



CSS ENVIRONMENTAL SERVICES, INC.  
Managing Cost, Scope and Schedule  
95 Belvedere Street, Suite 2  
San Rafael, CA 94901  
Telephone: (415) 457-9551  
Facsimile: (415) 457-9261

MAP 22 2001

### LETTER OF TRANSMITTAL

**DATE:** March 15, 2001

**TO:** Mr. John Robinson  
Pacific Gas & Electric Company  
4930 Coliseum Way  
Oakland, CA 94601

**FROM:** Aaron N. Stessman, P.E. 

**RE:** Semi-annual Groundwater Monitoring Report  
CSS Project No. 6118

Dear Mr. Robinson,

For your records enclosed please find one copy of the Semi-Annual Groundwater Monitoring Report for 4930 Coliseum Way in Oakland, California.

**CC:** Mr. Barney Chan  
Alameda County Health Agency  
Division of Environmental Protection  
1131 Harbor Bay Parkway, 2nd Floor  
Alameda, CA 94502

Mr. Chuck Hedley  
California Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

Please call me if you have questions at (415) 457-9551.

**SEMI-ANNUAL GROUNDWATER  
MONITORING REPORT**

**PACIFIC GAS & ELECTRIC  
GENERAL CONSTRUCTION YARD  
4930 COLISEUM WAY  
OAKLAND, CA 94601**

**March 15, 2001**

**CSS Project No. 6118**

*Prepared for*

**PACIFIC GAS & ELECTRIC COMPANY  
4930 Coliseum Way  
Oakland, California 94601**

*Prepared by*

**CSS ENVIRONMENTAL SERVICES, INC.  
95 Belvedere Street, Suite 2  
San Rafael, California 94901**

C S S

CSS ENVIRONMENTAL SERVICES, INC.

## SEMI-ANNUAL GROUNDWATER MONITORING REPORT

PACIFIC GAS & ELECTRIC  
GENERAL CONSTRUCTION YARD  
4930 COLISEUM WAY  
OAKLAND, CA 94601

*Prepared for*

PACIFIC GAS & ELECTRIC COMPANY  
4930 Coliseum Way  
Oakland, California 94601

*Prepared by*

CSS ENVIRONMENTAL SERVICES, INC.  
95 Belvedere Street, Suite 2  
San Rafael, California 94901

March 2001



Aaron N. Stessman, PE  
Principal Engineer



**TABLE OF CONTENTS**

<b>SECTION</b>	<b>PAGE</b>
<b>1.0 BACKGROUND .....</b>	<b>1</b>
<b>2.0 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES .....</b>	<b>3</b>
<b>3.0 ANALYTICAL RESULTS .....</b>	<b>5</b>
<b>3.1 PETROLEUM HYDROCARBONS.....</b>	<b>5</b>
<b>3.2 LEAD .....</b>	<b>6</b>
<b>3.3 VOLATILE ORGANIC COMPOUNDS .....</b>	<b>7</b>
<b>4.0 GROUNDWATER FLOW DIRECTION .....</b>	<b>8</b>
<b>5.0 CAP INSPECTION .....</b>	<b>9</b>
<b>6.0 CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>10</b>
<b>6.1 CONCLUSIONS.....</b>	<b>10</b>
<b>6.2 RECOMMENDATIONS .....</b>	<b>11</b>

## **APPENDICES**

- |                   |   |
|-------------------|---|
| <b>APPENDIX A</b> | Sample Collection Records<br>Certified Laboratory Results |
| <b>APPENDIX B</b> | Historical Monitoring Data                                |
| <b>APPENDIX C</b> | Figures   |

## 1.0 BACKGROUND

This report presents the results of semiannual groundwater monitoring and sampling completed in the fourth quarter of 2000 at the PG&E Distribution and Construction Yard at 4930 Coliseum Way in Oakland, California. A vicinity map is included as Figure 1. This report was completed in accordance to the directive issued by the Alameda County Health Care Services Agency (ACHCSA) and a PG&E letter to Alameda County dated April 12, 1993. This report discusses the November 2000 monitoring and sampling event and summarizes the results from groundwater monitoring and sampling performed at the site between January 1990 and the present. The groundwater monitoring program involves the following activities: measuring groundwater elevations; collecting groundwater samples from shallow wells on the site; and performing analyses of the samples to determine the distribution of selected fuel compounds, solvents, and lead in the uppermost water bearing zone, beneath the northern portion of the yard. This area includes the former locations of five underground storage tanks and one above ground natural gas storage tank. Figure 2 shows the site plan for the subject property.

In January 1988, all of the site's underground storage tanks and associated piping within the PG&E property lines were removed. Analysis of their contents revealed that of the four tanks formerly located in a cluster at the north corner of the yard, two contained mineral spirits and two contained heavy oils. A concrete sump was located approximately 50 feet northeast of the tank cluster, near the location of a former welding shop. A fifth tank was formerly located near the west corner of the yard and contained diesel fuel. A soil sample collected below this tank indicated a concentration for diesel below the detection limit of 10 mg/kg. Following the tank removal, a subsurface investigation showed that soils immediately adjacent to the former diesel tank were not adversely impacted.

A number of soil samples collected near the former tank cluster, sump and shop location were found to contain Total Petroleum Hydrocarbons such as Diesel (TPH-D) at concentrations up to 3,900 mg/kg and Oil and Grease (O&G) at concentrations up to 1,000 mg/kg. These results were reported in the July 1988 report "Underground Tanks Investigation" by PG&E's Technical and Ecological Services Division.

In November and December 1991, approximately 2,000 cubic yards of soil was excavated as a remedial action for the petroleum hydrocarbons identified in the soil. Soil was excavated to the depth of groundwater, approximately 8 to 8 ½ feet below ground surface at the time, and replaced with clean, compacted backfill. The backfill below approximately 7 feet consisted of drain rock while backfill above 7 feet consisted of Class II aggregate base. The northwest and northeast excavation boundaries reached the approximate PG&E property lines. During the remedial excavation, confirmatory samples were taken along the sidewalls and bottom of the excavation to confirm that all the contaminated soil with concentrations above the regulatory agency approved cleanup target levels was removed. The cleanup targets for gasoline (TPH-G) and diesel (TPH-D) were 10 mg/kg and 100 mg/kg, respectively. The cleanup target for O&G was 1,000 mg/kg, and for Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) compounds was 5 µg/kg (total BTEX). This work was described in an EARTH TECHNOLOGY CORPORATION (formerly Aqua Resources, Inc.) document "Site Remediation and Closure Report ... Former Tank Cluster Area" dated February 1992.

The samples collected along the PG&E property lines were above cleanup target levels, while each of the remaining confirmatory samples was below the cleanup target levels. The samples collected along the northeastern property line were above cleanup targets primarily due to TPH-D and O&G concentrations. The soils in this excavation wall contained visible tar and heavy oil, and also two pipes containing a similar petroleum product. Analytical testing of the product found in the pipes indicated TPH-D at 7,000 mg/kg and did not indicate VOCs above the method detection limit. The samples on the northwestern property line were above cleanup target levels for one or more of TPH-G, TPH-D, O&G, and BTEX.

The conclusions of the February 1992 closure report suggested that offsite sources of petroleum hydrocarbons may exist in both the northeast and northwest directions, and requested regulatory agency input in initiating an investigation of these potential sources. Quarterly groundwater monitoring and sampling for a period of one year was recommended in the 1992 report for wells OW-1, OW-4, OW-6 and OW-7.

In September and October of 1992, a containment mitigation cap was constructed over the surface soils in an area south of the hydrocarbon remediation area. These soils are contaminated with lead, believed to originate from lead-containing paint chips generated from sandblasting of a large above-ground natural gas storage tank. The tank was removed in May 1990, and the soils were found contaminated with total and soluble lead above California Code of Regulations (CCR) levels for hazardous wastes. The ACHCSA and the Regional Water Quality Control Board (RWQCB) approved capping as the selected remedial option for this area. As part of the remedial option the County agreed upon continued groundwater monitoring, sampling for lead and periodic inspection of the cap. Following containment capping, the remaining open ground at the site was covered with asphalt concrete.

In February 1993, well OW-8 was installed in the southern area of the yard in the vicinity of the former above-ground storage tank (AST). A maximum lead concentration of 27 µg/L (April 1993) was reported in samples collected from OW-8, which is below the state Maximum Contaminant Level (MCL) of 50 µg/L for drinking water. Wells OW-2 and OW-5 are located in the vicinity of the former AST and are also being monitored for lead. Lead has not been detected above the State MCL in any monitoring events for wells OW-2, OW-5 and OW-8.

Based on lead levels consistently falling below the MCL for drinking water, the lead regulatory agency, ACHCSA, issued a letter (Appendix C) on July 14, 1994 reducing the required lead sampling frequency from quarterly to semi-annually. Similarly, petroleum hydrocarbon and VOC monitoring is presently performed semi-annually for specific wells.

## 2.0 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES

Four of the five originally installed monitoring wells remain in existence at the site. Monitoring well OW-3 was destroyed during the remedial excavations performed in November 1991 in the northern corner of the yard. Two new monitoring wells, OW-6 and OW-7, were installed on December 19, 1991. OW-6 was placed in the vicinity of OW-3 to act as a replacement, and OW-7 was installed at the northeastern end of the remediation area to monitor upgradient contamination of the shallow groundwater underlying the site. Both wells penetrate the clean, compacted backfill placed in the previously excavated remediation area. Monitoring well OW-8 was installed in February 1993 to monitor possible lead contamination in the groundwater, downgradient of the former AST. The locations of the new wells were approved by the ACHCSA.

On November 28, 2000, groundwater samples were collected by CSS Environmental Services, Inc. (CSS) personnel from monitoring wells OW-1, OW-2, OW-5, OW-6, OW-7, and OW-8. Prior to sampling, three casing volumes of groundwater were purged with a bailer from each well to ensure the collection of formation water. The parameters' temperature, pH and conductivity were measured. Groundwater samples were then collected and properly stored for transportation to a State of California certified laboratory for analysis. This report presents the results of the November 28, 2000 sampling event.

The groundwater samples collected from each well were selectively analyzed by Chromalab, Inc. Environmental Services (SDB), Pleasanton, California for TPH-D (LUFT Manual, October 1989), TPH-G (LUFT Manual, October 1989), BTEX (EPA method 8020), purgeable halocarbons compounds (EPA method 8010), lead (EPA method 6010A), and MTBE (EPA method 8260A) according to the analyses.

Table 2.1 presents the current monitoring schedule with appropriate sample analyses. This schedule has been adopted with approval from the ACHCSA as provided in their letter dated July 14, 1994.

**Table 2.1 Well Monitoring Schedule and Analyses**

	TPH-D	TPH-G BTEX	MTBE by 8260	EPA 8010 (VOCs)	Lead	Groundwater Elevation
OW - 1	S	S		S		S
OW - 2					S	S
OW - 4						
OW - 5	S	S		S	S	S
OW - 6	S	S		S		S
OW - 7	S	S		S		S
OW - 8					S	S

S = Semiannual monitoring

Certified laboratory results are presented in Appendix A along with chain-of-custody documentation. A table of the historical results of the laboratory analyses is included in Appendix B.

### 3.0 ANALYTICAL RESULTS

#### 3.1 PETROLEUM HYDROCARBONS

Table 3.1 summarizes the analytical results for petroleum hydrocarbons detected in the groundwater samples collected on November 28, 2000. TPH-D was detected in two out of the four monitoring wells sampled for TPH-D and the highest concentration was observed in well OW-7. TPH-G was detected in two out of the four monitoring wells sampled for TPH-G. The highest concentration of TPH-G was observed in monitoring well OW-7.

**Table 3.1 Petroleum Hydrocarbons in Groundwater, in mg/L**

Well	TPH-D	TPH-G
OW - 1	0.250	0.620
OW - 5	ND	ND
OW - 6	ND	ND
OW - 7	0.370	1.100

Notes:

- 1) ND = Not Detected at or above the method Reporting Limits (RL)
- 2) TPH-D = Extractable Petroleum Hydrocarbons, Diesel Range, LUFT Manual, October 1989; RL = 0.05 mg/L.
- 3) TPH-G = Total Petroleum Hydrocarbons by California DHS Method LUFT Manual, October 1989; RL = 0.05 mg/L.
- 4) NA = Not Analyzed.

Figures 3.1 and 3.2 illustrate the historical concentrations of TPH-D in the monitored wells. The data from monitoring wells OW-3 and OW-6 are combined since OW-6 was installed to replace OW-3 following its destruction.

Figures 3.1 and 3.2 show that TPH-D concentrations were generally higher around the time of, or soon after, the remedial excavation in November 1991 in the wells in the remediation vicinity: OW-4, OW-6, and OW-7. Compared to the previous sampling event (June 2000), this quarter's results show a decrease in TPH-D concentrations in all wells except OW-7, which is slightly higher than the previous sampling. These are at or near their lowest TPH-D concentrations to date. Well OW-4 has been inaccessible for sampling over the past five sampling events due to the presence of an overlying storage container. Well OW-6 had no detected TPH-D for the first time since the November 1991 remedial excavation.

It was noted in the February 1992 tank cluster area remediation report that there is an apparent off-site source of contamination upgradient of the PG&E yard. The persistence of moderate TPH following remediation in this area is believed to be the result of this upgradient contamination.

Well OW-7's current TPH-G concentration of 1,100 µg/L is nearly double the previous sampling result. Figures 3.3 and 3.4 illustrate the historical concentrations of TPH-G. Between January 1991 and March 1992 the analyses were not performed. Monitoring of TPH-G concentrations in OW-2 is no longer performed due to non-detections in this well. TPH-G has been consistently below 500 µg/L in all wells except upgradient wells OW-1, and OW-7. Historically, OW-7 has had concentrations ranging from 650 to 1,800 µg/L. The current TPH-G concentration for OW-1 is 620 µg/L. Relative to the previous sampling results, TPH-G concentrations decreased in all wells except OW-7. Current sampling results were non-detect for wells OW-5 and OW-6.

