

1710 Main Street Escalon, CA 95320 Phone: (209) 838-3507 FAX: (209) 838-3509

FOURTH QUARTER 1991 PROGRESS REPORT

Desert Petroleum Incorporated Former Station No. 793 4035 Park Boulevard Oakland, CA 94602

prepared for:

Desert Petroleum Incorporated 2060 Knoll Drive Ventura, CA 93003

for submittal to:

Alameda Department of Environmental Health Hazardous Materials Program 80 Swan Way, Room 200 Oakland, CA 94621

prepared by:

Lois Frantz

Staff Geologist

Gregory P. Stahl

CA Registered Geologist No. 5023

February 6, 1992

TABLE OF CONTENTS

co	NTENTS		PAGE
1.0	INTRO	DUCTION	1
2.0	QUART	TERLY ACTIVITIES	1
	2.2 W 2.3 W	roundwater Monitoring/Sampling	
3.0	ANTIC	PATED ACTIVITIES DURING COMING QUARTER	2
	3.2 V 3.3 Q	Vorkplan Addressing Areas of Concern apor Extraction System uarterly Monitoring Veekly Activities	
<u>Tal</u>	oles:		
	1. 2. 3. 4. 5.	Groundwater Monitoring Data Laboratory Analysis - Water Free Product Thickness Bailed Volume of Free Product Organic Vapor Monitoring Data	
<u>Fig</u>	ures:		
	1. 2. 3.	Site Location Map Site Map With Previous Borings/Wells Groundwater Gradient Map	
Att	achments		
	1. 2. 3.	Groundwater Monitoring/Well Purge Logs Laboratory Data Sheets/Chain-of-Custody Product Thickness/Bailed Volume and Organic Vapor Charts	

1.0 INTRODUCTION

The former Desert Petroleum Station No. 793 is located at 4035 Park Boulevard in the City of Oakland, Alameda County, California (Figures 1 and 2). No gasoline is being dispensed from the station at present.) This report presents a summary of quarterly sampling/monitoring and interim remediation activities performed at the site during the fourth quarter of 1991.

altho USB exist.

2.0 QUARTERLY SITE ACTIVITIES

2.1 Groundwater Monitoring/Sampling

Groundwater monitoring/sampling for the fourth quarter of 1991 was conducted on December 12, 1991. Monitoring data (Table 1) indicate the groundwater gradient is toward the northwest at a magnitude of 0.072 ft/ft or 382 feet per mile (Figure 3), which is consistent with gradient magnitude and direction previously observed at the site.

Wells RS-1, RS-6, and RS-7 were purged prior to sampling but RESNA staff were unable to purge three well volumes (casing/sand pack) from RS-1 and RS-6 due to drought conditions. Well RS-5 was not sampled due to the presence of free product. The purged groundwater was placed in 55 gallon drums (DHS Approved) and remains on site. Monitoring data is included in Attachment I. RS-7 With had free product.

Subsequent to purging, RS-1, RS-6, and RS-7 were sampled using a bailer with a bottom emptying device. The water sample was transported to Applied Analytical to be analyzed for BTEX/TPHG by EPA methods 8020/8015.

Laboratory analysis of samples collected from RS-1, RS-6, and RS-7 detected moderate to high concentrations of petroleum hydrocarbon analytes. A summary of the laboratory results are shown on Table 2. The laboratory report and chain-of-custody documentation are shown in Attachment II. The next quarterly sampling round will be conducted in March 1992 and a report will be submitted to your office in April 1992.

R-011092.GPS

2.2 Weekly Product Thickness Monitoring

Pursuant to Alameda County Department of Environmental Health correspondence dated November 05, 1991, product thickness was measured on a weekly basis beginning November 13, 1991 and is recorded on Table 3. Well RS-5 monitoring revealed a slight increase in free product thickness in late November and early December with a decrease in January. A measurable amount of free product was detected in well RS-7 during the weeks of December 18, 1991 and January 3, 1992.

2.3 Weekly Free Product Removal

During weekly monitoring, free product was detected in wells RS-5, and RS-7. Approximately 5.67 and 0.25 liters of free product was bailed from wells RS-5 and RS-7 respectively (Table 4) since November 27, 1991.

2.4

Weekly Vapor Monitoring the quarter vapor reading During the quarter vapor readings were collected weekly using a photoionization detector (PID) calibrated to the benzene molecule. Vapor readings were collected from the following areas near the project; PG&E boxes; storm drains; water boxes; manholes; well casings; and crawl spaces beneath adjacent homes (Figure 2). Organic vapors were not detected above background levels in any crawl spaces beneath the homes. Sporadic levels of organic vapors were detected in the Brighton Avenue manhole and within well casings on-site (Table 5). Attachment III contains product thickness, free product removal and vapor monitoring field data.

