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

JAN 24 2002

LETTER OF TRANSMITTAL

DATE: January 18, 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 note that this report recommends the replacement of a small area of asphalt within the lead containment cap area.

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

CSS

CSS ENVIRONMENTAL SERVICES, INC.

SEMI-ANNUAL GROUNDWATER MONITORING REPORT

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

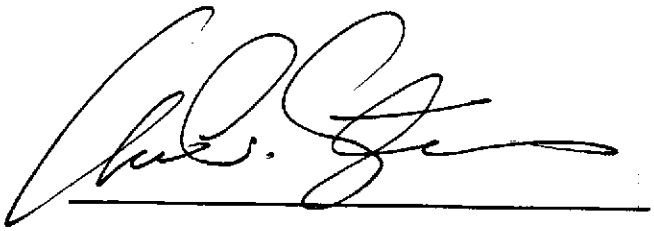
Prepared for

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

Prepared by

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

January 18, 2002



Aaron N. Stessman, PE
Principal Engineer

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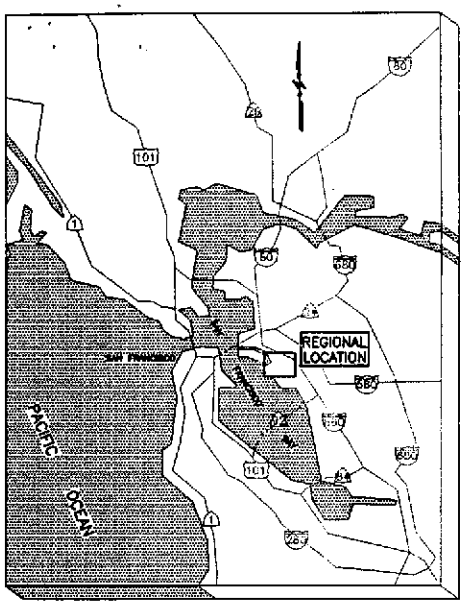
1.0 BACKGROUND

This report presents the results of semiannual groundwater monitoring and sampling completed in the fourth quarter of 2001 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 2001 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: 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.



SCALE

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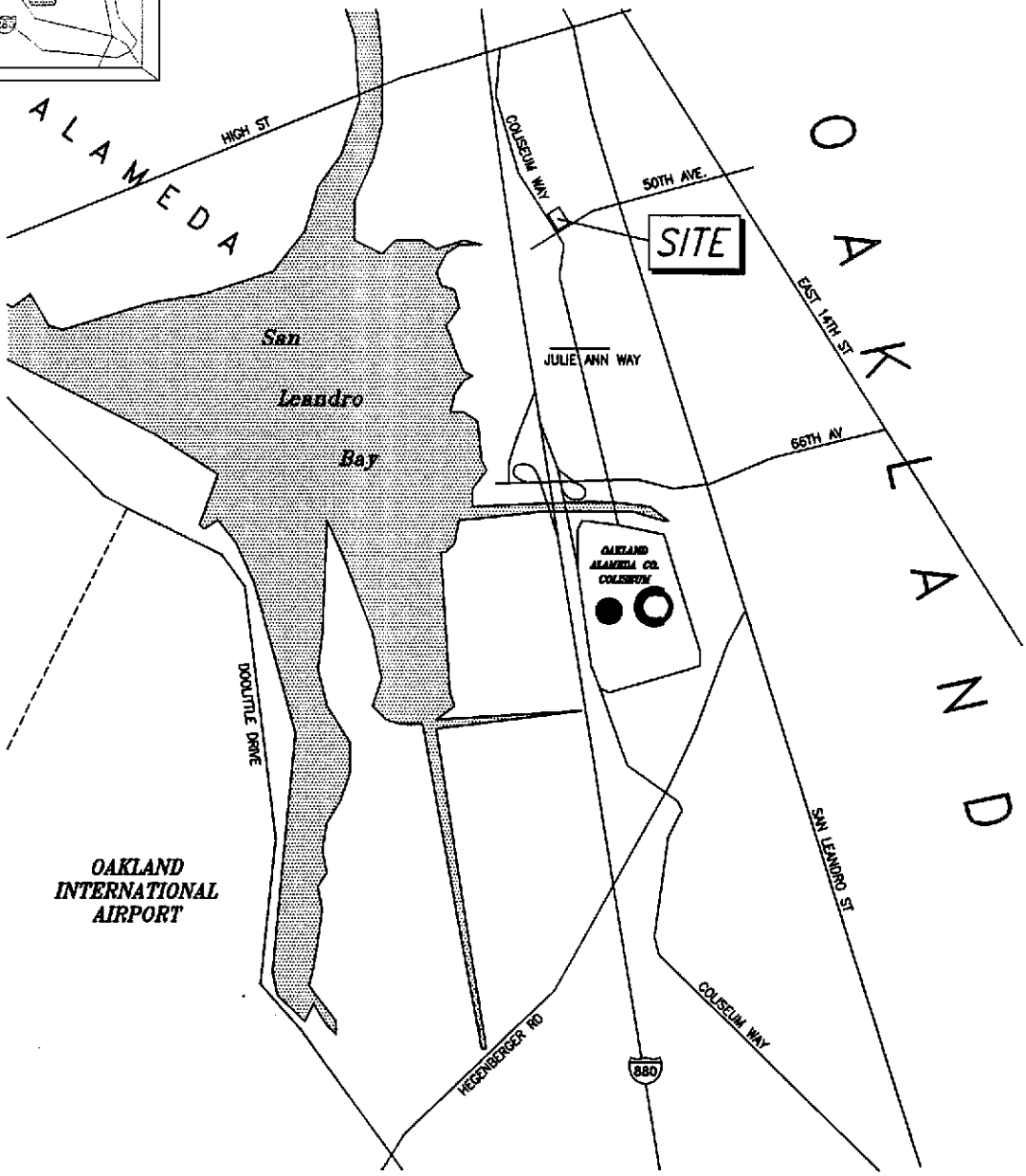


CSS ENVIRONMENTAL SERVICES, INC.

