Pacific Gas and Electric Company

General Construction
Gas Department
4930 Coliseum Way
Oakland, CA 94601
510/534-3265

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

March 11, 1998

Dear Mr. Chan,

Enclosed please find your copy of our latest groundwater monitoring report for our facility at 4930 Coliseum Way. If you have any concerns, please feel free to call me. Thank you for your continuing support with this project.

Respectfully Yours,

John Robinson
Field Engineer

SEMI-ANNUAL GROUNDWATER MONITORING REPORT

PACIFIC GAS & ELECTRIC
GENERAL CONSTRUCTION YARD
4930 COLISEUM WAY
OAKLAND, CA 94610

#67

February 9, 1998

CET Project No. 3666-000

Prepared for

PACIFIC GAS & ELECTRIC COMPANY
123 Mission Street
San Francisco, CA 94111

Prepared by

CET ENVIRONMENTAL SERVICES, INC.
3033 Richmond Parkway, Suite 300
Richmond, CA 94806

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Staff Engineer

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Regional Manager

REGISTERED ... No. C ... Exp. 12/31/99 CIVIL STATE OF CALIFORNIA

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APPENDICES

1.0 BACKGROUND

This report presents the results of semiannual groundwater monitoring and sampling completed in the fourth quarter of 1997 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 December 1997 monitoring and sampling event and summarizes the results from groundwater monitoring and sampling performed at the site between January 1990 and the present. As part of the groundwater monitoring program, groundwater elevations are measured, groundwater samples are collected from shallow wells on the site, and analyses of the samples are performed 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 oil. 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 as Diesel (TPH-D) at concentrations up to 3,900 mg/kg and Oil and Grease (O&G) at concentrations to 1,000 mg/kg. These results were reported in the July 1988 report "Underground Tanks Investigation" by PG&E's Technical and Ecological Services Division.

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

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

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

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

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

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

2.0 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES

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

On December 23, 1997, groundwater samples were collected by CET Environmental Services, Inc. (CET) personnel from monitoring wells OW-1, OW-2, OW-4, OW-5, OW-6, OW-7 and OW-8. Prior to sampling, four casing volumes of groundwater were purged with a bailer from each well to ensure the collection of formational water. The parameters pH and conductivity were measured periodically during purging until stabilized. 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 December 23, 1997 sampling event.

The groundwater samples collected from each well were selectively analyzed by Curtis & Tompkins, Ltd. Analytical Laboratories, Berkeley, 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) according to the analyses schedule (with one exception: OW-4 was not sampled for TPH-D). In addition, method blank analyses were performed for the purposes of quality assurance (QA) on the groundwater samples. Table 2.1 presents the current monitoring schedule with appropriate sample analyses. This schedule has been adopted with approval from the ACHCSA as provided in their letter dated July 14, 1994.

Table 2.1 Well Monitoring Schedule and Analyses

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

S = Semiannual monitoring

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

3.0 ANALYTICAL RESULTS

3.1 PETROLEUM HYDROCARBONS

Table 3.1 summarizes the analytical results for petroleum hydrocarbons detected in the groundwater samples collected on December 23, 1997. TPH-D was detected in each of the monitoring wells sampled for TPH-D and the highest concentration was observed in well OW-7. The highest concentration of TPH-G was also observed in monitoring well OW-7, located in the northern (most upgradient) corner of the site.

Table 3.1 Petroleum Hydrocarbons in Groundwater, in mg/L

Well	TPH-D	TPH-G
OW - 1	0.700	0.420
OW - 4	NA	ND
OW - 5	0.630	0.083
OW - 6	1.200	0.160
OW - 7	2.100	1.100

Notes:

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

Figures 3.1 and 3.2 illustrate the historical concentrations of TPH-D in the monitored wells. For samples which reported TPH-D as not detected, one half of the reporting limit was used in preparing these figures. 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 (April 1997), this quarter's results show a decrease in TPH-D concentrations in wells OW-1, OW-5, OW-6, and OW-7. 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.

Historically, TPH-D concentrations in monitoring well OW-5, located near the northwest property line, have fluctuated around 1,000 µg/L. The most recent sampling event yielded a concentration

of 630 µg/L. Monitoring well OW-1 had TPH-D concentrations near 2,000 µg/L in 1993, averaging 1,250 µg/L in 1994, about 1,000 µg/L in 1995, averaging 1,850 in 1996, and averaging 1,100 µg/L in 1997. Monitoring well OW-6 had a concentration of 1,200 µg/L in the most recent event, showing a decrease from 1,300 µg/L in the April 1997 event.

TPH-G has been consistently below 500 µg/L in all wells except upgradient wells OW-1, and OW-7. Historically, OW-7 has had concentrations ranging from 650 to 1,800 µg/L. The current TPH-G concentrations for OW-1 and OW-7 are 420 µg/L and 1,100 µg/L respectively. Figures 3.3 and 3.4 illustrate the historical concentrations of TPH-G. Between January 1991 and March 1992 the analyses were not performed. Monitoring of TPH-G concentrations in OW-2 is no longer performed due to non-detections in these wells. Relative to the previous sampling results, TPH-G concentrations have decreased in OW-1, remained steady in OW-7, and increased in OW-5 and OW-6. Current sampling results were non-detect for well OW-4.

3.2 LEAD

Table 3.2 presents the results of this quarter's groundwater analyses for lead. The state MCL for lead in drinking water is 50 µg/L. Samples were collected and analyzed for dissolved lead (filtered) in December of 1997. During this quarter's event, lead was not detected in the monitoring wells which were sampled for lead. Historically, all samples show concentrations below the 50 µg/L drinking water MCL. The highest historical concentration of lead was 27 µg/L in OW-8, sampled in April 1993.

Table 3.2 Lead in Groundwater, in µg/L

Well Number	State MCL	Reporting Limit	Dissolved Lead
OW-2	50	3.0	ND
OW-5	50	3.0	ND
OW-8	50	3.0	ND

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

3.3 VOLATILE ORGANIC COMPOUNDS

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: Benzene, 1,1-Dichloroethane (1,1-DCA), Chlorobenzene, and 1,4-Dichlorobenzene (1,4-DCB). Benzene was detected in monitoring well OW-5 at a concentration of 15 µg/L and monitoring well OW-7 at a concentration of 1.6 µg/L. 1,1-DCA was detected in monitoring wells OW-6 and OW-7 at concentrations of 7.7 and 9.8 µg/L, respectively. Chlorobenzene was detected in monitoring well OW-7 at 46 µg/L. 1,4-DCB was detected in monitoring wells OW-6 and OW-7 at 140 and 530 µg/L, respectively.

VOCs detected at concentrations below their MCLs included Benzene in well OW-6, Ethyl benzene in wells OW-6 and OW-7, Xylenes in wells OW-5 and OW-7, 1,1-Dichloroethane in well OW-5, Chlorobenzene in well OW-6, 1,3-Dichlorobenzene (1,3-DCB) in wells OW-6 and OW-7, 1,2-Dichlorobenzene (1,2-DCB) in wells OW-6 and OW-7, and 1,1,1-Trichloroethane (TCA) in well OW-7.

Figures 3.5 and 3.6 show the historical concentrations of total VOCs in the on-site monitoring wells. Figure 3.5 shows the concentrations of total VOCs in wells OW-1, OW-2 and OW-4. Of these wells, only OW-1 is presently monitored for VOCs, and these include only the BTEX fraction. From January 1994 to before the December 1997 sampling event, no BTEX was detected in well OW-1. Benzene, Ethyl Benzene and Xylene were detected in the December 1997 sample at concentrations of 0.66, 2.3, and 1.1 µg/L, respectively.

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 20.64, 261.5 and 1107 µg/L, respectively. Total VOC concentrations in each of these wells increased relative to the previous sampling event in the second quarter of 1997. These three wells lie within ten feet of the northeast and/or northwest property lines of the site. Groundwater elevation monitoring consistently indicates that the groundwater flow direction is from the north or northeast from neighboring properties onto the PG&E site. This demonstrates that VOCs are migrating onto the PG&E site from an upgradient source.

southerly

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

PURGEABLE HALOCARBONS	MCL	Well Number			
		OW-5	OW-6	OW-7	MB
Chloromethane		ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND
Vinyl chloride	0.5	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND
Methylene Chloride	5#	ND	ND	ND	ND
Trichlorofluoromethane	150	ND	ND	ND	ND
1,1-Dichloroethene	6	ND	ND	ND	ND
1,1-Dichloroethane	5	2.9	[redacted]	[redacted]	ND
cis-1,2-Dichloroethene	6	ND	ND	ND	ND
trans-1,2-Dichloroethene	10	ND	ND	ND	ND
Chloroform	100#*	ND	ND	ND	ND
Freon 113	1200	ND	ND	ND	ND
1,2-Dichloroethane	0.5	ND	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	31	ND
Carbon Tetrachloride	0.5	ND	ND	ND	ND
Bromodichloromethane	100#*	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND
cis-1,3-Dichloropropene	5***	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND
1,1,2-Trichloroethane	32	ND	ND	ND	ND
trans-1,3-Dichloropropene	5***	ND	ND	ND	ND
Dibromochloromethane	100#*	ND	ND	ND	ND
2-Chloroethylvinyl Ether		NA	NA	NA	NA
Bromoform	100#*	ND	ND	ND	ND
Tetrachloroethylene	5	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND
Chlorobenzene	30	ND	26	[redacted]	ND
1,3-Dichlorobenzene	600#	ND	46	360	ND
1,2-Dichlorobenzene	600#	ND	6.3	57	ND
1,4-Dichlorobenzene	5	ND	[redacted]	[redacted]	ND
PURGEABLE AROMATICS					
Benzene	1	[redacted]	0.5	[redacted]	ND
Toluene	1000#	ND	ND	ND	ND
Ethylbenzene	680	ND	35	70	ND
Total Xylenes	1750**	2.74	ND	1.1	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)

[redacted] Exceeded MCL

4.0 GROUNDWATER FLOW DIRECTION

Water level measurements in the site monitoring wells were collected on December 23, 1997, prior to groundwater sampling. Groundwater elevations are shown in relation to a site specific coordinate system reported in previous reports. The top of casing (TOC) elevations for each of the wells are based upon an assumed TOC elevation of 10 feet at OW-1.

The groundwater elevations measured on December 23, 1997 and the resulting gradient direction, are presented in Figure 4.1. Historical groundwater elevations along with TOC elevations for each well are presented as a graph in Figure 4.2. The groundwater flow direction was calculated from groundwater elevations in OW-1, OW-2, OW-4, OW-5, OW-6, and OW-7, and indicates the local groundwater flow direction on this date was 0.007 ft/ft due south. This flow direction is consistent with those observed since monitoring began in 1988. The lead mitigation cap now limits direct precipitative recharge in the area between wells OW-2 and OW-5, and OW-8. The majority of the remaining site area has also been paved.

5.0 CAP INSPECTION

The small areas of cracking or crumbling asphalt which were noted in the previous report were repaired by PG&E. The cap will be inspected again by CET prior to the next semi-annual report.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

The following conclusions are made based upon the results of analyses performed on groundwater samples collected on April 8 and June 13, 1997 from monitoring wells OW-1, OW-2, OW-4, OW-5, OW-6, OW-7 and OW-8, and from prior quarterly sampling results.

- Groundwater flow across the site appears to be to the south, consistent with the historical flow direction. Groundwater gradient at 0.007 ft/ft was also consistent with historical data.

- TPH characterized as diesel (TPH-D) was detected in wells OW-1,OW-5, OW-6 and OW-7 above the reporting limits of 50 µg/L. Well OW-4 was not analyzed for TPH-D this quarter. The highest concentration was found in well OW-7 at 2,100 µg/L. Moderate TPH-D concentrations in groundwater have persisted in wells located in the northeastern portion of the property since the soils source removal remedial action taken at their locations and are thought to be attributable to remaining upgradient and off-site sources. TPH-D in groundwater has no regulatory action limits but is being assessed on a case-by-case basis by the regulators.

- TPH-D was detected in well OW-1 at 700 µg/L, well below the maximum historical concentration of 3,900 µg/L observed in July of 1992. OW-1 is downgradient of a former diesel tank location.

- Monitoring wells OW-1, OW-5, OW-6 and OW-7 had TPH-G concentrations of 420, 83, 160, and 1,100 µg/L, respectively. TPH-G was not detected in well OW-4. Upgradient well OW-7 continues to have the highest concentration of TPH-G, whose presence is thought to be attributable to remaining upgradient and off-site sources.

- Soluble lead concentrations were not detected in monitoring wells OW-2, OW-5 and OW-8. The MCL for lead in drinking water is 50 µg/L.

- Wells OW-5, OW-6 and OW-7 lie at the upgradient portions of the site and historically have had the highest concentrations of TPH-G and VOCs. VOC concentrations are particularly elevated in OW-7, averaging near 1,000 µg/L. The concentration of total VOCs in each of these wells increased this quarter relative to the previous sampling event. This indicates an upgradient, off site source of fuel and solvent contamination located north of the subject site.

- The MCL for Benzene was exceeded in monitoring well OW-5 and OW-7. Concentrations of 1,1-DCA above the MCL were detected in monitoring wells OW-6 and OW-7. Chlorobenzene was detected in monitoring well OW-7 above its MCL, and 1,4-DCB was detected in monitoring wells OW-6 and OW-7 above its MCL. These and other VOCs detected are thought to originate from off-site sources.

- No Methylene Chloride was detected at the site in the most recent monitoring event.

6.2 RECOMMENDATIONS

- Continue monitoring in conformance with the revised ACHCSA schedule.

- An unidentified upgradient source of TPH-D, TPH-G and VOCs north of the subject property is clearly indicated by the groundwater monitoring data. Based on this finding, it is recommended that PG&E enter into discussions with the involved regulatory agencies to investigate and pursue those responsible for the groundwater contaminants entering the PG&E property.

APPENDIX A

Sample Collection Records
Certified Laboratory Results

APPENDIX B

Historical Monitoring Data

APPENDIX C

Figures

SAMPLE COLLECTION RECORD - MONITOR WELL

Date: 12-23-97 Sample I.D.: CW1 Job No.: 3666

Site Location: Flint Petroleum Mfg

No. of Containers: 7 / (Check one): ✓ Well Samples;

_____ Duplicates from well _____; _____ Travel Blanks; _____ Field Blanks;

_____ Other (explain) _____

W.L. (1/100'): 2.84 Date: 12/23/97 Time: 11:31 B.O.W.(1/2'): 18'

Method: ✓ Electric Well Sounder; _____ Other/_____

Meters Calibrated: Date: 12/23/97 By: VA

Calculated Purge Volume (4 casing volumes): 10 Gallons

3S
.16
1.90
13
2.40
4
9.60

Purging Method: ✓ Disposable Bailer; _____ Teflon Bailer;

_____ Whale SuperSub 920 submersible pump; _____ Other/Specify_____

Time Start Purging (24 hr): 11:32, Product: Y / (N), Sheen: Y / (N),
Odor: Y / (N), Vapor: _____ ppm / %LEL, Color: clear

Time Stop Purging (24 hr): 11:55, Product: Y / (N), Sheen: Y / (N),
Odor: Y / (N) Vapor: _____ ppm / %LEL, Color: cloudy

Time (24 hr)	H_2O (gal)	Temp. (C)	pH	Cond. (uS)	TDS (ppm)	Turbid. (NTU)	D.O. (ppm)
11:37	2.5	18.8	7.38	700			
:43	5	20.3	7.33	650			
11:49	7.5	20.5	7.32	680			
11:55	10	20.1	7.27	300			
:							

Sample Collection Time (24 hr): 12:05

Notes: Cond meter doesn't appear to be working - not reading temp

Collected By (signature): VA

SPLFRM.MW

SAMPLE COLLECTION RECORD - MONITOR WELL

Date: 12 - 23 - 97 Sample I.D.: OW2 Job No.: 3066-000

Site Location: POSE Col Tway

No. of Containers: 1 / (Check one): ✓ Well Samples;

_____ Duplicates from well _____; _____ Travel Blanks; _____ Field Blanks;

_____ Other (explain) _____

W.L. (1/100'): 1.89 Date: 12/23/97 Time: 10:47 B.O.W.(1/2'): 17'

Method: ✓ Electric Well Sounder; _____ Other/_____

Meters Calibrated: Date: 12/23/97 By: VA

Calculated Purge Volume (4 casing volumes): 8 Gallons

1
12
.16
72
3 1 2
9
7.6 8

Purging Method: ✓ Disposable Bailer; _____ Teflon Bailer;

_____ Whale SuperSub 920 submersible pump; _____ Other/Specify_____

Time Start Purging (24 hr): 10:47, Product: Y / (N), Sheen: Y / (N),

Odor: Y / (N), Vapor: _____ ppm / %LEL, Color: clear

Time Stop Purging (24 hr): 11:19, Product: Y / (N), Sheen: Y / (N),

Odor: Y / (N), Vapor: _____ ppm / %LEL, Color: clear, ~~slightly~~ turbid

Time (24 hr)	H_2O (gal)	Temp. (C)	pH	Cond. (uS)	TDS (ppm)	Turbid. (NTU)	D.O. (ppm)
10:52	2	19.7	7.55	650			
10:59	4	19.8	7.31	400			
11:12	6	19.8	7.40	1250			
11:19	8	19.9	7.48	1200			
:___							

Sample Collection Time (24 hr): 11:25

Notes: note: conductivity meter doesn't appear to be working correctly - won't read temp - am using temp settings from the pH meter

Collected By (signature): _____

SPLFRM.MW

SAMPLE COLLECTION RECORD - MONITOR WELL

Date: 12 - 23 - 97 Sample I.D.: OW4 Job No.: 36666

Site Location: PG&E Colma

No. of Containers: 3 / (Check one): ✓ Well Samples;

_____ Duplicates from well _____; _____ Travel Blanks; _____ Field Blanks;

_____ Other (explain) _____

W.L. (1/100'): 7.43 Date: 12/23/97 Time: 15:37 B.O.W.(1/2'): 19.9

Method: ✓ Electric Well Sounder; _____ Other/_____

Meters Calibrated: Date: 12/23/97 By: _____

Calculated Purge Volume (4 casing volumes): 11 Gallons

Purging Method: ✓ Disposable Bailer; _____ Teflon Bailer;

