

67 | Ro 99

AUG 08 2002

**SEMI-ANNUAL GROUNDWATER  
MONITORING REPORT**

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

**August 6, 2002**

**CSS Project No. 6118**

*Prepared for*

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

*Prepared by*

**C S S**

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




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

AUG 08 2002

**LETTER OF TRANSMITTAL**

**DATE:** August 6, 2002

**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 two copies of the most recent Semi-Annual Groundwater Monitoring Report for 4930 Coliseum Way in Oakland, California.

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

**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

Ms. Anne Conner  
Pacific Gas & Electric Company  
Mail Code B24A  
P.O. Box 7640  
San Francisco, CA 94120

**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*

**C S S**

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

**August 6, 2002**



**Aaron N. Stessman, PE REA  
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**

- APPENDIX A      Sample Collection Records  
                    Certified Laboratory Results
- APPENDIX B      Historical Monitoring Data

## 1.0 BACKGROUND

This report presents the results of semiannual groundwater monitoring and sampling completed in the second quarter of 2002 at the PG&E Distribution and Construction Yard at 4930 Coliseum Way in Oakland, California. A vicinity map is included as Figure 1.1. 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 June 2002 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 storage tank. Figure 1.2 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.

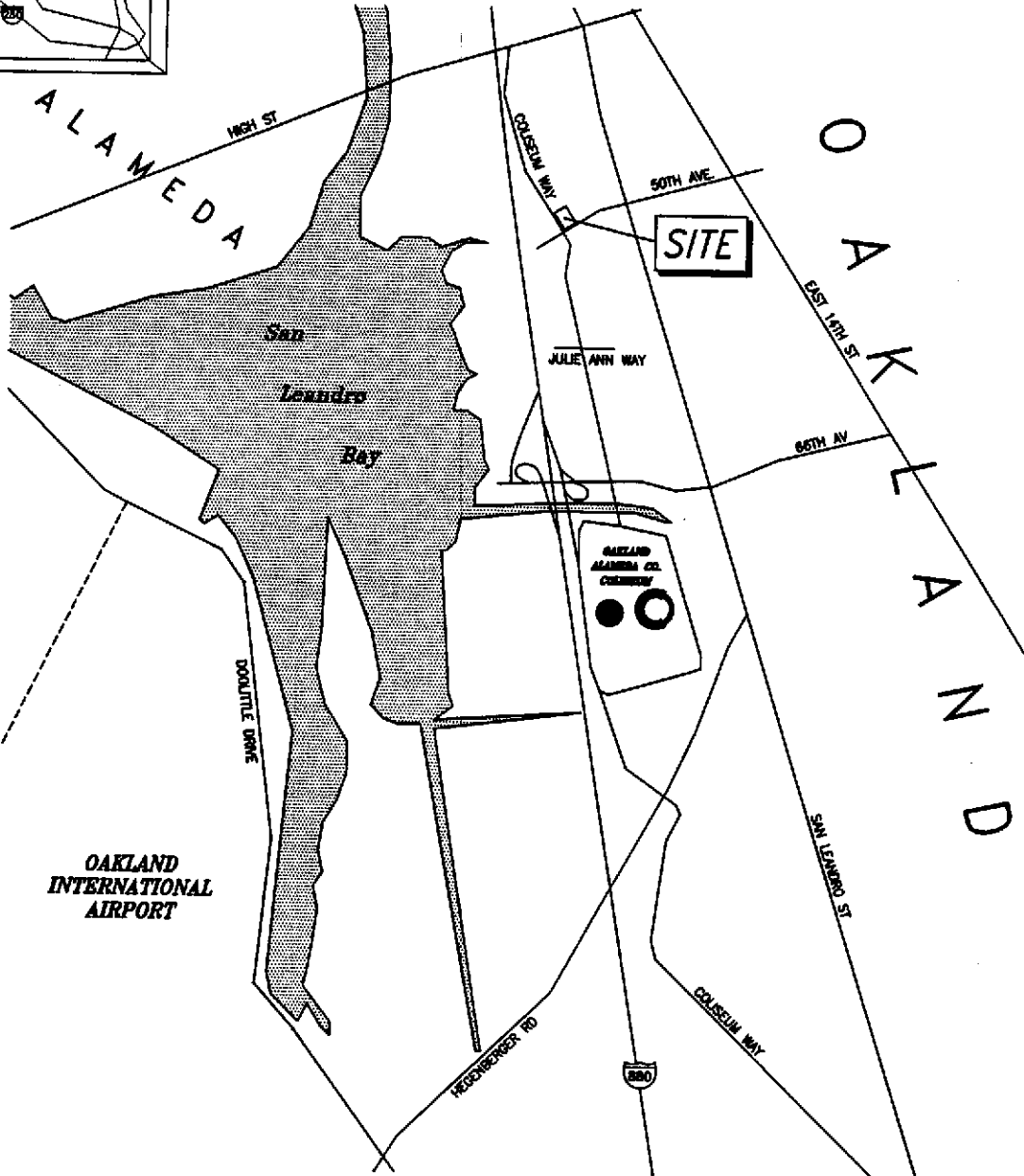
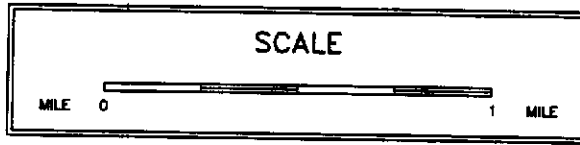
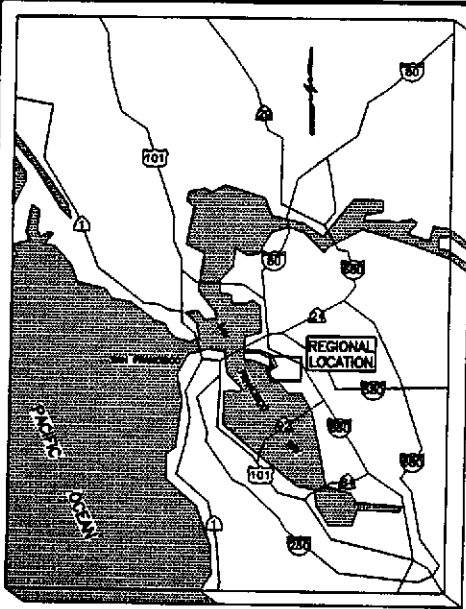
The samples collected along the PG&E property lines were above cleanup target levels, while each of the remaining confirmatory samples was below the cleanup target levels. The samples collected along the northeastern property line were above cleanup targets primarily due to TPH-D and O&G concentrations. 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. CCR Total Threshold Limit Concentration (TTLC) for lead is 1,000 mg/kg and the Soluble Threshold Limit Concentration (STLC) is 5 mg/L, equivalent to parts per million (ppm). The ACHCSA and the Regional Water Quality Control Board (RWQCB) approved capping with asphaltic concrete as the selected remedial option for this area. As part of the remedial option the County agreed upon continued groundwater monitoring and sampling for lead. 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 was below the state Maximum Contaminant Level (MCL) of 50 µg/L for drinking water at the time. 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.



CSS ENVIRONMENTAL SERVICES, INC.

SITE LOCATION MAP

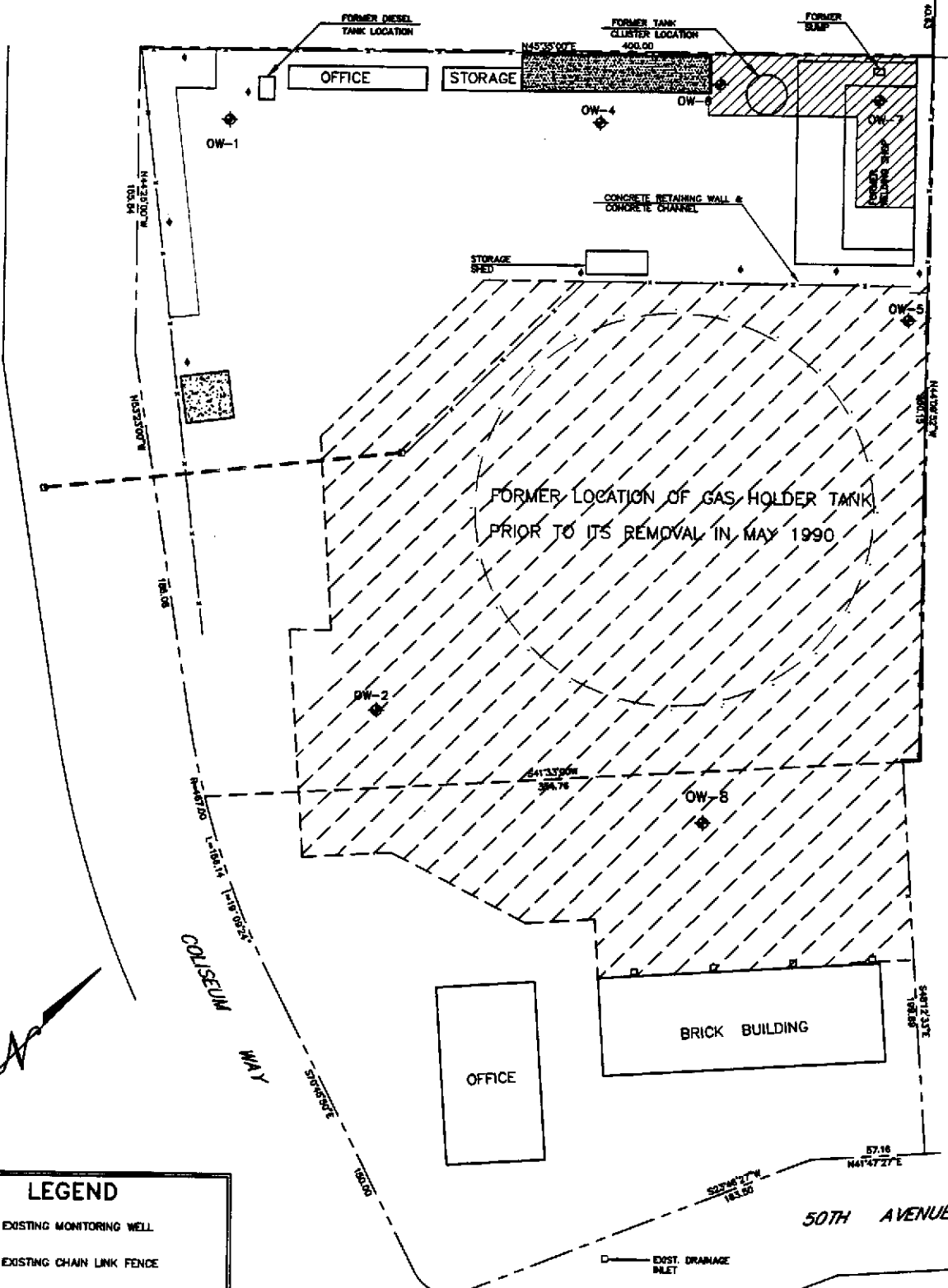
PG & E DISTRIBUTION CONSTRUCTION SITE  
 4930 COLISEUM WAY  
 OAKLAND, CA 94610

FIGURE

1.1

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





**LEGEND**

- OW-5 EXISTING MONITORING WELL
- EXISTING CHAIN LINK FENCE
- PROPERTY LINE
- EXISTING UTILITY POLE
- EXTENT OF CAPPED SOIL WITH AN ELEVATED LEAD CONCENTRATION
- EXTENT OF 1991 SOIL REMEDIATION (APPROXIMATE)

**SCALE**

FEET 0 80 FEET



CSS ENVIRONMENTAL SERVICES, INC.

