GROUNDWATER MONITORING AND SAMPLING REPORT

EMERYVILLE MAINTENANCE FACILITY
4525 HOLLIS STREET
EMERYVILLE, CALIFORNIA
THIRD QUARTER 1997

Prepared for

Pacific Gas and Electric Company
Technical and Ecological Services

September 1997

Prepared by

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Project 0143-014.02

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1 INTRODUCTION

This report presents data collected during the third quarter 1997 monitoring period at the Pacific Gas and Electric Company (PG&E) Emeryville Maintenance facility at 4525 Hollis Street in Emeryville, California (see Figure 1).

2 GROUNDWATER GRADIENT AND DIRECTION

Third quarter groundwater levels were measured at the PG&E Maintenance Facility in Emeryville, California, on August 22, 1997, using an electronic sounding device, and recorded on the historical monitoring well data form included in Appendix A. The groundwater elevations are summarized in Table 1. The August data were used in constructing a groundwater contour map (see Figure 2). August water levels ranged from a low of 11.06 feet above mean sea level (MSL) in well ESE-1 to a high of 17.59 feet above MSL in well MW-4. The groundwater gradient is 0.03 foot per foot (ft/ft) to the north between monitoring wells ESE-2 and MW-4. Due to construction, ESE-4 was inaccessible and was not measured.

3 SAMPLING, ANALYSIS, AND MONITORING PROGRAM RESULTS

Groundwater samples were collected from wells ESE-1 through ESE-3 on August 22, 1997, consistent with the protocol presented in Figure 3, and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by U.S. Environmental Protection Agency (USEPA) Method 602/8020; polychlorinated biphenyls (PCBs) by USEPA Method 3510/608; and total extractable petroleum hydrocarbons (TEPH) as mineral oil, by USEPA Method 3510/8015M. Temperature, pH, and electrical conductivity were measured in the field and recorded on the water sample field data sheets (see Appendix A). ESE-4 was inaccessible due to construction and was not sampled this quarter. Groundwater samples were not collected from well MW-4. Field readings from the third quarter 1997 monitoring event are summarized in Table 1.

The analytical results are discussed below. Third quarter 1997 and historical analytical data are summarized in Table 2. Certified analytical reports and chain-of-custody records are included in Appendix B.

BTEX and PCBs were not detected at or above the method reporting limit (MRL) in any sample collected from ESE-1 or ESE-3. Ethylbenzene was detected in the samples from ESE-2 at a concentration of 0.51 micrograms per liter (µg/L). Mineral oil was detected in the sample collected from ESE-1 at a concentration of 740 µg/L. Quantification for mineral oil is based on the response factor of diesel.

4 FIELD 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 (FB-1) and analyzing it for BTEX.

Field blanks are collected to assess the effect of field environments on the analytical results and to identify false positives. No parameters were detected above their respective MRLs in the field blank, indicating no adverse effects from sampling 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 to pass 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 results, were within the laboratory acceptance limits.

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

The material and data in this report were prepared under the supervision and direction of the undersigned.

EMCON

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EMCON

for Harold R. Duke
Project Manager

Table 1
Field Measurements
Third Quarter 1997 and Historical Data
Pacific Gas and Electric Company
Emeryville, California

Sample Designation	Date	Top-of-Casing Elevation (ft/MSL)[1]	Depth to Water (feet)	Groundwater Elevation (ft/MSL)	Measured Well Depth (feet)	pH (units)	Temperature (°F)	Electrical Conductivity (umhos/cm)
ESE-1	03/28/94	23.66	10.06	13.60	20.8	8.48	73.1	600
ESE-1	04/07/94	23.66	10.22	13.44	NM[3]	NS[4]	NS	NS
ESE-1	12/12/94	23.66	9.18	14.48	30.6	7.26	63.4	588
ESE-1	03/13/95	23.66	8.20	15.46	30.6	7.33	63.3	548
ESE-1	06/15/95	23.66	9.50	14.16	30.6	6.90	64	505
ESE-1	09/15/95	23.66	10.13	13.53	30.6	6.80	65.1	505
ESE-1	12/15/95	23.66	10.55	13.11	33.8	7.04	65.1	511
ESE-1	03/15/96	23.66	11.79	11.87	33.6	6.94	64.9	540
ESE-1	06/14/96	23.66	12.68	10.98	33.6	6.93	67.4	517
ESE-1	10/07/96	23.66	12.56	11.10	34.0	6.94	73.3	494
ESE-1	12/04/96	23.66	12.67	10.99	34.2	6.80	64.4	507
ESE-1	02/14/97	23.66	12.62	11.04	34.2	6.96	67.5	509
ESE-1	05/16/97	23.66	13.05	10.61	34.2	7.07	69.0	534
ESE-1	08/22/97	23.66	12.60	11.06	34.0	6.32	67.4	597
ESE-2	03/28/94	27.80	10.13	17.67	34.2	7.67	67.5	580
ESE-2	04/07/94	27.80	14.37	13.43	NM	NS	NS	NS
ESE-2	12/12/94	27.80	13.05	14.75	34.3	7.05	64.6	610
ESE-2	03/13/95	27.80	12.48	15.32	34.3	7.19	62.5	596
ESE-2	06/15/95	27.80	13.85	13.95	34.3	7.02	65.1	601
ESE-2	09/15/95	27.80	14.22	13.58	34.3	6.91	65.6	627
ESE-2	12/15/95	27.80	11.65	16.15	34.1	7.12	64.7	591
ESE-2	03/15/96	27.80	12.87	14.93	34.1	7.01	65.8	669
ESE-2	06/14/96	27.80	13.94	13.86	34.1	7.08	67.1	607
ESE-2	10/07/96	27.80	13.58	14.22	34.0	7.10	74.6	558
ESE-2	12/04/96	27.80	14.20	13.60	34.4	6.89	65.0	618
ESE-2	02/14/97	27.80	13.80	14.00	34.4	7.02	66.3	578
ESE-2	05/16/97	27.80	14.07	13.73	34.4	7.00	69.9	580
ESE-2	08/22/97	27.80	14.35	13.45	34.4	6.49	66.1	623

Table 1
Field Measurements
Third Quarter 1997 and Historical Data
Pacific Gas and Electric Company
Emeryville, California

