Weiss Associates *Environmental and Geologic Services*

5500 Shellmound Street, Emeryville, CA 94608-2411 *Fax: 510-547-5043* *Phone:* ***510-547-5420***

TRANSMITTAL LETTER

FROM: Eric Anderson

DATE: February 15, 1994

TO: Tom Callaghan
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

VIA: _X_ First Class Mail
___ Fax ___ pages
___ UPS (Surface)
___ Federal Express
___ Courier

SUBJECT: CALWATER reports for Shell Oil Co. sites

JOB: 81-424-104

AS: ____ We discussed on the telephone on _____
____ You requested _____
____ We believe you may be interested
_X_ Is required

WE ARE SENDING: _X_ Enclosed
____ Under Separate Cover Via _____

The CALWATER enclosed contains corrections for and replaces the most recent CALWATER submitted for this site. Please call me at (510) 450-6192 if you have any questions or comments. Thank you.

FOR: _X_ Your information
_X_ Your use
____ Your review & comments
____ Return to you

PLEASE: _X_ Keep this material
____ Return
____ Acknowledge receipt

cc: Lynn Walker, Shell Oil Company
Barney Chan, Alameda County Health Department

94 MAR -2 AM 11:51
ALCO
HAZMAT

SHELL OIL CORPORATION

QUARTERLY REPORT TO

THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

Date of Report: February 15, 1994

Service Station WIC Number:	204-5508-2402
Site Address (Number, Street):	7915 East 14th Street
City:	Oakland
County:	Alameda

Actions in the past three months:

Submitted quarterly status report.
Conducted subsurface investigation.

Actions planned for next three months:

Submit quarterly status report.
Conduct quarterly monitoring

Soil Contamination defined? Y\N	In progress
Soil Clean-up in progress? Y\N	N
Free-product plume defined? Y\N	NA
Free-product cleanup in progress? Y\N	NA
Dissolved constituent plume defined? Y\N	In progress
Dissolved constituent cleanup in progress? Y\N	N

Contractor: Weiss Associates, Emeryville, California.

GERAGHTY & MILLER, INC.
Environmental Services

ALCO
HAZMAT
93 DEC 21 PM 2:57

RC315

583

December 20, 1993
Project No. RC0027.008

Mr. Paul Ahlin
United Parcel Service, Inc.
8400 Pardee Drive
Oakland, California 94621

SUBJECT: Results of Groundwater Monitoring, October 1993, United Parcel Service, Inc. Facility, 8400 Pardee Drive, Oakland, California.

Dear Mr. Ahlin:

This letter report presents the results of the monitoring and sampling event performed by Geraghty & Miller, Inc. (Geraghty & Miller) on October 11, 1993, for the United Parcel Service, Inc. (UPS) facility referenced above (Figure 1). The scope of work for this project was contained in a previous Geraghty & Miller document to UPS, dated September 30, 1993.

In addition to groundwater sampling of Monitor Wells MW-1 through MW-6, the Alameda County Health Department (ACHD) requested in a July 27, 1993 document to UPS that the following issues be addressed in this report and/or tasks be performed at the site during the October sampling event (ACHD comments in italics):

- *Sample Monitor Well MW-7, the assumed downgradient well to the former waste oil tank.*

At the time of the sampling event, it was discovered that the vault for Well MW-7 had been backfilled with pea gravel and was therefore not sampled. Since that time, Geraghty & Miller has been notified by UPS that the pea gravel has been removed from the vault and that the well is now accessible for groundwater sampling. It is anticipated that this well will be sampled during the next quarterly sampling event scheduled for January 1993.

- *Propose the location of an additional groundwater monitor well offsite and downgradient to the diesel tank complex.*

The proposed location of an additional groundwater monitoring well downgradient from the diesel tank complex is shown on Figure 2.

- *Verify that no liquid-phase hydrocarbons (LPH) or sheen are present in any of the monitor wells that are scheduled for closure.*

Monitor Wells MW-1 through MW-6 and Observation Wells OW-1 and OW-A through OW-D were checked for the presence of LPH during the sampling event. This was performed by lowering a disposable bailer into each well and making visual observations of the retrieved groundwater sample. LPH were observed as a sheen on the surface of the groundwater sample collected from Monitor Well MW-2 and Observation Wells OW-1 and OW-C. LPH were not observed in groundwater samples collected from any of the other wells. The approximate locations of these wells are shown on Figure 2.