3.0 ANTICIPATED ACTIVITIES DURING COMING QUARTER

Workplan Addressing Areas of Concern 3.1

Desert Petroleum and RESNA/WaterWork are currently engaged in development of a workplan to address issues presented in Alameda County Department of Environmental Health correspondence dated November 5, 1991. The items discussed are 1) the proposed methodology for the delineation of the lateral and vertical extent of contamination, 2) a time line for the completion of definition of the lateral and vertical extent of contamination, 3) the anticipated date for the installation of a dedicated groundwater treatment system, (4) a timetable for the re-

2 R-011092.GPS

initiation of vapor extraction activities on site and for the installation and operation of off site vapor extraction, and 6) the methodology for determining the cone of influence for each vapor extraction well.

3.2 Vapor Extraction System

The RSI S.A.V.E. vapor extraction/treatment system had been idle during 1991. Operations were temporarily discontinued on January 24, 1991, for several reasons: (1) the product vapor recovery rate declined significantly, (2) treatment system operations were restricted to daylight hours only, (3) complaints by residents of excessive noise, and (4) the necessity of maintaining on-site security.

Desert Petroleum has concluded negotiations with the tenant concerning re-location of the RSI S.A.V.E. unit to within the building on-site. On January 17, 1992, the system was successfully moved indoors and operation resumed.

3.3 Quarterly Groundwater Monitoring

Quarterly groundwater monitoring and sampling will be conducted during March 1992, and a report will be submitted in April 1992.

3.4 Weekly Activities

To the extent possible, weekly monitoring and product recovery will continue. The necessity of product thickness measurement and hand bailing of the on-site wells has been eliminated by reinstitution of vapor recovery.

TABLE 1

Groundwater Monitoring Data
Desert Petroleum - Oakland

DATE	WELL ID	ELEVATION*	DEPTH TO WATER	WATER ELEVATION
07/25/90	RS-1	100.18	14.0	86.18
	RS-5	99.44	19.415	80.025
	RS-7	67.88	4.16	63.72
12/20/90	RS-1	100.18	17.17	83.01
	RS-5	99.44	21.0	78.44
	RS-7	67.88	4.12	63.7
02/15/91	RS-1	100.18	8.95	91.23
	RS-5	99.44	20.69	78.75
	RS-6	99.25	16.87	82.38
	RS-7	67.88	4.05	63.83
06/12/91	RS-1	100.18	12.15	88.03
	RS-5	99.44	19.84	79.60
	RS-6	99.25	17.45	81.80
	RS-7	67.88	4.02	63.86
09/13/91	RS-1	100.18	16.85	83.33
	RS-5	99.44	21.00	78.44
	RS-6	99.25	20.57	78.68
	RS-7	67.88	4.26	63.62
12/12/91	RS-1	100.18	15.04	85.14
	RS-5	99.44	21.97	77.47
	RS-6	99.25	21.31	77.94
	RS-7	67.88	4.24	63.64

TABLE 2 Laboratory Analysis - Water Desert Petroleum - Oakland

(ppb)

(БЪп)								
DATE	SAMPLE ID	В	T	E	х	TPHG		
12/14/89	RS-1	2600	2700	200	1200	19,000		
	RS-5	3100	4300	670	3400	57,000		
	RS-6	1400	1700	160	860	11,000		
07/18/90	RS-7	24,000	210,000	50,000	740,000	5,600,000		
08/21/90	DP-SB1-W	110,000	130,000	13,000	73,000	740,000		
12/20/90	RS-1	3500	330	170	760	15,000		
02/15/91	RS-1	910	200	39	540	6900		
	RS-5		FREE	PRODUCT	PRESENT	-		
	RS-6	FREE PRODUCT PRESENT						
	RS-7		FREE	PRODUCT	PRESENT			
06/12/91	RS-1	56	180	12	26	1600		
	RS-5	FREE PRODUCT PRESENT						
	RS-6	4200	4200	650	3700	95,000		
	RS-7		FREE	PRODUCT	PRESENT	•		
09/13/91	RS-1	730	7.6	5.1	24	4100		
	RS-5		FREE	PRODUCT	PRESENT	•		
	RS-6		FFFF FREE	PRODUCT	PRESENT	•		
	RS-7		FREE	PRODUCT F	PRESENT	**		
12/12/91	RS-1	950	160	71	190	8300		
	RS-5		FREE	PRODUCT P	PRESENT	FILE		
	RS-6	3700	2300	730	4100	64,000		
3	RS-7	11,000	22,000	2000	13,000	270,000		

