

*Alameda County*

*DEC 17 2003*

*Environmental Health*

## **SEMI-ANNUAL GROUNDWATER MONITORING REPORT**

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

**December 12, 2003**

**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**

Alameda County

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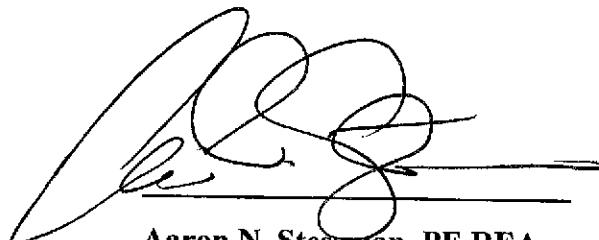
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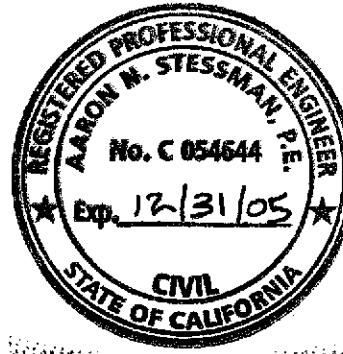
**CSS**

CSS ENVIRONMENTAL SERVICES, INC.  
95 Belvedere Street, Suite 2  
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**December 12, 2003**



Aaron N. Stessman, PE REA  
Principal Engineer



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## 1.0 BACKGROUND

This report presents the results of semiannual groundwater monitoring and sampling completed in the fourth quarter of 2003 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 November 19, 2003 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.

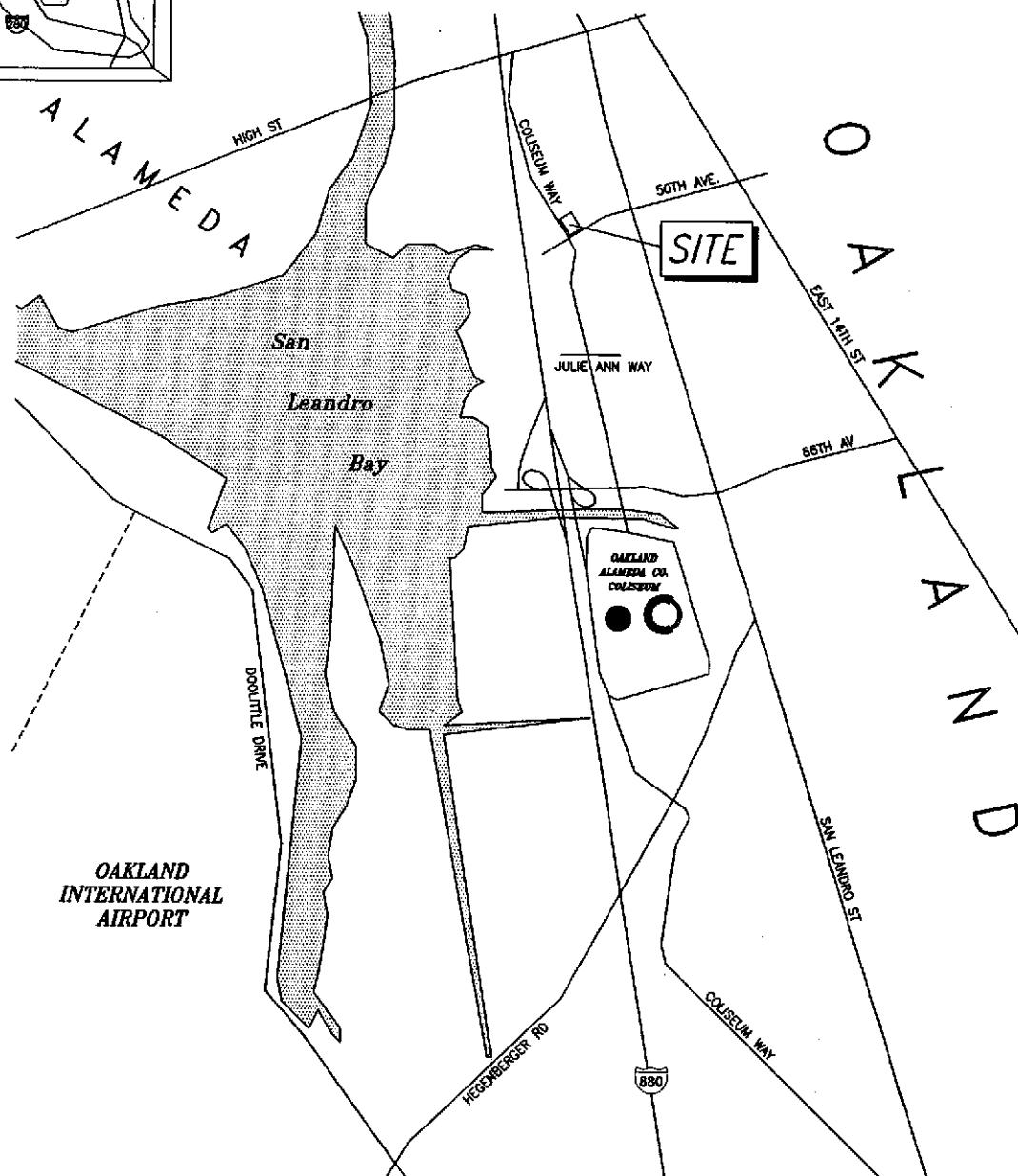
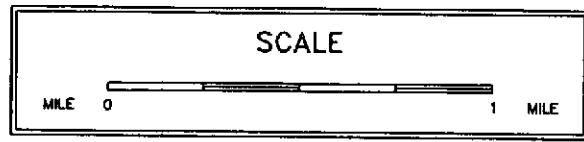
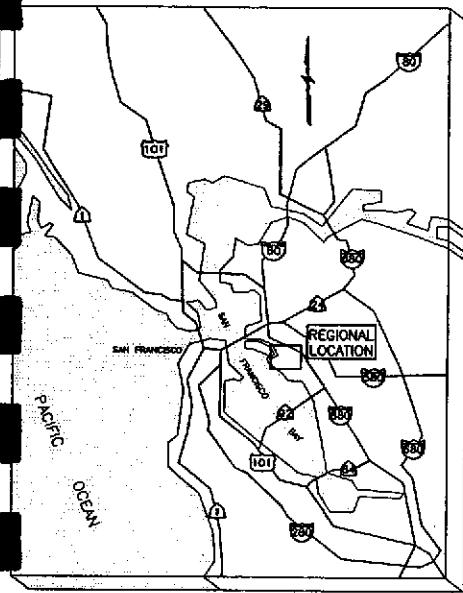
The samples collected along the PG&E property lines were above cleanup target levels, while each of the remaining confirmatory samples was below the cleanup target levels. The samples collected along the northeastern property line were above cleanup targets primarily due to TPH-D and O&G concentrations. 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.



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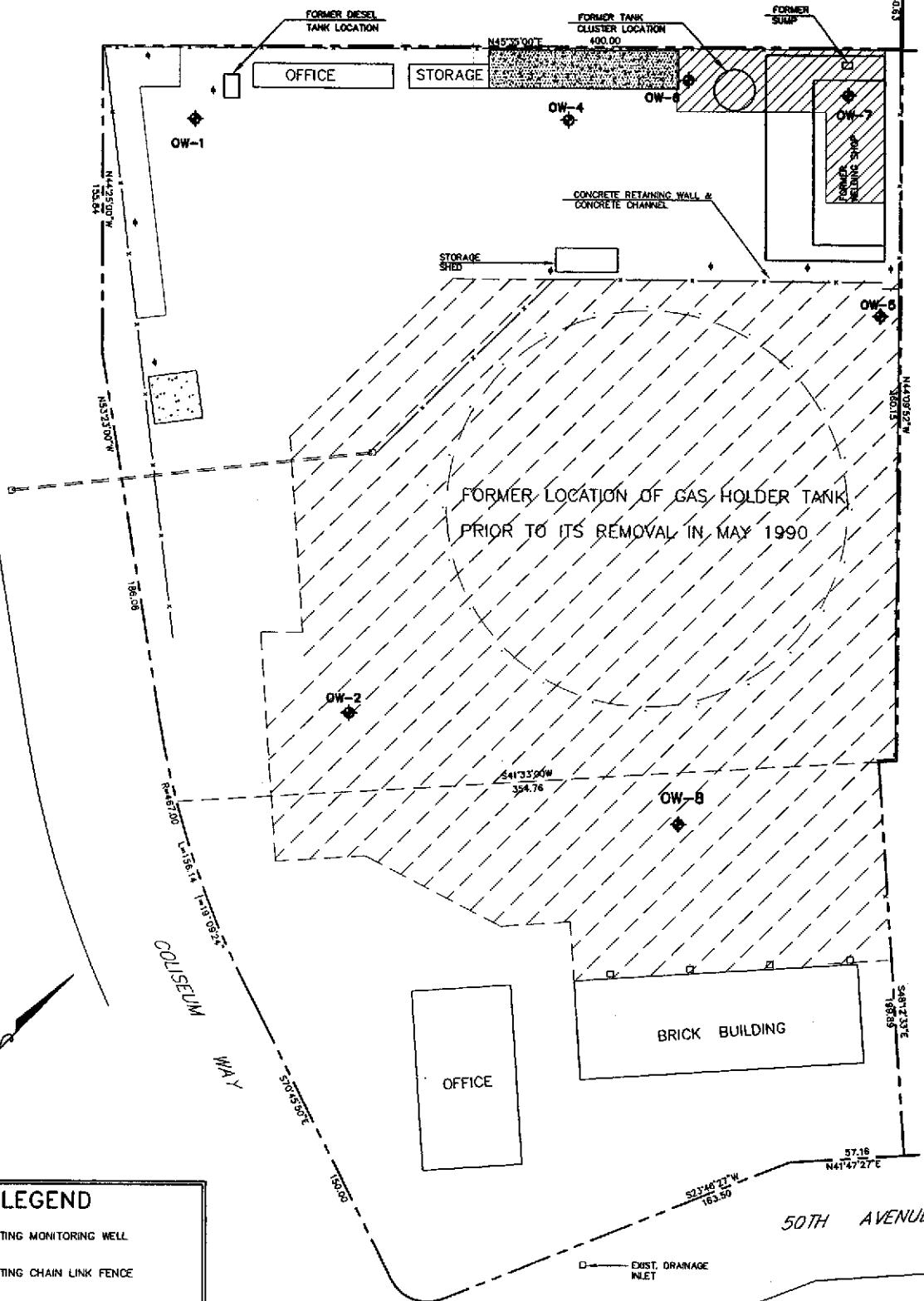
SITE LOCATION MAP

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

1.1



**CSS**

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**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

1.2

## 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 November 19, 2003, 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 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, 2003 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	Dissolved Lead	Groundwater 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 November 19, 2003. 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 three 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	0.470	0.310
OW - 5	0.250	0.060
OW - 6	0.380	ND
OW - 7	0.780	0.440

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 (April 2003), this quarter's results show slight variations in TPH-D concentrations in all wells. Well OW-4 has been inaccessible for sampling over the past eleven sampling events due to the presence of an overlying storage container.

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

in all wells except upgradient wells OW-1, and OW-7. Historically, OW-7 has had the highest concentrations, ranging from 530 to 1,800 µg/L. The current TPH-G concentration for OW-1 is 310 µg/L, showing a slight decrease as compared with the April 2003 sampling event. OW-7's current TPH-G concentration of 440 µg/L, however, is less than half of what it was in April. TPH-G was detected in OW-5 at 60 µg/L; TPH-G was not detected in well OW-6.

### 3.2 LEAD

Table 3.2 presents the results of this quarter's groundwater analyses for soluble 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

### 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: Vinyl Chloride in monitoring well OW-5 at a concentration of 0.55 µg/L; 1,4-Dichlorobenzene in wells OW-6 and OW-7 at 7.2 and 500 µg/L, respectively; Chlorobenzene in well OW-7 at 68 µg/L; and Benzene in well OW-5 at a concentration of 7.0 µg/L.

VOCs detected at concentrations below their MCLs include:

- 1,1-Dichloroethane in wells OW-5 and OW-6;
- 1,3-Dichlorobenzene in wells OW-6 and OW-7;
- 1,2-Dichlorobenzene in well OW-7;
- Chlorobenzene in well OW-6.

