GERAGHTY
& MILLER, INC.
Environmental Services

Ground Water *Engineering* *Hydrocarbon* *Remediation* *Education*

93 JUL 23 PM 1:36

July 13, 1993
Project No. RC02707

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

SUBJECT: Results of Ground-Water Monitoring, June 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 performed on June 23, 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. Inc. (Geraghty & Miller) document to UPS, dated June 3, 1993.

GROUND-WATER SAMPLING PROCEDURES

Ground-water samples were collected from Monitoring Wells MW-1 through MW-6 and Observation Well OW-1 on June 23, 1993 (Figure 2). Prior to sampling, depth to water was measured, and each well was checked for the presence of liquid-phase hydrocarbons. Liquid-phase hydrocarbons (LPH) were not observed in any of the monitor wells but were observed and measured in Observation Well OW-1 having a thickness of 0.05 feet. × 12 = 0.6"

Prior to sampling, each well was purged using an 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 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 on-site for proper handling and disposal by UPS.

Following purging, ground-water samples were collected from the wells using a new disposable polyethylene bailer for each well. The ground-water 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 water 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 ground-water elevations for the wells are presented in Table 2. Based on the ground-water elevations, the direction of shallow ground-water flow in the vicinity of the southern fueling facilities is generally toward the south. In the vicinity of the northern fueling facilities, the direction of shallow ground-water flow is generally toward the northwest (Figure 1).

The results of ground-water analyses for sampling event are summarized in Table 3.

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.

David B. Serena
Project Geologist/Project Manager

Jeffrey W. Hawkins, R.G.
Senior Geologist

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 Ground-Water Elevations
	Table 3	Ground-Water Analytical Results
	Figure 1	Ground-Water Contour Map June 1993
	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,
8400 Pardee Drive, Oakland, California.

Well	Date	Calculated Purge Volume (a) (Gallons)	Actual Purge Volume (Gallons)	FIELD PARAMETERS pH	SC (µmhos/cm)	Temperature (°F)	Depth to Water (b) (Feet)	Well Depth (b) (Feet)	Casing Diameter (inches)
MW-1	23-Jun-93	29.85	30	7.06	1,460	74.8	2.72	14.20	4
MW-2	23-Jun-93	25.92	10	7.20	5,030	74.1	4.38	14.35	4
MW-3	23-Jun-93	30.55	31	7.70	1,940	73.8	2.75	14.50	4
MW-4	23-Jun-93	31.33	27	6.56	18,590	73.5	2.49	14.54	4
MW-5	23-Jun-93	28.31	16	7.48	7,720	72.4	3.40	14.29	4
MW-6	23-Jun-93	67.64	25	6.57	11,000	72.1	7.53	19.11	6
OW-1	23-Jun-93	84.45	40	7.67	2,770	74.7	4.14	18.60	6

(a) Based on three 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 Ground-Water Elevations
United Parcel Service,
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
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
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
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

Project No. RC02707

Table 2: Depth-to-Water and Ground-Water Elevations
United Parcel Service,
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
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
OW-1	23-Jun-93	4.14	(b)	(b)	18.60

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

MSL Mean Sea Level.