- *Verify that all monitor wells are supplied with locking well caps.*

It was noted during the sampling event that Monitor Well MW-6 and Observation Well OW-1 have well caps but do not have locks. Observation Wells OW-A, OW-B, OW-C and OW-D are covered with well vaults but do not have well caps installed.

GROUNDWATER SAMPLING PROCEDURES

Groundwater samples were collected from Monitoring Wells MW-1 through MW-6 on October 11, 1993 (Figure 2). Prior to sampling, depth to water was measured, and each well was checked for the presence of LPH. LPH were observed in Monitor Well MW-2 and in Observation Wells OW-1 and OW-C as a sheen on the surface of groundwater collected using a disposable bailer.

Prior to sampling, each well was purged using a 1-inch diaphragm pump with a new length of polyethylene tubing for each well. Approximately four casing volumes of water were purged from each of the wells or the well was purged dry due to slow recovery. A summary of the field sampling parameters is presented in Table 1. The purged water was placed in 55-gallon drums and stored onsite for proper handling and disposal by UPS.

Following purging, groundwater samples were collected from the wells using a new disposable polyethylene bailer for each well. The groundwater samples were placed into the appropriate U.S. Environmental Protection Agency (USEPA) approved containers, placed on ice, and transported to Sequoia Laboratories, Inc. of Concord, California, along with appropriate chain-of-custody documentation. The groundwater samples were analyzed for total petroleum hydrocarbons as diesel (TPH-D) by modified USEPA Method 8015 and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by USEPA Method 8020. In addition, the samples collected from Monitor Wells MW-4 through MW-6 were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by modified USEPA Method 8015. Copies of the chain-of-custody forms and laboratory reports are attached. A trip blank was also submitted to the laboratory for analysis for quality control purposes. The trip blank was analyzed for TPH-G (modified USEPA Method 8015) and BTEX (USEPA Method 8020).

RESULTS

Depth-to-water measurements and groundwater elevations for the wells are presented in Table 2. Based on the groundwater elevations, the direction of shallow groundwater flow in the vicinity of the southern fueling facilities is generally toward the southwest. In the vicinity of the northern fueling facilities, the direction of shallow groundwater flow is generally toward the north-northwest (Figure 2).

The results of groundwater analyses for the October sampling event are summarized in Table 3. In the vicinity of the underground storage tanks beneath the southern portion of the site, TPH-D was detected at concentrations ranging from 9,600 µg/L (Well MW-1) to 1,400 µg/L (Well MW-2). BTEX concentrations are summarized on Table 3.

In the vicinity of the underground storage tanks beneath the northern portion of the site, TPH-G was not detected. TPH-D was detected in the water samples collected from Wells MW-4 (90 µg/L) and MW-5 (96 µg/L). TPH-D was not detected in the sample collected from Well MW-6. BTEX were not detected in the samples collected from these three wells.

Geraghty & Miller appreciates the opportunity to be of service to UPS. If you have any questions regarding this letter report, please do not hesitate to call.

Sincerely,
GERAGHTY & MILLER, INC.

Michael M. Bessette
Geologist/Project Manager

Gary W. Keyes, P.E.
Principal Engineer/Associate
Richmond, California Officer Manager

Attachments:

	Table 1	Summary of Field Sampling Data
	Table 2	Depth-to-Water and Groundwater Elevations
	Table 3	Groundwater Analytical Results
	Figure 1	Site Vicinity Map
	Figure 2	Groundwater Elevation Map October 1993
	Attachment 1	Copies of Certified Laboratory Analytical Results and Chain-of-Custody Documentation

xc: Mr. Barney Chan
Alameda County Health Department, Hazardous Materials Division
80 Swan Way, Room 200
Oakland, California 94621

Project No. RC0027.008

Table 1: Summary of Field Sampling Data
United Parcel Service, Inc.
8400 Pardee Drive, Oakland, California.

