



**Pacific Gas and  
Electric Company**

Technical and Ecological Services 3400 Crow Canyon Road  
San Ramon, CA 94583  
925.820.2000

April 25, 2001

Ms. Jennifer Eberle  
Hazardous Materials Specialist  
Alameda County Department of Environmental Health  
UST Local Oversight Program  
1131 Harbor Way Parkway, 2<sup>nd</sup> Floor  
Alameda, CA 94502-6577

Re: Groundwater Monitoring and Sampling Annual Report, Oakland Power Plant,  
Oakland, California

Dear Ms. Eberle:

Enclosed is a copy of the Groundwater Monitoring and Sampling Annual Report for Oakland Power Plant at 50 Martin Luther King Jr. Way, Oakland, California. The purpose of this report is to present the results of annual groundwater monitoring and sampling activities conducted at the site on March 1, 2001. This report is submitted to your office as requested in your letter dated April 23, 1993.

The analytical results show that diesel-range hydrocarbons were detected in the groundwater sample collected from well MW-1-2 at a concentration of 140 micrograms per liter ( $\mu\text{g/L}$ ).

Based on water level measurements made at the site, shallow groundwater is present about 4.0 feet below the surface and groundwater flowed to the north-northwest at a gradient of approximately 0.004 foot per foot.

**Based on the low concentrations of diesel-range hydrocarbons measured in samples taken from monitoring wells MW-1-2, MW-1-3, and MW-2-3 during the past four years, we believe that no additional monitoring is warranted at this site and ask that you issue a "no-further-action" letter.**

Please contact me at (925) 866-5882 if you wish to discuss this request.

Sincerely,

Korbin D. Creek  
Supervisor, Land and Water Quality Unit

EAGuenther (925-866-5472):dlw  
402.331-01.59lt.doc

Enclosure

# TES

**Groundwater Monitoring and  
Sampling Annual Report**

**Oakland Power Plant  
50 Martin Luther King Jr. Way  
Oakland, California**

**March 2001**

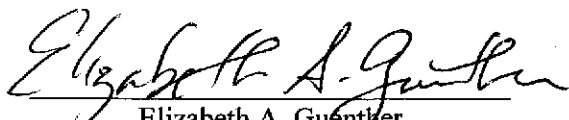
Prepared by  
**Technical and Ecological Services**

April 2001

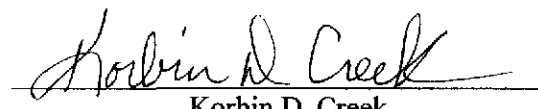
Report No.: 402.331-01.59

**Pacific Gas and Electric Company  
Technical and Ecological Services  
3400 Crow Canyon Road, San Ramon, California 94583  
TES 24-Hr. Service Line: 8-251-3197 or (925) 866-3197**

Prepared by:

  
Elizabeth A. Guenther  
Environmental Technical Specialist

Approved by:

  
Korbin D. Creek  
Supervisor, Land and Water Quality Unit

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## **1 INTRODUCTION**

This report presents the results of groundwater monitoring performed during the 2001 annual monitoring event to comply with the monitoring requirements for underground diesel dump tanks Nos. 2 and 3 Oakland Power Plant located at 50 Martin Luther King Jr. Way, Oakland, California (see Figure 1).

## **2 GROUNDWATER GRADIENT AND DIRECTION**

The 2001 annual groundwater levels were measured at Oakland Power Plant on March 1, 2001, using an electronic sounding device, and recorded on the monitoring well water level / floating product survey form included in Appendix A. The groundwater elevations are summarized in Table 1. The March data were used to construct a groundwater contour map (Figure 2). March water levels ranged from a low of 9.73 feet above mean sea level (MSL) in well MW-1-3 to a high of 9.98 feet above MSL in well MW-2-3. The estimated groundwater gradient is approximately 0.004 foot per foot (ft/ft) to the north-northwest.

## **3 SAMPLING, ANALYSIS, AND MONITORING PROGRAM RESULTS**

Groundwater samples were collected from wells MW-1-2, MW-1-3, and MW-2-3 on March 1, 2001, consistent with the protocol presented in Figure 3. Samples collected from these wells were analyzed for total petroleum hydrocarbons as diesel (TPHD) using U.S. Environmental Protection Agency (USEPA) Method 3510/8015. Field readings from the 2001 annual monitoring event, including sample temperature, conductivity, and pH, are recorded on the purging and sampling log sheets (see Appendix A).

Based on a letter dated January 11, 1996 from Jennifer Eberle, the Hazardous Materials Specialist with the Alameda County Environmental Health Services Department, the analysis for BTEX was eliminated for well MW-2-3 and the field blank. The analysis for BTEX was eliminated for wells MW-1-2 and MW-1-3 in the second quarter of 1994.

The March 2001 and historical analytical data are summarized in Table 1. Certified analytical reports and chain-of-custody records are included in Appendix B. The analytical results are discussed below:

- Diesel-range hydrocarbons were detected in the groundwater sample collected from well MW-1-2 at a concentration of 140 micrograms per liter ( $\mu\text{g/L}$ ).