### 3.2 LEAD

Table 3.2 presents the results of this quarter's groundwater analyses for lead. The current MCL set by the US EPA for lead in drinking water is 0 µg/L, while the MCL observed by the state water treatment systems is 15 µg/L. Samples were collected and analyzed for dissolved lead (filtered) in November of 2000. During this quarter's event, lead was not detected above the 5 µg/L reporting limit in the monitoring wells that were sampled for lead. Historically, all samples show concentrations below the previous 50 µg/L drinking water MCL. The highest historical concentration of lead was 27 µg/L in OW-8, sampled in April 1993.

**Table 3.2 Lead in Groundwater, in µg/L**

Well Number	State Water Treatment	Reporting Limit	Dissolved Lead
OW-2	15	5.0	ND
OW-5	15	5.0	ND
OW-8	15	5.0	ND

Notes:

MCL = State Water Treatment Maximum Contaminant Level for drinking water.

ND = Not Detected at or above the method Reporting Limits (RL)

NA = Not Analyzed

Dissolved Lead analyses performed by EPA Method 6010A

### 3.3 VOLATILE ORGANIC COMPOUNDS

Historical results of VOC monitoring are presented in Appendix B. Tables 3.5 and 3.6 present the recent analytical results for VOCs in groundwater. The state MCLs for drinking water were exceeded for:

- 1,4-Dichlorobenzene (1,4-DCB) in monitoring wells OW-6 and OW-7 at concentrations of 10 µg/L and 470 µg/L respectively;
- Chlorobenzene in well OW-7 at a concentration of 39 µg/L;
- Benzene in well OW-5 at a concentration of 10 µg/L.

VOCs detected at concentrations below their MCLs or where no MCL exists include:

- 1,1-Dichloroethane in wells OW-5 and OW-6;
- Trichloroethene in well OW-5;
- 1,4-Dichlorobenzene in well OW-5;
- 1,3-Dichlorobenzene (1,3-DCB) in wells OW-6 and OW-7;
- 1,2-Dichlorobenzene (1,2-DCB) in well OW-7;
- Benzene in well OW-7.

Figures 3.5 and 3.6 show the historical concentrations of total VOCs in the on-site monitoring wells. Figure 3.5 shows the concentrations of total VOCs in wells OW-1, OW-2 and OW-4. Of these wells, The only VOC monitoring performed presently is for BTEX in OW-1.

Figure 3.6 shows the concentrations of total VOCs in wells OW-5, OW-6, and OW-7, located at the upgradient edges of the site. The total VOC concentrations detected this quarter in wells OW-5, OW-6, and OW-7 were 14.35 µg/L, 15.0 µg/L, and 888.8 µg/L, respectively. Total VOC concentrations relative to the previous sampling event rose for OW-5 and OW-7; concentrations decreased slightly for OW-6. These three wells lie within ten feet of the northeast and/or northwest property lines of the site. Groundwater elevation monitoring consistently indicates that the groundwater flow direction is from the north or northeast from neighboring properties onto the PG&E site. This demonstrates that VOCs may be migrating onto the PG&E site from an upgradient source.

#### 4.0 GROUNDWATER FLOW DIRECTION

Water level measurements in the site monitoring wells were collected on November 28, 2000, prior to groundwater sampling. Groundwater elevations are shown in relation to a site specific coordinate system reported in previous reports. The top of casing (TOC) elevations for each of the wells are based upon an assumed TOC elevation of 10 feet at OW-1.

The groundwater elevations measured on November 28, 2000 and the resulting gradient direction are presented in Figure 4.1. Historical groundwater elevations along with TOC elevations for each well are presented as a graph in Figure 4.2. The groundwater flow direction was calculated from groundwater elevations in OW-1, OW-2, and OW-7, and indicates the local groundwater gradient on this date was 0.010 ft/ft to the south. The flow direction is consistent with those observed since monitoring began in 1988. The gradient value is slightly higher than that normally observed. The lead mitigation cap now limits direct precipitative recharge in the area between wells OW-2 and OW-5, and OW-8. The majority of the remaining site area has also been paved.

## 5.0 CAP INSPECTION

The site's asphaltic concrete cap was inspected by Aaron N. Stessman, PE on November 11, 2000. The Condition of the asphalt was good, and no repaving is recommended. It is recommended that the line demarcating the edge of the cap be repainted and that weeds be sprayed or removed to prevent their potential for damage to the cap.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

### 6.1 CONCLUSIONS

The following conclusions are made based upon the results of analyses performed on groundwater samples collected on November 28, 2000 from monitoring wells OW-1, OW-2, OW-5, OW-6, OW-7 and OW-8, and from prior semi-annual sampling results.

- The groundwater beneath the site appears to flow to the south, consistent with the historical flow direction range of south to southwest. The groundwater gradient of 0.010 ft/ft is slightly higher than that normally observed.
- TPH-D was detected in wells OW-1 and OW-7 above the reporting limit of 50 µg/L, however the concentrations are at or near their lowest concentrations to date. The highest concentration was found in well OW-7 at 370 µg/L. Moderate TPH-D concentrations in groundwater have persisted in well OW-7 located in the northeastern portion of the property and OW-1 located near the former diesel UST. Well OW-1's TPH-D concentration of 250 µg/L is the lowest reported since 1991. No TPH-D was detected in OW-6 for the first time since 1991 soil remediation in its vicinity. Since remedial action had removed known sources of contaminants within the site, the presence of TPH-D in OW-7 is likely to be caused by upgradient, off-site source. TPH-D in groundwater has no regulatory action limits but is being assessed on a case-by-case basis.
- Monitoring wells OW-1, and OW-7 had TPH-G concentrations of 620 and 1,100 µg/L, respectively. TPH-G was not detected in well OW-5 or OW-6. Well OW-7 continues to have the highest concentration of TPH-G. The presence of TPH-G is likely from an upgradient, off-site source.
- Soluble lead concentrations were not detected in monitoring wells OW-2, OW-5 and OW-8.
- Wells OW-5, OW-6 and OW-7 lie at the upgradient portion of the site and historically have had the highest concentrations of TPH-G and VOCs. The total VOC concentration is particularly elevated in OW-7, averaging near 1,000 µg/L. This indicates an upgradient, off-site source of fuel and solvent contamination located north of the subject site.

- The following VOC's were detected above their MCL:
  - 1,4-Dichlorobenzene (1,4-DCB) in monitoring wells OW-6 and OW-7;
  - Chlorobenzene in well OW-7;
  - Benzene in well OW-5.
  
- The following detected VOCs were below their MCL or where no MCL exists:
  - 1,1-Dichloroethane in wells OW-5 and OW-6;
  - Trichloroethene in well OW-5;
  - 1,4-Dichlorobenzene in well OW-5;
  - 1,3-Dichlorobenzene (1,3-DCB) in wells OW-6 and OW-7;
  - 1,2-Dichlorobenzene (1,2-DCB) in well OW-7;
  - Benzene in well OW-7.

## **6.2 RECOMMENDATIONS**

- Continue monitoring in conformance with the revised ACHCSA schedule.
- An unidentified upgradient source of TPH-D, TPH-G and VOCs north of the subject property is clearly indicated by the groundwater monitoring data. Based on this finding it is recommended that PG&E enter into discussions with the involved regulatory agencies to investigate and pursue those responsible for the groundwater contaminants entering the PG&E property.
- It is recommended that the line demarcating the edge of the cap be repainted and that weeds be sprayed or removed to prevent their potential for damage to the cap.

**C S S**

CSS ENVIRONMENTAL SERVICES, INC.

## ***APPENDIX A***

**Sample Collection Records  
Certified Laboratory Results**

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8010

Attn.: Aaron Stessman

Prep Method: 5030

## Halogenated Volatile Organic Compounds

Sample ID:	OW-5	Lab Sample ID:	2000-12-0008-003
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 15:00	Extracted:	12/05/2000 23:04
Matrix:	Water	QC-Batch:	2000/12/05-01.25

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	12/05/2000 23:04	
Vinyl chloride	ND	0.50	ug/L	1.00	12/05/2000 23:04	
Chloroethane	ND	0.50	ug/L	1.00	12/05/2000 23:04	
Trichlorodifluoromethane	ND	0.50	ug/L	1.00	12/05/2000 23:04	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	12/05/2000 23:04	
Methylene chloride	ND	5.0	ug/L	1.00	12/05/2000 23:04	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	12/05/2000 23:04	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	12/05/2000 23:04	
1,1-Dichloroethane	2.8	0.50	ug/L	1.00	12/05/2000 23:04	
Chloroform	ND	0.50	ug/L	1.00	12/05/2000 23:04	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	12/05/2000 23:04	
Carbon tetrachloride	ND	0.50	ug/L	1.00	12/05/2000 23:04	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	12/05/2000 23:04	
Trichloroethene	0.55	0.50	ug/L	1.00	12/05/2000 23:04	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	12/05/2000 23:04	
Bromodichloromethane	ND	0.50	ug/L	1.00	12/05/2000 23:04	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	12/05/2000 23:04	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	12/05/2000 23:04	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	12/05/2000 23:04	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	12/05/2000 23:04	
Tetrachloroethene	ND	0.50	ug/L	1.00	12/05/2000 23:04	
Dibromochloromethane	ND	0.50	ug/L	1.00	12/05/2000 23:04	
Chlorobenzene	ND	0.50	ug/L	1.00	12/05/2000 23:04	
Bromoform	ND	2.0	ug/L	1.00	12/05/2000 23:04	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	12/05/2000 23:04	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	12/05/2000 23:04	
1,4-Dichlorobenzene	1.0	0.50	ug/L	1.00	12/05/2000 23:04	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	12/05/2000 23:04	
Trichlorotrifluoroethane	ND	2.0	ug/L	1.00	12/05/2000 23:04	
Chloromethane	ND	1.0	ug/L	1.00	12/05/2000 23:04	
Bromomethane	ND	1.0	ug/L	1.00	12/05/2000 23:04	
<b>Surrogate(s)</b>						
1-Chloro-2-fluorobenzene	93.0	50-150	%	1.00	12/05/2000 23:04	

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8010

Attn.: Aaron Stessman

Prep Method: 5030

## Halogenated Volatile Organic Compounds

Sample ID:	OW-6	Lab Sample ID:	2000-12-0008-004
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 16:45	Extracted:	12/04/2000 21:54
Matrix:	Water	QC-Batch:	2000/12/04-01.26

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	12/04/2000 21:54	
Vinyl chloride	ND	0.50	ug/L	1.00	12/04/2000 21:54	
Chloroethane	ND	0.50	ug/L	1.00	12/04/2000 21:54	
Trichlorodifluoromethane	ND	0.50	ug/L	1.00	12/04/2000 21:54	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	12/04/2000 21:54	
Methylene chloride	ND	5.0	ug/L	1.00	12/04/2000 21:54	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	12/04/2000 21:54	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	12/04/2000 21:54	
1,1-Dichloroethane	2.3	0.50	ug/L	1.00	12/04/2000 21:54	
Chloroform	ND	0.50	ug/L	1.00	12/04/2000 21:54	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	12/04/2000 21:54	
Carbon tetrachloride	ND	0.50	ug/L	1.00	12/04/2000 21:54	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	12/04/2000 21:54	
Trichloroethene	ND	0.50	ug/L	1.00	12/04/2000 21:54	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	12/04/2000 21:54	
Bromodichloromethane	ND	0.50	ug/L	1.00	12/04/2000 21:54	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	12/04/2000 21:54	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	12/04/2000 21:54	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	12/04/2000 21:54	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	12/04/2000 21:54	
Tetrachloroethene	ND	0.50	ug/L	1.00	12/04/2000 21:54	
Dibromochloromethane	ND	0.50	ug/L	1.00	12/04/2000 21:54	
Chlorobenzene	ND	0.50	ug/L	1.00	12/04/2000 21:54	
Bromoform	ND	2.0	ug/L	1.00	12/04/2000 21:54	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	12/04/2000 21:54	
1,3-Dichlorobenzene	2.7	0.50	ug/L	1.00	12/04/2000 21:54	
1,4-Dichlorobenzene	10	0.50	ug/L	1.00	12/04/2000 21:54	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	12/04/2000 21:54	
Trichlorotrifluoroethane	ND	2.0	ug/L	1.00	12/04/2000 21:54	
Chloromethane	ND	1.0	ug/L	1.00	12/04/2000 21:54	
Bromomethane	ND	1.0	ug/L	1.00	12/04/2000 21:54	
<b>Surrogate(s)</b>						
1-Chloro-2-fluorobenzene	73.2	50-150	%	1.00	12/04/2000 21:54	

