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SECOND QUARTER 1997 MONITORING REPORT

UNION PACIFIC MOTOR FREIGHT FACILITY OAKLAND, CALIFORNIA

LAIDLAW PROJECT No. 792919-844

PREPARED FOR:

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July 29, 1997

SECOND QUARTER 1997 MONITORING REPORT UNION PACIFIC RAILROAD UNION PACIFIC MOTOR FREIGHT FACILITY OAKLAND, CALIFORNIA Laidlaw Project No. 792919-844

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1.0 Introduction

This report presents the results from the Second Quarter 1997 groundwater monitoring event conducted at the Union Pacific Railroad (UPRR) motor freight facility at 1750 Ferro Street in Oakland, California (Figure 1). The report has been prepared by Consulting Services of Laidlaw Environmental Services (Laidlaw) on behalf of UPRR as part of the groundwater monitoring and reporting program at the facility. The report was prepared in response to an April 29, 1993, Alameda County Department of Environmental Health, Hazardous Materials Division (ACDEH) request for UPRR to begin a quarterly monitoring program at the UPMF facility.

The quarterly monitoring program consists of the collection of fluid-level measurements in the groundwater monitoring wells and an analysis of dissolved contaminants in groundwater. The monitoring program is directed towards an understanding of the groundwater gradient and the changes in the concentration of dissolved petroleum hydrocarbons at the site. This report includes a discussion of the background information about the site, field and analytical results for the second quarter 1997 event, conclusions, and recommendations.

2.0 BACKGROUND INFORMATION

The following subsections present information about the site history and investigative procedures.

2.1 SITE HISTORY

The Union Pacific Motor Freight (UPMF) site is located on the southeastern portion of the UPRR Oakland trailer-on-flat-car (TOFC) Yard, which is adjacent to the Oakland Inner Harbor or Oakland Estuary (Figures 1 and 2). The area surrounding the site is used for heavy to light commerce. Residential areas are located approximately one-half mile north of the site and across the Oakland Estuary one-half mile south of the site.

Five underground storage tanks (USTs) were removed from the UPMF site between 1987 and 1990. As a result of the tank removal activities, a site assessment was performed in two phases to define the extent of petroleum hydrocarbons in the soil and groundwater (USPCI, 1993). All petroleum hydrocarbons found at the site have been identified as either used motor oil or "bunker C." For brevity, the light non-aqueous phase of these hydrocarbons are referred to as "product."

Groundwater monitoring has been conducted at the site since 1993. A skimming system that removes product only has operated in recovery well RW since May 2, 1994.

The refueling portion of the TOFC yard, approximately 700 feet northwest and upgradient of the UPMF site, is currently undergoing groundwater remediation for recovery of non-aqueous phase liquid as diesel. (The refueling area is a separate project and is not the subject of this report.) The extent of contamination at the refueling area was defined during previous investigations (USPCI, 1991). On the basis of these investigations and subsequent monitoring, petroleum hydrocarbons from the refueling area do not extend to the UPMF facility.

2.2 INVESTIGATIVE PROCEDURES

UPRR has subcontracted Burns and McDonnell Waste Consultants, Inc. to perform a portion of the fieldwork associated with the project. Laidlaw and the UPRR subcontractor followed the standard operating procedures previously supplied to and approved by the ACDEH (Laidlaw, 1994). The quarterly monitoring activities consist of the following:

- Measuring fluid-levels in all of the UPMF groundwater monitoring wells;
- Purging and sampling groundwater monitoring wells where product is not observed;
- Analyzing groundwater samples for petroleum hydrocarbons and constituents;
- Removing product from the recovery well (RW) and monitoring the performance of the product skimmer; and
- Determining the local groundwater flow direction and gradient based on the groundwater elevations.

All samples for the second quarter 1997 monitoring event were analyzed for: (1) total petroleum hydrocarbons as diesel (TPH-D) and total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 8015 Modified; and (2) benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020.

Fluid-level measurements are collected from the recovery well RW on a monthly basis. These measurements are made to assess the temporal variations in the thickness of product and to evaluate the effectiveness of the skimming system. Fluid-level measurements are collected from the remaining monitoring wells on a quarterly basis. The ACDEH has approved Laidlaw's request to begin gauging wells OKUS-W5 and OKUS-W6 on a quarterly basis.

On May 13, 1997, Laidlaw decommissioned groundwater monitoring well OKUS-W4. The decommissioning activity was approved by ACDEH in a letter dated February 4, 1997, and in accordance with the requirements of Alameda County, Zone 7, Water Resources Engineering Department.

3.0 FIELD INVESTIGATION RESULTS

The following subsections present the findings from activities completed during the monitoring event.

3.1 Fluid-Level Measurements

Fluid-levels were measured on May 21, 1997 and are compiled into Table 1. Copies of field notes for the fluid-level measurements are included in Appendix A. The data were used to produce the groundwater elevation map presented as Figure 3. A decrease in groundwater elevations relative to the previous monitoring event (first quarter 1997) was noted in all of the monitoring wells gauged at the site. Since 1995, groundwater elevations have been highest during the first quarter of each year, and are typically lower during the second, third, and fourth quarters.

3.2 GROUNDWATER GRADIENT

The groundwater gradient at the site averaged approximately 0.008 foot per foot (40 feet per mile) and the observed groundwater flow direction was to the east. The groundwater gradient and flow direction were consistent with gradients and flow directions observed during previous monitoring events. The lack of product observed during the collection of fluid-level measurements in downgradient groundwater monitoring wells indicates that product has not migrated downgradient.

3.3 ANALYTICAL RESULTS

Analytical results for all monitoring wells sampled during the second quarter 1997 monitoring event were compiled into Table 2. Samples were collected from monitoring wells OKUS-W1, OKUS-W2, OKUS-W3, OKUS-W7, OKUS-W8, APL/UP-W2, and APL/UP-W2.

Monitoring well OKUS-W1 did not contain dissolved BTEX concentrations above the method detection limit (MDL) of 0.50 micrograms per liter (μ g/l). The samples collected from monitoring wells OKUS-W2 and OKUS-W3 contained dissolved BTEX. The samples collected from monitoring wells OKUS-W7 and APL/UP-W2 contained dissolved benzene and ethylbenzene. The sample from APL/UP-W1 contained dissolved benzene, ethylbenzene, and xylenes and the sample collected from OKUS-W8 contained only dissolved benzene and xylenes.

Benzene concentrations ranged from below the MDL in OKUS-W1 to 190 μ g/l in OKUS-W3. Toluene ranged from below the MDL in wells OKUS-W1, OKUS-W7, OKUS-W8, APL/UP-W1, APL/UP-W2 to 43 μ g/l in OKUS-W3. Ethylbenzene ranged from below the MDL in OKUS-W1 to 120 μ g/l in OKUS-W3. Xylenes ranged from below the MDL in OKUS-W1, OKUS-W7, and APL/UP-W2 to 41 μ g/l in OKUS-W3. Total BTEX concentrations ranged from below the MDL of

 $0.50 \mu g/l$ (OKUS-W1) to 394 $\mu g/l$ (OKUS-W3).

Dissolved TPH-G, indicative of gasoline, was detected in the samples collected from monitoring wells OKUS-W2, OKUS-W3, OKUS-W8, APL/UP-W1, and APL/UP-W2. The TPH-G concentrations ranged from below the MDL of 50 μ g/l (OKUS-W1 and OKUS-W7) to 6,100 μ g/l (OKUS-W3).

Dissolved TPH-D concentrations indicating diesel fuel, were detected in the samples collected from all monitoring wells sampled during the during the second quarter 1997 monitoring event. TPH-D concentrations ranged from 190 μ g/l (OKUS-W1) to 2,500 μ g/l (OKUS-W3).

Groundwater analytical results for the wells at the site are presented in Table 2. The dissolved BTEX plume in the groundwater is presented in Figure 4. Analytical reports and chain of custody forms are included in Appendix B.

3.4 Non-Aqueous Phase Liquid

Fluid-level measurement data indicated that monitoring wells OKUS-W5 and OKUS-W6 continued to contain "bunker C" type product. An accurate determination of product thicknesses in OKUS-W5 and OKUS-W6 was not possible due to the high viscosity of the product and difficulty in measuring product thickness. Laidlaw personnel lowered a disposable bailer down the well until product was encountered. The depth to product was subsequently measured out of the well.

A product/water interface was detected in recovery well RW during the second quarter sampling event. Laidlaw personnel detected approximately 0.02 feet of product in well RW. Burns and McDonnell field personnel reported product "sheen" for the month of April 1997. The product recovery system was inoperable during the second quarter and is currently being repaired.

4.0 CONCLUSIONS

On the basis of the information obtained from the monitoring activities, Laidlaw concludes that:

- The groundwater flow direction is to the east at an average gradient of 0.008 foot per foot (40 feet per mile). This result is consistent with previous monitoring events;
- The dissolved BTEX and TPH concentrations are consistent with historical concentrations
 ranges and in most cases lower than previously observed levels. The finding suggests that the
 product present in groundwater is weathered and not contributing significant concentrations of
 BTEX to groundwater;
- The product observed in wells OKUS-W5, OKUS-W6, and RW does not appear to have migrated downgradient;
- The accumulation of product in well RW has decreased by approximately one order of magnitude, which indicates that the recovery of product has progressed; and,
- Historical monitoring results indicate that the residual petroleum contamination in the source area and downgradient wells has decreased over time, which indicates that a continued source of contamination is not present and the remaining residual contamination is relatively static.

5.0 RECOMMENDATIONS

On the basis of the above conclusions and the historical monitoring data, Laidlaw recommends the following:

- Discontinue the operation of the product skimming pump in well RW;
- Change the fluid-level measurement frequency in well RW from monthly to quarterly;
- Change the groundwater sample collection frequency from quarterly to semi-annually (first and third quarters); and,
- Change the reporting frequency from quarterly to semi-annually (end of April and September).

6.0 REFERENCES

USPCI, 1991. "Hydrocarbon Investigation and Remediation Design," Union Pacific Railroad, June 10, 1991.

USPCI, 1993. "Phase II Site Assessment Report," Union Pacific Railroad, October, 1993.

USPCI, 1994. "Fourth Quarter 1993, Monitoring Event," Union Pacific Railroad, May 1994.

TABLE 1 FLUID LEVEL MEASUREMENT DATA UNION PACIFIC RAILROAD OAKLAND MOTOR FREIGHT FACILITY

WELL NO.	ELEV.* TOC	DATE	DEPTH TO PRODUCT	PRODUCT THICKNESS	DEPTH TO WATER	WATER ELEV.	CORR'D ELEV.
							l · · · · ·
OKUS-W1	9.17	08/09/95	N/A	NP	8.18	0.99	0.99
	9.17	11/29/95	N/A	NP	8.78	0.39	0.39
	9.17	02/27/96	N/A	NP	7.58	1.59	1.59
	9.17	05/29/96	N/A	NP	7.80	1.37	1.37
	9.17	08/27/96	N/A	NP	8.34	0.83	0.83
	9.17	11/12/96	N/A	NP	8.71	0.46	0.46
	9.17	02/17/97	N/A	NP	7.58	1,59	1.59
	9.17	05/21/97	N/A	NP	8.24	0.93	0.93
OKUS-W2	9,71	08/09/95	N/A	NP	9.09	0,62	0.62
	9.71	11/29/95	N/A	NP	9.69	0.02	0.02
	9.71	02/27/96	N/A	NP	8.49	1.22	1.22
	9.71	05/29/96	N/A	NP	8.72	0.99	0.99
	9,71	08/27/96	N/A	NP	9.24	0.47	0.47
	9.71	11/12/96	N/A	NP	9.63	0.08	0.08
	9.71	02/17/97	N/A	NP	8.41	1.30	1.30
	9.71	05/21/97	N/A	NP	9.13	0.58	0.58
OKUS-W3	9.80	08/09/95	N/A	NP	9,41	0.39	0.39
	9.80	11/29/95	N/A	NP	9.97	-0.17	-0.17
	9.80	02/27/96	N/A	NP	8.73	1.07	1.07
	9.80	05/29/96	N/A	NP	8.94	0.86	0.86
	9.80	08/27/96	N/A	NP	9.52	0,28	0.28
	9.80	11/12/96	N/A	NP	9.90	-0.10	-0.10
	9.80	02/17/97	N/A	NP	8.67	1.13	1.13
	9.80	05/21/97	N/A	NP	9.44	0.36	0.36
OKUS-W4	7.35	08/09/95	N/A	NP	6,10	1,25	1.25
	7.35	11/29/95	N/A	NP	6.70	0.65	0.65
		05/13/97	WELL DEC	OMMISSIONED			
OKUS-W5	9.25	08/09/95	N/A	Trace	9.75	-0.50	-0.50
	9.25	09/07/95	N/A	Trace	9.56	-0.31	-0.31
	9.25	10/18/95	9.82	P	 -		
o co comprese respensivament simble dried	9.25	11/10/95	9.97	P			
	9,25	12/15/95	9.60	Р			
uur vesten proppi ostol 1927 (1996) (199	9.25	01/10/96	9.58	Р			
	9.25	02/16/96	9.08	P			# * =
	9.25	03/25/96	8.99	P			
	9.25	04/18/96	9.22	Р			
	9.25	05/29/96	9.06	Р			
	9.25	06/13/96	9.11	P			

