



BP OIL

ENVIRONMENTAL
PROTECTION

FEB -3 AM 9:31

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

January 28, 1998

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

Sample again in June 1998

RE: Former BP Oil Site No. 11120
6400 Dublin Boulevard
Dublin, CA
StID 2095

Dear Ms. Chu:

This letter transmits a Groundwater Monitoring and Sampling Report, dated 12 January 1997. The report summarizes groundwater chemical data obtained since 1992.

The investigation at this site was performed in 1992 to obtain baseline chemical data in support of BP's plans to withdraw from the California market. At that time, no petroleum release(s) were known or suspected to have occurred. Nevertheless, the data confirmed that a release had occurred, and further investigation required by the Alameda County Health Care Services Agency has been undertaken.

BP sold the site to Tosco, the current operator, during 1994. The underground storage tanks were replaced when the station was razed and rebuilt during 1996. It is my understanding that the UST system has been upgraded to comply with 1998 requirements for leak detection and prevention. You may recall that one of the monitoring wells (MW-1) was rendered inaccessible after the new station building was constructed.

The enclosed groundwater monitoring and sampling report includes laboratory data for samples collected on 3 December 1997. Note that MTBE and petroleum hydrocarbons were not detected in any of the samples obtained from the monitoring wells.

Since the tanks have been replaced, petroleum hydrocarbons are essentially below detectable concentrations, and MTBE concentrations appear to have stabilized, BP is hereby requesting a finding for "no further action" and a letter of "case closure" sometime in the near future. We plan to discontinue groundwater monitoring at this time, and assume that this will be acceptable absent contrary direction from the Alameda County Health Care Services Agency.

By copy of this letter to Brady Nagle at Alisto Engineering Group, please forward a cost estimate to destroy the groundwater monitoring wells installed at this site.

Please give me a call at (425) 251-0689 to discuss the disposition of this request for case closure.

Sincerely,



Scott Hooton
Environmental Remediation Management
BP Exploration & Oil, Inc.

attachment

cc: site file
Tina Berry - Tosco (w/attachment)
Brady Nagle - Alisto

GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-170-05-003

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**

January 12, 1998



**Brady Nagle
Project Manager**



**Al Sevilla, P.E.
Principal**



GROUNDWATER MONITORING AND SAMPLING REPORT

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

Project No. 10-170-05-003

January 12, 1998

INTRODUCTION

This report presents the results and findings of the December 3, 1997 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11120, 6400 Dublin Boulevard, Dublin, California. A site vicinity map is shown on Figure 1.

FIELD PROCEDURES

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

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

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

SAMPLING AND ANALYTICAL RESULTS

The results of monitoring and laboratory analysis of the groundwater samples for this and previous quarters are summarized in Table 1. The potentiometric groundwater elevations as interpreted from the results of this monitoring event are shown on Figure 2. The results of groundwater analysis are normally shown on Figure 3; however, because of non-detectable results, we have omitted the figure. The laboratory report and chain of custody record are presented in Appendix B.



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

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-1 (c)	10/27/92	328.96	8.19	320.77	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-1	04/09/93	328.96	4.79	324.17	ND<50	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-1	08/25/93	328.96	6.85	322.11	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-1	11/22/93	328.96	7.38	321.58	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-1	03/07/94	328.96	5.89	323.07	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	4.3	PACE
MW-1	06/09/94	328.96	6.42	322.54	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	8.8	PACE
MW-1	09/12/94	328.96	7.33	321.63	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.8	PACE
MW-1	12/20/94	328.96	6.34	322.62	---	---	---	---	---	---	---	---	---
MW-1	03/16/95	328.96	4.37	324.59	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	5.6	ATI
MW-1	06/28/95	328.96	5.35	323.61	---	---	---	---	---	---	---	---	---
MW-1	09/06/95	328.96	6.44	322.52	ND<50	340	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.4	ATI
MW-1	12/22/95	328.96	6.04	322.92	---	---	---	---	---	---	---	---	---
MW-1	08/20/96	328.96	5.65	323.31	---	---	---	---	---	---	---	---	---
MW-1	08/21/96	328.96	---	---	ND<50	160	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.8	SPL
MW-1	10/31/96	328.96	5.99	322.97	---	---	---	---	---	---	---	---	---
MW-1 (d)	12/02/96	328.96	---	---	---	---	---	---	---	---	---	---	---
MW-2	10/27/92	328.50	7.64	320.86	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-2	04/09/93	328.50	4.12	324.38	ND<50	80	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-2	08/25/93	328.50	6.31	322.19	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-2	11/22/93	328.50	7.12	321.38	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-2	03/07/94	328.50	5.60	322.90	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	4.3	PACE
MW-2	06/09/94	328.50	5.91	322.59	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	8.2	PACE
MW-2	09/12/94	328.50	6.87	321.63	ND<50	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.5	PACE
MW-2	12/20/94	328.50	5.86	322.64	---	---	---	---	---	---	---	---	---
MW-2	03/16/95	328.50	3.77	324.73	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	6.6	ATI
MW-2	03/16/95	328.50	3.77	324.73	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	6.6	ATI
MW-2	06/28/95	328.50	4.33	324.17	---	---	---	---	---	---	---	---	---
MW-2	09/06/95	328.50	5.85	322.65	ND<50	210	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.0	ATI
MW-2	12/22/95	328.50	5.50	323.00	---	---	---	---	---	---	---	---	---
MW-2	08/20/96	328.50	5.07	323.43	---	---	---	---	---	---	---	---	---
MW-2	08/21/96	328.50	---	---	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	7.0	SPL
MW-2	10/31/96	328.50	5.44	323.06	---	---	---	---	---	---	---	---	---
MW-2	12/02/96	328.50	5.50	323.00	---	---	---	---	---	---	---	---	---
MW-2	03/27/97	328.50	4.61	323.89	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.8	SPL
MW-2	06/03/97	328.50	7.14	321.36	---	---	---	---	---	---	---	---	---
MW-2	09/16/97	328.50	6.10	322.40	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.2	SPL
MW-2	12/03/97	328.50	6.22	322.28	---	---	---	---	---	---	---	---	---