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 9.95 µg/L, 14.4 µg/L, and 804 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 on November 19, 2003 (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	0.5*	ND	ND	NA	ND
Chloroethane		NA	NA	NA	ND	ND	ND	NA	ND
Methylene Chloride	5"	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	2.4	2.8	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**	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**	NA	NA	NA	ND	ND	ND	NA	ND
1,2-Dichloropropene	5	NA	NA	NA	ND	ND	ND	NA	ND
cis-1,3-Dichloropropene	5***	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***	NA	NA	NA	ND	ND	ND	NA	ND
Dibromochloromethane	100**	NA	NA	NA	ND	ND	ND	NA	ND
2-Chloroethylvinyl Ether		NA	NA	NA	ND	ND	ND	NA	ND
Bromoform	100**	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	2.5	10*	NA	ND
1,3-Dichlorobenzene	600"	NA	NA	NA	ND	1.9	210	NA	ND
1,2-Dichlorobenzene	600"	NA	NA	NA	ND	ND	26	NA	ND
1,4-Dichlorobenzene	5	NA	NA	NA	ND	7.2	500	NA	ND
<b>PURGEABLE AROMATICS</b>									
Benzene	1	ND	NA	NA	5.0*	ND	ND	NA	ND
Toluene	1000"	ND	NA	NA	ND	ND	ND	NA	ND
Ethylbenzene	680	ND	NA	NA	ND	ND	ND	NA	ND
Total Xylenes	1750**	ND	NA	NA	ND	ND	ND	NA	ND
<b>FUEL OXYGENATES</b>									
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)

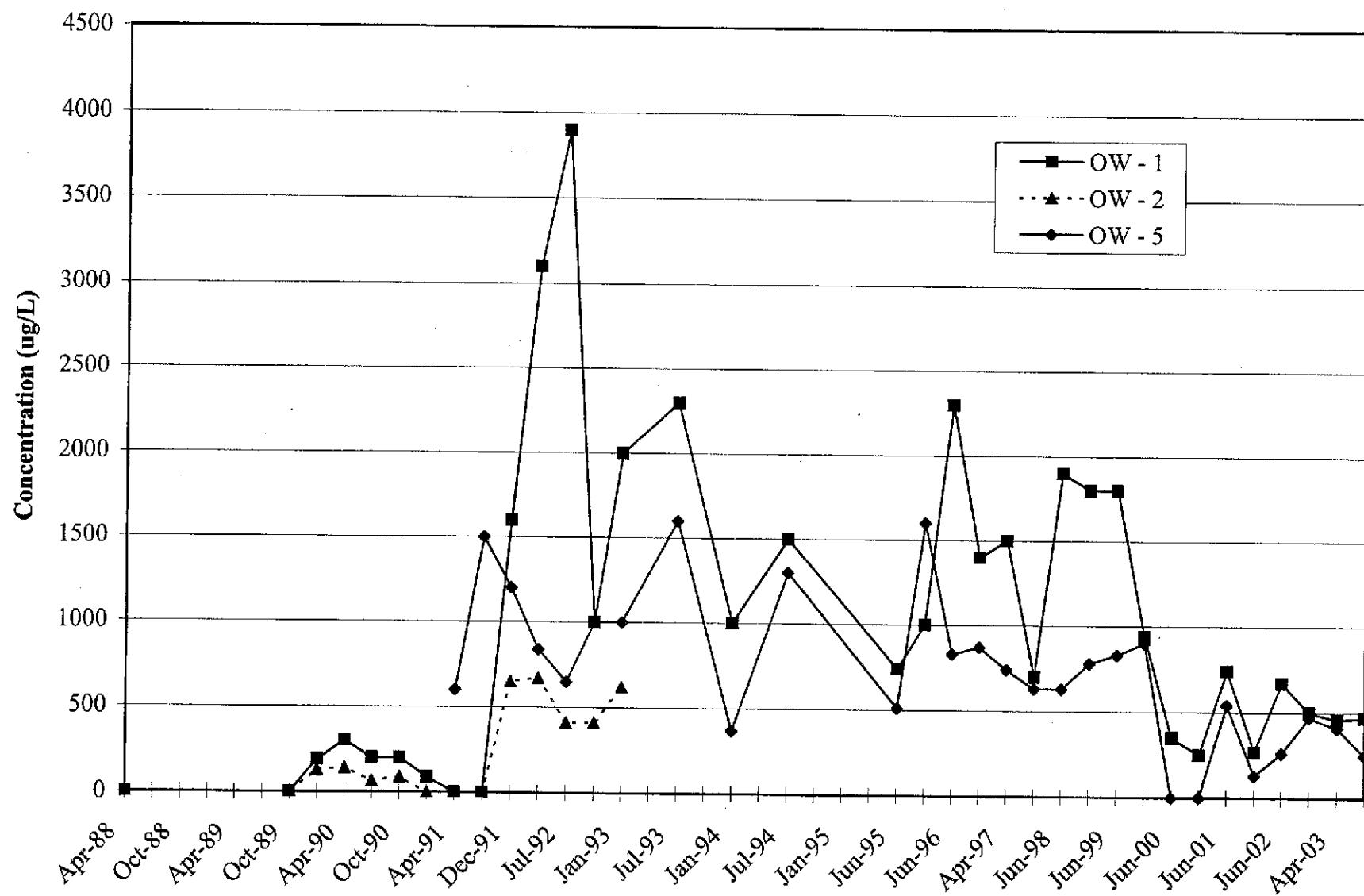
Exceeded MCL

10) NA = Not Tested

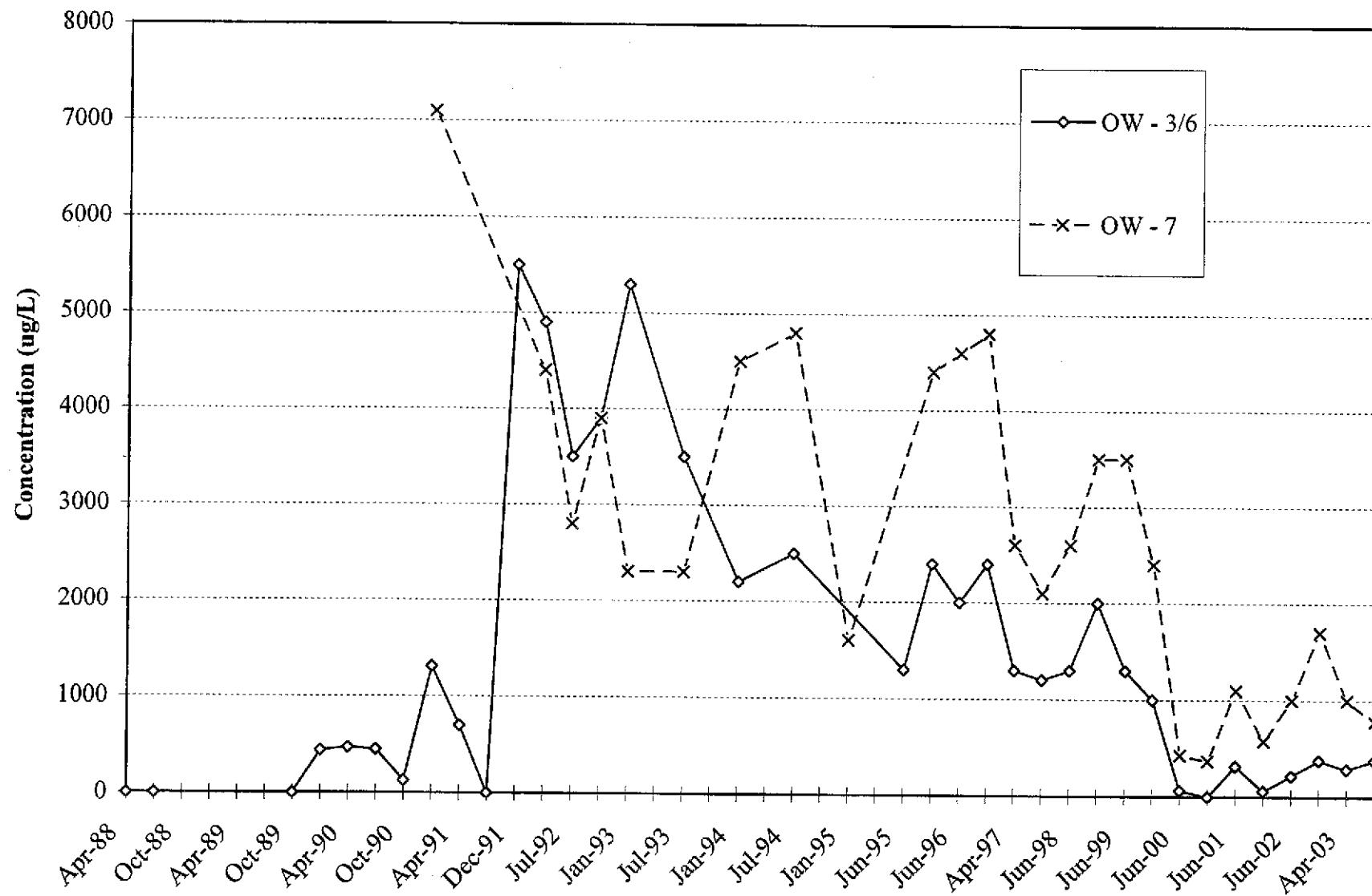
11) MB = Method Blank

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

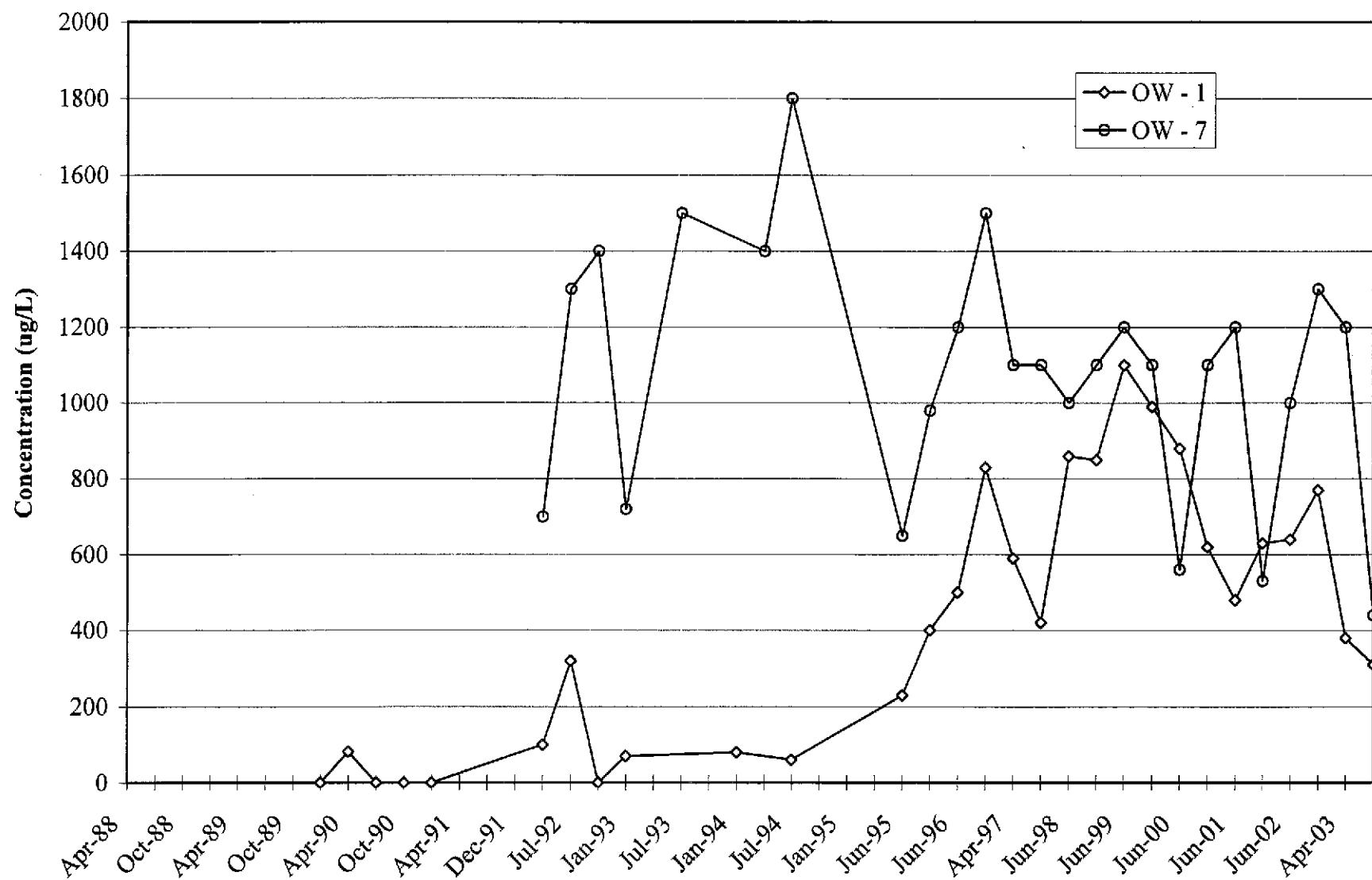
**FIGURE 3.1**  
**TPH-DIESEL in OW - 1, 2, & 5**