TABLE 1 (Cont.) FLUID LEVEL MEASUREMENT DATA UNION PACIFIC RAILROAD OAKLAND MOTOR FREIGHT FACILITY

	LEV.* TOC	DATE	DEPTH TO PRODUCT	PRODUCT THICKNESS	DEPTH TO WATER	WATER ELEV.	CORR'D ELEV.
		27/27/22					
OKUS-W5	9.25	07/25/96	9.11	P 2004-2 4 -24-4	—— Seciality a bilibitatoroi ya		
	9,25	08/27/96	9,44	P			
6757	9.25 9.25	09/16/96	N/A 9.65				
	9.25	10/17/96 11/12/96	9.65 9.87	P			
	9.25	12/16/96	9.67 N/A	66566 <u>1</u> 12666			
	9.25	01/20/97	N/A			**************************************	
	9.25	01/20/97	9.09	Р			
	9.25	05/21/97	9.29	P			
OKUS-W6	7.02	08/09/95	5.65	P			
	7.02	09/07/95	5.98	P	ragini, di agrigo anjunga una arawangan 	alminimum ana almingiji — —	
	7.02	10/18/95	6,38	P			
	7.02	11/10/95	6.52	P			
100000	7.02	12/15/95	5.47	P			
processors and described and the control of the	7.02	01/10/96	5.58	P			
	7 .02	02/16/96	4.70	P			
The second secon	7.02	03/25/96	4.72	Р			
	7.02	04/18/96	5.19	P	1888 - 14 8		
	7.02	05/29/96	5.02	P			
	7.02	06/13/96	4.99	P			
	7.02	07/25/96	5.23	P			
	7.02	08/27/96	5,82	Р	· · · · · · · · · · · · · · · · · · ·	<u></u> <u></u>	=-
	7.02	09/16/96	N/A				
	7.02	10/17/96	6,50	P			
	7.02	11/12/96	6.27	P			
	7.02	12/16/96	N/A				
015011 5115111 (1005 1000000 of 0160000 of 1	7.02	01/20/97	N/A				
	7.02	02/17/97	4.71	P			
	7.02	05/21/97	6.03	P			
	888 (<u>L</u> 1822)			£1m	A	4.00	4.50
OKUS-W7	6.91	08/09/95		NP NB	5.53	1.38	1.38
28.03.04.3.2.020.3.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	6.91	11/29/95	N/A	NP NB	6.09	0.82	0.82 1.93
	6.91	02/27/96	N/A	NP NP	4.98 5.09	1.93 1.83	1.83
93708840388881.8007030070880	6.91	05/29/96	N/A	NP NP	5.08 5.68	1.03	1,03
	6.91 6.01	08/27/96	N/A N/A	NP NP	5.99	0.92	0.92
#\$P#\$\$P\$ (0.625) #\$0.0555(0.625)	6.91	11/12/96 02/17/97	N/A N/A	NP NP	3.99 4.85	2.06	2.06
	6.91 6.91	02/17/97	N/A N/A	NP NP	5.53	2.30 1.38	1.38
-	0.91	03/21/97	14//\	FAL	3.30	1.50	1.50
OKUS-W8	6.75	08/09/95	N/A	NP	5.32	1.43	1,43
	6.75	11/29/95	N/A	NP	5.95	0.80	
	6.75	02/27/96	N/A	NP	4.84	1.91	1,91
	6.75	05/29/96	N/A	NP	4.93	1.82	Action of a second of a contract
	6.75	08/27/96	N/A	NP	5.52	1.23	en la companione de la co
	6.75	11/12/96	N/A	NP	5.89	0,86	
	6.75	02/17/97	N/A	NP	4,69	2.06	valouse as a section pot per tier tier ti
**************************************	6.75	05/21/97	N/A	NP	5.36	1.39	

TABLE 1 (Cont.) FLUID LEVEL MEASUREMENT DATA UNION PACIFIC RAILROAD OAKLAND MOTOR FREIGHT FACILITY

WELL	ELEV.*	DATE	DEPTH TO	PRODUCT	DEPTH TO	WATER	CORR'D
NO.	TOC		PRODUCT	THICKNESS	WATER	ELEV.	ELEV.
pour Court Court Court							
APL/UP-W1		08/09/95	N/A	NP	10.01	-1.89	-1.89
to estimate completions	8.12	11/29/95	N/A	NP	10.29	-2.17	-2.17
	8.12	02/27/96	N/A	NP	WELL INACCE	the state of the s	
	8.12	05/29/96	N/A	NP	WELL INACCE		
	8.12	08/27/96	N/A	NP	WELL INACCE	e a energia y carregia de la carregi	
	8.12	11/12/96	N/A	NP	WELL INACCE	account to the knowledge of these	and applicants of plants of the original or or or
	8.12	02/17/97	N/A	NP	10.02	-1.90	1.90
	8.12	05/21/97	N/A	NP	10.14	-2.02	-2.02
ADI/UD MA		20 (00 (00					
APL/UP-W2	1988 SAN SALASSANSA CALADA	08/09/95	N/A	NP NP	9,42	-2.11	-2.11
	7.31 7.31	11/29/95	N/A	NP NP	9.41	-2.10	-2.10
	7.31 7.31	02/27/96 05/29/96	N/A N/A	NP	8.89 9.68	-1.58 -2.37	-1.58 -2.37
	7.31 7.31	05/29/96	N/A N/A	NP NP	9.66 9.53	-2.37 -2.22	-2.37 -2.22
Eggisk oppsyllande blande til en blande flande i filmer. De syktok keelsk begender blande kan in syktomisk keelsk	7.31	11/12/96	N/A	NP	9.53 9.60	-2.29	-2.29
	7.31 7.31	02/17/97	N/A	NP.	9.07	-2.29 -1.76	-1.76
	7.31	05/21/97	N/A	NP	9.42	-2.11	-2.11
	7.01	00/21/01	13/73	(4)	J.72		2.11
RW		08/09/95	9.07	0.03	9.10	· · · · · · · · · · · · · · · · · · ·	
se en recentrativa de la compania d	— —	09/07/95	9.18	0.01	9.19		
		10/18/95	9.41	0.02	9.43	30 100 100 100 100 100 100 100 100 100 1	
		11/10/95	9.58		N/A		
		12/15/95	9.46	0.12	9.58		
		01/10/96	9.24	0.04	9.28		
		02/16/96	N/A	77	8.73		
		03/25/96	N/A		8.50		
		04/18/96	N/A		8.70		
		05/29/96	N/A		8.68		
		06/13/96	N/A	<u></u>	8.68		
		07/25/96	N/A		9.09		
		08/27/96	N/A		9.18	<u> </u>	
		09/16/96	N/A		9.33	 _	200000000000000000000000000000000000000
		10/17/96	N/A		9,50	00000000000000000000000000000000000000	
		11/12/96	N/A		9.59		
		12/16/96	9.12	0.10	9,22		
		01/20/97	N/A	— — sasays a tog <u>war</u> ay ka tarasa	8.50		
		02/17/97	8,39	0.01	8.40		
ilijiseji papai ilmiikši uri		03/17/97	8,39	0.01	8.40		
		04/17/97	8,39	0,01	8.40		
		05/21/97	9.10	0.01	9.12		

^{*} All well casings measured to mean sea level (MSL).

N/A Non Applicable

⁻⁻ Information not available or inaccurate.

NP - No Product

P - Product (bunker C) was encountered but the oil/water interface could not be found.

TABLE 2 ANALYTICAL RESULTS - GROUNDWATER MONITORING WELLS UNION PACIFIC RAILROAD OAKLAND MOTOR FREIGHT FACILITY

SAMPLE LOCATION	SAMPLE ID	DATE SAMPLED	TPH/D	TPH/G	B (440/1)	T	E (ua/l)	X	BTEX	As (mg/l)
LOCATION	וט	SAMPLED	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/i)	(mg/l)
OKUS-W1	OKUS-W1	01/14/93	ND	410	20	4	220	ND	240	ND
"		05/12/93	120	ND	ND	ND	ND	ND	ND	ND
a	W ^o	08/25/83	100	ND	ND	DN	ND	ND	ND	ND
ii	ii 	11/11/93	160	91	1.1	0.88	21	1.6	24	ND
	000 11 00 00 11 1	02/08/94	92	<50	<0.50	< 0.50	< 0.50	<0.50	ND	<0.10
1 18 1 8 100 8 8 8 1 1 1 2021, 11 20 8 20 8	en on elongou maretidas	05/03/94 08/24/94	61 86	<50 <50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	ND ND	<0.10 <0.10
20 10 10 10 10 10 10 10 10 10 10 10 10 10	entrantalista de la composición de la composició	11/16/94	51	<50	< 0.50	<0.50	<0.50	< 0.50	ND	NA
A	and the second	02/22/95	120	<50	< 0.50	<0.50	<0.50	<0,50	ND	NA
4	u	06/22/95	<50	<50	< 0.50	<0.50	<0.50	<0.50	ND	NA
W.	enda tenca re s trafficos Sea cama es escarriada	08/09/95	<50	<50	<0.50	< 0.50	<0.50	<0.50	ND	0.04
	II ость сэгть сампокой кы са	11/29/95	480	<50	< 0.50	<0.50	<0.50	<0.50	ND	< 0.0050
		02/27/96	330	<50	<0.50	< 0.50	< 0.50	<0.50	ND	NA NA
	n Hashima Halloha mmor	05/30/96	320 440	<50 <50	<0.50 <0.50	<0.50 <0.50	<0.50 <0,50	<0.50 <0.50	ND ND	NA <0.10
H	. 30 A . 40	08/27/96 11/13/96	180	<50	<0.50	< 0.50	<0.50	<0.50	ND	NA
M		02/18/97	400	~50 <50	<0.50	<0.50	<0.50 <0.50	<0.50	ND	NA NA
H	esse esse de la companie de la comp El companie de la companie de	05/21/97	190	<50	<0.50	<0.50	<0.50	<0.50	ND	NA
	·····		- -							
OKUS-W2	OKUS-W2	01/14/93	5400	14000	480	92	8500	ND	9100	0.036
H	III	05/12/93	2800	0088	220	47	4600	100	5000	0.093
		08/25/93	6500	22000	420	92	10000	210	11000	0.089
n 	" 	11/11/93	7700	24000	540	150	13000	280	14000	ND
	######################################	02/08/94 05/03/94	2300 2600	4900 17000	150 300	29 <0.50	3000 5800	78 220	3300 6300	<0.10 <0.10
disconnection of the second	88.03 49 4 10 3 4 5 4 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5	03/03/94	8200 8200	11000	320	~0.50 67	7500	250 250	B100	<0.10
"		11/16/94	5500	10000	290	79	130	160	660	NA
4		02/22/95	2000	3500	100	18	1600	66	1800	NA
п	M	06/22/95	3200	13000	260	62	<0.50	110	430	NA
超		08/09/95	2900	4800	160	28	<0.50	200	390	0.92
A A	≥ eterremeke <u>t</u> etrroppe; ki	11/29/95	5600	7100	240	34	<0.50	58	330	0.049
•		02/27/96	2400	5300	200	42 <0.50	3400 <0.50	160 180	3800 390	NA NA
		05/30/96 08/27/96	1900 3100	7000 6700	210 240	< 0.50 65	170	180	660	0.17
M	æ	11/12/96	2900	6000	160	34	130	64	390	NA
		02/18/97	3000	7800	190	44	4000	150	4390	NA
	nies i vois d'home en en de bien de P	05/21/97	2500	3300	120	23	11	31	185	NA
OKUS-W3	OKUS-W3		4200	4900	230	42	2600	44	2900	NA
	# colocius popular ancient	05/12/93	4400	4600	290	60 EE	3500 4300	72	3900	0.14
		08/25/93	2700	9400	280 390	55 110	4300 5100	41 130	4700 5700	0.08 0.14
	- -(30,900,90 , 000,000,000,000	11/11/93 02/08/94	5000 4400	9500 17000	420	78	9800	160	10000	0.14
# Company Contraction Contraction (Contraction Contraction)		05/03/94	3000	14000	310	61	6400	210	7000	0.14
á .	q	08/24/94	4500	10000	350	78	7300	170	7900	<0.10
en e	## ## ## ## ## ## ## ## ## ## ## ## ##	11/16/94	4700	9100	260	64	95	<0.50	420	NA
.0	n	02/22/95	2400	7400	250	51	4400	150	4900	NA
## house harmone with the control of the con-	AL CONTRACTOR OF THE CONTRACTO	06/22/95	3300	8100	250	53	<0.50	76	380	NA
		08/09/95	3100	5200	200	39	<0.50	140	380	1.6
	u ::::::::::::::::::::::::::::::::::::	11/29/95	4500	5300	220	42 75	<0.50 6400	44 240	310 7000	0.18 NA
n		02/27/96 05/30/96	4000 2300	7900 8900	330 200	75 <0.50	< 0.50	240 61	7000 260	NA
0.000		05/30/96	2700	3100	170	37	<0.50 64	36	310	0.20
es aransu renu de la PERESERS "	u	11/12/96	4700	7400	220	60	<0.50	< 0.50	280	NA
0		02/18/97	4600	9300	260	62	5800	85	6210	NA
II	H	05/21/97	2400	6100	190	43	120	41	394	NA