#### 4 FIELD AND LABORATORY QUALITY CONTROL RESULTS

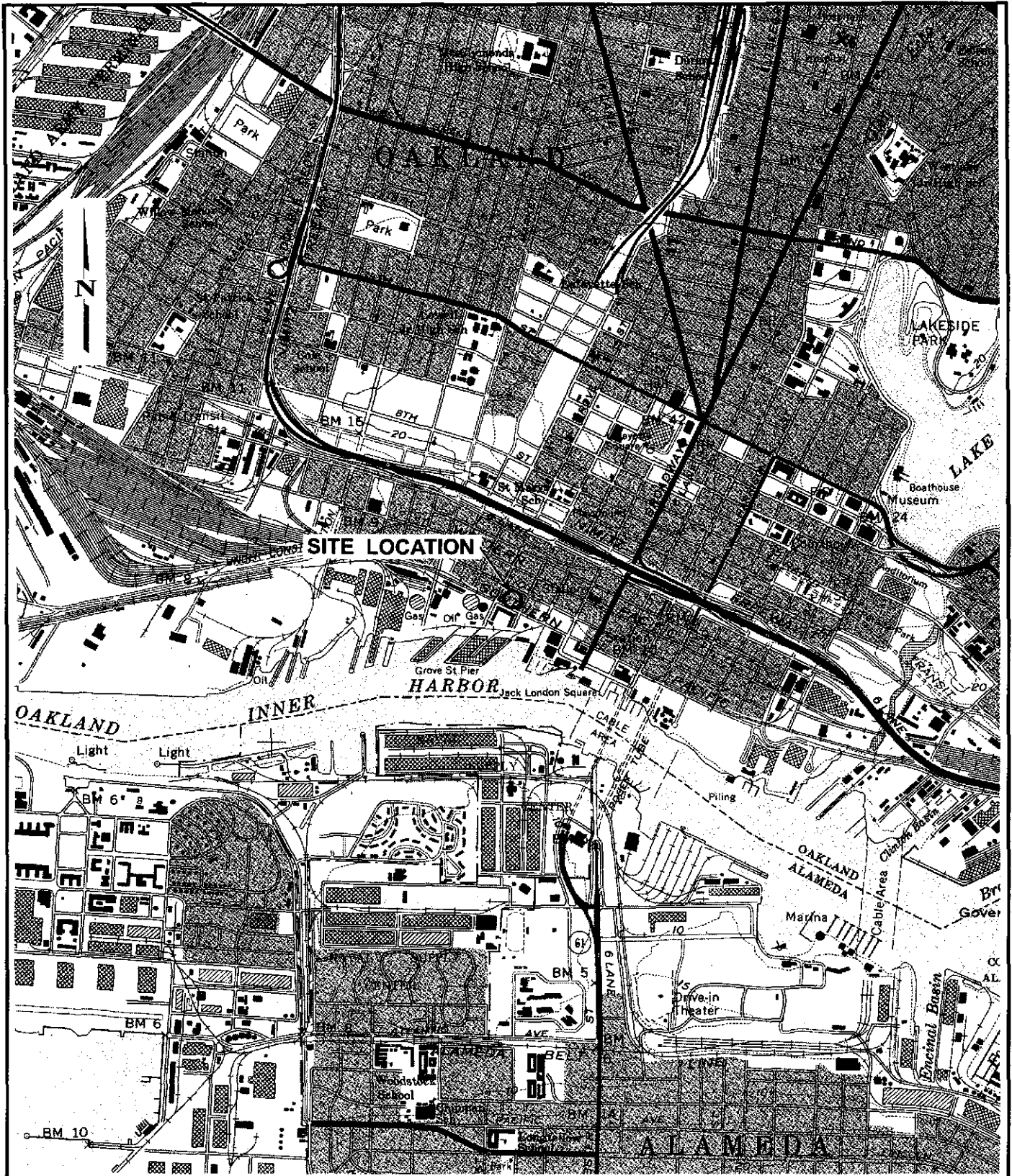
Analytical data were evaluated for accuracy and precision based on field and laboratory quality control (QC) sample performance. The field QC consisted of collecting one field blank and analyzing it for TPHD.

The field blank was collected to assess the effect of field environments on the analytical results and to identify false positives. No parameters were detected above their respective method reporting limits in the field blank, indicating no adverse effects from sampling or analytical procedures.

The laboratory QC consisted of checking adherence to holding times and evaluating method blanks and matrix spike (MS) results. Holding times are established by the USEPA and refer to the maximum time allowed between sample collection and analysis by the laboratory. These limits assist in determining data validity. The method blank results are used to assess the effect of the laboratory environment on the analytical results. The MS recoveries are used to assess accuracy.

All analyses were done within the holding times specified by the USEPA. No compounds were detected in the daily method blanks. Recoveries of MS were within the laboratory acceptance limits.

The field and laboratory QC results indicate that the analytical data are of acceptable quality.



Base map from U.S. Geological Survey 7.5 minute series.  
 Quadrangle: Oakland West, Calif.

