Alameda County
JUN 0 4 2004
Environmental Health

SECOND QUARTER 2004 GROUNDWATER MONITORING REPORT

TASK ORDER NUMBER 04-987901-VC CONTRACT NUMBER 43A0078

SOUTH OAKLAND MAINTENANCE STATION 1112 29th AVENUE OAKLAND, CALIFORNIA

Prepared for

CALIFORNIA DEPARTMENT
OF TRANSPORTATION
District 4
111 GRAND AVENUE
Oakland, California

Prepared by

Professional Service Industries 4703 Tidewater Avenue, Suite B Oakland, California 94601 (510) 434-9200

> May 26, 2004 575-4G019

DEPARTMENT OF TRANSPORTATION

BOX 23660 OAKLAND, CA 94623-0660 (510) 286-4444 TDD (510) 286-4454



June 1, 2004
Mr. Amir Gholami
Alameda County Environmental Health Service
Environmental Protection
1131 Harbor Bay Pkwy; Suite 250
Alameda, California 94502-6577

Alameda County

JUN 0 4 2084

Environmental testin

SUBJECT: Fuel Leak Case RO0000397, 1112 29th Ave., Oakland, CA 94601, South Oakland Maintenance Facility

Dear Mr. Gholami:

Attached please find a copy of the second quarter 2004 Ground Water Monitoring Report for the above address. Our consultant, PSI Inc. recommends that based on relatively stable concentrations of the COCs at property, monitoring to be continued annually.

If you have any questions or require additional information, please contact Bahram Sazegar at (510) 286-5643.

For RAY BOYER District Branch Chief Office of Environmental Engineering

B. Sazzer

Cc: Rboyer, File

TABLE OF CONTENTS

STATEMENT OF LIMITATIONS AND PROFESSIONAL CERTIFICATION i
1.0 INTRODUCTION
2.0 GROUNDWATER MONITORING ACTIVITIES
3.0 SUMMARY AND CONCLUSIONS7
4.0 RECOMEMENDATIONS7
FIGURES
FIGURE 1: SITE LOCATION MAP FIGURE 2: GROUNDWATER ELEVATION MAP - MAY 5, 2004 FIGURE 3: MTBE CONCENTRATIONS IN GROUNDWATER - MAY 5, 2004
TABLES
TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY TABLE 2: GROUNDWATER ANALYTICAL DATA SUMMARY
APPENDICES
APPENDIX A: GROUNDWATER PURGE LOGS APPENDIX B: LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORMS

STATEMENT OF LIMITATIONS AND PROFESSIONAL CERTIFICATIONS

Information provided in Professional Services Industries, Inc., (PSI) report number 575-4G019 is intended exclusively for the California Department of Transportation (Caltrans) for the evaluation of groundwater contamination as it pertains to the subject site. PSI is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official view or policies of the State of California or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation. The professional services provided have been performed in accordance with practices generally accepted by other geologists, hydrologists, hydrogeologists, engineers, and environmental scientists practicing in this field. No other warranty, either expressed or implied, is made. As with all subsurface investigations, there is no guarantee that the work conducted will identify any or all sources or locations of contamination.

This report is issued with the understanding that Caltrans is responsible for ensuring that the information contained in this report is brought to the attention of the appropriate regulatory agency. This report has been reviewed by a geologist who is registered in the State of California and whose signature and license number appear below.

i

Professional Service Industries, Inc.

Frank R. Poss

Senior Hydrogeologist

Brand Burfield R.G. 6986

Project Geologist

1.0 INTRODUCTION

This report summarizes the results of the Second Quarter 2004 groundwater monitoring and sampling activities conducted on May 5, 2004 at the South Oakland Maintenance Yard located at 1112 29th Avenue in Oakland, California. The location of the subject site is presented on Figure 1. The purpose of this project is to comply with quarterly sampling requirements for Alameda County Department of Environmental Health. The work was conducted under Contract 43A0078 and Task Order Number 04-987901-VU.

1.1 SITE DESCRIPTION AND HISTORY

The site is currently used as a maintenance station by Caltrans. The maintenance station includes offices, a repair shop, a sign shop, and several material storage bins. The entire property covers approximately two acres. The site is paved with asphalt and is relatively flat. The Alameda/Oakland Estuary is approximately 0.5 miles southwest of the site.

One 4,000-gallon diesel underground storage tank (UST) and one 2,000-gallon gasoline UST were removed from the site on March 11, 1997. The tank pit was over-excavated and soil samples were collected. Sidewall and bottom samples collected from the excavation contained concentrations of Total Petroleum Hydrocarbons as Gasoline (TPH-G), as high as 380 milligrams per kilogram (mg/kg), and Total Petroleum Hydrocarbons as Diesel (TPH-D), as high as 21 mg/kg. Concentrations of Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), ranged from 0.010 to 48 mg/kg. Methyl Tertiary Butyl Ether (MTBE) concentrations ranged from 0.041 to 9.15 mg/kg. Groundwater samples were not collected (Caltrans, 1999).

On April 6 and 7, 1999, Boreholes B1 through B6 were drilled at the site. All of the boreholes were converted to 1.3-centimeter (cm) (0.5-inch) inside diameter temporary groundwater monitoring wells. Soil samples were collected from each borehole at depths of 1.5, 3, and 4.6 meters (m) (5, 10, and 15 feet) below ground surface (bgs).

Soil samples were analyzed for TPH-G and TPH-D by EPA method 8015M and for Volatile Organic Compounds (VOCs) by EPA Method 8260. TPH-G was detected in one soil sample (B6-3M at 13 mg/kg). None of the soil samples contained detectable concentrations of TPH-D. MTBE was the only VOC detected in the soil samples analyzed. MTBE was detected in the sample B5-1.5M at 0.16 mg/kg. No other soil sample contained a detectable concentration of MTBE (PSI, 1999).

TPH-G was detected in groundwater samples collected from temporary Wells WB3 (520 micrograms per liter ($\mu g/l$)) and WB4 (520 $\mu g/l$). No other groundwater samples collected contained detectable concentrations of TPH-G. No TPH-D was detected in any of the groundwater samples collected. Benzene was detected in the groundwater sample collected from Well WB3 (6.3 $\mu g/l$). MTBE was detected in the groundwater

samples collected from Well WB5 (6,600 μ g/l) and WB6 (24 μ g/l). Concentrations of other gasoline related compounds were detected in groundwater samples collected from Wells WB1, WB3, WB4, and WB5. Chloroform was detected in groundwater samples collected from Wells WB4 (2.4 μ g/l) and WB6 (2.7 μ g/l). Tetrachloroethene (synonym Perchloroethene [PCE]) was detected in the groundwater sample collected from Well WB6 (12 μ g/l) (PSI, 1999).

On August 13, 1999, Boreholes B7 through B9 were drilled at the site. The boreholes were drilled along the property boundary. Results of the sampling indicated the following:

- TPH-G concentrations were detected in one soil sample [B9-15FT (0.54 mg/kg)] at the site.
- TPH-D was detected in groundwater sample WB7 (0.73 milligrams per liter (mg/l)).
- MTBE was detected in grab groundwater samples WB7 (5,600 μg/l) and WB8 (9.0 μg/l).

In June and July 2000, PSI completed a supplemental investigation, which included the installation of four monitoring wells at the site. The conclusions and recommendations of the investigation follow:

- None of the soil samples contained detectable concentrations of TPH-G, while TPH-D
 was detected in two soil samples at concentrations below regulatory concern.
- None of the soil samples contained detectable concentrations of VOCs with the exception of MTBE. The highest MTBE concentration detected was 0.52 mg/kg in soil sample B3-10FT. All of the MTBE concentrations detected were below first encountered groundwater.
- None of the groundwater samples contained detectable concentrations of TPH-D, while TPH-G was detected in two groundwater samples at a maximum concentration of 2.7 mg/l.
- VOCs were detected in the groundwater samples collected with only benzene and MTBE at concentrations greater than the State of California Primary Drinking Water Standard (PDWS) or Secondary Drinking Water Standard (SDWS). Based on the concentrations detected, MTBE is the primary contaminant of concern (COC).
- The report recommended continued groundwater monitoring and the installation of additional monitoring wells down gradient of monitoring well MW-3. Additionally, as TPH-D was not detected in the groundwater sample from monitoring well MW-3, the report recommended the analyses for TPH-D in this well be eliminated.

In August 2001, PSI completed a subsequent investigation into the lateral extent of groundwater contamination at the site. Three boreholes were drilled at the All Aboard Mini Storage facility located down gradient of the site. Soil and groundwater samples were collected from each of the boreholes. The samples were analyzed for TPH-G and VOCs. The conclusions and recommendations of the investigation follow:

- TPH-G and VOCs were not detected in any of the soil sample above laboratory detection limits.
- The results of the groundwater sampling conducted at the All-Aboard Mini-Storage indicates that MTBE impacted groundwater above the PDWS has not migrated down gradient onto the All-Aboard Mini-Storage site (downgradient site).
- TPH-G was detected in the groundwater samples collected from monitoring well MW-1 (1.7 mg/l).
- VOCs were detected in the groundwater samples from the site. However, only MTBE
 was detected in concentrations greater than the PDWS. Based on the concentrations
 detected in the groundwater at the site, the primary contaminant of concern (COC) is
 MTBE.
- Based on the results of the soil and groundwater sample analyses, PSI recommended no further investigation down-gradient of the South Oakland Maintenance Station.
- For complete details see PSI's Hazardous Waste Preliminary Site Investigation Report, South Oakland Maintenance Station dated September 27, 2001.

Further data was generated by GEOCON during quarterly groundwater sampling on March 27, 2001 and June 26, 2001. The additional groundwater elevation data and analytical results were added into Tables 1 and 2. GEOCON reported the following:

- On March 27, 2001 MW-3 had a TPH-G concentration of 5.2 mg/l. MTBE concentrations were: 29 μg/l for MW-1, 110 μg/l for MW-2, 5,500 μg/l in MW-3. MW-3 also had the following VOC concentrations: 220 μg/l of benzene, 5.9 μg/l of Toluene, 2.2 μg/l of Ethylbenzene, 12 μg/l of TAME, and 270 μg/l of Tert-butanol.
- On June 26, 2001 three wells had TPH-G levels that were above the laboratory detection limit. MW-1 had a TPH-G concentration of 0.24 μg/l, MW-2 had 0.11 ug/l, and MW-3 had 2.5 μg/l. MTBE was found in concentrations of 51 ug/l in MW-2 and 2,800 μg/l in MW-3. MW-3 also had the following VOC concentrations: a benzene concentration of 20 μg/l, 12 μg/l of TAME, and 230 μg/l of Tert-butanol.

