

March 2, 1995
Project No. RC0027.011

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Mr. Dan Lee
United Parcel Service, Inc.
8400 Pardee Drive
Oakland, California 94621

SUBJECT: Results of Groundwater Monitoring, February 1, 1995, United Parcel Service, Inc. Facility, 8400 Pardee Drive, Oakland, California.

Dear Mr. Lee:

This letter report presents the results of the groundwater monitoring and sampling performed on February 1, 1995, at 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, Inc. (Geraghty & Miller) document to UPS dated November 9, 1994, and modified at the request of UPS in a Geraghty & Miller letter dated November 21, 1994.

GROUNDWATER SAMPLING PROCEDURES

Groundwater samples were collected from Monitoring Wells MW-1, MW-2, MW-3, and MW-7 on February 1, 1995 (Figure 2). Prior to sampling, depth to water was measured, and each well was checked for the presence of liquid-phase hydrocarbons (LPH). LPH were not observed in any of the monitor wells.

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 groundwater were purged from each well 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 Redwood City, California, along with



appropriate chain-of-custody documentation. All groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by USEPA Method 8015, modified, total petroleum hydrocarbons as diesel (TPH-D) by USEPA Method 8015, modified, and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by USEPA Method 8020. In addition, the sample collected from Monitor Well MW-7 was also analyzed for total oil and grease (USEPA Method 5520F). 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 (USEPA Method 8015, modified) and BTEX (USEPA Method 8020).

RESULTS

Depth-to-water measurements and groundwater elevations for the wells are presented in Table 2. Monitor Well MW-6 was obstructed by a vehicle and no depth-to-water measurement was taken. Based on the groundwater elevations, the direction of shallow groundwater flow in the vicinity of the southern fueling facilities is generally toward the south-southwest (Figure 2).

The results of groundwater analyses for the February 1, 1995 sampling event are summarized in Table 3. In the vicinity of the underground storage tanks beneath the southeastern portion of the site, TPH-D was detected at concentrations ranging from 2,100 micrograms per liter ($\mu\text{g/L}$) (Well MW-2) to 10,000 $\mu\text{g/L}$ (Well MW-1). TPH-G was detected at concentrations of 510 $\mu\text{g/L}$ (MW-1) and 810 $\mu\text{g/L}$ (MW-3). BTEX concentrations are summarized in Table 3.

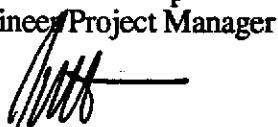
In the vicinity of the underground storage tanks beneath the northeastern portion of the site, TPH-D was detected in samples collected from Monitor Well MW-7 (420 $\mu\text{g/L}$). TPH-G, BTEX and total oil and grease were not detected in the sample collected from Monitor Well MW-7. TPH-G and BTEX were not detected in the trip blank.

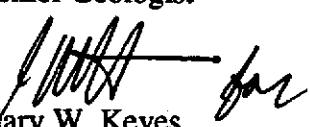


Geraghty & Miller appreciates the opportunity to be of service to UPS. If you have any questions regarding this letter report, please do not hesitate to call.

Sincerely,
GERAGHTY & MILLER, INC.


Edward H. Crump
Project Manager


Jeffrey W. Hawkins, R.G.
Senior Geologist


Gary W. Keyes
Principal Engineer/Associate
Richmond, California Office 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 Location Map
Figure 2	Groundwater Elevation Map (February 1995)
Attachment 1	Copies of Certified Laboratory Analytical Results and Chain-of-Custody Documentation

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



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 ($\mu\text{S}/\text{cm}$)	Temperature (°F)			
MW-1	1-Feb-95	33.40	40.0	6.43	1,523	60.6	1.84	14.33	4
MW-2	1-Feb-95	28.00	13.0 (c)	5.50	OR	62.4	4.00	14.40	4
MW-3	1-Feb-95	33.12	35.0	6.33	OR	61.8	2.43	14.61	4
MW-4	1-Feb-95	31.88	NM	NM	NM	NM	2.58	14.65	4
MW-5	1-Feb-95	27.44	NM	NM	NM	NM	3.87	14.42	4
MW-6	1-Feb-95	73.40	NM	NM	NM	NM	NM	NM	6
MW-7	1-Feb-95	4.80	6.0 (c)	7.10	OR	62.8	6.35	16.56	2

(a) Based on four casing volumes.