<b>SITE PLAN</b> <b>PG&amp;E DISTRIBUTION CONSTRUCTION SITE</b> <b>4930 COLISEUM WAY</b> <b>OAKLAND, CA 94610</b>					FIGURE  1.2
JOB NUMBER	DATE	DRAWING	BY	REVISED	
6118	11/96	6118SITE	ESS	7/00	

## 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 concentrations in the groundwater, downgradient of the former AST. The locations of the new wells were approved by the ACHCSA.

On June 17, 2002, 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. Well OW-4 was inaccessible due to the presence of an overlying storage container. Prior to sampling, three casing volumes of groundwater were purged with a bailer from each well to ensure the collection of formational 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 June 17, 2002 sampling event.

The groundwater samples collected from each well were selectively analyzed by STL San Francisco of Pleasanton, California for TPH-D (EPA method 8015M), TPH-G and BTEX (EPA method 8015M/8021), purgeable halocarbons compounds (EPA method 8021), and lead (EPA method 6010) according to the monitoring schedule.

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	Purgeable Halocarbons	Lead	Ground water Elevation
OW - 1	S	S			S
OW - 2				S	S
OW - 4	S	S			S
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 June 17, 2002. TPH-D was detected in the four monitoring wells sampled for TPH-D and the highest concentration was observed in well OW-7. TPH-G was detected in two 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	0.670	0.640
OW - 5	0.260	ND
OW - 6	0.220	ND
OW - 7	1.000	1.000

Notes:

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

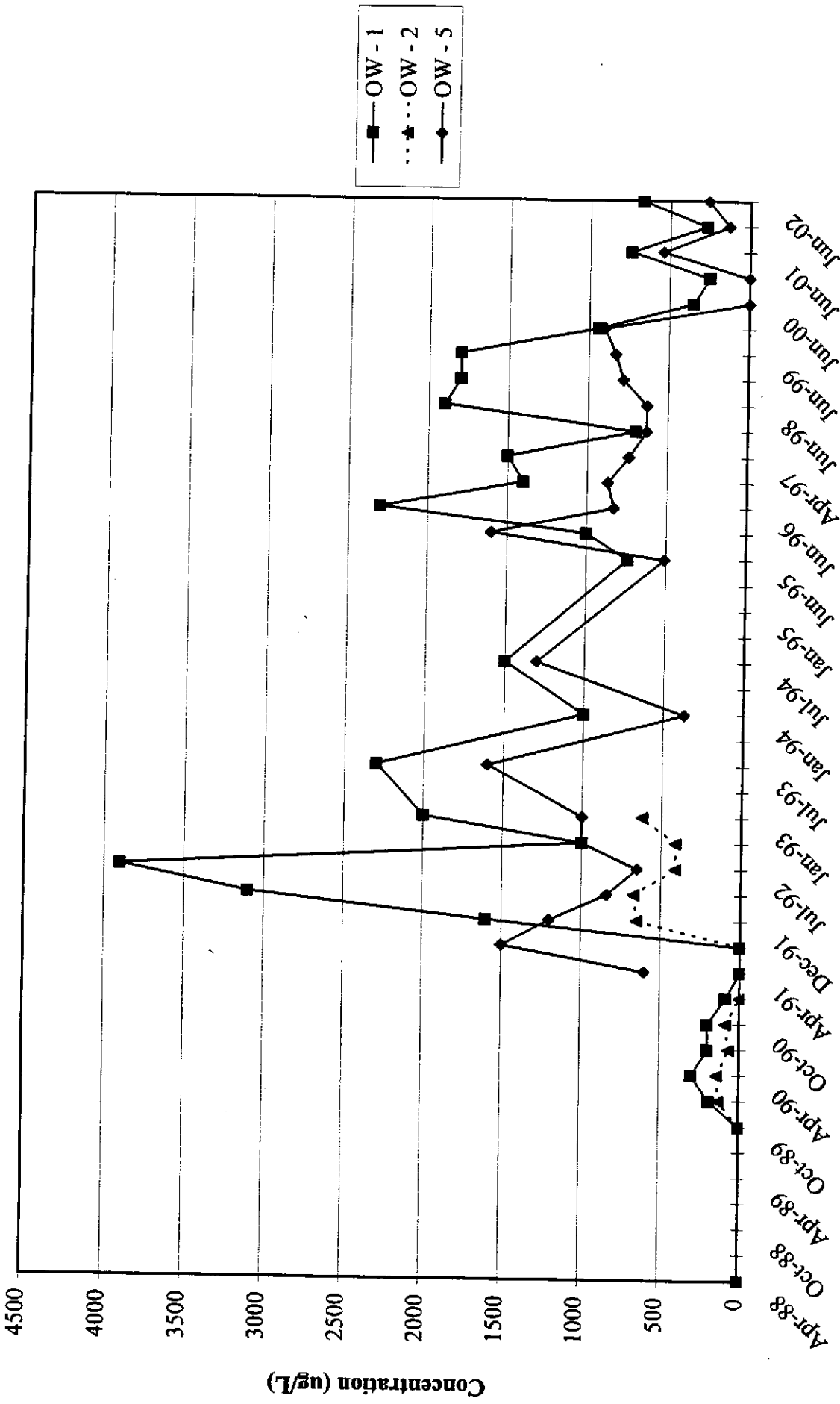
Figures 3.1 and 3.2 illustrate the historical concentrations of TPH-D in the monitored wells. The data from monitoring wells OW-3 and OW-6 are combined since OW-6 was installed to replace OW-3 following its destruction.

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 those wells in the remediation vicinity: OW-4, OW-6, and OW-7. Compared to the previous sampling event (November 2001), this quarter's results show an increase in TPH-D concentrations in all wells. [REDACTED] has been in [REDACTED] over the past eight sampling events. [REDACTED] [REDACTED].

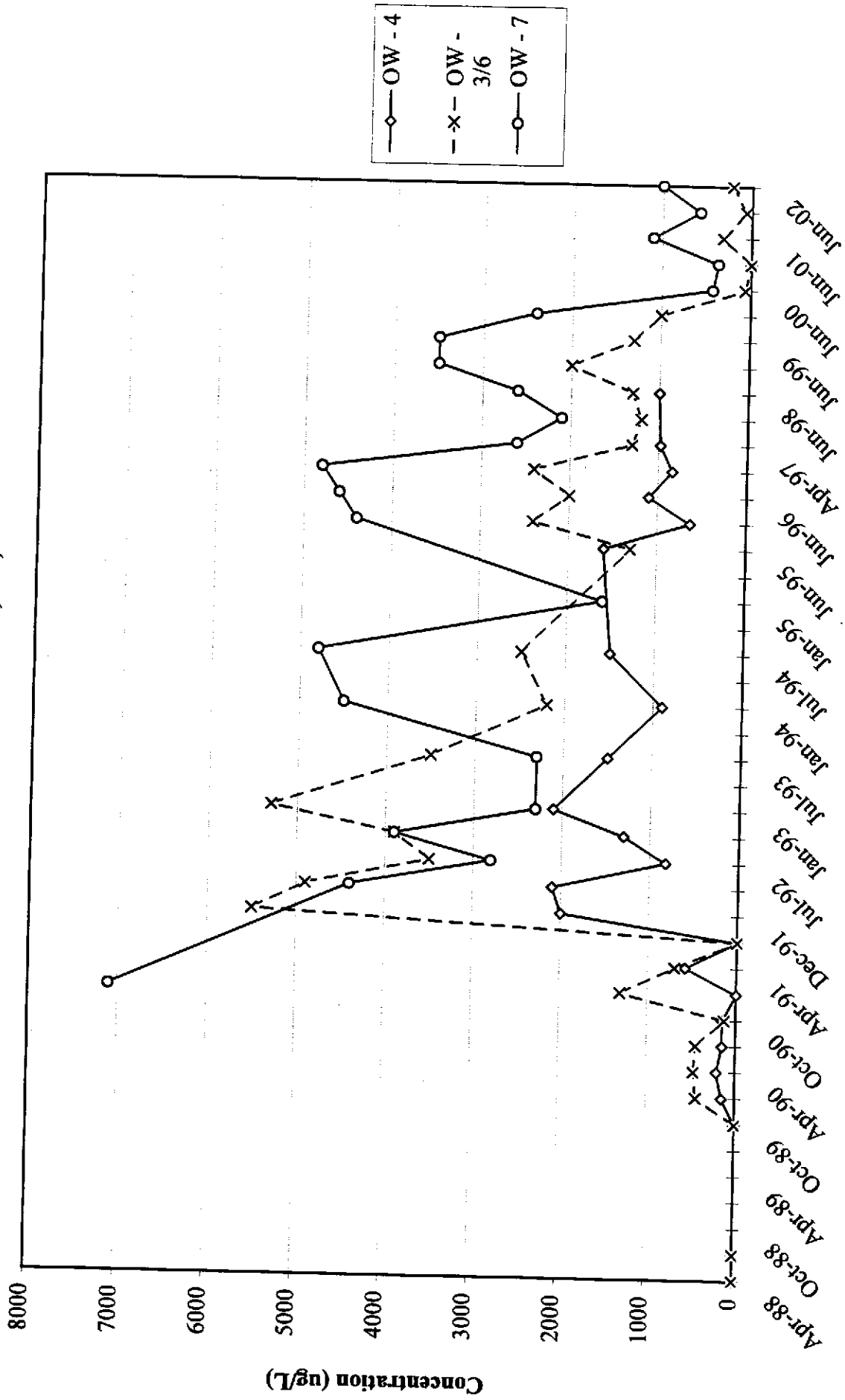
It was noted in the February 1992 tank cluster area remediation report that there is an apparent off-site source of contamination upgradient of the PG&E yard. The persistence of moderate TPH following remediation in this area is believed to be the result of this upgradient contamination.

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

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



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



in all wells except upgradient wells OW-1, and OW-7. Historically, OW-7 has had concentrations ranging from 530 to 1,800 µg/L. The current TPH-G concentration for OW-1 is 640 µg/L. Well OW-1's current TPH-G concentration shows a slight increase compared to the previous sampling event of November 2001. OW-7's current TPH-G concentration of 1000 µg/L has increased as well. 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 maximum contaminant level (MCL) observed by state water treatment systems is 15 µg/L. During this quarter's event, lead was not detected in the monitoring wells that were sampled for lead. Historically, the majority of samples show concentrations below the 15 µg/L drinking water MCL. The highest historical concentration of lead was 27 µg/L in OW-8, sampled in April 1993.