Sample Designation	Date	Top-of-Casing Elevation (ft/MSL)[1]	Depth to Water (feet)	Groundwater Elevation (ft/MSL)	Measured Well Depth (feet)	pH (units)	Temperature (°F)	Electrical Conductivity (umhos/cm)
ESE-3	03/28/94	23.91	11.23	12.68	30.9	7.47	68.7	610
ESE-3	04/07/94	23.91	11.29	12.62	NM	NS	NS	NS
ESE-3	12/12/94	23.91	10.62	13.29	31.0	7.19	63.9	600
ESE-3	03/13/95	23.91	9.45	14.46	31.0	6.99	62.5	600
ESE-3	06/15/95	23.91	10.27	13.64	31.0	7.10	64.9	556
ESE-3	09/15/95	23.91	10.87	13.04	31.0	6.96	65.5	559
ESE-3	12/19/95	23.91	9.40	14.51	31.0	7.28	64.2	556
ESE-3	03/15/96	23.91	10.02	13.89	30.9	7.01	65.0	583
ESE-3	06/14/96	23.91	10.63	13.28	30.9	7.09	67.0	546
ESE-3	10/07/96	23.91	10.85	13.06	31.0	6.87	68.8	514
ESE-3	12/04/96 [5]	23.91	10.67	13.24	30.9	NM	NM	NM
ESE-3	02/14/97	23.91	10.75	13.16	30.9	7.01	65.9	506
ESE-3	05/16/97	23.91	10.99	12.92	31.0	7.40	69.9	539
ESE-3	08/22/97	23.91	10.65	13.26	31.0	6.86	66.6	563
ESE-4	03/28/94	24.33	10.63	13.70	31.4	7.77	66.3	610
ESE-4	04/07/94	24.33	10.85	13.48	NM	NS	NS	NS
ESE-4	12/12/94	24.33	9.63	14.70	31.6	7.11	63.1	591
ESE-4	03/13/95	24.33	8.90	15.43	31.6	7.16	61.2	595
ESE-4	06/15/95	24.33	9.81	14.52	31.6	7.05	64.1	565
ESE-4	09/15/95	24.33	10.85	13.48	31.6	7.01	66.3	584
ESE-4	12/15/95	24.33	8.72	15.61	31.6	7.05	64.6	555
ESE-4	03/15/96	24.33	9.29	15.04	31.5	7.01	63.7	600
ESE-4	06/14/96	24.33	10.23	14.10	31.5	7.04	66.0	591
ESE-4	10/07/96	24.33	10.44	13.89	31.5	6.89	70.1	541
ESE-4	12/04/96 [5]	24.33	10.31	14.02	31.5	NM	NM	NM
ESE-4	02/14/97	24.33	10.12	14.21	31.5	7.11	65.3	511
ESE-4	05/16/97	24.33	10.56	13.77	31.6	7.40	69.1	559
ESE-4	08/22/97 [5]	24.33	NM	NM	NM	NM	NM	NM

Table 1
Field Measurements
Third Quarter 1997 and Historical Data
Pacific Gas and Electric Company
Emeryville, California

Sample Designation	Date	Top-of-Casing Elevation (ft/MSL)[1]	Depth to Water (feet)	Groundwater Elevation (ft/MSL)	Measured Well Depth (feet)	pH (units)	Temperature (°F)	Electrical Conductivity (umhos/cm)
MW-4	03/13/95	28.14	9.84	18.30	14.7	NS	NS	NS
MW-4	06/15/95	28.14	10.74	17.40	14.7	NS	NS	NS
MW-4	09/15/95	28.14	10.90	17.24	14.7	NS	NS	NS
MW-4	12/15/95	28.14	6.53	21.61	14.7	NS	NS	NS
MW-4	03/15/96	28.14	8.12	20.02	14.7	NS	NS	NS
MW-4	06/14/96	28.14	10.78	17.36	14.7	NS	NS	NS
MW-4	10/07/96	28.14	10.81	17.33	14.7	NS	NS	NS
MW-4	12/04/96	28.14	10.44	17.70	14.7	NS	NS	NS
MW-4	02/14/97	28.14	10.41	17.73	14.7	NS	NS	NS
MW-4	05/16/97	28.14	10.78	17.36	14.7	NS	NS	NS
MW-4	08/22/97	28.14	10.55	17.59	14.7	NS	NS	NS

[1] ft/MSL = feet relative to mean sea level.

[2] umhos/cm = micromhos per centimeter at 77°F.

[3] NM = not measured.

[4] NS = not sampled.

[5] Wells not sampled due to construction in the area resulting in heavy traffic.

Table 2
Analytical Data
Third Quarter 1997 and Historical Data
Pacific Gas and Electric Company
Emeryville, California
(ug/l)[1]

Sample Designation	Sampling Date	Polychlorinated Biphenols	TEPH[2]	Benzene	Toluene	Ethylbenzene	Xylenes
ESE-1	03/28/94	<1	340	<0.3	<0.3	<0.3	<0.3
ESE-1	12/12/94	<0.5	80	<0.5	<0.5	<0.5	<0.5
ESE-1	03/13/95	1.3	500 [3]	<0.5	<0.5	<0.5	<0.5
ESE-1	06/15/95	<0.5	350 [3]	<0.5	<0.5	<0.5	<0.5
ESE-1	09/15/95	<0.5	470 [3]	<0.5	<0.5	<0.5	<0.5
ESE-1	12/15/95	<0.5	440 [3]	<0.5	<0.5	<0.5	<0.5
ESE-1	03/15/96	<0.5	277	<0.5	<0.5	<0.5	<0.5
ESE-1	06/14/96	<0.5	<500	<0.5	<0.5	<0.5	<0.5
ESE-1	10/07/96	<0.5	110 [4]	<0.5	<0.5	<0.5	<0.5
ESE-1	12/04/96	<0.5	430 [4]	<0.5	<0.5	<0.5	<0.5
ESE-1	02/14/97	<0.5	1,600	<0.5	<0.5	<0.5	<0.5
ESE-1	05/16/97	<0.5	510 [8]	<0.5	<0.5	<0.5	<0.5
ESE-1	08/22/97	<0.5	740 [8]	<0.5	<0.5	<0.5	<0.5
ESE-2	03/28/94	<1	250	0.8	1.5	<0.3	2.7
ESE-2	12/12/94	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-2	03/13/95	<0.5	120 [5]	<0.5	<0.5	<0.5	<0.5
ESE-2	06/15/95	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-2	09/15/95	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-2	12/15/95	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-2	03/15/96	<0.5	<59	<0.5	<0.5	<0.5	<0.5
ESE-2	06/14/96	<0.5	<500	<0.5	<0.5	<0.5	<0.5
ESE-2	10/07/96	<0.5	150 [4]	<0.5	<0.5	<0.5	<0.5
ESE-2	12/04/96	<0.5	380 [4]	<0.5	<0.5	<0.5	<0.5
ESE-2	02/14/97	<0.5	510	<0.5	<0.5	<0.5	<0.5
ESE-2	05/16/97	<0.5	190 [8]	<0.5	<0.5	<0.5	<0.5
ESE-2	08/22/97	<0.5	<100 [8]	<0.5	<0.5	0.51	<0.5

Table 2
Analytical Data
Third Quarter 1997 and Historical Data
Pacific Gas and Electric Company
Emeryville, California
(ug/l)[1]