Table 3: Ground-Water Analytical Results
United Parcel Service,
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	3.00	1.40	4.00	2.40
	19-Jun-91	NA	7,100	1.70	0.70	0.50	0.90
	23-Jul-91	220	8,700	1.60	1.10	0.50	1.50
	26-Aug-91	NA	2,800	180.00	120.00	31.00	160.00
	18-Nov-91	NA	6,600	1.10	0.40	0.50	ND(<0.3)
	3-Feb-92	NA	2,200	0.90	ND(<0.3)	0.80	0.70
	29-Jun-92	NA	2,100	0.80	0.40	0.40	0.90
	23-Jun-93	NA	3,200	0.66	ND(<0.5)	0.48	ND(<0.5)
MW-2	28-Aug-90	NA	3,500	0.60	0.40	0.60	0.70
	19-Jun-91	NA	ND(<50)	0.50	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Jul-91	ND(<50)	660	0.70	ND(<0.3)	ND(<0.3)	ND(<0.3)
	26-Aug-91	NA	ND(<50)	0.70	ND(<0.3)	ND(<0.3)	ND(<0.3)
	18-Nov-91	NA	3,200	0.80	ND(<0.3)	ND(<0.3)	ND(<0.3)
	3-Feb-92	NA	400	0.70	ND(<0.3)	ND(<0.3)	0.50
	29-Jun-92	NA	250	0.60	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Jun-93	NA	11,000	0.55	ND(<0.5)	ND(<0.5)	ND(<0.5)
MW-3	28-Aug-90	NA	18,000	0.50	0.80	4.30	2.30
	19-Jun-91	NA	1,300	0.40	0.40	1.70	1.40
	23-Jul-91	330	6,800	0.30	ND(<0.3)	1.50	0.50
	26-Aug-91	NA	ND(<50)	13.00	13.00	5.80	26.00
	18-Nov-91	NA	2,500	0.60	ND(<0.3)	ND(<0.3)	ND(<0.3)
	3-Feb-92	NA	1,100	0.40	ND(<0.3)	1.30	0.60
	29-Jun-92	NA	3,200	ND(<0.3)	ND(<0.3)	1.30	0.30
	23-Jun-93	NA	8,100	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)

Table 3: Ground-Water Analytical Results
United Parcel Service,
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	0.30	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)
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)	0.50
	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)
MW-6	7-Sep-90	ND(<50)	ND(<100)	ND(<0.3)	0.50	ND(<0.3)	1.00
	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)

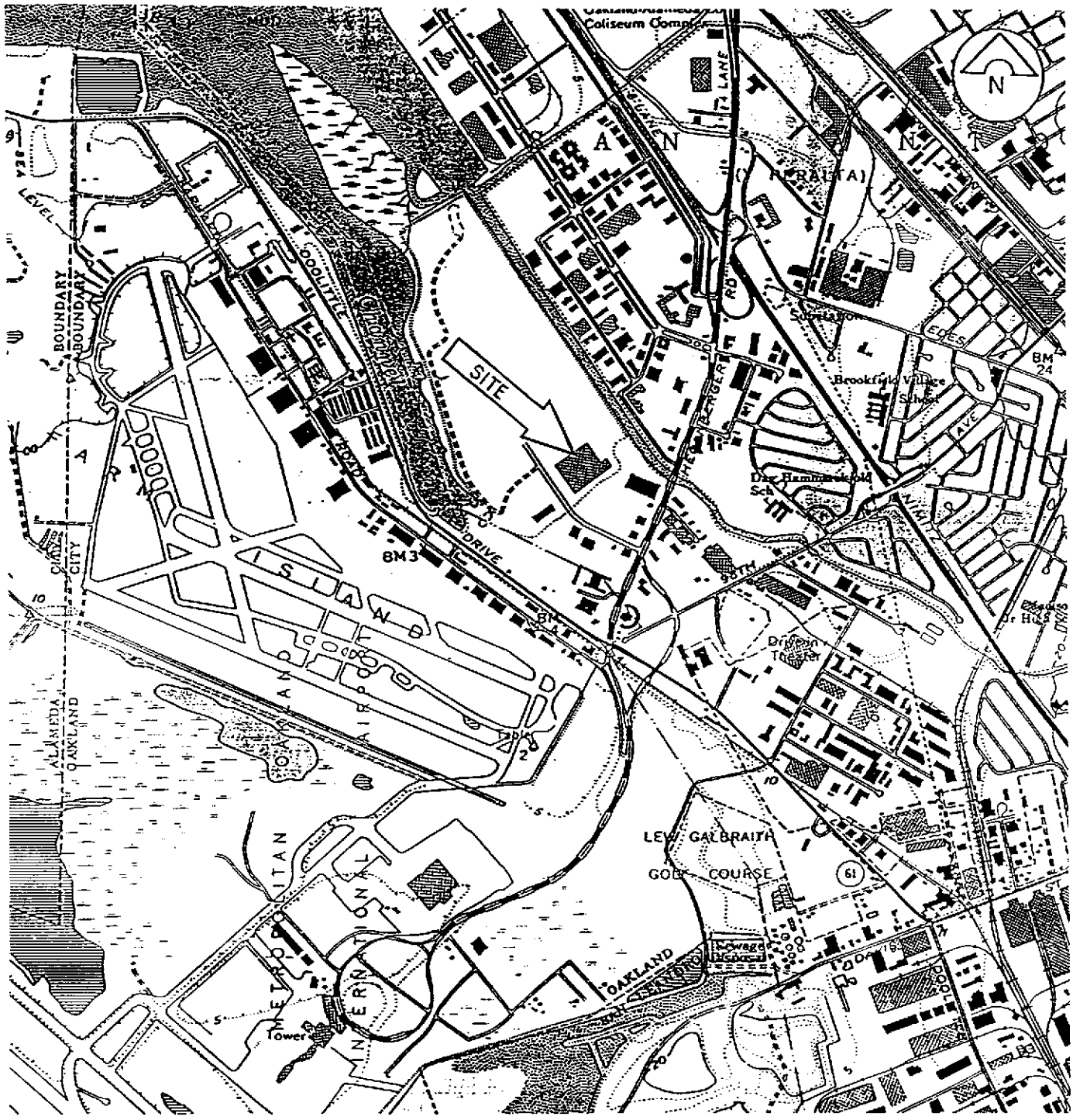
Table 3: Ground-Water Analytical Results
United Parcel Service,
8400 Pardee Drive, Oakland, California.

