Pacific Gas and Electric Company

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March 1, 1993

Mr. Britt Johnson
Mr. Barney Chan
Alameda County Health Agency
Division of Hazardous Materials
Department of Environmental Health
80 Swan Way, Room 350
Oakland, CA 94621

Subject: Quarterly Groundwater Monitoring report, 4930 Coliseum Way, Oakland, CA

Gentlemen:

PG&E is submitting the 1992 Fourth Quarterly Groundwater Monitoring Report for the aforementioned address. This report summarizes results of groundwater sampling completed from the inception of monitoring up to January 14, 1993.

With your concurrence Pg&E proposes to limit the frequency of sampling and the number of chemical analyses from once per quarter to twice annually. This decision was based on evaluation of the results of the 1992 Fourth Quarterly Groundwater Monitoring Report.

These changes were discussed with Mr. Barney Chan of Alameda County and are presented in the attached report. Due to the inherent presence of concentrations of TPH, TVHg, and BTEX compounds and the VOC's in upgradient wells, which strongly suggest a northern off-site migrational source of these contaminants coming onto our property, PG&E is hereby requesting Alameda County for enforcing soil and groundwater investigation to be performed on the adjacent properties.

We greatly appreciate your support with this issue. Should you have any questions with our request, please contact me at (415) 973-5615.

Wally A. Pearce

WAP:rjd

Attachment

Quarterly Groundwater Monitoring Report and Proposed Modifications to Future Monitoring Requirements

January 1993

PG&E
ENCON-GAS Transmission and Distribution
Construction Yard
4930 Coliseum Way
Oakland, California

Prepared by:

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Report issued:
February 24, 1993

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APPENDICES

1.0 BACKGROUND

This report presents the results of the quarterly groundwater monitoring performed in January 1993 at the PG&E ENCON-Gas Transmission and Distribution Construction Yard in accordance with the directive issued by the Alameda County Health Care Agency. This report also presents a summary of the results from groundwater sampling performed at the site between January 1990 and the present. The yard is located at 4930 Coliseum Way in Oakland, California. As part of the groundwater monitoring program, samples were collected from shallow wells on the site and analyses were performed to determine the distribution of selected fuel compounds, solvents and lead in the uppermost aquifer beneath the northern part of the yard. This area includes the former sites of five underground storage tanks.

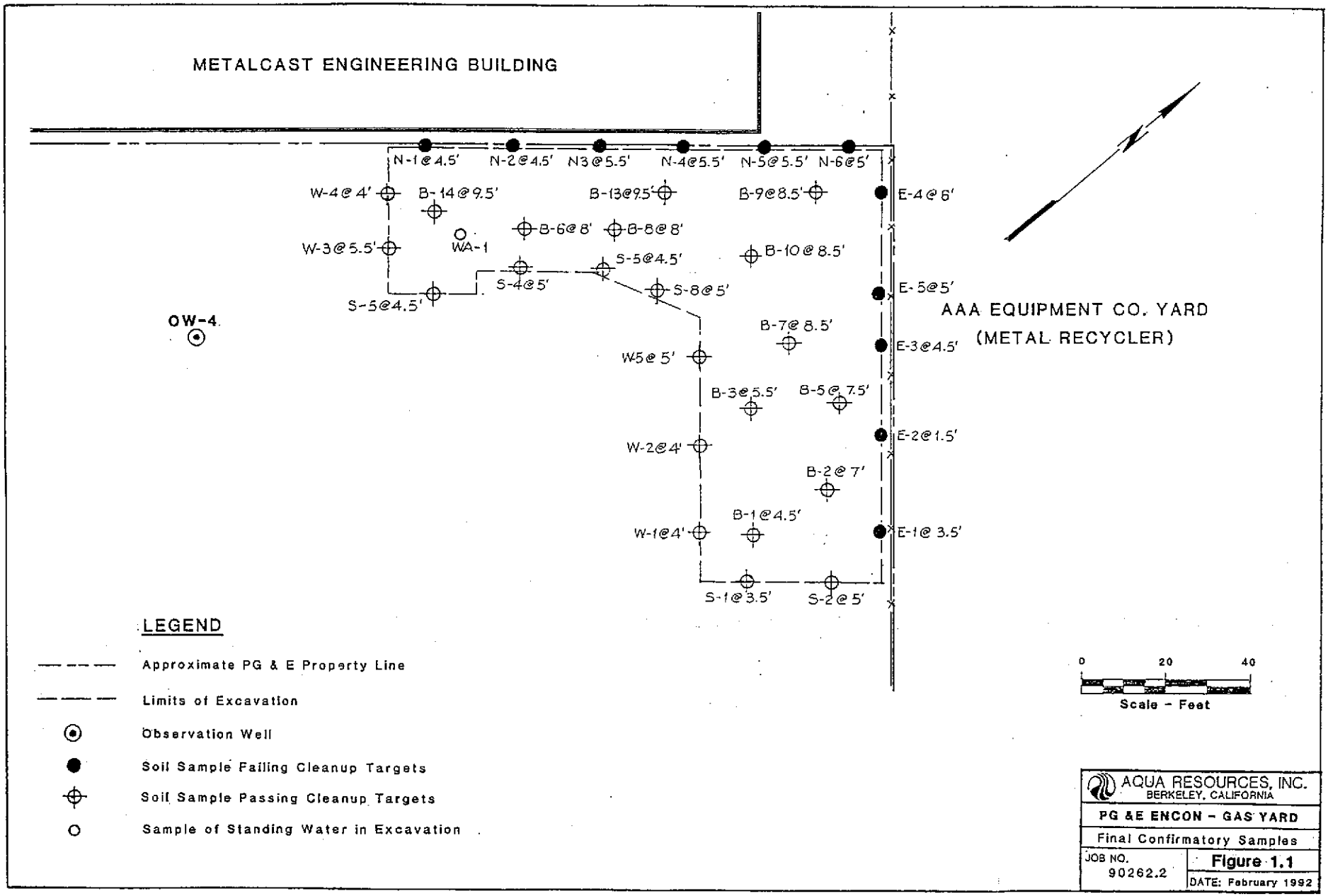
All of the underground tanks were removed in January 1988. Analyses of their contents revealed that of the four tanks formerly located in a cluster near the north corner of the yard, two contained mineral spirits and two tanks contained heavy oil. A concrete sump was located approximately 50 feet northeast of the tank cluster. Near this sump a shop also once stood. The fifth tank, formerly located near the west corner of the yard, contained diesel fuel. A soil sample collected below this tank indicated concentration of diesel below the detection limit of 10 mg/kg. Subsequent to the tank removal, a subsurface investigation indicated that soils neighboring the former diesel tank were not impacted.

A number of soil samples collected near the former tank cluster, sump and shop location were found to contain diesel at concentrations as high as 3900 mg/kg, Oil & Grease at concentrations over 1,000 mg/kg and showed evidence of volatile organic compounds (VOCs) in this area. 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, an area of approximately 6,600 square feet was excavated as a remedial action for the petroleum hydrocarbon soil contamination identified above and believed to originate from one or more of the following: the four-tank cluster, the concrete sump, the former shop location (each within the excavated area), or a possible offsite source. This work was described in The Earth Technology Corporation (formerly Aqua Resources Inc.) document "Site Remediation and Closure Report...Former Tank Cluster Area" dated February 1992.

During the remedial excavation, confirmatory soil samples were taken along the sidewalls and bottom of the excavation to determine if the full extent of soils impacted by hydrocarbons to above soil cleanup targets established for the project were removed. The cleanup targets for gasoline and diesel were 10 mg/kg and 100 mg/kg, respectively. Those for oil and grease (O&G) were 1,000 mg/kg and for benzene, toluene, ethylbenzene and xylene compounds were 5 μg/kg (cumulative). The excavated soils generally extended to the depth of groundwater, then at about 8 to 8-½ feet below grade, and were replaced with clean, compacted backfill. The backfill below about 7 feet consisted of drain rock, while that above the 7 feet in depth consisted of Class II aggregate base. The northwest and northeast excavation boundaries reached the approximate PG&E property lines. Figure 1.1, prepared for the closure report (1992) shows the location of the excavation and confirmatory samples. As this figure demonstrates, all of the samples collected at the PG&E property lines failed the cleanup levels, while each of the remaining confirmatory samples passed the cleanup targets. Samples along the northeastern property line failed primarily due to diesel and O&G concentrations. During excavation, this wall showed visible tar or heavy oil in the exposed soils. Two pipes containing a similar heavy petroleum product were also uncovered along this excavation wall. Analytical testing of the product found in pipes showed diesel at 7,000 mg/kg and did not indicate significant VOCs.

Samples along the northwestern property line failed variously due to concentration of gasoline, kerosene, diesel, O&G, and BTEX compounds. The cleanup targets were exceeded in at least one instance for each of these compounds.