NOTES:

ppb = Parts per Billion B = Benzene

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes

TPHG = Total Petroleum Hydrocarbons as Gasoline

TABLE 3

FREE PRODUCT THICKNESS
DESERT PETROLEUM, OAKLAND

WELL ID								
DATE	RS-1	RS-5	RS-6	RS-7				
12/20/90		5/8"	1/16*	3/8"				
02/15/91		5/8"	1/16"	1/4"				
06/12/91		1"	4-4-4	1"				
09/13/91		2.5*	1/8"	1/4"				
11/13/91		5/8"	***					
11/18/91		5/8"		I inte				
11/27/91	0	1 5/8"	0	0				
12/12/91	0	1 1/4"	0	0				
12/18/91	0	3/4"	0	1/8"				
12/26/91	0	3/8"	0	0				
01/03/92	0	3/16"	0	1/16"				

TABLE 4

BAILED VOLUME OF FREE PRODUCT (in liters) DESERT PETROLEUM, OAKLAND

WELL ID									
DATE	RS-1	RS-5	RS-6	RS-7					
12/20/90		≈19 (Water + Product)	~19 (Water + Product)	~19 (Water + Product)					
02/15/91		≈19 (Water + Product)	≈ 19 (Water + Product)	~19 (Water + Product)					
06/12/91		~28 (Water + Product)		~28 (Water + Product)					
09/13/91		≈ 0.167	≈.167	≈.167					
11/13/91		~0.05							
11/18/91		~0.12							
11/27/91		≈ 2		*****					
12/12/91	34443	≈ 2							
12/18/91		≈0.5	*****	≈0.15					
12/26/91		≈0.75							
01/03/92	3770	≈0.25	0	~0.1					