TABLE 2 (Cont) ANALYTICAL RESULTS - GROUNDWATER MONITORING WELLS UNION PACIFIC RAILROAD OAKLAND MOTOR FREIGHT FACILITY

" 08/25/93 PRODUCTIN WELL - NOT SAMPLED " " 11/11/93 1600 590 14 3.1 54 6.2 77 0.53 " " 02/07/94 1900 760 54 9.4 220 24 310 0.55 " " 05/03/94 2000 820 57 9.5 240 27 330 0.38	SAMPLE	SAMPLE	DATE	TPH/D	TPH/G	В	T	E	X	BTEX	As
***	LOCATION	ID	SAMPLED	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(mg/l)
*** 08/26/93 2200 6700 550 72 4800 130 5400 0.093 *** *** "11/11/93 2400 5500 250 6.050 4800 150 5300 0.13	OKUS-W4	OKUS-W4	01/15/93	5400		300	ND	4500	ND	4800	NA
** 11/11/193 2400 5500 530 4600 140 5000 0.13 ** 020/07/94 2700 9100 250 c.050 4900 150 5300 c.010 ** 08/24/94 2200 5500 240 34 4200 140 4600 0.12 ** 08/24/94 2200 5500 320 52 c.050 120 490 NA ** 06/22/95 2200 4300 250 47 2900 160 340 NA ** 08/07/95 2200 4900 280 38 5200 140 5700 NA ** 08/07/95 2200 5300 270 54 <0.50 220 530 33 13 ** 11/28/95 3100 4500 200 41 <0.50 240 30 30 30 31 ** 08/07/97 WELL DECOMMISSIONED ** 08/12/99 2100 550 53 11 180 20 260 NA ** 08/12/99 2100 550 53 11 180 20 260 NA ** 08/12/99 2100 550 53 11 180 20 260 NA ** 08/12/99 12/00 550 53 11 180 20 260 NA ** 08/12/99 12/00 550 53 11 180 20 260 NA ** 08/12/99 12/00 550 53 11 180 20 260 NA ** 08/12/99 12/00 550 83 11 180 20 260 NA ** 08/12/99 12/00 550 53 11 180 20 27 280 NA ** 08/12/99 12/00 550 180 14 250 37 880 0.56 ** 08/12/99 12/00 550 14 31 54 6.2 77 0.38 ** 08/12/99 1600 580 14 31 54 6.2 77 0.38 ** 08/12/99 1600 580 14 31 54 6.2 77 0.38 ** 08/12/99 17/00 910 155 14 5.5 16 96 0.45 ** PRODUCT IN WELL – THE WELL HAS NOT BEEN SAMPLED SINCE 1993 ** PRODUCT IN WELL – THE WELL HAS NOT BEEN SAMPLED SINCE 1993 ** PRODUCT IN WELL – THE WELL HAS NOT BEEN SAMPLED SINCE 1993 ** 11/12/99 1100 ND ND ND 12 ND 11 ND ND ND 2.5 0.004 ** 11/12/99 1100 ND ND ND ND 2.1 ND ND ND 2.1 ND ND ND 11/12/99 1100 ND ND ND 12 ND 11 ND ND ND 11/12/99 1100 ND ND ND ND 12 ND 11 ND ND ND 11/12/99 1100 ND	ti s enese mest gent nest man	n Sentral - Jagger Gustania									
** 02/07/94 2700 9100 250 <0.50 4900 150 5300 <0.6.10 ** 05/03/94 2200 5500 240 34 4200 140 4600 0.12 ** 08/24/94 2900 5500 220 41 8600 190 4000 0.11 ** 01/16/94 2800 5500 320 52 <0.50 20 40 NA ** 02/22/95 2200 4300 250 47 2900 60 3400 NA ** 06/09/95 2200 5300 270 54 <0.50 210 550 1.3 ** 06/09/95 2200 5300 270 54 <0.50 210 550 1.3 ** 05/13/97 WELL DECOMMISSIONED ** 05/13/97 2900 550 53 11 180 20 250 NA ** 05/13/97 2900 550 53 11 180 20 250 NA ** 05/13/97 2900 550 51 4 250 37 360 0.56 ** 05/13/97 4000 760 54 9.4 220 24 310 0.55 ** 05/13/94 2000 820 57 9.5 240 27 330 0.38 ** 06/12/94 2000 820 57 9.5 240 27 330 0.38 ** 06/12/94 2000 820 57 9.5 240 27 330 0.38 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1994 OKUS=W6 OKUS=W6 07/16/93 BRK ND 2.5 ND ND ND ND 2.5 0.004 ** 06/25/93 930 550 0.50 0.50 0.50 0.50 0.50 ** 06/25/93 930 550 0.50 0.50 0.50 0.50 0.50 0.50 ** 06/25/99 930 0.50 0.50 0.50 0.50 0.50 0.50 0.50 ** 06/25/99 930 0.50 0.50 0.50 0.50 0.50 0.50 0.50 ** 06/25/99 930 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 ** 06/25/99 930 0.50 0.50 0.50 0.50 0.50 0.50		# #									
** 0.50/3/94 2200 6500 240 34 4200 140 4600 0.12 ** 0.08/24/94 2200 5500 200 41 3600 190 4000 0.11 ** 0.02/24/95 2000 4300 250 47 2200 60 3400 NA ** 0.02/22/95 2700 4900 280 38 5200 140 5700 NA ** 0.08/22/95 2700 4900 280 38 5200 140 5700 NA ** 0.08/22/95 2700 5500 270 54 <0.50 210 550 1.3 ** 0.08/22/95 2000 5500 270 54 <0.50 210 550 1.3 ** 0.08/22/95 2000 5500 270 54 <0.50 210 550 1.3 ** 0.08/22/95 2000 5500 550 53 111 180 20 260 NA ** 0.08/12/93 2100 550 53 111 180 20 260 NA ** 0.08/12/93 2100 550 81 14 250 37 380 0.55 ** 0.08/25/93 PRODUCT IN WELL—NOT SAMPLED ** 0.08/25/94 1700 910 55 14 8.5 18 96 0.45 ** 0.08/24/94 1700 910 55 14 8.5 18 96 0.45 ** PRODUCT IN WELL—HAS NOT BEEN SAMPLED SINCE 1994 ** PRODUCT IN WELL—THE WELL HAS NOT BEEN SAMPLED SINCE 1994 ** PRODUCT IN WELL—THE WELL HAS NOT BEEN SAMPLED SINCE 1994 ** PRODUCT IN WELL—THE WELL HAS NOT BEEN SAMPLED SINCE 1994 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND ND 0.25 0.004 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 0.2 ND 4.9 1.3 6.6 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.005 ** 0.08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 0.00	a										
* 11/16/94 2800 5500 320 52 <0.50 120 490 NA * 20/22/95 2700 4900 280 38 5200 140 5700 NA * 08/22/95 2700 4900 280 38 5200 140 5700 NA * 108/29/95 3100 4500 200 41 <0.50 210 530 1.3 * 11/29/95 3100 4500 200 41 <0.50 210 530 1.3 * 11/29/95 3100 4500 200 41 <0.50 46 290 0.14 ** 05/13/97 **WELL**DECOMMISSIONED** * 05/13/99 2100 550 550 * 05/13/99 2100 550 550 311 180 20 20 0.14 ** 05/13/99 2100 550 83 111 180 20 26 NA * 05/13/99 2100 550 83 11 180 20 27 260 NA * 05/13/99 1600 550 81 14 250 37 380 0.55 * 05/13/99 1600 550 81 14 250 37 380 0.55 * 05/13/99 1600 760 550 81 14 250 37 380 0.55 * 05/03/94 1900 760 54 9.4 220 24 310 0.55 * 06/23/94 1700 910 55 14 8.5 18 96 0.45 * PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1994 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1994 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1994 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1994 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1995 ** PRODUCT IN WELL - THE WELL HA	u	H							and the first of the first of the	4600	0.12
* 02/22/95 2000 4300 250 47 2900 160 3400 NA * 08/09/95 2700 4900 280 38 5200 140 5700 NA * 08/09/95 2900 5300 270 54 <0.50 210 530 1.3 * 05/13/97 WELLDECOMMISSIONED * 05/13/97											
* 06/22/95 2700 4900 280 38 5200 140 5700 NA	en de										
** * 08(09/45) 2900 5300 270 54 <0.50 210 530 1.3 ** * 11/29/95 3100 4500 200 41 <0.50 46 290 0.14 ** 05/13/97 WELL DECOMMISSIONED ** 05/13/97 S50 OKUS-W5 OKUS-W5 01/15/93 2900 550 53 11 180 20 280 NA ** 05/13/97 2100 550 81 14 250 37 380 0.55 ** 09/25/93 PRODUCTIN WELL, NOT SAMPLED ** 11/11/93 1600 590 14 3.1 54 6.2 77 0.53 ** 05/03/94 2000 620 57 9.5 240 27 330 0.38 ** 05/03/94 2000 620 57 9.5 240 27 330 0.38 ** 06/24/94 1700 910 55 14 6.5 18 96 0.45 ** PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1994 OKUS-W6 OKUS-W6 07/16/93 BRK ND 2.5 ND ND ND ND 2.5 0.004 ** 911/12/95 610 ND 3.6 ND 3.7 1.3 8.6 ND 3.7											
* 05/13/97 WELL DECOMMISSIONED			e in annual								
OKUS-W5 OKUS-W5 01/15/93 2900 550 53 11 180 20 280 NA 05/12/93 2000 550 81 14 250 37 380 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.5		10						<0.50	46	290	0.14
OKUS-W5 OKUS-W5 01/15/99 2000 550 53 11 180 20 280 NA " 05/12/93 2100 550 81 14 250 37 380 0.56 " 08/25/99 PRODUCT IN WELL NOT SAMPLED " 11/11/93 1600 590 14 9.1 54 6.2 77 0.53 " 05/03/94 2000 820 57 9.5 240 27 330 0.38 " 08/26/94 1700 910 55 14 6.5 18 96 0.45 " PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1994 OKUS-W6 OKUS-W6 07/16/93 BRK ND 2.5 ND ND ND ND 2.5 0.004 " 11/12/99 610 ND 3.6 ND 3.7 1.3 8.6 0.013 " PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1993 OKUS-W7 OKUS-W7 07/16/93 ND ND 2.6 ND 3.7 1.3 8.6 0.013 " PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1993 OKUS-W7 OKUS-W7 07/16/93 ND ND 2.1 ND ND ND 2.5 0.004 " 11/12/93 610 ND ND ND ND ND ND 2.1 0.005 " 11/12/93 1100 ND		0.000	05/13/97	WELL		IISSIONED					, KC CO 10 10 10 10 10 10 10 1
" " 05/12/93 2100 550 81 14 250 37 380 0.55 " " 08/25/93 PRODUCTIN WELL NOT SAMPLED " " 11/11/93 1600 590 14 3.1 54 6.2 77 0.53 " " 02/07/94 1900 760 54 9.4 220 24 310 0.55 " " 05/03/94 1200 620 57 9.5 240 27 330 0.38 " " PRODUCT IN WELL − THE WELL HAS NOT BEEN SAMPLED SINCE 1994 " " 08/24/94 1700 910 55 14 8.5 18 96 0.45 " PRODUCT IN WELL − THE WELL HAS NOT BEEN SAMPLED SINCE 1994 " 08/25/93 590 ND 2.6 ND 4.9 1.3 8.8 0.013 " " 11/12/93 610 ND 3.6 ND 3.7 1.3 8.6 ND " " PRODUCT IN WELL − THE WELL HAS NOT BEEN SAMPLED SINCE 1993 " " " PRODUCT IN WELL − THE WELL HAS NOT BEEN SAMPLED SINCE 1993 " " " PRODUCT IN WELL − THE WELL HAS NOT BEEN SAMPLED SINCE 1993 " " " " " " " " " " " " " " " " "	OKUS-W5	OKUS-W5	01/15/93	2900		59	88 to 88884464	180	20	260	NA
* * * * 08/25/93 PRODUCT IN WELL - NOT SAMPLED * * 11/11/93 1600 590 14 3.1 54 6.2 77 0.53 * * 02/07/94 1900 760 54 9.4 220 24 310 0.55 * * 05/03/94 2000 820 57 9.5 240 27 330 0.38 * * 08/24/94 1700 910 55 14 8.5 18 96 0.45 * PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1994 OKUS-W6 OKUS-W6 07/16/93 BRK ND 2.5 ND ND ND ND 2.5 0.094 * * 11/12/99 610. ND 3.6 ND 3.7 1.3 8.6 0.013 * * 11/12/99 610. ND 3.6 ND 3.7 1.3 8.6 ND 3.7 1.3 1.3 1.3 ND 3.7 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	*	"	05/12/93	2100	550	81	waa ay ah ah ah barka a			Section 19 Section 20 Section 2	0.56
" " 02/07/94 1900 760 54 9.4 220 24 310 0.55 05/06/94 2000 820 57 9.5 240 27 330 0.38 " " 08/24/94 1700 910 55 14 8.5 18 96 0.45 " PRODUCT IN WELL — THE WELL HAS NOT BEEN SAMPLED SINCE 1994 OKUS—W6 0KUS—W6 07/16/93 BRK ND 2.5 ND ND ND ND 2.5 0.004		n	08/25/93	PRODUC	TIN WEL		the second of the second				
