BURBANK PROGRAM OFFICE
Burbank, CA 91505

JUNE 1995
WATER QUALITY REPORT
BEAUMONT TEST SITE FACILITY No. 1
BEAUMONT, CA

Volume 1

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1.0 INTRODUCTION

This report presents the analytical results from the June 1995 groundwater sampling event at the former Lockheed Martin Company (LMC) facility located near Beaumont, California, hereinafter referred to as Beaumont Site No. 1 (Figure 1).

1.1 Purpose and Scope

The purpose of this report is to present field, laboratory, and quality control data obtained during purging and sampling of monitoring wells during the June, 1995 event. Water level elevation measurements in the study area are conducted on a monthly basis and are reported semiannually in a separate report.

Groundwater samples were collected from 55 monitor wells during the June, 1995 sampling event as part of the ongoing groundwater monitoring program. Table 1, lists construction data on the sampled groundwater monitoring wells including well depth, screened interval, and the water bearing zone in which each well is completed. The sampling and analysis schedule followed during this semiannual sampling event is presented in Table 2.

The field data collected is presented in Appendix A. Groundwater samples were sent to the Lockheed Analytical Services (LAS) laboratory and analyzed for VOCs by U.S. Environmental Protection Agency (EPA) Method 8010; this data is presented in Table 3. For external quality assurance/quality control (A/QC), seven samples were sent to the BC Analytical (BCA) laboratory in Glendale, California, and were analyzed by the aforementioned method and are also presented in Table 3. Laboratory data for each well is contained in Appendix B, together with data from the previous sampling event.

Graphs displaying chemical concentration of trichloroethylene (TCE), tetrachloroethylene (PCE), 1,1,1-Trichloroethane (1,1,1-TCA), 1,1-Dichlorethylene (1,1-DCE), and 1,2-Dichloroethane (1,2-

DCA) have been prepared for each well are presented in Appendix C. This report also summarized the results of the data assessment and data validation process for groundwater sample collection and analysis (Appendix D). The standard sample collection and handling procedures for groundwater sampling, field water quality measurements, and water level measurements are included in Appendix E. The original submissions of laboratory data, including chain-of-custody forms, are included in Volume II. Sample identification and cross-reference tables have been prepared for the semiannual (June, 1995) laboratory analytical reports and are included together with laboratory data sheets in Volume II, Appendix F.

2.0 BACKGROUND

2.1 Project Area Location

The project area is located south of the town of Beaumont, California, about 70 miles east of Los Angeles (Figure 1). The site covers 9,100 acres in the San Jacinto Nuevo y Potrero Valley, which is drained primarily by Potrero Creek. The site lies immediately north of the Colorado River Aqueduct Tunnel, which has influenced local groundwater conditions since its construction in the 1930s (Radian 1990, 1992b).

2.2 Project Area History

For detail project area history, see previous Water Quality Report, Beaumont Test Site Facility No. 1, May 1995.

2.3 Groundwater Sampling History

For detail groundwater sampling history, see previous Water Quality Report, Beaumont Test Site Facility No. 1, May 1995.

3.0 GEOLOGIC AND HYDROGEOLOGIC CONDITIONS

The geology and hydrogeology of the site has been described in detail in reports by Radian (1990, 1992b).

4.0 FIELD WORK AND LABORATORY METHODS

4.1 Field Work

The June, 1995, semiannual groundwater sampling was performed by LMC and Lockheed Environmental System and Technologies (LESAT) personnel during the period from June 12 to 25, 1995. Sampling activities were conducted following the Lockheed Martin Beaumont No. 1 Operations and Maintenance Health and Safety Plan, and the LMC Standard Operating Procedures (SOP).

Groundwater sampling activities performed during the groundwater sampling included monitoring water quality parameters while purging multiple well casing volumes to obtain representative groundwater samples. Following parameter stabilization or after the purged wells had recharged to within 80 percent of their initial level, representative groundwater samples were collected for laboratory analysis from the monitoring wells. The locations of the groundwater monitoring wells sampled during this event are shown in Figure 2. Groundwater samples were collected, handled, transported, and documented in accordance with the attached SOP (Appendix E). All samples were preserved as required by the specific analytical method, packed in ice, and submitted with chain-of-custody records to the LAS laboratory in Las Vegas, Nevada for analysis. Equipment blanks were taken for the first few days and periodically thereafter.

4.2 Laboratory Methods

Lockheed Analytical Services (California State Certification No. 1392) analyzed the groundwater samples obtained in the June 1995, following Method 8010 as documented by the United States Environmental Protection Agency (EPA, 1982, 1983).

Groundwater samples collected from specific wells were analyzed for VOCs according to EPA method 8010. Selected split samples were also analyzed by EPA method 8010. Chain-of-custody records and laboratory data sheets are included in Volume II, Appendix F.

5.0 LABORATORY RESULTS

Analytical results for the groundwater samples collected during the June 1995, are summarized in Table 3 and tabulated in Appendix B. Concentrations of the analytes of interest are plotted on Figures 3 through 8. In addition, water quality hydrographs of TCE, PCE, 1,1,1-TCA, 1,1-DCE and 1,2-DCA are plotted by well for all cumulative data of record, and are presented in Appendix C.

Groundwater samples were collected from 27 wells screened in the Mt. Eden formation in the burn pit area. Results from most wells sampled indicate decreases or no change in concentration from the previous sampling round. The highest concentrations of 1,1,1-TCE, 1,1-DCE, and TCE at 450 ppb, 9,000 ppb, and 3,900 ppb, respectively, were detected in monitoring well MW-61B (MCLs are 200 ppb, 6 ppb, and 5 ppb, respectively). 1,1-DCA was reported to be present up to 250 ppb in extraction well EW-18 (MCL is 5 ppb). 1,1-DCA and PCE were also reported to be present at elevated levels, ranging up to 300 ppb and 15 ppb (MCLs are 0.5 ppb and 5.0 ppb, respectively) in monitoring well MW-26.

Groundwater samples were collected from 28 wells screened in the Quaternary Alluvium in the motor production area. Results from most wells sampled indicate decreases or no change in

concentration from the previous sampling round. The highest concentrations of 1,1,1- TCA, 1,1-DCA, and 1,1-DCE at 21 ppb, 4.7 ppb, and 220 ppb, respectively, were detected in monitoring well MW-65. The concentrations of 1,2-DCA at 4.8 ppb and TCE at 4.8 ppb, were also detected in monitoring wells MW-57A, and MW-65, respectively. High values of the same contaminants in the former rocket motor production area are usually about an order of magnitude lower.

Monitoring wells, MW-3, MW-4, MW-22, MW-32, and MW-34 were sampled to determine the continuity of the contamination between the burn pit and motor production area. 1,2-DCE concentrations between the two area ranged from nondetectable to 600 ppb (well MW-22). TCE concentrations between the two areas ranged from nondetecable to 380 ppb (well MW-22).

Three upgradient wells (MW-27, MW-34, and MW-36) from burn pit area were sampled to delineate the eastern boundary of contamination. MW-36 was reported to be non-detect, but relatively low concentrations of TCE (43.0 in MW-27 and 31.0 ppb in MW-34) were detected. This data indicates that the contaminant plume may end near MW-36 and that the low concentrations of contaminants detected in MW-22 and MW-34 may be isolated occurrences.

Two deep wells, MW-3 and MW-32 located downgradient and within the lateral limit of the plume, were sampled to estimate the vertical distribution of contamination. Analytical results were reported to be non-detect, which indicates that there are no deep contaminants in the Mt. Eden Formation. Data from other wells located within the contaminant plume indicate that the contamination decreases with depth.

6.0 SUMMARY, CONCLUSIONS AND RECOMMENDATION

Based on the results of this and previous investigations, the following conclusions can be made:

- Trichloroethylene and 1,1-Dichloroethylene are present above the MCL in every well

sampled except wells, MW-3, MW-32, and MW-36. 1,2-Dichloroethane is in excess of the MCL in every well in the burn pit area and in all but three wells, (MW-6, MW-17, and MW-50,) in the rocket motor production area. 1,1-Dichloroethane exceeds the MCL in all but three wells (MW-59A, MW-60A and MW-61A) in the burn pit area, none of the wells in the rocket motor production area exceed the MCL for 1,1-Dichloroethane. Tetrachloroethylene exceeds the MCL in only three wells (EW-18, MW-26, and MW-61B) in the burn pit area, and in no wells in the rocket motor production area. 1,1-Trichloroethane exceeds the MCL in five wells (EW-13, EW-15, EW-18 MW-26 and MW-61B) in the burn pit area, and in no wells in the rocket motor production area.

- Three upgradient wells from burn pit area were sampled. MW-36 was reported to be non-detect but relatively low concentrations of VOCs were detected in other wells. Therefore, the contaminant plume may end near MW-36 and may be locally isolated in wells MW-22, and MW-34. However, to define the lateral extent of the contaminant plume a subsurface investigation is needed to the east of MW-22, MW-27, and MW-34. Also the area west of the plume in the burn pit area has not been fully defined. Therefore, MW-35 should be added to the next sampling round. In the current and the previous sampling rounds, the burn pit area was observed to have relatively high contaminant concentrations.

- The west and south edge of the plume in the rocket motor production area is defined by wells MW-6, MW-19, and MW-17. Minor concentrations of TCE (below MCLs) were detected in these wells. However, to fully define the extent of contamination the following wells should be considered in future sampling efforts: MW-66, MW-44, MW-40, MW-29, and MW-42.

7.0 REFERENCES

Radian Corporation, 1990. Lockheed Propulsion Company Beaumont Test Facilities Source and Hydrogeologic Investigation Final. February 1990.

_____ 1992b. Lockheed Propulsion Company Beaumont No. 1 Facility Hydrogeologic Report. December 1992.

Lockheed Environmental System & Technologies Company (LESAT), 1995. Water Level and Water Quality Report, Beaumont Test Facility No. 1, Beaumont, Ca. Dec. 1994.

U.S. EPA, 1982. Handbook for Sampling and Sample Preservation of Water and Wastewater. Cincinnati. Ohio: Environmental Monitoring and Support Laboratory. EPA-600/4-82-029; September 1982.

_____ 1983. Methods for Chemical Analysis of Water and Wastes. Cincinnati, Ohio: Environmental Monitoring and Support Laboratory. EPA-600/4-79-020; March 1979, revised 1983.

TABLE 1

MONITOR WELL CONSTRUCTION
DATA SUMMARY

WELL IDENTIFICATION	DATE COMPLETED	SURFACE ELEVATION (feet msl)	MEASURING POINT ELEVATION (feet msl)	TOTAL DEPTH DRILLED	SCREENED INTERVAL (fbls)		HYDROSTRATIGRAPHIC UNIT SCREENED
EW-01	22SEP92	2139.98	2142.64	85.0	34.6	76.0	QA
EW-02	22OCT92	2125.67	2125.06	70.0	25.0	66.5	QA
EW-08	21OCT92	2174.75	2175.13	115.0	60.6	112.0	ME
EW-09	23SEP92	2176.52	2176.39	122.0	69.4	120.0	ME
EW-10	20OCT92	2176.50	2176.94	115.0	60.5	111.9	ME
EW-11	07OCT92	2178.57	2178.74	105.0	60.6	101.2	ME
EW-12	12OCT92	2176.79	2176.79	115.0	60.7	111.3	ME
EW-13	17SEP92	2179.66	2179.89	117.0	74.0	114.0	ME
EW-14	08OCT92	2180.64	2181.40	105.0	60.5	101.3	QA/ME
EW-15	25SEP92	2180.93	2181.32	107.0	64.4	105.0	ME
EW-16	28SEP92	2181.68	2182.30	107.0	64.4	105.0	ME
EW-18	03FEB93	2181.41	2182.34	102.0	60.0	100.5	ME
MW-03	19DEC92	2165.61	2166.44	272.0	260.0	270.0	ME
MW-04	09DEC92	2156.67	2157.39	85.0	62.0	82.4	QA
MW-06	10DEC89	2117.73	2119.11	119.0	104.0	114.0	QA/ME
MW-17	11DEC89	2136.18	2137.72	65.0	44.1	64.3	QA
MW-19	13DEC89	2114.72	2115.79	50.0	25.0	45.0	QA
MW-22	28JAN91	2168.37	2168.22	120.0	74.0	114.0	QA
MW-26	30JAN91	2180.06	2179.93	129.0	87.6	128.0	ME
MW-27	08FEB91	2178.27	2177.99	92.2	29.3	91.4	QA
MW-32	11FEB91	2171.86	2173.38	223.0	210.0	220.0	ME
MW-34	18FEB91	2150.39	2151.38	85.0	62.0	82.0	QA
MW-36	14MAR91	2200.82	2202.53	105.0	85.0	105.0	QA/GB

TABLE 1 (continued)

MONITOR WELL CONSTRUCTION
DATA SUMMARY

WELL IDENTIFICATION	DATE COMPLETED	SURFACE ELEVATION (feet msl)	MEASURING POINT ELEVATION (feet msl)	TOTAL DEPTH DRILLED	SCREENED INTERVAL (fbls)		HYDROSTRATIGRAPHIC UNIT SCREENED
MW-39	11MAR91	2139.34	2141.54	86.0	60.0	80.0	QA
MW-41	10DEC91	2129.74	2131.28	55.0	35.0	55.0	QA/ME
MW-49	20DEC91	2127.18	2128.19	113.5	30.5	52.0	QA
MW-50	19DEC91	2148.11	2148.76	74.0	54.3	74.0	QA
MW-51	14AUG92	2134.55	2135.71	67.0	39.0	59.5	QA
MW-52	17AUG92	2131.98	2133.53	65.0	37.0	57.5	QA
MW-56A	27AUG92	2139.38	2140.44	183.0	175.7	178.0	ME
MW-56B	27AUG92	2139.33	2139.93	95.5	88.7	91.0	QA
MW-56C	31AUG92	2139.21	2140.14	63.8	48.2	58.5	QA
MW-56D	11SEP92	2138.94	2139.85	75.0	71.7	74.0	QA
MW-57A	08SEP92	2142.71	2143.34	75.0	58.7	69.0	QA
MW-57B	09SEP92	2142.73	2143.58	98.0	93.7	96.0	QA
MW-57C	10SEP92	2142.45	2143.38	85.0	81.2	84.5	QA
MW-57D	10SEP92	2142.56	2143.48	57.0	45.7	56.0	QA
MW-58A	14SEP92	2137.13	2138.06	88.5	78.3	81.0	QA
MW-58B	14SEP92	2137.21	2138.13	50.0	39.7	50.0	QA
MW-58C	15SEP92	2137.38	2138.36	60.0	57.3	59.6	QA
MW-58D	15SEP92	2137.50	2138.31	70.0	67.7	70.0	QA
MW-59A	26AUG92	2175.43	2176.95	144.0	138.0	140.0	ME
MW-59B	04SEP92	2175.54	2177.18	110.0	97.0	107.0	ME
MW-59C	10SEP92	2175.48	2176.71	135.5	132.0	134.0	ME
MW-59D	10SEP92	2175.71	2177.32	125.0	118.0	120.0	ME
MW-60A	02SEP92	2177.85	2179.35	149.0	131.7	134.0	ME

TABLE 1 ontinued)

MONITOR WELL CONSTRUCTION
DATA SUMMARY

WELL IDENTIFICATION	DATE COMPLETED	SURFACE ELEVATION (feet msl)	MEASURING POINT ELEVATION (feet msl)	TOTAL DEPTH DRILLED	SCREENED INTERVAL (fbls)		HYDROSTRATIGRAPHIC UNIT SCREENED
MW-60B	02SEP92	2177.88	2179.52	119.0	111.7	114.0	ME
MW-61A	01SEP92	2181.19	2183.74	155.0	148.0	150.0	ME
MW-61B	02SEP92	2181.16	2183.59	105.0	92.0	102.0	ME
MW-61C	08SEP92	2181.23	2183.68	135.0	128.0	130.0	ME
MW-61D	09SEP92	2181.12	2183.65	120.0	114.0	116.0	ME
MW-62A	20OCT92	2127.89	2128.82	45.0	38.4	41.1	QA
MW-62B	20OCT92	2127.71	2128.86	65.0	62.2	64.5	QA
MW-65	09FEB93	2123.77	2126.27	47.0	23.4	45.0	QA
OW-03	26MAY83	2139.40	2141.01	70.0	46.0	56.0	QA

FOOTNOTE:

fbls = feet below land surface
feet msl= feet above mean sea level
ME = Mount Eden formation
QA = Quaternary Alluvium formation
- = Unknown

TABLE 2

SAMPLING AND ANALYSIS SCHEDULE
SECOND QUARTER 1995

WELL	SAMPLE DATE	ORGAINIC COMPOUNDS			QUALITY CONTROL				
		EPA 8260	EPA 8010	EPA 8020	EQUIP BLANK	FIELD BLANK	DVP	FIELD DUP	FIELD SPLIT
EW-01	25JUN95		X						
EW-02	25JUN95		X						
EW-08	19JUN95		X		X				
EW-09	20JUN95		X		X	X	X	X	X
EW-10	21JUN95		X		X				
EW-11	24JUN95		X						
EW-12	24JUN95		X		X				
EW-13	25JUN95		X	X					
EW-14	21JUN95		X		X				
EW-15	25JUN95		X	X					
EW-16	25JUN95		X	X					
EW-18	25JUN95		X	X		X	X	X	X
MW-03	22JUN95		X						
MW-04	20JUN95		X		X				
MW-06	20JUN95		X			X			
MW-17	24JUN95		X						
MW-19	21JUN95		X						
MW-22	20JUN95		X		X				
MW-26	21JUN95		X			X	X	X	X
MW-27	20JUN95		X		X				
MW-32	25JUN95		X						
MW-34	21JUN95		X						
MW-36	19JUN95		X		X	X	X	X	X

TABLE 2 (continued)

SAMPLING AND ANALYSIS SCHEDULE
SECOND QUARTER 1995

WELL	SAMPLE DATE	ORGAINIC COMPOUNDS			QUALITY CONTROL				
		EPA 8260	EPA 8010	EPA 8020	EQUIP BLANK	FIELD BLANK	DVP	FIELD DUP	FIELD SPLIT
MW-39	23JUN95		X			X			
MW-41	22JUN95		X						
MW-49	21JUN95		X						
MW-50	19JUN95		X						
MW-51	21JUN95		X						
MW-52	21JUN95		X						
MW-56A	19JUN95		X		X	X	X	X	X
MW-56B	21JUN95		X						
MW-56C	21JUN95		X						
MW-56D	21JUN95		X						
MW-57A	22JUN95		X			X			
MW-57B	21JUN95		X						
MW-57C	21JUN95		X						
MW-57D	22JUN95		X						
MW-58A	20JUN95		X		X				
MW-58B	22JUN95		X						
MW-58C	20JUN95		X						
MW-58D	20JUN95		X						
MW-59A	21JUN95		X						
MW-59B	23JUN95		X						
MW-59C	21JUN95		X						
MW-59D	24JUN95		X						
MW-60A	20JUN95		X		X				

TABLE 2 (continued)

SAMPLING AND ANALYSIS SCHEDULE
SECOND QUARTER 1995

WELL	SAMPLE DATE	ORGAINIC COMPOUNDS			QUALITY CONTROL				
		EPA 8260	EPA 8010	EPA 8020	EQUIP BLANK	FIELD BLANK	DVP	FIELD DUP	FIELD SPLIT
MW-60B	20JUN95		X		X				
MW-61A	21JUN95		X						
MW-61B	21JUN95		X						
MW-61C	25JUN95		X						
MW-61D	24JUN95		X						
MW-62A	22JUN95		X						
MW-62B	22JUN95		X			X	X	X	X
MW-65	22JUN95		X						
OW-03	22JUN95		X			X	X	X	X

TABLE 3

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	EW-01 25-JUN-95 QA	EW-02 25-JUN-95 QA	EW-08 19-JUN-95 ME	EW-09 20-JUN-95 ME
1,1,1-Trichloroethane	14.000 E	15.000 E	1.8000	29.000 E
1,1,2-Trichloroethane	< 0.5000 E	< 0.5000 E	< 0.5000	< 5.0000
1,1-Dichloroethane	3.0000 E	4.0000 E	< 1.0000	19.000 E
1,1-Dichloroethylene	73.000 E	130.00 E	< 17.000	500.00 E
1,2-Dichloroethane	2.9000 E	1.3000 E	0.8700	29.000
1,2-Dichloropropane	< 1.0000 E	< 1.0000 E	< 1.0000	< 5.0000
Benzene	---	---	---	---
Carbon tetrachloride	< 0.5000 E	1.1000 E	< 0.5000	< 5.0000
Chloroform	< 1.0000 E	2.6000 E	< 1.0000	< 5.0000
Methylene chloride	< 2.0000 E	< 2.0000 E	< 2.0000	< 5.0000
Tetrachloroethylene	< 0.5000 E	< 0.5000 E	< 0.5000	< 5.0000
Trichloroethylene	85.000 E	130.00 E	< 5.9000	420.00 E
Vinyl chloride	< 0.5000 E	< 0.5000 E	< 0.5000	< 5.0000
cis-1,2-Dichloroethylene	< 1.0000 E	< 1.0000 E	< 1.0000	< 5.0000
trans-1,2-Dichloroethylene	< 1.0000 U	< 1.0000 U	< 1.0000	< 5.0000
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	BC Analytical
Quality Assurance Code	ORG	ORG	ORG	SPT

< = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	EW-09 20-JUN-95 ME	EW-09 20-JUN-95 ME	EW-10 21-JUN-95 ME	EW-11 24-JUN-95 ME
1,1,1-Trichloroethane	22.000	20.000 E	25.000	38.000
1,1,2-Trichloroethane	2.8000	2.5000	2.6000	2.8000
1,1-Dichloroethane	15.000	15.000 E	16.000	16.000
1,1-Dichloroethylene	360.00 E	290.00 E	430.00	730.00
1,2-Dichloroethane	26.000	25.000	25.000 E	27.000
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	1.3000	1.1000	1.5000	2.4000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 3.0000	< 2.8000	2.7000	2.4000
Methylene chloride	< 2.0000	< 2.0000	< 2.0000	< 3.4000
Tetrachloroethylene	1.4000	1.4000	1.7000	2.2000
Trichloroethylene	300.00 E	250.00 E	330.00	360.00
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	2.5000	2.5000	2.5000	3.4000
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	1.3000
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	FD	ORG	ORG	ORG

(<) = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective

TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	EW-12 24-JUN-95 ME	EW-13 25-JUN-95 ME	EW-14 21-JUN-95 QA/ME	EW-15 25-JUN-95 ME
1,1,1-Trichloroethane	41.000	230.00 E	66.000	240.00 E
1,1,2-Trichloroethane	11.000	18.000 E	10.000	9.3000 E
1,1-Dichloroethane	11.000	< 200.00 E	12.000	< 200.00 E
1,1-Dichloroethylene	530.00	< 1400.0 E	320.00	< 1400.0 E
1,2-Dichloroethane	35.000	< 100.00 E	< 25.000	150.00 E
1,2-Dichloropropane	< 1.0000	< 1.0000 E	< 1.0000	< 1.0000 E
Benzene	---	1.2000	---	1.1000
Carbon tetrachloride	1.6000	3.5000 E	1.3000	3.0000 E
Chloroform	2.5000	10.000 E	3.2000	16.000 E
Methylene chloride	< 3.3000	2.1000 E	< 2.0000	< 2.0000 E
Tetrachloroethylene	2.5000	4.7000 E	2.7000	4.6000 E
Trichloroethylene	160.00	< 840.00 E	210.00	< 770.00 E
Vinyl chloride	< 0.5000	< 0.5000 E	< 0.5000	< 0.5000 E
cis-1,2-Dichloroethylene	5.0000	21.000 E	6.0000	20.000 E
trans-1,2-Dichloroethylene	< 1.0000	2.2000 E	< 1.0000	1.9000 E
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	ORG	ORG

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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E = Estimated; selected quality control data not within criteria limited use determined by data quality objective

TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	EW-16 25-JUN-95 ME	EW-18 25-JUN-95 ME	EW-18 25-JUN-95 ME	EW-18 25-JUN-95 ME
1,1,1-Trichloroethane	130.00 E	400.00 E	570.00 E	290.00 E
1,1,2-Trichloroethane	5.4000 E	< 200.00 E	< 125.00	< 125.00 E
1,1-Dichloroethane	22.000 E	< 200.00 E	< 250.00	< 250.00 E
1,1-Dichloroethylene	< 930.00 E	21000. E	6800.0 E	< 2900.0 E
1,2-Dichloroethane	17.000 E	< 200.00 E	320.00 E	160.00 E
1,2-Dichloropropane	< 1.0000 E	< 200.00 E	< 1.0000 E	< 1.0000 E
Benzene	1.0000	4.0000	3.6000	3.3000
Carbon tetrachloride	3.2000 E	< 200.00 E	14.000 E	12.000 E
Chloroform	< 100.00 E	< 200.00 E	< 250.00	< 250.00 E
Methylene chloride	< 2.0000 E	< 200.00 E	< 2.0000 E	2.2000 E
Tetrachloroethylene	1.9000 E	< 200.00 E	17.000 E	13.000 E
Trichloroethylene	< 700.00 E	4700.0 E	< 2000.0	< 1300.0 E
Vinyl chloride	< 0.5000 E	< 200.00 E	0.7800 E	0.8100 E
cis-1,2-Dichloroethylene	6.1000 E	< 200.00 E	< 250.00	< 250.00 E
trans-1,2-Dichloroethylene	1.0000 E	< 200.00 E	5.4000 E	6.7000 E
Laboratory	Lockheed Analytical	BC Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	ORG	SPT	FD	ORG

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E = Estimated; selected quality control data not within criteria limited use determined by data quality objective

TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-03 22-JUN-95 ME	MW-04 20-JUN-95 QA	MW-06 20-JUN-95 QA/ME	MW-17 24-JUN-95 QA
1,1,1-Trichloroethane	< 1.0000	18.000	< 1.0000	14.000
1,1,2-Trichloroethane	< 0.5000	0.6800	< 0.5000	< 0.5000
1,1-Dichloroethane	< 1.0000	4.2000	< 1.0000	< 1.0000
1,1-Dichloroethylene	1.8000	160.00	< 0.6700	17.000
1,2-Dichloroethane	< 0.5000	3.6000	< 0.5000	< 0.5000
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	< 0.5000	1.1000	< 0.5000	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 1.0000	2.0000	< 1.0000	< 1.0000
Methylene chloride	< 2.0000	< 2.0000	< 2.0000	< 2.4000
Tetrachloroethylene	< 0.5000	0.5800	< 0.5000	< 0.5000
Trichloroethylene	1.8000	160.00	< 1.1000	15.000
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	ORG	ORG

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TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-19 21-JUN-95 QA	MW-22 20-JUN-95 QA	MW-26 21-JUN-95 ME	MW-26 21-JUN-95 ME
1,1,1-Trichloroethane	1.7000	130.00	600.00 E	370.00 E
1,1,2-Trichloroethane	< 0.5000	2.3000	38.000 E	24.000
1,1-Dichloroethane	1.6000	8.1000	230.00 E	200.00 E
1,1-Dichloroethylene	< 5.5000	600.00	6800.0 E	4400.0 E
1,2-Dichloroethane	0.7500 E	9.6000	370.00 E	280.00
1,2-Dichloropropane	< 1.0000	< 1.0000	< 30.000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	< 0.5000	1.2000	< 30.000	7.8000
Chlorobenzene	< 2.0000	< 2.0000	< 30.000	< 2.0000
Chloroform	< 1.0000	3.2000	< 36.000	21.000
Methylene chloride	< 2.0000	< 2.0000	< 30.000	2.1000
Tetrachloroethylene	< 0.5000	0.8000	6000.0 E	15.000
Trichloroethylene	< 4.8000	380.00	6000.0 E	3800.0 E
Vinyl chloride	< 0.5000	< 0.5000	< 30.000	0.6600 E
cis-1,2-Dichloroethylene	< 1.0000	3.4000	75.000 E	< 100.00
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 30.000	4.9000
Laboratory	Lockheed Analytical	Lockheed Analytical	BC Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	SPT	FD

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Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective

TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-26 21-JUN-95 ME	MW-27 20-JUN-95 QA	MW-32 25-JUN-95 ME	MW-34 21-JUN-95 QA
1,1,1-Trichloroethane	270.00 E	5.0000	< 1.0000	3.9000
1,1,2-Trichloroethane	28.000 E	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	140.00 E	< 1.0000	< 1.0000 E	< 1.0000
1,1-Dichloroethylene	2100.0 E	< 32.000	3.4000	< 30.000 E
1,2-Dichloroethane	300.00 E	0.9100	< 0.5000	0.7500 E
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	7.8000	< 0.5000	< 0.5000	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	22.000	< 1.0000	< 1.0000	1.5000
Methylene chloride	2.3000	< 2.0000	< 2.0000	< 2.0000
Tetrachloroethylene	15.000 E	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	2600.0 E	43.000	2.2000	31.000 E
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	52.000 E	< 1.0000	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene	4.7000	< 1.0000	< 1.0000 U	< 1.0000
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	ORG	ORG

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E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-36 19-JUN-95 QA/GB	MW-36 19-JUN-95 QA/GB	MW-36 19-JUN-95 QA/GB	MW-39 23-JUN-95 QA
1,1,1-Trichloroethane	< 1.0000	< 1.0000	< 1.0000	7.7000
1,1,2-Trichloroethane	< 0.5000	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	< 1.0000	< 1.0000	< 1.0000	2.3000
1,1-Dichloroethylene	< 0.5000	< 0.6100	< 0.5000	65.000
1,2-Dichloroethane	< 0.5000	< 0.5000	< 0.5000	1.1000
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	< 0.5000	< 0.5000	< 0.5000	1.7000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000	< 1.0000	< 3.7000
Methylene chloride	< 2.0000	< 2.0000	< 2.0000	< 2.4000
Tetrachloroethylene	< 0.5000	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	< 0.5000	< 0.5000	< 0.5000	57.000
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Laboratory	BC Analytical	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	SPT	FD	ORG	ORG

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TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-41 22-JUN-95 QA/ME	MW-49 21-JUN-95 QA	MW-50 19-JUN-95 QA	MW-51 21-JUN-95 QA
1,1,1-Trichloroethane	8.1000	5.9000	3.1000	16.000
1,1,2-Trichloroethane	< 0.5000	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	2.6000	< 1.0000	< 1.0000	2.3000
1,1-Dichloroethylene	120.00	< 18.000	< 9.7000	85.000 E
1,2-Dichloroethane	1.3000 E	1.2000 E	< 0.5000	1.9000 E
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	2.9000	< 0.5000	< 0.5000	1.7000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	2.8000	< 1.0000	< 1.0000	2.0000
Methylene chloride	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Tetrachloroethylene	< 0.5000	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	120.00	21.000	< 9.0000	87.000 E
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	ORG	ORG

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E = Estimated; selected quality control data not within criteria limited use determined by data quality objective

TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-52 21-JUN-95 QA	MW-56A 19-JUN-95 ME	MW-56A 19-JUN-95 ME	MW-56A 19-JUN-95 ME
1,1,1-Trichloroethane	12.000	< 1.0000	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	1.7000	< 1.0000	< 1.0000	< 1.0000
1,1-Dichloroethylene	78.000	3.2000 E	< 2.2000	< 1.7000 E
1,2-Dichloroethane	1.9000 E	< 0.5000	< 0.5000	< 0.5000
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	0.9500	< 0.5000	< 0.5000	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Methylene chloride	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Tetrachloroethylene	< 0.5000	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	77.000	2.8000 E	< 2.1000	< 1.7000 E
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Laboratory	Lockheed Analytical	BC Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	ORG	SPT	FD	ORG

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TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-56B 21-JUN-95 QA	MW-56C 21-JUN-95 QA	MW-56D 21-JUN-95 QA	MW-57A 22-JUN-95 QA
1,1,1-Trichloroethane	6.4000	14.000	10.000	17.000
1,1,2-Trichloroethane	< 0.5000	< 0.5000	< 0.5000	0.7400
1,1-Dichloroethane	1.4000	3.0000	2.3000	3.3000
1,1-Dichloroethylene	43.000	98.000	75.000	91.000
1,2-Dichloroethane	1.8000 E	2.2000 E	2.5000 E	4.8000 E
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	< 0.5000	0.6300	0.5200	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Methylene chloride	< 2.0000	< 2.0000	< 2.0000	3.2000
Tetrachloroethylene	< 0.5000	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	43.000	97.000	73.000	98.000
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	ORG	ORG

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TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-57B 21-JUN-95 QA	MW-57C 21-JUN-95 QA	MW-57D 22-JUN-95 QA	MW-58A 20-JUN-95 QA
1,1,1-Trichloroethane	9.5000	10.000	12.000	4.2000
1,1,2-Trichloroethane	< 0.5000	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	2.1000	2.3000	2.2000	1.1000
1,1-Dichloroethylene	72.000	65.000	68.000	40.000
1,2-Dichloroethane	1.4000 E	2.1000 E	3.0000 E	< 0.5000
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	0.5200	< 0.5000	0.5700	0.6600
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Methylene chloride	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Tetrachloroethylene	< 0.5000	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	74.000 E	70.000 E	69.000	35.000
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	ORG	ORG

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TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-58B 22-JUN-95 QA	MW-58C 20-JUN-95 QA	MW-58D 20-JUN-95 QA	MW-59A 21-JUN-95 ME
1,1,1-Trichloroethane	13.000	8.2000	14.000	2.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	1.7000	1.4000	2.9000	1.3000
1,1-Dichloroethylene	80.000	47.000	97.000	< 19.000
1,2-Dichloroethane	1.0000 E	1.1000	2.9000	2.3000 E
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	1.0000	0.6500	0.8800	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000	1.0000	< 1.0000
Methylene chloride	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Tetrachloroethylene	< 0.5000	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	77.000	42.000	89.000	< 17.000 E
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	ORG	ORG

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TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-59B 23-JUN-95 ME	MW-59C 21-JUN-95 ME	MW-59D 24-JUN-95 ME	MW-60A 20-JUN-95 ME
1,1,1-Trichloroethane	27.000	4.7000	42.000	7.0000
1,1,2-Trichloroethane	3.1000	< 0.5000	3.0000	< 0.5000
1,1-Dichloroethane	20.000	2.7000	21.000	1.3000
1,1-Dichloroethylene	520.00	52.000	580.00	85.000
1,2-Dichloroethane	39.000	5.0000 E	40.000	1.2000
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	2.0000	< 0.5000	2.2000	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	4.4000	< 1.0000	4.2000	< 1.0000
Methylene chloride	44.000	< 2.0000	< 3.4000	< 2.0000
Tetrachloroethylene	1.9000	< 0.5000	2.0000	< 0.5000
Trichloroethylene	450.00	43.000 E	490.00	< 49.000
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	3.2000	< 1.0000	3.0000	< 1.0000
trans-1,2-Dichloroethylene	1.2000	< 1.0000	1.1000	< 1.0000
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	ORG	ORG

(<) = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective

TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-60B 20-JUN-95 ME	MW-61A 21-JUN-95 ME	MW-61B 21-JUN-95 ME	MW-61C 25-JUN-95 ME
1,1,1-Trichloroethane	< 1.0000	3.6000	450.00	< 1.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000	25.000	< 0.5000
1,1-Dichloroethane	< 1.0000	1.8000	240.00	< 1.0000 E
1,1-Dichloroethylene	< 16.000	110.00	9000.0	2.6000
1,2-Dichloroethane	< 0.5000	0.9800 E	170.00	< 0.5000
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	< 0.5000	< 0.5000	15.000	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 1.0000	2.3000	73.000	< 1.0000
Methylene chloride	< 2.0000	< 2.0000	< 2.0000	8.1000
Tetrachloroethylene	< 0.5000	< 0.5000	14.000	< 0.5000
Trichloroethylene	< 6.6000	20.000 E	3900.0	0.7500
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000	80.000	< 1.0000
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	5.7000	< 1.0000 U
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	ORG	ORG

(<) = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-61D 24-JUN-95 ME	MW-62A 22-JUN-95 QA	MW-62B 22-JUN-95 QA	MW-62B 22-JUN-95 QA
1,1,1-Trichloroethane	2.9000	14.000	14.000	15.000
1,1,2-Trichloroethane	< 0.5000	< 0.5000	0.5200	< 0.5000
1,1-Dichloroethane	< 1.0000	2.9000	4.3000	3.4000
1,1-Dichloroethylene	7.5000	120.00	150.00 E	140.00 E
1,2-Dichloroethane	< 0.5000	2.3000 E	1.8000 E	2.8000 E
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	< 0.5000	1.8000	1.7000	1.7000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 1.0000	2.7000	3.3000	< 2.2000
Methylene chloride	< 2.2000	< 2.0000	< 2.0000	< 2.0000
Tetrachloroethylene	< 0.5000	< 0.5000	1.2000	0.8500
Trichloroethylene	3.1000	120.00	130.00	140.00 E
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Laboratory	Lockheed Analytical	Lockheed Analytical	BC Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	SPT	FD

(<) = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective

TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION			
	MW-62B 22-JUN-95 QA	MW-65 22-JUN-95 QA	OW-03 22-JUN-95 QA	OW-03 22-JUN-95 QA
1,1,1-Trichloroethane	15.000	21.000	7.9000	7.8000
1,1,2-Trichloroethane	< 0.5000	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	3.7000	4.7000	1.5000	1.3000
1,1-Dichloroethylene	97.000 E	220.00	52.000 E	37.000 E
1,2-Dichloroethane	2.5000 E	2.8000 E	1.3000	0.9300 E
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Benzene	---	---	---	---
Carbon tetrachloride	1.7000	2.6000	< 0.5000	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 2.3000	4.9000	2.2000 E	< 1.0000
Methylene chloride	< 2.0000	< 2.0000	< 2.0000	< 2.0000
Tetrachloroethylene	0.8500	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	110.00 E	220.00	63.000 E	37.000 E
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000	< 0.5000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000	< 1.0000
Laboratory	Lockheed Analytical	Lockheed Analytical	BC Analytical	Lockheed Analytical
Quality Assurance Code	ORG	ORG	SPT	FD

(<) = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective

TABLE 3 (continued)

VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
SECOND QUARTER 1995

CONSTITUENT (Micrograms per liter)	MONITOR WELL IDENTIFIER/DATE SAMPLED/FORMATION
	OW-03 22-JUN-95 QA
1,1,1-Trichloroethane	8.5000
1,1,2-Trichloroethane	< 0.5000
1,1-Dichloroethane	1.3000
1,1-Dichloroethylene	34.000 E
1,2-Dichloroethane	1.3000 E
1,2-Dichloropropane	< 1.0000
Benzene	---
Carbon tetrachloride	0.5000
Chlorobenzene	< 2.0000
Chloroform	< 1.0000 E
Methylene chloride	< 2.0000
Tetrachloroethylene	< 0.5000
Trichloroethylene	39.000 E
Vinyl chloride	< 0.5000
cis-1,2-Dichloroethylene	< 1.0000
trans-1,2-Dichloroethylene	< 1.0000
Laboratory	Lockheed Analytical
Quality Assurance Code	ORG

(<) = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective

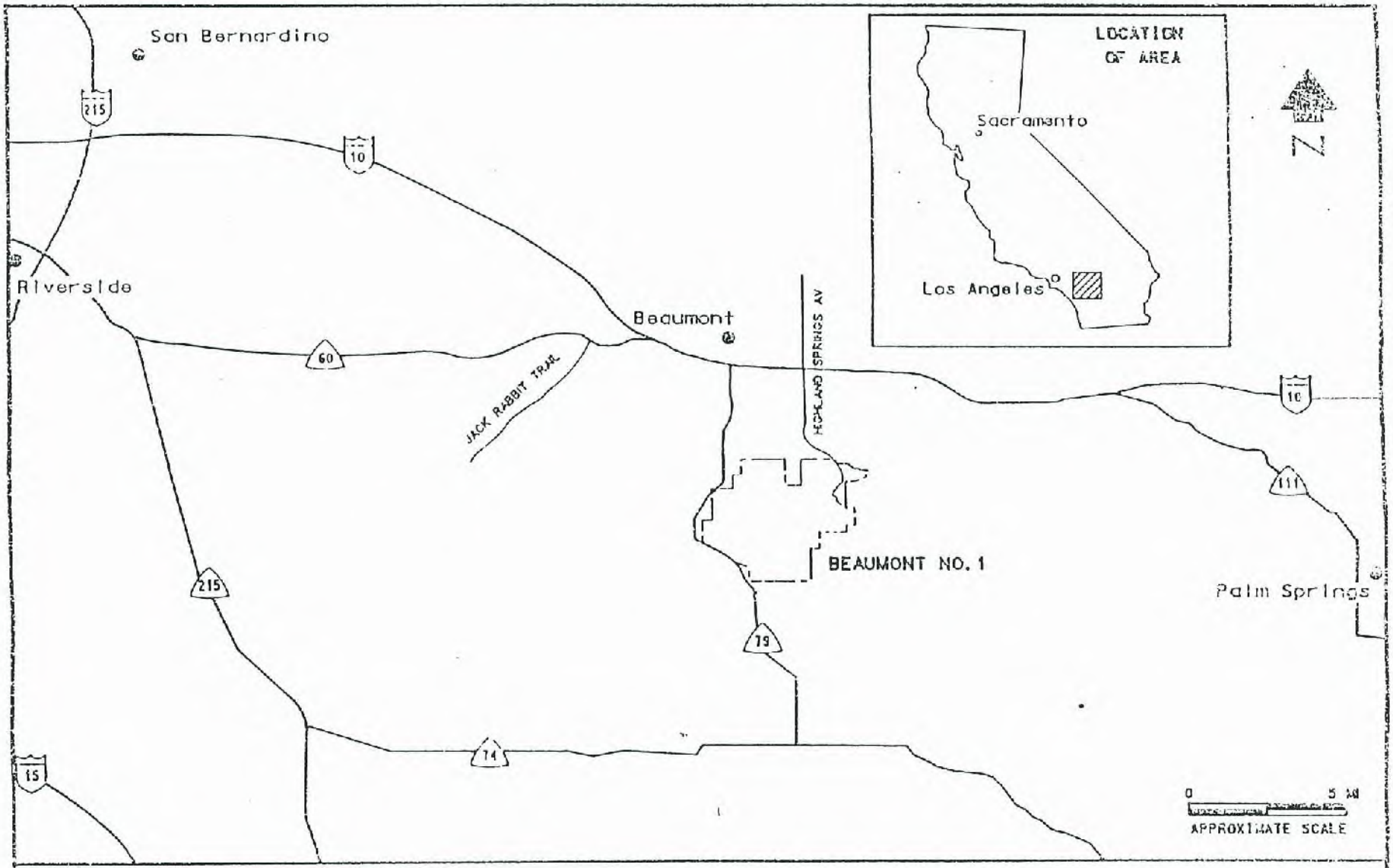
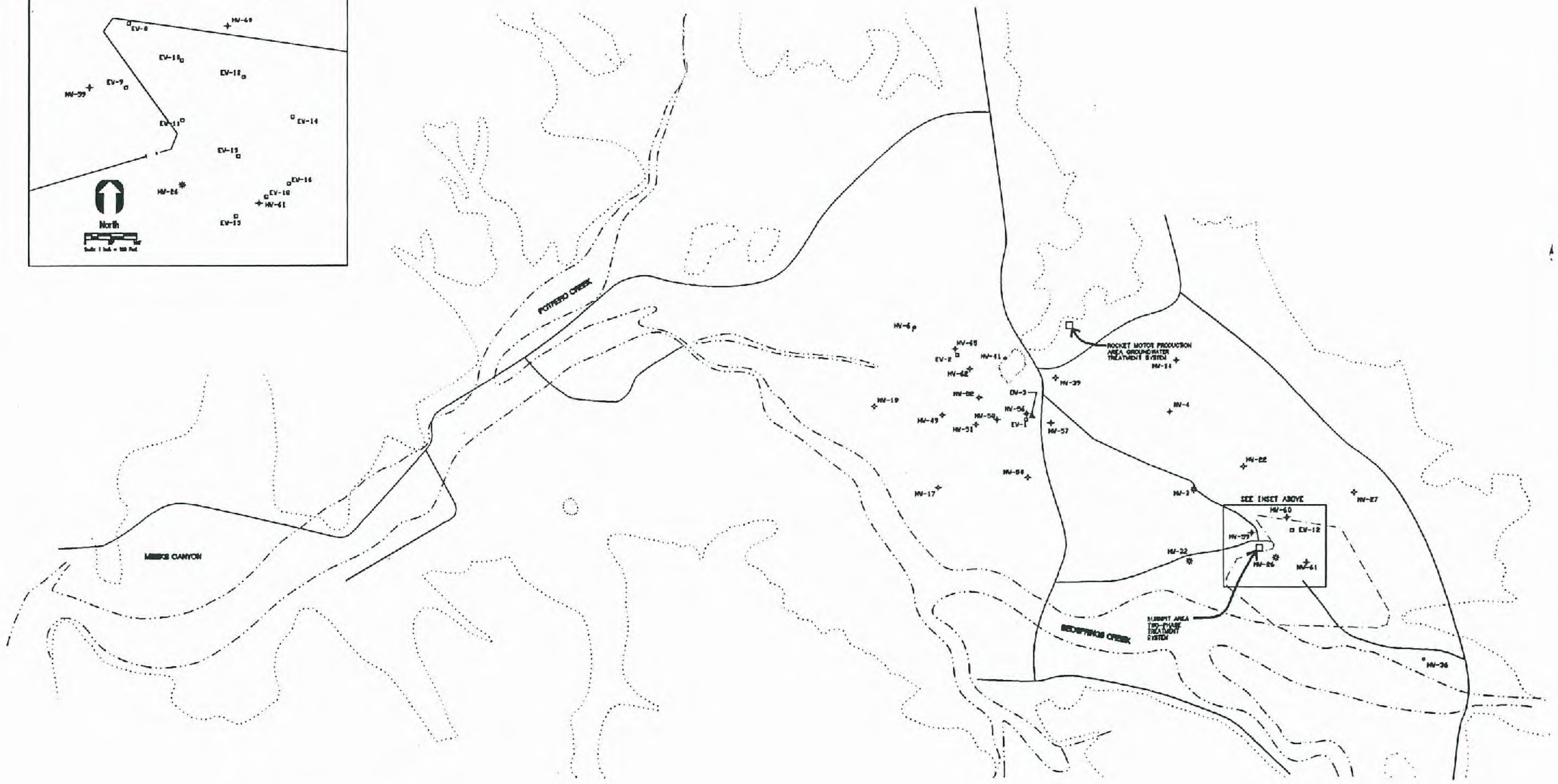


Figure 1 Location of Lockheed Beaumont No. 1 Site

LOCKHD LOB1-2 3/10/92



Legend

North

- ROAD
- CONTACT OF ALLUVIUM WITH GRANITIC BEDROCK AND/OR MT. EDEN FORMATION AT GROUND SURFACE
- INTERMITTENT STREAM
- BURN PIT AREA PERIMETER
- COMPOSITE WELL (SA/HE or SA/SB)
- EXTRACTION WELL (RADIAN CORPORATION)
- MULTIPLE WELL POINT CLUSTER (RADIAN CORPORATION)
- MT. EDEN ZONE MONITORING WELL (RADIAN CORPORATION)
- SINGLE POINT SHALLOW MONITORING WELL (RADIAN CORPORATION)
- OBSERVATION WELL (LEIGHTON AND ASSOCIATES)
- PIEZOMETER (RADIAN CORPORATION)
- INJECTION WELL (RADIAN CORPORATION)

CADD INFO:
WBS# 14714
Time: 13:46:38
Date: 10/25/1995
Scale: 1"=400
Drawing File: DRAFT\BEAUMONT\WELLSAMP.DWG (F.K.)

