RECEIVED: 02/28/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	63	50 P	µg/L
Benzene	17	2.5 P	µg/L
Toluene	28	5 P	µg/L
Ethylbenzene	100	5 P	µg/L
Total Xylene	1050	5 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	92		
4-Bromofluorobenzene	130		
METHOD 8020***			
Analyzed by: VHZ			
Date: 03/05/96			
Total Petroleum Hydrocarbons-Gasoline	3.6	0.25 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	110		
4-Bromofluorobenzene	CI		
CA LUFT - Gasoline			
Analyzed by: VHZ			
Date: 03/05/96 08:09:00			

(P) - Practical Quantitation Limit CI - Coeluting interference.

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. H9-9602C52-04

Alisto Engineering
1575 Treat Blvd.
Walnut Creek, CA 94598
ATTN: Bill Howell

P.O.# G602087 , COC#061534
DATE: 03/06/96

PROJECT: BP Oil #11116
SITE: Dublin, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-4

PROJECT NO: 10-017-05-003
MATRIX: WATER
DATE SAMPLED: 02/26/96
DATE RECEIVED: 02/28/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1 P	µg/L
Ethylbenzene	ND	1 P	µg/L
Total Xylene	ND	1 P	µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	55 «		
METHOD 8020***			
Analyzed by: VHZ			
Date: 03/05/96			
Total Petroleum Hydrocarbons-Gasoline	ND	0.05 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	101		
4-Bromofluorobenzene	47 «		
CA LUFT - Gasoline			
Analyzed by: VHZ			
Date: 03/05/96 07:16:00			

ND - Not detected. (P) - Practical Quantitation Limit
« - Recovery beyond control limits.

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 8020/602

Matrix: Aqueous
Units: µg/L

Batch Id: HP_J960305175700

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	47	94.0	20 - 110
Benzene	ND	50	48	96.0	62 - 121
Toluene	ND	50	45	90.0	66 - 136
EthylBenzene	ND	50	43	86.0	70 - 136
O Xylene	ND	50	46	92.0	74 - 134
M & P Xylene	ND	100	91	91.0	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	662	20	660	NC	640	NC	NC	20	39 - 150
BENZENE	ND	20	17	85.0	16	80.0	6.06	25	39 - 150
TOLUENE	ND	20	15	75.0	14	70.0	6.90	26	56 - 134
ETHYLBENZENE	ND	20	14	70.0	13	65.0	7.41	38	61 - 128
O XYLENE	ND	20	15	75.0	14	70.0	6.90	29	40 - 130
M & P XYLENE	ND	40	29	72.5	27	67.5	7.14	20	43 - 152

Analyst: VHZ
Sequence Date: 03/05/96
SPL ID of sample spiked: 9602C52-01A
Sample File ID: J___331.TX0
Method Blank File ID:
Blank Spike File ID: J___329.TX0
Matrix Spike File ID: J___336.TX0
Matrix Spike Duplicate File ID: J___337.TX0

* = Values Outside QC Range
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 (3rd Q '95)
(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID):

9602C56-03A 9602C56-04A 9602C56-05A 9602C45-03A
9602C46-03A 9602C56-06A 9602C56-07A 9602C45-01A
9602C46-01A 9602C46-02A 9602C56-01A 9602C56-02A
9602C52-01A 9602B09-07A 9602C52-01A 9602C52-04A
9602C52-02A 9602C52-03A

QC Officer

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

** SPL BATCH QUALITY CONTROL REPORT **
CA LUFT

Matrix: Aqueous
Units: mg/L

Batch Id: HP_J960305151800

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits (**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons-Gas	ND	1.0	0.84	84.0	50 - 150

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits (***) (Advisory) RPD Max.	QC Limits (***) (Advisory) Recovery Range
PETROLEUM HYDROCARBONS-GAS	ND	0.9	0.69	76.7	0.71	78.9	2.83	50	50 - 150

Analyst: VHZ
Sequence Date: 03/05/96
SPL ID of sample spiked: 9602C52-04A
Sample File ID: JJ__332.TX0
Method Blank File ID:
Blank Spike File ID: JJ__328.TX0
Matrix Spike File ID: JJ__338.TX0
Matrix Spike Duplicate File ID: JJ__339.TX0

* = Values Outside QC Range
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: Temporary Limits
(***) = Source: Temporary Limits

SAMPLES IN BATCH(SPL ID): 9602C56-03A 9602C56-04A 9602C56-05A 9602C56-06A 9602C56-07A 9602C56-01A 9602C56-02A 9602C52-01A 9602C52-04A 9602C52-02A 9602C52-03A

QC Officer

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

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

** SPL BATCH QUALITY CONTROL REPORT **
CA LUFT

Matrix: Aqueous
Units: mg/L

Batch Id: HP_J960305151800

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons-Gas	ND	1.0	0.84	84.0	50 - 150