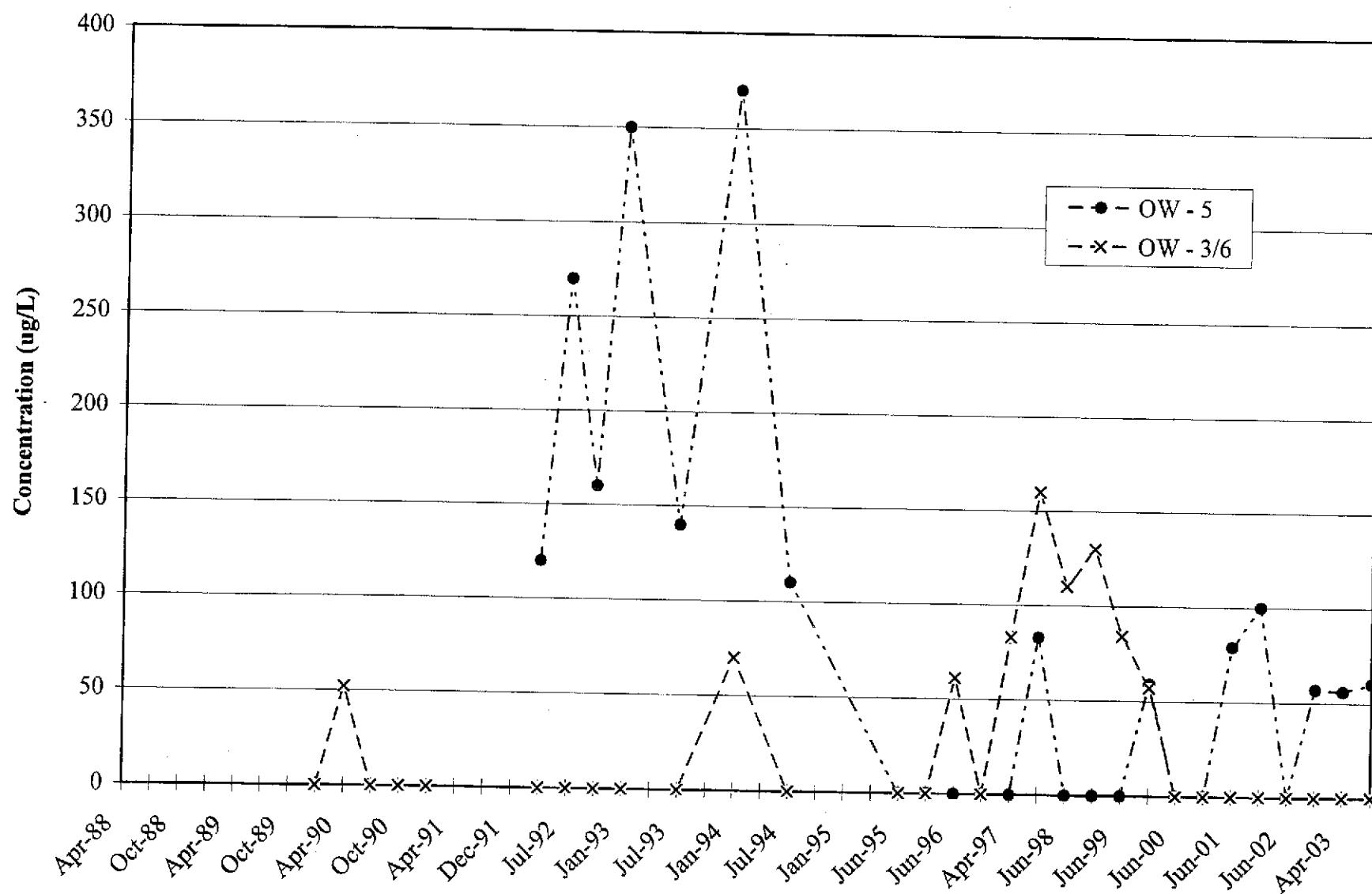
**FIGURE 3.2**  
**TPH-DIESEL in OW - 4, 3/6, & 7**



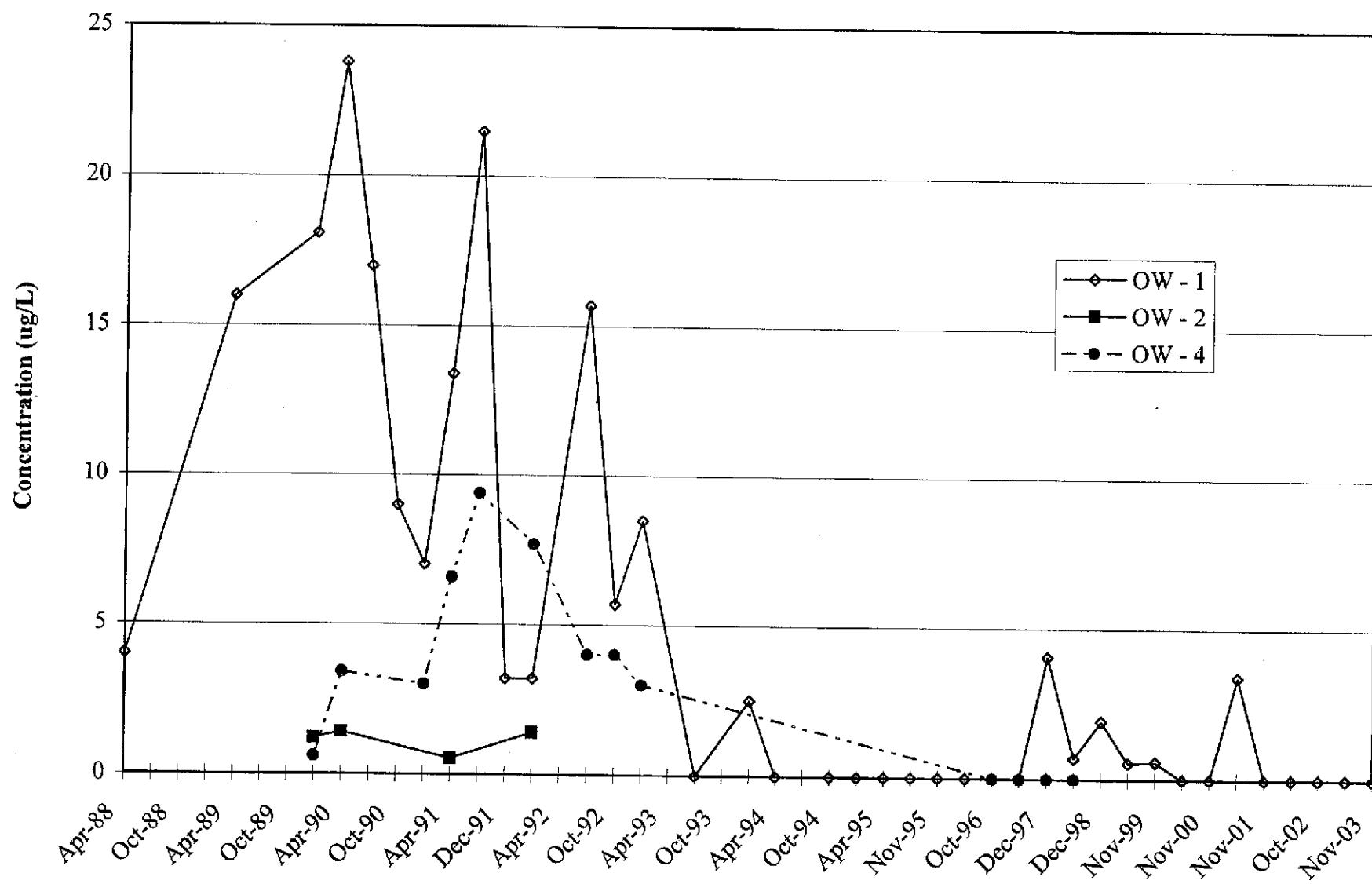
**FIGURE 3.3**  
**TPH-GASOLINE in OW - 1 & 7**



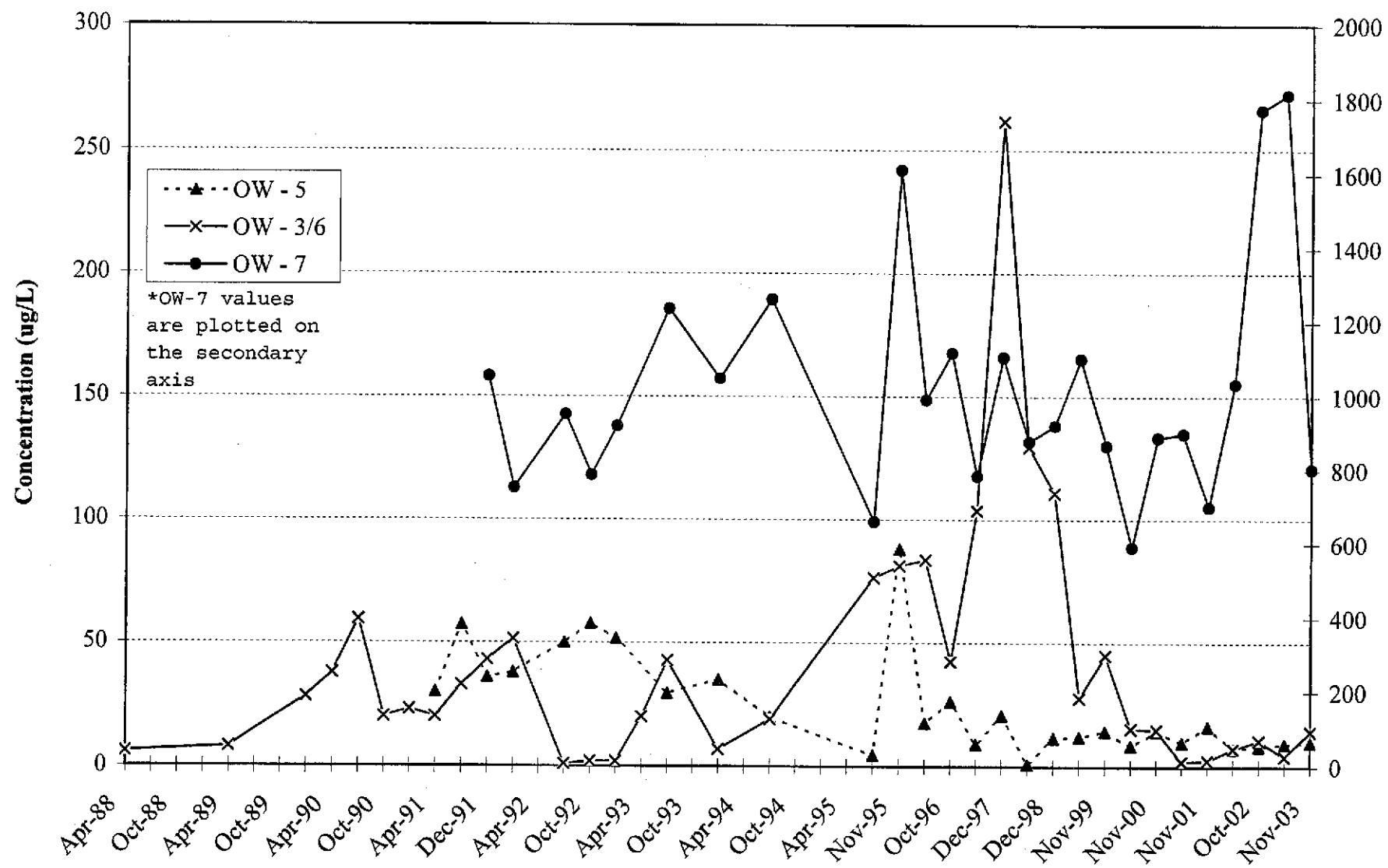
**FIGURE 3.4**  
**TPH-GASOLINE in OW - 5 & 3/6**



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



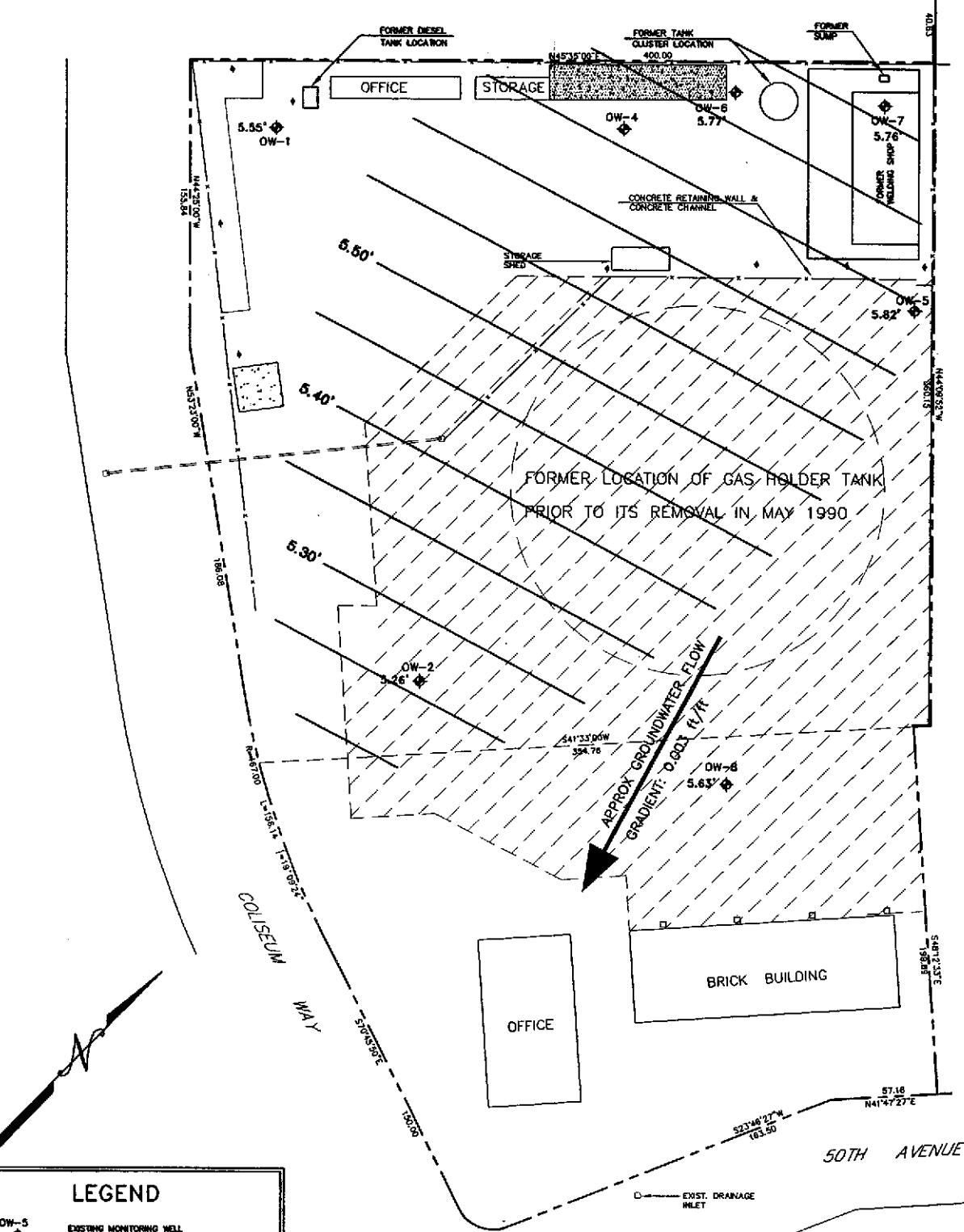
**FIGURE 3.6**  
**TOTAL VOCs in OW-5, 6, & 7\***