PREP. BY: F.K.	SCALE: 1"=400'
REV. BY:	DATE: 10/26/95

LOCKHEED MARTIN
BURBANK PROGRAM OFFICE
[illegible] HOLLYWOOD WAY BLVD 005
BURBANK, CALIFORNIA 91505

Figure 2
BEAUMONT #1, CALIFORNIA
WELL LOCATION MAP
WELLS SAMPLED



LEGEND

Alluvium/Bedrock contact - ⟨
Mt. Eden above water table - -
Stream boundary - -----
Burn Pit fencing - ——

Well Type:
EW Extraction Well
MW Monitor Well
OW Observation Well

Well Screening Interval:
QA Quaternary Alluvium
ME Mt. Eden

LOCKHEED MARTIN
Beaumont, California

**1,1 Dichloroethane (DCA)
In Ground Water, in ppb
2nd Quarter 1995**

DRAWN BY ____ SCALE ____ DATE 9/95 **FIGURE 4**



LEGEND

Alluvium/Bedrock contact -
Mt. Eden above water table -
Stream boundary - -----
Burn Pit fencing - ——

Well Type:
EW Extraction Well
MW Monitor Well
OW Observation Well

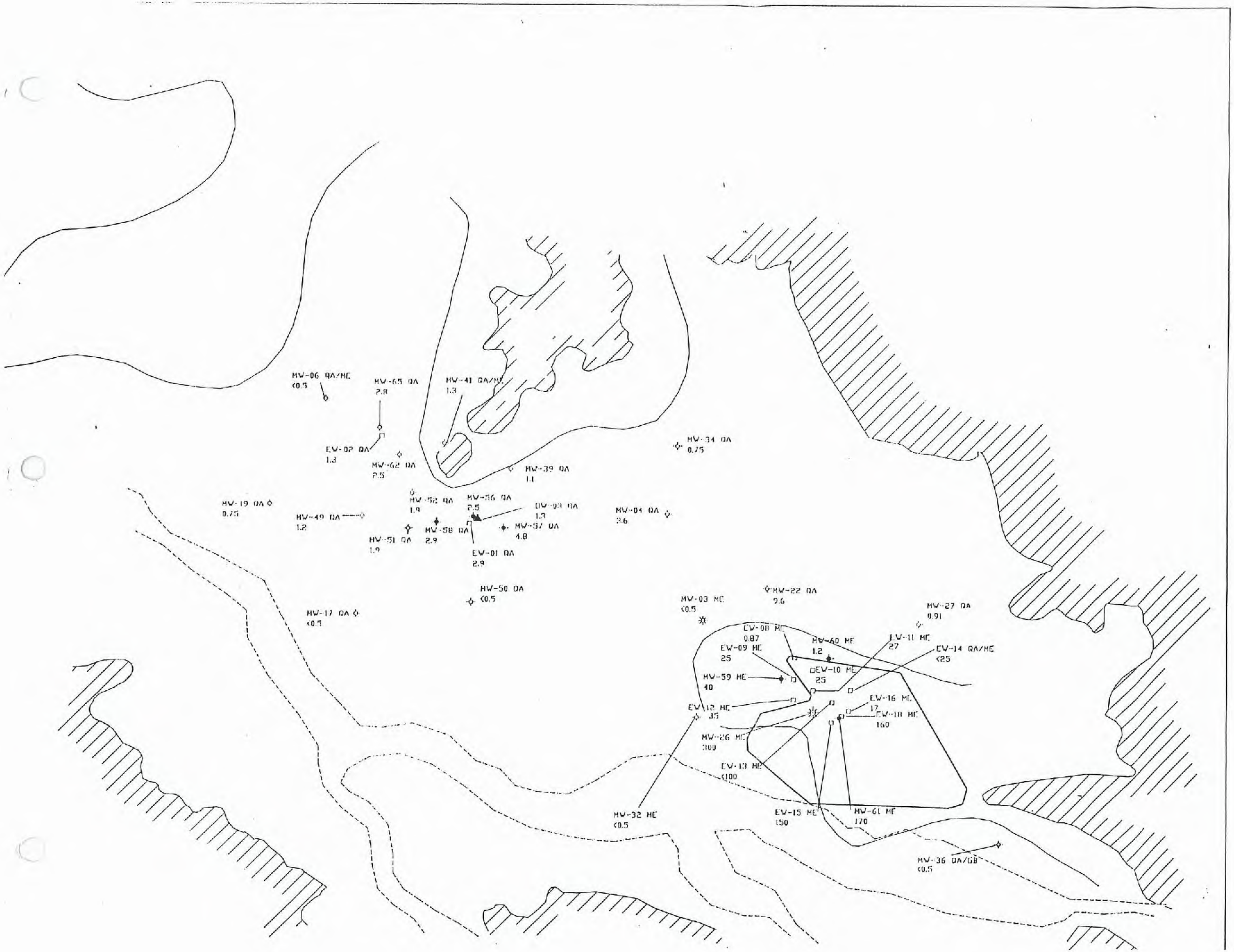
Well Screening Interval:
QA Quaternary Alluvium
ME Mt. Eden

0 400 800
FEET

LOCKHEED MARTIN
Beaumont, California

**1,1 Dichloroethylene (DCE)
In Ground Water, In ppb
2nd Quarter, 1995**

PREP. BY ____ | DRAWN ____ | DATE 9/95 | FIGURE 5



LEGEND

Alluvium/Bedrock contact – ↙
Mt. Eden above water table – –
Stream boundary – -----
Burn Pit fencing – ——

Well Type:
EW Extraction Well
MW Monitor Well
OW Observation Well

Well Screening Interval:
QA Quaternary Alluvium
ME Mt. Eden

0 400 800
FEET

LOCKHEED MARTIN
Beaumont, California

1,2 Dichloroethane (DCA) In Ground Water, In ppb 2nd Quarter, 1995

PREP BY ____ | NAME ____ | DATE 8/95 | FIGURE 6



LEGEND

Alluvium/Bedrock contact - ⅓
Mt. Eden above water table - -
Stream boundary - -----
Burn Pit fencing - ——

Well Type:
EW Extraction Well
MW Monitor Well
OW Observation Well

Well Screening Interval:
QA Quaternary Alluvium
ME Mt. Eden

0 400 800
FEET

LOCKHEED MARTIN
Beaumont, California

Tetrachloroethylene (PCE) In Ground Water, in ppb 2nd Quarter, 1995

DRWN BY | SCALE | DATE 9/95 | FIGURE 7



LEGEND

Alluvium/Bedrock contact -
Mt. Eden above water table -
Stream boundary - -----
Burn Pit fencing - ——

Well Type:
EW Extraction Well
MW Monitor Well
OW Observation Well

Well Screening Interval:
QA Quaternary Alluvium
ME Mt. Eden

LOCKHEED MARTIN
Beaumont, California

**Trichloroethylene (TCE)
In Ground Water, in ppb
2nd Quarter, 1995**

DRWN BY ____ | SCALE ____ | DATE 9/95 | FIGURE

APPENDIX A

FIELD DATA SHEETS

Punch List
G/W Sampling Field Notes

- ☐ Both PUMP OFF times should be the same.
- ☐ Note under comments when unable to sample well due to well failure or other reasons.
- ☐ Make sure there is a time filled in for every entry.
- ☐ Make sure, you initial the "verified by:" entry.
- ☐ Continue to note when a well is effervescent under the notes & comments section.
- ☐ Note the color and visual characterizations of the water when first pumping.
- ☐ ~~When noting weather temperatures~~, make sure it is noted in fahrenheit degrees (°C)
- ☐ Make sure to line out appropriate entry boxes when noting the start sampling entry.
- ☐ Make sure all calculations have been noted.
- ☐ Good idea/ when making entry corrections, use footnotes & enter the correct numbers under notes & comments section. Mart and Bill.
- ☐ Last two entries should be: stop sampling and pump off and both should have a different time.
- ☐ Remember to take a final DTW prior to sampling.
- ☐ PICKUP GASOLINE CARDS
- ☐ FILL UP GASOLINE CANS AND VEHICLES

WELL ID: [illegible]

Date: 12-95

TD OF CASING 270.0 ft

STATIC DTW (-) 105.78 ft @ _____ hr

FT WATER (=) 164.22

SAMPLE PUMP INT. @ 262.0 ft

SCREEN INTERVAL: 260 - 270 ft

SPURGE PUMP: ____ (hp) ____ (volts) 30 (amps)

Team No: 2

Samplers' Initials: WHC / Yonker / Pump Crew

CAP OF CASING (x) 1.02 gal / ft (=) 108.3 gal / 1 CASING VOL (x3 =) 325.2 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME TOTALIZER FLOWMETER READING	APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1156							1 L / 8		
1158	PUMP ON								
1200	80.7	.26	9.56	—	21.2	.25	27.2 / 19	6.8	Clear, DTW 149 @ 1200
1204	78.7	.26	9.56	—	54.1	.50	27.2 / 19	6.8	DTW 179 @ 1204
1208	78.6	.26	9.58	—	81.6	.75	27.2 / 19	6.8	DTW 190 @ 1209
1213	79.4	.26	9.59	—	113.6	1.2	31.0 / 15	6.8	
1218	79.0	.26	9.58	—	149.6	1.4	31.0 / 15	6.8	Clear DTW 234 @ 1219
1224	80.1	.33	9.52	—	190.4	1.8	40.8 / 16	6.4	DTW 240 @ 1224
1230	80.1	.36	9.54	—	231.2	2.1	40.8 / 16	6.4	DTW @ 300 @ 1230
1237	79.2	.34	9.53	—	268.4	2.34	27.2 / 19	6.8	well inst. dug at 1230
1243	79.0	31	9.56	—	295.6	2.64	27.2 / 19	6.8	Pump off @ 1238
1248	79.1	.30	9.54	—	319.6	2.80	34 / 15	6.8	V230-1233
							/		
							/		
							/		

30 / 19 = 3 + 9 / 38 + 4 / 42

PUMP ON @ 1156 Hrs

PUMP OFF @ 1250 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL 190.4 ft @ _____ Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 10:30 TEMP 75°

SKIES Clear / Hazy

WIND (mph) 0 - 5 from NE

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml / HCl - FB
8010	3	40ml / HCl

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: [illegible]

Date: [illegible]

TD OF CASING 85.0 ft | SAMPLE PUMP INTAKE @ 65.0 ft | Team No: [illegible]

STATIC DTW (–) 18.88 ft @ 1315 hr | SCREEN INTERVAL: [illegible] ft | Samplers' Initials: [illegible]

FT WATER (=) 66.12 | SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 67.4 gal / 1 CASING VOL (x3 =) 202.3 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) [illegible] TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1319	PUMP ON						4.61		
1324	85.4	32	7.36	—	23.0	1.34	23.0 / 5	4.6	[illegible]
[illegible]									
[illegible]									
[illegible]									
[illegible]									DIW 33.3 @ 1316
[illegible]									
[illegible]									
1329	84.9	Temp	e.f				/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ [illegible] Hrs
PUMP OFF @ [illegible] Hrs
GALLONS PURGED _____
CASING VOLS. PURGED _____
AVERAGE Q: _____ GPM
FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ [illegible] Hrs
STOP SAMPLING @ 1405 Hrs

WEATHER CONDITIONS
TIME [illegible] TEMP [illegible]
SKIES [illegible]
WIND (mph) _____ from _____

AIR MONITORING PID / FID (ppm)
VAULT [illegible] BKGD [illegible]
BREATHING ZONE [illegible]
DISCHARGE WATER [illegible]

HEALTH & SAFETY EQUIPMENT
GLOVES / GOGGLES / HARDHAT
RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

DUP / MS/MSD / TB / FB Y N
If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: [illegible]-17

TD OF CASING 50.0 ft
STATIC DTW (-) 0.- ft @ ---- hr
FT WATER (=) 50.0
CAP OF CASING (x) 1.02 gal / ft (=) 33 gal / 1 CASING VOL (x3 =) 100 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

SAMPLE PUMP INTAKE @ 46' ft
SCREEN INTERVAL: 25 - 45 ft
SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Date: 6-25
Team No: 3
Samplers' Initials: MBE / Harold Ray

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1558	PUMP ON			---			1.38		
1602	83.0	.18	7.62	---	17.52	0.52	17.52 / 4	4.38	Color, odor, sand & silt content of Casing
1607	81.5	.21	7.28	---	39.42	1.19	21.7 / 5	4.34	Clear, DTW = 28.80
1613	81.7	.21	7.30	---	52.5	1.56	13.08 / 12	11	↓ water level @ 1605
1630	80.2	.21	7.28	---	95.46	2.89	12.76 / 4	11	↓ flow rate to 2 gpm
1641	Pump off						/		Drop pump at 43.0' @ 1616
							/		DTW = 15.46 @ 1613
							/		@ 1613 flow rate at 2gpm
							/		Pumping rate 2.22 gpm
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1558 Hrs
PUMP OFF @ 1641 Hrs
GALLONS PURGED _____
CASING VOLS. PURGED _____
AVERAGE Q: _____ GPM
FINAL PURGE PUMPING WL
4 ft @ _____ Hrs

START SAMPLING @ 1635 Hrs
STOP SAMPLING @ 1640 Hrs

WEATHER CONDITIONS
TIME _____ TEMP 96°
SKIES Clear
WIND (mph) 0-15 from NE

AIR MONITORING PID / FID (ppm)
VAULT 0 BKGD 0
BREATHING ZONE 0
DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT
(GLOVES) (GOGGLES) / HARDHAT
RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml / HCL - EB
8010	3	40ml / HCL

UP / MS/MSD / TB / FB Y N
"Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / (BUCKET)

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: EW-09

Date: [illegible]
Team No: 3
Samplers' Initials: [illegible]

TD OF CASING [illegible] ft
STATIC DTW (-) 36.00 ft @ 1617 hr
FT WATER (=) [illegible]
SAMPLE PUMP INTAKE @ 100.0 ft
SCREEN INTERVAL: 70-120 ft
SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)
CAP OF CASING (x) 1.02 gal / ft (=) [illegible] gal / 1 CASING VOL (x3 =) [illegible] gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
[illegible]	PUMP ON						[illegible]		
1530	80.1	1.26	8.91	----	25.86	[illegible]	25.86/6	4.31	Silty brown
1611	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1722		Pump off		6.11					

PUMP ON @ 1624 Hrs
PUMP OFF @ 1722 Hrs
GALLONS PURGED _____
CASING VOLS. PURGED _____
AVERAGE Q: _____ GPM
FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ 1711 Hrs
STOP SAMPLING @ 1721 Hrs

WEATHER CONDITIONS
TIME _____ TEMP 70°
SKIES Clear
WIND (mph) 10-15 from N

AIR MONITORING PID / FID (ppm)
VAULT 0 BKGD 0
BREATHING ZONE 0
DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT
GLOVES / GOGGLES / HARDHAT
RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
BTEX	3	40ml / HCl - FB
8010	3	" " - FB
"	2	40ml / HCl
"	3	" " - FD
"	3	" " - FD

DUP / MS/MSD / TB / FB Y N
If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: EW-10

Date: [illegible]

Team No: [illegible]

Samplers' Initials: [illegible]

TD OF CASING 115.0 ft

STATIC DTW (-) 37.66 ft @ 1011 hr

FT WATER (=) 77.34

SAMPLE PUMP INTAKE @ 75.0 ft

SCREEN INTERVAL: 61 - 112 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 51.0 gal / 1 CASING VOL (x3 =) 153.0 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
[illegible]	PUMP ON						1.21		
1030	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1035	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1039	76.6	.30	8.01		50.9	.99	29.7 / 12	1.24	DTW = 48.9 @ 1035
1037	77.2	.30	7.91		81.9	1.66	[illegible]	[illegible]	[illegible]
1044	78.1	.30	7.85		111.3	2.24	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	.30	7.81		[illegible]	2.11	[illegible]		[illegible]
1101	[illegible]	[illegible]	[illegible]	[illegible]			/		
							/		
							/		
							/		
							/		
							/		
							/		

NOTES

PUMP ON @ 1017 Hrs

PUMP OFF @ 1101 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

_____ ft @ _____ Hrs

START SAMPLING @ [illegible] Hrs

STOP SAMPLING @ 1130 Hrs

WEATHER CONDITIONS

TIME _____ TEMP 90

SKIES [illegible]

WIND (mph) [illegible] from [illegible]

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

(GLOVES) / (GOGGLES) / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml / HCl - EB
8010	3	40ml / HCl -

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / (BUCKET)

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: MW-51

Date: 6-95

Team No: 3

Samplers' Initials: MHC / Houda / Pm Crew

TD OF CASING 67.0 ft

STATIC DTW (-) 0.50 ft @ 1204 hr

FT WATER (=) 66.5

SAMPLE PUMP INTAKE @ 50.0 ft

SCREEN INTERVAL: 37 - 57 ft

SPURGE PUMP: ____ (hp) ____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 43.8 gal / 1 CASING VOL (x3 =) 131.6 gal / 3 CASING VOL (+) INIT FLOWMETER READING ____ (=) ____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1207	PUMP ON			—			4.82		
1211	82.7	.21	7.89	—	19.28	.44	19.28/4	4.82	DTW = 10.48 @ 1211
1218	80.2	.19	7.02	—	53.02	1.21	33.74/7		Clear
1221	77.6	.19	6.92	—	67.48	1.54	14.46/3	4.82	DTW = 15.6 @ 1226
1228	75.2	.16	6.88	—	101.22	2.31	33.74/7	4.82	
1232	74.7	.17	6.90	—	121.0	2.76	19.78/4	4.70	
1235	74.6	.19	6.92	—	135.5	3.09	14.5/3	4.84	
1243	Pump OFF						/		
							/		
							/		
							/		
							/		
							/		
							/		

DISCHARGE RATE: VOLUME / TIME (min) — Q (GPM)

NOTES: (Color, odor, sand & silt content & other characteristics of the discharge water)

PUMP ON @ 1207 Hrs

PUMP OFF @ 1243 Hrs

GALLONS PURGED ____

CASING VOLS. PURGED ____

AVERAGE Q: ____ GPM

FINAL PURGE PUMPING WL ____ ft @ ____ Hrs

START SAMPLING @ 1240 Hrs

STOP SAMPLING @ 1242 Hrs

WEATHER CONDITIONS

TIME 1210 TEMP 90°

SKIES Clear

WIND (mph) 0-15 from NE

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
BOIC	3	40ml / HCL-EB
BOIC	3	40ml / HCL

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: ____ Date: ____

WELL ID: [redacted]

Date: [redacted]

Team No: 3

Samplers' Initials: [redacted]

TD OF CASING _____ ft

STATIC DTW (-) [redacted] ft @ [redacted] hr

FT WATER (=) [redacted]

SAMPLE PUMP INTAKE @ 30.93 ft

SCREEN INTERVAL: 20 - 101 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) [redacted] gal / 1 CASING VOL (x3 =) [redacted] gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME TOTALIZER FLOWMETER READING	APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
[redacted]	PUMP ON						4.1		
830	71.8	13	7.25	—	—	—	— / 1	—	Rusty, oily brown
838	73.2	.17	7.33	—			/ 1		Pump off @ 832-835
841	71.4	.16	7.25	—			2.24 / 1		
849	71.1	.17	7.02	—	6.72	.17	8.72 / 3	2.24	SWL = 43.68
[redacted]									

PUMP ON @ [redacted] Hrs

PUMP OFF @ [redacted] Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

43.76 ft @ 919 Hrs

START SAMPLING @ [redacted] Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME _____ TEMP _____

SKIES _____

WIND (mph) _____ from [redacted]

AIR MONITORING PID / FID (ppm)

VAULT _____ BKGD _____

BREATHING ZONE _____

DISCHARGE WATER _____

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: _____ (_____)

Date: 6-9-95

TD OF CASING _____ ft

STATIC DTW (–) _____ ft @ _____ hr

FT WATER (=) _____

SAMPLE PUMP INTAKE @ 1340 ft

SCREEN INTERVAL: 1320 - 1340 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Team No: 3

Samplers' Initials: MHC / Hassel P. CMD

CAP OF CASING (x) 1.02 gal / ft (=) _____ gal / 1 CASING VOL (x3 =) _____ gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
	PUMP ON								
1505	PUMP OFF								
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ _____ Hrs

PUMP OFF @ _____ Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

_____ ft @ _____ Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ 1504 Hrs

WEATHER CONDITIONS

TIME _____ TEMP _____

SKIES _____

WIND (mph) _____ from _____

AIR MONITORING PID / FID (ppm)

VAULT _____ BKGD _____

BREATHING ZONE _____

DISCHARGE WATER _____

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: [illegible]

Date: [illegible]

TD OF CASING 111 ft

STATIC DTW (-) 99.10 ft @ 13:32 hr

FT WATER (=) 11.90

SAMPLE PUMP INTAKE @ 114 ft

SCREEN INTERVAL: 112 - 114 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Team No: 3

Samplers' Initials: WHC/HRM/GC

CAP OF CASING (x) 1.02 gal / ft (=) [illegible] gal / 1 CASING VOL (x3 =) [illegible] gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
[illegible]	PUMP ON					[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]				/		
1554		[illegible]	[illegible]	[illegible]			/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1539 Hrs

PUMP OFF @ 1554 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

_____ ft @ _____ Hrs

START SAMPLING @ [illegible] Hrs

STOP SAMPLING @ [illegible] Hrs

WEATHER CONDITIONS

TIME _____ TEMP [illegible]

SKIES _____

WIND (mph) [illegible] from _____

AIR MONITORING PID / FID (ppm)

VAULT [illegible] BKGD _____

BREATHING ZONE _____

DISCHARGE WATER _____

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
SCIC	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: MW-39

Date: 6/

Team No: 3

Samplers' Initials: MC/AT

TD OF CASING 85 ft

STATIC DTW (-) 15.06 ft @ 1315 hr

FT WATER (=) 69.94

CAP OF CASING (x) .66 .102 gal / ft (=) 16.16 gal / 1 CASING VOL (x3 =) 138.48 gal / 3 CASING VOL (+) INIT FLOWMETER READING ____ (=) ____ TARGET

SAMPLE PUMP INTAKE @ ____ ft

SCREEN INTERVAL: 67 - 82 ft

SPURGE PUMP: ---- (hp) ---- (volts) 30 (amps)

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1314	PUMP ON						1 32		Heavy pump
1320	80.6	.54	7.37	----	13.56	.21	13.56 / 3	4.32	very 2" drawdown
1325	79.0	.54	7.41	----	27.12	.53	13.56 / 3	4.34	clear
1330	77.5	.53	7.07	----	41.72	1.05	22.60 / 5	4.32	DTW = 30.19 @ 1332
1335	75.9	.52	7.32	----	72.32	1.57	22.60 / 5	4.32	
1340	74.8	.52	7.30	----	94.92	2.06	22.60 / 5	4.32	DTW = 30.20 @ 1340
1346	74.9	.52	7.29	----	122.04	2.64	27.12 / 6	4.07	
1354		Pump OFF					/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1319 Hrs

PUMP OFF @ 1354 Hrs

GALLONS PURGED ____

CASING VOLS. PURGED ____

AVERAGE Q: ____ GPM

FINAL PURGE PUMPING WL ____ ft @ ____ Hrs

START SAMPLING @ 1350 Hrs

STOP SAMPLING @ 1353 Hrs

WEATHER CONDITIONS

TIME 1310 TEMP 75

SKIES Clear

WIND (mph) 0-15 from NE

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
BCLC	3	40ml / HCl - EB
BCLC	3	40ml / HCl -

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: ____ Date: ____

WELL ID: [illegible]-19

Date: [illegible]

Team No: [illegible]

Samplers' Initials: [illegible]

TD OF CASING 50.0 ft

STATIC DTW (-) 0 ft @ — hr

FT WATER (=) 43.0 ft

CAP OF CASING (x) 1.62 gal / ft (=) 74.5 gal / 1 CASING VOL (x3 =) 223.5 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

SAMPLE PUMP INTAKE @ 45.0 ft

SCREEN INTERVAL: 30 - 50 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1117	PUMP ON			—			1.15		Clear, cloudy during first well
1153	21.1	.17	7.17	—	26.7	81	20 / 10	1.43	DTW - 3.20 @ 1152
1157	25.1	.13	7.13	—	19.3	1.33	17.8 / 1	1.43	
1202	23.3	.13	7.11	—	21.2	2.16	26.7 / 5	1.43	DTW - 10.10 @ 1203
1208	22.9	.13	7.10	—	23.15	2.83	22.2 / 6	1.43	DTW - 10.20 @ 1207
1217	PUMP OFF			—	—	—	— / —		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1217 Hrs

PUMP OFF @ 1217 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ 1214 Hrs

STOP SAMPLING @ 1218 Hrs

WEATHER CONDITIONS

TIME _____ TEMP _____

SKIES _____

WIND (mph) _____ from _____

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER _____

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml / HCL - FB
8010	3	40ml / HCL

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: *well observed to be 30.0' Soiled Bottom

Date: 6-16-15

Team No: 3

Samplers' Initials: MHC/[illegible]

TD OF CASING 30.0 ft

STATIC DTW (-) 6.30 ft @ 0800 hr

FT WATER (=) 23.70

SAMPLE PUMP INTAKE @ 65.0 ft

SCREEN INTERVAL: 60 - 70 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 9.8 gal / 1 CASING VOL (x3 =) 30 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
0803	PUMP ON						1.49		
0809	73.1	.19	7.20	—	8.94	.91	8.94/6	1.49	DTW - 17.30
0812	71.2	.19	7.03	—	13.41	1.36	4.47/3	1.49	DTW 20.30 @ 813
0818	70.6	.20	6.85	—	22.35	2.28	8.94/6	1.49	DTW 20.00 @ 817
0821	70.8	.20	7.01	—	26.82	2.74	4.47/3	1.49	DTW = 21.00 @ 820
0825	70.9	.21	6.99	—	32.78	3.34	/		DTW = 22.00 @ 831
0831	70.5	.22	6.98	—			/		
0835	Pump off			—			/		
0850	Pump off			water level	6.94	@ 0853	—		almost 100% discharge
0922	Pump off						/		
							/		
							/		
							/		
							/		

PUMP ON @ 0803 Hrs

PUMP OFF @ 0922 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ 0910 Hrs

STOP SAMPLING @ 0921 Hrs

WEATHER CONDITIONS

TIME 301 TEMP 70°

SKIES clear

WIND (mph) 0-5 from NE

AIR MONITORING PID / FID (ppm)

VAULT _____ BKGD _____

BREATHING ZONE _____

DISCHARGE WATER _____

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml / HCl - EB
8010	3	40ml / HCl - FB
8010	6	40ml / HCl
8010	3	40ml / HCl - ES
8010	3	40ml / HCl - FD

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

- Bottom observed to be Soiled at 30.0'

Verified by: _____ Date: _____

WELL ID: MW-58B

Date: 6-23-95

Team No: 3

Samplers' Initials: MHC / Grundfos Pump

TD OF CASING 50.0 ft

STATIC DTW (-) 2.96 ft @ 1102 hr

FT WATER (=) 47.54

SAMPLE PUMP INTAKE @ 45.0 ft

SCREEN INTERVAL: 40 - 50 ft

SPURGE PUMP: ____ (hp) ____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 8.2 gal / 1 CASING VOL (x3 =) 25.0 gal / 3 CASING VOL (+) INIT FLOWMETER READING ____ (=) ____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1207	PUMP ON						1.45		
1409	82.0	.22	8.22	—	8.9	1.1	8.7 / 2	4.45	DTW = 7.90 @ 1410
1412	80.9	.20	7.36	—	22.3	2.7	13.6 / 3	4.45	
1419	80.2	.20	7.30	—			/		
1420	Pump off						/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1407 Hrs

PUMP OFF @ 1426 Hrs

GALLONS PURGED ____

CASING VOLS. PURGED ____

AVERAGE Q: ____ GPM

FINAL PURGE PUMPING WL 3.02 ft @ 1425 Hrs

START SAMPLING @ 1415 Hrs

STOP SAMPLING @ 1424 Hrs

WEATHER CONDITIONS

TIME 1405 TEMP 95°

SKIES clear

WIND (mph) 0 - 5 from N

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml / HCl - TB
8010	3	40ml / HCl

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: ____ Date: ____

WELL ID: MW-11

Date: 6-2-95

TD OF CASING 55.0 ft

STATIC DTW (-) 5.16 ft @ 1513 hr

FT WATER (=) _____

SAMPLE PUMP INTAKE @ 50.6 ft

SCREEN INTERVAL: 35.55 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Team No: 3

Samplers' Initials: MHC / Hollaway pump crew

CAP OF CASING (x) 1.02 gal / ft (=) .33 gal / 1 CASING VOL (x3 =) 9.9.0 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1514	PUMP ON			—			1.32		
1518	81.4	.11	7.21		17.28	.52	17.28 / 4	1.32	Clear
1524	81.1	.12	7.50	—	43.20	1.31	25.92 / 6	1.32	DTW = 20.40 @ 1524
1527	79.4	.11	7.71	—	56.16	1.70	12.96 / 3	1.32	
1532	78.2	.11	7.69	—	77.76	2.36	21.6 / 5	1.32	DTW = 21.20 @ 1534
1538	78.0	.11	7.64	—	103.68	3.14	/		DTW = 11.01 @ 1547
1549		Pump-off					/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1514 Hrs

PUMP OFF @ 1547 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL 11.01 ft @ 1543 Hrs

START SAMPLING @ 1540 Hrs

STOP SAMPLING @ 1548 Hrs

WEATHER CONDITIONS

TIME 1502 TEMP 100 ?

SKIES Clear

WIND (mph) 6-15 from NE

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml / HCL - FB
8010	3	40ml / HCL

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: MW 05

Date: 2-15

Team No: 3

Samplers' Initials: MHC / Nasa

TD OF CASING 47.0 ft

STATIC DTW (-) 3.60 ft @ 1636 hr

FT WATER (=) 43.4

SAMPLE PUMP INTAKE @ 40.0 ft

SCREEN INTERVAL: 23 - 43 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 44.2 gal / 1 CASING VOL (x3 =) 132.8 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1640	PUMP ON						4.31		
1646	28.3	.31	7.53	—	23.9	.59	23.9 / 6	4.31	Clear
1650	73.7	.29	7.25	—	43.0	1.0	17.1 / 4	4.3	Clr. BTW: 13.0' @ 1631
1654	74.0	.27	7.08	—	60.2	1.35	17.2 / 4	4.3	BTW: 23.10' @ 1659
1700	74.1	.29	7.09	—	86.2	1.93	26.0 / 6	4.3	
1706	74.0	.28	7.05	—	112.06	2.54	25.86 / 6	4.3	BTW = 25.10 @ 1705
1712	73.7	.29	7.01	—	137.91	3.12	25.85 / 6	4.3	BTW = 10.12 @ 1720
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1640 Hrs

PUMP OFF @ 1721 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

_____ ft @ _____ Hrs

START SAMPLING @ 1716 Hrs

STOP SAMPLING @ 1720 Hrs

WEATHER CONDITIONS

TIME 1647 TEMP 90°

SKIES Clear

WIND (mph) 0-10 from NE

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

(GLOVES) / (GOGGLES) HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml / HCl - EB
8015	3	40ml / HCl

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

Punch List
G/W Sampling Field Notes

- ☐ Both **PUMP OFF** times should be the same.
- ☐ Note under comments when unable to sample well due to well failure or other reasons.
- ☐ Make sure there is a time filled in for every entry.
- ☐ Make sure, you initial the "verified by:" entry.
- ☐ Continue to note when a well is effervescent under the notes & comments section.
- ☐ Note the color and visual characterizations of the water when first pumping.
- ☐ When noting weather temperatures, make sure it is noted in fahrenheit degrees (°C)
- ☐ Make sure to line out appropriate entry boxes when noting the start sampling entry.
- ☐ Make sure all calculations have been noted.
- ☐ Good idea/ when making entry corrections, use footnotes & enter the correct numbers under notes & comments section. Mart and Bill.
- ☐ Last two entries should be: stop sampling and pump off and both should have a different time.
- ☐ Remember to take a final DTW prior to sampling.
- ☐ PICKUP GASOLINE CARDS
- ☐ FILL UP GASOLINE CANS AND VEHICLES

WELL ID: MW 36 (QA)

Date: 3/95

TD OF CASING 105 ft

STATIC DTW (-) 47.18 ft @ 1045 hr

FT WATER (=) 57.82 2 IN WELL DIAM

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: 85 - 105 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Team No: _____

Samplers' Initials: WAC / KMP / MHC

CAP OF CASING (x) 1.02 gal / ft (=) 9.8 gal / 1 CASING VOL (x3 =) 30 gal / 3 CASING VOL (+) INIT FLOWMETER READING 79520.5 (=) 79550.5 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1137	PUMP ON			79520.5			/		
~~1143~~	~~—~~	~~—~~	~~—~~	~~79525.5~~	~~—~~	~~—~~	~~/~~	~~—~~	~~MURKY / SILTY~~
1148	17.6	180	5.92	79530.2	11.7	1.19	5 GAL / 5 MIN	1.06	
1151	17.6	184	5.94	79536.5	16.0	1.63	4.3 / 3	1.4	
1154	17.4	172	5.84	79540.6	20.1	2.05	/		CLEAR / EFFERVESCENT
1157	17.3	185	5.81	79545.7	25.2	2.57	5 / 3	.25 1.7	
1212	17.5	186	5.80	79579.1			/		WL = 49.92
1226				79589.6	69.1	7.05	/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1137 Hrs

PUMP OFF @ 1227 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

_____ ft @ _____ Hrs

START SAMPLING @ 1220 Hrs

STOP SAMPLING @ 1227 Hrs

WEATHER CONDITIONS

TIME 1015 TEMP 75

SKIES CLEAR

WIND (mph) 10 from NW

AIR MONITORING PID / FID (ppm)

VAULT 0.2 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER Ø

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	18	40 ml / HCl

DUP / MS/MSD (TB / FB) (Y) N

If "Y", complete appropriate forms

MEASUREMENT METHOD: (FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

EXTREMELY EFFERVESCENT; THREW OUT ~10 VIALS W/ HEAD SPACE

Verified by: _____ Date: _____

EW-08 WELL ID: ~~EW-08~~ ~~MW~~ EW-08

Date: 6/1/15

TD OF CASING 115.00 ft | SAMPLE PUMP INTAKE _____ ft | Team No: _____

STATIC DTW (-) 36.30 ft @ 1520 hr | SCREEN INTERVAL: 61 - 112 ft | Samplers' Initials: WHC/KMP/MHC

FT WATER (=) 78.7 | 4" WELL DIAM | SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 80.3 gal / 1 CASING VOL (x3 =) 156.9 gal / 3 CASING VOL (+) INIT FLOWMETER READING 79580.0 (=) 79736.9 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1533	PUMP ON			79580.0					
1539	20.6	197	9.22	79586.9	6.9	0.13	6.9 / 6	1.15	H2O SILT
1543	21.0	191	9.15	79592.4	12.4	0.24	5.5 / 4	1.38	DTW 46.3
1601	21.0	204	8.90	79623.6	43.6	0.83	31.2 / 19	1.64	DTW 61.6
1616	21.2	230	8.74	79648.5	68.5	1.31	24.9 / 14	1.78	DTW 63.7
1626	21.3	200	8.73	79670.6	90.6	1.72	21.5 / 10	2.15	DTW 68.1
1642	21.2	190	8.57	79703.1	123.1	2.35	33.1 / 16	2.07	DTW 64.3
1656	21.2	213	8.70	79731.5	151.5	2.90	28.4 / 14	2.02	DTW 61.6
1703	START SAMPLING			79732.8			/		
1705	OFF			79737.9			/		
							/		
							/		
							/		
							/		

PUMP ON @ 1532 Hrs

PUMP OFF @ 1705 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ 1703 Hrs

STOP SAMPLING @ 1705 Hrs

WEATHER CONDITIONS

TIME 1520 TEMP 70

SKIES CLEAR

WIND (mph) _____ from

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8021	6	40mL / HCl
3 EQUIP BLANK		

DUP / MS/MSD / TB / FB (Y) N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

1:1 7.0 BUFFER ⇒ 6.7 @ 31.6

Verified by: _____ Date: _____

WELL ID: MW-54A (A AVE)

Date: 6/21/95

TD OF CASING 144 ft | SAMPLE PUMP INTAKE: _____ ft | Team No: _____

STATIC DTW (-) 43.32 ft @ 0915 hr | SCREEN INTERVAL: 135 - 140 ft | Samplers' Initials: MHC, KMP

FT WATER (=) 100.68 | SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 16.6 gal / 1 CASING VOL (x3 =) 49.8 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
0945	PUMP ON								
0955				WELL DRY			1		
0817		RETURNED TO WELL			WELL ONLY		1	70% RECOVERY	
1202		RETURNED TO WELL			45.62 DTW		RECOVERY	> 80%	
							1		
1225		SAMPLE TIME					1		
							1		
							1		
							1		
							1		
							1		
							1		
							1		
							1		

PUMP ON @ 0945 Hrs
PUMP OFF @ _____ Hrs
GALLONS PURGED _____
CASING VOLS. PURGED _____
AVERAGE Q: _____ GPM
FINAL PURGE PUMPING WL
_____ ft @ _____ Hrs
START SAMPLING @ 1225 Hrs
STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS
TIME 0913 TEMP 70°C
SKIES fair
WIND (mph) 5-15 from N

AIR MONITORING PID / FID (ppm)
VAULT 0 BKGD 0
BREATHING ZONE 0
DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT
(GLOVES) GOGGLES / HARDHAT
RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	3	40mL / HCl
BAILER SAMPLED		

DUP / MS/MSD / TB / FB Y N
If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)
6/21 DTW 52.53 @ 0817
6/21 DTW 45.62 @ 1202
1225 sampling

Verified by: _____ Date: _____

WELL ID: MW-59S [MIE]

Date: 6/ 25

Team No: 1

Samplers' Initials: WHC, KMP

TD OF CASING 135.50 ft

STATIC DTW (-) 38.86 ft @ 1017 hr

FT WATER (=) 96.64

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: 132 . 134 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 16 gal / 1 CASING VOL (x3 =) 48 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1017	PUMP ON								
1034				WELL	DRY		/		
0826				RETURNED TO WELL			⇒ ONLY 70% RECOVERY		
							/		
1210				"	"	"	⇒ RECOVERY > 80%		
							/		
1230		SAMPLE TIME					/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1027 Hrs

PUMP OFF @ _____ Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

_____ ft @ _____ Hrs

START SAMPLING @ 1230 Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 1017 TEMP 76°C

SKIES fair

WIND (mph) 5-15 from SW

AIR MONITORING (PID) / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

(GLOVES) / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40-mL / HCl
BAILER SAMPLED		

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly effecting samples, condition of sampling equipment, etc.)

6/21 DTW 71.30 @ 0826

" " 55.56 @ 1210

NEEDS WELL CAP

Verified by: _____ Date: _____

TM 31

WELL ID: MW-61 A (DE)

Date: 6/ /15

TD OF CASING 155 ft

STATIC DTW (–) 51.84 ft @ 1121 hr

FT WATER (=) [redacted] 103.16

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: 148 - 150 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Team No: 1

Samplers' Initials: WHC/KMP

CAP OF CASING (x) 1.02 gal / ft (=) 17.0 gal / 1 CASING VOL (x3 =) 51.0 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1140	PUMP ON								
1149				WELL DRY			1		
0945	RETURNED TO WELL				51.69 @ DTW		1		IRR COLORLESS >80%
					35% (RMNDR OUT OF LINE)				
	DROPPED			BAILER ~	35 INTO		WATER COLUMN		
					*		1		
1008	SAMPLE			TIME			1		
							1		
							1		
							1		
							1		
							1		
							1		
							1		

PUMP ON @ 1140 Hrs

PUMP OFF @ 1148 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ 1008 Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 11:32 TEMP 71°C

SKIES clear

WIND (mph) 5-10 from S

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	3	40 mL / HCl
SAMPLED BY		
BAILER		

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

6/21 51.69 DTW @ 0945

* BAILER ~35' INTO WATER COLUMN

Verified by: _____ Date: _____

WELL ID: ~~MW 7B~~ (QA)

Date: 6/

Team No: LO. IRMO

Samplers' Initials: I

TD OF CASING 98 ft

STATIC DTW (-) 5.98 ft @ 1401 hr

FT WATER (=) 92.02

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: 94 - 96 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 16.3 gal / 1 CASING VOL (x3 =) 48.6 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
~~1409~~	PUMP ON								
1414	PUMP	ON					/		
1425				WELL	DRY		/		
0844	RETURNED TO			WELL DTW 6.10 @ 0844			/	RECOVERY >80%	
0856	DROPPED	BAILER	TO	APPROX 60 FT			BELOW	WATER LEVEL	
							/		
9:03		SAMPLE	TIME				/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ ~~1409~~ 1414 Hrs

PUMP OFF @ _____ Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

_____ ft @ _____ Hrs

START SAMPLING @ 0903 Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 1403 TEMP 85°C

SKIES fair

WIND (mph) 5-10 from NE

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8260	3	40ml / HCl
SAMPLED BY		
BAILER		

DUP / MS/MSD / TB / FB Y (N)

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

* PUMP ON @ 1414 - PUMP MALFUNCTION

6/21 DTW 6.10 @ 0844

Verified by: _____ Date: _____

WELL ID: MW-57C (LA)

Date: 6/ /'05

TD OF CASING 85 ft

STATIC DTW (-) 5.60 ft @ 1446 hr

FT WATER (=) 79.2

SAMPLE PUMP INTAKE _____ ft

SCREEN INTERVAL: 81.5 - 83.5 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Team No: 1

Samplers' Initials: WIC, KMP

CAP OF CASING (x) 1.02 gal / ft (=) 13.9 gal / 1 CASING VOL (x3 =) 41.7 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1448	PUMP ON								
1756				WELL	DRY				
WROTE ON WRONG PAGE. REFERS TO MW-26				THIS	WELL		PURGED	DRY	EXCEPT
				HAVE	BEEN		3 WELL VOLUMES		+ COULD
				CARRY	FOR		PUMP		SAMPLED THROUGH THE
				SET	UP	FOR	BAILER		(HH) WE BEEN
0918	RETURNED			TO	WELL		DROPPED BAILER		APPROX 60 FT
	TO SAMPLE			WITH	BAILER				
0922	SAMPLE			TMB					

PUMP ON @ 1448 Hrs

PUMP OFF @ 1456 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ 0922 Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 1442 TEMP 80°F

SKIES fair

WIND (mph) 5-10 from N

AIR MONITORING (PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 3.6

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	3	40ml / HCl

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly effecting samples, condition of sampling equipment, etc.)

d/s DTW 5.94 @ 0918 RECOVERY > 80% To

Verified by: _____ Date: _____

WELL ID: MW61 (NE)

Date: 6/ /5

TD OF CASING 105 ft

STATIC DTW (–) 51.62 ft @ 1534 hr

FT WATER (=) 53.38

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: 93 - 103 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Team No: _____

Samplers' Initials: WHC, KHJ

CAP OF CASING (x) 1.02 gal / ft (=) 17.3 gal / 1 CASING VOL (x3 =) 51.6 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1546	PUMP ON						/		
0947	RETURNED TO WELL						/		
							/		
				DTW = 50.76 ⇒		RECOVERY >	80%		
							/		
							/		
1034	SAMPLE			TIME			/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1546 Hrs

PUMP OFF @ 1605 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ 1034 Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 1534 TEMP 80°C

SKIES Sunny

WIND (mph) 10-15 (from SW)

AIR MONITORING PID / FID (ppm)

VAULT 33.0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 36

HEALTH & SAFETY EQUIPMENT

(GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8021	3	40mL (HCl)
SAMPLED BY		
BAILED		

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly effecting samples, condition of sampling equipment, etc.)

6/21 50.76 DTW @ 0947

Verified by: _____ Date: _____

WELL ID: MW-36 [ME]

Date: 6/[illegible]/5

TD OF CASING 139 ft

STATIC DTW (-) 37.82 ft @ 1603 hr

FT WATER (=) 91.18 93

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: 28 - 108 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Team No: 1

Samplers' Initials: WK, MMP

CAP OF CASING (x) 1.02 gal / ft (=) [illegible] gal / 1 CASING VOL (x3 =) 279 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1632	PUMP ON			PUMP OFF			/		
1756	—	WATER →					/		
[illegible]						THIS	WELL	IS UP	20' FROM
							/		
		DECEMBER & HAD SUFFICIENT VOLUME TO ATTAIN							
		STEADY STATE & SAMPLE					USING	CROWFOOT	
							/		
	→ THIS	TIME, PROBABLY		PUMPED	WELL		IN EXCESS OF		
							/		
		3 WELL VOLUMES		BEFORE	WENT		DRY		
							/		
		SAMPLE TIMES					/		
							/		
							/		

PUMP ON @ 1632 Hrs

PUMP OFF @ _____ Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 1632 TEMP [illegible]

SKIES [illegible]

WIND (mph) 10-15 from SE

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	18	40mL / HCl
FB, RO, MS/MSD; FB, LS		

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

ΔTW = 58.18 > 80% RECOVERY RECOVERY

Verified by: _____ Date: _____

WELL ID: ~~MW05~~

Date: 6/ /25

Team No: 1

Samplers' Initials: WHC, KMP

TD OF CASING 110.00 ft

STATIC DTW (-) 26.58 ft @ 1544 hr

FT WATER (=) 13.42

2" DIAM

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: 97 - 107 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 12.3 gal / 1 CASING VOL (x3 =) 36.9 gal / 3 CASING VOL (+) INIT FLOWMETER READING 79788.3 (=) 79765.2 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1546	* PUMP ON			79788.3					
				INST FLOW SEVERAL TIMES					
1612	23.4	326	8.47	79747.5			/		DTW 7156
1617	24.1	401	8.48	79748.5			/		DTW
1632	PUMP OFF - WELL PUMPED DRY						/		
	RETURNED TO WELL						/		
				⇒ RECOVERY > 80%			/		BAILER SAMPLED
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1553 Hrs

PUMP OFF @ 1632 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS 6/23

TIME 1540 TEMP 110T

SKIES CLEAR

WIND (mph) 0 from

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

(GLOVES) / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8260 8270	6	40ml / HCl
	6/23 TRIP BLANK SAMPLED	
~~2nd QA/QC BLANK~~		

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

* PUMP ON @ 1553

6/23 36.13 DTW @ 0837

Verified by: _____ Date: _____

WELL ID: MW54-D (NE)

Date: 6/ '95

Team No: 1

Samplers' Initials: WHC, KMP

TD OF CASING 125 ft

STATIC DTW (-) 38.34 ft @ 1633 hr

FT WATER (=) 86.66

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: 118 - 120 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 14.3 gal / 1 CASING VOL (x3 =) 42.9 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
	PUMP ON								
1	PUMP	CL	OGGED → NEED TO REMOVE				/		
3 0815 → RETURNED TO PUMP WELL							/		DTW 37.86 @ 0815
0821	PUMP ON						/		
0833	PUMP OFF - WELL PUMPED DRY						WILL RETURN TO BAILER		
				SATURDAY NOON			/		
0818 → Returned to Bailer							/		
							/		
				DTW @ 0825	39.35	17	80%		RECOVERY
							/		
							/		
							/		
							/		

PUMP ON @ 0824 Hrs

PUMP OFF @ 0833 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ 0830 Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 1633 TEMP 92°C (mm

SKIES 1/2 24

WIND (mph) 5-7 from W

AIR MONITORING PID / FID (ppm)

VAULT 1.6 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER _____

HEALTH & SAFETY EQUIPMENT

(GLOVES) GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40mL / HCl
BAILER SAMPLED ON 6/24/95		

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: MW-6I (MIE)

Date: 6/25

Team No: 1

Samplers' Initials: WHC, JCMP

TD OF CASING 135 ft

STATIC DTW (-) 38.95 ft @ 1016 hr

FT WATER (=) 96.05

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: 128 . 130 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 15.7 gal / 1 CASING VOL (x3 =) 47.1 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME TOTALIZER FLOWMETER READING	APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1021	PUMP ON			PUMPED WELL DRY			- BAILER		
1026				WILL RETURN TO			BAILER SAMPLE	DRY	CLR SLIGHT SED
0916		DTW		@ 0910	= 56.65	= 80%		=	1%
		DTW		@ 0435	= 52.38	= 80%			
		DTW	@	0955	= 37.20				
				SAMPLED TIME			1000	ON	6/25

PUMP ON @ 1021 Hrs

PUMP OFF @ 1026 Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 1016 TEMP 92°C

SKIES fair

WIND (mph) 0-5 from E

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

(GLOVES) / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40 ml / HCl
BAILER SAMPLED		ON 6/25/95 WHC

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

TD OF CASING 120 ft
STATIC DTW (-) 46.14 ft @ 1049 hr
FT WATER (=) 73.86
CAP OF CASING (x) 1.02 gal / ft (=) 12 gal / 1 CASING VOL (x3 =) 36 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

SAMPLE PUMP INTAKE _____ ft
SCREEN INTERVAL: 114 - 116 ft
SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Date: 6/[illegible]/95
Team No: _____
Samplers' Initials: WHC, KMP

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1103	PUMP ON								
1104				WELL DRY			/		DTW 61.5
							/		
				PUMP SETS IN WELL					~ 62'
			⇒	WELL CONSTRUCTION PKTS TD @ 120'					
				+ SCREEN INTERVAL @ 114 - 116'			/		
			⇒	WILL RETURN TOMORROW TO SEE IF			/		TURBIDITY
				THERE'S ANY RECHARGE			/		SATURDAY
							/		
0924		DTW =		46.18 RECOVERY >			50%		
							/		
				* WELL CONSTRUCTION DATA IN ERROR					
							/		

PUMP ON @ _____ Hrs
PUMP OFF @ _____ Hrs
GALLONS PURGED _____
CASING VOLS. PURGED _____
AVERAGE Q: _____ GPM
FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ 0930 Hrs
STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS
TIME 1049 TEMP 95°F
SKIES fair
WIND (mph) 0-5 from E

AIR MONITORING PID / FID (ppm)
VAULT 0 BKGD 0
BREATHING ZONE 0
DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT
GLOVES / GOGGLES / HARDHAT
RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml/HCl
BAILER SAMPLED ON 6/24/95		

DUP / MS/MSD / TB / FB Y N
If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: → EW-1E MW

Date: 6/[illegible]/95

TD OF CASING 117 ft | SAMPLE PUMP INTAKE ( ) ft | Team No: 1

STATIC DTW (-) 39.85 ft @ 1307 hr | SCREEN INTERVAL: 114 . 114 ft | Samplers' Initials: WHC, KMP

FT WATER (=) 77.15 | SPURGE PUMP: ____ (hp) ____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 42 gal / 1 CASING VOL (x3 =) 126 gal / 3 CASING VOL (+) INIT FLOWMETER READING 79749.4 (=) 79875.4 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1307 by KC	PUMP ON			79749.4					
1414	20.9	281	7.89	79754.5			1		DTW 43.0
1418	20.2	295	8.03	79766.4			1		DTW 54.9
1421	20.2	295	7.91	79772.2	22.8	0.54	22.8 / 18	2.28	DTW 65.2
1432	19.7	307	7.69	79802.1	52.7	1.25	29.9 / 11	2.72	DTW 80.25
1440	PUMP D. ED*			79847.8	98.4	2.34	1		DTW 87.62
1504	PUMP BACK ON			79847.8			1		
1514	WELL DRY						1		DTW = 107'
							1		
6/24/95	DTW @ 0935 = 39.88 "Full Recovery"						1		
	BAILER SAMPLES 6/25 AFTER TUBING MIX-UP								
→	→ 3 ROUTINE SAMPLES ONLY							6/25	DTW = 39.74

PUMP ON @ 1411 Hrs
PUMP OFF @ ____ Hrs
GALLONS PURGED ____
CASING VOLS. PURGED ____
AVERAGE Q: ____ GPM
FINAL PURGE PUMPING WL
____ ft @ ____ Hrs
START SAMPLING @ 0940 Hrs
STOP SAMPLING @ ____ Hrs

WEATHER CONDITIONS
TIME 1306 TEMP 102F
SKIES fair
WIND (mph) 0-5 from

AIR MONITORING (PID) / FID (ppm)
VAULT 0 BKGD 0
BREATHING ZONE 0
DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT
(GLOVES) / GOGGLES / HARDHAT
RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
~~VOA~~ BTEX	8 0 1 0 / 8 0 2 0	40ml HCl
	40	
Bailer Sampled 0940 6/24/95		
3 Equipment Blanks 6/23/95	VT	

DUP / MS/MSD / TB / FB (Y) N
If "Y", complete appropriate forms

MEASUREMENT METHOD: (FLOWMETER) / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)

* SILT/CRAP SO THICK, ~~WOULD~~ PUMP CLOGGED; LET SIT FOR ~40 min + RE PUMPED. SED/WATER TOO THICK TO DROP PUMP TO BOTTOM + PURGE COMPLETELY DRY. WILL BAILER SAMPLES TOMORROW (SATURDAY)

3 Field Blanks ~~Equip~~ 6/24/95
3 Routines via Editor

Verified by: ____ Date: ____

WELL ID: EW-18 ( )

Date: 6/1/95

TD OF CASING 102 ft | SAMPLE PUMP INTAKE @ _____ ft | Team No: Ex. 1

STATIC DTW (-) 44.64 ft @ 1135 hr | SCREEN INTERVAL: 60 - 101 ft | Samplers' Initials: LKB, WHC, KDCK

FT WATER (=) 57.36 | SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 58.5 gal / 1 CASING VOL (x3 =) 175.5 gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1148	PUMP ON			19858.0			/		
1207	Well Dry			19923.1	65.1	1.11	/		
							/		
				Well Bailed sample on Tuesday 6/25/95			/		
0849			STW = 44.65		RECOVERY		4.7	80%	
			Bailed on 6/25-95.		Dropping				
			approx 25 feet into the water column						
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1148 Hrs
PUMP OFF @ 1207 Hrs
GALLONS PURGED 65.1
CASING VOLS. PURGED 1.11
AVERAGE Q: _____ GPM
FINAL PURGE PUMPING WL
_____ ft @ _____ Hrs

START SAMPLING @ _____ Hrs
STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS
TIME 1148 TEMP 95°
SKIES Clear
WIND (mph) 5 from NE

AIR MONITORING PID / FID (ppm)
VAULT 0 BKGD 0
BREATHING ZONE 0
DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT
(GLOVES) GOGGLES / HARDHAT
RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	3	40ml Vial.
for Equipment Blanks on 6/24/95		
8010/8020	12	40ml/HCl

(DUP) / (MS/MSD) / TB / (FB) (Y) N
If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: EW-15 (mw)

Date: 6/25

TD OF CASING 107 ft

STATIC DTW (-) 42.70 ft @ 1424 hr

FT WATER (=) _____

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: 65 - 105 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Team No: 1

Samplers' Initials: LKA, WHC, KSCK

CAP OF CASING (x) 1.02 gal / ft (=) _____ gal / 1 CASING VOL (x3 =) _____ gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1439	PUMP ON								
1459				Well Dry - will bail sample on 6/25/95.					
				SAMPLE TIME:		0920	ON	6/25/95	
				DTW	43.90		RECOVERY	>80%	
				BAILER	DROPPED		20	INTO H2O	
				COLUMN =>	TOP OF SCREEN			TOTAL VOL	

PUMP ON @ 1439 Hrs

PUMP OFF @ _____ Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ ~~1425~~ 0920 Hrs

STOP SAMPLING @ Y Hrs

WEATHER CONDITIONS

TIME 1420 TEMP 100

SKIES CLEAR

WIND (mph) 10 from W

AIR MONITORING PID / FID (ppm)

VAULT Ø BKGD Ø

BREATHING ZONE Ø

DISCHARGE WATER Ø

HEALTH & SAFETY EQUIPMENT

(GLOVES) / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	3	40ml HCl
for equipment	blanks on 6/24/95 @ 1425	
BAILER SAMPLE 6/25		
8010/8020	3	40ml/HCl

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: [illegible]

TD OF CASING 107 ft
STATIC DTW (-) 43.82 ft @ 1544 hr
FT WATER (=) _____

SAMPLE PUMP INTAKE (_____ ft
SCREEN INTERVAL: 65 - 105 ft
SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Date: 6/95
Team No: _____
Samplers' Initials: LKB, WHC, KDCK

CAP OF CASING (x) 1.02 gal / ft (=) _____ gal / 1 CASING VOL (x3 =) _____ gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1600	PUMP ON								
1630		W	ELL	DRY			/		
							/		
				WELL	BAILED		SAMPLED ON		6/25
							/		
							/		
				→ SAMPLE	TIME:	0935	ON 6/25		
							/		
				DTW =	43.84		RECOVERY	> 80%	
							/		
							/		
							/		
							/		

PUMP ON @ 1600 Hrs
PUMP OFF @ _____ Hrs
GALLONS PURGED _____
CASING VOLS. PURGED _____
AVERAGE Q: _____ GPM
FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ _____ Hrs
STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS
TIME _____ TEMP _____
SKIES _____
WIND (mph) _____ from _____

AIR MONITORING PID / FID (ppm)
VAULT 0 BKGD 0
BREATHING ZONE 0
DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT
(GLOVES) / GOGGLES / HARDHAT
RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	3	40ml. HCl
for equipment blanks on: 6/24/95 @ 1557		

DUP / MS/MSD / TB / FB Y N
If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: MW-32 ( )

Date: 6/95

TD OF CASING 223 ft

STATIC DTW (-) 55.40 ft @ 0805 hr

FT WATER (=) _____

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: 210 - 220 ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Team No: _____

Samplers' Initials: LKB WHC, KDE

CAP OF CASING (x) 1.02 gal / ft (=) _____ gal / 1 CASING VOL (x3 =) _____ gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
	PUMP ON								
			6/25/95	Bailer sampling the well because					
				it was pumped dry 6/24/95.					
				Dropped bailer to the water					
				column to sample. Was					
				Extremely hard to sample					
				as water would			/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ _____ Hrs

PUMP OFF @ _____ Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

_____ ft @ _____ Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 0805 TEMP 65°

SKIES Smoggy

WIND (mph) 5 from

AIR MONITORING PID / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

(GLOVES) GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml HCl

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

TD OF CASING 223 ft | SAMPLE PUMP INTAKE @ _____ ft | Team No: _____

STATIC DTW (-) 55.40 ft @ 0805 hr | SCREEN INTERVAL: 210 - 220 ft | Samplers' Initials: LKB, WHC, KBK

FT WATER (=) _____ | SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) _____ gal / 1 CASING VOL (x3 =) _____ gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
	PUMP ON								
			6/25/95	Bailed sampling the well because					
				it was purged dry 6/24/95.					
				Dropped bailer in the water					
				column to sample via					
				Waterra pump & a sample of					
				aquifer could.			/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ _____ Hrs

PUMP OFF @ _____ Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 0805 TEMP 63°

SKIES Smoggy.