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8010

Attn.: Aaron Stessman

Prep Method: 5030

## Halogenated Volatile Organic Compounds

Sample ID:	OW-7	Lab Sample ID:	2000-12-0008-005
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 17:25	Extracted:	12/04/2000 22:34
Matrix:	Water	QC-Batch:	2000/12/04-01.26
Sample/Analysis Flag o ( See Legend & Note section )			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	10	ug/L	10.00	12/04/2000 22:34	
Vinyl chloride	ND	5.0	ug/L	10.00	12/04/2000 22:34	
Chloroethane	ND	5.0	ug/L	10.00	12/04/2000 22:34	
Trichlorofluoromethane	ND	5.0	ug/L	10.00	12/04/2000 22:34	
1,1-Dichloroethene	ND	5.0	ug/L	10.00	12/04/2000 22:34	
Methylene chloride	ND	50	ug/L	10.00	12/04/2000 22:34	
trans-1,2-Dichloroethene	ND	5.0	ug/L	10.00	12/04/2000 22:34	
cis-1,2-Dichloroethene	ND	5.0	ug/L	10.00	12/04/2000 22:34	
1,1-Dichloroethane	ND	5.0	ug/L	10.00	12/04/2000 22:34	
Chloroform	ND	5.0	ug/L	10.00	12/04/2000 22:34	
1,1,1-Trichloroethane	ND	5.0	ug/L	10.00	12/04/2000 22:34	
Carbon tetrachloride	ND	5.0	ug/L	10.00	12/04/2000 22:34	
1,2-Dichloroethane	ND	5.0	ug/L	10.00	12/04/2000 22:34	
Trichloroethene	ND	5.0	ug/L	10.00	12/04/2000 22:34	
1,2-Dichloropropane	ND	5.0	ug/L	10.00	12/04/2000 22:34	
Bromodichloromethane	ND	5.0	ug/L	10.00	12/04/2000 22:34	
2-Chloroethylvinyl ether	ND	5.0	ug/L	10.00	12/04/2000 22:34	
trans-1,3-Dichloropropene	ND	5.0	ug/L	10.00	12/04/2000 22:34	
cis-1,3-Dichloropropene	ND	5.0	ug/L	10.00	12/04/2000 22:34	
1,1,2-Trichloroethane	ND	5.0	ug/L	10.00	12/04/2000 22:34	
Tetrachloroethene	ND	5.0	ug/L	10.00	12/04/2000 22:34	
Dibromochloromethane	ND	5.0	ug/L	10.00	12/04/2000 22:34	
Chlorobenzene	39	5.0	ug/L	10.00	12/04/2000 22:34	
Bromoform	ND	20	ug/L	10.00	12/04/2000 22:34	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	10.00	12/04/2000 22:34	
1,3-Dichlorobenzene	330	5.0	ug/L	10.00	12/04/2000 22:34	
1,4-Dichlorobenzene	470	5.0	ug/L	10.00	12/04/2000 22:34	
1,2-Dichlorobenzene	49	5.0	ug/L	10.00	12/04/2000 22:34	
Trichlorotrifluoroethane	ND	20	ug/L	10.00	12/04/2000 22:34	
Chloromethane	ND	10	ug/L	10.00	12/04/2000 22:34	
Bromomethane	ND	10	ug/L	10.00	12/04/2000 22:34	
<b>Surrogate(s)</b>						
1-Chloro-2-fluorobenzene	76.9	50-150	%	1.00	12/04/2000 22:34	

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services  
Attn.: Aaron Stessman

Test Method: 8010  
Prep Method: 5030

**Batch QC Report**  
**Halogenated Volatile Organic Compounds**

Method Blank	Water	QC Batch # 2000/12/04-01.26
MB: 2000/12/04-01.26-001		Date Extracted: 12/04/2000 09:08

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	12/04/2000 09:08	
Vinyl chloride	ND	0.5	ug/L	12/04/2000 09:08	
Chloroethane	ND	0.5	ug/L	12/04/2000 09:08	
Trichlorofluoromethane	ND	0.5	ug/L	12/04/2000 09:08	
1,1-Dichloroethene	ND	0.5	ug/L	12/04/2000 09:08	
Methylene chloride	ND	5.0	ug/L	12/04/2000 09:08	
trans-1,2-Dichloroethene	ND	0.5	ug/L	12/04/2000 09:08	
cis-1,2-Dichloroethene	ND	0.5	ug/L	12/04/2000 09:08	
1,1-Dichloroethane	ND	0.5	ug/L	12/04/2000 09:08	
Chloroform	ND	0.5	ug/L	12/04/2000 09:08	
1,1,1-Trichloroethane	ND	0.5	ug/L	12/04/2000 09:08	
Carbon tetrachloride	ND	0.5	ug/L	12/04/2000 09:08	
1,2-Dichloroethane	ND	0.5	ug/L	12/04/2000 09:08	
Trichloroethene	ND	0.5	ug/L	12/04/2000 09:08	
1,2-Dichloropropane	ND	0.5	ug/L	12/04/2000 09:08	
Bromodichloromethane	ND	0.5	ug/L	12/04/2000 09:08	
2-Chloroethylvinyl ether	ND	0.5	ug/L	12/04/2000 09:08	
trans-1,3-Dichloropropene	ND	0.5	ug/L	12/04/2000 09:08	
cis-1,3-Dichloropropene	ND	0.5	ug/L	12/04/2000 09:08	
1,1,2-Trichloroethane	ND	0.5	ug/L	12/04/2000 09:08	
Tetrachloroethene	ND	0.5	ug/L	12/04/2000 09:08	
Dibromochloromethane	ND	0.5	ug/L	12/04/2000 09:08	
Chlorobenzene	ND	0.5	ug/L	12/04/2000 09:08	
Bromoform	ND	2.0	ug/L	12/04/2000 09:08	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	12/04/2000 09:08	
1,3-Dichlorobenzene	ND	0.5	ug/L	12/04/2000 09:08	
1,4-Dichlorobenzene	ND	0.5	ug/L	12/04/2000 09:08	
1,2-Dichlorobenzene	ND	0.5	ug/L	12/04/2000 09:08	
Trichlorotrifluoroethane	ND	2.0	ug/L	12/04/2000 09:08	
Chloromethane	ND	1.0	ug/L	12/04/2000 09:08	
Bromomethane	ND	1.0	ug/L	12/04/2000 09:08	
<b>Surrogate(s)</b>					
1-Chloro-2-fluorobenzene	77.0	50-150	%	12/04/2000 09:08	

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services  
Attn.: Aaron StessmanTest Method: 8010  
Prep Method: 5030Batch QC Report  
Halogenated Volatile Organic Compounds

Method Blank	Water	QC Batch # 2000/12/05-01.25
MB: 2000/12/05-01.25-001		Date Extracted: 12/05/2000 10:33

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	12/05/2000 10:33	
Vinyl chloride	ND	0.5	ug/L	12/05/2000 10:33	
Chloroethane	ND	0.5	ug/L	12/05/2000 10:33	
Trichlorofluoromethane	ND	0.5	ug/L	12/05/2000 10:33	
1,1-Dichloroethene	ND	0.5	ug/L	12/05/2000 10:33	
Methylene chloride	ND	5.0	ug/L	12/05/2000 10:33	
trans-1,2-Dichloroethene	ND	0.5	ug/L	12/05/2000 10:33	
cis-1,2-Dichloroethene	ND	0.5	ug/L	12/05/2000 10:33	
1,1-Dichloroethane	ND	0.5	ug/L	12/05/2000 10:33	
Chloroform	ND	0.5	ug/L	12/05/2000 10:33	
1,1,1-Trichloroethane	ND	0.5	ug/L	12/05/2000 10:33	
Carbon tetrachloride	ND	0.5	ug/L	12/05/2000 10:33	
1,2-Dichloroethane	ND	0.5	ug/L	12/05/2000 10:33	
Trichloroethene	ND	0.5	ug/L	12/05/2000 10:33	
1,2-Dichloropropane	ND	0.5	ug/L	12/05/2000 10:33	
Bromodichloromethane	ND	0.5	ug/L	12/05/2000 10:33	
2-Chloroethylvinyl ether	ND	0.5	ug/L	12/05/2000 10:33	
trans-1,3-Dichloropropene	ND	0.5	ug/L	12/05/2000 10:33	
cis-1,3-Dichloropropene	ND	0.5	ug/L	12/05/2000 10:33	
1,1,2-Trichloroethane	ND	0.5	ug/L	12/05/2000 10:33	
Tetrachloroethene	ND	0.5	ug/L	12/05/2000 10:33	
Dibromochloromethane	ND	0.5	ug/L	12/05/2000 10:33	
Chlorobenzene	ND	0.5	ug/L	12/05/2000 10:33	
Bromoform	ND	2.0	ug/L	12/05/2000 10:33	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	12/05/2000 10:33	
1,3-Dichlorobenzene	ND	0.5	ug/L	12/05/2000 10:33	
1,4-Dichlorobenzene	ND	0.5	ug/L	12/05/2000 10:33	
1,2-Dichlorobenzene	ND	0.5	ug/L	12/05/2000 10:33	
Trichlorotrifluoroethane	ND	2.0	ug/L	12/05/2000 10:33	
Chloromethane	ND	1.0	ug/L	12/05/2000 10:33	
Bromomethane	ND	1.0	ug/L	12/05/2000 10:33	
<b>Surrogate(s)</b>					
1-Chloro-2-fluorobenzene	93.5	50-150	%	12/05/2000 10:33	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services  
Attn.: Aaron StessmanTest Method: 8010  
Prep Method: 5030Batch QC Report  
Halogenated Volatile Organic Compounds

Method Blank	Water	QC Batch # 2000/12/06-01.25
MB: 2000/12/06-01.25-001		Date Extracted: 12/06/2000 10:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	12/06/2000 10:00	
Vinyl chloride	ND	0.5	ug/L	12/06/2000 10:00	
Chloroethane	ND	0.5	ug/L	12/06/2000 10:00	
Trichlorodifluoromethane	ND	0.5	ug/L	12/06/2000 10:00	
1,1-Dichloroethene	ND	0.5	ug/L	12/06/2000 10:00	
Methylene chloride	ND	5.0	ug/L	12/06/2000 10:00	
trans-1,2-Dichloroethene	ND	0.5	ug/L	12/06/2000 10:00	
cis-1,2-Dichloroethene	ND	0.5	ug/L	12/06/2000 10:00	
1,1-Dichloroethane	ND	0.5	ug/L	12/06/2000 10:00	
Chloroform	ND	0.5	ug/L	12/06/2000 10:00	
1,1,1-Trichloroethane	ND	0.5	ug/L	12/06/2000 10:00	
Carbon tetrachloride	ND	0.5	ug/L	12/06/2000 10:00	
1,2-Dichloroethane	ND	0.5	ug/L	12/06/2000 10:00	
Trichloroethene	ND	0.5	ug/L	12/06/2000 10:00	
1,2-Dichloropropane	ND	0.5	ug/L	12/06/2000 10:00	
Bromodichloromethane	ND	0.5	ug/L	12/06/2000 10:00	
2-Chloroethylvinyl ether	ND	0.5	ug/L	12/06/2000 10:00	
trans-1,3-Dichloropropene	ND	0.5	ug/L	12/06/2000 10:00	
cis-1,3-Dichloropropene	ND	0.5	ug/L	12/06/2000 10:00	
1,1,2-Trichloroethane	ND	0.5	ug/L	12/06/2000 10:00	
Tetrachloroethene	ND	0.5	ug/L	12/06/2000 10:00	
Dibromochloromethane	ND	0.5	ug/L	12/06/2000 10:00	
Chlorobenzene	ND	0.5	ug/L	12/06/2000 10:00	
Bromoform	ND	2.0	ug/L	12/06/2000 10:00	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	12/06/2000 10:00	
1,3-Dichlorobenzene	ND	0.5	ug/L	12/06/2000 10:00	
1,4-Dichlorobenzene	ND	0.5	ug/L	12/06/2000 10:00	
1,2-Dichlorobenzene	ND	0.5	ug/L	12/06/2000 10:00	
Trichlorotrifluoroethane	ND	2.0	ug/L	12/06/2000 10:00	
Chloromethane	ND	1.0	ug/L	12/06/2000 10:00	
Bromomethane	ND	1.0	ug/L	12/06/2000 10:00	
<b>Surrogate(s)</b>					
1-Chloro-2-fluorobenzene	108.0	50-150	%	12/06/2000 10:00	

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8010

Attn: Aaron Stessman

Prep Method: 5030

## Batch QC Report

### Halogenated Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD)		Water		QC Batch # 2000/12/04-01.26					
LCS: 2000/12/04-01.26-002		Extracted: 12/04/2000 09:48			Analyzed 12/04/2000 09:48				
LCSD: 2000/12/04-01.26-003		Extracted: 12/04/2000 10:29			Analyzed 12/04/2000 10:29				

Compound	Conc. [ ug/L ]		Exp.Conc. [ ug/L ]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
1,1-Dichloroethene	20.9	20.4	20	20	104.5	102.0	2.4	50-140	20		
Trichloroethene	21.0	21.7	20	20	105.0	108.5	3.3	50-150	20		
Chlorobenzene	20.6	20.5	20	20	103.0	102.5	0.5	50-150	20		
<b>Surrogate(s)</b>											
1-Chloro-2-fluorobenzene	18.2	18.1	20	20	91.0	90.5		50-150			

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8010

Attn: Aaron Stessman

Prep Method: 5030

## Batch QC Report

### Halogenated Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD)		Water				QC Batch # 2000/12/05-01.25			
LCS:	2000/12/05-01.25-002	Extracted: 12/05/2000 11:17				Analyzed 12/05/2000 11:17			
LCSD:	2000/12/05-01.25-003	Extracted: 12/05/2000 12:01				Analyzed 12/05/2000 12:01			

Compound	Conc. [ ug/L ]		Exp.Conc. [ ug/L ]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
1,1-Dichloroethene	22.8	23.0	20	20	114.0	115.0	0.9	50-140	20		
Trichloroethene	22.3	22.3	20	20	111.5	111.5	0.0	50-150	20		
Chlorobenzene	19.9	19.6	20	20	99.5	98.0	1.5	50-150	20		
<b>Surrogate(s)</b>											
1-Chloro-2-fluorobenzene	22.8	22.7	20	20	114.0	113.5		50-150			

1220 Quarry Lane \* Pleasanton, CA 94566-4756

Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8010

Attn: Aaron Stessman

Prep Method: 5030

## Batch QC Report

### Halogenated Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD)		Water		QC Batch # 2000/12/06-01.25			
LCS:	2000/12/06-01.25-002	Extracted:	12/06/2000 10:45	Analyzed	12/06/2000 10:45		
LCSD:	2000/12/06-01.25-003	Extracted:	12/06/2000 11:26	Analyzed	12/06/2000 11:26		

Compound	Conc. [ ug/L ]		Exp.Conc. [ ug/L ]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
1,1-Dichloroethene	23.7	24.7	20	20	118.5	123.5	4.1	50-140	20		
Trichloroethene	23.4	24.3	20	20	117.0	121.5	3.8	50-150	20		
Chlorobenzene	21.5	22.7	20	20	107.5	113.5	5.4	50-150	20		
<b>Surrogate(s)</b>											
1-Chloro-2-fluorobenzene	25.7	27.4	20	20	128.5	137.0		50-150			

# **CHROMALAB, INC.**

Environmental Services (SDB)

Submission #: 2000-12-0008

To: **CSS Environmental Services**  
Attn: Aaron Stessman

Test Method: 8010  
Prep Method: 5030

## **Legend & Notes**

**Halogenated Volatile Organic Compounds**

### **Analysis Flags**

0

Reporting limits were raised due to high level of analyte present in the sample.