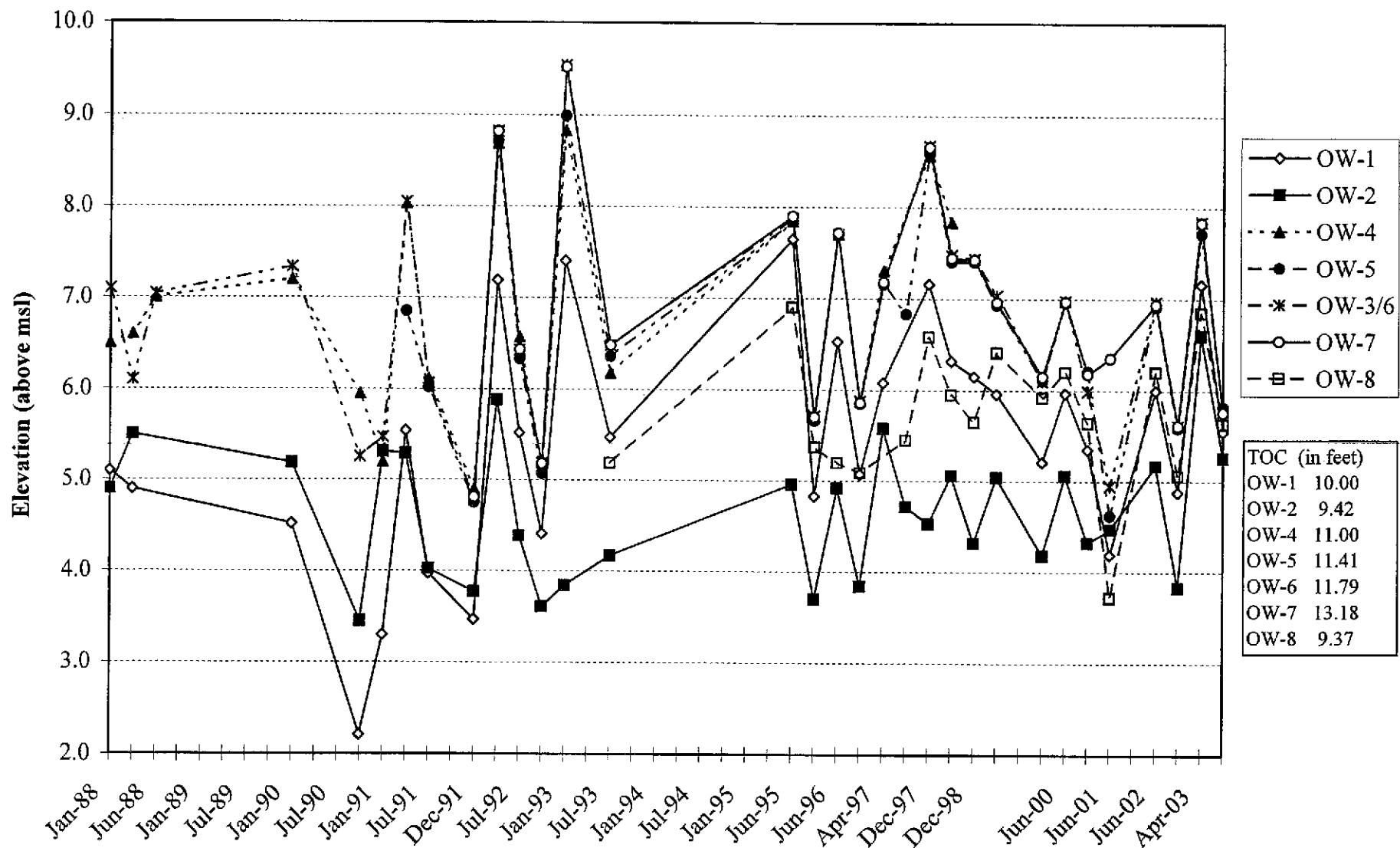
## 4.0 GROUNDWATER FLOW DIRECTION

Water level measurements in the site monitoring wells were collected on November 19, 2003, 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 19, 2003 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 0.003 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.

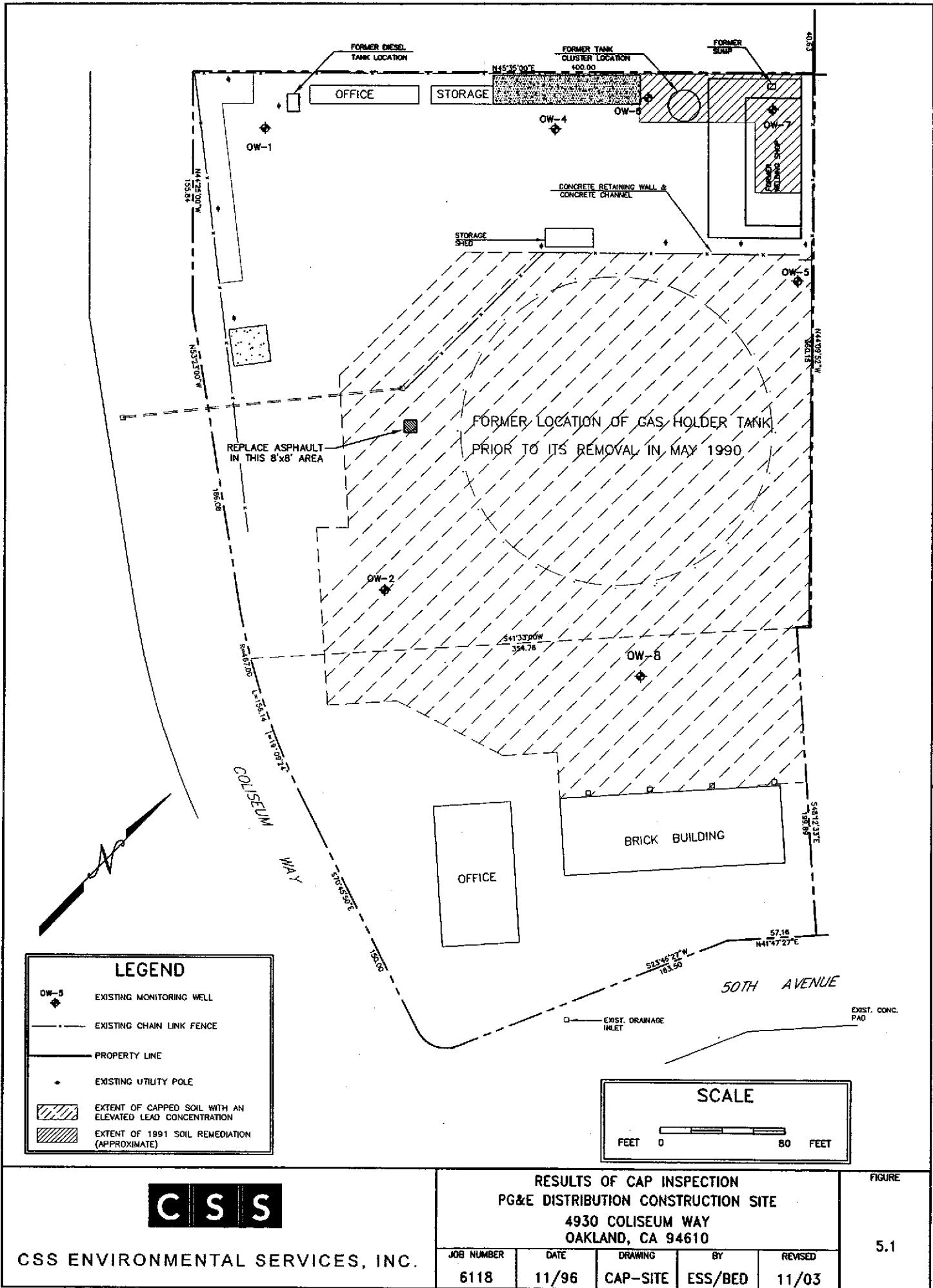


**FIGURE 4.2**  
**HISTORICAL GROUNDWATER ELEVATIONS**



## 5.0 CAP INSPECTION

The asphaltic concrete cap was inspected by Mr. Aaron N. Stessman, PE on November 19, 2003. The condition of the asphalt was good as was the line demarcating the edge of the cap. One 8-foot by 8-foot area with damaged asphalt shown on Figure 5.1 was identified and marked with white paint. It is recommended that this area be repaired or replaced, and that general weed control be continued to prevent potential damage to the cap. The next scheduled cap inspection is during the fourth quarter of 2004.



## 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 19, 2003 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 0.003 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 780 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).
- TPH-G was detected in monitoring wells OW-1, and OW-7 at concentrations of 310 and 440 µg/L, respectively. Well OW-5 showed very minor levels of TPH-G just above the reporting limit of 50 µg/L, while well OW-6 showed none. Although OW-7 showed a significant decrease compared with previous quarters, it 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 over 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 increased slightly in two out of the three wells sampled relative to the previous sampling event, while decreasing significantly in OW-7. The adjoining property to the northeast of the site, which was cleared of all structures during the April 2003 sampling event, experienced recent redevelopment. The resulting decreased infiltration rate for direct precipitation may be the source of recent decreased organic compound concentrations in groundwater observed at OW-7 in the upgradient portion of the site.

- The following VOC's were detected above their MCL:
  - Vinyl Chloride in monitoring well OW-5;
  - 1,4-Dichlorobenzene 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 in wells OW-6 and OW-7;
  - 1,2-Dichlorobenzene in well OW-7;
  - Chlorobenzene in well OW-6.

## **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.

C S S

CSS ENVIRONMENTAL SERVICES, INC.

## ***APPENDIX A***

### **Sample Collection Records Certified Laboratory Results**

CSS Environmental Services

December 03, 2003

95 Belvedere Street, Suite 2

San Rafael, CA 94901

Attn.: Aaron Stessman

Project#: 6118

Project: PG&E Coliseum Way

Dear Mr. Stessman,

Attached is our report for your samples received on 11/24/2003 11:15

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 01/08/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,

You can also contact me via email. My email address is: dsharma@stl-inc.com

Sincerely,



Dimple Sharma  
Project Manager

**Halogenated Volatile Organic Compounds by 8021B/8260B**

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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
OW-5	11/19/2003 15:25	Water	3
OW-6	11/19/2003 16:30	Water	4
OW-7	11/19/2003 16:55	Water	5

## Halogenated Volatile Organic Compounds by 8021B/8260B

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: 11/24/2003 11:15

Prep(s): 5030B

Test(s): 8260B

Sample ID: OW-5

Lab ID: 2003-11-0839 - 3

Sampled: 11/19/2003 15:25

Extracted: 12/1/2003 17:33

Matrix: Water

QC Batch#: 2003/12/01-1A.09

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	12/01/2003 17:33	
Vinyl chloride	0.55	0.50	ug/L	1.00	12/01/2003 17:33	
Chloroethane	ND	1.0	ug/L	1.00	12/01/2003 17:33	
Trichlorodifluoromethane	ND	1.0	ug/L	1.00	12/01/2003 17:33	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	12/01/2003 17:33	
Methylene chloride	ND	5.0	ug/L	1.00	12/01/2003 17:33	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	12/01/2003 17:33	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	12/01/2003 17:33	
1,1-Dichloroethane	2.4	0.50	ug/L	1.00	12/01/2003 17:33	
Chloroform	ND	0.50	ug/L	1.00	12/01/2003 17:33	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	12/01/2003 17:33	
Carbon tetrachloride	ND	0.50	ug/L	1.00	12/01/2003 17:33	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	12/01/2003 17:33	
Trichloroethene	ND	0.50	ug/L	1.00	12/01/2003 17:33	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	12/01/2003 17:33	
Bromodichloromethane	ND	0.50	ug/L	1.00	12/01/2003 17:33	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	12/01/2003 17:33	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	12/01/2003 17:33	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	12/01/2003 17:33	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	12/01/2003 17:33	
Tetrachloroethene	ND	0.50	ug/L	1.00	12/01/2003 17:33	
Dibromochloromethane	ND	0.50	ug/L	1.00	12/01/2003 17:33	
Chlorobenzene	ND	0.50	ug/L	1.00	12/01/2003 17:33	
Bromoform	ND	2.0	ug/L	1.00	12/01/2003 17:33	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	12/01/2003 17:33	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	12/01/2003 17:33	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	12/01/2003 17:33	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	12/01/2003 17:33	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	12/01/2003 17:33	
Chloromethane	ND	1.0	ug/L	1.00	12/01/2003 17:33	

## Halogenated Volatile Organic Compounds by 8021B/8260B

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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Prep(s):	5030B	Test(s):	8260B
Sample ID:	OW-5	Lab ID:	2003-11-0839 - 3
Sampled:	11/19/2003 15:25	Extracted:	12/1/2003 17:33
Matrix:	Water	QC Batch#:	2003/12/01-1A.09

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Bromomethane	ND	1.0	ug/L	1.00	12/01/2003 17:33	
<b>Surrogate(s)</b>						
4-Bromofluorobenzene	92.9	86-115	%	1.00	12/01/2003 17:33	
1,2-Dichloroethane-d4	103.9	76-114	%	1.00	12/01/2003 17:33	
Toluene-d8	96.7	88-110	%	1.00	12/01/2003 17:33	

## Halogenated Volatile Organic Compounds by 8021B/8260B

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: 11/24/2003 11:15

Prep(s):	5030B	Test(s):	8260B
Sample ID:	OW-6	Lab ID:	2003-11-0839-4
Sampled:	11/19/2003 16:30	Extracted:	12/1/2003 17:59
Matrix:	Water	QC Batch#:	2003/12/01-1A.09

