GERAGHTY
& MILLER, INC.
Environmental Services

A Heidemij company

August 29, 1995
Project No. RC0027.011

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

SUBJECT: Results of Groundwater Monitoring, August 2, 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 August 2, 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 August 2, 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 Analytical, Walnut Creek, 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 document 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 Monitor Wells MW-1 through MW-5 and MW-7 are presented in Table 2. Monitor Well MW-6 was covered 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 remains generally toward the south-southwest (Figure 2).

The results of groundwater analyses for the August 2, 1995 sampling event are summarized in Table 3. TPH-D was detected at concentrations ranging from 3,600 micrograms per liter (µg/L) to 8,700 µg/L (MW-2 and MW-1, respectively) in the southeastern portion of the site and at 360 µg/L (MW-7) in the northeastern portion of the site. TPH-G was detected at concentrations ranging from 210 µg/L to 1,200 µg/L (MW-2 and MW-3, respectively) in the southeastern portion of the site and was not detected in the samples collected from the northeastern portion of the site. BTEX and total oil and grease were not detected in any of the samples collected.

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
Engineer/Project Manager

Jeffrey W. Hawkins, R.G.
Senior Geologist

Gary W. Keyes
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 Location Map
Figure 2	Groundwater Elevation Map (August 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

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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 (µS/cm)	Temperature (°F)			
MW-1	2-Aug-95	29.00	30.0	7.0	2,440	77	3.10	14.33	4
MW-2	2-Aug-95	25.20	10 (c)	7.0	4,390	76	4.71	14.40	4
MW-3	2-Aug-95	29.60	15 (c)	7.0	2,620	74	3.20	14.61	4
MW-4	2-Aug-95	NM	NM	NM	NM	NM	4.24	14.65	4
MW-5	2-Aug-95	NM	NM	NM	NM	NM	2.92	14.42	4
MW-6	2-Aug-95	NM	NM	NM	NM	NM	NM	NM	6
MW-7	2-Aug-95	6.33	6.0 (c)	7.0	1,070	78	NM	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
µS/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
	2-Aug-95	3.10		4.33	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
	2-Aug-95	4.71		2.44	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

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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)
	10-May-94	2.25		5.17	NM
	1-Feb-95	2.43		4.99	14.61
	2-Aug-95	3.20		4.22	14.61
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
	2-Aug-95	4.24		1.47	NM
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
	2-Aug-95	2.92		2.01	NM
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

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)
	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
	2-Aug-95	NM		NM	NM
MW-7	4-Jan-94	7.75	(b)	(b)	16.16
	10-May-94	7.44			NM
	1-Feb-95	6.35			16.56
	2-Aug-95	6.70			16.60
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
	2-Aug-95	NM		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) (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)
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	NA
	1-Feb-95	510	10,000	(f)	ND(<1.0)	ND(<1.0)	1.0	ND(<1.0)	NA
	2-Aug-95	510	8,700		ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	NA
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	NA
	1-Feb-95	ND(<100)	2,100	(d)	2.1	ND(<1.0)	ND(<1.0)	ND(<1.0)	NA
	2-Aug-95	210	3,600		ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	NA
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)	ND(<0.5)	NA
	1-Feb-95	810	10,000	(f)	ND(<1.0)	ND(<1.0)	2.7	4.1	NA
	2-Aug-95	1,200	6,500		ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	NA
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)	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
	2-Aug-95	NS	NS		NS	NS	NS	NS	NA

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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)
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)	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
	2-Aug-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
	2-Aug-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)	ND(<0.5)	NA
	10-May-94	ND(<50)	250 (e)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	NA
	1-Feb-95	ND(<50)	420	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<5.0)
	2-Aug-95	ND(<50)	360	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)
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)	
	2-Aug-95	ND(<50)	NA	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	

Notes appear on the 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 lter

August 26, 1991 through June 29, 1992 analyses by Superior Precision Analytical Laboratories, Inc., Martinez, Californ
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.
August 2, 1995 analysis by Sequoia Analytical, Inc., Walnut Creek, California.