2.0 GROUNDWATER MONITORING ACTIVITIES

2.1 GROUNDWATER ELEVATION AND HYDRAULIC GRADIENT

On May 5, 2004, static groundwater elevations were measured in wells MW-1 through MW-4 (Figure 2). The groundwater depths were measured using a groundwater interface probe. A summary of the depth-to-groundwater data collected during this monitoring event and previous monitoring events is presented in Table 1. Based on the groundwater data, the inferred groundwater flow direction beneath the site is to the southwest with a hydraulic gradient of 0.008 (Figure 2).

2.2 GROUNDWATER SAMPLING

Groundwater samples were collected from monitoring wells MW-1 through MW-4. Prior to the collection of groundwater samples, the monitoring wells were purged approximately three well volumes of water until pH, conductivity, and temperature stabilized. If purged to dryness, the wells were allowed to recover to at least 80 percent of their original static groundwater levels prior to sampling.

The following procedures for well monitoring, well purging, and water sampling were implemented while sampling the wells:

- 1. All non-dedicated equipment was washed prior to entering the well with an Alconox solution, followed by a deionized water rinse.
- 2. Prior to purging the wells, depth-to-water was measured using an Solinst groundwater interface probe to an accuracy of approximately 0.01 foot. The measurements were made to the top of the well casing on the north side.
- 3. Monitoring wells at the site were prepared for sampling by purging the well of approximately 3 well volumes of water using disposable Teflon bailers.
- 4. Water samples were collected with a single-use Teflon bailer after the well had been purged and water in the well had equilibrated to approximately 80 percent of the static water level. The water collected was immediately decanted into laboratory-supplied vials and bottles. The containers were overfilled, capped, labeled, and placed in a chilled cooler prior to delivery to the laboratory for analysis.

- Chain-of-custody procedures, including chain-of-custody forms, were used to document water sample handling and transport from collection to delivery to the laboratory for analyses.
- 6. Groundwater samples were delivered to the State-certified hazardous waste laboratory within approximately 48-hours of collection.
- 7. Purged water was contained in a DOT approved 55-gallon drum. The drum was labeled with the contents, date, well number, client name, and project number.

The groundwater monitoring purge logs are presented in Appendix A.

2.3 LABORATORY ANALYSIS AND RESULTS

The groundwater samples were submitted for analyses to Basic Laboratory of Redding, California, a State of California certified hazardous waste analytical laboratory. The samples were analyzed for the following:

- EPA 8015 modified TPH-G;
- EPA 8260 Volatile Organic Compounds (VOCs).

A summary of the laboratory results for groundwater samples is presented in Table 2. A copy of the laboratory reports and chain of custody records are presented in Appendix B. The following are the results of the groundwater sampling:

 TPH-G was detected only in the groundwater sample collected from monitoring well MW-3 (0.27 mg/l). The TPH-G concentration has decreased since the previous sampling results.

VOCs were detected in the groundwater samples with the highest concentrations detected in the groundwater sample collected from monitoring well MW-3. The compounds detected are common constituents of gasoline. The compound with the highest concentration was MTBE at 4,420 micrograms per liter (µg/l) in monitoring well MW-3. The concentration of MTBE decreased in one of the monitoring wells and increased in three of the monitoring wells since the previous sampling event.

2.4 COMPARISON OF GROUNDWATER RESULTS WITH REGULATORY CRITERIA

The concentrations of contaminants reported by the analytical laboratory were compared to the State of California Maximum Contaminant Level (MCL). The following samples were above their respective MCL.

- Benzene (MCL of 1.0 µg/l) detected in groundwater sample MW-3 (24.0 µg/l).
- MTBE (MCL of 1.0 μg/l) detected in groundwater samples MW-1 (201 μg/l), MW-2 (13.5 μg/l), and MW-3 (4,420 μg/l).

Based on the concentrations detected in the groundwater at the site, the primary COC is MTBE. The concentrations of MTBE in each of the monitoring wells are shown in Figure 3. This figure indicates that the highest concentrations of MTBE were encountered in the groundwater samples collected in the monitoring well MW-3, directly down gradient of the former USTs.

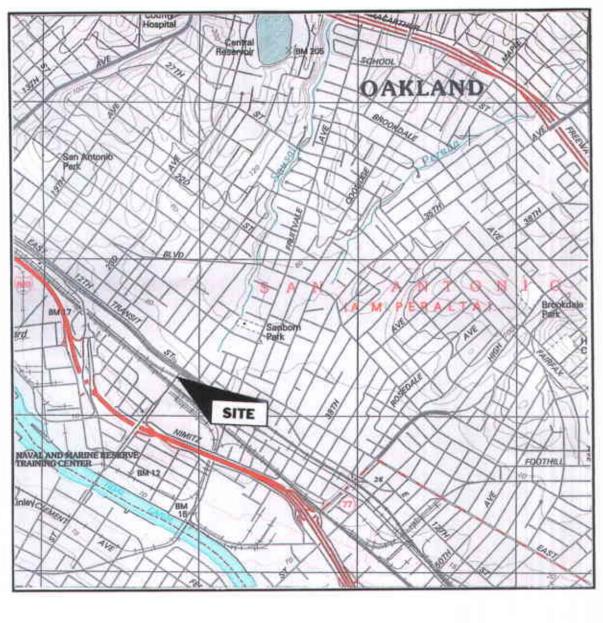
3.0 SUMMARY AND CONCLUSIONS

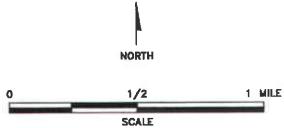
PSI performed a groundwater monitoring event on May 5, 2004. Groundwater samples were collected from monitoring wells MW-1 through MW-4. Based on measurements collected and analytical data the following conclusions are provided. Groundwater elevation data indicates the groundwater flow direction beneath the site is towards the southwest, with a hydraulic gradient of 0.008.

- TPH-G was detected in the groundwater sample collected from monitoring wells MW-3 (0.27 mg/l).
- VOCs were detected in all four groundwater samples collected from the monitoring wells at the site. Only benzene and MTBE were detected in concentrations greater than their MCL. Based on the concentrations detected in the groundwater at the site, the primary COC is MTBE.

4.0 RECOMMENDATIONS

Based on the relatively stable concentrations of the COCs at the property and the extensive previous quarterly data for the site, PSI recommends that yearly monitoring of the site continue.





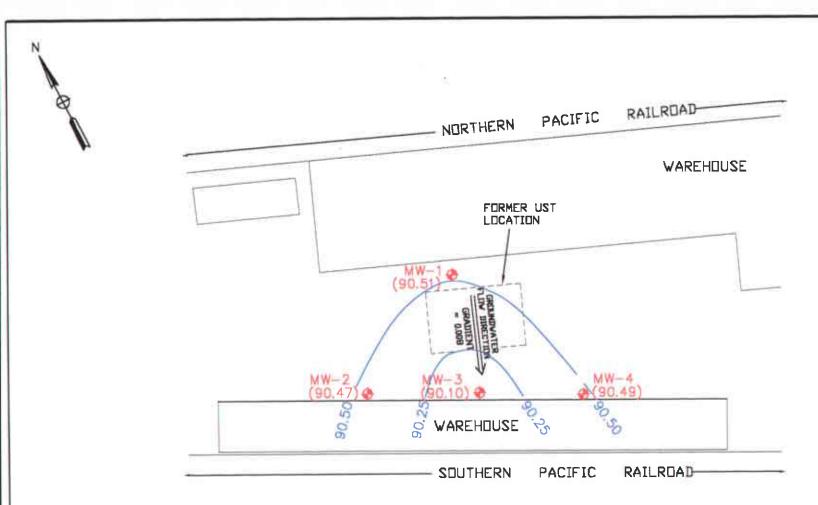
REFERENCE:

OAKLAND EAST, CA 7.5 MINUTE SERIES TOPOGRAPHIC MAP, DATED 1997.



4703 Tidewater Avenue, Suite B Oakland, California 94601 (510) 434—9200

CALTRANS MAINTENANCE STATION	B.S.	5/04	46019-01	Figure Fac
SITE LOCATION MAP	Approved By: F.P.	575	-4G019	/



EXPLANATION:

MW-4 (90.49)

- GROUNDWATER MONITORING WELL LOCATION (GROUNDWATER ELEVATION GIVEN IN FEET MSL)

90.50

GROUNDWATER ELEVATION CONTOUR (ELEVATION IN FEET MSL)





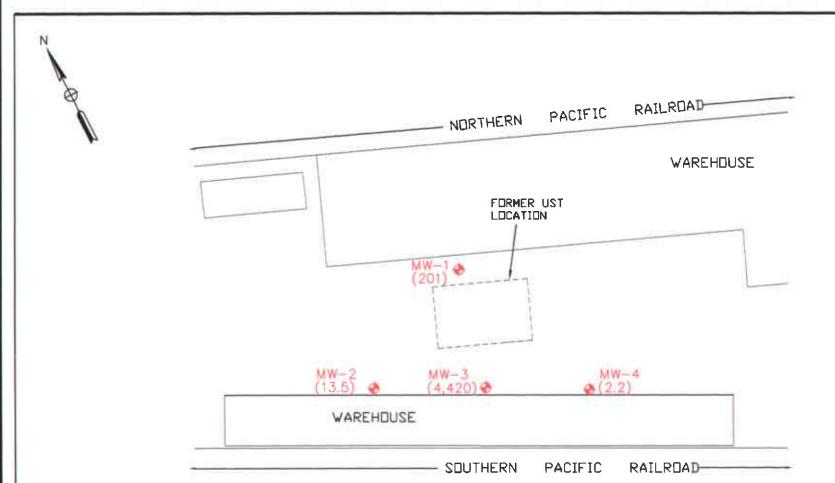
4703 Tidewater Avenue, Suite B Oakland, California 94601 (510) 434-9200

100 ft

Project		TENANCE STATION
77 Marie	GROUNDWATER	ELEVATION MAP

B.S.	5/04 4G019				
pproved By:	Project St.				
F.P.	575	-4G019			

(May 5, 2004)



EXPLANATION:

₩-3

- GROUNDWATER MONITORING WELL LOCATION

(4,240)