---

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

**CHROMALAB, INC.**  
Environmental Services (SDB)

Submission #: 2000-12-0008

Diesel with Silica Gel Clean-up

**CSS Environmental Services**

Attn: Aaron Stessman  
Project #: 6118

✉ 95 Belvedere Street, Suite 2  
San Rafael, CA 94901

Phone: (415) 457-9551 Fax: (415) 457-9261

Project: PG&E Coliseum

**Samples Reported**

Sample ID	Matrix	Date Sampled	Lab #
OW-1	Water	11/28/2000 15:50	1
OW-5	Water	11/28/2000 15:00	3
OW-6	Water	11/28/2000 16:45	4
OW-7	Water	11/28/2000 17:25	5

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8015M

Attn.: Aaron Stessman

Prep Method: 3510/8015M

Diesel with Silica Gel Clean-up

Sample ID:	OW-1	Lab Sample ID:	2000-12-0008-001
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 15:50	Extracted:	12/01/2000 11:56
Matrix:	Water	QC-Batch:	2000/12/01-03.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	250	50	ug/L	1.00	12/06/2000 00:56	nhc
<b>Surrogate(s)</b> o-Terphenyl	73.7	60-130	%	1.00	12/06/2000 00:56	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Attn.: Aaron Stessman

Test Method: 8015M

Prep Method: 3510/8015M

Diesel with Silica Gel Clean-up

Sample ID:	OW-5	Lab Sample ID:	2000-12-0008-003
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 15:00	Extracted:	12/01/2000 11:56
Matrix:	Water	QC-Batch:	2000/12/01-03.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	12/06/2000 01:39	
Surrogate(s) o-Terphenyl	66.1	60-130	%	1.00	12/06/2000 01:39	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Attn.: Aaron Stessman

Test Method: 8015M

Prep Method: 3510/8015M

Diesel with Silica Gel Clean-up

Sample ID:	OW-6	Lab Sample ID:	2000-12-0008-004
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 16:45	Extracted:	12/01/2000 11:56
Matrix:	Water	QC-Batch:	2000/12/01-03.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	12/06/2000 15:08	
<i>Surrogate(s)</i> o-Terphenyl	67.0	60-130	%	1.00	12/06/2000 15:08	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: **CSS Environmental Services**

Attn.: Aaron Stessman

Test Method: 8015M

Prep Method: 3510/8015M

Diesel with Silica Gel Clean-up

Sample ID:	<b>OW-7</b>	Lab Sample ID:	<b>2000-12-0008-005</b>
Project:	<b>6118 PG&amp;E Coliseum</b>	Received:	<b>11/30/2000 18:15</b>
Sampled:	<b>11/28/2000 17:25</b>	Extracted:	<b>12/01/2000 11:56</b>
Matrix:	<b>Water</b>	QC-Batch:	<b>2000/12/01-03.10</b>

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	370	50	ug/L	1.00	12/06/2000 03:04	nhc
<b>Surrogate(s)</b> o-Terphenyl	67.6	60-130	%	1.00	12/06/2000 03:04	

---

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8015M

Attn.: Aaron Stessman

Prep Method: 3510/8015M

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

Method Blank	Water	QC Batch # 2000/12/01-03.10
MB: 2000/12/01-03.10-003		Date Extracted: 12/01/2000 11:56

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	50	ug/L	12/06/2000 09:21	
<b>Surrogate(s)</b> o-Terphenyl	99.5	60-130	%	12/06/2000 09:21	

# CHROMALAB, INC.

Submission #: 2000-12-0008

Environmental Services (SDB)

To: CSS Environmental Services

Test Method: 8015M

Attn: Aaron Stessman

Prep Method: 3510/8015M

**Batch QC Report**

Diesel with Silica Gel Clean-up

Laboratory Control Spike (LCS/LCSD)		Water				QC Batch # 2000/12/01-03.10			
LCS: 2000/12/01-03.10-001		Extracted: 12/01/2000 11:56				Analyzed 12/05/2000 05:50			
LCSD: 2000/12/01-03.10-002		Extracted: 12/01/2000 11:56				Analyzed 12/05/2000 06:37			

Compound	Conc. [ ug/L ]		Exp.Conc. [ ug/L ]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Diesel	1150	1190	1250	1250	92.0	95.2	3.4	60-130	25		
<b>Surrogate(s)</b>											
<i>o-Terphenyl</i>	25.6	25.7	20.0	20.0	128.0	128.5		60-130			

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services  
Attn: Aaron Stessman

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

## Legend & Notes

Diesel with Silica Gel Clean-up

### Analyte Flags

nhc

Compounds reported are in this range but they do not exhibit a pattern characteristic of petroleum hydrocarbon.

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

## Gas/BTEX

**CSS Environmental Services**

Attn: Aaron Stessman

Project #: 6118

✉ 95 Belvedere Street, Suite 2  
San Rafael, CA 94901

Phone: (415) 457-9551 Fax: (415) 457-9261

Project: PG&E Coliseum

### Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
OW-1	Water	11/28/2000 15:50	1
OW-5	Water	11/28/2000 15:00	3
OW-6	Water	11/28/2000 16:45	4
OW-7	Water	11/28/2000 17:25	5

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8020  
8015M

Attn.: Aaron Stessman

Prep Method: 5030

Gas/BTEX

Sample ID:	OW-1	Lab Sample ID:	2000-12-0008-001
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 15:50	Extracted:	12/05/2000 19:46
Matrix:	Water	QC-Batch:	2000/12/05-01.05

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	620	50	ug/L	1.00	12/05/2000 19:46	g
Benzene	ND	0.50	ug/L	1.00	12/05/2000 19:46	
Toluene	ND	0.50	ug/L	1.00	12/05/2000 19:46	
Ethyl benzene	ND	0.50	ug/L	1.00	12/05/2000 19:46	
Xylene(s)	ND	0.50	ug/L	1.00	12/05/2000 19:46	
<i>Surrogate(s)</i>						
Trifluorotoluene	108.0	58-124	%	1.00	12/05/2000 19:46	
4-Bromofluorobenzene-FID	74.6	50-150	%	1.00	12/05/2000 19:46	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8020  
8015M

Attn.: Aaron Stessman

Prep Method: 5030

Gas/BTEX

Sample ID:	OW-5	Lab Sample ID:	2000-12-0008-003
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 15:00	Extracted:	12/05/2000 19:14
Matrix:	Water	QC-Batch:	2000/12/05-01.05

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/05/2000 19:14	
Benzene	10	0.50	ug/L	1.00	12/05/2000 19:14	
Toluene	ND	0.50	ug/L	1.00	12/05/2000 19:14	
Ethyl benzene	ND	0.50	ug/L	1.00	12/05/2000 19:14	
Xylene(s)	ND	0.50	ug/L	1.00	12/05/2000 19:14	
<i>Surrogate(s)</i>						
Trifluorotoluene	111.4	58-124	%	1.00	12/05/2000 19:14	
4-Bromofluorobenzene-FID	78.0	50-150	%	1.00	12/05/2000 19:14	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8020  
8015M

Attn.: Aaron Stessman

Prep Method: 5030

Gas/BTEX

Sample ID:	OW-6	Lab Sample ID:	2000-12-0008-004
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 16:45	Extracted:	12/05/2000 20:18
Matrix:	Water	QC-Batch:	2000/12/05-01.05

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/05/2000 20:18	
Benzene	ND	0.50	ug/L	1.00	12/05/2000 20:18	
Toluene	ND	0.50	ug/L	1.00	12/05/2000 20:18	
Ethyl benzene	ND	0.50	ug/L	1.00	12/05/2000 20:18	
Xylene(s)	ND	0.50	ug/L	1.00	12/05/2000 20:18	
<i>Surrogate(s)</i>						
Trifluorotoluene	88.9	58-124	%	1.00	12/05/2000 20:18	
4-Bromofluorobenzene-FID	71.1	50-150	%	1.00	12/05/2000 20:18	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8020  
8015M

Attn.: Aaron Stessman

Prep Method: 5030

Gas/BTEX

Sample ID:	OW-7	Lab Sample ID:	2000-12-0008-005
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 17:25	Extracted:	12/05/2000 20:50
Matrix:	Water	QC-Batch:	2000/12/05-01.05

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	1100	50	ug/L	1.00	12/05/2000 20:50	g
Benzene	0.83	0.50	ug/L	1.00	12/05/2000 20:50	
Toluene	ND	0.50	ug/L	1.00	12/05/2000 20:50	
Ethyl benzene	ND	0.50	ug/L	1.00	12/05/2000 20:50	
Xylene(s)	ND	0.50	ug/L	1.00	12/05/2000 20:50	
<i>Surrogate(s)</i>						
Trifluorotoluene	98.3	58-124	%	1.00	12/05/2000 20:50	
4-Bromofluorobenzene-FID	73.8	50-150	%	1.00	12/05/2000 20:50	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8015M

8020

Attn.: Aaron Stessman

Prep Method: 5030

## Batch QC Report

Gas/BTEX

Method Blank	Water	QC Batch # 2000/12/05-01.05
MB: 2000/12/05-01.05-001		Date Extracted: 12/05/2000 09:59

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	12/05/2000 09:59	
Benzene	ND	0.5	ug/L	12/05/2000 09:59	
Toluene	ND	0.5	ug/L	12/05/2000 09:59	
Ethyl benzene	ND	0.5	ug/L	12/05/2000 09:59	
Xylene(s)	ND	0.5	ug/L	12/05/2000 09:59	
<i>Surrogate(s)</i>					
Trifluorotoluene	107.2	58-124	%	12/05/2000 09:59	
4-Bromofluorobenzene-FID	81.4	50-150	%	12/05/2000 09:59	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 8015M  
8020

Attn: Aaron Stessman

Prep Method: 5030

## Batch QC Report

Gas/BTEX

Laboratory Control Spike (LCS/LCSD)	Water	QC Batch # 2000/12/05-01.05
LCS: 2000/12/05-01.05-002	Extracted: 12/05/2000 10:31	Analyzed 12/05/2000 10:31
LCSD: 2000/12/05-01.05-003	Extracted: 12/05/2000 11:03	Analyzed 12/05/2000 11:03

Compound	Conc. [ ug/L ]		Exp.Conc. [ ug/L ]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Gasoline	394	391	500	500	78.8	78.2	0.8	75-125	20		
Benzene	99.3	103	100.0	100.0	99.3	103.0	3.7	77-123	20		
Toluene	96.9	98.6	100.0	100.0	96.9	98.6	1.7	78-122	20		
Ethyl benzene	95.6	96.6	100.0	100.0	95.6	96.6	1.0	70-130	20		
Xylene(s)	285	290	300	300	95.0	96.7	1.8	75-125	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	515	513	500	500	103.0	102.6		58-124			
4-Bromofluorobenzene-Fl	363	362	500	500	72.6	72.4		50-150			

# **CHROMALAB, INC.**

Environmental Services (SDB)

**Submission #: 2000-12-0008**

**To: CSS Environmental Services**

**Test Method:** 8015M  
8020

**Attn: Aaron Stessman**

**Prep Method:** 5030

## **Legend & Notes**

**Gas/BTEX**

### **Analyte Flags**

**g**

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

## Soluble Metals

**CSS Environmental Services**

Attn: Aaron Stessman  
Project #: 6118

✉ 95 Belvedere Street, Suite 2  
San Rafael, CA 94901

Phone: (415) 457-9551 Fax: (415) 457-9261  
Project: PG&E Coliseum

**Samples Reported**

Sample ID	Matrix	Date Sampled	Lab #
OW-2	Water	11/28/2000 13:55	2
OW-5	Water	11/28/2000 15:00	3
OW-8	Water	11/28/2000 14:25	6

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services  
Attn.: Aaron Stessman

Test Method: 6010B  
Prep Method: 3005A

## Soluble Metals

Sample ID:	OW-2	Lab Sample ID:	2000-12-0008-002
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 13:55	Extracted:	12/04/2000 08:25
Matrix:	Water	QC-Batch:	2000/12/04-03.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	ND	0.0050	mg/L	1.00	12/04/2000 13:27	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: **CSS Environmental Services**  
Attn.: Aaron Stessman

Test Method: 6010B  
Prep Method: 3005A

## Soluble Metals

Sample ID:	OW-5	Lab Sample ID:	2000-12-0008-003
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 15:00	Extracted:	12/04/2000 08:25
Matrix:	Water	QC-Batch:	2000/12/04-03.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	ND	0.0050	mg/L	1.00	12/04/2000 13:32	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 6010B

Attn.: Aaron Stessman

Prep Method: 3005A

## Soluble Metals

Sample ID:	OW-8	Lab Sample ID:	2000-12-0008-006
Project:	6118 PG&E Coliseum	Received:	11/30/2000 18:15
Sampled:	11/28/2000 14:25	Extracted:	12/04/2000 08:25
Matrix:	Water	QC-Batch:	2000/12/04-03.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	ND	0.0050	mg/L	1.00	12/04/2000 13:36	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 6010B

Attn.: Aaron Stessman

Prep Method: 3005A

## Batch QC Report

### Soluble Metals

Method Blank	Water	QC Batch # 2000/12/04-03.15
MB: 2000/12/04-03.15-014		Date Extracted: 12/04/2000 08:25

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	0.0050	mg/L	12/04/2000 12:31	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0008

To: CSS Environmental Services

Test Method: 6010B

Attn: Aaron Stessman

Prep Method: 3005A

## Batch QC Report

### Soluble Metals

Laboratory Control Spike (LCS/LCSD)		Water				QC Batch # 2000/12/04-03.15			
LCS: 2000/12/04-03.15-015		Extracted: 12/04/2000 08:25				Analyzed 12/04/2000 12:36			
LCSD: 2000/12/04-03.15-016		Extracted: 12/04/2000 08:25				Analyzed 12/04/2000 12:40			

Compound	Conc. [ mg/L ]		Exp.Conc. [ mg/L ]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Lead	0.460	0.480	0.500	0.500	92.0	96.0	4.3	80-120	20		

# CHROMALAB, INC.

Environmental Services (SDS) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756  
(925) 484-1919 • Fax (925) 484-1096

Reference #: 56110

## Chain of Custody

DATE 11/29/00 PAGE 1 OF 2

				ANALYSIS REPORT																	
SAMPLE ID	DATE	TIME	MATRIX PRESERV.	TPH (EPA 8015, 8020) O Dose w/ QTEX OMTCB	PURGEABLE AROMATICS BTX (EPA 8020)	TPH-Diesel (EPA 8015M) Silica gel, C, U	TPH (EPA 8015M) O Diesel O.M.O. O Other	PURGEABLE HALOCARBONS, (HVOCS) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMICARBOLES (EPA 8270)	TOTAL OIL AND GREASE (SM 5520 B + F, E + F)	PESTICIDES (EPA 8080) O PCPs (EPA 8080)	PCPs by O 8170 O 8310	O Spec. Cond. O TSS O TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	O W.E.T. (STLC) O TLC	O Reservoir Chromium O PR (3 hr hold time for H2O)	FOX by 8260	Filter sample	Composite as 1	NUMBER OF CONTAINERS
OW-1	11-28-00	1550	H <sub>2</sub> O	HCl	X			X											6		
OW-1		1600		None		X													1		
OW-2		1355		None															1		
OW-5		1500		HCl	X			X											6		
OW-5		1510		None		X													1		
OW-5		1512		None															1		
OW-6		1635		HCl	X			X											6		
OW-6		1645		None		X													1		

### PROJECT INFORMATION

### SAMPLE RECEIPT

PROJECT NAME: Port Coliseum Way  
PROJECT NUMBER: 6118  
P.O.F.