SITE LOCATION MAP

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

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

FIGURE 1.1

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 6, 2001, 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 November 6, 2001 sampling event.

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

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 6, 2001. 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-1.

Table 3.1 Petroleum Hydrocarbons in Groundwater, in mg/L

Well	TPH-D	TPH-G
OW – 1	0.270	0.630
OW – 5	0.130	0.100
OW – 6	0.065	ND
OW – 7	0.580	0.530

Notes:

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

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

Figures 3.1 and 3.2 show that TPH-D concentrations were generally higher around the time of, or soon after, the remedial excavation in November 1991 in the wells in the remediation vicinity: OW-4, OW-6, and OW-7. Compared to the previous sampling event (June 2001), this quarter's results show a decrease in TPH-D concentrations in all wells. Well OW-4 has been inaccessible for sampling over the past seven 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.

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

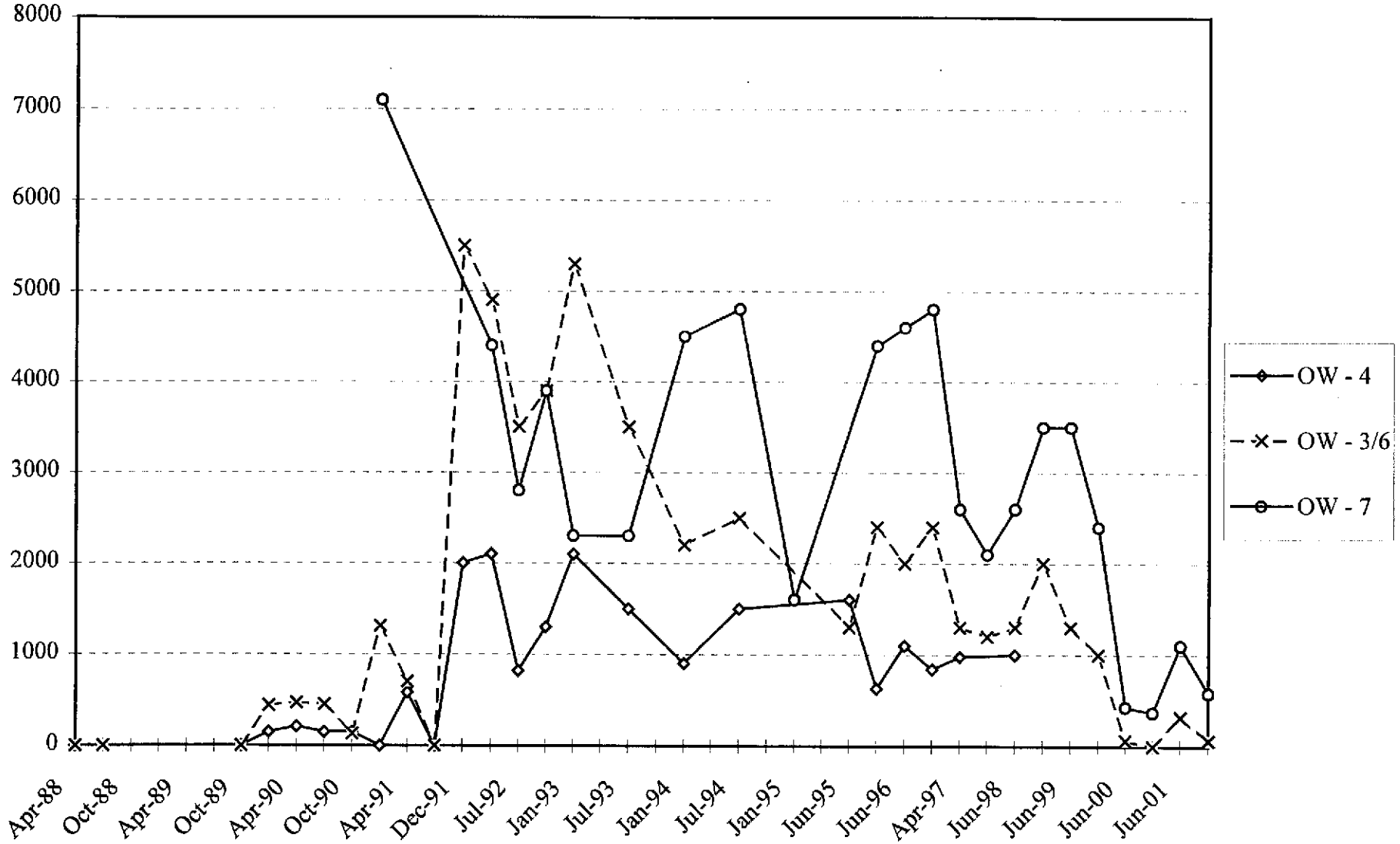
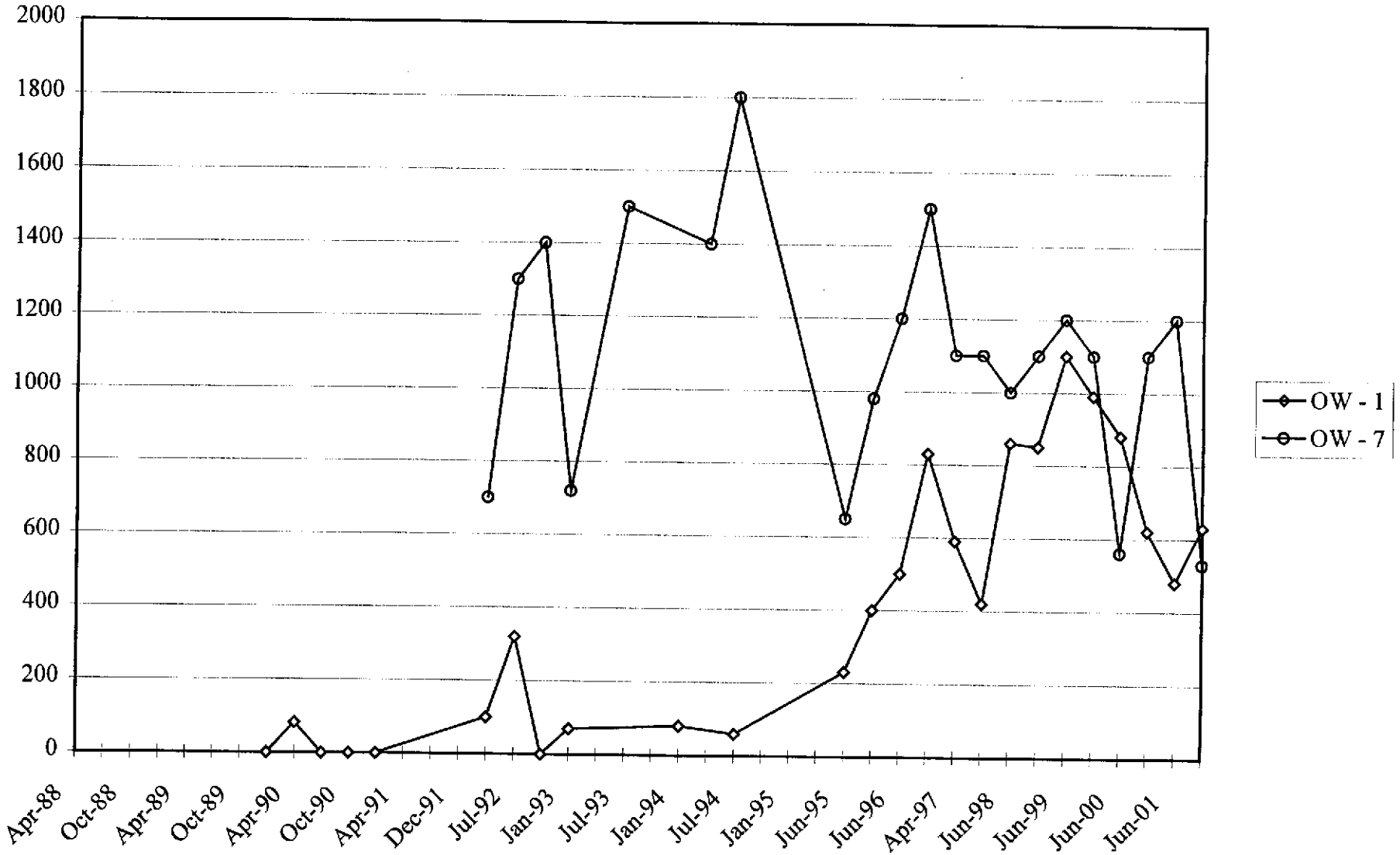