 CONCENTRATION (ug/L) OF MTBE DETECTED IN GROUNDWATER SAMPLES (ND INDICATES NOT DETECTED ABOVE LAB METHOD DETECTION LIMITS)



Information
To Build On
Engineering Consulting Testing

4703 Tidewater Avenue, Suite B Oakland, California 94601 (510) 434-9200

File Haz

Figure Ha.:

Project				E STATION	
	1112 29TH	AVENUE,	OARTAND,	CALIFORNIA	
Pidder	MITDE	CONCE	NTDATIC	MC IN	

B.B. 1/02 1G026-03 Approved By: Project No.: F.P. 575-4G019

MTBE CONCENTRATIONS IN GROUNDWATER (May 5, 2004)

TABLE 1

GROUNDWATER ELEVATION DATA SUMMARY SOUTH OAKLAND MAINTENANCE STATION SOUTH OAKLAND, CALIFORNIA

Sample Location	Date	TOC Elevation (feet msl)*	Depth To Groundwater (feet)	Groundwater Elevate (feet msl)
MW-1	6/27/2000	99.57	9.13	90.44
	9/11/2000	99.57	9.52	90.05
	11/28/2000	99,57	9.62	89.95
	3/27/2001	99.57	8,79	90.78
	6/26/2001	99.57	9.80	89.77
	12/5/2001	99.57	8.32	91.25
	3/4/2002	99.57	8.66	90,91
	6/14/2002	99.57	9.53	90.04
	9/24/2002	99.57	10.06	89,51
	5/5/2004	99.57	9.06	90.51
MW-2	6/27/2000	98.91	9.05	89.86
	9/11/2000	98.91	9.95	88.96
	11/28/2000	98.91	9.94	88,97
	3/27/2001	98.91	8.35	90.56
	6/26/2001	98.91	10.76	88.15
	12/5/2001	98.91	8.53	90.38
	3/4/2002	98.91	8.25	90.66
Į	6/14/2002	98.91	9.50	89.41
	9/24/2002	98.91	10.31	88.60
	5/5/2004	98.91	8.46	90.45
мw-з	6/27/2000	98.98	8.76	90.22
[9/11/2000	98.98	9.28	89.70
	11/28/2000	98.98	9.36	89.62
	3/27/2001	98.98	8,35	90.63
	6/26/2001	98.98	10.51	88.47
	12/5/2001	98.98	8.05	90.93
	3/4/2002	98.98	8.05	90.93
	6/14/2002	98,98	9.35	89.63
	9/24/2002	98.98	10.28	88.70
	5/5/2004	98.98	8.88	90.10
MW-4	6/27/2000	99.04	8.74	90.30
	9/11/2000	99.04	9.30	89.74
į	11/28/2000	99.04	9.32	89.72
	3/27/2001	99.04	7.96	91.08
	6/26/2001	99.04	9.56	89.48
[12/5/2001	99.04	8.58	90.46
	3/4/2002	99.04	8.00	91.04
ſ	6/14/2002	99.04	8.79	90.25
	9/24/2002	99.04	9.75	89.29
	5/5/2004	99.04	8,55	90.49

Notes:

All measurements are recorded in feet.
*TOC Measurements are from data supplied by Meridian Surveying

Feet msi = feet above mean sea level

TABLE 2

GROUNDWATER ANALYTICAL DATA SUMMARY SOUTH OAKLAND MAINTENANCE STATION SOUTH OAKLAND, CALIFORNIA

/2000 /2000 /2000 /2001 /2001 /2001 /2001 /2002 /2002 /2002	000 0.92	880	1000	(TAME)	μηλ	hØv	р9Л	µg/l	llgu	ug1	ľQu
7/2000 7/2001 7/2001 7/2001 7/2001 7/2002 7/2002	_		<50	<5	20	<1.0	≺1,0	19			-
/2001 /2001 /2001 /2001 /2002 /2002		860	190	< 5	14	<1.0	1.6	3.6		_	-
/2001 /2001 /2001 /2001 2002 /2002	2000 <0.5	610	<250	<25	3.6	<2.5	<2.5	≺7.5	_	-	***
/2001 /2001 2002 /2002	001 <0.20	29	<200	<5.0	<0.50	<0.50	<0.50	<1.0	<5.0	<5.0	<5,0 [′]
/2001 2002 /2002	0.24	200	<200	<5.0	<0.50	<0.50	<0.50	<1.0	<5.0	<5.0	<5.0
2002 /2002	001 <0.5	520	<1,200	<50	<25	<25	<25	<75			_
/2002	001 0.38	505	<100	<0.5	3,5	<0.3	2.4	15.4	***	_	•••
	002 0.69	55	<50	<0.5	<0.5	<0.5	<0.5	≺1.0	<0.5	<0.5	
/2002	002 <0.5	5.3	<0.5	<0.5	<0,5	<0.5	<0.5	<1	<0.5	<0.5	***
	002 0.164	60.0	<50	<0.5	<0.5	<0.5	0.5	1.6	<0.5	< 0.5	napthalene - 0.6 n-propylbenzene - 0.7 1.2.4-trimethylbenzene - 4.1 1.3.5-trimethylbenzene - 1.1 n-Butylbenzene - 2.3 isopropylbenzene - 0.5
2004	004 <0.0	5 201	<50	<0.5	0.5	<0.5	0.6	1.7	<0.5	<0.5	n-propylbenzene - 0.8 1,2,4-trimethylbenzene - 4, 1,3,5-trimethylbenzene - 1. isopropylbenzene - 0.8
			-							ļ	
/2000			<50	<5	<1.0	<1.0	<1.0	<3.0			
/2000	—— 		<50	< 5	<1.0	<1.0	<1.0	<3.0			-
3/2000			<50	<5	<1.0	<1.0	<1.0	<3.0			
/2001	_	_	<200	<5.0	<0.50	<0.50	<0.50	<1.0	<5.0	<5.0	<5.0
/2001			<200	<5.0	<0.50	<0.50	<0.50	<1.0	<5.0	<5.0	<5.0
/2001			<100	<4	<2.0	<2.0	<2.0	<6.0			***
/2001			<100	<0.5	<0.3	<0.3	<0.3	<0.6			
2002			<50	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	
/2002			<0.5	<0.5	<0,5	<0.5	<0.5	<1	<0.5	<0.5	***
/2002			<50	<0.5	<0.5	<0.5	<0,5	<1.0	<0.5	<0.5	-
2004	004 <0.0	5 13.5	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	
/2000	2000 2.7	5,000	1,500	11	73	1.7	1,2	4.6			***
/2000		2,700	310	10	19	<1.0	<1.0	<3.0	_	 	
B/2000		2,500	<1,000	<100	27	92	<10	<30		 	
72001		-	270	12	220	5.9	2.2	<1.0	<5.0	<5.0	_
V2001		2,800	230	12	20	<0.50	<0.50	<1.0	<5.0	<5,0	
/2001		2,800	<5,000	<200	<100	<100	<100	<300			
/2001			<5,000	<200	18.3	0.3	1.2	1	_		
/2002			<50	11	84.2	8.0	2.4	6.9	<0.5	<0.5	
/2002	-+		<0.5	8.9	3,6	<0.5	<0.5	<1	<0.5	<0.5	
/2002		<u> </u>	<50	7.6	24.0	0.5	1.2	3.4	<0.5	<0.5	tert-butylbenzene - 0.5 n-propylbenzene - 0.7 1,2,4 trimethylbenzene - 0.
/2004	0.27	0 4,420	<50	<0.5	32.2	<0.5	0.8	4,8	<0.5	<0.5	napthalene - 2.0 n-propylbenzene - 1.3 isopropylbenzene - 0.9
12020	2000 -5	-	~e^	30,	<1.0	<1.0	<1.0	<3.0			
7/2000 1/2000			<50 <50	<5 <5	<1.0	<1.0 <1.0	<1.0	<3.0	-	- -	
			<50	<5	<0.5	<0.5	<0.5	<1.5		 	<u> </u>
8/2000 7/2001			<200	<5.0	<0.50	<0.50	<0.50	<1.0	<5,0	<5.0	chloroform - 5.1
		_		ļ		+		.)		<5.0	<5.0
			+			-			-5.5		
		-		-					├	 	
~ £ UV I			-	 				+)	<u> </u>	_
						+		<1	+	<0.5	chloroform - 5.4
/2002				+		· 	 	+	+	<0.5	chloroform - 5.3
			+				+		+		chloroform - 3.0
3/2001 1/2001 5/2001	2001 2001 2002 2002	<0.9 <0.0 <0.9 <0.9 <0.9 <0.9	 <0.5 <2 <0.05 <0.3 <0.5 <0.5 <0.5 <0.5 <1.3 	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

NOTES:

NOTES:

--- = Not Tested

TPH-G = Total Petroleum Hydrocarbons as Gasoline by EPA Method 8015M.

MTBE = Methyl Tertiary Butyl Ether

ETBE = Ethyl Tertiary Butyl Ether

VOCs = Volatile Organic Compounds

Tryl-G = Total Petroleum Hydrocarbons as Gasoline by EPA Method 8015M.