TOTAL NO. OF CONTAINERS

HEAD SPACE

TEMPERATURE 3.6°C

CONFORMS TO RECORD

TAT STANDARD 5-DAY

24 48 72 OTHER

### SPECIAL INSTRUCTIONS/COMMENTS:

Report:  Routine  Level 2  Level 3  Level 4  Electronic Report

\* Filter Lead Sample prior to analysis

Please see attached price sheet

### RELINQUISHED BY

Jules L. Liblio 12/12  
(SIGNATURE) (TIME)

Jules L. Liblio 11/30/00  
(PRINTED NAME) (DATE)

CSS Environmental  
(COMPANY)

### RECEIVED BY

Jules L. Liblio 12/12  
(SIGNATURE) (TIME)

Jules L. Liblio 11/30/00  
(PRINTED NAME) (DATE)

Crowell

### RELINQUISHED BY

Jules L. Liblio 12/12  
(SIGNATURE) (TIME)

Jules L. Liblio 11/30/00  
(PRINTED NAME) (DATE)

Crowell

### RELINQUISHED BY

D. Harrington 1815  
(SIGNATURE) (TIME)

D. Harrington 11/30/00  
(PRINTED NAME) (DATE)

Crowell

### RECEIVED BY (LABORATORY)

D. Harrington 1815  
(SIGNATURE) (TIME)

D. Harrington 11/30/00  
(PRINTED NAME) (DATE)

Chromalab

# CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756  
(925) 484-1919 • Fax (925) 484-1096

Reference #: 510110

## Chain of Custody

DATE 11/29/00 PAGE 2 of 2

PROJ. MGR Aaron Stessman  
COMPANY CSS Environmental Services  
ADDRESS 95 Belvedere Street, Suite  
San Rafael, CA 94901

SAMPLERS (SIGNATURE) Jules L. Sibilio (PHONE NO.)  
(415) 457-9551 (FAX NO.)  
(415) 457-9261

SAMPLE ID DATE TIME MATRIX PRESERV.

OW-7	11-26-00	1715	H <sub>2</sub> O	HCl	X
OW-7		1725		None	X
OW-8	↓	1425	↓	None	

ANALYSIS REPORT						
TPH (EPA 8015, 8020) ○ Gas w/ O <sub>2</sub> TEX DMTE	PURGEABLE AROMATICS BTX (EPA 8020)	TPH-Diesel (EPA 8015MA) Silica gel C. u.	TPEB (EPA 8015RA) ○ Diesel O.M.O. O Other	PURGEABLE HALOCARBONS. (PVOCl) (EPA 8010)	VOLATILE ORGANICS VOCl (EPA 8260)	SEMIVOLATILES (EPA 8270)
						TOTAL OIL AND GREASE ISM 5520 B+F, E+F
						PESTICIDES (EPA 8080) ○ PCB's (EPA 8080)
						PCBs by O 8270 ○ 8310
						Spec. Cont'd. ○ TSS DTDS
						LUFT METALS: Cd, Cr, Pb, Ni, Zn
						CAM 17 METALS EPA 6010/7470/7471
						TOTAL LEAD
						D.W.T. (STLC) ○ TCCLP
						○ Residual Chromium O pH (24 hr hold time for H2O)
						FOX by 8260
						Filter sample
						Composite as 1
						NUMBER OF CONTAINERS

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT NAME:	PGE Coliseum Way	TOTAL NO. OF CONTAINERS	
PROJECT NUMBER:	6118	HEAD SPACE	
P.O. #		TEMPERATURE	
CONFORMS TO RECORD			
TAT	STANDARD 5-DAY	24	48
		72	OTHER

RELINQUISHED BY		RELINQUISHED BY		RELINQUISHED BY	
<u>Jules L. Sibilio</u> 1242 (SIGNATURE)	(TIME)	<u>Jules L. Sibilio</u> 11/30/00 (PRINTED NAME)	(DATE)	<u>B. Morris</u> 11/30/00 (PRINTED NAME)	(DATE)
<u>CSS Environmental</u> (COMPANY)		<u>Cromalab</u> (COMPANY)		<u>Cromalab</u> (COMPANY)	
RECEIVED BY		RECEIVED BY		RECEIVED BY	
<u>B. Morris</u> 11/30/00 (SIGNATURE)	(TIME)	<u>B. Morris</u> 11/30/00 (SIGNATURE)	(TIME)	<u>Denise Harrington</u> (SIGNATURE)	(TIME)
<u>Cromalab</u> (COMPANY)		<u>Cromalab</u> (COMPANY)		<u>D. Harrington</u> 1815 (PRINTED NAME)	(DATE)
RECEIVED BY (LABORATORY)					
<u>Denise Harrington</u> (SIGNATURE)					
<u>D. Harrington</u> 1815 (PRINTED NAME)					
<u>Chromalab</u> 11/30/00 (COMPANY)					

### SPECIAL INSTRUCTIONS/COMMENTS:

Report:  Routine  Level 2  Level 3  Electronic Report

\* Filter Lead Sample prior to analysis

Please see attached price sheet!

**CHROMALAB, INC.****FAX TRANSMISSION**

Environmental Services (SDB)

Date: June 28, 2000

Pages: 1  
Fax#: 415-457-9261

To: Aron N. Stessman  
 Company: CSS  
 From: Afsaneh Salimpour  
 Subject: Coliseum Way

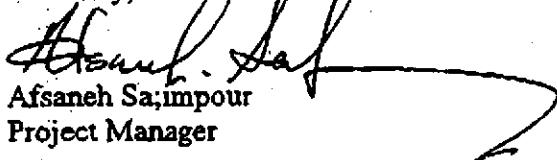
Thanks for the fax today. ChromaLab will be glad to offer the following quotation on this project. For this quote, our service includes glass or plastic sample containers, sample pickup at your office, and final results faxed to you in Ten working days.

Our prices are:

Method	# of samples	Price/sample	TOAL
Filtration	12	10.00	120.00
Lead	12	18.00	216.00
TPH-D	20	50.00	1000.00
VOCs (8010 list by 8260)	12	70.00	840.00
MTBE by 8260	20	125.00	2500.00
TPH-gas/BTEX	20	50.00	1000.00
<b>TOTAL</b>			<b>\$ 5676.00</b>

Please let me know if you have any questions. I'm looking forward to working with you on this project.

Sincerely,



Afsaneh Salimpour  
Project Manager

Project: PG&amp;E Coliseum Way

Job No.: 6118

Subject: FIELD INVESTIGATION DAILY REPORT

Date: 11-28-00

Equipment Rental: Company:

To: CSE

Equipment Hours: F.E. Time from: to:

By: JS

(outside service and expense record must be attached for any outside costs)

- 1130 - Arrive @ CSE. Meet w/ Aaron + Terry. Load Truck  
 1200 - Drive to PG&E Coliseum Way (site)  
 1240 - On-site. Open 9" wells  
 1310 - Start  $\Delta$  level meas.  
 1335 - Start to purge  $\approx$  7.2 gal from OW-2  
 1350 - Meas. Temp. (see attached sheet)  
 1355 - Sampled OW-2. Pb  
 1405 - Start to purge  $\approx$  6.7 gal. from OW-8  
 1420 - Meas. Temp. (see attached sheet)  
 1425 - Sampled OW-8. Pb  
 1435 - Start to purge  $\approx$  6.6 gal. from OW-5  
 1450 - Meas. Temp. (see attached sheet)  
 1500 - Sampled OW-5 TPH-g/BTEX; HVOCS  
 1510 - " " . TPH-d.  
 1512 - " " . Pb  
 1525 - Start to purge  $\approx$  6.4 gal. from OW-1  
 1540 - Meas. Temp. (see attached sheet)  
 1550 - Sampled OW-1. TPH-g/BTEX; HVOCS  
 1600 - " " . TPH-d.  
 1615 - Start to purge  $\approx$  5.5 gal. from OW-6  
 1625 - Meas. Temp. (see attached sheet)  
 1635 - Sampled OW-6. TPH-g/BTEX; HVOCS  
 1645 - " " . TPH-d  
 1655 - Start to purge  $\approx$  5.4 gal. from OW-7  
 1705 - Meas. Temp. (see attached sheet)  
 1715 - Sampled OW-7. TPH-g/BTEX; HVOCS  
 1725 - " " . TPH-d  
 - Clean up.

Attachments:

Initial

Project: PCTE Coliseum Way Job No.: 6118  
Subject: FIELD INVESTIGATION DAILY REPORT Date: 11-28-00  
Equipment Rental:                          Company:                           
Equipment Hours:                          F.E. Time from:                          to:                           
To: CSS By: TJS

(outside service and expense record must be attached for any outside costs)

1745 - Drive to CSS.

1850 - Arrive @ CSS

- Finish Paperwork

- Fill out C-O-C

1920

Attachments:

Initials

**RECORD OF GROUNDWATER LEVEL MEASUREMENTS**

Page 1 of 1

Job No.: 6110

Date Measured: 11 - 26 - 00

Site Location: PG+E Coliseum Way

Well location map attached? Yes X No \_\_\_\_\_

Method of Measurement: X Electric well sounder,

Other: \_\_\_\_\_

Weather/Visibility: \_\_\_\_\_

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Well I.D.	Time (24 hr)	G.W.L. (1/100 ft)	G.W.L. 3x's?	B.O.W. (1/2ft)	Remarks
DW-1		4.65		17.95	2"
DW-2		5.10		20.11	2"
DW-4					Covered
DW-5		5.20		18.95	2"
DW-6		5.80		17.20	2"
DW-7		7.00		18.20	2"
DW-8		3.73		17.76	2"

Measured by (Signature): Julus L. Abellie



# WATER QUALITY SAMPLING INFORMATION

Date:

Project:

Sampling method:

Well No.: OW-8

Sampled by:

Project No.:

## GROUNDWATER

Well diameter (in.)

Well elevation (ft.)

Depth to static water (ft.)

Water level elevation (ft.)

Well casing depth (ft.)

Water volume in well (gals)

Pump water depth (ft.)

## SURFACE WATER

Stream width (ft.)

Stream depth (ft.)

Stream velocity (cfs.)

Rained recently (?)

2-in. Casing = 0.16 gal/in.

4-in. Casing = 0.65 gal/in.

6-in. Casing = 1.47 gal/in.

Sketch of well location

Analyses requested:

Pb

No. &amp; types of sample bottles used:

Method of shipping:

TIME	DEPTH TO WATER (ft.)	VOLUME WITHDRAWN (GALS.)	TEMP. (deg. F.)	pH	CONDUCTIVITY	TURBIDITY	REMARKS
1405	3.73	0	—	—	—	—	Start
1420	± 6.7	70	—	—	0.68	—	Light brown, No Odor
1425	—	—	—	—	—	—	Sampled OW-8 Pb

6.72



# WATER QUALITY SAMPLING INFORMATION

Date: \_\_\_\_\_ Well No.: OW-1 Sampled by: \_\_\_\_\_  
 Project: \_\_\_\_\_ Project No.: \_\_\_\_\_  
 Sampling method: \_\_\_\_\_

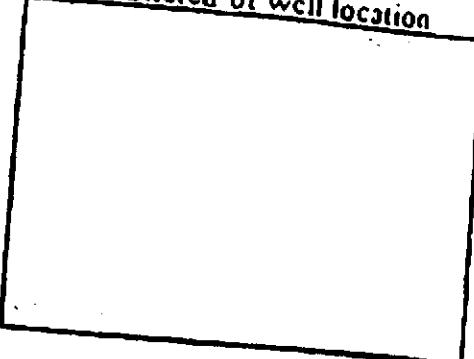
## GROUNDWATER

Well diameter (in.) \_\_\_\_\_  
 Well elevation (ft.) \_\_\_\_\_  
 Depth to static water (ft.) \_\_\_\_\_  
 Water level elevation (ft.) 4.65  
 Well casing depth (ft.) 17.95  
 Water volume in well (gals) 2.13  
 Pump water depth (ft.) \_\_\_\_\_

## SURFACE WATER

Stream width (ft.) \_\_\_\_\_  
 Stream depth (ft.) \_\_\_\_\_  
 Stream velocity (cfs.) \_\_\_\_\_  
 Rained recently (?) \_\_\_\_\_  
 2-in. Casing = 0.16 gal/sf.  
 4-in. Casing = 0.65 gal/sf.  
 6-in. Casing = 1.47 gal/sf.