WIND (mph) 0 from _____

AIR MONITORING PID / FID (ppm)

VAULT Ø BKGD Ø

BREATHING ZONE Ø

DISCHARGE WATER Ø

HEALTH & SAFETY EQUIPMENT

(GLOVES) GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml VOA

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: MW5 A

Page 1 of 1

TD OF CASING 180.04 ft

STATIC DTW (-) 20.22 ft @ 1043 hr

FT WATER (=) 159.82

CAP OF CASING (x) ~~1.02~~ gal / ft (=) 26.2 gal / 1 CASING VOL (x3 = 78.6 gal / 3 CASING VOL (+) INIT FLOWMETER READING 152456.2 (=) 152534.8 TARGET

SAMPLE PUMP INTAKE @ DEDICATED 175 ft

SCREEN INTERVAL: 176 - 180 ft

SPURGE PUMP: 5 (hp) 230/230 (volts) 30 (amps)

Date: 6-19-95

Team No: TEC

Samplers' Initials: CAH/RG/JC

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME TOTALIZER FLOWMETER READING	APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1225	PUMP ON			152534.8					
1227	19.7	0.49	11.25						26.04 = DTW
1230	20.0	0.54	11.42				1		29.94 = DTW
1232	20.1	0.51	11.44				1		CLEAR 31.22 DTW
1234	20.4	0.13	11.44	152458.5	2.3	.02	1		
1238	19.8	0.24	10.30	152466.0	9.8	.12	1		
1242	19.8	0.22	9.87	152474.5	18.3	.23	4 1m	2.45	clear DTW=30.2
1250	19.9	0.22	9.64	152491.2	35.0	.44	9.5 1m	2.12	DTW=34.52
1300	19.8	0.22	9.58	152511.9	55.7	2.21	16.7 1m	2.08	High CO2 Content DTW=31.82
1310	19.9	0.23	9.53	152532.3	76.1	2.90	20.7 10	2.07	DTW=40.60
1314	19.9	0.26	9.50	152540.2	84.0	3.20	20.4 10	2.04	DTW=42.70
1315	START SAMPLE			152541.2	85.0	3.24	7.9 4	1.97	
1321	STOP SAMPLE						1.0 1	1.0	DTW=39.70
1322	PUMP OFF			152542.2	86.0	3.28	1.0 1		
							1		
							1.0 17	0.14	

PUMP ON @ 1225 Hrs

PUMP OFF @ 1322 Hrs

GALLONS PURGED 86.0

CASING VOLS. PURGED 3.28

AVERAGE Q: .66 GPM

FINAL PURGE PUMPING WL 42.70 ft @ 1315 Hrs

START SAMPLING @ 1314 Hrs (1315)

STOP SAMPLING @ 1321 Hrs

WEATHER CONDITIONS

TIME 1655 TEMP 70°

SKIES CLEAR

WIND (mph) 0.5 from N

AIR MONITORING (PID) / FID (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT

(GLOVES) GOGGLES / HARDHAT

~~RESPIRATORS~~ / TYVEK / ~~VEST~~

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	HEADSPACE 18	40 ml VOA/HCl

(DUP) / (MS/MSD) / TB / (B) (Y) / NL

If "Y", complete appropriate forms

MEASUREMENT METHOD (FLOWMETER) / ~~BUCKET~~

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: [signature] Date: 6/19/95

WELL ID: MW 2 ( )

Page 1 of 1

TD OF CASING 75.08 ft
STATIC DTW (–) 11.3 ft @ 1530 hr
FT WATER (=) 63.78

SAMPLE PUMP INTAKE @ DATA 70 ft
SCREEN INTERVAL: 54.3 - 74.3 ft
SPURGE PUMP: .5 (hp) 220/23 (volts) 30 (amps)

Date: 6-19-95
Team No: Dix
Samplers' Initials: EBW / JC / RA

CAP OF CASING (x) 1.02 gal / ft (=) 42.5 gal / 1 CASING VOL (x3 =) 127.5 gal / 3 CASING VOL (+) INIT FLOWMETER READING 152541.7 (=) 152669.2 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1543	PUMP ON			152541.7					
1545	20.4	0.11	8.14	152543.6	1.9	.04	1.9 / 2	.95	DTW=11.43
1549	17.9	0.15	6.84	152552.2	10.5	.24	8.6 / 4	2.15	High CO_2 Content
1553	18.3	0.15	6.78	152563.3	21.6	.50	11.1 / 4	2.77	DTW=11.59
1557	18.3	0.14	6.80	152575.2	33.5	.78	11.9 / 4	2.97	DTW=11.54
1605	18.2	0.14	6.89	152595.8	54.1	1.34	23.6 / 8	2.95	
1613	18.2	0.14	6.87	152622.3	80.6	1.89	23.5 / 8	2.93	DTW = 11.53
1623	18.3	0.15	6.92	152651.8	110.1	2.59	29.5 / 10	2.95	Check High CO_2
1629	18.3	0.15	6.99	152679.2	137.5	3.23	27.4 / 6	4.56	
1633	START SAMPLE PUMP			152681.2	139.5	3.28	2.0 / 4	.05	DTW = 11.62
1636	STOP PUMP			152688.9	147.2	3.46	7.7 / 3	2.5	
							/		
							/		
							/		

PUMP ON @ 1543 Hrs
PUMP OFF @ 1636 Hrs
GALLONS PURGED 147.2
CASING VOLS. PURGED 2.77 (3.5) 3.46
AVERAGE Q: 2.77 GPM
FINAL PURGE PUMPING WL 11.62 ft @ 1633 Hrs

START SAMPLING @ 1633 Hrs
STOP SAMPLING @ 1636 Hrs

WEATHER CONDITIONS
TIME 1511 TEMP 78°
SKIES CLEAR
WIND (mph) 5-15 from W

AIR MONITORING (PID) / FID (ppm)
VAULT 0.0 BKGD 0.0
BREATHING ZONE 0.0
DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT
(GLOVES) / GOGGLES / ~~HARDHAT~~
~~RESPIRATORS~~ / TYVEK / ~~VEST~~

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	6	40 ml VOA / HCl

DUP / MS/MSD / TB / FB Y (N)
If "Y", complete appropriate forms

MEASUREMENT METHOD: (FLOWMETER) / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by [signature] Date: 6/19/95

WELL ID: MW-58A

TD OF CASING 82.06 ft
STATIC DTW (-) 2.71 ft @ 0915 hr
FT WATER (=) 79.35
CAP OF CASING (x) 1.02 gal / ft (=) 13.1 gal / 1 CASING VOL (x3 =) 39.3 gal / 3 CASING VOL (+) INIT FLOWMETER READING 152689.8 (=) 152729.1 TARGET

SAMPLE PUMP INTAKE @ 76.0 ft
SCREEN INTERVAL: 71.0 - 81.0 ft
SPURGE PUMP: 1140 (hp) 8L0 (volts) 30 (amps)

Date: 10-95
Team No: 7010
Samplers' Initials: RSW / RG / JT

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME TOTALIZER FLOWMETER READING	APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
0933	PUMP ON			152689.8					
0938	17.7	0.27	6.58	152693.5	3.7	.28	3.7 15	.74	DTW = 10.36
0940	19.4	0.25	6.66	~~152697.8~~			/		DTW = 14.40
				152697.8	8.0	.61	4.3 12	2.15	CLOUDY DTW = 21.03
0944	19.3	0.23	6.82	152705.7	15.9	1.21	7.9 14	1.97	CLOUDY High Co Content
0948	19.3	0.26	6.88	152714.1	24.3	1.85	8.4 14	2.1	DTW = 22.44
0952	19.4	0.26	6.94	152723.0	33.2	2.53	8.9 14	2.22	DTW = 25.78
0955	19.6	0.25	6.97	152730.0	40.2	3.06	7.0 13	2.33	DTW = 28.34
0956	START SAMPLE			152733.0	43.2	3.29	3.0 11	3.0	Cloudy High Co Content
0959	PUMP OFF			152736.0	46.2	3.52	3 0 13	1.0	
							/		
							/		
							/		
							/		

PUMP ON @ 0933 Hrs
PUMP OFF @ 0959 Hrs
GALLONS PURGED 46.2
CASING VOLS. PURGED 3.52
AVERAGE Q: 1.77 GPM
FINAL PURGE PUMPING WL 31.86 ft @ 0956 Hrs
START SAMPLING @ 0956 Hrs
STOP SAMPLING @ 0959 Hrs

WEATHER CONDITIONS
TIME 0955 TEMP 68
SKIES CLEAR
WIND (mph) 0-5 from N

AIR MONITORING PID / FID (ppm)
VAULT 0.0 BKGD 0.0
BREATHING ZONE 0.0
DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT
GLOVES / GOGGLES / HARDHAT
RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	6	40 ml VOA / HCl

DUP / MS/MSD / TB / FB Y (N)
If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)
MW58A-EB Taken @ 1212
Sample Water Milky Brown at 0958

Verified by: [signature] Date: 6/20/95

WELL ID: MW58C

TD OF CASING 60.09 ft
STATIC DTW (-) 2.70 ft @ 1105 hr
FT WATER (=) 57.39
SAMPLE PUMP INTAKE @ 54.0 ft
SCREEN INTERVAL: 57.50 - 59.50 ft
SPURGE PUMP: 5 (hp) 115/230 (volts) 30 (amps)
Date: 6-20-95
Team No: 40
Samplers' Initials: DRP/RRJ/JC

CAP OF CASING (x) 1.02 gal / ft (=) 9.8 gal / 1 CASING VOL (x3 =) 29.4 gal / 3 CASING VOL (+) INIT FLOWMETER READING 152736.0 (=) 152765.4 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME TOTALIZER FLOWMETER READING	APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1110	PUMP ON			152736.0					DTW = 3.38
1112	21.0	0.16	7.12	152739.4	3.4	.34	3.4 / 2	1.7	DTW = 3.40
1114	19.9	0.18	7.05	152744.6	8.6	.87	5.2 / 2	2.6	Brown, Cloudy, High O2
1116	20.0	0.17	7.05	152750.2	14.2	1.44	5.6 / 2	2.8	DTW = 3.57
1118	20.2	0.17	7.06	152756.1	20.1	2.05	5.9 / 2	2.9	Grey, Cloudy, High O2
1120	20.3	0.17	7.07	152762.2	26.2	2.67	6.1 / 2	3.0	DTW = 3.69
1122	20.4	0.17	7.07	152768.4	32.4	3.30	6.2 / 2	3.1	
1124	START SAMPLE			152774.2	38.2	3.89	5.8 / 2	2.9	DTW = 3.71
1128	PUMP OFF			152784.2	48.2	4.91	10.0 / 4	2.5	
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1110 Hrs
PUMP OFF @ 1128 Hrs
GALLONS PURGED 48.2
CASING VOLS. PURGED 4.91
AVERAGE Q: 2.67 GPM
FINAL PURGE PUMPING WL 3.71 ft @ 1124 Hrs
START SAMPLING @ 1124 Hrs
STOP SAMPLING @ 1125 Hrs

WEATHER CONDITIONS
TIME 1057 TEMP 82°
SKIES CLEAR
WIND (mph) CALM from N

AIR MONITORING (PID) / FID (ppm)
VAULT 0.0 BKGD 0.0
BREATHING ZONE 0.0
DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT
(GLOVES) / ~~GOGGLES~~ / ~~HARDHAT~~
~~RESPIRATORS~~ / ~~TYVEK~~ / ~~VEST~~

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8240/8260	6	40ml VOA / HCL

DUP / MS/MSD / TB / FB Y (N)
If "Y", complete appropriate forms

MEASUREMENT METHOD: (FLOWMETER) ~~BUCKET~~

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)
MW58C-EB at 1103
Samples Taken Had High O2 Content

Verified by: Dan Pace Date: 6/20/95

WELL ID: MW-58D (182)

Date: 6/[illegible]/95

TD OF CASING 71.08 ft

STATIC DTW (–) 2.16 ft @ 1158 hr

FT WATER (=) 68.92

SAMPLE PUMP INTAKE @ 65.0 ft

SCREEN INTERVAL: 68.0 - 70.0 ft

SPURGE PUMP: 5 (hp) 184/230 (volts) 30 (amps)

Team No: 1-30

Samplers' Initials: DJK/TEC/RG

CAP OF CASING (x) 1.02 gal / ft (=) 11.5 gal / 1 CASING VOL (x3 =) 34.5 gal / 3 CASING VOL (+) INIT FLOWMETER READING 152784 (=) 152818 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1219	PUMP ON			152784.4					
1221	23.3	0.00	7.16	152786.9	2.5	.21	2.5 / 2	1.25	DTW = 20.22
1225	23.4	0.05	7.04	152790.0	5.6	.48	3.1 / 4	.77	DTW = 27.40
1229	23.5	0.05	7.01	152791.7	7.3	.63	1.7 / 4	.42	DTW = 34.38
1230	PUMP OFF			PUMP ON TO CLEAN					SCREEN DTW = 48.06
1237	21.2	0.19	7.02	152797.9	13.5	1.17	6.2 / 8	.77	
1239	21.6	0.25	7.02	152800.2	15.8	1.37	2.3 / 2	1.15	DTW = 57.60
1241	21.2	0.25	7.02	152800.6	16.2	1.40	0.4 / 2	0.2	DTW = 47.88
1245	21.1	0.24	7.02	152805.4	21.0	1.82	4.8 / 4	1.2	clear. High CO_2 DTW = 57.57
1246	PUMP OFF			PUMP ON	TO CLEAN		SCREEN		DTW = 61.37
1248	21.0	0.24	7.03	152807.2	22.8	1.98	1.8 / 3	0.6	DTW = 61.94 clear. High CO_2
1252	PUMP OFF			PUMP ON TO CLEAN			SCREEN		
1253	21.8	0.23	7.05	152809.4	25.0	2.17	2.2 / 5	.44	DTW = 44.34
1257	21.8	0.23	6.94	152811.2	26.8	2.33	1.8 / 4	.45	DTW = 54.32

PUMP ON @ 1219 Hrs

PUMP OFF @ 1319 Hrs

GALLONS PURGED 37.0

CASING VOLS. PURGED 3.21

AVERAGE Q: .61 GPM

FINAL PURGE PUMPING WL 57.40 ft @ 1309 Hrs

START SAMPLING @ 1315 Hrs

STOP SAMPLING @ 1319 Hrs

WEATHER CONDITIONS

TIME 1147 TEMP 76 °F

SKIES CLEAR

WIND (mph) 5-15 from N

AIR MONITORING PID / FID (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
3010/8020	6	40ml VOA / HCl

DUP / MS/MSD / TB / FB Y (N)

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

MW58D - EB at 1211

SAMPLES TAKEN AT HIGH CO_2 CONTENT

Verified by: [signature] Date: 6/20/95

WELL ID: MW 8.0 ( )

Date: 6-20-95

TD OF CASING 71.03 ft

STATIC DTW (-) 2.16 ft @ 1153 hr

FT WATER (=) 68.92

SAMPLE PUMP INTAKE @ 65.0 ft

SCREEN INTERVAL: 63.0 - 70.0 ft

SPURGE PUMP: 5 (hp) 115/230 (volts) 30 (amps)

2 of 2

Team No: 200

Samplers' Initials: EM/JC/RG

CAP OF CASING (x) 1.02 gal / ft (=) 11.5 gal / 1 CASING VOL (x3 =) 34.5 gal / 3 CASING VOL (+) INIT FLOWMETER READING 152784 (=) 152818.9 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1257	PUMP ON			152811.2					DTW = 56.24
1300	PUMP OFF			PUMP ON TO CLEAR SCREEN					
1305	21.0	0.23	6.93	152816.0	31.6	2.74	4.8 / 8	0.6	Clear High O2 Content
1307	PUMP OFF			PUMP ON TO CLEAR SCREEN					DTW = 57.40
1309	21.9	0.20	7.14	152819.6	35.2	3.06	3.6 / 4	0.9	DTW = 57.40
1312	PUMP OFF			PUMP ON TO CLEAR SCREEN					
1315	START SAMPLE			152821.4	37.0	3.21	1.8 / 6	0.3	
1319	PUMP OFF			152821.4	37.0	3.21	0.0 / 4	0.0	
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1219 Hrs

PUMP OFF @ 1319 Hrs

GALLONS PURGED 37.0

CASING VOLS. PURGED 3.21

AVERAGE Q: .61 GPM

FINAL PURGE PUMPING WL 52.40 ft @ 1309 Hrs

START SAMPLING @ 1315 Hrs

STOP SAMPLING @ 1319 Hrs

WEATHER CONDITIONS

TIME 1147 TEMP 76°

SKIES CLEAR

WIND (mph) 5-15 from N

AIR MONITORING PID / FID (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.3

DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
		#1
GEX	PAR	

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Samples Taken Had High O2 Content

Verified by: Date: 6/20/95

WELL ID: MW06 [illegible]

Date: 6/[illegible]/95

TD OF CASING 115.82 ft

STATIC DTW (-) ±0.01 ft @ 1518 hr

FT WATER (=) 115.82 75.1

SAMPLE PUMP INTAKE @ 110 ft

SCREEN INTERVAL: 104' - 114' ft

SPURGE PUMP: 5 (hp) 230 (volts) 30 (amps)

Team No: 2

Samplers' Initials: JC DP, JG

CAP OF CASING (x) 1.02 gal / ft (=) [illegible] gal / 1 CASING VOL (x3 =) 225.3 gal / 3 CASING VOL (+) INIT FLOWMETER READING 152821.7 (=) 153047.0 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1550	PUMP ON			152821.7					
1552	25.0	.20	7.8	152824.8	3.1	.01	3.1 / 2	1.5	DTW = 1.32
1554	19.6	20	7.4	152830.2	8.5	.1	5.1 / 2	2.7	
1558	19.6	21	7.4	152842.7	21.0	.2	12.5 / 5	2.5	DTW = 1.95 @ 1557
1609	20.1	.25	7.5	152874.5	52.8	.7	31.8 / 10	3.1	DTW = 3.16 @ 1609
1615	20.1	.25	7.5	152893.6	71.9	.95	19.1 / 11	3.7	Water Level Very Low
1630	20.0	.25	7.5	152941.5	119.8	1.5	47.9 / 15	3.2	DTW = 3.59 @ 1615
1640	20.0	.25	7.4	152973.3	151.6	2.0	31.8 / 10	3.1	DTW = 3.88 @ 1625
1650	20.0	.23	7.4	153005.4	183.7	2.4	32.1 / 10	3.2	DTW = 4.16 @ 1641
1700	20.0	.25	7.4	153037.4	215.7	2.8	32.0 / 10	3.2	
1705	Start Sampling			153052.1	230.1	3.0	14.7 / 5	2.9	DTW = 4.40 @ 1703
1717	Stop Sampling			153070.7	249.0	3.3	18.6 / 7	2.6	
				Lunch Hour					

PUMP ON @ 1550 Hrs

PUMP OFF @ 1717 Hrs

GALLONS PURGED 249.0

CASING VOLS. PURGED 3.3

AVERAGE Q: 2.9 GPM

FINAL PURGE PUMPING WL 4.40 ft @ 1703 Hrs

START SAMPLING @ 1705 Hrs

STOP SAMPLING @ 1712 Hrs

WEATHER CONDITIONS

TIME 1545 TEMP 80°

SKIES Clear

WIND (mph) 0-3 from SE

AIR MONITORING (PID) / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010/8020	3	40-mL HCl
8010/8020	3	40-mL HCl
8010/8020	3	40-mL HCl

DUP / MS/MSD / TB (FB) (Y) N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

MW06 - EB @ 1535

MW06 - FB @ 1645

- Taking a While Using Bent Thru. Well Very Shallow

Verified by: [signature] Date: 6/20/95

WELL ID: MW 56B

TD OF CASING 91.70 ft
STATIC DTW (−) 2.70 ft @ 0805 hr
FT WATER (=) 89.0
SAMPLE PUMP INTAKE @ 85.0 ft
SCREEN INTERVAL: 89.0 - 91.0 ft
SPURGE PUMP: 5 (hp) 115/230 (volts) 30 (amps)

Date: 6/21/95
Team No: 1WQ
Samplers' Initials: DRP/JC/RL

CAP OF CASING (x) 1.02 gal / ft (=) 14.7 gal / 1 CASING VOL (x3 =) 44.1 gal / 3 CASING VOL (+) INIT FLOWMETER READING 153071.3 (=) 153115.4 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
0846	PUMP ON			153071.3					
0850	19.4	0.31	6.48	153074.9	3.6	.24	3.6 / 4	0.9	DTW = 7.04 cloudy
0854	19.5	0.26	6.79	153080.5	9.2	.62	5.6 / 4	1.4	DTW = 9.44
0858	19.9	0.25	6.91	153091.4	20.1	1.36	10.9 / 4	2.72	DTW = 17.44
0902	20.0	0.24	7.00	153103.2	31.9	2.17	11.8 / 4	2.95	DTW = 19.72
0907	20.0	0.24	7.04	153117.5	46.2	3.14	14.3 / 5	2.86	DTW = 19.94 clear (light)
0910	START SUBMERSIBLE PUMP			153126.8	55.5	3.77	9.3 / 3	3.10	DTW = 19.97
0913	PUMP OFF			153133.9	62.6	4.25	7.1 / 3	2.3	
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 0846 Hrs
PUMP OFF @ 0913 Hrs
GALLONS PURGED 62.6
CASING VOLS. PURGED 4.25
AVERAGE Q: 2.31 GPM
FINAL PURGE PUMPING WL 19.97 ft @ 0910 Hrs

START SAMPLING @ 0910 Hrs
STOP SAMPLING @ 0913 Hrs

WEATHER CONDITIONS
TIME 0810 TEMP 65
SKIES CLEAR
WIND (mph) 0.2 from N

AIR MONITORING PID / FID (ppm)
VAULT 2.2 BKGD 0.2
BREATHING ZONE 0.0
DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT
GLOVES / GOGGLES / ~~HARDHAT~~
RESPIRATORS / TYVEK / ~~VEST~~

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	6	40ml VOA / HCL

DUP / MS/MSD / TB / FB Y (N)
If "Y", complete appropriate forms

MEASUREMENT METHOD: (FLOWMETER) / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)
MW56B-EB Taken At 0837

Verified by: Dana Price Date: 6/21/95

WELL ID: MW56C

Date: 6/21/95

TD OF CASING 59.46 ft

STATIC DTW (−) 3.88 ft @ 0741 hr

FT WATER (=) 55.58

SAMPLE PUMP INTAKE @ 54.46 ft

SCREEN INTERVAL: 48.0 - 58.0 ft

SPURGE PUMP: 5 (hp) 3/4 (volts) 30 (amps)

Team No: 140

Samplers' Initials: DWS/SC/AG

CAP OF CASING (x) 1.02 gal / ft (=) 9.0 gal / 1 CASING VOL (x3 =) 27.0 gal / 3 CASING VOL (+) INIT FLOWMETER READING 153134.1 (=) 153161.1 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1006	PUMP ON			153134.1					
1009	19.6	.222	7.04	153135.7	1.6	.17	1.6 / 3	0.53	DTW = 7.23 Brown
1012	19.5	.226	7.00	153139.3	5.2	.57	3.6 / 3	1.2	DTW = 9.19 cloudy
1015	19.9	.228	7.00	153147.4	13.3	1.47	8.1 / 3	2.7	DTW = 11.78 High CO_2
1018	20.0	.228	6.98	153156.2	22.1	2.45	8.8 / 3	2.9	DTW = 12.07 cloudy, High CO_2
1021	20.0	.228	6.99	153165.0	30.9	3.43	8.8 / 3	2.9	DTW = 12.28
1023	START SAMPLE			153169.7	35.6	3.95	4.7 / 2	2.35	
1025	PUMP OFF			153175.2	41.1	4.50	5.5 / 2	2.75	
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1006 Hrs

PUMP OFF @ 1025 Hrs

GALLONS PURGED 41.1

CASING VOLS. PURGED 4.50

AVERAGE Q: 2.16 GPM

FINAL PURGE PUMPING WL 12.28 ft @ 1021 Hrs

START SAMPLING @ 1023 Hrs

STOP SAMPLING @ 1025 Hrs

WEATHER CONDITIONS

TIME 0933 TEMP 70°

SKIES CLEAR

WIND (mph) 5-10 from N

AIR MONITORING (PID) / FID (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT

(GLOVES) / ~~GOGGLES~~ / ~~HARDHAT~~

~~RESPIRATORS~~ / ~~TYVEK~~ / ~~VEST~~

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	6	40ml VOA / HCL

DUP / MS/MSD / TB / FB Y (N)

If "Y", complete appropriate forms

MEASUREMENT METHOD: (FLOWMETER) / ~~BUCKET~~

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

MW56C-EB Tekon AT 0958

Verified by: [signature] Date: 6/21/95

WELL ID: MW56D ( )

Date: 6/21-25

TD OF CASING 75.0 ft

STATIC DTW (−) 2.80 ft @ 1057 hr

FT WATER (=) 72.2

SAMPLE PUMP INTAKE @ ____ ft

SCREEN INTERVAL: 72.00 - 77.00 ft

SPURGE PUMP: 5 (hp) 184/230 (volts) 30 (amps)

Team No: Two

Samplers' Initials: EXD/JEC/RG

CAP OF CASING (x) 1.02 gal / ft (=) 12.3 gal / 1 CASING VOL (x3 =) 36.9 gal / 3 CASING VOL (+) INIT FLOWMETER READING 1531753 (=) 1532122 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1111	PUMP ON			153175.3					
1114	20.7	.282	6.80	153176.7	1.4	.03	1.4 / 3	.46	DTW=2.95
1117	20.4	.297	7.04	153184.4	9.1	.73	7.7 / 3	2.56	DTW=3.74
1120	20.5	.288	7.15	153192.4	17.1	1.39	8.0 / 3	2.66	DTW=3.76 Clear, High O2
1123	20.5	.298	7.11	153200.8	25.5	2.07	8.4 / 3	2.80	Clear
1126	20.5	.290	7.10	153209.2	33.9	2.75	8.4 / 3	2.80	DTW=3.78
1129	20.5	.290	7.10	153217.9	42.6	3.46	8.7 / 3	2.90	DTW 3.78
1131	START SAMPLE			153223.8	48.5	3.94	5.9 / 2	2.95	Clear High O2
1134	STOP PUMP			153231.6	56.3	4.57	7.8 / 3	2.6	
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1111 Hrs

PUMP OFF @ 1134 Hrs

GALLONS PURGED 56.3

CASING VOLS. PURGED 4.57

AVERAGE Q: 2.44 GPM

FINAL PURGE PUMPING WL 3.78 ft @ 1129 Hrs

START SAMPLING @ 1131 Hrs

STOP SAMPLING @ 1134 Hrs

WEATHER CONDITIONS

TIME 1035 TEMP 76°

SKIES CLEAR

WIND (mph) 0-10 from N

AIR MONITORING PID / FID (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

~~RESPIRATORS~~ / ~~TYVEK~~ / ~~VEST~~

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	6	40ml VOA / HCL

DUP / MS/MSD / TB / FB Y (N)

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / ~~BUCKET~~

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

MW56D-EB Taken At 1105

Verified by: [signature] Date: 6/21/95

WELL ID: MW52

Date: 6-21-95

TD OF CASING 58.92 ft

STATIC DTW (-) +0.01 ft @ 1532 hr

FT WATER (=) 58.93

SAMPLE PUMP INTAKE @ 53.92 ft

SCREEN INTERVAL: 37.0 - 57.0 ft

SPURGE PUMP: 5 (hp) N/A (volts) 30 (amps)

Team No: 160

Samplers' Initials: WSP / JTC

CAP OF CASING (x) 1.02 gal / ft (=) 39.2 gal / 1 CASING VOL (x3 =) 117.6 gal / 3 CASING VOL (+) INIT FLOWMETER READING 153231.9 (=) 153349.5 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1606	PUMP ON			153231.9					
1609	19.9	.170	7.00	153237.3	5.4	.13	5.4 / 3	1.8	DTW = 0.82
1612	20.0	.168	6.97	153244.0	12.1	.30	6.7 / 3	2.23	Cloudy, High O2 Content
1615	20.1	.184	6.98	153252.4	20.5	.52	8.4 / 3	2.80	DTW = 1.05
1620	20.3	.197	6.88	153267.5	35.6	.90	15.1 / 5	3.02	DTW = 1.62, High O2
1625	20.3	.171	6.93	153283.0	51.1	1.30	15.5 / 5	3.10	DTW = 1.66
1630	20.3	.177	6.93	153298.5	66.6	1.69	15.5 / 5	3.10	High O2 Content
1635	20.3	.186	6.87	153313.5	81.6	2.08	15.0 / 5	3.00	DTW = 1.63
1640	20.3	.185	6.89	153329.5	97.6	2.48	16.0 / 5	3.20	
1645	20.3	.184	6.93	153344.5	112.6	2.87	15.0 / 5	3.00	DTW = 1.68
1647	20.2	.183	6.87	153351.0	119.1	3.03	6.5 / 2	3.25	Clear High O2 Content
1648	START SAMPLE			153354.0	122.1	3.11	3.0 / 1	3.0	DTW = 1.70
1654	STOP SAMPLE			153370.0	138.1	3.52	16.0 / 6	2.66	
1655	PUMP OFF			153372.5	140.6	3.58	2.5 / 1	2.5	

PUMP ON @ 1606 Hrs

PUMP OFF @ 1655 Hrs

GALLONS PURGED 140.6

CASING VOLS. PURGED 3.58

AVERAGE Q: 2.86 GPM

FINAL PURGE PUMPING WL 1.70 ft @ 1648 Hrs

START SAMPLING @ 1648 Hrs

STOP SAMPLING @ 1654 Hrs

WEATHER CONDITIONS

TIME 1520 TEMP 80°

SKIES CLEAR

WIND (mph) 5-15 from N

AIR MONITORING (PID) / FID (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT

(GLOVES) / (GOGGLES) / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	6	40ml VOA / HCL

DUP / MS/MSD / TB / FB Y (N)

If "Y", complete appropriate forms

MEASUREMENT METHOD: (FLOWMETER) / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

MW52-EB Taken At 1550

Samples Taken Have High O2 Content - Best of 6

Verified by [signature] Date: 6/21/95

WELL ID: MW 57A

Date: 6-22-95

Team No: 7406

Samplers' Initials: [illegible] / BK

TD OF CASING 68.95 ft

STATIC DTW (-) 6.00 ft @ 0810 hr

FT WATER (=) 62.95

SAMPLE PUMP INTAKE @ 63.95 ft

SCREEN INTERVAL: 59.00 - 69.00 ft

SPURGE PUMP: 5 (hp) 230 (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 10.7 gal / 1 CASING VOL (x3 =) 32.1 gal / 3 CASING VOL (+) INIT FLOWMETER READING 153372.7 (=) 153404.8 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME TOTALIZER FLOWMETER READING	APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
0836	PUMP ON			153372.7					
0840	19.8	.189	6.36	153372.7	-0-	-0-	-0-14	-0-	Brown Cloudy
0844	19.9	.212	6.65	153372.7	-0-	-0-	-0-14	.0-	DTW = 7.50
0848	19.9	.222	6.64	153382.9	10.2	.95	10.2 14	2.55	DTW = 8.96
0852	19.9	.221	6.67	153395.5	22.8	2.13	12.6 14	3.15	Cloudy, High O2 Content
0856	20.0	.215	6.77	153408.2	35.5	3.31	12.7 14	3.17	High O2 Content
0857	START SAMPLE			153411.5	38.8	3.62	3.3 11	3.3	DTW = 6.42
0904	PUMP OFF			153413.1	40.4	3.77	1.6 13	.53	
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 0836 Hrs

PUMP OFF @ 0904 Hrs

GALLONS PURGED 40.4

CASING VOLS. PURGED 3.77

AVERAGE Q: 1.44 GPM

FINAL PURGE PUMPING WL 6.42 ft @ 0857 Hrs

START SAMPLING @ 0857 Hrs

STOP SAMPLING @ 0904 Hrs

WEATHER CONDITIONS

TIME 0823 TEMP 70°

SKIES CLEAR

WIND (mph) 0 from N

AIR MONITORING PID / FID (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	9	40ml VOA / HCl

DUP / MS/MSD / TB / (FB) (Y) N

If "Y", complete appropriate forms

MEASUREMENT METHOD: (FLOWMETER) / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

MW 57A - EB Taken At 0818

MW 57A - EB Taken At 0855

Samples Taken Had High O2 Content - Best of 6 Taken

Verified by: [signature] Date: 6/22/95

WELL ID: MW57D ( )

Date: 6-22-95

TD OF CASING 57.35 ft

STATIC DTW (-) 6.55 ft @ 0853 hr

FT WATER (=) 50.8

SAMPLE PUMP INTAKE @ 52.35 ft

SCREEN INTERVAL: 46.00 - 56.00 ft

SPURGE PUMP: 5 (hp) 115/230 (volts) 30 (amps)

Team No: TJO

Samplers' Initials: ~~RRP~~/DK/KF

CAP OF CASING (x) 1.02 gal / ft (=) 8.2 gal / 1 CASING VOL (x3 =) 24.6 gal / 3 CASING VOL (+) INIT FLOWMETER READING 153434 (=) 153458 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1015	PUMP ON			153413.4					
1017	20.6	.184	6.88	153417.0	3.6	.43	3.6 / 2	1.8	DTW = 7.10 Brown
1019	20.6	.161	6.93	153423.2	9.8	1.19	6.2 / 2	3.1	Brown, Cloudy
1021	20.7	.166	6.91	153429.3	15.9	~~3.75~~ 1.91	6.1 / 2	3.05	DTW = 7.12
1023	20.8	.160	6.93	153435.4	22.0	2.68	6.1 / 2	3.05	High O2 Content
1024	START SAMPLE			153438.5	25.1	3.06	3.1 / 1	3.10	DTW = 7.12
1033	PUMP OFF			153446.5	33.1	4.03	8.0 / 9	.88	
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1015 Hrs

PUMP OFF @ 1033 Hrs

GALLONS PURGED 33.1

CASING VOLS. PURGED 4.03

AVERAGE Q: 1.83 GPM

FINAL PURGE PUMPING WL 7.12 ft @ 1024 Hrs

START SAMPLING @ 1024 Hrs

STOP SAMPLING @ 1033 Hrs

WEATHER CONDITIONS

TIME 0821 TEMP 74°

SKIES CLEAR

WIND (mph) 3-5 from N

AIR MONITORING (PID) / ~~FID~~ (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT

(GLOVES) / (GOGGLES) / ~~HARDHAT~~ / ~~RESPIRATORS~~ / ~~TYVEK~~ / ~~VEST~~

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	6	40ml VOA / HCL

DUP / MS/MSD / TB / FB Y (N)

If "Y", complete appropriate forms

MEASUREMENT METHOD: (FLOWMETER) / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

MW57D-EB Taken At 1011

Verified by Dana Pares Date: 6/22/95

WELL ID: MW-2B

TD OF CASING 64.55 ft
STATIC DTW (-) ±0.01 ft @ 1306 hr
FT WATER (=) 64.56
CAP OF CASING (x) 1.02 gal / ft (=) 10.7 gal / 1 CASING VOL (x3 =) 32.1 gal / 3 CASING VOL (+) INIT FLOWMETER READING 53446.5 (=) 53478.6 TARGET

SAMPLE PUMP INTAKE 59.0 ft
SCREEN INTERVAL: 6260. 6400 ft
SPURGE PUMP: 5 (hp) 460/230 (volts) 30 (amps)

Date: 12-8-15
Team No: 1200
Samplers' Initials: CBZ/JC

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
	PUMP ON			153446.5					
				WELL IS VISIBLY			FLOWING		(~0.5g/m).
			WELL	USED BAILER			TO SAMPLE WELL.		
			6.2 A, winds	~3' UPGRADIENT			WITH A SHALLOWER		
			SCREENED INTERVAL,				IT IS PROBABLY		INDICATIVE
			OF	AND UP	SAND		VERTICAL		GRADIENT
				LOCALLY					

PUMP ON @ ____ Hrs
PUMP OFF @ ____ Hrs
GALLONS PURGED ____
CASING VOLS. PURGED ____
AVERAGE Q: ____ GPM
FINAL PURGE PUMPING WL
____ ft @ ____ Hrs

START SAMPLING @ 1315 Hrs
STOP SAMPLING @ ____ Hrs

WEATHER CONDITIONS
TIME 1305 TEMP 80°
SKIES CLEAR
WIND (mph) 0-5 from N

AIR MONITORING PID / FID (ppm)
1.0

DUP / MS/MSD / TB / FB Y (N)
If "Y", complete appropriate forms

* WL @ TOP OF WELL BORE BUT NOT NOTICIBLY FLOWING
* * START SAMPLING 1749
* Time noted may be inaccurate

Verified by: [signature] Date: 6/

WELL ID: MW 62A

Date: 12/95

TD OF CASING 45' ft | SAMPLE PUMP INTAKE 40.0 ft | Team No: 2

STATIC DTW (-) * 0' ft @ 1509 hr | SCREEN INTERVAL: 39 . 41 ft | Samplers' Initials: DLP/KMP/WI

FT WATER (=) 45' 2" WELLBORE | SPURGE PUMP: 5 (hp) 184/230 (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 7.4 gal / 1 CASING VOL (x3 =) 22.2 gal / 3 CASING VOL (+) INIT FLOWMETER READING 153446.5 (=) 153468.7 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1723	PUMP ON (MS/MSD)			153446.5					
1728	~~21.3~~	~~227~~	~~6.91~~	153452.2	5.7	0.77	5.7 / 5	1.14	
1732	21.2	227	6.91	153455.2	8.7	1.18	3.0 / 4	0.75	DTW = 21.75
1734	21.3	228	6.92	153458.2	11.7	1.58	3.0 / 2	1.5	DTW = 23.7
1736	21.4	227	6.92	153460.0	13.5	1.82	1.8 / 2	0.9	DTW = 25.0
1740	21.6	260	6.89	153462.2	16.7	2.26	3.2 / 4	0.8	DTW = 25.8
1748	21.7	265	6.95	153470.5	24.0	3.24	7.3 / 8	0.91	
1749		START		STARTING			/		
1751		PUMP		OFF			/		
				153470.6			/		
							/		
							/		
							/		
							/		

PUMP ON @ 1723 Hrs

PUMP OFF @ 1751 Hrs

GALLONS PURGED 24.1

CASING VOLS. PURGED 3.26

AVERAGE Q: 0.86 GPM

FINAL PURGE PUMPING WL 25.8 ft @ 1740 Hrs

START SAMPLING @ ~~1729~~ Hrs * 1749

STOP SAMPLING @ 1751 Hrs

WEATHER CONDITIONS

TIME 1511 TEMP 90°

SKIES CLEAR

WIND (mph) 5-10 from SW

AIR MONITORING (PID) / FID (ppm)

VAULT 0 BKGD 0

BREATHING ZONE 0

DISCHARGE WATER 0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / ~~HARDHAT~~

~~RESPIRATORS~~ / ~~TYVEK~~ / ~~VEST~~

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	3	40ml / HCl
8010	3	40ml / VOA / HCl

DUP / MS/MSD / TB / FB Y (N)

If "Y", complete appropriate forms

MEASUREMENT METHOD: (FLOWMETER) / ~~BUCKET~~

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

MW 62A - EB Taken At 1351

* WL @ TOP OF WELL BORE BUT NOT NOTICIBLY FLOWING

* * START SAMPLING 1749

* Time noted may be inaccurate

Verified by: [signature] Date: 6/

WELL ID: MW-39

Date: 6/23/95
Team No: 200
Samplers' Initials: DED/JC/MHC

TD OF CASING 83.30 ft
STATIC DTW (-) 5.04 ft @ 0902 hr
FT WATER (=) 78.26

SAMPLE PUMP INTAKE @ 78.30 ft
SCREEN INTERVAL: 60.00-80.00 ft
SPURGE PUMP: 3" (hp) N/A (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 32.3 gal / 1 CASING VOL (x3 =) 156.9 gal / 3 CASING VOL (+) INIT FLOWMETER READING 153420.6 (=) 153577.5 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
0929	PUMP ON			153470.6					
0932	20.0	.393	7.06	153475.3	4.7	.08	4 7 / 3	1.5	DTW = 8.90, clear
0935	20.2	.457	7.05	153482.1	11.5	.21	6.8 / 3	2.26	DTW = 11.20
0938	20.2	.413	7.09	153488.5	17.9	.34	6.4 / 3	2.13	DTW = 12.78, High O2
0943	20.3	.444	7.10	153499.9	29.3	.56	11.4 / 5	2.28	DTW = 13.52,
0948	20.7	.443	7.11	153514.3	43.7	.83	14.4 / 5	2.88	DTW = 22.32, cloudy
0958	20.7	.447	7.12	153544.0	73.4	1.40	29.7 / 10	2.97	DTW = 24.92, High O2
1008	20.8	.435	7.12	153573.2	102.6	1.96	29.2 / 10	2.92	DTW = 27.33, CLEAR
1018	20.9	.449	7.12	153602.5	131.9	2.52	29.3 / 10	2.93	DTW = 28.22, CLEAR
1028	20.9	.450	7.12	153631.5	160.9	3.07	29.0 / 10	2.90	DTW = 28.31, CLEAR
1032	20.9	.463	7.12	153642.5	171.9	3.28	11.0 / 4	2.75	Clear, High O2 Cont'd
1035	START SAMPLE			153651.2	180.6	3.43	8.7 / 3	2.90	
1037	PUMP OFF			153655.7	185.1	3.53	4.5 / 2	2.25	
							/		

PUMP ON @ 0929 Hrs
PUMP OFF @ 1037 Hrs
GALLONS PURGED 185.1
CASING VOLS. PURGED 3.53
AVERAGE Q: 2.72 GPM
FINAL PURGE PUMPING WL 28.68 ft @ 1032 Hrs

START SAMPLING @ 1035 Hrs
STOP SAMPLING @ 1057 Hrs

WEATHER CONDITIONS
TIME 0902 TEMP 80°
SKIES CLEAR
WIND (mph) 0 from W

AIR MONITORING PID / FID (ppm)
VAULT 0.0 BKGD 0.0
BREATHING ZONE 0.0
DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT
GLOVES / GOGGLES / HARDHAT
RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	9	40ml / HCl / HCl
8016	3	40ml / HCl / HCl

DUP / MS/MSD / TB / FB (Y) N
If "Y", complete appropriate forms

MEASUREMENT METHOD: (FLOWMETER) / BUCKET

OTHER NOTES & COMMENTS:
(Factors possibly affecting samples, condition of sampling equipment, etc.)
MW39-EB Taken At 0923
MW39-FB Taken At 1030
CTB062395 Take At 0900

Verified by Dennis Ross Date: 6/23/95

WELL ID: MW-7

Date: 6-3-95

TD OF CASING 65.52 ft

STATIC DTW (-) 2.36 ft @ 1150 hr

FT WATER (=) 63.16

SAMPLE PUMP INTAKE @ 60.52 ft

SCREEN INTERVAL: 44.00 - 64.00 ft

SPURGE PUMP: 5 (hp) 18-123 (volts) 30 (amps)

Team No: 1 WC

Samplers' Initials: RKD/DTHC/

CAP OF CASING (x) 1.02 gal / ft (=) 4.25 gal / 1 CASING VOL (x3 =) 12.5 gal / 3 CASING VOL (+) INIT FLOWMETER READING 536561 (=) 537356 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1222	PUMP ON			536560.1					
1225	19.4	.245	7.21	536562.4	1.5	.03	1.5 / 3	.43	DTW = 5.40 clear
1230	18.7	.248	7.08	536566.8	10.7	.25	9.4 / 5	1.88	DTW = 25.30
1235	19.4	.247	7.05	536579.3	22.7	.53	12.0 / 5	2.40	DTW = 37.24
1240	19.3	.246	7.04	536586.3	30.7	.72	8.0 / 5	1.60	DTW = 45.18 clear
1245	19.6	.247	7.06	536592.8	36.7	.86	6.0 / 5	1.20	DTW = 47.84
1251	19.3	.255	7.07	536599.4	43.3	1.01	6.6 / 6	1.10	DTW = 51.98
1300	19.0	.247	7.14	536707.5	51.4	1.20	8.1 / 7	0.9	DTW = 56.78 clear
1301	19.4	PUMP	OFF	536708.1	52.0	1.22	0.6 / 1	0.6	DTW = 58.78
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1222 Hrs

PUMP OFF @ 1301 Hrs

GALLONS PURGED 52.0

CASING VOLS. PURGED 1.22

AVERAGE Q: _____ GPM

FINAL PURGE-PUMPING WL 65.74 ft @ 58.78 Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 1157 TEMP 95°

SKIES CLEAR

WIND (mph) 5-10 from NE

AIR MONITORING PID / FID (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER 0.0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / ~~HARDHAT~~

RESPIRATORS / ~~TYVEK~~ / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	6	40ml VOA / HCl

DUP / MS/MSD / TB / FB Y (N)

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

MW17-EB Taken At 1216

Samples Taken At 0810 on 6/24/95 At A Depth 10 Feet Below the water level

DTW = 5.21 @ 0805 on 6/24/95

Verified by: [signature] Date: 6/23/95

WELL ID: MW-7

Date: 4/14/95

TD OF CASING _____ ft

STATIC DTW (–) 5.21 ft @ _____ hr

FT WATER (=) _____

SAMPLE PUMP INTAKE @ _____ ft

SCREEN INTERVAL: _____ - _____ ft

SPURGE PUMP: _____ (hp) _____ (volts) 30 (amps)

Team No: 1-06

Samplers' Initials: _____

CAP OF CASING (x) 1.02 gal / ft (=) _____ gal / 1 CASING VOL (x3 =) _____ gal / 3 CASING VOL (+) INIT FLOWMETER READING _____ (=) _____ TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
	PUMP ON								
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ _____ Hrs

PUMP OFF @ _____ Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

_____ ft @ _____ Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME _____ TEMP _____

SKIES _____

WIND (mph) _____ from _____

AIR MONITORING PID / FID (ppm)

VAULT 9.6 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER _____

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: MW32

Date: 6-Y-95

Team No: TWC

Samplers' Initials: DF/GM/MH

TD OF CASING 223.0 ft

STATIC DTW (-) 50.40 ft @ 0834 hr

FT WATER (=) 172.6

SAMPLE PUMP INTAKE @ 210.00 ft

SCREEN INTERVAL: 210.00 - 220.00 ft

SPURGE PUMP: 5 (hp) 187/234 (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 114.3 gal / 1 CASING VOL (x3 =) 342.9 gal / 3 CASING VOL (+) INIT FLOWMETER READING 1537059 (=) 1540502 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
0903	PUMP ON			1537029					
0911	17.8	.316	9.09	1537092	1.3	.01	1.3 / 3	4.3	DTW=54.10
0915	17.7	.319	9.49	1537165	8.6	.07	7.3 / 45	1.82	DTW=70.5
0920	17.9	.318	9.63	1537268	18.9	.16	10.3 / 5	2.06	DTW=79.0 clear
0925	PUMP OFF			1537346	26.7	.23	7.8 / 5	1.56	DTW=92.1 cloudy
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 0908 Hrs

PUMP OFF @ _____ Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL _____ ft @ _____ Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 0837 TEMP 77°F

SKIES CLEAR

WIND (mph) 5-10 from W

AIR MONITORING PID / FID (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER _____

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	6	40ml VOA / HCl

DUP / MS/MSD / TB / FB Y (N)

If "Y", complete appropriate forms

MEASUREMENT METHOD (FLOWMETER) / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

MW32-EB Taken At 0895

Sample Pump At Full Extension of Hose

Verified by: _____ Date: _____

WELL ID: EW11

Date: 6/24/95

TD OF CASING 99.8 ft

STATIC DTW (-) 34.4 ft @ 1645 hr

FT WATER (=) 63.4

SAMPLE PUMP INTAKE @ 94.8 ft

SCREEN INTERVAL: 66.00 - 111.00 ft

SPURGE PUMP: 5 (hp) 18/230 (volts) 30 (amps)

Team No: 1030

Samplers' Initials: DAP/CAN/MM

CAP OF CASING (x) 1.02 gal / ft (=) 42.5 gal / 1 CASING VOL (x3 =) 127.5 gal / 3 CASING VOL (+) INIT FLOWMETER READING 153734.2 (=) 153861.7 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME TOTALIZER FLOWMETER READING	APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1110	PUMP ON								
1115							1		DTW = 42.0
1120							1		Brown, Rusty DTW = 47.60
1125							1		DTW = 51.40
1129	PUMP	OFF					1		
1134	PUMP	ON		153734.2			1		DTW = 47.92
1136	21.9	.273	8.68	153737.7	3.5	.08	3.5 | 2	1.75	DTW = 51.40
1140	21.0	.288	8.74	153745.4	14.2	.33	10.7 | 4	2.67	Brown, Rusty DTW = 53.75
1145	21.4	.309	8.66	153760.2	25.8	.60	11.6 | 5	2.32	DTW = 52.85
1155	21.1	.311	8.82	153774.9	40.7	.95	14.9 | 10	1.49	DTW = 52.10
1205	21.1	.303	8.64	153790.2	56.0	1.31	15.3 | 10	1.53	DTW = 52.10 Brown
1215	21.1	.301	8.59	153805.3	71.1	1.67	15.1 | 10	1.51	DTW = 52.40 Brown
1220	21.0	.307	8.53	153818.4	84.2	1.98	13.1 | 5	2.62	DTW = 56.70
1225	21.0	.285	8.58	153831.1	96.9	2.28	12.7 | 5	2.54	DTW = 58.80

PUMP ON @ 1134 Hrs

PUMP OFF @ _____ Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

_____ ft @ _____ Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME 1255 TEMP 95

SKIES CLEAR

WIND (mph) 5-15 from SE

AIR MONITORING PID FID (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.0

DISCHARGE WATER _____

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
BTEX	6	40ml VOA / HCl

DUP / MS/MSD / TB / FB Y (N)

If "Y", complete appropriate forms

MEASUREMENT METHOD: ~~FLOWMETER~~ / ~~BUSKET~~ BUCKET 5 gallon, 90 sec.

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

EW11 - EB taken at 1105

Verified by: _____ Date: _____

WELL ID: E-11

Date: 6/15/05

TD OF CASING 92.8 ft

SAMPLE PUMP INTAKE @ 74.8 ft

Team No: 1 SC

STATIC DTW (−) 36.4 ft @ 1045 hr

SCREEN INTERVAL: 60.00 - 111.00 ft

Samplers' Initials: DSH/CAR/MH

FT WATER (=) 63.4

SPURGE PUMP: 5 (hp) 180/230 (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 42.5 gal / 1 CASING VOL (x3 =) 127.5 gal / 3 CASING VOL (+) INIT FLOWMETER READING 153734.2 (=) 153861.7 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1225	PUMP ON @ 74'			153831.1					
1230	21.1	.310	8.65	153843.8	109.6	2.57	12.7 / 5	2.54	DTW = 60.01, cloudy
1235	21.2	.300	8.73	153856.5	122.3	2.87	12.7 / 5	2.54	DTW = 60.79
1238	21.1	.298	8.72	153864.2	130.0	3.05	7.7 / 3	2.56	DTW = 60.98 cloudy
1239	START SAMPLE			153866.5	132.3	3.11	2.3 / 1	2.3	
1241	PUMP OFF			153871.6	137.4	3.23	5.1 / 2	2.55	
							/		
							/		
							/		
							/		
							/		
							/		
							/		
							/		

PUMP ON @ 1154 Hrs

PUMP OFF @ _____ Hrs

GALLONS PURGED _____

CASING VOLS. PURGED _____

AVERAGE Q: _____ GPM

FINAL PURGE PUMPING WL

60.95 ft @ 1258 Hrs

START SAMPLING @ _____ Hrs

STOP SAMPLING @ _____ Hrs

WEATHER CONDITIONS

TIME _____ TEMP _____

SKIES _____

WIND (mph) _____ from _____

AIR MONITORING PID / FID (ppm)

VAULT _____ BKGD _____

BREATHING ZONE _____

DISCHARGE WATER _____

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

Verified by: _____ Date: _____

WELL ID: EW-2

Date: 6-24-95

TD OF CASING 115.00 ft → 100.00

SAMPLE PUMP INTAKE @ 95.00 ft

Team No: 7 50

STATIC DTW (-) 41.64 ft @ 1525 hr

SCREEN INTERVAL: 60.00 - 111.00 ft

Samplers' Initials: DSP/GM/CH

FT WATER (=) 73.36

SPURGE PUMP: 5 (hp) 460/230 (volts) 30 (amps)

CAP OF CASING (x) 1.02 gal / ft (=) 49.0 gal / 1 CASING VOL (x3 =) 147.0 gal / 3 CASING VOL (+) INIT FLOWMETER READING 153871.7 (=) 154018.7 TARGET

TIME	FIELD PARAMETERS T°C	EC	pH	VOLUME ( ) TOTALIZER FLOWMETER READING	( ) APPROX. GALS PURGED	APPROX. CASING VOLS PURGED	DISCHARGE RATE VOLUME / TIME (min)	Q (GPM)	NOTES (Color, odor, sand & silt content & other characteristics of the discharge water)
1535	PUMP ON			153871.7					
1538	20.7	353	796	153877.4	5.7	.11	5.7 / 3	1.9	DTW = 45.62, CLEAR
1541	20.8	331	780	153885.8	14.1	.28	8.4 / 3	2.8	DTW = 47.32, High O2
1545	20.8	333	769	153896.0	24.3	.49	10.2 / 4	2.55	DTW = 48.18 CLEAR
1555	20.7	271	765	153920.8	49.1	1.00	24.8 / 10	2.48	DTW = 48.91 High O2
1605	20.6	269	760	153946.6	74.9	1.52	25.8 / 10	2.58	DTW = 49.54 High O2
1615	20.7	252	758	153971.5	99.8	2.03	24.9 / 10	2.49	DTW = 49.88 CLEAR
1625	20.7	266	756	153997.0	125.3	2.55	25.5 / 10	2.55	DTW = 50.11, High O2
1635	20.7	255	753	154021.7	150.0	3.06	24.7 / 10	2.47	DTW = 50.42
1638	START SAMPLE			154027.4	155.7	3.17	5.7 / 3	1.9	clear, High O2 Calm
1644	PUMP OFF			154029.1	157.4	3.21	1.7 / 6	.28	
							/		
							/		
							/		

PUMP ON @ 1535 Hrs

PUMP OFF @ 1644 Hrs

GALLONS PURGED 157.4

CASING VOLS. PURGED 3.21

AVERAGE Q: 2.28 GPM

FINAL PURGE PUMPING WL 50.42 ft @ 1635 Hrs

START SAMPLING @ 1630 Hrs

STOP SAMPLING @ 1644 Hrs

WEATHER CONDITIONS

TIME 1531 TEMP 100°

SKIES CLEAR

WIND (mph) 10-15 from S

AIR MONITORING PID / FID (ppm)

VAULT 0.0 BKGD 0.0

BREATHING ZONE 0.6

DISCHARGE WATER 3.0

HEALTH & SAFETY EQUIPMENT

GLOVES / GOGGLES / HARDHAT

RESPIRATORS / TYVEK / VEST

SAMPLE COLLECTION

ANALYSIS	QUANTITY	CONTAINER / ACID
8010	6	40ml / HCl / ACL

DUP / MS/MSD / TB / FB Y N

If "Y", complete appropriate forms

MEASUREMENT METHOD: FLOWMETER / BUCKET

OTHER NOTES & COMMENTS:

(Factors possibly affecting samples, condition of sampling equipment, etc.)