_____ Whale SuperSub 920 submersible pump; _____ Other/Specify_____

Time Start Purging (24 hr): 15:40, Product: Y / N , Sheen: Y / N ,

Odor: Y / N , Vapor: _____ ppm / %LEL , Color: _____

Time Stop Purging (24 hr): _____, Product: Y / N , Sheen: Y / N ,

Odor: Y / N , Vapor: _____ ppm / %LEL , Color: _____

Time (24 hr)	H_2O (gal)	Temp. (C)	pH	Cond. (uS)	TDS (ppm)	Turbid. (NTU)	D.O. (ppm)
12:44	3	19.6	7.64	600			
12:48	5.5	18.9	7.63	600			
5:56	8.5	19.1	7.45	600			
16:01	11	18.9	7.61	600			
:							

Sample Collection Time (24 hr): 16:10

Notes: _____

Collected By (signature): _____

SPLFRM.MW

SAMPLE COLLECTION RECORD - MONITOR WELL

Date: 12-23-97 Sample I.D.: OW5 Job No.: 3666

Site Location: Flake Coliseum Wing

No. of Containers: 8 / (Check one): ✓ Well Samples;

_____ Duplicates from well _____; _____ Travel Blanks; _____ Field Blanks;

_____ Other (explain) _____

W.L. (1/100'): 2.82 Date: 12-23-97 Time: 8:33 B.O.W.(1/2'): 19

Method: ✓ Electric Well Sounder; _____ Other/_____

Meters Calibrated: Date: 12/23/97 By: VA

Calculated Purge Volume (4 casing volumes): 10.2 Gallons

3
16
.16
196
14
2.56
4
10.24

Purging Method: ✓ Disposable Bailer; _____ Teflon Bailer;

_____ Whale SuperSub 920 submersible pump; _____ Other/Specify_____

Time Start Purging (24 hr): 8:41, Product: Y / (N), Sheen: Y / (N),
Odor: Y / (N), Vapor: _____ ppm / %LEL, Color: clear

Time Stop Purging (24 hr): 09:40, Product: Y / (N), Sheen: Y / (N),
Odor: Y / (N), Vapor: _____ ppm / %LEL, Color: clear

Time (24 hr)	H_2O (gal)	Temp. (C)	pH	Cond. (uS)	TDS (ppm)	Turbid. (NTU)	D.O. (ppm)
08:49	2	15.9	5.99	275			
08:56	4	15.4	5.70	280			
09:13	6	15.7	5.90	285			
09:18	8.5	15.9	5.73	290			
09:40	10.5	15.5	6.03	305			

Sample Collection Time (24 hr): 9:45

Notes: _____

Collected By (signature): _____

SPLFRM.MW

SAMPLE COLLECTION RECORD - MONITOR WELL

Date: 12-23-97 Sample I.D.: MW6 Job No.: 3666

Site Location: PG&E Cal Zero

No. of Containers: 7 / (Check one): ✓ Well Samples;

_____ Duplicates from well _____; _____ Travel Blanks; _____ Field Blanks;

_____ Other (explain) _____

W.L. (1/100'): 3.12 Date: 12/23/97 Time: 14:43 B.O.W.(1/2'): 17'

Method: ✓ Electric Well Sounder; _____ Other/_____

Meters Calibrated: Date: 12/23/97 By: VA

Calculated Purge Volume (4 casing volumes): 11.5 Gallons

Purging Method: ✓ Disposable Bailer; _____ Teflon Bailer;

_____ Whale SuperSub 920 submersible pump; _____ Other/Specify_____

Time Start Purging (24 hr): 14:45, Product: Y / (N), Sheen: Y / (N),

Odor: Y / (N), Vapor: _____ ppm / %LEL, Color: clear

Time Stop Purging (24 hr): 15:15, Product: Y / (N), Sheen: Y / (N),

Odor: Y / (N), Vapor: _____ ppm / %LEL, Color: clear

Time (24 hr)	H_2O (gal)	Temp. (C)	pH	Cond. (uS)	TDS (ppm)	Turbid. (NTU)	D.O. (ppm)
14:50	3	19.3	7.99	550			
14:56	5.5	19.0	7.91	650			
15:10	8.5	19.1	7.89	680			
15:15	11.5	19.0	7.96	650			
:__							

Sample Collection Time (24 hr): 15:20

Notes: _____

Collected By (signature): _____

SPLFRM.MW

SAMPLE COLLECTION RECORD - MONITOR WELL

Date: 12-23-97 Sample I.D.: OW7 Job No.: 3161616

Site Location: Hope Coliseum Way

No. of Containers: 7 / (Check one): ✓ Well Samples;

_____ Duplicates from well _____; _____ Travel Blanks; _____ Field Blanks;

_____ Other (explain) _____

W.L. (1/100'): 7.52 Date: 12/23/97 Time: 8.52 B.O.W.(1/2'): 18.5

Method: ✓ Electric Well Sounder; _____ Other/_____

Meters Calibrated: Date: 12/23/97 By: VA

Calculated Purge Volume (4 casing volumes): 9 Gallons

Purging Method: ✓ Disposable Bailer; _____ Teflon Bailer;

_____ Whale SuperSub 920 submersible pump; _____ Other/Specify_____

2
14
.16
184
14
2.24
4
8.96

Time Start Purging (24 hr): 13:55, Product: Y / N, Sheen: Y / N,

Odor: Y / N, Vapor: _____ ppm / %LEL, Color: _____

Time Stop Purging (24 hr): 14:18, Product: Y / (N), Sheen: Y / (N),

Odor: Y / (N), Vapor: _____ ppm / %LEL, Color: Clear

Time (24 hr)	H_2O (gal)	Temp. (C)	pH	Cond. (uS)	TDS (ppm)	Turbid. (NTU)	D.O. (ppm)
13:58	2	19.4	7.51	700			
14:05	4.5	18.8	7.54	~~480~~ NA			
14:10	7	18.7	7.33	1080			
14:18	9	18.8	7.26	1020			
:_____							

Sample Collection Time (24 hr): 14:20

Notes: _____

Collected By (signature): _____

SPLFRM.MW

SAMPLE COLLECTION RECORD - MONITOR WELL

Date: 12-23-97 Sample I.D.: GW8 Job No.: 3666

Site Location: Pelt Collision Way

No. of Containers: 1 / (Check one): ✓ Well Samples;

_____ Duplicates from well _____; _____ Travel Blanks; _____ Field Blanks;

_____ Other (explain) _____

W.L. (1/100'): 2.79 Date: 12/23/97 Time: 10:07 B.O.W.(1/2'): 16

Method: ✓ Electric Well Sounder; _____ Other/_____

Meters Calibrated: Date: 12/23/97 By: VA

Calculated Purge Volume (4 casing volumes): 8.2 Gallons

Purging Method: ✓ Disposable Bailer; _____ Teflon Bailer;

_____ Whale SuperSub 920 submersible pump; _____ Other/Specify_____

Time Start Purging (24 hr): 10:10, Product: Y / (N), Sheen: Y / (N),

Odor: Y / (N), Vapor: _____ ppm / %LEL, Color: clear

Time Stop Purging (24 hr): 10:34, Product: Y / (N), Sheen: Y / (N)

Odor: Y / (N), Vapor: _____ ppm / %LEL, Color: light brown

Time (24 hr)	H_2O (gal)	Temp. (C)	pH	Cond. (uS)	TDS (ppm)	Turbid. (NTU)	D.O. (ppm)
10:13	2	19.7	6	450			
10:18	4	19.5	6	420			
10:26	6	20.1	7.07	450			
10:34	8.5	20.9	7.04	420			
:_____							

Sample Collection Time (24 hr): 10:35

Notes: _____

Collected By (signature): _____

LFRM.MW

1
13
.16
.78
13
208
4
8.16

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

ANALYTICAL REPORT

Prepared for:

CET Environmental Services
3033 Richmond Parkway
Suite 300
Richmond, CA 94806

Date: 09-JAN-98
Lab Job Number: 131816
Project ID: 3666-001
Location: PG&E COLISEUM WY.

Reviewed by: Damara Moore

Reviewed by: Tracy Bibza

CLIENT: CET Environmental Services
PROJECT ID: 3666-001
LOCATION: PG&E COLISEUM WY.
MATRIX: Filtrate

DATE REPORTED: 01/09/98

Metals Analytical Report

Lead

Sample ID	Lab ID	Sample Date	Receive Date	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
OW2	131816-001	12/23/97	12/23/97	ND	3.0	1	38347	EPA 6010A	01/08/98
OW5	131816-004	12/23/97	12/23/97	ND	3.0	1	38347	EPA 6010A	01/08/98
OW8	131816-007	12/23/97	12/23/97	ND	3.0	1	38347	EPA 6010A	01/08/98

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

CLIENT: CET Environmental Services
JOB NUMBER: 131816

DATE REPORTED: 01/09/98

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Lead	ND	3	ug/L	1	38347	EPA 6010A	01/08/98

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: ET Environmental Services
JOB NUMBER: 131816

DATE REPORTED: 01/09/98

BATCH QC REPORT
LABORATORY CONTROL SAMPLE

Compound	Spike Amt	Result	Units	% Rec.	QC Batch	Method	Analysis Date
Lead	500	518	ug/L	104	38347	EPA 6010A	01/08/98

Curtis & Tompkins, Ltd.

CLIENT: CET Environmental Services
JOB NUMBER: 131816

DATE REPORTED: 01/09/98

BATCH QC REPORT
MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Compound	Sample	Sample Result	Spike Amount	MS Result	MSD Result	Units	MS% Rec.	MSD% Rec.	Rec. Limit	RPD %	RPD Lim	QC Batch	Method	Analysis Date
Lead	131825-001	<3.000	500	521	522	ug/L	104	104	65-135	0	35	38347	EPA 6010A	01/08/98

TEH-Tot Ext Hydrocarbons

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8015M
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
131816-002	OW1	38412	12/23/97	01/06/98	01/08/98	
131816-004	OW5	38412	12/23/97	01/06/98	01/08/98	
131816-005	OW6	38412	12/23/97	01/06/98	01/08/98	
131816-006	OW7	38412	12/23/97	01/06/98	01/08/98	

Matrix: Water

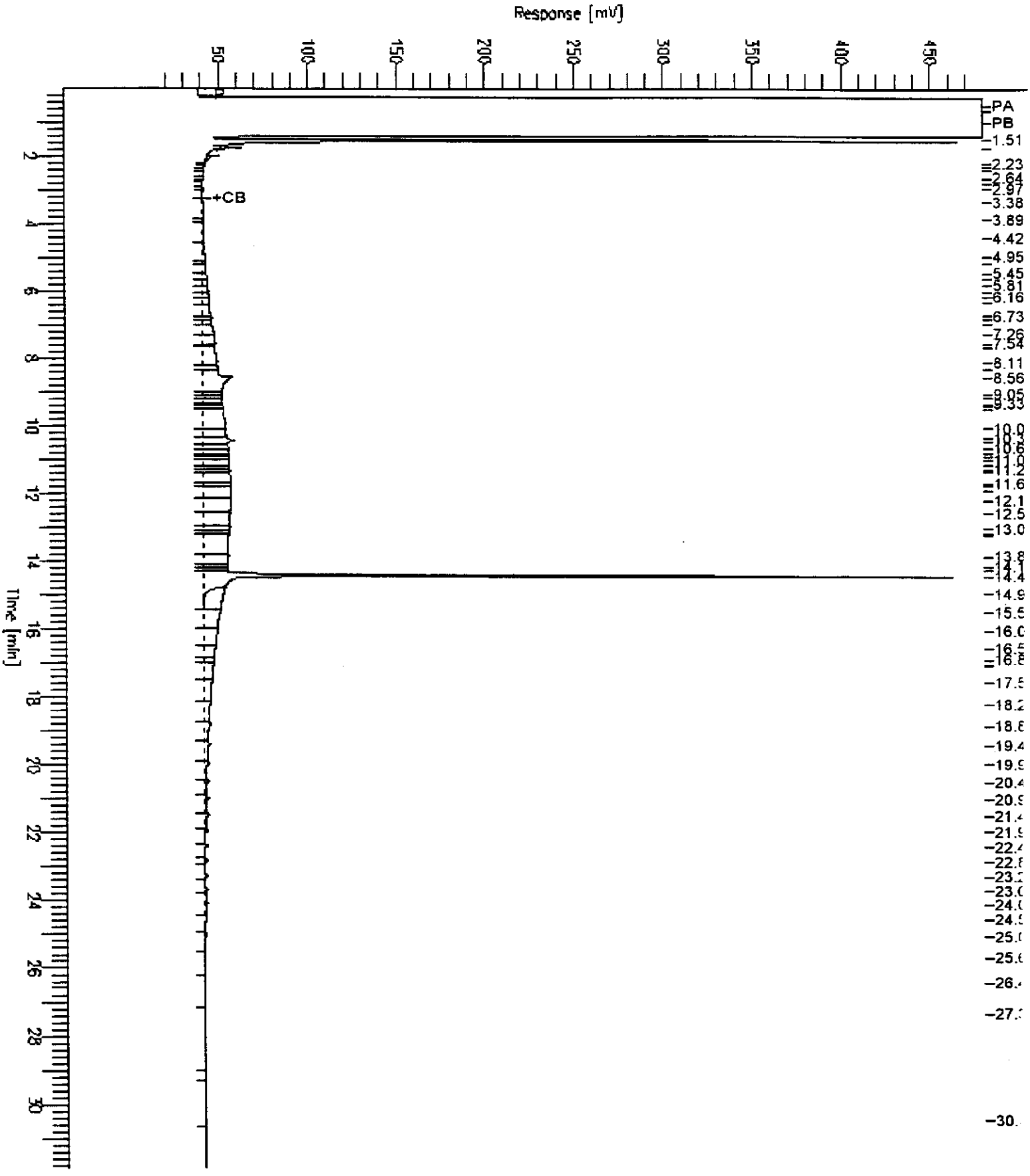
Analyte	Units	131816-002	131816-004	131816-005	131816-006
Diln Fac:		1	1	1	1
Diesel C12-C22	ug/L	700 YH	630 YH	1200 YH	2100 YH
Surrogate					
Hexacosane	%REC	78	86	83	82

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard

GC15 Channel B TEH

Sample Name : 131816-002,38412
FileName : G:\GC15\CHB\007B034.RAW
Method : B356TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 15 mV

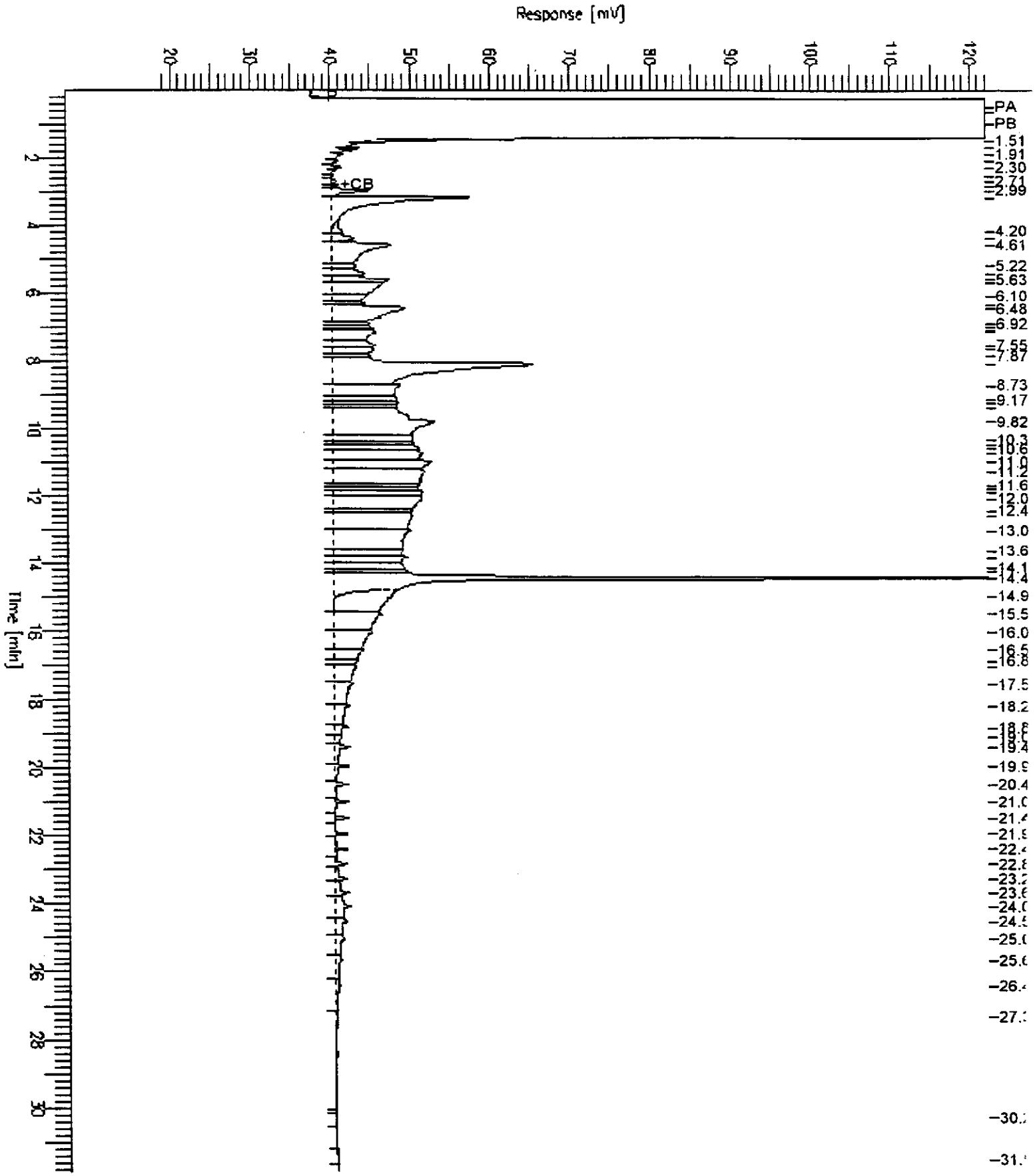
Sample #: 38412 Page 1 of 1
Date : 1/9/98 10:44 AM
Time of Injection: 1/8/98 02:51 PM
Low Point : 15.40 mV High Point : 479.87 mV
Plot Scale: 464.5 mV