Mg/l = micrograms per liter

ug/l = micrograms per liter

APPENDIX A

GROUNDWATER PURGE LOGS

FLUID MEASUREMENT FIELD DATA SHEET: OF (575-46-019 PROJECT NO: PROJECT NAME: CT South Oakland DATE: SERIAL NO: WATER LEVEL MEASUREMENT INSTRUMENT: Solitst SERIAL NO: PRODUCT DETECTION INSTRUMENT: ANALYTE FREE FINAL RINSE TAP WATER FINAL RINSE ☐ ISOPROPANOL DIST/DEION 1 RINSE ALCONOX WASH EQUIP. DECON: ☐ DIST/DEION FINAL RINSE ☐ AIR DRY ☐ OTHER SOLVENT ☐ DIST/DEION 2 RINSE LIQUINOX WASH ☐ TAP WATER WASH **ACTUAL** PRODUCT WATER WELL **DEPTH TO DEPTH TO GROUND** TOP OF WELL **TABLE** TIME THICKNESS DEPTH WATER PRODUCT CASING SURFACE NUMBER **ELEVATION** BELOW TOC. **BELOW TOC BELOW TOC ELEVATION ELEVATION** 9.06 25.18 MW-1 20.20 24.37

PREPARED BY:

REMEMBER TO CORRECT PRODUCT THICKNESS FOR DENSITY BEFORE CALCULATINGWATER TABLE ELEVATION

		·· .			WELL N	0:	Mw-1	
DATE: 5/5/04 PROJE	ECT NAME:	South	09	Klad	PROJEC	CT NO:	46-019	
WEATHER CONDITIONS:	54	my,	wwn	~				
WELL DIAMETER (IN.)	□ 1	⊠ 2	□ 4	☐ 6	OTHER			
SAMPLE TYPE: 🗖 GRO	UNDWATER	☐ WASTI	EWATER	SURF	ACE WATE	R 🗆 C	THER	
WELL DEPTH (TOC)	VELL DEPTH (TOC) 25.18 FT. DEPTH TO WATER BEFORE PURGING (TOC) 9.06 FT.							
LENGTH OF WATER	16.1°	Д FT.	1		E WELL VO		2.7 GAL	
PURGING DEVICE:			DEDIC	ATED X] disposa	BLE 🗆 C	PECONTAMINATED	
SAMPLING DEVICE:		4		ATED [disposa	BLE 🗆 C	ECONTAMINATED	
EQUIP. DECON.	TAP WATER V			ISOPROPA			FREE FINAL RINSE	
ALCONOX WASH		ION 1 RINSE					ON FINAL RINSE	
LIQUINOX WASH		ION 2 RINSE			R FINAL RIN		AIR DRY	
CONTAINER PRESERVATI WATER ANALYZER MODE	<u> </u>	PRESERVED	- LIFIELD	PRESERV	<u>.</u>	•		
ANY I EV WINE: TEIN MOOD!		•	•					
ACTUAL CUMUL TEMI TIME VOLUME G*F (MIN) PURGED G*G** (GAL)	CONDUCT.	рН	DISS. OXYGEN	TURBIDITY (NTUs)	WATER APPEAR CL=CLEAR CO=CLOUDY	(EVIDE)	REMARKS VT ODOR, COLOR, PID)	
10-27 INITIAL 19.	8 514.6	0 04	-		TU=TURBID	<u> </u>		
11:20 7 19	4 50,9	Q 23						
11:40 5.5 195	2.506.8	8.85			01	<u> </u>		
11:46 95 9	2 5122	2 84			01			
11340 13	C 76.2	0 -0 1						
								
		:			 			
				 			*	
					 			
					 			
					 			
DEPTH TO WATER AFTER	PURGING (TO		 FT	SAMPLE	FILTERED	YES	□NO SIZE	
NOTES:	., ., ., ., ., ., ., ., ., ., ., ., ., .	 	SAMPLE	J	11:48			
1101 Ed.			DUPLICATE TIME: 10#:					
			EQUIP. 8		TIME:	ID#	t:	
	E arti		PREPARI		BS			

¹ A 1 FOOT LENGTH OF WATER = 0.05 GAL IN 1" DIA. PIPE 0.17 GAL IN 2" DIA PIPE 0.65 GAL IN 4" DIA PIPE 1.5 GAL IN 6" DIA PIPE

	WELL NO: MW-2	:
DATE: 5/5/04 PROJECT NAME: 500	the Gakland PROJECT NO: 4601	9
WEATHER CONDITIONS: Cuny,		
WELL DIAMETER (IN.)	4 6 OTHER	
SAMPLE TYPE: 🛮 GROUNDWATER 🔲 WASTE	EWATER SURFACE WATER OTHER	
WELL DEPTH (TOC) 19.47 FT.	DEPTH TO WATER BEFORE PURGING (TOC)	46 FT.
LENGTH OF WATER (c) FT.	CALCULATED ONE WELL VOLUME1:	GAL.
PURGING DEVICE:	DEDICATED DISPOSABLE DECONTAM	INATED
SAMPLING DEVICE:	DEDICATED Z DISPOSABLE DECONTAM	INATED
EQUIP. DECON. TAP WATER WASH	☐ ISOPROPANOL ☐ ANALYTE FREE FINA	
ALCONOX WASH DIST/DEION 1 RINSE		INSE
LIQUINOX WASH DIST/DEION 2 RINSE		
CONTAINER PRESERVATION: LAB PRESERVED WATER ANALYZER MODEL & SERIAL NO:	D FIELD PRESERVED	
WATER ANALIZER MODEL & SERIAL NO.		
ACTUAL CLIMUL TEMP SPECIFIC PH TIME VOLUME TO SPECIFIC PH (MIN) PURGED TO SPECIFIC PH (GAL)	DISS. TURBIDITY WATER REMARKS OXYGEN (NTUs) APPEAR (EVIDENT ODOR, COI CL=CLEAR CO=CLOUDY TU=TURBID	LOR, PID)
11:10 INITIAL 18.6 5846893	(c)	
11:13 2 18,3583.6 888	cl	
11:16 4 184 5888 8-96	CI	
1620 6 184 5719 8:30	C!	
1		
		·
DEPTH TO WATER AFTER PURGING (TOC)	FT. SAMPLE FILTERED YES NO SE	ZE
NOTES:	SAMPLETIME: 11:33 ID# M	w-2
	DUPLICATE TIME: ID#:	
	EQUIP. BLANK: TIME: 10#:	
P and	PREPARED BY: 35	

DATE: 5/5/04/PROJECT NAME: South Oaklac	PROJECT NO: 46-09
WEATHER CONDITIONS: Suny Warm	
	OTHER
	ACE WATER OTHER
WELL DEPTH (TOC) 20.20 FT. DEPTH TO WATER	BEFORE PURGING (TOC) 8,88 FT.
LENGTH OF WATER 1.32 FT. CALCULATED ONE	WELL VOLUME1: 1, 9 GAL
PURGING DEVICE:	DISPOSABLE DECONTAMINATED
	DISPOSABLE DECONTAMINATED
EQUIP. DECON. TAP WATER WASH ISOPROPAI	<u> </u>
	LVENT DIST/DEION FINAL RINSE R FINAL RINSE AIR DRY
CONTAINER PRESERVATION: M LAB PRESERVED FIELD PRESERVE	
WATER ANALYZER MODEL & SERIAL NO:	
	ΰ,
ACTUAL CUMUL TEMP SPECIFIC PH DISS. TURBIDITY TIME VOLUME OF CONDUCT. OXYGEN (NTUs) (MIN) PURGED (GAL)	WATER REMARKS APPEAR (EVIDENT ODOR, COLOR, PID) CL=CLEAR CO=CLOUDY TU=TURBID
11:58 INITIAL 19.5 G27.7 8.84	(1)
n-62 2 189 C294884	CI
1005 CHT 8 84	CO
13.00 6 196 (37.9) 8.87	C
1270	
DEPTH TO WATER AFTER PURGING (TOC) FT. SAMPLE F	ILTERED YES NO SIZE
NOTES: SAMPLETIME:	12:10 10# MW-3
DUPLICATE	TIME: ID#:
EQUIP. BLANK:	TIME: ID#:
PREPARED BY:	135

A 1 FOOT LENGTH OF WATER = 0.05 GAL IN 1" DIA. PIPE 0.17 GAL IN 2" DIA PIPE 0.65 GAL IN 4" DIA PIPE 1.5 GAL IN 6" DIA FIFE

	·····		, 	··	WELL N		7w-4
DATE: 5/5/04PROJE	CT NAME:	Sou	th C	Daklan	d PROJEC	T NO:	46-019
WEATHER CONDITIONS:	S	unny,	Wo	(m	<u> </u>		
WELL DIAMETER (IN.)	<u> </u>	[Q 2 /	4	6	OTHER		
SAMPLE TYPE: 又GRO	JNDWATER	WASTE	WATER	SUR	FACE WATE	R 🔲 o	THER
WELL DEPTH (TOC)	24.35	7 FT.	DEPTH.	TO WATE	R BEFORE F	URGING	(TOC) 8,55FT.
LENGTH OF WATER	15.	82 FT.	CALCUL	ATED ON	E WELL VOL	LUME ¹ :	2.7 GAL
PURGING DEVICE:			DEDIC	ATED [X	DISPOSA	BLE DO	ECONTAMINATED
SAMPLING DEVICE:		4	DEDIC	ATED [DISPOSAE	BLE D	ECONTAMINATED
EQUIP. DECON.	TAP WATER W		=	ISOPROPA			FREE FINAL RINSE
ALCONOX WASH		ION 1 RINSE					ON FINAL RINSE
LIQUINOX WASH CONTAINER PRESERVATION		ION 2 RINSE			R FINAL RIN		AIR DRY
WATER ANALYZER MODEL	<u> </u>			FRESERV		• •	
, , , , , , , , , , , , , , , , , , , ,		•					
ACTUAL CUMUL TEMP TIME VOLUME OF (MIN) PURGED (C) °C (GAL)	SPECIFIC CONDUCT.	ρH	DISS. OXYGEN	TURBIDITY (NTUs)	WATER APPEAR CL=CLEAR CO=CLOUDY TU=TURBID	(EVIDE)	REMARKS NT ODOR, COLOR, PID)
10:40 INITIAL 19,0	2 5193	8.90			CITA		-
10.46 3 18.		8.96		_	Co		
10-50 5.5 18:	4 54.1	8.80			30.		
10:54 8.5 18:	2 515.0	8-86			(O		
DEPTH TO WATER AFTER	PURGING (TO)C)	FT.	SAMPLE	FILTERED	YES	□NO SIZE
NOTES:	<i>\frac{1}{2}</i>		SAMPLE	гімЕ:	10:55	· ID#	* MW4
}		}	DUPLICA	re 🗆	TIME:	ID#	f:
\ .		1	EQUIP. BLANK: TIME: ID#:				
	·**		PREPARE	D BY:	13<	2	

¹ A 1 FOOT I ENGTH OF WATER = 0.05 GAL IN 1" DIA. PIPE 0.17 GAL IN 2" DIA PIPE 0.65 GAL IN 4" DIA PIPE 1.5 GAL IN 6" DIA PIPE

APPENDIX B

LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORMS



www.basiclab.com

voice 530,243,7234 fax 530,243,7494

2218 Railroad Avenue Redding, California 96001

May 21, 2004

Lab ID: 4050260

FRANK POSS
PROFESSIONAL SERVICE INDUSTRIES
4703 TIDEWATER AVENUE SUITE B
OAKLAND, CA 94601

RE: SOUTH OAKLAND 4G019

Dear FRANK POSS,

Enclosed are the analysis results for Work Order number 4050260. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

James E. Hawley
Laboratory Director

California ELAP Certification Number 1677



www.basic ab.com

voice 530.243.7234 2218 Railroad Avenue fax 530.243,7494

Redding, California 96001

Report To:

(aboratory

PROFESSIONAL SERVICE INDUSTRIES

4703 TIDEWATER AVENUE SUITE B

OAKLAND, CA 94601

Attention: FRANK POSS

Project: SOUTH OAKLAND 4G019

Volatile Organic Compounds

Lab No: 4050260 Reported: 05/25/04

Phone: 510-434-9200

P.O. #

Analyte	Units	Results	Qualifier	MDL	RL	14-54-4	A. 1 1	_	
MW-1 Water (4050260-01)	Sampled:05/		Received:05/0		KL_	Method	Analyzed	Prepared	Batch
Acetone	ug/i	ND ND	Received:05/0	0/04 10:38					
Acrylonitrile	egy,	ND ND			5.0	EPA 8260	05/06/04	05/06/04	B4E0104
Benzene	N	0.5			5.0	"	*	Ħ	ti
8romobenzene	h		•		0.5	n		34	н
Bromochloromethane	n	ND			0.5	A	7	4	n
Bromodichioromethane	н	ND			0.5	n	н	•	II.
Bramoform	II	ND			0.5	17	R	н	ri .
Bromomethane		ND			0.5	a	•	H	tı
2-Butanone	n	ND			1.0	**		•	0
n-Butylbenzene		ND			5.0	п	п	п	10
sec-Butylbenzene	n	ND			0.5	n	r	₩	*
tert-Butylbenzene	•	ND			0.5	#1	n	II	n
Carbon disulfide	Ħ	ND			0.5	п	•	n	•
Carbon tetrachloride	., H	ND			0.5	r,	п	Ħ	19
Chlorobenzene	li .	ND			0.5	4	Ħ	4	
Chloroethane		ND			0.5	le .	11	ii .	
2-Chloroethylvinyl ether		ND			0.5	II .	е .	11	•
Chloroform	н	NO			1.0	•	tr .	μ	п
Chloromethane	Ħ	ND	•		0.5	u	r.	₩.	7
2-Chiarotoluene		ND			0,5	*1	n	u	н
4-Chlorotoluene		ND			0.5	ű.		v	le
Olbromochioromethane	*	ND		•	0.5	18		п	ņ
1,2-Dibromo-3-chloropropane (DBCP)		NO			0.5	•	n	W	•
1,2-Dibromoethane (EDB)	H	ND			0.5	π	ħ	N	H ·
Dibromomethane	"	NO			0.5	**	n	ч	
1,2-Dichlorobenzene		ND			0.5	ri	n	II	13
1,3-Dichlorobenzene	1)	ND			0.5	и	n	и	W
1,4-Dichlorobenzene	"	ND			0,5	n	n	и	14
Dichlorodifluoromethane	" II	ND			0.5	ii .	h	-	**
1,1-Dichloroethane	"	ND			0.5	и	0	**	U
1,2-Dichloroethane		ND			0.5	11	h	u	14
1,1-Dichloroethene	<u>"</u>	ND			0,5	4	#	N	
cls-1,2-Dichloroethene	# H	ND			0.5		M	le .	•
irans-1,2-Dichloroethene		ND			0.5	•	w	16	14
Dichloromethane		ND			0.5	7	11	15	
1,2-Olchloropropane	,,	СN			1.0	»	**	•	н
1,3-Dichloropropane		ND			0.5	n	a	11	11
2,2-Dichloropropane		ND			0.5	**	35.	u	*
1,1-Dichloropropene		ND			0.5	u	н	n .	и
tis-1,3-Dichloropropene	"	ND			0.5	b		11	
trans-1,3-Dichloropropene	" u	ND			0.5	•	u	•	u
1,4-Dioxane		ND		•	0.5	ħ	**	**	H
Ethylbenzene	ir It	ND			25.0	и	10	п	n
Ethyl tert-buty) ether	"	0.6			0.5	H	11	u	и
	"	ND			0.5	u	u	u	ч
Hexachlorobutadiene 2-Hexanone	n n	ND			0.5	п	н	ri .	н
	n ti	ND			5.0	и	. 11	14	•
Isopropy/benzene	n n	0.6			0.5	. "	n		н
Di-isopropyl ether	n.	ND			0.5	н	u		н
- Isopropyltoluene - Methyl-2-pentanone	"	ND			0.5	n	44	н	11
Methyl tert-butyl ether	11	ND			5.0	u	н ,	п	н
	" ►	201			10.0	u	05/10/04	Ħ	#
Naphthalene	-	ND			0.5	16	05/06/04	"	н

Approved By

Basic Laboratory, Inc.

Zalifornia D.O.H.S. Cert #1677



www.basiclab.com

laboratory

voice 530.243,7234 fax 530.243.7494

2218 Railroad Avenue Redding, California 96001

PROFESSIONAL SERVICE INDUSTRIES Report To:

4703 TIDEWATER AVENUE SUITE B

OAKLAND, CA 94601

Attention: FRANK POSS

Project: SOUTH OAKLAND 4G019

Phone:

Reported: 05/25/04 510-434-9200

Lab No: 4050260

P.O. #

Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batc
MW-2 Water (4050260-02) Sampled:05/	05/04 11:22	Received:05/06	/04 10:38					
1,3-Olchlorobenzene	н	ИD			0.5		le .	05/06/04	. 4
1,4-Dichlorobenzene		ИО			0.5	**	*	Ħ	ų
Dichlorodifluoromethane	π	ND			0.5	11	St.	я	ч
1,1-Dichloroethane		ИD			0,5	N	Ħ	•	p
1,2-Dichloroethane		ND			0.5	u	Ü	*	۳
I,1-Dichloroethene	и	ND			0.5	и .	N	•	
cls-1,2-Dichloroethene	"	МÐ			0.5	W	13	H	e
trans-1,2-Dichloroethene	*	ND			0.5	и	15	n	¥
Dichioromethane	Ħ	ND			1.0	W	ur .	u	
1,2-Dichloropropane	rt	ND			0.5	п	п –	μ	
1,3-Dichloropropane	H	ND			0.5	н	и	n	II.
2,2-Dichloropropane	3)	ND			0.5	п	u	D	19
1,1-Dichloropropene	π	ND			0.5	41		w	-
cis-1,3-Dichloropropene	tı	מא			0.5	-	•	u	и
trans-1,3-Dichloropropene	4	ND			0.5			N	4
1,4-Dioxane	lı .	מא	•		25.0	**		u	ч
Ethylbenzene	l1	ND			0.5	p	tı	H	u
Ethyl tert-butyl ether	n	ND			0.5	ıl	n		w
Hexachlorobutadiene	и	ND			0.5	19	R		п
2-Hexanone	11	ND			5.0	**	H		н
(soprapylbenzene	u .	ND			0.5	n	h	11	7
Di-Isopropyl ether	ıı	ИD			0.5	77		II .	tr
o-Isopropyltoluene	u	ND			0.5	SF .	4	и	77 ·
I-Methyl-2-pentanone	11	ON			5.0	17	H2	H	п
Methyl tert-butyl ether	P	13.5			1.0	n	05/10/04	H	61
Naphthalene	n	ND			0.5	D.	05/06/04	u	n
n-Propylbenzene	19	NO	•		0.5	и	ti .	w	II.
Styrene	w	ND			0.5	н	и	10	н
Fert-amyl methyl ether	n	ND			0.5	₩	W	1	u
1,1,1,2-Tetrachloroethane	Ħ	ND			0.5	a	u	H	ır
1,1,2,2-Tetrachioroethane	н	ND			0.5	u	0		n
Fetrachloroethene	u	ND			0.5	Ħ	Ħ	п	**
Tetrahydrofuran	77	ND			5.0	11	11	u	10
Fert-butyl alcohol	7	ND			50.0	н	п	H	a
Foluene	44	ON			0.5	n	u	Ħ	
,2,3-Trichlarabenzene	n	ND			0.5	•	u	"	11
,2,4-Trichlorobenzene	H	ND			0.5	u	R		н
,1,1-Trichloroethane	II	ND			0.5	* #	4	4	11
1,1,2-Trichloroethane	п	ND .			0.5	n	ц	tı	n
richloroethene	и	ND			0.5	н	D	1r	-
richlorotrifluoroethane	11	ND			2.0	11	H	ri	н
'richlorofluoromethane		ND			D.5	44	ar	II.	Į÷
,2,3-Trichloropropane	W	מא			0.5		'H	н	24
,2,4-Trimethylbenzene	Ħ	ND			0.5	а	rt	н	le .
,3,5-Trimethylbenzene	rr	ND			0.5	11	ņ	u	n
Inyl acetate	ц	ND			0.5			p	ri
Inyl chioride	Ħ	ND			0.5	и	n	น	
ylenes (total)	н	ND			1.0	ii	e#	26	n
iurrogate: 1,2-Dichloroethane-d4		95.5 %		28-129				*	u
urrogate: Tolvene-d8		76.4 %		52-150		w	p	w	4
urrogate: 4-Bromofluorobenzene		71.8 %		43-155		v	tr	•	*
W-3 Water (4050260-03)	Sampled:05/0		Received:05/06/		•				

Approved By

Basic Laboratory, Inc.