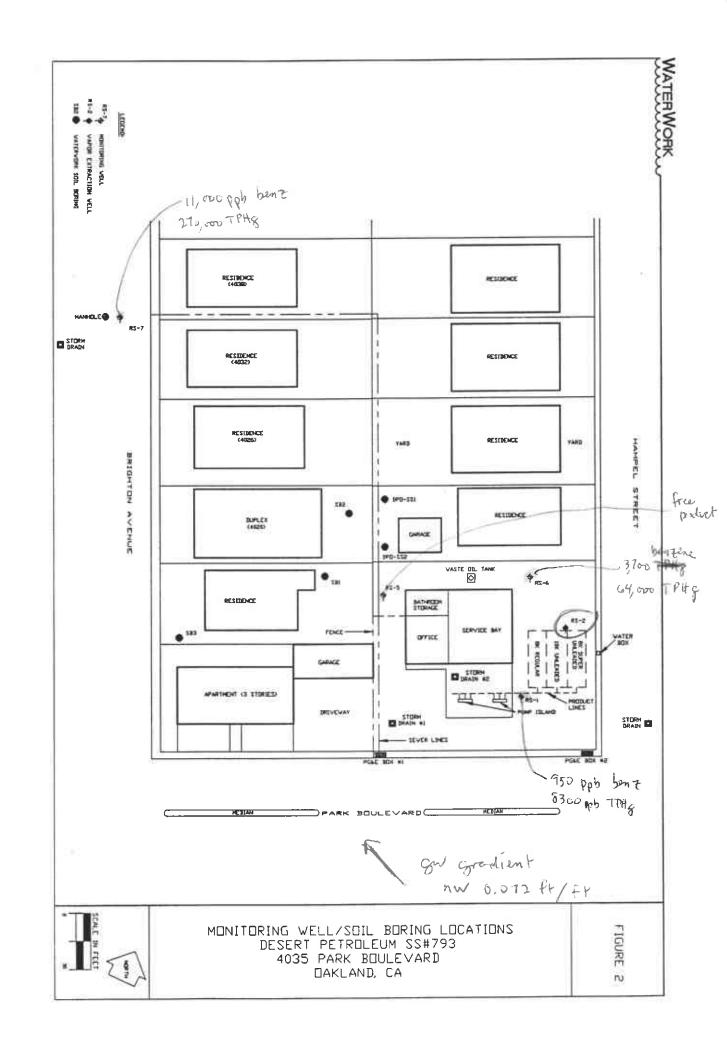
TABLE 5

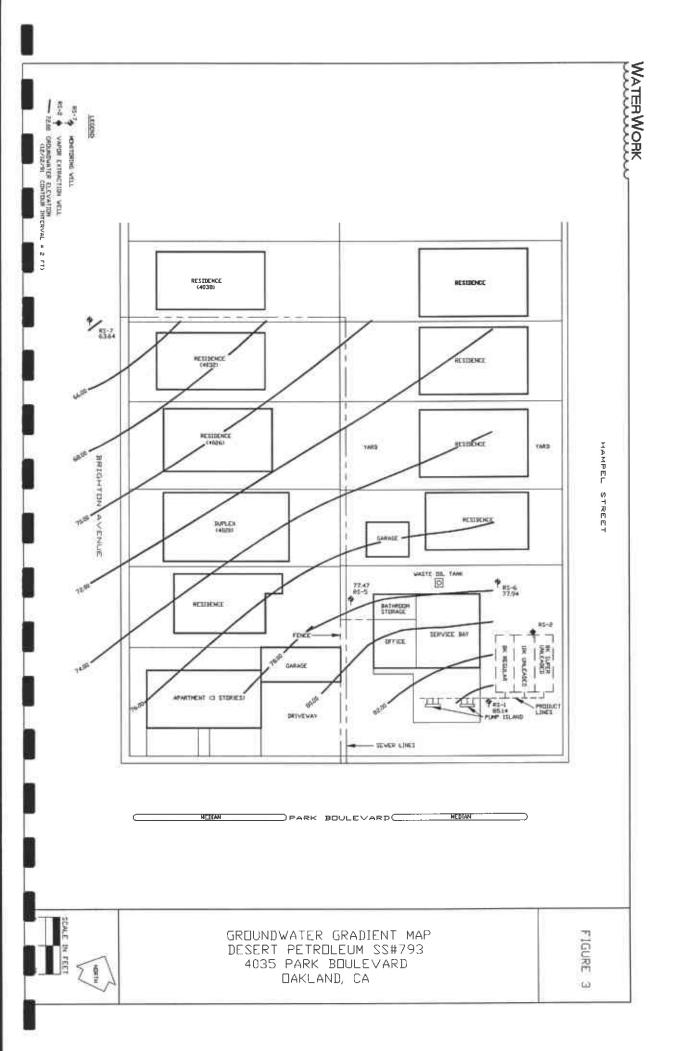
ORGANIC VAPOR MONITORING DATA (PID readings in ppm) DESERT PETROLEUM, OAKLAND

				DATE			
LOCATION*	11/13/91	11/18/91	11/27/91	12/12/91	12/18/91	12/26/91*	01/03/92
PG&E Box 1	1.5	3.0	0	0	0	0	0
PG&E Box 2	1.5	3.0	0	0	0	0	0
Storm Drain 1	3.5	5.0	0	0	0	0	0
Storm Drain 2	2.7	1.8	0	0	0	0	0
Water Box	29	3.0	0	0	0	0	0
Hampel St. Storm Drain	14	1.0	0	0	0	0	0
Brighton Ave. Storm Drain	1	0.0	0	2.0	0	0	1.4
Brighton Ave. Manhole	0.0	3.0	1.6	8.5	85.0	16.0	346
RS-1	50	4.0	0.3	1.3	1.0	18.5	0
RS-5	1632	731	449	632	490	537	543
RS-6	103	9.0	0.6	0	74.0	1.0	0
RS-7	104	595	379	572	575	439	596
Background	0.7-1.2	0-0.6	0-0.8	0-2.0	0-0.7	0	0-0.8
Crawl Space 4038 Brighton Ave.	0	0	1.4	0.4	0	0	0
Crawl Space 4032 Brighton Ave.	0	0	0	0	0	0	0
Crawl Space 4026 Brighton Ave.	0	0	0	0	0	0	0
Crawl Space 4010 & 4012Brighton Ave.	0	0	0	0	0	0	0
Vault Below Station 4035 Park Blvd.	6.0	0	0	0	0	0	0
RS-2	Not Sampled	Not Sampled	1.4	0	0	0	0

^{*} See Figure 2 for locations

WATERWORK FIGURE 1 SITE LOCATION MAP DESERT PETROLEUM SS #793 4035 PARK BOULEVARD DAKLAND, CA LEGEND SITE LOCATION NORTH SCALE IN FEET 2000