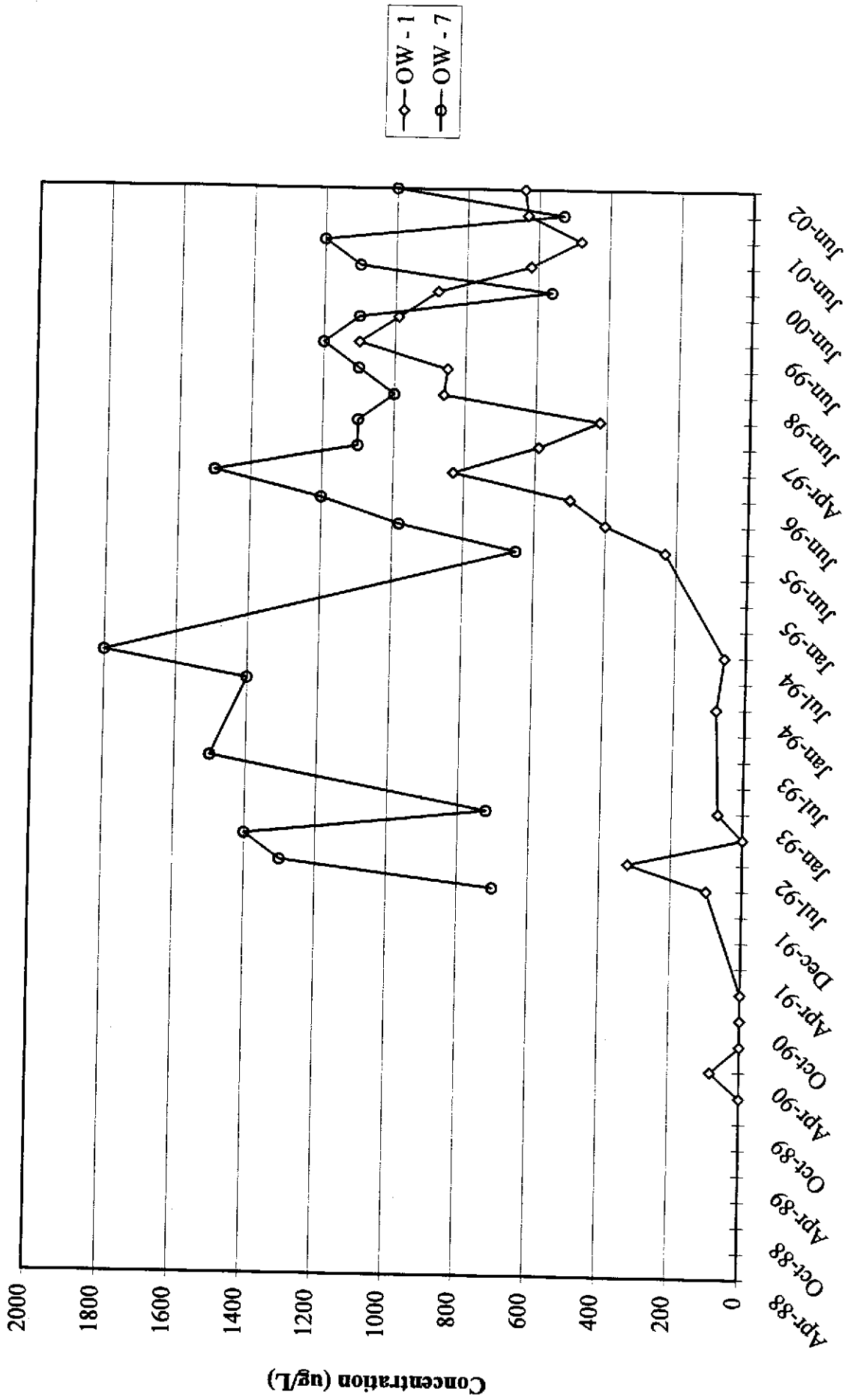
**Table 3.2 Lead in Groundwater, in µg/L**

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

**Notes:**

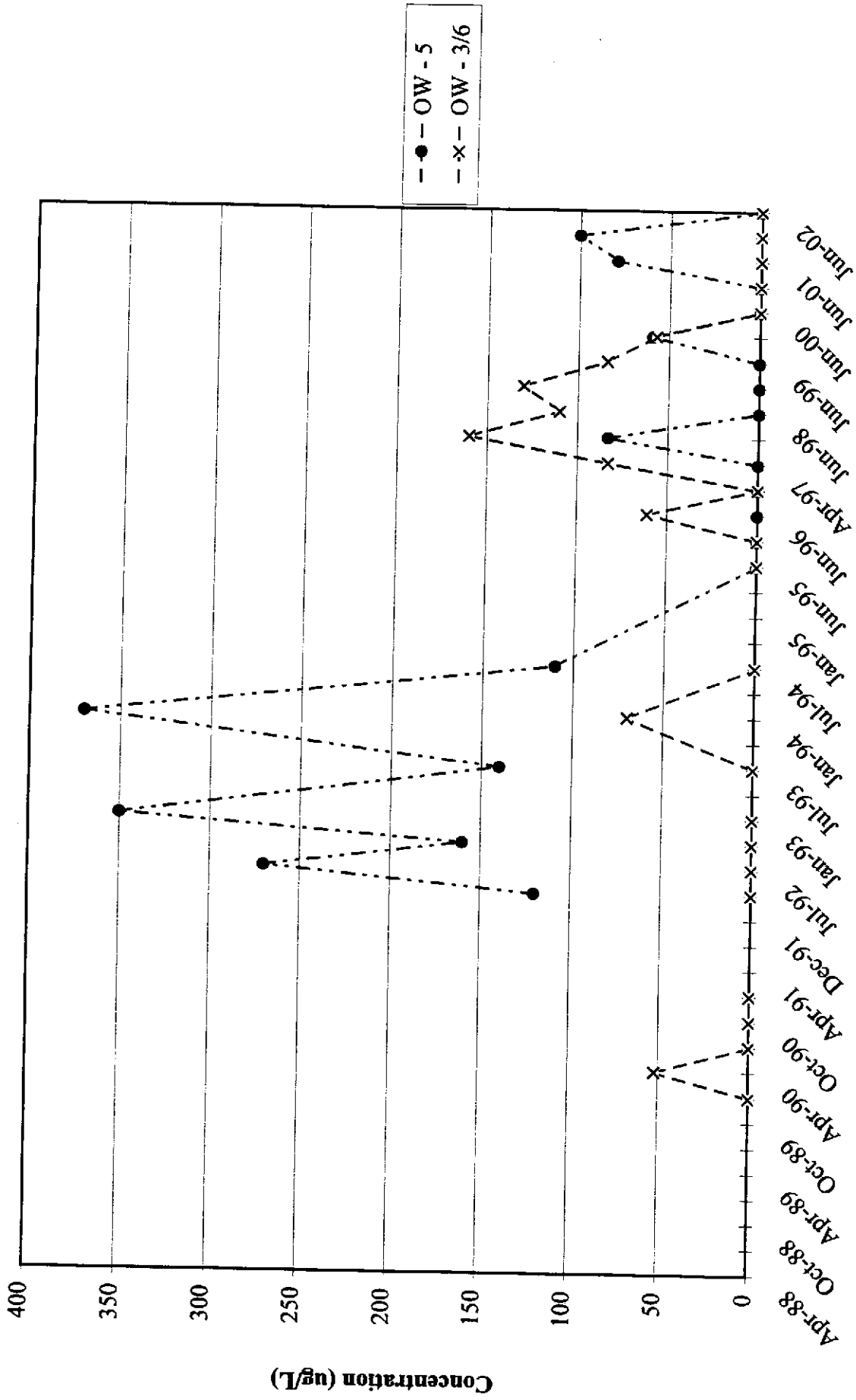
- MCL = Maximum Contaminant Level for drinking water.
- ND = Not Detected at or above the method Reporting Limits (RL)
- NA = Not Analyzed
- Dissolved Lead analyses performed by EPA Method 6010A

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





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



### 3.3 VOLATILE ORGANIC COMPOUNDS

Table 3.3 presents the recent analytical results for VOCs in groundwater. Historical results of VOC monitoring are presented in Appendix B. The state MCLs for drinking water were exceeded for the following compounds: 1,4-Dichlorobenzene (1,4-DCB) in monitoring wells OW-6 and OW-7 at concentrations of 5.0 µg/L and 500 µg/L respectively, Chlorobenzene in well OW-7 at 46 µg/L, and Benzene in well OW-5 at a concentration of 6.3 µg/L.

VOCs detected at concentrations below their MCLs include:

- 1,1-Dichloroethane in wells OW-5 and OW-6;
- 1,3-Dichlorobenzene (1,3-DCB) in wells OW-6 and OW-7;
- 1,2-Dichlorobenzene (1,2-DCB) 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. These wells are not presently monitored for VOCs.

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 7.4 µg/L, 7.4 µg/L, and 1,035 µg/L, respectively. 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 from neighboring properties onto the PG&E site. This demonstrates that VOCs may be migrating onto the PG&E site from an upgradient source.

Table 3.3 Volatile Organic Compounds in Groundwater, in ug/l

PURGEABLE HALOCARBONS	MCL	Well Number							
		OW-1	OW-2	OW-4	OW-5	OW-6	OW-7	OW-8	MB
Chloromethane		NA	NA	NA	ND	ND	ND	NA	ND
Bromomethane		NA	NA	NA	ND	ND	ND	NA	ND
Vinyl chloride	0.5	NA	NA	NA	ND	ND	ND	NA	ND
Chloroethane		NA	NA	NA	ND	ND	ND	NA	ND
Methylene Chloride	5 <sup>#</sup>	NA	NA	NA	ND	ND	ND	NA	ND
Trichlorofluoromethane	150	NA	NA	NA	ND	ND	ND	NA	ND
1,1-Dichloroethene	6	NA	NA	NA	ND	ND	ND	NA	ND
1,1-Dichloroethane	5	NA	NA	NA	1.1	1.3	ND	NA	ND
cis-1,2-Dichloroethene	6	NA	NA	NA	ND	ND	ND	NA	ND
trans-1,2-Dichloroethene	10	NA	NA	NA	ND	ND	ND	NA	ND
Chloroform	100 <sup>6*</sup>	NA	NA	NA	ND	ND	ND	NA	ND
Freon 113	1200	NA	NA	NA	ND	ND	ND	NA	ND
1,2-Dichloroethane	0.5	NA	NA	NA	ND	ND	ND	NA	ND
1,1,1-Trichloroethane	200	NA	NA	NA	ND	ND	ND	NA	ND
Carbon Tetrachloride	0.5	NA	NA	NA	ND	ND	ND	NA	ND
Bromodichloromethane	100 <sup>6*</sup>	NA	NA	NA	ND	ND	ND	NA	ND
1,2-Dichloropropane	5	NA	NA	NA	ND	ND	ND	NA	ND
cis-1,3-Dichloropropene	5 <sup>***</sup>	NA	NA	NA	ND	ND	ND	NA	ND
Trichloroethylene	5	NA	NA	NA	ND	ND	ND	NA	ND
1,1,2-Trichloroethane	32	NA	NA	NA	ND	ND	ND	NA	ND
trans-1,3-Dichloropropene	5 <sup>***</sup>	NA	NA	NA	ND	ND	ND	NA	ND
Dibromochloromethane	100 <sup>6*</sup>	NA	NA	NA	ND	ND	ND	NA	ND
2-Chloroethylvinyl Ether		NA	NA	NA	ND	ND	ND	NA	ND
Bromoform	100 <sup>6*</sup>	NA	NA	NA	ND	ND	ND	NA	ND
Tetrachloroethylene	5	NA	NA	NA	ND	ND	ND	NA	ND
1,1,2,2-Tetrachloroethane	1	NA	NA	NA	ND	ND	ND	NA	ND
Chlorobenzene	30	NA	NA	NA	ND	ND	46	NA	ND
1,3-Dichlorobenzene	600 <sup>#</sup>	NA	NA	NA	ND	1.1	420	NA	ND
1,2-Dichlorobenzene	600 <sup>#</sup>	NA	NA	NA	ND	ND	69	NA	ND
1,4-Dichlorobenzene	5	NA	NA	NA	ND	500	500	NA	ND
PURGEABLE AROMATICS									
Benzene	1	ND	NA	NA	74	ND	ND	NA	ND
Toluene	1000 <sup>#</sup>	ND	NA	NA	ND	ND	ND	NA	ND
Ethylbenzene	680	ND	NA	NA	ND	ND	ND	NA	ND
Total Xylenes	1750 <sup>**</sup>	ND	NA	NA	ND	ND	ND	NA	ND
FUEL OXYGENATES									
Methyl tertiary butyl ether	13+	NA	NA	NA	NA	NA	NA	NA	NA