alifornia D.O.H.S. Cert #1677



www.basiclab.com

laboratory

voice 530.243.7234 fax 530.243.7494

2218 Railroad Avenue Redding, California 96001

Report To: PROFESSIONAL SERVICE INDUSTRIES

4703 TIDEWATER AVENUE SUITE B

OAKLAND, CA 94601

Attention: FRANK POSS

Project: SOUTH OAKLAND 4G019 Lab No: 4050260

Reported: 05/25/04 Phone: 510-434-9200

P.O. #

Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL.	Method	Analyzo	d Prepared	D-4-6
MW-1 Water (4050260-01)	Sampled:05/	05/04 11:48	Received:05/0			1-10(1100	Analyze	- repared	Batch
n-Propylbenzene	,	0.8	tacarcaros, o	0/07 10.3		n			
Styrene	В	ND			0.5		"	05/06/04	II
Tert-amyl methyl ether	II	ND			0.5				и
1,1,1,2-Tetrachloroethane	11	ND			0.5			11	ır
1,1,2,2-Tetrachloroethane	ıt	מא			0.5				
Tetrachioroethene	n	ND			0.5	. "			u
Tetrahydrofuran	u	ND			0.5		.,		a
Tert-butyl alcohol	u	ND			5.0	-			u
Toluene	•	ND			50.0	"			
1,2,3-Trichlorobenzene	51	ND			0.5	,, ,	# N	r)	ų
1,2,4-Trichlorobenzene	ri	ND			0.5	e e		11	4
1,1,1-Trichloroethane	n				0.5			u u	п
1,1,2-Trichloroethane	7	ND			0.5	N	П	u	u
Trichloroethene	••	ND			0.5	u	u	и	11
Trichlorotrifiuoroethane	11	ND			0.5	•	,rt	•	"
Trichiorofluoromethane	,- H	ND			2.0		ěL.	u	FI
1,2,3-Trichloropropane	н	ND			0.5	10	ñ	H	а
1,2,4-Trimethylbenzene	<u>"</u> .	ND			0.5	**	76	11	U
1,3,5-Trimethylbenzene	-	4.7		•	0.5	11	n	"	"
Vinyl acetate	,	1.3			0.5	n	14	n	10
Vinyi chloride	,,	ND			0.5	4	4	u u	
Xylenes (total)	. "	ND			0.5	4	I 1	*	₹.
Surrogate: 1,2-Dichloroethane-d4		1.7			1.0	ч		**	14
Surrogate: Toluene-d8		88.7 %		28-	129	r	*	*	# .
-		83.6 %		<i>52</i> •.	1 <i>50</i>	#	"	•	*
Surrogate: 4-Bromofluorobenzene		77.7 %		43					
MW-2 Water (4050260-02)	Sampled:05/0		Received:05/06	/04 10:38					
Acetone	ug/l	ND			5.0	EPA 8260	05/06/04	05/06/04	B4E0104
Acrylonitrile	u u	ND			5.0	"		*	¥
Benzene		סא			0.5	н	**		n
romobenzene		ND			0.5	q	Ħ	IJ	II.
romochloromethane	u	ND			0.5	n	n		•
Bromodichloromethane	н	ND			0.5	*	H	U	μ
Bromoform	11	ND			0.5	ä	14	n	n.
romomethane	16	ND			1.0	•	10	•	
-Butanone	и	ND			5.0	н ′	74	4	
-Butylbenzene	ır	ND			0.5	N		•	4
sec-Butylbenzene	11	ND			0.5		ır	₩.	#
tert-Butylbenzene	н	ND			0.5	К	п	н	*
arbon disulfide	o	ND			0.5	μ	19	n	#
arbon tetrachioride	ii .	ND			0.5	#	Ħ	**	**
Chlorobenzene	₩	ND			0.5	н	11	*	10
Chloroethane	đ	ND			0.5	н		tr rt	u
-Chloroethylvinyl ether	*	ND			1.0	4	н	*	н
hioroform	Я	ND			0.5	п	ч		п
hioromethane	n	ND			0.5	п	10	Ħ	ц
2-Chlorotoluene	II	ND			0.5	н	н	n	11
4-Chlorotoluene	n	ND			0.5	н	u u	п	•
bromochloromethane	27	ND			0.5	₩	4	п	٠
2-Dibromo-3-chtoropropane (DBCP)		ND			0.5	u	te te	to .	"
1,2-Dibromoethane (EDB)	u	ND			0.3 0.5	h		н	n
Dibromomethane	п	ND			0.5	u		11	
2-Dichlorobenzene	п	ND			0.5	H		h	п
• • • •		110			U.3				

pproved By

Basic Laboratory, Inc.

[alifornia D.O.H.S. Cert #1677;

MAY 26 2004 15:10

Lab No: 4050260

05/25/04

510-434-9200

Reported:

Phone:

P.O. #



www.basiclab.com

basıc laboratory

voice 530.243.7234 2218 Railroad Avenue

fax 530.243.7494 Redding, California 96001

Report To:

PROFESSIONAL SERVICE INDUSTRIES

4703 TIDEWATER AVENUE SUITE B

OAKLAND, CA 94601

Attention: FRANK POSS

Project: SOUTH OAKLAND 4G019

Volatile Organic Compounds

Analyte		Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
	4050260-03)	Sampled:05/	05/04 12:10	Received:05/06	/04 10:38			'	 -	
Acetone		υg/l	ND		·	5.0	EPA 8260	05/06/04	05/06/04	B4E0104
Acrylanitrile		4	ND			5.0	11	н	22/00/01	0.000
Benzene		l1	32.2			5,D	n,	05/10/04	•	4
Bromobenzene		ıı	ND			0,5	W	05/06/04	п	
Bromochloromethane		u	ND			0.5	n	00,00,01		
Bromodichioromethane		ч	ND			0.5	•	Ħ	U.	u
Bromoform		н	ND			0.5	· ·	n	T T	и
Bromomethane		, . 4	NO			1.0	я	н	to to	
2-Butanone		**	ND			5,0	n		p	
n-Butylbenzene		ti	ND				**			n
sec-Butylbenzene		H	ND			0.5			u	
tert-Butylbenzene		π	ND			0.5	11	-	 н	
Carbon disulfide		n				0.5	 n			
Carbon tetrachioride		11	ND			0.5		-	,,	14
Chlorobenzene		u	ND			0.5	н		=	
Chloroethane		n	ND			0.5	10	a .	n	4
2-Chloroethylvinyl ether	•		ND			0.5	11*	T#	**	И
		Î	ND			1.0	n	•	**	n
Chloroform			ND		•	0.5	ri.	- 4	41	
Chloromethane		"	NO			0.5	IP		Ħ	¥
2-Chlorotoluene		-	ŃО			0.5	10	и		•
4-Chiorotoluene			ND			0.5	U	11	и	Są.
Dibromochioromethane		ħ	ND			0.5	п	16		•
1,2-Dibromo-3-chioropri		**	ND			0.5	Ħ		н	н '
1,2-Dibromoethane (ED	B)	Ħ	ND			0.5	IS	n		H
Dibromomethane		u	ND			0.5	H	•	11	н
1,2-Dichlorobenzene		п	NĐ			0.5	4	II.	В	11
1,3-Dichlorobenzene		ti .	МD			0,5	ri		#	15
1,4-Dichlarobenzene		19	ND			0.5	•	н	u	11
Dichlorodifluoremethane)	₩	ND			0.5	n	H	m	
1.1-Dichloroethane		•	ND			0.5	1	14	N	
1,2-Dichloroethane		41	ND			0.5	9	34	an a	pt
1,1-Dichloroethene		Ħ	ND			0.5	41	M		n
cis-1,2-Oichioroethene		ii.	ND ND							10
rans-1,2-Dichloroethen		н				0.5	 D	н		
Dichloromethane	-		ND			0.5		D.		
,2-Dichloropropane			ND			1.0		"	-	
		-	ND			0.5				-
1,3-Dichloropropane		-	ND			0.5	7	79	-	
2,2-Dichloropropane			NO			0.5	Th.		n 11	
,1-Dichloropropene			ND			0.5		ч		
ts-1,3-Dichloropropene		*	ND			0.5	и	ч		*
rans-1,3-Dichloroproper	ne	4	ND			0.5	n	Ħ	-	
L,4-Dloxane		. " .	ND			25.0	п	05/06/04	n	U
thylbenzene		٩	0.8			0.5	u	05/06/04	21	y
thyl tert-butyl ether		n	ND			0.5	11	4	и .	н
lexachlorobutadiene		D	ND			0.5	н		**	и
2-Hexanone		и	ND			5.0	II	**	re .	
sopropylbenzene		-tt	0.9			0.5	tı		•	я
i-Isopropyl ether		n	ND			0.5	n	. н		11
-Isopropyltoluene		π	ND			0.5	n	п	p	4
-Methyl-2-pentanone			ND			5.0	н		19	19
fethyl tert-butyl ethe	F	n	4420			200	a	05/10/04	п	и
japhthalene		4	2.0			Q.5		05/06/04	u	h

pproved By

<u>Basic Laboratory</u>, Inc.

alifornia D.O.H.S. Cert #1677

PAGE.05



www.basickib.com

laboratory

voice 530.243.7234 2218 Railroad Avenue

fax 530.243 7494

Redding, California 96001

Report To: PROFESSIONAL SERVICE INDUSTRIES

4703 TIDEWATER AVENUE SUITE 8

OAKLAND, CA 94601

Attention:

FRANK POSS

Project: SOUTH OAKLAND 4G019 Lab No:

4050260 05/25/04

Reported: Phone: 510-434-9200

P.O. #

Volatile Organic Compounds

Surrogate: Toluene-d8 Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone ug/i Acrylonitrile " Benzene " Bromobenzene " Bromochloromethane " Bromodlichloromethane " Bromoflichloromethane " Brom	04 12:10 Receive 1.3 ND	ed:05/06/04 10:3	0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.0 0.5 0.5	is	05/06/0	
Styrene Tert-amyl methyl ether 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Tetrachloroethene Tetrachloroethene Tetrachloroethene Tetrachlorobenzene 1,2,3-Trichlorobenzene 1,2,4-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane Trichlorofluoroethane Trichlorofluoroethane Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromodichloromethane Bromodichloromethane Bromoform Bromomethane Bromoform Bromometh	1.3 ND		0.5 0.5 0.5 0.5 0.5 0.5 5.0 5.0	17 18 18 18 18 18 18 18 18 18 18 18 18 18	# H H H H H H H H H H H H H H H H H H H	
Tert-amyl methyl ether 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Tetrachloroethene Tetrachloroethene Tetrachloroethene Tetrachloroethene Tert-butyl alcohol Toluene 1,2,3-Trichloroethane 1,2,4-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane Trichloroethene Trichloroethene Trichloroethene Trichloroflouromethane 1,2,3-Trichloroethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl acetate Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1-Divene-d8 Surrogate: 4-Bromoflorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromochloromethane Bromodichloromethane	NO N		0.5 0.5 0.5 5.0 50.0 0.5 0.5 0.5	11 14 14 14 14 14 14 14 14 14 14 14 14 1	# H H H H H H H H H H H H H H H H H H H	
1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Tetrachloroethene Tetrahydrofuran Tert-butyi alcohol Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane Trichloroethene Trichloroethene Trichloroethene Trichlorofuoromethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyi acetate Vinyi chloride Xylenes (totat) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromoflorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromodichloromethane Bromodichloromethane Bromodichloromethane Bromodichloromethane Bromodomm Bromomethane Bromodom	ND N		0.5 0.5 0.5 5.0 50.0 0.5 0.5 0.5 0.5 0.5	11 11 11 11 11 11 11 11 11	77 II	в М П П М В П
1,1,2,2-Tetrachloroethane Tetrachloroethene Tetrahydrofuran Tert-butyl alcohol Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene Trichloroethene Trichloroethene Trichloroethane Trichloroethane Trichloropane 1,2,4-Trimethybenzene 1,3,5-Trimethybenzene Vinyl acetate Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1,2-Dichloroethane-d8 Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromodichloromethane Bromodichloromethane Bromodichloromethane Bromodom Bromomethane Bromofom Bromom	ND N		0.5 0.5 5.0 50.0 0.5 0.5 0.5 0.5 0.5	H H H H H H H H H H H H H H H H H H H	10	в Я Я Я И В
Tetrahydrofuran Tetrahydrofuran Tetr-butyi alcohol Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene Trichloroethene Trichloroethane Trichloroethane Trichloroethane 1,2,3-Trichloropane 1,2,3-Trichloropane 1,2,4-Trimethyibenzene 1,3,5-Trimethyibenzene Vinyi acetate Vinyi chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromodichloromethane Bromodichloromethane Bromodichloromethane Bromodom Bromomethane Bromoform Bromomethane Bromofor	ND N		0.5 0.5 5.0 50.0 0.5 0.5 0.5 0.5 0.5	11 II I	## ## ## ### ### #####################	Я Я И В И
Tetrahydrofuran Tert-butyl alcohol Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3,5-Trimet	ND N		0.5 5.0 50.0 0.5 0.5 0.5 0.5 0.5 0.5	H # # # # # # # # # # # # # # # # # # #	## ## ## ### ### #####################	я п . ч п н
Tert-butyl alcohol Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane Trichloroethene Trichloroethene Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl acetate Vinyl acetate Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromobenzene Bromobenzene Bromodlichloromethane Bromoflom Bromomethane Bromoflom Bro	NO NO NO NO NO NO NO NO NO NO		5.0 50.0 0.5 0.5 0.5 0.5 0.5 0.5 2.0	# # # #	## ## ## ### ### #####################	й В И
Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,2,3-Trichloroethane 1,2,3-Trichloropropane 1,2,4-Trimethybenzene 1,2,4-Trimethybenzene 1,3,5-Trimethybenzene 1,3,5-Trime	ND ND ND ND ND NO ND ND ND ND		50.0 0.5 0.5 0.5 0.5 0.5 0.5 2.0	77 11 11	11 99 74 75 75 75 75 75 75 75 75 75 75 75 75 75	н в и
1,2,3-Trichlorobenzene 1,2,4-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,2,3-Trichloroethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3,5-	ND ND ND ND NO NO ND NO ND		0.5 0.5 0.5 0.5 0.5 0.5 2.0	77 11 11	■ •	в и п
1,2,4-Trichlorobenzene 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3,	ND ND ND NO NO NO ND ND		0.5 0.5 0.5 0.5 0.5 2.0	n n	■ •	M 11
1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene Trichloroethene Trichlorotrifluoroethane Trichlorofluoromethane Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl acetate Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromodlichloromethane Bromodlichl	ND ND ND NO ND ND		0,5 0,5 0,5 0,5 2,0	n	■ •	п
1,1,2-Trichloroethane Trichloroethene Trichloroethene Trichloroffluoroethane Trichloroffluoroethane Trichloroffluoroethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl acetate Vinyl acetate Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromochloromethane Bromodlichloromethane Bromofloromethane Butylbenzene Butylbenzene Bromofloromethane Butylbenzene Bromofloromethane Butylbenzene Bromofloromethane Butylbenzene Bromofloromethane Bromof	ND ND NO ND ND ND		0.5 0.5 0.5 2.0		_	
Trichloroethene Trichlorofiluoroethane Trichlorofiluoromethane Trichlorofiluoromethane Trichlorofiluoromethane Trichlorofiluoromethane Trichlorofiluoromethane Trichlorofiluoromethane Trichlorofiluoroethane Trichloromethane Tric	ND NO ND NO ND		0.5 0.5 2.0	ıt		
Trichlorotrifluoroethane Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl acetate Vinyl acetate Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromobenzene Bromochloromethane Bromodlichloromethane Bromoflom Bromomethane Br	ND NO ND NO ND		0.5 2.0		n U	16
Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl acetate Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromobenzene Bromodichloromethane Bromodichloromethane Bromodichloromethane Bromoform Bromorethane Bromoform Bromorethane Bromoform Bromorethane Bromodichloromethane Bromodichloromethane Bromodichloromethane Bromoform Bromorethane	NO ND NO NO		2.0	n	н п	Ħ
1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl acetate Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromochloromethane Bromodichloromethane	· ND ND ND			W	ų u	И
1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl acetate Vinyl chloride Xylenes (total) Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Acetone Acrylonitrile Benzene 3romobenzene Bromochloromethane Bromodichloromethane Bromodichloromethane Bromodenee -Butylbenzene -Butylbenzene ert-Butylbenzene arbon disuifide arbon tetrachioride Chlorobenzene Chioroethane	ND ND	•		și	11 9	u
1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl acetate Vinyl chloride Xylenes (total) Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Acetone Acrylonitrile Benzene 3romobenzene Bromochloromethane Bromodichloromethane Bromodichloromethane Bromomodichloromethane Bromomothane Bromothane	NO		0.5	Я	н н	4
1,3,5-Trimethylbenzene Vinyl acetate Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Acetone Acrylonitrile Benzene Bromochloromethane Bromodichloromethane Bromodichloromethane Bromodichloromethane Bromoform Bromomethane Bromoform			0.5	u	и , е	11
Vinyl acetate Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1-Bunnofluorobenzene MW-4 Water (4050260-04) Acetone Acrylonitrile Benzene Bromochloromethane Bromodichloromethane Bromodichloromethane Bromodichloromethane Bromoform Bromomethane Bromodichloromethane Bromodichloromethane Bromoform Bromomethane			0.5	16	n •	H
Vinyl chloride Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone Acrylonitrile Benzene Bromochloromethane Bromochloromethane Bromochloromethane Bromofluhloromethane	ND		0.5	4	и #	· II
Xylenes (total) Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone ug/l Acrylonitrile ug/l Benzene nonchloromethane	ND		0.5	H	ti ti	Ħ
Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1-2-Dichloroethane-d8 Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone ug/l Acrylonitrile " Benzene " Bromobenzene " Bromochloromethane " Bromodlichloromethane " Bromoflom " Bromomethane " Bromomethane " Bromomethane " Bromoflom " Bromomethane " Br	4.8		1.0	Ħ	10 11	u
Surrogate: Toluene-d8 Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone ug/l Acrylonitrile " Benzene " Bromobenzene " Bromochloromethane " Bromodlichloromethane " Bromoflom " Brom	105 %	70	1.u <i>3-129</i>	u	# #	и.
Surrogate: 4-Bromofluorobenzene MW-4 Water (4050260-04) Sampled:05/05/0 Acetone ug/l Acrylonitrile					W #	
MW-4 Water (4050260-04) Sampled:05/05/0 Acetone ug/ Acrylonitrile " Benzene " Bromochloromethane " Bromodichloromethane " Bromoform " Bromomethane " Bromomethane " Bromothane " Bromothan	92.9 % 85.2 %		2-150	-	 m 4	
Acetone ug/l Acrylonitrile " Benzene " Bromobenzene " Bromochloromethane " Bromodichloromethane " Bromoform " Bromornethane " Brom		d:05/06/04 10:38	R- <i>155</i>			
Acrylonitrile Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromodichloromethane Bromomethane	ND RECEIVE	.0.05/ 00/ 04 20/36		A 8260 - 05/	06/04 05/06/04	4 B4E0104
Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromorethane P-Butanone n-Butyl benzene Bert-Butylbenzene	ND		5.0	M 0200 . 45)	n "	, п
Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane 2-Butanone n-Butyl benzene sec-Butylbenzene ert-Butylbenzene arbon disulfide Carbon tetrachioride Chiorobenzene Chioroethane	ND		0.5	и	и и	
Bromochloromethane Bromodichloromethane Bromoform Bromomethane 2-Butanone n-Butyl benzene sec-Butylbenzene ert-Butylbenzene ert-Butylbenzene carbon disuifide Carbon tetrachioride Chiorobenzene Chioroethane	ND		0.5	в :	n u	38
Bromodichloromethane Bromoform Bromornethane	ND		0.5	и	11 11	
Bromoform Bromomethane -Butanone -Butyl benzene sec-Butylbenzene ert-Butyibenzene arbon disuifide arbon tetrachioride Chlorobenzene Chioroethane				ъ	и 4	ıı.
Bromomethane -Butylbenzene sec-Butylbenzene ert-Butylbenzene ert-Butylbenzene ert-Butylbenzene Larbon disuifide arbon tetrachioride Chiorobenzene Chioroethane	ND		0,5			
z-Butanone " n-Butylbenzene " sec-Butylbenzene " tert-Butylbenzene " tarbon disulfide " tarbon tetrachioride " Chiorobenzene " Chioroethane "	ND		0.5		,, ,	н
n-Butylbenzene " sec-Butylbenzene " tert-Butylbenzene " Larbon disuifide " Larbon tetrachioride " Chiorobenzene " Chioroethane "	ND		1,0	_		
sec-Butylbenzene " ert-Butylbenzene " Larbon disuifide " Larbon tetrachioride " Chiorobenzene " Chioroethane "	ND		5.0		и и	
ert-Butylbenzene " Carbon disulfide " Carbon tetrachioride " Chlorobenzene " Chioroethane "	ND		0,5	**	u	
Carbon disulfide " Carbon tetrachionide " Chiorobenzene " Chioroethane "	ND		0.5	"		"
Carbon tetrachioride "Chiorobenzene "Chioroethane "	ND		0.5	•		-
Chlorobenzene "Chloroethane "	ND		0.5	#	11 11	
Chloroethane			0.5	t i		N
Linordeurane	ND		0,5	ď	H 11	"
Chlorosthulidayi ethor	ND ND		0.5	**	" "	T
L-Chloroethylvinyl ether "			1.0	и	u a	11
Chloroform "	ND		0.5	n	п 4	14
Chloromethane "	ND ND		0.5		и и	14
2-Chlorotoluene "	ND ND ND		0.5		u u	19
d-Chlorotaluene	ND ND ND 3.0			m	ų · u	Ja
libromochkoromethane "	ND ND ND 3.0 ND		0.5	u	n H	
,2-Dibromo-3-chloropropane (DBCP) "	ND ND ND 3.0 ND		0.5 0.5	w	н п	w
1,2-Dibromoethane (EDB)	ND ND ND 3.0 ND ND ND		0.5		11 9	41
Dibromomethane "	ND ND ND 3.0 ND ND ND ND		0.5 0.5	n		ų
,2-Dichlorobenzene "	ND ND ND 3.0 ND ND ND		0.5	n u	11 0	•

Approved By

Basic Laboratory, Inc.