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)	31.00
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(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)

(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 analysis by Superior Precision Analytical Laboratories, Inc., Martinez, California; June 23, 1993 analysis by Sequoia Analytical, Inc. Concord, California.



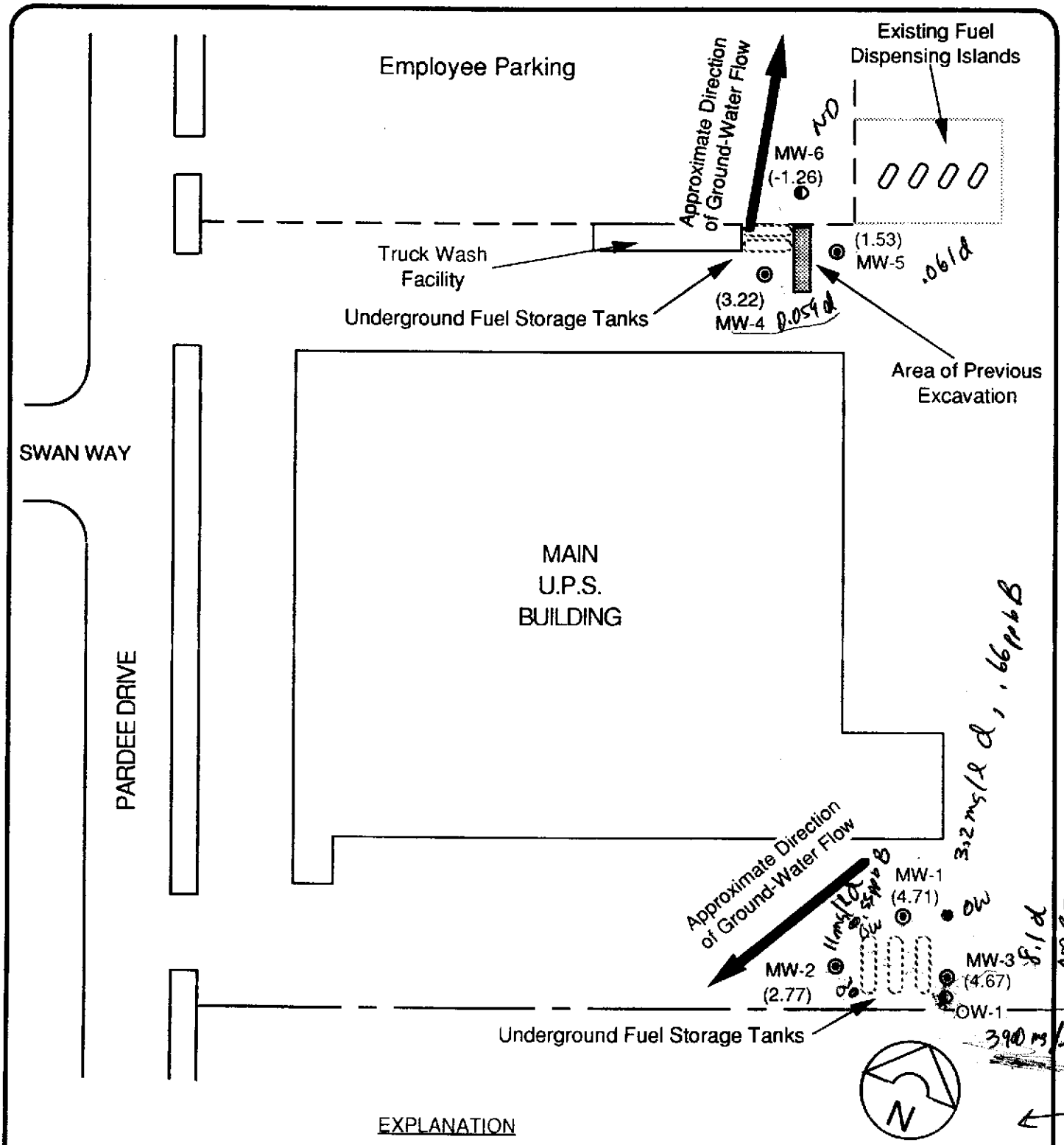
GERAGHTY & MILLER, INC.
Environmental Services