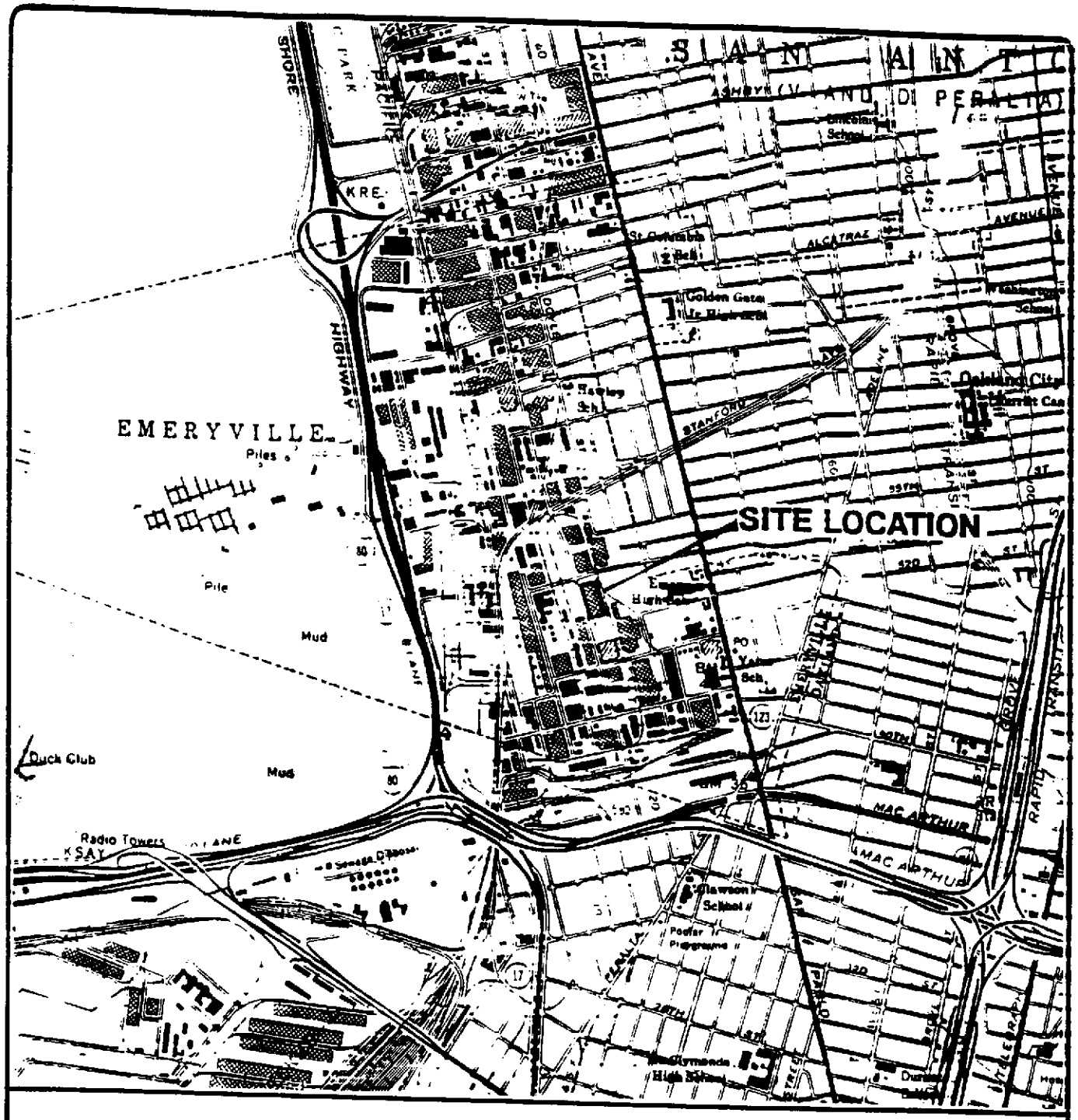
Sample Designation	Sampling Date	Polychlorinated Biphenols	TEPH[2]	Benzene	Toluene	Ethylbenzene	Xylenes
ESE-3	03/28/94	<1	<50	<0.3	<0.3	<0.3	<0.3
ESE-3	12/12/94	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-3	03/13/95	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-3	06/15/95	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-3	09/15/95	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-3	12/15/95	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-3	03/15/96	<0.5	<59	<0.5	<0.5	<0.5	<0.5
ESE-3	06/14/96	<0.5	<500	<0.5	<0.5	<0.5	<0.5
ESE-3	10/07/96	<0.5	<100	<0.5	<0.5	<0.5	<0.5
ESE-3	12/04/96 [6]	NA [7]	NA	NA	NA	NA	NA
ESE-3	02/14/97	<0.5	<100	<0.5	<0.5	<0.5	<0.5
ESE-3	05/16/97	<0.5	<110 [8]	<0.5	<0.5	<0.5	<0.5
ESE-3	08/22/97	<0.5	<100 [8]	<0.5	<0.5	<0.5	<0.5
ESE-4	03/28/94	<1	<50	<0.3	<0.3	<0.3	<0.3
ESE-4	12/12/94	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-4	03/13/95	<0.5	56 [5]	<0.5	<0.5	<0.5	<0.5
ESE-4	06/15/95	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-4	09/15/95	<0.5	<50	<0.5	<0.5	<0.5	<0.5
ESE-4	12/15/95	<0.5	57 [5]	<0.5	<0.5	<0.5	<0.5
ESE-4	03/15/96	<0.5	<59	<0.5	<0.5	<0.5	<0.5
ESE-4	06/14/96	<0.5	<500	<0.5	<0.5	<0.5	<0.5
ESE-4	10/07/96	<0.5	<100	<0.5	<0.5	<0.5	<0.5
ESE-4	12/04/96 [6]	NA	NA	NA	NA	NA	NA
ESE-4	02/14/97	<0.5	270 [4]	<0.5	<0.5	<0.5	<0.5
ESE-4	05/16/97	<0.5	<110 [8]	<0.5	<0.5	<0.5	<0.5
ESE-4	08/22/97 [6]	NA	NA	NA	NA	NA	NA

Table 2
Analytical Data
Third Quarter 1997 and Historical Data
Pacific Gas and Electric Company
Emeryville, California
(ug/l)[1]

Sample Designation	Sampling Date	Polychlorinated Biphenols	TEPH[2]	Benzene	Toluene	Ethylbenzene	Xylenes
Trip Blank	03/28/94	<1	<50	<0.3	<0.3	<0.3	<0.3
Trip Blank	12/12/94	NA	NA	<0.5	<0.5	<0.5	<0.5
Trip Blank	03/13/95	NA	NA	<0.5	<0.5	<0.5	<0.5
Trip Blank	06/15/95	NA	NA	<0.5	<0.5	<0.5	<0.5
Trip Blank	09/15/95	NA	NA	<0.5	<0.5	<0.5	<0.5
Trip Blank	12/15/95	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	03/28/94	NA	NA	NA	NA	NA	NA
Field Blank	12/12/94	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	03/13/95	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	06/15/95	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	09/15/95	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	12/15/95	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	03/15/96	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	06/14/96	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	10/07/96	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	12/04/96	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	02/14/97	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	05/16/97	NA	NA	<0.5	<0.5	<0.5	<0.5
Field Blank	08/22/97	NA	NA	<0.5	<0.5	<0.5	<0.5

[1] ug/l = micrograms per liter.
[2] TEPH = total extractable petroleum hydrocarbons.
[3] Compounds similar to client-supplied transformer oil were found.
[4] Hydrocarbon reported does not match the pattern of laboratory standard for mineral oil.
[5] Compounds in diesel range not similar to laboratory standard for transformer oil.
[6] Wells not sampled due to construction in the area resulting in heavy traffic.
[7] NA = not analyzed.
[8] Quantitation for mineral oil is based on the response factor of diesel.