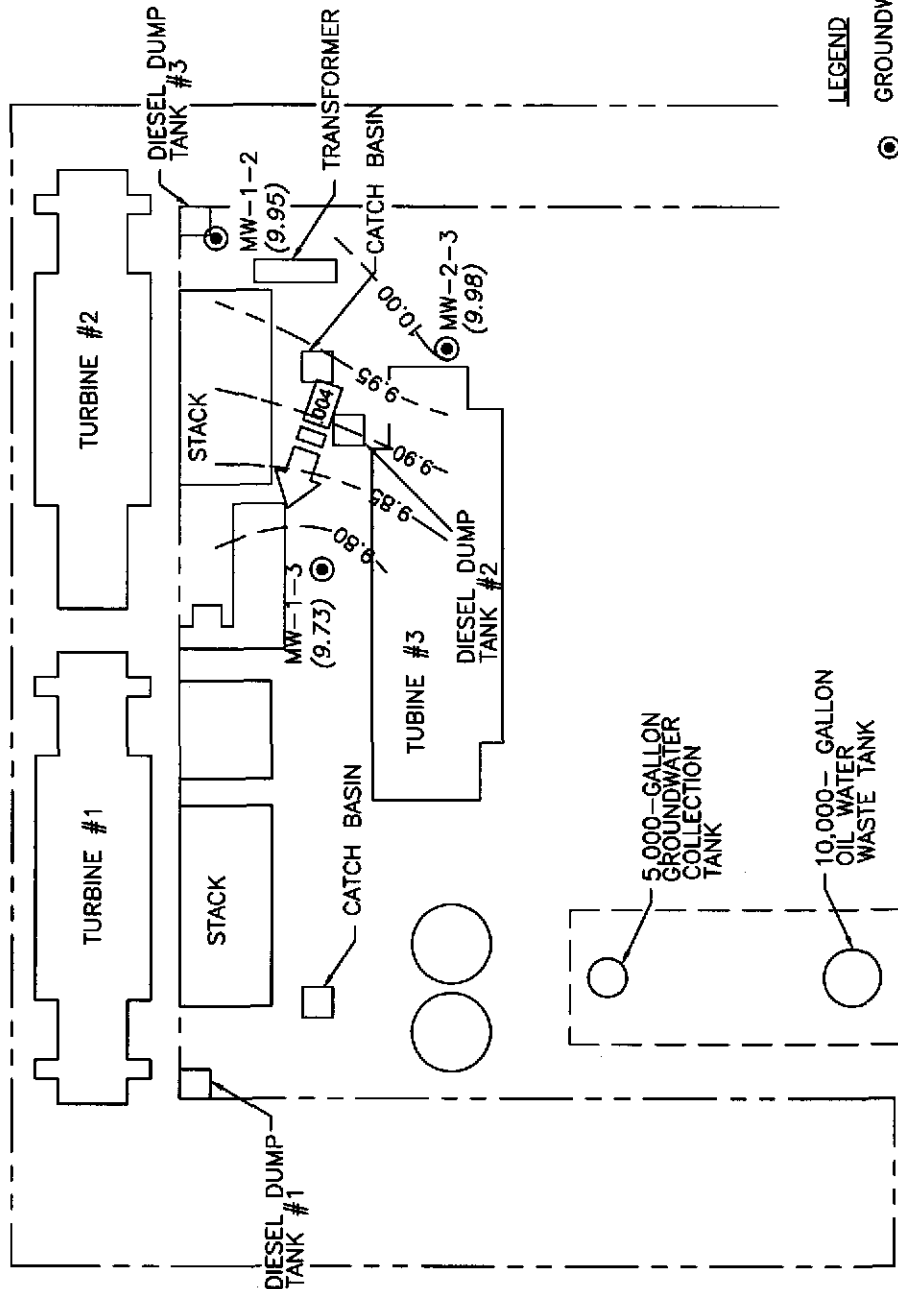
0 2000 Feet



Figure 1. Site Location Map of Oakland Power Plant.



EMBARCADERO WAY

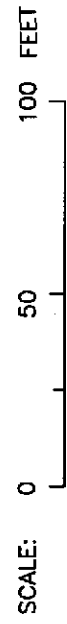


JEFFERSON STREET

MARTIN LUTHER KING, JR. WAY

**LEGEND**

- ⊙ GROUNDWATER MONITORING WELL
- (10.19) GROUNDWATER ELEVATION (Ft-MSL)
- - - GROUNDWATER ELEVATION CONTOUR (Ft-MSL)
- ↑ 0.007 APPROXIMATE DIRECTION OF GROUNDWATER FLOW SHOWING GRADIENT, Ft/Ft



DRN: LKE	DATE: 3/22/01
CHK: EG	SCALE: As Shown
APPR: EPJ	SHEET: Oakland PP
REV.	0