EW12-EB Taken @ 1515

Verified by: _____ Date: _____

APPENDIX B

ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOS 8010

TABLE B-1

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-01

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	17-DEC-94 QA	25-JUN-95 QA
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000 E	< 1.0000 E
Bromoform	< 2.0000 E	< 2.0000 E
Bromomethane	< 5.0000 E	< 5.0000 E
Carbon tetrachloride	0.6800 E	< 0.5000 E
Chlorobenzene	< 2.0000 E	< 2.0000 E
Chloroethane	< 2.0000 E	< 2.0000 E
Chloroform	< 1.0000 E	< 1.0000 E
Chloromethane	< 2.0000 E	< 2.0000 E
cis-1,2-Dichloroethylene	< 1.0000 E	< 1.0000 E
cis-1,3-Dichloropropylene	< 0.5000 E	< 0.5000 E
Dibromochloromethane	< 1.0000 E	< 1.0000 E
Dichlorodifluoromethane	< 5.0000 E	< 5.0000 E
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000 E	< 2.0000 E
o-Xylene	---	---
Tetrachloroethylene	< 0.5000 E	< 0.5000 E
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000 E	< 1.0000 U
trans-1,3-Dichloropropylene	< 0.5000 E	< 0.5000 E
Trichloroethylene	110.00	85.000 E
Trichlorofluoromethane	< 5.0000 E	< 5.0000 E
Vinyl chloride	< 0.5000 E	< 0.5000 E
1,1,1-Trichloroethane	14.000	14.000 E
1,2,2-Tetrachloroethane	< 1.0000 E	< 1.0000 E
1,2-Trichloroethane	< 0.5000 E	< 0.5000 E
1,1-Dichloroethane	1.9000 E	3.0000 E
1,1-Dichloroethylene	86.000 E	73.000 E
1,2-Dichlorobenzene	< 3.0000 E	< 3.0000 E
1,2-Dichloroethane	1.2000 E	2.9000 E
1,3-Dichlorobenzene	< 2.0000 E	< 2.0000 E
1,4-Dichlorobenzene	< 2.0000 E	< 2.0000 E
2-Chloroethylvinyl ether	< 2.0000 E	< 2.0000 E
1,2-Dichloropropane	< 1.0000 E	< 1.0000 E
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

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-) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-2

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-02

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	17-DEC-94 QA	25-JUN-95 QA
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000 E	< 1.0000 E
Bromoform	< 2.0000 E	< 2.0000 E
Bromomethane	< 5.0000 E	< 5.0000 E
Carbon tetrachloride	1.4000 E	1.1000 E
Chlorobenzene	< 2.0000 E	< 2.0000 E
Chloroethane	< 2.0000 E	< 2.0000 E
Chloroform	3.1000 E	2.6000 E
Chloromethane	< 2.0000 E	< 2.0000 E
cis-1,2-Dichloroethylene	< 1.0000 E	< 1.0000 E
cis-1,3-Dichloropropylene	< 0.5000 E	< 0.5000 E
Dibromochloromethane	< 1.0000 E	< 1.0000 E
Dichlorodifluoromethane	< 5.0000 E	< 5.0000 E
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000 E	< 2.0000 E
o-Xylene	---	---
Tetrachloroethylene	< 0.5000 E	< 0.5000 E
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000 E	< 1.0000 U
trans-1,3-Dichloropropylene	< 0.5000 E	< 0.5000 E
Trichloroethylene	250.00	130.00 E
Trichlorofluoromethane	< 5.0000 E	< 5.0000 E
Vinyl chloride	< 0.5000 E	< 0.5000 E
',1-Trichloroethane	29.000	15.000 E
,2,2-Tetrachloroethane	< 1.0000 E	< 1.0000 E
,1,2-Trichloroethane	< 0.5000 E	< 0.5000 E
1,1-Dichloroethane	4.6000 E	4.0000 E
1,1-Dichloroethylene	260.00 E	130.00 E
1,2-Dichlorobenzene	< 3.0000 E	< 3.0000 E
1,2-Dichloroethane	0.9900 E	1.3000 E
1,3-Dichlorobenzene	< 2.0000 E	< 2.0000 E
1,4-Dichlorobenzene	< 2.0000 E	< 2.0000 E
2-Chloroethylvinyl ether	< 2.0000 E	< 2.0000 E
1,2-Dichloropropane	< 1.0000 E	< 1.0000 E
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-3

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-08

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	14-APR-94 ME	14-DEC-94 ME	19-JUN-95 ME
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000
Carbon tetrachloride	---	< 0.5000	< 0.5000
Chlorobenzene	---	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000
Chloroform	---	< 1.0000	< 1.0000
Chloromethane	---	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000
o-Xylene	---	---	---
Tetrachloroethylene	---	< 0.5000	< 0.5000
Toluene	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Trichloroethylene	16.400	6.3000	< 5.9000
Trichlorofluoromethane	---	< 5.0000	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000
1,1,1-Trichloroethane	---	< 1.6000	< 1.8000
1,1,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	< 0.5000	< 0.5000
1,1-Dichloroethane	---	< 1.0000	< 1.0000
1,1-Dichloroethylene	15.400	15.000	< 17.000
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000
1,2-Dichloroethane	6.1000	0.5100	0.8700
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
U = Data unusable; data not suitable for any purpose

TABLE B-4

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-09

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	18-APR-94 ME	18-APR-94 ME	13-DEC-94 ME	20-JUN-95 ME
Acetone	---	---	---	---
Benzene	---	---	---	---
Bromodichloromethane	---	---	< 1.0000	< 1.0000
Bromoform	---	---	< 2.0000	< 2.0000
Bromomethane	---	---	< 5.0000 E	< 5.0000
Carbon tetrachloride	---	---	0.5000 E	1.3000
Chlorobenzene	---	---	< 2.0000 E	< 2.0000
Chloroethane	---	---	< 2.0000 E	< 2.0000
Chloroform	---	---	1.9000 E	< 3.0000
Chloromethane	---	---	< 2.0000 E	< 2.0000
cis-1,2-Dichloroethylene	---	---	1.7000 E	2.5000
cis-1,3-Dichloropropylene	---	---	< 0.5000 E	< 0.5000
Dibromochloromethane	---	---	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	---	< 5.0000 E	< 5.0000
Ethylbenzene	---	---	---	---
m,p-Xylene	---	---	---	---
Methyl ethyl ketone	---	---	---	---
Methylene chloride	---	---	< 2.0000	< 2.0000
o-Xylene	---	---	---	---
Tetrachloroethylene	80.000	---	1.5000 E	1.4000
Toluene	---	---	---	---
trans-1,2-Dichloroethylene	---	---	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	---	< 0.5000	< 0.5000
Trichloroethylene	---	272.00	300.00	300.00 E
Trichlorofluoromethane	---	---	< 5.0000 E	< 5.0000
Vinyl chloride	---	---	< 0.5000 E	< 0.5000
1,1,1-Trichloroethane	65.000	84.000	16.000 E	22.000
1,1,2,2-Tetrachloroethane	---	---	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	---	1.4000 E	2.8000
1,1-Dichloroethane	---	---	11.000 E	15.000
1,1-Dichloroethylene	220.00	262.00	350.00	360.00 E
1,2-Dichlorobenzene	---	---	< 3.0000	< 3.0000
1,2-Dichloroethane	170.00	40.060	17.000 E	26.000
1,3-Dichlorobenzene	---	---	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	---	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	---	< 1.0000	< 1.0000
Quality Assurance Code	FDA	FDB	ORG	FD
Laboratory	Radian	Radian	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-4 (continued)

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-09

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	20-JUN-95 ME	20-JUN-95 ME
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000	< 5.0000
Bromoform	< 2.0000	< 5.0000
Bromomethane	< 5.0000	< 5.0000
Carbon tetrachloride	1.1000	< 5.0000
Chlorobenzene	< 2.0000	< 5.0000
Chloroethane	< 2.0000	< 5.0000
Chloroform	< 2.8000	< 5.0000
Chloromethane	< 2.0000	< 5.0000
cis-1,2-Dichloroethylene	2.5000	< 5.0000
cis-1,3-Dichloropropylene	< 0.5000	< 5.0000
Dibromochloromethane	< 1.0000	< 5.0000
Dichlorodifluoromethane	< 5.0000	---
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000	< 5.0000
o-Xylene	---	---
Tetrachloroethylene	1.4000	< 5.0000
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000	< 5.0000
trans-1,3-Dichloropropylene	< 0.5000	< 5.0000
Trichloroethylene	250.00 E	420.00 E
Trichlorofluoromethane	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 5.0000
1-Trichloroethane	20.000 E	29.000 E
,2,2-Tetrachloroethane	< 1.0000	< 5.0000
,1,2-Trichloroethane	2.5000	< 5.0000
1,1-Dichloroethane	15.000 E	19.000 E
1,1-Dichloroethylene	290.00 E	500.00 E
1,2-Dichlorobenzene	< 3.0000	< 5.0000
1,2-Dichloroethane	25.000	29.000
1,3-Dichlorobenzene	< 2.0000	< 5.0000
1,4-Dichlorobenzene	< 2.0000	< 5.0000
2-Chloroethylvinyl ether	< 2.0000 U	---
1,2-Dichloropropane	< 1.0000	< 5.0000
Quality Assurance Code	ORG	SPT
Laboratory	Lockheed Analytical	BC Analytical

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TABLE B-5

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-10

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	19-APR-94 ME	14-DEC-94 ME	21-JUN-95 ME
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000
Carbon tetrachloride	---	0.9200	1.5000
Chlorobenzene	---	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000
Chloroform	---	1.8000	2.7000
Chloromethane	---	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	1.9000	2.5000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000
o-Xylene	---	---	---
Tetrachloroethylene	---	1.2000	1.7000
Toluene	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Trichloroethylene	---	280.00	330.00
Trichlorofluoromethane	---	< 5.0000	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000
',1-Trichloroethane	86.500	25.000 E	25.000
.,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	2.4000	2.6000
1,1-Dichloroethane	---	12.000	16.000
1,1-Dichloroethylene	405.50	510.00	430.00
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000
1,2-Dichloroethane	205.00	20.000	25.000 E
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

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TABLE B-6

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-11

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	19-APR-94 ME	14-DEC-94 ME	24-JUN-95 ME
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000
Carbon tetrachloride	---	1.3000	2.4000
Chlorobenzene	---	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000
Chloroform	---	1.9000	2.4000
Chloromethane	---	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	2.7000	3.4000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	---	< 2.0000	< 3.4000
o-Xylene	---	---	---
Tetrachloroethylene	57.000	1.7000	2.2000
Toluene	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	1.3000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Trichloroethylene	---	540.00	360.00
Trichlorofluoromethane	---	< 5.0000	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000
,1-Trichloroethane	174.00	35.000 E	38.000
,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	1.8000	2.8000
1,1-Dichloroethane	---	12.000	16.000
1,1-Dichloroethylene	755.00	1200.0	730.00
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000
1,2-Dichloroethane	400.00	16.000	27.000
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

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TABLE B-7

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-12

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	14-APR-94 ME	14-APR-94 ME	14-DEC-94 ME	24-JUN-95 ME
Acetone	---	---	---	---
Benzene	---	---	---	---
Bromodichloromethane	---	---	< 1.0000	< 1.0000
Bromoform	---	---	< 2.0000	< 2.0000
Bromomethane	---	---	< 5.0000	< 5.0000
Carbon tetrachloride	---	---	4.7000	1.6000
Chlorobenzene	---	---	< 2.0000	< 2.0000
Chloroethane	---	---	< 2.0000	< 2.0000
Chloroform	---	---	12.000	2.5000
Chloromethane	---	---	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	---	23.000	5.0000
cis-1,3-Dichloropropylene	---	---	< 0.5000	< 0.5000
Dibromochloromethane	---	---	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	---	< 5.0000	< 5.0000
Ethylbenzene	---	---	---	---
m,p-Xylene	---	---	---	---
Methyl ethyl ketone	---	---	---	---
Methylene chloride	---	---	2.9000	< 3.3000
o-Xylene	---	---	---	---
Tetrachloroethylene	4.1300	---	650.00	2.5000
Toluene	---	---	---	---
trans-1,2-Dichloroethylene	---	---	1.3000	< 1.0000
trans-1,3-Dichloropropylene	---	---	< 0.5000	< 0.5000
Trichloroethylene	9687.0	15400.	1400.0	160.00
Trichlorofluoromethane	---	---	< 5.0000	< 5.0000
Vinyl chloride	---	---	< 0.5000	< 0.5000
1,1,1-Trichloroethane	125.00	243.00	120.00 E	41.000
1,1,2,2-Tetrachloroethane	---	---	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	---	41.000 E	11.000
1,1-Dichloroethane	---	---	48.000 E	11.000
1,1-Dichloroethylene	530.00	702.00	3700.0	530.00
1,2-Dichlorobenzene	---	---	< 3.0000	< 3.0000
1,2-Dichloroethane	79.300	693.00	88.000 E	35.000
1,3-Dichlorobenzene	---	---	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	---	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	---	< 1.0000	< 1.0000
Quality Assurance Code	FDA	FDB	ORG	ORG
Laboratory	Radian	Radian	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-8

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-13

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	13-APR-94 ME	13-APR-94 ME	09-MAR-95 ME	25-JUN-95 ME
Acetone	---	---	< 14.000	< 14.000
Benzene	---	---	< 1.0000 U	1.2000
Bromodichloromethane	---	---	< 1.0000	< 1.0000 E
Bromoform	---	---	< 2.0000	< 2.0000 E
Bromomethane	---	---	< 5.0000	< 5.0000 E
Carbon tetrachloride	---	---	0.6100	3.5000 E
Chlorobenzene	---	---	< 1.0000	< 1.0000
Chloroethane	---	---	< 2.0000	< 2.0000 E
Chloroform	---	---	5.8000	10.000 E
Chloromethane	---	---	< 2.0000	< 2.0000 E
cis-1,2-Dichloroethylene	---	---	8.0000	21.000 E
cis-1,3-Dichloropropylene	---	---	< 0.5000	< 0.5000 E
Dibromochloromethane	---	---	< 1.0000	< 1.0000 E
Dichlorodifluoromethane	---	---	< 5.0000	< 5.0000 E
Ethylbenzene	---	---	< 1.0000	< 1.0000
m,p-Xylene	---	---	< 1.0000	< 1.0000
Methyl ethyl ketone	---	---	< 6.0000	< 6.0000
Methylene chloride	---	---	< 2.0000	2.1000 E
o-Xylene	---	---	< 1.0000	< 1.0000
Tetrachloroethylene	---	2.9400	1.3000	4.7000 E
Toluene	---	---	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene	---	---	< 1.0000	2.2000 E
trans-1,3-Dichloropropylene	---	---	< 0.5000	< 0.5000 E
Trichloroethylene	2110.0	4730.0	250.00	< 840.00 E
Trichlorofluoromethane	---	---	< 5.0000	< 5.0000 E
Vinyl chloride	---	---	< 0.5000	< 0.5000 E
1,1,1-Trichloroethane	73.800	22.600	52.000	230.00 E
1,2,2-Tetrachloroethane	---	---	< 1.0000	< 1.0000 E
1,1,2-Trichloroethane	---	---	6.2000	18.000 E
1,1-Dichloroethane	---	---	19.000	< 200.00 E
1,1-Dichloroethylene	1600.0	844.00	820.00	< 1400.0 E
1,2-Dichlorobenzene	---	---	< 1.0000	< 1.0000
1,2-Dichloroethane	590.00	75.000	29.000	< 100.00 E
1,3-Dichlorobenzene	---	---	< 1.0000	< 1.0000
1,4-Dichlorobenzene	---	---	< 1.0000	< 1.0000
2-Chloroethylvinyl ether	---	---	< 2.0000 U	< 2.0000 U
1,2-Dichloropropane	---	---	4.5000	< 1.0000 E
Quality Assurance Code	FDA	FDB	ORG	ORG
Laboratory	Radian	Radian	Lockheed Analytical	Lockheed Analytical

= Less than; numerical value is the limit of detection for that analyte
--) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-9

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-14

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	21-APR-94 QA/ME	17-DEC-94 QA/ME	17-DEC-94 QA/ME	21-JUN-95 QA/ME
Acetone	---	---	---	---
Benzene	---	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000	< 5.0000
Carbon tetrachloride	---	0.8600	0.8300	1.3000
Chlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000	< 2.0000
Chloroform	---	2.2000	2.2000	3.2000
Chloromethane	---	< 2.0000	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	3.5000	3.3000	6.0000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000	< 5.0000
Ethylbenzene	---	---	---	---
m,p-Xylene	---	---	---	---
Methyl ethyl ketone	---	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000	< 2.0000
o-Xylene	---	---	---	---
Tetrachloroethylene	210.00	2.1000	1.9000	2.7000
Toluene	---	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	---	800.00 E	600.00 E	210.00
Trichlorofluoromethane	---	< 5.0000	< 5.0000	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000	< 0.5000
1-Trichloroethane	1160.0	180.00	150.00	66.000
,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	2.9000	2.6000	10.000
1,1-Dichloroethane	---	7.7000	7.7000	12.000
1,1-Dichloroethylene	4960.0	1100.0 E	680.00 E	320.00
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000	< 3.0000
1,2-Dichloroethane	1890.0	11.000	11.000	< 25.000
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000	< 1.0000
Quality Assurance Code	ORG	FD	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-10

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-15

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	21-APR-94 ME	10-MAR-95 ME	25-JUN-95 ME
Acetone	---	< 14.000 E	< 14.000
Benzene	---	< 1.0000 E	1.1000
Bromodichloromethane	---	< 1.0000	< 1.0000 E
Bromoform	---	< 2.0000	< 2.0000 E
Bromomethane	---	< 5.0000	< 5.0000 E
Carbon tetrachloride	---	1.6000	3.0000 E
Chlorobenzene	---	< 2.0000	< 1.0000
Chloroethane	---	< 2.0000	< 2.0000 E
Chloroform	---	16.000	16.000 E
Chloromethane	---	< 2.0000	< 2.0000 E
cis-1,2-Dichloroethylene	---	13.000	20.000 E
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000 E
Dibromochloromethane	---	< 1.0000	< 1.0000 E
Dichlorodifluoromethane	---	< 5.0000	< 5.0000 E
Ethylbenzene	---	< 1.0000 E	< 1.0000
m,p-Xylene	---	< 1.0000 E	< 1.0000
Methyl ethyl ketone	---	< 6.0000 E	< 6.0000
Methylene chloride	---	4.0000	< 2.0000 E
o-Xylene	---	< 1.0000 E	< 1.0000
Tetrachloroethylene	---	1.7000	4.6000 E
Toluene	---	< 1.0000 E	< 1.0000
trans-1,2-Dichloroethylene	---	3.4000	1.9000 E
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000 E
Trichloroethylene	1425.0	410.00	< 770.00 E
Trichlorofluoromethane	---	< 5.0000	< 5.0000 E
Vinyl chloride	---	< 0.5000	< 0.5000 E
1,1,1-Trichloroethane	865.00	91.000	240.00 E
',1,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000 E
1,2-Trichloroethane	---	4.6000	9.3000 E
.,1-Dichloroethane	---	46.000	< 200.00 E
1,1-Dichloroethylene	6525.0	1600.0	< 1400.0 E
1,2-Dichlorobenzene	---	< 3.0000	< 1.0000
1,2-Dichloroethane	136.50	44.000	150.00 E
1,3-Dichlorobenzene	---	< 2.0000	< 1.0000
1,4-Dichlorobenzene	---	< 2.0000	< 1.0000
2-Chloroethylvinyl ether	---	< 2.0000 U	< 2.0000 U
1,2-Dichloropropane	---	7.7000	< 1.0000 E
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

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-) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-11

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-16

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	21-APR-94 ME	21-APR-94 ME	10-MAR-95 ME	25-JUN-95 ME
Acetone	---	---	< 14.000 E	< 14.000
Benzene	---	---	< 1.0000 U	1.0000
Bromodichloromethane	---	---	< 1.0000 E	< 1.0000 E
Bromoform	---	---	< 2.0000 E	< 2.0000 E
Bromomethane	---	---	< 5.0000 E	< 5.0000 E
Carbon tetrachloride	---	---	6.3000 E	3.2000 E
Chlorobenzene	---	---	< 1.0000 E	< 1.0000
Chloroethane	---	---	< 2.0000 E	< 2.0000 E
Chloroform	---	---	66.000 E	< 100.00 E
Chloromethane	---	---	< 2.0000 E	< 2.0000 E
cis-1,2-Dichloroethylene	---	---	12.000 E	6.1000 E
cis-1,3-Dichloropropylene	---	---	< 0.5000 E	< 0.5000 E
Dibromochloromethane	---	---	< 1.0000 E	< 1.0000 E
Dichlorodifluoromethane	---	---	< 5.0000 E	< 5.0000 E
Ethylbenzene	---	---	< 1.0000 E	< 1.0000
m,p-Xylene	---	---	< 1.0000 E	< 1.0000
Methyl ethyl ketone	---	---	< 6.0000 E	< 6.0000
Methylene chloride	---	---	4.3000 E	< 2.0000 E
o-Xylene	---	---	< 1.0000 E	< 1.0000
Tetrachloroethylene	180.00	149.00	2.8000 E	1.9000 E
Toluene	---	---	< 1.0000 E	< 1.0000
trans-1,2-Dichloroethylene	---	---	5.0000 E	1.0000 E
trans-1,3-Dichloropropylene	---	---	< 0.5000 E	< 0.5000 E
Trichloroethylene	---	---	110.00 E	< 700.00 E
Trichlorofluoromethane	---	---	< 5.0000 E	< 5.0000 E
Vinyl chloride	---	---	< 0.5000 E	< 0.5000 E
1,1,1-Trichloroethane	830.00	560.00	110.00 E	130.00 E
1,1,2,2-Tetrachloroethane	---	---	< 1.0000 E	< 1.0000 E
1,1,2-Trichloroethane	---	---	9.2000 E	5.4000 E
1,1-Dichloroethane	---	---	43.000 E	22.000 E
1,1-Dichloroethylene	9200.0	5450.0	93.000 E	< 930.00 E
1,2-Dichlorobenzene	---	---	< 1.0000 E	< 1.0000
1,2-Dichloroethane	1810.0	1510.0	29.000 E	17.000 E
1,3-Dichlorobenzene	---	---	< 1.0000 E	< 1.0000
1,4-Dichlorobenzene	---	---	< 1.0000 E	< 1.0000
2-Chloroethylvinyl ether	---	---	< 2.0000 U	< 2.0000 U
1,2-Dichloropropane	---	---	< 1.0000 E	< 1.0000 E
Quality Assurance Code	FDA	FDB	ORG	ORG
Laboratory	Radian	Radian	Lockheed Analytical	Lockheed Analytical

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(-) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
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TABLE B-12

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-18

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	21-APR-94 ME	09-MAR-95 ME	25-JUN-95 ME	25-JUN-95 ME
Acetone		< 14.000	< 14.000	< 14.000
Benzene		3.3000 E	3.6000	3.3000
Bromodichloromethane		< 1.0000	< 1.0000 E	< 1.0000 E
Bromoform		< 2.0000	< 2.0000 E	< 2.0000 E
Bromomethane		< 5.0000	< 5.0000 E	< 5.0000 E
Carbon tetrachloride		9.1000	14.000 E	12.000 E
Chlorobenzene		< 1.0000	1.3000	< 1.0000
Chloroethane		< 2.0000	< 2.0000 E	< 2.0000 E
Chloroform		69.000	< 250.00	< 250.00 E
Chloromethane		< 2.0000	< 2.0000 E	< 2.0000 E
cis-1,2-Dichloroethylene		80.000	< 250.00	< 250.00 E
cis-1,3-Dichloropropylene		< 0.5000	< 0.5000 E	< 0.5000 E
Dibromochloromethane		< 1.0000	< 1.0000 E	< 1.0000 E
Dichlorodifluoromethane		< 5.0000	< 5.0000 E	< 5.0000 E
Ethylbenzene		< 1.0000	< 1.0000	< 1.0000
m,p-Xylene		< 1.0000	< 1.0000	< 1.0000
Methyl ethyl ketone		< 6.0000	< 6.0000	< 6.0000
Methylene chloride		6.3000	< 2.0000 E	2.2000 E
o-Xylene		< 1.0000	< 1.0000	< 1.0000
Tetrachloroethylene		15.000	17.000 E	13.000 E
Toluene		< 1.0000	< 1.0000	< 1.0000
trans-1,2-Dichloroethylene		12.000	5.4000 E	6.7000 E
trans-1,3-Dichloropropylene		< 0.5000	< 0.5000 E	< 0.5000 E
Trichloroethylene		2800.0	< 2000.0	< 1300.0 E
Trichlorofluoromethane		< 5.0000	< 5.0000 E	< 5.0000 E
Vinyl chloride		0.6100	0.7800 E	0.8100 E
1,1,1-Trichloroethane	124.00	590.00	570.00 E	290.00 E
1,2,2-Tetrachloroethane		< 1.0000	< 1.0000 E	< 1.0000 E
1,2-Trichloroethane		27.000	< 125.00	< 125.00 E
1,1-Dichloroethane		290.00	< 250.00	< 250.00 E
1,1-Dichloroethylene	836.00	10000	6800.0 E	< 2900.0 E
1,2-Dichlorobenzene		< 1.0000	< 1.0000	< 1.0000
1,2-Dichloroethane	534.00	270.00	320.00 E	160.00 E
1,3-Dichlorobenzene		< 1.0000	< 1.0000	< 1.0000
1,4-Dichlorobenzene		< 1.0000	< 1.0000	< 1.0000
2-Chloroethylvinyl ether		< 2.0000 U	< 2.0000 U	< 2.0000 U
1,2-Dichloropropane		31.000 E	< 1.0000 E	< 1.0000 E
Quality Assurance Code		ORG	FD	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical

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U = Data unusable; data not suitable for any purpose

TABLE B-12 (continued)

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL EW-18

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	25-JUN-95
	ME
Acetone	
Benzene	4.0000
Bromodichloromethane	< 200.00 E
Bromoform	< 200.00 E
Bromomethane	< 200.00 E
Carbon tetrachloride	< 200.00 E
Chlorobenzene	< 1.0000
Chloroethane	< 200.00 E
Chloroform	< 200.00 E
Chloromethane	< 200.00 E
cis-1,2-Dichloroethylene	< 200.00 E
cis-1,3-Dichloropropylene	< 200.00 E
Dibromochloromethane	< 200.00 E
Dichlorodifluoromethane	
Ethylbenzene	< 1.0000
m,p-Xylene	< 1.0000
Methyl ethyl ketone	
Methylene chloride	< 200.00 E
o-Xylene	< 1.0000
Tetrachloroethylene	< 200.00 E
Toluene	< 1.0000
trans-1,2-Dichloroethylene	< 200.00 E
trans-1,3-Dichloropropylene	< 200.00 E
Trichloroethylene	4700.0 E
Trichlorofluoromethane	< 200.00 E
Vinyl chloride	< 200.00 E
1,1,1-Trichloroethane	400.00 E
1,2,2-Tetrachloroethane	< 200.00 E
1,2-Trichloroethane	< 200.00 E
1,1-Dichloroethane	< 200.00 E
1,1-Dichloroethylene	21000. E
1,2-Dichlorobenzene	< 1.0000
1,2-Dichloroethane	< 200.00 E
1,3-Dichlorobenzene	< 1.0000
1,4-Dichlorobenzene	< 1.0000
2-Chloroethylvinyl ether	
1,2-Dichloropropane	< 200.00 E
Quality Assurance Code	SPT
Laboratory	BC
	Analytical

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TABLE B-13

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-03

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	22-JUN-95 ME
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	< 0.5000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	< 1.0000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	< 5.0000
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 2.0000
o-Xylene	---
Tetrachloroethylene	< 0.5000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	1.8000
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
,1-Trichloroethane	< 1.0000
,2,2-Tetrachloroethane	< 1.0000
1,1,2-Trichloroethane	< 0.5000
1,1-Dichloroethane	< 1.0000
1,1-Dichloroethylene	1.8000
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	< 0.5000
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 U
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	ORG
Laboratory	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
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TABLE B-14

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-04

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	16-DEC-94 QA	20-JUN-95 QA
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000
Bromomethane	< 5.0000	< 5.0000
Carbon tetrachloride	1.2000	1.1000
Chlorobenzene	< 2.0000	< 2.0000
Chloroethane	< 2.0000	< 2.0000
Chloroform	2.8000	2.0000
Chloromethane	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000	< 2.0000
o-Xylene	---	---
Tetrachloroethylene	0.5200	0.5800
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000
Trichloroethylene	210.00	160.00
Trichlorofluoromethane	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 0.5000
1,1,1-Trichloroethane	23.000	18.000
1,1,2,2-Tetrachloroethane	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	0.6800
1,1-Dichloroethane	3.5000	4.2000
1,1-Dichloroethylene	170.00 E	160.00
1,2-Dichlorobenzene	< 3.0000	< 3.0000
1,2-Dichloroethane	3.0000	3.6000
1,3-Dichlorobenzene	< 2.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000	< 2.0000 U
1,2-Dichloropropane	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-15

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-06

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	20-JUN-95 QA/ME
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	< 0.5000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	< 1.0000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	< 5.0000
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 2.0000
o-Xylene	---
Tetrachloroethylene	< 0.5000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	< 1.1000
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
1-Trichloroethane	< 1.0000
,2,2-Tetrachloroethane	< 1.0000
,1,2-Trichloroethane	< 0.5000
1,1-Dichloroethane	< 1.0000
1,1-Dichloroethylene	< 0.6700
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	< 0.5000
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 U
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	ORG
Laboratory	Lockheed Analytical

= Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
U = Data unusable; data not suitable for any purpose

TABLE B-16

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-17

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	17-DEC-94 QA	13-MAR-95 QA	24-JUN-95 QA
Acetone	---	< 14.000	---
Benzene	---	< 1.0000 U	---
Bromodichloromethane	< 1.0000	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000	< 2.0000
Bromomethane	< 5.0000	< 5.0000	< 5.0000
Carbon tetrachloride	2.4000	< 0.5000	< 0.5000
Chlorobenzene	< 2.0000	< 1.0000	< 2.0000
Chloroethane	< 2.0000	< 2.0000	< 2.0000
Chloroform	3.7000	< 1.0000	< 1.0000
Chloromethane	< 2.0000	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	4.8000	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000	< 5.0000	< 5.0000
Ethylbenzene	---	< 1.0000	---
m,p-Xylene	---	< 1.0000	---
Methyl ethyl ketone	---	< 6.0000	---
Methylene chloride	< 2.0000	< 2.0000	< 2.4000
o-Xylene	---	< 1.0000	---
Tetrachloroethylene	3.0000	< 0.5000	< 0.5000
Toluene	---	< 1.0000	---
trans-1,2-Dichloroethylene	1.2000	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	800.00	16.000	15.000
Trichlorofluoromethane	< 5.0000	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000
',1-Trichloroethane	94.000	13.000	14.000
,2,2-Tetrachloroethane	< 1.0000	< 1.0000	< 1.0000
1,1,2-Trichloroethane	5.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	27.000	< 1.0000	< 1.0000
1,1-Dichloroethylene	1100.0 E	22.000	17.000
1,2-Dichlorobenzene	< 3.0000	< 1.0000	< 3.0000
1,2-Dichloroethane	70.000	< 0.5000	< 0.5000
1,3-Dichlorobenzene	< 2.0000	< 1.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000	< 1.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000	< 2.0000 U	< 2.0000 U
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical

< = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-17

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-19

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	13-MAR-95 QA	21-JUN-95 QA
Acetone	< 14.000	---
Benzene	< 1.0000 U	---
Bromodichloromethane	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000
Bromomethane	< 5.0000	< 5.0000
Carbon tetrachloride	< 0.5000	< 0.5000
Chlorobenzene	< 1.0000	< 2.0000
Chloroethane	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000
Chloromethane	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000	< 5.0000
Ethylbenzene	< 1.0000	---
m,p-Xylene	< 1.0000	---
Methyl ethyl ketone	< 6.0000	---
Methylene chloride	< 2.0000	< 2.0000
o-Xylene	< 1.0000	---
Tetrachloroethylene	< 0.5000	< 0.5000
Toluene	< 1.0000	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000
Trichloroethylene	6.7000	< 4.8000
Trichlorofluoromethane	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 0.5000
1,1,1-Trichloroethane	2.7000	1.7000
1,1,2,2-Tetrachloroethane	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000
1,1-Dichloroethane	2.2000	1.6000
1,1-Dichloroethylene	16.000	< 5.5000
1,2-Dichlorobenzene	< 1.0000	< 3.0000
1,2-Dichloroethane	< 0.5000	0.7500 E
1,3-Dichlorobenzene	< 1.0000	< 2.0000
1,4-Dichlorobenzene	< 1.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 U	< 2.0000 U
1,2-Dichloropropane	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-18

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-22

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	20-JUN-95 QA
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	1.2000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	3.2000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	3.4000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	< 5.0000
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 2.0000
o-Xylene	---
Tetrachloroethylene	0.8000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	380.00
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
1-Trichloroethane	130.00
,2,2-Tetrachloroethane	< 1.0000
,2-Trichloroethane	2.3000
1,1-Dichloroethane	8.1000
1,1-Dichloroethylene	600.00
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	9.6000
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 U
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	ORG
Laboratory	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
U = Data unusable; data not suitable for any purpose

TABLE B-19

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-26

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	21-APR-94 ME	16-DEC-94 ME	21-JUN-95 ME	21-JUN-95 ME
Acetone	---	---	---	---
Benzene	---	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000	< 5.0000
Carbon tetrachloride	---	6.3000	7.8000	7.8000
Chlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000	< 2.0000
Chloroform	---	20.000	21.000	22.000
Chloromethane	---	< 2.0000	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	66.000	< 100.00	52.000 E
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000	< 5.0000
Ethylbenzene	---	---	---	---
m,p-Xylene	---	---	---	---
Methyl ethyl ketone	---	---	---	---
Methylene chloride	---	< 2.0000	2.1000	2.3000
o-Xylene	---	---	---	---
Tetrachloroethylene	57.200	12.000	15.000	15.000 E
Toluene	---	---	---	---
trans-1,2-Dichloroethylene	---	3.5000	4.9000	4.7000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	---	6300.0 E	3800.0 E	2600.0 E
Trichlorofluoromethane	---	< 5.0000	< 5.0000	< 5.0000
Vinyl chloride	---	< 0.5000	0.6600 E	< 0.5000
1,1,1-Trichloroethane	388.00	460.00	370.00 E	270.00 E
1,1,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	27.000	24.000	28.000 E
1,1-Dichloroethane	---	170.00	200.00 E	140.00 E
1,1-Dichloroethylene	1368.0	9400.0 E	4400.0 E	2100.0 E
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000	< 3.0000
1,2-Dichloroethane	998.00	310.00	280.00	300.00 E
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	FD	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-19 (continued)

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-26

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION 21-JUN-95 ME
Acetone	---
Benzene	---
Bromodichloromethane	< 30.000
Bromoform	< 30.000
Bromomethane	< 30.000
Carbon tetrachloride	< 30.000
Chlorobenzene	< 30.000
Chloroethane	< 30.000
Chloroform	< 36.000
Chloromethane	< 30.000
cis-1,2-Dichloroethylene	75.000 E
cis-1,3-Dichloropropylene	< 30.000
Dibromochloromethane	< 30.000
Dichlorodifluoromethane	---
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 30.000
o-Xylene	---
Tetrachloroethylene	6000.0 E
Toluene	---
trans-1,2-Dichloroethylene	< 30.000
trans-1,3-Dichloropropylene	< 30.000
Trichloroethylene	6000.0 E
Trichlorofluoromethane	< 30.000
Vinyl chloride	< 30.000
',1-Trichloroethane	600.00 E
,2,2-Tetrachloroethane	< 30.000
1,1,2-Trichloroethane	38.000 E
1,1-Dichloroethane	230.00 E
1,1-Dichloroethylene	6800.0 E
1,2-Dichlorobenzene	< 30.000
1,2-Dichloroethane	370.00 E
1,3-Dichlorobenzene	< 30.000
1,4-Dichlorobenzene	< 30.000
2-Chloroethylvinyl ether	---
1,2-Dichloropropane	< 30.000
Quality Assurance Code	SPT
Laboratory	BC Analytical

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Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective

TABLE B-20

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-27

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	20-JUN-95 QA
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	< 0.5000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	< 1.0000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	< 5.0000
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 2.0000
o-Xylene	---
Tetrachloroethylene	< 0.5000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	43.000
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
1,1-Trichloroethane	5.0000
1,2,2-Tetrachloroethane	< 1.0000
1,1,2-Trichloroethane	< 0.5000
1,1-Dichloroethane	< 1.0000
1,1-Dichloroethylene	< 32.000
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	0.9100
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 U
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	ORG
Laboratory	Lockheed Analytical

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Historic data undergoing verification
U = Data unusable; data not suitable for any purpose

TABLE B-21

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-32

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	25-JUN-95 ME
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	< 0.5000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	< 1.0000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	< 5.0000
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 2.0000
o-Xylene	---
Tetrachloroethylene	< 0.5000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000 U
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	2.2000
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
1,1,1-Trichloroethane	< 1.0000
1,1,2,2-Tetrachloroethane	< 1.0000
1,1,2-Trichloroethane	< 0.5000
1,1-Dichloroethane	< 1.0000 E
1,1-Dichloroethylene	3.4000
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	< 0.5000
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	< 2.0000
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	ORG
Laboratory	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-22

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-34

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	21-JUN-95 QA
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	< 0.5000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	1.5000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	< 5.0000
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 2.0000
o-Xylene	---
Tetrachloroethylene	< 0.5000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	31.000 E
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
1,1,1-Trichloroethane	3.9000
1,1,2,2-Tetrachloroethane	< 1.0000
1,1,2-Trichloroethane	< 0.5000
1,1-Dichloroethane	< 1.0000
1,1-Dichloroethylene	< 30.000 E
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	0.7500 E
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 U
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	ORG
Laboratory	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-23

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-36

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	19-JUN-95 QA/GB	19-JUN-95 QA/GB	19-JUN-95 QA/GB
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	< 1.0000	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000	< 2.0000
Bromomethane	< 5.0000	< 5.0000	< 5.0000
Carbon tetrachloride	< 0.5000	< 0.5000	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000	< 2.0000
Chloroethane	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000	< 1.0000
Chloromethane	< 2.0000	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000	< 5.0000	---
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	< 2.0000	< 2.0000	< 2.0000
o-Xylene	---	---	---
Tetrachloroethylene	< 0.5000	< 0.5000	< 0.5000
Toluene	---	---	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	< 0.5000	< 0.5000	< 0.5000
Trichlorofluoromethane	< 5.0000	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 0.5000	< 0.5000
',1-Trichloroethane	< 1.0000	< 1.0000	< 1.0000
,2,2-Tetrachloroethane	< 1.0000	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	< 1.0000	< 1.0000	< 1.0000
1,1-Dichloroethylene	< 0.6100	< 0.5000	< 0.5000
1,2-Dichlorobenzene	< 3.0000	< 3.0000	< 3.0000
1,2-Dichloroethane	< 0.5000	< 0.5000	< 0.5000
1,3-Dichlorobenzene	< 2.0000	< 2.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 U	< 2.0000 U	---
1,2-Dichloropropane	< 1.0000	< 1.0000	< 1.0000
Quality Assurance Code	FD	ORG	SPT
Laboratory	Lockheed Analytical	Lockheed Analytical	BC Analytical

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Historic data undergoing verification
U = Data unusable; data not suitable for any purpose

TABLE B-24

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-39

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	23-JUN-95 QA
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	1.7000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	< 3.7000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	< 5.0000
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 2.4000
o-Xylene	---
Tetrachloroethylene	< 0.5000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	57.000
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
,1-Trichloroethane	7.7000
,2,2-Tetrachloroethane	< 1.0000
,1,2-Trichloroethane	< 0.5000
1,1-Dichloroethane	2.3000
1,1-Dichloroethylene	65.000
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	1.1000
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 U
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	ORG
Laboratory	Lockheed Analytical

, = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
U = Data unusable; data not suitable for any purpose

TABLE B-25

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-41

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION 16-DEC-94 QA/ME	22-JUN-95 QA/ME
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000
Bromomethane	< 5.0000	< 5.0000
Carbon tetrachloride	1.5000	2.9000
Chlorobenzene	< 2.0000	< 2.0000
Chloroethane	< 2.0000	< 2.0000
Chloroform	3.4000	2.8000
Chloromethane	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000	< 2.0000
o-Xylene	---	---
Tetrachloroethylene	< 0.5000	< 0.5000
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000
Trichloroethylene	300.00 E	120.00
Trichlorofluoromethane	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 0.5000
1,1,1-Trichloroethane	8.2000	8.1000
1,1,2,2-Tetrachloroethane	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000
1,1-Dichloroethane	2.5000	2.6000
1,1-Dichloroethylene	250.00 E	120.00
1,2-Dichlorobenzene	< 3.0000	< 3.0000
1,2-Dichloroethane	0.6900 E	1.3000 E
1,3-Dichlorobenzene	< 2.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000	< 2.0000 U
1,2-Dichloropropane	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

< = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-26

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-49

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	13-MAR-95 QA	21-JUN-95 QA
Acetone	< 14.000	---
Benzene	< 1.0000 U	---
Bromodichloromethane	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000
Bromomethane	< 5.0000	< 5.0000
Carbon tetrachloride	< 0.5000	< 0.5000
Chlorobenzene	< 1.0000	< 2.0000
Chloroethane	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000
Chloromethane	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000	< 5.0000
Ethylbenzene	< 1.0000	---
m,p-Xylene	< 1.0000	---
Methyl ethyl ketone	< 6.0000	---
Methylene chloride	< 2.0000	< 2.0000
o-Xylene	< 1.0000	---
Tetrachloroethylene	< 0.5000	< 0.5000
Toluene	< 1.0000	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000
Trichloroethylene	28.000	21.000
Trichlorofluoromethane	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 0.5000
1,1,1-Trichloroethane	8.8000	5.9000
1,1,2,2-Tetrachloroethane	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000
1,1-Dichloroethane	< 1.0000	< 1.0000
1,1-Dichloroethylene	34.000	< 18.000
1,2-Dichlorobenzene	< 1.0000	< 3.0000
1,2-Dichloroethane	< 0.5000	1.2000 E
1,3-Dichlorobenzene	< 1.0000	< 2.0000
1,4-Dichlorobenzene	< 1.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 U	< 2.0000 U
1,2-Dichloropropane	2.8000	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

< = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-27

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-50

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	17-DEC-94 QA	19-JUN-95 QA
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000
Bromomethane	< 5.0000	< 5.0000
Carbon tetrachloride	< 0.5000	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000
Chloroethane	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000
Chloromethane	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000	< 2.0000
o-Xylene	---	---
Tetrachloroethylene	< 0.5000	< 0.5000
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000
Trichloroethylene	12.000 E	< 9.0000
Trichlorofluoromethane	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 0.5000
1,1,1-Trichloroethane	3.5000	3.1000
1,1,2,2-Tetrachloroethane	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000
1,1-Dichloroethane	< 1.0000	< 1.0000
1,1-Dichloroethylene	9.9000 E	< 9.7000
1,2-Dichlorobenzene	< 3.0000	< 3.0000
1,2-Dichloroethane	< 0.5000	< 0.5000
1,3-Dichlorobenzene	< 2.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000	< 2.0000 U
1,2-Dichloropropane	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

< = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-28

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-51

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	13-DEC-94 QA	21-JUN-95 QA
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000
Bromomethane	< 5.0000 E	< 5.0000
Carbon tetrachloride	< 0.5000 E	1.7000
Chlorobenzene	< 2.0000 E	< 2.0000
Chloroethane	< 2.0000 E	< 2.0000
Chloroform	1.6000 E	2.0000
Chloromethane	< 2.0000 E	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000 E	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000 E	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000	< 2.0000
o-Xylene	---	---
Tetrachloroethylene	< 0.5000 E	< 0.5000
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000
Trichloroethylene	57.000	87.000 E
Trichlorofluoromethane	< 5.0000 E	< 5.0000
Vinyl chloride	< 0.5000 E	< 0.5000
1,1-Trichloroethane	18.000 E	16.000
1,2,2-Tetrachloroethane	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000
1,1-Dichloroethane	1.3000 E	2.3000
1,1-Dichloroethylene	47.000	85.000 E
1,2-Dichlorobenzene	< 3.0000	< 3.0000
1,2-Dichloroethane	< 0.5000	1.9000 E
1,3-Dichlorobenzene	< 2.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000	< 2.0000 U
1,2-Dichloropropane	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-29

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-52

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	17-DEC-94 QA	21-JUN-95 QA
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000 E	< 1.0000
Bromoform	< 2.0000 E	< 2.0000
Bromomethane	< 5.0000 E	< 5.0000
Carbon tetrachloride	1.3000 E	0.9500
Chlorobenzene	< 2.0000 E	< 2.0000
Chloroethane	< 2.0000 E	< 2.0000
Chloroform	2.0000 E	< 1.0000
Chloromethane	< 2.0000 E	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000 E	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000 E	< 0.5000
Dibromochloromethane	< 1.0000 E	< 1.0000
Dichlorodifluoromethane	< 5.0000 E	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000 E	< 2.0000
o-Xylene	---	---
Tetrachloroethylene	0.5200 E	< 0.5000
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000 E	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000 E	< 0.5000
Trichloroethylene	370.00 E	77.000
Trichlorofluoromethane	< 5.0000 E	< 5.0000
Vinyl chloride	< 0.5000 E	< 0.5000
1,1,1-Trichloroethane	19.000 E	12.000
1,1,2,2-Tetrachloroethane	< 1.0000 E	< 1.0000
1,1,2-Trichloroethane	< 0.5000 E	< 0.5000
1,1-Dichloroethane	3.4000 E	1.7000
1,1-Dichloroethylene	300.00 E	78.000
1,2-Dichlorobenzene	< 3.0000 E	< 3.0000
1,2-Dichloroethane	1.9000 E	1.9000 E
1,3-Dichlorobenzene	< 2.0000 E	< 2.0000
1,4-Dichlorobenzene	< 2.0000 E	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 E	< 2.0000 U
1,2-Dichloropropane	< 1.0000 E	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-30

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-56A

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	12-APR-94 ME	13-DEC-94 ME	19-JUN-95 ME	19-JUN-95 ME
Acetone	---	---	---	---
Benzene	---	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000	< 5.0000
Carbon tetrachloride	---	< 0.5000	< 0.5000	< 0.5000
Chlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000	< 2.0000
Chloroform	---	< 1.0000	< 1.0000	< 1.0000
Chloromethane	---	< 2.0000	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000	< 5.0000
Ethylbenzene	---	---	---	---
m,p-Xylene	---	---	---	---
Methyl ethyl ketone	---	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000	< 2.0000
o-Xylene	---	---	---	---
Tetrachloroethylene	4.1000	< 0.5000	< 0.5000	< 0.5000
Toluene	---	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	---	1.2000	< 2.1000	< 1.7000 E
Trichlorofluoromethane	---	< 5.0000	< 5.0000	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000	< 0.5000
1,1,1-Trichloroethane	11.800	< 1.0000	< 1.0000	< 1.0000
1,1,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	---	< 1.0000	< 1.0000	< 1.0000
1,1-Dichloroethylene	10.400	0.6200	< 2.2000	< 1.7000 E
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000	< 3.0000
1,2-Dichloroethane	48.000	< 0.5000	< 0.5000	< 0.5000
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	FD	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-30 (continued)

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-56A

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	19-JUN-95 ME
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	< 0.5000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	< 1.0000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	---
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 2.0000
o-Xylene	---
Tetrachloroethylene	< 0.5000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	2.8000 E
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
1,1-Trichloroethane	< 1.0000
,2,2-Tetrachloroethane	< 1.0000
,1,2-Trichloroethane	< 0.5000
1,1-Dichloroethane	< 1.0000
1,1-Dichloroethylene	3.2000 E
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	< 0.5000
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	---
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	SPT
Laboratory	BC Analytical

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Historic data undergoing verification
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TABLE B-31

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-56B

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	14-APR-94 QA	14-DEC-94 QA	21-JUN-95 QA
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000 E	< 5.0000
Carbon tetrachloride	---	< 0.5000 E	< 0.5000
Chlorobenzene	---	< 2.0000 E	< 2.0000
Chloroethane	---	< 2.0000 E	< 2.0000
Chloroform	---	< 1.0000	< 1.0000
Chloromethane	---	< 2.0000 E	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000 E	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000 E	< 5.0000
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000
o-Xylene	---	---	---
Tetrachloroethylene	---	< 0.5000 E	< 0.5000
Toluene	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Trichloroethylene	58.600	73.000	43.000
Trichlorofluoromethane	---	< 5.0000 E	< 5.0000
Vinyl chloride	---	< 0.5000 E	< 0.5000
1,1,1-Trichloroethane	---	< 5.5000 E	< 6.4000
1,1,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	< 0.5000	< 0.5000
1,1-Dichloroethane	---	1.3000 E	1.4000
1,1-Dichloroethylene	48.000	75.000	43.000
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000
1,2-Dichloroethane	46.200	< 0.5000	1.8000 E
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-32

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-56C

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	18-APR-94 QA	14-DEC-94 QA	21-JUN-95 QA
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000 E	< 5.0000
Carbon tetrachloride	---	0.9800 E	0.6300
Chlorobenzene	---	< 2.0000 E	< 2.0000
Chloroethane	---	< 2.0000 E	< 2.0000
Chloroform	---	1.5000 E	< 1.0000
Chloromethane	---	< 2.0000 E	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000 E	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000 E	< 5.0000
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000
o-Xylene	---	---	---
Tetrachloroethylene	52.750	< 0.5000 E	< 0.5000
Toluene	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Trichloroethylene	---	190.00	97.000
Trichlorofluoromethane	---	< 5.0000 E	< 5.0000
Vinyl chloride	---	< 0.5000 E	< 0.5000
1,1-Trichloroethane	64.500	18.000 E	14.000
1,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000
1,2-Trichloroethane	---	< 0.5000	< 0.5000
1,1-Dichloroethane	---	3.0000 E	3.0000
1,1-Dichloroethylene	135.25	180.00	98.000
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000
1,2-Dichloroethane	132.75	1.5000 E	2.2000 E
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-33

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-56D

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	15-APR-94 QA	14-DEC-94 QA	14-DEC-94 QA	21-JUN-95 QA
Acetone	---	---	---	---
Benzene	---	---	---	---
Bromodichloromethane	---	< 10.000	< 1.0000	< 1.0000
Bromoform	---	< 20.000	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000 E	< 5.0000
Carbon tetrachloride	---	0.9500 E	0.8300 E	0.5200
Chlorobenzene	---	< 2.0000	< 2.0000 E	< 2.0000
Chloroethane	---	< 2.0000 E	< 2.0000 E	< 2.0000
Chloroform	---	< 1.0000 E	2.3000 E	< 1.0000
Chloromethane	---	< 2.0000 E	< 2.0000 E	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000 E	< 0.5000
Dibromochloromethane	---	< 10.000	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000 E	< 5.0000 E	< 5.0000
Ethylbenzene	---	---	---	---
m,p-Xylene	---	---	---	---
Methyl ethyl ketone	---	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000	< 2.0000
o-Xylene	---	---	---	---
Tetrachloroethylene	---	< 5.0000	< 0.5000 E	< 0.5000
Toluene	---	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	---	130.00	130.00	73.000
Trichlorofluoromethane	---	< 5.0000 E	< 5.0000 E	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000 E	< 0.5000
1,1-Trichloroethane	---	< 33.000	11.000 E	10.000
,2,2-Tetrachloroethane	---	< 10.000	< 1.0000	< 1.0000
,2-Trichloroethane	---	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	---	2.6000 E	2.4000 E	2.3000
1,1-Dichloroethylene	56.400	140.00	140.00	75.000
1,2-Dichlorobenzene	---	< 30.000	< 3.0000	< 3.0000
1,2-Dichloroethane	52.900	0.8300 E	0.7900 E	2.5000 E
1,3-Dichlorobenzene	---	< 20.000	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 20.000	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000	< 1.0000
Quality Assurance Code	ORG	FD	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-34

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-57A

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	17-DEC-94 QA	22-JUN-95 QA
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000
Bromomethane	< 5.0000	< 5.0000
Carbon tetrachloride	0.6200	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000
Chloroethane	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000
Chloromethane	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000	3.2000
o-Xylene	---	---
Tetrachloroethylene	< 0.5000	< 0.5000
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000
Trichloroethylene	260.00 E	98.000
Trichlorofluoromethane	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 0.5000
1,1,1-Trichloroethane	13.000	17.000
1,1,2,2-Tetrachloroethane	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	0.7400
1,1-Dichloroethane	2.2000	3.3000
1,1-Dichloroethylene	190.00 E	91.000
1,2-Dichlorobenzene	< 3.0000	< 3.0000
1,2-Dichloroethane	1.6000 E	4.8000 E
1,3-Dichlorobenzene	< 2.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000	< 2.0000 U
1,2-Dichloropropane	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-35

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-57B

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	19-DEC-94 QA	21-JUN-95 QA
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000
Bromomethane	< 5.0000	< 5.0000
Carbon tetrachloride	< 0.5000	0.5200
Chlorobenzene	< 2.0000	< 2.0000
Chloroethane	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000
Chloromethane	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000	< 2.0000
o-Xylene	---	---
Tetrachloroethylene	< 0.5000	< 0.5000
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000
Trichloroethylene	140.00 E	74.000 E
Trichlorofluoromethane	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 0.5000
1,1,1-Trichloroethane	6.3000	9.5000
1,1,2,2-Tetrachloroethane	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000
1,1-Dichloroethane	1.2000	2.1000
1,1-Dichloroethylene	150.00 E	72.000
1,2-Dichlorobenzene	< 3.0000	< 3.0000
1,2-Dichloroethane	0.7100 E	1.4000 E
1,3-Dichlorobenzene	< 2.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000	< 2.0000 U
1,2-Dichloropropane	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-36

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-57C

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	19-DEC-94 QA	21-JUN-95 QA
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000
Bromomethane	< 5.0000	< 5.0000
Carbon tetrachloride	< 0.5000	< 0.5000
Chlorobenzene	< 2.0000	< 2.0000
Chloroethane	< 2.0000	< 2.0000
Chloroform	< 1.0000	< 1.0000
Chloromethane	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000	< 2.0000
o-Xylene	---	---
Tetrachloroethylene	< 0.5000	< 0.5000
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000
Trichloroethylene	88.000 E	70.000 E
Trichlorofluoromethane	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 0.5000
1,1,1-Trichloroethane	10.000	10.000
1,1,2,2-Tetrachloroethane	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000
1,1-Dichloroethane	1.8000	2.3000
1,1-Dichloroethylene	73.000 E	65.000
1,2-Dichlorobenzene	< 3.0000	< 3.0000
1,2-Dichloroethane	1.5000 E	2.1000 E
1,3-Dichlorobenzene	< 2.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000	< 2.0000 U
1,2-Dichloropropane	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-37

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-57D

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	19-DEC-94 QA	22-JUN-95 QA
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000
Bromomethane	< 5.0000	< 5.0000
Carbon tetrachloride	0.5200	0.5700
Chlorobenzene	< 2.0000	< 2.0000
Chloroethane	< 2.0000	< 2.0000
Chloroform	1.2000	< 1.0000
Chloromethane	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000	< 2.0000
o-Xylene	---	---
Tetrachloroethylene	< 0.5000	< 0.5000
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000
Trichloroethylene	140.00 E	69.000
Trichlorofluoromethane	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000	< 0.5000
1,1,1-Trichloroethane	11.000	12.000
,2,2-Tetrachloroethane	< 1.0000	< 1.0000
,2-Trichloroethane	< 0.5000	< 0.5000
1,1-Dichloroethane	2.1000	2.2000
1,1-Dichloroethylene	110.00 E	68.000
1,2-Dichlorobenzene	< 3.0000	< 3.0000
1,2-Dichloroethane	1.2000 E	3.0000 E
1,3-Dichlorobenzene	< 2.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000	< 2.0000 U
1,2-Dichloropropane	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

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Historic data undergoing verification
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TABLE B-38

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-58A

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	15-APR-94 QA	13-DEC-94 QA	20-JUN-95 QA
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	---	< 10.000	< 1.0000
Bromoform	---	< 20.000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000
Carbon tetrachloride	---	< 5.0000	0.6600
Chlorobenzene	---	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000 E	< 2.0000
Chloroform	---	< 1.0000	< 1.0000
Chloromethane	---	< 2.0000 E	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Dibromochloromethane	---	< 10.000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000 E	< 5.0000
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000
o-Xylene	---	---	---
Tetrachloroethylene	---	< 5.0000	< 0.5000
Toluene	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Trichloroethylene	57.400	59.000	35.000
Trichlorofluoromethane	---	< 5.0000 E	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000
1,1,1-Trichloroethane	6.0800	< 13.000	4.2000
1,1,2,2-Tetrachloroethane	---	< 10.000	< 1.0000
1,1,2-Trichloroethane	---	< 0.5000	< 0.5000
1,1-Dichloroethane	---	1.0000 E	1.1000
1,1-Dichloroethylene	40.800	56.000	40.000
1,2-Dichlorobenzene	---	< 30.000	< 3.0000
1,2-Dichloroethane	42.400	0.6300 E	< 0.5000
1,3-Dichlorobenzene	---	< 20.000	< 2.0000
1,4-Dichlorobenzene	---	< 20.000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