METALCAST ENGINEERING BUILDING
N-1@4.5'
N-2@4.5'
N3@5.5'
N-4@5.5'
N-5@5.5'
N-6@5'
W-4@4'
B-14@9.5'
B-13@9.5'
B-9@8.5'
E-4@6'
B-6@8'
B-8@8'
W-3@5.5'
WA-1
S-5@4.5'
B-10@8.5'
S-4@5'
S-8@5'
E-5@5'
S-5@4.5'
OW-4
AAA EQUIPMENT CO. YARD
(METAL RECYCLER)
B-7@8.5'
W5@5'
E-3@4.5'
B-3@5.5'
B-5@7.5'
E-2@1.5'
W-2@4'
B-2@7'
B-1@4.5'
W-1@4'
E-1@3.5'
S-1@3.5'
S-2@5'
LEGEND
Approximate PG & E Property Line
Limits of Excavation
Observation Well
Soil Sample Failing Cleanup Targets
Soil Sample Passing Cleanup Targets
Sample of Standing Water in Excavation
0
20
40
Scale - Feet
AQUA RESOURCES, INC.
BERKELEY, CALIFORNIA
PG &E ENCON - GAS YARD
Final Confirmatory Samples
JOB NO.
90262.2
Figure 1.1
DATE: February 1992

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

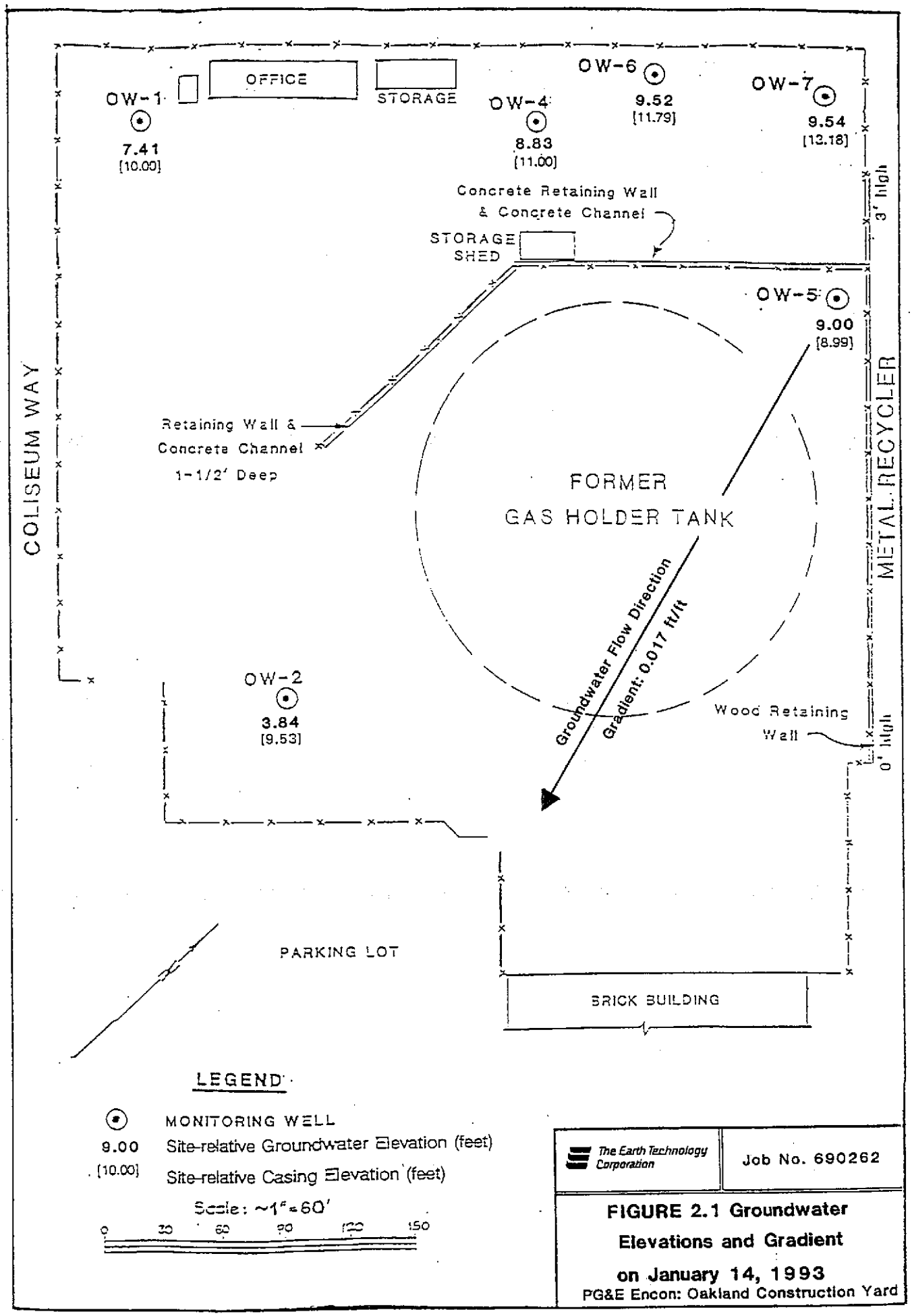
In September and October of 1992 a contaminant mitigation cap was constructed over surface soils in an area south of the hydrocarbon remediation area. These soils are contaminated with lead, thought to originate from lead paint chips generated from sandblasting operations on a large above-ground natural gas storage tank. The tank was removed in May 1990. These soils were found contaminated with total and soluble lead above California Code of Regulations (CCR) levels for hazardous wastes. CCR Total Threshold Limit Concentration for lead is 1,000 mg/kg (ppm) and the Soluble Threshold Limit Concentration for lead is 5 mg/l (ppm). The Alameda County Health Care Services Agency and the Regional Water Quality Control Board approved capping as the selected remedial option for this area. Continued groundwater monitoring for lead was agreed upon by the County as part of this remedial option. Following contaminant capping the remaining open ground at the site was covered with asphaltic concrete.

2.0 SAMPLING ACTIVITIES

Four of the five originally-installed monitoring wells remain in existence on the site. One 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 were installed on December 19, 1991: OW-6, which was installed in the general vicinity of well OW-3 to act as its replacement; and OW-7, which was installed at the northeastern end of the remediation area to gauge the likelihood of upgradient contamination in the shallow groundwater underlying the site. Both wells penetrate the clean, compacted fill placed in the November remedial action. The locations of these new wells were approved by the Alameda County Health Care Services Agency. Figure 2.1 presents the site plan including all present monitoring well locations. On January 14, 1993, groundwater samples were collected by Earth Technology personnel from monitoring wells OW-1, OW-2, OW-4, OW-5, OW-6, and OW-7. Prior to sampling, three to six casing volumes of groundwater were purged with a bailer from each well. Conductivity, pH, and temperature were measured periodically and purging continued until these properties were stable. The groundwater sample was then collected.

The groundwater samples collected from each well were analyzed by Curtis & Tompkins, Ltd. Analytical Laboratories, Berkeley, California for extractable petroleum hydrocarbons as diesel or kerosene (TPH-d,k; LUFT Manual, October 1989); purgeable halocarbon compounds (EPA method 8010); total volatile hydrocarbons as gasoline (TVH-g; LUFT Manual October 1989); benzene, toluene, xylenes, and ethylbenzene (BTXE, EPA 5030/8020); and for lead (EPA 7421). In addition, method blank analyses were performed for the purposes of quality assurance (QA) on the groundwater sample results.

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



The Earth Technology Corporation

Job No. 690262

FIGURE 2.1 Groundwater Elevations and Gradient on January 14, 1993

PG&E Encon: Oakland Construction Yard

3.0 ANALYTICAL RESULTS

Table 3.1 summarizes the analytical results for petroleum hydrocarbons detected in the groundwater samples collected on January 14, 1993. TPH-d was detected in each of the monitoring wells and was found in the highest concentration in wells near the 1991 hydrocarbon remediation area namely, OW-6, OW-7, and OW-4. The highest concentration of TVH-g continues to be that detected in the upgradient well OW-7.

Table 3.1 Petroleum Hydrocarbons in Groundwater, in mg/l

Well	TPH-Diesel	TVH-Gasoline
OW-1	2.00	0.07
OW-2	0.62	ND
OW-4	2.10	ND
OW-5	1.00	0.35
OW-6	5.30	ND
OW-7	2.30	0.72

Notes:

1) ND = Not Detected at or above the method reporting limits (RL).
2) TPH-Diesel = Extractable Petroleum Hydrocarbons, Diesel Range, LUFT Manual October 1989; RL = 0.05 mg/l.
3) TVH-Gasoline = Total Volatile Hydrocarbons by California DHS Method LUFT Manual October 1989; RL = 0.05 mg/l.

Figures 3.1 and 3.2 illustrate the historical concentrations of TPH in the monitoring wells on site. For samples which reported TPH as not detected, one half of the detection limit was used in preparing these figures. The data from monitoring wells OW-3 and OW-6 are combined in the figures since OW-6 was installed to replace OW-3 following its destruction.

Throughout the site's water monitoring history, there have been differences in reporting TPH by the three different laboratories used throughout this time. TPH prior to April 1991 was reported as diesel and/or oil (Brown and Caldwell Analytical), in April 1991 as strictly diesel (The Earth Technology Corporation Analytical Laboratory), and

following April 1991 as diesel and/or kerosene (Curtis and Tompkins Ltd.). TPH characterized as kerosene has never been detected. In an attempt to compare results, the TPH presented in these figures is the sum of these distinguished characterizations.