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) Fuel Oxygenates, MTBE only (EPA method 8260A)

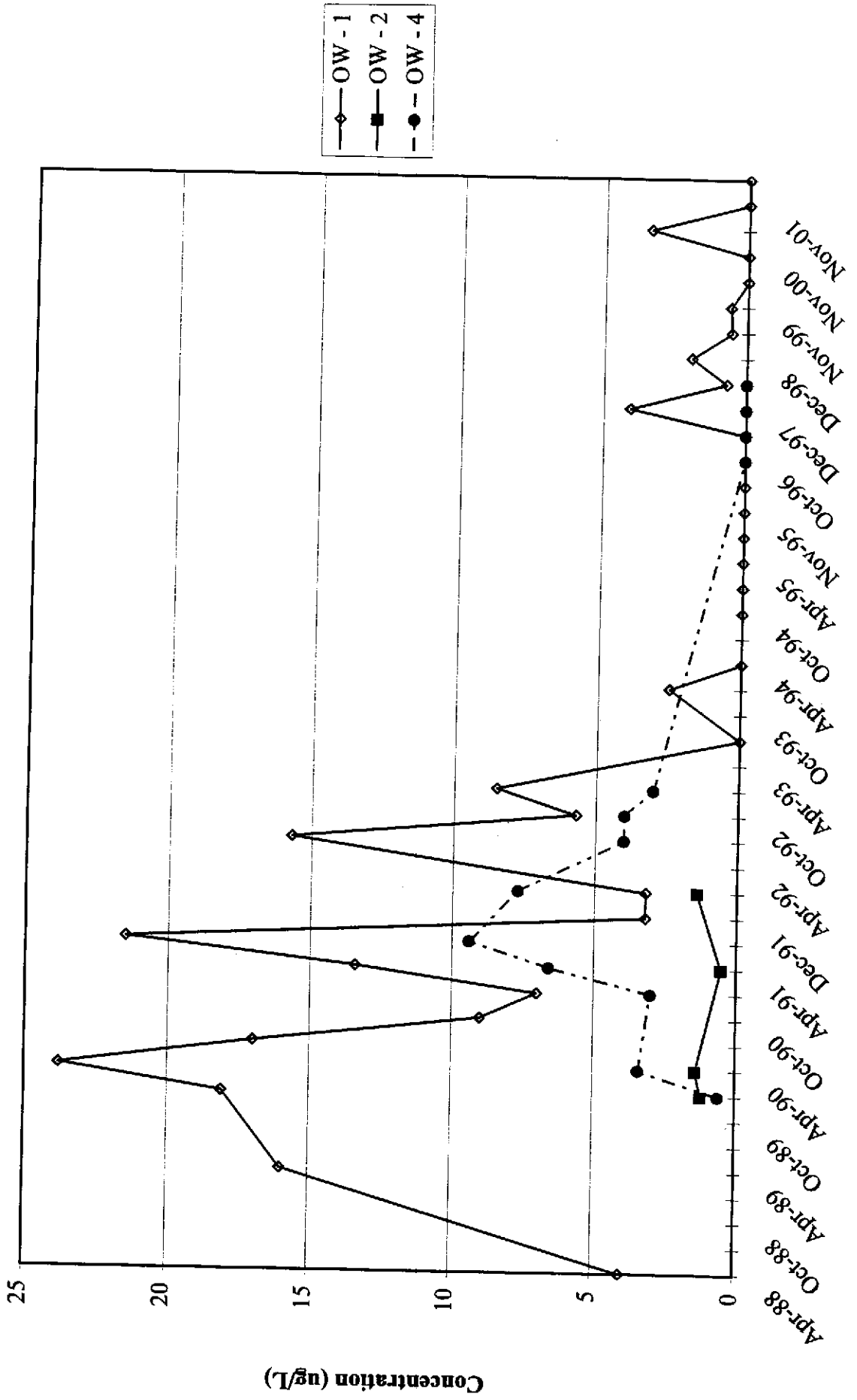
Exceeded MCL

10) NA = Not Tested

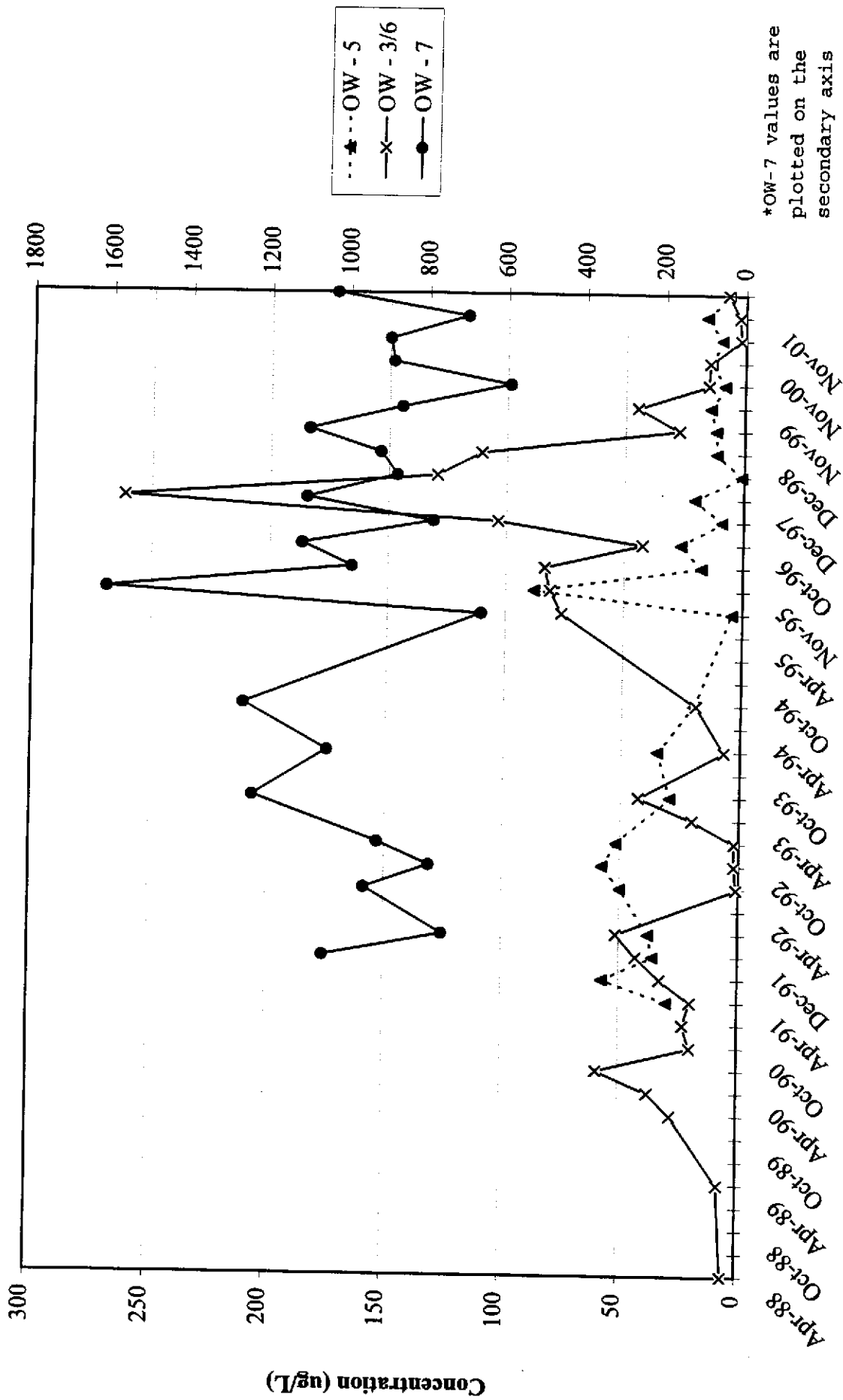
11) MB = Method Blank

12) + = California Public Health Goal for Chemicals in Drinking Water

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



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

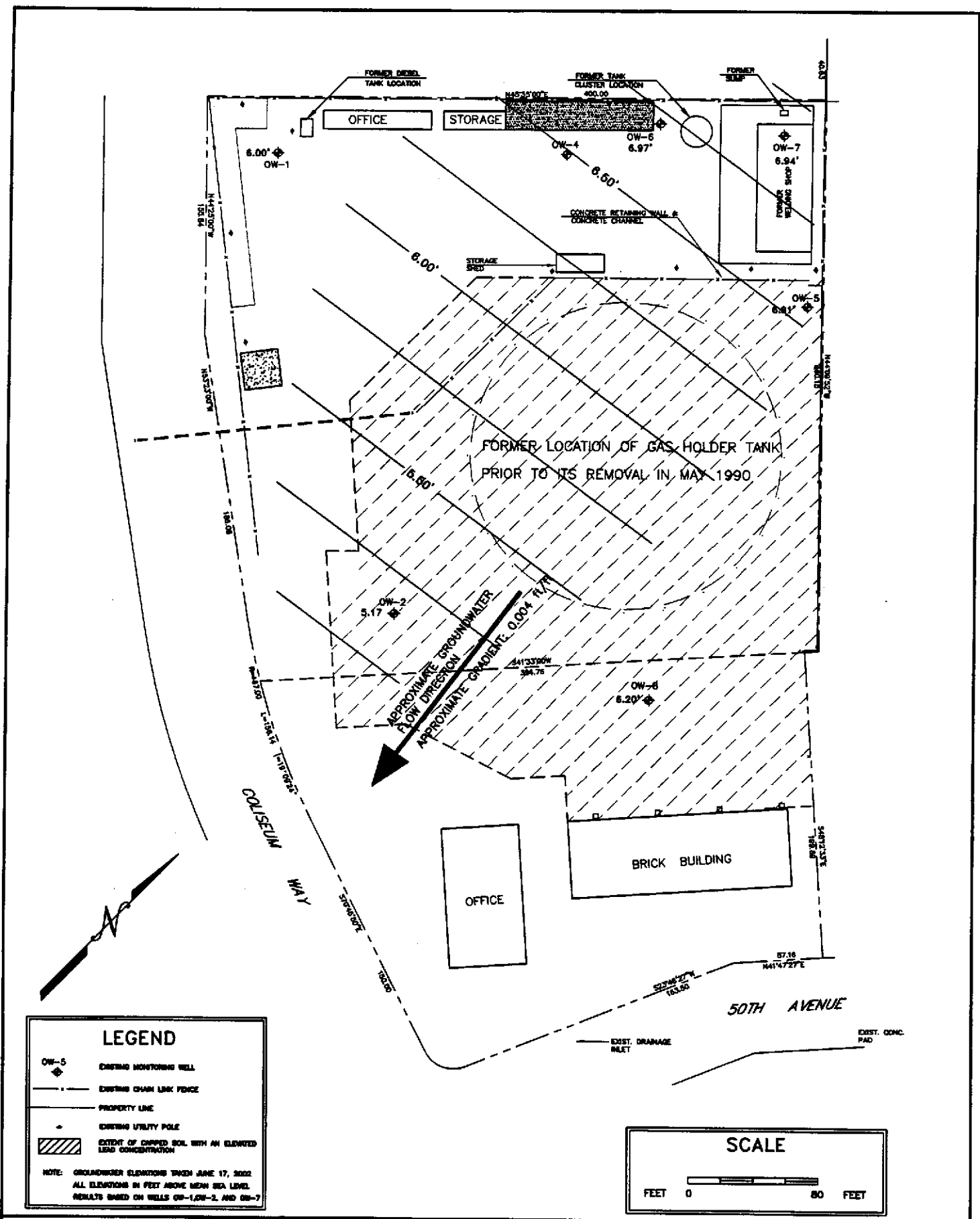


\*OW-7 values are plotted on the secondary axis

#### 4.0 GROUNDWATER FLOW DIRECTION

Water level measurements in the site monitoring wells were collected on June 17, 2002, 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 June 17, 2002 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 0.004 ft/ft to the south. The gradient value is slightly lower 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.