Sketch of well location



Analyses requested: TPH-H-d; TPH-H-g/BTEX;  
 No. & types of sample bottles used: \_\_\_\_\_

Method of shipment: \_\_\_\_\_

TIME	DEPTH TO WATER (ft.)	VOLUME WITHDRAWN (GALS.)	TEMP (deg. F)	pH	CONDUCTIVITY	TURBIDITY	REMARKS
1525		0	—	—	—	—	Start
1540	≈ 6.4	6 B	—	—	—	—	Clear; No Odor
1550							
1600							Sampled OW-1 TPH-H-g/BTEX; VOCs Sampled OW-1 TPH-H-d

WATER QUALITY SAMPLING INFORMATION

Date:

Project:

Sampling method:

Well No.: OW-6

Sampled by:

Project No.:

**GROUNDWATER**

Well diameter (in.)

Well elevation (ft.)

Depth to static water (ft.)

Water level elevation (ft.) 5.80

Well casing depth (ft.) 17.20

Water volume in well (gals) 1.82

Pump water depth (ft.)

SURFACE WATER

Stream width (ft.)

Stream depth (ft.)

Stream velocity (cfs.)

Rained recently (?)

2-in. Casing = 0.16 gals/in.

4-in. Casing = 0.65 gals/in.

6-in. Casing = 1.47 gals/in.

Sketch of well location

Analyses requested: TPH-d; TPH-g/TEX; VOC's  
No. & types of sample bottles used:

Method of shipping:

TIME	DEPTH TO WATER (ft.)	VOLUME WITHDRAWN (GALS.)	TEMP. (deg. F)	pH	CONDUCTIVITY	TURBIDITY	REMARKS
1615		0					Start
1625		2.55	70				Bigt Brown; Slight Odor
1635							Samp'd TPH-g/TEX; VOC's
1645							Samp'ed TPH-d

# WATER QUALITY SAMPLING INFORMATION

Date: \_\_\_\_\_ Well No.: OW-7 Sampled by: \_\_\_\_\_  
 Project: \_\_\_\_\_ Project No.: \_\_\_\_\_  
 Sampling method: \_\_\_\_\_

## GROUNDWATER

Well diameter (in.) \_\_\_\_\_  
 Well elevation (ft.) \_\_\_\_\_  
 Depth to static water (ft.) \_\_\_\_\_  
 Water level elevation (ft.) \_\_\_\_\_  
 Well casing depth (ft.) 7.00  
 Water volume in well (gals) 1.79  
 Pump inlet depth (ft.) \_\_\_\_\_

## SURFACE WATER

Stream width (ft.) \_\_\_\_\_  
 Stream depth (ft.) \_\_\_\_\_  
 Stream velocity (cfs.) \_\_\_\_\_  
 Rained recently (?) \_\_\_\_\_  
 2-in. Casing = 0.16 gal/sq. ft.  
 4-in. Casing = 0.63 gal/sq. ft.  
 6-in. Casing = 1.47 gal/sq. ft.

Sketch of well location

Analyses requested: TPH-d; TPH-g/BTEX; VOCs  
 No. & types of sample bottles used: \_\_\_\_\_

Method of shipment: \_\_\_\_\_

TIME	DEPTH TO WATER (ft.)	VOLUME WITHDRAWN (GALS.)	TEMP (deg. F.)	pH	CONDUCTIVITY	TURBIDITY	REMARKS
1655	7.00	0	—	—	—	—	Start
1705	~5.4	68	—	—	—	—	Clear; No Odor
1715	—	—	—	—	—	—	Sampled DW-7 TPH-g/BTEX; VOCs
1725	—	—	—	—	—	—	Sampled OW-7 TPH-d

**C S S**

CSS ENVIRONMENTAL SERVICES, INC.

---

***APPENDIX B***  
**Historical Monitoring Data**













## Historical Groundwater Analytical Data

Well ID Date	OW-8 Apr-93	OW-8 Jul-93	OW-8 Oct-93	OW-8 Jan-94	OW-8 Apr-94	OW-8 Jul-94	OW-8 Jun-95	OW-8 Nov-95	OW-8 Jun-96	OW-8 Oct-96	OW-8 Apr-Jun-97	OW-8 Dec-97	OW-8 Jun-97	OW-8 Dec-98	OW-8 Jun-98	OW-8 Nov-98	OW-8 Jun-99	OW-8 Nov-99	OW-8 Jun-00	OW-8 Nov-00
<b>PURGEABLE HALOCARBONS</b>																				
Chloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Bromomethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Vinyl chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Chloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Chloreform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Freon 113	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
1,2-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Carbon Tetrachloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Bromodichloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
1,2-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Trichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Dibromochloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
2-Chloroethylvinyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Bromoform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Tetrachloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Chlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
<b>PURGEABLE AROMATICS</b>																				
Benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Ethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Total Xylenes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
<b>TOTAL VOCs</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
<b>HYDROCARBONS</b>																				
TVH-g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
TEPH-d	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
C8G	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
TPH (416.1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
<b>METALS</b>																				
Lead	27	17	ND	25	12	24	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Notes:**

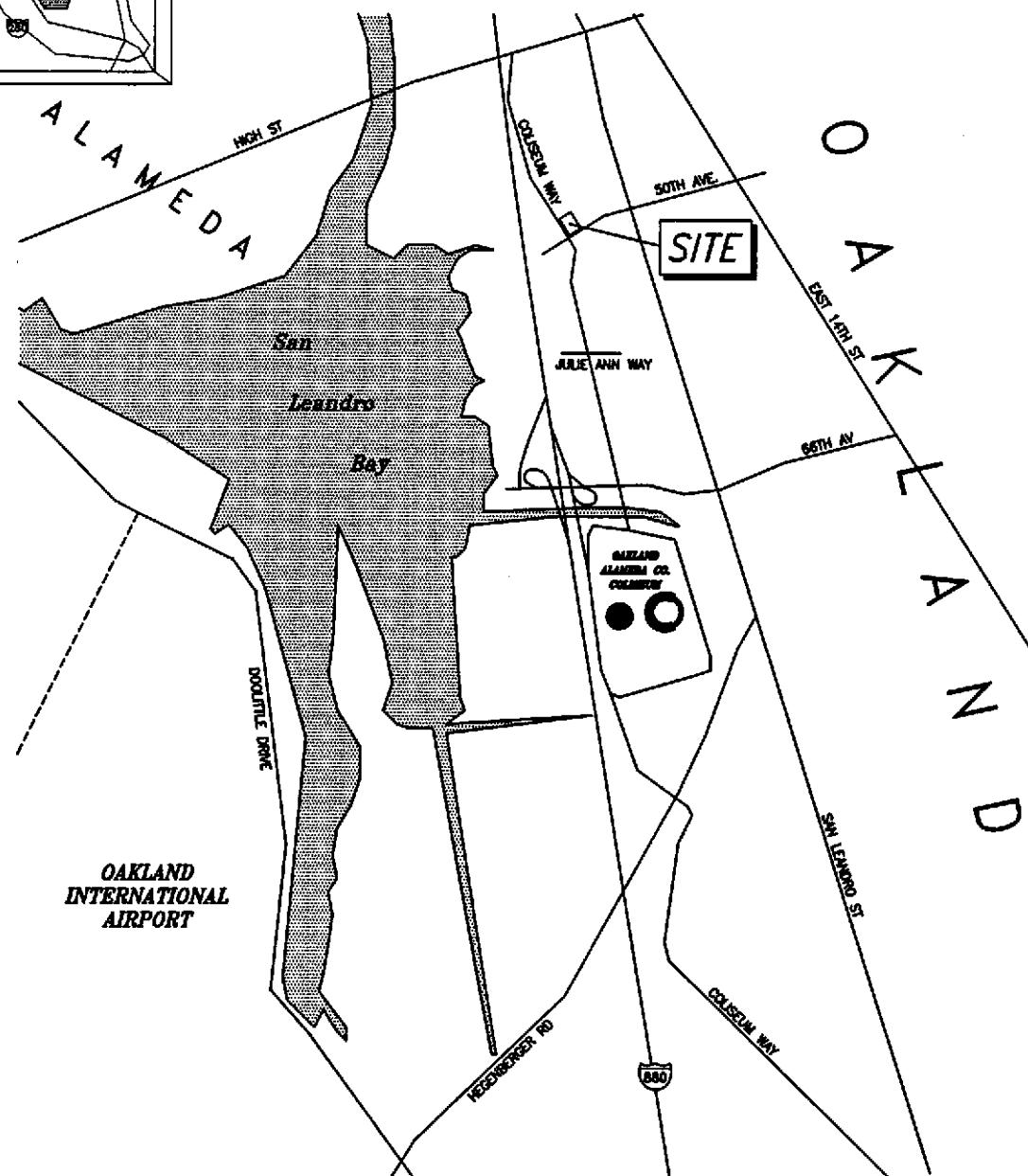
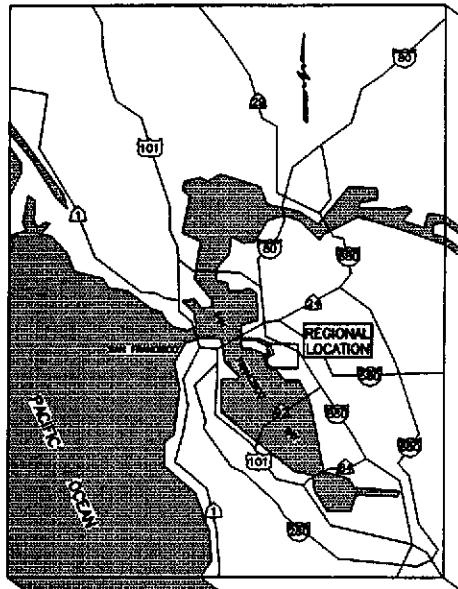
- 1) MCL = Maximum Contaminant Level in drinking water (State MCL if not noted otherwise )
- 2) # = EPA MCL
- 3) \* = MCL for sum of four compounds
- 4) \*\* = MCL for sum of all xylene isomers
- 5) \*\*\* = MCL for sum of trans- and cis-1,3-Dichloropropene
- 6) ND = Not Detected at or above MDL
- 7) Purgeable Halocarbons (EPA method 8010)
- 8) Purgeable Aromatics (EPA method 8020)
- 9) NA = Not Analyzed or analysis not required

C S S

CSS ENVIRONMENTAL SERVICES, INC.

---

***APPENDIX C***  
**Figures**



**CSS**

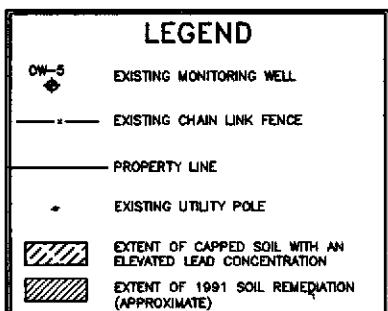
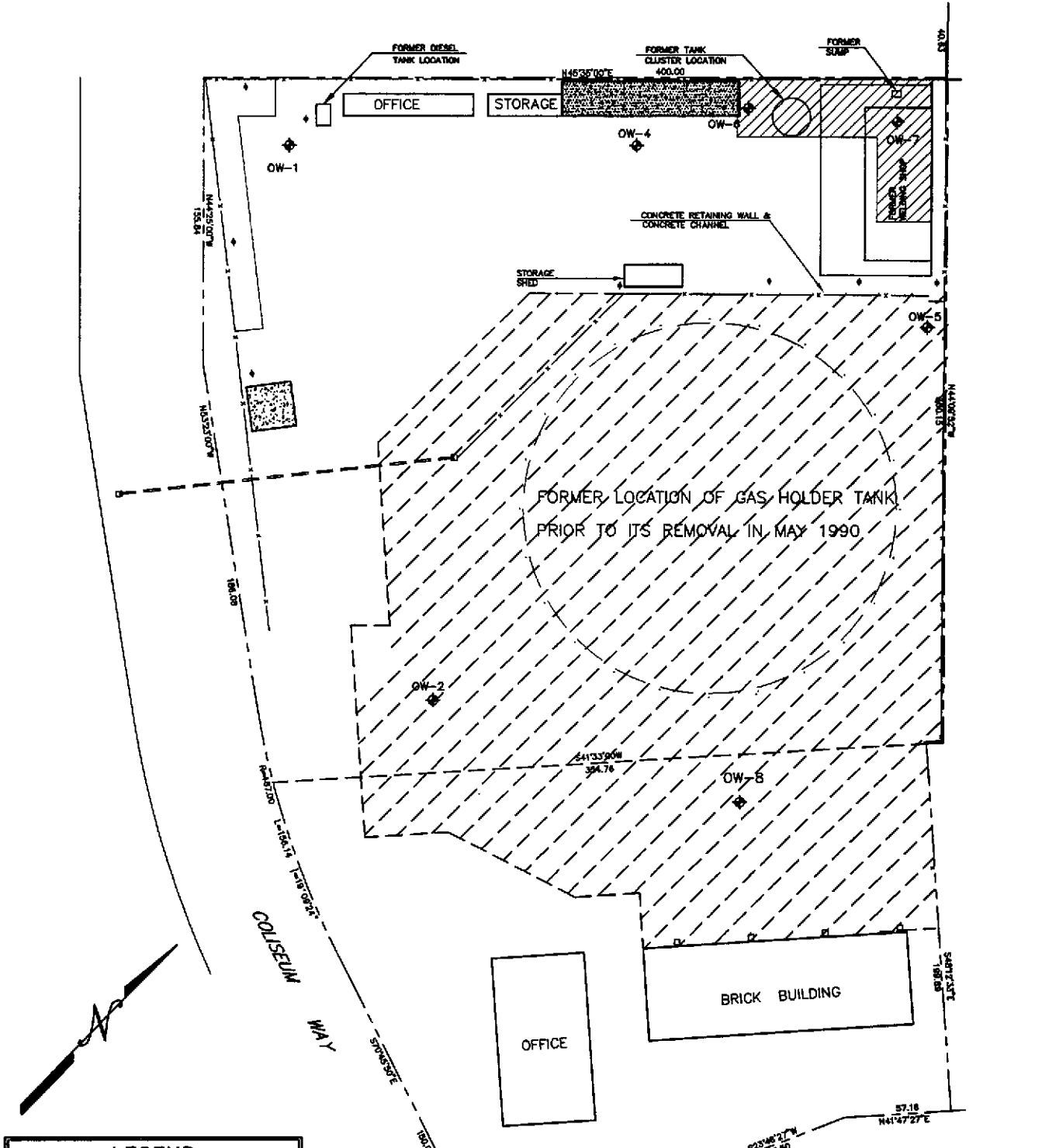
CSS ENVIRONMENTAL SERVICES, INC.