GC15 Channel B TEH

Sample Name : 131816-004,38412
FileName : G:\GC15\CHB\007B038.RAW
Method : B356TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 19 mV

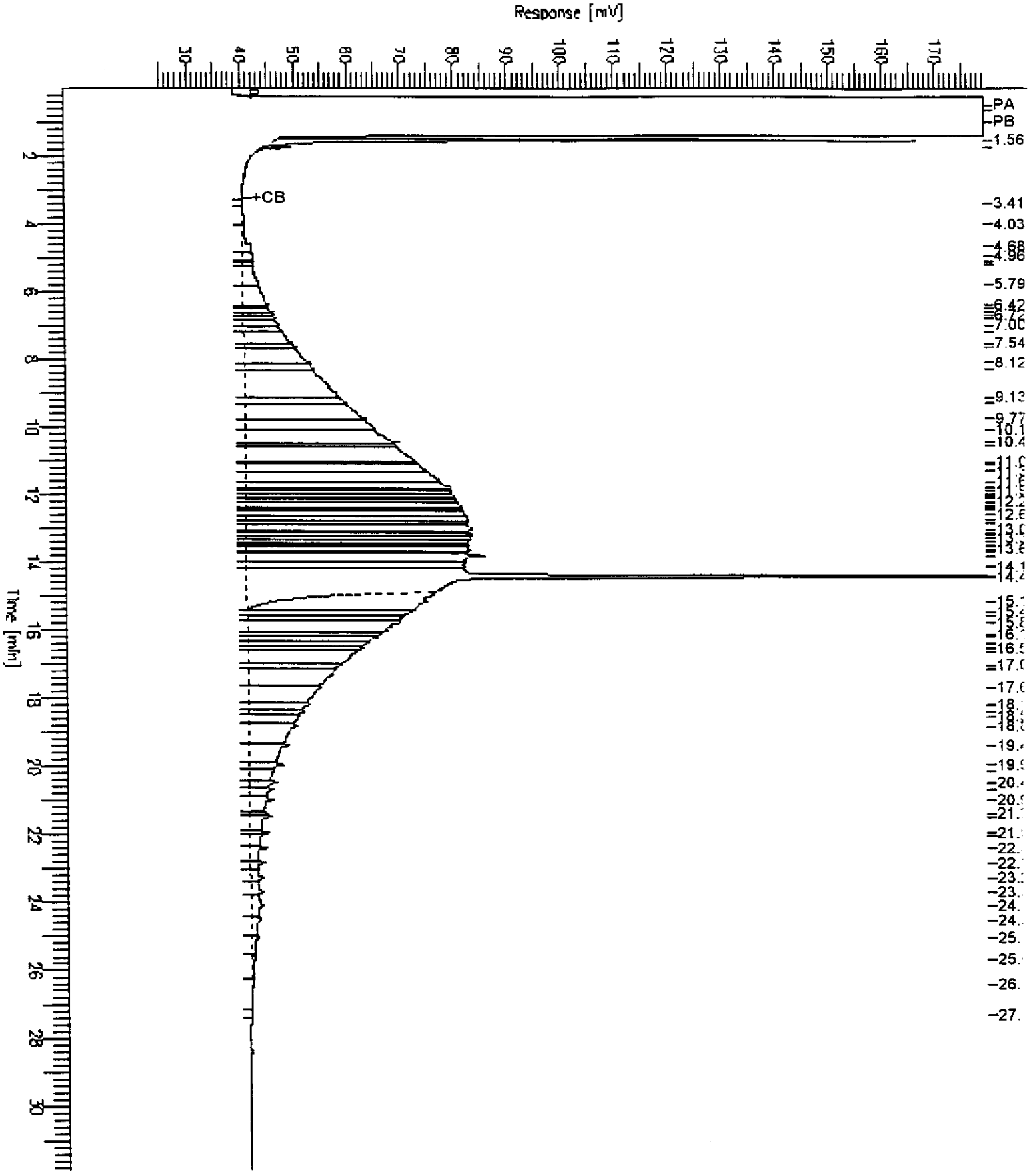
Sample #: 38412 Page 1 of 1
Date : 1/9/98 10:50 AM
Time of Injection: 1/8/98 05:43 PM
Low Point : 18.51 mV High Point : 122.02 mV
Plot Scale: 103.5 mV



GC15 Channel B TEH

Sample Name : 131816-005,38412
FileName : G:\GC15\CHB\007B036.RAW
Method : B356TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 25 mV

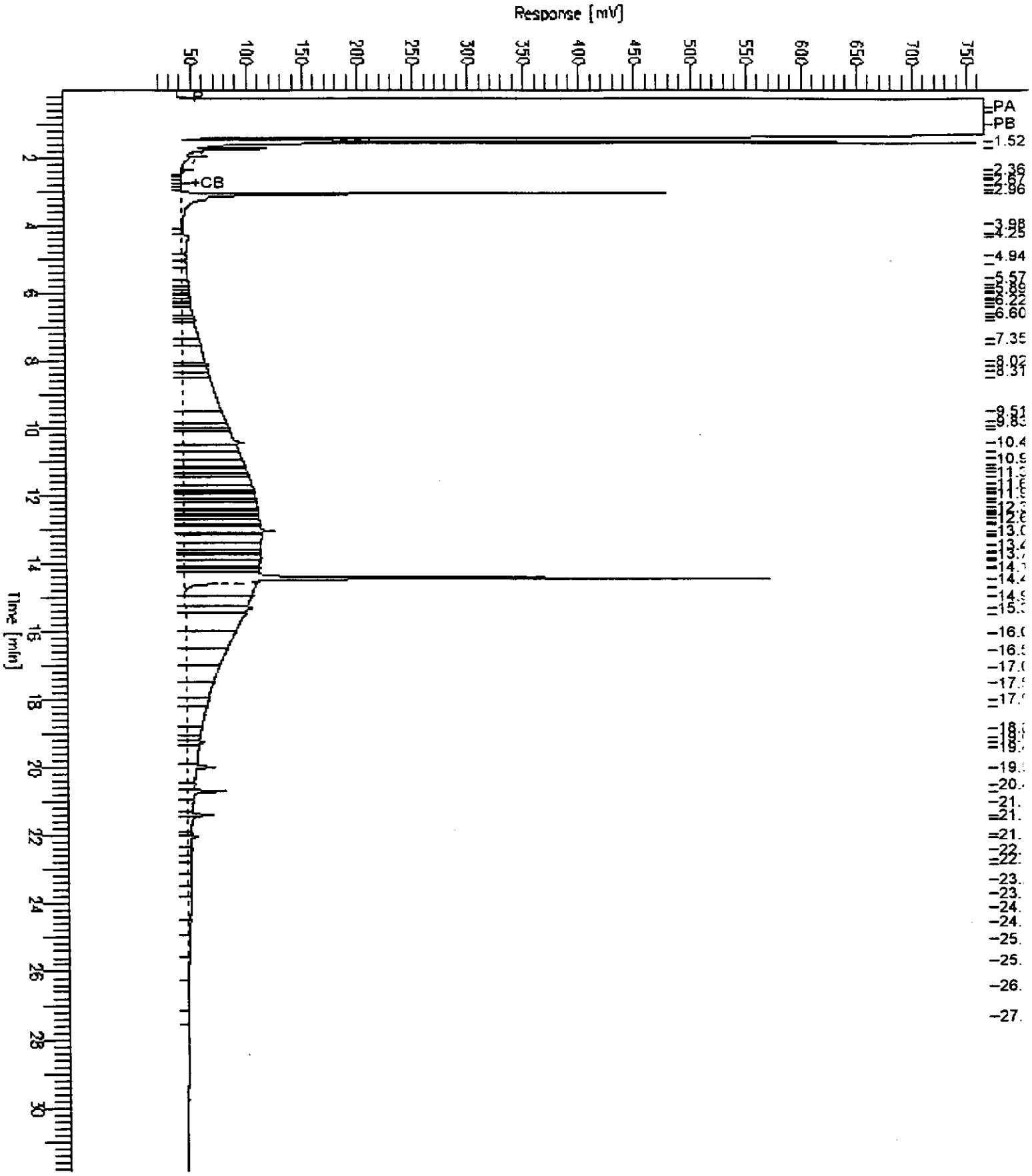
Sample #: 38412 Page 1 of 1
Date : 1/9/98 10:47 AM
Time of Injection: 1/8/98 04:17 PM
Low Point : 24.60 mV High Point : 179.35 mV
Plot Scale: 154.8 mV



GC15 Channel B TEH

Sample Name : 131816-006,38412
FileName : G:\GC15\CHB\007B037.RAW
Method : B356TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 19 mV

Sample #: 38412 Page 1 of 1
Date : 1/9/98 10:49 AM
Time of Injection: 1/8/98 05:00 PM
Low Point : 18.94 mV High Point : 765.71 mV
Plot Scale: 746.8 mV

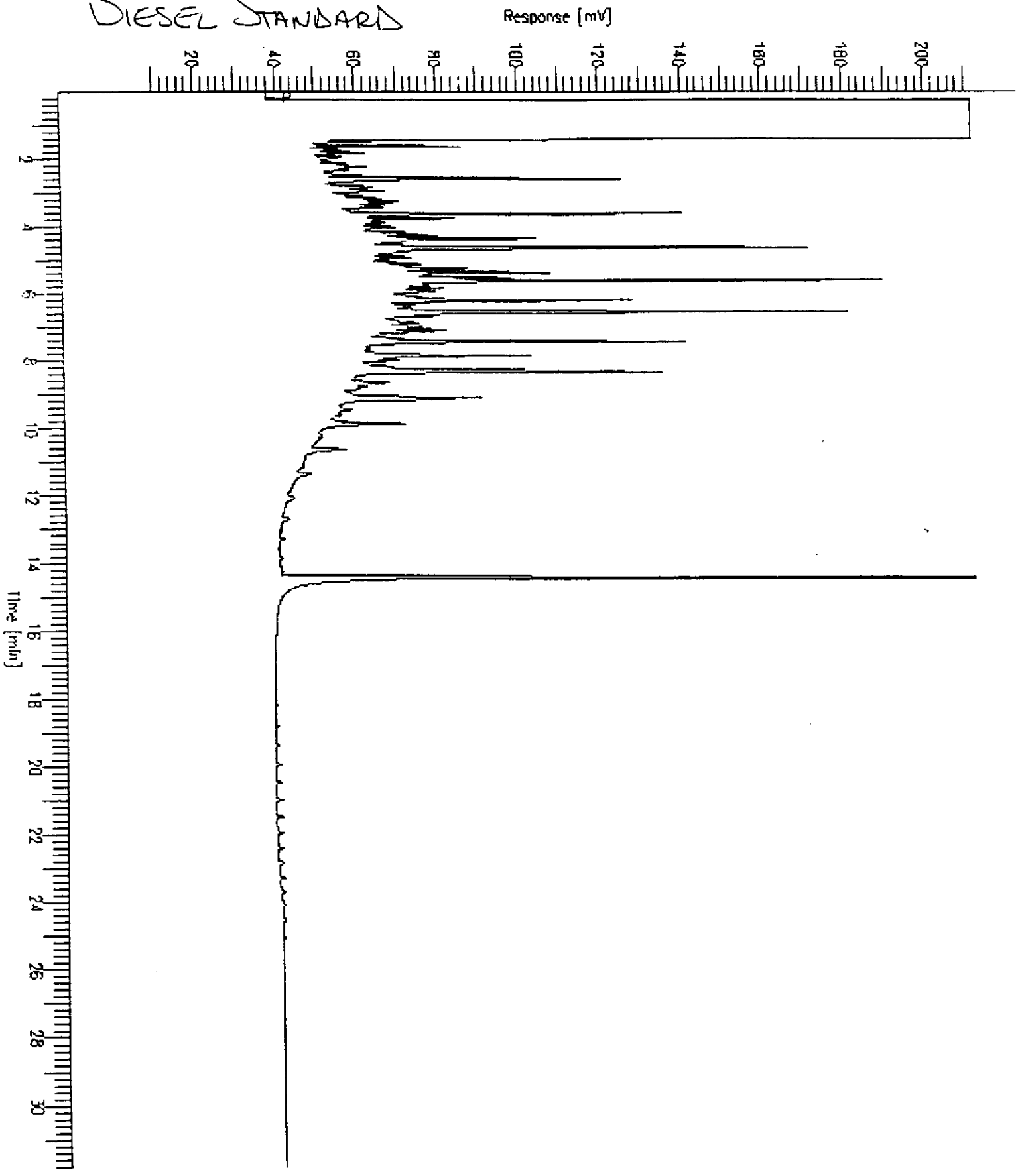


GC15 Channel B TEH

Sample Name : CCV,97WS5204,DS
FileName : G:\GC15\CHB\007B031.RAW
Method : B356TEH.MTH
Start Time : 0.01 min End Time : 31.85 min
Scale Factor: 0.0 Plot Offset: 10 mV

Sample #: 500MG/L Page 1 of 1
Date : 1/8/98 01:56 PM
Time of Injection: 1/8/98 12:58 PM
Low Point : 9.75 mV High Point : 211.69 mV
Plot Scale: 201.9 mV

DIESEL STANDARD



BATCH QC REPORT

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client:	CET Environmental Services	Analysis Method:	EPA 8015M
Project#:	3666-001	Prep Method:	EPA 3520
Location:	PG&E COLISEUM WY.		

METHOD BLANK

Matrix:	Water	Prep Date:	01/06/98
Batch#:	38412	Analysis Date:	01/08/98
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC61756

Analyte	Result	
Diesel C12-C22	<50	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	102	60-140

TEH-Tot Ext Hydrocarbons

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8015M
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 38412
Units: ug/L
Diln Fac: 1

Prep Date: 01/06/98
Analysis Date: 01/08/98

BS Lab ID: QC61757

Analyte	Spike Added	BS	%Rec	#	Limits
Diesel C12-C22	2475	1945	79		60-140
Surrogate	**%Rec**	**Limits**			
Hexacosane	91	60-140			

BSD Lab ID: QC61758

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
Diesel C12-C22	2475	2041	82		60-140	5		35
Surrogate	**%Rec**	**Limits**						
Hexacosane	97	60-140						

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: TVH
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
131816-002	OW1	38395	12/23/97	01/06/98	01/06/98	
131816-003	OW4	38395	12/23/97	01/06/98	01/06/98	
131816-004	OW5	38395	12/23/97	01/06/98	01/06/98	
131816-005	OW6	38395	12/23/97	01/06/98	01/06/98	

Matrix: Water

Analyte	Units	131816-002	131816-003	131816-004	131816-005
Diln Fac:		1	1	1	1
Gasoline C7-C12	ug/L	420 Z	<50	83 Z	160 Z
Surrogate					
Bromofluorobenzene	%REC	111	77	101	101

Z: Sample exhibits unknown single peak or peaks

TVH-Total Volatile Hydrocarbons

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: TVH
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
131816-006	OW7	38395	12/23/97	01/06/98	01/06/98	
131816-008	DI	38395	12/23/97	01/06/98	01/06/98	

Matrix: Water

Analyte	Units	131816-006	131816-008
Diln Fac:		1	1
Gasoline C7-C12	ug/L	1100 Z	<50
Surrogate			
Bromofluorobenzene	%REC	115	71

Z: Sample exhibits unknown single peak or peaks

BTXE

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
131816-002	OW1	38395	12/23/97	01/06/98	01/06/98	
131816-003	OW4	38395	12/23/97	01/06/98	01/06/98	
131816-004	OW5	38395	12/23/97	01/06/98	01/06/98	
131816-005	OW6	38395	12/23/97	01/06/98	01/06/98	

Matrix: Water

Analyte	Units	131816-002	131816-003	131816-004	131816-005
Diln Fac:		1	1	1	1
Benzene	ug/L	0.66	<0.5	15	0.5
Toluene	ug/L	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	ug/L	2.3C	<0.5	<0.5	35
m,p-Xylenes	ug/L	1.1	<0.5	1.8	<0.5
o-Xylene	ug/L	<0.5	<0.5	0.94	<0.5
Surrogate					
Trifluorotoluene	%REC	83	83	77	85
Bromofluorobenzene	%REC	80	70	75	77

C: Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two

BTXE

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
131816-006	OW7	38395	12/23/97	01/06/98	01/06/98	