**Oakland Power Plant**  
**Groundwater Contour Map - March 1, 2001**

TECHNICAL AND ECOLOGICAL SERVICES - LWQU

FIGURE 2

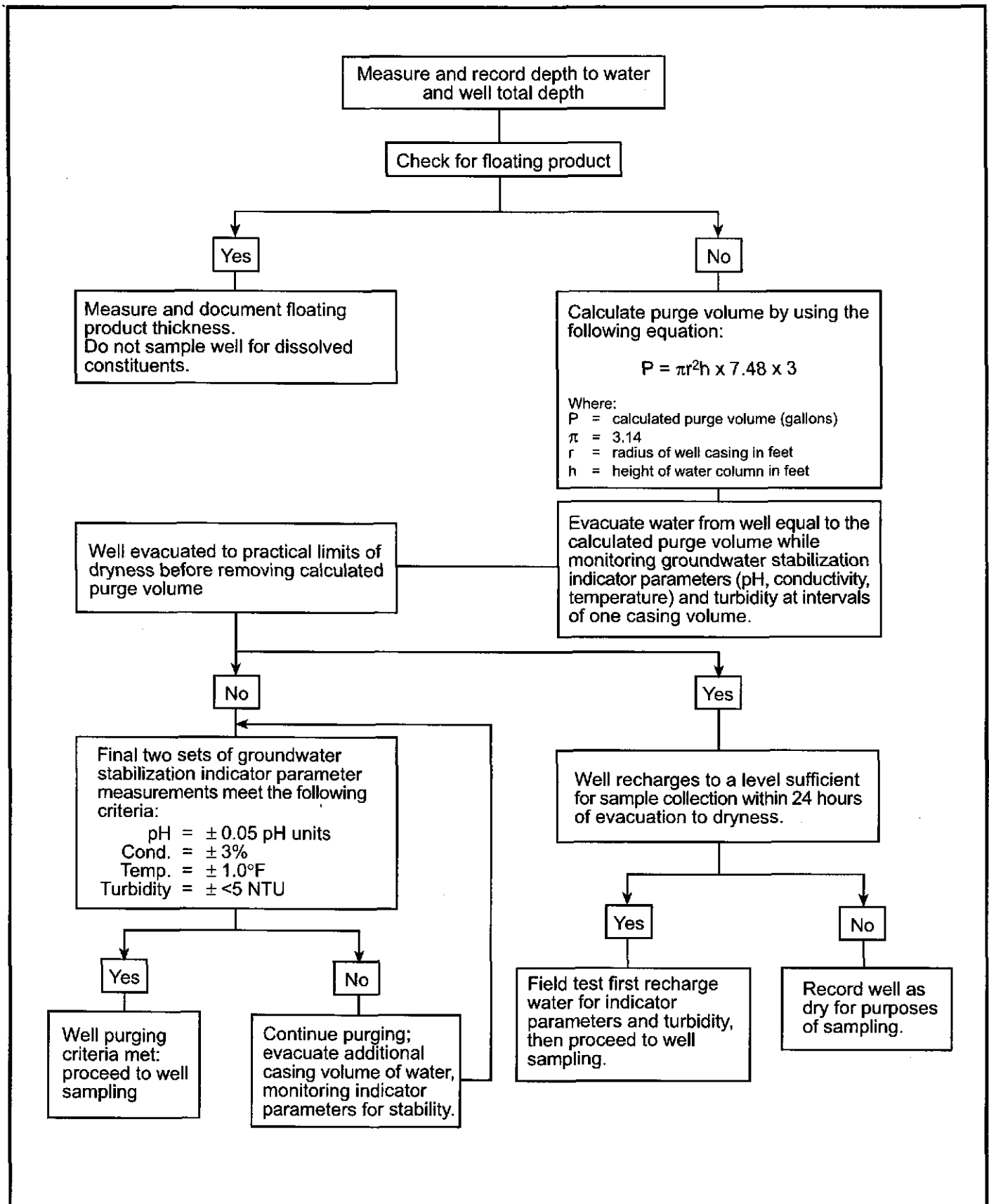


Figure 3. Monitoring Well Purging Protocol



**Table 1**  
**Oakland Power Plant**  
**March 2001 and Historical Monitoring Data**

Sample Designation	Sampling Date	Top of Casing (ft/MSL)	Groundwater		TPHD $\mu\text{g/L}$	Benzene $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethyl-benzene $\mu\text{g/L}$	Total Xylenes $\mu\text{g/L}$
			Depth to Groundwater (ft)	Elevation (ft/MSL)					
MW-1-2	06/22/93	13.95	5.05	8.90	1,500 <sup>1</sup>	<0.5	<0.5	<0.5	<0.5
MW-1-2	09/22/93		5.91	8.04	240	<0.5	<0.5	<0.5	<0.5
Dup	09/22/93		---	---	---	<0.5	<0.5	<0.5	<0.5
MW-1-2	12/28/93		4.77	9.18	200	<0.5	<0.5	<0.5	<0.5
Dup	12/28/93		---	---	---	<0.5	<0.5	<0.5	<0.5
MW-1-2	04/11/94		4.66	9.29	---	<0.5	<0.5	<0.5	<0.5
Dup	04/11/94		---	---	---	<0.5	<0.5	<0.5	<0.5
MW-1-2	04/20/94		4.86	9.09	600	---	---	---	---
MW-1-2	06/29/94		5.18	8.77	520	---	---	---	---
MW-1-2	10/07/94		4.55	9.40	590	---	---	---	---
MW-1-2	01/03/95		4.11	9.84	650 <sup>1</sup>	---	---	---	---
MW-1-2	03/24/95		3.57	10.38	740 <sup>1</sup>	---	---	---	---
MW-1-2	06/30/95		4.69	9.26	540	---	---	---	---
MW-1-2	10/12/95		5.35	8.60	230 <sup>1</sup>	---	---	---	---
MW-1-2	01/18/96		4.19	9.76	600 <sup>1</sup>	---	---	---	---
MW-1-2	02/19/96		4.03	9.92	670 <sup>1</sup>	---	---	---	---
MW-1-2	02/28/97		4.73	9.22	1,800 <sup>1</sup>	---	---	---	---
MW-1-2	02/24/98		3.50	10.45	430 <sup>1</sup>	---	---	---	---
MW-1-2	02/17/99		3.33	10.62	130 <sup>1,5</sup>	---	---	---	---
MW-1-2	02/16/00		3.42	10.53	710 <sup>1</sup>	---	---	---	---
MW-1-2	03/01/01		4.00	9.95	140 <sup>1</sup>	---	---	---	---
MW-1-3	06/22/93	14.01	5.15	8.86	160 <sup>1</sup>	<0.5	<0.5	<0.5	<0.5
MW-1-3	09/22/93		5.57	8.44	430	<0.5	<0.5	<0.5	<0.5
MW-1-3	12/28/93		5.13	8.88	<50	<0.5	<0.5	<0.5	<0.5
MW-1-3	04/11/94		5.01	9.00	---	<0.5	<0.5	<0.5	<0.5
MW-1-3	04/20/94		5.09	8.92	<50	---	---	---	---
MW-1-3	06/29/94		5.30	8.71	280 <sup>1</sup>	---	---	---	---
MW-1-3	10/07/94		5.69	8.32	160 <sup>1</sup>	---	---	---	---
MW-1-3	01/03/95		4.62	9.39	210 <sup>1</sup>	---	---	---	---
MW-1-3	06/30/95		4.89	9.12	231 <sup>1</sup>	---	---	---	---