" " 05/03/94 2000 820 57 9.5 240 27 330 0.38 " " PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1994 OKUS-W6 OKUS-W6 07/16/93 BRK ND 2.5 ND ND ND ND 2.5 0.004 " " 11/12/93 590 ND 2.6 ND 4.9 1.3 8.8 0.013 " " PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1994 OKUS-W6 OKUS-W6 07/16/93 DR ND 2.6 ND 4.9 1.3 8.8 0.013 " " " PRODUCT IN WELL - THE WELL HAS NOT BEEN SAMPLED SINCE 1993 OKUS-W7 OKUS-W7 07/16/93 ND ND 3.6 ND 3.7 1.3 8.6 ND ND " ND		ili maga pagangan salaban									
" 08/24/94 1700 910 55 14 8.5 18 96 0.45 PRODUCT IN WELL — THE WELL HAS NOT BEEN SAMPLED SINCE 1994 OKUS—W6 OKUS—W6 07/16/93 BRK ND 2.5 ND ND ND ND 2.5 ND ND ND ND ND ND ND N		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)				2500 - 100					
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" " 08/25/93	U	er mu, i umm mente II									
" " 08/25/93							2020 1000 000 000 000 0 00 000			848888888	
	OKUS-W6	OKUS-W6									
OKUS-W7 OKUS-W7 07/16/93 ND ND 2.1 ND ND ND 2.1 0.009 " " 08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND	46	e.								I	
** 08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 1.1/12/98 1100 ND	"	i)			THE WE					east respect to the treat	100000000000000000000000000000000000000
** 08/25/93 930 56 2.9 ND 1.2 ND 4.1 ND 1.1/12/98 1100 ND					iiii iiii ii gaas		en e				6 666
" 11/12/93 1100 ND	OKUS-W/	OKUS-W/								e san section and a section of the	AND COLUMN TO SERVICE AND THE SERVICE AND THE
" 02/07/94 1100 ND 0.7 <0.50 <0.50 <0.50 0.7 <0.10 " 05/03/94 1300 <50 <0.50 <0.50 <0.50 <0.50 <0.50 ND <0.10 " 08/24/94 910 <50 2.5 0.54 <0.50 <0.50 <0.50 3.0 <0.10 " 11/16/94 820 <50 0.62 <0.50 <0.50 <0.50 <0.50 0.65 NA " 02/22/95 830 <50 0.54 <0.50 <0.50 <0.50 0.6 NA " 06/22/95 850 <50 0.54 <0.50 <0.50 <0.50 0.6 NA " 06/22/95 850 <50 0.54 <0.50 0.52 <0.50 0.5 NA " 06/02/95 640 71 4.2 <0.50 0.52 <0.50 2.9 NA " 11/29/95 1300 64 4.3 <0.50 1.3 0.51 6.1 0.0095 " " 02/27/96 2600 <50 1.5 <0.50 0.54 <0.50 2.0 NA " 05/30/96 1900 60 2 <0.50 0.54 <0.50 2.0 NA " 08/27/96 1700 70 2.3 <0.50 0.54 <0.50 2.0 NA " 11/12/95 1700 70 2.3 <0.50 <0.50 <0.50 2.3 <0.10 ND N	11	30									
" 08/24/94 910 <50	ii	и				0.7	<0.50	<0.50			Anna State and Company of the State of the S
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	" #************************************	u Ye	ranger and the second of the s							COLUMN CONTRACTOR CONTRACTOR	
	"	u u					Management of the second			entra contra en estado en el como de estado en est	1, - 1, - 1, - 1, - 1, - 1, - 1, - 1, -
# 11/29/95 1300 64 4.3 <0.50 1.3 0.51 6.1 0.0095 " 02/27/96 2600 <50 1.5 <0.50 0.54 <0.50 2.0 NA " 05/30/96 1900 60 2 <0.50 0.54 <0.50 2.0 NA " 08/27/96 1700 70 2.3 <0.50 <0.50 <0.50 2.3 <0.10 " 11/12/96 1400 86 4.1 <0.50 <0.50 <0.50 <0.50 4.1 NA " 02/18/97 2000 <50 0.75 <0.50 <0.50 <0.50 <0.50 4.1 NA " 02/18/97 1200 <50 0.75 <0.50 <0.50 <0.50 <0.50 0.7 NA OKUS-W8 OKUS-W8 07/16/93 ND	40	at									
" " 02/27/96 2600 <50 1.5 <0.50 0.54 <0.50 2.0 NA " 05/30/96 1900 60 2 <0.50 0.54 <0.50 2.0 NA " 08/27/96 1700 70 2.3 <0.50 <0.50 <0.50 2.3 <0.10 " 11/12/96 1400 86 4.1 <0.50 <0.50 <0.50 <0.50 4.1 NA " 02/18/97 2000 <50 0.75 <0.50 <0.50 <0.50 <0.50 0.7 NA " 05/21/97 1200 <50 0.75 <0.50 <0.50 <0.50 0.7 NA OKUS-W8 OKUS-W8 07/16/93 ND	iii		or soosoo saasaa sanaa aasa	640		4.2	<0.50	1.2	an tanang ang tanggalan katalon ang tanggalan d		
- 9 05/30/96 1900 60 2 <0.50 0.54 <0.50 2.0 NA - 9 08/27/96 1700 70 2.3 <0.50 <0.50 <0.50 2.3 <0.10 - 11/12/96 1400 86 4.1 <0.50 <0.50 <0.50 4.1 NA - 9 02/18/97 2000 <50 0.75 <0.50 <0.50 <0.50 0.7 NA - 9 05/21/97 1200 <50 2.6 <0.50 0.84 <0.50 0.7 NA - 9 05/21/97 1200 <50 2.6 <0.50 0.84 <0.50 3.4 NA - 11/16/93 ND		n n				L	Market Control of the				
" " 08/27/96 1700 70 2.3 <0.50 <0.50 <0.50 2.3 <0.10 " " 11/12/96 1400 86 4.1 <0.50 <0.50 <0.50 4.1 NA " " 02/18/97 2000 <50 0.75 <0.50 <0.50 <0.50 0.7 NA " " 05/21/97 1200 <50 2.6 <0.50 0.84 <0.50 3.4 NA OKUS-W8 OKUS-W8 07/16/93 ND											
" 11/12/96 1400 86 4.1 <0.50 <0.50 <0.50 4.1 NA " 02/18/97 2000 <50 0.75 <0.50 <0.50 <0.50 0.7 NA " 05/21/97 1200 <50 2.6 <0.50 0.84 <0.50 3.4 NA OKUS-W8 OKUS-W8 07/16/93 ND	u proposition (SC)	II						Contraction of the contract of			<0.10
" " 05/21/97 1200 <50 2.6 <0.50 0.84 <0.50 3.4 NA OKUS-W8 OKUS-W8 07/16/93 ND ND ND ND ND ND ND ND 0.012 " " 08/27/93 1100 120 1.3 ND ND ND 0.85 2.2 ND " " 11/11/93 1300 190 3.5 1.3 46 4.9 55.7 ND " " 02/07/94 1000 120 0.9 <0.50 <0.50 <0.50 0.9 <0.10 " " 05/03/94 780 79 0.99 <0.50 <0.50 <0.50 0.9 <0.10 " " 08/24/94 700 100 1.4 <0.50 <0.50 <0.50 <0.50 1.4 <0.10 " " 08/24/94 830 110 0.77 <0.50 <0.50 <0.50 0.8 NA " " 02/22/95 370 150 0.96 <0.50 <0.50 <0.50 0.9 NA " " 08/09/95 1100 90 1.1 <0.50 <0.50 <0.50 0.9 NA " " 08/09/95 1100 90 1.1 <0.50 <0.50 <0.50 0.9 NA " " 08/09/95 2400 100 0.73 <0.50 <0.50 0.91 1.6 <0.0050	i		11/12/96	1400	86	4.1	<0.50				
OKUS-W8 CKUS-W8 07/16/93 ND ND ND ND ND ND ND 0.012 " " 08/27/93 1100 120 1.3 ND ND ND 0.85 2.2 ND " " 11/11/93 1300 190 3.5 1.3 46 4.9 55.7 ND " " 02/07/94 1000 120 0.9 <0.50 <0.50 <0.50 0.9 <0.10 " " 05/03/94 780 79 0.99 <0.50 <0.50 <0.50 0.9 <0.10 " " 08/24/94 700 100 1.4 <0.50 <0.50 <0.50 <0.50 1.4 <0.10 " " 08/24/94 830 110 0.77 <0.50 <0.50 <0.50 0.8 NA " " 02/02/95 370 150 0.96 <0.50 <0.50 <0.50 0.8 NA " " 06/22/95 870 76 0.92 <0.50 <0.50 <0.50 0.9 NA " " 08/09/95 1100 90 1.1 <0.50 <0.50 <0.50 0.91 1.6 <0.078 " " 08/09/95 2400 100 0.73 <0.50 <0.50 0.91 1.6 <0.0050	in the state of th	R 									
" " 08/27/93 1100 120 1.3 ND ND 0.85 2.2 ND 11/11/93 1300 190 3.5 1.3 46 4.9 55.7 ND 0.000 11/11/93 1300 190 0.9 <0.50 <0.50 <0.50 <0.50 0.9 <0.10 0.9 <0.10 0.9 <0.50 <0.50 <0.50 0.9 <0.10 0.9 <0.10 0.9 <0.50 <0.50 <0.50 0.9 <0.10 0.9 <0.10 0.9 <0.10 0.9 <0.50 <0.50 <0.50 0.9 <0.10 0.9 <0.10 0.9 0.9 0.50 0.50 0.9 0.9 0.9 0.9 0.50 0.9 0.50 0.9 0.9 0.10 0.9 0.9 0.50 0.50 0.50 0.9 0.9 0.10 0.9 0.50 0.50 0.50 0.9 0.50 0.9 0.50 0.9 0.50 0.9 0.50 0.9 0.50 0.9 0.50 0.9 0.9 0.9 0.50 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.			05/21/97	1200	<50	2.6	<0.50	U.84	<0.50	J.4	19/5
" " 08/27/93 1100 120 1.3 ND ND 0.85 2.2 ND " 11/11/93 1300 190 3.5 1.3 46 4.9 55.7 ND " " 02/07/94 1000 120 0.9 <0.50 <0.50 <0.50 0.9 <0.10 " " 05/03/94 780 79 0.99 <0.50 <0.50 <0.50 <0.50 1.0 <0.10 " " 08/24/94 700 100 1.4 <0.50 <0.50 <0.50 <0.50 1.4 <0.10 " " 08/24/94 830 110 0.77 <0.50 <0.50 <0.50 0.8 NA " " 02/02/95 370 150 0.96 <0.50 <0.50 <0.50 1.2 2.2 NA " " 06/22/95 870 76 0.92 <0.50 <0.50 <0.50 0.9 NA " " 08/09/95 1100 90 1.1 <0.50 <0.50 <0.50 0.9 NA " " 08/09/95 2400 100 0.73 <0.50 <0.50 0.91 1.6 <0.0050	OKUS-W8	OKUS-W8	07/16/93	ND	ND	ND	ND	ND	ND	ND	0.012
" " 02/07/94 1000 120 0.9 <0.50 <0.50 <0.50 0.9 <0.10 " 05/03/94 780 79 0.99 <0.50 <0.50 <0.50 1.0 <0.10 " " 08/24/94 700 100 1.4 <0.50 <0.50 <0.50 1.4 <0.10 " " 11/16/94 830 110 0.77 <0.50 <0.50 <0.50 0.8 NA " " 02/22/95 370 150 0.96 <0.50 <0.50 1.2 2.2 NA " " 06/22/95 870 76 0.92 <0.50 <0.50 <0.50 0.9 NA " " 08/09/95 1100 90 1.1 <0.50 <0.50 <0.50 1.3 2.4 0.078 " " 11/29/95 2400 100 0.73 <0.50 <0.50 0.91 1.6 <0.0050	II	at an annual contract of the second of the s	08/27/93	1100	120	1.3	ND	ND	0.85	2.2	
" 05/03/94 780 79 0.99 <0.50 <0.50 <0.50 1.0 <0.10 " 08/24/94 700 100 1.4 <0.50 <0.50 <0.50 1.4 <0.10 " 11/16/94 830 110 0.77 <0.50 <0.50 <0.50 0.8 NA " 02/22/95 370 150 0.96 <0.50 <0.50 1.2 2.2 NA " 06/22/95 870 76 0.92 <0.50 <0.50 <0.50 0.9 NA " 08/09/95 1100 90 1.1 <0.50 <0.50 <0.50 0.9 NA " 11/29/95 2400 100 0.73 <0.50 <0.50 0.91 1.6 <0.0050	4 000000 4 000000000000000000000000000	4				200100000000000000000000000000000000000					
" " 08/24/94 700 100 1.4 <0.50 <0.50 <0.50 1.4 <0.10 " " 11/16/94 830 110 0.77 <0.50 <0.50 <0.50 0.8 NA " " 02/22/95 370 150 0.96 <0.50 <0.50 1.2 2.2 NA " " 06/22/95 670 76 0.92 <0.50 <0.50 <0.50 0.9 NA " " 08/09/95 1100 90 1.1 <0.50 <0.50 <0.50 0.9 NA 11/29/95 2400 100 0.73 <0.50 <0.50 0.91 1.6 <0.0050		u Santana							and a second control of the control		Contract to the contract of
" " 11/16/94 830 110 0.77 <0.50 <0.50 <0.50 0.8 NA " " 02/22/95 370 150 0.96 <0.50 <0.50 1.2 2.2 NA " " 06/22/95 870 76 0.92 <0.50 <0.50 <0.50 0.9 NA " " 08/09/95 1100 90 1.1 <0.50 <0.50 1.3 2.4 0.078 " " 11/29/95 2400 100 0.73 <0.50 <0.50 0.91 1.6 <0.0050		u		And the second second second	A SAN AND AND A SAN AND AND AND A SAN A	a grand and a state of the state of the state of		Charles the fight of the control of		the contract of the contract o	
" " 02/22/95 370 150 0.96 <0.50 <0.50 1.2 2.2 NA " 06/22/95 870 76 0.92 <0.50 <0.50 <0.50 0.9 NA " 08/09/95 1100 90 1.1 <0.50 <0.50 1.3 2.4 0.078 " 11/29/95 2400 100 0.73 <0.50 <0.50 0.91 1.6 <0.0050		н 💮					< 0.50	<0,50	<0.50	8:0	NA
" 08/09/95 1100 90 1.1 <0.50 <0.50 1.3 2.4 0.078 " 11/29/95 2400 100 0.73 <0.50 <0.50 0.91 1.6 <0.0050	4	u u	02/22/95	370	150	0.96				the property of the contract o	
*	*	ч									
	# 60-400-00 # 00-000	# 									
	H	H				Action and the second second second			Security of a section of the section of the section of		