As figures illustrate, TPH concentrations reached a peak around the time of the remedial excavation in November, 1991 in the wells in the remediation vicinity: OW-4, OW-6 and OW-7. Each of these wells reported TPH at greater than 2000 ppb. It was noted in the February 1992 tank cluster area remediation report that there is apparent offsite contamination upgradient of the PG&E yard. The persistence of moderate TPH concentrations following remediation in this area is believed to be the result of this upgradient contamination. Well OW-5, which lies near the northeast property line showed TPH as diesel at 1,000 ppb for the second consecutive quarter. Wells OW-1 and OW-2, which are distant from the hydrocarbon remediation area, continue to contain detectable concentrations of TPH as diesel. Over the past year OW-1 has fluctuated around 2000 ppb and OW-2 has remained fairly constant at about 500 ppb.

TVH-g has been consistently below 1,000 ppb in all wells except upgradient well OW-7. This well has consistently shown concentration of TVH-g greater than 700 ppb. Figure 3.3 illustrates the historical concentrations of TVH-g. Between January 1991 and March 1992, this analysis was not performed. Since January 1991, TVH-g concentrations have been below the detection limit in the remaining wells with the exception of wells OW-5 and OW-1, where the concentrations have fluctuated at near non-detect concentrations.

Table 3.3 presents the results of this quarter's groundwater analyses for soluble lead. The EPA and State MCL for lead in drinking water is 50 μg/l. Lead was not detected above the Method Detection Limit in any well during this quarter of sampling. Lead has been detected in the monitoring wells only once, in well OW-4 on July 1, 1992. The concentration of lead in that sample was 5 μg/l.