152753



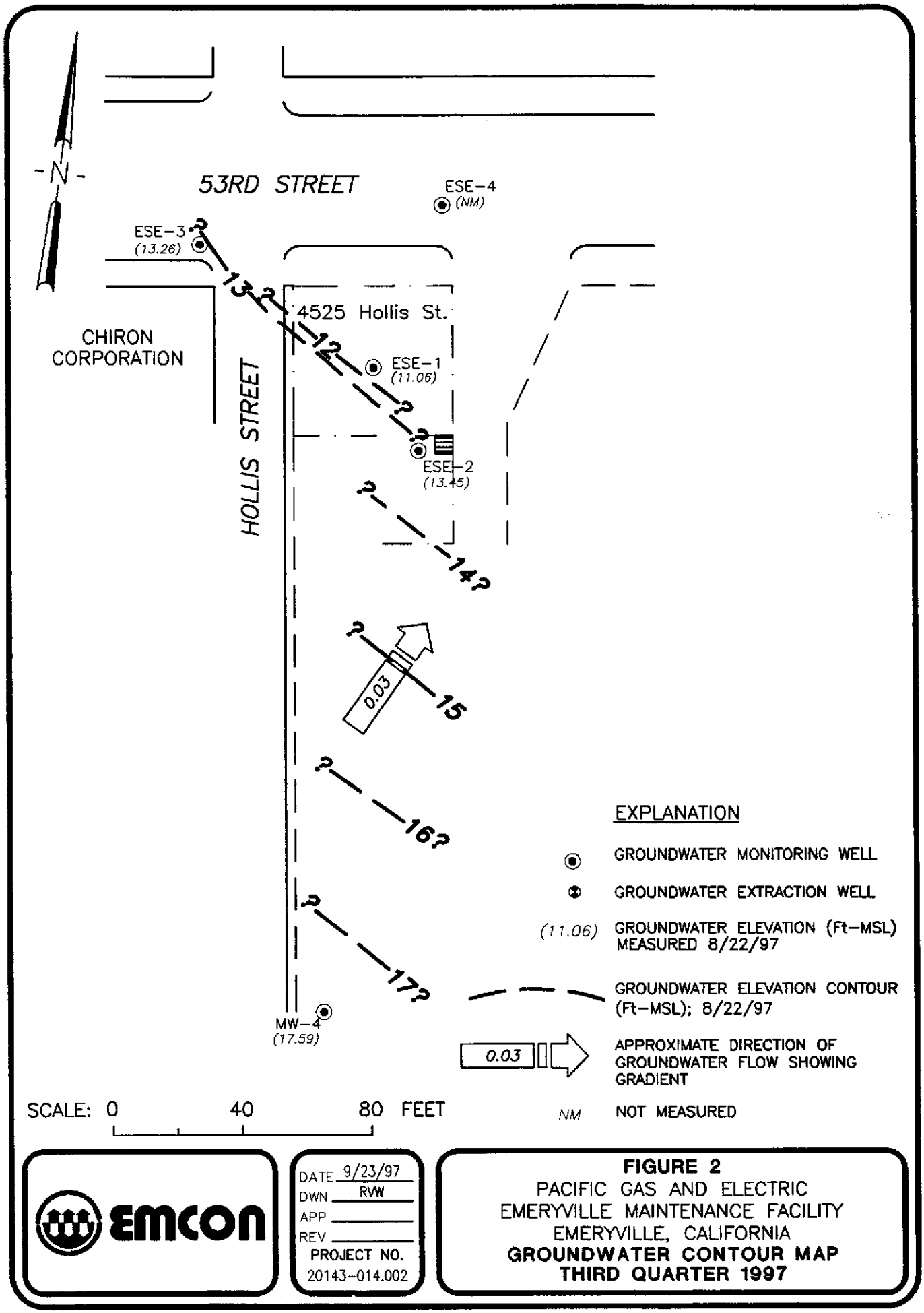
EMCON Associates

PACIFIC GAS & ELECTRIC COMPANY
QUARTERLY MONITORING PROGRAM
EMERYVILLE, CALIFORNIA

SITE LOCATION

FIGURE 1

PROJECT NO. 143-014.02



EA-SACRAMENTO1/DRAWINGS: I:\DWGS\PG&E\014GWCM.dwg Xrefs: <NONE>
Scale: 1 = 40.00 DimScale: 1 = 40.00 Date: 9/23/97 Time: 1:29 PM Operator: RVW

MONITORING WELL PURGING PROTOCOL

EMCON

MEASURE AND RECORD DEPTH TO WATER AND WELL TOTAL DEPTH

CHECK FOR FLOATING PRODUCT

YES

MEASURE AND DOCUMENT FLOATING PRODUCT THICKNESS. DO NOT SAMPLE WELL FOR DISSOLVED CONSTITUENTS.

NO

CALCULATE PURGE VOLUME BY USING THE FOLLOWING EQUATION:

$$P = \pi r^2 h \times 7.48 \times 3$$

where:

- P = calculated purge volume (gallons)
- π = 3.14
- r = radius of well casing in feet
- h = height of water column in feet

EVACUATE WATER FROM WELL EQUAL TO THE CALCULATED PURGE VOLUME WHILE MONITORING GROUND-WATER STABILIZATION INDICATOR PARAMETERS (pH, CONDUCTIVITY, TEMPERATURE) AND TURBIDITY AT INTERVALS OF ONE CASING VOLUME.

WELL EVACUATED TO PRACTICAL LIMITS OF DRYNESS BEFORE REMOVING CALCULATED PURGE VOLUME

NO

FINAL TWO SETS OF GROUND-WATER STABILIZATION INDICATOR PARAMETER MEASUREMENTS MEET THE FOLLOWING CRITERIA:

pH	= ±	0.05 pH units
COND.	= ±	3 %
TEMP.	= ±	1.0 °F
TURBIDITY	= ±	<5 NTU

YES

WELL PURGING CRITERIA MET; PROCEED TO WELL SAMPLING

NO

CONTINUE PURGING; EVACUATE ADDITIONAL CASING VOLUME OF WATER, MONITORING INDICATOR PARAMETERS FOR STABILITY.