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

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-3	10/27/92	329.36	8.43	320.93	210	ND<50	3	0.7	0.9	30	—	—	PACE
MW-3	04/09/93	329.36	4.90	324.46	400	260	6.1	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-3	08/25/93	329.36	7.13	322.23	2000	440	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3300 (e)	—	PACE
MW-3	11/22/93	329.36	7.60	321.76	1800	360	ND<2.5	ND<2.5	ND<2.5	ND<2.5	910 (e)	—	PACE
MW-3	03/07/94	329.36	6.08	323.28	1300	5000	22	4.0	2.2	3.8	7200 (e)	3.7	PACE
MW-3	06/09/94	329.36	6.51	322.85	8500	2600	25	8.3	0.5	15	13000 (e)	7.2	PACE
QC-1 (f)	06/09/94	—	—	—	8800	—	23	6.3	0.5	10	13000 (e)	—	PACE
MW-3	09/12/94	329.36	7.63	321.73	2100	3200	ND<5.0	ND<5.0	8.8	20	3800 (e)	7.3	PACE
QC-1 (f)	09/12/94	—	—	—	1800	—	ND<5.0	ND<5.0	8.0	10	3900 (e)	—	PACE
MW-3	12/20/94	329.36	6.41	322.95	18000	9600	79	28	89	9.3	—	7.3	PACE
QC-1 (f)	12/20/94	—	—	—	17000	—	79	33	80	ND<2.5	—	—	PACE
MW-3	03/16/95	329.36	4.39	324.97	6300	7000	470	ND<5.0	210	9.9	—	5.5	ATI
QC-1 (f)	03/16/95	—	—	—	6300	—	500	ND<5.0	230	13	—	—	ATI
MW-3	06/28/95	329.36	5.50	323.86	9000	3000 (g)	ND<10	ND<10	ND<10	ND<20	—	7.4	ATI
QC-1 (f)	06/28/95	—	—	—	8800	— (g)	ND<10	ND<10	ND<10	ND<20	—	—	ATI
MW-3	09/06/95	329.36	6.66	322.70	10000	2800	ND<50	ND<50	ND<50	ND<100	37000	7.1	ATI
QC-1 (f)	09/06/95	—	—	—	9700	—	ND<50	ND<50	ND<50	ND<100	36000	—	ATI
MW-3	12/22/95	329.36	6.31	323.05	9200	2500	ND<50	ND<50	ND<50	ND<100	29000	6.7	ATI
MW-3	08/20/96	329.36	5.87	323.49	—	—	—	—	—	—	—	—	—
MW-3	08/21/96	329.36	—	—	3700	1900	ND<25	ND<50	ND<50	ND<50	4100	6.8	SPL
QC-1 (f)	08/21/96	—	—	—	3500	—	ND<25	ND<50	ND<50	ND<50	4000	—	SPL
MW-3	10/31/96	329.36	6.20	323.16	ND<250	ND<500	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	6.8	SPL
QC-1 (f)	10/31/96	—	—	—	ND<250	—	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	—	—
MW-3	12/02/96	329.36	6.27	323.09	ND<250	50	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	6.4	SPL
QC-1 (f)	12/02/96	—	—	—	ND<250	—	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	—	—
MW-3	03/27/97	329.36	5.39	323.97	470	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	490	6.2	SPL
MW-3	06/03/97	329.36	7.92	321.44	ND<250	100	ND<2.5	ND<5.0	ND<5.0	ND<5.0	84	5.9	SPL
QC-1 (f)	06/03/97	—	—	—	ND<250	—	ND<2.5	ND<5.0	ND<5.0	ND<5.0	74.0	—	—
MW-3	09/16/97	329.36	6.67	322.69	ND<50	330	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	5.5	SPL
MW-3	12/03/97	329.36	6.81	322.55	ND<50	ND<200	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.0	SPL
QC-1 (f)	12/03/97	—	—	—	ND<50	—	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	—	SPL