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	12/01/2003 17:59	
Vinyl chloride	ND	0.50	ug/L	1.00	12/01/2003 17:59	
Chloroethane	ND	1.0	ug/L	1.00	12/01/2003 17:59	
Trichlorodifluoromethane	ND	1.0	ug/L	1.00	12/01/2003 17:59	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	12/01/2003 17:59	
Methylene chloride	ND	5.0	ug/L	1.00	12/01/2003 17:59	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	12/01/2003 17:59	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	12/01/2003 17:59	
1,1-Dichloroethane	2.8	0.50	ug/L	1.00	12/01/2003 17:59	
Chloroform	ND	0.50	ug/L	1.00	12/01/2003 17:59	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	12/01/2003 17:59	
Carbon tetrachloride	ND	0.50	ug/L	1.00	12/01/2003 17:59	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	12/01/2003 17:59	
Trichloroethene	ND	0.50	ug/L	1.00	12/01/2003 17:59	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	12/01/2003 17:59	
Bromodichloromethane	ND	0.50	ug/L	1.00	12/01/2003 17:59	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	12/01/2003 17:59	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	12/01/2003 17:59	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	12/01/2003 17:59	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	12/01/2003 17:59	
Tetrachloroethene	ND	0.50	ug/L	1.00	12/01/2003 17:59	
Dibromochloromethane	ND	0.50	ug/L	1.00	12/01/2003 17:59	
Chlorobenzene	2.5	0.50	ug/L	1.00	12/01/2003 17:59	
Bromoform	ND	2.0	ug/L	1.00	12/01/2003 17:59	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	12/01/2003 17:59	
1,3-Dichlorobenzene	1.9	0.50	ug/L	1.00	12/01/2003 17:59	
1,4-Dichlorobenzene	7.2	0.50	ug/L	1.00	12/01/2003 17:59	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	12/01/2003 17:59	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	12/01/2003 17:59	
Chloromethane	ND	1.0	ug/L	1.00	12/01/2003 17:59	

## Halogenated Volatile Organic Compounds by 8021B/8260B

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: 11/24/2003 11:15

Prep(s): 5030B

Test(s): 8260B

Sample ID: OW-6

Lab ID: 2003-11-0839-4

Sampled: 11/19/2003 16:30

Extracted: 12/1/2003 17:59

Matrix: Water

QC Batch#: 2003/12/01-1A.09

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Bromomethane	ND	1.0	ug/L	1.00	12/01/2003 17:59	
<i>Surrogate(s)</i>						
4-Bromofluorobenzene	93.7	86-115	%	1.00	12/01/2003 17:59	
1,2-Dichloroethane-d4	97.5	76-114	%	1.00	12/01/2003 17:59	
Toluene-d8	98.4	88-110	%	1.00	12/01/2003 17:59	

## Halogenated Volatile Organic Compounds by 8021B/8260B

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: 11/24/2003 11:15

Prep(s): 5030B

Test(s): 8260B

Sample ID: OW-7

Lab ID: 2003-11-0839-5

Sampled: 11/19/2003 16:55

Extracted: 12/1/2003 18:25

Matrix: Water

QC Batch#: 2003/12/01-1A.09

Analysis Flag: o ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	20	ug/L	20.00	12/01/2003 18:25	
Vinyl chloride	ND	10	ug/L	20.00	12/01/2003 18:25	
Chloroethane	ND	20	ug/L	20.00	12/01/2003 18:25	
Trichlorofluoromethane	ND	20	ug/L	20.00	12/01/2003 18:25	
1,1-Dichloroethene	ND	10	ug/L	20.00	12/01/2003 18:25	
Methylene chloride	ND	100	ug/L	20.00	12/01/2003 18:25	
trans-1,2-Dichloroethene	ND	10	ug/L	20.00	12/01/2003 18:25	
cis-1,2-Dichloroethene	ND	10	ug/L	20.00	12/01/2003 18:25	
1,1-Dichloroethane	ND	10	ug/L	20.00	12/01/2003 18:25	
Chloroform	ND	10	ug/L	20.00	12/01/2003 18:25	
1,1,1-Trichloroethane	ND	10	ug/L	20.00	12/01/2003 18:25	
Carbon tetrachloride	ND	10	ug/L	20.00	12/01/2003 18:25	
1,2-Dichloroethane	ND	10	ug/L	20.00	12/01/2003 18:25	
Trichloroethene	ND	10	ug/L	20.00	12/01/2003 18:25	
1,2-Dichloropropane	ND	10	ug/L	20.00	12/01/2003 18:25	
Bromodichloromethane	ND	10	ug/L	20.00	12/01/2003 18:25	
2-Chloroethylvinyl ether	ND	10	ug/L	20.00	12/01/2003 18:25	
trans-1,3-Dichloropropene	ND	10	ug/L	20.00	12/01/2003 18:25	
cis-1,3-Dichloropropene	ND	10	ug/L	20.00	12/01/2003 18:25	
1,1,2-Trichloroethane	ND	10	ug/L	20.00	12/01/2003 18:25	
Tetrachloroethene	ND	10	ug/L	20.00	12/01/2003 18:25	
Dibromochloromethane	ND	10	ug/L	20.00	12/01/2003 18:25	
Chlorobenzene	68	10	ug/L	20.00	12/01/2003 18:25	
Bromoform	ND	40	ug/L	20.00	12/01/2003 18:25	
1,1,2,2-Tetrachloroethane	ND	10	ug/L	20.00	12/01/2003 18:25	
1,3-Dichlorobenzene	210	10	ug/L	20.00	12/01/2003 18:25	
1,4-Dichlorobenzene	500	10	ug/L	20.00	12/01/2003 18:25	
1,2-Dichlorobenzene	26	10	ug/L	20.00	12/01/2003 18:25	
Trichlorotrifluoroethane	ND	10	ug/L	20.00	12/01/2003 18:25	

## Halogenated Volatile Organic Compounds by 8021B/8260B

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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Prep(s): 5030B

Test(s): 8260B

Sample ID: OW-7

Lab ID: 2003-11-0839 - 5

Sampled: 11/19/2003 16:55

Extracted: 12/1/2003 18:25

Matrix: Water

QC Batch#: 2003/12/01-1A.09

Analysis Flag: o ( See Legend and Note Section.)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Chloromethane	ND	20	ug/L	20.00	12/01/2003 18:25	
Bromomethane	ND	20	ug/L	20.00	12/01/2003 18:25	
<i>Surrogate(s)</i>						
4-Bromofluorobenzene	95.9	86-115	%	20.00	12/01/2003 18:25	
1,2-Dichloroethane-d4	99.1	76-114	%	20.00	12/01/2003 18:25	
Toluene-d8	96.5	88-110	%	20.00	12/01/2003 18:25	

## Halogenated Volatile Organic Compounds by 8021B/8260B

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: 11/24/2003 11:15

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2003/12/01-1A.09

MB: 2003/12/01-1A.09-004

Date Extracted: 12/01/2003 13:29

Compound	Conc.	RL	Unit	Analyzed	Flag
Bromodichloromethane	ND	0.5	ug/L	12/01/2003 13:29	
Bromoform	ND	2.0	ug/L	12/01/2003 13:29	
Bromomethane	ND	1.0	ug/L	12/01/2003 13:29	
Carbon tetrachloride	ND	0.5	ug/L	12/01/2003 13:29	
Chlorobenzene	ND	0.5	ug/L	12/01/2003 13:29	
Chloroethane	ND	1.0	ug/L	12/01/2003 13:29	
2-Chloroethylvinyl ether	ND	0.5	ug/L	12/01/2003 13:29	
Chloroform	ND	0.5	ug/L	12/01/2003 13:29	
Chloromethane	ND	1.0	ug/L	12/01/2003 13:29	
Dibromochloromethane	ND	0.5	ug/L	12/01/2003 13:29	
1,2-Dichlorobenzene	ND	0.5	ug/L	12/01/2003 13:29	
1,3-Dichlorobenzene	ND	0.5	ug/L	12/01/2003 13:29	
1,4-Dichlorobenzene	ND	0.5	ug/L	12/01/2003 13:29	
Dichlorodifluoromethane	ND	1.0	ug/L	12/01/2003 13:29	
1,1-Dichloroethane	ND	0.5	ug/L	12/01/2003 13:29	
1,2-Dichloroethane	ND	0.5	ug/L	12/01/2003 13:29	
1,1-Dichloroethene	ND	0.5	ug/L	12/01/2003 13:29	
cis-1,2-Dichloroethene	ND	0.5	ug/L	12/01/2003 13:29	
trans-1,2-Dichloroethene	ND	0.5	ug/L	12/01/2003 13:29	
1,2-Dichloropropane	ND	0.5	ug/L	12/01/2003 13:29	
cis-1,3-Dichloropropene	ND	0.5	ug/L	12/01/2003 13:29	
trans-1,3-Dichloropropene	ND	0.5	ug/L	12/01/2003 13:29	
Methylene chloride	ND	5.0	ug/L	12/01/2003 13:29	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	12/01/2003 13:29	
Tetrachloroethene	ND	0.5	ug/L	12/01/2003 13:29	
1,1,1-Trichloroethane	ND	0.5	ug/L	12/01/2003 13:29	
1,1,2-Trichloroethane	ND	0.5	ug/L	12/01/2003 13:29	
Trichloroethene	ND	0.5	ug/L	12/01/2003 13:29	
Trichlorofluoromethane	ND	1.0	ug/L	12/01/2003 13:29	
Trichlorotrifluoroethane	ND	0.5	ug/L	12/01/2003 13:29	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

12/03/2003 15:07

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

Page 8 of 11

**Halogenated Volatile Organic Compounds by 8021B/8260B**

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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

<b>Batch QC Report</b>					
Prep(s):	5030B			Test(s):	8260B
Method Blank		Water		QC Batch #	2003/12/01-1A.09
MB:	2003/12/01-1A.09-004			Date Extracted:	12/01/2003 13:29
Compound	Conc.	RL	Unit	Analyzed	Flag
Vinyl chloride	ND	0.5	ug/L	12/01/2003 13:29	
4-Bromofluorobenzene	98.7	86-115	%	12/01/2003 13:29	
1,2-Dichloroethane-d4	102.8	76-114	%	12/01/2003 13:29	
Toluene-d8	99.6	88-110	%	12/01/2003 13:29	

## Halogenated Volatile Organic Compounds by 8021B/8260B

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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

## Laboratory Control Spike

## Water

QC Batch # 2003/12/01-1A.09

LCS 2003/12/01-1A.09-002

Extracted: 12/01/2003

Analyzed: 12/01/2003 12:26

LCSD 2003/12/01-1A.09-003

Extracted: 12/01/2003

Analyzed: 12/01/2003 13:03

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Chlorobenzene	20.2	20.7	20	101.0	103.5	2.4	61-121	20		
1,1-Dichloroethene	20.5	21.0	20	102.5	105.0	2.4	65-125	20		
Trichloroethene	21.7	21.0	20	108.5	105.0	3.3	74-134	20		
<i>Surrogates(s)</i>										
4-Bromofluorobenzene	473	483	500	94.6	96.6		86-115			
1,2-Dichloroethane-d4	509	508	500	101.8	101.6		76-114			
Toluene-d8	495	485	500	99.0	97.0		88-110			

**Halogenated Volatile Organic Compounds by 8021B/8260B**

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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

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**Legend and Notes**

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**Analysis Flag**

0

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

**Gas/BTEX by 8015M/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: 11/24/2003 11:15

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
OW-1	11/19/2003 16:05	Water	1
OW-5	11/19/2003 15:25	Water	3
OW-6	11/19/2003 16:30	Water	4
OW-7	11/19/2003 16:55	Water	5

## Gas/BTEX by 8015M/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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Prep(s):	5030		Test(s):	8015M		
	5030			8021B		
Sample ID:	OW-1		Lab ID:	2003-11-0839 - 1		
Sampled:	11/19/2003 16:05		Extracted:	11/27/2003 04:15		
Matrix:	Water		QC Batch#:	2003/11/26-01.05		
Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	310	100	ug/L	2.00	11/27/2003 04:15	g
Benzene	ND	1.0	ug/L	2.00	11/27/2003 04:15	
Toluene	ND	1.0	ug/L	2.00	11/27/2003 04:15	
Ethyl benzene	ND	1.0	ug/L	2.00	11/27/2003 04:15	
Xylene(s)	ND	1.0	ug/L	2.00	11/27/2003 04:15	
<i>Surrogate(s)</i>						
Trifluorotoluene	78.2	58-124	%	2.00	11/27/2003 04:15	
4-Bromofluorobenzene-FID	95.5	50-150	%	2.00	11/27/2003 04:15	

## Gas/BTEX by 8015M/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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Prep(s):	5030 5030	Test(s):	8015M 8021B			
Sample ID:	OW-5	Lab ID:	2003-11-0839 - 3			
Sampled:	11/19/2003 15:25	Extracted:	11/25/2003 20:44			
Matrix:	Water	QC Batch#:	2003/11/25-01.05			
Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	60	50	ug/L	1.00	11/25/2003 20:44	g
Benzene	7.0	0.50	ug/L	1.00	11/25/2003 20:44	
Toluene	ND	0.50	ug/L	1.00	11/25/2003 20:44	
Ethyl benzene	ND	0.50	ug/L	1.00	11/25/2003 20:44	
Xylene(s)	ND	0.50	ug/L	1.00	11/25/2003 20:44	
<i>Surrogate(s)</i>						
Trifluorotoluene	104.5	58-124	%	1.00	11/25/2003 20:44	
4-Bromofluorobenzene-FID	105.7	50-150	%	1.00	11/25/2003 20:44	