YES

WELL RECHARGES TO A LEVEL SUFFICIENT FOR SAMPLE COLLECTION WITHIN 24 HOURS OF EVACUATION TO DRYNESS.

YES

FIELD TEST FIRST RECHARGE WATER FOR INDICATOR PARAMETERS AND TURBIDITY, THEN PROCEED TO WELL SAMPLING.

NO

RECORD WELL AS DRY FOR PURPOSES OF SAMPLING.

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MONITORING WELL PURGING PROTOCOL

FIGURE 3

APPENDIX A

HISTORICAL MONITORING WELL DATA FORM AND WATER SAMPLE FIELD DATA SHEETS

EMCON - Field Services
1921 Ringwood Avenue
San Jose, California

Signature

Historical Monitoring Well Data
PG&E Emeryville
0143-014.002

Well ID	Date	Depth to Floating Product (feet)	First Depth to Water (feet)	Second Depth to Water (feet)	Floating Product Thickness (feet)	Well Total Depth (feet)	Comments
Depth to liquid : 0.01 foot							Total depth : 0.1 foot
	12/15/95		10.55	10.55	ND	33.8	
	03/15/96		11.79	11.79	ND	33.6	
	05/16/97		13.05	13.05	ND	34.2	
ESE-1	8/27/97		12.60	12.60		34.0	Time: 0903 Lock: None
	12/15/95		11.65	11.65	ND	34.1	
	03/15/96		12.87	12.87	ND	34.1	
	05/16/97		14.07	14.07	ND	34.4	
ESE-2			14.35	14.35		34.4	Time: 0858 Lock: Dolphin
	12/15/95		9.40	9.40	ND	31.0	
	03/15/96		10.02	10.02	ND	30.9	
	05/16/97		10.99	10.99	ND	31.0	
ESE-3			10.65	10.65		31.0	Time: 0853 Lock: 3210
	12/15/95		8.72	8.72	ND	31.6	no water level
	03/15/96		9.29	9.29	ND	31.5	Due to heavy
	05/16/97		10.56	10.56	ND	31.6	construction on
ESE-4			I W	I W	I W	I W	Roadway. Time: —— Lock: 3210
	12/15/95		6.53	6.53	ND	14.7	
	03/15/96		8.12	8.12	ND	14.7	
	05/16/97		10.78	10.78	ND	14.7	
MW-4	√		10.55	10.55		14.7	Time: 0850 Lock: None

Rev 3.2/94

WATER SAMPLE FIELD DATA SHEET

EMCON ASSOCIATES

PROJECT NO: 20143-014.002 SAMPLE ID: ESE-1

PURGED BY: M. Gallegos CLIENT NAME: PG&E - Emeryville

SAMPLED BY: ↓ LOCATION: Emeryville, CA.

TYPE: Ground Water ✓ Surface Water ___ Treatment Effluent ___ Other ___

CASING DIAMETER (inches): 2 ✓ 3 ___ 4 ___ 4.5 ___ 6 ___ Other ___

CASING ELEVATION (feet/MSL):	NR	VOLUME IN CASING (gal.):	3.49
DEPTH TO WATER (feet):	12.60	CALCULATED PURGE (gal.):	13.97
DEPTH OF WELL (feet):	34.0	ACTUAL PURGE VOL. (gal.):	14.0

DATE PURGED: 8-22-97 Start (2400 Hr) 0940 End (2400 Hr) 0955

DATE SAMPLED: ↓ Start (2400 Hr) 1005 End (2400 Hr) —

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25° C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (visual)
0943	3.5	6.30	604	67.6	BRN	Heavy
0946	7.0	6.33	600	67.5		
0950	10.5	6.33	596	67.5		
0955	14.0	6.32	597	67.4	↓	↓

D. O. (ppm): NR ODOR: none

COLOR: NR (COBALT 0 - 500) TURBIDITY: NR (NTU 0 - 200 or 0 - 1000)

Field QC samples collected at this well: FB-1 (1015)

Parameters field filtered at this well: NR

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
___ 2" Bladder Pump	___ Bailer (Teflon®)	___ 2" Bladder Pump	✓ Bailer (Teflon®)
___ Centrifugal Pump	✓ Bailer (PVC)	___ DDL Sampler	___ Bailer (Stainless Steel)
___ Submersible Pump	___ Bailer (Stainless Steel)	___ Dipper	___ Submersible Pump
___ Well Wizard™	___ Dedicated	___ Well Wizard™	___ Dedicated
Other: ___		Other: ___	

WELL INTEGRITY: OK LOCK #: PG&E

REMARKS: Cell Samples taken

Meter Calibration: Date: 8/22/97 Time: 0935 Meter Serial #: 9204 Temperature °F: 72.9

(EC 1000 997/1000) (DI ___) (pH 7 595/700) (pH 10 1023/1000) (pH 4 398/___)

Location of previous calibration: ___

Signature: [signature] Reviewed By: [signature] Page 1 of 4

Rev 3. 2/94

WATER SAMPLE FIELD DATA SHEET

EMCON ASSOCIATES

PROJECT NO: 20143-014.002 SAMPLE ID: ESE-2

PURGED BY: M. Gallegos CLIENT NAME: PG&E

SAMPLED BY: ↓ LOCATION: Emeryville, CA

TYPE: Ground Water ✓ Surface Water ___ Treatment Effluent ___ Other ___

CASING DIAMETER (inches): 2 ✓ 3 ___ 4 ___ 4.5 ___ 6 ___ Other ___

CASING ELEVATION (feet/MSL):	N/R	VOLUME IN CASING (gal.):	3.27
DEPTH TO WATER (feet):	14.35	CALCULATED PURGE (gal.):	13.09
DEPTH OF WELL (feet):	34.4	ACTUAL PURGE VOL. (gal.):	13.5

DATE PURGED: 8-22-97 Start (2400 Hr) 1022 End (2400 Hr) 1034

DATE SAMPLED: ↓ Start (2400 Hr) 1045 End (2400 Hr) —

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25° C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (visual)
1024	3.5	6.58	634	67.8	BRN	Heavy
1028	7.0	6.53	628	66.7		
1031	10.5	6.50	626	66.3		
1034	13.5	6.49	623	66.1		

D. O. (ppm): NR ODOR: Moderate

COLOR (COBALT 0 - 500): N/R

TURBIDITY (NTU 0 - 200 or 0 - 1000): N/R

Field QC samples collected at this well: N/R

Parameters field filtered at this well: N/R

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
___ 2" Bladder Pump	___ Bailer (Teflon®)	___ 2" Bladder Pump	✓ Bailer (Teflon®)
___ Centrifugal Pump	✓ Bailer (PVC)	___ DDL Sampler	___ Bailer (Stainless Steel)
___ Submersible Pump	___ Bailer (Stainless Steel)	___ Dipper	___ Submersible Pump
___ Well Wizard™	___ Dedicated	___ Well Wizard™	___ Dedicated
Other: ___		Other: ___	