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 6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-4	10/27/92	329.45	8.61	320.84	2300	190	23	54	50	320	---	---	PACE
MW-4	04/09/93	329.45	5.25	324.20	1600	500	78	3.5	68	1.0	---	---	PACE
MW-4	08/25/88	329.45	7.32	322.13	1800	380	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2100 (e)	---	PACE
QC-1 (f)	08/25/93	---	---	---	1600	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2100 (e)	---	PACE
MW-4	11/22/93	329.45	7.83	321.62	610	260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-1 (f)	11/22/93	---	---	---	1700	---	ND<2.5	ND<2.5	ND<2.5	ND<2.5	3500 (e)	---	PACE
MW-4	03/07/94	329.45	6.29	323.16	710	1400	0.5	0.8	ND<0.5	ND<0.5	5900 (e)	3.8	PACE
QC-1 (f)	03/07/94	---	---	---	1600	---	ND<0.5	ND<0.5	1.4	0.6	4200 (e)	---	PACE
MW-4	06/09/94	329.45	6.76	322.69	6400	1800	ND<10	ND<10	ND<10	ND<10	10000 (e)	7.5	PACE
MW-4	09/12/94	329.45	7.83	321.62	2000	2700	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4200 (e)	7.2	PACE
MW-4	12/20/94	329.45	6.68	322.77	9200	2400	ND<5.0	ND<5.0	ND<5.0	ND<5.0	---	6.1	PACE
MW-4	03/16/95	329.45	4.66	324.79	1400	960	140	ND<2.5	58	14	---	5.5	ATI
MW-4	06/28/95	329.45	5.93	323.52	5000	5400 (g)	240	ND<5.0	220	ND<10	---	7.4	ATI
MW-4	09/06/95	329.45	6.83	322.62	4400	4500	ND<13	ND<13	ND<13	ND<25	12000	7.6	ATI
MW-4	12/22/95	329.45	6.42	323.03	3800	4700	15	ND<13	ND<13	ND<25	9200	7.1	ATI
QC-1 (f)	12/22/95	---	---	---	3900	---	16	ND<13	ND<13	ND<25	8600	---	ATI
MW-4	08/20/96	329.45	6.01	323.44	---	---	---	---	---	---	---	---	---
MW-4	08/21/96	329.45	---	---	ND<250	470	ND<12	ND<25	ND<25	ND<25	ND<250	7.7	SPL
MW-4	10/31/96	329.45	6.37	323.08	ND<250	1600	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	7.1	SPL
MW-4	12/02/96	329.45	6.71	322.74	ND<50	13000	ND<5	ND<10	ND<10	ND<10	2200	7.3	SPL
MW-4	03/27/97	329.45	5.70	323.75	8300	1500	44	ND<25	ND<25	ND<25	8000	6.2	SPL
QC-1 (f)	03/27/97	---	---	---	6900	---	51	ND<25	ND<25	ND<25	8500	---	SPL
MW-4	06/03/97	329.45	8.37	321.08	2800	270	62	ND<1.0	ND<1.0	ND<1.0	7000.0	7.1	SPL
MW-4	09/16/97	329.45	6.91	322.54	110	1800	0.80	ND<1.0	ND<1.0	ND<1.0	7700	6.2	SPL
QC-1 (f)	09/16/97	---	---	---	130	---	1.2	ND<1.0	ND<1.0	1.1	7100	---	SPL
MW-4	12/03/97	329.45	7.16	322.29	ND<50	ND<200	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.0	SPL
MW-5	04/09/93	329.60	5.18	324.42	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	08/25/93	329.60	7.28	322.32	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	11/22/93	329.60	7.82	321.78	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-5	03/07/94	329.60	6.27	323.33	ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	5.7	PACE
MW-5	06/09/94	329.60	6.73	322.87	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.7	PACE
MW-5	09/12/94	329.60	7.78	321.82	ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.2	PACE
MW-5	12/20/94	329.60	6.63	322.97	---	---	---	---	---	---	---	---	---
MW-5	03/16/95	329.60	4.65	324.95	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	4.9	ATI
MW-5	06/28/95	329.60	5.69	323.91	---	---	---	---	---	---	---	---	---
MW-5	09/06/95	329.60	6.82	322.78	ND<50	200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.3	ATI
MW-5	12/22/95	329.60	6.40	323.20	---	---	---	---	---	---	---	---	---
MW-5	08/20/96	329.60	5.98	323.62	---	---	---	---	---	---	---	---	---
MW-5	08/21/96	329.60	---	---	ND<50	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<10	6.9	SPL
MW-5	10/31/96	329.60	6.29	323.31	---	---	---	---	---	---	---	---	---
MW-5	12/02/96	329.60	6.37	323.23	---	---	---	---	---	---	---	---	---
MW-5	03/27/97	329.60	5.33	324.27	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.8	SPL
MW-5	06/03/97	329.60	8.00	321.60	---	---	---	---	---	---	---	---	---
MW-5	09/16/97	329.60	6.89	322.71	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	27	5.4	SPL
MW-5	12/03/97	329.60	6.99	322.61	---	---	---	---	---	---	---	---	---

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

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-6	04/09/93	329.55	5.37	324.18	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	08/25/93	329.55	7.42	322.13	ND<50	170	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	11/22/93	329.55	7.93	321.62	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	03/07/94	329.55	6.25	323.30	ND<50	90	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	4.2	PACE
MW-6	06/09/94	329.55	6.85	322.70	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.0	PACE
MW-6	09/12/94	329.55	7.91	321.64	ND<50	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	6.7	PACE
MW-6	12/20/94	329.55	6.82	322.73	---	---	---	---	---	---	---	---	---
MW-6	03/16/95	329.55	4.78	324.77	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	6.1	ATI
MW-6	06/28/95	329.55	5.97	323.58	---	---	---	---	---	---	---	---	---
MW-6	09/06/95	329.55	6.94	322.61	ND<50	340	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.2	ATI
MW-6	12/22/95	329.55	6.53	323.02	---	---	---	---	---	---	---	---	---
MW-6	08/20/96	329.55	6.18	323.37	---	---	---	---	---	---	---	---	---
MW-6	08/21/96	329.55	---	---	ND<50	120	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	SPL
MW-6	10/31/96	329.55	6.52	323.03	---	---	---	---	---	---	---	---	---
MW-6	12/02/96	329.55	6.55	323.00	---	---	---	---	---	---	---	---	---
MW-6	03/27/97	329.55	5.50	324.05	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.3	SPL
MW-6	06/03/97	329.55	8.19	321.36	---	---	---	---	---	---	---	---	---
MW-6	09/16/97	329.55	6.95	322.60	ND<250	680	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	5.5	SPL
MW-6	12/03/97	329.55	7.22	322.33	---	---	---	---	---	---	---	---	---
MW-7	04/09/93	329.49	5.36	324.13	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	08/25/93	329.49	7.44	322.05	ND<50	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	11/22/93	329.49	7.92	321.57	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	03/07/94	329.49	6.20	323.29	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	3.7	PACE
MW-7	06/09/94	329.49	6.89	322.60	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	6.8	PACE
MW-7	09/12/94	329.49	7.87	321.62	ND<50	50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	6.8	PACE
MW-7	12/20/94	329.49	6.77	322.72	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	6.5	PACE
MW-7	03/16/95	329.49	4.77	324.72	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	5.9	ATI
MW-7	06/28/95	329.49	5.94	323.55	ND<50	320	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	7.8	ATI
MW-7	09/06/95	329.49	6.98	322.51	ND<50	240	ND<0.50	ND<0.50	ND<0.50	ND<1.0	8.5	7.5	ATI
MW-7	12/22/95	329.49	6.65	322.84	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	7.2	6.9	ATI
MW-7	08/20/96	329.49	6.22	323.27	---	---	---	---	---	---	---	---	---
MW-7	08/21/96	329.49	---	---	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	SPL
MW-7	10/31/96	329.49	6.56	322.93	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	86	6.8	SPL
MW-7	12/02/96	329.49	6.13	323.36	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	59	7.3	SPL
MW-7	03/27/97	329.49	5.08	324.41	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.6	SPL
MW-7	06/03/97	329.49	7.80	321.69	650	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	630	6.8	SPL
MW-7	09/16/97	329.49	6.50	322.99	120	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	2200	6.0	SPL
MW-7	12/03/97	329.49	6.66	322.83	ND<50	ND<200	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.0	SPL