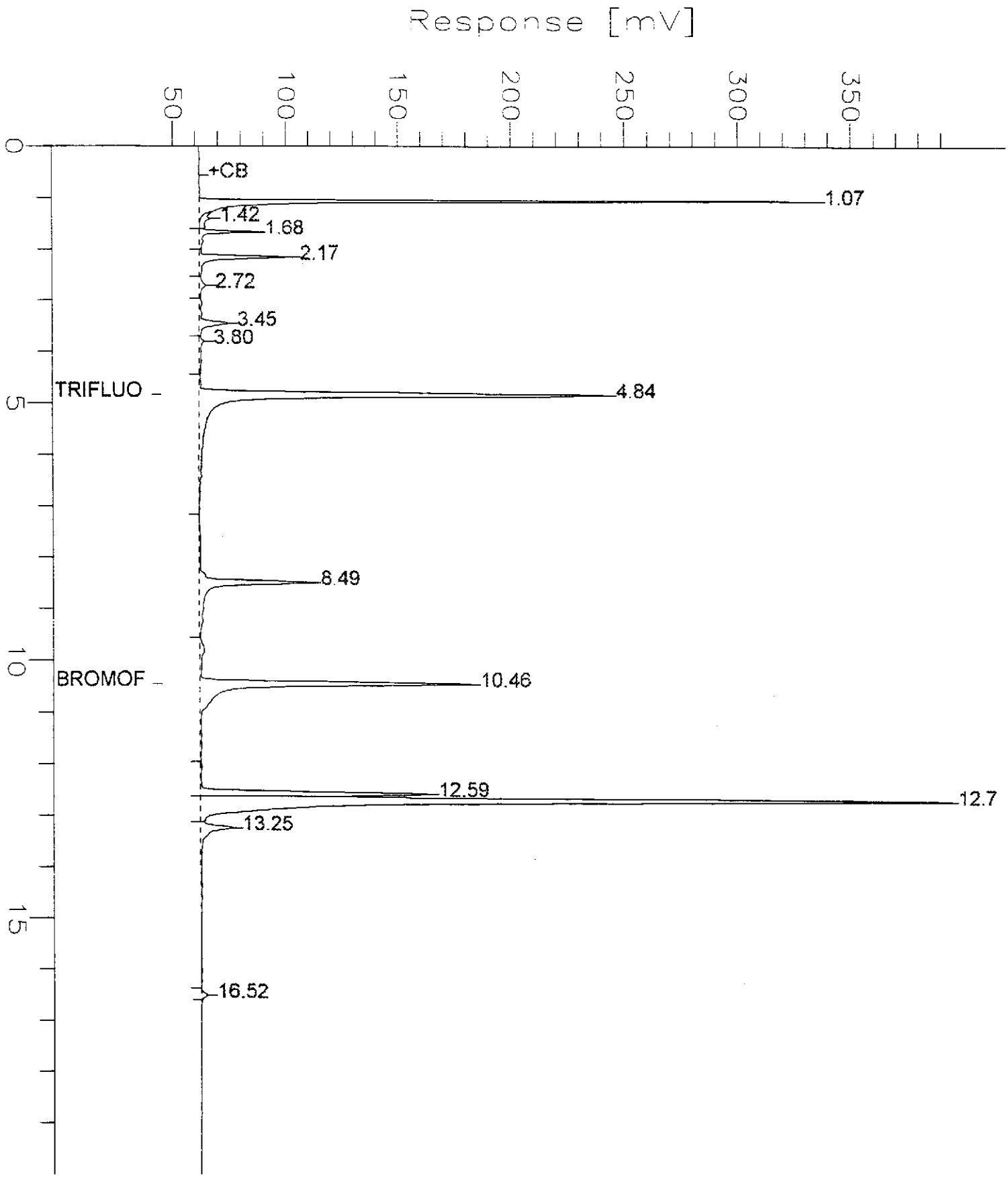
Matrix: Water

Analyte	Units	131816-006
Diln Fac:		1
Benzene	ug/L	1.6
Toluene	ug/L	<0.5
Ethylbenzene	ug/L	70
m,p-Xylenes	ug/L	1.1
o-Xylene	ug/L	<0.5
Surrogate		
Trifluorotoluene	%REC	88
Bromofluorobenzene	%REC	85

GC04 TVH 'J' Data File Rtx1FID

Sample Name : S,131816-002,38395,
FileName : G:\GC04\DATA\006J019.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 1.0 Plot Offset: 45 mV

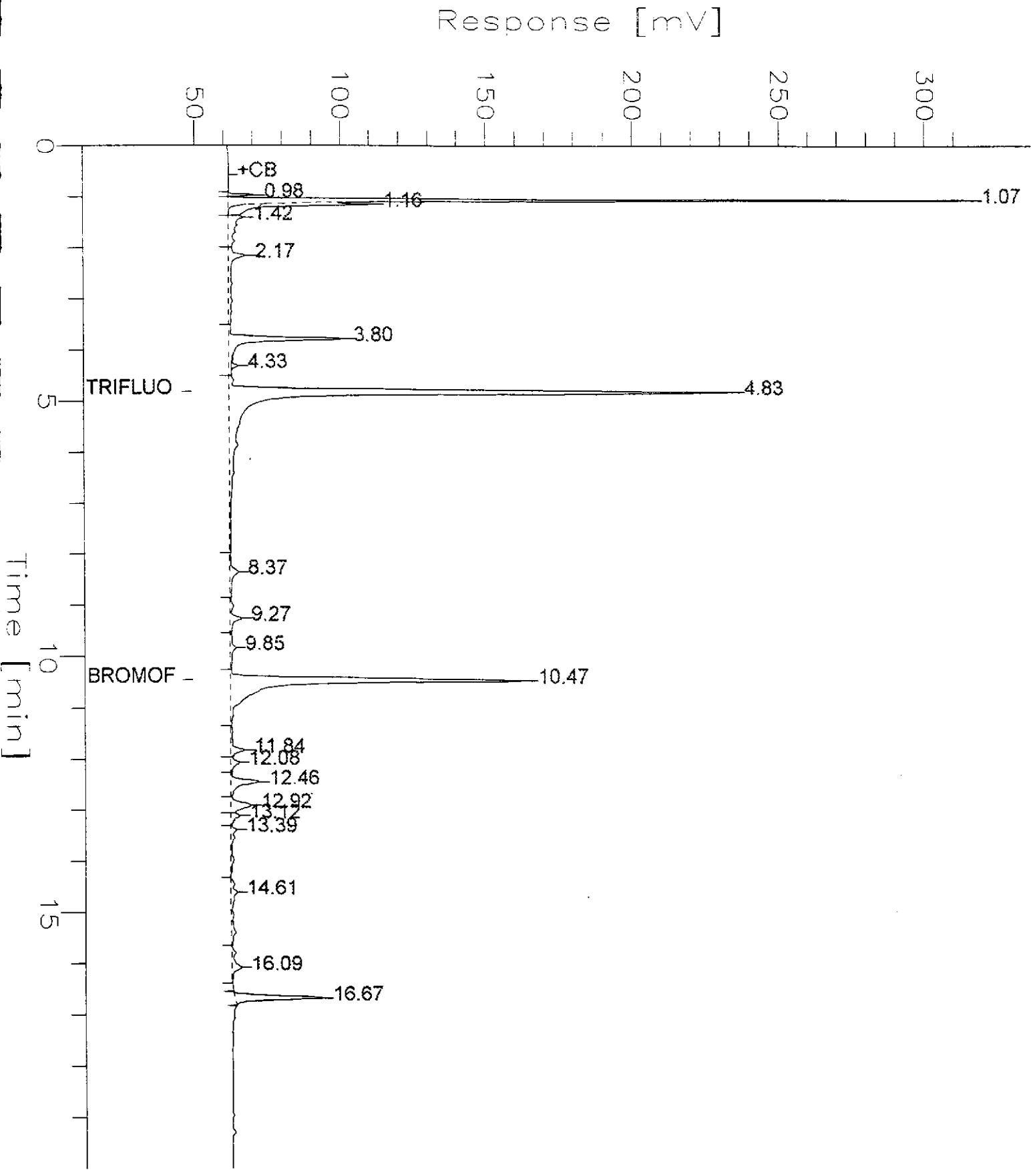
Sample #:
Date : 1/6/98 08:25 PM
Time of Injection: 1/6/98 08:05 PM
Low Point : 44.63 mV High Point : 392.53 mV
Plot Scale: 347.9 mV



GC04 TVH 'J' Data File Rtx1FID

Sample Name : S,131816-004,38395,
FileName : G:\GC04\DATA\006J021.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 1.0 Plot Offset: 49 mV

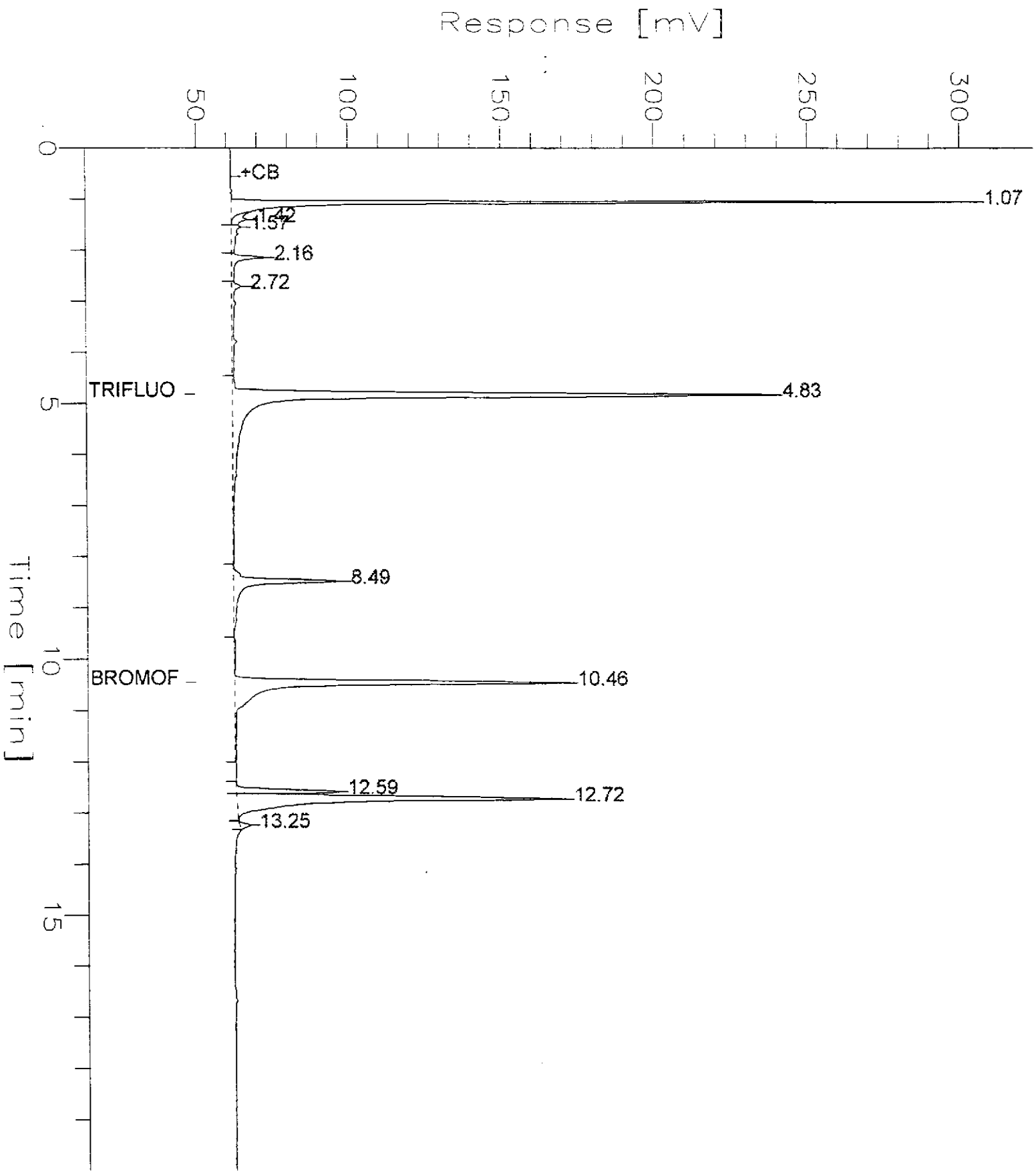
Sample #: Page 1 of 1
Date : 1/6/98 09:21 PM
Time of Injection: 1/6/98 09:01 PM
Low Point : 48.60 mV High Point : 316.37 mV
Plot Scale: 267.8 mV



GC04 TVH 'J' Data File Rtx1FID

Sample Name : S.131816-005.38395.
FileName : G:\GC04\DATA\006J022.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 1.0 Plot Offset: 49 mV

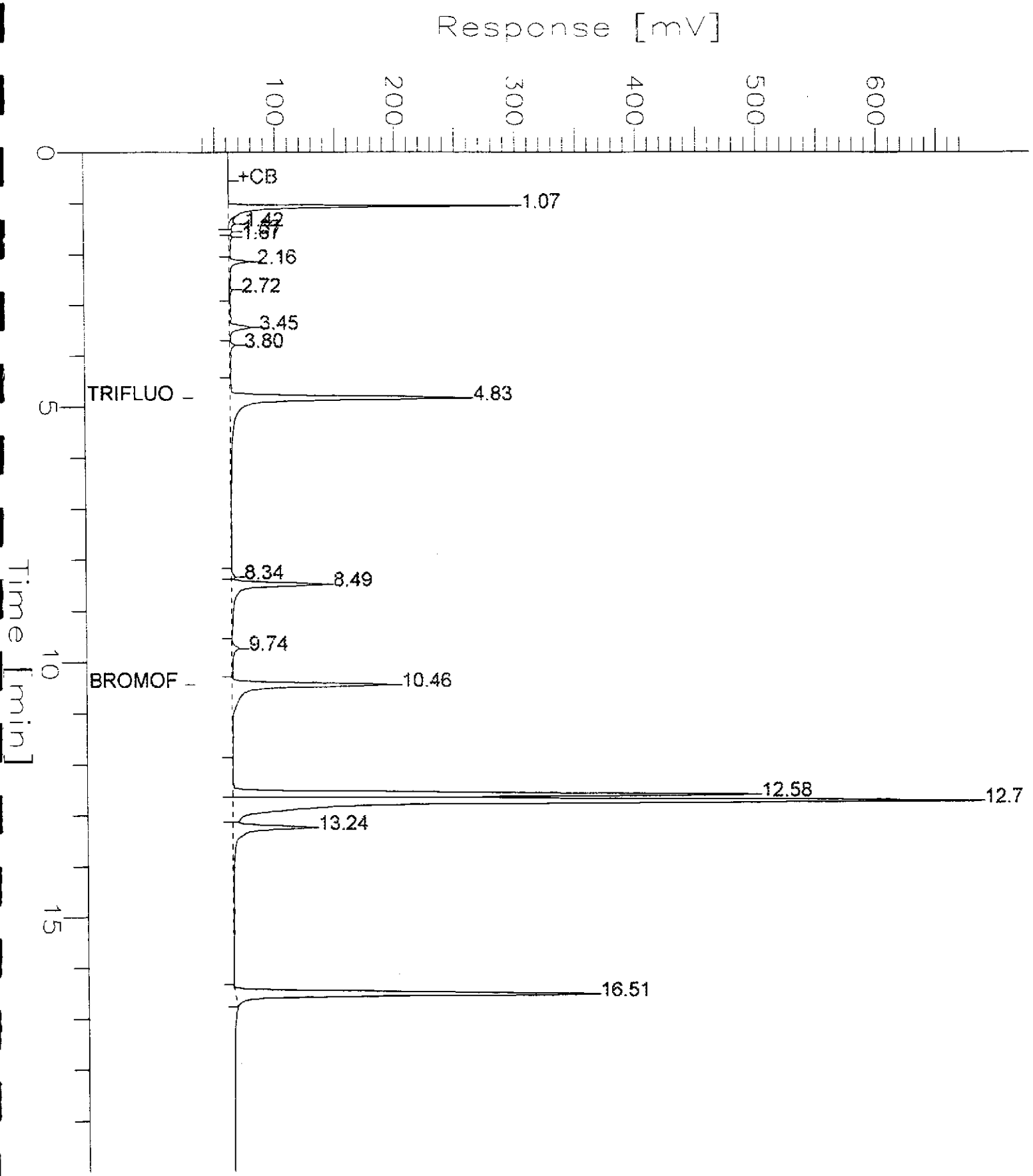
Sample #: Page 1 of 1
Date : 1/6/98 09:49 PM
Time of Injection: 1/6/98 09:29 PM
Low Point : 49.16 mV High Point : 304.97 mV
Plot Scale: 255.8 mV



GC04 TVH 'J' Data File Rtx1FID

Sample Name : S,131816-006,38395,
FileName : G:\GC04\DATA\006J023.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 1.0 Plot Offset: 31 mV

Sample #:
Date : 1/6/98 10:17 PM
Time of Injection: 1/6/98 09:57 PM
Low Point : 30.50 mV High Point : 679.15 mV
Plot Scale: 648.6 mV

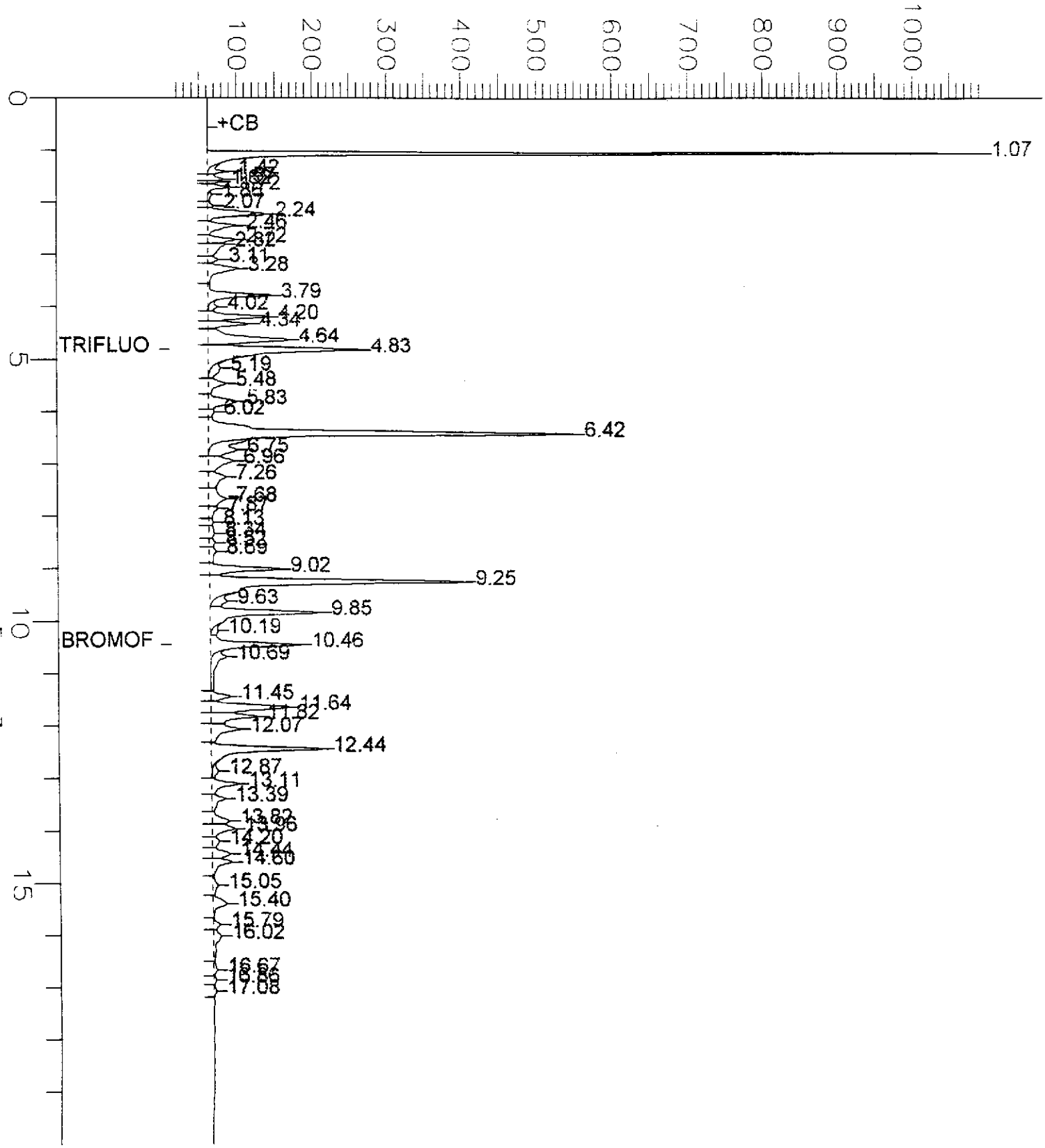


GC04 TVH 'J' Data File Rtx1FID

Sample Name : CCV/LCS,QC61698,97WS5166,38395
FileName : G:\GC04\DATA\006J010.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 1.0 Plot Offset: 10 mV

Sample #: GAS Page 1 of 1
Date : 1/6/98 05:02 PM
Time of Injection: 1/6/98 03:48 PM
Low Point : 10.17 mV High Point : 1092.88 mV
Plot Scale: 1082.7 mV

Gasoline Standard Response [mV]



TVH-Total Volatile Hydrocarbons

Client:	CET Environmental Services	Analysis Method:	TVH
Project#:	3666-001	Prep Method:	EPA 5030
Location:	PG&E COLISEUM WY.		