FIGURE 3.3
TPH-GASOLINE in OW - 1 & 7



3.3 VOLATILE ORGANIC COMPOUNDS

Historical results of VOC monitoring are presented in Appendix B. Table 3.3 presents the recent analytical results for VOCs in groundwater. The state MCLs for drinking water were exceeded for the following compounds: 1,4-Dichlorobenzene (1,4-DCB) in monitoring well OW-7 at a concentration of 360 µg/L, 1,2-Dichloroethane in well OW-6 at a concentration of 0.76 µg/L, and Benzene in well OW-5 at a concentration of 13 µg/L.

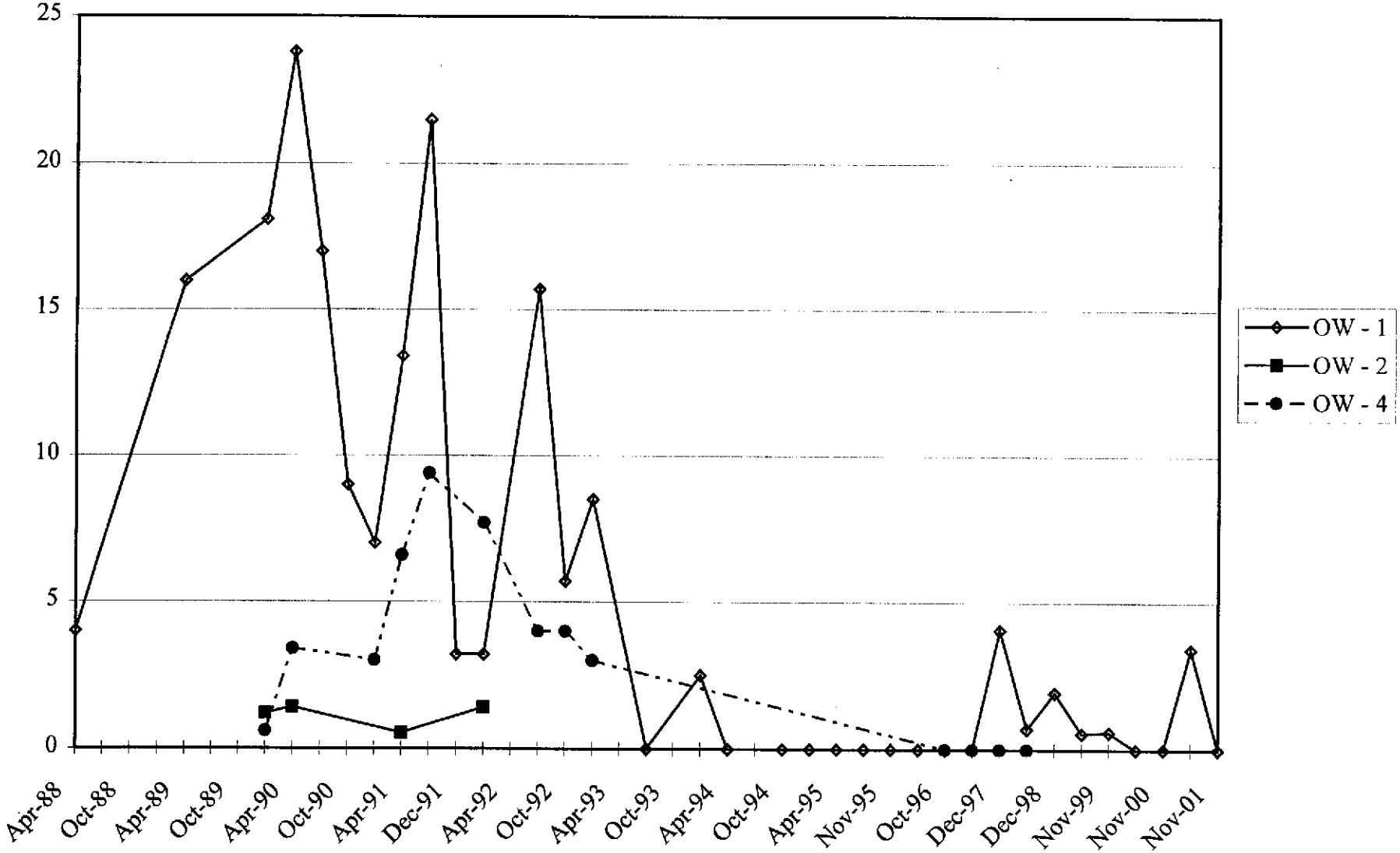
VOCs detected at concentrations below their MCLs include:

- 1,1-Dichloroethane in wells OW-5 and OW-6;
- Chlorobenzene in well OW-7;
- 1,3-Dichlorobenzene (1,3-DCB) in well OW-7;
- 1,2-Dichlorobenzene (1,2-DCB) in well OW-7;
- Ethyl benzene in well OW-5.

Figures 3.5 and 3.6 show the historical concentrations of total VOCs in the on-site monitoring wells. Figure 3.5 shows the concentrations of total VOCs in wells OW-1, OW-2 and OW-4. Of these wells, none are 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 16.26 µg/L, 2.56 µg/L, and 701 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.

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



4.0 CAP INSPECTION

The site's asphaltic concrete cap was inspected by Aaron N. Stessman, PE on December 27, 2001. Mr. Stessman confirmed that the line demarcating the edge of the cap had been implemented since the prior annual cap inspection of November 11, 2000. The condition of the asphalt is good, except for an approximately 60-ft^2 area subject to heavy yard traffic. CSS recommends that the asphaltic concrete be replaced in this area, shown on Figure 4.1 Results of Cap Inspection.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

The following conclusions are made based upon the results of analyses performed on groundwater samples collected on November 6, 2001 from monitoring wells OW-1, OW-2, OW-5, OW-6, OW-7 and OW-8, and from prior semi-annual sampling results.

- 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 580 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, OW-5, and OW-7 had TPH-G concentrations of 630, 100, and 530 µg/L, respectively. TPH-G was not detected in well OW-6. Well OW-1 had 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 decreased this quarter relative to the previous sampling event.

APPENDIX A

Certified Laboratory Results

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

Volatile Organic Compounds by 8021B/8260B

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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

CA DHS ELAP#1094

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

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
TRIP BLANK	Water	11/06/2001 10:20	7

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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

CA DHS ELAP#1094

Volatile Organic Compounds by 8021B/8260B

Batch QC report

Test Method: 8260B Prep Method: 5030B

Method Blank	**Water**	**QC Batch # 2001/11/18-01.09**
MB: 2001/11/18-01.09-007		Date Extracted: 11/18/2001 15:27

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Bromodichloromethane	ND	0.5	ug/L	11/18/2001 15:27	
Bromoform	ND	0.5	ug/L	11/18/2001 15:27	
Bromomethane	ND	1.0	ug/L	11/18/2001 15:27	
Carbon tetrachloride	ND	0.5	ug/L	11/18/2001 15:27	
Chlorobenzene	ND	0.5	ug/L	11/18/2001 15:27	
Chloroethane	ND	1.0	ug/L	11/18/2001 15:27	
2-Chloroethylvinyl ether	ND	5.0	ug/L	11/18/2001 15:27	
Chloroform	ND	1.0	ug/L	11/18/2001 15:27	
Chloromethane	ND	1.0	ug/L	11/18/2001 15:27	
Dibromochloromethane	ND	0.5	ug/L	11/18/2001 15:27	
1,2-Dichlorobenzene	ND	0.5	ug/L	11/18/2001 15:27	
1,3-Dichlorobenzene	ND	0.5	ug/L	11/18/2001 15:27	
1,4-Dichlorobenzene	ND	0.5	ug/L	11/18/2001 15:27	
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/18/2001 15:27	
1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/18/2001 15:27	
Dichlorodifluoromethane	ND	0.5	ug/L	11/18/2001 15:27	
1,1-Dichloroethane	ND	0.5	ug/L	11/18/2001 15:27	
1,2-Dichloroethane	ND	0.5	ug/L	11/18/2001 15:27	
1,1-Dichloroethene	ND	0.5	ug/L	11/18/2001 15:27	
cis-1,2-Dichloroethene	ND	0.5	ug/L	11/18/2001 15:27	
trans-1,2-Dichloroethene	ND	0.5	ug/L	11/18/2001 15:27	
1,2-Dichloropropane	ND	0.5	ug/L	11/18/2001 15:27	
Methylene chloride	ND	5.0	ug/L	11/18/2001 15:27	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/18/2001 15:27	
Tetrachloroethene	ND	0.5	ug/L	11/18/2001 15:27	
1,1,1-Trichloroethane	ND	0.5	ug/L	11/18/2001 15:27	
1,1,2-Trichloroethane	ND	0.5	ug/L	11/18/2001 15:27	
Trichloroethene	ND	0.5	ug/L	11/18/2001 15:27	
Trichlorofluoromethane	ND	1.0	ug/L	11/18/2001 15:27	
Trichlorotrifluoroethane	ND	1.0	ug/L	11/18/2001 15:27	
Vinyl chloride	ND	0.5	ug/L	11/18/2001 15:27	
Surrogate(s)					
4-Bromofluorobenzene	100.4	86-115	%	11/18/2001 15:27	
1,2-Dichloroethane-d4	93.6	76-114	%	11/18/2001 15:27	
Toluene-d8	103.9	88-110	%	11/18/2001 15:27	