## Gas/BTEX by 8015M/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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Prep(s):	5030 5030	Test(s):	8015M 8021B
Sample ID:	OW-6	Lab ID:	2003-11-0839-4
Sampled:	11/19/2003 16:30	Extracted:	11/27/2003 04:46
Matrix:	Water	QC Batch#:	2003/11/26-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	11/27/2003 04:46	
Benzene	ND	0.50	ug/L	1.00	11/27/2003 04:46	
Toluene	ND	0.50	ug/L	1.00	11/27/2003 04:46	
Ethyl benzene	ND	0.50	ug/L	1.00	11/27/2003 04:46	
Xylene(s)	ND	0.50	ug/L	1.00	11/27/2003 04:46	
<i>Surrogate(s)</i>						
Trifluorotoluene	81.8	58-124	%	1.00	11/27/2003 04:46	
4-Bromofluorobenzene-FID	81.9	50-150	%	1.00	11/27/2003 04:46	

## Gas/BTEX by 8015M/8021

CSS Environmental Services

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Project: 6118

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	OW-7	Lab ID:	2003-11-0839 - 5
Sampled:	11/19/2003 16:55	Extracted:	11/27/2003 05:18
Matrix:	Water	QC Batch#:	2003/11/26-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	440	100	ug/L	2.00	11/27/2003 05:18	g
Benzene	ND	1.0	ug/L	2.00	11/27/2003 05:18	
Toluene	ND	1.0	ug/L	2.00	11/27/2003 05:18	
Ethyl benzene	ND	1.0	ug/L	2.00	11/27/2003 05:18	
Xylene(s)	ND	1.0	ug/L	2.00	11/27/2003 05:18	
<i>Surrogate(s)</i>						
Trifluorotoluene	75.2	58-124	%	2.00	11/27/2003 05:18	
4-Bromofluorobenzene-FID	98.3	50-150	%	2.00	11/27/2003 05:18	

**Gas/BTEX by 8015M/8021**

CSS Environmental Services

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95 Belvedere Street, Suite 2

San Rafael, CA 94901

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

Project: 6118  
PG&E Coliseum Way

Received: 11/24/2003 11:15

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

Method Blank

Water

QC Batch # 2003/11/25-01.05

MB: 2003/11/25-01.05-005

Date Extracted: 11/25/2003 12:04

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/25/2003 12:04	
Benzene	ND	0.5	ug/L	11/25/2003 12:04	
Toluene	ND	0.5	ug/L	11/25/2003 12:04	
Ethyl benzene	ND	0.5	ug/L	11/25/2003 12:04	
Xylene(s)	ND	0.5	ug/L	11/25/2003 12:04	
<b>Surrogates(s)</b>					
Trifluorotoluene	81.0	58-124	%	11/25/2003 12:04	
4-Bromofluorobenzene-FID	90.4	50-150	%	11/25/2003 12:04	

**Gas/BTEX by 8015M/8021**

CSS Environmental Services

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San Rafael, CA 94901

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

Project: 6118

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

Method Blank

Water

QC Batch # 2003/11/26-01.05

MB: 2003/11/26-01.05-001

Date Extracted: 11/26/2003 08:32

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/26/2003 08:32	
Benzene	ND	0.5	ug/L	11/26/2003 08:32	
Toluene	ND	0.5	ug/L	11/26/2003 08:32	
Ethyl benzene	ND	0.5	ug/L	11/26/2003 08:32	
Xylene(s)	ND	0.5	ug/L	11/26/2003 08:32	
<b>Surrogates(s)</b>					
Trifluorotoluene	85.8	58-124	%	11/26/2003 08:32	
4-Bromofluorobenzene-FID	89.6	50-150	%	11/26/2003 08:32	

## Gas/BTEX by 8015M/8021

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Project: 6118

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Batch QC Report													
Prep(s): 5030		Test(s): 8021B											
Laboratory Control Spike			Water			QC Batch # 2003/11/25-01.05							
LCS	2003/11/25-01.05-006					Extracted: 11/25/2003							
LCSD	2003/11/25-01.05-007					Extracted: 11/25/2003							
Compound	Conc.		ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %				
	LCS	LCSD	LCS	LCSD	%	LCS	LCSD	Rec.	RPD	LCS	LCSD		
Benzene	87.5	84.5	100.0	87.5	84.5	3.5	77-123	20					
Toluene	89.2	85.9	100.0	89.2	85.9	3.8	78-122	20					
Ethyl benzene	83.1	78.3	100.0	83.1	78.3	5.9	70-130	20					
Xylene(s)	265	252	300	88.3	84.0	5.0	75-125	20					
<i>Surrogates(s)</i>													
Trifluorotoluene		376	360	500	75.2	72.0		58-124					

## Gas/BTEX by 8015M/8021

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Project: 6118

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Batch QC Report									
Prep(s): 5030								Test(s): 8015M	
Laboratory Control Spike				Water		QC Batch # 2003/11/25-01-05			
LCS	2003/11/25-01-05-008		Extracted: 11/25/2003		Analyzed: 11/25/2003 13:40				
LCSD	2003/11/25-01-05-009		Extracted: 11/25/2003		Analyzed: 11/25/2003 14:12				
Compound	Conc. ug/L		Exp.Conc.		Recovery %		RPD	Ctrl.Limits %	
	LCS	LCSD	LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Gasoline	408	389	500	81.6	77.8	4.8	75-125	20	
<b>Surrogates(s)</b>									
4-Bromofluorobenzene-FID	465		500	93.0			50-150		

## Gas/BTEX by 8015M/8021

CSS Environmental Services

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

Project: 6118

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Batch QC Report										
Prep(s): 5030		Test(s): 8021B								
Laboratory Control Spike			Water			QC Batch # 2003/11/26-01.05				
LCS	2003/11/26-01.05-002		Extracted: 11/26/2003			Analyzed: 11/26/2003 09:03				
LCSD	2003/11/26-01.05-003		Extracted: 11/26/2003			Analyzed: 11/26/2003 09:35				
Compound	Conc.		ug/L		Exp.Conc.		Recovery %		RPD	Ctrl.Limits %
	LCS	LCSD			LCS	LCSD	%	Rec.	RPD	Flags
Benzene	90.2	86.4		100.0	90.2	86.4	4.3	77-123	20	
Toluene	94.0	88.6		100.0	94.0	88.6	5.9	78-122	20	
Ethyl benzene	88.1	81.9		100.0	88.1	81.9	7.3	70-130	20	
Xylene(s)	279	261		300	93.0	87.0	6.7	75-125	20	
<b>Surrogates(s)</b>										
Trifluorotoluene	452	422		500	90.4	84.4		58-124		

## Gas/BTEX by 8015M/8021

CSS Environmental Services

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Project: 6118  
PG&E Coliseum Way

Received: 11/24/2003 11:15

## Batch QC Report

Prep(s): 5030

Test(s): 8015M

## Laboratory Control Spike

## Water

QC Batch # 2003/11/26-01.05

LCS 2003/11/26-01.05-004

Extracted: 11/26/2003

Analyzed: 11/26/2003 10:07

LCSD 2003/11/26-01.05-005

Extracted: 11/26/2003

Analyzed: 11/26/2003 10:39

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Gasoline	436	423	500	87.2	84.6	3.0	75-125	20		
Surrogates(s) 4-Bromofluorobenzene-FID	504	496	500	100.8	99.2		50-150			

Gas/BTEX by 8015M/8021

CSS Environmental Services

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

Project: 6118  
PG&E Coliseum Way

Received: 11/24/2003 11:15

---

**Legend and Notes**

---

**Result Flag**

g

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

**Total Lead**

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

Received: 11/24/2003 11:15

PG&E Coliseum Way

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
OW-2	11/19/2003 14:10	Water	2
OW-5	11/19/2003 15:25	Water	3
OW-8	11/19/2003 14:45	Water	6

## Total Lead

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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Prep(s): 3010A

Test(s): 6010B

Sample ID: OW-2

Lab ID: 2003-11-0839 - 2

Sampled: 11/19/2003 14:10

Extracted: 11/25/2003 12:59

Matrix: Water

QC Batch#: 2003/11/25-04.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	ND	0.0050	mg/L	1.00	11/29/2003 13:32	

## Total Lead

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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Prep(s):	3010A	Test(s):	6010B
Sample ID:	OW-5	Lab ID:	2003-11-0839 - 3
Sampled:	11/19/2003 15:25	Extracted:	11/25/2003 12:59
Matrix:	Water	QC Batch#:	2003/11/25-04.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	ND	0.0050	mg/L	1.00	11/29/2003 13:36	

**Total Lead**

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

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Prep(s): 3010A

Test(s): 6010B

Sample ID: OW-8

Lab ID: 2003-11-0839-6

Sampled: 11/19/2003 14:45

Extracted: 11/25/2003 12:59

Matrix: Water

QC Batch#: 2003/11/25-04.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	ND	0.0050	mg/L	1.00	11/29/2003 13:40	

**Total Lead**

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: 11/24/2003 11:15

**Batch QC Report**

Prep(s): 3010A

Test(s): 6010B

Method Blank

Water

QC Batch # 2003/11/25-04.15

MB: 2003/11/25-04.15-001

Date Extracted: 11/25/2003 12:59

Compound	Conc.	RL	Unit	Analyzed	Flag
Lead	ND	0.0050	mg/L	11/29/2003 12:50	

**Total Lead**

CSS Environmental Services

Attn.: Aaron Stessman

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San Rafael, CA 94901

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Project: 6118

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

**Batch QC Report**

Prep(s): 3010A

Test(s): 6010B

**Laboratory Control Spike****Water****QC Batch # 2003/11/25-04.15**

LCS	2003/11/25-04.15-002
LCSD	2003/11/25-04.15-003

Extracted: 11/25/2003
Extracted: 11/25/2003

Analyzed: 11/29/2003 12:54
Analyzed: 11/29/2003 12:58

Compound	Conc. mg/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Lead	0.441	0.451	0.500	88.2	90.2	2.2	80-120	20		

Diesel

CSS Environmental Services

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

Project: 6118  
PG&E Coliseum Way

Received: 11/24/2003 11:15

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
OW-1	11/19/2003 16:05	Water	1
OW-5	11/19/2003 15:25	Water	3
OW-6	11/19/2003 16:30	Water	4
OW-7	11/19/2003 16:55	Water	5

**Diesel**

CSS Environmental Services

Attn.: Aaron Stessman

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

Project: 6118  
PG&E Coliseum Way

Received: 11/24/2003 11:15

Prep(s): 3510/8015M

Test(s): 8015M

Sample ID: OW-1

Lab ID: 2003-11-0839 - 1

Sampled: 11/19/2003 16:05

Extracted: 11/25/2003 12:32

Matrix: Water

QC Batch#: 2003/11/25-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	470	50	ug/L	1.00	11/26/2003 22:50	ndp
<b>Surrogate(s)</b> o-Terphenyl	84.9	60-130	%	1.00	11/26/2003 22:50	

## Diesel

CSS Environmental Services

Attn.: Aaron Stessman

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Project: 6118  
PG&E Coliseum Way

Received: 11/24/2003 11:15

Prep(s): 3510/8015M

Test(s): 8015M

Sample ID: OW-5

Lab ID: 2003-11-0839 - 3

Sampled: 11/19/2003 15:25

Extracted: 11/25/2003 12:32

Matrix: Water

QC Batch#: 2003/11/25-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	250	50	ug/L	1.00	11/26/2003 22:16	
Surrogate(s) o-Terphenyl	48.7	60-130	%	1.00	11/26/2003 22:16	sl

**Diesel**

CSS Environmental Services

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Project: 6118

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

Prep(s):	3510/8015M	Test(s):	8015M
Sample ID:	OW-6	Lab ID:	2003-11-0839-4
Sampled:	11/19/2003 16:30	Extracted:	11/25/2003 12:32
Matrix:	Water	QC Batch#:	2003/11/25-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	380	50	ug/L	1.00	11/26/2003 23:16	ndp
Surrogate(s) o-Terphenyl	73.4	60-130	%	1.00	11/26/2003 23:16	

## Diesel

CSS Environmental Services

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

Project: 6118  
PG&E Coliseum Way

Received: 11/24/2003 11:15

Prep(s): 3510/8015M

Test(s): 8015M

Sample ID: OW-7

Lab ID: 2003-11-0839 - 5

Sampled: 11/19/2003 16:55

Extracted: 11/25/2003 12:32

Matrix: Water

QC Batch#: 2003/11/25-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	780	50	ug/L	1.00	11/26/2003 23:42	ndp
Surrogate(s)						
o-Terphenyl	74.2	60-130	%	1.00	11/26/2003 23:42	

**Diesel**

CSS Environmental Services

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

Project: 6118

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

<b>Batch QC Report</b>					
Prep(s): 3510/8015M				Test(s): 8015M	
<b>Method Blank</b>		Water		<b>QC Batch #</b> 2003/11/25-06.10	
MB: 2003/11/25-06.10-003				Date Extracted: 11/25/2003 12:32	
Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	11/26/2003 19:17	
<b>Surrogates(s)</b>					
o-Terphenyl	80.3	60-130	%	11/26/2003 19:17	

**Diesel**

CSS Environmental Services

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San Rafael, CA 94901  
Phone: (415) 457-9551 Fax: (415) 457-9261

Project: 6118  
PG&E Coliseum Way

Received: 11/24/2003 11:15

**Batch QC Report**

Prep(s): 3510/8015M

Test(s): 8015M

**Laboratory Control Spike****Water****QC Batch # 2003/11/25-06.10**

LCS 2003/11/25-06.10-001

Extracted: 11/25/2003

Analyzed: 11/26/2003 18:16

LCSD 2003/11/25-06.10-002

Extracted: 11/25/2003

Analyzed: 11/26/2003 18:47

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %	Flags			
	LCS	LCSD		LCS	LCSD			Rec.	RPD	LCS	LCSD
Diesel	835	815	1000	83.5	81.5	2.4	60-130	25			
<b>Surrogates(s)</b> o-Terphenyl	16.5	16.2	20.0	82.7	81.1		60-130	0			

**Diesel**

CSS Environmental Services

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Project: 6118

Received: 11/24/2003 11:15

PG&amp;E Coliseum Way

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**Legend and Notes**

---

**Result Flag**

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

sl

Surrogate recoveries were lower than QC limit due to matrix interference,  
confirmed by reanalysis.