(b) Measured from top of PVC casing.

(c) Well went dry prior to purging four casing volumes.

NM Not Measured

SC Specific Conductance

OR Out of Range

$\mu\text{S}/\text{cm}$ microSiemens per centimeter



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	NM
	19-Jun-91	3.47		3.96	NM
	23-Jul-91	3.70		3.73	NM
	26-Aug-91	3.92		3.51	NM
	18-Nov-91	4.21		3.22	NM
	3-Feb-92	3.99		3.44	NM
	29-Jun-92	3.38		4.05	NM
	23-Jun-93	2.72		4.71	14.20
	11-Oct-93	3.87		3.56	14.27
	4-Jan-94	3.34		4.09	14.10
	10-May-94	2.14		5.29	NM
	1-Feb-95	1.84		5.59	14.33
MW-2	28-Aug-90	4.98	7.15	2.17	15.35
	20-Sep-90	4.94		2.21	NM
	19-Jun-91	4.66		2.49	NM
	23-Jul-91	4.81		2.34	NM
	26-Aug-91	4.89		2.26	NM
	18-Nov-91	4.93		2.22	NM
	3-Feb-92	4.44		2.71	NM
	29-Jun-92	4.80		2.35	NM
	23-Jun-93	4.38		2.77	14.35
	11-Oct-93	5.20		1.95	14.35
	4-Jan-94	4.56		2.59	14.15
	10-May-94	4.22		2.93	NM
	1-Feb-95	4.00		3.15	14.40
MW-3	28-Aug-90	3.88	7.42	3.54	14.60
	20-Sep-90	3.99		3.43	NM
	19-Jun-91	3.49		3.93	NM
	23-Jul-91	3.71		3.71	NM
	26-Aug-91	3.94		3.48	NM
	18-Nov-91	4.23		3.19	NM
	3-Feb-92	4.01		3.41	NM
	29-Jun-92	3.40		4.02	NM
	23-Jun-93	2.75		4.67	14.50
	11-Oct-93	3.84		3.58	14.45
	4-Jan-94	3.40		4.02	14.33
	10-May-94	2.25		5.17	NM
	1-Feb-95	2.43		4.99	14.61

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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-4	28-Aug-90	3.15	5.71	2.56	14.66
	20-Sep-90	3.19		2.52	NM
	19-Jun-91	2.73		2.98	NM
	23-Jul-91	3.07		2.64	NM
	26-Aug-91	4.32		1.39	NM
	18-Nov-91	4.03		1.68	NM
	3-Feb-92	3.86		1.85	NM
	29-Jun-92	2.94		2.77	NM
	23-Jun-93	2.49		3.22	14.54
	11-Oct-93	4.08		1.63	14.45
	4-Jan-94	3.49		2.22	14.37
	10-May-94	2.73		2.98	NM
	1-Feb-95	2.58		3.13	14.65
MW-5	28-Aug-90	7.46	4.93	-2.53	14.77
	20-Sep-90	3.99		0.94	NM
	19-Jun-91	3.63		1.30	NM
	23-Jul-91	4.37		0.56	NM
	26-Aug-91	4.19		0.74	NM
	18-Nov-91	4.25		0.68	NM
	3-Feb-92	3.53		1.40	NM
	29-Jun-92	3.48		1.45	NM
	23-Jun-93	3.40		1.53	14.29
	11-Oct-93	3.66		1.27	14.40
	4-Jan-94	3.72		1.21	14.19
	10-May-94	4.44		0.49	NM
	1-Feb-95	3.87		1.06	14.42
MW-6	28-Aug-90	7.76	6.27	-1.49	18.10
	20-Sep-90	7.18		-0.91	NM
	19-Jun-91	7.71		-1.44	NM
	23-Jul-91	7.90		-1.63	NM
	26-Aug-91	7.71		-1.44	NM
	18-Nov-91	6.99		-0.72	NM
	3-Feb-92	7.19		-0.92	NM
	29-Jun-92	7.92		-1.65	NM
	23-Jun-93	7.53		-1.26	19.11
	11-Oct-93	7.60		-1.33	19.20
	4-Jan-94	7.27		-1.00	19.10
	10-May-94	7.43		-1.16	NM
	1-Feb-95	NM		NM	NM