TABLE 2 (Cont) ANALYTICAL RESULTS - GROUNDWATER MONITORING WELLS UNION PACIFIC RAILROAD OAKLAND MOTOR FREIGHT FACILITY

SAMPLE	SAMPL		TPH/D	TPH/G	В	Т	E	Х	BTEX	As
LOCATION	ID	SAMPLED	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(mg/l)
OKUS-W8	okus-v	N8 05/30/96	2200	210	<0.50	< 0.50	<0.50	0.7	0.7	NA
9	II.	08/27/96	2100	150	0.64	<0.50	<0.50	<0.50	0.64	<0.10
	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	11/12/96	1600	170	< 0.50	<0.50	<0.50	1.1	1.1	NA
erigangangangan pengelakkan ungak unaga	u Sadan Siljii iy Tibbas	02/18/97	1900	140	< 0.50	< 0.50	< 0.50	1.3	1.3	NA
		05/21/97	1600	100	1.3	<0.50	<0.50	1.1	2.4	NA
APL/UP-W1	APL/UP-	W1 07/16/93	700	300	25.4	1,7	ND	3.0	30	0.011
	II	08/26/93	810	720	47	1.3	360	14.0	420	0.013
n		11/11/93	530	560 620	26.	ND	220 180	11,0 10	260	ND <0.10
2, 11861 (100 0 0) (100 00 00 00 00 00 00 00 00 00 00 00 00		02/07/94 05/03/94	660 590	680	25 48	<0.50 2.9	260	9.8	220 320	<0.10 <0.10
n Malianian inner an eileannan inn	II	08/24/94	420	830	48	4.8	12	3.2	68	<0.10
		11/15/94	480	470	36	3.6	9.6	12	61	NA
e Profit jakaj n ikia, Kaskiji	u Vasta 1840 valotsida	02/22/95 06/22/95	510 320	470 160	33 12	2.8 0.82	170 3.5	9 2.4	210 19	NA NA
#	ilitat e kantaure ki u	08/09/95	160	69	4.2	<0.50	<0.50	2.3	7	<0.0050
ne.	o distribution	11/29/95	920	170	7.4	0.58	66	3.5	78	0.018
B contraction to March 415 415 415 415 415 415 415 415 415 415	u siminasii o o	02/27/96		ACCESS		OT SAMPLE		on and the second	potagogan pokamakk	
) h H		05/30/96 08/27/96				OT SAMPLE OT SAMPLE				
¥C.	0000000 Ta	11/12/96				OT SAMPLE		1 2 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
Н		02/18/97	1800	620	43	3.3	130	20	196	NA
н	n de la companya de l	05/21/97	850	260	22	<0.50	13	2.5	38	NA
APL/UPW2	ADI /I ID	W2 07/16/93	ND.	ND	8.0	ND	ND	ND	8	0.016
"	71 E/OI	08/26/93	240	94	ND	ND	35	2.4	37	0.023
6	.49	11/11/93	190	110	5.0	ND	38	2.6	46	ND
# # # # # # # # # # # # # # # # # # #	n Istici ini ingkalance na	02/07/94	270	120	6.6	<0.50	38	1.8	46	<0.10
0	0	05/03/94 08/24/94	100	<50 220	<0,50 13.0	<0.50 0.77	<0.50 3.5	<0.50 3.1	ND 20	<0.10 <0.10
49		11/15/94	320	190	11.0	<0.50	63.0	5.4	 79	NA
"		02/22/95	550	320	19.0	<0.50	100	9.5	130	NA
4	0	06/22/95	300	170	10.0	62	2.2	2.3		NA
#1	u u	08/09/95 11/29/95	180 690	62 110	3.5 7.2	<0.50 <0.50	<0.50 49	2.3 2.3	5.8 59	0.22 0.019
ii	2000 - 100 -	02/27/96	480	100	5.3	<0.50	33	2.9	41	NA
n i	en de	05/30/96	280	<50	1.9	<0.50		1.2		NA
### ##################################	II A toward to towage out on a	08/27/96	320	<50	1.1	<0.50	1.0	< 0.50		<0.10
41	u	11/12/96 02/18/97	470 770	85 170	3,2 12	<0.50 0.77	1.7 81	0.62 9,4		
11		05/21/97	430	92	4.8	<0.50		<0.50		
	UPLICATI	ES			ogorosonordan, que anti-				2000 000 1 su a <u>n in</u>	onici o populaci di dici
OKUS-W5	OKUS-V			510	50	10 ND	170 ND			NA ND
OKUS-W1	OKUS-V QA/QC-		140 ND	ND 0.21	ND 22.4	UN DN				
OKUS-W4	OKUS-V	N9 08/26/93	2700	6200	340	78	4500	100	5000	0.10
OKUS-W8	OKUS-V			120	1.3	ND				A 100 (100) TO 100 (100) TO 100 (100)
OKUS-W3	QA/QC-			15000	280 300	64 41	5800 5200			1
[18] C. Carlos S. Santana and A. Carlos and Co.	OKUS-C			5400 92	1.6	<0.50				
APL/UP-W2				190	de e e come e e e como estado de estado en el como	< 0.50	62	4.7	77	NA
APL/UP-W2	APL-W	12 02/22/95	490	360	20	<0.50				
APL/UP-W2	APL-W			71 170		<0,50 0.57				
APL/UP-W1 OKUS-W1	APL-W OKUS-W			170 < 50	7.5 <0.50			entra de la companya		
	OKUS-W			<50			< 0.50	< 0.50	ND.	NA
OKUS-W1	OKUS-W	/11 08/27/96	330	<50	<0.50	and the state of t	the first of the second second second		and the second second second second	
	OKUS-W			11000	210	55 • •				
APL/UP-W1 OKUS-W1	APL/UP-	Charles and the contract of th		370 <50						approximate a construction of the construction
OV09-111	OVO2-M	111 00/21/9/	1 220	< 50	1 <0.50	~0.50	~0.00	~0.50	, INL	11/3

TABLE 2 (Cont) ANALYTICAL RESULTS — GROUNDWATER MONITORING WELLS UNION PACIFIC RAILROAD OAKLAND MOTOR FREIGHT FACILITY

SAMPLE LOCATION	SAMPLE ID	DATE SAMPLED	TPH/D (ug/l)	TPH/G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	BTEX (ug/l)	As (mg/l)
			\ _0. /	, <u>G</u> , ,	, 5.,					
1	TRIP BLANKS							•		
UPMF	OAK-FB 1	07/16/93	NA .	NA	ND	ND	ND	ND	ND	NA
UPMF	OAK-TB 2	07/16/93	NA	NA	ND	ND	ND	ND	ND	NA
UPMF	TB-1	08/27/93	NA NA	NA .	ND	ND	ND	ND	ND	NA .
UPMF	TB-2	08/27/93	NA	NA	ND	ND	ND	ND	ND	NA
UPMF	TB-1	11/12/93	NA	NA	ND	ND	ND.	ND	ND	NA
UPMF	TB-1	08/24/94	NA	NA	ND	ND	ND	ND	ND	NA
UPMF	TB-1	11/16/94	NA	NA	NA	NA	NA	NA	NA	NA
UPMF	TB-1	02/22/95	NA	ND	ND	ND	ND	ND	ND	NA
UPMF	TB-1	06/22/95	NA	ND	ND	ND	ND	ND	ND	NA
UPMF	TB-1	08/09/95	NA	ND	ND	ND	ND	ND	ND	NA ·
UPMF	TRIP BLANK	11/29/95	NA	ND	ND	ND	ND	ND	ND	NA
UPMF	TRIP BLANK	02/27/96	NA	ND	ND	ND	ND	ND	ND	NA
UPMF	TRIP BLANK	05/29/96	NA	ND	ND	ND	ND	ND	ND	NA
UPMF	TRIP BLANK	08/27/96	NA	ND	ND	ND	ND	ND	ND	NA
UPMF	TRIP BLANK	11/12/96	NA NA	ND	ND	ND	ND	ND.	ND	NA
UPMF	TRIP BLANK	02/18/97	NA	ND	ND	ND	ND	ND	ND	NA
UPMF	TRIP BLANK	05/21/97	NA	ND	ND	ND	ND	ND	ND	NA

ND - Not Detected

NA - Not Analyzed BRK - Bottle broken during shipment

TPH - Total Petroleum Hydrocarbons

mg/L - milligram per liter

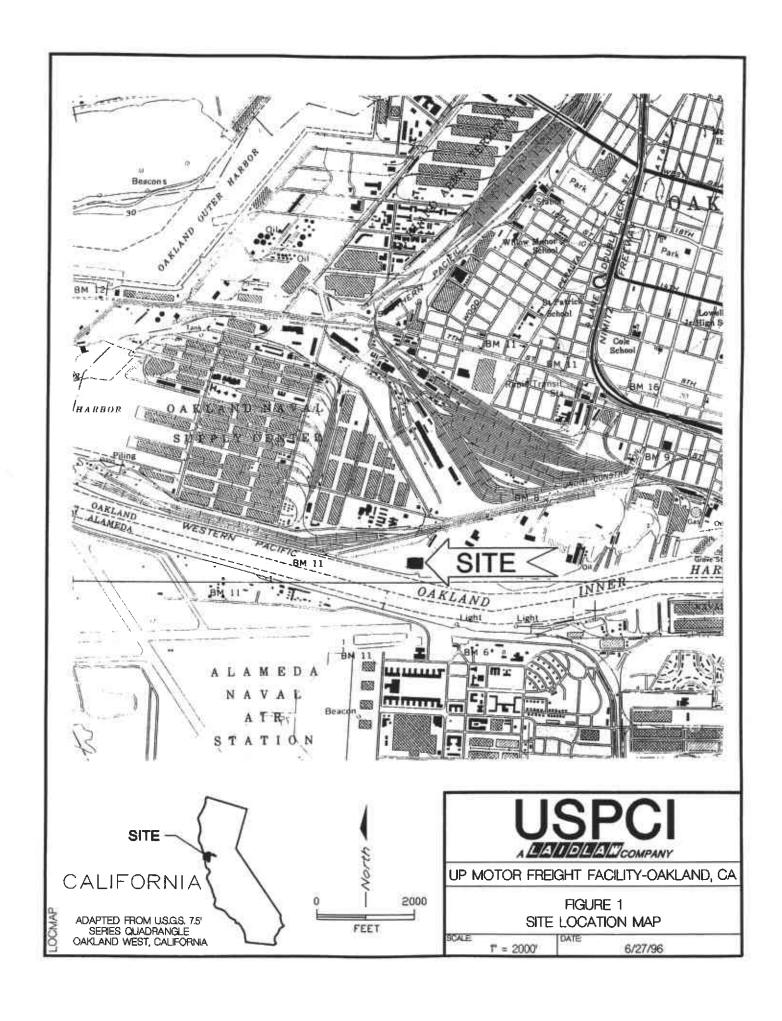
ug/L - microgram per liter

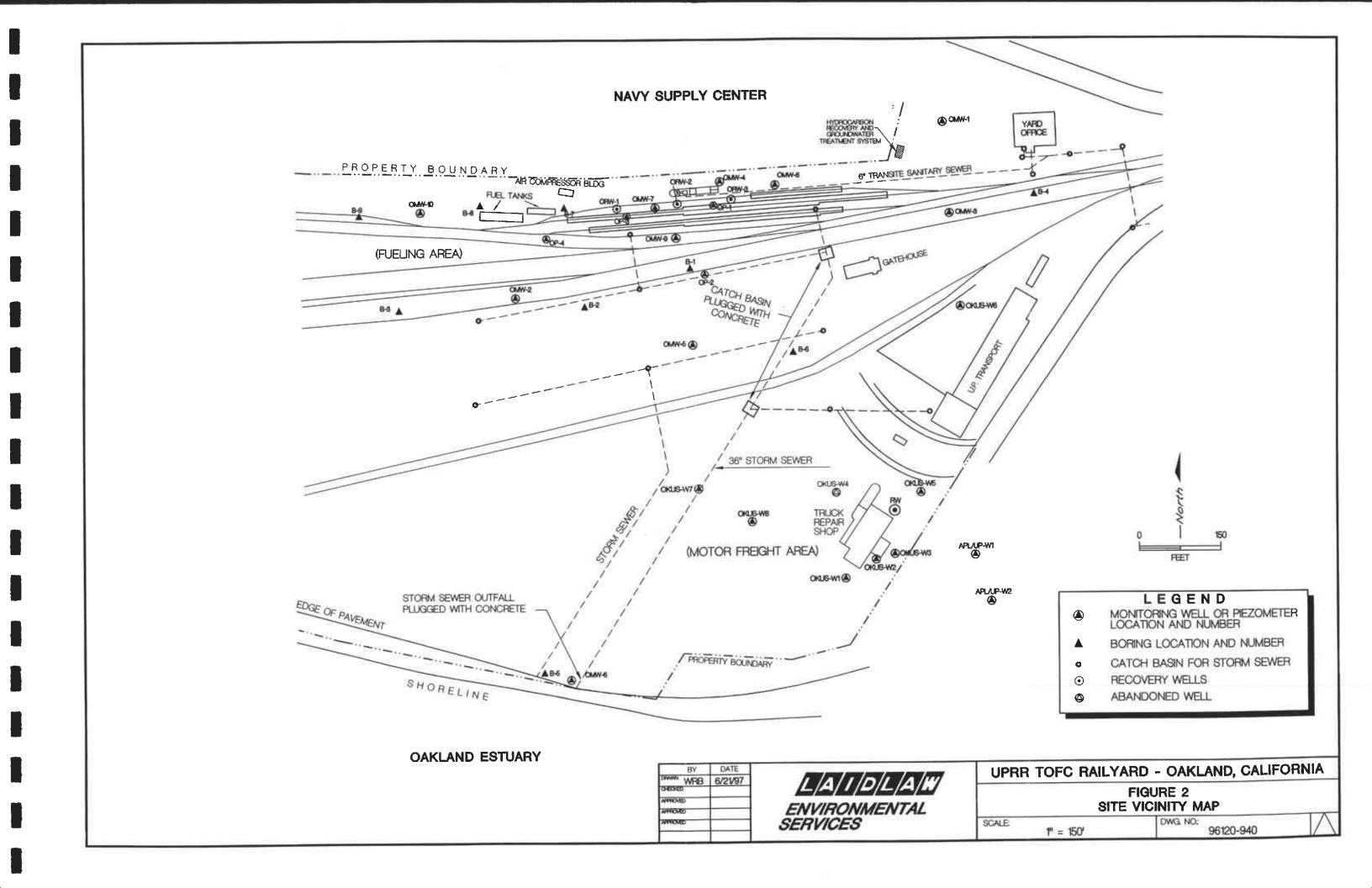
TPH/D - anaylzed using EPA Method 8015 Mod.