Well	Date	Calculated Purge Volume (a) (Gallons)	Actual Purge Volume (Gallons)	FIELD PARAMETERS			Depth to Water (b) (Feet)	Well Depth (b) (Feet)	Casing Diameter (inches)
				pH	SC (µmhos/cm)	Temperature (°F)			
MW-1	11-Oct-93	27.00	28.0	6.48	2,400	70.6	3.87	14.27	4
MW-2	11-Oct-93	23.80	20.5	6.45	7,110	72.3	5.20	14.36	4
MW-3	11-Oct-93	27.60	20.5	6.43	2,370	71.2	3.84	14.45	4
MW-4	11-Oct-93	27.30	29.0	6.48	>19,000	73.5	4.08	14.59	4
MW-5	11-Oct-93	27.90	27.0	6.44	7,790	71.6	3.66	14.40	4
MW-6	11-Oct-93	67.70	50.5	6.24	9,540	70.1	7.60	19.20	6

(a) Based on four casing volumes.
(b) Measured from top of PVC casing.

NM Not Measured.
SC Specific Conductance.
MSL Mean Sea Level.

Table 2: Depth-to-Water and Groundwater Elevations
United Parcel Service, Inc.
8400 Pardee Drive, Oakland, California.

Well	Date	Depth to Water (a) (feet)	Top of Casing Elevation (feet MSL)	Top of Water Elevation (feet MSL)	Measured Depth of Well (a) (feet)
MW-1	28-Aug-90	3.80	7.43	3.63	14.05
	20-Sep-90	3.99		3.44	
	19-Jun-91	3.47		3.96	
	23-Jul-91	3.70		3.73	
	26-Aug-91	3.92		3.51	
	18-Nov-91	4.21		3.22	
	3-Feb-92	3.99		3.44	
	29-Jun-92	3.38		4.05	
	23-Jun-93	2.72		4.71	14.20
	11-Oct-93	3.87		3.56	14.27
MW-2	28-Aug-90	4.98	7.15	2.17	15.35
	20-Sep-90	4.94		2.21	
	19-Jun-91	4.66		2.49	
	23-Jul-91	4.81		2.34	
	26-Aug-91	4.89		2.26	
	18-Nov-91	4.93		2.22	
	3-Feb-92	4.44		2.71	
	29-Jun-92	4.80		2.35	
	23-Jun-93	4.38		2.77	14.35
	11-Oct-93	5.20		1.95	14.35
MW-3	28-Aug-90	3.88	7.42	3.54	14.60
	20-Sep-90	3.99		3.43	
	19-Jun-91	3.49		3.93	
	23-Jul-91	3.71		3.71	
	26-Aug-91	3.94		3.48	
	18-Nov-91	4.23		3.19	
	3-Feb-92	4.01		3.41	
	29-Jun-92	3.40		4.02	
	23-Jun-93	2.75		4.67	14.50
	11-Oct-93	3.84		3.58	14.45
MW-4	28-Aug-90	3.15	5.71	2.56	14.66
	20-Sep-90	3.19		2.52	
	19-Jun-91	2.73		2.98	
	23-Jul-91	3.07		2.64	
	26-Aug-91	4.32		1.39	
	18-Nov-91	4.03		1.68	
	3-Feb-92	3.86		1.85	
	29-Jun-92	2.94		2.77	
	23-Jun-93	2.49		3.22	14.54
	11-Oct-93	4.08		1.63	14.45

Project No. RC0027.008

Table 2: Depth-to-Water and Groundwater Elevations
United Parcel Service, Inc.
8400 Pardee Drive, Oakland, California.

Well	Date	Depth to Water (a) (feet)	Top of Casing Elevation (feet MSL)	Top of Water Elevation (feet MSL)	Measured Depth of Well (a) (feet)
MW-5	28-Aug-90	7.46	4.93	-2.53	14.77
	20-Sep-90	3.99		0.94	
	19-Jun-91	3.63		1.30	
	23-Jul-91	4.37		0.56	
	26-Aug-91	4.19		0.74	
	18-Nov-91	4.25		0.68	
	3-Feb-92	3.53		1.40	
	29-Jun-92	3.48		1.45	
	23-Jun-93	3.40		1.53	14.29
	11-Oct-93	3.66		1.27	14.40
MW-6	28-Aug-90	7.76	6.27	-1.49	18.10
	20-Sep-90	7.18		-0.91	
	19-Jun-91	7.71		-1.44	
	23-Jul-91	7.90		-1.63	
	26-Aug-91	7.71		-1.44	
	18-Nov-91	6.99		-0.72	
	3-Feb-92	7.19		-0.92	
	29-Jun-92	7.92		-1.65	
	23-Jun-93	7.53		-1.26	19.11
	11-Oct-93	7.60		-1.33	19.20
OW-1	23-Jun-93	4.14	(b)	(b)	18.60
	11-Oct-93	NM			NM