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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-7	4-Jan-94	7.75	(b)	(b)	16.16
	10-May-94	7.44			NM
	1-Feb-95	6.35			16.56
OW-1	23-Jun-93	4.14	(b)	(b)	18.60
	11-Oct-93	NM			NM
	4-Jan-94	NM			NM
	10-May-94	NM			NM
	1-Feb-95	NM			NM

(a) Measured from top of PVC casing.

(b) Well casing elevation unknown.

MSL Mean Sea Level
 NM Not Measured



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

Well	Date	TPH Gasoline (a) ($\mu\text{g/L}$)	TPH Diesel (b) ($\mu\text{g/L}$)	Benzene (c) ($\mu\text{g/L}$)	Toluene (c) ($\mu\text{g/L}$)	Ethyl- benzene (c) ($\mu\text{g/L}$)	Total Xylenes (c) ($\mu\text{g/L}$)	Total Oil & Grease (mg/L)
MW-1	28-Aug-90	NA	21,000	3.0	1.4	4.0	2.4	NA
	19-Jun-91	NA	7,100	1.7	0.7	0.5	0.9	NA
	23-Jul-91	220	8,700	1.6	1.1	0.5	1.5	NA
	26-Aug-91	NA	2,800	180	120	31	160	NA
	18-Nov-91	NA	6,600	1.1	0.4	0.5	ND(<0.3)	NA
	3-Feb-92	NA	2,200	0.9	ND(<0.3)	0.8	0.7	NA
	29-Jun-92	NA	2,100	0.8	0.4	0.4	0.9	NA
	23-Jun-93	NA	3,200	0.66	ND(<0.5)	0.5	ND(<0.5)	NA
	11-Oct-93	NA	9,600	1.3	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	4-Jan-94	NA	12,000	2.1	0.65	1.3	2.1	NA
	10-May-94	NA	6,400	(e)	0.54	0.53	ND(<0.5)	1.1
	1-Feb-95	510	10,000	(f)	ND(<1.0)	ND(<1.0)	1.0	ND(<1.0)
MW-2	28-Aug-90	NA	3,500	0.6	0.4	0.6	0.7	NA
	19-Jun-91	NA	ND(<50)	0.5	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	23-Jul-91	ND(<50)	660	0.7	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	26-Aug-91	NA	ND(<50)	0.7	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	18-Nov-91	NA	3,200	0.8	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	3-Feb-92	NA	400	0.7	ND(<0.3)	ND(<0.3)	0.5	NA
	29-Jun-92	NA	250	0.6	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	23-Jun-93	NA	11,000	0.55	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	11-Oct-93	NA	1,400	1.2	ND(<0.5)	ND(<0.5)	1.3	NA
	4-Jan-94	NA	3,700	0.72	ND(<0.5)	ND(<0.5)	1.1	NA
	10-May-94	NA	2,300	(e)	0.74	ND(<0.5)	ND(<0.5)	0.7
	1-Feb-95	ND(<100)	2,100	(d)	2.1	ND(<1.0)	ND(<1.0)	ND(<1.0)
MW-3	28-Aug-90	NA	18,000	0.5	0.8	4.3	2.3	NA
	19-Jun-91	NA	1,300	0.4	0.4	1.7	1.4	NA
	23-Jul-91	330	6,800	0.3	ND(<0.3)	1.5	0.5	NA
	26-Aug-91	NA	ND(<50)	13	13	5.8	26	NA
	18-Nov-91	NA	2,500	0.6	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	3-Feb-92	NA	1,100	0.4	ND(<0.3)	1.3	0.6	NA
	29-Jun-92	NA	3,200	ND(<0.3)	ND(<0.3)	1.3	0.3	NA
	23-Jun-93	NA	8,100	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	11-Oct-93	NA	7,100	1.0	ND(<0.5)	1.5	2.4	NA
	4-Jan-94	NA	7,400	ND(<0.5)	ND(<0.5)	1.6	ND(<0.5)	NA
	10-May-94	NA	5,700	(e)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	1-Feb-95	810	10,000	(f)	ND(<1.0)	ND(<1.0)	2.7	4.1
MW-4	28-Aug-90	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	19-Jun-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	23-Jul-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	26-Aug-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	18-Nov-91	ND(<50)	60	0.3	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	3-Feb-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	29-Jun-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	23-Jun-93	ND(<50)	59	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	11-Oct-93	ND(<50)	90	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	4-Jan-94	ND(<50)	110	(d)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	10-May-94	ND(<50)	100	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	1-Feb-95	NS	NS	NS	NS	NS	NS	NA