Project No. RC02700

SITE VICINITY MAP

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

FIGURE
1



GERAGHTY & MILLER, INC. *Environmental Services* Project No. RC02700	**GROUND-WATER ELEVATION MAP JUNE 1993** UNITED PARCEL SERVICE, INC. 8400 Pardee Drive Oakland, California	FIGURE **2**

ATTACHMENT 1

COPIES OF CERTIFIED ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

SEQUOIA ANALYTICAL

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

Geraghty & Miller, Inc.	Client Project ID:	RC02707/Oakland, CA	Sampled:	Jun 23, 1993
1050 Marina Way South	Sample Matrix:	Water	Received:	Jun 24, 1993
Richmond, CA 94804	Analysis Method:	EPA 5030/8020	Reported:	Jul 9, 1993
Attention: Dave Serena	First Sample #:	306-1074		

BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 306-1074 MW-1	Sample I.D. 306-1075 MW-2	Sample I.D. 306-1076 MW-3	Sample I.D. 306-1081 OW-1
Benzene	0.5	0.66	0.65	N.D.	N.D.
Toluene	0.5	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.5	0.48	N.D.	N.D.	N.D.
Total Xylenes	0.5	N.D.	N.D.	N.D.	31

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	40
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93
Instrument Identification:	HP-2	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	106	106	101	99

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:	RC02707/Oakland, CA	Sampled:	Jun 23, 1993
1050 Marina Way South	Sample Matrix:	Water	Received:	Jun 24, 1993
Richmond, CA 94804	Analysis Method:	EPA 5030/8015/8020	Reported:	Jul 9, 1993
Attention: Dave Serena	First Sample #:	306-1077		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 306-1077 MW-4	Sample I.D. 306-1078 MW-5	Sample I.D. 306-1079 MW-6	Sample I.D. 306-1080 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:	6/29/93	6/29/93	6/29/93	6/29/93
Instrument Identification:	HP-2	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	100	104	102	102

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:	RC02707/Oakland, CA	Sampled: Jun 23, 1993
1050 Marina Way South	Sample Matrix:	Water	Received: Jun 24, 1993
Richmond, CA 94804	Analysis Method:	EPA 3510/3520/8015	Reported: Jul 9, 1993
Attention: Dave Serena	First Sample #:	306-1074	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 306-1074 MW-1	Sample I.D. 306-1075 MW-2	Sample I.D. 306-1076 MW-3	Sample I.D. 306-1077 MW-4	Sample I.D. 306-1078 MW-5	Sample I.D. 306-1079 MW-6
Extractable Hydrocarbons	50	3,200	11,000	8,100	59	61	N.D.
Chromatogram Pattern:		Diesel & Non Diesel Mixture (>C20)	Diesel & Non Diesel Mixture (>C20)	Diesel & Non Diesel Mixture (>C20)	Diesel	Diesel	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	10	10	1.0	1.0	1.0
Date Extracted:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Date Analyzed:	7/6/93	7/6/93	7/7/93	7/6/93	7/6/93	7/6/93
Instrument Identification:	HP-3A	HP-3A	HP-3A	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