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TABLE B-39

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-58B

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	15-DEC-94 QA	22-JUN-95 QA
Acetone	---	---
Benzene	---	---
Bromodichloromethane	< 1.0000	< 1.0000
Bromoform	< 2.0000	< 2.0000
Bromomethane	< 5.0000 E	< 5.0000
Carbon tetrachloride	0.5600 E	1.0000
Chlorobenzene	< 2.0000 E	< 2.0000
Chloroethane	< 2.0000 E	< 2.0000
Chloroform	< 1.0000	< 1.0000
Chloromethane	< 2.0000 E	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000 E	< 0.5000
Dibromochloromethane	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000 E	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	< 2.0000	< 2.0000
o-Xylene	---	---
Tetrachloroethylene	< 0.5000 E	< 0.5000
Toluene	---	---
trans-1,2-Dichloroethylene	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000	< 0.5000
Trichloroethylene	130.00	77.000
Trichlorofluoromethane	< 5.0000 E	< 5.0000
Vinyl chloride	< 0.5000 E	< 0.5000
1,1-Trichloroethane	15.000 E	13.000
1,2,2-Tetrachloroethane	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000	< 0.5000
1,1-Dichloroethane	1.8000 E	1.7000
1,1-Dichloroethylene	110.00	80.000
1,2-Dichlorobenzene	< 3.0000	< 3.0000
1,2-Dichloroethane	0.9800 E	1.0000 E
1,3-Dichlorobenzene	< 2.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000	< 2.0000 U
1,2-Dichloropropane	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Lockheed Analytical	Lockheed Analytical

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TABLE B-40

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-58C

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	15-APR-94 QA	15-DEC-94 QA	20-JUN-95 QA
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000
Carbon tetrachloride	---	< 0.5000	0.6500
Chlorobenzene	---	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000
Chloroform	---	< 1.0000	< 1.0000
Chloromethane	---	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000
o-Xylene	---	---	---
Tetrachloroethylene	---	< 0.5000	< 0.5000
Toluene	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Trichloroethylene	265.00	94.000	42.000
Trichlorofluoromethane	---	< 5.0000	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000
1,1,1-Trichloroethane	22.900	8.5000 E	8.2000
1,1,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	< 0.5000	< 0.5000
1,1-Dichloroethane	---	1.1000	1.4000
1,1-Dichloroethylene	128.00	65.000	47.000
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000
1,2-Dichloroethane	129.00	0.7900	1.1000
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

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Historic data undergoing verification
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TABLE B-41

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-58D

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	19-APR-94 QA	15-DEC-94 QA	20-JUN-95 QA
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000
Carbon tetrachloride	---	2.1000	0.8800
Chlorobenzene	---	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000
Chloroform	---	3.7000	1.0000
Chloromethane	---	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000
o-Xylene	---	---	---
Tetrachloroethylene	---	0.6500	< 0.5000
Toluene	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Trichloroethylene	---	310.00	89.000
Trichlorofluoromethane	---	< 5.0000	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000
1,1,1-Trichloroethane	101.50	24.000 E	14.000
1,1,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	< 0.5000	< 0.5000
1,1-Dichloroethane	---	5.8000	2.9000
1,1-Dichloroethylene	324.00	320.00	97.000
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000
1,2-Dichloroethane	260.50	2.3000	2.9000
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

< Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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TABLE B-42

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-59A

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	15-APR-94 ME	15-DEC-94 ME	21-JUN-95 ME
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000
Carbon tetrachloride	---	< 0.5000	< 0.5000
Chlorobenzene	---	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000
Chloroform	---	< 1.0000	< 1.0000
Chloromethane	---	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000
o-Xylene	---	---	---
Tetrachloroethylene	---	< 0.5000	< 0.5000
Toluene	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Trichloroethylene	41.800	6.8000	< 17.000 E
Trichlorofluoromethane	---	< 5.0000	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000
1,1-Trichloroethane	---	< 1.0000	< 2.0000
1,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	< 0.5000	< 0.5000
1,1-Dichloroethane	---	< 1.0000	1.3000
1,1-Dichloroethylene	8.2700	9.6000	< 19.000
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000
1,2-Dichloroethane	4.8500	< 0.5000	2.3000 E
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-43

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-59B

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	19-APR-94 ME	23-JUN-95 ME
Acetone	---	---
Benzene	---	---
Bromodichloromethane	---	< 1.0000
Bromoform	---	< 2.0000
Bromomethane	---	< 5.0000
Carbon tetrachloride	---	2.0000
Chlorobenzene	---	< 2.0000
Chloroethane	---	< 2.0000
Chloroform	---	4.4000
Chloromethane	---	< 2.0000
cis-1,2-Dichloroethylene	---	3.2000
cis-1,3-Dichloropropylene	---	< 0.5000
Dibromochloromethane	---	< 1.0000
Dichlorodifluoromethane	---	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	---	44.000
o-Xylene	---	---
Tetrachloroethylene	---	1.9000
Toluene	---	---
trans-1,2-Dichloroethylene	---	1.2000
trans-1,3-Dichloropropylene	---	< 0.5000
Trichloroethylene	---	450.00
Trichlorofluoromethane	---	< 5.0000
Vinyl chloride	---	< 0.5000
1,1-Trichloroethane	79.000	27.000
,2,2-Tetrachloroethane	---	< 1.0000
,1,2-Trichloroethane	---	3.1000
1,1-Dichloroethane	---	20.000
1,1-Dichloroethylene	259.85	520.00
1,2-Dichlorobenzene	---	< 3.0000
1,2-Dichloroethane	240.00	39.000
1,3-Dichlorobenzene	---	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Radian	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
U = Data unusable; data not suitable for any purpose

TABLE B-44

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-59C

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	19-APR-94 ME	15-DEC-94 ME	15-DEC-94 ME	21-JUN-95 ME
Acetone	---	---	---	---
Benzene	---	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000	< 5.0000
Carbon tetrachloride	---	< 0.5000	< 0.5000	< 0.5000
Chlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000	< 2.0000
Chloroform	---	< 1.0000	< 1.0000	< 1.0000
Chloromethane	---	< 2.0000	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000	< 5.0000
Ethylbenzene	---	---	---	---
m,p-Xylene	---	---	---	---
Methyl ethyl ketone	---	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000	< 2.0000
o-Xylene	---	---	---	---
Tetrachloroethylene	27.200	< 0.5000	< 0.5000	< 0.5000
Toluene	---	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	---	39.000	41.000	43.000 E
Trichlorofluoromethane	---	< 5.0000	< 5.0000	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000	< 0.5000
1,1-Trichloroethane	24.800	< 4.1000 E	< 4.6000	4.7000
,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000	< 1.0000
,2-Trichloroethane	---	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	---	2.3000	2.4000	2.7000
1,1-Dichloroethylene	69.600	41.000	44.000	52.000
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000	< 3.0000
1,2-Dichloroethane	48.600	4.3000	4.9000 E	5.0000 E
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000	< 1.0000
Quality Assurance Code	ORG	FD	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-45

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-59D

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	19-APR-94 ME	24-JUN-95 ME
Acetone	---	---
Benzene	---	---
Bromodichloromethane	---	< 1.0000
Bromoform	---	< 2.0000
Bromomethane	---	< 5.0000
Carbon tetrachloride	---	2.2000
Chlorobenzene	---	< 2.0000
Chloroethane	---	< 2.0000
Chloroform	---	4.2000
Chloromethane	---	< 2.0000
cis-1,2-Dichloroethylene	---	3.0000
cis-1,3-Dichloropropylene	---	< 0.5000
Dibromochloromethane	---	< 1.0000
Dichlorodifluoromethane	---	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	---	< 3.4000
o-Xylene	---	---
Tetrachloroethylene	31.400	2.0000
Toluene	---	---
trans-1,2-Dichloroethylene	---	1.1000
trans-1,3-Dichloropropylene	---	< 0.5000
Trichloroethylene	---	490.00
Trichlorofluoromethane	---	< 5.0000
Vinyl chloride	---	< 0.5000
1,1-Trichloroethane	99.000	42.000
,2,2-Tetrachloroethane	---	< 1.0000
.,2-Trichloroethane	---	3.0000
1,1-Dichloroethane	---	21.000
1,1-Dichloroethylene	324.00	580.00
1,2-Dichlorobenzene	---	< 3.0000
1,2-Dichloroethane	314.00	40.000
1,3-Dichlorobenzene	---	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Radian	Lockheed Analytical

= Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
U = Data unusable; data not suitable for any purpose

TABLE B-46

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-60A

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	14-APR-94 ME	20-JUN-95 ME
Acetone	---	---
Benzene	---	---
Bromodichloromethane	---	< 1.0000
Bromoform	---	< 2.0000
Bromomethane	---	< 5.0000
Carbon tetrachloride	---	< 0.5000
Chlorobenzene	---	< 2.0000
Chloroethane	---	< 2.0000
Chloroform	---	< 1.0000
Chloromethane	---	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000
Dibromochloromethane	---	< 1.0000
Dichlorodifluoromethane	---	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	---	< 2.0000
o-Xylene	---	---
Tetrachloroethylene	---	< 0.5000
Toluene	---	---
trans-1,2-Dichloroethylene	---	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000
Trichloroethylene	16.700	< 49.000
Trichlorofluoromethane	---	< 5.0000
Vinyl chloride	---	< 0.5000
1,1,1-Trichloroethane	---	7.0000
',2,2-Tetrachloroethane	---	< 1.0000
,2-Trichloroethane	---	< 0.5000
1,1-Dichloroethane	---	1.3000
1,1-Dichloroethylene	44.200	85.000
1,2-Dichlorobenzene	---	< 3.0000
1,2-Dichloroethane	19.300	1.2000
1,3-Dichlorobenzene	---	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Radian	Lockheed Analytical

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Historic data undergoing verification
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TABLE B-47

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-60B

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION	
	13-APR-94 ME	20-JUN-95 ME
Acetone	---	---
Benzene	---	---
Bromodichloromethane	---	< 1.0000
Bromoform	---	< 2.0000
Bromomethane	---	< 5.0000
Carbon tetrachloride	---	< 0.5000
Chlorobenzene	---	< 2.0000
Chloroethane	---	< 2.0000
Chloroform	---	< 1.0000
Chloromethane	---	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000
Dibromochloromethane	---	< 1.0000
Dichlorodifluoromethane	---	< 5.0000
Ethylbenzene	---	---
m,p-Xylene	---	---
Methyl ethyl ketone	---	---
Methylene chloride	---	< 2.0000
o-Xylene	---	---
Tetrachloroethylene	---	< 0.5000
Toluene	---	---
trans-1,2-Dichloroethylene	---	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000
Trichloroethylene	---	< 6.6000
Trichlorofluoromethane	---	< 5.0000
Vinyl chloride	---	< 0.5000
1,1,1-Trichloroethane	---	< 1.0000
,2,2-Tetrachloroethane	---	< 1.0000
,2-Trichloroethane	---	< 0.5000
1,1-Dichloroethane	---	< 1.0000
1,1-Dichloroethylene	4.4900	< 16.000
1,2-Dichlorobenzene	---	< 3.0000
1,2-Dichloroethane	---	< 0.5000
1,3-Dichlorobenzene	---	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000
Quality Assurance Code	ORG	ORG
Laboratory	Radian	Lockheed Analytical

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Historic data undergoing verification
U = Data unusable; data not suitable for any purpose

TABLE B-48

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-61A

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	20-APR-94 ME	17-DEC-94 ME	21-JUN-95 ME
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	---	< 1.0000 E	< 1.0000
Bromoform	---	< 2.0000 E	< 2.0000
Bromomethane	---	< 5.0000 E	< 5.0000
Carbon tetrachloride	---	< 0.5000 E	< 0.5000
Chlorobenzene	---	< 2.0000 E	< 2.0000
Chloroethane	---	< 2.0000 E	< 2.0000
Chloroform	---	2.2000 E	2.3000
Chloromethane	---	< 2.0000 E	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000 E	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000 E	< 0.5000
Dibromochloromethane	---	< 1.0000 E	< 1.0000
Dichlorodifluoromethane	---	< 5.0000 E	< 5.0000
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	---	< 2.0000 E	< 2.0000
o-Xylene	---	---	---
Tetrachloroethylene	---	< 0.5000 E	< 0.5000
Toluene	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000 E	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000 E	< 0.5000
Trichloroethylene	---	52.000	20.000 E
Trichlorofluoromethane	---	< 5.0000 E	< 5.0000
Vinyl chloride	---	< 0.5000 E	< 0.5000
1,1,1-Trichloroethane	36.329	4.5000 E	3.6000
1,1,2,2-Tetrachloroethane	---	< 1.0000 E	< 1.0000
1,1,2-Trichloroethane	---	< 0.5000 E	< 0.5000
1,1-Dichloroethane	---	1.3000 E	1.8000
1,1-Dichloroethylene	98.323	200.00 E	110.00
1,2-Dichlorobenzene	---	< 3.0000 E	< 3.0000
1,2-Dichloroethane	84.991	< 0.5000 E	0.9800 E
1,3-Dichlorobenzene	---	< 2.0000 E	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000 E	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000 E	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000 E	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-49

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-61B

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION		
	21-APR-94 ME	17-DEC-94 ME	21-JUN-95 ME
Acetone	---	---	---
Benzene	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000
Carbon tetrachloride	---	13.000	15.000
Chlorobenzene	---	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000
Chloroform	---	93.000	73.000
Chloromethane	---	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	78.000	80.000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000
Ethylbenzene	---	---	---
m,p-Xylene	---	---	---
Methyl ethyl ketone	---	---	---
Methylene chloride	---	8.3000	< 2.0000
o-Xylene	---	---	---
Tetrachloroethylene	228.00	15.000	14.000
Toluene	---	---	---
trans-1,2-Dichloroethylene	---	7.4000	5.7000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000
Trichloroethylene	---	3300.0 E	3900.0
Trichlorofluoromethane	---	< 5.0000	< 5.0000
Vinyl chloride	---	0.6300	< 0.5000
1,1,1-Trichloroethane	2206.0	670.00	450.00
1,1,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	19.000	25.000
1,1-Dichloroethane	---	310.00	240.00
1,1-Dichloroethylene	8520.0	14000. E	9000.0
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000
1,2-Dichloroethane	1956.0	190.00	170.00
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
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Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-50

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-61C

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	25-JUN-95 ME
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	< 0.5000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	< 1.0000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	< 5.0000
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	8.1000
o-Xylene	---
Tetrachloroethylene	< 0.5000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000 U
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	0.7500
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
1,1-Trichloroethane	< 1.0000
1,2,2-Tetrachloroethane	< 1.0000
1,2-Trichloroethane	< 0.5000
1,1-Dichloroethane	< 1.0000 E
1,1-Dichloroethylene	2.6000
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	< 0.5000
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	< 2.0000
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	ORG
Laboratory	Lockheed Analytical

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(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
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U = Data unusable; data not suitable for any purpose

TABLE B-51

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-61D

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	24-JUN-95 ME
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	< 0.5000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	< 1.0000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	< 5.0000
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 2.2000
o-Xylene	---
Tetrachloroethylene	< 0.5000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	3.1000
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
1,1,1-Trichloroethane	2.9000
,2,2-Tetrachloroethane	< 1.0000
,2-Trichloroethane	< 0.5000
1,1-Dichloroethane	< 1.0000
1,1-Dichloroethylene	7.5000
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	< 0.5000
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 U
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	ORG
Laboratory	Lockheed Analytical

< Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
U = Data unusable; data not suitable for any purpose

TABLE B-52

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-62A

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	18-APR-94 QA	16-DEC-94 QA	16-DEC-94 QA	22-JUN-95 QA
Acetone	---	---	---	---
Benzene	---	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000 E	< 5.0000
Carbon tetrachloride	---	2.1000	2.1000 E	1.8000
Chlorobenzene	---	< 2.0000	< 2.0000 E	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000 E	< 2.0000
Chloroform	---	5.7000	5.4000 E	2.7000
Chloromethane	---	< 2.0000	< 2.0000 E	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000 E	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000 E	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000 E	< 5.0000
Ethylbenzene	---	---	---	---
m,p-Xylene	---	---	---	---
Methyl ethyl ketone	---	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000 E	< 2.0000
o-Xylene	---	---	---	---
Tetrachloroethylene	---	< 0.5000	< 0.5000 E	< 0.5000
Toluene	---	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000 E	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000 E	< 0.5000
Trichloroethylene	---	590.00 E	380.00 E	120.00
Trichlorofluoromethane	---	< 5.0000	< 5.0000 E	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000 E	< 0.5000
1,1-Trichloroethane	102.00	22.000	22.000 E	14.000
',2,2-Tetrachloroethane	---	< 1.0000	< 1.0000 E	< 1.0000
,2-Trichloroethane	---	< 0.5000	< 0.5000 E	< 0.5000
1,1-Dichloroethane	---	4.1000	4.2000 E	2.9000
1,1-Dichloroethylene	828.00	800.00 E	360.00 E	120.00
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000	< 3.0000
1,2-Dichloroethane	866.00	1.6000 E	1.6000 E	2.3000 E
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000 E	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000 E	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 E	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000 E	< 1.0000
Quality Assurance Code	ORG	FD	ORG	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical

< = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-53

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-62B

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	18-APR-94 QA	16-DEC-94 QA	22-JUN-95 QA	22-JUN-95 QA
Acetone	---	---	---	---
Benzene	---	---	---	---
Bromodichloromethane	---	< 1.0000	< 1.0000	< 1.0000
Bromoform	---	< 2.0000	< 2.0000	< 2.0000
Bromomethane	---	< 5.0000	< 5.0000	< 5.0000
Carbon tetrachloride	---	2.2000	1.7000	1.7000
Chlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
Chloroethane	---	< 2.0000	< 2.0000	< 2.0000
Chloroform	---	5.0000	< 2.2000	< 2.3000
Chloromethane	---	< 2.0000	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	---	< 1.0000	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	---	< 0.5000	< 0.5000	< 0.5000
Dibromochloromethane	---	< 1.0000	< 1.0000	< 1.0000
Dichlorodifluoromethane	---	< 5.0000	< 5.0000	< 5.0000
Ethylbenzene	---	---	---	---
m,p-Xylene	---	---	---	---
Methyl ethyl ketone	---	---	---	---
Methylene chloride	---	< 2.0000	< 2.0000	< 2.0000
o-Xylene	---	---	---	---
Tetrachloroethylene	35.000	0.5800	0.8500	0.8500
Toluene	---	---	---	---
trans-1,2-Dichloroethylene	---	< 1.0000	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	---	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	---	430.00 E	140.00 E	110.00 E
Trichlorofluoromethane	---	< 5.0000	< 5.0000	< 5.0000
Vinyl chloride	---	< 0.5000	< 0.5000	< 0.5000
1,1,1-Trichloroethane	71.250	18.000	15.000	15.000
1,1,2,2-Tetrachloroethane	---	< 1.0000	< 1.0000	< 1.0000
1,1,2-Trichloroethane	---	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	---	4.1000	3.4000	3.7000
1,1-Dichloroethylene	185.00	410.00 E	140.00 E	97.000 E
1,2-Dichlorobenzene	---	< 3.0000	< 3.0000	< 3.0000
1,2-Dichloroethane	186.25	1.6000 E	2.8000 E	2.5000 E
1,3-Dichlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
1,4-Dichlorobenzene	---	< 2.0000	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	---	< 2.0000	< 2.0000 U	< 2.0000 U
1,2-Dichloropropane	---	< 1.0000	< 1.0000	< 1.0000
Quality Assurance Code	ORG	ORG	FD	ORG
Laboratory	Radian	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical

< Less than; numerical value is the limit of detection for that analyte
--- = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-53 (continued)

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-62B

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	22-JUN-95
	QA
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	1.7000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	3.3000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	---
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 2.0000
o-Xylene	---
Tetrachloroethylene	1.2000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	130.00
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
1,1,1-Trichloroethane	14.000
,2,2-Tetrachloroethane	< 1.0000
,2-Trichloroethane	0.5200
1,1-Dichloroethane	4.3000
1,1-Dichloroethylene	150.00 E
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	1.8000 E
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	---
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	SPT
Laboratory	BC
	Analytical

= Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective

TABLE B-54

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL MW-65

CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION
	22-JUN-95
	QA
Acetone	---
Benzene	---
Bromodichloromethane	< 1.0000
Bromoform	< 2.0000
Bromomethane	< 5.0000
Carbon tetrachloride	2.6000
Chlorobenzene	< 2.0000
Chloroethane	< 2.0000
Chloroform	4.9000
Chloromethane	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000
Dibromochloromethane	< 1.0000
Dichlorodifluoromethane	< 5.0000
Ethylbenzene	---
m,p-Xylene	---
Methyl ethyl ketone	---
Methylene chloride	< 2.0000
o-Xylene	---
Tetrachloroethylene	< 0.5000
Toluene	---
trans-1,2-Dichloroethylene	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000
Trichloroethylene	220.00
Trichlorofluoromethane	< 5.0000
Vinyl chloride	< 0.5000
1,1,1-Trichloroethane	21.000
1,2,2-Tetrachloroethane	< 1.0000
1,2-Trichloroethane	< 0.5000
1,1-Dichloroethane	4.7000
1,1-Dichloroethylene	220.00
1,2-Dichlorobenzene	< 3.0000
1,2-Dichloroethane	2.8000 E
1,3-Dichlorobenzene	< 2.0000
1,4-Dichlorobenzene	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 U
1,2-Dichloropropane	< 1.0000
Quality Assurance Code	ORG
Laboratory	Lockheed Analytical

< = Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

TABLE B-55

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS ANALYZED BY EPA METHOD 8010 IN SAMPLES COLLECTED FROM MONITOR WELL OW-03

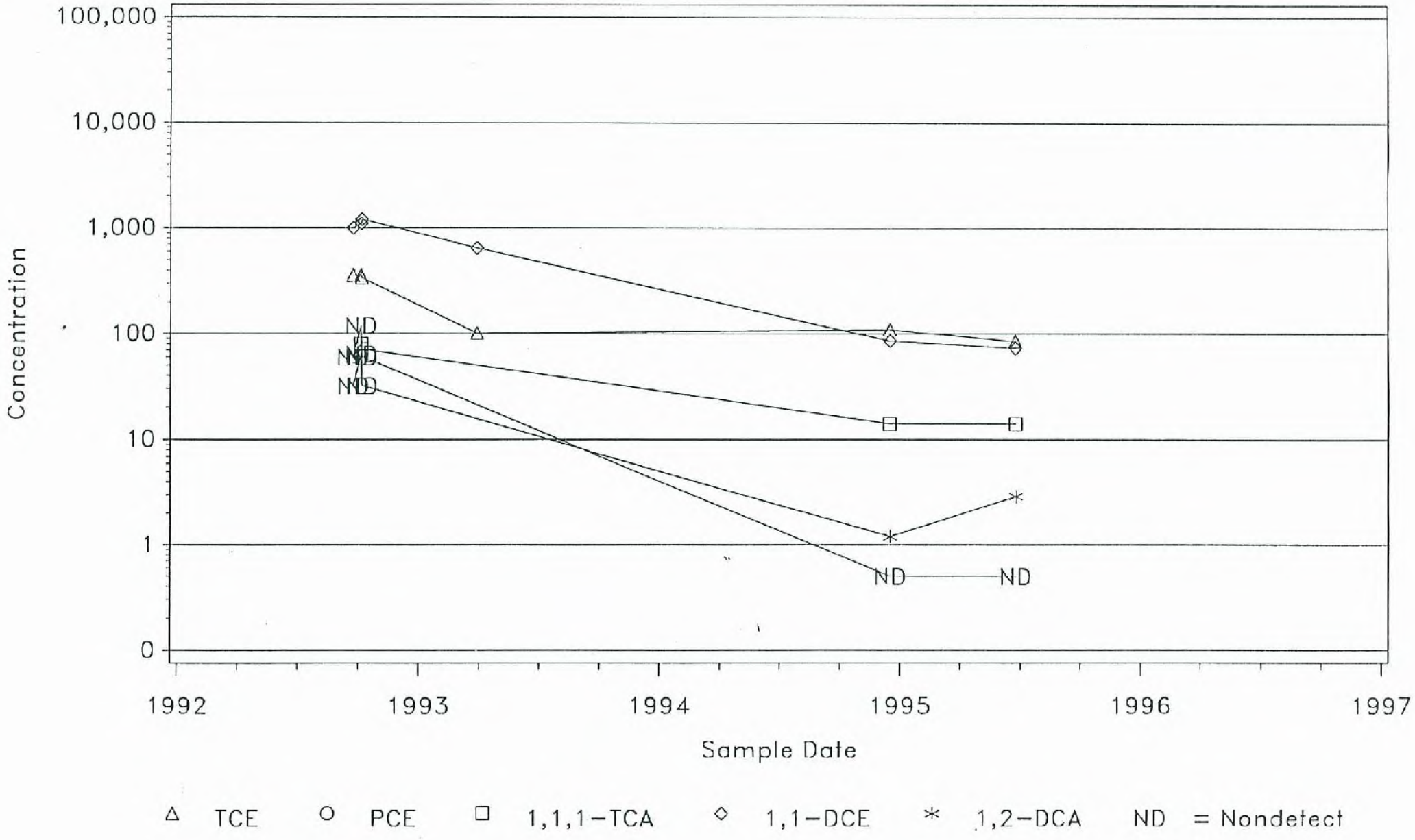
CONSTITUENT (Micrograms per liter)	DATE SAMPLED/FORMATION			
	12-DEC-94 QA	22-JUN-95 QA	22-JUN-95 QA	22-JUN-95 QA
Acetone	---	---	---	---
Benzene	---	---	---	---
Bromodichloromethane	< 1.0000 E	< 1.0000	< 1.0000	< 1.0000
Bromoform	< 2.0000 E	< 2.0000	< 2.0000	< 2.0000
Bromomethane	< 5.0000 E	< 5.0000	< 5.0000	< 5.0000
Carbon tetrachloride	< 0.5000 E	< 0.5000	0.5000	< 0.5000
Chlorobenzene	< 2.0000 E	< 2.0000	< 2.0000	< 2.0000
Chloroethane	< 2.0000 E	< 2.0000	< 2.0000	< 2.0000
Chloroform	< 1.0000 E	< 1.0000	< 1.0000 E	2.2000 E
Chloromethane	< 2.0000 E	< 2.0000	< 2.0000	< 2.0000
cis-1,2-Dichloroethylene	< 1.0000 E	< 1.0000	< 1.0000	< 1.0000
cis-1,3-Dichloropropylene	< 0.5000 E	< 0.5000	< 0.5000	< 0.5000
Dibromochloromethane	< 1.0000 E	< 1.0000	< 1.0000	< 1.0000
Dichlorodifluoromethane	< 5.0000 E	< 5.0000	< 5.0000	---
Ethylbenzene	---	---	---	---
m,p-Xylene	---	---	---	---
Methyl ethyl ketone	---	---	---	---
Methylene chloride	< 2.0000 E	< 2.0000	< 2.0000	< 2.0000
o-Xylene	---	---	---	---
Tetrachloroethylene	< 0.5000 E	< 0.5000	< 0.5000	< 0.5000
Toluene	---	---	---	---
trans-1,2-Dichloroethylene	< 1.0000 E	< 1.0000	< 1.0000	< 1.0000
trans-1,3-Dichloropropylene	< 0.5000 E	< 0.5000	< 0.5000	< 0.5000
Trichloroethylene	130.00	37.000 E	39.000 E	63.000 E
Trichlorofluoromethane	< 5.0000 E	< 5.0000	< 5.0000	< 5.0000
Vinyl chloride	< 0.5000 E	< 0.5000	< 0.5000	< 0.5000
1,1,1-Trichloroethane	8.5000 E	7.8000	8.5000	7.9000
1,1,2,2-Tetrachloroethane	< 1.0000 E	< 1.0000	< 1.0000	< 1.0000
1,1,2-Trichloroethane	< 0.5000 E	< 0.5000	< 0.5000	< 0.5000
1,1-Dichloroethane	1.1000 E	1.3000	1.3000	1.5000
1,1-Dichloroethylene	110.00	37.000 E	34.000 E	52.000 E
1,2-Dichlorobenzene	< 3.0000 E	< 3.0000	< 3.0000	< 3.0000
1,2-Dichloroethane	< 0.5000 E	0.9300 E	1.3000 E	1.3000
1,3-Dichlorobenzene	< 2.0000 E	< 2.0000	< 2.0000	< 2.0000
1,4-Dichlorobenzene	< 2.0000 E	< 2.0000	< 2.0000	< 2.0000
2-Chloroethylvinyl ether	< 2.0000 E	< 2.0000 U	< 2.0000 U	---
1,2-Dichloropropane	< 1.0000 E	< 1.0000	< 1.0000	< 1.0000
Quality Assurance Code	ORG	FD	ORG	SPT
Laboratory	Lockheed Analytical	Lockheed Analytical	Lockheed Analytical	BC Analytical

= Less than; numerical value is the limit of detection for that analyte
(---) = Not analyzed/reported; (ORG) = original sample; (FD) = field duplicate sample; (SPT) = split sample
Trailing zeros may be computer generated and do not necessarily reflect the laboratory degree of accuracy
Historic data undergoing verification
E = Estimated; selected quality control data not within criteria limited use determined by data quality objective
U = Data unusable; data not suitable for any purpose

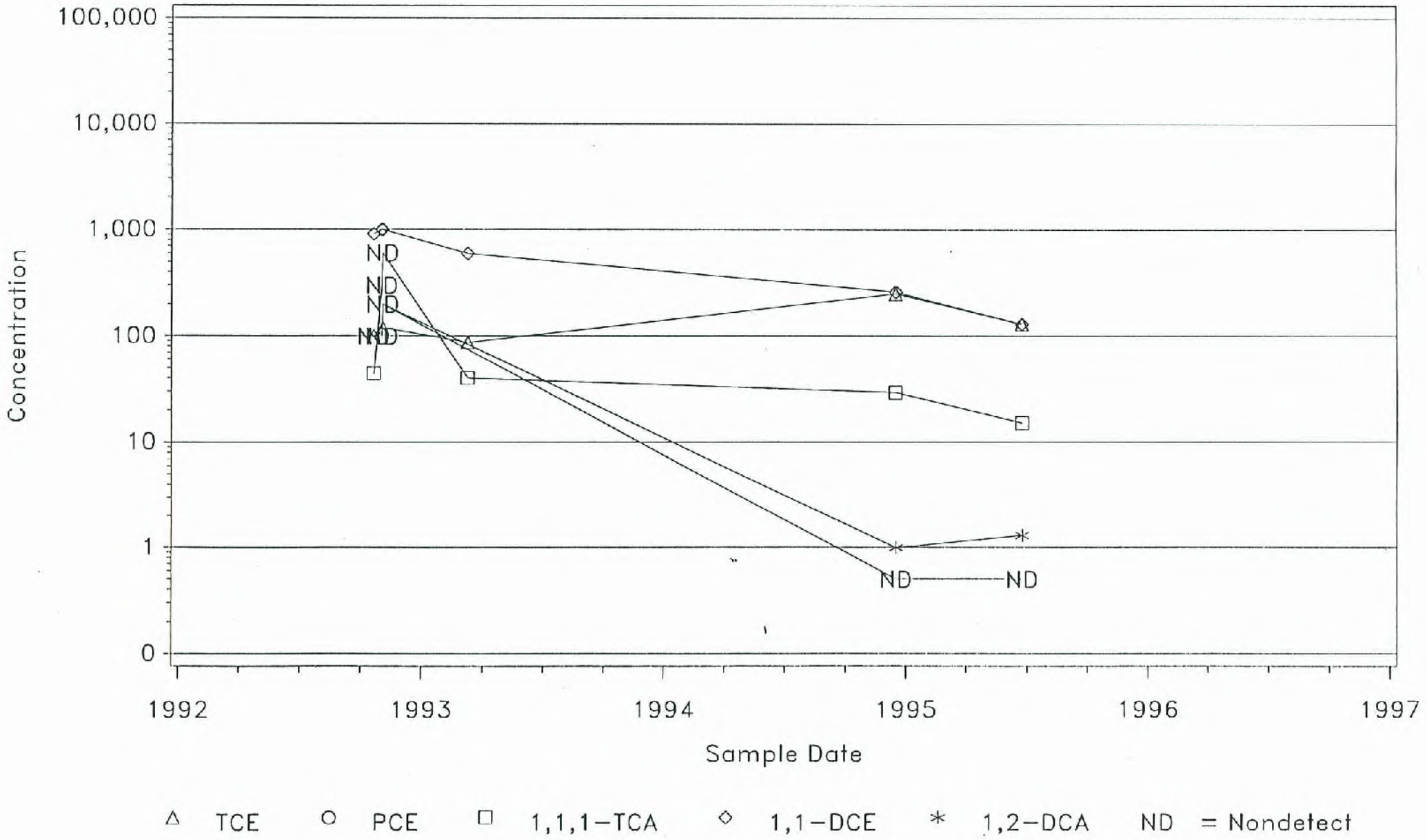
APPENDIX C

WATER QUALITY HYDROGRAPHS

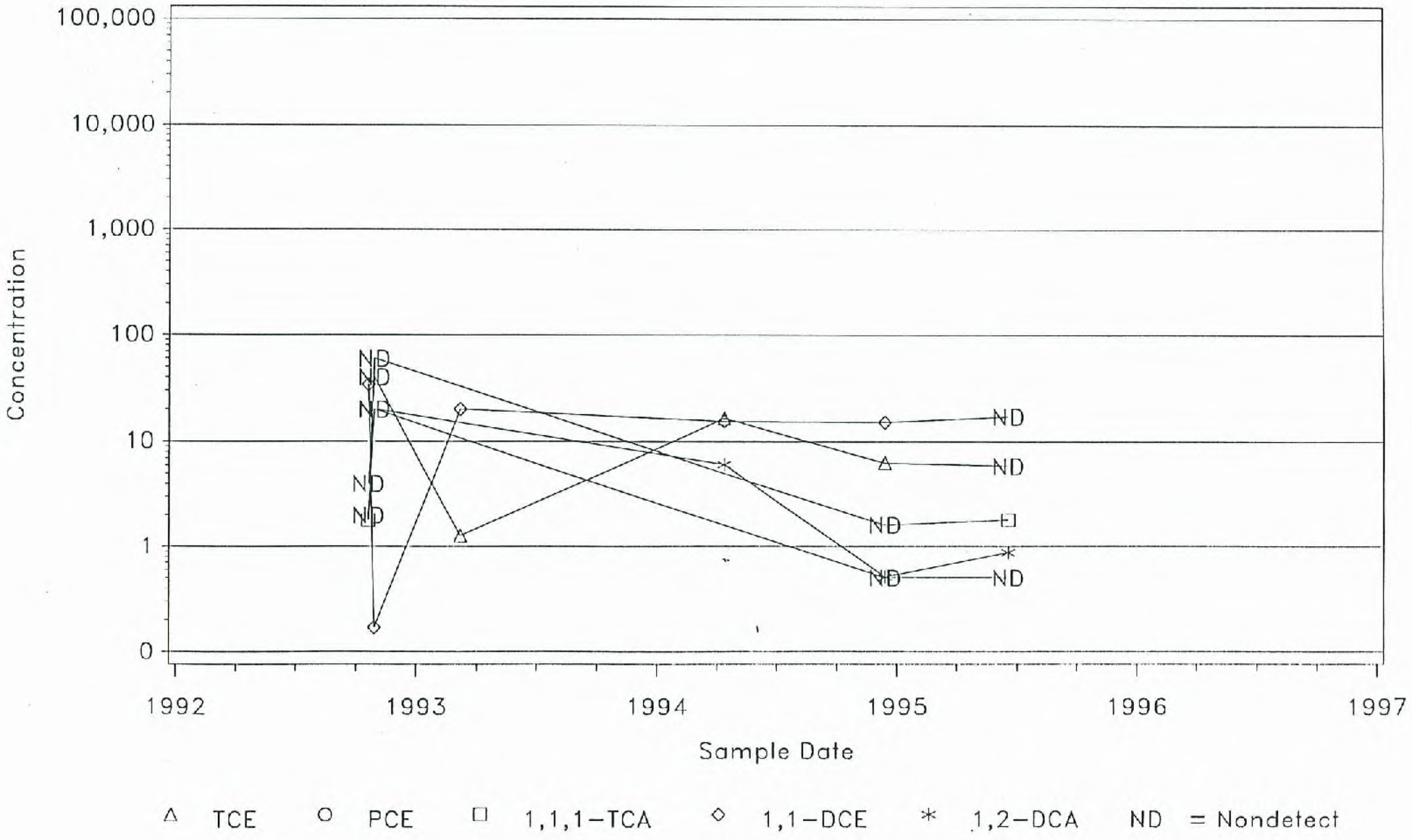
WATER QUALITY HYDROGRAPH
SAMPLE ID=EW-01



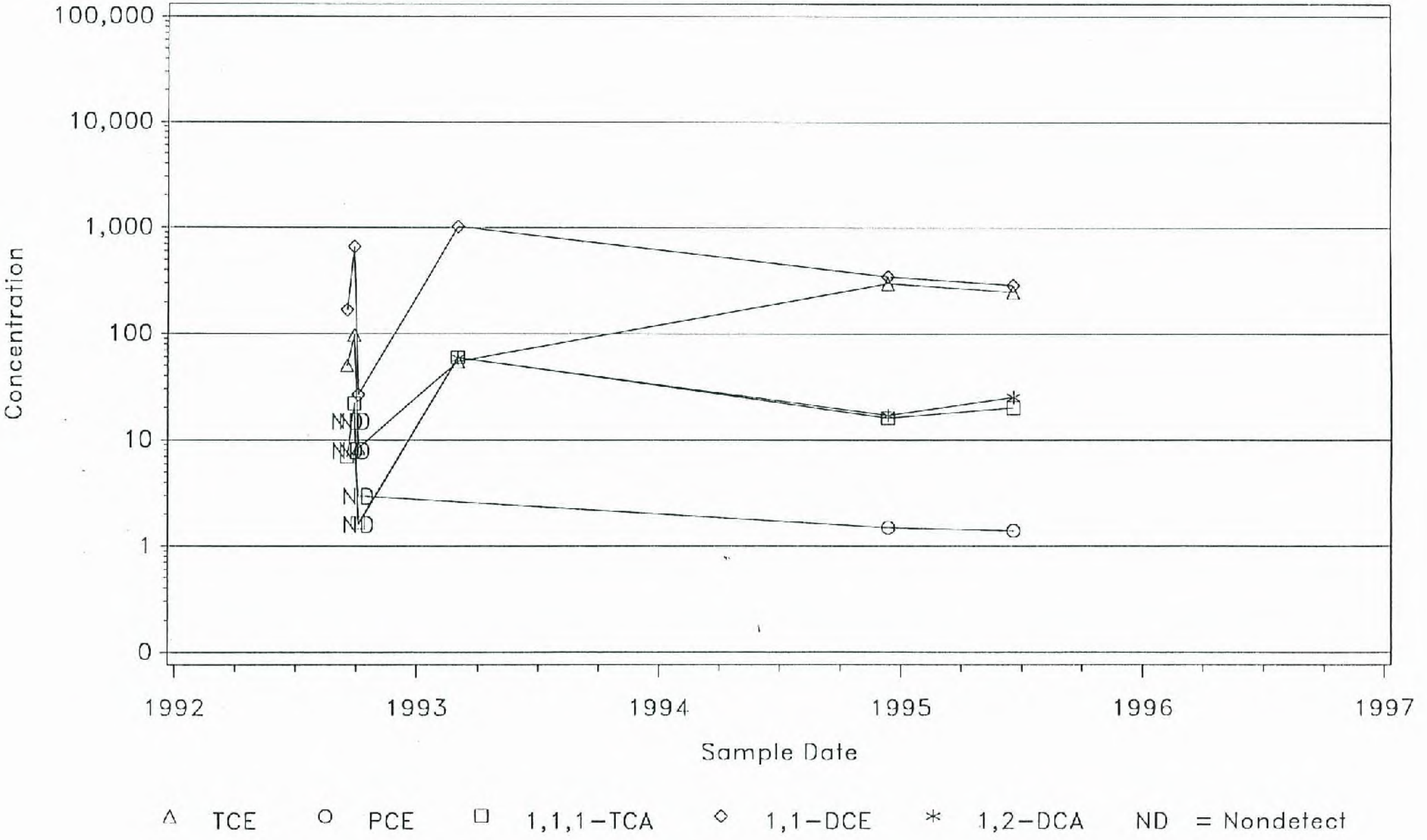
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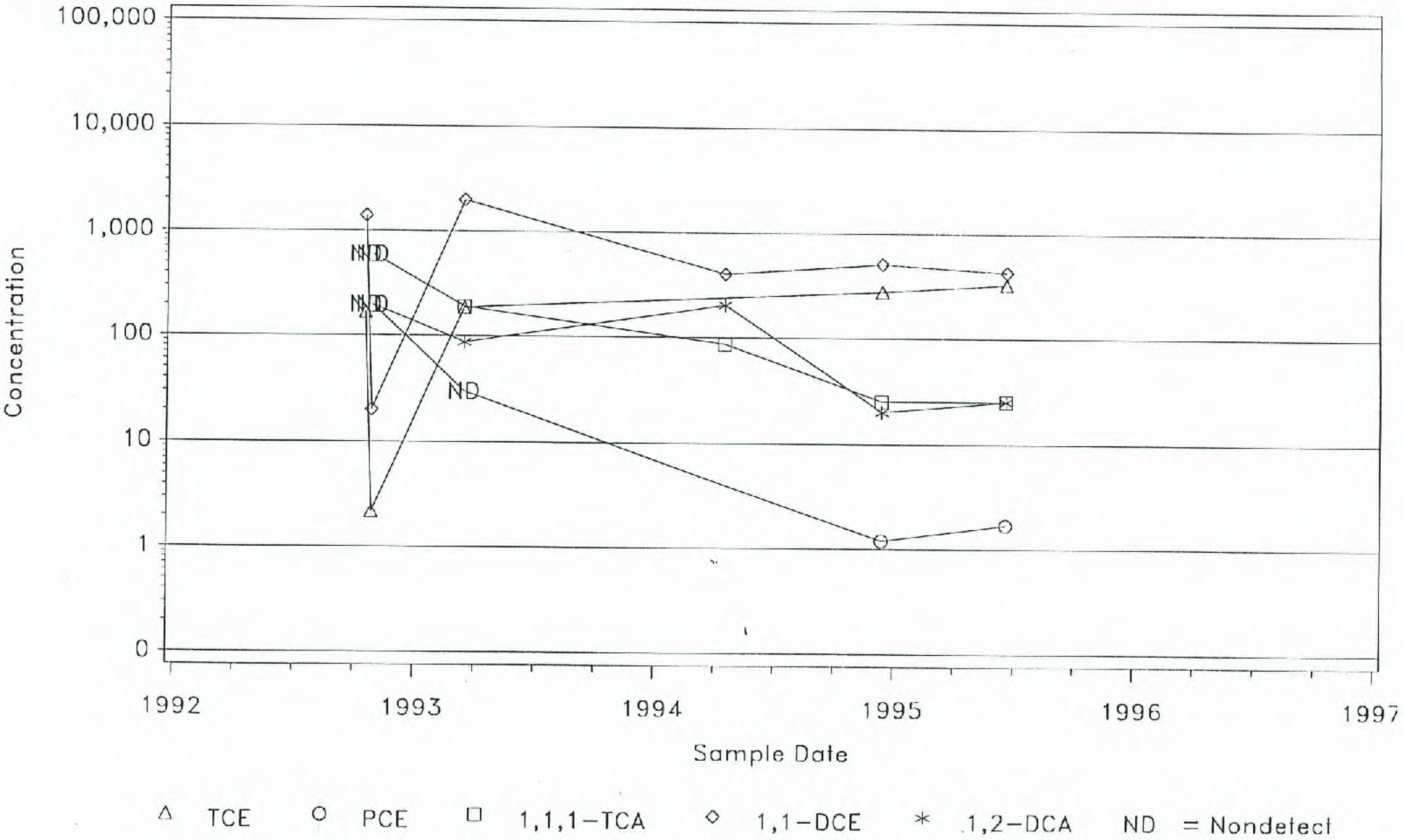
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SAMPLE ID=EW-08



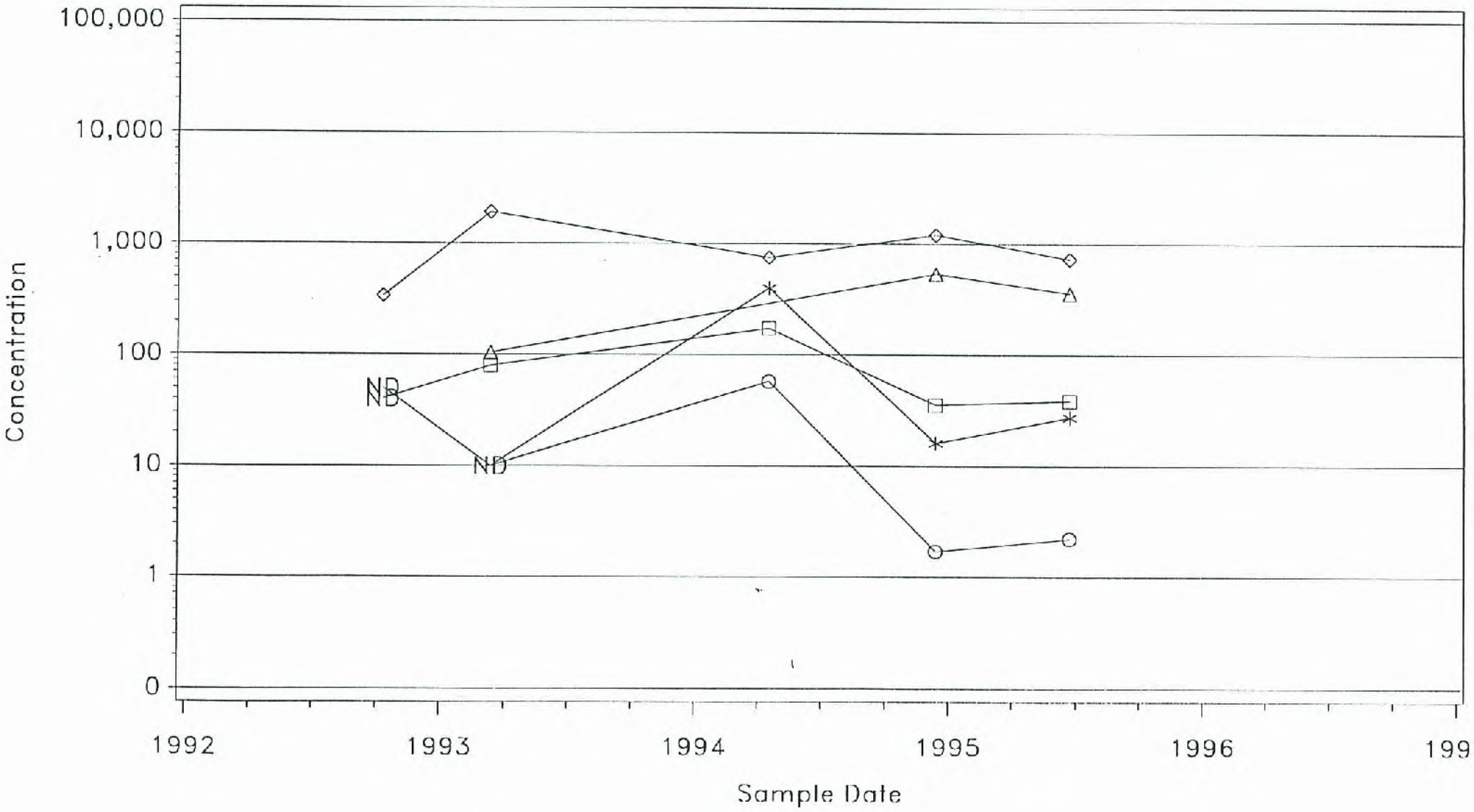
WATER QUALITY HYDROGRAPH
SAMPLE ID=EW-09



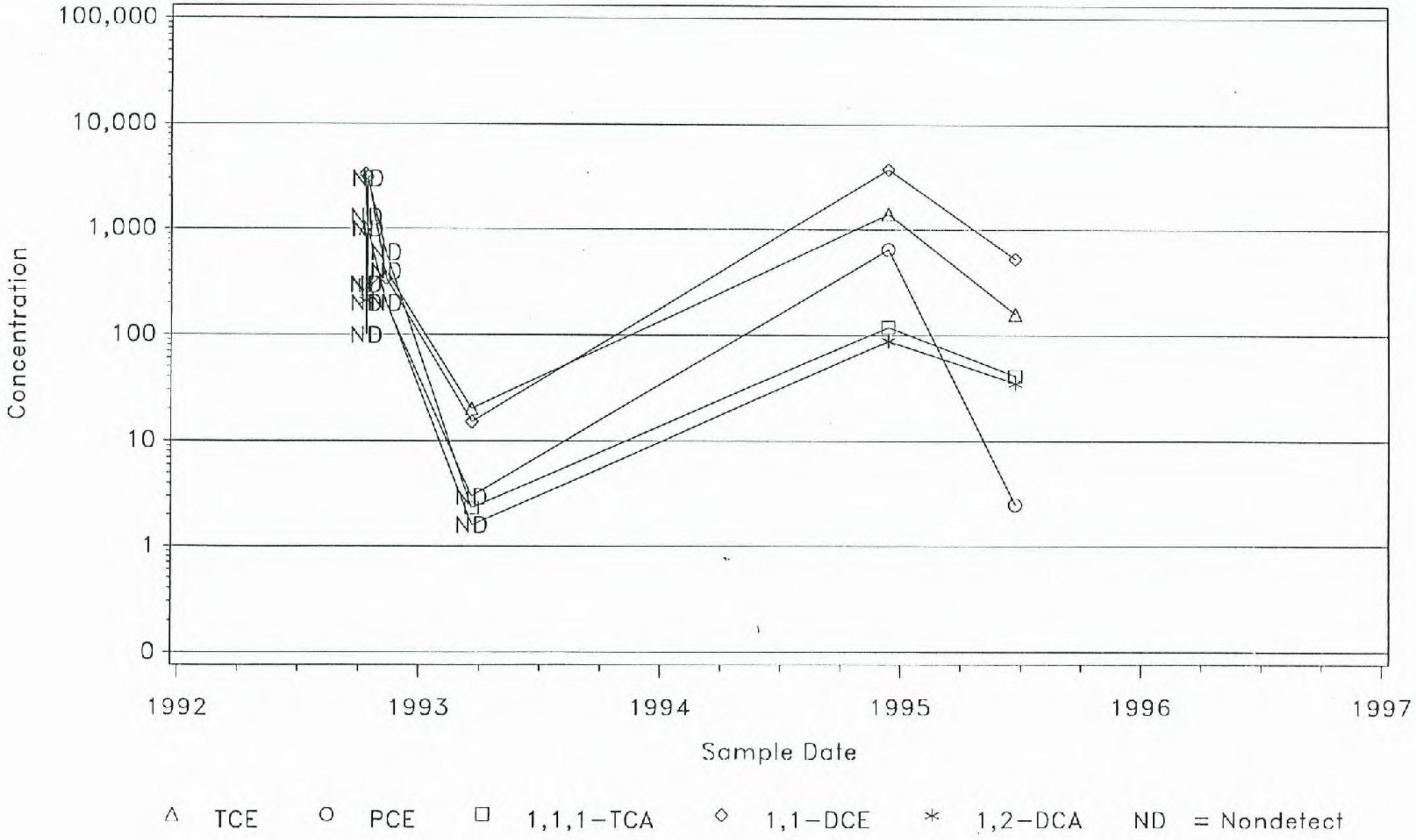
WATER QUALITY HYDROGRAPH
SAMPLE ID=EW-10



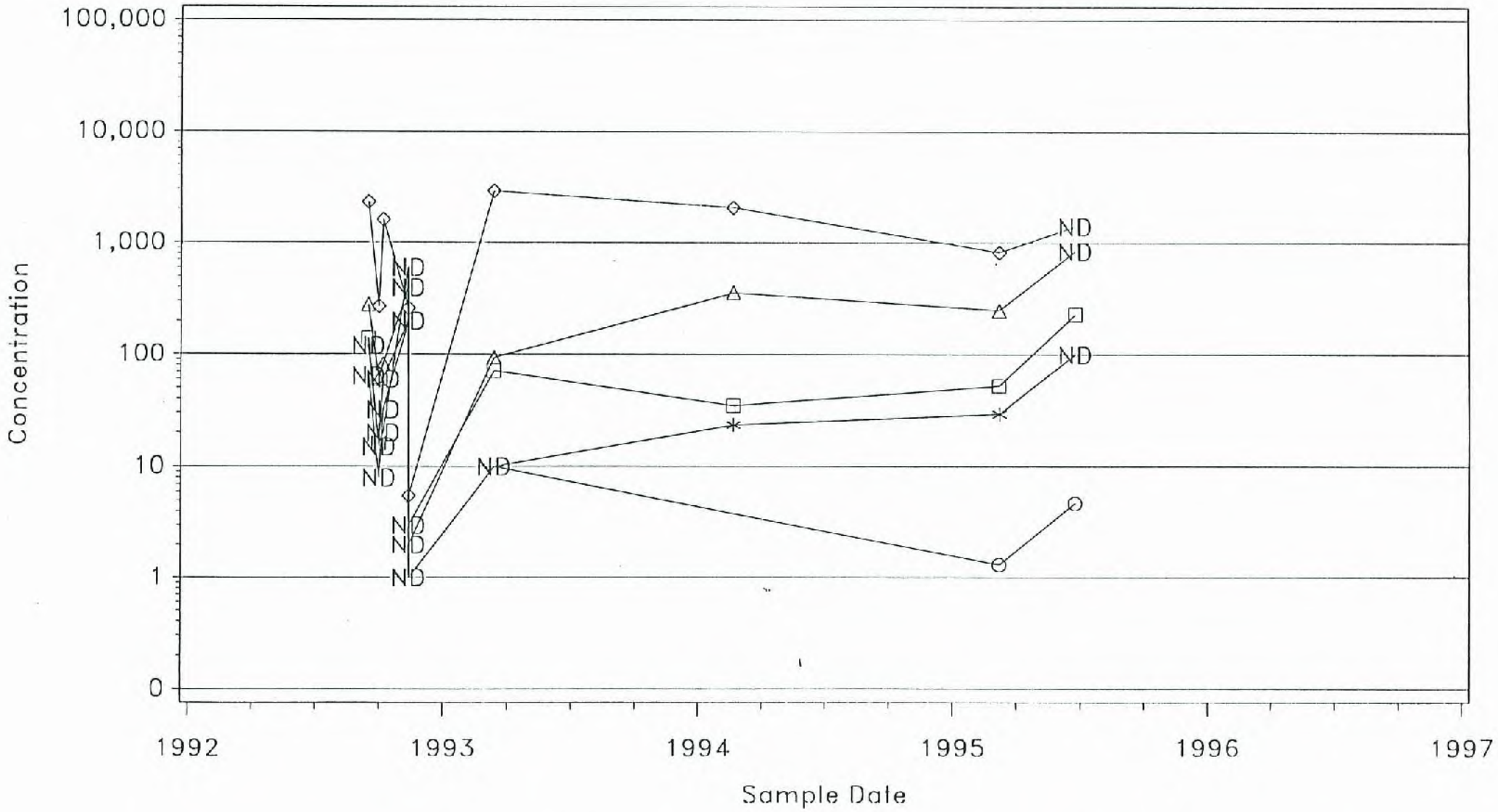
WATER QUALITY HYDROGRAPH
SAMPLE ID=EW-11