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

Well	Date	TPH	TPH	Benzene (c) (µg/L)	Toluene (c) (µg/L)	Ethyl-	Total	Total
		Gasoline (a) (µg/L)	Diesel (b) (µg/L)			benzene (c) (µg/L)	Xylenes (c) (µg/L)	Oil & Grease (mg/L)
MW-5	28-Aug-90	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	19-Jun-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	23-Jul-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	26-Aug-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	18-Nov-91	ND(<50)	100	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	3-Feb-92	53	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	0.5	NA
	29-Jun-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	23-Jun-93	ND(<50)	61	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	11-Oct-93	ND(<50)	96	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	4-Jan-94	ND(<50)	100	(d)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	10-May-94	ND(<50)	190	ND(<0.5)	0.74	1.2	1.7	NA
	1-Feb-95	NS	NS	NS	NS	NS	NS	NA
MW-6	7-Sep-90	ND(<50)	ND(<100)	ND(<0.3)	0.5	ND(<0.3)	1.0	NA
	19-Jun-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	23-Jul-91	ND(<50)	110	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	26-Aug-91	NA	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)	NA
	3-Feb-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	29-Jun-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	NA
	23-Jun-93	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	11-Oct-93	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	4-Jan-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	10-May-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	1-Feb-95	NS	NS	NS	NS	NS	NS	NA
MW-7	4-Jan-94	ND(<50)	250	(d)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	10-May-94	ND(<50)	250	(e)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	1-Feb-95	ND(<50)	420	(f)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<5.0)
OW-1	23-Jun-93	NA	3,400,000	ND(<0.5)	ND(<0.5)	ND(<0.5)	31.0	NS
	4-Jan-94	NS	NS	NS	NS	NS	NS	NS
	10-May-94	NS	NS	NS	NS	NS	NS	NS
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)	
	4-Jan-94	ND(<50)	NA	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	
	10-May-94	ND(<50)	NA	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	
	1-Feb-95	ND(<50)	NA	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	

(Remarks on following page.)