(a) Measured from top of PVC casing.
(b) Well casing elevation unknown.

MSL Mean Sea Level.
NM Not Measured.

Project No. RC0027.008

Table 3: Groundwater Analytical Results
United Parcel Service, Inc.
8400 Pardee Drive, Oakland, California.

Well	Date	TPH Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethyl-benzene (b) (µg/L)	Xylenes (b) (µg/L)
MW-1	28-Aug-90	NA	21,000	3.0	1.4	4.0	2.4
	19-Jun-91	NA	7,100	1.7	0.7	0.5	0.9
	23-Jul-91	220	8,700	1.6	1.1	0.5	1.5
	26-Aug-91	NA	2,800	180.0	120.0	31.0	160.0
	18-Nov-91	NA	6,600	1,1	0.4	0.5	ND(<0.3)
	3-Feb-92	NA	2,200	0.9	ND(<0.3)	0.8	0.7
	29-Jun-92	NA	2,100	0.8	0.4	0.4	0.9
	23-Jun-93	NA	3,200	0.7	ND(<0.5)	0.5	ND(<0.5)
	11-Oct-93	NA	9,600	1.3	ND(<0.5)	ND(<0.5)	ND(<0.5)
MW-2	28-Aug-90	NA	3,500	0.6	0.4	0.6	0.7
	19-Jun-91	NA	ND(<50)	0.5	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Jul-91	ND(<50)	660	0.7	ND(<0.3)	ND(<0.3)	ND(<0.3)
	26-Aug-91	NA	ND(<50)	0.7	ND(<0.3)	ND(<0.3)	ND(<0.3)
	18-Nov-91	NA	3,200	0.8	ND(<0.3)	ND(<0.3)	ND(<0.3)
	3-Feb-92	NA	400	0.7	ND(<0.3)	ND(<0.3)	0.5
	29-Jun-92	NA	250	0.6	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Jun-93	NA	11,000	0.6	ND(<0.5)	ND(<0.5)	ND(<0.5)
	11-Oct-93	NA	1,400	1.2	ND(<0.5)	ND(<0.5)	1.3
MW-3	28-Aug-90	NA	18,000	0.5	0.8	4.3	2.3
	19-Jun-91	NA	1,300	0.4	0.4	1.7	1.4
	23-Jul-91	330	6,800	0.3	ND(<0.3)	1.5	0.5
	26-Aug-91	NA	ND(<50)	13.0	13.0	5.8	26.0
	18-Nov-91	NA	2,500	0.6	ND(<0.3)	ND(<0.3)	ND(<0.3)
	3-Feb-92	NA	1,100	0.4	ND(<0.3)	1.3	0.6
	29-Jun-92	NA	3,200	ND(<0.3)	ND(<0.3)	1.3	0.3
	23-Jun-93	NA	8,100	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	11-Oct-93	NA	7,100	1.0	ND(<0.5)	1.5	2.4

Table 3: Groundwater Analytical Results
United Parcel Service, Inc.
8400 Pardee Drive, Oakland, California.