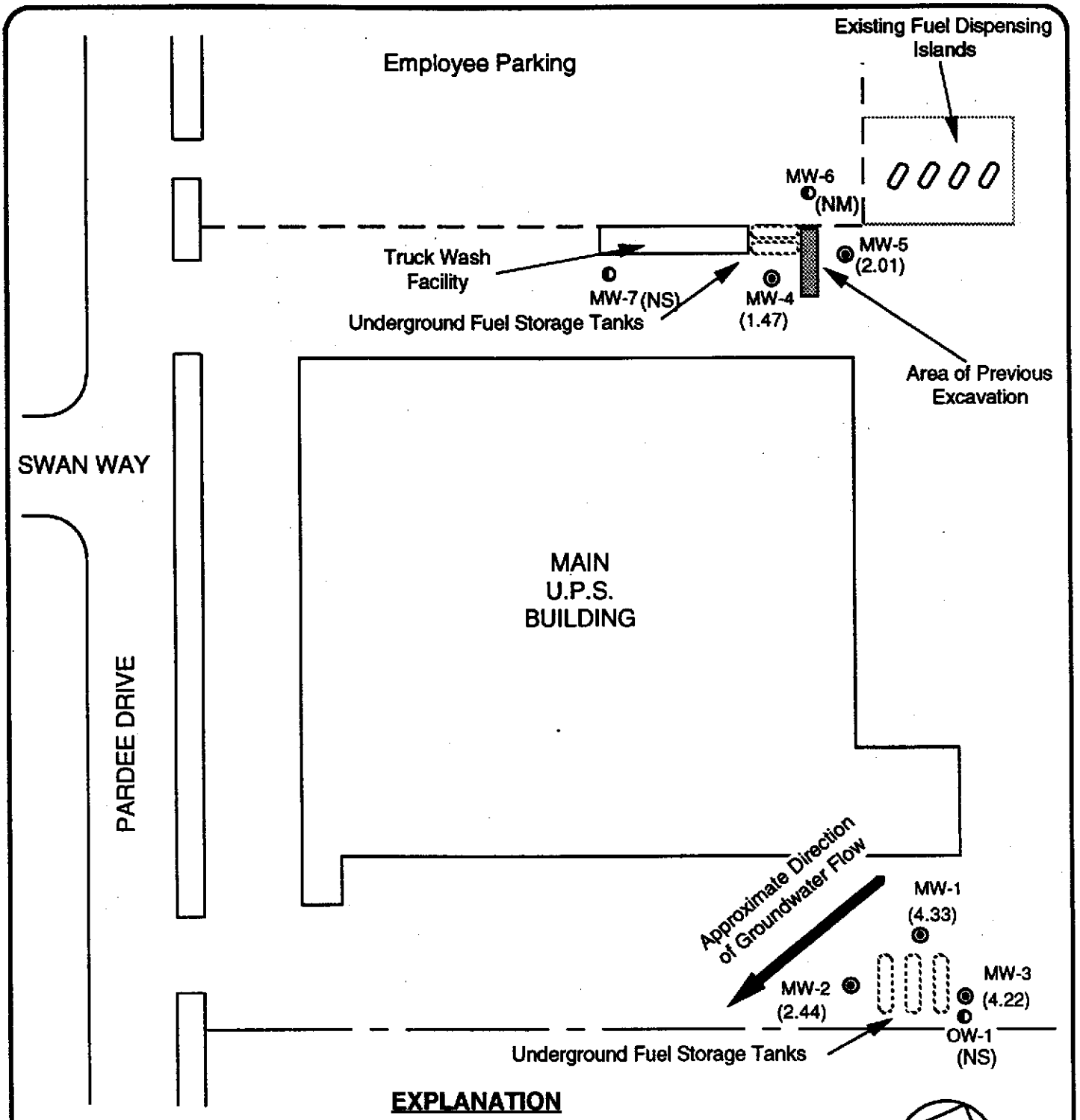
CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS