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:	RC02707/Oakland, CA	Sampled:	Jun 23, 1993
1050 Marina Way South	Sample Matrix:	Water	Received:	Jun 24, 1993
Richmond, CA 94804	Analysis Method:	EPA 3510/3520/8015	Reported:	Jul 9, 1993
Attention: Dave Serena	First Sample #:	306-1081		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 306-1081 OW-1
Extractable Hydrocarbons	50	3,400,000
Chromatogram Pattern:		Diesel & Non Diesel Mixture (>C20)

3,400 mg/L d

Quality Control Data

Report Limit Multiplication Factor:	1,000
Date Extracted:	6/30/93
Date Analyzed:	7/7/93
Instrument Identification:	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

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:	RC02707/Oakland, CA
1050 Marina Way South	Matrix:	Water
Richmond, CA 94804		
Attention: Dave Serena	QC Sample Group	3061074-81

Reported: Jul 9, 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.F.	J.F.	J.F.	J.F.	K.Wimer
Conc. Spiked:	200	200	200	600	300
Units:	ng	ng	ng	ng	µg/L
LCS Batch#:	1LCS062993	1LCS062993	1LCS062993	1LCS062993	BLK063093
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/30/93
Date Analyzed:	6/29/93	6/29/93	6/29/93	6/29/93	7/7/93
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3A
LCS % Recovery:	98	96	97	100	119
Control Limits:	70-130	70-130	70-130	70-130	80-120
MS/MSD Batch #:	3061078	3061078	3061078	3061078	BLK063093
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/30/93
Date Analyzed:	6/29/93	6/29/93	6/29/93	6/29/93	7/7/93
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3A
Matrix Spike % Recovery:	95	95	95	98	119
Matrix Spike Duplicate % Recovery:	95	95	95	98	112
Relative % Difference:	0.0	0.0	0.0	0.0	6.1

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 RC02707

Project Location OAKLAND, CALIF.

Laboratory SEQUOIA / CONCORD

Sampler(s)/Affiliation GERAGHTY & MILLER RICHMOND, CALIF.

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	SAMPLE BOTTLE / CONTAINER DESCRIPTION: TPH-D + BTEX (8015/8020)	TPH-G + TPH-D + BTEX (8015/8020)	TPH-G + BTEX (8015/8020)							TOTAL
MW-1	L	6/23/93/1811		X				306	1074	AD			4
MW-2		1746		X					1075				4
MW-3		1758		X					1076				4
MW-4		1733			X				1077				4
MW-5		1720			X				1078				4
MW-6		1702			X				1079				4
TRIP BLANK		NA				X			1080				1
OW-1	L	1839		X					1081	AD			4

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

Total No. of Bottles/ Containers: 29

Relinquished by: Paul Horvath	Organization: GERAGHTY & MILLER, INC.	Date 6/24/93	Time 12:43 PM	Seal Intact? (Yes) No N/A
Received by: Eric Vonnel	Organization: SAL	Date 6/24/93	Time 12:45 PM	
Relinquished by: _____	Organization: _____	Date / /	Time _____	Seal Intact? Yes No N/A
Received by: _____	Organization: _____	Date / /	Time _____	

Special Instructions/Remarks: MAIL / FAX RESULTS TO GERAGHTY & MILLER, INC., c/o DAVE SERENA, 1050 MARINA WAY SOUTH, RICHMOND 94804

Std TAT as per M. Beasley 4/25/93

Delivery Method: ☐ In Person ☐ Common Carrier _____ ☐ Lab Courier ☐ Other 093 (SPECIFY)

G&M Form 09-9-91

Southprint 91-1768