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

Halogenated Volatile Organic Compounds by 8021

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

Attn: Aaron Stessman
Phone: (415) 457-9551 Fax: (415) 457-9261

6118
Project: PG&E Coliseum Way

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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

CA DHS ELAP#1094

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
OW-5	Water	11/06/2001 14:05	3
OW-6	Water	11/06/2001 15:45	4
OW-7	Water	11/06/2001 16:30	5

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

Halogenated Volatile Organic Compounds by 8021

CSS Environmental Services
Attn: Aaron Stessman

Test Method: 8021B
Prep Method: 5030B

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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

CA DHS ELAP#1094

Sample ID:	**OW-6**	Lab Sample ID:	2001-11-0175-004
Project:	6118 PG&E Coliseum Way	Received:	11/08/2001 18:10
		Extracted:	11/18/2001 17:18
Sampled:	11/06/2001 15:45	QC-Batch:	2001/11/18-01.26
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	11/18/2001 17:18	
Vinyl chloride	ND	0.50	ug/L	1.00	11/18/2001 17:18	
Chloroethane	ND	0.50	ug/L	1.00	11/18/2001 17:18	
Trichlorofluoromethane	ND	0.50	ug/L	1.00	11/18/2001 17:18	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	11/18/2001 17:18	
Methylene chloride	ND	5.0	ug/L	1.00	11/18/2001 17:18	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	11/18/2001 17:18	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	11/18/2001 17:18	
1,1-Dichloroethane	1.8	0.50	ug/L	1.00	11/18/2001 17:18	
Chloroform	ND	0.50	ug/L	1.00	11/18/2001 17:18	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	11/18/2001 17:18	
Carbon tetrachloride	ND	0.50	ug/L	1.00	11/18/2001 17:18	
1,2-Dichloroethane	0.76	0.50	ug/L	1.00	11/18/2001 17:18	
Trichloroethene	ND	0.50	ug/L	1.00	11/18/2001 17:18	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	11/18/2001 17:18	
Bromodichloromethane	ND	0.50	ug/L	1.00	11/18/2001 17:18	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	11/18/2001 17:18	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	11/18/2001 17:18	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	11/18/2001 17:18	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	11/18/2001 17:18	
Tetrachloroethene	ND	0.50	ug/L	1.00	11/18/2001 17:18	
Dibromochloromethane	ND	0.50	ug/L	1.00	11/18/2001 17:18	
Chlorobenzene	ND	0.50	ug/L	1.00	11/18/2001 17:18	
Bromoform	ND	2.0	ug/L	1.00	11/18/2001 17:18	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	11/18/2001 17:18	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	11/18/2001 17:18	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	11/18/2001 17:18	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	11/18/2001 17:18	
Trichlorotrifluoroethane	ND	2.0	ug/L	1.00	11/18/2001 17:18	
Chloromethane	ND	1.0	ug/L	1.00	11/18/2001 17:18	
Bromomethane	ND	1.0	ug/L	1.00	11/18/2001 17:18	
Surrogate(s)						
1-Chloro-2-fluorobenzene	111.1	70-130	%	1.00	11/18/2001 17:18	

SEVERN TRENT SERVICES

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1220 Quarry Lane
Pleasanton, CA 94566

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

CA DHS ELAP#1094

Halogenated Volatile Organic Compounds by 8021

Batch QC report

Test Method: 8021B Prep Method: 5030B

Method Blank **Water** **QC Batch # 2001/11/18-01.26**

MB: 2001/11/18-01.26-004 Date Extracted: 11/18/2001 13:35

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	11/18/2001 13:35	
Vinyl chloride	ND	0.5	ug/L	11/18/2001 13:35	
Chloroethane	ND	0.5	ug/L	11/18/2001 13:35	
Trichlorofluoromethane	ND	0.5	ug/L	11/18/2001 13:35	
1,1-Dichloroethene	ND	0.5	ug/L	11/18/2001 13:35	
Methylene chloride	ND	5.0	ug/L	11/18/2001 13:35	
trans-1,2-Dichloroethene	ND	0.5	ug/L	11/18/2001 13:35	
cis-1,2-Dichloroethene	ND	0.5	ug/L	11/18/2001 13:35	
1,1-Dichloroethane	ND	0.5	ug/L	11/18/2001 13:35	
Chloroform	ND	0.5	ug/L	11/18/2001 13:35	
1,1,1-Trichloroethane	ND	0.5	ug/L	11/18/2001 13:35	
Carbon tetrachloride	ND	0.5	ug/L	11/18/2001 13:35	
1,2-Dichloroethane	ND	0.5	ug/L	11/18/2001 13:35	
Trichloroethene	ND	0.5	ug/L	11/18/2001 13:35	
1,2-Dichloropropane	ND	0.5	ug/L	11/18/2001 13:35	
Bromodichloromethane	ND	0.5	ug/L	11/18/2001 13:35	
2-Chloroethylvinyl ether	ND	0.5	ug/L	11/18/2001 13:35	
trans-1,3-Dichloropropene	ND	0.5	ug/L	11/18/2001 13:35	
cis-1,3-Dichloropropene	ND	0.5	ug/L	11/18/2001 13:35	
1,1,2-Trichloroethane	ND	0.5	ug/L	11/18/2001 13:35	
Tetrachloroethene	ND	0.5	ug/L	11/18/2001 13:35	
Dibromochloromethane	ND	0.5	ug/L	11/18/2001 13:35	
Chlorobenzene	ND	0.5	ug/L	11/18/2001 13:35	
Bromoform	ND	2.0	ug/L	11/18/2001 13:35	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/18/2001 13:35	
1,3-Dichlorobenzene	ND	0.5	ug/L	11/18/2001 13:35	
1,4-Dichlorobenzene	ND	0.5	ug/L	11/18/2001 13:35	
1,2-Dichlorobenzene	ND	0.5	ug/L	11/18/2001 13:35	
Trichlorotrifluoroethane	ND	2.0	ug/L	11/18/2001 13:35	
Chloromethane	ND	1.0	ug/L	11/18/2001 13:35	
Bromomethane	ND	1.0	ug/L	11/18/2001 13:35	
Surrogate(s)					
1-Chloro-2-fluorobenzene	122.1	70-130	%	11/18/2001 13:35	