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
PETROLEUM HYDROCARBONS-GAS	ND	0.9	0.69	76.7	0.71	78.9	2.83	50	50 - 150

Analyst: VHZ
Sequence Date: 03/05/96
SPL ID of sample spiked: 9602C52-04A
Sample File ID: JJ__332.TX0
Method Blank File ID:
Blank Spike File ID: JJ__328.TX0
Matrix Spike File ID: JJ__338.TX0
Matrix Spike Duplicate File ID: JJ__339.TX0

* = Values Outside QC Range
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
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LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: Temporary Limits
(***) = Source: Temporary Limits

SAMPLES IN BATCH(SPL ID): 9602C56-03A 9602C56-04A 9602C56-05A 9602C56-06A 9602C56-07A 9602C56-01A 9602C56-02A 9602C52-01A 9602C52-04A 9602C52-02A 9602C52-03A

QC Officer

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

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020/602

Matrix: Aqueous
Units: µg/L

Batch Id: HP_J960305175700

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	47	94.0	20 - 110
Benzene	ND	50	48	96.0	62 - 121
Toluene	ND	50	45	90.0	66 - 136
EthylBenzene	ND	50	43	86.0	70 - 136
O Xylene	ND	50	46	92.0	74 - 134
M & P Xylene	ND	100	91	91.0	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	662	20	660	NC	640	NC	NC	20	39 - 150
BENZENE	ND	20	17	85.0	16	80.0	6.06	25	39 - 150
TOLUENE	ND	20	15	75.0	14	70.0	6.90	26	56 - 134
ETHYLBENZENE	ND	20	14	70.0	13	65.0	7.41	38	61 - 128
O XYLENE	ND	20	15	75.0	14	70.0	6.90	29	40 - 130
M & P XYLENE	ND	40	29	72.5	27	67.5	7.14	20	43 - 152

Analyst: VHZ
Sequence Date: 03/05/96
SPL ID of sample spiked: 9602C52-01A
Sample File ID: J___331.TX0
Method Blank File ID:
Blank Spike File ID: J___329.TX0
Matrix Spike File ID: J___336.TX0
Matrix Spike Duplicate File ID: J___337.TX0

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NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
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% 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 (3rd Q '95)
(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID):

9602C56-03A 9602C56-04A 9602C56-05A 9602C45-03A
9602C46-03A 9602C56-06A 9602C56-07A 9602C45-01A
9602C46-01A 9602C46-02A 9602C56-01A 9602C56-02A
9602C52-01A 9602B09-07A 9602C52-01A 9602C52-04A
9602C52-02A 9602C52-03A

QC Officer

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
2/28/94	1000

SPL Sample ID:
9602C52

			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:		2° C	
10	Method of sample delivery to SPL:	**SPL Delivery**		
		Client Delivery		
		FedEx Delivery (airbill #)	936071583 6	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
S West	2/28/94

9602C52

CHAIN OF CUSTODY

No. 061534

Page 1 of 1

CONSULTANT'S NAME: Alisto Engineering	ADDRESS: 1575 Treat Blvd	CITY: Walnut Creek	STATE: CA	ZIP CODE: 94598
BP SITE NUMBER: 11116	BP CORNER ADDRESS/CITY: 7197 Village Parkway, Dublin CA			CONSULTANT PROJECT NUMBER: 10-017-05-003
CONSULTANT PROJECT MANAGER: Bill Howell	PHONE NUMBER: (510) 295 1650	FAX NUMBER: (510) 295 1823		CONSULTANT CONTRACT NUMBER: G602087
BP CONTACT: A SPL Scott Hooton	BP ADDRESS: Renton WA	PHONE NUMBER: —		FAX NO.: —
LAB CONTACT: SPL	LABORATORY ADDRESS: Houston Texas	PHONE NUMBER: —		FAX NO.: —
SAMPLED BY (Please Print Name): Dave Wagner	SAMPLED BY (Signature):	SHIPMENT DATE: 2-27-96		SHIPMENT METHOD: Fed Ex

TAT: [ ] 24 Hours [ ] 48 Hours [ ] 1 Week [X] Standard 2 Weeks

AIRBILL NUMBER: 936071 5836

ANALYSIS REQUIRED: TPH BTEX MTBE

SAMPLE DESCRIPTION	COLLECTION DATE / TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	PRESERVATIVE LAB SAMPLE #	TPH BTEX MTBE	COMMENTS
S-1 1540	2/26/96	H2O	3	VOA		X	
S-2 1010							
S-3 —							
S-4 —							

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Dave Wagner Alisto	2/27/96	0800	P. Yelton	2/27/96	1630
P. Yelton	2/27/96	1640	S. West	2/28/96	1000

ADDITIONAL COMMENTS: 2°C Intact

FAX to:

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