Figure 3.1

Total Petroleum Hydrocarbons as Diesel and Oil in Monitoring Wells Versus Time

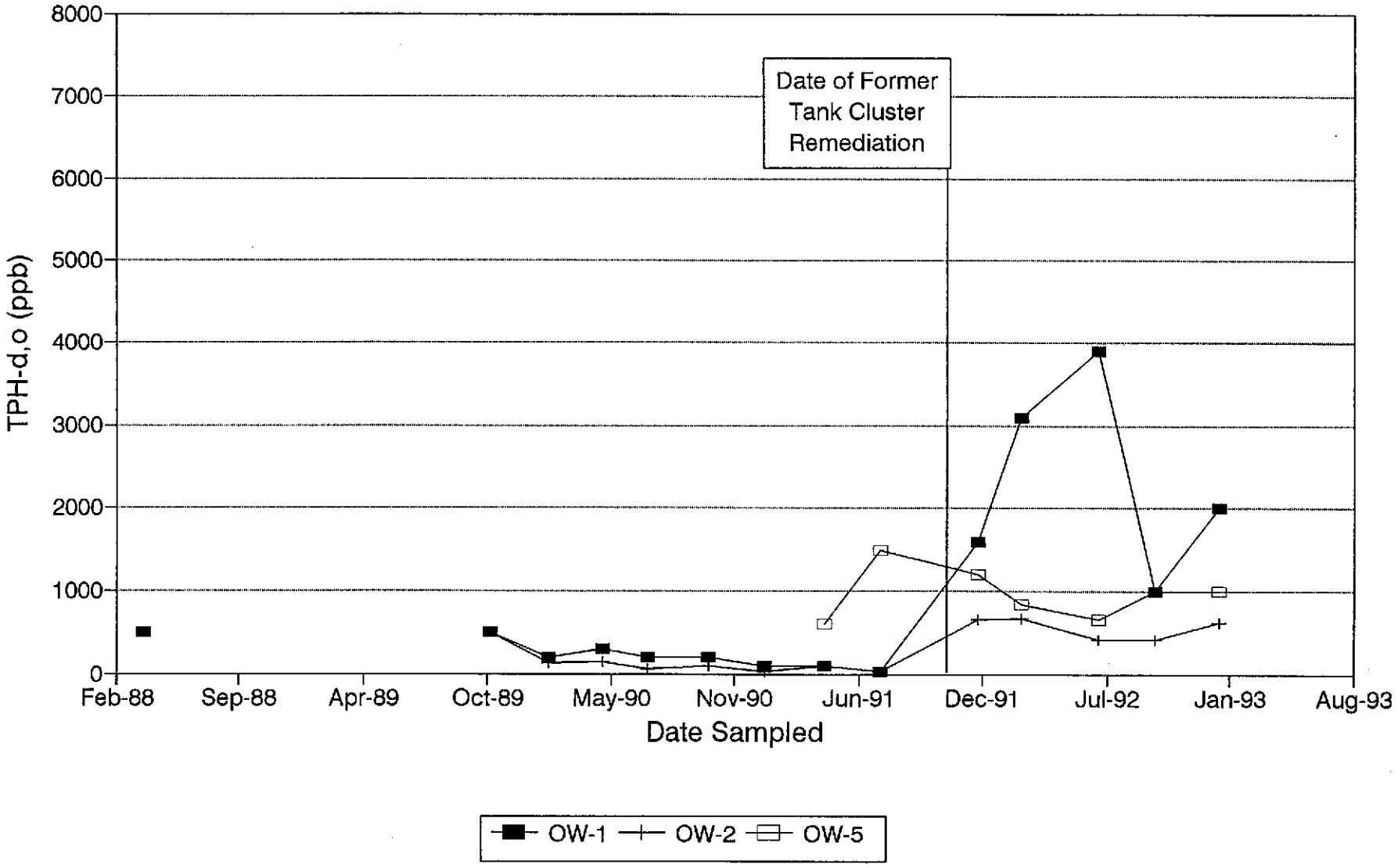


Figure 3.2

Total Petroleum Hydrocarbons as Diesel and Oil in Monitoring Wells Versus Time

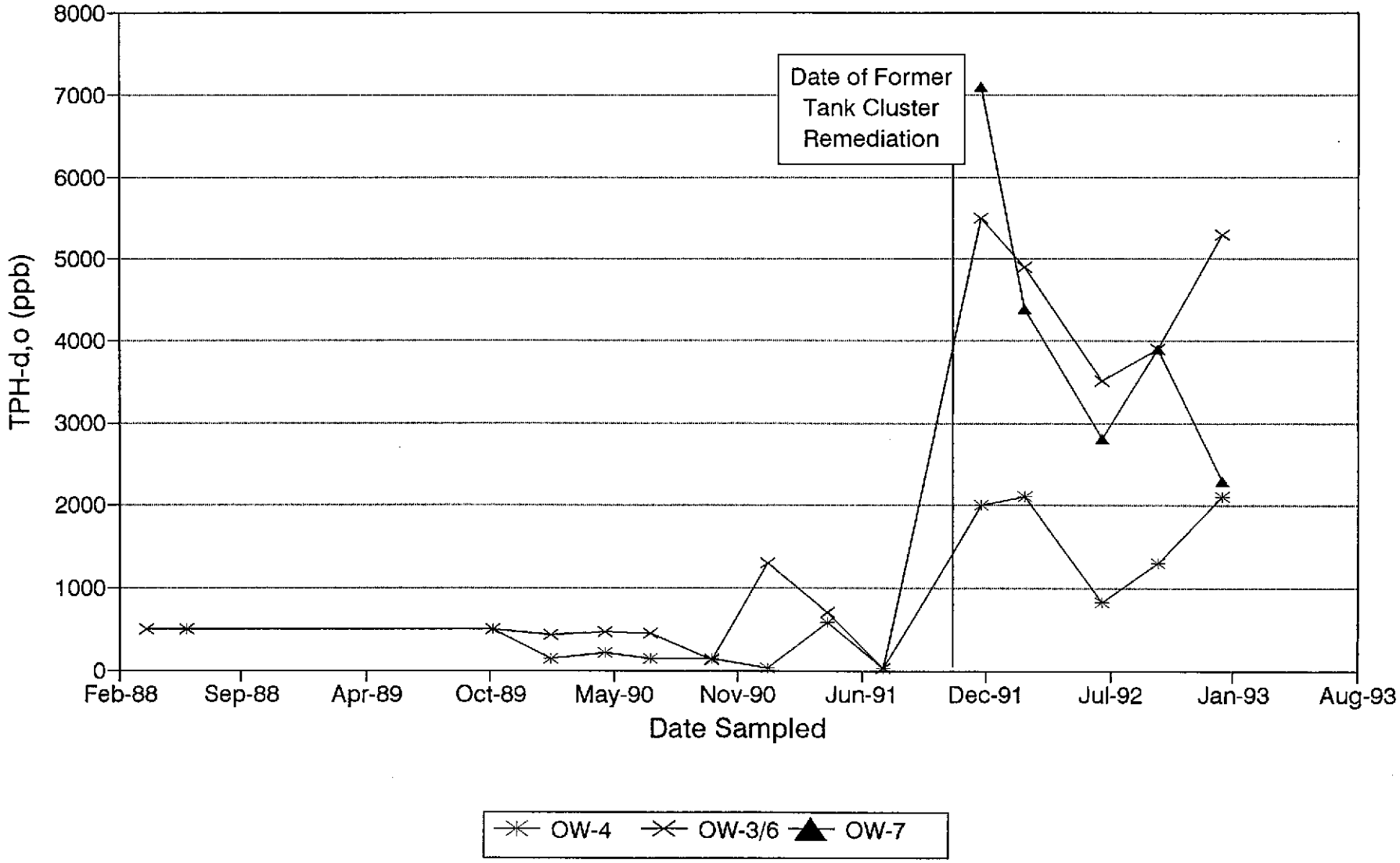


Figure 3.3

Total Volatile Hydrocarbons as Gasoline
in Monitoring Wells Versus Time

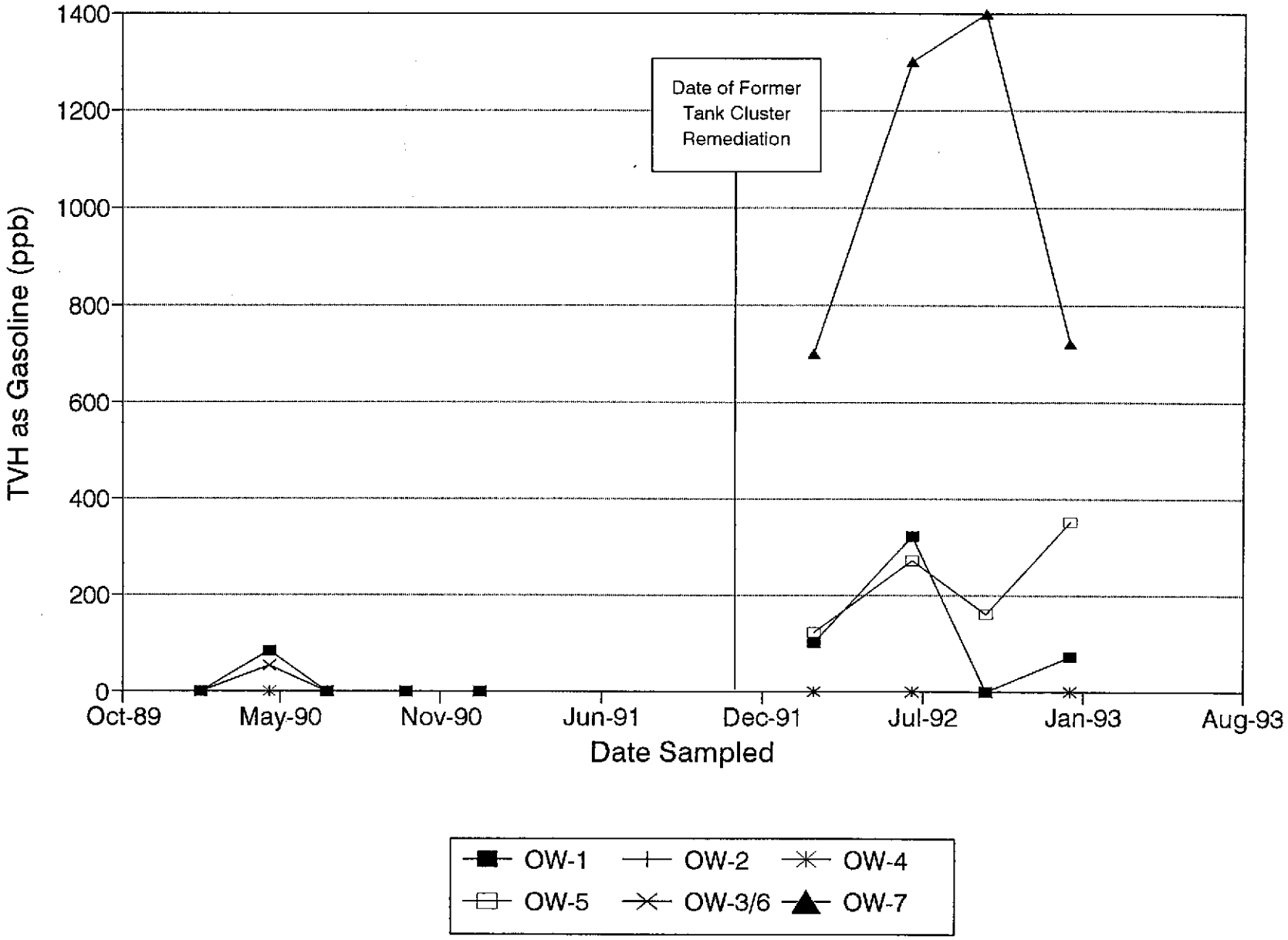


Table 3.2 presents the analytical results of volatile organic compounds (VOCs) in groundwater. The State maximum contaminant levels (MCLs) for drinking water for four compounds; 1,1-Dichloroethane (DCA, 5 µg/l), 1,1,1-Trichloroethane (TCA, 200 µg/l), 1,4-Dichlorobenzene (1,4-DCB, 5 µg/l), and Benzene (BZ, 1 µg/l), were each exceeded: upgradient well OW-5 had 5 µg/l of DCA and 26 µg/l of BZ, while the second upgradient well, OW-7, had 25 µg/l of DCA, 530 µg/l of TCA and 160 µg/l of 1,4-DCB. In well OW-6, DCA was detected at 10 µg/l. DCA was also detected at low concentrations in wells OW-1 and OW-4. TCA was also observed in wells OW-5 and OW-6 at 7 and 10 µg/l, respectively, well below the MCL of 200 µg/l.

Figure 3.4 illustrates the historical concentrations of total VOCs from 8010/8020 analyses in the monitoring wells on site. Since the installation of upgradient well OW-7, whose data is plotted using the right hand scale, this well has been found to have the highest concentration of VOCs, an order of magnitude larger than any of the other wells. The second upgradient well, OW-5, contains the next highest concentration of total VOCs at 51.7 µg/l. These two wells lie within ten feet of the northeast property line of the site and groundwater elevation monitoring consistently indicates that the groundwater flow direction is from the northeast neighboring property onto the PG&E site. This is a strong indication that VOCs are migrating onto the PG&E site from an upgradient source.

Table 3.2 Volatile Organic Compounds in Groundwater, in ug/l

PURGEABLE HALOCARBONS	MCL	Well Number					
		OW-1	OW-2	OW-4	OW-5	OW-6	OW-7
Chloromethane		ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND
Vinyl chloride	0.5	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND
Methylene Chloride	5#	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	150	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	6	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	2	ND	3	5	10	25
cis-1,2-Dichloroethene	6	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	10	ND	ND	ND	ND	ND	ND
Chloroform	100#*	ND	ND	ND	ND	ND	ND
Freon 113	1200	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND	7	10	530
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND	ND
Bromodichloromethane	100#*	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND
Dibromochloromethane	100#*	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl Ether		ND	ND	ND	ND	ND	ND
Bromoform	100#*	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND	ND	ND
Chlorobenzene	30	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene		ND	ND	ND	ND	ND	170
1,2-Dichlorobenzene	600#	ND	ND	ND	ND	ND	33
1,4-Dichlorobenzene	5	3	ND	ND	ND	ND	160
PURGEABLE AROMATICS							
Benzene	1	ND	ND	ND	26	ND	0.6
Toluene	1000#	ND	ND	ND	ND	ND	ND
Ethylbenzene	680	0.6	ND	ND	0.7	ND	ND
Total Xylenes	1750**	1.9	ND	ND	13	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 reporting limit

7) Purgeable Halocarbons (EPA method 8010)

8) Purgeable Aromatics (EPA method 8020)