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

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (e) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
QC-2	(h) 08/25/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2	(h) 11/22/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2	(h) 03/07/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2	(h) 06/09/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2	(h) 09/12/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2	(h) 12/20/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2	(h) 03/16/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2	(h) 06/28/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2	(h) 09/06/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI
QC-2	(h) 12/22/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI

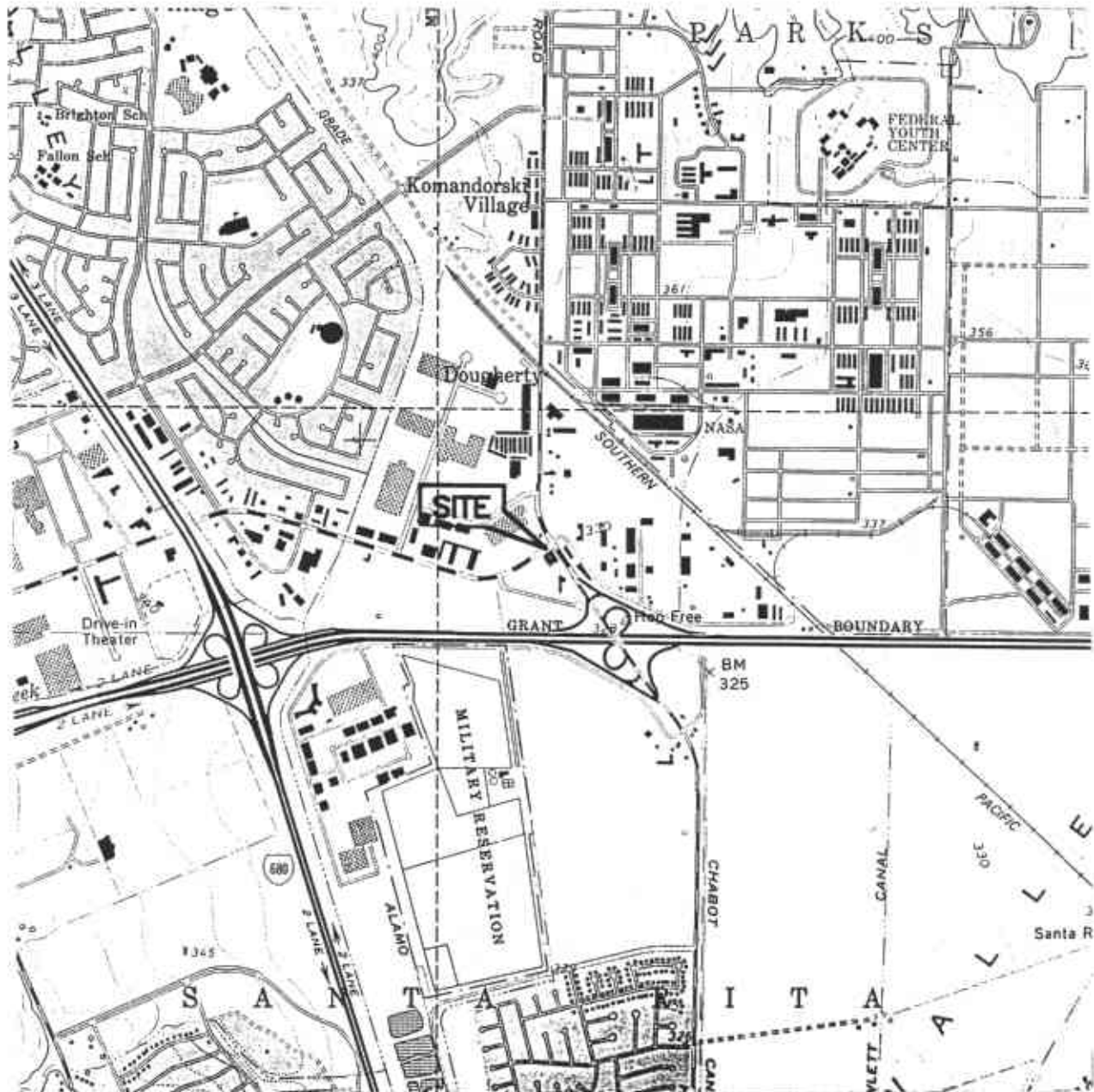
ABBREVIATIONS:

TPH-G Total petroleum hydrocarbons as gasoline
 TPH-D Total petroleum hydrocarbons as diesel
 B Benzene
 T Toluene
 E Ethylbenzene
 X Total xylenes
 MTBE Methyl tert butyl ether
 DO Dissolved oxygen
 ug/l Micrograms per liter
 ppm Parts per million
 ND Not detected above reported detection limit
 --- Not analyzed/applicable/measured
 PACE Pace, Inc.
 ATI Analytical Technologies, Inc.
 SPL Southern Petroleum Laboratories

NOTES:

- (a) Top of casing elevations surveyed to an arbitrary datum.
- (b) Groundwater elevations relative to an arbitrary datum.
- (c) Analysis did not detect total oil and grease and halogenated volatile organic compounds above reported detection limits.
- (d) Well inaccessible.
- (e) A copy of the documentation for this data is included in Appendix C of Alisto report 10-170-05-001.
- (f) Blind duplicate.
- (g) MTBE peak. Refer to documentation for this data in Appendix C of Alisto report 10-170-05-001.
- (h) Travel blank.

F:\10-170\170-5-3.WQ2



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

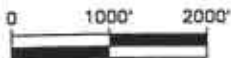
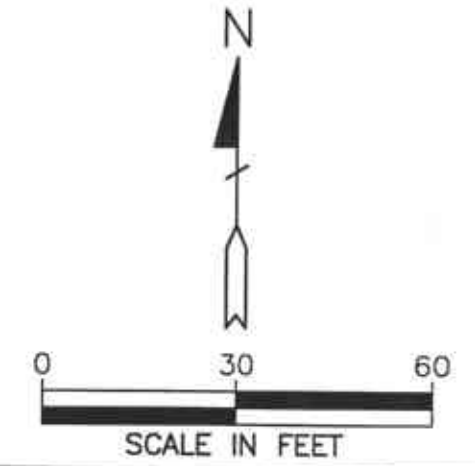
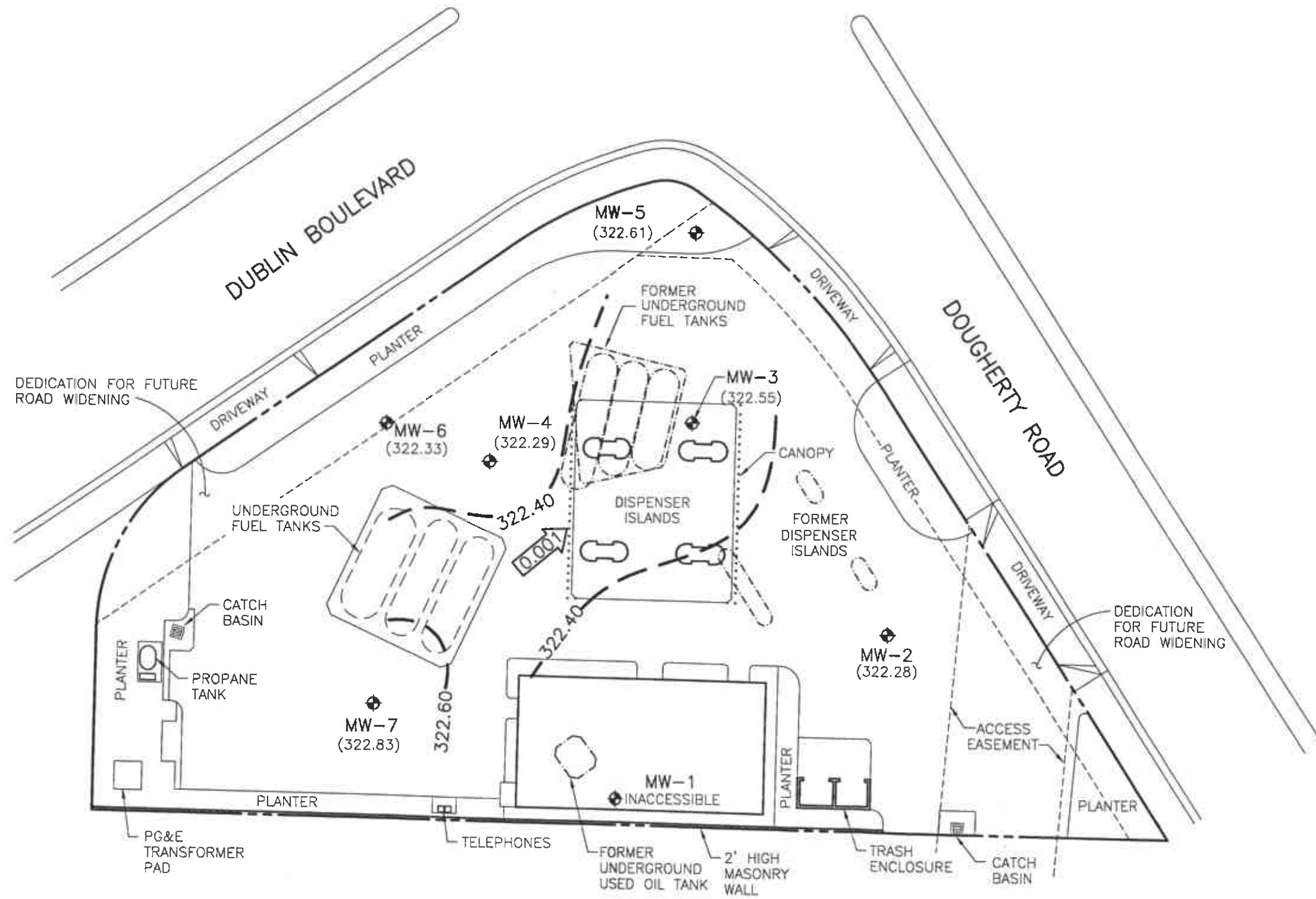