Well	Date	TPH Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethyl-benzene (b) (µg/L)	Xylenes (b) (µg/L)
MW-4	28-Aug-90	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	19-Jun-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Jul-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	26-Aug-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	18-Nov-91	ND(<50)	60	0.3	ND(<0.3)	ND(<0.3)	ND(<0.3)
	3-Feb-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	29-Jun-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Jun-93	ND(<50)	59	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	11-Oct-93	ND(<50)	90	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
MW-5	28-Aug-90	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	19-Jun-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Jul-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	26-Aug-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	18-Nov-91	ND(<50)	100	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	3-Feb-92	53	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	0.5
	29-Jun-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Jun-93	ND(<50)	61	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	11-Oct-93	ND(<50)	96	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
MW-6	7-Sep-90	ND(<50)	ND(<100)	ND(<0.3)	0.5	ND(<0.3)	1.0
	19-Jun-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Jul-91	ND(<50)	110	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	26-Aug-91	NA	NA	NA	NA	NA	NA
	18-Nov-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	3-Feb-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	29-Jun-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Jun-93	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	11-Oct-93	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)

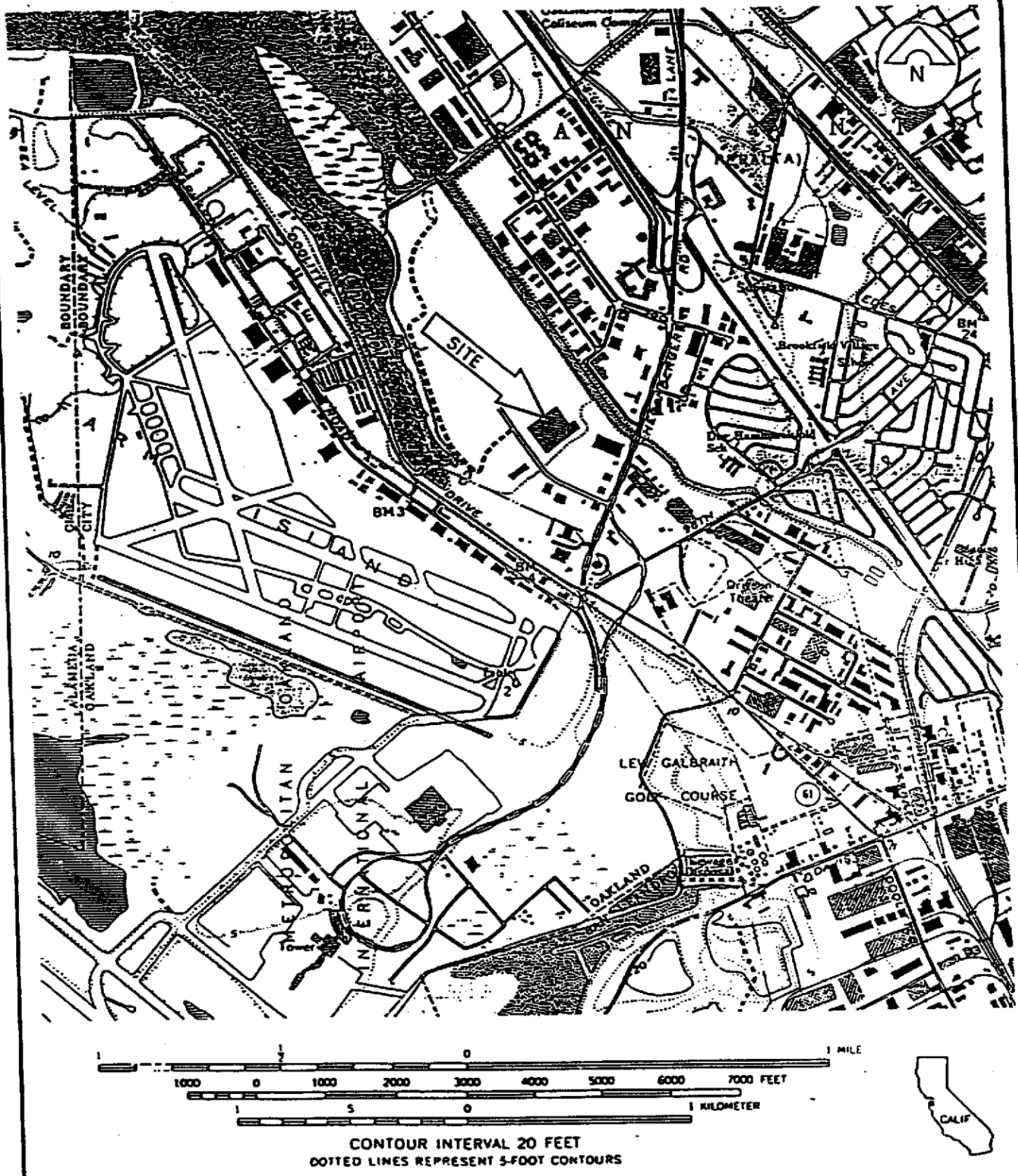
Table 3: Groundwater Analytical Results
United Parcel Service, Inc.
8400 Pardee Drive, Oakland, California.