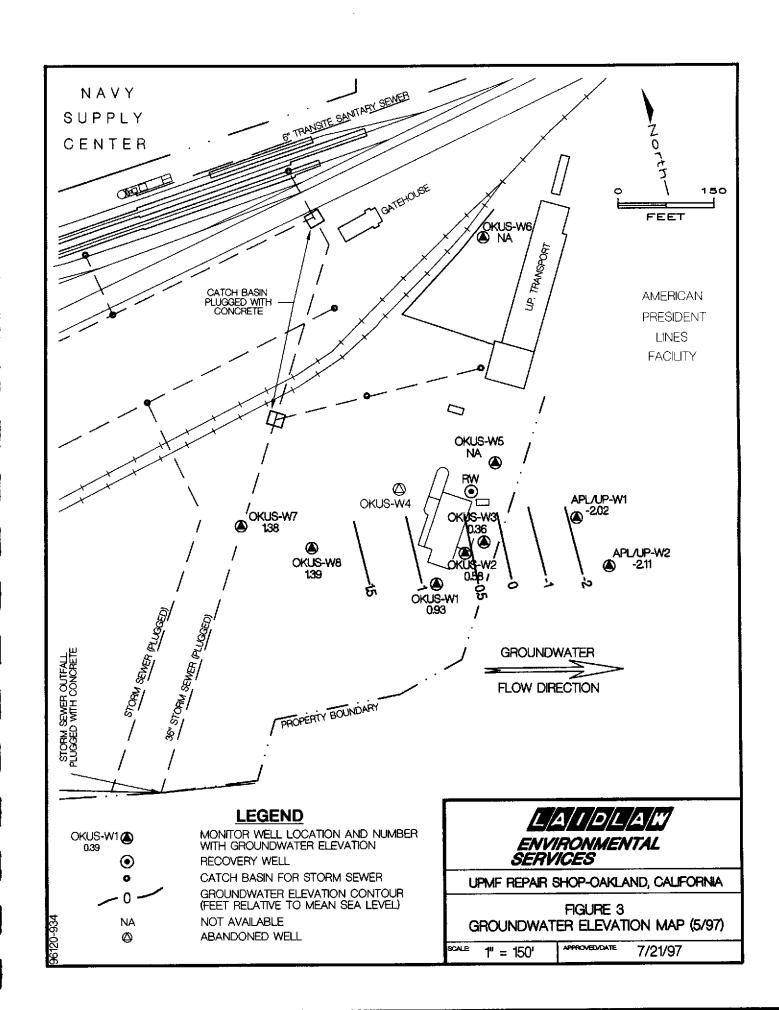
TPH/G - analyzed using EPA Method 8015 Mod.

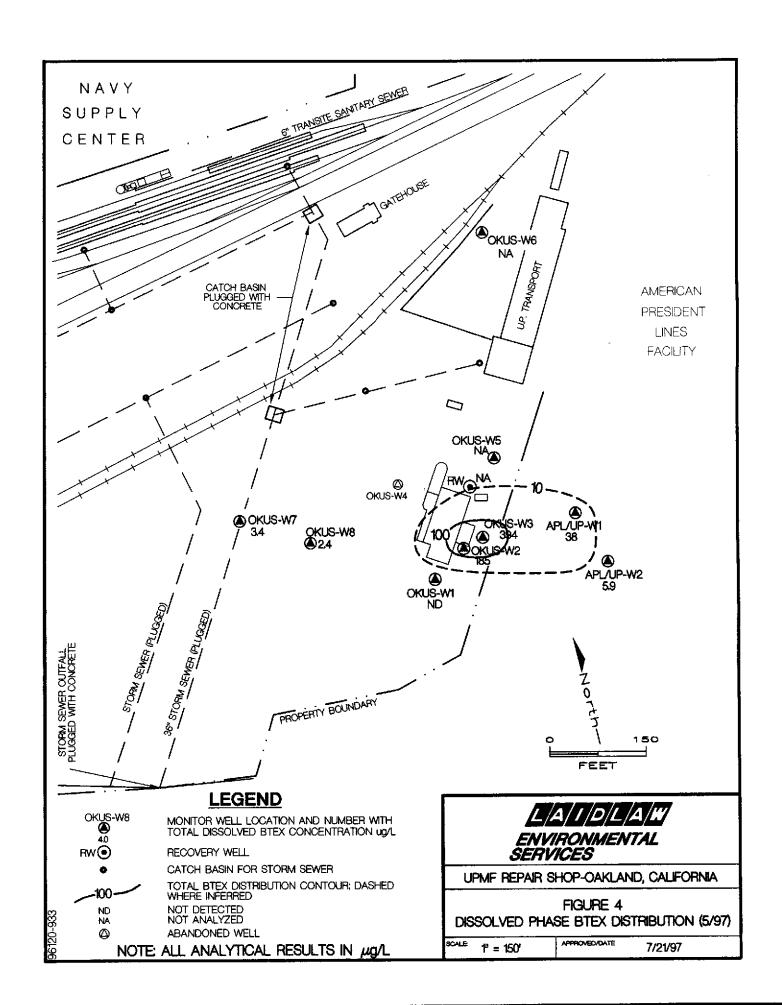
BTEX - analyzed using EPA Method 8020

As - analyzed using EPA Method 7060









APPENDIX A

FLUID-LEVEL MEASUREMENTS AND SAMPLE COLLECTION LOGS

	. 							
USPCI Project	Name: UPMF	Oakland		USPCI I	Project Number: 96120-8	344		
Measuring Poi	nt (MP) Location	Top of casing		Well	No. OKUS-WI	[
Well Depth: (I	Below MP): 18.76	0 Feet	-		<u>.</u>			
Casing diamete	er: 2 Inches				Sampling Date: 5/2	1/97		
Depth To Gro	und Water (Below	MP): 8.24 Feet		Sample ID No. OKUS-W1				
Method Of W	ell <u>Development:</u>		_		Time: 14:15			
□ Тар 〔	Submersible Pu	mp 🗆 Bladder	Pump		Riser Elevation (MF): 9.17 Peet		
■ Bailer 〔	☐ Centrifugal Pur	np 🗆 Other			Top of Screen Eleva	ition: 6.85 Peet		
Sampling Col	lection Method:			Sample .	Appearance: Clear			
	bmersible Pump	☐ Bladder	Pump Sample	Odor: L	ight			
■ Bailer Tyr		n 🔘 Stainless Ste	æl	Samplin	g Problems (if any):	<u>-</u>		
			3 plastic disposable			,		
		Feet Bel		Deconta	mination Performed: Pr	obe		
Tubing Type (<u>, , , , , , , , , , , , , , , , , , , </u>					
	·	Collection	ell Development/Fie	ld Tests Samples	Collected: TPH-Gasolii 8020 BTEX			
Time	pH (Units)	Temperature Corrected Conductance (umbo/cm)	Temperature (Centigrade)	Water Level (Nearest 0.01 Ft.)	Cumulative Volume of Water Removed From well (Gallons)	Pumping Rate in Gallons/Minute (GPM)		
13:58	Begin well							
14:03	7.0	1,300	19.8		1.75			
14:07	7.1	1,900	19.5		3.50			
14:11	7.1	1,800	19.2		5.25			
14:15	Sample well							
· · · · · · · · · · · · · · · · · · ·								
	-							
		Were Evacuated B						
					[Comme	nts may continue on back		
Form Complet	ted By: Mark Me	cCormick		Witnessed By:				
		-						

USPCI Project	Name: UPMF ()akland	USPCI	USPCI Project Number: 96120-844					
Measuring Poin	t (MP) Location	Top of casing	Wel	l No. OKUS-W2					
Well Depth: (B	elow MP): 22.34	Feet							
Casing diameter	r: 2 Inches				Sampling Date: 5/21/97				
Depth To Grou	nd Water (Below	MP): 9.13 Feet			Sample ID No. OKUS-W2				
Method Of We	ell Development:				Time: 14:55				
□ Tap □	Submersible Pu	mp 🗆 Bladder	Pump		Riser Elevation (MF): 9.71 Feet			
■ Bailer □	Centrifugal Pun	np 🗆 Other			Top of Screen Eleva	tion: 7.05 Feet			
Sampling Colle	ection Method:			Sample	Appearance: Clear/very	lightly turbid			
☐ Tap ☐ Sub	mersible Pump	☐ Bladder	Pump Sample	Odor:	Moderate				
■ Bailer Type	: O Teflo	n O Stainless Ste	el .	Sampli	ng Problems (if any):				
) PVC ●HDPE	Plastic disposable						
Pump Intake O	r Bailer Set At _	Feet Bel	low MP	Decont	amination Performed: Pr	obe			
Tubing Type (i									
		Collection 🗆 We	ell Development/Fiel	d Tests Sample	es Collected: TPH-Gasolii 8020 BTEX				
Time	pH (Units)	Temperature Corrected Conductance (umbo/cm)	Temperature (Centigrade)	Water Level (Nearest 0.01 Ft.)	Cumulative Volume of Water Removed From well (Gallons)	Pumping Rate in Gallons/Minute (GPM)			
14:33	Begin well								
14:38	7,1	4.000	19.6		2.25				
14:43	7.1	4,400	19.5		4.50	<u> </u>			
14:48	7.0	4,300	19.6		6.50				
14:55	Sample well								
-									
	l Bore Volumes	Were Evacuated B	efore Sampling			-			
Comments:									
<u> </u>					[Comme	nts may continue on back			
Form Complete	ed By: Mark Mo	eCormick		Witnessed By:					

USPCI Project	Name: UPMF ()akland		USPCI I	roject Number: 96120-8	344				
Measuring Poi	nt (MP) Location	Top of casing		Well	No. OKUS-W3	3				
Well Depth: (I	Below MP): 22.05	5 Feet								
Casing diamete	er: 2 Inches				Sampling Date: 5/2	1/97				
Depth To Grou	und Water (Below	MP): 9.44 Feet			Sample ID No. OK	US-W3				
Method Of W	ell Development:				Time: 15:30					
☐ Tap [☐ Submersible Pu	mp 🗌 Bladder	Pump		Riser Elevation (MF): 9.80 Feet				
■ Bailer	☐ Centrifugal Pun	np 🗆 Other		·	Top of Screen Eleva	ation: 6.55 Feet				
Sampling Col	lection Method:			Sample	Appearance: Clear					
☐ Tap ☐ Su	bmersible Pump	☐ Bladder	Pump Sample	Odor: M	loderate					
■ Bailer Tyr		n O Stainless Ste	el	Samplin	g Problems (if any):					
			plastic disposable							
		Feet Bel		Deconta	mination Performed: Pr	obe				
Tubing Type (if Used):										
Tubing Used for: Sample Collection Well Development/Field Tests Samples Collected: TPH-Gasoline, TPH-Diesel, 8020 BTEX										
Time	Time pH Corrected Temperature (Centigrade) Water Level (Nearest 0.01 Ft.) Cumulative Volume of Water of Water Removed From well (Gallons) Gallons/Minute (GPM)									
15:10	Begin well									
15:15	7.0	3,600	19.7		2.0					
15:20	7.0	3,900	19.7		4.0					
15:24	7.0	3,700	19.7		6.0					
15:30	Sample well									
At Least 3 We Comments:	ell Bore Volumes	Were Evacuated B	efore Sampling							
					Comme	nts may continue on back]				
Form Comple	ted By: Mark M	eCormick		Witnessed By:	w					