CSS ENVIRONMENTAL SERVICES, INC.

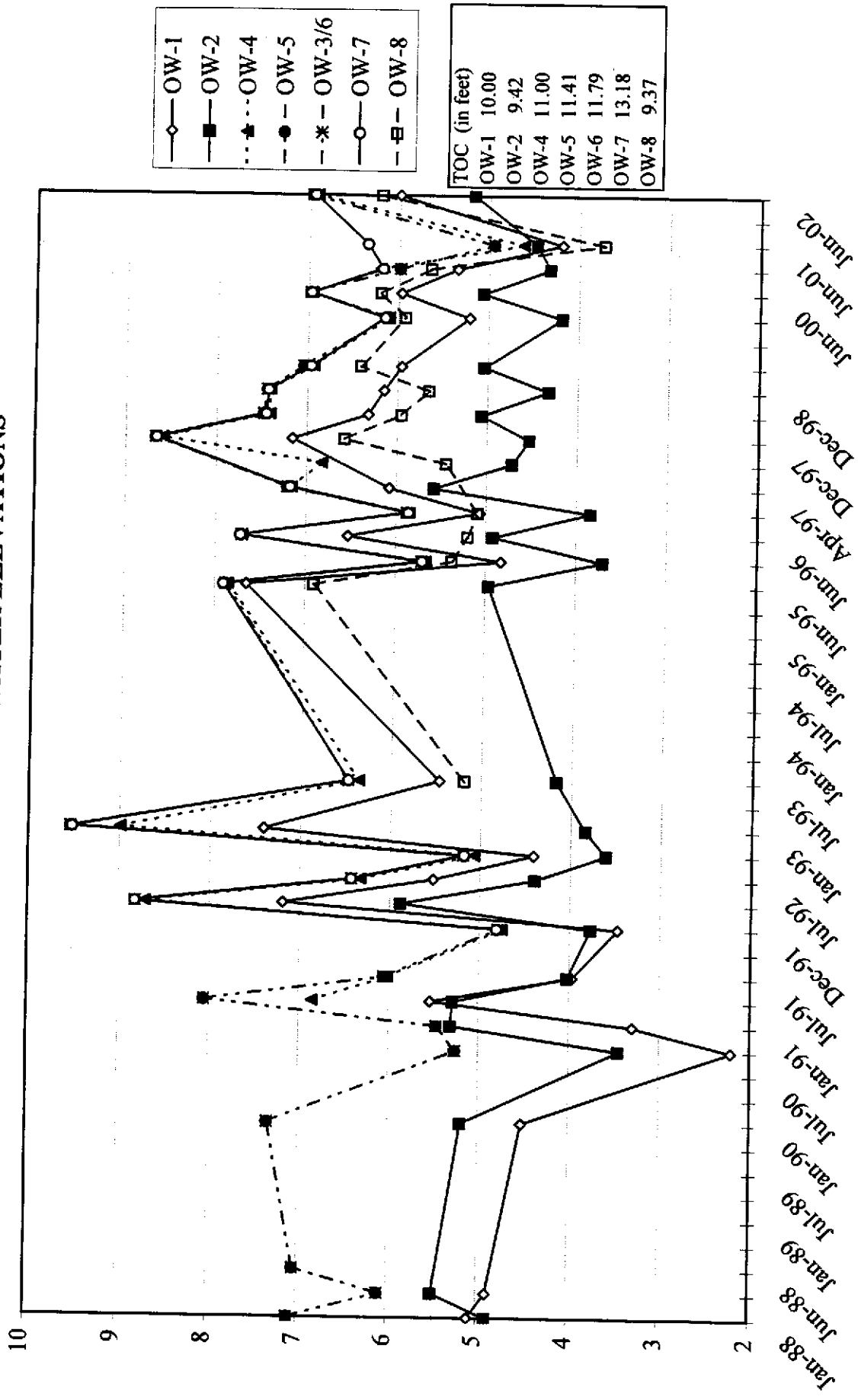
SITE PLAN AND SITE RELATIVE GROUNDWATER ELEVATIONS  
 PG&E DISTRIBUTION CONSTRUCTION SITE  
 4930 COLISEUM WAY  
 OAKLAND, CA 94610

FIGURE

4.1

JOB NUMBER	DATE	DRAWING	BY	REVISED
6118	1/99	GW06-02	ES/ZS/BD	06/02

**FIGURE 4.2**  
**HISTORICAL GROUNDWATER ELEVATIONS**





## 5.0 CAP INSPECTION

The next scheduled cap inspection is during the fourth quarter of 2002.

## 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 June 17, 2002 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 0.004 ft/ft is slightly lower than that previously observed.
- TPH-D was detected in wells OW-1, OW-5, OW-6 and OW-7 above the reporting limit of 50 µg/L, however the concentrations are at lower concentrations than most historical sampling events. The highest concentration was found in well OW-7 at 1000 µg/L. Moderate TPH-D concentrations in groundwater have persisted in wells located in the northeastern portion of the property. Since remedial action had removed known sources of contaminants within the site, the presence of TPH-D is likely to be caused by upgradient, off-site source. The current applicable guideline for TPH-D where groundwater is a potential source of drinking water is the California Regional Water Quality Control Board, San Francisco Bay Region's (RWQCB's) Risk-Based Screening Level (RBSL) of 100 µg/L, the EPA Suggested No-Adverse-Response Level (SNARL).
- Monitoring wells OW-1, and OW-7 had TPH-G concentrations of 640 and 1000 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. The current applicable guideline for TPH-G is the RBSL of 100 µg/L, the EPA SNARL for diesel.
- Soluble lead concentrations were not detected in monitoring wells OW-2, OW-5 and OW-8. The MCL for lead in drinking water is 15 µg/L.
- 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/or 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 concentration of total VOCs in two out of the three wells increased this quarter relative to the previous sampling event.

- The following VOC's were detected above their MCL:  
  
1,4-Dichlorobenzene (1,4-DCB) in wells OW-6 and OW-7;  
Chlorobenzene in well OW-7  
Benzene in well OW-5.
  
- The following VOCs were detected below their MCL:  
  
1,1-Dichloroethane in wells OW-5 and OW-6;  
1,3-Dichlorobenzene (1,3-DCB) in wells OW-6 and OW-7;  
1,2-Dichlorobenzene (1,2-DCB) 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. OPD
- Perform the annual inspection of the lead containment cap during the fourth quarter of 2002.

***APPENDIX A***

---

**Sample Collection Records  
Certified Laboratory Results**

**Submission#: 2002-07-0220**

July 16, 2002

**SEVERN**

**TRENT**

**LABORATORY**

**CSS Environmental Services**  
95 Belvedere Street, Suite 2  
San Rafael, CA 94901

**STL San Francisco**  
1220 Quarry Ln  
Pleasanton CA 94566

Attn.: Aaron Stessman  
Project#: 6118  
Project: PG&E Coliseum Way

Tel.: (925) 484-1919  
Fax: (925) 484-1096  
[www.stl-inc.com](http://www.stl-inc.com)  
[www.chromalab.com](http://www.chromalab.com)

CA DHS ELAP#:2496

Dear Mr. Stessman,

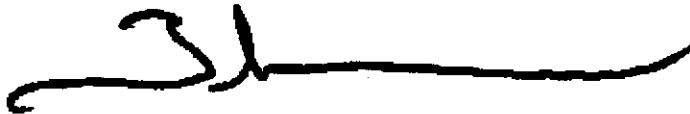
Attached is our report for your samples received on 06/19/2002 11:48  
This report has been reviewed and approved for release. Reproduction of this report  
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after  
08/03/2002 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,  
please call me at (925) 484-1919.

You can also contact me via email. My email address is: [tgranicher@chromalab.com](mailto:tgranicher@chromalab.com)

Sincerely,



Tod Granicher  
Project Manager

Submission #: 2002-07-0220

Halogenated Volatile Organic Compounds by 8021

CSS Environmental Services

Attn.: Aaron Stessman

95 Belvedere Street, Suite 2

San Rafael, CA 94901

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

Project: 6118

PG&E Coliseum Way

Received: 06/19/2002 11:48

SEVERN

TRENT

LABORATORY

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel: (925) 484-1919  
Fax: (925) 484-1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP# 2496

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
OW-6	06/17/2002 15:50	Water	1
OW-7	06/17/2002 15:15	Water	2
OW-5	06/17/2002 14:35	Water	3

Submission #: 2002-07-0220

SEVERN

Halogenated Volatile Organic Compounds by 8021

TRENT

LABORATORY

CSS Environmental Services

Attn.: Aaron Stessman  
 95 Belvedere Street, Suite 2  
 San Rafael, CA 94901  
 Phone: (415) 457-9551 Fax: (415) 457-9261

STL San Francisco  
 1220 Quarry Lane  
 Pleasanton, CA 94566

Tel: (925) 484-1919  
 Fax: (925) 484-1096  
 www.stl-inc.com  
 www.chromalab.com

Project: 6118  
 PG&E Coliseum Way

Received: 06/19/2002 11:48

CA DHS ELAP# 2496

Prep(s): 5030B Test(s): 8021B  
 Sample ID: OW-6 Lab ID: 2002-07-0220 - 1  
 Sampled: 06/17/2002 15:50 Extracted: 7/16/2002 03:24  
 Matrix: Water QC Batch#: 2002/07/15-01.25  
 Analysis Flag: HT ( See Legent and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	07/16/2002 03:24	
Vinyl chloride	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Chloroethane	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Trichlorofluoromethane	ND	0.50	ug/L	1.00	07/16/2002 03:24	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Methylene chloride	ND	5.0	ug/L	1.00	07/16/2002 03:24	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	07/16/2002 03:24	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	07/16/2002 03:24	
1,1-Dichloroethane	1.3	0.50	ug/L	1.00	07/16/2002 03:24	
Chloroform	ND	0.50	ug/L	1.00	07/16/2002 03:24	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Carbon tetrachloride	ND	0.50	ug/L	1.00	07/16/2002 03:24	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Trichloroethene	ND	0.50	ug/L	1.00	07/16/2002 03:24	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Bromodichloromethane	ND	0.50	ug/L	1.00	07/16/2002 03:24	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	07/16/2002 03:24	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/16/2002 03:24	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/16/2002 03:24	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Tetrachloroethene	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Dibromochloromethane	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Chlorobenzene	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Bromoform	ND	2.0	ug/L	1.00	07/16/2002 03:24	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	07/16/2002 03:24	
1,3-Dichlorobenzene	1.1	0.50	ug/L	1.00	07/16/2002 03:24	
1,4-Dichlorobenzene	5.0	0.50	ug/L	1.00	07/16/2002 03:24	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	07/16/2002 03:24	
Chloromethane	ND	1.0	ug/L	1.00	07/16/2002 03:24	
Bromomethane	ND	1.0	ug/L	1.00	07/16/2002 03:24	
<b>Surrogates(s)</b>						
1-Chloro-2-fluorobenzene	92.2	70-130	%	1.00	07/16/2002 03:24	