Well	Date	TPH Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethyl-benzene (b) (µg/L)	Xylenes (b) (µg/L)
OW-1	23-Jun-93	NA	3,400,000	ND(<0.5)	ND(<0.5)	ND(<0.5)	31.0
Trip Blank	26-Aug-91	ND(<50)	NA	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	18-Nov-91	ND(<50)	NA	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	3-Feb-92	ND(<50)	NA	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	29-Jun-92	ND(<50)	NA	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Jun-93	ND(<50)	NA	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	11-Oct-93	ND(<50)	NA	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)

(a) Total Petroleum Hydrocarbons analyzed by modified USEPA Method 8015.
(b) Analyzed by USEPA Method 8020.

ND Not Detected.
NA Not Analyzed.
µg/L micrograms per liter.

August 26, 1991 through June 29, 1992 analyses by Superior Precision Analytical Laboratories, Inc., Martinez, California; June 23 through October 11, 1993 analyses by Sequoia Analytical, Inc. Concord, California.



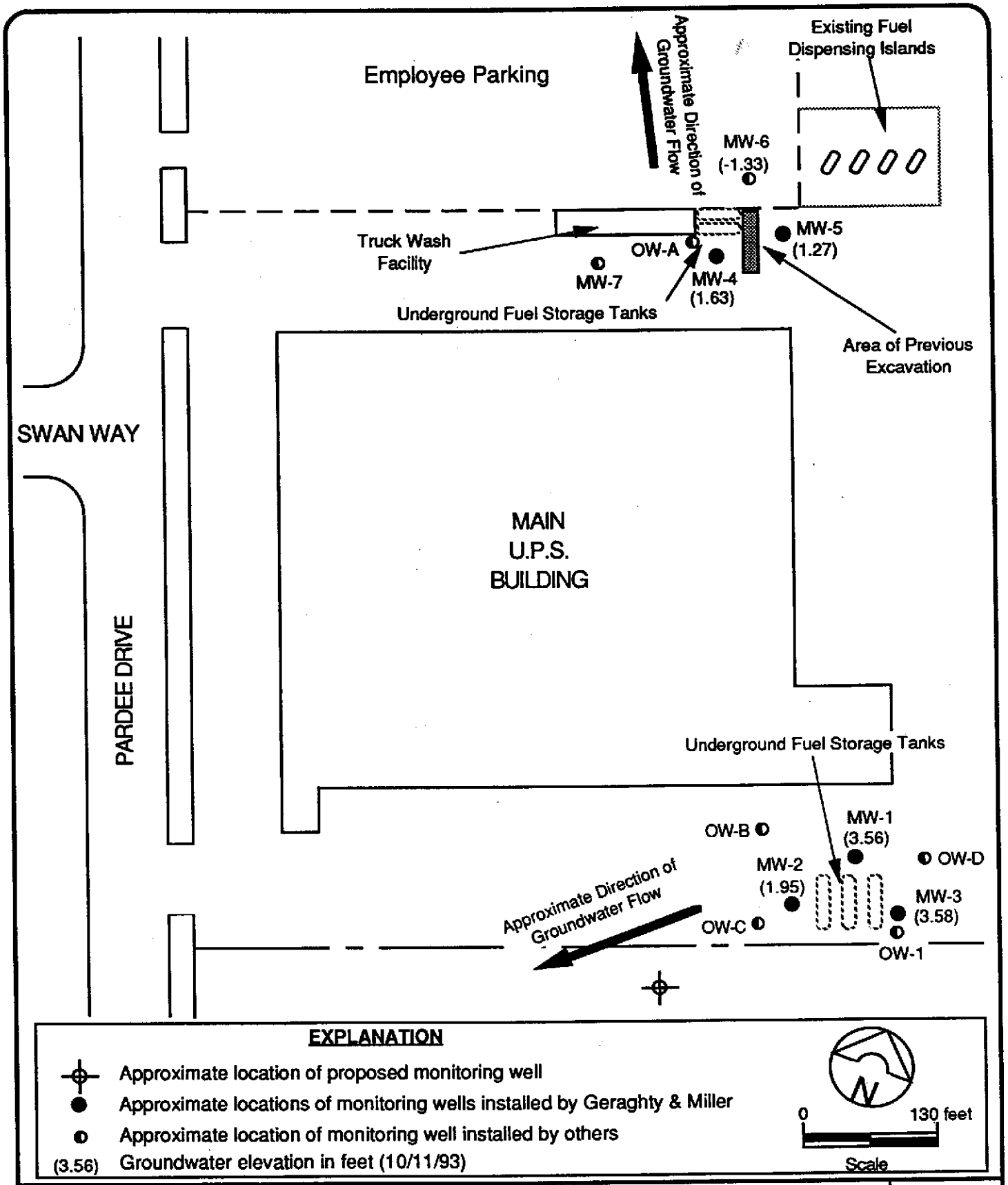
GERAGHTY & MILLER, INC.
Environmental Services