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

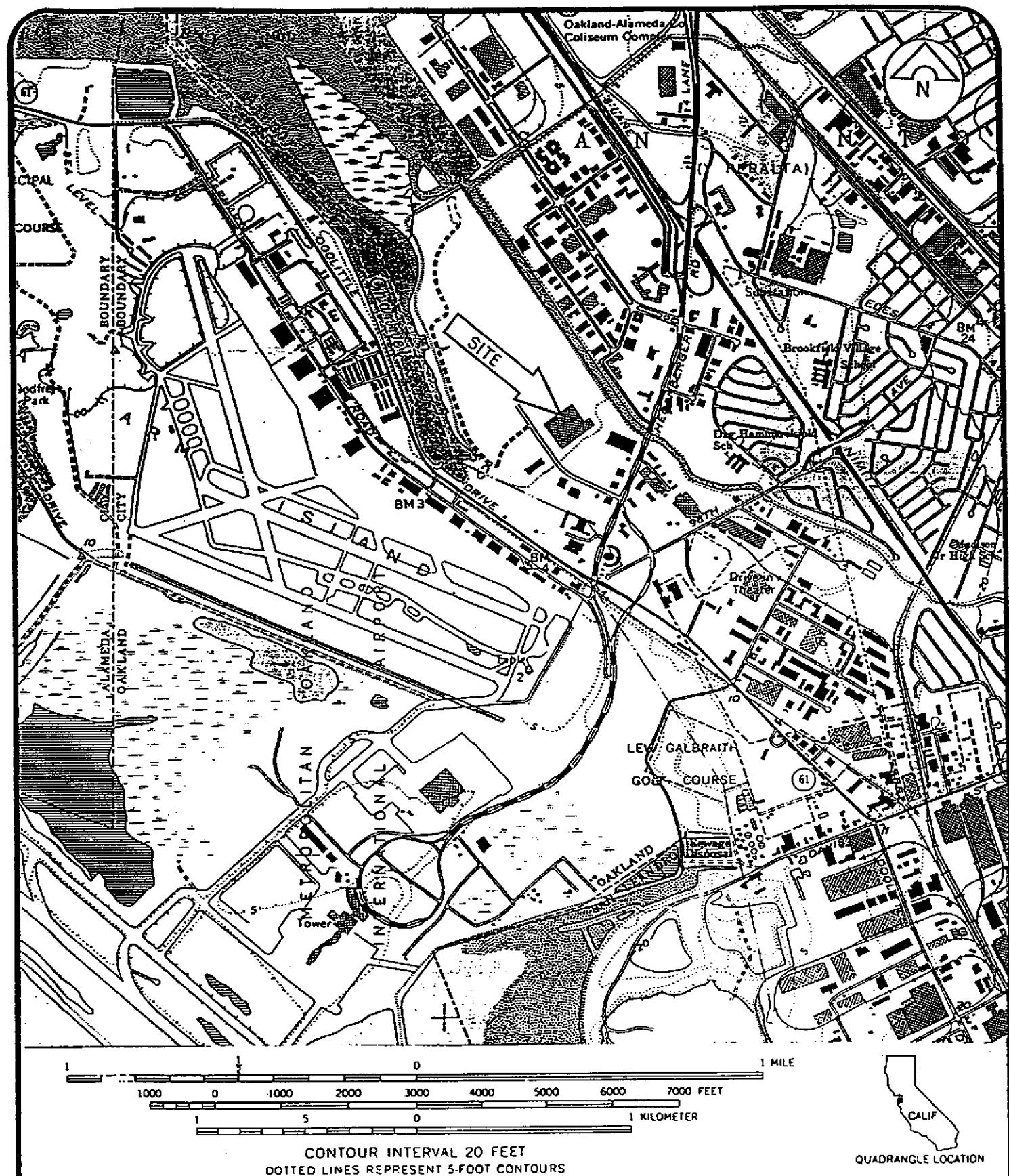
Well	Date	TPH Gasoline (a) (µg/L)	TPH Diesel (b) (µg/L)	Benzene (c) (µg/L)	Toluene (c) (µg/L)	Ethyl- benzene (c) (µg/L)	Total Xylenes (c) (µg/L)	Total Oil & Grease (mg/L)
(a) Total Petroleum Hydrocarbons as Gasoline analyzed by USEPA Method 5030/8015 modified.								
(b) Total Petroleum Hydrocarbons as Diesel analyzed by USEPA Method 3510/8015 modified.								
(c) BTEX analyzed by USEPA Method 5030/8020.								
(d) Reported by the laboratory as a diesel and nondiesel mixture.								
(e) Reported by the laboratory as a diesel and unidentified hydrocarbons > C20.								
(f) Reported by the laboratory as a nondiesel mixture.								
ND		Not Detected						
NA		Not Analyzed						
NS		Not Sampled						
µg/L		micrograms per liter						
mg/L		Miligrams per liter						

August 26, 1991 through June 29, 1992 analyses by Superior Precision Analytical Laboratories, Inc., Martinez, California.

June 23, 1993 through May 10, 1994 analyses by Sequoia Analytical, Inc., Concord, California.

February 1, 1995 analysis by Sequoia Analytical, Inc., Redwood City, California.