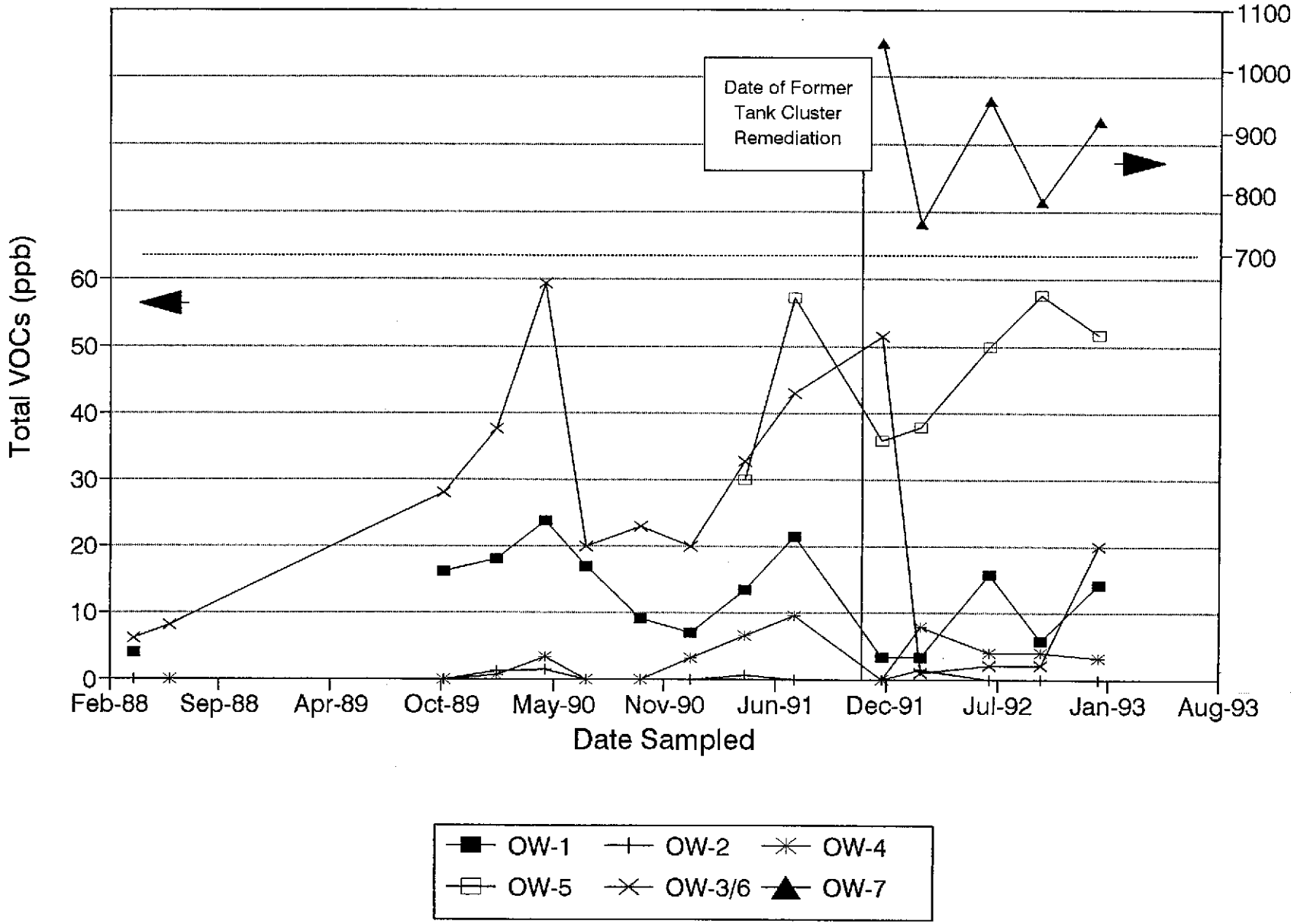
Table 3.3 Lead in Groundwater, in μg/l

Well	Reporting Limit	Soluble Lead
OW-1	6.0	ND
OW-2	6.0	ND
OW-4	6.0	ND
OW-5	6.0	ND
OW-6	6.0	ND
OW-7	6.0	ND

1) Method EPA 7421
2) ND = Not Detected above the RL

Figure 3.4

Total VOCs from EPA 8010/8020 Analyses
in Monitoring Wells Versus Time



4.0 GROUNDWATER FLOW DIRECTION

Water level measurements in the monitoring wells were made on January 14, 1993. The measurements were made on each well prior to well purging. 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 these wells is based upon an assumed TOC elevation of 10 feet at well OW-1. In late September, the wellhead of OW-2 was raised to match the new grade of the lead mitigation cap. A 1.10 foot riser was placed on the existing casing and the TOC reference elevation for this well was adjusted appropriately.

The groundwater elevations measured January 14, 1993 are presented in Figure 2.1 along with the relative TOC elevations of each of the wells. The groundwater flow direction calculated from groundwater elevations in OW-1, OW-2, and OW-5 indicates the local groundwater flow direction on this date to be to the south at a gradient of approximately 0.017 ft/ft. This flow direction is consistent with those observed over the last two quarters (July 1 and October 1, 1992). The gradient value has increased by a factor of almost four (0.0046 to 0.017) since October. This is probably due to the heavy precipitation experienced in late December and early January, combined with the completion of the lead mitigation cap over what was formerly open ground. The cap now limits direct precipitative recharge in the area between wells OW-5 and OW-2, while most of the neighboring upgradient property near OW-5 is open ground.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are made based upon the results of analyses performed on groundwater samples collected on January 14, 1993 from monitoring wells OW-1, OW-2, OW-4, OW-5, OW-6 and OW-7 and from prior quarterly sampling results.

- TPH characterized as diesel (TPH-d) was detected in each well above the method reporting limit (RL). The highest concentrations of TPH-d were observed in wells OW-6 (5,300 µg/l), upgradient well OW-7 (2,300 µg/l), and well OW-4 (2,100 µg/l). These wells lie in or near the 1991 former tank cluster remediation area. Moderate TPH concentrations have persisted in these wells since the remedial action. Soil samples collected during remediation indicated that TPH-d concentrations in excess of 100 mg/kg were present in soil only near the property boundaries along the northeast and northwest excavation limits. TPH-d concentrations in these wells are thought to be a result, at least in part, of an offsite source. Placement of Class II aggregate base as a backfill material increased water permeability at the site allowing contamination to reach wells located farther away downgradient from the PG&E property line.

- TPH concentrations in well OW-1 have fluctuated at around 2,000 µg/l over the past year. This well is downgradient of a former diesel tank location. Five soils samples collected from below and around the tank location after its removal in 1988 gave TPH concentrations of ND at RL's of 10 mg/kg on the bottom sample and 1 mg/kg in the surrounding samples.

- Well OW-2, although distant from the suspected former sources of hydrocarbons, continues to contain a fairly constant concentration of TPH-d at about 500 µg/l.

- Upgradient wells OW-5 (DCA and BZ) and OW-7 (DCA, TCA and 1,4-DCB) and well OW-6 (DCA) were the only wells found to have VOCs whose concentrations exceed the MCLs for drinking water. These and the other VOCs detected are thought to originate from an offsite sources.

- The three isomers of DCB continue to be the VOCs found at the highest concentrations. They are found predominantly in upgradient well OW-7 (total DCB 697 µg/l).

- The solvent TCA continues to be present in upgradient wells OW-5 (28 µg/l) and OW-7 (80 µg/l). It was found, for the first time, in the January 1993 sampling in well OW-6 (10 µg/l).

- TVH-g was detected in three wells: upgradient wells OW-7 (1400 µg/l) and OW-5 (160 µg/l), and also in well OW-1 (70 µg/l). Over the past year of monitoring, TVH-g has not been detected in wells OW-2, OW-4, and OW-6.

- Wells OW-5 and OW-7 both lie at the upgradient end of the site. Both have historically contained the highest concentrations of TVH-g and VOCs, indicating an upgradient, i.e. from the north or northeast, source of fuel and/or solvent contamination.

- Groundwater flow across the site appears to be to the south and southwest.

- Lead was not detected at concentrations above the RL (6 µg/l) in any of the six wells on site. Historically lead has only been detected once: in OW-4 on July 1, 1992 at 5 µg/l.

Five quarters of monitoring have been performed on wells OW-1, OW-2, OW-4 OW-6, and OW-7 since the former tank cluster remediation in November of 1991. Based on the observations of chemical constituent concentrations, the following recommendations are made for future monitoring. These recommendations are also summarized in Table 5.1 Recommended Well Monitoring Matrix.

- TPH monitoring should continue on most wells but at a semi-annual frequency. TPH concentrations have detected in excess of 1,000 µg/l in all wells except OW-2. Since OW-2 is remote from any known or suspected sources of hydrocarbons, it is recommended that in this well, TPH analysis be suspended altogether.

- TVH and BTXE monitoring should continue on wells OW-1, OW-5, OW-6, and OW-7 but at a semi-annual frequency. Wells OW-1, OW-5, and OW-7 are the only wells with detected TVH concentrations over the past four quarters of monitoring. Since OW-6 lies down gradient of wells OW-5 and OW-7, it is recommended that monitoring in this well continue in order to determine when, if ever, TVH reaches this well. BTEX compounds are typically associated with

the presence of gasoline. This has been the observed case during the past four quarters of monitoring. The wells in which gasoline has been detected (OW-1, OW-5, and OW-7) have also contained the largest cumulative concentration of BTEX compounds. Wells OW-2 and OW-4 have shown low concentrations on a few occasions of BTEX compounds and no TVH over the past year and it is therefore recommended that they be suspended from quarterly monitoring for these compounds.

- EPA 8010 monitoring for VOCs should continue on wells OW-5, OW-6, and OW-7, but at a semi-annual frequency. In these wells over the past year, numerous Volatile Organic Compounds (VOCs) have been detected and MCLs have been exceeded. In well OW-2, no VOC compounds have been detected in the past year. During the same time period in Ow-1, DCA and 1,4-DCB have been detected but at concentrations below their MCLs. These same compounds have also been detected in OW-4, but only on one occasion was an MCL exceeded that of DCA: in March 1992. It is recommended that monitoring for VOC's by EPA 8010 in wells OW-1, OW-2, and OW-4 be suspended.

- Quarterly lead monitoring should continue in wells OW-2 and OW-5. Among the remaining wells, lead has only been detected one time: in well OW-4 at 5 μg/l. Since this is an insignificant concentration bordering on the detection limit for this analysis, it can be recommended that lead monitoring be suspended for wells OW-1, OW-3, OW-6, and OW-7. These wells are located outside the area immediately impacted by paint chips.