Project No. RC0027.000

SITE VICINITY MAP

UNITED PARCEL SERVICE, INC.
8400 Pardee Drive
Oakland, California

FIGURE
1



GERAGHTY & MILLER, INC.
Environmental Services

Project No. RC0027.000

GROUNDWATER ELEVATION MAP
OCTOBER 1993
UNITED PARCEL SERVICE, INC.
8400 Pardee Drive
Oakland, California

FIGURE
2

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Geraghty & Miller, Inc.	Client Project ID:	RC0027.008	Sampled:	Oct 11, 1993
1050 Marina Way South	Sample Matrix:	Water	Received:	Oct 13, 1993
Richmond, CA 94804	Analysis Method:	EPA 5030/8020	Reported:	Oct 27, 1993
Attention: Michael Bessette	First Sample #:	310-0779		

BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 310-0779 MW-1	Sample I.D. 310-0780 MW-2	Sample I.D. 310-0781 MW-3
Benzene	0.5	1.3	1.2	1.0
Toluene	0.5	N.D.	N.D.	N.D.
Ethyl Benzene	0.5	N.D.	N.D.	1.5
Total Xylenes	0.5	N.D.	1.3	2.4

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Analyzed:	10/20/93	10/20/93	10/20/93
Instrument Identification:	ML #2	ML #2	ML #2
Surrogate Recovery, %: (QC Limits = 70-130%)	104	106	100

Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Karen L. Enstrom
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Geraghty & Miller, Inc.	Client Project ID:	RC0027.008	Sampled: Oct 11, 1993
1050 Marina Way South	Sample Matrix:	Water	Received: Oct 13, 1993
Richmond, CA 94804	Analysis Method:	EPA 5030/8015/8020	Reported: Oct 27, 1993
Attention: Michael Bessette	First Sample #:	310-0782	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 310-0782 MW-4	Sample I.D. 310-0783 MW-5	Sample I.D. 310-0784 MW-6	Sample I.D. 310-0785 Trip Blank
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.
Benzene	0.5	N.D.	N.D.	N.D.	N.D.
Toluene	0.5	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.5	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.5	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0
Date Analyzed:	10/20/93	10/20/93	10/20/93	10/20/93
Instrument Identification:	ML #2	ML #2	ML #2	ML #2
Surrogate Recovery, %: (QC Limits = 70-130%)	103	103	108	105

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Karen L. Enstrom
Project Manager

SEQUOIA ANALYTICAL
1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Geraghty & Miller, Inc.	Client Project ID:	RC0027.008	Sampled: Oct 11, 1993
1050 Marina Way South	Sample Matrix:	Water	Received: Oct 13, 1993
Richmond, CA 94804	Analysis Method:	EPA 3510/3520/8015	Reported: Oct 27, 1993
Attention: Michael Bessette	First Sample #:	310-0779	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 310-0779 MW-1	Sample I.D. 310-0780 MW-2	Sample I.D. 310-0781 MW-3	Sample I.D. 310-0782 MW-4	Sample I.D. 310-0783 MW-5	Sample I.D. 310-0784 MW-6
Extractable Hydrocarbons	50	9,600	1,400	7,100	90	96	N.D.
Chromatogram Pattern:		Diesel	Diesel and Non-Diesel Mixture (>C20)	Diesel	Diesel	Diesel	--