**Table 1**  
**Oakland Power Plant**  
**March 2001 and Historical Monitoring Data**

Page 2 of 3

Sample Designation	Sampling Date	Top of Casing (ft/MSL)	Depth to Groundwater (ft)	Groundwater Elevation (ft/MSL)	TPHD $\mu\text{g/L}$	Benzene $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethylbenzene $\mu\text{g/L}$	Total Xylenes $\mu\text{g/L}$
MW-1-3	10/12/95		5.43	8.58	190 <sup>1</sup>	---	---	---	---
MW-1-3	01/18/96		4.72	9.29	240 <sup>1</sup>	---	---	---	---
MW-1-3	02/19/96		4.41	9.60	290 <sup>1</sup>	---	---	---	---
MW-1-3	02/28/97		4.90	9.11	1,500 <sup>1</sup>	---	---	---	---
MW-1-3	02/24/98		3.82	10.19	160 <sup>1</sup>	---	---	---	---
MW-1-3	02/17/99		4.10	9.91	<50 <sup>5</sup>	---	---	---	---
MW-1-3	02/16/00		3.80	10.21	150 <sup>1</sup>	---	---	---	---
MW-1-3	03/01/01		4.28	9.73	<50	---	---	---	---
MW-2-3	06/22/93	13.91	5.00	8.91	560 <sup>2</sup>	3	<0.5	<0.5	<0.5
MW-2-3	09/22/93		5.50	8.41	460	<0.5	<0.5	<0.5	<0.5
MW-2-3	12/28/93		4.74	9.17	<50 <sup>3</sup>	<0.5	<0.5	<0.5	<0.5
MW-2-3	04/11/94		5.62	8.29	---	<0.5	<0.5	<0.5	<0.5
MW-2-3	04/20/94		5.83	8.08	<50	---	---	---	---
MW-2-3	06/29/94		5.14	8.77	920 <sup>1,4</sup>	<0.5	<0.5	<0.5	<0.5
MW-2-3	10/07/94		5.50	8.41	<50	16	13	6	24
MW-2-3	01/03/95		4.11	9.80	190 <sup>1</sup>	<0.5	<0.5	<0.5	<0.5
MW-2-3	03/24/95		3.47	10.44	110 <sup>1</sup>	<0.5	<0.5	<0.5	<0.5
Dup	03/24/95		---	---	---	<0.5	<0.5	<0.5	<0.5
MW-2-3	06/30/95		4.66	9.25	187 <sup>1</sup>	<0.5	<0.5	<0.5	<0.5
Dup	06/30/95		---	---	---	<0.5	<0.5	<0.5	<0.5
MW-2-3	10/12/95		5.30	8.61	290 <sup>1</sup>	<0.5	<0.5	<0.5	<0.5
MW-2-3	01/18/96		4.15	9.76	370 <sup>1</sup>	---	---	---	---
MW-2-3	02/19/96		3.97	9.94	320 <sup>1</sup>	---	---	---	---
MW-2-3	02/28/97		4.70	9.21	610 <sup>1</sup>	---	---	---	---
MW-2-3	02/24/98		3.40	10.51	140 <sup>1</sup>	---	---	---	---
MW-2-3	02/17/99		3.31	10.60	<50 <sup>5</sup>	---	---	---	---
MW-2-3	02/16/00		3.27	10.64	190 <sup>1</sup>	---	---	---	---
MW-2-3	03/01/01		3.93	9.98	<50	---	---	---	---

**Table 1**  
**Oakland Power Plant**  
**March 2001 and Historical Monitoring Data**

Sample Designation	Sampling Date	Top of Casing (ft/MSL)	Depth to Groundwater (ft)	Groundwater Elevation (ft/MSL)	TPHD $\mu\text{g/L}$	Benzene $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethylbenzene $\mu\text{g/L}$	Total Xylenes $\mu\text{g/L}$
Travel Blank	09/22/93				---	<0.5	<0.5	<0.5	<0.5
Travel Blank	12/28/93				---	<0.5	<0.5	<0.5	<0.5
Travel Blank	04/11/94				---	<0.5	<0.5	<0.5	<0.5
Travel Blank	01/03/95				---	<0.5	<0.5	<0.5	<0.5
Travel Blank	03/24/95				---	<0.5	0.5	<0.5	<0.5
Travel Blank	06/30/95				---	<0.5	<0.5	<0.5	<0.5
Travel Blank	10/12/95				---	<0.5	<0.5	<0.5	<0.5
Travel Blank	01/18/96				<50	---	---	---	---
Field Blank	02/19/96				<50	---	---	---	---
Field Blank	02/28/97				<50	---	---	---	---
Field Blank	02/24/98				<50	---	---	---	---
Field Blank	02/17/99				<50	---	---	---	---
Field Blank	02/16/00				<50	---	---	---	---
Field Blank	03/01/01				<50	---	---	---	---

TPHD = Total petroleum hydrocarbons as diesel.

ft/MSL = Feet with respect to mean sea level.

$\mu\text{g/L}$  = Micrograms per liter.

Dup = Blind duplicate.

1 Unknown hydrocarbon in diesel range quantified as diesel.

2 Motor oil at a concentration of 3.1 milligrams per liter detected in sample.

3 Motor oil at a concentration of 2.9 milligrams per liter detected in sample.

4 Unknown hydrocarbon in motor oil range was also observed in sample.

5 Sample preparation included silica gel clean-up.

--- = Not analyzed.