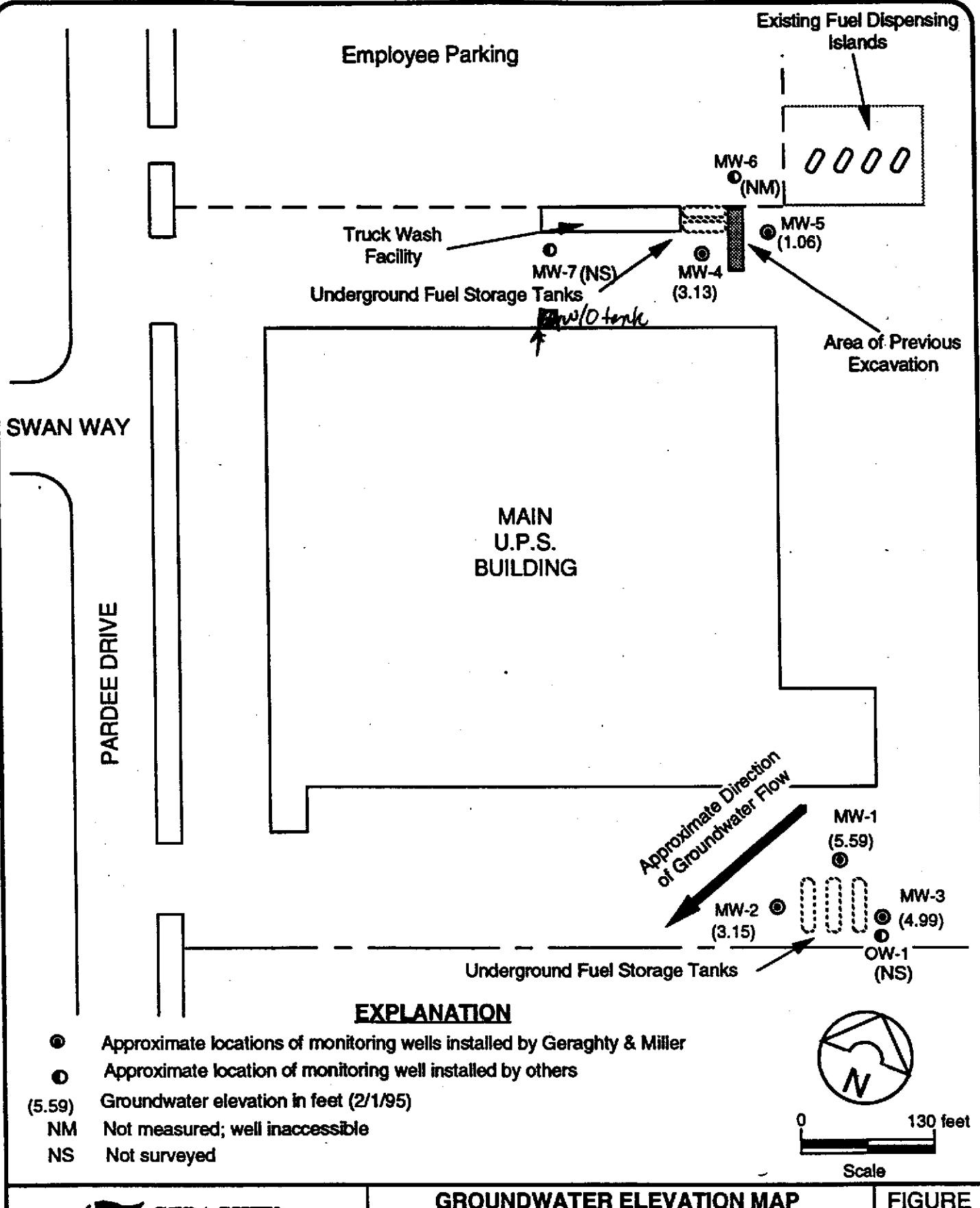


The logo for Geraghty & Miller, Inc. Environmental Services. It features a stylized graphic of three overlapping shapes resembling leaves or wings on the left, followed by the company name "GERAGHTY & MILLER, INC." in a bold, serif font, with "Environmental Services" in a smaller, italicized, serif font below it.