Report To

Attn: Flaron Stessman  
Company: CSS Environmental  
Address: 95 Belvedere, Suite 2, San Rafael, CA 94901  
Phone: (415) 845-3465 Email:

TPH EPA -  8015B021  82608  
 Gas w/  MTBE

Purgeable Aromatics  
BTX EPA -  8021  82608

TEPH EPA 8015M  Silica Gel  
 Diesel  Motor Oil  Other

Fuel Test EPA 82608:  Gas  BTX  
 Five Oxygenates  DCA, EOB  Ethanol

Purgeable Halocarbons  
(HVOCS) EPA 8021

Volatile Organics GC/MS (VOCs)  
 EPA 82608  624

Semivolatile GC/MS  
 EPA 8270  625

Oil and Grease  Petroleum  
(EPA 1664)  Total

Pesticides  EPA 8081  608  
PCBs  EPA 8082  608

PNAs by  8270  8310

CAM17 Metals  
(EPA 6010/747-0747-1)  
 Lead  LUFT  RCRA  
 Other

WET (STLC)  
 TCLP

Hexavalent Chromium  
pH (24h hold time for H<sub>2</sub>O)  
 TSS  Alkalinity  
 TDS

Anions:  Cl  SO<sub>4</sub>  NO<sub>3</sub>  F  
 Br  NO<sub>2</sub>  PO<sub>4</sub>

Number of Containers

Sample ID	Date	Time	Mat	Pres	Sample By:	Analysis Request	Number of Containers
OW-1	11/19/03	1605	H <sub>2</sub> O	Y/N	X	X	4
OW-2		1410		Y			1
OW-5		1525		Y/N	X	X	8
OW-6		1630			X	X	7
OW-7		1655			X	X	7
OW-8		1445		Y		X	1

Project Info.

Sample Receipt

Project Name:

PG&E Coliseum Way

# of Containers:

Project#:

G11B

Head Space:

PO#:

Temp:

4.0

Credit Card#:

Conforms to record:

T	Std 5 Day	72h	48h	24h	Other:
---	-----------	-----	-----	-----	--------

Report:  Routine  Level 3  Level 4  EDD  State Tank Fund EDF  
Special Instructions / Comments:  Global ID \_\_\_\_\_

1) Relinquished by:

Shannon Dustin 9:40  
Signature Time  
Shannon Dustin 11/24/03  
Printed Name Date  
CSS Env Services Inc.  
Company

2) Relinquished by:

R. Allen 11:15  
Signature Time  
R. Allen 11/24/03  
Printed Name Date  
STL SF  
Company

3) Relinquished by:

M. Villanueva 11:15  
Signature Time  
M. Villanueva 11/24/03  
Printed Name Date  
STL SF  
Company

1) Received by:

K. Allen 11:00 9:40  
Signature Time  
K. Allen 11/24/03  
Printed Name Date  
STL SF  
Company

2) Received by:

K. Allen 11:00  
Signature Time  
K. Allen 11/24/03  
Printed Name Date  
STL SF  
Company

3) Received by:

M. Villanueva 11:00  
Signature Time  
M. Villanueva 11/24/03  
Printed Name Date  
STL SF  
Company

DTW → ELEV's ON: 11/19/03

6118

OW -	TOC	Depth	Elev
1	10.00'	4.45'	5.55'
2	9.42'	4.16'	5.26'
-	-	-	-
4	11.00'	-	-
5	11.41'	5.59'	5.82'
3/6	11.79'	6.02'	5.77'
7	13.18'	7.42'	5.76'
8	9.37'	3.74'	5.63'

C S S

CSS ENVIRONMENTAL SERVICES, INC.

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

## **Historical Groundwater Analytical Data**

## 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-butadiene

6) ND = Not Detected at or above MDL

#### 7) Purgeable Halocarbons (EPA method)

#### 8) Purgeable Aromatics (EPA method 8020)

9) NA = Not Analyzed or analysis not required

10) 6/17/02 Samples analyzed for VOCs out o

## Historical Groundwater Analytical Data

Well ID Date	OW-1 Jun-00	OW-1 Nov-00	OW-1 Jun-01	OW-1 Nov-01	OW-1 Jun-02	OW-1 Oct-02	OW-1 Apr-03	OW-1 Nov-03
<b>PURGEABLE HALOCARBONS</b>								
Chloromethane	NA							
Bromomethane	NA							
Vinyl chloride	NA							
Chloroethane	NA							
Methylene Chloride	NA							
Trichlorofluoromethane	NA							
1,1-Dichloroethene	NA							
1,1-Dichloroethane	NA							
cis-1,2-Dichloroethene	NA							
trans-1,2-Dichloroethene	NA							
Chloroform	NA							
Freon 113	NA							
1,2-Dichloroethane	NA							
1,1,1-Trichloroethane	NA							
Carbon Tetrachloride	NA							
Bromodichloromethane	NA							
1,2-Dichloropropane	NA							
cis-1,3-Dichloropropene	NA							
Trichloroethene	NA							
1,1,2-Trichloroethane	NA							
trans-1,3-Dichloropropene	NA							
Dibromochloromethane	NA							
2-Chloroethylvinyl Ether	NA							
Bromoform	NA							
Tetrachloroethene	NA							
1,1,2,2-Tetrachloroethane	NA							
Chlorobenzene	NA							
1,3-Dichlorobenzene	NA							
1,2-Dichlorobenzene	NA							
1,4-Dichlorobenzene	NA							
<b>PURGEABLE AROMATICS</b>								
Benzene	ND							
Toluene	ND							
Ethylbenzene	ND							
Total Xylenes	ND	ND	3.4	ND	ND	ND	ND	ND
<b>TOTAL VOCs</b>	NA	NA	3.4	NA	NA	NA	NA	NA
<b>HYDROCARBONS</b>								
TVH-g	880	620	480	630	640	770	380	310
TEFH-d	350	250	740	270	670	500	460	470
O&G	NA							
TPH (418.1)	NA							
<b>METALS</b>								
Lead	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) NA = Not Analyzed or analysis not required								
10) 6/17/02 Samples analyzed for VOCs out of holding time due to laboratory error								

## Historical Groundwater Analytical Data

Well ID Date	MCL ug/L	OW-2 Apr-88	OW-2 Oct-89	OW-2 Jan-90	DW-2 Apr-90	DW-2 Jul-90	OW-2 Oct-90	OW-2 Jan-91	OW-2 Apr-91	OW-2 Jul-91	OW-2 Dec-91	OW-2 Mar-92	OW-2 Jul-92	OW-2 Oct-92	OW-2 Jan-93	OW-2 Apr-93	OW-2 Jul-93	OW-2 Oct-93	OW-2 Jan-94	OW-2 Apr-94	OW-2 Jul-94	OW-2 Jun-95	OW-2 Nov-95	OW-2 Jun-96	OW-2 Oct-96	OW-2 Apr-Jun-97	OW-2 Dec-97	OW-2 Jun-98	OW-2 Dec-98	OW-2 Jun-99	OW-2 Nov-99
<b>PURGEABLE HALOCARBONS</b>																															
Chloromethane		ND	NA	NA	NA	NA	NA	NA																							
Bromomethane		ND	NA	NA	NA	NA	NA	NA																							
Vinyl chloride	0.5	ND	NA	NA	NA	NA	NA	NA																							
Chloroethane		ND	NA	NA	NA	NA	NA	NA																							
Methylene Chloride	5#	ND	NA	NA	NA	NA	NA	NA																							
Trichlorofluoromethane	150	ND	NA	NA	NA	NA	NA	NA																							
1,1-Dichloroethene	6	ND	NA	NA	NA	NA	NA	NA																							
1,1-Dichloroethane	5	ND	NA	NA	NA	NA	NA	NA																							
cis-1,2-Dichloroethene	6	NA	ND	NA	NA	NA	NA	NA	NA																						
trans-1,2-Dichloroethene	10	ND	NA	NA	NA	NA	NA	NA																							
Chloroform	100#*	ND	NA	NA	NA	NA	NA	NA																							
Freon 113	1200	NA	ND	NA	NA	NA	NA	NA	NA																						
1,2-Dichloroethane	0.5	ND	NA	NA	NA	NA	NA	NA																							
1,1,1-Trichloroethane	200	ND	NA	NA	NA	NA	NA	NA																							
Carbon Tetrachloride	0.5	ND	NA	NA	NA	NA	NA	NA																							
Bromochloromethane	100#*	NO	ND	NA	NA	NA	NA	NA	NA																						
1,2-Dichloropropene	5	ND	NA	NA	NA	NA	NA	NA																							
cis-1,3-Dichloropropene	5**	ND	NA	NA	NA	NA	NA	NA																							
Trichloroethene	5	ND	NA	NA	NA	NA	NA	NA																							
1,1,2-Trichloroethane	32	ND	NA	NA	NA	NA	NA	NA																							
trans-1,3-Dichloropropene	5**	ND	NA	NA	NA	NA	NA	NA																							
Dibromochloromethane	100#*	ND	NA	NA	NA	NA	NA	NA																							
2-Chloroethylvinyl Ether		ND	NA	NA	NA	NA	NA	NA																							
Bromoform	100#*	ND	NA	NA	NA	NA	NA	NA																							
Tetrachloroethene	5	ND	NA	NA	NA	NA	NA	NA																							
1,1,2,2-Tetrachloroethane	1	ND	NA	NA	NA	NA	NA	NA																							
Chlorobenzene	30	ND	NA	NA	NA	NA	NA	NA																							
1,3-Dichlorobenzene		NA	NA	ND	NA	NA	NA	NA	NA	NA																					
1,2-Dichlorobenzene	600#	NA	NA	ND	NA	NA	NA	NA	NA	NA																					
1,4-Dichlorobenzene	5	NA	NA	ND	NA	NA	NA	NA	NA	NA																					
<b>PURGEABLE AROMATICS</b>																															
Benzene	1	ND	ND	0.4	ND	NA	NA	NA	NA	NA	NA																				
Toluene	1000#	ND	ND	0.4	0.6	ND	NA	NA	NA	NA	NA	NA																			
Ethylbenzene	580	ND	NA	NA	NA	NA	NA	NA																							
Total Xylenes	1750**	ND	ND	0.4	0.8	ND	NA	NA	NA	NA	NA	NA																			
TOTAL VOCs		NA	NA	1.2	1.4	NA	NA	NA	0.53	NA	NA	1.4	NA	NA	NA	NA	NA	NA													
<b>HYDROCARBONS</b>																															
TVH-g		NA	NA	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NA	< 50	< 50	< 50	< 50	NA	NA	NA	NA	NA	NA									
TEPH-d		< 1000	< 1000	130	140	68	90	< 200	< 50	650	670	410	410	620	NA	NA	NA	NA	NA	NA											
O&S		16000	16000	NA	NA	NA	NA	NA	NA	< 5000	< 5000	< 5000	< 500	NA	NA	NA	NA	NA	NA												
TPH (418,1)		NA	NA	< 5000	< 5000	< 5000	< 5000	< 5000	< 500	NA	NA	NA	NA	NA	NA																
<b>METALS</b>																															
Lead	0	NA	ND	NA	NA	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
- 10) 6/17/02 Samples analyzed for VOCs out of holding time due to laboratory error

## Historical Groundwater Analytical Data

Well ID Date	OW-2 Jun-00	OW-2 Nov-00	OW-2 Jun-01	OW-2 Nov-01	OW-2 Jun-02	OW-2 Oct-02	OW-2 Apr-03	OW-2 Nov-03
<b>PURGEABLE HALOCARBONS</b>								
Chloromethane	NA							
Bromomethane	NA							
Vinyl chloride	NA							
Chloroethane	NA							
Methylene Chloride	NA							
Trichlorofluoromethane	NA							
1,1-Dichloroethene	NA							
1,1-Dichloroethane	NA							
cis-1,2-Dichloroethene	NA							
trans-1,2-Dichloroethene	NA							
Chloroform	NA							
Freon 113	NA							
1,2-Dichloroethane	NA							
1,1,1-Trichloroethane	NA							
Carbon Tetrachloride	NA							
Bromodichloromethane	NA							
1,2-Dichloropropane	NA							
cis-1,3-Dichloropropene	NA							
Trichloroethene	NA							
1,1,2-Trichloroethane	NA							
trans-1,3-Dichloropropene	NA							
Dibromochloromethane	NA							
2-Chloroethylvinyl Ether	NA							
Bromoform	NA							
Tetrachloroethene	NA							
1,1,2,2-Tetrachloroethane	NA							
Chlorobenzene	NA							
1,3-Dichlorobenzene	NA							
1,2-Dichlorobenzene	NA							
1,4-Dichlorobenzene	NA							
<b>PURGEABLE AROMATICS</b>								
Benzene	NA							
Toluene	NA							
Ethylbenzene	NA							
Total Xylenes	NA							
<b>TOTAL VOCs</b>	NA							
<b>HYDROCARBONS</b>								
TVH-d	NA							
TEPH-d	NA							
O&G	NA							
TPH (418.1)	NA							
<b>METALS</b>								
Lead	ND							
<b>Notes:</b>								
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 xyline 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								
10) 6/17/02 Samples analyzed for VOCs out of holding time due to laboratory error								