- A new well will be installed in the lead cap area between this and next quarter's sampling event. This well will be referenced as OW-8. Per the lead remedial action plan, this well will be monitored quarterly for lead.

- It is recommended that quarterly measurements of the groundwater elevation in all wells continue in order to track the local groundwater gradient.

Table 5.1 Recommended Well Monitoring Matrix

	TPHg	TVHg/BTXE	EPA 8010 (VOC)	Lead	Groundwater Elev.
OW-1	S	S			Q
OW-2				Q	Q
OW-4	S				Q
OW-5	S	S	S	Q	Q
OW-6	S	S	S		Q
OW-7	S	S	S		Q
OW-8					Q

S = Semi-annual monitoring starting with January 1993
Q = Quarterly monitoring

APPENDIX A

Certified Laboratory Results

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

DATE RECEIVED: 01/14/93
DATE REPORTED: 02/04/93

Job# 690262.03
File results

LABORATORY NUMBER: 109775

CLIENT: AQUA RESOURCES

PROJECT ID: 690262.03

LOCATION: PG & E COLLISEUM

RESULTS: SEE ATTACHED

Reviewed by

Reviewed by

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109775
CLIENT: AQUA RESOURCES
PROJECT ID: 690262.03
LOCATION: PG & E COLLISEUM

DATE SAMPLED: 01/14/93
DATE RECEIVED: 01/14/93
DATE ANALYZED: 02/02/93
DATE REPORTED: 02/04/93

ANALYSIS: LEAD
ANALYSIS METHOD: EPA 239.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
109775-1	W-1	ND	ug/L	6
109775-2	W-2	ND	ug/L	6
109775-3	W-4	ND	ug/L	6
109775-4	W-5	ND	ug/L	6
109775-5	W-6	ND	ug/L	6
109775-6	W-7	ND	ug/L	6

ND = Not detected at or above the reporting limit.

QA/QC SUMMARY:

RPD, %	4
RECOVERY, %	100

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109775
CLIENT: AQUA RESOURCES
PROJECT ID: 690206.03
LOCATION: PG & E COLLISEUM

DATE SAMPLED: 01/14/93
DATE RECEIVED: 01/14/93
DATE ANALYZED: 01/21-22/93
DATE REPORTED: 02/04/93

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions
TVH by California DOHS Method/LUFT Manual October 1989
BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
109775-1	W-1	70	ND(0.5)	ND(0.5)	0.6	1.9
109775-2	W-2	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
109775-3	W-4	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
109775-4	W-5	350	26	ND(0.5)	0.7	13
109775-5	W-6	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
109775-6	W-7	720	0.6	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, %	2
RECOVERY, %	108

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109775
CLIENT: AQUA RESOURCES
PROJECT ID: 690262.03
LOCATION: PG & E COLLISEUM

DATE SAMPLED: 01/14/93
DATE RECEIVED: 01/14/93
DATE EXTRACTED: 01/18/93
DATE ANALYZED: 01/21/93
DATE REPORTED: 02/04/93

Extractable Petroleum Hydrocarbons in Aqueous Solutions
California DOHS Method
LUFT Manual October 1989

LAB ID	CLIENT ID	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT* (ug/L)
109775-1	W-1	**	2,000	50
109775-2	W-2	**	620	50
109775-3	W-4	**	2,100	50
109775-4	W-5	**	1,000	50
109775-5	W-6	**	5,300	50
109775-6	W-7	**	2,300	50

** Quantitated as diesel range.

ND = Not detected at or above reporting limit.

* Reporting limit applies to all analytes.

QA/QC SUMMARY

RPD, %	2
RECOVERY, %	94

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109775-1
CLIENT: AQUA RESOURCES
PROJECT ID: 690262.03
LOCATION: PG & E COLLISEUM
SAMPLE ID: W-1

DATE SAMPLED: 01/14/93
DATE RECEIVED: 01/14/93
DATE ANALYZED: 01/20/93
DATE REPORTED: 02/04/93

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	2
Bromomethane	ND	2
Vinyl chloride	ND	2
Chloroethane	ND	2
Methylene chloride	ND	20
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloroethane	2	1
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
Chloroform	ND	1
Freon 113	ND	1
1,2-Dichloroethane	ND	1
1,1,1-Trichloroethane	ND	1
Carbon tetrachloride	ND	1
Bromodichloromethane	ND	1
1,2-Dichloropropane	ND	1
cis-1,3-Dichloropropene	ND	1
Trichloroethene	ND	1
1,1,2-Trichloroethane	ND	1
trans-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
2-Chloroethylvinyl ether	ND	2
Bromoform	ND	2
Tetrachloroethene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	3	1
1,2-Dichlorobenzene	ND	1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

Surrogate Recovery, %	104

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109775-2
CLIENT: AQUA RESOURCES
PROJECT ID: 690262.03
LOCATION: PG & E COLLISEUM
SAMPLE ID: W-2

DATE SAMPLED: 01/14/93
DATE RECEIVED: 01/14/93
DATE ANALYZED: 01/20/93
DATE REPORTED: 02/04/93

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	2
Bromomethane	ND	2
Vinyl chloride	ND	2
Chloroethane	ND	2
Methylene chloride	ND	20
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
Chloroform	ND	1
Freon 113	ND	1
1,2-Dichloroethane	ND	1
1,1,1-Trichloroethane	ND	1
Carbon tetrachloride	ND	1
Bromodichloromethane	ND	1
1,2-Dichloropropane	ND	1
cis-1,3-Dichloropropene	ND	1
Trichloroethene	ND	1
1,1,2-Trichloroethane	ND	1
trans-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
2-Chloroethylvinyl ether	ND	2
Bromoform	ND	2
Tetrachloroethene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

Surrogate Recovery, %	104

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109775-3
CLIENT: AQUA RESOURCES
PROJECT ID: 690262.03
LOCATION: PG & E COLLISEUM
SAMPLE ID: W-4

DATE SAMPLED: 01/14/93
DATE RECEIVED: 01/14/93
DATE ANALYZED: 01/20/93
DATE REPORTED: 02/04/93

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L		Reporting Limit ug/L
Chloromethane	ND		2
Bromomethane	ND		2
Vinyl chloride	ND		2
Chloroethane	ND		2
Methylene chloride	ND		20
Trichlorofluoromethane	ND		1
1,1-Dichloroethene	ND		1
1,1-Dichloroethane		3	1
cis-1,2-Dichloroethene	ND		1
trans-1,2-Dichloroethene	ND		1
Chloroform	ND		1
Freon 113	ND		1
1,2-Dichloroethane	ND		1
1,1,1-Trichloroethane	ND		1
Carbon tetrachloride	ND		1
Bromodichloromethane	ND		1
1,2-Dichloropropane	ND		1
cis-1,3-Dichloropropene	ND		1
Trichloroethene	ND		1
1,1,2-Trichloroethane	ND		1
trans-1,3-Dichloropropene	ND		1
Dibromochloromethane	ND		1
2-Chloroethylvinyl ether	ND		2
Bromoform	ND		2
Tetrachloroethene	ND		1
1,1,2,2-Tetrachloroethane	ND		1
Chlorobenzene	ND		1
1,3-Dichlorobenzene	ND		1
1,4-Dichlorobenzene	ND		1
1,2-Dichlorobenzene	ND		1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

Surrogate Recovery, %	106

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109775-4
CLIENT: AQUA RESOURCES
PROJECT ID: 690262.03
LOCATION: PG & E COLLISEUM
SAMPLE ID: W-5

DATE SAMPLED: 01/14/93
DATE RECEIVED: 01/14/93
DATE ANALYZED: 01/20/93
DATE REPORTED: 02/04/93

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	2
Bromomethane	ND	2
Vinyl chloride	ND	2
Chloroethane	ND	2
Methylene chloride	ND	20
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloroethane	5	1
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
Chloroform	ND	1
Freon 113	ND	1
1,2-Dichloroethane	ND	1
1,1,1-Trichloroethane	7	1
Carbon tetrachloride	ND	1
Bromodichloromethane	ND	1
1,2-Dichloropropane	ND	1
cis-1,3-Dichloropropene	ND	1
Trichloroethene	ND	1
1,1,2-Trichloroethane	ND	1
trans-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
2-Chloroethylvinyl ether	ND	2
Bromoform	ND	2
Tetrachloroethene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

Surrogate Recovery, %	103

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109775-5
CLIENT: AQUA RESOURCES
PROJECT ID: 690262.03
LOCATION: PG & E COLLISEUM
SAMPLE ID: W-6

DATE SAMPLED: 01/14/93
DATE RECEIVED: 01/14/93
DATE ANALYZED: 01/20/93
DATE REPORTED: 02/04/93

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	2
Bromomethane	ND	2
Vinyl chloride	ND	2
Chloroethane	ND	2
Methylene chloride	ND	20
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloroethane	10	1
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
Chloroform	ND	1
Freon 113	ND	1
1,2-Dichloroethane	ND	1
1,1,1-Trichloroethane	10	1
Carbon tetrachloride	ND	1
Bromodichloromethane	ND	1
1,2-Dichloropropane	ND	1
cis-1,3-Dichloropropene	ND	1
Trichloroethene	ND	1
1,1,2-Trichloroethane	ND	1
trans-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
2-Chloroethylvinyl ether	ND	2
Bromoform	ND	2
Tetrachloroethene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