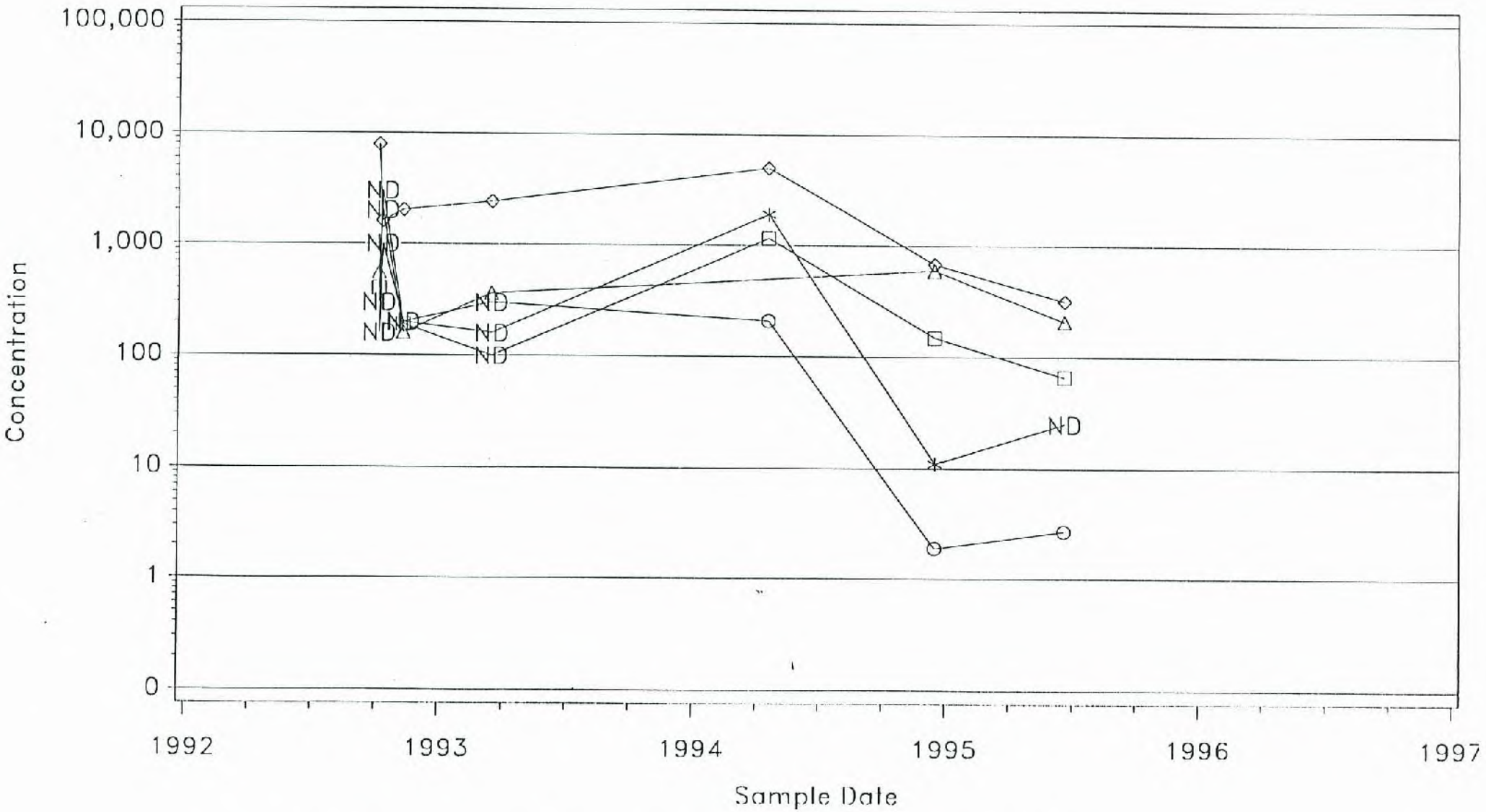
WATER QUALITY HYDROGRAPH
SAMPLE ID=EW-12



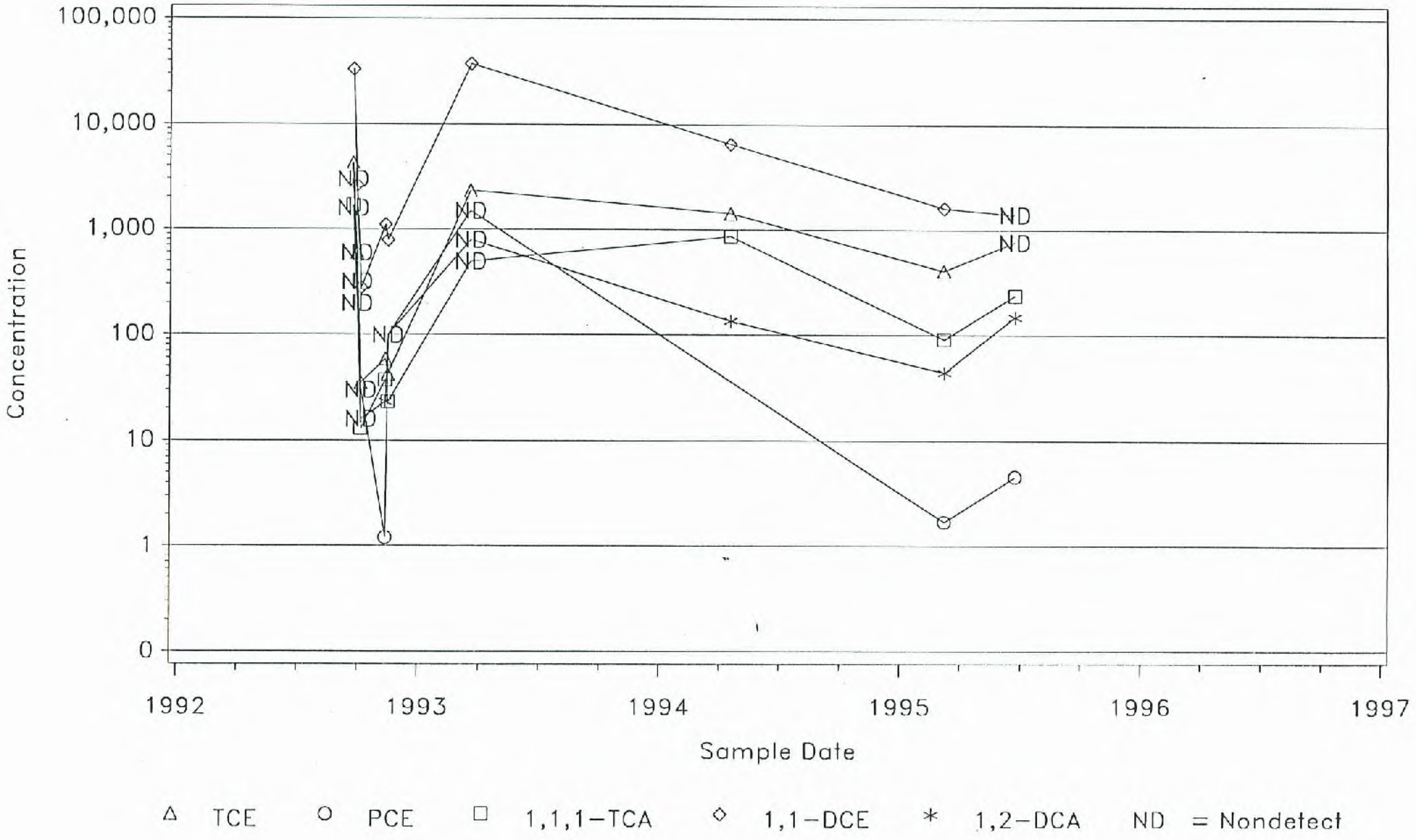
WATER QUALITY HYDROGRAPH
SAMPLE ID=EW-13



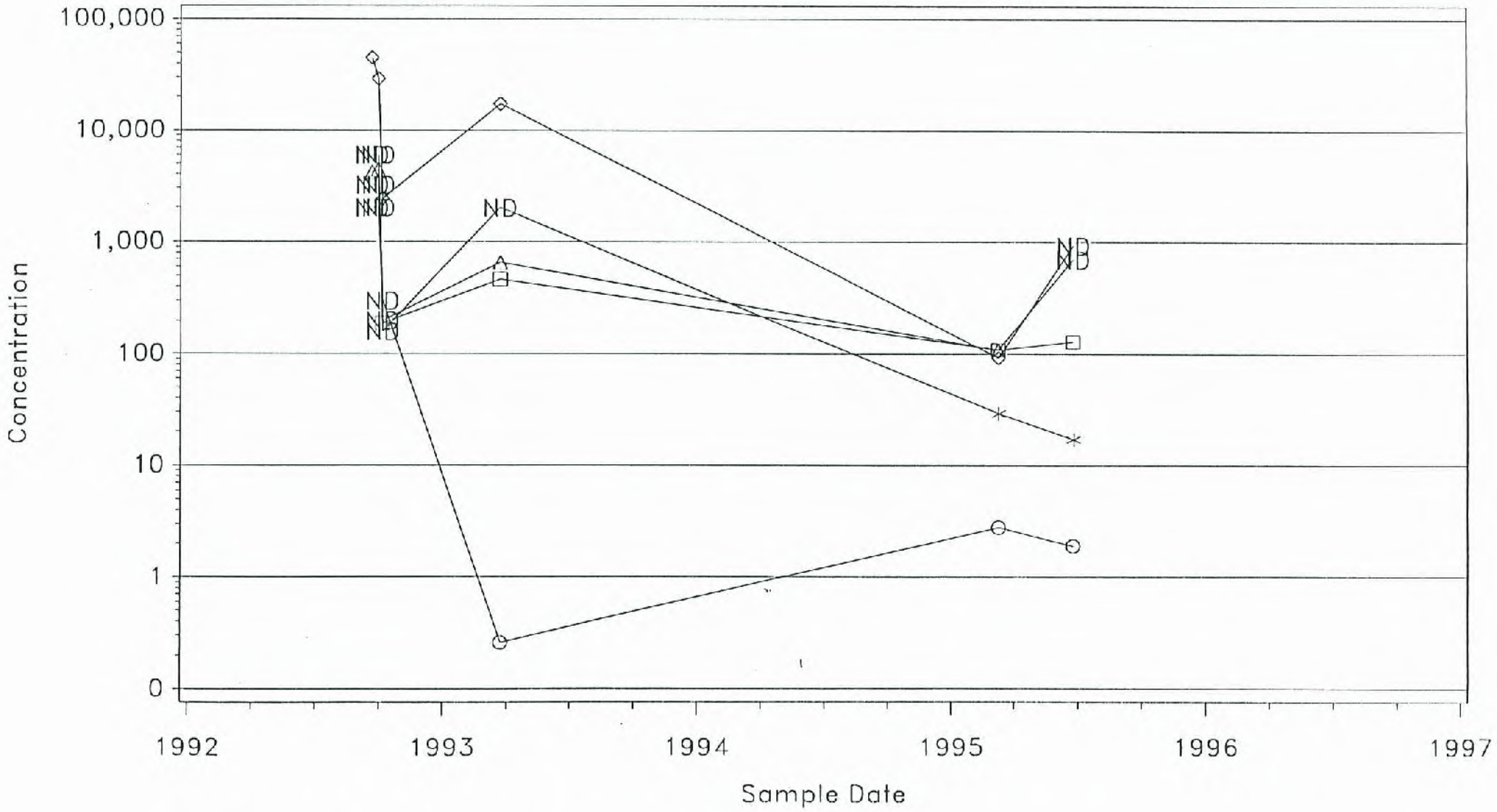
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SAMPLE ID=EW-14



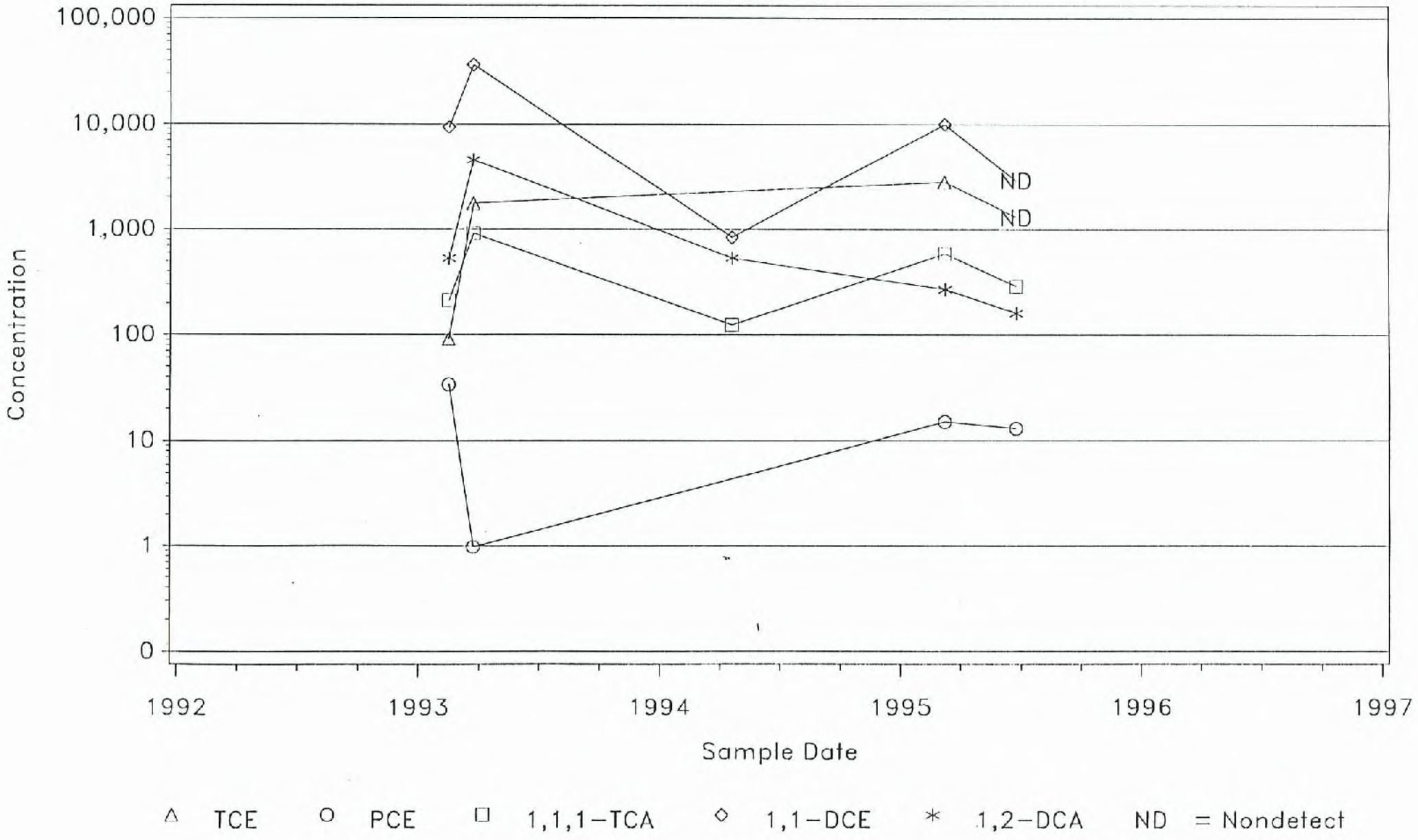
WATER QUALITY HYDROGRAPH
SAMPLE ID=EW-15

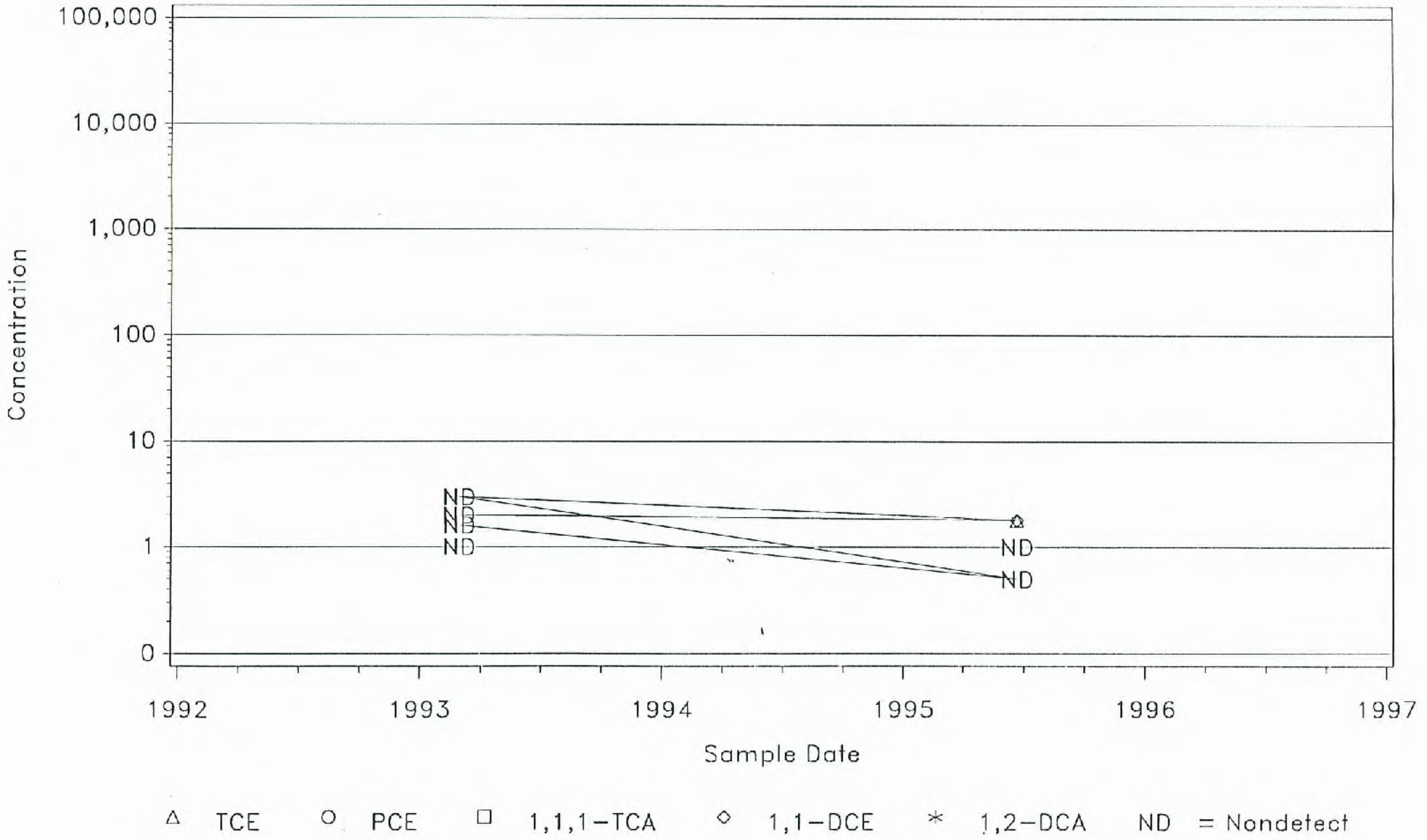


WATER QUALITY HYDROGRAPH
SAMPLE ID=EW-16

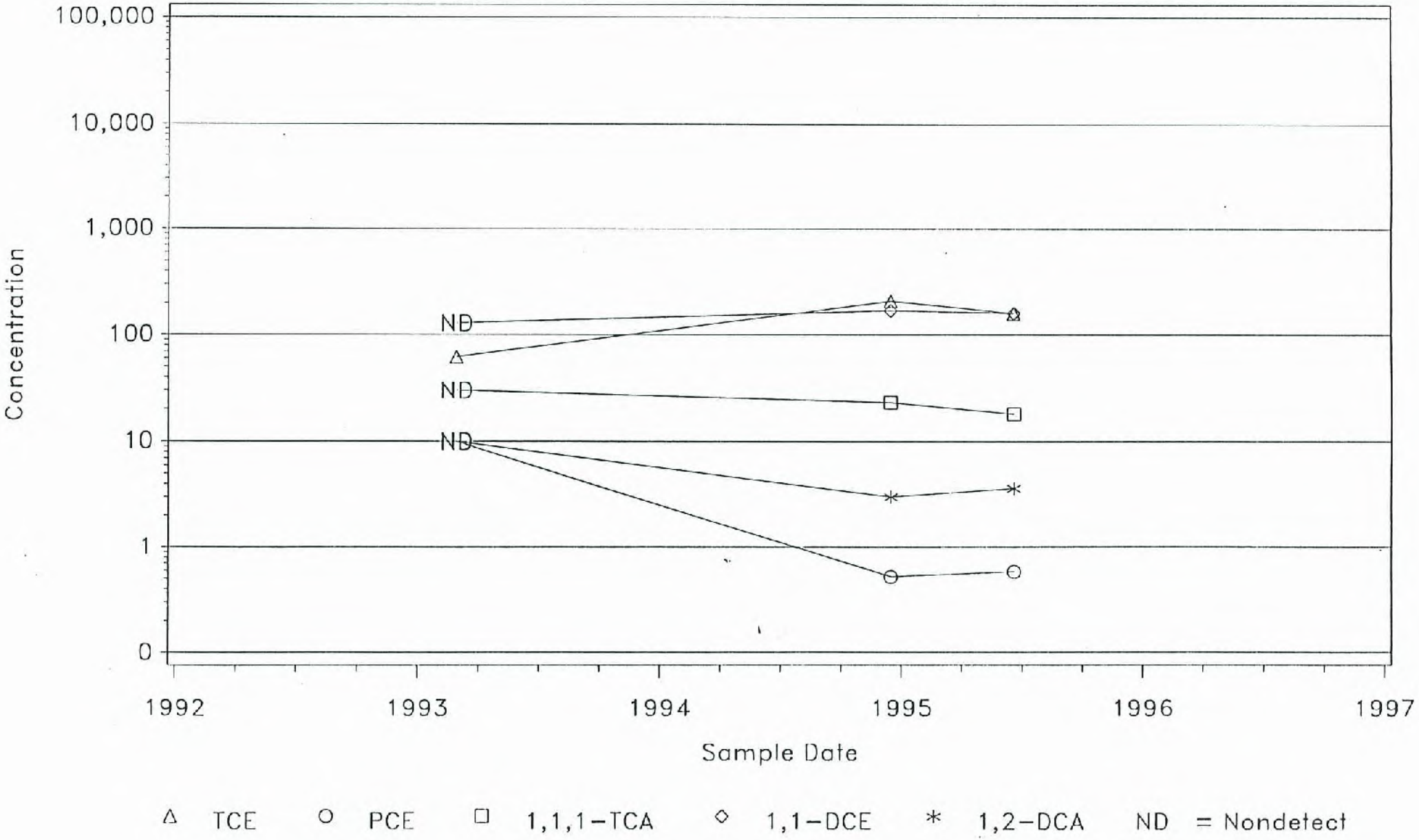


WATER QUALITY HYDROGRAPH
SAMPLE ID=EW-18

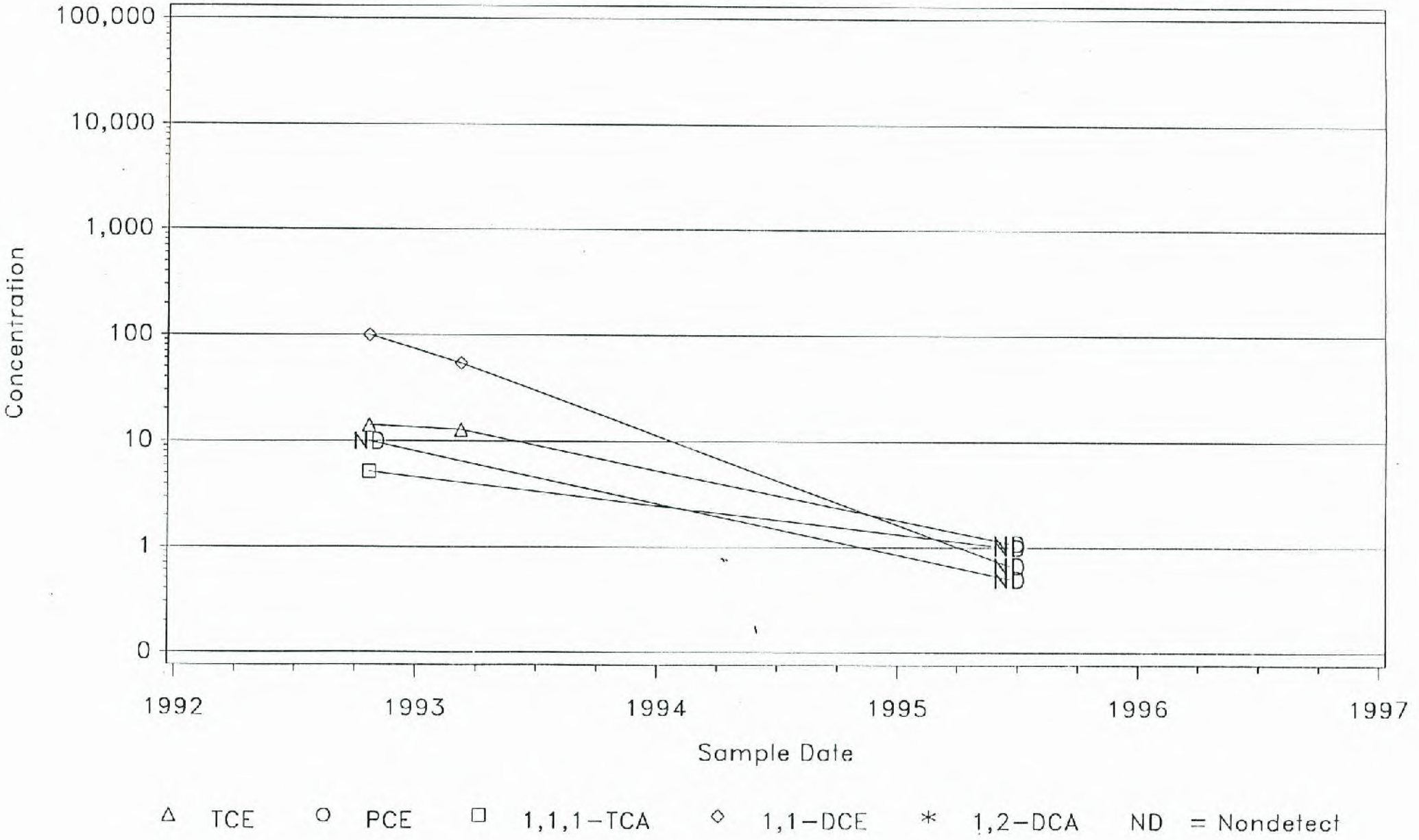



WATER QUALITY HYDROGRAPH
SAMPLE ID=MW-03
100,000
10,000
1,000
100
10
1
0
Concentration
ND
ND
ND
ND
ND
ND
1992
1993
1994
1995
1996
1997
Sample Date
TCE
PCE
1,1,1-TCA
1,1-DCE
1,2-DCA
ND = Nondetect

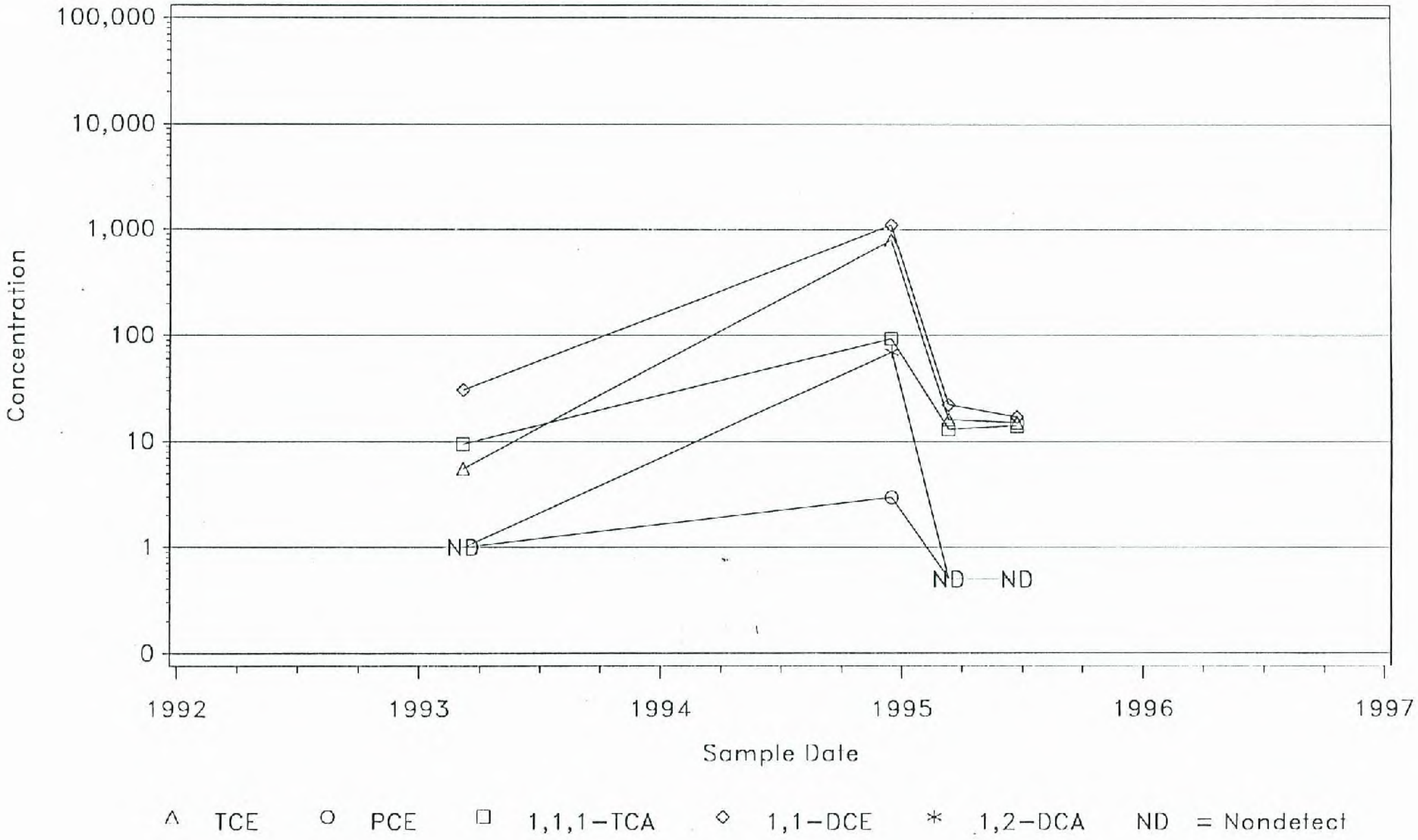
WATER QUALITY HYDROGRAPH
SAMPLE ID=MW-04



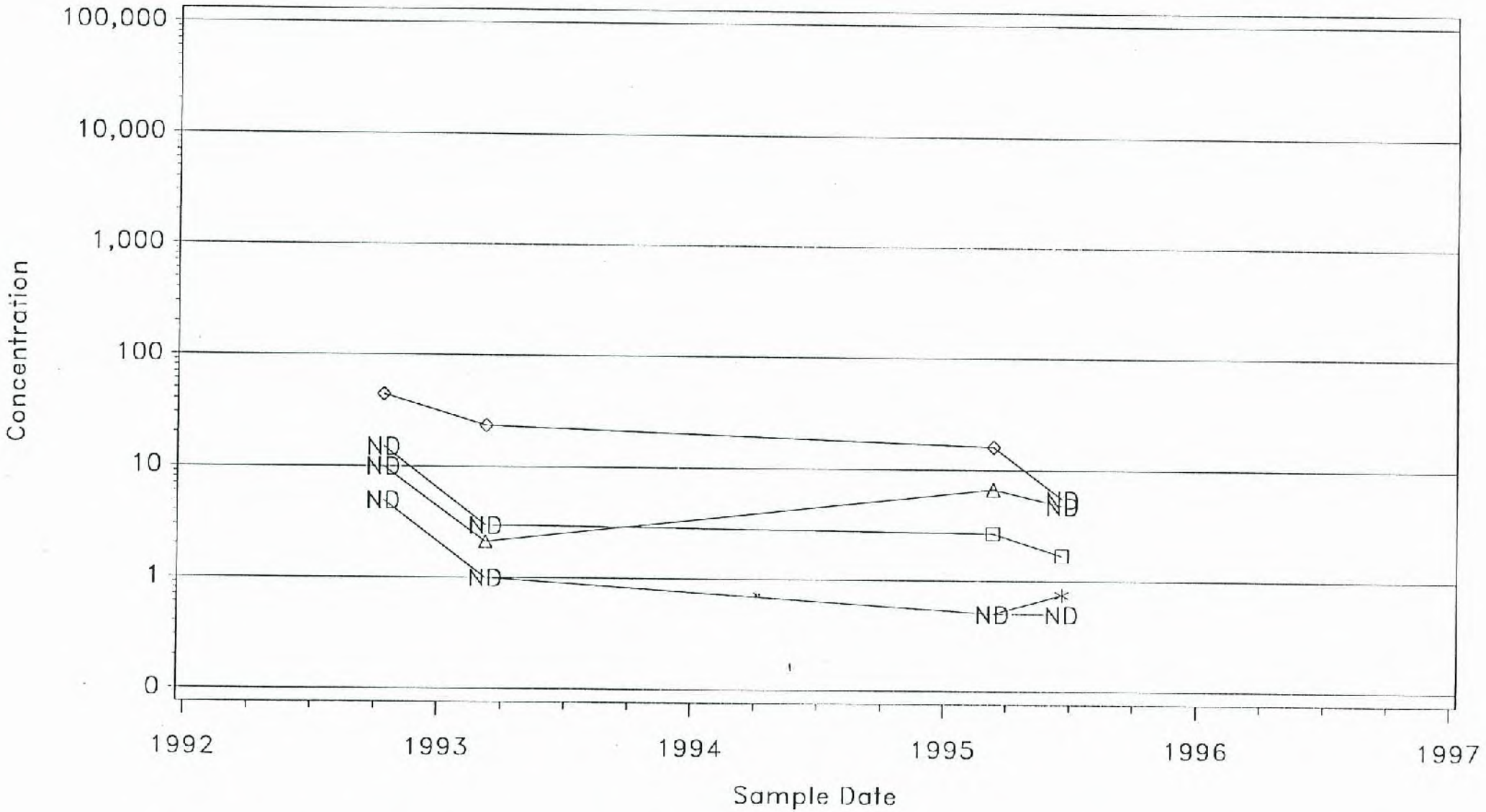
WATER QUALITY HYDROGRAPH
SAMPLE ID=MW-06



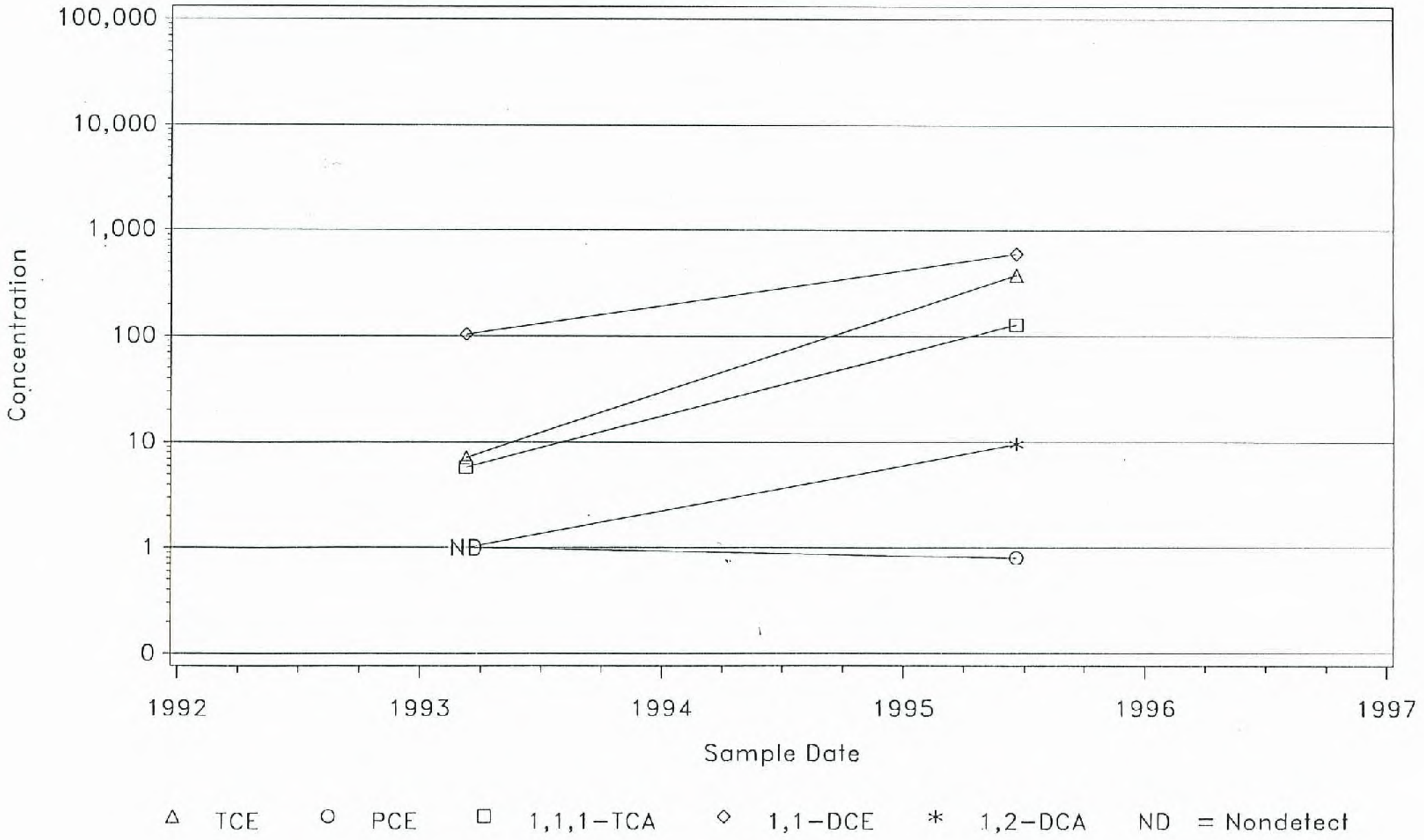
WATER QUALITY HYDROGRAPH
SAMPLE ID=MW-17