Quality Control Data

Report Limit Multiplication Factor:	10	1.0	10	1.0	1.0	1.0
Date Extracted:	10/20/93	10/20/93	10/20/93	10/20/93	10/20/93	10/20/93
Date Analyzed:	10/22/93	10/21/93	10/22/93	10/21/93	10/21/93	10/21/93
Instrument Identification:	HP-3A	HP-3B	HP-3A	HP-3A	HP-3A	HP-3A

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

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Karen L. Enstrom
Project Manager

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Geraghty & Miller, Inc.	Client Project ID:	RC0027.008
1050 Marina Way South	Matrix:	Water
Richmond, CA 94804		
Attention: Michael Bessette	QC Sample Group: 3100779-85	Reported: Oct 27, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	J. Dinsay	J. Dinsay	J. Dinsay	J. Dinsay	K.Wimer
Conc. Spiked:	20	20	20	60	300
Units:	µg/L	µg/L	µg/L	µg/L	µg/L
LCS Batch#:	GBLK102093	GBLK102093	GBLK102093	GBLK102093	BLK102093
Date Prepared:	10/20/93	10/20/93	10/20/93	10/20/93	10/20/93
Date Analyzed:	10/20/93	10/20/93	10/20/93	10/20/93	10/21/93
Instrument I.D.#:	ML #2	ML #2	ML #2	ML #2	HP-3A
LCS % Recovery:	115	105	110	110	99
Control Limits:	70-130	70-130	70-130	70-130	80-120
MS/MSD Batch #:	G3100782	G3100782	G3100782	G3100782	BLK102093
Date Prepared:	10/20/93	10/20/93	10/20/93	10/20/93	10/20/93
Date Analyzed:	10/20/93	10/20/93	10/20/93	10/20/93	10/21/93
Instrument I.D.#:	ML #2	ML #2	ML #2	ML #2	HP-3A
Matrix Spike % Recovery:	110	100	105	105	99
Matrix Spike Duplicate % Recovery:	108	100	105	103	97
Relative % Difference:	1.8	0.0	0.0	1.9	1.7

SEQUOIA ANALYTICAL

Karen L. Enstrom
Project Manager

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

GERAGHTY & MILLER, INC.
Environmental Services

Laboratory Task Order No. ________

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project Number RC0027.008

Project Location UPS/OAKLAND

Laboratory SEQUOIA · CONCORD (510) 686-9600

Sampler(s)/Affiliation SEAN BISCH G&M

SAMPLE BOTTLE / CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	BTEX 8020	TPH-DIESEL 8015 MOD.	TPH-GAS/BTEX 8015/8020							TOTAL
MW-1	L	10/11/93 1350		X	X								4
MW-2		10/11/93 1414		X	X								4
MW-3		10/11/93 1324		X	X								4
MW-4		10/11/93 1258			X	X							4
MW-5		10/11/93 1311			X	X							4
MW-6		10/11/93 1241			X	X							4
MW-7		Not Sampled			X	X							~~4~~
TRIP BLANK		10/11/93				X							1

Total No. of Bottles/Containers: 25

Sample Code: L = Liquid; S = Solid; A = Air

Relinquished by: Sean Bisch	Organization: Geraghty & Miller	Date / /	Time 455p	Seal Intact? Yes No N/A
Received by: [signature]	Organization: Sequoia [illegible]	Date 10/13/93	Time 455p	
Relinquished by:	Organization:	Date / /	Time	Seal Intact? Yes No N/A
Received by:	Organization:	Date / /	Time	

Special Instructions/Remarks:
- FAX & MAIL RESULTS TO MICHAEL BESSETTE.
- 10-DAY TURNAROUND TIME

Delivery Method: ☐ In Person ☐ Common Carrier ________ SPECIFY ☐ Lab Courier ☐ Other ________ SPECIFY