SEVERN TRENT SERVICES

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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

CA DHS ELAP#1094

Halogenated Volatile Organic Compounds by 8021

Legend & Notes

Test Method: 8021B Prep Method: 5030B

Analysis Flags

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

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

Diesel with Silica Gel Clean-up

CSS Environmental Services
Attn: Aaron Stessman

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

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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

CA DHS ELAP#1094

Sample ID:	**OW-1**	Lab Sample ID:	2001-11-0175-001
Project:	6118 PG&E Coliseum Way	Received:	11/08/2001 18:10
		Extracted:	11/19/2001 13:42
Sampled:	11/06/2001 14:55	QC-Batch:	2001/11/19-07.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	270	50	ug/L	1.00	11/21/2001 16:30	ndp
Surrogate(s)						
o-Terphenyl	83.4	60-130	%	1.00	11/21/2001 16:30	

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

Diesel with Silica Gel Clean-up

CSS Environmental Services

Attn: Aaron Stessman

Test Method: 8015M

Prep Method: 3510/8015M

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Pleasanton, CA 94566

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www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**OW-6**	Lab Sample ID:	2001-11-0175-004
Project:	6118 PG&E Coliseum Way	Received:	11/08/2001 18:10
		Extracted:	11/19/2001 13:42
Sampled:	11/06/2001 15:45	QC-Batch:	2001/11/19-07.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	65	50	ug/L	1.00	11/21/2001 15:51	ndp
Surrogate(s)						
o-Terphenyl	98.1	60-130	%	1.00	11/21/2001 15:51	

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

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Pleasanton, CA 94566

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Fax 925 484 1096
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www.chromalab.com

CA DHS ELAP#1094

Diesel with Silica Gel Clean-up

Batch QC report

Test Method: 8015M

Prep Method: 3510/8015 M

Method Blank | **Water** | **QC Batch # 2001/11/19-07.10**

MB: 2001/11/19-07.10-001

Date Extracted: 11/19/2001 13:42

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	11/21/2001 13:57	
Surrogate(s)					
o-Terphenyl	98.5	60-130	%	11/21/2001 13:57	

SEVERN TRENT SERVICES

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
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www.chromalab.com

CA DHS ELAP#1094

Diesel with Silica Gel Clean-up

Legend & Notes

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

Notes

Precision measurement RPD was outside of our normal QC range. All spike recoveries, method blanks, and surrogate recoveries met QC requirements. No sample remained to re-extract.

QC Sample Notes

Laboratory Control Spike Duplicate (Lab# 2001/11/19-07.10-003)
rpo = % RPD outside of control limit.

Analyte Flags

ndp
Hydrocarbon reported does not match the pattern of our Diesel standard

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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

CA DHS ELAP#1094

CSS Environmental Services

Attn: Aaron Stessman

Test Method: 8015M 8021B

Prep Method: 5030

Sample ID:	**OW-1**	Lab Sample ID:	2001-11-0175-001
Project:	6118 PG&E Coliseum Way	Received:	11/08/2001 18:10
		Extracted:	11/19/2001 12:52
Sampled:	11/06/2001 14:55	QC-Batch:	2001/11/19-01.05
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	630	50	ug/L	1.00	11/19/2001 12:52	g
Benzene	ND	0.50	ug/L	1.00	11/19/2001 12:52	
Toluene	ND	0.50	ug/L	1.00	11/19/2001 12:52	
Ethyl benzene	ND	0.50	ug/L	1.00	11/19/2001 12:52	
Xylene(s)	ND	0.50	ug/L	1.00	11/19/2001 12:52	
Surrogate(s)						
Trifluorotoluene	77.8	58-124	%	1.00	11/19/2001 12:52	
4-Bromofluorobenzene-FID	93.4	50-150	%	1.00	11/19/2001 12:52	

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

CSS Environmental Services

Attn: Aaron Stessman

Test Method: 8015M 8021B

Prep Method: 5030

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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

CA DHS ELAP#1094

Sample ID:	**OW-6**	Lab Sample ID:	2001-11-0175-004
Project:	6118 PG&E Coliseum Way	Received:	11/08/2001 18:10
		Extracted:	11/19/2001 13:57
Sampled:	11/06/2001 15:45	QC-Batch:	2001/11/19-01.05
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	11/19/2001 13:57	
Benzene	ND	0.50	ug/L	1.00	11/19/2001 13:57	
Toluene	ND	0.50	ug/L	1.00	11/19/2001 13:57	
Ethyl benzene	ND	0.50	ug/L	1.00	11/19/2001 13:57	
Xylene(s)	ND	0.50	ug/L	1.00	11/19/2001 13:57	
Surrogate(s)						
Trifluorotoluene	77.6	58-124	%	1.00	11/19/2001 13:57	
4-Bromofluorobenzene-FID	90.7	50-150	%	1.00	11/19/2001 13:57	

SEVERN TRENT SERVICES

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www.chromalab.com

CA DHS ELAP#1094

Gas/BTEX by 8015M/8021

Batch QC report

Test Method: 8015M
8021B

Prep Method: 5030

Method Blank | **Water** | **QC Batch # 2001/11/19-01.05**

MB: 2001/11/19-01.05-005 | Date Extracted: 11/19/2001 10:11

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/19/2001 10:11	
Benzene	ND	0.5	ug/L	11/19/2001 10:11	
Toluene	ND	0.5	ug/L	11/19/2001 10:11	
Ethyl benzene	ND	0.5	ug/L	11/19/2001 10:11	
Xylene(s)	ND	0.5	ug/L	11/19/2001 10:11	
Surrogate(s)					
Trifluorotoluene	102.7	58-124	%	11/19/2001 10:11	
4-Bromofluorobenzene-FID	104.3	50-150	%	11/19/2001 10:11	