Submission #: 2002-07-0220

Halogenated Volatile Organic Compounds by 8021

CSS Environmental Services

Attn.: Aaron Stessman  
95 Belvedere Street, Suite 2  
San Rafael, CA 94901  
Phone: (415) 457-9551 Fax: (415) 457-9261

Project: 6118  
PG&E Coliseum Way

Received: 06/19/2002 11:48

SEVERN

TRENT

LABORATORY

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel: (925) 484-1919  
Fax: (925) 484-1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 5030B

Test(s): 8021B

Sample ID: OW-7

Lab ID: 2002-07-0220 - 2

Sampled: 06/17/2002 15:15

Extracted: 7/16/2002 04:09

Matrix: Water

QC Batch#: 2002/07/15-01.25

Analysis Flag: HT;o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	10	ug/L	10.00	07/16/2002 04:09	
Vinyl chloride	ND	5.0	ug/L	10.00	07/16/2002 04:09	
Chloroethane	ND	5.0	ug/L	10.00	07/16/2002 04:09	
Trichlorofluoromethane	ND	5.0	ug/L	10.00	07/16/2002 04:09	
1,1-Dichloroethene	ND	5.0	ug/L	10.00	07/16/2002 04:09	
Methylene chloride	ND	50	ug/L	10.00	07/16/2002 04:09	
trans-1,2-Dichloroethene	ND	5.0	ug/L	10.00	07/16/2002 04:09	
cis-1,2-Dichloroethene	ND	5.0	ug/L	10.00	07/16/2002 04:09	
1,1-Dichloroethane	ND	5.0	ug/L	10.00	07/16/2002 04:09	
Chloroform	ND	5.0	ug/L	10.00	07/16/2002 04:09	
1,1,1-Trichloroethane	ND	5.0	ug/L	10.00	07/16/2002 04:09	
Carbon tetrachloride	ND	5.0	ug/L	10.00	07/16/2002 04:09	
1,2-Dichloroethane	ND	5.0	ug/L	10.00	07/16/2002 04:09	
Trichloroethene	ND	5.0	ug/L	10.00	07/16/2002 04:09	
1,2-Dichloropropane	ND	5.0	ug/L	10.00	07/16/2002 04:09	
Bromodichloromethane	ND	5.0	ug/L	10.00	07/16/2002 04:09	
2-Chloroethylvinyl ether	ND	5.0	ug/L	10.00	07/16/2002 04:09	
trans-1,3-Dichloropropene	ND	5.0	ug/L	10.00	07/16/2002 04:09	
cis-1,3-Dichloropropene	ND	5.0	ug/L	10.00	07/16/2002 04:09	
1,1,2-Trichloroethane	ND	5.0	ug/L	10.00	07/16/2002 04:09	
Tetrachloroethene	ND	5.0	ug/L	10.00	07/16/2002 04:09	
Dibromochloromethane	ND	5.0	ug/L	10.00	07/16/2002 04:09	
Chlorobenzene	46	5.0	ug/L	10.00	07/16/2002 04:09	
Bromoform	ND	20	ug/L	10.00	07/16/2002 04:09	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	10.00	07/16/2002 04:09	
1,3-Dichlorobenzene	420	5.0	ug/L	10.00	07/16/2002 04:09	
1,4-Dichlorobenzene	500	5.0	ug/L	10.00	07/16/2002 04:09	
1,2-Dichlorobenzene	69	5.0	ug/L	10.00	07/16/2002 04:09	
Trichlorotrifluoroethane	ND	5.0	ug/L	10.00	07/16/2002 04:09	
Chloromethane	ND	10	ug/L	10.00	07/16/2002 04:09	
Bromomethane	ND	10	ug/L	10.00	07/16/2002 04:09	
<b>Surrogates(s)</b>						
1-Chloro-2-fluorobenzene	84.5	70-130	%	1.00	07/16/2002 04:09	



Submission #: 2002-07-0220

Halogenated Volatile Organic Compounds by 8021

CSS Environmental Services

Attn.: Aaron Stessman  
95 Belvedere Street, Suite 2  
San Rafael, CA 94901  
Phone: (415) 457-9551 Fax: (415) 457-9261

Project: 6118  
PG&E Coliseum Way

Received: 06/19/2002 11:48

SEVERN

TRENT

LABORATORY

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel: (925) 484-1919  
Fax: (925) 484-1096  
www.sil-inc.com  
www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 5030B

Test(s): 8021B

Sample ID: OW-5

Lab ID: 2002-07-0220 - 3

Sampled: 06/17/2002 14:35

Extracted: 7/16/2002 04:54

Matrix: Water

QC Batch#: 2002/07/15-01.25

Analysis Flag: HT ( See Legent and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	07/16/2002 04:54	
Vinyl chloride	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Chloroethane	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Trichlorofluoromethane	ND	0.50	ug/L	1.00	07/16/2002 04:54	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Methylene chloride	ND	5.0	ug/L	1.00	07/16/2002 04:54	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	07/16/2002 04:54	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	07/16/2002 04:54	
1,1-Dichloroethane	1.1	0.50	ug/L	1.00	07/16/2002 04:54	
Chloroform	ND	0.50	ug/L	1.00	07/16/2002 04:54	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Carbon tetrachloride	ND	0.50	ug/L	1.00	07/16/2002 04:54	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Trichloroethene	ND	0.50	ug/L	1.00	07/16/2002 04:54	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Bromodichloromethane	ND	0.50	ug/L	1.00	07/16/2002 04:54	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	07/16/2002 04:54	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/16/2002 04:54	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/16/2002 04:54	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Tetrachloroethene	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Dibromochloromethane	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Chlorobenzene	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Bromoform	ND	2.0	ug/L	1.00	07/16/2002 04:54	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	07/16/2002 04:54	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	07/16/2002 04:54	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	07/16/2002 04:54	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	07/16/2002 04:54	
Chloromethane	ND	1.0	ug/L	1.00	07/16/2002 04:54	
Bromomethane	ND	1.0	ug/L	1.00	07/16/2002 04:54	
<b>Surrogates(s)</b>						
1-Chloro-2-fluorobenzene	89.3	70-130	%	1.00	07/16/2002 04:54	

Submission #: 2002-07-0220

# Halogenated Volatile Organic Compounds by 8021

CSS Environmental Services

Attn.: Aaron Stessman  
95 Belvedere Street, Suite 2  
San Rafael, CA 94901  
Phone: (415) 457-9551 Fax: (415) 457-9261

Project: 6118  
PG&E Coliseum Way

Received: 06/19/2002 11:48

SEVERN

TRENT

LABORATORY

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel: (925) 484-1919  
Fax: (925) 484-1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP# 2496

## Batch QC Report

Prep(s): 5030B

Method Blank

MB: 2002/07/15-01.25-004

Water

Test(s): 8021B

QC Batch # 2002/07/15-01.25

Date Extracted: 07/15/2002 10:35

Compound	Conc.	RL	Unit	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	07/15/2002 10:35	
Vinyl chloride	ND	0.5	ug/L	07/15/2002 10:35	
Chloroethane	ND	0.5	ug/L	07/15/2002 10:35	
Trichlorofluoromethane	ND	0.5	ug/L	07/15/2002 10:35	
1,1-Dichloroethene	ND	0.5	ug/L	07/15/2002 10:35	
Methylene chloride	ND	5.0	ug/L	07/15/2002 10:35	
trans-1,2-Dichloroethene	ND	0.5	ug/L	07/15/2002 10:35	
cis-1,2-Dichloroethene	ND	0.5	ug/L	07/15/2002 10:35	
1,1-Dichloroethane	ND	0.5	ug/L	07/15/2002 10:35	
Chloroform	ND	0.5	ug/L	07/15/2002 10:35	
1,1,1-Trichloroethane	ND	0.5	ug/L	07/15/2002 10:35	
Carbon tetrachloride	ND	0.5	ug/L	07/15/2002 10:35	
1,2-Dichloroethane	ND	0.5	ug/L	07/15/2002 10:35	
Trichloroethene	ND	0.5	ug/L	07/15/2002 10:35	
1,2-Dichloropropane	ND	0.5	ug/L	07/15/2002 10:35	
Bromodichloromethane	ND	0.5	ug/L	07/15/2002 10:35	
2-Chloroethylvinyl ether	ND	0.5	ug/L	07/15/2002 10:35	
trans-1,3-Dichloropropene	ND	0.5	ug/L	07/15/2002 10:35	
cis-1,3-Dichloropropene	ND	0.5	ug/L	07/15/2002 10:35	
1,1,2-Trichloroethane	ND	0.5	ug/L	07/15/2002 10:35	
Tetrachloroethene	ND	0.5	ug/L	07/15/2002 10:35	
Dibromochloromethane	ND	0.5	ug/L	07/15/2002 10:35	
Chlorobenzene	ND	0.5	ug/L	07/15/2002 10:35	
Bromoform	ND	2.0	ug/L	07/15/2002 10:35	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	07/15/2002 10:35	
1,3-Dichlorobenzene	ND	0.5	ug/L	07/15/2002 10:35	
1,4-Dichlorobenzene	ND	0.5	ug/L	07/15/2002 10:35	
1,2-Dichlorobenzene	ND	0.5	ug/L	07/15/2002 10:35	
Trichlorotrifluoroethane	ND	0.5	ug/L	07/15/2002 10:35	
Chloromethane	ND	1.0	ug/L	07/15/2002 10:35	
Bromomethane	ND	1.0	ug/L	07/15/2002 10:35	
<b>Surrogates(s)</b>					
1-Chloro-2-fluorobenzene	85.0	70-130	%	07/15/2002 10:35	

Submission #: 2002-07-0220

Halogenated Volatile Organic Compounds by 8021

CSS Environmental Services  
Attn.: Aaron Stessman  
95 Belvedere Street, Suite 2  
San Rafael, CA 94901  
Phone: (415) 457-9551 Fax: (415) 457-9261  
Project: 6118  
PG&E Coliseum Way

Received: 06/19/2002 11:48

**SEVERN**  
**TRENT**  
**LABORATORY**

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel: (925) 484-1919  
Fax: (925) 484-1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP# 2496

**Batch QC Report**

Prep(s): 5030B

Test(s): 8021B

Laboratory Control Spike

Water

QC Batch # 2002/07/15-01.25

LCS 2002/07/15-01.25-002

Extracted: 07/15/2002

Analyzed: 07/15/2002 09:05

LCSD 2002/07/15-01.25-003

Extracted: 07/15/2002

Analyzed: 07/15/2002 09:50

Compound	Conc. ug/L		Exp. Conc.	Recovery		RPD	Ctri. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
1,1-Dichloroethene	18.4	17.0	20.0	92.0	85.0	7.9	70-130	20		
Trichloroethene	19.9	18.3	20.0	99.5	91.5	8.4	70-130	20		
Chlorobenzene	20.0	18.7	20.0	100.0	93.5	6.7	70-130	20		
<b>Surrogates(s)</b>										
1-Chloro-2-fluorobenzene	22.9	21.3	20	114.5	106.5		70-130			

Submission #: 2002-07-0220

Halogenated Volatile Organic Compounds by 8021

CSS Environmental Services

Attn.: Aaron Stessman

95 Belvedere Street, Suite 2

San Rafael, CA 94901

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

Project: 6118

PG&E Coliseum Way

Received: 06/19/2002 11:48

SEVERN

TRENT

LABORATORY

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel: (925) 484-1919  
Fax: (925) 484-1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP# 2496

---

**Legend and Notes**

---

**Analysis Flag**

HT

Extracted out of holding time

o

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

Submission #: 2002-06-0364

Date: June 26, 2002

**SEVERN**  
**TRENT**  
**SERVICES**

**CSS Environmental Services**

95 Belvedere Street, Suite 2  
San Rafael, CA 94901

Attn: Mr. Aaron Stessman

Project: 6118  
PG&E Coliseum Way

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com  
CA DHS ELAP#2496

Dear Mr. Stessman,

Attached is our report for your samples received on Wednesday June 19, 2002  
This report has been reviewed and approved for release. Reproduction of this report  
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after  
August 3, 2002 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,  
please call me at (925) 484-1919.