ATTACHMENT 1



352 Universer Avenue. Westweet. MA 02090 (617) 328-6640

• FREMONT • HEVINE • HOUSTON • GOSTON • SACRAMENTO • CLILVER CITY • SAN HOSE

FILL INVESTIGATION DAILY REPORT

SHEET / OF 4

PROJECT MANE: D.P. Oakland JOE NO. 6/034.01

12/12/91

Jim Schollard, RESNA, insite @ 10:00 am. Gallon 4 well volumes 1 well Volume OTW well Time odar Shear prod. OTP DTB DTW 23.48 23.56 15:15 23.13 5.87 15.04 10:30 5/+ 34.12 31.73 15:45 34.23 8,53 21.31 5-6 4" 10:40 51+ 2.96 11.84 04.42 15:30 07.20 04.24 Q2.05 21.81 5-5 4" 11:10 Stira CORRECTED DTM = 31,97 RS-1 + RS-6 Went dry twice. called in to Godf he reprosted Next time bring: 2-55gal. barrel drums, 4,0 scrply -2 rel water Jim leaves Site @ 17:30

WELL PURGE DATA SHEET

Project Name: D.P. Oakland

Job No. 6/034.0/

Date: 12/12/91

Page 2 of 4

Well No. RS-/

Time Started /2:/0

	Time (hr)	Gallons (cum.)	Temp.	рĦ	Conduct. (micromoh)	Turbidity (NTU)
	12:16	·				
30	12:16	19 LI	68.5	6.19	7.85	NA
5 3	12:21	3	65.0	7.01	9.42	
36	12:25	6	64.9	6.67	9.54	
31	12:28	9	63.6	6.50	9.92	
42	12:31	12	63.8	6.48	9.87	
45		12.5 Dry-				
~ 3		13	62.3	6.46	9.73	-
4 1	13:39	Dr. (13)			→	V
54						
						
				<u> </u>		
			/ / /	, ,	· andin	

Notes: 5/t-moderat product odor during pumping
Well diameter (inches: : 4"
Depth to Bottom (feet): 23.93

Depth to Water - initial (feet) : 15.04 Depth to Water - final (feet) : 23.56

% recovery : 40/0

Time Sampled :/5:/5 Gallons per Well Casing Volume : 5.87

Gallons Purged : /3

Well Casing Volumes Purged : 2.2

Approximate Pumping Rate (gpm): .78

WELL PURGE DATA SHERT

Project Name: D.P. Oakland

Job No. 6/034.0/

Date: 12/12/91

Page $\frac{3}{2}$ of $\frac{4}{3}$

Well No. RS-6

Time Started /2:40

	Time (hr)	Gallons (cum.)	Temp. (F)	рĦ	Conduct. (micromoh)	Turbidity (NTU)
						· · · · · · · · · · · · · · · · · · ·
26	12:42	AD L1	53.4	6.61	7.35	
"	12:47	5	58.9	6.49	8.64	
36	12:54	10	59.0	6.58	8.30	
ના	13:01	15	58.3	6.51	8.7/	
16	13:08	20	54.5	6.77	7.28	
	13:085	20.2	Dry -			
	14:46	20.3	58.9	6.78	7.84	
	14:54	23	Dry -		>	
			<u> </u>			
	Notes: -/	moderate?	odor during	pumping	- (frehes) : /	274
	·		De	pth to Bo	er (inches) : 4 ttom (feet) : 3 tial (feet) : 2	4.23 1.31

* recovery : 19%

Time Sampled :/5:45

Gallons per Well Casing Volume : 8.53

Gallons Purged : 23

Well Casing Volumes Purged : 2.7 Approximate Pumping Rate (gpm): .77

WELL PURGE DATA SHEET

Project Name: D. P. Oakland

Job No. 6/034.0/

Date: 12/12/91

Page 4 of 4

Well No. RS-7

Time Started 13:50

Time (hr)	Gallons (cum.)	Temp. (F)	рĦ	Conduct. (micromoh)	Turbidity (NTU)
13:52	4/	61.3	6.66	6.02	
13:56	2	61.4	6.59	5.79	
13:59	4	61.4	6.56	5.93	
14:203	6	61.2	6.64	5.93	
14:06	8	61.2	6.55	5.6/	
14:09	10	61.4	6.54	6.00	
14:12	12	61.2	6.54	6.03	
14:15	14	61.2	6.54	6.07	
			4.		