Appendix A

**MONITORING WELL WATER LEVEL / FLOATING PRODUCT  
SURVEY FORM AND  
PURGING AND SAMPLING LOG SHEETS**

Survey date: 3/1/01

Site location: OAKLAND PP

Sampler: Dawson Wright

Well ID	Casing elevation (ft, MSL)	Time of level	Total depth (ft)	Depth to water (ft)	Depth to floating product (ft)	Floating product thickness (ft)	Dissolved oxygen (mg/L)	Temp. (°C)	Comments
MW-1-2		0820	13.5	4.00	NA				
MW-1-3		0825	7.1	4.28	NA				
MW-2-3		0830	13.3	3.93	NA				

Comments:

Signature

TES - DRUM INVENTORY RECORD

OAKLAND PP

3/1/01

Swims No.

Location

Date

E. GUENTHER

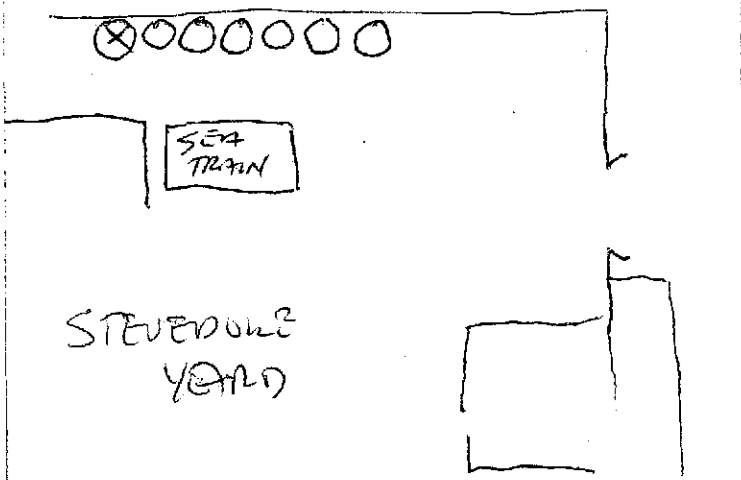
D. WRIGHT

Site Lead

Sampler

DRUM NUMBER (6 digit date + seq. #) eg. 070498A	WELL NO. OR SOURCE ID	TYPE OF MATERIAL	AMOUNT OF MATERIAL IN DRUM	DATE ACCUMULATED OR GENERATED
# 030101	WW-1-2, 1-3, 2-3	GROUND WATER	40 gm	3/1/01

Sketch locations of drums, include drum ID's



Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Number of drums  
from this event

1

Total number of  
drums at site

7



**Pacific Gas & Electric Co. - TES  
Groundwater Purging and Sampling Log**

Site: AKLAND PP Job ID: \_\_\_\_\_ Well ID: MW-1-2  
 Purge date: 3/1/01 Sampler: D. WRIGHT Weather: SUNNY  
 Sample date: 3/1/01 Sampler: D. WRIGHT

**Depth measurements and purge volume calculation**

Measuring point: TOC @ Hydrocarbon odor yes no  
 Depth of well (DTB) 13.5 ft. Thickness \_\_\_\_\_  
 Depth to water (DTW) 4.00 ft.  
 Total water depth (TD) 9.50 ft.  
 Measurement method: solinst slope indicator

TD 9.5 casing factor x .66 gal. per vol. volumes = 6.27 x 3 = total purge volume (gal) 18.8

Casing factor for 2" dia. = 0.17 gallons per ft.  
 for 3" dia. = 0.38 gallons per ft.  
for 4" dia. = 0.66 gallons per ft.  
 for 6" dia. = 1.47 gallons per ft.

**Purge water data**

Time Start	Time End	Cumulative volume (gal.)	pH	Conductivity (umho/cm)	Turbidity	Temp. (deg. C)	Comments
0841	0846	6.25	7.32	1829	CLEAR	16.9	
0850	0856	12.5	7.24	1403	CLEAR	16.8	
0859	0905	18.5	7.17	1253	CLEAR	16.9	SULFUR ODOR

**Methods**

(circle methods used)

Discharge disposal: ground (barrel) pond treatment system  
 Purging: surface pump bailer submersible  
 Sampling: disp. bailer bailer dedicated pump  
 Decontamination: soap/DI pressure wash. dedicated equip.

**Calibration**

pH meter YSI 3500  
 calibrated yes no  
 temp. corrected yes no

pH 4 = 4.00  
 pH 7 = 7.00  
 pH 10 = 10.00

Cond. meter YSI 3500  
 std. 1,000 = 100  
 std. 10,000 = \_\_\_\_\_

**Samples**

Sample time: 1130  
 Lab analyses: TPH-D

**Remarks**

**Pacific Gas & Electric Co. - TES  
Groundwater Purging and Sampling Log**

Site: OAKLAND PP  
 Purge date: 3/1/01  
 Sample date: 3/1/01

Job ID: \_\_\_\_\_  
 Sampler: D WRIGHT  
 Sampler: D WRIGHT

Well ID: MW-1-3  
 Weather: SUNNY

**Depth measurements and purge volume calculation**

Measuring point: TOC @ Hydrocarbon odor yes (no)  
 Depth of well (DTB) 7.1 ft. Thickness \_\_\_\_\_  
 Depth to water (DTW) 4.28 ft.  
 Total water depth (TD) 2.82 ft.  
 Measurement method: solinst slope indicator

TD casing factor gal. per vol. volumes total purge volume (gal)  
2.82 x .66 = 1.9 x 3 = 5.7

Casing factor for 2" dia. = 0.17 gallons per ft.  
 for 3" dia. = 0.38 gallons per ft.  
for 4" dia. = 0.66 gallons per ft.  
 for 6" dia. = 1.47 gallons per ft.