You can also contact me via email. My email address is: [tgranicher@chromalab.com](mailto:tgranicher@chromalab.com)

Sincerely,



Tod Granicher  
Project Manager

Submission #: 2002-06-0364

Diesel

**SEVERN  
TRENT  
SERVICES**

<b>CSS Environmental Services</b>	✉ 95 Belvedere Street, Suite 2 San Rafael, CA 94901
Attn: Aaron Stessman 6118	Phone: (415) 457-9551 Fax: (415) 457-9261 Project: PG&E Coliseum Way

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

**Samples Reported**

Sample ID	Matrix	Date Sampled	Lab #
OW-1	Water	06/17/2002 16:30	1
OW-5	Water	06/17/2002 14:35	3
OW-6	Water	06/17/2002 15:50	4
OW-7	Water	06/17/2002 15:15	5

Submission #: 2002-06-0364



Diesel

CSS Environmental Services

Test Method: 8015M

Attn: Aaron Stessman

Prep Method: 3510/8015M

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Sample ID: <b>OW-1</b>	Lab Sample ID: 2002-06-0364-001
Project: 6118 PG&E Coliseum Way	Received: 06/19/2002 17:05
Sampled: 06/17/2002 16:30	Extracted: 06/20/2002 07:26
Matrix: Water	QC-Batch: 2002/06/20-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	670	50	ug/L	1.00	06/21/2002 18:25	ndp
<i>Surrogate(s)</i>						
o-Terphenyl	99.7	60-130	%	1.00	06/21/2002 18:25	

Submission #: 2002-06-0364



Diesel

CSS Environmental Services

Test Method: 8015M

Attn: Aaron Stessman

Prep Method: 3510/8015M

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Sample ID: OW-5	Lab Sample ID: 2002-06-0364-003
Project: 6118 PG&E Coliseum Way	Received: 06/19/2002 17:05
Sampled: 06/17/2002 14:35	Extracted: 06/20/2002 07:26
Matrix: Water	QC-Batch: 2002/06/20-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	260	50	ug/L	1.00	06/24/2002 18:08	ndp
<b>Surrogate(s)</b> o-Terphenyl	99.5	60-130	%	1.00	06/24/2002 18:08	



Submission #: 2002-06-0364



Diesel

CSS Environmental Services

Test Method: 8015M

Attn: Aaron Stessman

Prep Method: 3510/8015M

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Sample ID: <b>OW-6</b>	Lab Sample ID: 2002-06-0364-004
Project: 6118 PG&E Coliseum Way	Received: 06/19/2002 17:05
Sampled: 06/17/2002 15:50	Extracted: 06/20/2002 07:26
Matrix: Water	QC-Batch: 2002/06/20-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	220	50	ug/L	1.00	06/21/2002 23:22	ndp
<i>Surrogate(s)</i>						
o-Terphenyl	96.8	60-130	%	1.00	06/21/2002 23:22	

Submission #: 2002-06-0364



Diesel

CSS Environmental Services

Test Method: 8015M

Attn: Aaron Stessman

Prep Method: 3510/8015M

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Sample ID: <b>OW-7</b>	Lab Sample ID: 2002-06-0364-005
Project: 6118 PG&E Coliseum Way	Received: 06/19/2002 17:05
Sampled: 06/17/2002 15:15	Extracted: 06/20/2002 07:26
Matrix: Water	QC-Batch: 2002/06/20-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	1000	50	ug/L	1.00	06/21/2002 22:45	ndp
<b>Surrogate(s)</b>						
o-Terphenyl	103.1	60-130	%	1.00	06/21/2002 22:45	

Submission #: 2002-06-0364



Diesel

Batch QC report

Test Method: 8015M

Prep Method: 3510/8015  
M

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Method Blank	Water	QC Batch # 2002/06/20-02.10
MB: 2002/06/20-02.10-001		Date Extracted: 06/20/2002 07:26

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	06/20/2002 15:36	
<i>Surrogate(s)</i> o-Terphenyl	88.1	60-130	%	06/20/2002 15:36	

Submission #: 2002-06-0364



Diesel

Batch QC report

Test Method: 8015M

Prep Method: 3510/8015M

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Laboratory Control Spike (LCS/LCSD)      Water      QC Batch # 2002/06/20-02.10  
LCS: 2002/06/20-02.10-002    Extracted: 06/20/2002 07:26    Analyzed: 06/20/2002 11:15  
LCSD: 2002/06/20-02.10-003    Extracted: 06/20/2002 07:26    Analyzed: 06/20/2002 12:29

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recover	RPD	LCS	LCSD
Diesel	803	854	1250	1250	64.2	68.3	6.2	60-130	25		
<b>Surrogate(s)</b>											
o-Terphenyl	15.1	15.5	20.0	20.0	75.4	77.7		60-130	0		

Submission #: 2002-06-0364



Diesel

**Legend & Notes**

Test Method: 8015M

Prep Method: 3510/8015M

**Analyte Flags**

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel 925 484 1919  
Fax 925 484 1096  
[www.stl-inc.com](http://www.stl-inc.com)  
[www.chromalab.com](http://www.chromalab.com)

CA DHS ELAP#2496

Submission #: 2002-06-0364

**SEVERN  
TRENT  
SERVICES**

Gas/BTEX by 8015M/8021

CSS Environmental Services

Test Method: 8021B  
8015M

Attn: Aaron Stessman

Prep Method: 5030

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Sample ID: OW-5	Lab Sample ID: 2002-06-0364-003
Project: 6118 PG&E Coliseum Way	Received: 06/19/2002 17:05
Sampled: 06/17/2002 14:35	Extracted: 06/21/2002 21:50
Matrix: Water	QC-Batch: 2002/06/21-01.05

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/21/2002 21:50	
Benzene	6.3	0.50	ug/L	1.00	06/21/2002 21:50	
Toluene	ND	0.50	ug/L	1.00	06/21/2002 21:50	
Ethyl benzene	ND	0.50	ug/L	1.00	06/21/2002 21:50	
Xylene(s)	ND	0.50	ug/L	1.00	06/21/2002 21:50	
<b>Surrogate(s)</b>						
Trifluorotoluene	115.1	58-124	%	1.00	06/21/2002 21:50	
4-Bromofluorobenzene-FID	72.8	50-150	%	1.00	06/21/2002 21:50	

Submission #: 2002-06-0364

**SEVERN  
TRENT  
SERVICES**

Gas/BTEX by 8015M/8021

CSS Environmental Services

Test Method: 8021B  
8015M

Attn: Aaron Stessman

Prep Method: 5030

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Sample ID: <b>OW-6</b>	Lab Sample ID: 2002-06-0364-004
Project: 6118 PG&E Coliseum Way	Received: 06/19/2002 17:05
Sampled: 06/17/2002 15:50	Extracted: 06/21/2002 22:22
Matrix: Water	QC-Batch: 2002/06/21-01.05

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/21/2002 22:22	
Benzene	ND	0.50	ug/L	1.00	06/21/2002 22:22	
Toluene	ND	0.50	ug/L	1.00	06/21/2002 22:22	
Ethyl benzene	ND	0.50	ug/L	1.00	06/21/2002 22:22	
Xylene(s)	ND	0.50	ug/L	1.00	06/21/2002 22:22	
<b>Surrogate(s)</b>						
Trifluorotoluene	113.3	58-124	%	1.00	06/21/2002 22:22	
4-Bromofluorobenzene-FID	71.9	50-150	%	1.00	06/21/2002 22:22	

Gas/BTEX by 8015M/8021

Batch QC report

Test Method: 8015M  
8021B

Prep Method: 5030

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

<b>Method Blank</b>	<b>Water</b>	<b>QC Batch # 2002/06/24-01.05</b>
MB: 2002/06/24-01.05-008		Date Extracted: 06/24/2002 11:33

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	06/24/2002 11:33	
Benzene	ND	0.5	ug/L	06/24/2002 11:33	
Toluene	ND	0.5	ug/L	06/24/2002 11:33	
Ethyl benzene	ND	0.5	ug/L	06/24/2002 11:33	
Xylene(s)	ND	0.5	ug/L	06/24/2002 11:33	
<b>Surrogate(s)</b>					
Trifluorotoluene	104.6	58-124	%	06/24/2002 11:33	
4-Bromofluorobenzene-FID	74.5	50-150	%	06/24/2002 11:33	



Gas/BTEX by 8015M/8021

**Batch QC report**

Test Method: 8021B

Prep Method: 5030

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

**Laboratory Control Spike (LCS/LCSD) Water QC Batch # 2002/06/21-01.05**  
 LCS: 2002/06/21-01.05-004 Extracted: 06/21/2002 09:04 Analyzed: 06/21/2002 09:04  
 LCSD: 2002/06/21-01.05-005 Extracted: 06/21/2002 09:36 Analyzed: 06/21/2002 09:36

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recover	RPD	LCS	LCSD
Benzene	106	108	100.0	100.0	106.0	108.0	1.9	77-123	20		
Toluene	107	109	100.0	100.0	107.0	109.0	1.9	78-122	20		
Ethyl benzene	102	104	100.0	100.0	102.0	104.0	1.9	70-130	20		
Xylene(s)	306	311	300	300	102.0	103.7	1.7	75-125	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	531	556	500	500	106.2	111.2		58-124			

Dissolved Metals



<b>CSS Environmental Services</b>	☒ 95 Belvedere Street, Suite 2 San Rafael, CA 94901
Attn: Aaron Stessman 6118	Phone: (415) 457-9551 Fax: (415) 457-9261 Project: PG&E Coliseum Way

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
OW-2	Water	06/17/2002 13:30	2
OW-5	Water	06/17/2002 14:35	3
OW-8	Water	06/17/2002 14:00	6

Submission #: 2002-06-0364

SEVERN

TRENT

SERVICES

Dissolved Metals

CSS Environmental Services

Attn: Aaron Stessman

Test Method: 6010B

Prep Method: 3005A

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Sample ID: OW-2	Lab Sample ID: 2002-06-0364-002
Project: 6118 PG&E Coliseum Way	Received: 06/19/2002 17:05
Sampled: 06/17/2002 13:30	Extracted: 06/21/2002 06:01
Matrix: Water	QC-Batch: 2002/06/21-03.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	ND	0.0050	mg/L	1.00	06/21/2002 17:25	

Submission #: 2002-06-0364



Dissolved Metals

Batch QC report

Test Method: 6010B

Prep Method: 3005A

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

<b>Method Blank</b> MB: 2002/06/21-03.15-076	<b>Water</b>	<b>QC Batch # 2002/06/21-03.15</b> Date Extracted: 06/21/2002 06:01
---	--------------	--

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Lead	ND	0.0050	mg/L	06/21/2002 16:05	

Submission #: 2002-06-0364



Dissolved Metals  
Batch QC report

Test Method: 6010B

Prep Method: 3005A

STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566

Laboratory Control Spike (LCS/LCSD)      Water      QC Batch # 2002/06/21-03.15  
LCS: 2002/06/21-03.15-077    Extracted: 06/21/2002 06:01    Analyzed: 06/21/2002 16:10  
LCSD: 2002/06/21-03.15-078    Extracted: 06/21/2002 06:01    Analyzed: 06/21/2002 16:14

Tel 925 484 1919  
Fax 925 484 1096  
www.stl-inc.com  
www.chromalab.com

CA DHS ELAP#2496

Compound	Conc. [mg/L]		Exp. Conc. [mg/L]		Recovery		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recover	RPD	LCS	LCSD
Lead	0.483	0.485	0.500	0.500	96.6	97.0	0.4	80-120	20		

Report To

Attn: Aron Skesman

Company: CSS Environmental Services, Inc.