SITE LOCATION MAP
United Parcel Service
Package Distribution Facility
Oakland, California

FIGURE

1



**GERAGHTY
& MILLER, INC.**
Environmental Services

Project No. RC0027.000

**GROUNDWATER ELEVATION MAP
FEBRUARY 1995**
UNITED PARCEL SERVICE, INC.
8400 Pardee Drive
Oakland, California

**FIGURE
2**

ENVIRONMENTAL
PROTECTION

95 MAR 21 AM 8:05

ATTACHMENT 1

**COPIES OF CERTIFIED LABORATORY ANALYTICAL RESULTS
AND CHAIN-OF-CUSTODY DOCUMENTATION**



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
1900 Bates Avenue, Suite L Concord, CA 94520 (510) 686-9600 FAX (510) 686-9689
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Geraghty & Miller
1050 Marina Way South
Richmond, CA 94504

Attention: Edward Crump

Client Proj. ID: RC0027.010, 8400 Pardee Dr.
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9502224-01

Sampled: 02/01/95
Received: 02/03/95
Extracted: 02/27/95
Analyzed: 02/28/95
Reported: 03/01/95

QC Batch Number: GC0224950HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Non Diesel Mix	..... 500	..... 10000
	.....	..... C9-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery Q

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Todd Olive
Project Manager



**Sequoia
Analytical**

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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94504

Attention: Edward Crump

Client Proj. ID: RC0027.010, 8400 Pardee Dr.
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9502224-01

Sampled: 02/01/95
Received: 02/03/95

Analyzed: 02/17/95
Reported: 03/01/95

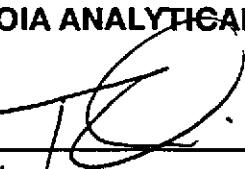
QC Batch Number: GC021795BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	510
Benzene	1.0	N.D.
Toluene	1.0	N.D.
Ethyl Benzene	1.0	1.0
Xylenes (Total)	1.0	N.D.
Chromatogram Pattern: Non Gas Mix	.....	>C8
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 90

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Todd Olive
Project Manager



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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94504
Attention: Edward Crump

Client Proj. ID: RC0027.010, 8400 Pardee Dr.
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9502224-02

Sampled: 02/01/95
Received: 02/03/95
Extracted: 02/10/95
Analyzed: 02/11/95
Reported: 03/01/95

QC Batch Number: GC0209950HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Diesel & Non Diesel Mix	..... 50	..... 2100
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 186 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Page:

4



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Analytical**

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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94504

Attention: Edward Crump

Client Proj. ID: RC0027.010, 8400 Pardee Dr.
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9502224-02

Sampled: 02/01/95
Received: 02/03/95

Analyzed: 02/17/95
Reported: 03/01/95

QC Batch Number: GC021795BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	N.D.
Benzene	1.0	2.1
Toluene	1.0	N.D.
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	1.0	N.D.
Chromatogram Pattern: Non Gas Mix	.....	>C10

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

Analyses reported as N.D. were not present above the stated limit of detection.

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Todd Olive
Project Manager



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1050 Marina Way South
Richmond, CA 94504
Attention: Edward Crump

Client Proj. ID: RC0027.010, 8400 Pardee Dr.
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9502224-03

Sampled: 02/01/95
Received: 02/03/95
Extracted: 02/10/95
Analyzed: 02/11/95
Reported: 03/01/95

QC Batch Number: GC0209950HBPEXA
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	500
Chromatogram Pattern: Non Diesel Mix	.....	10000
	.....	C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	0 Q

Analytes reported as N.D. were not present above the stated limit of detection.

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Project Manager



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1050 Marina Way South
Richmond, CA 94504
Attention: Edward Crump

Client Proj. ID: RC0027.010, 8400 Pardee Dr.
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9502224-03

Sampled: 02/01/95
Received: 02/03/95
Analyzed: 02/17/95
Reported: 03/01/95

QC Batch Number: GC021795BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	810
Benzene	1.0	N.D.
Toluene	1.0	N.D.
Ethyl Benzene	.....	2.7
Xylenes (Total)	1.0	4.1
Chromatogram Pattern: Non Gas Mix	.....	>C8
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 91

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager



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Analytical**

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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94504

Attention: Edward Crump

Client Proj. ID: RC0027.010, 8400 Pardee Dr.
Sample Descript: MW-7
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9502224-04

Sampled: 02/01/95
Received: 02/03/95
Extracted: 02/10/95
Analyzed: 02/11/95
Reported: 03/01/95