USPCI Project l	Name: UPMF ()akland	USPCI	Project Number: 96120-8	44			
Measuring Poin	t (MP) Location	Top of casing	Well	No. OKUS-W	5			
Well Depth: (Be	elow MP): 21.00	0 Feet						
Casing diameter	r: 2 Inches				Sampling Date: N/A			
Depth To Produ	uct (Below MP):	9.29 Feet (Se	ee comments)		Sample ID No. N/A	<u> </u>		
Method Of We	ell Development:				Time: N/A			
□ Tap □	Submersible Pu	mp 🗀 Bladder	Pump		Riser Elevation (MP): 9.25 Feet		
☐ Bailer ☐	Centrifugal Pun	np 🗆 Other			Top of Screen Eleva	tion: 5.95 Feet		
Sampling Colle	ection Method:			Sample	Appearance: N/A			
☐ Tap ☐ Sub	mersible Pump	☐ Bladder	Pump Sample	Odor: N	I/A			
☐ Bailer Type		n O Stainless Sto	cl c	Samplin	g Problems (if any): Prod	uct in well water		
	ABS Plastic () PVC						
Pump Intake Or	r Bailer Set At _	Feet Be	low MP	Deconts	mination Performed: Pr	obe		
Tubing Type (it			-					
	or: Sample C	Collection	ell Development/Fie	ld Tests Samples	s Collected: None			
Time	pH (Units)	Temperature Corrected Conductance (umho/cm)	Temperature (Centigrade)	Water Level (Nearest 0.01 Ft.)	Cumulative Volume of Water Removed From well (Gallons)	Pumping Rate in Gallons/Minute (GPM)		
WELL NOT	SAMPLED							
· · · · · · · · · · · · · · · · · · ·								
<u> </u>								
	†							
		ļ			<u>.</u>			
						-		
<u></u>	<u> </u>	<u> </u>		<u> </u>				
Comments: Pro	oduct was noted	as "Bunker C"	ype hydrocarbon.	Depth to water measur	ement was not available			
Tì	he well was not	sampled because	of the presence of	phase-separated hydroc	arbon.			
[Comments may co	ntinue on back)							
Form Complete	d By: Mark Me	cCormick		Witnessed By	<u> </u>			

USPCI Project Name: UPMF Oakland	USPCI Project Number: 96120-844
Measuring Point (MP) Location Top of casing	Well No. OKUS-W6
Well Depth: (Below MP): 16.30 Feet	
Casing diameter: 2 Inches	Sampling Date: N/A
Depth To Product (Below MP): 6.03 Feet (See comments)	Sample ID No. N/A
Method Of Well Development:	Time: N/A
□ Tap □ Submersible Pump □ Bladder Pump	Riser Elevation (MP): 7.29 Feet
☐ Bailer ☐ Centrifugal Pump ☐ Other	Top of Screen Elevation: 2.29 Feet
Sampling Collection Method:	Sample Appearance: N/A
☐ Tap ☐ Submersible Pump ☐ Bladder Pump Sample	Odor: N/A
☐ Bailer Type: ☐ Teflon ☐ Stainless Steel	Sampling Problems (if any): Product in well water
○ ABS Plastic ○ PVC	
Pump Intake Or Bailer Set At Feet Below MP	Decontamination Performed: Probe
Tubing Type (if Used):	
Tubing Used for: Sample Collection Well Development/Fig	eld Tests Samples Collected: None
Time pH Corrected Temperature (Units) Conductance (Centigrade) (umho/cm)	Water Level (Nearest 0.01 Ft.) Cumulative Volume of Water of Water Removed From well (Gallons) Cumulative Volume in Gallons/Minute (GPM)
WELL NOT SAMPLED	
Comments: Product was noted as "Bunker C" type hydrocarbon.	Depth to water measurement was not available.
	phase-separated hydrocarbon.
The well was not sampled because of the presence of	
The well was not sampled because of the presence of [Comments may continue on back]	

Measuring Point (MP) Location Top of casing Well No. OKUS-W7 Well Depth: (Below MP): 19.88 Feet Casing diameter: 2 Inches Depth To Ground Water (Below MP): 5.53 Feet Sampling Date: 5/21/97 Depth To Ground Water (Below MP): 5.53 Feet Sample ID No. OKUS-W7 Method Of Well Development: Time: 13:45 Tap
Well Depth: (Below MP): 19.88 Feet Casing diameter: 2 Inches Depth To Ground Water (Below MP): 5.53 Feet Sampling Date: 5/21/97 Depth To Ground Water (Below MP): 5.53 Feet Sample ID No. OKUS-W7 Time: 13:45 Tap
Depth To Ground Water (Below MP): 5.53 Feet Method Of Well Development: Time: 13:45 Tap
Method Of Well Development: Time: 13:45 □ Tap □ Submersible Pump □ Bladder Pump Riser Elevation (MP): 7.4 Feet ■ Bailer □ Centrifugal Pump □ Other Top of Screen Elevation: 2.4 Feet Sampling Collection Method: Sample Appearance: Clear/very slightly turbid □ Tap □ Submersible Pump □ Bladder Pump Sample Odor: Slight ■ Bailer Type: ○ Teflon ○ Stainless Steel Sampling Problems (if any): ○ ABS Plastic ○ PVC ● HDPE plastic disposable Pump Intake Or Bailer Set At Feet Below MP Decontamination Performed: Probe Tubing Type (if Used): Feet Below MP Decontamination Performed: Probe
Tap
Bailer ☐ Centrifugal Pump ☐ Other Top of Screen Elevation: 2.4 Feet Sampling Collection Method: Sample Appearance: Clear/very slightly turbid ☐ Tap ☐ Submersible Pump ☐ Bladder Pump Sample Odor: Slight Bailer Type: ☐ Teflon ☐ Stainless Steel Sampling Problems (if any): ☐ ABS Plastic ☐ PVC ● HDPE plastic disposable Pump Intake Or Bailer Set At Feet Below MP Decontamination Performed: Probe Tubing Type (if Used):
Sampling Collection Method: Sample Appearance: Clear/very slightly turbid □ Tap □ Submersible Pump □ Bladder Pump Sample Odor: Slight ■ Bailer Type: ○ Teflon ○ Stainless Steel Sampling Problems (if any): □ ABS Plastic ○ PVC ◆ HDPE plastic disposable Pump Intake Or Bailer Set At Feet Below MP Decontamination Performed: Probe Tubing Type (if Used): Feet Below MP Probe
□ Tap □ Submersible Pump □ Bladder Pump Sample Odor: Slight ■ Bailer Type: ○ Teflon ○ Stainless Steel Sampling Problems (if any): ○ ABS Plastic ○ PVC ● HDPE plastic disposable Pump Intake Or Bailer Set At Feet Below MP Decontamination Performed: Probe Tubing Type (if Used):
■ Bailer Type:
■ Bailer Type:
O ABS Plastic ○ PVC ◆ HDPE plastic disposable Pump Intake Or Bailer Set At Feet Below MP Decontamination Performed: Probe Tubing Type (if Used):
Pump Intake Or Bailer Set At Feet Below MP Decontamination Performed: Probe Tubing Type (if Used):
Tubing Type (if Used):
Tubing Used for: Sample Collection Well Development/Field Tests Samples Collected: TPH-Gasoline, TPH-Diese 8020 BTEX
Time pH Corrected Conductance (Units) (Centigrade) (Centi
13:22 Begin well
13:28 7.1 2,900 19.5 2.5
13:34 7.2 3,100 19.5 5.0
13:40 7.1 2.800 19.4 7.5
13:45 Sample well
At Least 3 Well Bore Volumes Were Evacuated Before Sampling
Comments:
[Comments may continue on back]
Form Completed By: Mark McCormick Witnessed By:

USPCI Project	Name: UPMF (Dakland		USPCI	Project Number: 96120-6	344
Measuring Poi	nt (MP) Location	Top of casing		Wel	No. OKUS-W	3
Well Depth: (F	Below MP): 14.8	0 Feet				
Casing diamete	er: 2 Inches				Sampling Date: 5/2	1/97
Depth To Grou	und Water (Below	MP): 5.36 Feet			Sample ID No. OK	US-W8
Method Of W	ell Development:				Time: 13:10	
□ Tap 〔	☐ Submersible Pu	mp 🗆 Bladder	Pump		Riscr Elevation (MF): 7.11 Feet
■ Bailer [☐ Centrifugal Pur	np 🗆 Other			Top of Screen Eleva	ation: 2.11 Feet
Sampling Col	lection Method:			Sample	Appearance: Very slightl	y turbid, yellow
☐ Tap ☐ Su	bmersible Pump	☐ Bladder	Pump Sample	Odor: I	ight	
■ Bailer Tyr	_	n O Stainless Ste	æl	Samplin	g Problems (if any): Wa	ter is reactive
			plastic disposable			
		Feet Bel		Deconte	mination Performed: Pr	obe
Tubing Type (
		Collection We	ell Development/Fie	ld Tests Samples	s Collected: TPH-Gasoli 8020 BTEX	
Time	pH (Units)	Temperature Corrected Conductance (umho/cm)	Temperature (Centigrade)	Water Level (Nearest 0.01 Ft.)	Cumulative Volume of Water Removed From well (Gallons)	Pumping Rate in Gallons/Minute (GPM)
12:53	Begin well					
12:56	7.3	4,100	19.7		1.5	
_12:59	7.2	4,000	19.2		3.0	
13:02	7.2	4,000	19.8		4.5	<u> </u>
13:10	Sample well					
						<u> </u>
	1		.,			
	-					
At Least 3 We	ll Bore Volumes	Were Evacuated B	efore Sampling			
Constitutions:						
				-		
[Comments may o	ontinue on back1		·			
·	ted By: Mark Me	cCormick		Witnessed By:		

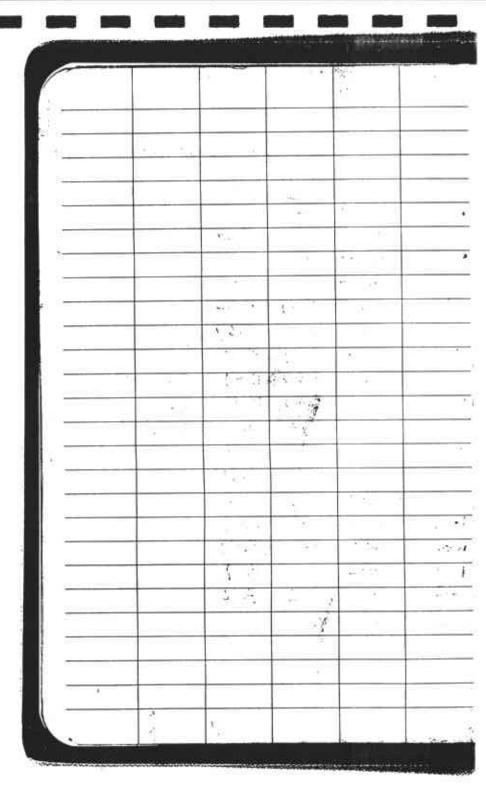
USPCI Project	Name: UPMF (Dakland		USPCI	Project Number: 96120-8	344
Measuring Poir	nt (MP) Location	Top of casing	Wel	Well No. APL-W1		
Well Depth: (B	telow MP): 21.8	6 Feet				
Casing diamete	r: 2 Inches				Sampling Date: 5/2	1/97
Depth To Grou	ind Water (Below	MP): 10.14 Fee			Sample ID No. AP	L/UP-W1
Method Of W	ell Development:	<u> </u>			Time: 11:05	
□ Tap □	☐ Submersible Pu	mp 🗆 Bladder	Pump		Riser Elevation (MF	?): 7.11 Feet
■ Bailer	Centrifugal Pur	np 🗆 Other		-	Top of Screen Eleva	ation: 2.11 Feet
Sampling Coll	ection Method:			Sample	Appearance: Clear	
	omersible Pump	☐ Bladder	Pump Sample	Odor: S	light	<u> </u>
■ Bailer Typ		n O Stainless Ste	æl	Samplin	g Problems (if any):	
		PVC • HDPI				
		Feet Be		Deconts	mination Performed: Prob	oe
Tubing Type (i			· -			
		Collection	ell Development/Fie	ld Tests Samples	Collected: TPH-Gasolia 8020 BTEX	
Time	pH (Units)	Temperature Corrected Conductance (umho/cm)	Temperature (Centigrade)	Water Level (Nearest 0.01 Ft.)	Cumulative Volume of Water Removed From well (Gallons)	Pumping Rate in Gallons/Minute (GPM)
10:45	Begin Well					
10:50	7.1	2,700	18.6		2.0	
10:54	7.0	2,700	18.2		4.0	
10:58	7.0	2,800	17.9		6.0	·
11:05	Sample Well					
	<u> </u>					-
	<u> </u>	·	·			
				-		
<u>L </u>					<u> </u>	
At Least 3 Wel	l Bore Volumes	Were Evacuated Be	efore Sampling			
Comments: Th	PH-Diesel X 3 fo	r MS/MSD				<u> </u>
					<u> </u>	<u> </u>
			<u>.</u>			
[Comments may co	ntinue on back]		·-···			
Form Complete	ed By: Mark Mo	-Cormick		Witnessed By:		