**SITE LOCATION MAP**  
PG & E DISTRIBUTION CONSTRUCTION SITE  
4930 COLISEUM WAY  
OAKLAND, CA 94610

JOB NUMBER	DATE	DRAWING	BY	REVISED
6118	01/99	3666LOC	JL/ZS	00/00

FIGURE

1



**CSS**

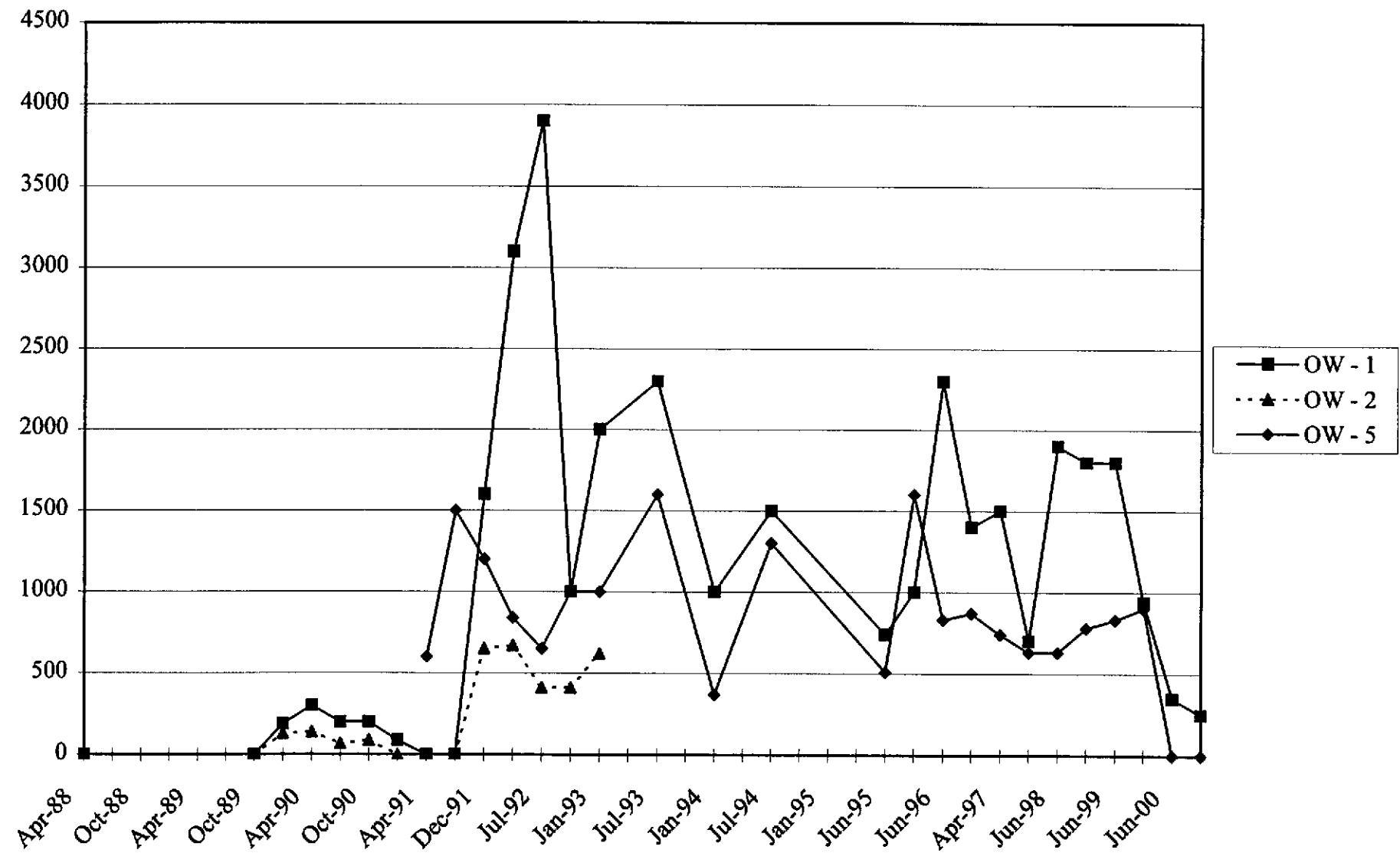
CSS ENVIRONMENTAL SERVICES, INC.

**SITE PLAN**  
**PG&E DISTRIBUTION CONSTRUCTION SITE**  
4930 COLISEUM WAY  
OAKLAND, CA 94610

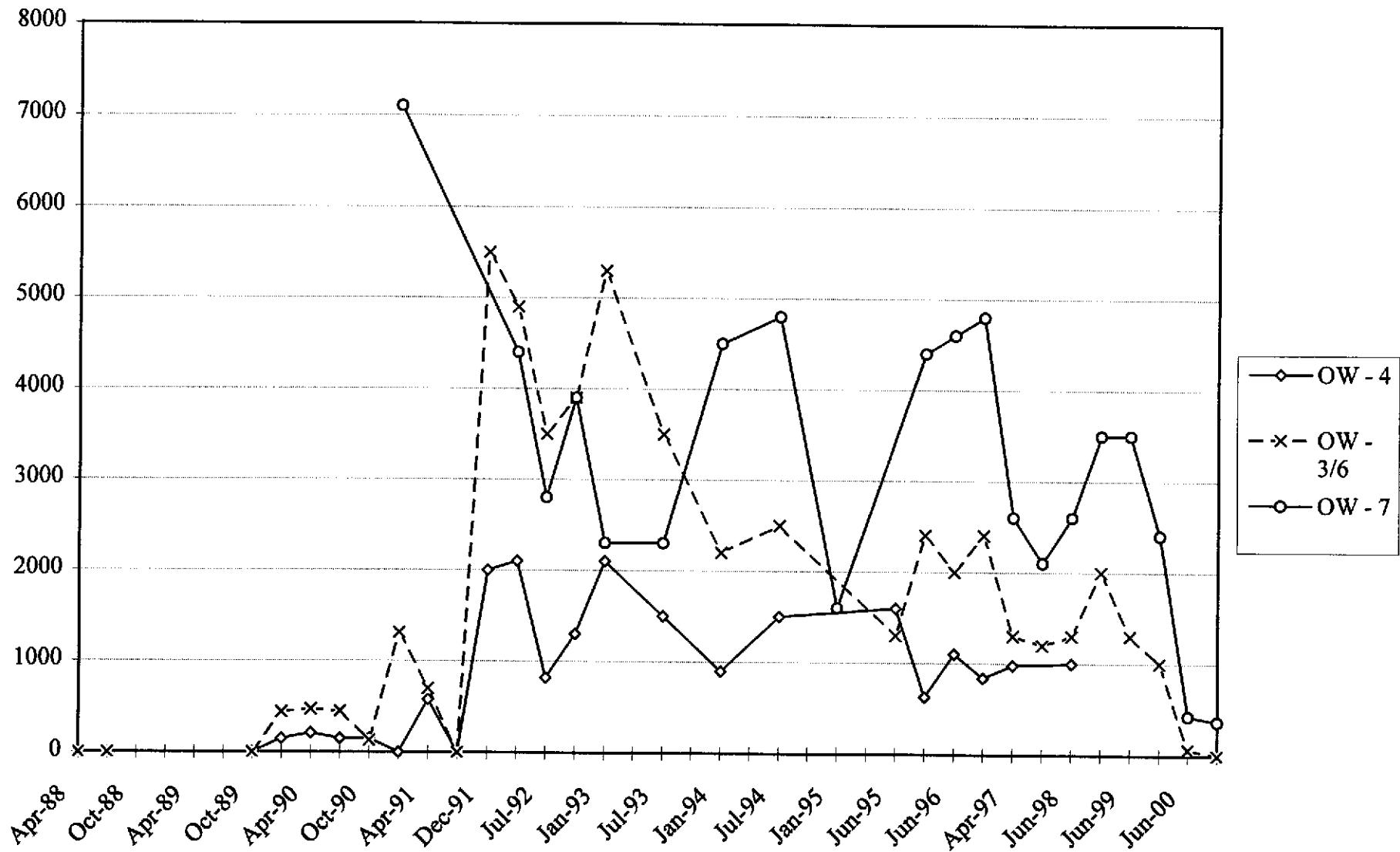
JOB NUMBER	DATE	DRAWING	BY	REVISED
6118	11/96	6118SITE	ESS	7/00

FIGURE

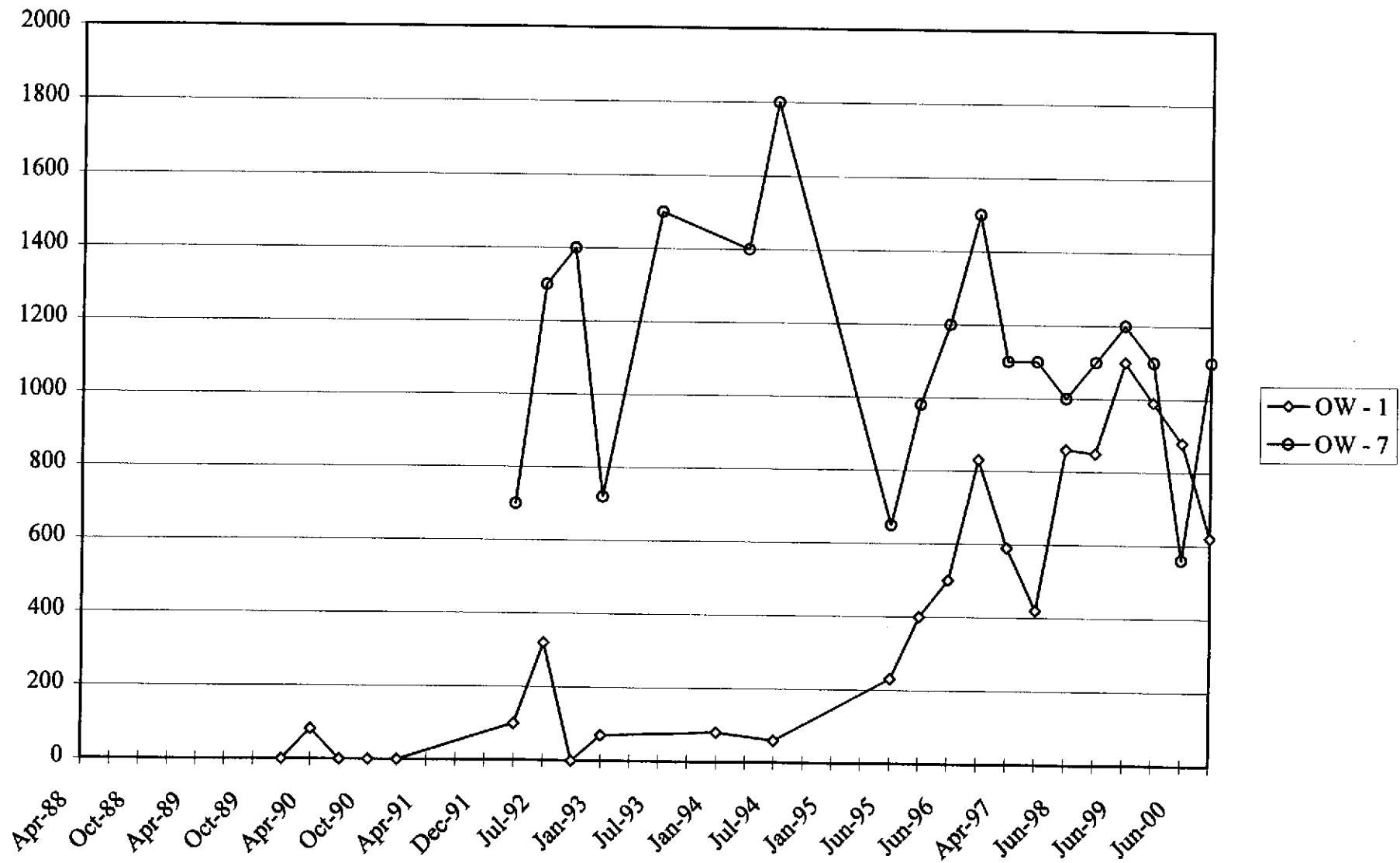
**FIGURE 3.1**  
**TPH-DIESEL in OW - 1, 2, & 5**