METHOD BLANK

Matrix:	Water	Prep Date:	01/06/98
Batch#:	38395	Analysis Date:	01/06/98
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC61700

Analyte	Result
Gasoline C7-C12	<50

Surrogate	%Rec	Recovery Limits
Bromofluorobenzene	73	70-122

BTXE

Client: CET Environmental Services	Analysis Method: EPA 8020A
Project#: 3666-001	Prep Method: EPA 5030
Location: PG&E COLISEUM/YY.	

METHOD BLANK

Matrix: Water	Prep Date: 01/06/98
Batch#: 38395	Analysis Date: 01/06/98
Units: ug/L	
Diln Fac: 1	

MB Lab ID: QC61700

Analyte	Result
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	84	58-130
Bromofluorobenzene	64	62-131

BTXE

Client:	CET Environmental Services	Analysis Method:	EPA 8020A
Project#:	3666-001	Prep Method:	EPA 5030
Location:	PG&E COLISEUM WY.		

METHOD BLANK

Matrix:	Water	Prep Date:	01/08/98
Batch#:	38453	Analysis Date:	01/08/98
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC61891

Analyte	Result
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	78	58-130
Bromofluorobenzene	72	62-131

TVH-Total Volatile Hydrocarbons

Client:	CET Environmental Services	Analysis Method:	TVH
Project#:	3666-001	Prep Method:	EPA 5030
Location:	PG&E COLISEUM WY.		

LABORATORY CONTROL SAMPLE

Matrix:	Water	Prep Date:	01/06/98
Batch#:	38395	Analysis Date:	01/06/98
Units:	ug/L		
Diln Fac:	1		

LCS Lab ID: QC61698

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	1976	2000	99	80-120

Surrogate	%Rec	Limits
Bromofluorobenzene	101	70-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

BTXE

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 38395
Units: ug/L
Diln Fac: 1

Prep Date: 01/06/98
Analysis Date: 01/06/98

LCS Lab ID: QC61699

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	17.24	20	86	80-120
Toluene	19.32	20	97	80-120
Ethylbenzene	19.27	20	96	80-120
m,p-Xylenes	40.92	40	102	80-120
o-Xylene	20.42	20	102	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	87	58-130
Bromofluorobenzene	67	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

BTXE

Client: CET Environmental Services
Project#: 3666-031
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 38453
Units: ug/L
Diln Fac: 1

Prep Date: 01/08/98
Analysis Date: 01/08/98

LCS Lab ID: QC61890

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	19.6	20	98	80-120
Toluene	19.86	20	99	80-120
Ethylbenzene	19.7	20	99	80-120
m,p-Xylenes	42.5	40	106	80-120
o-Xylene	23.02	20	115	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	83	58-130
Bromofluorobenzene	74	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Curtis & Tompkins Ltd.

TVH-Total Volatile Hydrocarbons

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM NY.

Analysis Method: TVH
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 131823-001
Matrix: Water
Batch#: 38395
Units: ug/L
Diln Fac: 1

Sample Date: 12/23/97
Received Date: 12/24/97
Prep Date: 01/06/98
Analysis Date: 01/06/98

MS Lab ID: QC61701

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	2000	<50	1889	94	75-125
Surrogate	**%Rec**	**Limits**			
Bromofluorobenzene	106	70-122			

MSD Lab ID: QC61702

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	2000	1828	91	75-125	3	35
Surrogate	**%Rec**	**Limits**				
Bromofluorobenzene	105	70-122				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

BTXE

Client:	CET Environmental Services	Analysis Method:	EPA 8020A
Project#:	3666-001	Prep Method:	EPA 5030
Location:	PG&E COLISEUM WY.		

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	ZZZZZZ	Sample Date:	01/06/98
Lab ID:	131905-001	Received Date:	01/07/98
Matrix:	Miscell.	Prep Date:	01/08/98
Batch#:	38453	Analysis Date:	01/08/98
Units:	ug/L		
Diln Fac:	1		

MS Lab ID: QC61892

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	20	<0.5	21.19	106	75-125
Toluene	20	2.09	20.79	94	75-125
Ethylbenzene	20	2.34	19.38	85	75-125
m,p-Xylenes	40	<0.5	32.56	81	75-125
o-Xylene	20	2.25	22.69	102	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	75	58-130
Bromofluorobenzene	70	62-131

MSD Lab ID: QC61893

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	20	20.71	104	75-125	2	20
Toluene	20	20.01	90	75-125	4	20
Ethylbenzene	20	18.29	80	75-125	6	20
m,p-Xylenes	40	28.69	72 *	75-125	13	20
o-Xylene	20	21.59	97	75-125	5	20

Surrogate	%Rec	Limits
Trifluorotoluene	82	58-130
Bromofluorobenzene	71	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 1 out of 10 outside limits

Halogenated Volatile Organics
EPA 8010 Analyte List

Client:	CET Environmental Services	Analysis Method:	EPA 8260
Project#:	3666-001	Prep Method:	EPA 5030
Location:	PG&E COLISEUM WY.		

Field ID:	OW5	Sampled:	12/23/97
Lab ID:	131816-004	Received:	12/23/97
Matrix:	Water	Extracted:	12/31/97
Batch#:	38331	Analyzed:	12/31/97
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	ND	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	2.9	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%Recovery	Recovery Limits
Toluene-d8	97	92-107
Bromofluorobenzene	100	80-121
1,2-Dichloroethane-d4	108	87-121

Halogenated Volatile Organics
EPA 8010 Analyte List

Client:	CET Environmental Services	Analysis Method:	EPA 8260
Project#:	3666-001	Prep Method:	EPA 5030
Location:	PG&E COLISEUM WY.		

Field ID:	OW6	Sampled:	12/23/97
Lab ID:	131816-005	Received:	12/23/97
Matrix:	Water	Extracted:	12/31/97
Batch#:	38331	Analyzed:	12/31/97
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	ND	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	7.7	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	26	1.0
1,3-Dichlorobenzene	46	1.0
1,4-Dichlorobenzene	140	1.0
1,2-Dichlorobenzene	6.3	1.0

Surrogate	%Recovery	Recovery Limits
Toluene-d8	97	92-107
Bromofluorobenzene	101	80-121
1,2-Dichloroethane-d4	106	87-121

Curtis & Tompkins, Ltd.

Halogenated Volatile Organics
EPA 8010 Analyte List

Client:	CET Environmental Services	Analysis Method:	EPA 8260
Project#:	3666-001	Prep Method:	EPA 5030
Location:	PG&E COLISEUM WY.		

Field ID:	OW7	Sampled:	12/23/97
Lab ID:	131816-006	Received:	12/23/97
Matrix:	Water	Extracted:	01/02/98
Batch#:	38354	Analyzed:	01/02/98
Units:	ug/L		
Diln Fac:	3.333		

Analyte	Result	Reporting Limit
Chloromethane	ND	6.7
Bromomethane	ND	6.7
Vinyl Chloride	ND	6.7
Chloroethane	ND	6.7
Methylene Chloride	ND	67
Trichlorofluoromethane	ND	3.3
1,1-Dichloroethene	ND	3.3
1,1-Dichloroethane	9.8	3.3
cis-1,2-Dichloroethene	ND	3.3
trans-1,2-Dichloroethene	ND	3.3
Chloroform	ND	3.3
Freon 113	ND	3.3
1,2-Dichloroethane	ND	3.3
1,1,1-Trichloroethane	31	3.3
Carbon Tetrachloride	ND	3.3
Bromodichloromethane	ND	3.3
1,2-Dichloropropane	ND	3.3
cis-1,3-Dichloropropene	ND	3.3
Trichloroethene	ND	3.3
1,1,2-Trichloroethane	ND	3.3
trans-1,3-Dichloropropene	ND	3.3
Dibromochloromethane	ND	3.3
Bromoform	ND	6.7
Tetrachloroethene	ND	3.3
1,1,2,2-Tetrachloroethane	ND	3.3
Chlorobenzene	46	3.3
1,3-Dichlorobenzene	360	3.3
1,4-Dichlorobenzene	530	3.3
1,2-Dichlorobenzene	57	3.3

Surrogate	%Recovery	Recovery Limits
Toluene-d8	100	92-107
Bromofluorobenzene	107	80-121
1,2-Dichloroethane-d4	96	87-121

Halogenated Volatile Organics
EPA 8010 Analyte List

Client:	CET Environmental Services	Analysis Method:	EPA 8260
Project#:	3666-001	Prep Method:	EPA 5030
Location:	PG&E COLISEUM WY.		

Field ID:	DI	Sampled:	12/23/97
Lab ID:	131816-008	Received:	12/23/97
Matrix:	Water	Extracted:	01/02/98
Batch#:	38354	Analyzed:	01/02/98
Units:	ug/L		
Dilu Fac:	1		

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	ND	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%Recovery	Recovery Limits
Toluene-d8	100	92-107
Bromofluorobenzene	106	80-121
1,2-Dichloroethane-d4	98	87-121

Aromatic Volatile Organics

Client:	CET Environmental Services	Analysis Method:	EPA 8260
Project#:	3666-001	Prep Method:	EPA 5030
Location:	PG&E COLISEUM WY.		
Field ID:	DI	Sampled:	12/23/97
Lab ID:	131816-008	Received:	12/23/97
Matrix:	Water	Extracted:	01/02/98
Batch#:	38354	Analyzed:	01/02/98
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%Recovery	Recovery Limits
Toluene-d8	100	92-107
Bromofluorobenzene	106	80-121
1,2-Dichloroethane-d4	98	87-121

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 38331
Units: ug/L
Diln Fac: 1

Prep Date: 12/31/97
Analysis Date: 12/31/97

MB Lab ID: QC61474

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	ND	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%Rec	Recovery Limits
Toluene-d8	96	92-107
Bromofluorobenzene	104	80-121
1,2-Dichloroethane-d4	102	87-121

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 38331
Units: ug/L
Diln Fac: 1

Prep Date: 12/31/97
Analysis Date: 12/31/97

MB Lab ID: QC61478

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	ND	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%Rec	Recovery Limits
Toluene-d8	96	92-107
Bromofluorobenzene	103	80-121
1,2-Dichloroethane-d4	105	87-121

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 38354
Units: ug/L
Diln Fac: 1

Prep Date: 01/02/98
Analysis Date: 01/02/98

MB Lab ID: QC61551

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	ND	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%Rec	Recovery Limits
Toluene-d8	101	92-107
Bromofluorobenzene	109	80-121
1,2-Dichloroethane-d4	94	87-121

Purgeable Aromatics by GC/MS
EPA 8020 Analyte List

Client:	CET Environmental Services	Analysis Method:	EPA 8260
Project#:	3666-001	Prep Method:	EPA 5030
Location:	PG&E COLISEUM WY.		

METHOD BLANK

Matrix:	Water	Prep Date:	01/02/98
Batch#:	38354	Analysis Date:	01/02/98
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC61551

Analyte	Result	Reporting Limit
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	94	87-121
Toluene-d8	101	92-107
Bromofluorobenzene	109	80-121

Halogenated Volatile Organics

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 38331
Units: ug/L
Diln Fac: 1

Prep Date: 12/31/97
Analysis Date: 12/31/97

LCS Lab ID: QC61473

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	54.49	50	109	73-141
Trichloroethene	54.16	50	108	84-113
Chlorobenzene	52.95	50	106	87-117

Surrogate	%Rec	Limits
Toluene-d8	97	92-107
Bromofluorobenzene	102	80-121
1,2-Dichloroethane-d4	102	87-121

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 3 outside limits

Halogenated Volatile Organics

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 131825-001
Matrix: Water
Batch#: 38331
Units: ug/L
Diln Fac: 1

Sample Date: 12/19/97
Received Date: 12/24/97
Prep Date: 12/31/97
Analysis Date: 12/31/97

MS Lab ID: QC61475

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<1	57.08	114	65-135
Trichloroethene	50	29.67	80.14	101	77-109
Chlorobenzene	50	<1	52.75	106	82-115

Surrogate	%Rec	Limits
Toluene-d8	97	92-107
Bromofluorobenzene	100	80-121
1,2-Dichloroethane-d4	104	87-121

MSD Lab ID: QC61476

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	62.61	125	65-135	9	14
Trichloroethene	50	81.7	104	77-109	2	14
Chlorobenzene	50	53.99	108	82-115	2	13

Surrogate	%Rec	Limits
Toluene-d8	97	92-107
Bromofluorobenzene	99	80-121
1,2-Dichloroethane-d4	103	87-121

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 3 outside limits
Spike Recovery: 0 out of 6 outside limits

Halogenated Volatile Organics

Client: CET Environmental Services
Project#: 3666-001
Location: PG&E COLISEUM WY.

Analysis Method: EPA 8260
Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 38354
Units: ug/L
Diln Fac: 1

Prep Date: 01/02/98
Analysis Date: 01/02/98

BS Lab ID: QC61549

Analyte	Spike Added	BS	%Rec #	Limits
1,1-Dichloroethene	50	53.85	108	73-141
Trichloroethene	50	46.94	94	84-113
Chlorobenzene	50	47.73	95	87-117

Surrogate	%Rec	Limits
Toluene-d8	100	92-107
Bromofluorobenzene	105	80-121
1,2-Dichloroethane-d4	92	87-121

BSD Lab ID: QC61550

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	55.02	110	73-141	2	14
Trichloroethene	50	47.74	95	84-113	2	14
Chlorobenzene	50	48.32	97	87-117	1	13

Surrogate	%Rec	Limits
Toluene-d8	101	92-107
Bromofluorobenzene	107	80-121
1,2-Dichloroethane-d4	92	87-121

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 3 outside limits
Spike Recovery: 0 out of 6 outside limits

Purgeable Aromatics by GC/MS
EPA 8020 Analyte List

Client:	CET Environmental Services	Analysis Method:	EPA 8260
Project#:	3666-001	Prep Method:	EPA 5030
Location:	PG&E COLISEUM WY.		

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix:	Water	Prep Date:	01/02/98
Batch#:	38354	Analysis Date:	01/02/98
Units:	ug/L		
Diln Fac:	1		

BS Lab ID: QC61549

Analyte	Spike Added	BS	%Rec #	Limits
Benzene	50	39.7	79	76-127
Toluene	50	44.36	89	76-125

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	92	87-121
Toluene-d8	100	92-107
Bromofluorobenzene	105	80-121

BSD Lab ID: QC61550

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Benzene	50	40.24	80	76-126	1	11
Toluene	50	45.48	91	76-125	2	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	92	87-121
Toluene-d8	101	92-107
Bromofluorobenzene	107	80-121

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

CET Environmental Services, Inc.
5845 Doyle Street, Suite 104
Emeryville, California 94608
(510) 652-7001 FAX (510) 652-7002

131806

CHAIN-OF-CUSTODY RECORD

COC NO: 02196
DATE _____ PAGE ___ OF ___

PROJECT NAME Fo&e Coliseum Way
ADDRESS Fo&e Coliseum Way
SAMPLER'S SIGNATURE
PRINTED NAME VICKY ATKINSON
CET PROJECT NO. 3466 - 001
PROJECT MANAGER Aaron Stussman

	SAMPLE NO.	DATE	TIME	LOCATION/DESCRIPTION	TPH GASOLINE	TPH DIESEL	BTEX	418.1	lead	8010				RUSH	MATRIX	CONTAINER TYPE	# OF CONTAINERS	REMARKS
-1	OW2	12/23/97	11:25	well OW2					X						H2O		1	unfiltered please filter lead samples
-2	OW1	12/23/97	12:05	well OW1	X	X	X										7	
-3	OW4	12/23/97	16:10	well OW4	X		X										3	
-4	OW5	12/23/97	9:45	well OW5	X	X	X		X	X							8	
-5	OW6	12/23/97	15:20	well OW6	X	X	X			X							7	
-6	OW7	12/23/97	14:20	well OW7	X	X	X			X							7	
-7	OW8	12/23/97	10:35	well OW8					X								1	
-8	DI			blank	X		X			X							5	
								7										

ANALYSES REQUESTED

1 RELINQUISHED BY SIGNATURE PRINTED NAME VICKY ATKINSON COMPANY CET	DATE 12/23/97 TIME 17:10	3 RELINQUISHED BY SIGNATURE PRINTED NAME COMPANY	DATE TIME	5 RELINQUISHED BY SIGNATURE PRINTED NAME COMPANY	DATE TIME
2 RECEIVED BY SIGNATURE J. Morrison PRINTED NAME TERESA MORRISON COMPANY CET	DATE 12/23/97 TIME 17:0	4 RECEIVED BY SIGNATURE PRINTED NAME COMPANY	DATE TIME	6 RECEIVED BY (LAB) SIGNATURE PRINTED NAME COMPANY	DATE TIME

SAMPLE CONDITIONS

RECEIVED ON ICE	YES/NO
CHAIN OF CUSTODY SEAL	YES/NO
SAMPLES RECEIVED INTACT	YES/NO
CORRECT CONTAINER TYPE	YES/NO

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Samples will be returned to client or disposed of at client expense.