WELL INTEGRITY: OK LOCK #: Dolphin

REMARKS: All Samples taken

Meter Calibration: Date: 8/22/97 Time: ___ Meter Serial #: 9204 Temperature °F: ___

(EC 1000 ___ / ___) (DI ___) (pH 7 ___ / ___) (pH 10 ___ / ___) (pH 4 ___ / ___)

Location of previous calibration: ESE-1

Signature: [signature] Reviewed By: [signature] Page 2 of 4

Rev. 3, 2/94

WATER SAMPLE FIELD DATA SHEET

EMCON ASSOCIATES

PROJECT NO: 20143-014.002 SAMPLE ID: ESE-3

PURGED BY: M. Gallegos CLIENT NAME: PG&E

SAMPLED BY: ↓ LOCATION: Emeryville, CA.

TYPE: Ground Water X Surface Water ___ Treatment Effluent ___ Other ___

CASING DIAMETER (inches): 2 X 3 ___ 4 ___ 4.5 ___ 6 ___ Other ___

CASING ELEVATION (feet/MSL):	NR	VOLUME IN CASING (gal.):	3.32
DEPTH TO WATER (feet):	10.65	CALCULATED PURGE (gal.):	13.28
DEPTH OF WELL (feet):	31.0	ACTUAL PURGE VOL. (gal.):	13.5

DATE PURGED: 8-22-97 Start (2400 Hr) 1100 End (2400 Hr) 1112

DATE SAMPLED: ↓ Start (2400 Hr) 1120 End (2400 Hr) ___

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25° C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (visual)
1103	3.5	6.81	570	68.0	Brn	Heavy
1104	7.0	6.79	563	67.1		
1109	10.5	6.83	564	66.7		
1112	13.5	6.86	563	66.6	↓	↓

D. O. (ppm): NR ODOR: Musty

COLOR: NR (COBALT 0 - 500) TURBIDITY: NR (NTU 0 - 200 or 0 - 1000)

Field QC samples collected at this well: NR

Parameters field filtered at this well: NR

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
___ 2" Bladder Pump	___ Bailer (Teflon®)	___ 2" Bladder Pump	✓ Bailer (Teflon®)
___ Centrifugal Pump	✓ Bailer (PVC)	___ DDL Sampler	___ Bailer (Stainless Steel)
___ Submersible Pump	___ Bailer (Stainless Steel)	___ Dipper	___ Submersible Pump
___ Well Wizard™	___ Dedicated	___ Well Wizard™	___ Dedicated
Other: ___		Other: ___	

WELL INTEGRITY: OK LOCK #: 3210

REMARKS: All Samples taken

Meter Calibration: Date: 8/22/97 Time: ___ Meter Serial #: 9204 Temperature °F: ___

(EC 1000 ___ / ___) (DI ___) (pH 7 ___ / ___) (pH 10 ___ / ___) (pH 4 ___ / ___)

Location of previous calibration: ESE-1

Signature: [signature] Reviewed By: [signature] Page 3 of 4

Rev. 3.2/94

WATER SAMPLE FIELD DATA SHEET

EMCON ASSOCIATES

PROJECT NO: 2014.3.015.002 SAMPLE ID: ESE-4

PURGED BY: M. Gallegos CLIENT NAME: PG&E

SAMPLED BY: V LOCATION: Emeryville, CA

TYPE: Ground Water X Surface Water ___ Treatment Effluent ___ Other ___

CASING DIAMETER (inches): 2 X 3 ___ 4 ___ 4.5 ___ 6 ___ Other ___

CASING ELEVATION (feet/MSL): NA VOLUME IN CASING (gal.): ___

DEPTH TO WATER (feet): ___ CALCULATED PURGE (gal.): ___

DEPTH OF WELL (feet): ___ ACTUAL PURGE VOL. (gal.): ___

DATE PURGED: 7-22-97 Start (2400 Hr) — End (2400 Hr) —

DATE SAMPLED: — Start (2400 Hr) — End (2400 Hr) ___

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25° C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (visual)
	NO Samples taken Heavy			TEAFER	Area. Due	
	to construction.					

D. O. (ppm): ___ ODOR: ___ (COBALT 0 - 500) (NTU 0 - 200 or 0 - 1000)

Field QC samples collected at this well: ___

Parameters field filtered at this well: ___

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
___ 2" Bladder Pump	___ Bailer (Teflon®)	___ 2" Bladder Pump	___ Bailer (Teflon®)
___ Centrifugal Pump	___ Bailer (PVC)	___ QDL Sampler	___ Bailer (Stainless Steel)
___ Submersible Pump	___ Bailer (Stainless Steel)	___ Dipper	___ Submersible Pump
___ Well Wizard™	___ Dedicated	___ Well Wizard™	___ Dedicated
Other: ___		Other: ___	

WELL INTEGRITY: ___ LOCK #: ___

REMARKS: ___

Meter Calibration: Date: ___ Time: ___ Meter Serial #: ___ Temperature °F: ___

(EC 1000 ___ / ___) (DI ___) (pH 7 ___ / ___) (pH 10 ___ / ___) (pH 4 ___ / ___)

Location of previous calibration: ___

Signature: ___ Reviewed By: ___ Page 4 of 4

EMCON

GROUNDWATER SAMPLING AND ANALYSIS REQUEST FORM

PROJECT NAME: **PG&E-Emeryville**
4525 Hollis Street, Emeryville, CA
DATE SUBMITTED: **15-Aug-97**

SPECIAL INSTRUCTIONS / CONSIDERATIONS :
Quarterly Water Quality Monitoring - Third Month of the Quarter

Survey water levels prior to well purging and sampling.
Purge four casing volumes prior to sample collection
Purge and sample using bailers.
Drum purge water; use the drums supplied by PG&E
Deliver samples to Chromalabs upon completion.

Authorization: _____

Project No. : **20143-014.002**

Send Results To: **J. C. Isham**

Coordinator: **Steve Horton**

Well Locks:
PG&E

PG&E Project
Coordinator: **Mr. Fred Flint** Phone No.: **(510) 866-5808**
Site Contact: **Mr. Mel Byrd** Phone No.: **(510) 450-5740**

Well ID or Source	Casing Diameter (inches)	Casing Length (feet)	ANALYSES REQUESTED
ESE-1	2.0	30.6	**PCBs by EPA 8080** **BTEX by EPA 602** **TEPH as mineral oil by EPA 3510/8015**
ESE-2	2.0	34.3	
ESE-3	2.0	31.0	
ESE-4	2.0	31.6	
FB-1	NA	NA	**BTEX by EPA 602**
MW-4	2.0	14.7	**Water Level & Total Depth Only**

Laboratory and Lab QC Instructions:
Tier I QC; all samples are to be analyzed by Chromalab

APPENDIX B

CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

CHROMALAB, INC.