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

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Pleasanton, CA 94566

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www.chromalab.com

CA DHS ELAP#1094

Gas/BTEX by 8015M/8021

Batch QC report

Test Method: 8015M Prep Method: 5030

Laboratory Control Spike (LCS/LCSD)		**Water**		**QC Batch # 2001/11/19-01.05**
LCS:	2001/11/19-01.05-008	Extracted:	11/19/2001 11:48	Analyzed: 11/19/2001 11:48
LCSD:	2001/11/19-01.05-009	Extracted:	11/19/2001 12:20	Analyzed: 11/19/2001 12:20

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	405	393	500	500	81.0	78.6	3.0	75-125	20		
Surrogate(s)											
4-Bromofluorobenzene-	549	516	500	500	109.8	103.2		50-150			

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

Soluble Metals

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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

CA DHS ELAP#1094

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

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
OW-2	Water	11/06/2001 12:50	2
OW-5	Water	11/06/2001 14:05	3
OW-8	Water	11/06/2001 13:20	6

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

Soluble Metals

CSS Environmental Services
Attn: Aaron Stessman

Test Method: 6010B
Prep Method: 3005A

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
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www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**OW-5**	Lab Sample ID:	2001-11-0175-003
Project:	6118 PG&E Coliseum Way	Received:	11/08/2001 18:10
		Extracted:	11/12/2001 19:35
Sampled:	11/06/2001 14:05	QC-Batch:	2001/11/12-04.15
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	ND	0.0050	mg/L	1.00	11/13/2001 10:54	

Submission #: 2001-11-0175

SEVERN TRENT SERVICES

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
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www.chromalab.com

CA DHS ELAP#1094

Soluble Metals

Batch QC report

Test Method: 6010B Prep Method: 3005A

Method Blank	**Water**	**QC Batch # 2001/11/12-04.15**
MB: 2001/11/12-04.15-011		Date Extracted: 11/12/2001 19:35

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Lead	ND	0.0050	mg/L	11/13/2001 09:13	

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

2001-11-0175

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

Reference #: 62971

Chain of Custody

DATE 11-6-01 PAGE 1 of 1

PROJ MGR: Aaron Stessman
COMPANY: CSS Environmental Services
ADDRESS: 95 Belvedere Street, Suite 2
San Rafael, CA 94901
SAMPLERS (SIGNATURE): John L. Schleiter
(PHONE NO.) (415) 457-9551
(FAX NO.) (415) 457-9261

ANALYSIS REPORT

SAMPLE ID	DATE	TIME	MATRIX	PRESERV.	TPH-(EPA 8015,8020) ☑ Gas w/ ☑ BTEX ☐MTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M) silica gel C.U.	TEPH (EPA 8015M) ☐Diesel ☐M.O. ☐Other	PURGEABLE HALOCARBONS (EHVOCs) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	TOTAL OIL AND GREASE (SM 5520 B+F, E+F)		☐ PESTICIDES(EPA 8080) ☐ PCB's (EPA 8080)	PNA's by ☐ 8270 ☐ 8310	☐ Spec. Cond. ☐ TSS ☐ TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD *	☐ W.E.T. (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24 hr hold time for 8270)	FOx by 8260	Filter sample	Composite as 1	NUMBER OF CONTAINERS
OW-1	11-6-01	1455	H_2O		X		X																			4
OW-2	"	1250	"																X							1
OW-5	"	1405	"		X		X		X										X							8
OW-6	"	1545	"		X		X		X																	7
OW-7	"	1630	"		X		X		X																	7
OW-8	"	1320	"																X							1
Trip Blank	"	1020	"						X																	3

PROJECT INFORMATION

PROJECT NAME: Pete Stessman Way
PROJECT NUMBER: 6118
P.O. #:

TAT: STANDARD 5-DAY | 24 | 48 | 72 | OTHER

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS:
HEAD SPACE:
TEMPERATURE: 3.0C
CONFORMS TO RECORD:

SPECIAL INSTRUCTIONS/COMMENTS

Report: ☐ Routine ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ Electronic Report

* Filter in Lab!

See Attached Special Pricing.

RELINQUISHED BY 1	RELINQUISHED BY 2	RELINQUISHED BY 3
(SIGNATURE) 11:25 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1800 (TIME)
Aaron Stessman 11/8/01 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
CSS Environmental (COMPANY)	(COMPANY)	STL-CC (COMPANY)
RECEIVED BY 1	**RECEIVED BY 2**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) 1125 (TIME)	(SIGNATURE) (TIME)	Denise Harrington (SIGNATURE) (TIME)
[illegible] 11/8/01 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	D Harrington 1810 (PRINTED NAME) (DATE)
STL-CC (COMPANY)	(COMPANY)	STL-CC 11/8/01

APPENDIX B

Historical Monitoring Data

Historical Groundwater Analytical Data

Well ID	MCL	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2	OW-2
Date	ug/L	Apr-88	Oct-89	Jan-90	Apr-90	Jul-90	Oct-90	Jan-91	Apr-91	Jul-91	Dec-91	Mar-92	Jul-92	Oct-92	Jan-93	Apr-93	Jul-93	Oct-93	Jan-94	Apr-94	Jul-94	Jun-95	Nov-95	Jun-96	Oct-96	pr,Jun-9	Dec-97	Jun-98	Dec-98	Jun-99	Nov-99	Jun-00	Nov-00	Jun-01	Nov-01
PURGEABLE HALOCARBONS																																			
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	5#	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	6	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Freon 113	1200	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	0.53	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	600#	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	5	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PURGEABLE AROMATICS																																			
Benzene	1	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	1000#	ND	ND	0.4	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	680	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylenes	1750**		ND	0.4	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HYDROCARBONS																																			
TVH-g		NA	NA	< 50	< 50	< 50	< 50	< 50	NA	NA	NA	< 50	< 50	< 50	< 50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TEPH-d		< 1000	< 1000	130	140	68	90	< 50	< 200	< 50	650	670	410	410	620	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
O&G		18000	16000	NA	NA	NA	NA	NA	NA	< 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
TPH (418.1)		NA	NA	< 5000	< 5000	< 5000	< 5000	< 5000	< 500	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	0	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	9	ND	4.1	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-1,3-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