Notes: 3 moderate product oder during pumping
Bell diameter (inches): 4

Depth to Bottom (feet) : 7.20

Depth to Water - initial (feet) : 4.24 Depth to Water - final (feet): 4.42

: 94% * recovery

Time Sampled: 15:30

Gallons per Well Casing Volume : 2.96

Gallons Purged : 14.0 Well Casing Volumes Purged : 4.7

Approximate Pumping Rate (gpm) : . 6/





Environmental Laboratories

42501 Albrae St., Suite 100 Fremont, CA 94538 Bus: (510) 623-0775 Fax: (510) 651-2233

ANALYSIS REPORT

RES 1710 Esca Project: AGS		r. Greg Stahl ESNA/Water Work 10 Main Street scalon, CA 95320 GS 61034.01 esert Petroleum, Oakland		Dat BTI TPI TPI	te Sampled: te Received: EX Analyzed: Hg Analyzed: Hd Analyzed: trix:	1020lab.frm 12-12-91 12-13-91 12-17-91 12-17-91 NR Water	
Detection L	imit:	Benzene ppb 0.5	Toluene ppb 0.5	Ethyl- benzene ppb 0.5	Total Xylenes <u>ppb</u> 0.5	TPHg ppb 50	TPHd <u>ppb</u> 100
SAMPLE Laboratory Ide	entificati	ion					
W-23'-RS-1 W1112380		950	160	71	190	8300	NR
W-4'-RS-7 W1112381		11000	22000	2000	13000	270000	NR
W-31'-RS-6 W1112382		3700	2300	730	4100	64000	NR

ppb = parts per billion = ug/L = micrograms per liter.

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

NR = Analysis not requested.

ANALYTICAL PROCEDURES

BTEX—Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction using EPA Method 5030 followed by analysis using EPA Method 8020/602, which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID) and a flame-ionization detector (FID) in series.

TPHg—Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are measured by extraction using EPA Method 5030, followed by analysis using modified EPA Method 8015, which utilizes a GC equipped with an FID.

TPHd-Total petroleum hydrocarbons as diesel (high boiling points) are measured by extraction using EPA Method 3550 for soils and EPA Method 3510 for water, followed by modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.

Laboratory Representative

December 19, 1991
Date Reported



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST 094389 PROJECT NAME/SITE PROJECT NO. ANALYSIS REQUESTED 61034.01 Desert Petroleum, Oakland 87.EX (028/8020) 70G 418.1880 SAMPLE TYPE (PRINT) Jim Schollard 7249 (801S) 170Ho (8015) 000/18010 OF OF OF 000 M COMP ICED PRES. ò TIME SAMPLE IDENTIFICATION DATE USED REMARKS 12/12/91 15:15 W-23'-R5-1 3 14/2/9/ 15:30 W-4'-RS-7 W-31'-RS-6 3 DATE RECEIVED BY: TIME LABORATORY: PLEASE SEND RESULTS TO: Atta: RELINQUISHED BY: Greg Stahl RESNA/Waterwork 1710 Main st. Applied Analytical 09:45K RELINQUISHED BY: TIME RECEIVED BY: 10 30 A Escalon CA 95320 RELINQUISHED BY: DATE TIME RECEIVED BY: REQUESTED TURNAROUND TIME: Standark FAX: 209-838 -3509 RECEIVED BY LABORATORY: RECEIPT CONDITION: TIME PROJECT MANAGER: RELINQUISHED BY: Greg Stahl 633



O.P. Oaklard #6103 01

QM . EMPLOYEE'S INJURY AND ILLNESS PREVENTION PROGRAM

EXPOSURE MONITORING LOG

PID Calibration Lag

Date:	nt(s); VOC	Labora	itory: <i>NA</i>	
Origin of C	Contaminant e, diesel, etc.	Soil Concentration	Groundwater Concentration	Other
CALIBRAT	TION RECORD (P.	10 580 A -	waterbark)	
Time	Date	Instrument	Calibration Gas Response Factor	Calibration Valu
07:42	12/12/91	580 A	Isohtylere	100.3
LABORAT	ORY RESULTS	·		
Pump #	Pump Location	Sample Rate	Start/Stop Time	Lab Result
<u></u>	\			

Attach final laboratory results



EM. LOYEE'S INJURY AND ILLNESS PREVENTION PROGRAM

Backgourd VOC'S levels (monitoring) EXPOSURE MONITORING LOG CONTINUED

		DP.	DP. Oakland #610\$34.01				
Hazard Monitored	Monitoring Instrument	Sample Location	Time and Date	Sample Value			
vocs	580 A (PID)	near wells, whin Propertylines	12/12/21	03			
11		Park Ave.	12/12/91 12:10	06			
′1	1,	near R5-7 on Brighton Ave. Residences on		0.6-2.0 &			
11	"	Residences on Brighton Ave	12/12/91 14:15	03			
//	11	Hampell St.	12/12/91	03			
			Range:	0-2.0			
		·					
· · · · · · · · · · · · · · · · · · ·							
	<u> 1</u>		<u></u>				