Address: 95 Belvedere St, #2 San Rafael, CA 94901

Phone: 415-457-9551 Email: cssenv@prodigy.net

Bill To: Sampled By: JS

Attn: Phone:

Sample ID Date Time Mat Pres  
IX EIV

Sample ID	Date	Time	Mat IX	Pres EIV	TPH EPA - <input type="checkbox"/> 8015/8021 <input type="checkbox"/> 8260B <input checked="" type="checkbox"/> Gas w/ <input checked="" type="checkbox"/> BTEX <input type="checkbox"/> MTBE	Purgeable Aromatics BTEX EPA - <input type="checkbox"/> 8021 <input type="checkbox"/> 8260B	TEPH EPA 8015M <input type="checkbox"/> Silica Gel <input checked="" type="checkbox"/> Diesel <input type="checkbox"/> Motor Oil <input type="checkbox"/> Other	Fuel Tests EPA 8260B: <input type="checkbox"/> Gas <input type="checkbox"/> BTEX <input type="checkbox"/> Five Oxygenates <input type="checkbox"/> DCA, EDB <input type="checkbox"/> Ethanol	Purgeable Halocarbons (HVOCS) EPA 8021	Volatile Organics GC/MS (VOCs) <input type="checkbox"/> EPA 8260B <input type="checkbox"/> 624	Semivolatiles GC/MS <input type="checkbox"/> EPA 8270 <input type="checkbox"/> 625	Oil and Grease <input type="checkbox"/> Petroleum (EPA 1664) <input type="checkbox"/> Total	Pesticides <input type="checkbox"/> EPA 8081 <input type="checkbox"/> 608 <input type="checkbox"/> PCBs <input type="checkbox"/> EPA 8082 <input type="checkbox"/> 608	PNA's by <input type="checkbox"/> 8270 <input type="checkbox"/> 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: <input checked="" type="checkbox"/> Lead <input type="checkbox"/> LUFT <input type="checkbox"/> RCRA <input type="checkbox"/> Other:	<input type="checkbox"/> W.E.T (STLC) <input type="checkbox"/> TCLP	<input type="checkbox"/> Hexavalent Chromium pH (24h hold time for H <sub>2</sub> O)	<input type="checkbox"/> Spec Cond. <input type="checkbox"/> Alkalinity <input type="checkbox"/> TSS <input type="checkbox"/> TDS	Anions: <input type="checkbox"/> Cl <input type="checkbox"/> SO <sub>4</sub> <input type="checkbox"/> NO <sub>3</sub> <input type="checkbox"/> F <input type="checkbox"/> Br <input type="checkbox"/> NO <sub>2</sub> <input type="checkbox"/> PO <sub>4</sub>	Number of Containers	
OU-1	6/17/02	1630			X		X		X													
OU-2		1330					X		X													
OU-5		1435					X		X													
OU-6		1550					X		X													
OU-7		1515					X		X													
OU-B		1400					X		X													

Project Info Sample Receipt

Project Name: Gate Coliseum Way # of Containers:

Project#: 6118 Head Space:

PO#: Temp: 3.50C

Credit Card#: Conforms to record:

Report:  Routine  Level 3  Level 4  EDD  
Special Instructions / Comments:  
\* Filter in Lab

Signature: [Signature] Time: 1030  
Printed Name: BRECK DAVIS Date: 6/19  
Company: CSS

Signature: [Signature] Time: 1030  
Printed Name: Maria Date: 6/19/02  
Company: STL SF

Signature: [Signature] Time: 1705  
Printed Name: Maria Date: 6/19/02  
Company: STL S.F.

Signature: [Signature] Time: 1705  
Printed Name: D. Harrington Date: 6/19/02  
Company: STL-SF

66990



STL San Francisco

### Sample Receipt Checklist

Submission #: 2002- 06 - 0364

Checklist completed by: (initials) DSH Date: 06/20/02

Courier name:  STL San Francisco  Client \_\_\_\_\_

Custody seals intact on shipping container/samples

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 ( $4^{\circ}C \pm 2$ )?

Temp: 3.5°C Yes  No \_\_\_

Water - VOA vials have zero headspace?

No VOA vials submitted \_\_\_ Yes  No \_\_\_

(if bubble is present, refer to approximate bubble size and itemize in comments as S (small - ), M (medium - ) or L (large - )

Water - pH acceptable upon receipt?  Yes  No

pH adjusted- Preservative used:  HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc

For any item check-listed "No", provided detail of discrepancy in comment section below:

Comments:

### Project Management [Routing for instruction of indicated discrepancy(ies)]

Project Manager: (initials) \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ /02

Client contacted:  Yes  No

Summary of discussion:

Corrective Action (per PM/Client):

# RECORD OF GROUNDWATER LEVEL MEASUREMENTS

Page 1 of 1

Date Measured: 6-17-02

Job No.: \_\_\_\_\_

Site Location: P.G+E Coliseum Way

Well location map attached? Yes  No

Method of Measurement:  Electric well sounder,  
 \_\_\_\_\_ Other: \_\_\_\_\_

Weather/Visibility: Windy, Clear

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

Well I.D.	Time (24 hr)	G.W.L. (1/100 ft)	G.W.L. 3x's?	B.O.W. (1/2ft)	Remarks
OW-1		4.00'	4.00'	18.00	2'
OW-2		4.25'	4.25'	<del>20.15</del>	2"
OW-4					Covered
OW-5		4.50'	4.50'	18.95'	2"
OW-6		4.82'	4.82'	17.10'	2"
OW-7		6.24'	6.24'	18.05'	2"
OW-8		3.17'	3.17'	17.80'	2"

Measured by (Signature): \_\_\_\_\_



---

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

Historical Groundwater Analytical Data

Well ID	Date	MCL ug/L	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	
			Apr-88	Oct-88	Jan-89	Apr-89	Jul-89	Oct-89	Jan-90	Apr-90	Jul-90	Oct-90	Jan-91	Apr-91	Jul-91	Oct-91	Jan-92	Apr-92	Jul-92	Oct-92	Jan-93	Apr-93	Jul-93	Oct-93	
<b>PURGEABLE HALOCARBONS</b>																									
Chloroethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloroethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride		0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethene		50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Dichloroethane		6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene		1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform		1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Freon 113		0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene		200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane		0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride		1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloroethane		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Dichloropropane		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethene		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene		1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichlorobutene		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethene		1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene		30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>PURGEABLE AROMATICS</b>																									
Benzene		1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes		1750**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>TOTAL VOCs</b>			4	18	18.1	20.3	17	3	7	13.41	21.5	3.2	3.2	15.7	8.1	3.7	1.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
<b>HYDROCARBONS</b>																									
TPH-g			NA	NA	<50	82	<50	<50	<500	NA	NA	100	320	<50	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TEPH-d			<1000	<1000	180	300	200	300	80	<200	1600	3100	3600	1000	2000	NA	2000	NA	NA	NA	NA	NA	NA	NA	NA
OLE			<5000	<5000	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TPH (418 1)			NA	NA	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000
<b>METALS</b>																									
Lead		0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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 three styrene isomers  
 5) \*\*\*\* = MCL for sum of four styrene isomers  
 6) ND = Not Detected for above MCL  
 7) Purgeable Halocarbons (EPA method 8200)  
 8) Purgeable Aromatics (EPA method 8200)  
 9) NA = Not Analyzed or analysis not required  
 10) 8/17/02 Samples analyzed for VOCs out of holding time due to laboratory error

Historical Groundwater Analytical Data

Well ID	MCL	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
PURGEABLE HALOCARBONS																																								
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Chloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroform	100*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Form 113	1200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Carbon Tetrachloride	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bromodichloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,3-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Dibromochloromethane	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chlorobenzene	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,3-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
PURGEABLE AROMATICS																																								
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Toluene	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Ethylbenzene	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Total Xylenes	1750*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TOTAL VOCs		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
HYDROCARBONS																																								
TPH-g		NA	NA	< 50	< 50	< 50	< 50	< 50	< 50	MA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
TEPH-d		NA	NA	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
CMG		18000	18000	NA	NA	NA	NA	NA	NA	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	
TPH (#18.1)		NA	NA	< 5000	< 5000	< 5000	< 5000	< 5000	< 5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
METALS																																								
Lead		NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	

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 810)  
 8) MA = Not Analyzed (EPA method 802)  
 9) NA = Not Analyzed or analysis not required  
 10) 0/1/0Z: Samples analyzed for VOCs out of holding time due to laboratory error

# Historical Groundwater Analytical Data

Well ID	Date	MCL	0W-4	0W-4	0W-4	0W-4	0W-4	0W-4	0W-4	0W-4	0W-4	0W-4	0W-4	0W-4	0W-4	0W-4	0W-4	0W-4			
PURGEABLE HALOGENATED		ug/L	Jan-88	Dec-88	Jan-89	Apr-89	Oct-89	Jan-90	Apr-90	Jan-91	Apr-91	Jul-91	Dec-91	Mar-92	Jul-92	Oct-92	Jan-93	Apr-93			
PURGEABLE HALOGENATED																					
Chloroethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bromoethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride		0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane		50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane		150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Dichloroethane		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane		1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform		1200*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene		0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichlorobenzene		200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride		0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloroethane		1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene		1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4-Tetrachlorobenzene		5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene		30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene		6000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene		5	ND	ND	ND	ND	ND	ND	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-1,2-Dichloroethene  
 6) ND = Not Detected at or above MCL  
 7) Purgeable Halocarbons (EPA method 8021)  
 8) Purgeable Aromatics (EPA method 8021)  
 9) NA = Not Analyzed or analysis not required  
 10) 0/1702 Samples analyzed for VOC's out of holding time due to laboratory error







# Historical Groundwater Analytical Data

Well ID	01W-9	01W-8	01W-7	01W-6	01W-5	01W-4	01W-3	01W-2	01W-1	01W-9	01W-8	01W-7	01W-6	01W-5	01W-4	01W-3	01W-2	01W-1			
Date	Apr-85	Jul-85	Oct-85	Jan-84	Apr-84	Jul-84	Jan-85	Nov-85	Jun-86	Oct-86	Apr-87	Dec-87	Apr-87	Dec-88	Jan-89	Nov-88	Jan-90	Nov-90	Jan-91	Jun-92	Jun-92
PURGEABLE HALOCARBONS																					
Chloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Freon 113	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromellene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrahydrofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrahaloethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PURGEABLE AROMATICS																					
Benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylenes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs																					
HYDROCARBONS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TVHs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TEPHs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OHs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TPH (418.1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METALS																					
Lead	27	17	ND	25	12	24	3.2	ND	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 xylenes isomers  
 5) \*\*\* = MCL for sum of trans- and cis-1,2-Dichloropropane  
 6) ND = Not Detected at or above MCL  
 7) Purgeable Halocarbons (EPA method 8101)  
 8) Purgeable Aromatics (EPA method 8102)  
 9) NA = Not Analyzed or analysis not required  
 10) 6/11/02 Samples analyzed for VOCs out of holding time due to laboratory error