White - ORIGINAL Canary - FILE Pink - CLIENT COPY

APPENDIX B

Historical Monitoring Data

Well ID	MCL	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	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1
Date	ug/L	Apr-88	Oct-88	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	Jul-94	Jun-95	Nov-95	Jun-96	Oct-96	pr,Jun-9	Dec-97
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
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
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
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
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
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
1,1-Dichloroethene	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
1,1-Dichloroethane	5	ND	5	4	4	2	2	1	2.6	4.6	ND	ND	ND	1	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	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
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
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
Freon 113	1200	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
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	ND	ND	0.63	ND	ND	ND	ND	ND	ND	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
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
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
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
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
Trichloroethylene	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
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
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
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
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
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
Tetrachloroethylene	5	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	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
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
1,3-Dichlorobenzene		NA	NA	1	4	4	1	3	1.8	2.9	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	600#	Total	Total	ND	ND	ND	ND	ND	0.58	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	5	4	11	5	13	11	8	3	6.7	14	3.2	ND	4	3	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PURGEABLE AROMATICS																										
Benzene	1	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	ND	0.66
Toluene	1000#	ND	ND	2.3	0.4	ND	ND	ND	ND	ND	ND	ND	0.7	ND	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	ND	ND
Ethylbenzene	680	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	0.8	NA	ND	NA	ND	ND	NA	ND	ND	ND	ND	2.3
Total Xylenes	1750**		ND	2.6	2.4	ND	ND	ND	ND	ND	ND	3.2	9	1.7	1.9	NA	ND	NA	2.5	ND	NA	ND	ND	ND	ND	1.1
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	NA	NA	NA	2.5	NA	NA	NA	NA	NA	NA	4.06
HYDROCARBONS																										
TVH-g		NA	NA	< 50	82	< 50	< 50	< 500	NA	NA	NA	100	320	< 50	70	NA	NA	NA	80	60	400	230	500	830	590	420
TEPH-d		< 1000	< 1000	190	300	200	200	90	< 200	< 50	1600	3100	3900	1000	2000	NA	2300	NA	1000	1500	740	1000	2300	1400	1500	700
O&G		< 5000	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
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
METALS																										
Lead	50	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA

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

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
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-	Dec-97
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
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
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
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
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
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
1,1-Dichloroethene	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
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
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
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
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
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
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
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
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
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
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
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
Trichloroethylene	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
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
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
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
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
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
Tetrachloroethylene	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
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
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
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
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
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
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
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
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
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
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
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
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
O&G		16000	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
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
METALS																											
Lead	50	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	8	ND	4.1	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)

Well ID	MCL	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	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4	OW-4
Date	ug/L	Jun-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	Jul-94	Jun-95	Nov-95	Jun-96	Oct-96	pr,Jun-	Dec-97
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
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
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
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
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
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
1,1-Dichloroethene	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
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	3	6.1	9.4	ND	7	4	4	3	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
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
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
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
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	ND	ND	0.49	ND	ND	ND	ND	ND	ND	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
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
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
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
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
Trichloroethylene	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
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
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
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
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
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
Tetrachloroethylene	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
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
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
1,3-Dichlorobenzene		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
1,2-Dichlorobenzene	600#	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
1,4-Dichlorobenzene	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
PURGEABLE AROMATICS																										
Benzene	1	ND	ND	ND	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Toluene	1000#	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Ethylbenzene	680	ND	ND	ND	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Total Xylenes	1750**	ND	ND	0.6	2	ND	ND	ND	ND	ND	ND	0.7	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
TOTAL VOCs		NA	NA	0.6	3.4	NA	NA	3	6.59	9.4	NA	7.7	4	4	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	ND	ND	ND
TEPH-d		< 1000	< 1000	150	210	150	150	<50	580	< 50	2000	2100	820	1300	2100	NA	1500	NA	NA	NA	1600	630	1100	840	980	NA
O&G		< 5000	< 5000	NA	NA	NA	NA	NA	NA	< 5000	< 5000	< 5000	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
METALS																										
Lead	50	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	5	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
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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	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
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	pr,Jun-	Dec-97
PURGEABLE HALOCARBONS																			
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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
Vinyl chloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	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
Methylene Chloride	5#	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	67	ND	ND	ND	ND
Trichlorofluoromethane	150	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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
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	2.9
cis-1,2-Dichloroethene	6	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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
Chloroform	100#*	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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
Trichloroethylene	5	0.75	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	NO
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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
Dibromochloromethane	100#*	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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
Bromoform	100#*	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	0.7	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	NO	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
Chlorobenzene	30	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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
1,2-Dichlorobenzene	600#	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	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
PURGEABLE AROMATICS																			
Benzene	1	14	20	11	15	11	13	26	14	NA	21	NA	11		11	15	18	3.8	15
Toluene	1000#	0.54	ND	ND	1.1	ND	ND	ND	ND	NA	ND	NA	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
Total Xylenes	1750**	5.6	4	6.9	5.1	6	3.8	13	2.4	NA	9.2	NA	1.3		ND	ND	ND	ND	2.74
TOTAL VOCs		29.97	57.2	35.9	37.8	50	57.6	51.7	29.4	NA	34.9	NA	19.9	4.5	88	17.5	26.2	9.1	20.64
HYDROCARBONS																			
TVH-g		NA	NA	NA	120	270	160	350	140	NA	370	NA	110	ND	ND	ND	ND	ND	63
TEPH-d		600	1500	1200	840	650	1000	1000	1600	NA	510	NA	1300	510	1600	830	870	740	630
O&G		NA	< 5000	< 5000	< 5000	NA	NA	NA	NA	NA	ND	NA	ND	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
METALS																			
Lead	50	ND	NA	NA	ND	ND	ND	ND	ND	ND	7.3	7.4	5	ND	ND	ND	ND	5	ND

Notes:
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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	MCL	OW-3	OW-3	OW-3	OW-3	OW-3	OW-3	OW-3	OW-3	OW-3	OW-3	OW-6	OW-6	OW-6	OW-6	OW-6	OW-6	OW-6	OW-6	OW-6	OW-6	OW-6	OW-6	OW-6	OW-6
Date	ug/L	Apr-88	Jun-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	Jul-93	Oct-93	Jan-94	Jul-94	Jun-95	Nov-95	Jun-96	Oct-96	pr,Jun-	Dec-97
PURGEABLE HALOCARBONS																									
Chloromethane		ND	ND	ND	ND	ND	NO	ND	ND	ND	ND	ND	ND	NO	ND	ND	ND	NA	ND	ND	ND	ND	NO	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	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	ND	NA	ND	ND	ND	49	ND	ND	ND
Trichlorofluoromethane	150	ND	ND	ND	ND	ND	ND	ND	ND	0.82	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NO	ND	ND	ND	ND
1,1-Dichloroethene	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	4	5	28	29	14	17	17	15	16	41	ND	1	2	2	10	23	NA	7	17	31	8.8	10	5.4	7	7.7
cis-1,2-Dichloroethene	6	NA	NA	ND	ND	33	ND	1	1	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	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	ND	NA	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	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
Freon 113	1200	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	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	ND	NA	ND	ND	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	18	NA	ND	ND	3.9	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	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	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	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	ND	NA	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	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	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	ND	NA	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	ND	NA	ND	ND	ND	ND	ND	ND	ND	NA
Bromoform	100#*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	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	ND	NA	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	ND	ND	NA	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	ND	NA	ND	2	4.5	ND	5.2	1	4.5	26
1,3-Dichlorobenzene		NA	NA	NA	3	ND	2	2	1	3.3	ND	15	ND	ND	ND	ND	ND	NA	ND	ND	11	7.4	20	10	25	46
1,2-Dichlorobenzene	600#	NA	NA	NA	2	ND	1	1	1	2.3	ND	5.8	ND	ND	ND	ND	ND	NA	ND	ND	23	ND	2.4	ND	2.1	6.3
1,4-Dichlorobenzene	5	NA	NA	NA	2	ND	ND	2	1	3.1	ND	23	ND	ND	ND	ND	ND	NA	ND	ND	2.9	16	46	26	65	140
PURGEABLE AROMATICS																										
Benzene	1	ND	ND	ND	0.5	ND	ND	ND	ND	0.54	ND	ND	ND	ND	ND	ND	0.6	NA	ND	ND	ND	ND	ND	ND	ND	0.5
Toluene	1000#	ND	ND	ND	0.4	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	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	1.1	NA	ND	ND	ND	ND	ND	ND	ND	35
Total Xylenes	1750**			ND	0.7	2.1	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	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	42.7	NA	7	19	76.3	81.2	83.6	42.4	103.6	261.5
HYDROCARBONS																										
TVH-g		NA	NA	NA	< 50	52	< 50	< 50	< 50	NA	NA	NA	< 50	< 50	< 50	< 50	< 50	NA	70	<50	ND	ND	61	ND	83	160
TEPH-d		< 1000	< 1000	< 1000	440	470	450	130	1310	700	< 50	5500	4900	3500	3900	5300	3500	NA	2200	2500	1300	2400	2000	2400	1300	1200
O&G		< 5000	< 5000	5000	NA	NA	NA	NA	NA	NA	< 5000	< 5000	< 5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TPH (418.1)		NA	NA	NA	< 5000	< 5000	< 5000	< 5000	< 5000	< 500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METALS																										
Lead	50	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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
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	pr,Jun-	Dec-97
PURGEABLE HALOCARBONS																	
Chloromethane		ND	ND	ND	ND	ND	NA	ND	NA	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
Vinyl chloride	0.5	ND	ND	ND	ND	ND	NA	ND	NA	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
Methylene Chloride	5#	14	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	570	ND	ND	ND	ND
Trichlorofluoromethane	150	ND	ND	ND	ND	ND	NA	ND	NA	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
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
cis-1,2-Dichloroethene	6	ND	ND	ND	ND	ND	NA	ND	NA	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
Chloroform	100#*	ND	ND	ND	ND	ND	NA	ND	NA	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
1,2-Dichloroethane	0.5	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	10	460	29	80	530	NA	73	NA	76	28	33	41	18	6.6	7.9	31
Carbon Tetrachloride	0.5	ND	ND	ND	ND	ND	NA	ND	NA	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
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	NA	ND	NA	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
Trichloroethylene	5	ND	ND	ND	ND	ND	NA	ND	NA	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
trans-1,3-Dichloropropene	5***	ND	ND	ND	ND	ND	NA	ND	NA	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
2-Chloroethylvinyl Ether		ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	NA
Bromoform	100#*	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	ND	ND	ND	ND	ND	NA	ND	NA	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
Chlorobenzene	30	10	ND	ND	8	ND	NA	29	NA	21	24	12	34	25	31	25	46
1,3-Dichlorobenzene		460	130	420	330	170	NA	540	NA	450	570	270	400	380	440	290	360
1,2-Dichlorobenzene	600#	120	22	95	77	33	NA	470	NA	78	100	290	81	62	74	47	57
1,4-Dichlorobenzene	5	440	120	400	290	160	NA	110	NA	410	540	51	480	500	560	410	530
PURGEABLE AROMATICS																	
Benzene	1	ND	0.8	1	1.4	0.6	NA	1.5	NA	1.6	1.2		1.1	ND	ND	0.56	1.6
Toluene	1000#	ND	0.6	0.5	ND	ND	NA	ND	NA	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
Total Xylenes	1750**	ND	2.1	5	ND	ND	NA	ND	NA	4.2	ND		ND	ND	ND	ND	1.1
TOTAL VOCs		1054	751.5	951	786.4	916.6	NA	1237.5	NA	1048.8	1283.2	681.5	1612.1	991.5	1118.2	784.76	1106.5
HYDROCARBONS																	
TVH-g		NA	700	1300	1400	720	NA	1500	NA	1400	1800	650	980	1200	1500	1100	1100
TEPH-d		7100	4400	2800	3900	2300	NA	4900	NA	4500	4800	1600	4400	4600	4800	2600	2100
O&G		< 5000	< 5000	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
METALS																	
Lead	50	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

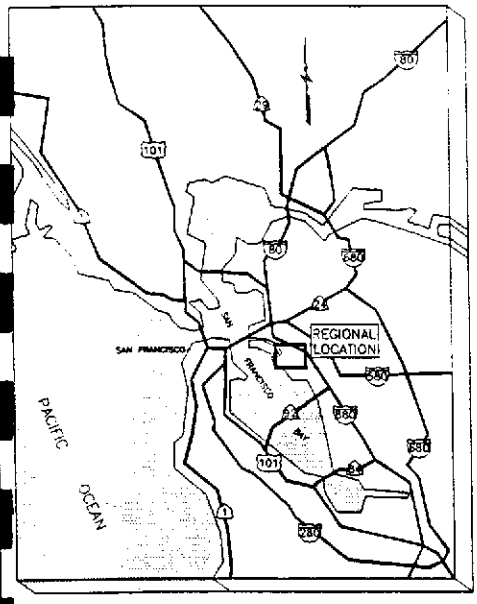
Notes:
1) MCL = Maximum Contaminant Level in drinking water (State MCL if not noted otherwise)
2) # = EPA MCL
3) * = MCL for sum of four compounds
4) ** = MCL for sum of all xylene isomers
5) *** = MCL for sum of trans- and cis-1,3-Dichloropropene
6) ND = Not Detected at or above MDL
7) Purgeable Halocarbons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

Well ID	OW-8	OW-8	OW-8	OW-8	OW-8	OW-8	OW-8	OW-8	OW-8	OW-8	OW-8	OW-8
Date	Apr-93	Jul-93	Oct-93	Jan-94	Apr-94	Jul-94	Jun-95	Nov-95	Jun-96	Oct-96	Apr,Jun-97	Dec-97
PURGEABLE HALOCARBONS												
Chloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Freon 113	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethylvinyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PURGEABLE AROMATICS												
Benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylenes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HYDROCARBONS												
TVH-g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TEPH-d	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
O&G	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
METALS												
Lead	27	17	ND	25	12	24	3.2	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)