Surrogate Recovery, %	107

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109775-6
CLIENT: AQUA RESOURCES
PROJECT ID: 690262.03
LOCATION: PG & E COLLISEUM
SAMPLE ID: W-7

DATE SAMPLED: 01/14/93
DATE RECEIVED: 01/14/93
DATE ANALYZED: 01/20/93
DATE REPORTED: 02/04/93

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	100
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
1,1-Dichloroethane	25	5
cis-1,2-Dichloroethene	ND	5
trans-1,2-Dichloroethene	ND	5
Chloroform	ND	5
Freon 113	ND	5
1,2-Dichloroethane	ND	5
1,1,1-Trichloroethane	530	5
Carbon tetrachloride	ND	5
Bromodichloromethane	ND	5
1,2-Dichloropropane	ND	5
cis-1,3-Dichloropropene	ND	5
Trichloroethene	ND	5
1,1,2-Trichloroethane	ND	5
trans-1,3-Dichloropropene	ND	5
Dibromochloromethane	ND	5
2-Chloroethylvinyl ether	ND	10
Bromoform	ND	10
Tetrachloroethene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Chlorobenzene	ND	5
1,3-Dichlorobenzene	170	5
1,4-Dichlorobenzene	160	5
1,2-Dichlorobenzene	33	5

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

Surrogate Recovery, %	105

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109775
CLIENT: AQUA RESOURCES
PROJECT ID: 690262.03
LOCATION: PG & E COLLISEUM
SAMPLE ID: METHOD BLANK

DATE ANALYZED: 01/20/93
DATE REPORTED: 02/04/93

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	2
Bromomethane	ND	2
Vinyl chloride	ND	2
Chloroethane	ND	2
Methylene chloride	ND	20
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
Chloroform	ND	1
Freon 113	ND	1
1,2-Dichloroethane	ND	1
1,1,1-Trichloroethane	ND	1
Carbon tetrachloride	ND	1
Bromodichloromethane	ND	1
1,2-Dichloropropane	ND	1
cis-1,3-Dichloropropene	ND	1
Trichloroethene	ND	1
1,1,2-Trichloroethane	ND	1
trans-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
2-Chloroethylvinyl ether	ND	2
Bromoform	ND	2
Tetrachloroethene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

Surrogate Recovery, %	105

Curtis & Tompkins, Ltd.

MS/MSD SUMMARY SHEET FOR EPA 8010

Laboratory Number: 109775
Client: Aqua Resources
Analysis date: 01/20/93 Spike file: 020w007
Sample type: Water Spike dup file: 020w008

8010 MS/MSD DATA (spiked at 20 ppb)

SPIKE COMPOUNDS	READING	RECOVERY	STATUS	LIMITS
1,1-Dichloroethene	18.24	84 %	OK	61 - 145
Trichloroethene	22.35	112 %	OK	71 - 120
Chlorobenzene	21.03	104 %	OK	75 - 130
SPIKE DUP COMPOUNDS				
1,1-Dichloroethene	17.66	81 %	OK	61 - 145
Trichloroethene	21.99	110 %	OK	71 - 120
Chlorobenzene	21.28	105 %	OK	75 - 130
SURROGATES				
Bromobenzene (MS)	102.77	103 %	OK	75 - 125
Bromobenzene (MSD)	101.10	101 %	OK	75 - 125

MATRIX RESULTS

1,1-Dichloroethene	1.509
Trichloroethene	0
Chlorobenzene	0.195

RPD DATA

8010 COMPOUNDS	SPIKE	SPIKE DUP	RPD	STATUS	LIMITS
1,1-Dichloroethene	18.24	17.66	4 %	OK	<= 14
Trichloroethene	22.35	21.99	2 %	OK	<= 14
Chlorobenzene	2.00	21.28	1 %	OK	<= 13

109775

AQUA RESOURCES, INC.

SHIPMENT NO.: _____

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2

DATE 1-14-93

PROJECT NAME: PG+E Colliseum

PROJECT NO.: 690262.03

Sample Number	Location	Type of Sample: Material	Type of Sample: Method	Type of Container	Type of Preservation: Temp	Type of Preservation: Chemical	Analysis Required
W-1	OW1	H_2O	Bailer	1 L Amber	±4°C	~~C~~	1 (see remarks)
W-1	"	"	"	500 ml plastic	"	HNO_3	2
W-1	"	"	"	2 x VOA	"	HCl	3
W-1	"	"	"	2x VOA	"	HCl	4
W-2	OW2	"	"	1 L Amber	"	~~C~~	1
W-2	"	"	"	500 ml plastic	"	HNO_3	2
W-2	"	"	"	2 x VOA	"	HCl	3
W-2	"	"	"	2 x VOA	"	HCl	4
W-4	OW4	"	"	1 L Amber	"	~~C~~	1
W-4	OW4	"	"	500ml plastic	"	HNO_3	2
W-4	"	"	"	2 x VOA	"	HCl	3
W-4	"	"	"	2 x VOA	"	HCl	4
W-5	OW5	"	"	1 L Amber	"	~~C~~	1
W-5	"	"	"	500ml plastic		HNO_3	2
W-5	"	"	"	2 x VOA		HCl	3
W-5	"	"	"	2x VOA		HCl	4
W-6	OW6	"	"	1 L Amber	"	~~C~~	1
W-6	"	"	"	1-500ml plastic	"	HNO_3	2
W-6	"	"	"	2x VOA	"	HCl	3
W-6	"	"	"	2x VOA	"	HCl	4

Total Number of Samples Shipped: 20

Sampler's Signature: Mark C. Peterson

Relinquished By:
Signature: Mark C. Peterson
Printed Name: Mark C. Peterson
Company: East Technology
Reason: Analysis

Received By:
Signature: Teresa K. Morrison
Printed Name: TERESA MORRISON
Company: E&T
Date: 1/14/93
Time: 18:12

Relinquished By:
Signature: _____
Printed Name: _____
Company: _____
Reason: _____

Received By:
Signature: _____
Printed Name: _____
Company: _____
Date: / /
Time: _____

REMARKS:

1 = TPH - D

2 = Pb

3 = 8010

4 = TVH / BTXE

STANDARD T.A.T.

Special Shipment / Handling / Storage Requirements:

CHAIN OF CUSTODY FORM

Curtis & Tompkins, Ltd.
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900 Phone
(510) 486-0532 Fax

Sampler: Mark Peterson

Report to: Voytek B.

Project No: 690262.03 Company: Earth Technology

Project Name: PG+E Coliseum Telephone: 510-540-6954

Turnaround Time: _____ Fax: _____

Laboratory Number	Sample ID.	Sampling Date	Sampling Time	Matrix: Soil	Matrix: Water	Matrix: Waste	Matrix:	# of Containers	Preservative: HCl	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Preservative:	Field Notes
19-19156	W-7	1-14-93			X			1						
	"	1-14-93			X			1			X			
	"	"			X			2	X					
	"	"			X			2	X					

Analyses

TPH-D	Pb	8010	TVH/BTXE									
X												
	X											
		X										
			X									

Laboratory Use Only

NOTES:

STANDARD T.A.T.

RELINQUISHED BY:

Mark Cotham 1-14-93 18:12 DATE/TIME

DATE/TIME

DATE/TIME

RECEIVED BY:

Teresa Morris 12/14/93 18:12 DATE/TIME

DATE/TIME

DATE/TIME

APPENDIX B

Table of the Historical Results of Laboratory Analyses

APPENDIX B

Table of the Historical Results of Laboratory Analyses

Well ID		OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1
Date		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
PURGEABLE HALOCARBONS	MCL														
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5#	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	150	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	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	5	4	4	2	2	1	2.6	4.6	ND	ND	ND	1	3
cis-1,2-Dichloroethene	6		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	ND	ND	ND	ND	ND	ND
Chloroform	100#*	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	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	ND	ND	0.63	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	100#*	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	ND	ND	ND	ND	ND	ND
Bromoform	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene				1	4	4	1	3	1.8	2.9	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600#	Total	Total	ND	ND	ND	ND	ND	0.58	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	4	11	5	13	11	6	3	6.7	14	3.2	ND	4	3	3
PURGEABLE AROMATICS															
Benzene	1	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000#	ND	ND	2.3	0.4	ND	ND	ND	ND	ND	ND	ND	0.7	ND	ND
Ethylbenzene	680	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	0.6
Total Xylenes	1750**		ND	2.6	2.4	ND	ND	ND	ND	ND	ND	3.2	9	1.7	1.9
TOTAL VOCs		4	16	18.1	23.8	17	9	7	13.41	21.5	3.2	3.2	15.7	5.7	8.5
HYDROCARBONS															
TVH-g		NA	NA	< 50	82	< 50	< 50	< 500	NA	NA	NA	100	320	< 50	70
TEPH-d		< 1000	< 1000	190	300	200	200	90	< 200	< 50	1600	3100	3900	1000	2000
O&G		< 5000	16000	NA	NA	NA	NA	NA	NA	< 5000	< 5000	< 5000	NA	NA	NA
TPH (418.1)		NA	NA	< 5000	< 5000	< 5000	< 5000	< 5000	< 500	NA	NA	NA	NA	NA	NA
METALS															
Lead	50								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)