FIGURE 1
SITE VICINITY MAP

BP OIL SERVICE STATION NO. 11120
6400 DUBLIN BOULEVARD
DUBLIN, CALIFORNIA
PROJECT NO. 10-170



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



- LEGEND**
- ◆ GROUNDWATER MONITORING WELL
 - (322.83) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
 - 322.60 - GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL-.2 FOOT)
 - ← 0.001 → CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP
DECEMBER 3, 1997
 BP OIL SERVICE STATION NO. 11120
 6400 DUBLIN BOULEVARD
 DUBLIN, CALIFORNIA
 PROJECT NO. 10-170

APPENDIX A
WATER SAMPLING FIELD SURVEY FORMS

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. 10-170-05-003

Address 6400 Dublin Blvd

Contract No. H177101A

Station No. BP 11120

Date: 12/3/97

Day: M T W T H F

City: Dublin

Sampler: UCB

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS:
MW-1	—	2"	—	—	—	—	Cannot locate
MW-2	NIS	2"	25.00	6.22	∅	1457	Not Sampled this event
MW-3	S-3	2"	20.00	6.81	↓	1520	QC-1 (S-4) From this well
MW-4	S-2	2"	20.00	7.16	↓	1515	
MW-5	NIS	2"	25.00	6.99	↓	1502	Not Sampled this event
MW-6	NIS	4"	25.00	7.22	↓	1507	Not Sampled this event
MW-7	S-1	2"	20.25	6.66	↓	1511	

FIELD INSTRUMENT CALIBRATION DATA

pH METER Imm 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED N TIME 1527 WEATHER Cloudy
 D.O. METER Imm ZERO d.O. SOLUTION _____ BAROMETRIC PRESSURE 760 TEMP 62
 CONDUCTIVITY METER Imm 10,000 _____ TURBIDITY METER _____ 5.0 NTU _____ OTHER X
 LEAK DETECTOR: _____ ALARM MODE NON ALARM MODE

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.	
MW-7	6.66	2"	OK	∅	Y (N)	2	1540	60.3	7.62	1.36ms	4.7	<input type="checkbox"/> EPA 601 _____
Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.						4		61.1	7.51	1.57ms		<input checked="" type="checkbox"/> TPH-G/BTEX _____
$20.25 - 6.66 = 13.59 \times .16 = 2.17 \times 3 = 6.51$						7	1552	61.5	7.49	1.64ms	5.0	<input checked="" type="checkbox"/> TPH Diesel _____
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s) <u>1</u> OSys Port												<input type="checkbox"/> TOG 5520 _____
Comments:												TIME/SAMPLE ID <u>1558</u>

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.	
MW-4	7.16	2"	OK	∅	Y (N)	2	1612	59.3	7.80	1.22ms	5.4	<input type="checkbox"/> EPA 601 _____
Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.						4		60.7	7.68	1.57ms		<input checked="" type="checkbox"/> TPH-G/BTEX _____
$20.00 - 7.16 = 12.84 \times .16 = 2.05 \times 3 = 6.15$						7	1620	61.1	7.58	1.54ms	6.0	<input checked="" type="checkbox"/> TPH Diesel _____
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s) <u>1</u> OSys Port												<input type="checkbox"/> TOG 5520 _____
Comments:												TIME/SAMPLE ID <u>1625</u>

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.

10-170-05-003

Date:

12/3/97

Address

6400 Dublin Blvd.

Day:

MTWTF

Contract No.

H177101A

City:

Dublin

Station No.

BP 11120

Sampler:

W

Well ID	Depth to Water	Diam	Cap/Lock	Product	Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.		
Mw-3	6.81	2"	oil	Ø	Y	(N)	2	1637	60.9	7.97	1.21ms	5.0	<input type="checkbox"/> EPA 601	
Total Depth - Water Level=							x Well Vol. Factor=	x#vol. to Purge		Purge Vol.			<input type="checkbox"/> TPH-G/BTEX	
20.00 - 6.81 = 13.19							16 = 2.11	3 = 6.33	7	1644	62.4	7.79	1.40ms	<input checked="" type="checkbox"/> TPH Diesel
Purge Method: OSurface Pump							ODisp.Tube	OWinch	QDisp. Baller(s)	1	OSys Port			<input type="checkbox"/> TOG 5520
Comments: QC-1 (S-4) From this well														TIME/SAMPLE ID
												1651		

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD



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

December 16, 1997

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

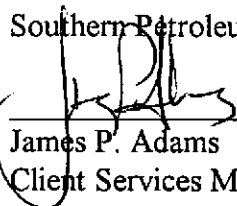
The following report contains analytical results for samples received at Southern Petroleum Laboratories (SPL) on December 5, 1997. The samples were assigned to Certificate of Analysis No.(s) 9712351 and analyzed for all parameters as listed on the chain of custody.

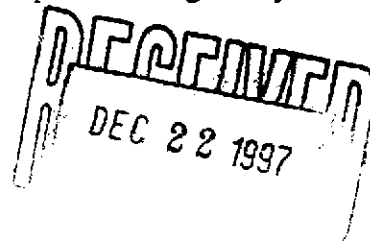
Any data flag or quality control exception associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s).

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories


James P. Adams
Client Services Manager



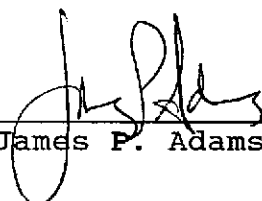


HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 97-12-351

Approved for Release by:



James P. Adams, Client Services Manager

12/16/97
Date:

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer

The attached analytical data package may not be reproduced except in full without the express written approval of this laboratory.