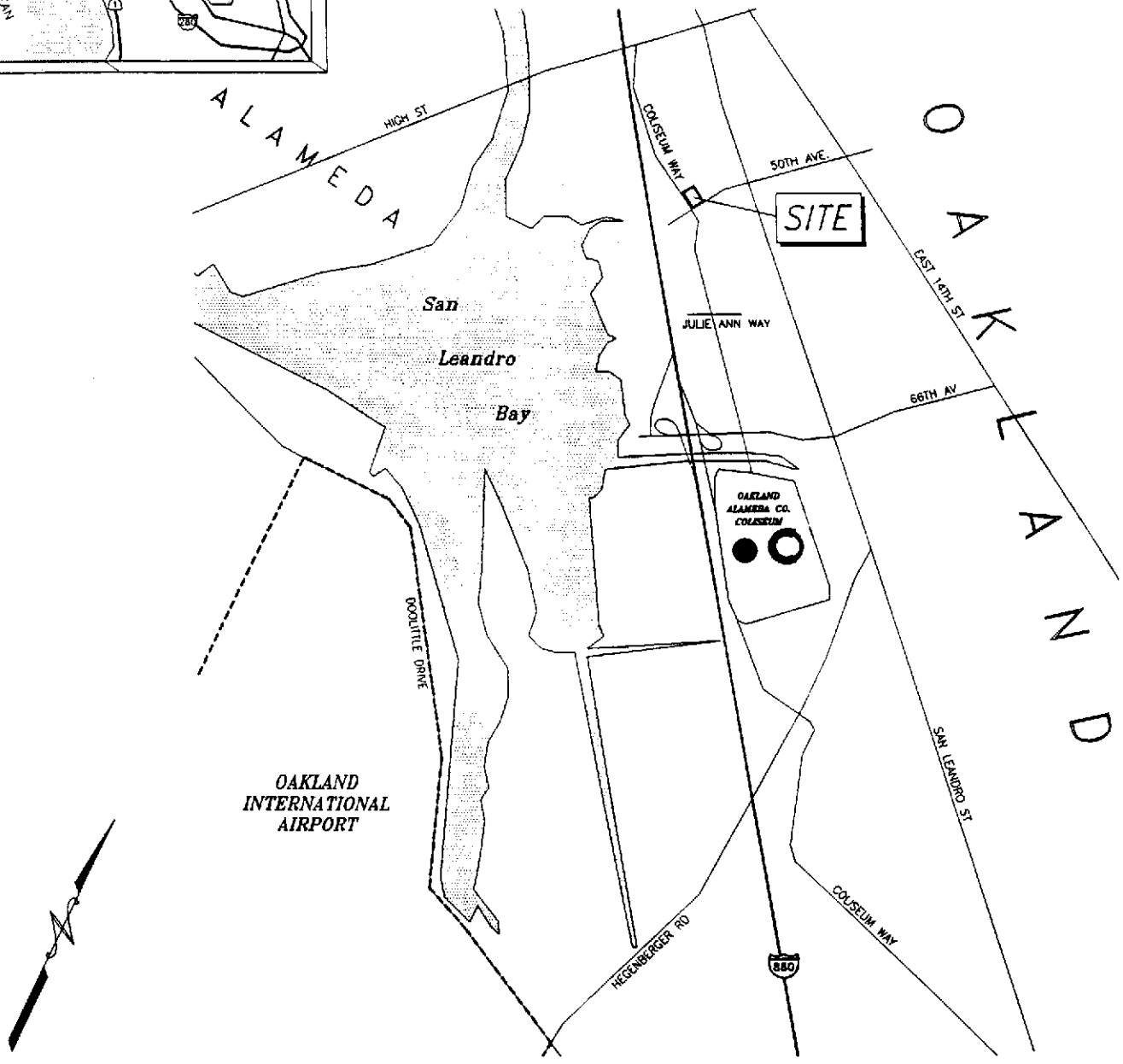
APPENDIX C

Figures



SCALE

MILE 0 1 MILE



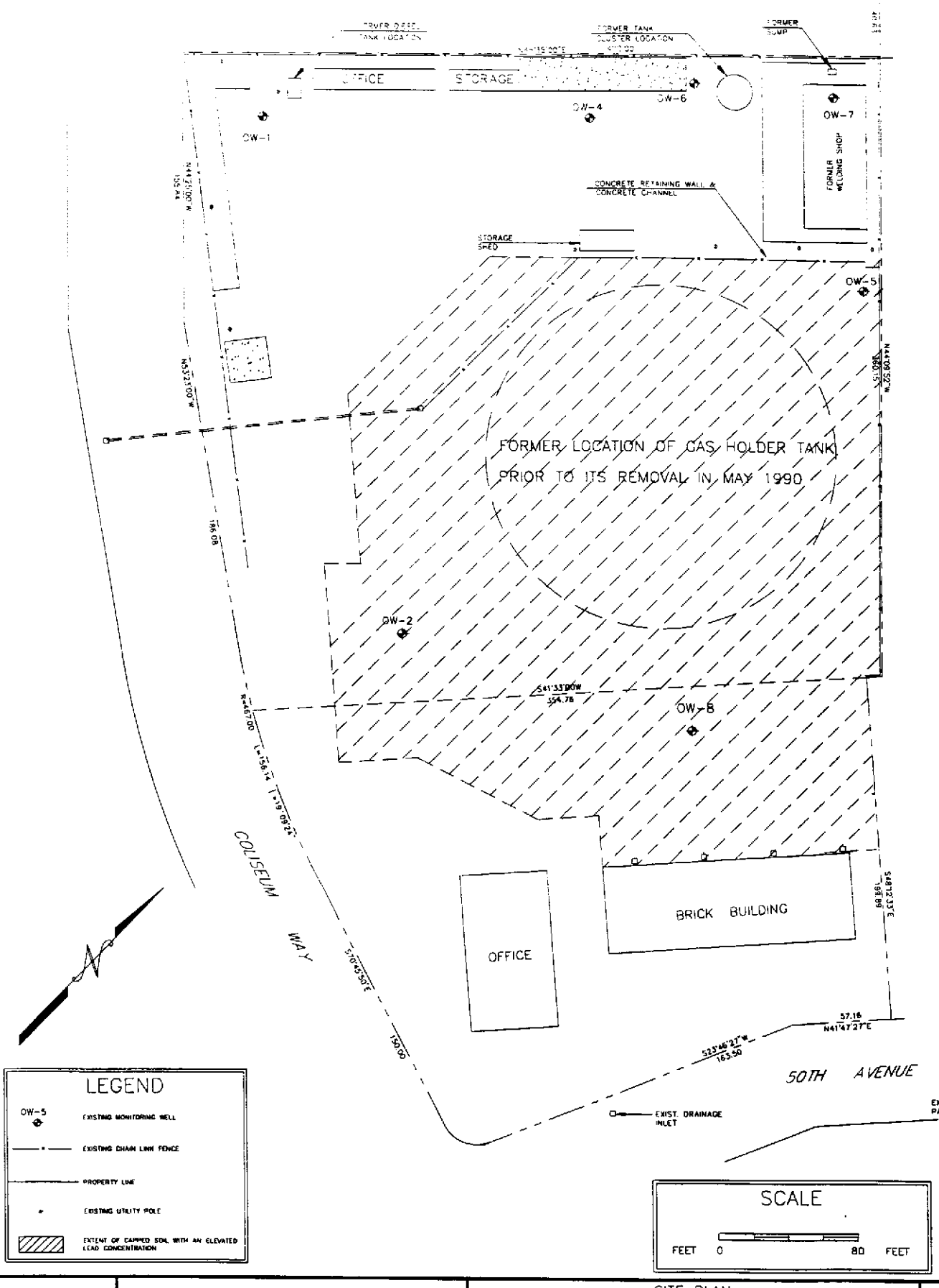
CET Environmental Services, Inc.

SITE LOCATION MAP

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

JOB NUMBER	DATE	DRAWING	BY	REVISED
3666	07/95	3666LOC	LONG	07/19

FIGURE 1.1



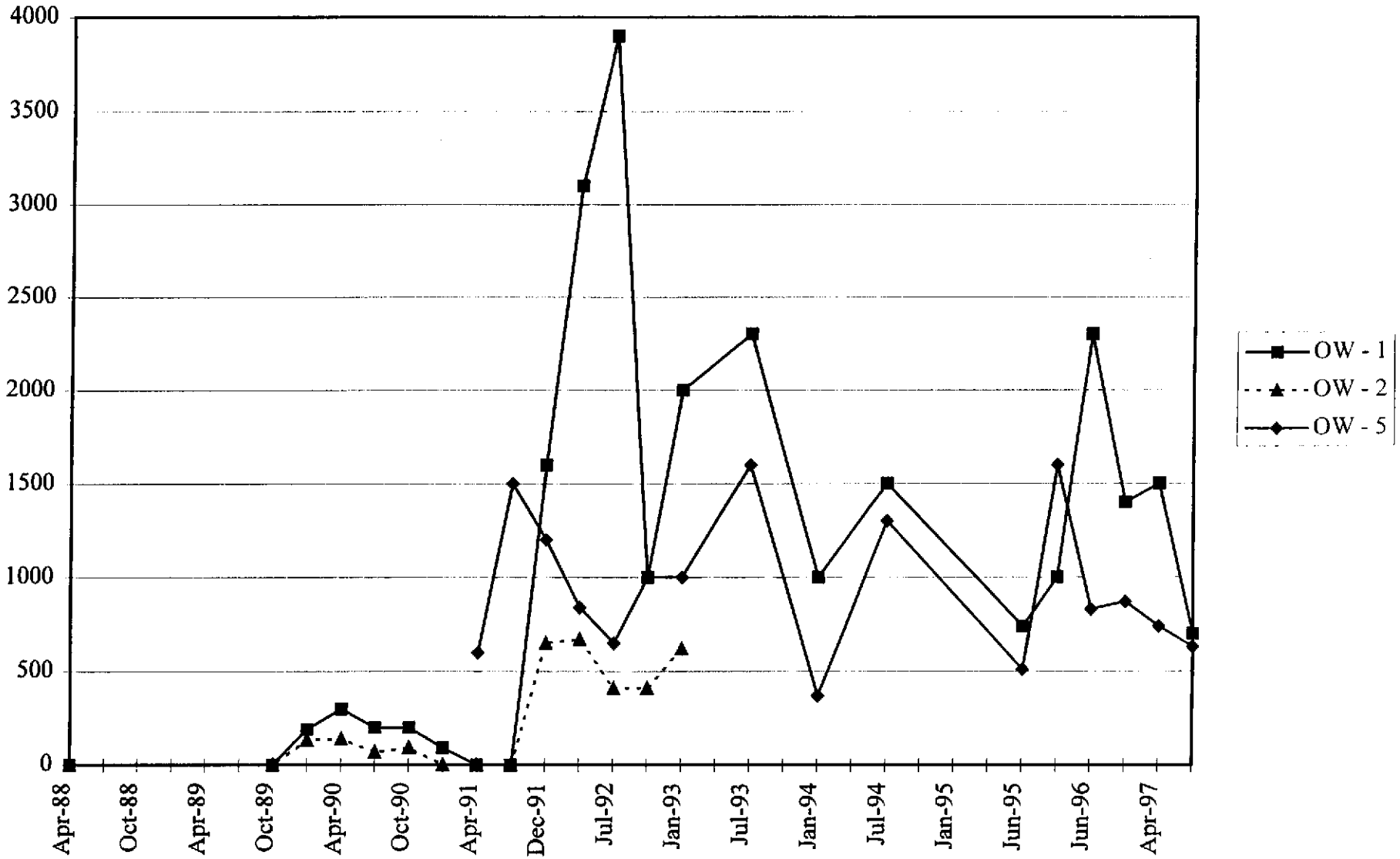
CET Environmental Services, Inc.