California D.O.H.S. Cert #1677



www.basiclab.com

Dasic

voice 530.243.7234 fax 530.243.7494

2218 Railroad Avenue Redding, California 96001

Report To:

PROFESSIONAL SERVICE INDUSTRIES

4703 TIDEWATER AVENUE SUITE B

OAKLAND, CA 94601

Attention: FRANK POSS

Project: SOUTH OAKLAND 4G019

Lab No: Reported:

4050260 05/25/04

Phone: 510-434-9200

P.O. #

Volatile Organic Compounds

		Results	Qualifier	MDL	RL	Method	Anaiyzed	Prepared	Batch
MW-4 Water (4050260-0	4) Sampled:05/	05/04 10:55	Received:05/0	6/04 10:38	_				
1,3-Dichlorobenzene	н	ND	· · · · · · · · · · · · · · · · · · ·		0.5	n .	н	05/06/04	
1,4-Dictiorobenzene	H	ND			0.5	u	n n	*	0
Dichlorodifluoromethane	π	ND			0.5	n	н	41	
1,1-Dichloroethane	H	ND			0.5	**	•	N	ч
1,2-Dichloroethane	W	ND			0.5	Ħ		•	я
1,1-Dichloroethene	41	ND			0.5	Ħ	n	it.	51
ds-1,2-Dichloroethene	n	ND			0.5	· u	16	H	
trans-1,2-Dichloroethene	a.	ND			0.5	· n	A	₹	11
Dichloromethane	**	ND			1.0	n		**	п.
1,2-Olchloropropane	п	ND			0.5	41	b	*	*
1,3-Olchioropropane	n	ND			0.5	18	N	11	н
2,2-Dichloropropane		ND			0.5	ti	ų	и	
I,1-Dichloropropene	4	ND					ir .	41	
cis-1,3-Dichloropropene	II .	ND			0.5	н			
trans-1,3-Dichloropropene	¥	ND			0.5	"			
1,4-Dioxane	•	dи			0.5			n.	
Ethylbenzene	n	ND			25.0	 n			
Ethyl tert-butyl ether	п	ND		,	0.5		.,	16	
Hexachlorobutadiene	a	ND			0.5			**	
2-Hexanone	я				0.5		₩ 11		"
Isopropyibenzene	#	ND DN			5.0		"	,, u	. "
Di-Isopropyl ether	u				0.5		" *	4	
p-Isopropyltaluene	и	ND ND			0.5	-		,	
4-Methyl-2-pentanone	n	ND			0.5	"	35 35	"	٠.
_Methyl tert-butyl ether		ND			5.0			ar .	
Naphthalene	14	2.2			1,0	•	05/11/04	н	11
	" "	ND			0.5	и	05/06/04	14	n
n-Propylbenzene	" n	ND			0.5	•	u	•	н
Styrene	"	ND			0.5	H	ie .	ü	0
Tert-amyl methyl ether		ND			0.5	11	н	•	н
I,1,1,2-Tetrachioroethane	16	ND			0.5	•	u	•	
1,1,2,2-Tetrachloroethane	0	ND			0.5		19	н	
Tetrachioroethene	Ħ	ND			0.5	H	W	e e	•
Tetrahydrofuran		ND			5.0	•	rt.	ч	H
ert-butyl alcohol	н	ND			50.0	H	u	ij	л
foluene	4	ND			0.5	Ji	н	•	*
.,2,3-Trichlorobenzene	u	ND			0.5	*	H	ь	H
1,2,4-Trichiorobenzene	h	ND			0.5	N:	н	n	
1,1,1-Trichioroethane	R	ND			0.5	п	И	н	
,1,2-Trichloroethane	П	ND			0.5	*	•	w	u
richloroethene	n	ND			0.5	н	ы.,	#	n
richlorotrifluomethane	7	ND			2.0	**	10	•	п
Trichlorofluoromethane	N .	ND			0.5	ਸ	n	₩	14
1,2,3-Trichipropropane	e	ND			0.5	n '	0	n ,	п
,2,4-Trimethylbenzene	tr	ND			0.5	IJ	н	**	¥
,3,5-Trimethylbenzene	4	ND			0.5	и	11	. и	u
Vinyl acetate	e ·	DA CM			. 0.5		н	п	11
Vinyi chloride	¥	ND ON			0.5	u	h	11	
Yylenes (total)	. п	ND			1.0	n	Ħ	ш	ıL
urrogate: 1,2-Dichloroethane-d4		97.5 %		28-12					я
urrogate: Toluene-d8		79.6 %		20-12 52-15			#		
AND THE PROPERTY AND THE PARTY		/ 2. U 70		24-13	10				

Approved By

Basic Laboratory, Inc.

MAY 26 2004 15:10



www.basiclab.com

laboratory

voice 530.243.7234 fax 530,243,7494

2218 Railroad Avenue Redding, California 96001

Report To:

PROFESSIONAL SERVICE INDUSTRIES

4703 TIDEWATER AVENUE SUITE B

OAKLAND, CA 94601

Attention: FRANK POSS

Project: SOUTH OAKLAND 4G019

TPH Gasoline

Lab No: 4050260 Reported: 05/25/04

Phone: 510-434-9200

P.O. #

Analyt	:e		Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
MW-1	Water	(4050260-01)	Sampled:05/	05/04 11:48	Received:05/08	5/04 10:38			·····		
		ที่เบอrobenzene	ug/l	ND 77.7 %	·	43-1	50.0 55	EPA 8015/8260	05/06/04	05/06/04	B4E0104
MW-2	Water	(4050260-02)	Sampled:05/	05/04 11:22	Received:05/06	5/04 10:38					
		ofluorobenzene	ug/l	ND 71.8 %		43-1	50.0 55	EPA 8015/8260	05/06/04	05/06/04	B4E0104
MW-3	Water	(4050260-03)	Sampled:05/	05/04 12:10	Received:05/06	6/04 10:38					
		fluorobenzene	ug/l	270 85.2 %		43-1.	50.0 55	EPA 8015/8260	05/06/04	05/06/04	B4E0104
MW-4	Water	(4050260-04)	Sampled:05/	05/04 10:55	Received:05/06	6/04 10:38		· · · · · · · · · · · · · · · · · · ·			
Gasoline Surrogate	: 4-8romo	fluorobenzene	ug/l	ND 74.1 %		43-1.	50.0 55	EPA 8015/8260	05/06/04	05/06/04	B4E0104

Notes and Definitions

QR-02	The RPD result for the MS/MSD exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted
	based on percent recoveries and completeness of QC data.
DET	Analyte DETECTED

Analyte NOT DETECTED at or above the detection limit

NR Not Reported

Sample results reported on a dry weight basis

Relative Percent Difference Less than reporting limit

Less than or equal to reporting limit

Greater than reporting limit

Greater than or equal to reporting limit

MDL Method Detection Limit

RL/ML Minimum Level of Quantitation

MCL/AL Maxium Contaminant Level/Action Level

mg/kg Results reported as wet weight

Total Threshold Limit Concentration TTLC STLC Soluble Threshold Limit Concentration

TCLP Toxicity Characteristic Leachate Procedure

Basic Laboratory, Inc.

California D.O.H.S. Cert #1677

MAY 26 2004 15:11



BASIC LABORATOR	RY CHAIN OF C	CUSTODY RECORD											LAB#:			
2218 Railroad Ave., Redding,										4050360						
PSI						,	 . •		_	JECT			\$AMP	LE TYPE	<u>:</u> :	
		South Oakland 460 REQUESTED COMP. DATE: STATE FOR										ω				
ADDRESS:							E:		SIAI	EFC	HMS		# OF SAMPLES:			
on file				10 -				<u></u> .!	71.01							
		TURN	I ARC	OUND									PAG	3E <u> </u>	_OF	
ROJECT MANAGER:		-	— т		4 A	ALY.	SIS R	EQU	ESTE	D				REP:		
Frank Poss]							
PHONE: FAX: E-I	MAIL;	# 0		仪	.				1					ID#:		
510 434-9200 510 434-7676		F		0										SYSTEM	14.	
_ Sane)#: 	В	7	7				.						G F G I E M	rer.	
PECIAL MAIL E-MAIL FAX	EOT X	al	#	3			Ì		1				- 1	GLOBAL	_	
		T	7	0										<u>:T06</u>	<u>0010</u>	<u> 163</u>
A O O		Ē	۱-۱	4			l							QC = 1	2 3	4
E M 1	ESCOIDTION	S		Ø				Ì					ЦАВ		MADVO	
DATE TIME R SAMPLED	ESCRIPTION .	7		-1/									X		MARKS	
0/5/04 11-90 %		긖	糿				-				\dashv				d. Bu	
I li dax Mu-	₹	/حـ		4										<u> </u>	Iusa.	6/
10 X MW-	5	3	4	4									3			
\vee 10.55 \times $Mw-$	4	3	4	싀									4	<u> </u>	*	
									-		_			 -	<u>. </u>	
		:		_	_									· · · · · · · · · · · · · · · · · · ·	· · · · -	
																·
												_		<u> </u>		
															<u> </u>	
															• .	
														<u> </u>	·	
				,												
						,				-						:
		•	_								·	:				
		٠.											,			
							-								٠.	
				.				,	•						* .	
			٠.,													
	-		-	7.	一 †											
_												\neg				
RESERVED WITH: HNO3 H2SO4 NaOH						ŅaT	hio [OTI	IER_					-	
SAMPLED BY:	15/04 Lay	RELIN	iQUI	SHEC	BY:		رل						DATE	TIME: 5/04	シリフ	00
	15/04 20-7	RELIN	<u>ارامہ</u> ارک	on.	<u>->7∂</u> >BY:	re	K							<i>Э/О</i> 7 /⊓ME:		
				•				_								
RECEIVED BY: (SAMPLES UNVERIFIED) DA	TE/TIME:	RELIN	NQUI	SHED	BY:								DATE	/TIME:		
ECEIVED BY LAB: (VERIFIED) . DA	TE/TIME:				AFT:					,	207			THER		
ECEIVED BY LAB: (VERIFIED) NOCHULEM KNOW! TON 5-6-04 10:38				SAMPLES SHIPPED VIA: UPS FEDEX POST BUS OTHER												

35.55