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

Certificate of Analysis No. H9-9712351-01

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

P.O.#
 H177101, COC#072097
 DATE: 12/16/97

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

PROJECT NO: 10-170-5-3
 MATRIX: WATER
 DATE SAMPLED: 12/03/97
 DATE RECEIVED: 12/05/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	97		
Method 8020A*** Analyzed by: LJ Date: 12/13/97			
Gasoline Range Organics	ND	0.05 P	mg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	73		
4-Bromofluorobenzene	103		
California LUFT Manual for Gasoline Analyzed by: LJ Date: 12/13/97 12:07:00			
Diesel Range Organics	ND	0.2 P	mg/L
Surrogate	% Recovery		
n-Pentacosane	74		
California LUFT Manual for Diesel Analyzed by: RR Date: 12/12/97 04:09:00			

ND - Not detected.

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
 **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
 ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

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



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

Certificate of Analysis No. H9-9712351-01

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

P.O.#
 H177101, COC#072097
 DATE: 12/16/97

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

PROJECT NO: 10-170-5-3
 MATRIX: WATER
 DATE SAMPLED: 12/03/97
 DATE RECEIVED: 12/05/97

PARAMETER	ANALYTICAL DATA			UNITS
	RESULTS	DETECTION LIMIT		
California TPH-D Extraction Method 3510B *** Analyzed by: PC Date: 12/09/97 08:00:00	12/09/97			

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
 **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
 ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

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



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

Certificate of Analysis No. H9-9712351-02

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

P.O.#
 H177101, COC#072097
 DATE: 12/16/97

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

PROJECT NO: 10-170-5-3
 MATRIX: WATER
 DATE SAMPLED: 12/03/97
 DATE RECEIVED: 12/05/97

PARAMETER	ANALYTICAL DATA		DETECTION LIMIT	UNITS
	RESULTS			
MTBE	ND		10 P	µg/L
Benzene	ND		0.5 P	µg/L
Toluene	ND		1.0 P	µg/L
Ethylbenzene	ND		1.0 P	µg/L
Total Xylene	ND		1.0 P	µg/L
Surrogate	% Recovery			
1,4-Difluorobenzene		97		
4-Bromofluorobenzene		97		
Method 8020A***				
Analyzed by: LJ				
Date: 12/13/97				
Gasoline Range Organics	ND		0.05 P	mg/L
Surrogate	% Recovery			
1,4-Difluorobenzene		73		
4-Bromofluorobenzene		103		
California LUFT Manual for Gasoline				
Analyzed by: LJ				
Date: 12/13/97 12:34:00				
Diesel Range Organics	ND		0.2 P	mg/L
Surrogate	% Recovery			
n-Pentacosane		78		
California LUFT Manual for Diesel				
Analyzed by: RR				
Date: 12/12/97 01:52:00				

ND - Not detected.

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
 **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
 ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

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



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

Certificate of Analysis No. H9-9712351-02

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

P.O.#
 H177101, COC#072097
 DATE: 12/16/97

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

PROJECT NO: 10-170-5-3
 MATRIX: WATER
 DATE SAMPLED: 12/03/97
 DATE RECEIVED: 12/05/97

PARAMETER	ANALYTICAL DATA	RESULTS	DETECTION LIMIT	UNITS
California TPH-D Extraction Method 3510B *** Analyzed by: PC Date: 12/09/97 08:00:00		12/09/97		

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
 **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
 ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

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



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TEXAS 77054
 PHONE (713) 680-0901

Certificate of Analysis No. H9-9712351-03

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

P.O.#
 H177101, COC#072097
 DATE: 12/16/97

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

PROJECT NO: 10-170-5-3
 MATRIX: WATER
 DATE SAMPLED: 12/03/97
 DATE RECEIVED: 12/05/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L

Surrogate % Recovery
 1,4-Difluorobenzene 97
 4-Bromofluorobenzene 97

Method 8020A***
 Analyzed by: LJ
 Date: 12/13/97

Gasoline Range Organics ND 0.05 P mg/L

Surrogate % Recovery
 1,4-Difluorobenzene 73
 4-Bromofluorobenzene 107

California LUFT Manual for Gasoline
 Analyzed by: LJ
 Date: 12/13/97 01:00:00

Diesel Range Organics ND 0.2 P mg/L

Surrogate % Recovery
 n-Pentacosane 64

California LUFT Manual for Diesel
 Analyzed by: RR
 Date: 12/12/97 04:55:00

ND - Not detected.

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
 **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
 ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

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

Certificate of Analysis No. H9-9712351-03

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

P.O.#
 H177101, COC#072097
 DATE: 12/16/97

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

PROJECT NO: 10-170-5-3
 MATRIX: WATER
 DATE SAMPLED: 12/03/97
 DATE RECEIVED: 12/05/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
California TPH-D Extraction Method 3510B *** Analyzed by: PC Date: 12/09/97 08:00:00	12/09/97		

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
 **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
 ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

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

Certificate of Analysis No. H9-9712351-04

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

P.O.#
 H177101, COC#072097
 DATE: 12/16/97

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

PROJECT NO: 10-170-5-3
 MATRIX: WATER
 DATE SAMPLED: 12/03/97
 DATE RECEIVED: 12/05/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	ND	10 P	µg/L
Benzene	ND	0.5 P	µg/L
Toluene	ND	1.0 P	µg/L
Ethylbenzene	ND	1.0 P	µg/L
Total Xylene	ND	1.0 P	µg/L

Surrogate % Recovery
 1,4-Difluorobenzene 97
 4-Bromofluorobenzene 97
 Method 8020A***
 Analyzed by: LJ
 Date: 12/13/97