EMPLOYEE'S INJURY AND ILLNESS PREVENTION PROGRAM

EXPOSURE MONITORING LOG CONTINUED

12/18/91 Desert Petroleum, Oakland

Hazard Monitored	Backgrove Monitoring Instrument	Sample Location	Time and Date	Sample Value
Vocs		Driveway	12/18/91 13:50	
· y	. //	near 15-1	12/18/41 14:00	·7
ч	u .	Corner of Purk + Hampel	11 14:15	0.0-0.3
"	1/	Brighton Ave.	" 14:30	0.3
4	"	near RS6	" 14:35	0.0
		·	Range: 0.0-	0.7
<u> </u>				



EMPLOYEE'S INJURY AND ILLNESS PREVENTION PROGRAM

EXPOSURE MONITORING LOG

Desert Petroleum, Caklond

Contamina Date: /2	nt(s); RTEX	(v.o. cs')	itory:	Sim Schollard
Origin of C		Soil Concentration	Groundwater Concentration	Other
8 220 2111				
**************************************			<u> </u>	
CALIBRAT	ION RECORD PI	D	_	
Time	Date	Instrument	Calibration Gas Response Factor	Calibration Value
13:45	12/18/91	580 A	Isobetylene	100.3
· ************************************				
LABORATO	ORY RESULTS			
Pump #	Pump Location	Sample Rate	Start/Stop Time	Lab Result

Attach final laboratory results

12/26/91

RESNA

RESNA

EMPLOYEE'S INJURY AND ILLNESS PREVENTION PROGRAM

EXPOSURE	MONITORING	LOG
-----------------	------------	-----

Desert Petroleum, ookland 12/26/91

Contamin	ant(s); BTEX 12/26/91	Vocs	2.	Schollard
Date:	12/26/9/	Labor	atory:	
Origin of ex. gasolin	Contaminant ne, diesel, etc.	Soil Concentration	Groundwater Concentration	Other
CALIBRA	TION RECORD :	PID (580	A DUM W.U.))
Time	Date	Instrument	Calibration Gas Response Factor	Calibration Value
09:06	12/26/91	580 A	Isob Afler	99.5
			1	

LABORATORY RESULTS

ը հրանագրա	Pump Location	Sample Rate	Start/Stop Time	Lab Result

Attach final laboratory results

RESNA

EMPLOYEE'S INJURY AND ILLNESS PREVENTION PROGRAM

EXPOSURE MONITORING LOG CONTINUED

Desert Petroleum, Ockbord 12/26/91 5. Scholland

	<i>*</i>	ン・	2 C88/1910	
Hazard Monitored	Monitoring Instrument	Sample Location	Time and Date	Sample Value
V.O.C;	580 A	Mear RSS	12/26/91 12:41	O,0
u	//	fump Island	1 12:50	0.0
1/	()	near RSG	11 /2:51	0.0
<i>c</i> ₁	11	Hampell St. Brighton And Park Ave	11 /:20	0.0
41	"	Brighton An	" 1:32	0.0
11	16	Park Ave	4 /:43	0.0
				Ave. = 0.0

ATTACHMENT 3

FREE PRODUCT THICKNESS DESERT PETROLEUM, OAKLAND

TABLE 1

		WELT 10	And the second s	
DATE	RS-1		- BS-6-	
12/20/90	_	5/8*	1/16*	3/8"
02/15/91		5/8"	1/16*	1/4"
06/12/31		1.		1*
09/13/91		2.5*	1/8*	1/4*
11/13/91		5/8"	_	<u> </u>
11/18/91		5/8*		_
11/27/91	0	15/8"	0	0
12/12/91	0	11/4"	0	0
12/18/91	0	3/4"	0	1/8"
12/26/91	0	3/8"	0	0
1/3/92	0	3/16"	0	1/16"

Table 2

B/ ED VOLUME OF FREE PRODU

(in liters)

DESERT PETROLEUM, OAKLAND

		•		
			WELL ID	
DATE	RS-1	RS-5	RS-6	R8-7
12/20/90		=19 (Water + Product)	=19 (Water + Product)	=19 (Water + Product)
09/15/91		=19 (Water + Product)	≈19 (Water + Producti	=19 (Water + Product)
05/12/91		=28 (Water + Product)		~28 (Water + Product)
0913/91		- .167	≂.167	≈.187
11713/91	_	.05		
1918/91		′0.12		
11/27/9/	0	-17.5 (water product)	0	0
2/9/	0	~ 2 l.	0	0
2 /8/91	0	~ 0.5l	0	~.15
12/26/91	0	~ .75 l	0	0
1/3/92	0	~.25l	0	<.12
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ORGANIC VAPOR MONITORING DATA (PID readings in ppm) DESERT PETROLEUM, OAKLAND