Environmental Services (SDB)

RECEIVED
SEP - 4 1997
EMCON/SACRAMENTO

August 29, 1997 *Submission #:* 9708252

EMCON ASSOCIATES-SACRAMENTO

Atten: J.C. Isham

Project: PGE-EMERYVILLE *Project#:* 20143-014.002
Received: August 22, 1997

re: One sample for TEPH analysis.
Method: *EPA 8015M*

Client Sample ID: **ESE-1**
Spl#: 144617 *Matrix:* WATER *Extracted:* August 28, 1997
Sampled: August 22, 1997 *Run#:* 8383 *Analyzed:* August 29, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MINERAL OIL	740	100	N.D.	122	1

Note: *Hydrocarbon reported does not match the pattern of our Mineral oil Standard. Quantitation for the above Analyte is based on the response factor of Diesel.*

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

August 29, 1997 *Submission #:* 9708252

EMCON ASSOCIATES-SACRAMENTO

Atten: J.C. Isham

Project: PGE-EMERYVILLE *Project#:* 20143-014.002
Received: August 22, 1997

re: One sample for TEPH analysis.
Method: *EPA 8015M*

Client Sample ID: **ESE-2**
Spl#: 144618 *Matrix:* WATER *Extracted:* August 28, 1997
Sampled: August 22, 1997 *Run#:* 8383 *Analyzed:* August 29, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MINERAL OIL	N.D.	100	N.D.	122	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel.

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

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(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

August 29, 1997 *Submission #:* 9708252

EMCON ASSOCIATES-SACRAMENTO

Atten: J.C. Isham

Project: PGE-EMERYVILLE *Project#:* 20143-014.002
Received: August 22, 1997

re: One sample for TEPH analysis.
Method: *EPA 8015M*

Client Sample ID: **ESE-3**
Spl#: 144619 *Matrix:* WATER *Extracted:* August 28, 1997
Sampled: August 22, 1997 *Run#:* 8383 *Analyzed:* August 29, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MINERAL OIL	N.D.	100	N.D.	122	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel.

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

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(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

August 29, 1997 *Submission #:* 9708252

EMCON ASSOCIATES-SACRAMENTO

Atten: J.C. Isham

Project: PGE-EMERYVILLE *Project#:* 20143-014.002
Received: August 22, 1997

re: One sample for Polychlorinated Biphenyls (PCBs) analysis.
Method: *SW846 Method 8080A Nov 1990*

Client Sample ID: **ESE-1**
Spl#: 144617 *Matrix:* WATER *Extracted:* August 29, 1997
Sampled: August 22, 1997 *Run#:* 8403 *Analyzed:* August 29, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
AROCLOR 1016	N.D.	0.50	N.D.	95.5	1
AROCLOR 1221	N.D.	0.50	N.D.	--	1
AROCLOR 1232	N.D.	0.50	N.D.	--	1
AROCLOR 1242	N.D.	0.50	N.D.	--	1
AROCLOR 1248	N.D.	0.50	N.D.	--	1
AROCLOR 1254	N.D.	0.50	N.D.	--	1
AROCLOR 1260	N.D.	0.50	N.D.	84.5	1

Dennis Mayugba
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

August 29, 1997 *Submission #:* 9708252

EMCON ASSOCIATES-SACRAMENTO

Atten: J.C. Isham

Project: PGE-EMERYVILLE *Project#:* 20143-014.002
Received: August 22, 1997

re: One sample for Polychlorinated Biphenyls (PCBs) analysis.
Method: *SW846 Method 8080A Nov 1990*

Client Sample ID: **ESE-2**
Spl#: 144618 *Matrix:* WATER *Extracted:* August 29, 1997
Sampled: August 22, 1997 *Run#:* 8403 *Analyzed:* August 29, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
AROCLOR 1016	N.D.	0.50	N.D.	95.5	1
AROCLOR 1221	N.D.	0.50	N.D.	--	1
AROCLOR 1232	N.D.	0.50	N.D.	--	1
AROCLOR 1242	N.D.	0.50	N.D.	--	1
AROCLOR 1248	N.D.	0.50	N.D.	--	1
AROCLOR 1254	N.D.	0.50	N.D.	--	1
AROCLOR 1260	N.D.	0.50	N.D.	84.5	1

Dennis Mayugba
Chemist

Alex Tam
Semivolatiles Supervisor

916-928-3341 GC 08/29

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

8051 0:0C0405 DENNIS 16:50

CHROMALAB, INC.

Environmental Services (SDB)

August 29, 1997 *Submission #:* 9708252

EMCON ASSOCIATES-SACRAMENTO

Atten: J.C. Isham

Project: PGE-EMERYVILLE *Project#:* 20143-014.002
Received: August 22, 1997

re: One sample for Polychlorinated Biphenyls (PCBs) analysis.
Method: *SW846 Method 8080A Nov 1990*

Client Sample ID: **ESE-3**
Spl#: 144619 *Matrix:* WATER *Extracted:* August 29, 1997
Sampled: August 22, 1997 *Run#:* 8403 *Analyzed:* August 29, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
AROCLOR 1016	N.D.	0.50	N.D.	95.5	1
AROCLOR 1221	N.D.	0.50	N.D.	--	1
AROCLOR 1232	N.D.	0.50	N.D.	--	1
AROCLOR 1242	N.D.	0.50	N.D.	--	1
AROCLOR 1248	N.D.	0.50	N.D.	--	1
AROCLOR 1254	N.D.	0.50	N.D.	--	1
AROCLOR 1260	N.D.	0.50	N.D.	84.5	1

Dennis Mayugba
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

August 29, 1997 *Submission #:* 9708252

EMCON ASSOCIATES-SACRAMENTO

Atten: J.C. Isham

Project: PGE-EMERYVILLE *Project#:* 20143-014.002
Received: August 22, 1997

re: One sample for BTEX analysis.
Method: SW846 8020A Nov 1990

Client Sample ID: **ESE-1**
Spl#: 144617 *Matrix:* WATER
Sampled: August 22, 1997 *Run#:* 8339 *Analyzed:* August 25, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
BENZENE	N.D.	0.50	N.D.	108	1
TOLUENE	N.D.	0.50	N.D.	107	1
ETHYL BENZENE	N.D.	0.50	N.D.	104	1
XYLENES	N.D.	0.50	N.D.	41	1