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

FIGURE 1.2

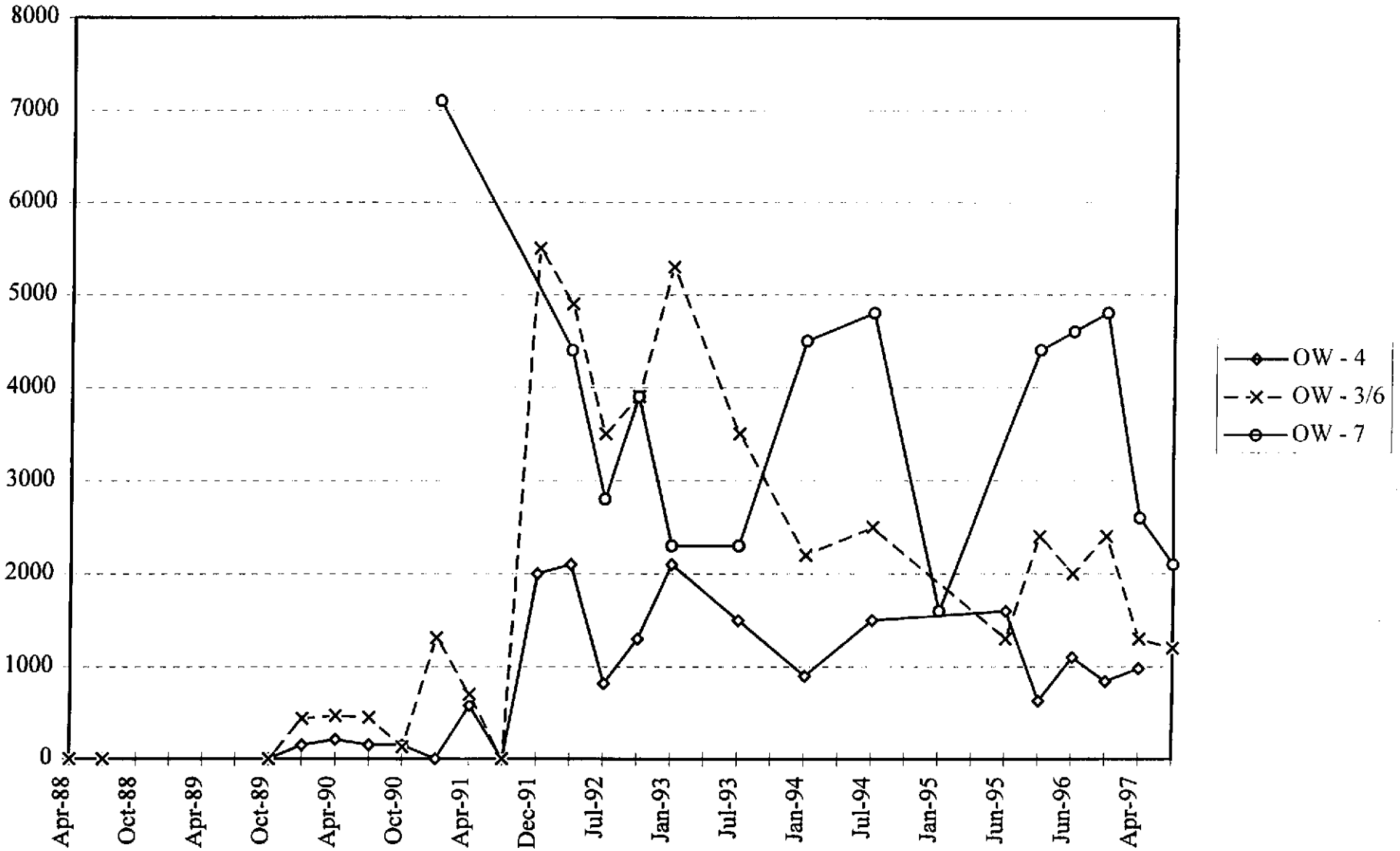
JOB NUMBER	DATE	DRAWING	BY	REVISED
3666	7/97	3666SITE	ESS	7/17

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



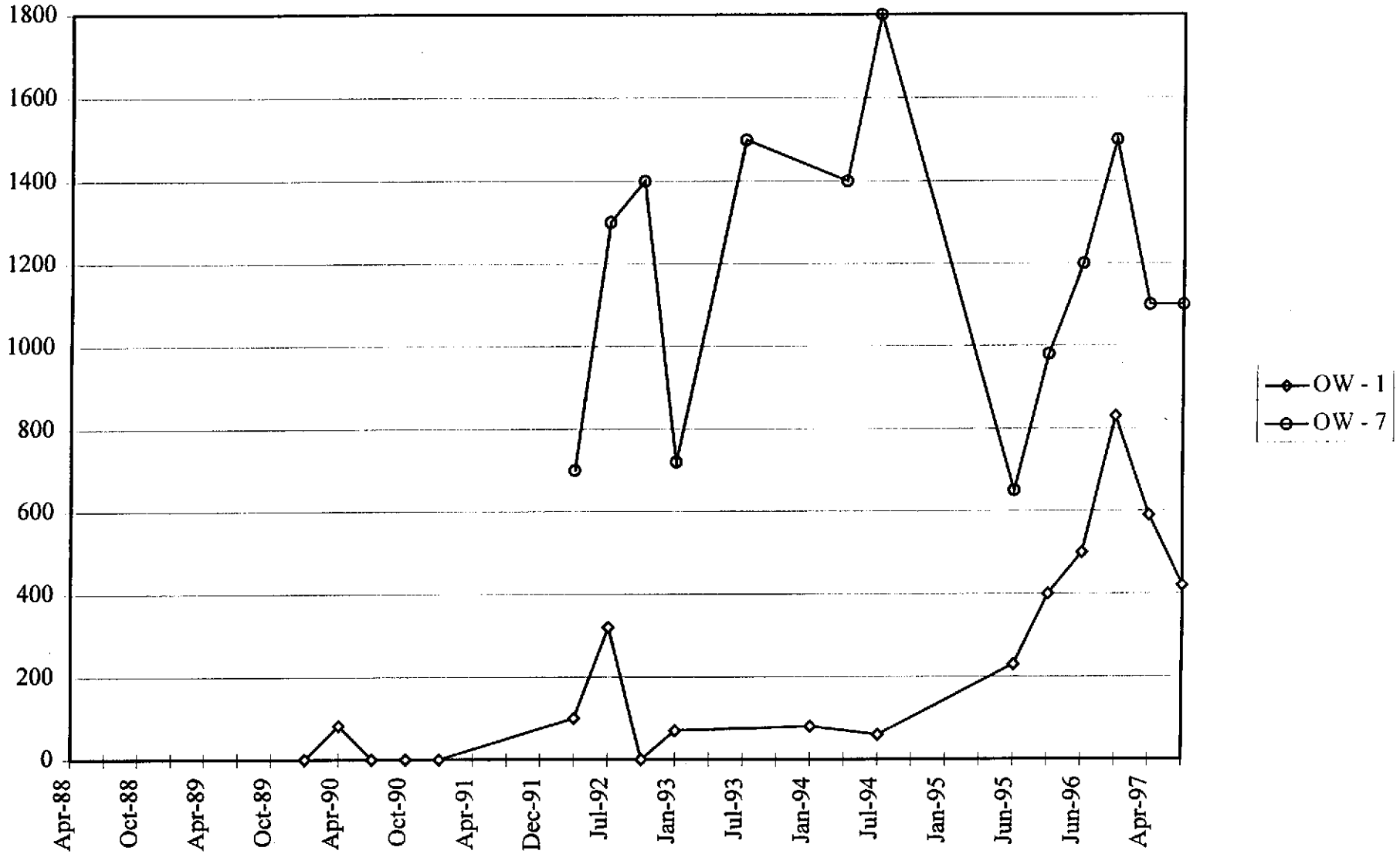
3666.XLS

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



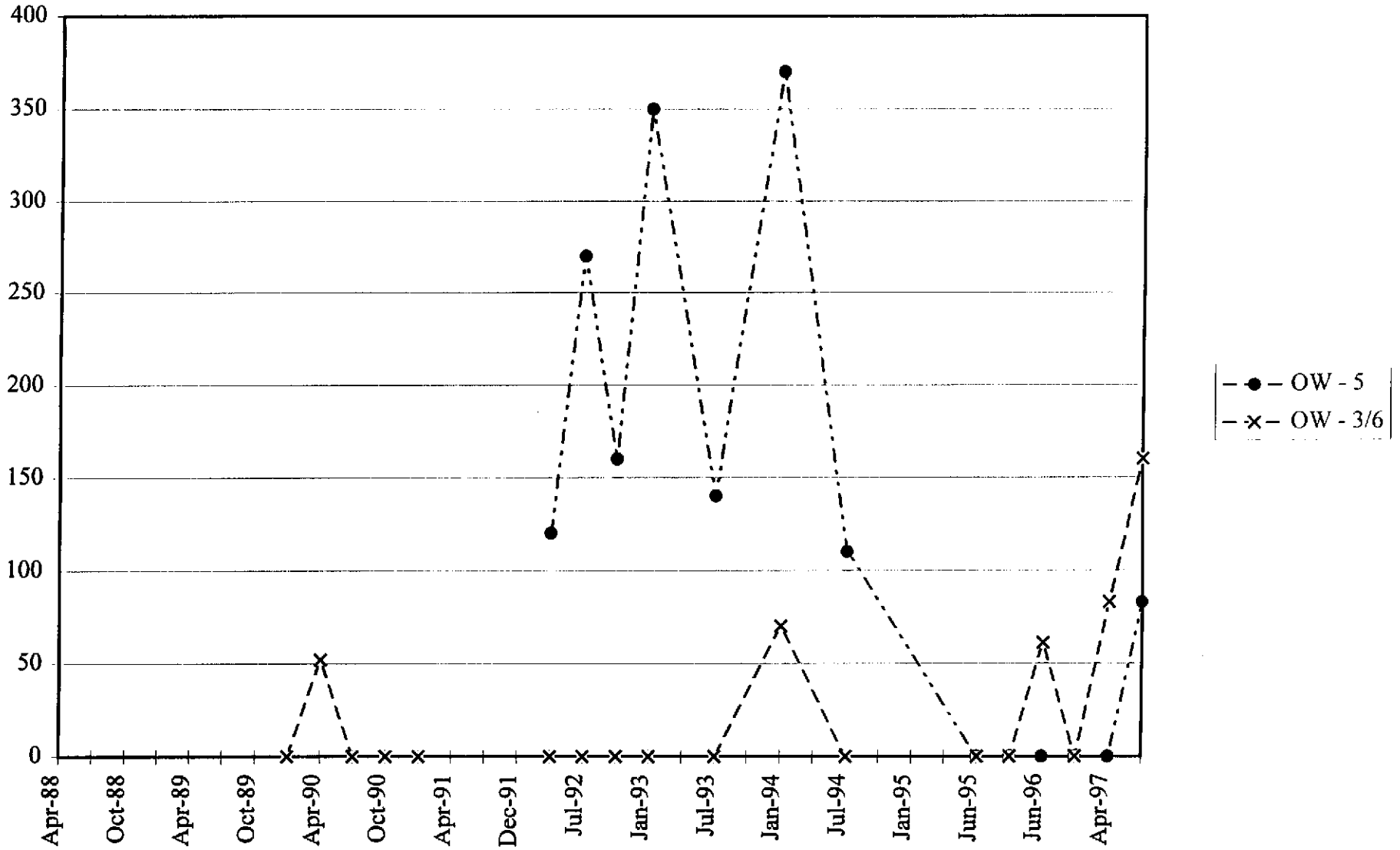
3666.XLS

FIGURE 3.3
TPH-GASOLINE in OW - 1 & 7



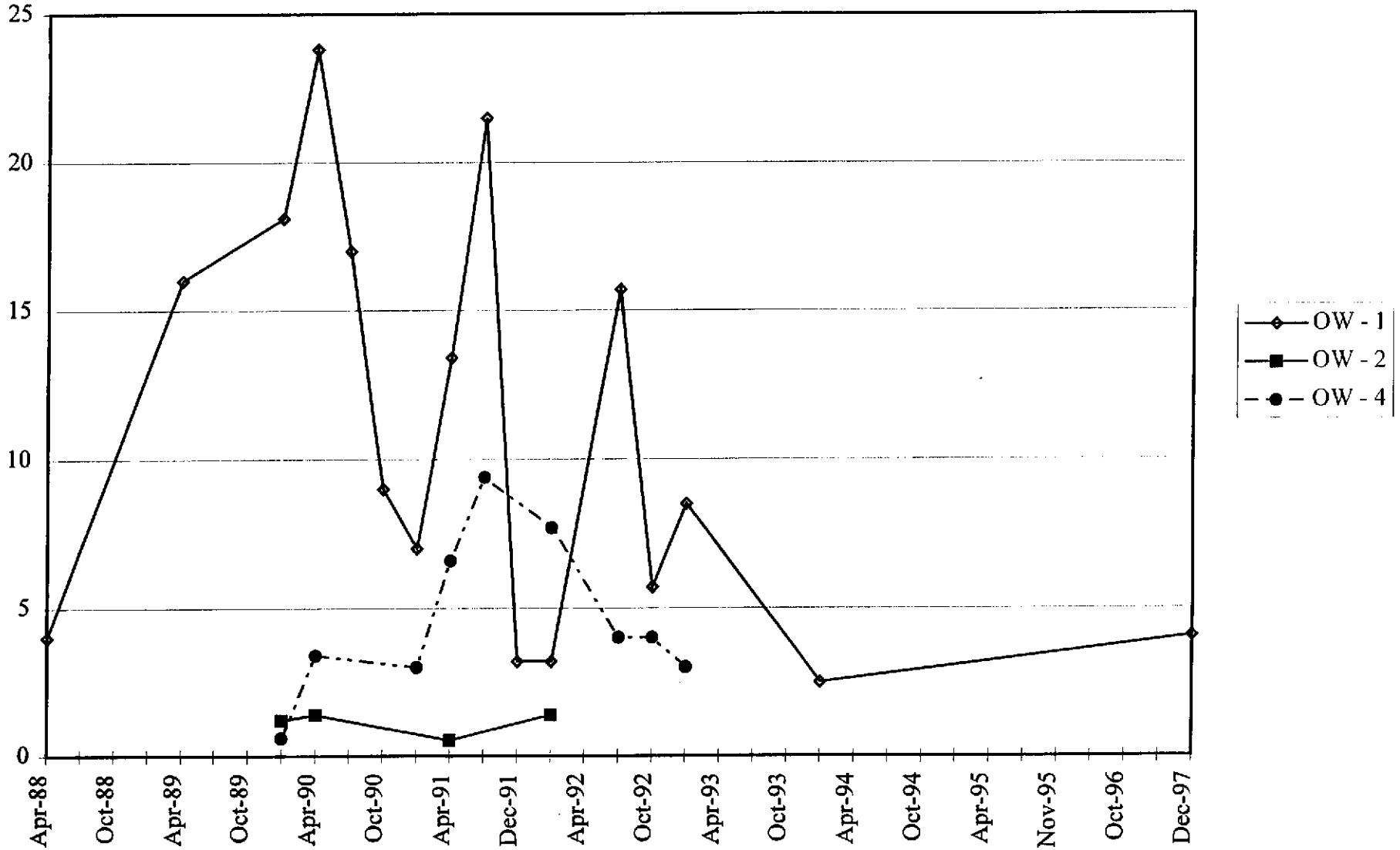
3666.XLS

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



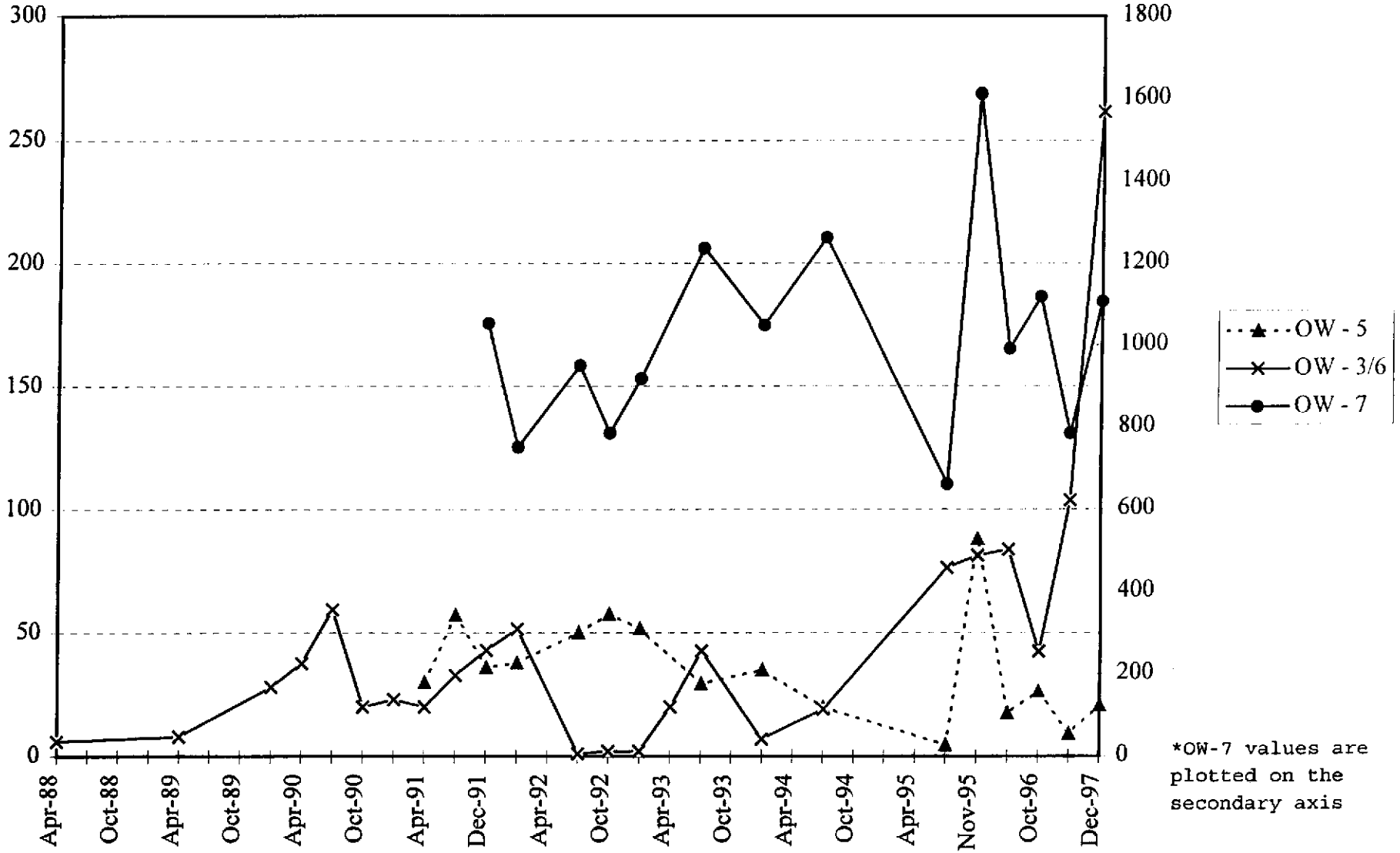
3666.XLS

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

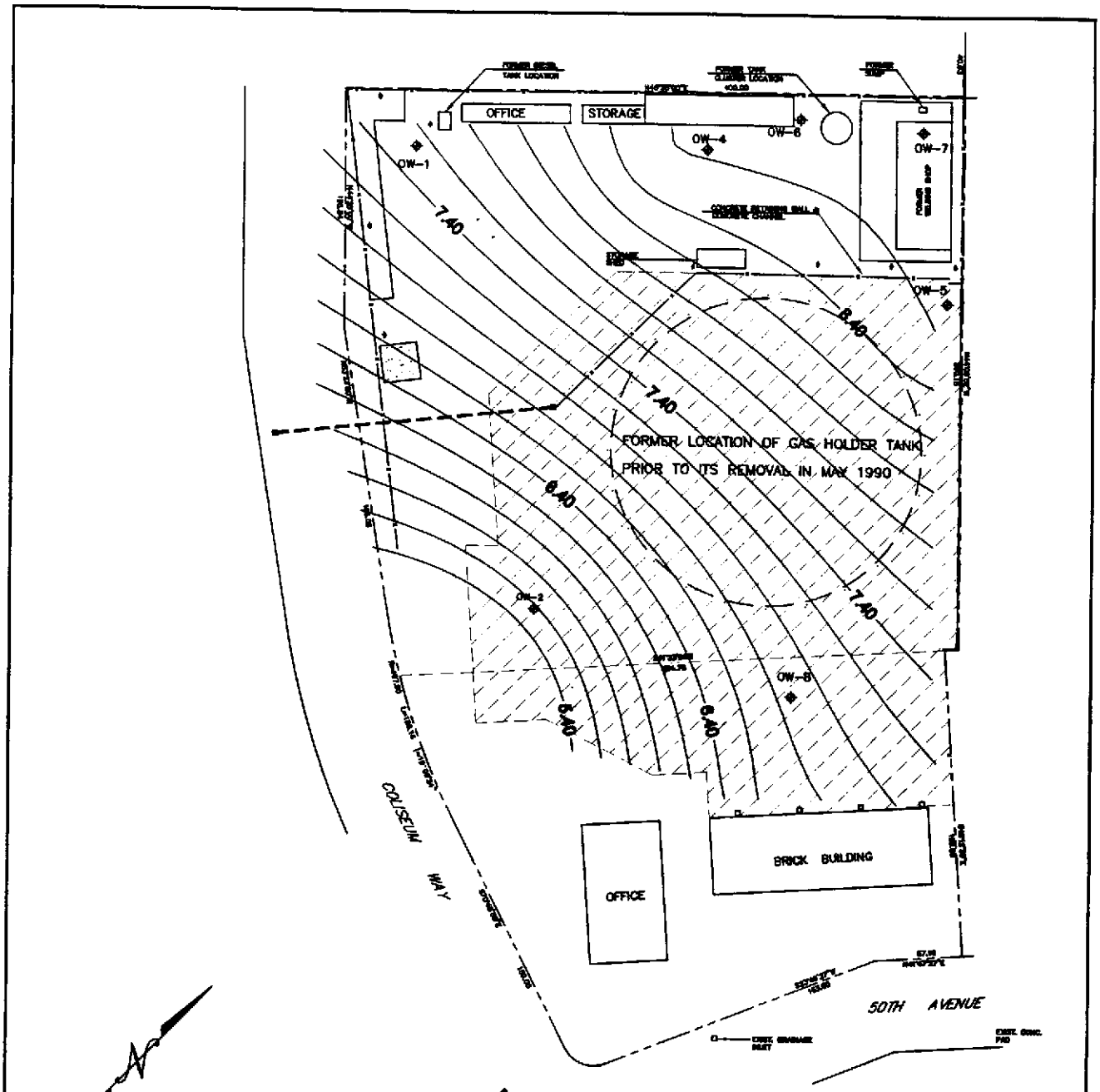


3666.XLS

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



3666.XLS



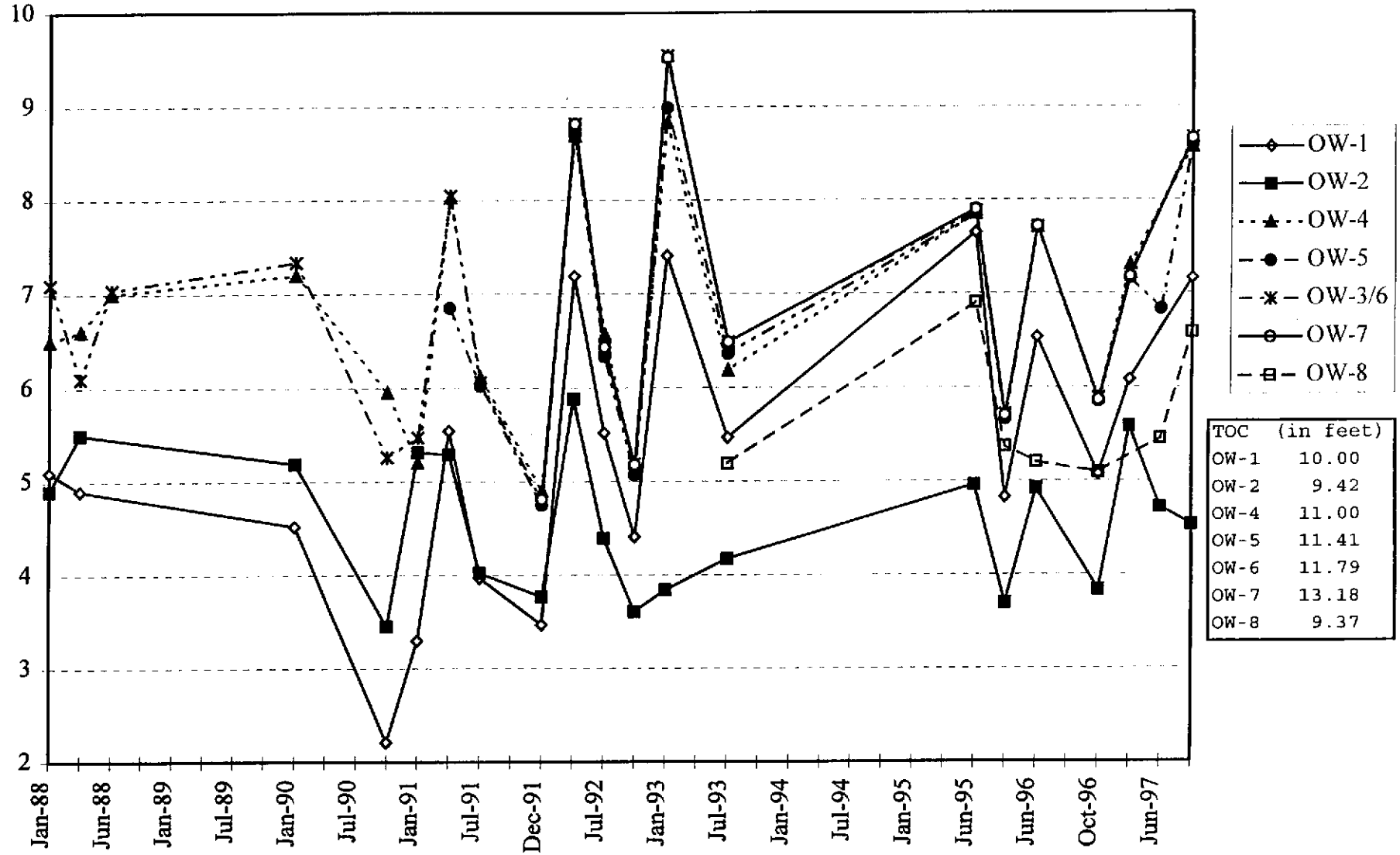
CET Environmental Services, Inc.

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

JOB NUMBER	DATE	DRAWING	BY	REVISED
3666	1/98	gw12-97	ZS	2/9

FIGURE 4.1

FIGURE 4.2
HISTORICAL GROUNDWATER LEVELS



TOC	(in feet)
OW-1	10.00
OW-2	9.42
OW-4	11.00
OW-5	11.41
OW-6	11.79
OW-7	13.18
OW-8	9.37

3666.XLS