## Historical Groundwater Analytical Data

Well ID Date	MCL ug/L	OW-4 Jun-88	OW-4 Oct-89	OW-4 Jan-90	OW-4 Apr-90	OW-4 Jul-90	OW-4 Oct-90	OW-4 Jan-91	OW-4 Apr-91	OW-4 Jul-91	OW-4 Dec-91	OW-4 Mar-92	OW-4 Jul-92	OW-4 Oct-92	OW-4 Jan-93	OW-4 Apr-93	OW-4 Jul-93	OW-4 Oct-93	OW-4 Jan-94	OW-4 Jul-94	OW-4 Jun-95	OW-4 Nov-95	OW-4 Jun-96	OW-4 Oct-Jun-97	OW-4 Apr,Jun-97	OW-4 Dec-97	OW-4 Jul-98	OW-4 Dec-98	OW-4 Jun-99	OW-4 Nov-99	OW-4 Jun-00	OW-4 Nov-00	OW-4 Jun-01	OW-4 Nov-01
<b>PURGEABLE HALOCARBONS</b>																																		
Chloromethane		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Bromomethane		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Vinyl chloride	0.5	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Chloroethane		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Methylene Chloride	5#	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Trichlorofluoromethane	150	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
1,1-Dichloroethane	6	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
1,1-Dichloroethene	5	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
cis-1,2-Dichloroethene	6	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																						
trans-1,2-Dichloroethene	10	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Chloroform	100#	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Freon 113	1200	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																						
1,2-Dichloroethane	0.5	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
1,1,1-Trichloroethane	200	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Carbon Tetrachloride	0.5	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Bromodichloromethane	100#	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
1,2-Dichloropropene	5	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
cis-1,3-Dichloropropene	5**	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Trichloroethene	5	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
1,1,2-Trichloroethane	32	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
trans-1,3-Dichloropropene	5***	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Bromochloromethane	100#	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
2-Chloroethylvinyl Ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA										
Bromoform	100#	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Tetrachloroethene	5	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
1,1,2,2-Tetrachloroethane	1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
Chlorobenzene	30	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
1,3-Dichlorobenzene		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
1,2-Dichlorobenzene	600#	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
1,4-Dichlorobenzene	5	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA																							
<b>PURGEABLE AROMATICS</b>																																		
Benzene	1	ND	ND	ND	0.5	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	NA																	
Toluene	1000#	ND	ND	ND	0.8	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	NA																	
Ethylbenzene	680	ND	ND	ND	0.3	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	NA																	
Total Xylenes	1750**	ND	ND	ND	0.6	2	ND	ND	ND	0.7	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	NA								
TOTAL VOCs		NA	NA	NA	0.6	3.4	NA	NA	3	6.59	9.4	NA	7.7	4	4	3	NA	NA	NA	NA	NA	NA	NA	NA	NA									
<b>HYDROCARBONS</b>																																		
TVH-g		NA	NA	<50	<50	<50	<50	<50	NA	NA	NA	<50	<50	<50	<50	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA								
TEPH-d		<1000	<1000	150	210	150	150	<50	580	<50	2000	2100	820	1300	2100	NA	1500	NA	NA	NA	1600	630	1100	840	980	NA	1000	NA	NA	NA	NA	NA	NA	
O&G		<5000	<5000	NA	<5000	<5000	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA																		
TPH (418.1)		NA	NA	<5000	<5000	<5000	<5000	<5000	<500	NA	NA	NA	NA	NA	NA	NA	NA	NA																
<b>METALS</b>																																		
Lead	0	NA	ND	NA	NA	ND	NA	NA	5	ND	ND	NA	NA	NA	NA	NA	NA	NA	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) NA = Not Analyzed or analysis not required  
 10) 6/17/02 Samples analyzed for VOCs out of holding time due to laboratory error

## **Historical Groundwater Analytical Data**

#### PURGEABLE AROMATICS

## HYDROCARBONS

TVM-g NA NA NA 120 270 160 350 140 NA 370 NA 110 ND ND ND ND ND 83 ND ND ND 59 ND ND 79 100 ND 57 56 60  
 TEPH-d 600 1500 1200 840 650 1000 1000 1600 NA 510 NA 1300 510 1600 630 870 740 630 630 780 830 900 ND ND 540 130 260 470 410 250  
 C&G NA < 5000 < 5000 < 5000 NA NA NA NA ND NA ND NA  
 TPH (418.1) < 500 NA NA NA NA NA ND NA ND NA ND NA NA

METALS

Lead 0 ND NA NA ND ND ND ND ND ND ND 7.3 7.4 5 ND ND ND ND ND 5 ND ND

#### **Notes:**

1) MCL = Maximum

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-butadiene.

6) ND = Not Detected at or above MDL  
7) Biodegradable Halocarbazes (EPA method)

**B) Purgeable Aromatics (EPA method 25)**

9) NA = Not Analyzed or analysis not required

19) 6/17/02 Samples analyzed for VOCs pH etc

May 21, 2018 - Sample E-143266 for Vessel Outfitting

## Historical Groundwater Analytical Data

Well ID Date	MCL ug/L	OW-3 Apr-88	OW-3 Jun-88	OW-3 Oct-89	OW-3 Jan-90	OW-3 Apr-90	OW-3 Jul-90	OW-3 Oct-90	OW-3 Jan-91	OW-3 Apr-91	OW-3 Jul-91	OW-5 Dec-91	OW-6 Mar-92	OW-6 Jul-92	OW-6 Oct-92	OW-6 Jan-93	OW-6 Jul-93	OW-6 Oct-93	OW-6 Jan-94	OW-6 Jul-94	OW-6 Jun-95	OW-6 Nov-95	OW-6 Jun-96	OW-6 Oct-96	OW-6 Apr-Jun-97	OW-6 Dec-97	OW-6 Jun-98	OW-6 Dec-98	OW-6 Jun-99	OW-6 Nov-99							
<b>PURGEABLE HALOCARBONS</b>																																					
Chloromethane		ND	ND	ND	ND	ND	ND	ND																													
Bromomethane		ND	ND	ND	ND	ND	ND	ND																													
Vinyl chloride	0.5	ND	ND	ND	ND	ND	ND	ND																													
Chloroethane		ND	ND	ND	ND	ND	ND	ND																													
Methylene Chloride	5#	ND	ND	ND	ND	ND	ND	ND																													
Trichlorofluoromethane	150	ND	0.82	ND	ND	ND	ND	ND	ND	ND																											
1,1-Dichloroethene	6	ND	ND	ND	ND	ND	ND	ND																													
1,1-Dichloroethane	5	4	5	28	29	14	17	17	15	16	41	ND	1	2	2	10	23	NA	7	17	31	8.8	10	5.4	7	7.7	3.3	4.6	2.1	3.1							
cis-1,2-Dichloroethene	6	NA	NA	ND	ND	33	ND	1	1	ND	NA	ND	ND	ND	ND	ND	ND	ND																			
trans-1,2-Dichloroethene	10	ND	2	ND	ND	ND	ND	ND	ND	ND																											
Chloroform	100**	2	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																					
Freon 113	1200	NA	NA	ND	ND	ND	ND	ND	ND	ND																											
1,2-Dichloroethane	0.5	ND	0.55	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																				
1,1,1-Trichloroethane	200	ND	2.5	ND	10	18	NA	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND																				
Carbon Tetrachloride	0.5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																						
Bromodichloromethane	100**	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																						
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND																													
cis-1,3-Dichloropropene	5***	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																						
Dibromochloromethane	100**	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																						
2-Chloroethylvinyl Ether		ND	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	1.1																						
Bromoform	100**	ND	1.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																				
Tetrachloroethene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																						
1,1,2,2-Tetrachloroethane	1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																						
Chlorobenzens	30	ND	1	ND	ND	ND	ND	ND	1	2.3	2	5.7	ND	ND	ND	ND	ND	NA	ND	2	4.5	5.2	1	4.5	28	9.1	8.3	ND	1.9								
1,3-Dichlorobenzene		NA	NA	NA	3	ND	2	2	1	3.3	ND	15	ND	ND	ND	ND	NA	ND	NA	11	7.4	20	10	25	46	30	27	5.4	9.2								
1,2-Dichlorobenzene	600#	NA	NA	NA	2	ND	1	1	1	2.3	ND	5.8	ND	ND	ND	ND	NA	ND	NA	23	ND	2.4	ND	2.1	8.3	3	2.8	ND	0.7								
1,4-Dichlorobenzene	5	NA	NA	NA	2	ND	ND	2	1	3.1	ND	23	ND	ND	ND	ND	NA	ND	ND	2.9	16	46	26	65	140	84	68	19	30								
<b>PURGEABLE AROMATICS</b>																																					
Benzene	1	ND	ND	ND	0.5	ND	ND	ND	ND	0.54	ND	0.6	NA	ND	ND	ND	ND	ND	ND	0.5	ND	ND	ND	ND	ND	ND	ND										
Toluene	1000#	ND	ND	ND	0.4	0.8	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND																					
Ethylbenzene	680	ND	ND	ND	0.5	ND	1.1	NA	ND	ND	ND	ND	ND	ND	35	ND	ND	ND	ND	ND	ND	ND															
Total Xylenes	1750**	ND	0.7	2.1	ND	ND	ND	ND	ND	ND	2	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND												
TOTAL VOCs	6	8	26	37.6	59.4	20	23	20	32.81	43	51.5	1	2	2	20	42.7	NA	7	19	76.3	81.2	83.6	42.4	103.6	261.5	129.4	110.7	27.6	44.9								
<b>HYDROCARBONS</b>																																					
TVH-g		NA	NA	NA	< 50	52	< 50	< 50	NA	NA	NA	NA	< 50	< 50	< 50	< 50	< 50	NA	70	< 50	ND	ND	81	ND	83	180	110	130	84	57							
TEPH-d		< 1000	< 1000	< 1000	440	470	450	130	1310	700	< 50	5500	4800	3500	3900	5300	3500	NA	2200	2500	1300	2400	2000	2400	1300	1200	1300	2000	1300	1000							
O&G		< 5000	< 5000	5000	NA	NA	NA	NA	NA	NA	< 5000	< 5000	NA	NA	NA	NA	NA	NA	NA																		
TPH (418.1)		NA	NA	NA	< 5000	< 5000	< 5000	< 5000	< 5000	< 5000	NA	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) NA = Not Analyzed or analysis not required					</td																																

## Historical Groundwater Analytical Data

Well ID Date	OW-6 Jun-00	OW-6 Nov-00	OW-6 Jun-01	OW-6 Nov-01	OW-6 Jun-02	OW-6 Oct-02	OW-6 Apr-03	OW-6 Nov-03
<b>PURGEABLE HALOCARBONS</b>								
Chloromethane	ND							
Bromomethane	ND							
Vinyl chloride	ND							
Chloroethane	ND							
Methylene Chloride	ND							
Trichlorofluoromethane	ND							
1,1-Dichloroethene	ND							
1,1-Dichloroethane	1.4	2.3	1.4	1.8	1.3	1.5	1.2	2.8
cis-1,2-Dichloroethene	ND							
trans-1,2-Dichloroethene	ND							
Chloroform	ND							
Freon 113	ND							
1,2-Dichloroethane	ND	ND	ND	0.76	ND	ND	ND	ND
1,1,1-Trichloroethane	ND							
Carbon Tetrachloride	ND							
Bromodichloromethane	ND							
1,2-Dichloropropane	ND							
cis-1,3-Dichloropropene	ND							
Trichloroethene	ND	ND	0.7	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND							
trans-1,3-Dichloropropene	ND							
Dibromoethane	ND							
2-Chloroethylvinyl Ether	ND							
Bromoform	ND							
Tetrachloroethene	ND							
1,1,2,2-Tetrachloroethane	ND							
Chlorobenzene	ND	2.5						
1,3-Dichlorobenzene	3	2.7	ND	ND	1.1	2.0	ND	1.9
1,2-Dichlorobenzene	ND							
1,4-Dichlorobenzene	11	10	ND	ND	5.0	7.2	3.0	7.2
<b>PURGEABLE AROMATICS</b>								
Benzene	ND							
Toluene	ND							
Ethylbenzene	ND							
Total Xylenes	ND							
<b>TOTAL VOCs</b>	<b>15.4</b>	<b>15.0</b>	<b>2.1</b>	<b>2.6</b>	<b>7.4</b>	<b>10.7</b>	<b>4.2</b>	<b>14.4</b>
<b>HYDROCARBONS</b>								
TVH-g	ND							
TEPH-d	68	ND	320	85	220	380	290	380
O&G	NA							
TPH (418.1)	NA							
<b>METALS</b>								
Lead	NA							
<b>Notes:</b>								
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								

## Historical Groundwater Analytical Data

## Notes:

- 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
  - 10) 6/17/02 Samples analyzed for VOCs out of holding time due to laboratory error

## 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-99	OW-8 Nov-99	OW-8 Jun-00	OW-8 Nov-00	OW-8 Jun-01	OW-8 Jun-02	OW-8 Jun-02	
<b>PURGEABLE HALOCARBONS</b>																						
Chloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Bromomethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Vinyl chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Chloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Trichlorofluoromethane	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											
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Chloroform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Freon 113	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											
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Carbon Tetrachloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Bromodichloromethane	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											
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Trichloroethene	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											
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Dibromochloromethane	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											
Bromoform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Tetrachloroethene	NA	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	NA											
Chlorobenzene	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											
1,2-Dichlorobenzene	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											
<b>PURGEABLE AROMATICS</b>																						
Benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Ethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Total Xylenes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
TOTAL VOCs	NA	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	NA											
TEPH-d	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA											
O&G	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											
<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	ND	
Notes:																						
1) MCL = Maximum Contaminant Level in drinking water (State MCL if not noted otherwise )																						
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