QC Batch Number: GC0209950HBPEXA
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	50
Chromatogram Pattern: Non Diesel Mix	.....	420
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	117

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager



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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94504
Attention: Edward Crump

Client Proj. ID: RC0027.010, 8400 Pardee Dr.
Sample Descript: MW-7
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9502224-04

Sampled: 02/01/95
Received: 02/03/95
Analyzed: 02/17/95
Reported: 03/01/95

QC Batch Number: GC021795BTEX06A
Instrument ID: GCHP06

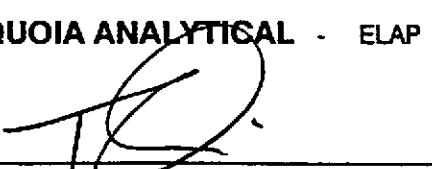
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	98

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Todd Olive
Project Manager



Sequoia
Analytical

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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94504

Attention: Edward Crump

Client Proj. ID: RC0027.010, 8400 Pardee Dr.

Lab Proj. ID: 9502224

Sampled: 02/01/95

Received: 02/03/95

Analyzed: see below

Reported: 03/01/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9502224-04 Sample Desc : LIQUID,MW-7	mg/L	02/13/95	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive 1900 Bares Avenue, Suite L 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Concord, CA 94520 Sacramento, CA 95834	(415) 364-9600 (510) 686-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 686-9689 FAX (916) 921-0100
---	---	--	--

Geraghty & Miller
1050 Marina Way South
Richmond, CA 94504

Attention: Edward Crump

Client Proj. ID: RC0027.010, 8400 Pardee Dr.
Sample Descript: TB-LB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9502224-05

Sampled: 02/01/95
Received: 02/03/95

Analyzed: 03/06/95
Reported: 03/07/95

QC Batch Number: GC030695BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	83

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #2000

Todd Olive
Project Manager



Laboratory Task Order No. _____

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project Number KC0027.010

Project Location 8400 Pardee Driv

Laboratory Sausalito / Redwood City

Sampler(s)/Affiliation G. Crowley
Geography & Miller

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID
-----------------	------	----------------------	--------

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

Total No. of Bottles/
Containers

Relinquished by: <u>Mary Clegg</u>	Organization: <u>Georgina Miller</u>	Date <u>2/3/95</u> Time <u>10:30</u>	Seal Intact? <u>Yes</u>
Received by: <u>Charles D.</u>	Organization: <u>Singhale</u>	Date <u>2/3/95</u> Time <u>10:30</u>	<u>N/A</u>
Relinquished by: <u>Charles D.</u>	Organization: <u>Sequoia</u>	Date <u>2/3/95</u> Time <u>1:50</u>	Seal Intact? <u>Yes</u>
Received by: <u>N.M. M.</u>	Organization: <u>sequoia</u>	Date <u>2/3/95</u> Time <u>1:50</u>	<u>N/A</u>

Special Instructions/Remarks: Send Results to Edward Gramp
1050 Marina Way South
Richmond, BC V6V 1Z2 510 233 3200
(Normal Turnaround)

Delivery Method: In Person Common Carrier _____ Lab Courier Other _____



Laboratory Task Order No. _____

CHAIN-OF-CUSTODY RECORD

Page _____ of _____

Project Number Rc0027.010

Project Location UPS Oakland

Laboratory Seyvoia Analytical

Sampler(s)/Affiliation G. Crowley
Georgatty & Miller

SAMPLE IDENTITY Code Date/Time
Sampled Lab ID

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

**Total No. of Bottles/
Containers**

Distinguished by $H_2 \rightarrow C_{60}^-$

Relinquished by: *[Signature]*
Received by: *[Signature]*

Organization: ~~Garcia & Miller~~

Organization: Cognac

Date 3/22/95 Time 11:05

Date 3/22/17 Time 11:0

Seal Intact?

Yes No N/A

W. H. McLean

Organization: SERVIA

Organization: Searcy's

Date 2/22/95 Time 1:3

Date 2/22/95 Time 133

Seal Intact?

Yes No N/A

Special Instructions/Remarks:

Delivery Method: In Person Common Carrier _____ **SPECIFY**

Lab Courier Other _____

SPECIFY