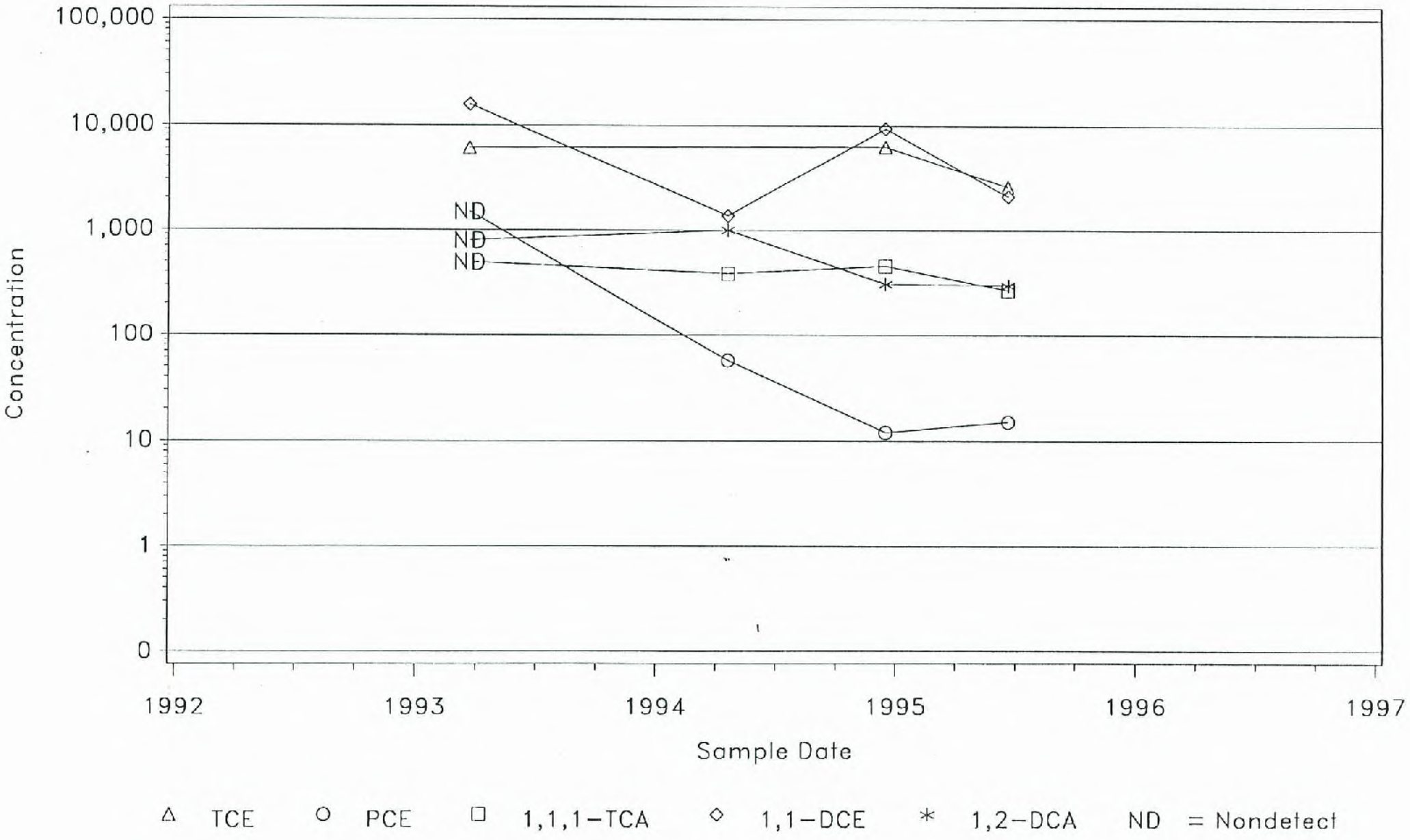
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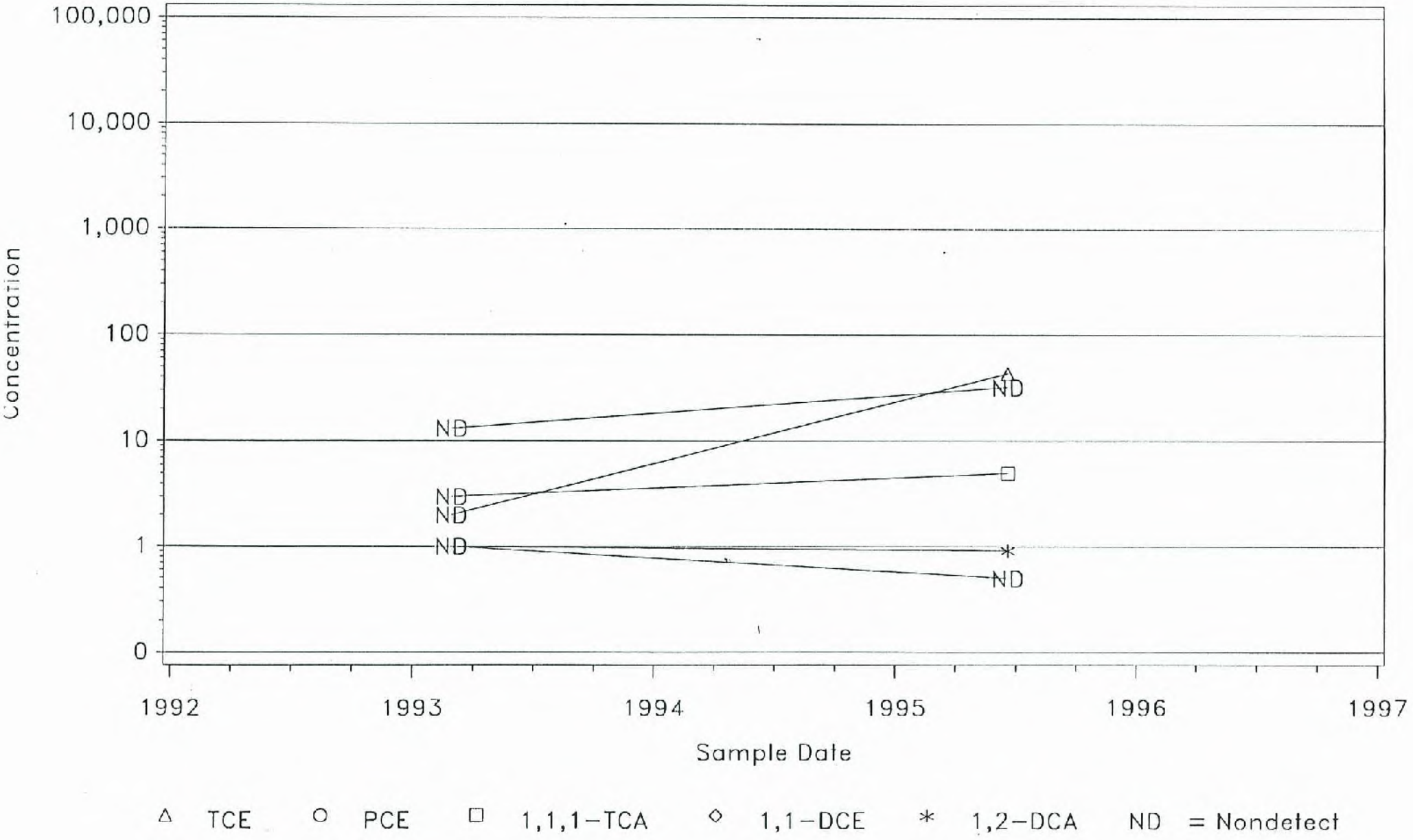
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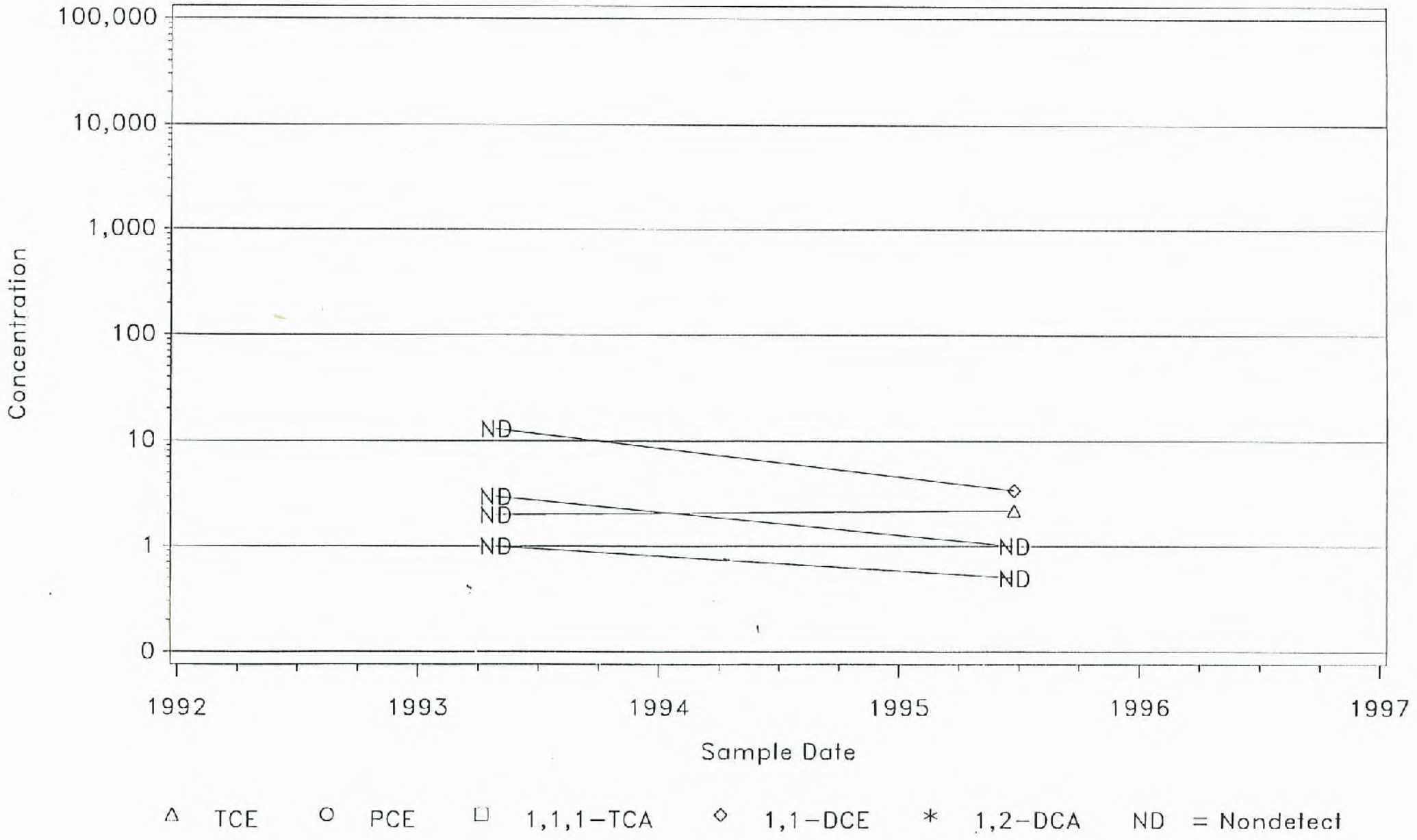
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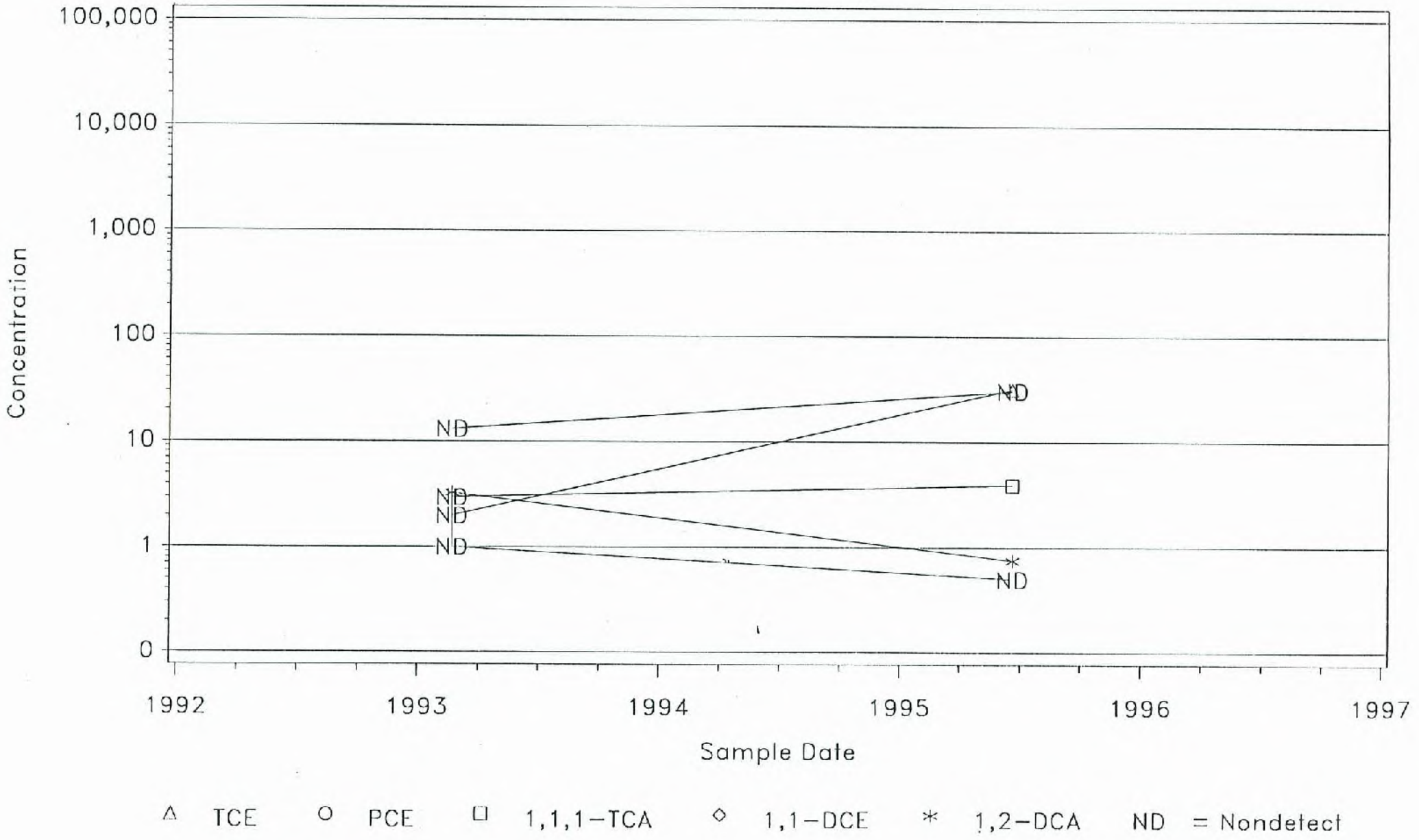
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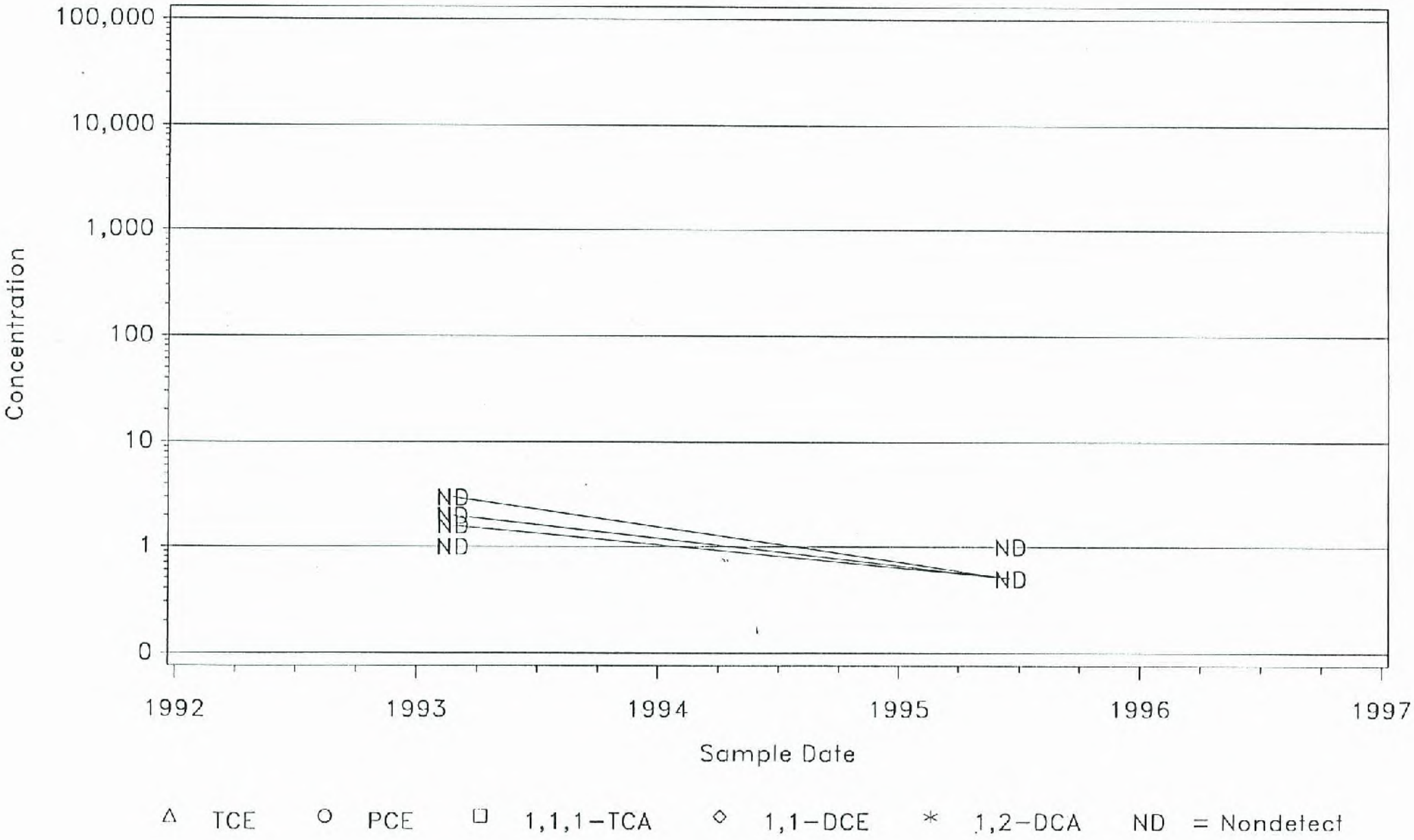
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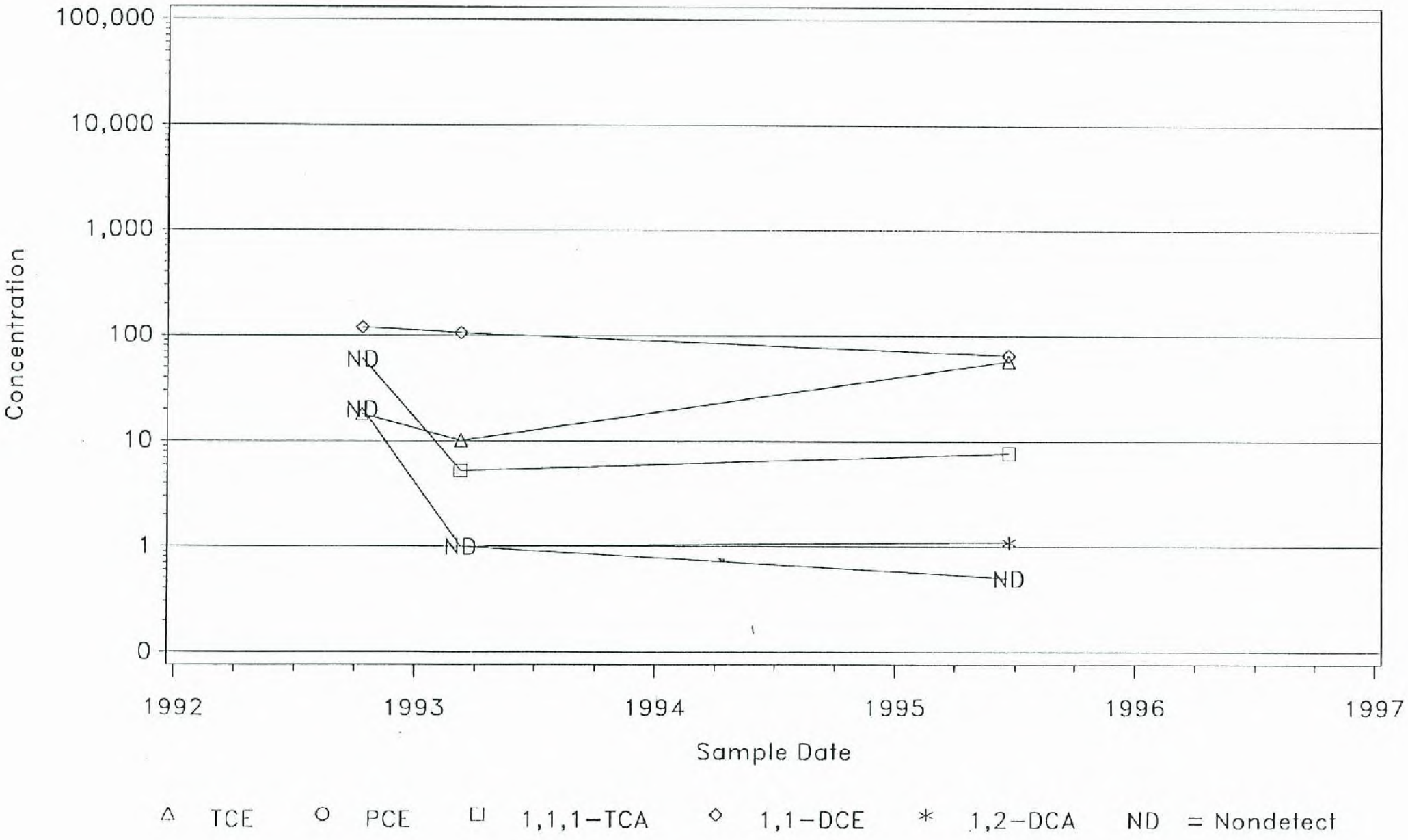
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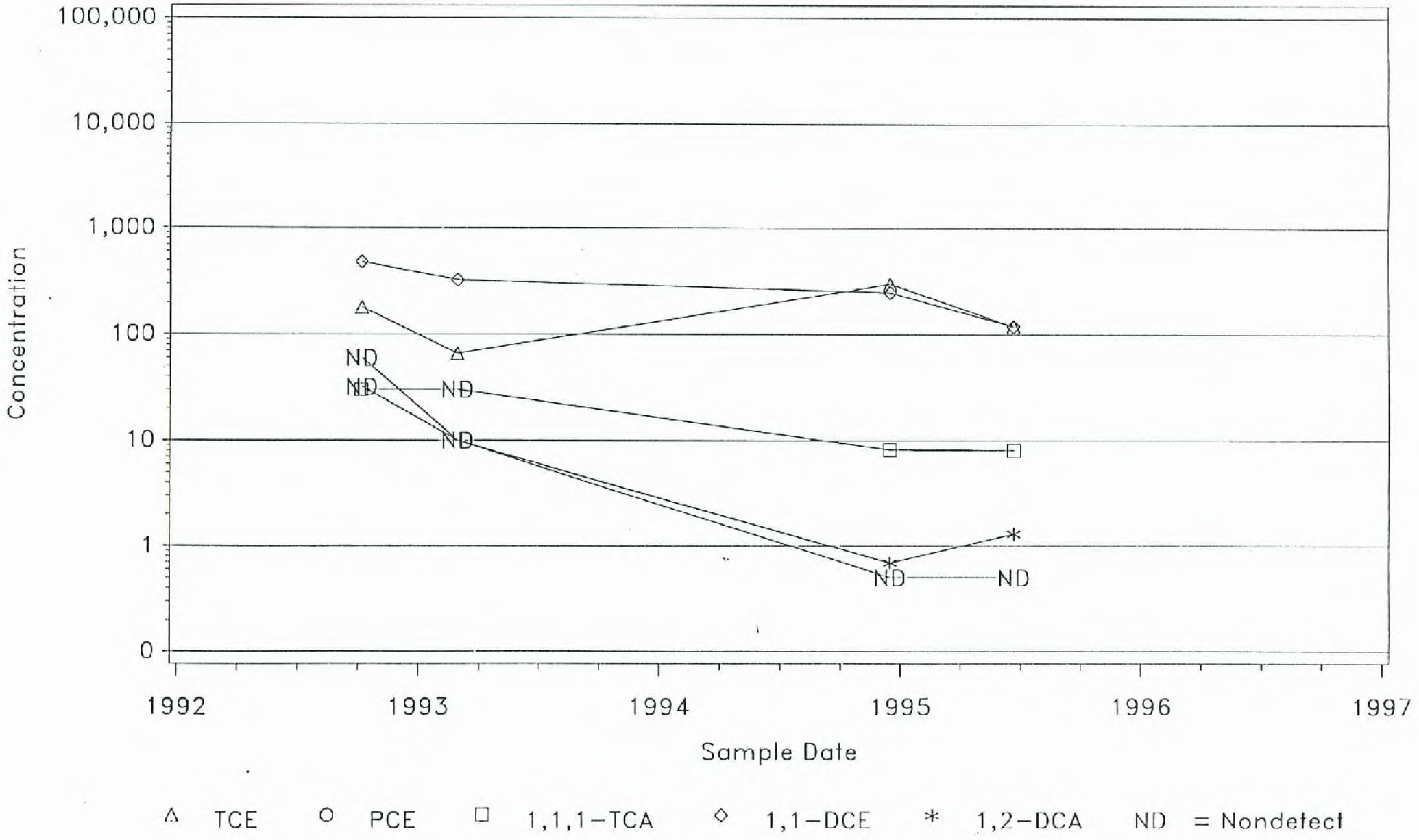
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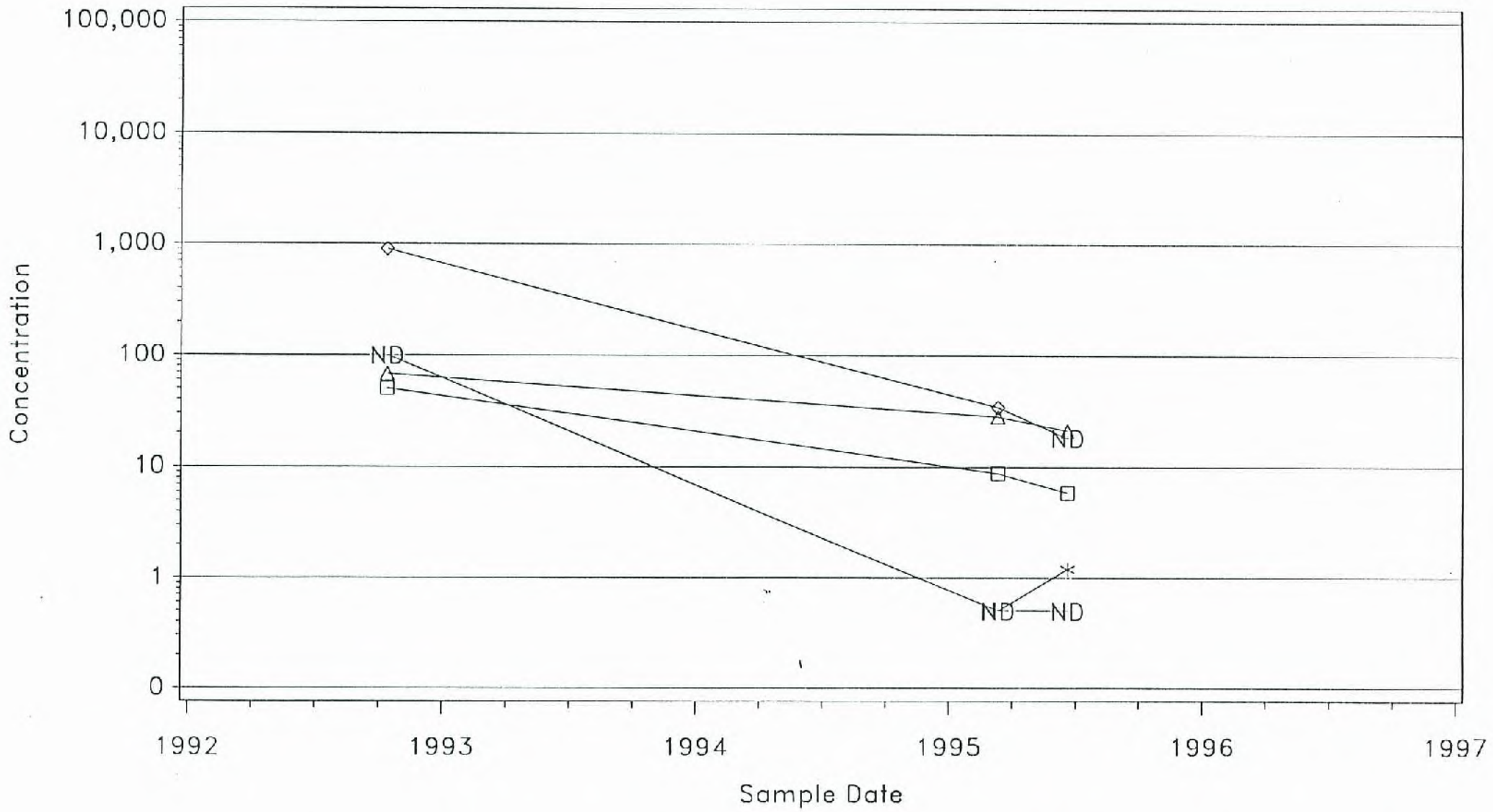
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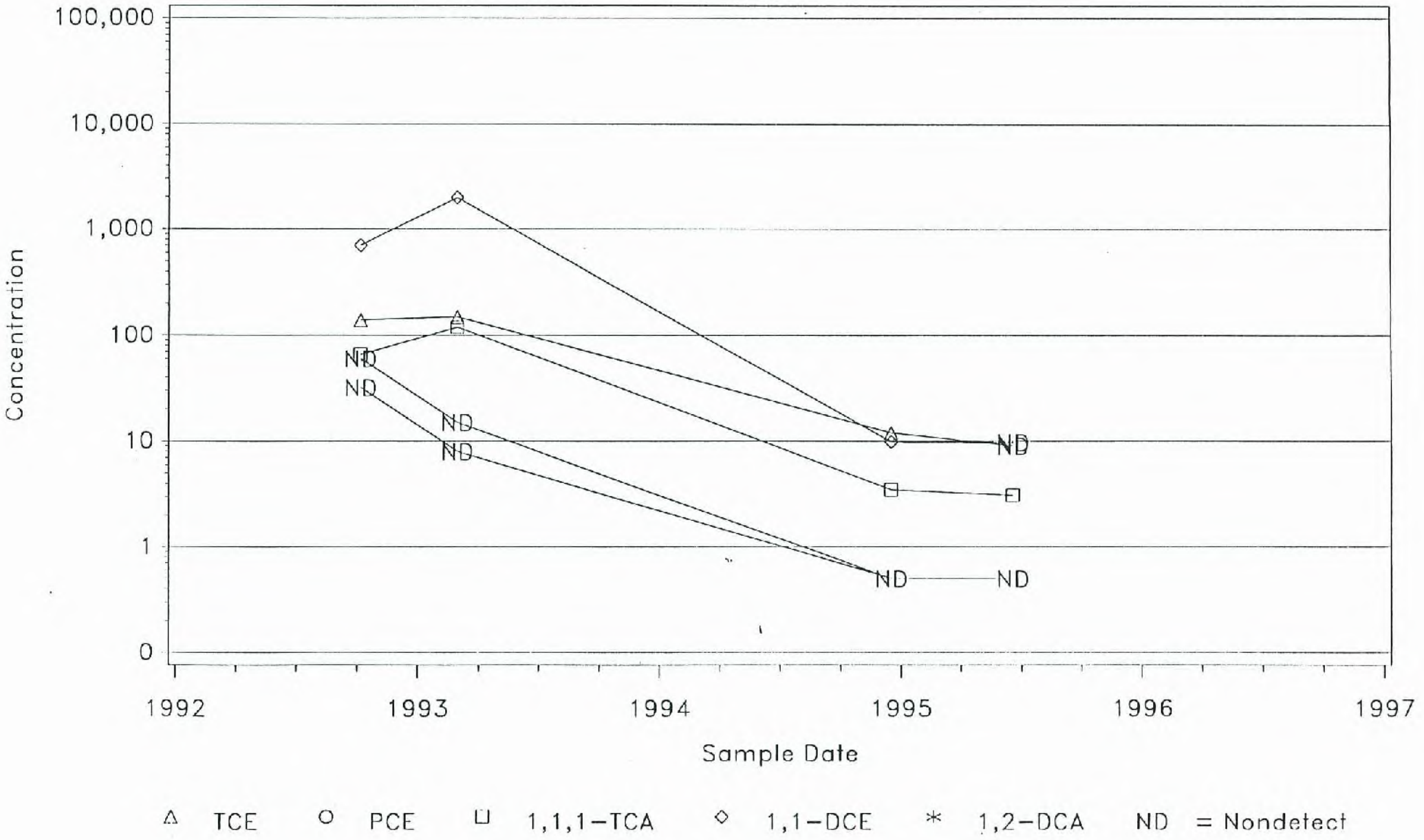
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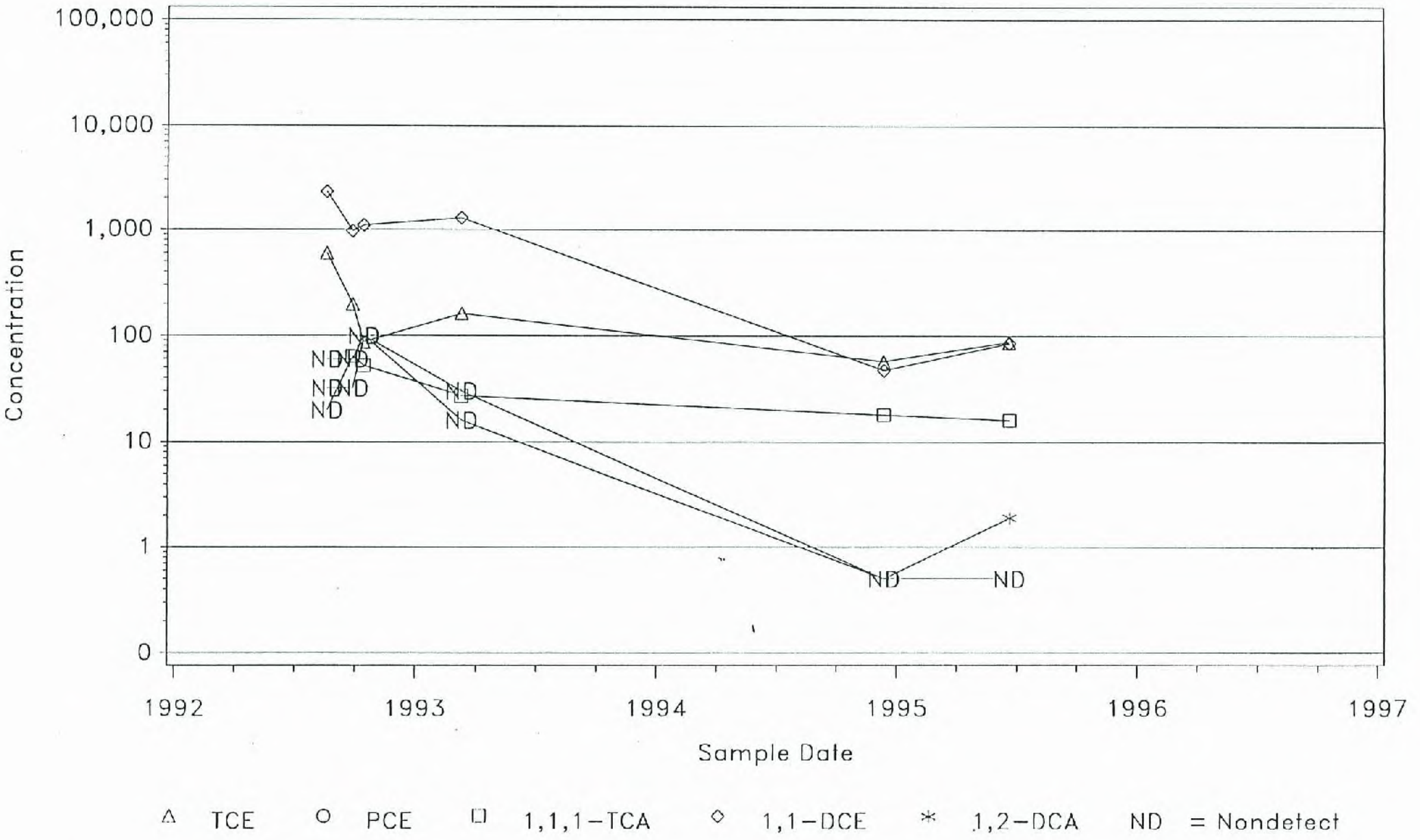
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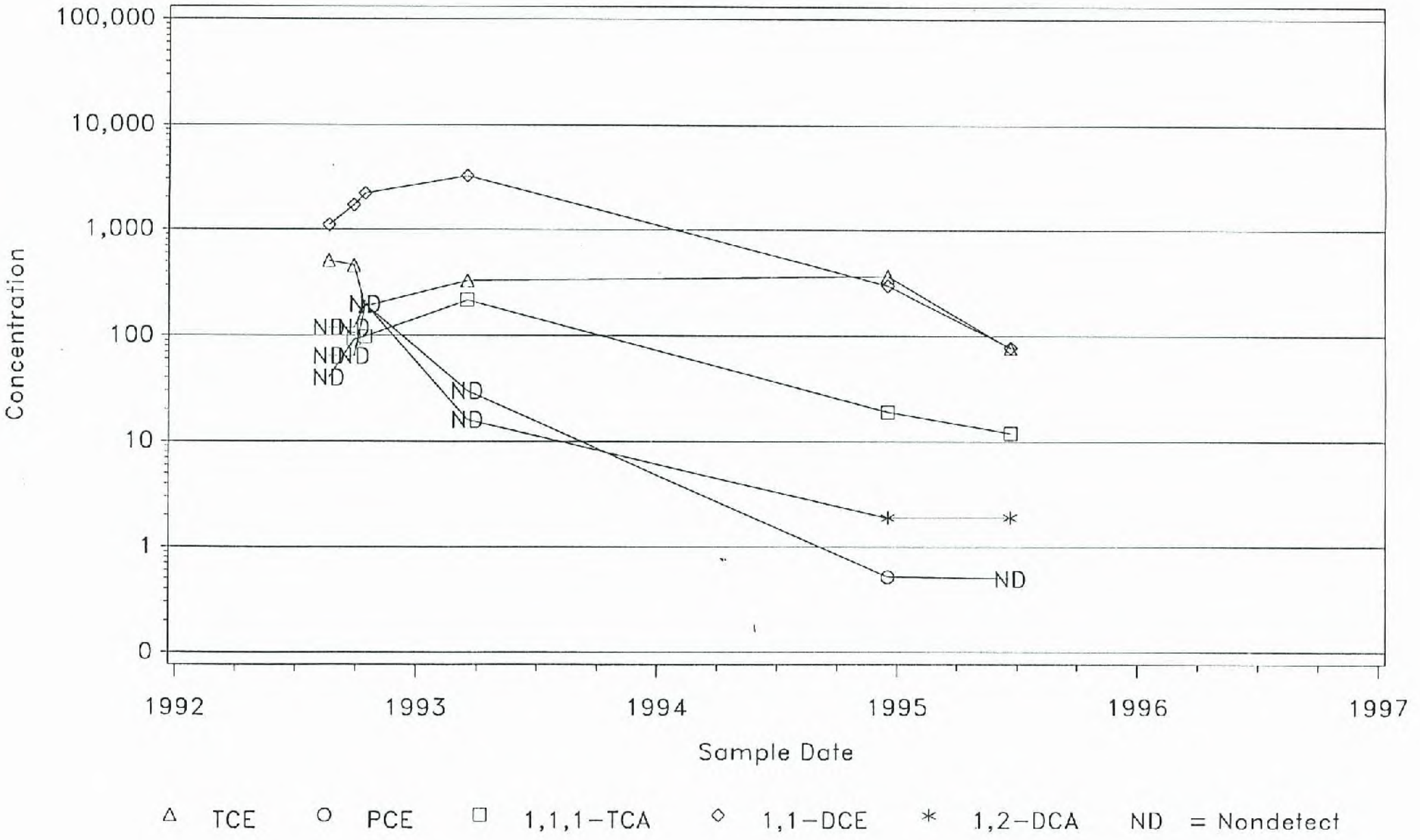
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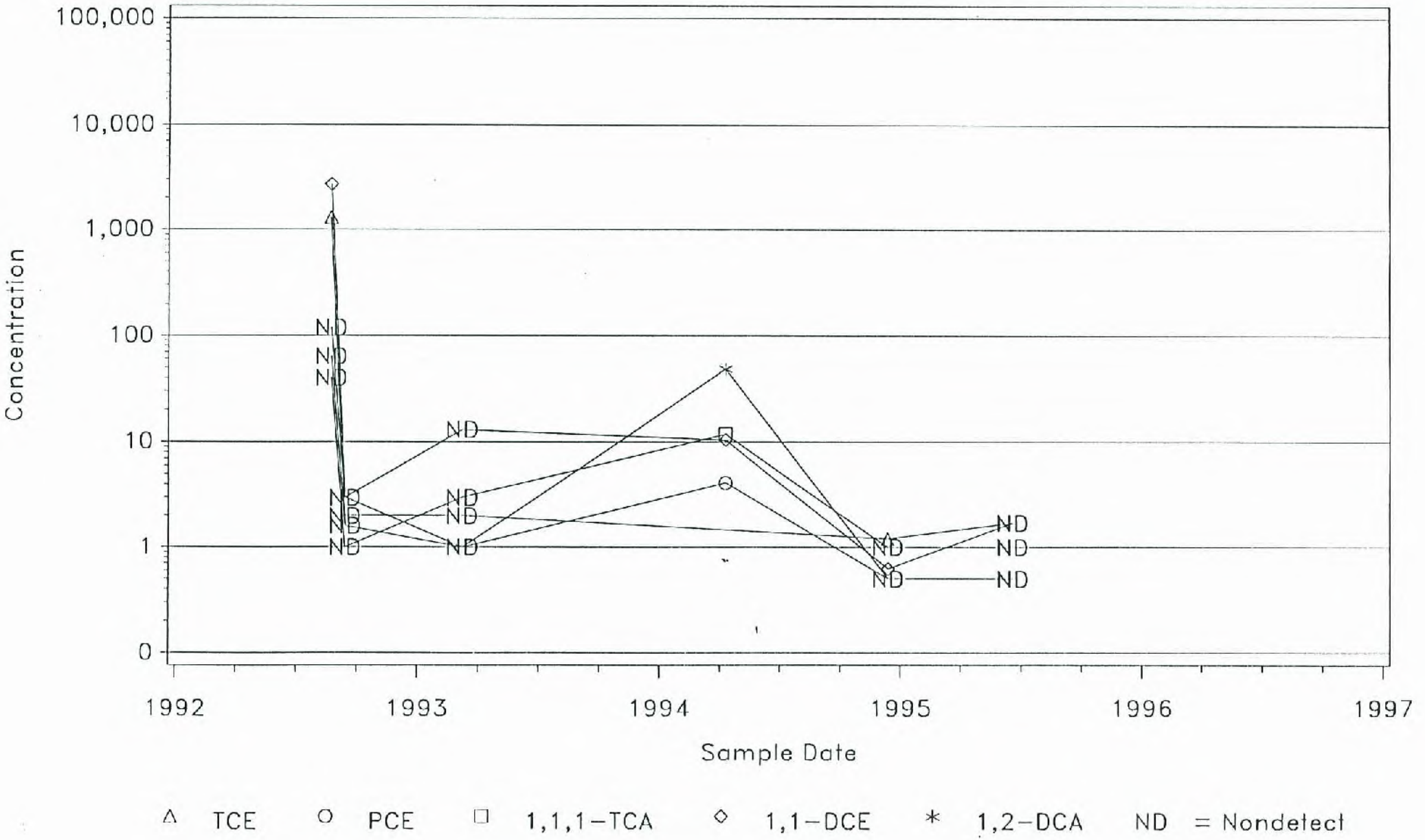
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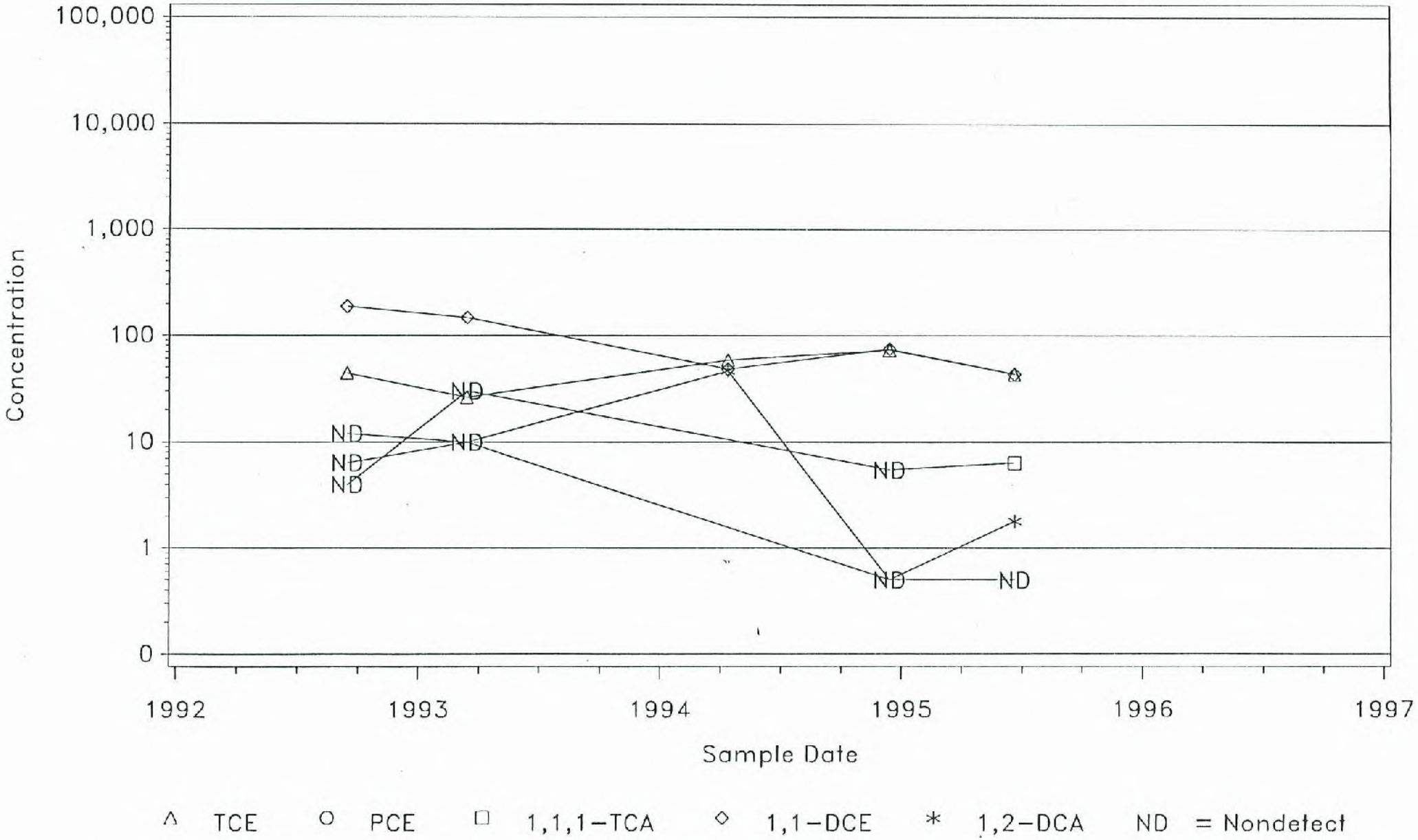
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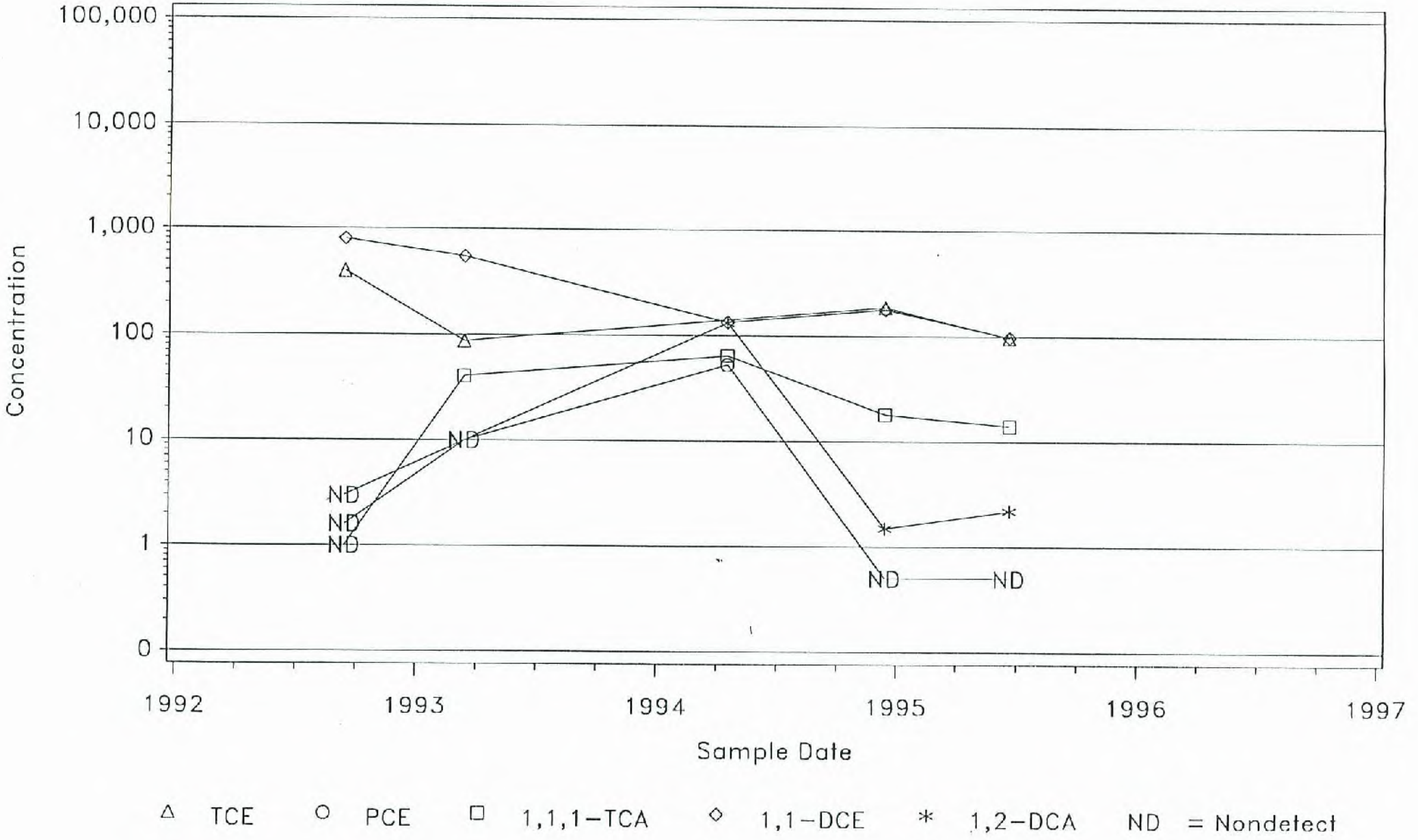
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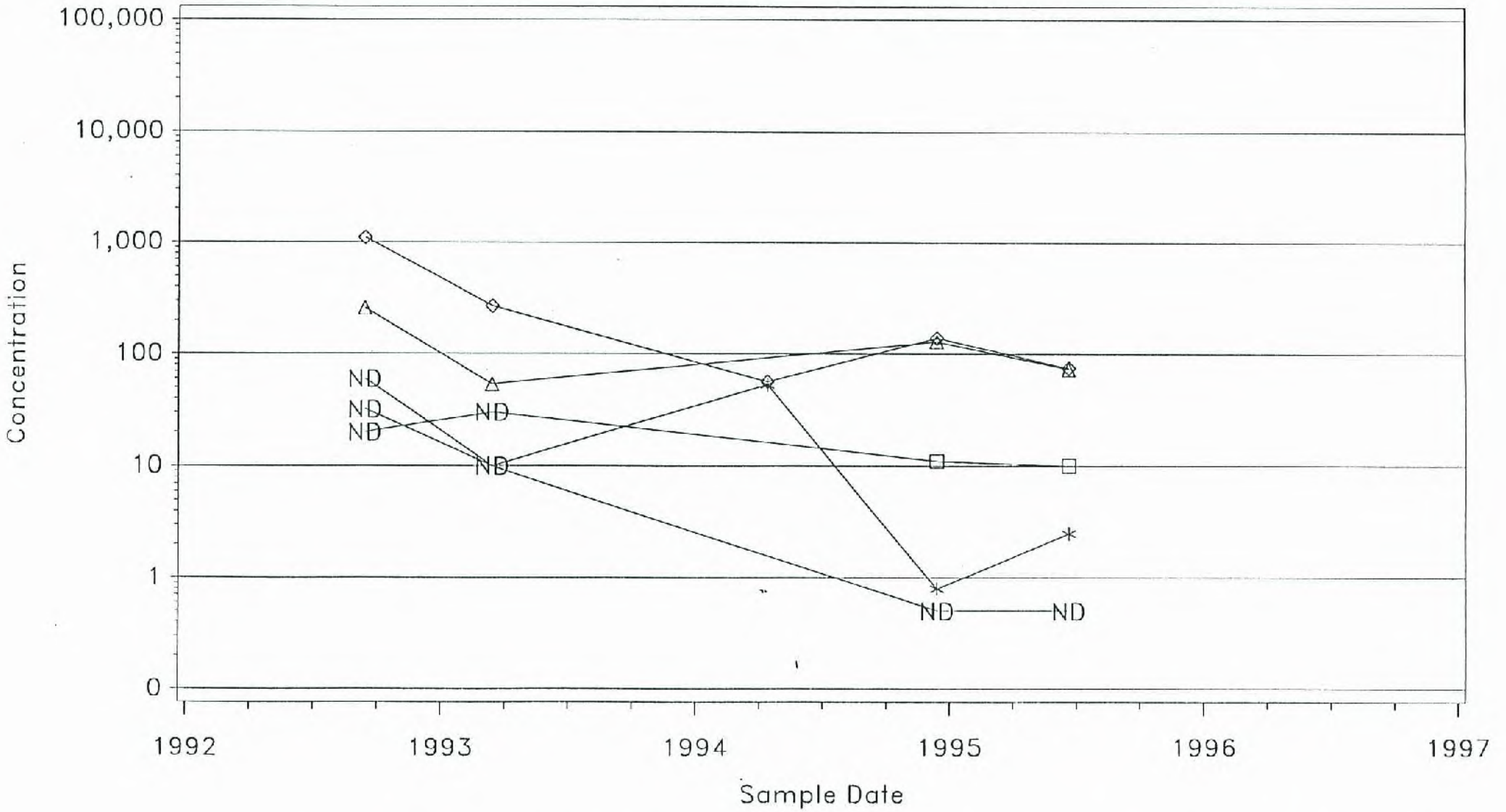
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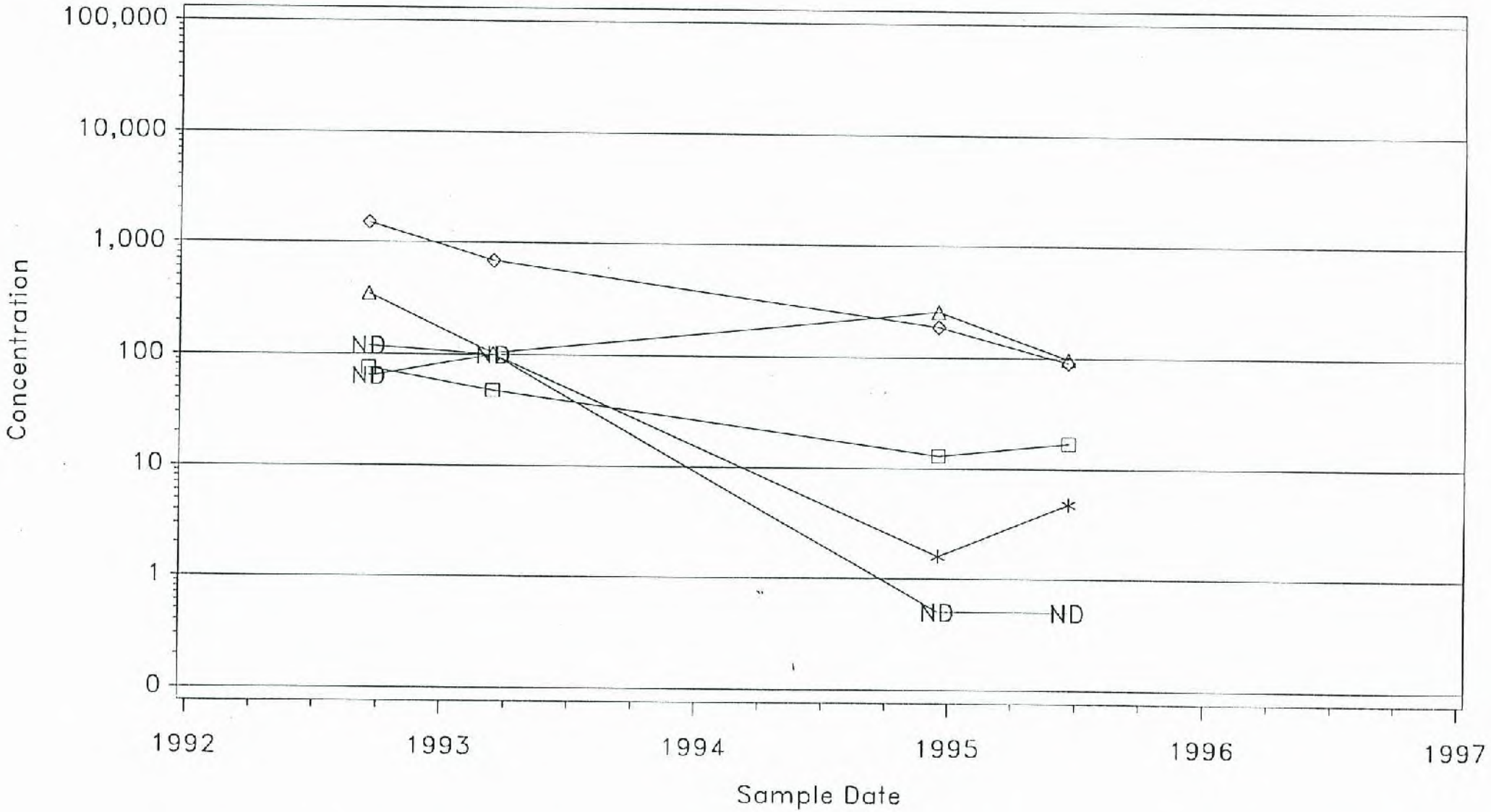
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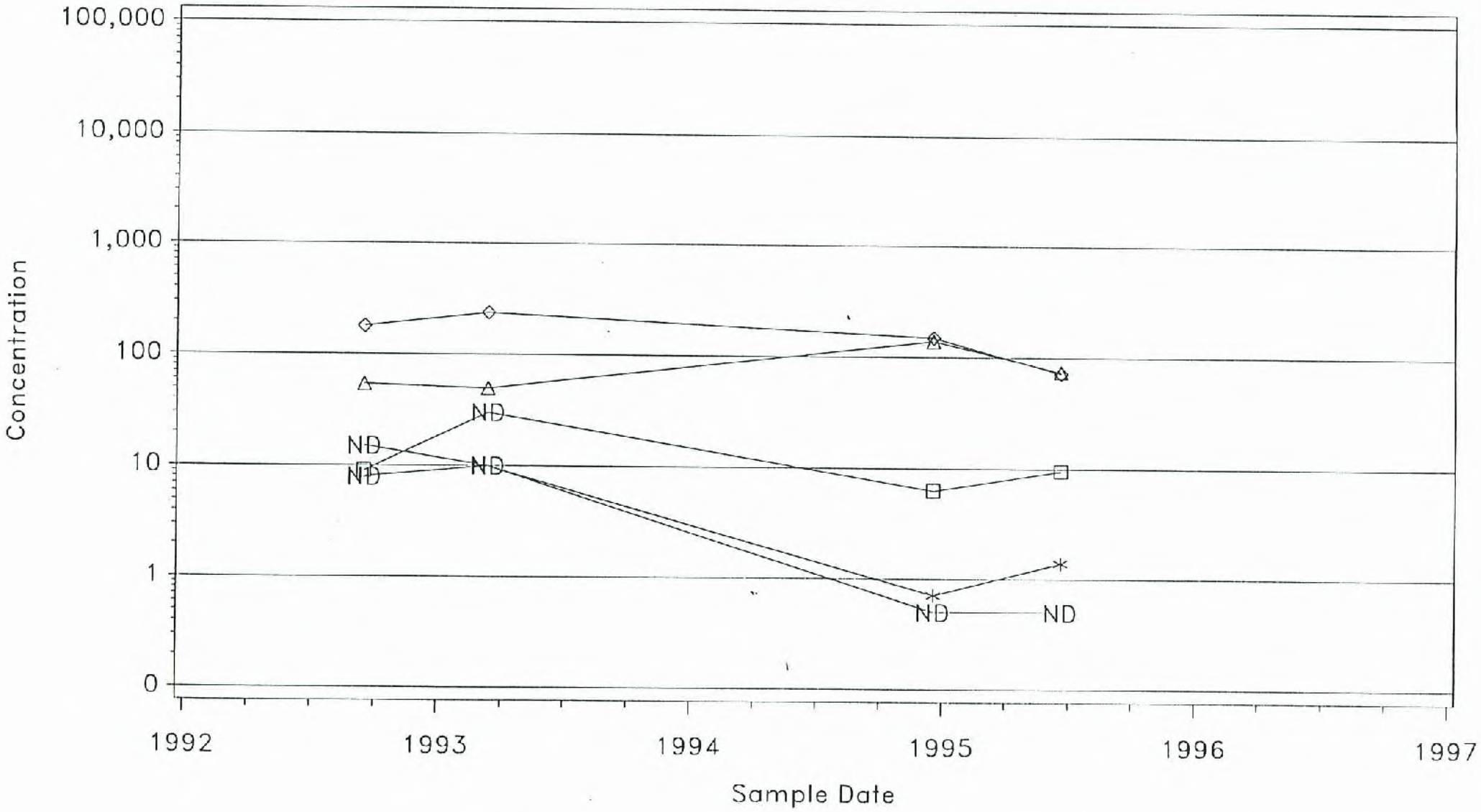
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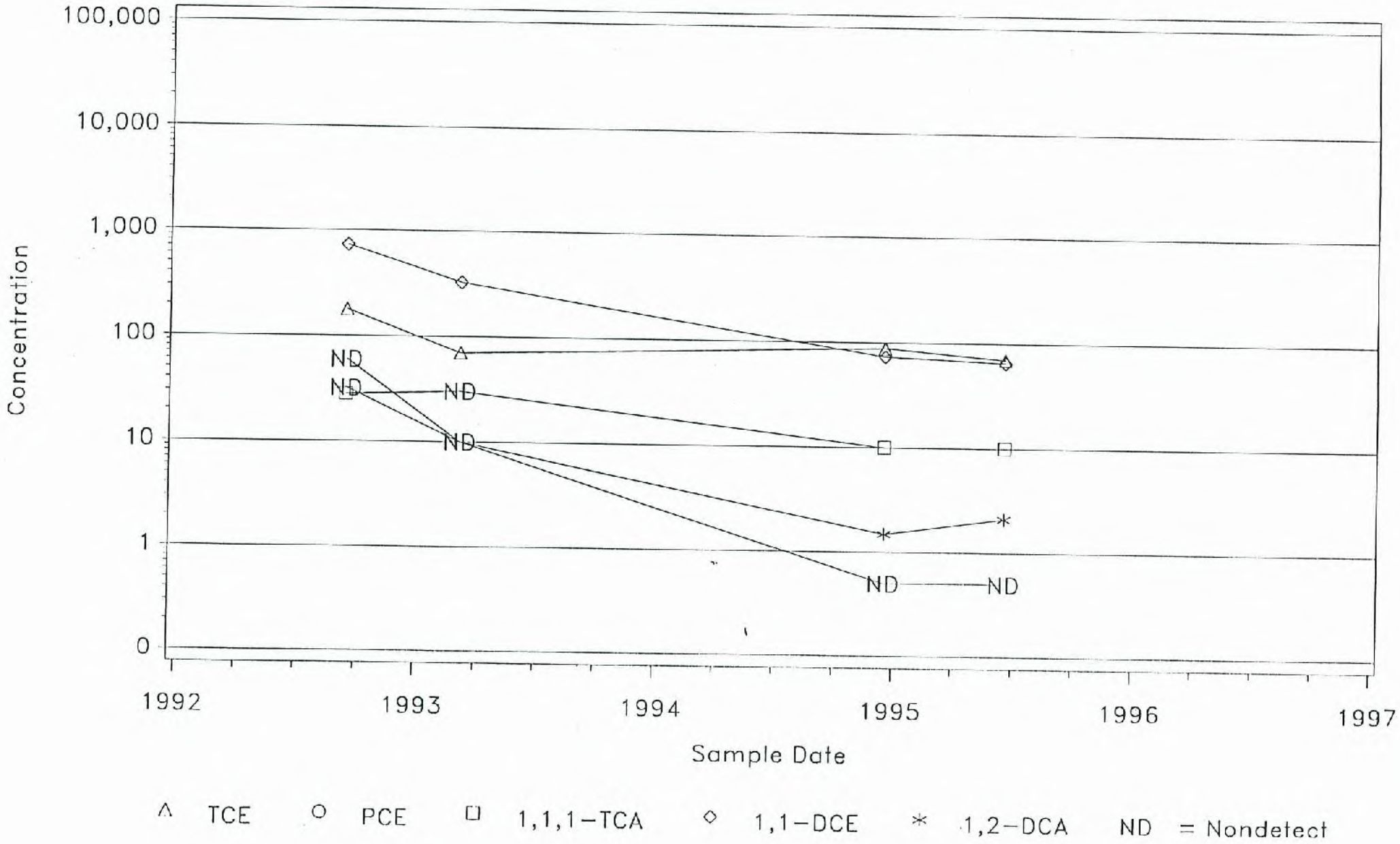