LOCATION*	11/13/91	11/18/91	11/27/4	12/12/91		
PG&E Box 1	1.5 ppm	3.0 ppm			VEA 147	12/26/9/
PG&E Box 2	1.5 ppm	3.0 ppm	0.		0	0
Storm Drain 1	3.5 ppm	5.0 ppm	0	0	0	0
Storm Drain 2	2.7 ppm	1.8 ppm	0		0	0
Water Box	29 ppm	3.0 ppm	0	0	0	0
Hampel St. Storm Drain	14 ppm	1.0 ppm	0	0		0
Brighton Ave. Storm Drain	1 ppm	0.0 ppm	0	20	2	
Brighton Ave. Manhole	angq 0.0	3.0 ppm	1.6	2.0 8.5	0	0
RS-1	50 ppm	4.0 ppm	0.3	1.3	85.0 /.O	16.0
RS-5	1632 ppm	731 ppm	449	632	490	18.5
RS-6	103 թքու	9.0 ppm	0.6	0	74.0	537
RS-7	104 ppm	595 ppm	379	572	555	1.0
Background Crawl Communication	0.7-1.2 ppm	0-0.6 рргп	0-0.8	0-2.0	0-0.7	439
Crawl Space 4038 Brighton Ave.	0 ppm	0 ppm	1.4	0.4	0	0
Crawl Space 4032 Brighton Ave.	O ppm	0 ррт	0	0	10	
Crawl Space 4026 Brighton Ave.	0 ppm	0 ppm	0	0	0	0
awl Space 4010 & 4012Brighton Ave.	0 ppm	С ррт	0	0	0	
Vault Below Station 4035 Park Blvd.	6.0 ppm	0 ррт	0	0	Ŏ	
iquie 2 for locations RS-2			1.4			

ORGANIC VAPOR MONITORING DATA (PID readings in ppm) DESERT PETROLEUM, OAKLAND

		DATE A PARTIE				
LOCATION*	1/3/92					
PG&E Box 1	0			[Augus] 2	Costa Mishirkiishii	
PG&E Box 2	0				<u></u>	
Storm Drain 1	0					
Storm Drain 2	0					
Water Box	0			·	:	
Hampel St. Storm Drain	0			·		
Brighton Ave. Storm Drain	1.4					·
Brighton Ave. Manhole	346					
RS-1	0					
RS-5	543					
RS-6						
RS-7	596					
Background	0-0.8					
Crawl Space 4038 Brighton Ave.	0					
Crawl Space 4032 Brighton Ave.	0		<u> </u>)
Crawl Space 4026 Brighton Ave.	0		*			
Crawl Space 4010 & 4012Brighton Ave.	0		i i			
Vault Below Station 4035 Park Blvd.	0		:		······································	
Figure 2 for locations RS-2	0					17



EMPLOYEE'S INJURY AND ILLNESS PREVENTION PROGRAM

O.P.Oakland #61034.01

5. Schollad

EXPOSURE MONITORING LOG

PID Calibration Log

Contomina	nt(e). 1/0.	C. ś	-	
Date:	$int(s): \frac{1}{2/92}.$	Labora	itory: NA	
Origin of Vex. gasolin	Sontaminant ne, diesel, etc.	Soil Concentration	Groundwater Concentration	Other
- W-7-1-A-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1				
CALIBRA	ΠΟΝ RECORD			
Time	Date	Instrument	Calibration Gas Response Factor	Calibration Value
14:12	1/3/92	580B OVM	Isobutylene	98.9 p
	ORY RESULTS		T No. 100	
Pump #	Pump Location	Sample Rate	Start/Stop Time	Lab Result
Attach fina	ıl laboratory results		<u> </u>	



EN. LOYEE'S INJURY AND ILLNESS PREVENTION PROGRAM

D.P. Oakland #61034.01 Jim Scholland

EXPOSURE MONITORING LOG CONTINUED

Background V.O.C. (BTEX) Monitoring Hazard Monitoring Sample Time and Sample Monitored Instrument Location Date Value	
V.O.C. 580 B-OUM PEAR RS-5 14:18 0.2 p	pm.
V.O.C.S 580 B-OUM PEAR RS-5 14:18 0.2 p	opm
11 11 Brighton St. 15:10 05-0	
11 Pesidences nova 15:18 0-0.	2
11 Homphell St. 15:35 0.0	
Range: 0.0-0	8 ppm
	····
	