Well ID		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		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
PURGEABLE HALOCARBONS	MCL														
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5#	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	150	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	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	6		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	ND	ND	ND	ND	ND	ND
Chloroform	100#*	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	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	100#*	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	ND	ND	ND	ND	ND	ND
Bromoform	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	ND	ND	ND	ND	ND	ND	ND	0.53	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600#			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PURGEABLE AROMATICS															
Benzene	1	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND
Toluene	1000#	ND	ND	0.4	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	680	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1750**		ND	0.4	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs		0	0	1.2	1.4	0	0	0	0.53	0	0	1.4	0	0	0
HYDROCARBONS															
TVH-g		NA	NA	< 50	< 50	< 50	< 50	< 50	NA	NA	NA	< 50	< 50	< 50	< 50
TEPH-d		< 1000	< 1000	130	140	68	90	< 50	< 200	< 50	650	670	410	410	520
O&G		16000	16000	NA	NA	NA	NA	NA	NA	< 5000	< 5000	< 5000	NA	NA	NA
TPH (418.1)		NA	NA	< 5000	< 5000	< 5000	< 5000	< 5000	< 500	NA	NA	NA	NA	NA	NA
METALS															
Lead	50								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)

Well ID		OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4
Date		June-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
PURGEABLE HALOCARBONS	MCL														
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5#	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	150	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	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	3	6.1	9.4	ND	7	4	4	3
cis-1,2-Dichloroethene	6		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	ND	ND	ND	ND	ND	ND
Chloroform	100#*	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	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	ND	ND	0.49	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	100#*	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	ND	ND	ND	ND	ND	ND
Bromoform	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	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	ND	ND	ND	ND	ND	ND
Chlorobenzene	30	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	ND	ND	ND	ND
1,2-Dichlorobenzene	600#			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PURGEABLE AROMATICS															
Benzene	1	ND	ND	ND	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000#	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	680	ND	ND	ND	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1750**		ND	0.6	2	ND	ND	ND	ND	ND	ND	0.7	ND	ND	ND
TOTAL VOCs		0	0	0.6	3.4	0	0	3	6.59	9.4	0	7.7	4	4	3
HYDROCARBONS															
TVH-g		NA	NA	<50	<50	<50	<50	<50	NA	NA	NA	< 50	< 50	< 50	< 50
TEPH-d		< 1000	< 1000	150	210	150	150	<50	580	< 50	2000	2100	820	1300	2100
O&G		< 5000	< 5000	NA	NA	NA	NA	NA	NA	< 5000	< 5000	< 5000	NA	NA	NA
TPH (418.1)		NA	NA	< 5000	< 5000	< 5000	< 5000	< 5000	< 500	NA	NA	NA	NA	NA	NA
METALS															
Lead	50								ND			ND	5	ND	ND

Notes:

1) MCL = Maximum Contaminent 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)

Well ID		OW-5	OW-5	OW-5	OW-5	OW-5	OW-5
Date		Apr-91	Jul-91	Dec-91	Mar-92	Jul-92	Oct-92
PURGEABLE HALOCARBONS	MCL						
Chloromethane		ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND
Vinyl chloride	0.5	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND
Methylene Chloride	5#	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	150	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	6	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	1.8	7.2	ND	4	8	13
cis-1,2-Dichloroethene	6	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	10	ND	ND	ND	ND	ND	ND
Chloroform	100#*	ND	ND	ND	ND	ND	ND
Freon 113	1200	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	6	26	18	12	25	28
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND	ND
Bromodichloromethane	100#*	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	0.75	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND
Dibromochloromethane	100#*	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl Ether		ND	ND	ND	ND	ND	ND
Bromoform	100#*	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	0.7	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND	ND	ND
Chlorobenzene	30	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene		ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600#	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND
PURGEABLE AROMATICS							
Benzene	1	14	20	11	15	11	13
Toluene	1000#	0.54	ND	ND	1.1	ND	ND
Ethylbenzene	680	0.58	ND	ND	0.6	ND	ND
Total Xylenes	1750**	5.6	4	6.9	5.1	6	3.6
TOTAL VOCs		29.97	57.2	35.9	37.8	50	57.6
HYDROCARBONS							
TVH-g		NA	NA	NA	120	270	160
TEPH-d		600	1500	1200	840	650	1000
O&G		NA	< 5000	< 5000	< 5000	NA	NA
TPH (418.1)		< 500	NA	NA	NA	NA	NA
METALS							
Lead	50	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)

Well ID		OW-3	OW-3	OW-3	OW-3	OW-3	OW-3	OW-3	OW-3	OW-3	OW-3	OW-5	OW-5	OW-5	OW-6	OW-6
Date		Apr-88	June-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
PURGEABLE HALOCARBONS	MCL															
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5#	ND	ND	ND	ND	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	150	ND	ND	ND	ND	ND	ND	ND	ND	0.82	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	6	ND	ND	ND	ND	ND	ND	ND	ND	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
cis-1,2-Dichloroethene	6			ND	ND	33	ND	1	1	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	10	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	100#*	2	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	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	ND	ND	ND	0.55	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	10
Carbon Tetrachloride	0.5	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	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5***	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	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl Ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	30	ND	1	ND	ND	ND	ND	ND	1	2.3	2	5.7	ND	ND	ND	ND
1,3-Dichlorobenzene					3	ND	2	2	1	3.3	ND	15	ND	ND	ND	ND
1,2-Dichlorobenzene	600#				2	ND	1	1	1	2.3	ND	5.8	ND	ND	ND	ND
1,4-Dichlorobenzene	5				2	ND	ND	2	1	3.1	ND	23	ND	ND	ND	ND
PURGEABLE AROMATICS																
Benzene	1	ND	ND	ND	0.5	ND	ND	ND	ND	0.54	ND	ND	ND	ND	ND	ND
Toluene	1000#	ND	ND	ND	0.4	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	680	ND	ND	ND	ND	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1750**			ND	0.7	2.1	ND	ND	ND	ND	ND	2	ND	ND	ND	ND
TOTAL VOCs		6	8	28	37.6	59.4	20	23	20	32.81	43	51.5	1	2	2	20
HYDROCARBONS																
TVH-g		NA	NA	NA	< 50	52	< 50	< 50	< 50	NA	NA	NA	< 50	< 50	< 50	< 50
TEPH-d		< 1000	< 1000	< 1000	440	470	450	130	1310	700	< 50	5500	4900	3500	3900	5300
O&G		< 5000	< 5000	5000	NA	NA	NA	NA	NA	NA	< 5000	< 5000	< 5000	NA	NA	NA
TPH (418.1)		NA	NA	NA	< 5000	< 5000	< 5000	< 5000	< 5000	< 500	NA	NA	NA	NA	NA	NA
METALS																
Lead	50									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)

Well ID		OW-7	OW-7	OW-7	OW-7	OW-7
Date		Dec-91	Mar-92	Jul-92	Oct-92	Jan-93
PURGEABLE HALOCARBONS	MCL					
Chloromethane		ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND
Vinyl chloride	0.5	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND
Methylene Chloride	5#	14	ND	ND	ND	ND
Trichlorofluoromethane	150	ND	ND	ND	ND	ND
1,1-Dichloroethene	6	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	16	ND	ND	25
cis-1,2-Dichloroethene	6	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	10	ND	ND	ND	ND	ND
Chloroform	100#*	ND	ND	ND	ND	ND
Freon 113	1200	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	ND	460	29	60	530
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND
Bromodichloromethane	100#*	ND	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND
Dibromochloromethane	100#*	ND	ND	ND	ND	ND
2-Chloroethylvinyl Ether		ND	ND	ND	ND	ND
Bromoform	100#*	ND	ND	ND	ND	ND
Tetrachloroethylene	5	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND	ND
Chlorobenzene	30	10	ND	ND	8	ND
1,3-Dichlorobenzene		460	130	420	330	170
1,2-Dichlorobenzene	600#	120	22	95	77	33
1,4-Dichlorobenzene	5	440	120	400	290	160
PURGEABLE AROMATICS						
Benzene	1	ND	0.8	1	1.4	0.6
Toluene	1000#	ND	0.6	0.5	ND	ND
Ethylbenzene	680	ND	ND	0.5	ND	ND
Total Xylenes	1750**	ND	2.1	5	ND	ND
TOTAL VOCs		1044	751.5	951	786.4	918.6
HYDROCARBONS						
TVH-g		NA	700	1300	1400	720
TEPH-d		7100	4400	2800	3900	2300
O&G		< 5000	< 5000	NA	NA	NA
TPH (418.1)		NA	NA	NA	NA	NA
METALS						
Lead	50		ND	ND	ND	ND

Notes:

1) MCL = Maximum Contaminent 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)