**Purge water data**

Time Start	Time End	Cumulative volume (gal.)	pH	Conductivity (umho/cm)	Turbidity	Temp. (deg. C)	Comments
0928	0931	2.0	7.42	2300	CLEAR	19.5	
0940	0943	4.0	7.54	1856	CLEAR	21.3	
0948	0950	6.0	7.53	1745	CLEAR	21.3	

**Methods**

(circle methods used)  
 Discharge disposal: ground barrel pond treatment system  
 Purging: surface pump bailer submersible  
 Sampling: disp bailer bailer dedicated pump  
 Decontamination: soap/DI pressure wash dedicated equip.

**Calibration**  
 calibrated yes no  
 temp. corrected yes no

pH meter YSI 3500  
 pH 4 = 4.00  
 pH 7 = 7.00  
 pH 10 = 10.00  
 Cond. meter YSI 3500  
 std. 1,000 = 2004  
 std. 10,000 = \_\_\_\_\_

**Samples**

Sample time: 1100  
 Lab analyses: TPH-D

**Remarks**

**Pacific Gas & Electric Co. - TES  
Groundwater Purging and Sampling Log**

Site: OAKLAND PP Job ID: \_\_\_\_\_ Well ID: MW-2-3  
 Purge date: 3/1/01 Sampler: D. WRIGHT Weather: SUNNY  
 Sample date: 3/1/01 Sampler: D. WRIGHT

**Depth measurements and purge volume calculation**

Measuring point: TOC @ Hydrocarbon odor yes (no)  
 Depth of well (DTB) 13.3 ft. Thickness \_\_\_\_\_  
 Depth to water (DTW) 3.93 ft.  
 Total water depth (TD) 9.37 ft.  
 Measurement method: solinst slope indicator

TD casing factor gal. per vol. volumes total purge volume (gal)  
9.37 x 0.66 = 6.18 x 3 = 18.5

Casing factor for 2" dia. = 0.17 gallons per ft.  
 for 3" dia. = 0.38 gallons per ft.  
for 4" dia. = 0.66 gallons per ft.  
 for 6" dia. = 1.47 gallons per ft.

**Purge water data**

Time Start	Time End	Cumulative volume (gal.)	pH	Conductivity (umho/cm)	Turbidity	Temp. (deg. C)	Comments
1022	1028	6.2	7.05	1856	LIGHT	19.4	
1033	1038	11.2	7.36	1881	CLEAR	20.0	WELL PURGED DAY
1105	1110	15.2	7.16	1600	CLEAR	19.3	

**Methods**

(circle methods used)  
 Discharge disposal: ground barrel pond treatment system  
 Purging: surface pump bailer submersible  
 Sampling: disp. bailer bailer dedicated pump  
 Decontamination: soap/DI pressure wash dedicated equip.

**Calibration**  
 pH meter YSI 3500  
 calibrated yes no  
 temp. corrected yes no  
 pH 4 = 4.00  
 pH 7 = 7.00  
 pH 10 = 10.00  
 Cond. meter YSI 3500  
 std. 1,000 = 1004  
 std. 10,000 = \_\_\_\_\_

**Samples** Sample time: 1200 Lab analyses: TPH-D

**Remarks**

Sample log.xls  
 891  
 200  
 4407

Appendix B

**CERTIFIED ANALYTICAL REPORTS  
AND  
CHAIN-OF-CUSTODY DOCUMENTATION**

Diesel with Silica Gel Clean-up

P.G.& E TES	☒ 3400 Crow Canyon Road San Ramon, CA 94583-1393
Attn: Elizabeth Guenther	Phone: (925) 866-5472 Fax: (925) 866-5681
Project #:	Project: Oakland Power Plant

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
QC-1	Water	03/01/2001 10:45	1
MW-1-3	Water	03/01/2001 11:00	2
MW-1-2	Water	03/01/2001 11:30	3
MW-2-3	Water	03/01/2001 12:00	4

To: P.G.& E TES  
Attn.: Elizabeth Guenther

Test Method: 8015M  
Prep Method: 3510/8015M

Diesel with Silica Gel Clean-up

Sample ID: QC-1	Lab Sample ID: 2001-03-0068-001
Project: Oakland Power Plant	Received: 03/02/2001 17:48
Sampled: 03/01/2001 10:45	Extracted: 03/06/2001 06:36
Matrix: Water	QC-Batch: 2001/03/06-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	03/07/2001 12:08	
<i>Surrogate(s)</i> o-Terphenyl	97.0	60-130	%	1.00	03/07/2001 12:08	

To: P.G.& E TES  
 Attn.: Elizabeth Guenther

Test Method: 8015M  
 Prep Method: 3510/8015M

Diesel with Silica Gel Clean-up

Sample ID: MW-1-3	Lab Sample ID: 2001-03-0068-002
Project: Oakland Power Plant	Received: 03/02/2001 17:48
Sampled: 03/01/2001 11:00	Extracted: 03/06/2001 06:36
Matrix: Water	QC-Batch: 2001/03/06-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND ✓	50	ug/L	1.00	03/07/2001 12:55	
<i>Surrogate(s)</i> o-Terphenyl	89.5	60-130	%	1.00	03/07/2001 12:55	

To: P.G.& E TES  
 Attn.: Elizabeth Guenther

Test Method: 8015M  
 Prep Method: 3510/8015M

Diesel with Silica Gel Clean-up

Sample ID: MW-1-2	Lab Sample ID: 2001-03-0068-003
Project: Oakland Power Plant	Received: 03/02/2001 17:48
Sampled: 03/01/2001 11:30	Extracted: 03/06/2001 06:36
Matrix: Water	QC-Batch: 2001/03/06-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	140 ✓	50	ug/L	1.00	03/07/2001 13:42	ndp
<i>Surrogate(s)</i> o-Terphenyl	88.8	60-130	%	1.00	03/07/2001 13:42	