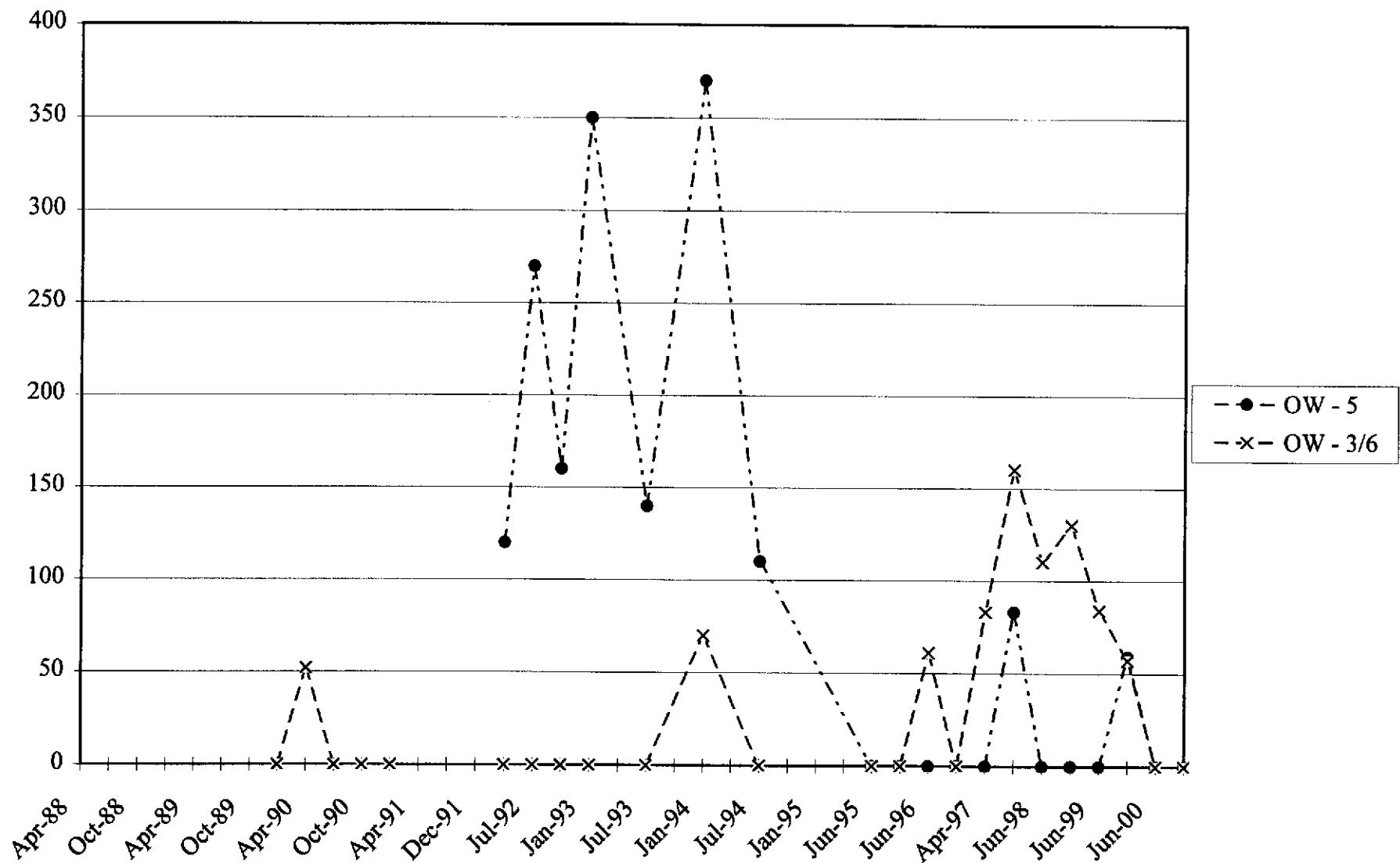
**FIGURE 3.2**  
**TPH-DIESEL in OW - 4, 3/6, & 7**



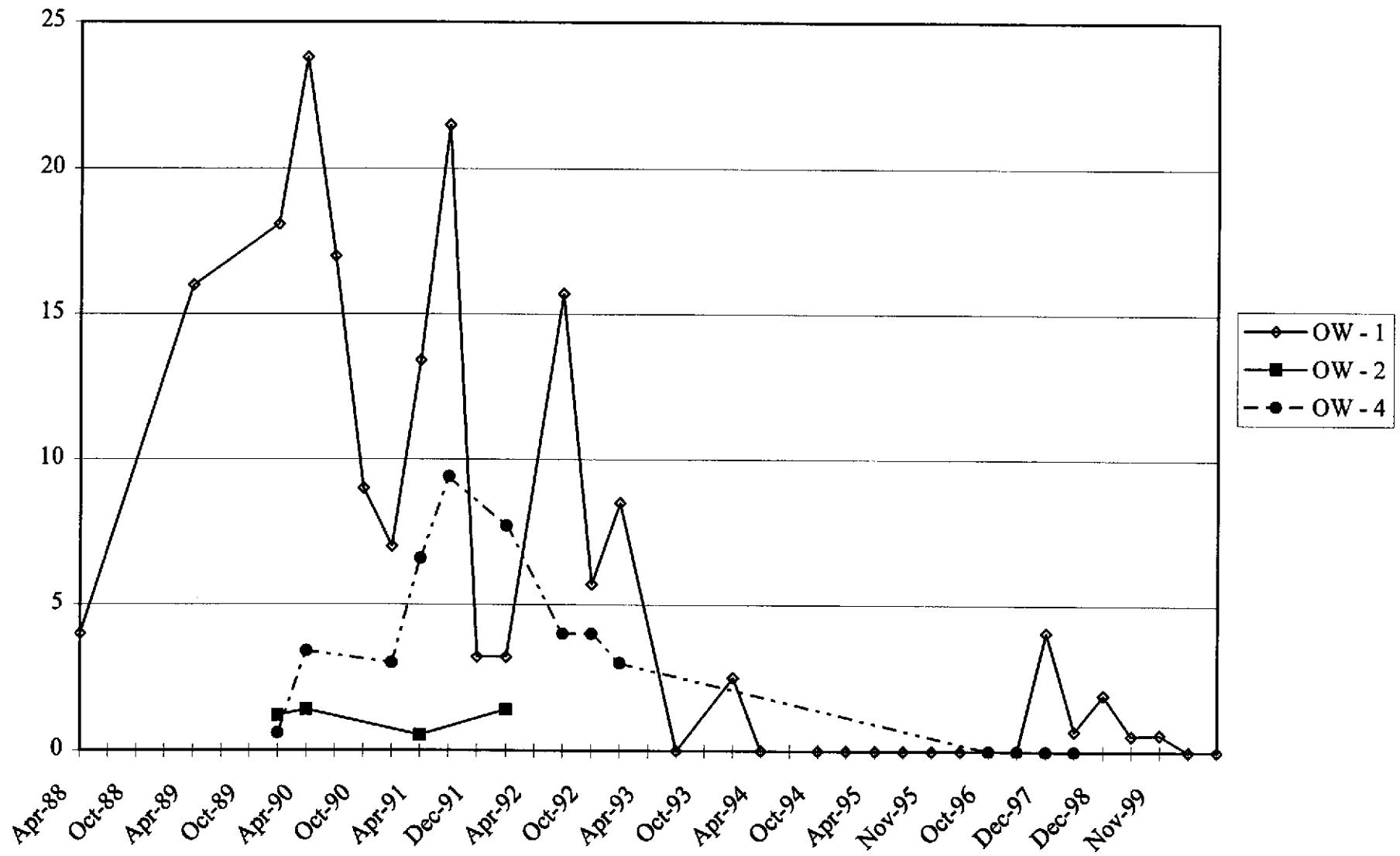
**FIGURE 3.3**  
**TPH-GASOLINE in OW - 1 & 7**



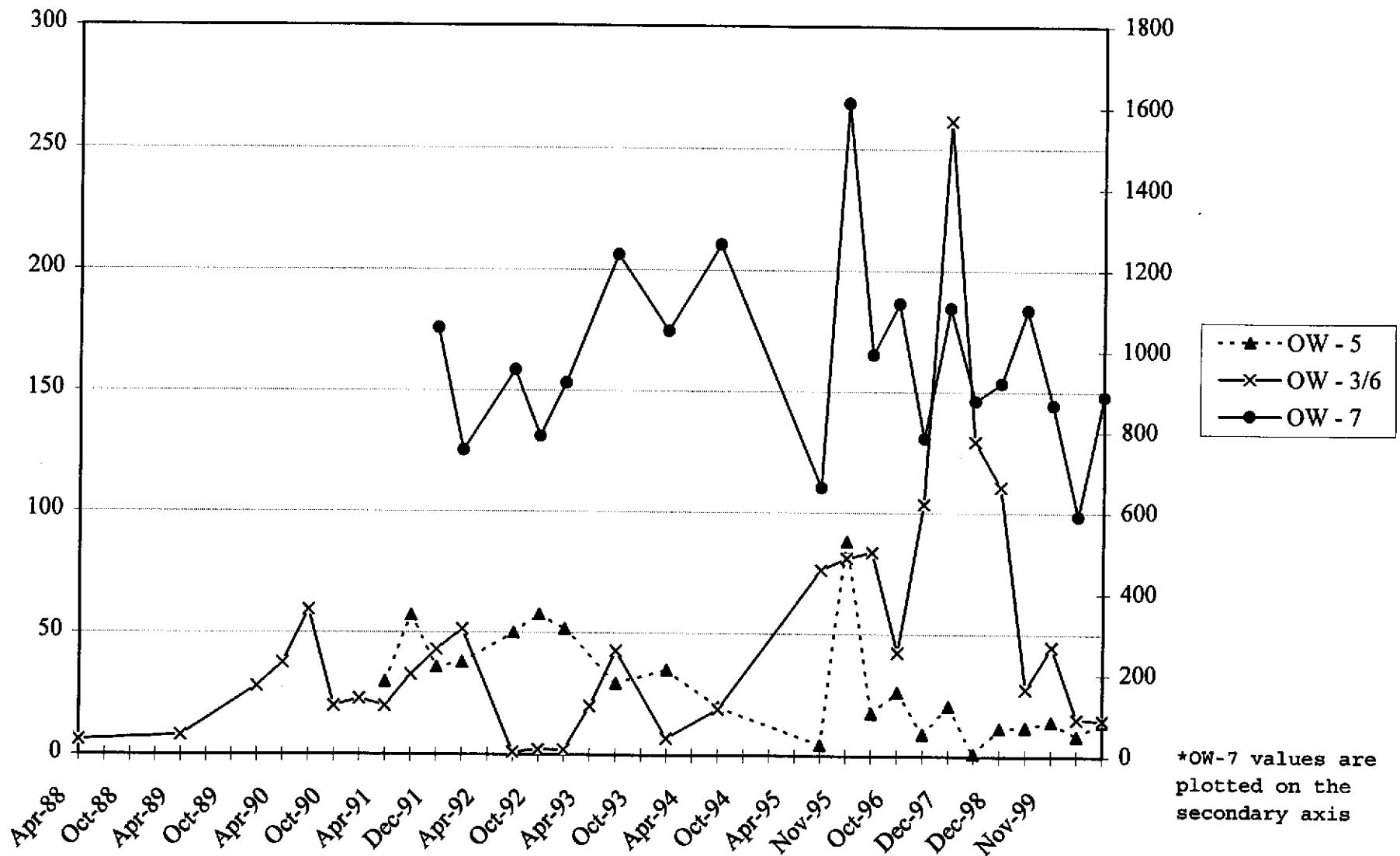
**FIGURE 3.4**  
**TPH-GASOLINE in OW - 5 & 3/6**

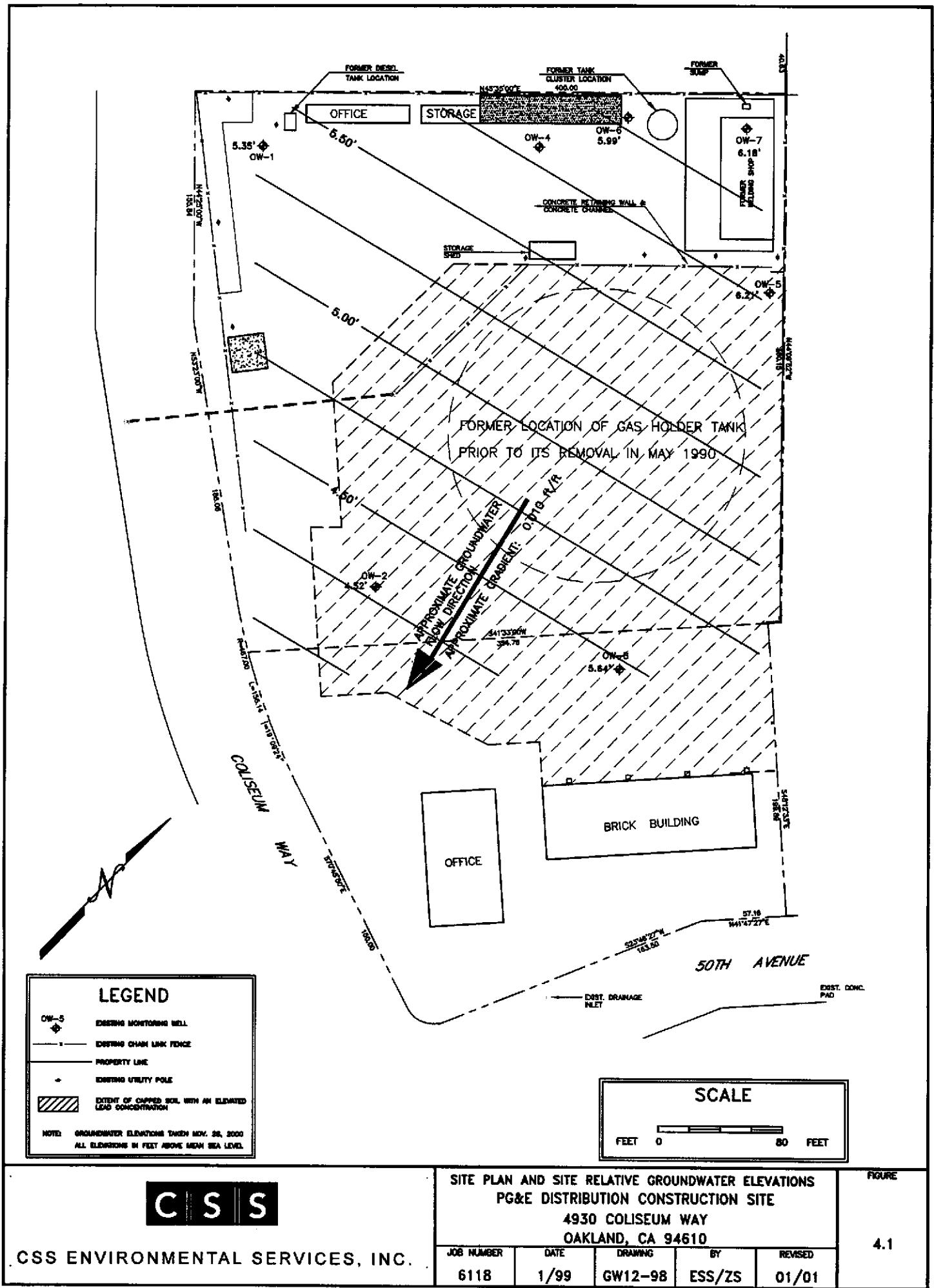


**FIGURE 3.5**  
**TOTAL VOCs in OW-1, 2, & 4**



**FIGURE 3.6**  
**TOTAL VOCs in OW-5, 6, & 7\***





**FIGURE 4.2**  
**HISTORICAL GROUNDWATER LEVELS**