QUADRANGLE LOCATION

GERAGHTY & MILLER, INC.
Environmental Services

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

FIGURE
1



EXPLANATION

- Approximate locations of monitoring wells installed by Geraghty & Miller
- Approximate location of monitoring well installed by others
- (4.33) Groundwater elevation in feet (8/2/95)
- NM Not measured; well inaccessible
- NS Not surveyed

N

0 130 feet

Scale

GERAGHTY & MILLER, INC.
Environmental Services

Project No. RC0027.000

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

FIGURE
2

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
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Geraghty & Miller, Inc.	Client Project ID:	#RC0027.011	Sampled: Aug 2, 1995
1050 Marina Way South	Sample Matrix:	Water	Received: Aug 3, 1995
Richmond, CA 94804	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Aug 23, 1995
Attention: Ted Crump	First Sample #:	508-0322	

QC Batch Number: GC081595 802005A | GC081595 802004A | GC081595 802004A | GC081595 802005A | GC081595 802005A

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 508-0322 MW-1	Sample I.D. 508-0323 MW-2	Sample I.D. 508-0324 MW-3	Sample I.D. 508-0325 MW-7	Sample I.D. 508-0326 TB-LB
Purgeable Hydrocarbons	50	510	210	1,200	N.D.	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		Unidentified Hydrocarbons >C9	Unidentified Hydrocarbons >C9	Unidentified Hydrocarbons >C9	--	--

Quality Control Data

Report Limit Multiplication Factor:	2.0	2.0	10	1.0	1.0
Date Analyzed:	8/15/95	8/15/95	8/15/95	8/15/95	8/15/95
Instrument Identification:	HP-5	HP-4	HP-4	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	93	101	98	98	97

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

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Geraghty & Miller, Inc.	Client Project ID:	#RC0027.011	Sampled: Aug 2, 1995
1050 Marina Way South	Sample Matrix:	Water	Received: Aug 3, 1995
Richmond, CA 94804	Analysis Method:	EPA 3510/8015 Mod.	Reported: Aug 23, 1995
Attention: Ted Crump	First Sample #:	508-0322	

QC Batch Number: SP080895 8015EXA | SP080895 8015EXA | SP080895 8015EXA | SP080895 8015EXA

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 508-0322 MW-1	Sample I.D. 508-0323 MW-2	Sample I.D. 508-0324 MW-3	Sample I.D. 508-0325 MW-7
Extractable Hydrocarbons	50	8700	3600	6500	360
Chromatogram Pattern:		Diesel	Diesel	Diesel	Diesel

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0
Date Extracted:	8/8/95	8/8/95	8/8/95	8/8/95
Date Analyzed:	8/9/95	8/9/95	8/9/95	8/9/95
Instrument Identification:	HP-3B	HP-3B	HP-3B	HP-3B

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

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Geraghty & Miller, Inc.	Client Project ID:	#RC0027.011	Sampled: Aug 2, 1995
1050 Marina Way South	Matrix Descript:	Water	Received: Aug 3, 1995
Richmond, CA 94804	Analysis Method:	SM 5520 B&F (Gravimetric)	Extracted: Aug 10, 1995
Attention: Ted Crump	First Sample #:	508-0325	Analyzed: Aug 10, 1995
			Reported: Aug 23, 1995

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/L (ppm)	Detection Limit Multiplication Factor	QC Batch Number	Instrument ID
508-0325	MW7	N.D.	1.0	SP0810965520MDA	Manual