Gasoline Range Organics ND 0.05 P mg/L

Surrogate % Recovery
 1,4-Difluorobenzene 73
 4-Bromofluorobenzene 103
 California LUFT Manual for Gasoline
 Analyzed by: LJ
 Date: 12/13/97 01:26:00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
 **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
 ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

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

QUALITY CONTROL
DOCUMENTATION



** SPL BATCH QUALITY CONTROL REPORT **
California LUFT Manual for Gasoline

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

Matrix: Aqueous
Units: mg/L

Batch Id: HP_S971212120600

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Gasoline Range Organics	ND	1.0	0.91	91.0	64 - 131

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
GASOLINE RANGE ORGANICS	ND	0.90	0.86	95.6	0.90	100	4.50	36	36 - 160

Analyst: LJ
Sequence Date: 12/12/97
SPL ID of sample spiked: 9712443-05A
Sample File ID: SSL7470.TX0
Method Blank File ID:
Blank Spike File ID: SSL7464.TX0
Matrix Spike File ID: SSL7467.TX0
Matrix Spike Duplicate File ID: SSL7468.TX0

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = $[(<1> - <2>) / <3>] \times 100$
LCS % Recovery = $(<1> / <3>) \times 100$
Relative Percent Difference = $| (<4> - <5>) | / [(<4> + <5>) \times 0.5] \times 100$
(**) = Source: SPL-Houston Historical data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID):

9712215-03A 9712215-04A 9712215-05A 9712215-06A
9712215-07A 9712215-08A 9712215-09A 9712351-01A
9712351-02A 9712351-03A 9712351-04A 9712443-04A
9712443-05A 9712357-02C 9712215-01A



** SPL BATCH QUALITY CONTROL REPORT **
 Method Modified 8015A*** for Diesel

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

Matrix: Aqueous
 Units: mg/L

Batch Id: HPVV9712122000

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Diesel	ND	5.0	4.4	88.0	53 - 148

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
DIESEL	ND	5.0	1.7	34.0	1.8	36.0	5.71	39	21 - 175

Analyst: RR
 Sequence Date: 12/12/97
 SPL ID of sample spiked: 9712351-02B
 Sample File ID: VVL2065.TX0
 Method Blank File ID:
 Blank Spike File ID: VVL2063.TX0
 Matrix Spike File ID: V_L2077.TX0
 Matrix Spike Duplicate File ID: V_L2078.TX0

* = Values Outside QC Range. « = Data outside Method Specification limits.
 NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
 ND = Not Detected/Below Detection Limit
 $\% \text{ Recovery} = [(<1> - <2>) / <3>] \times 100$
 $\text{LCS } \% \text{ Recovery} = (<1> / <3>) \times 100$
 $\text{Relative Percent Difference} = [(<4> - <5>) / [(<4> + <5>) \times 0.5]] \times 100$
 (**) = Source: SPL-Houston Historical Data (4th Q '97)
 (***) = Source: SPL-Houston Historical Data (4th Q '97)

SAMPLES IN BATCH(SPL ID): 9712351-02B 9712351-01B 9712351-03B

CHAIN OF CUSTODY
AND
SAMPLE RECEIPT CHECKLIST

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: 12-5-97	Time: 1820
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SPL Sample ID:
9712351

		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:	3	C
10	Method of sample delivery to SPL:	SPL Delivery	
		Client Delivery	
		FedEx Delivery (airbill #)	3848471465
		Other:	
11	Method of sample disposal:	SPL Disposal	
		HOLD	
		Return to Client	

Name: R. J. ...	Date: 12-5-97
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9712351

CHAIN OF CUSTODY

No.072097

Page 1 of 1

CONSULTANT'S NAME: Alisto Engineering ADDRESS: 1575 Treat Blvd #201 CITY: Walnut Creek STATE: Ca ZIP CODE: 94598

BP SITE NUMBER: 11120 BP CORNER ADDRESS/CITY: Dublin, Ca CONSULTANT PROJECT NUMBER: 10-170-5-3

CONSULTANT PROJECT MANAGER: Bredy Nagle PHONE NUMBER: (510) 295-1650 FAX NUMBER: 295-1823 CONSULTANT CONTRACT NUMBER: H177101

BP CONTACT: Scott Hooton BP ADDRESS: Kenton, WA PHONE NUMBER: FAX NO:

LAB CONTACT: SPL LABORATORY ADDRESS: Texas PHONE NUMBER: FAX NO:

SAMPLED BY (Please Print Name): Larry Buenavista SAMPLED BY (Signature): [Signature] SHIPMENT DATE: SHIPMENT METHOD: Fed Ex

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks ANALYSIS REQUIRED AIRBILL NUMBER: 3848471465

SAMPLE DESCRIPTION	COLLECTION DATE	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	TPH-1	TPH-2	TPH-3	TPH-4	TPH-5	TPH-6	TPH-7	TPH-8	TPH-9	TPH-10	COMMENTS
	COLLECTION TIME		NO.	TYPE (VOL.)	LAB SAMPLE #											
S-1	12/3/97	W	5	HCL		X	X	X								
S-2	↓	↓	↓	↓		X	X	X								
S-3	↓	↓	↓	↓		X	X	X								ph
S-4	↓	↓	3	↓		X	X	X								RT

RELINQUISHED BY / AFFILIATION: <u>[Signature]</u>	DATE: <u>12/3/97</u>	TIME: <u>1345</u>	ACCEPTED BY / AFFILIATION: <u>[Signature]</u>	DATE: <u>12-5-97</u>	TIME: <u>10⁰⁰</u>	ADDITIONAL COMMENTS: <u>Temp 30c RT</u>
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