Well ID	MCL	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5	OW-5
Date	ug/L	Apr-91	Jul-91	Dec-91	Mar-92	Jul-92	Oct-92	Jan-93	Jul-93	Oct-93	Jan-94	Apr-94	Jul-94	Jun-95	Nov95	Jun-96	Oct-96	Apr,Jun-97	Dec-97	Jun-98	Dec-98	Jun-99	Nov-99	Jun-00	Nov-00	Jun-01	Nov-01
PURGEABLE HALOCARBONS																											
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND.	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	ND	ND	67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	150	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	6	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	1.8	7.2	ND	4	8	13	5	6	NA	2	NA	4	3.2	7.9	2.5	6.9	5.3	2.8	1	2.5	3	2.5	2.2	2.8	1.4	2.7
cis-1,2-Dichloroethene	6	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	10	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Freon 113	1200	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	6	26	18	12	25	28	7	7	NA	2	NA	3	1.3	2.1	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	100#*	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	0.75	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.7	0.8	0.9	ND	0.55	0.7	ND
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	100#*	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl Ether		ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND
Bromoform	100#*	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethane	5	0.7	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600#	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.0	ND	ND
PURGEABLE AROMATICS																											
Benzene	1	14	20	11	15	11	13	26	14	NA	21	NA	11		11	15	18	3.8	15	ND	7.3	8.2	11	6.3	10	7.7	13
Toluene	1000#	0.54	ND	ND	1.1	ND	ND	ND	ND	NA	ND	NA	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	680	0.58	ND	ND	0.6	ND	ND	0.7	ND	NA	0.7	NA	0.6		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56
Total Xylenes	1750**	5.6	4	6.9	5.1	6	3.6	13	2.4	NA	9.2	NA	1.3		ND	ND	ND	ND	2.74	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs		29.97	57.2	35.9	37.8	50	57.6	51.7	29.4	NA	34.8	NA	19.9	4.5	88	17.5	26.2	9.1	20.64	1	11.6	12	14.4	8.5	14.35	9.8	16.26
HYDROCARBONS																											
TVH-g		NA	NA	NA	120	270	180	350	140	NA	370	NA	110	ND	ND	ND	ND	ND	83	ND	ND	ND	59	ND	ND	79	100
TEPH-d		600	1500	1200	840	650	1000	1000	1600	NA	510	NA	1300	510	1600	830	870	740	830	630	780	830	800	ND	ND	540	130
O&G		NA	< 5000	< 5000	< 5000	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TPH (418.1)		< 500	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METALS																											
Lead	0	ND	NA	NA	ND	ND	ND	ND	ND	ND	7.3	7.4	5	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND

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Historical Groundwater Analytical Data

Well ID	MCL	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7	OW-7
Date	ug/L	Dec-91	Mar-92	Jul-92	Oct-92	Jan-93	Apr-93	Jul-93	Oct-93	Jan-94	Jul-94	Jun-95	Nov-95	Jun-96	Oct-96	Apr,Jun-97	Dec-97	Jun-98	Dec-98	Jun-99	Nov-99	Jun-00	Nov-00	Jun-01	Nov-01
PURGEABLE HALOCARBONS																									
Chloromethane		ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5#	14	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	570	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	150	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	6	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	16	ND	ND	25	NA	14	NA	8	ND	5.5	25	6.5	6.6	4.3	9.8	4.1	5.7	ND	6.3	ND	ND	ND	ND
cis-1,2-Dichloroethene	6	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	10	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	100#	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Freon 113	1200	ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	10	460	29	80	530	NA	73	NA	78	28	33	41	18	6.6	7.9	31	5.9	5.6	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	100#	ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	NA	ND	NA	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	NA	ND	NA	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	NO	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	100#	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl Ether		ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND
Bromoform	100#	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	30	10	ND	ND	8	ND	NA	29	NA	21	24	12	34	25	31	25	45	27	31	34	36	18	39	27	25
1,3-Dichlorobenzene		460	130	420	330	170	NA	540	NA	450	570	270	400	380	440	290	360	340	360	420	330	220	330	320	260
1,2-Dichlorobenzene	600#	120	22	85	77	33	NA	470	NA	78	100	290	61	62	74	47	57	50	48	87	44	44	49	42	56
1,4-Dichlorobenzene	5	440	120	400	290	160	NA	110	NA	410	540	51	480	500	560	410	530	450	470	580	450	310	470	510	360
PURGEABLE AROMATICS																									
Benzene	1	ND	0.8	1	1.4	0.8	NA	1.5	NA	1.6	1.2		1.1	ND	ND	0.56	1.6	0.86	0.85	0.84	0.62	ND	0.83	ND	ND
Toluene	1000#	ND	0.6	0.5	ND	ND	NA	ND	NA	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	680	ND	ND	0.5	ND	ND	NA	ND	NA	ND	ND		ND	ND	ND	ND	70	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1750**	ND	2.1	6	ND	ND	NA	ND	NA	4.2	ND		ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs		1054	751.5	961	786.4	916.6	NA	1237.5	NA	1046.8	1263.2	861.5	1612.1	981.5	1118.2	784.76	1106.5	877.66	920.95	1102	866.9	582	888.8	899	701
HYDROCARBONS																									
TVH-g		NA	700	1300	1400	720	NA	1500	NA	1400	1800	650	980	1200	1500	1100	1100	1000	1100	1200	1100	560	1100	1200	530
TEPH-d		7100	4400	2800	3900	2300	NA	4900	NA	4500	4800	1600	4400	4800	4800	2600	2100	2800	3500	3500	2400	430	370	1100	580
O&G		< 5000	< 5000	NA	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	NA	NA	NA
METALS																									
Lead	0	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
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