Detection Limits:	**5.0**

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

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

5080322.GER <3>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Ted Crump

Client Project ID: #RC0027.011
Matrix: Liquid

QC Sample Group: 5080322-26

Reported: Aug 23, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel	Oil & Grease
QC Batch#:	GC081595	GC081595	GC081595	GC081595	SP080895	SP081095
Analy. Method:	802005A EPA 8020	802005A EPA 8020	802005A EPA 8020	802005A EPA 8020	8015EXA EPA 8015	5520MDA SM 5520
Prep. Method:	-	-	-	-	EPA 3510	SM 5520
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	J. Dinsay	D. Newcomb
MS/MSD #:	5080326	5080326	5080326	5080326	BLK080895	BLK081095
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/15/95	8/15/95	8/15/95	8/15/95	8/8/95	8/10/95
Analyzed Date:	8/15/95	8/15/95	8/15/95	8/15/95	8/9/95	8/10/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	GCHP-3B	Manual
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L	100mg/L
Result:	20	19	19	58	210	92
MS % Recovery:	100	95	95	97	70	92
Dup. Result:	18	18	18	55	200	93
MSD % Recov.:	90	90	90	92	67	93
RPD:	11	5.4	5.4	5.3	4.4	1.1
RPD Limit:	0-20	0-20	0-20	0-20	0-20	0-20

LCS #:	3LCS081595	3LCS081595	3LCS081595	3LCS081595	BLK080895	BLK081095
Prepared Date:	8/15/95	8/15/95	8/15/95	8/15/95	8/8/95	8/10/95
Analyzed Date:	8/15/95	8/15/95	8/15/95	8/15/95	8/9/95	8/10/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	GCHP-3B	Manual
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L	100 mg/L
LCS Result:	18	18	18	54	210	92
LCS % Recov.:	90	89	88	91	70	92

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120	38-122	60-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
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 matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600

Geraghty & Miller, Inc.	Client Project ID:	#RC0027.011
1050 Marina Way South	Matrix:	Liquid
Richmond, CA 94804		
Attention: Ted Crump	QC Sample Group: 5080322-26	Reported: Aug 23, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC081595	GC081595	GC081595	GC081595
Analy. Method:	802004A EPA 8020	802004A EPA 8020	802004A EPA 8020	802004A EPA 8020
Prep. Method:	-	-	-	-
Analyst:	M. Creusere	M. Creusere	M. Creusere	M. Creusere
MS/MSD #:	5080329	5080329	5080329	5080329
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/15/95	8/15/95	8/15/95	8/15/95
Analyzed Date:	8/15/95	8/15/95	8/15/95	8/15/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	17	18	18	55
MS % Recovery:	85	90	90	92
Dup. Result:	20	21	21	64
MSD % Recov.:	100	105	105	107
RPD:	16	15	15	15
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS081595	2LCS081595	2LCS081595	2LCS081595
Prepared Date:	8/15/95	8/15/95	8/15/95	8/15/95
Analyzed Date:	8/15/95	8/15/95	8/15/95	8/15/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	21	22	23	68
LCS % Recov.:	106	112	113	113

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
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 matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

GERAGHTY & MILLER, INC. Environmental Services a Halliburton company

Laboratory Task Order No. 4711N.

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

9508067

Project Number R10027.018

Project Location 8400 Pardee Dr

Laboratory Sequoia Analytical

Sampler(s)/Affiliation Aaron OBrien
Geraghty & Miller

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	TPH-Diesel (8015 mod.)	BTEX (8020)	TPH-G (8015 mod.)	Total Oil & Grease (5520E)	SAMPLE BOTTLE / CONTAINER DESCRIPTION				TOTAL
MW-1	L	8-2-95 12:15 PM		X	X	X		5080322	AD			4
MW-2	L			X	X	X		5080323	↓			4
MW-3	L			X	X	X		5080324	↓			4
MW-7	L			X	X	X	X	5080325	AE			5
TB-LB	L	✓			X	X		5080326	—			1

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

Total No. of Bottles/ Containers: 18

Relinquished by: C. DeYoung	Organization: Geraghty & Miller	Date 8-13-95	Time 12:30	Seal Intact? (Yes) No N/A
Received by:	Organization: Sequoia	Date 8-13-95	Time 12:30	
Relinquished by:	Organization: Sequoia	Date 8-13-95	Time 4:40	Seal Intact? Yes No N/A
Received by:	Organization: SAL-Inc.	Date 8-13-95	Time 16:40	

Special Instructions/Remarks:

Delivery Method: ☐ In Person ☐ Common Carrier _____ (SPECIFY) ☐ Lab Courier ☐ Other _____ (SPECIFY)

G&M Form 09 9 91

Southprint 95-0533