Marianne Alexander
Gas/BTEX Supervisor

Chip Poalinelli
Operations Manager

916-928-3341

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

August 29, 1997 *Submission #:* 9708252

EMCON ASSOCIATES-SACRAMENTO

Atten: J.C. Isham

Project: PGE-EMERYVILLE *Project#:* 20143-014.002
Received: August 22, 1997

re: One sample for BTEX analysis.
Method: SW846 8020A Nov 1990

Client Sample ID: **ESE-2**
Spl#: 144618 *Matrix:* WATER
Sampled: August 22, 1997 *Run#:* 8339 *Analyzed:* August 25, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
BENZENE	N.D.	0.50	N.D.	108	1
TOLUENE	N.D.	0.50	N.D.	107	1
ETHYL BENZENE	0.51	0.50	N.D.	104	1
XYLENES	N.D.	0.50	N.D.	41	1

Marianne Alexander
Gas/BTEX Supervisor

Chip Poalinelli
Operations Manager

916-928-3341

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

August 29, 1997 *Submission #:* 9708252

EMCON ASSOCIATES-SACRAMENTO

Atten: J.C. Isham

Project: PGE-EMERYVILLE *Project#:* 20143-014.002
Received: August 22, 1997

re: One sample for BTEX analysis.
Method: SW846 8020A Nov 1990

Client Sample ID: **ESE-3**
Spl#: 144619 *Matrix:* WATER
Sampled: August 22, 1997 *Run#:* 8339 *Analyzed:* August 25, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
BENZENE	N.D.	0.50	N.D.	108	1
TOLUENE	N.D.	0.50	N.D.	107	1
ETHYL BENZENE	N.D.	0.50	N.D.	104	1
XYLENES	N.D.	0.50	N.D.	41	1

Marianne Alexander
Gas/BTEX Supervisor

Chip Poalinelli
Operations Manager

916-928-3341

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

August 29, 1997 *Submission #:* 9708252

EMCON ASSOCIATES-SACRAMENTO

Atten: J.C. Isham

Project: PGE-EMERYVILLE *Project#:* 20143-014.002
Received: August 22, 1997

re: One sample for BTEX analysis.
Method: SW846 8020A Nov 1990

Client Sample ID: **FB-1**
Spl#: 144620 *Matrix:* WATER
Sampled: August 22, 1997 *Run#:* 8339 *Analyzed:* August 25, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
BENZENE	N.D.	0.50	N.D.	108	1
TOLUENE	N.D.	0.50	N.D.	107	1
ETHYL BENZENE	N.D.	0.50	N.D.	104	1
XYLENES	N.D.	0.50	N.D.	41	1

Marianne Alexander
Gas/BTEX Supervisor

Chip Poalinelli
Operations Manager

916-928-3341

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

EMCON - San Jose

CHAIN OF CUSTODY /LABORATORY ANALYSIS REQUEST FORM

1921 Ringwood Avenue, San Jose, CA 95131 (408) 453-7300 FAX (408) 437-9526

Date 8-22-97 Page 1 of 1

Project Name: Pacific Gas & Electric - Emeryville
Project Number: 20143-014.002
Project Manager: J.C. Isham

Company/Address: EMCON
1433 North Market Boulevard
Sacramento, CA 95834-1943
Phone: (916) 928-3300
(916) 928-3341 **(fax)**
Sampler's Signature: Manuel Gallegos

SUBM #: 9708252 REP: GC
CLIENT: EMCON
DUE: 08/29/97
REF #: 35163

Sample I.D.	Date	Time	LAB I.D.	Sample Matrix	Number of Containers	BTEX EPA 602	PCBs EPA 8080	TEPH as mineral oil by EPA 3510/8015	REMARKS
						Analysis Requested			
						HCl	NP	NP	Preservations
ESE-1	8/22/97	1005		H2O	6	X	X	X	
ESE-2		1045			6	X	X	X	
ESE-3		1120			6	X	X	X	
ESE-4		no	samples			calcm			
FD-1	↓	1015		↓		X			

Relinquished By	Received By
Signature: Manuel Gallegos	Signature
Printed Name: EMCON	Printed Name
Firm	Firm
Date/Time: 8/22/97	Date/Time
Relinquished By	Received By
Signature	Signature: Samantha Antone
Printed Name	Printed Name: Chromalab, Inc.
Firm	Firm
Date/Time	Date/Time: 8/22/97 @ 1410

TURNAROUND REQUIREMENTS
___ 24 hr ___ 48 hr
X Standard
___ Provide Verbal Preliminary Results
X Provide FAX Preliminary Results
Requested Report Date ____

REPORT REQUIREMENTS
X I. Routine Report
___ II. Report (includes DUP, MS MSD, as required, may be charged as samples)
___ III. Data Validation Report (includes All Raw Data)
___ RWQCB (MDLs/PQLs/TRACE#)

INVOICE INFORMATION
P.O. # ____
Bill to: ____

SAMPLE RECEIPT
Shipping VIA: ____
Shipping #: ____
Condition: ____
Lab No: ____

Special Instructions/Comments:

Please fax *chain-of-custody* to Fred Flint *prior* to conducting analysis; please fax *analytical results* to Fred Flint *after* conducting analysis (fax # 510-866-5681)

Send results to J.C. Isham at Emcon-Sacramento **(please FAX preliminary results)**
Use Dielectric standard previously supplied to Chromalab for TEPH Analysis

CHROMALAB, INC.

Environmental Service (SDB)

Sample Receipt Checklist

Client Name: **EMCON ASSOCIATES-SACRAMENTO** Date/Time Received: **08/22/97** | 1410

Reference/Submis: **35163** | **9708252** Received by: SA

Checklist completed by: Chris Romilly 8/25/97 Reviewed by: MN 8/25/97
Signature Date Initials | Date

Matrix: H2O Carrier name: (Client) - C/L _____

Shipping container/cooler in good condition?	Yes ✓	No ___	Not Present ___
Custody seals intact on shipping container/cooler?	Yes ___	No ___	Not Present ✓
Custody seals intact on sample bottles?	Yes ___	No ___	Not Present ✓
Chain of custody present?	Yes ✓	No ___	
Chain of custody signed when relinquished and received?	Yes ✓	No ___	
Chain of custody agrees with sample labels?	Yes ✓	No ___	
Samples in proper container/bottle?	Yes ✓	No ___	
Sample containers intact?	Yes ✓	No ___	
Sufficient sample volume for indicated test?	Yes ✓	No ___	
All samples received within holding time?	Yes ✓	No ___	
Container/Temp Blank temperature in compliance? Temp: 6.9 °C	Yes ✓	No ___	
Water - VOA vials have zero headspace? No VOA vials submitted ___	Yes ___	No ___	
Water - pH acceptable upon receipt? Yes Adjusted? ___ Checked by CR (chemist for VOAs)			

Any No and/or NA (not applicable) response must be detailed in the comments section below.

==========

Client contacted: _____ **Date contacted:** _____ **Person contacted:** _____

Contacted by: _____ **Regarding:** _____

Comments: _____

_____

_____

_____

Corrective Action: _____

_____

_____

_____