USPCI Project	Name: UPMF ()akland		USPCI	Project Number: 96120-8	844
Measuring Poin	at (MP) Location	Top of casing		We	ll No. APL-W2	-
Well Depth: (B	elow MP): 17.0) Feet	· · ·			
Casing diameter	r: 2 Inches				Sampling Date: 5/2	1/97
Depth To Grou	nd Water (Below	MP): 9.42 Feet			Sample ID No. AP	L/UP-W2
Method Of We	ell Development:	,			Time: 11:35	
□ Tap □	Submersible Pu	mp 🗆 Bladder	Pump		Riser Elevation (MF	P): 7.62 Feet
Bailer [Centrifugal Pun	np 🗆 Other			Top of Screen Eleve	ation: 2.62 Feet
Sampling Colle	ection Method:			Sample	Appearance: Clear	<u> </u>
☐ Tap ☐ Sub	omersible Pump	☐ Bladder	Pump Sample	Odor:	Very slight	
■ Bailer Type	e: O Teflo	n O Stainless Ste	æl	Sampli	ng Problems (if any):	
	•) PVC ● HDPE	disposable			
Pump Intake O	r Bailer Set At _	Feet Bel	ow MP	Decon	tamination Performed: Prol	be
Tubing Type (i			-			
		Collection	ell Development/Fie	ld Tests Sample	cs Collected: TPH-Gasoli 8020 BTEX	
Time	pH (Units)	Temperature Corrected Conductance (umbo/cm)	Temperature (Centigrade)	Water Level (Nearest 0.01 Ft.)	Cumulative Volume of Water Removed From well (Gallons)	Pumping Rate in Gallons/Minute (GPM)
11:19	Begin well					
11:22	7.1	2,800	18.6		1.25	
11:25	7.0	2,900	18.4		2.50	
11:28	7.0	2,800	18.7		3.75	
11:35	Sample well				 	
			·			
					<u> </u>	
		<u></u>		I	<u> </u>	
At Least 3 Wel	l Bore Volumes	Were Evacuated B	efore Sampling			
Comments:		<u></u>				
·				<u></u>		
··-						
				****	<u>[Comme</u>	nts may continue on back
Form Complete	d By: Mark Me	cCormick		Witnessed By:		

5/21/97

1700 , Call Agua-Bailer, UPS 1057 Shipment from Tenn? >No Barlers 0730 > Aqua-Baiker calls back (Mike) > Still no word on if bailers can be delivered today > He'll call back 0800 > Call UPS - they're not sure what happened > No Bailers 0815 > Call local consultants > Mike from Blymer suggests EI m Concord 0830 > Leave for EI 0930 > Pick up Ics bailers from EI
> they will bill Boulder
1030 > Arrive on side APL 1045 > Begin APL/UP-WI 1105 > Sample APL/UP-WI: WAS, TPH-Dx3600 1119 > Begin APL/UP-WZ MS/MS 1135 > Sample APL/UP-WZ: VOS, TPH-GYD 1150 > Qwit APL 1205 > Buy ice, grab some eats
1253 > Begin OKUS-WB; RTEX+TPH-G, TPH-D
1322 > Begin OKUS-WB; BTEX+TPH-G, TPH-D
1345 > Sample OKUS-W7: BTEX+TPH-G, TPH-D

-un magains (**** (FEE *)				
1358	Begin	OKUS.	-WI		
1415	Sample	OKUS-	VI: BTEX	TPHG,	TPH-D
14 ZD	Dup 0	KU5-	W1 = 0	KUS-U	/11
	1	BI	EX + TPH	G, TPI	1-D
1433	Begin	OKUS-1	NZ		
1455	bample	DKUS-V	VZ;TPH-	G+BTEX	TPH-D
1510	Beain	DKUS-1	13		
1530	Sample	OKUS-	W3; TPH	G+BTEX,	TPH-D
1540	Quit 4				
1630			at Sec	woig	
1720	Dn-51-				
1730	-		= 6.03	3	
1746	OKUS-W	S. DTF	= 9.29	1	
1755	RW	DTP =	9,10		
1	1,12	DTW=			
	>4 place	SinDe	r not	worki	ing
1810	Get	Ollie G	m UPM	tod	arge
1010	batte	~			J'
1815	>Ollie	Janks	IN cho	raper.	ratter
1015	dead	start	4 cha	mina.	nttery_
	com.	PHOC	motor	Will	not
-	6/21/	off	, mores	V	
1827	School	500	er pur	ns un	17
1840	Sodiu	at was	s pres	Sucero	lve
1010	Shut	110	al Cyc ho	two	ina
1847	Shull	OF TE	Hoov of	00656	x Sul
1910	4 Need	WI, Du	H RELA	1.5xster	n down
1932	Quit	うを		157500	



APPENDIX B ANALYTICAL REPORTS



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

Redwood City, CA 94063 Walnut Creek, CA 94598

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

n er endra og gjerer i Somman og skrivering stiller forsælde. Præmi og gjerer i Somman og skrivering skriveringer i skrivering skrivering skrivering skrivering skrivering s U.S.P.C.I. 5665 Flatiron Pkwy Boulder, CO 80301

Client Project ID: Sample Matrix:

UP Motor Freight Water

Sampled: Received: May 21, 1997 May 21, 1997

Analysis Method: Attention: Denton Mauldin First Sample #:

EPA 5030/8015 Mod./8020

Reported:

Jun 4, 1997

QC Batch Number:

GC060397

GC060397

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GC060297

GC060297

802002A 802005A B02005A TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

705-1480

Analyte	Reporting Limit μg/L	Sample I.D. 705-1480 APL/UP-W1	Sample I.D. 705-1481 APL/UP-W2	Sample I.D. 705-1482 OKUS-W8	Sample I,D. 705-1483 OKUS-W7	Sample I.D. 705-1484 OKUS-W1	Sample I.D. 705-1485 OKUS-W11
Purgeable Hydrocarbons	50	260	92	100	N.D.	N.D.	N.D
Benzene	0.50	22	4.8	1.3	2.6	N.D.	. N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	13	1.1	N.D.	0.84	N.D.	N.D.
Total Xylenes	0.50	2.5	N.D.	1.1	N.D.	N.D.	N.D.
Chromatogram Pat		. Gasoline & Discrete Peaks	Gasoline & Discrete Peaks	Gasoline & Unidentified Hydrocarbons > C8		••	••
Quality Control Da	ota		· · _ · _ · _ · · · · · · · · · · ·		. w <u>.</u>		
Report Limit Multip	lication Factor:	5.0	1.0	2.0	1.0	1.0	1.0
Date Analyzed:		6/3/97	6/3/97	6/2/97	6/4/97	6/2/97	6/2/97
Instrument Identific	ation:	HP-5	HP-5	HP-5	HP-2	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)		109	103	107	86	113	111

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

Melissa

Revised report issued 06/20/97

Melissa A. Brewer Client Services Representative

7051480.USP <1>



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

U.S.P.C.I. 5665 Flatiron Pkwy Boulder, CO 80301 Client Project ID: Sample Matrix:

UP Motor Freight Water

EPA 5030/8015 Mod./8020

Sampled: Received: Reported:

May 21, 1997 May 21, 1997 Jun 4, 1997

Attention: Denton Mauldin

Analysis Method: First Sample #: ----

705-1486

namidaetaalaatatatata GC060397

GC060497

QC Batch Number:

GC060297

GC060297

GC060297 GC060297

802005A

802002A

802005A TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit μg/L	Sample I.D. 705-1486 OKUS-W2	Sample I.D. 705-1487 OKUS-W3	Sample I.D. 705-1488 Trip Blank	Sample I.D. Method Blank	Sample I.D. Method Blank	Sample I.D. Method Blank
Purgeable Hydrocarbons	50	3,300	6,100	N.D.	N.D.	N.D.	N.D.
Benzene	0.50	120	190	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	23	43	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	11	120	N.D.	N.Ď.	N.D.	N.D.
Total Xylenes	0.50	31	41	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		Gasoline & Discrete Peaks	Gasoline & Discrete Peaks				••
Quality Control D	ata	····			, , , , , , , , , , , , , , , , , , ,		
Report Limit Multip	dication Factor:	20	50	1.0	1.0	1.0	1.0
Date Analyzed:		6/2/97	6/2/97	6/2/97	6/2/97	6/3/97	6/4/97
Instrument identifi	cation:	HP-5	HP-5	HP-5	HP-5	HP-5	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)		114	104	114	122	121	101

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

Please Note:

Revised report issued 06/20/97

Melissa A. Brewer

Client Services Representative

7051480.USP <2>



404 N. Wiget Lane Walnut Creek, CA 94598 819 Striker Avenue, Suite 8 Sacramento, CA 93859

(510) 988-9600

FAX (510) 988-9673 FAY (914) 921 0100

U.S.P.C.I. 5665 Flatiron Pkwy Boulder, CO 80301 Attention: Denton Mauldin		Client Project ID: Sample Matrix: Analysis Method: First Sample #:	UP Motor Fre Water EPA 3510/86 705-1480)15 Mod.		Sampled: Received: Reported:	May 21, 1997 May 21, 1997 Jun 4, 1997
QC Batch Number:		SF-052897 8015EXA EXTRACTABLE	SP052897 8015EXA PETROLE	\$P052897 8015EXA	SP052897 8015EXA	SP052897 8015EXA	SP052897 8015EXA
Analyte	Reporting Limit µg/L	Sample I.D. 705-1480 APL/UP-W1	Sample 1.D. 705-1481 APL/UP-W2	Sample I.D. 705-1482 OKUS-W8	Sample I.D. 705-1483 OKUS-W7	Sample I.D. 705-1484 OKUS-W1	Sample I.D. 705-1485 OKUS-W11
Extractable Hydrocarbons	50	850	430	1,600	1,200	190	220
Chromatogram Pa	ttern:	Diesel & Unidentified Hydrocarbons > C20	Diesel & Unidentified Hydrocarbons > C20	Diesel & Unidentified Hydrocarbons > C20	Diesel & Unidentified Hydrocarbons > C20	Diesel & Unidentified Hydrocarbons > C20	Dissel & Unidentified Hydrocarbons > C20

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Extracted:	5/28/97	5/28/97	5/28/97	5/28/97	5/28/97	5/28/97
Date Analyzed:	5/29/97	5/29/97	5/29/97	5/29/97	5/29/97	5/29/97
Instrument identification:	HP-3A	HP-3A	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.

SEQUOIA ANALYTICAL, #1271

Melissa a. Brewen

Melissa A. Brewer Client Services Representative

7051480 USP <3>



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

Redwood City, CA 94063 Walnut Creek, CA 94598

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

USPCI.

5665 Flatiron Pkwy Boulder, CO 80301 Client Project ID: Sample Matrix:

UP Motor Freight Water

Sampled: Received: May 21, 1997 May 21, 1997

Attention: Denton Mauldin The second of th

Analysis Method: First Sample #:

EPA 3510/8015 Mod. 705-1486

Reported:

and the second second

Jun 4, 1997

QC Batch Number:

\$P052897

SP052897

\$P052897

8015EXA

8015EXA

8015EXA

				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Analyte	Reporting Limit μg/L	Sample I.D. 705-1486 OKUS-W2	Sample I.D. 705-1487 OKUS-W3	Sample I.D. Method Blank		
Extractable Hydrocarbons	50	2,500	2,400	N.D.		
Chromatogram Pa	ttern:	Diesel & Unidentified Hydrocarbons < C15 > C20	Diesel & Unidentified Hydrocarbons < C15 > C20			

Quality Control Data

Report Limit Multiplication F	actor: 1.0	1.0	1.0
Date Extracted:	5/28/97	5/28/97	5/28/97
Date Analyzed:	5/29/97	5/29/97	5/29/97
Instrument Identification:	НР-ЗА	НР-ЗА	HP-3A

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

ra a Brewer Melissa A. Brewer

Client Services Representative

7051480.USP <4>





_	680 Chesapeake Drive	 Redwood City, CA 	94063 • (415) 364-9600	FAX (415) 364-9233

- □ 819 Striker Ave., Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100
- 2 404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673

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Company Name: 1	PCI /LA	IDLA	W			Project I	Name:	UP	MO	TOR	F	RE	IGI	1 T		
Address: 56	65 FLA	TIRDI	V P	KWY		Billing A	ddress	(if diffe				-	•			
	DER State:				80301		<u>.</u>			SAN	(6			<u></u>		
Telephone: 303-						1			<u> </u>							
Report To: DENTON	MAULDIN	Sämpler	MARI	K MCCO	PRMICK	QC Data	a: 🖵 L	evel D (Standard)	E Lev	el C	٦L	evel B	ָ ַ	Level A	· •
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Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia Sample	s # /*/	25 X								Commer	nts
1. APL/UP-W/	5/2/47 1105	AQu	3	VDA		X	X	,					:			IMSD
2.			163	1 L ANBEL				X			<u> </u>			USE	FOR MS	
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9. CKU3-W1	1415		3	VOA		X	X	4.1								• (
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Relinquished By:	and M. Vala	w	Date	3/21/97	Time: 163	Rec	eived E	Зу:	· 1		ם	ate:		Time	:	
Relinquished By:			Date		Time:	Rec	eived E	3y:	SP	-	F7	atė:		Time		
Relinquished By:			Date):	Time:	Rec	eived E	By Lab:	1/12	KA	<u>/ </u>	Date:	1219	Time	: 163	<u></u>
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404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600 FAX (510) 988-9673

									
Company Name: USPCI/LAIDLAW	Project Name: Up MOTOR FREIGHT								
Address: 5665 FLATIRON PKWY	Billing Address (if different):								
City: BOWLDER State: CO Zip Code: 8030)	SANE								
Telephone: 303-938-5500 FAX #: 303 938 5520									
Report To: DENTON MAWDIN Sampler: MARK MCCORMICK	_ QC Data: ☐ Level D (Standard) De Level C ☐ Level B ☐ ☐ Level A ☐								
	Drinking Water Analyses Requested								
	Other (100 Comments) Comments								
Client Date/Time Matrix # of Cont. Sequoi Sample I.D. Sampled Desc. Cont. Type Sample	a's comments								
1. DKUS-WII 5/21/97 1970 AQU 3 VOA									
2. I AMBER									
3. DKUS,-WZ 35 3 01									
4. — AMRER									
5. OKUS-W3 153 VOA									
6. AMEN									
7.TRIPBLANK YOU									
8.									
9.									
10.									
Relinquished By. M.M.M. Law Date: 5/21/97 Time: 16.	30 Received By: Date: Time:								
Relinquished By: Date: Time:	Received By: Date: Time:								
Relinquished By: Date: Time:	Received By Lab: 5/21/A Time: 630								