To: P.G.& E TES  
Attn.: Elizabeth Guenther

Test Method: 8015M  
Prep Method: 3510/8015M

Diesel with Silica Gel Clean-up

Sample ID: MW-2-3	Lab Sample ID: 2001-03-0068-004
Project: Oakland Power Plant	Received: 03/02/2001 17:48
Sampled: 03/01/2001 12:00	Extracted: 03/06/2001 06:36
Matrix: Water	QC-Batch: 2001/03/06-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND ✓	50	ug/L	1.00	03/07/2001 14:30	
<i>Surrogate(s)</i> o-Terphenyl	94.9	60-130	%	1.00	03/07/2001 14:30	

To: P.G.& E TES  
Attn.: Elizabeth Guenther

Test Method: 8015M  
Prep Method: 3510/8015M

**Batch QC Report**  
Diesel with Silica Gel Clean-up

Method Blank	Water	QC Batch # 2001/03/06-01.10
MB: 2001/03/06-01.10-001		Date Extracted: 03/06/2001 06:36

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	50	ug/L	03/07/2001 12:47	
<i>Surrogate(s)</i> o-Terphenyl	85.0	60-130	%	03/07/2001 12:47	

To: P.G.& E TES  
 Attn: Elizabeth Guenther

Test Method: 8015M  
 Prep Method: 3510/8015M

### Batch QC Report

Diesel with Silica Gel Clean-up

<b>Laboratory Control Spike (LCS/LCSD)</b>	<b>Water</b>	<b>QC Batch # 2001/03/06-01.10</b>
LCS: 2001/03/06-01.10-002	Extracted: 03/06/2001 06:36	Analyzed 03/07/2001 13:25
LCSD: 2001/03/06-01.10-003	Extracted: 03/06/2001 06:36	Analyzed 03/07/2001 14:04

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Diesel	1000	990	1250	1250	80.0	79.2	1.0	60-130	25		
<i>Surrogate(s)</i> o-Terphenyl	18.5	17.6	20.0	20.0	92.5	88.0		60-130			

To: P.G.& E TES  
Attn: Elizabeth Guenther

Test Method: 8015M  
Prep Method: 3510/8015M

## Legend & Notes

Diesel with Silica Gel Clean-up

### Analyte Flags

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard



Pacific Gas and Electric Company

2001-03-0068

62-1174 (Rev 2/99)  
Environmental Affairs

57813

Chain of Custody Record

From: Pacific Gas & Electric Company  PG&E Facility  Sample Site  
 Address or Location: 3400 CROW CANYON RD  
 City: SAH RAMON, CA (Zip) 94583  
 Contact Name/Phone No.: ELIZABETH GUENTHER 866-5472

Ship To: Lab Name: STC / CHROMALAB  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_, CA (Zip) \_\_\_\_\_  
 Phone No. \_\_\_\_\_  
 Contact Name: \_\_\_\_\_

NORMAL (10 days or less)  RUSH  OTHER, Specify \_\_\_\_\_  
 Due Date & Time \_\_\_\_\_  
 TELEPHONE  FAX Give Results to: E. GUENTHER (925) 866-5681  
 Name \_\_\_\_\_ PUFAX \_\_\_\_\_  
 Project Name: OAKLAND Power Plant  
 Project Supervisor (Name/Phone No.): RONNY CREEK 866-5882  
 (Print Name)

Analysis Requested  
 W/SILICA GET  
 (PT-D)  
 XXXX  
 XXXX  
 XXXX

Sample No./ Equipment-Serial Nbr	Sampled		Sample Type/Description	Containers	
	Date	Time		No.	Size
1. QC-1	3/1	1045	HPD	2	1L
2. MW-1-3	↓	1100	↓	2	↓
3. MW-1-2	↓	1130	↓	2	↓
4. MW-2-3	↓	1200	↓	2	↓
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

Sample No./ Equipment-Serial Nbr	Sample Type/Description	Containers No. Size	Analysis Requested		Remarks
			Date & Time	Time	
1. QC-1	HPD	2 1L	3/1/01	1525	REQUEST SILICA GEL CLEANUP FOR TPH-D
2. MW-1-3	↓	2 ↓			
3. MW-1-2	↓	2 ↓			
4. MW-2-3	↓	2 ↓			
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

Relinquished by (Name & Dept.): \_\_\_\_\_ Date & Time: 3/1/01 1525  
 Relinquished by (Name & Dept.): \_\_\_\_\_ Date & Time: 3/2/01 9:55AM  
 Relinquished by (Name & Dept.): \_\_\_\_\_ Date & Time: 3/2/01 1748

Received by (Name & Dept.): \_\_\_\_\_ Date & Time: 3/1/01 1525  
 Received by (Name & Dept.): \_\_\_\_\_ Date & Time: 3/2/01 1748  
 Received by (Name & Dept.): \_\_\_\_\_ Date & Time: 3/2/01 1748

SAP Accounting Data: \_\_\_\_\_  
 Billing Contact: \_\_\_\_\_  
 Billing Address: \_\_\_\_\_

Ship Via: \_\_\_\_\_  
 Bill of Lading/Airbill No.: 3.10C

- Notes:
1. Samples are discarded by the laboratory 90 days after results are reported unless other arrangements are made.
  2. File a copy of this Chain of Custody Record, complete with appropriate laboratory signatures, with the test analysis results.
  3. The first "Relinquished by/Date" is the shipping date unless otherwise noted.
  4. The final PCB results will be the cumulative results added together for each PCB.
  5. When this form is computer-generated, send the completed original to the laboratory, and make copies for the originator and sampler.

Distribution (See note #5)  
 White: Laboratory  
 Canary: Originator  
 Pink: Sampler