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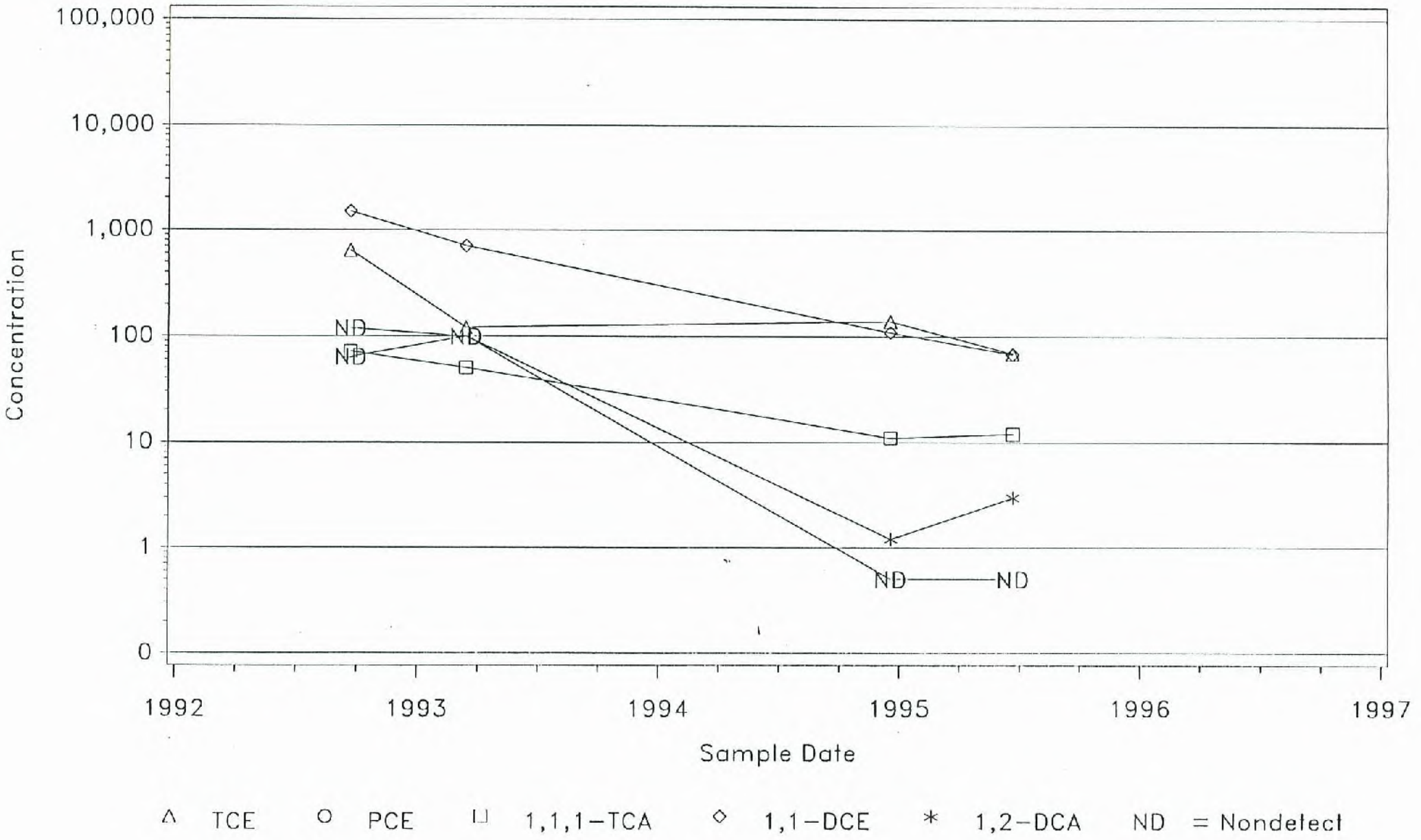
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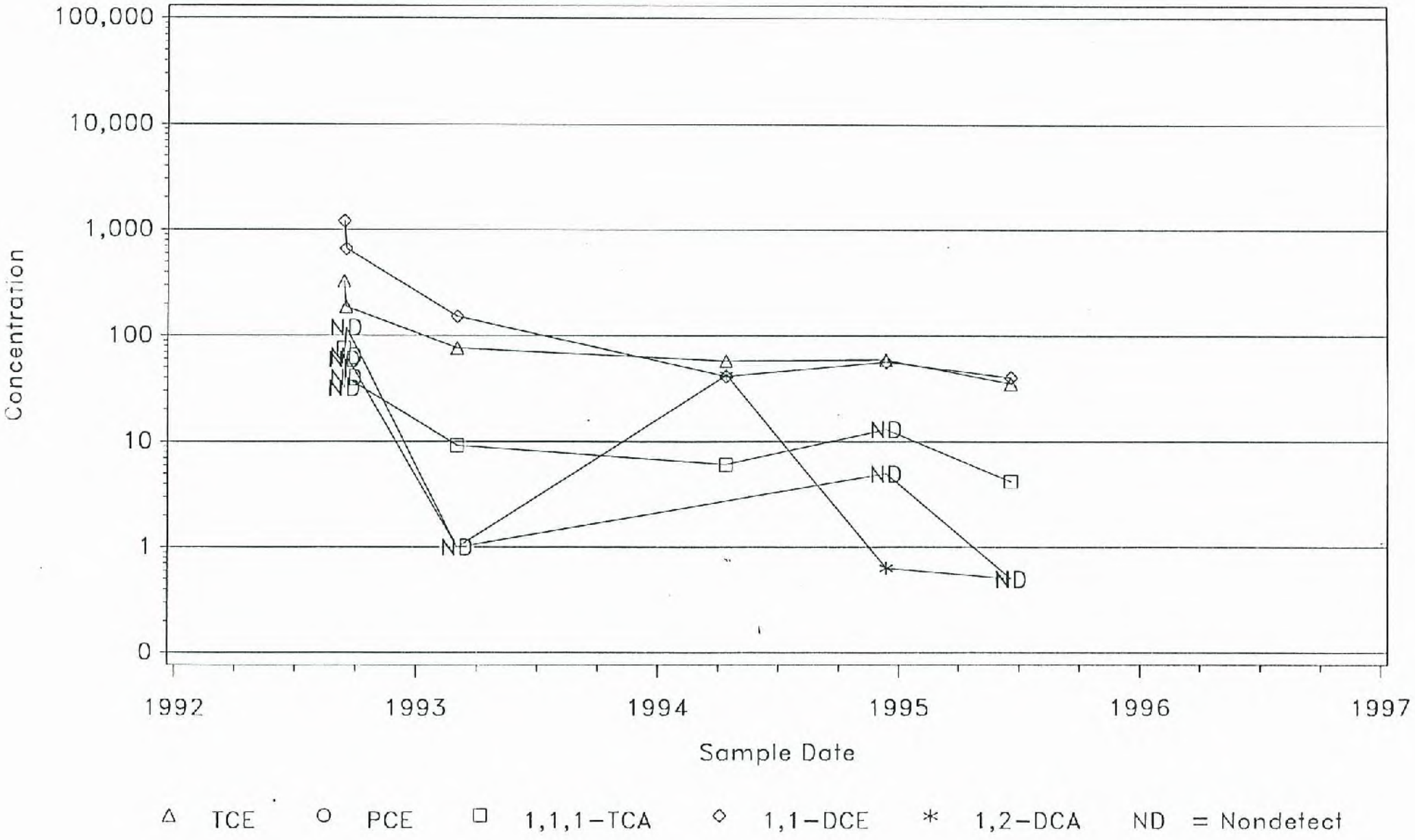
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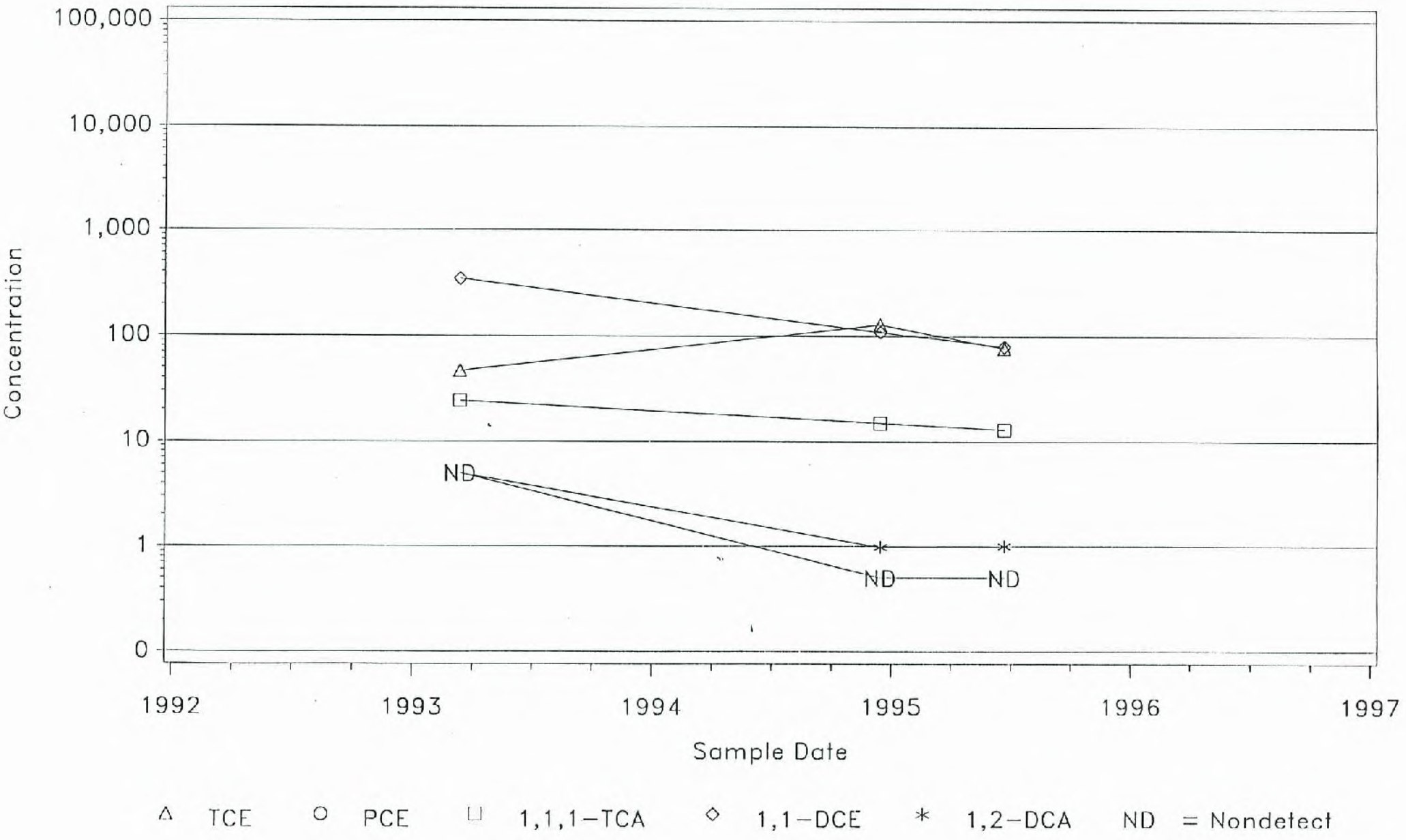
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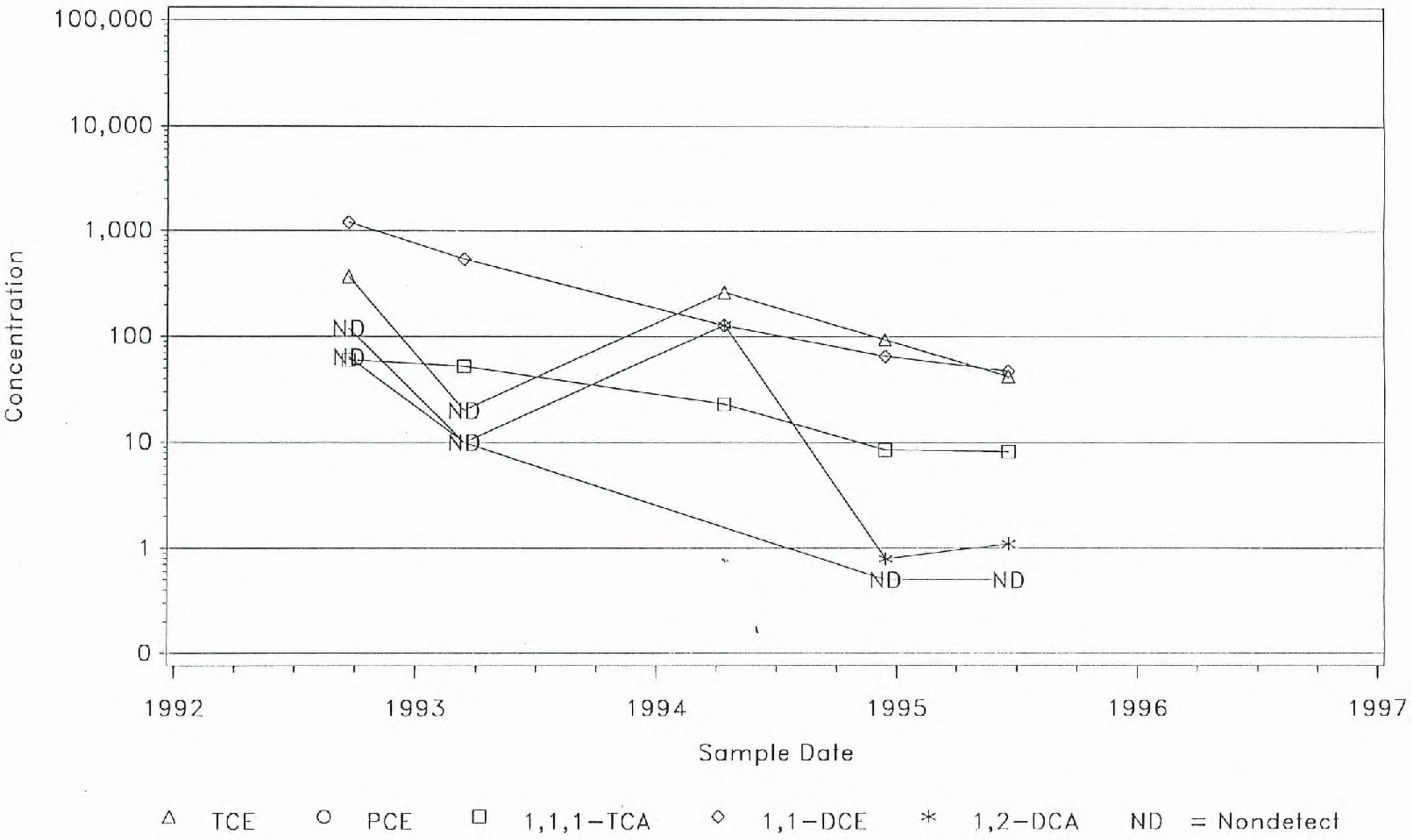
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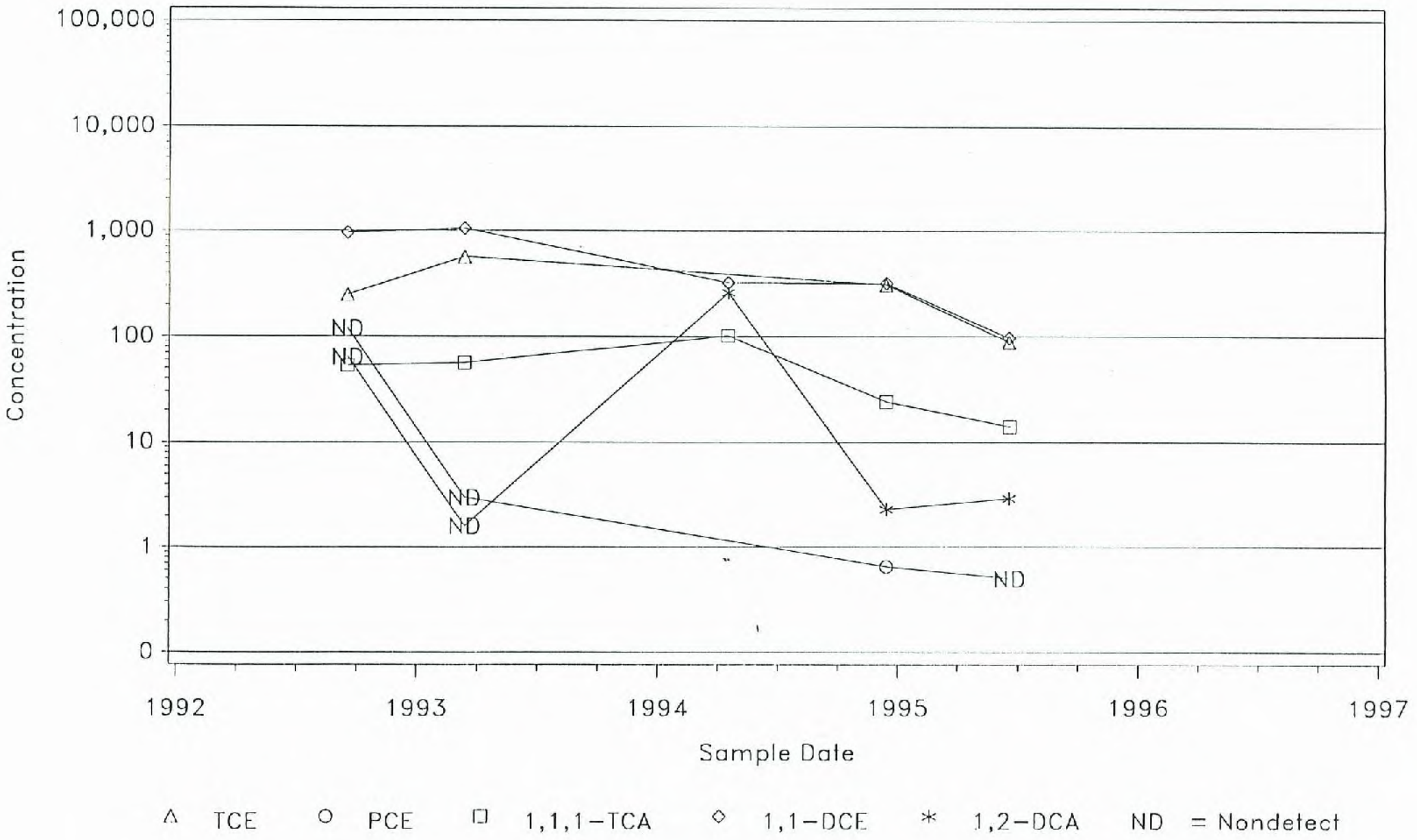
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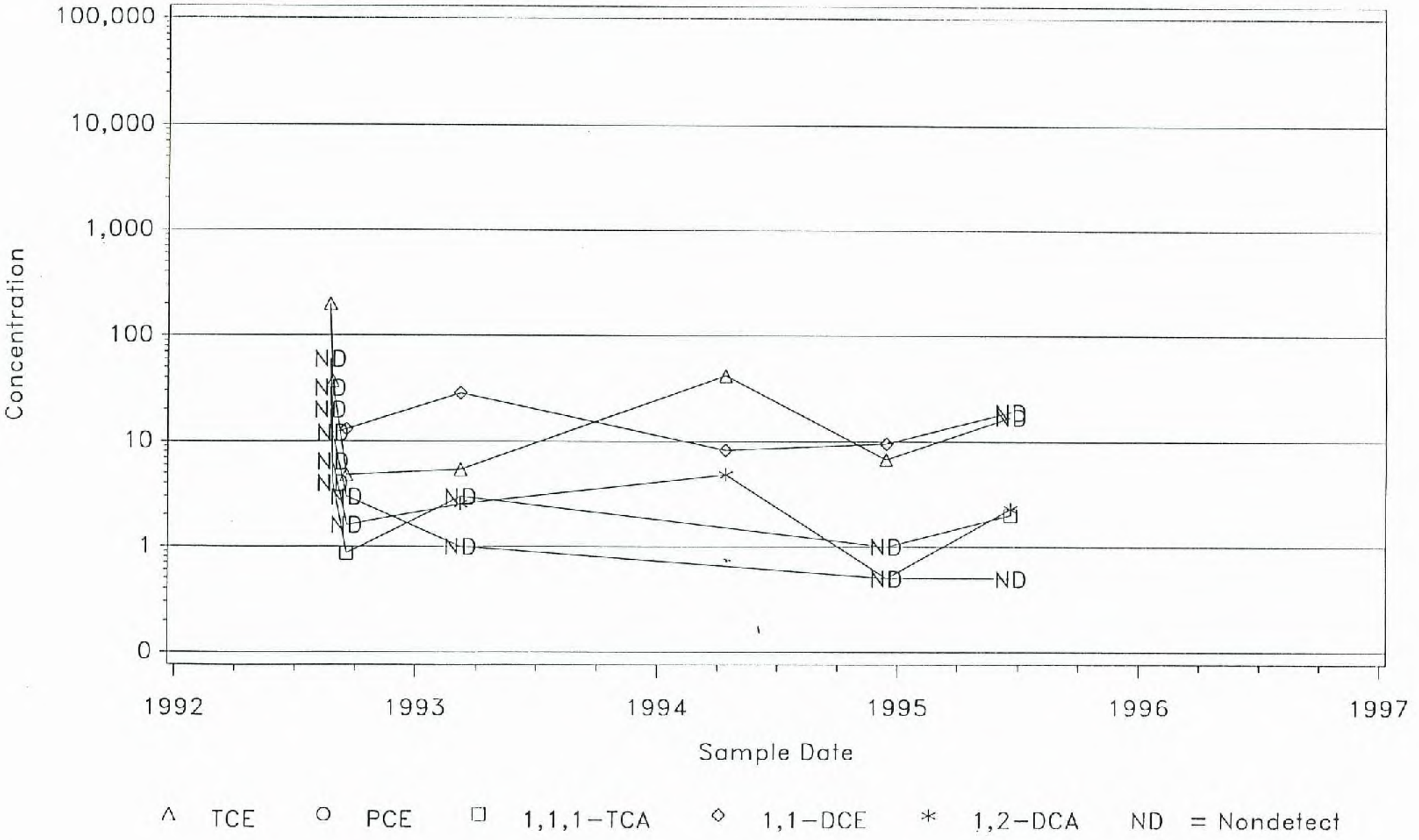
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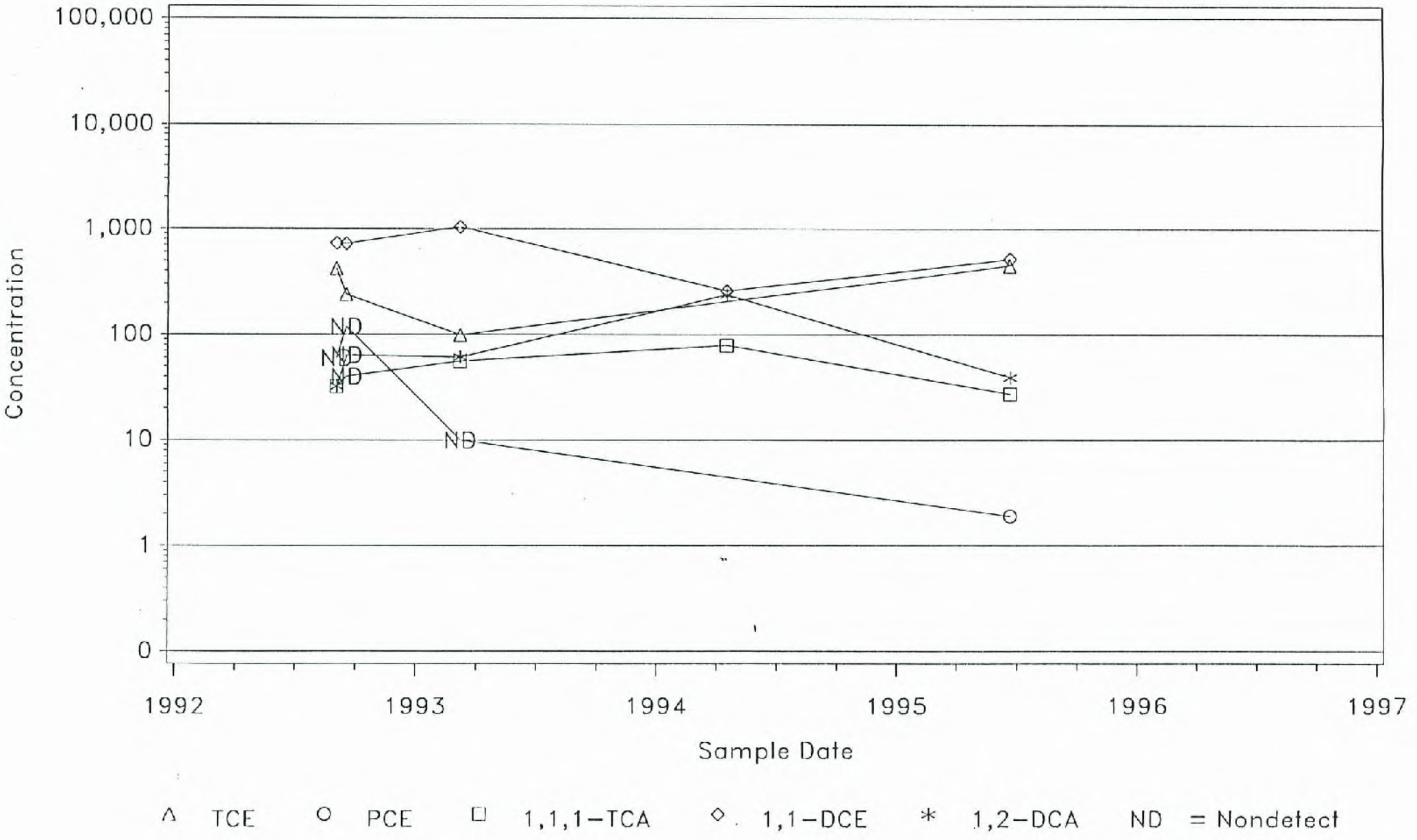
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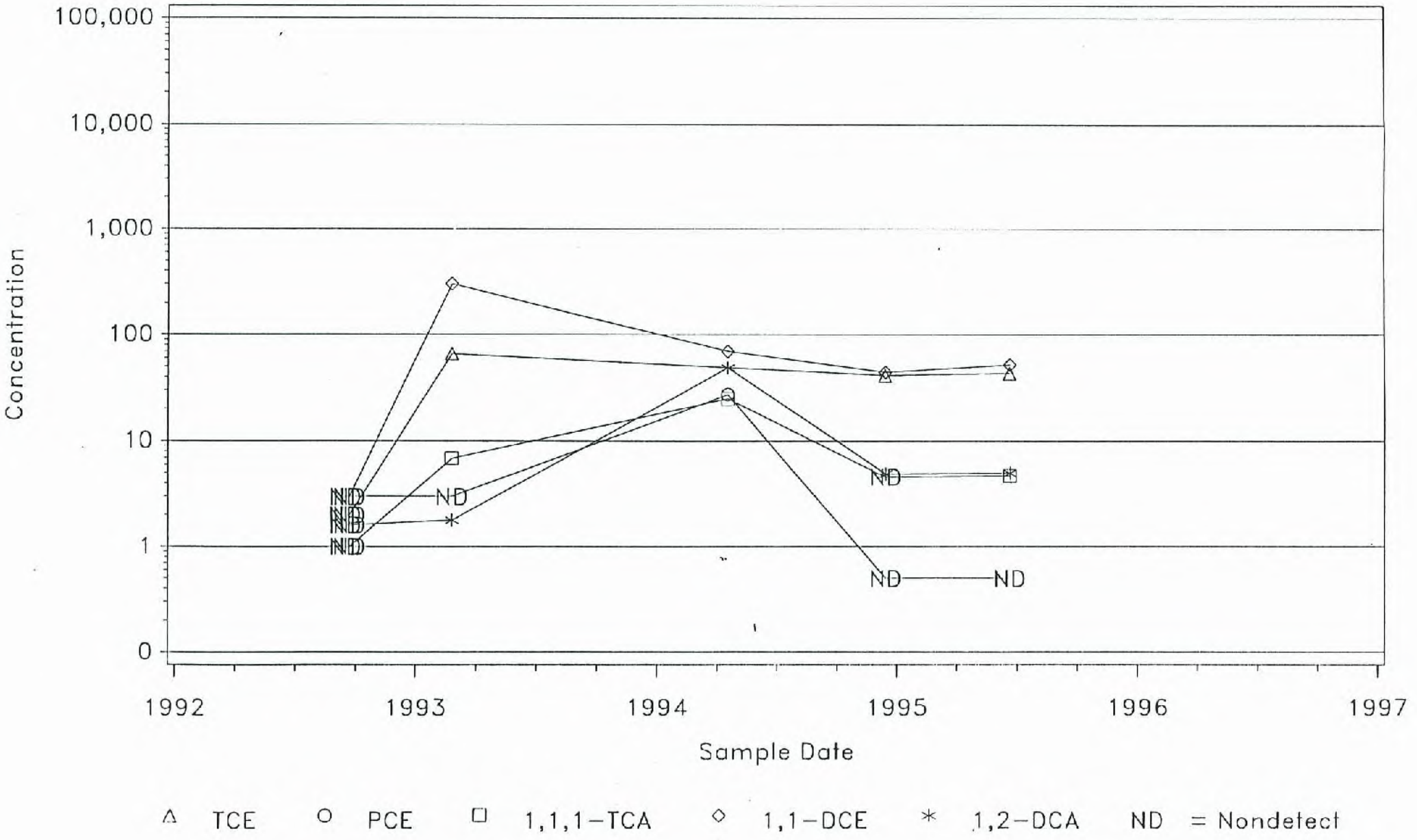
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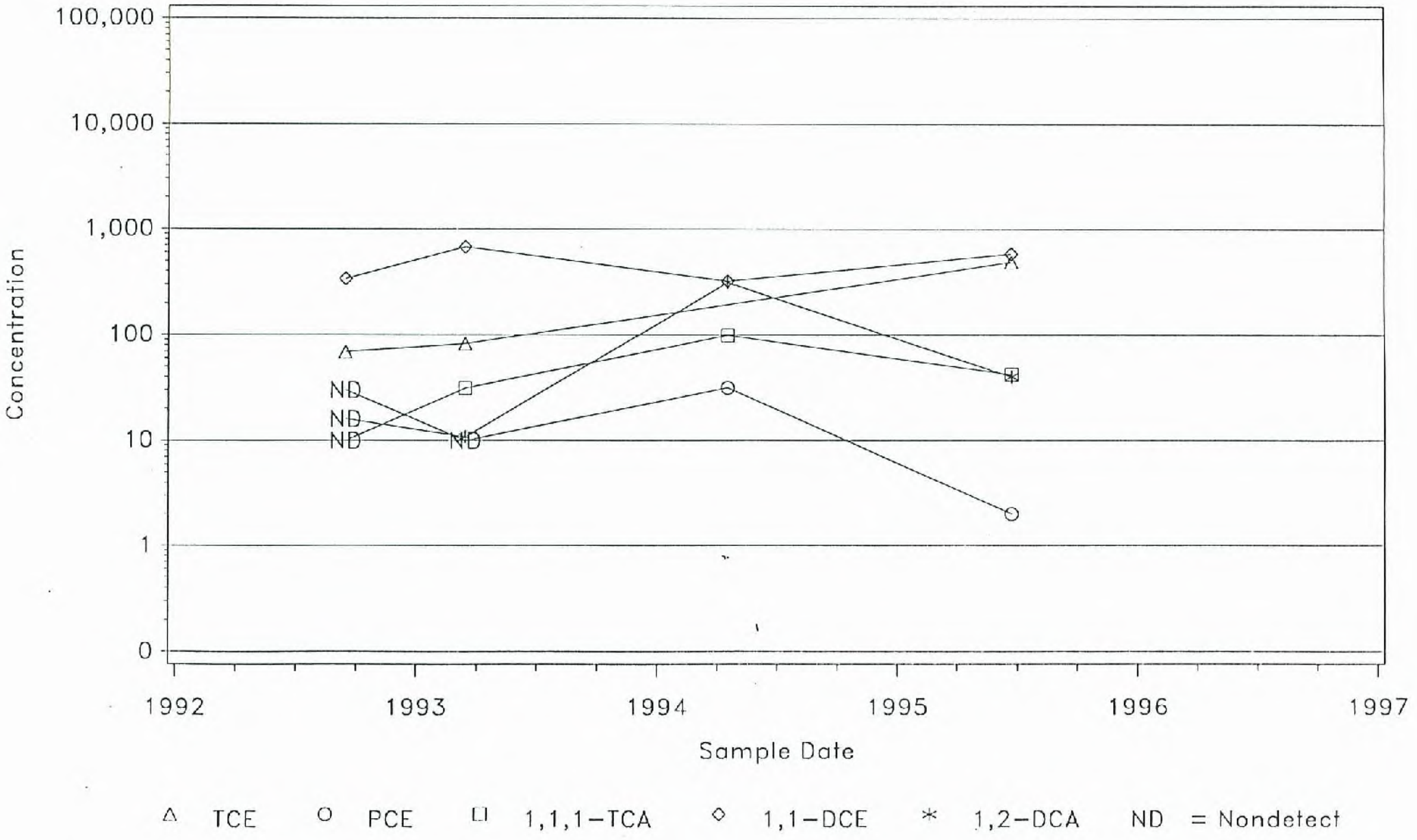
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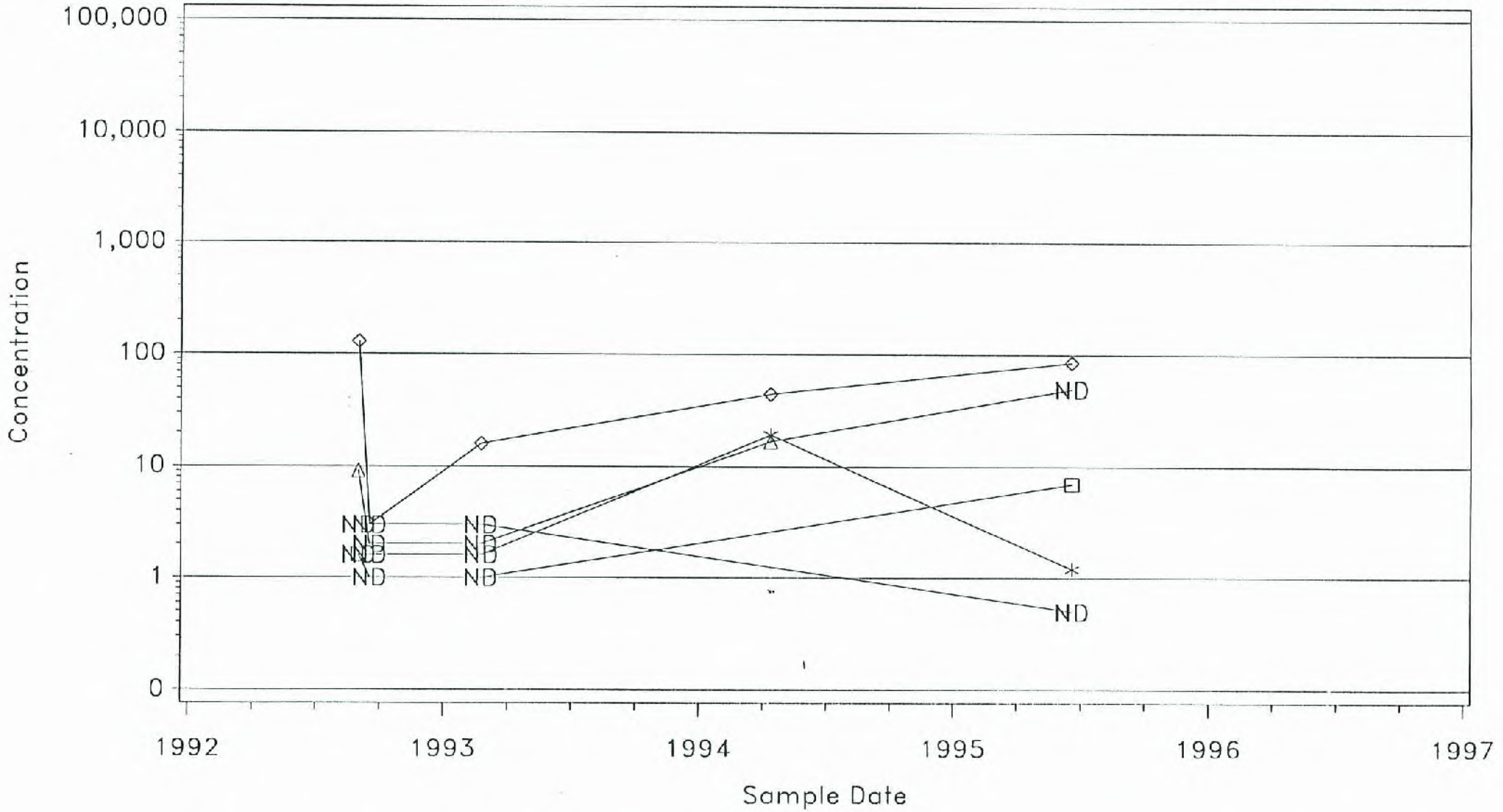
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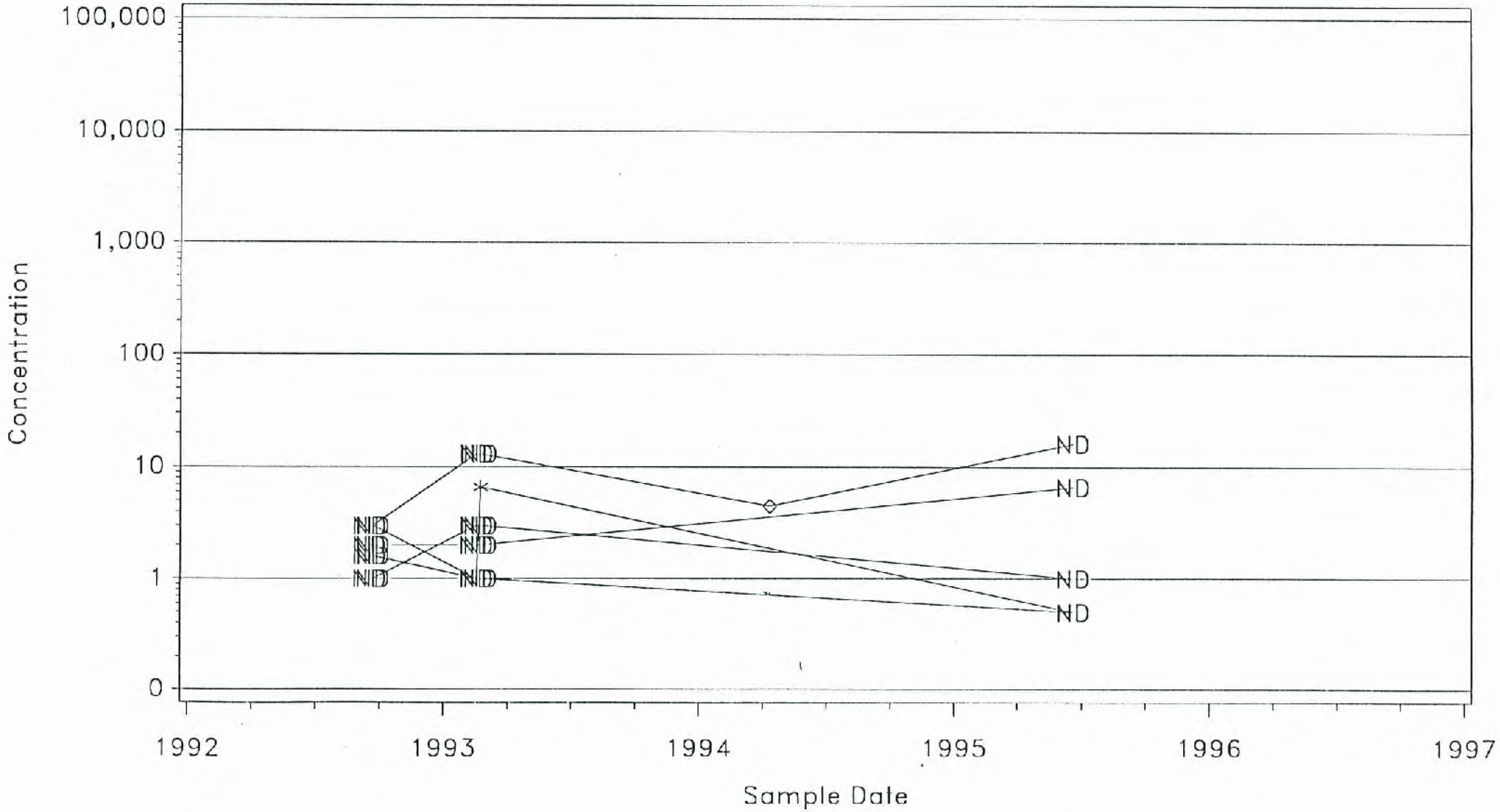
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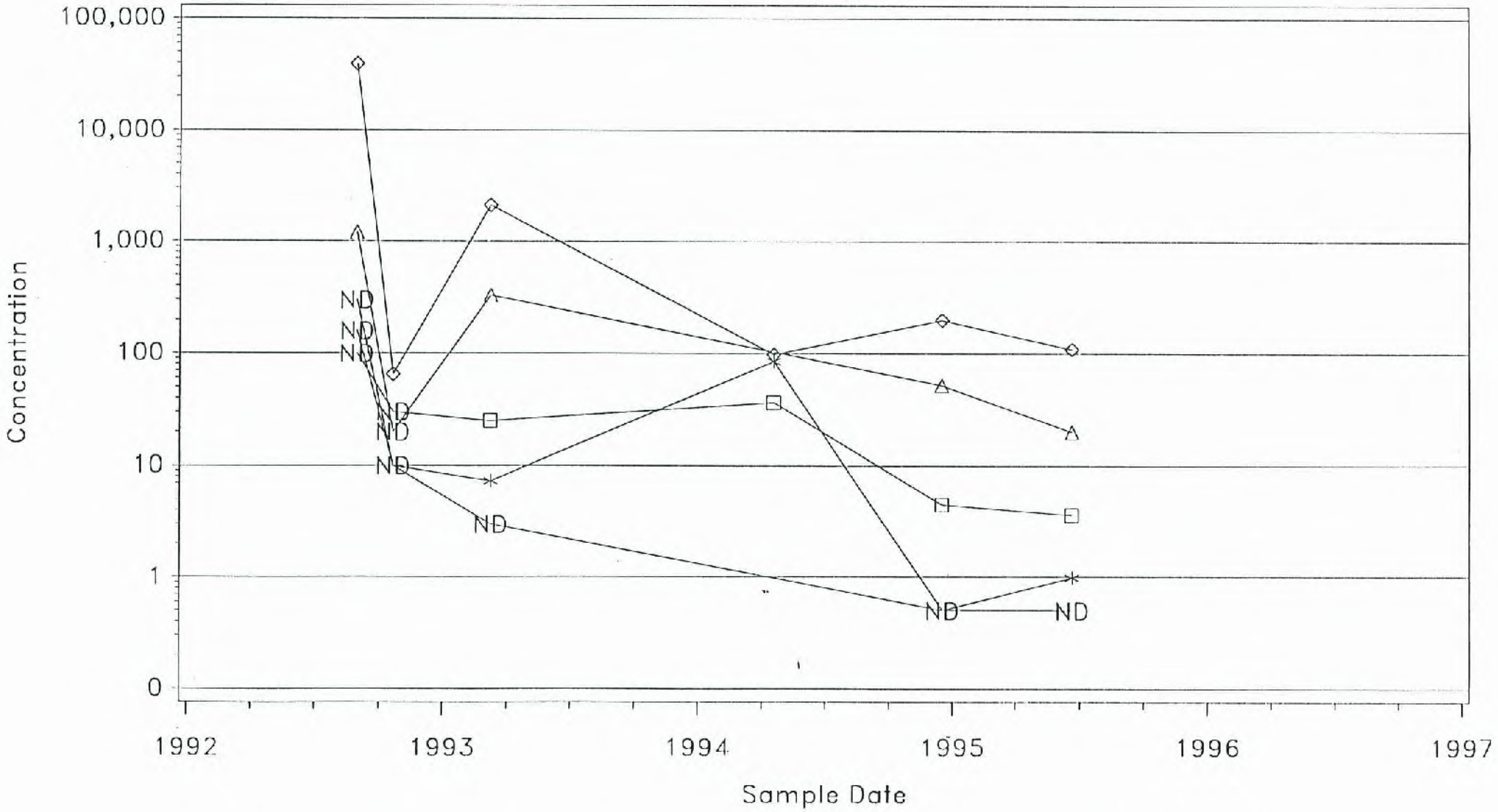
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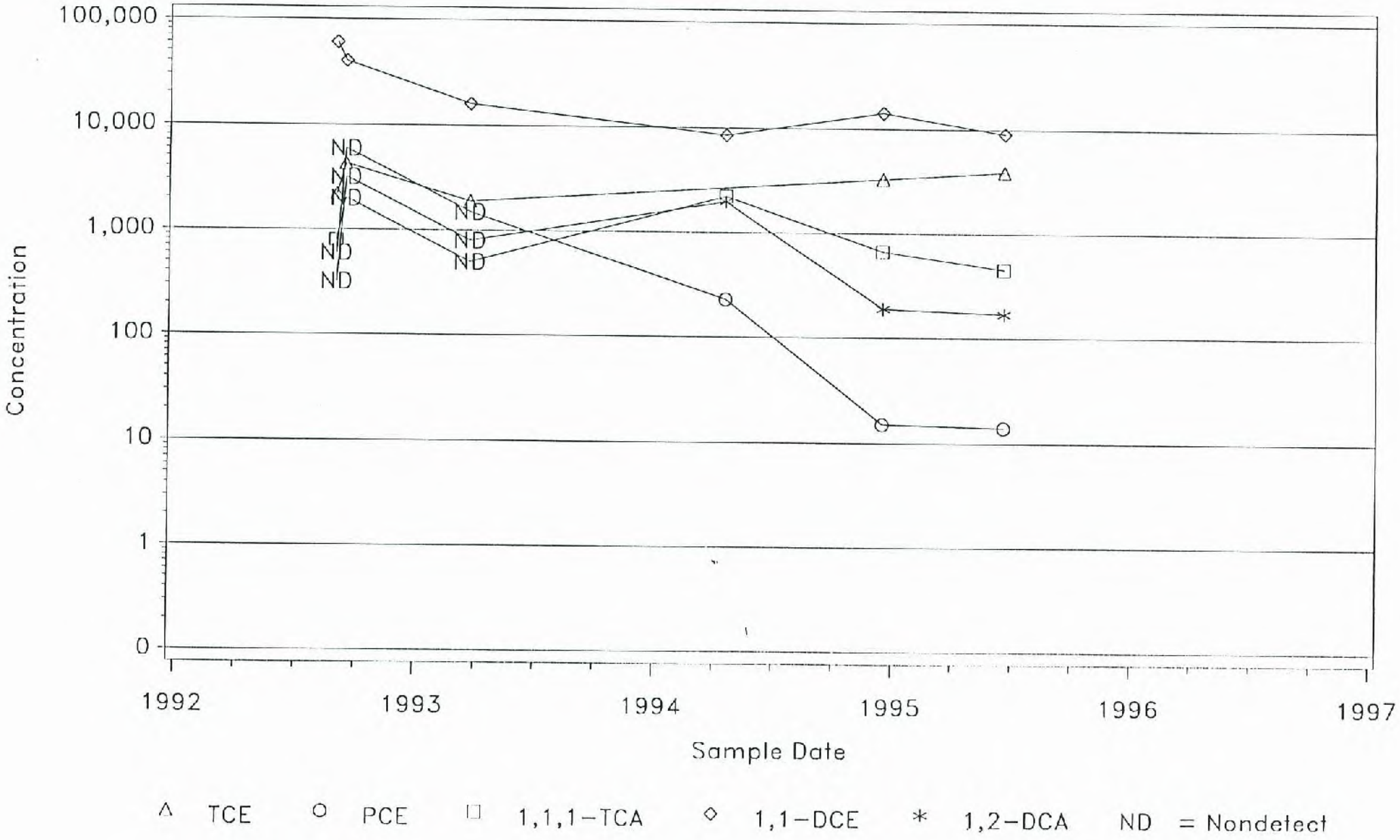
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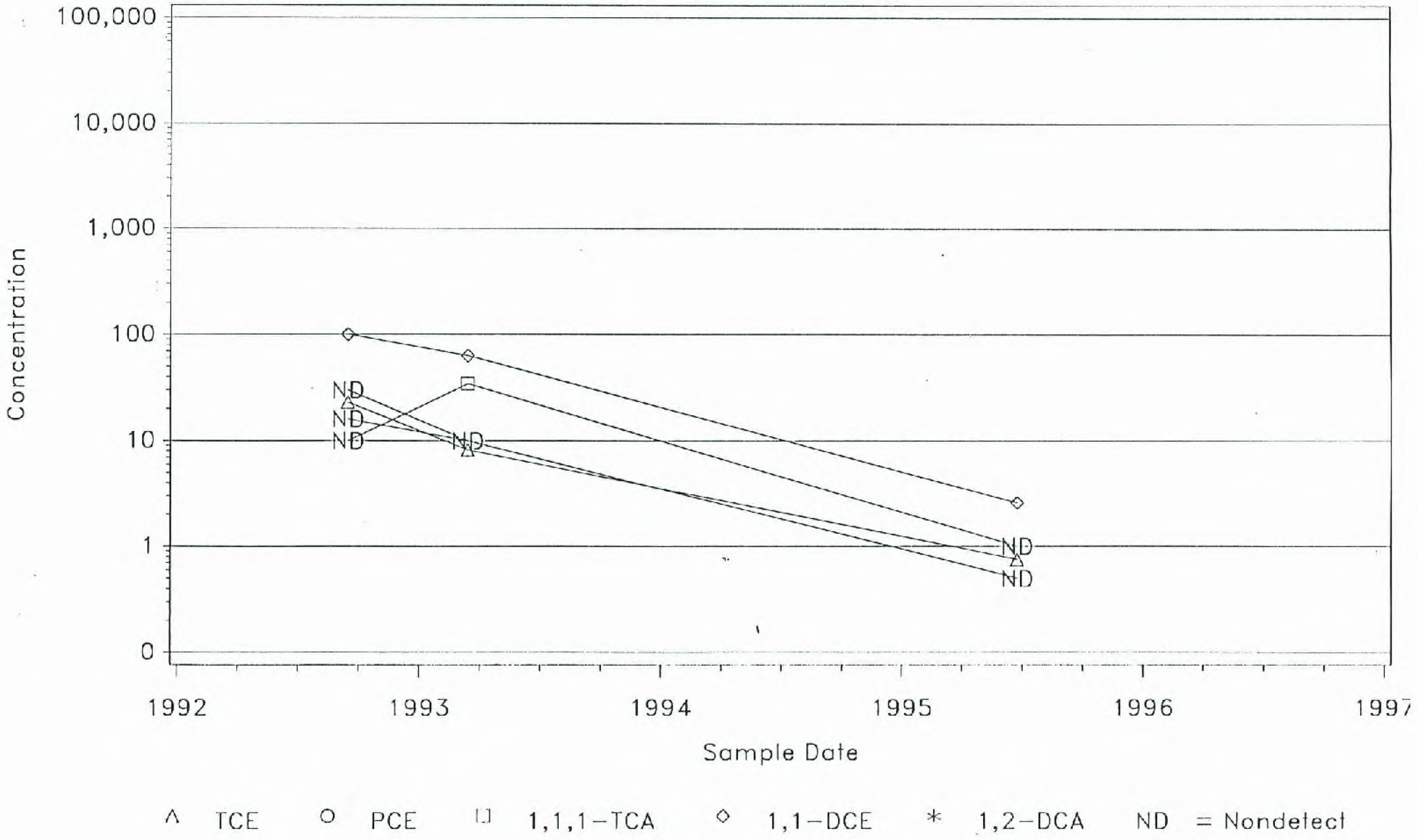
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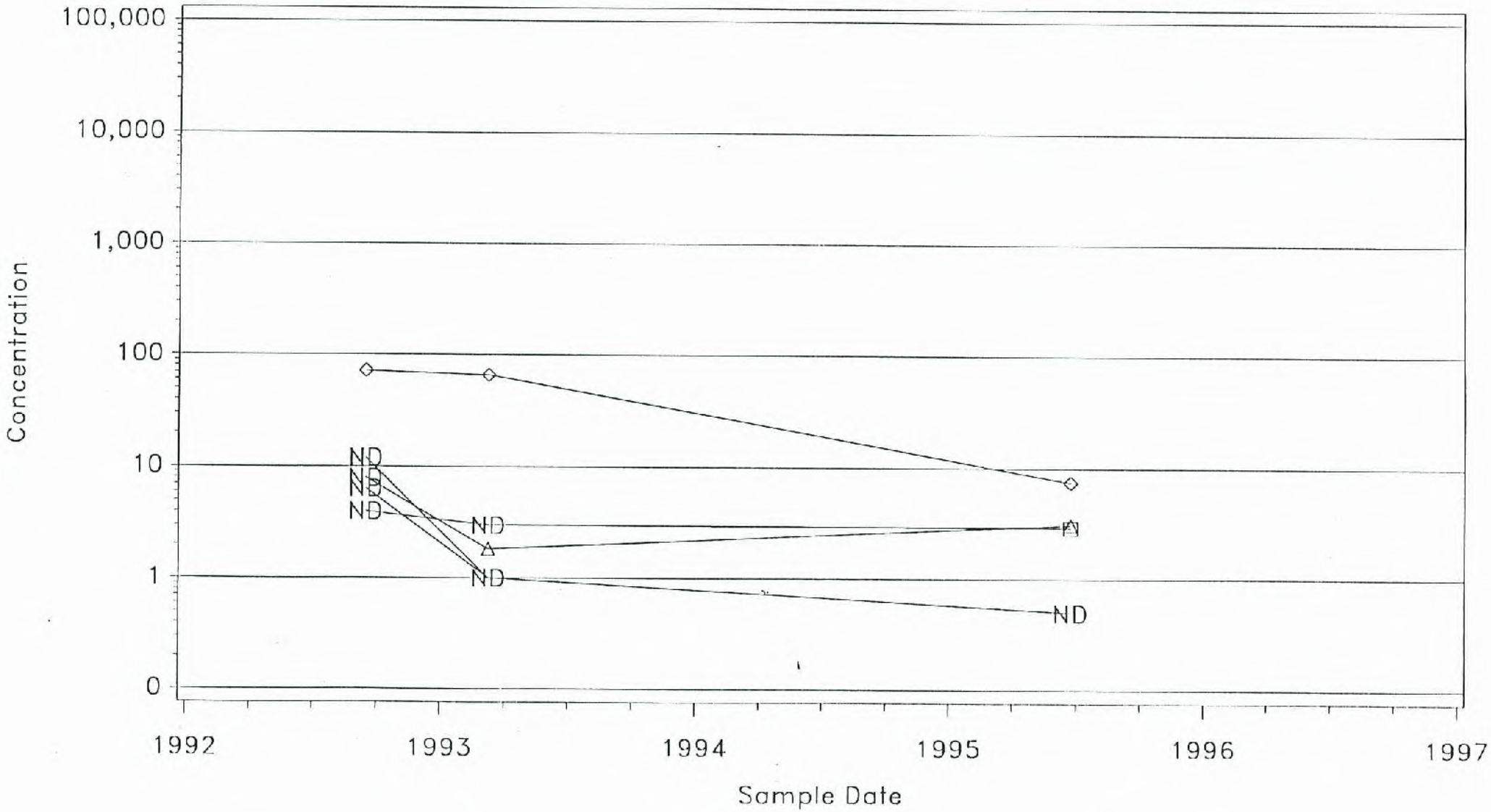
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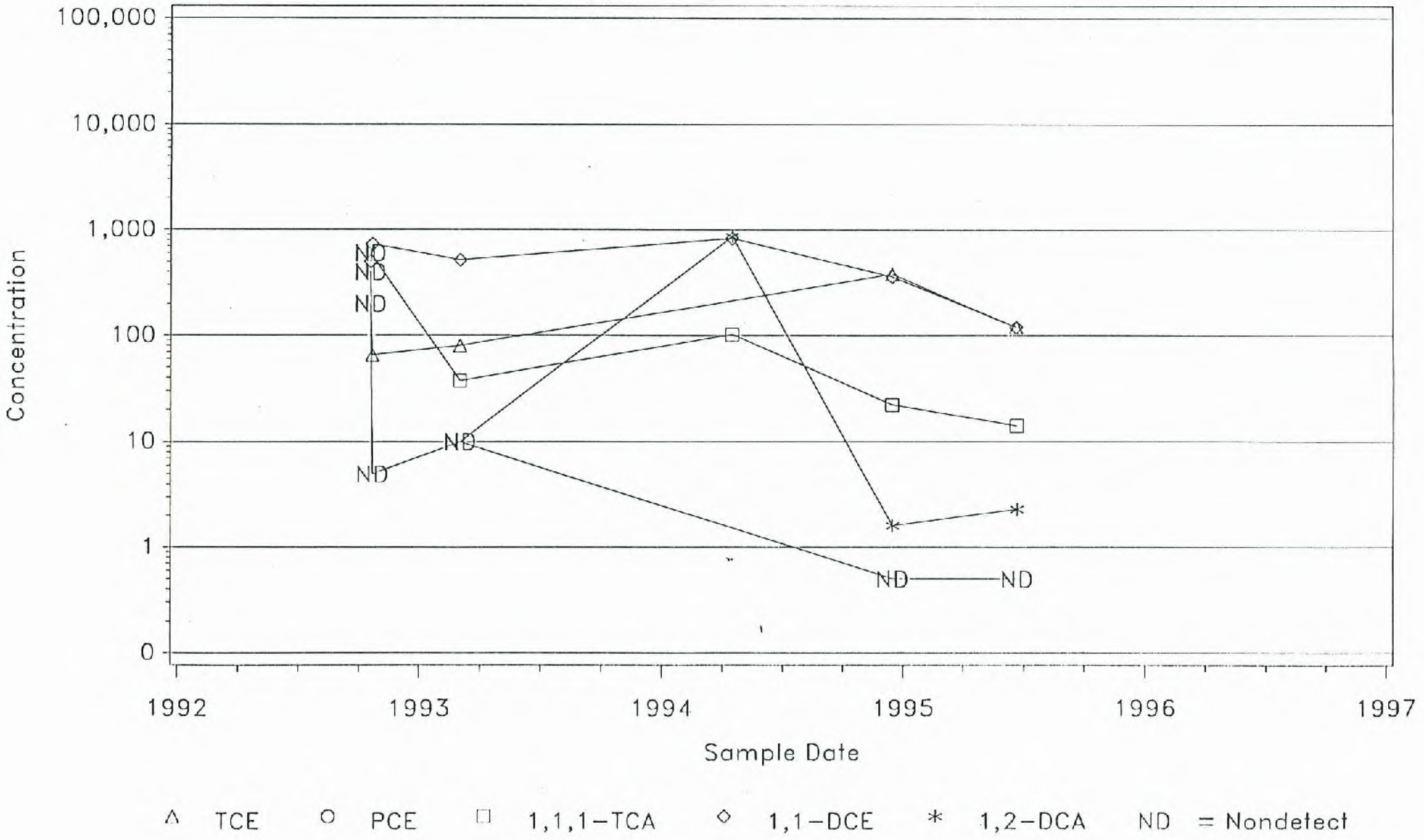


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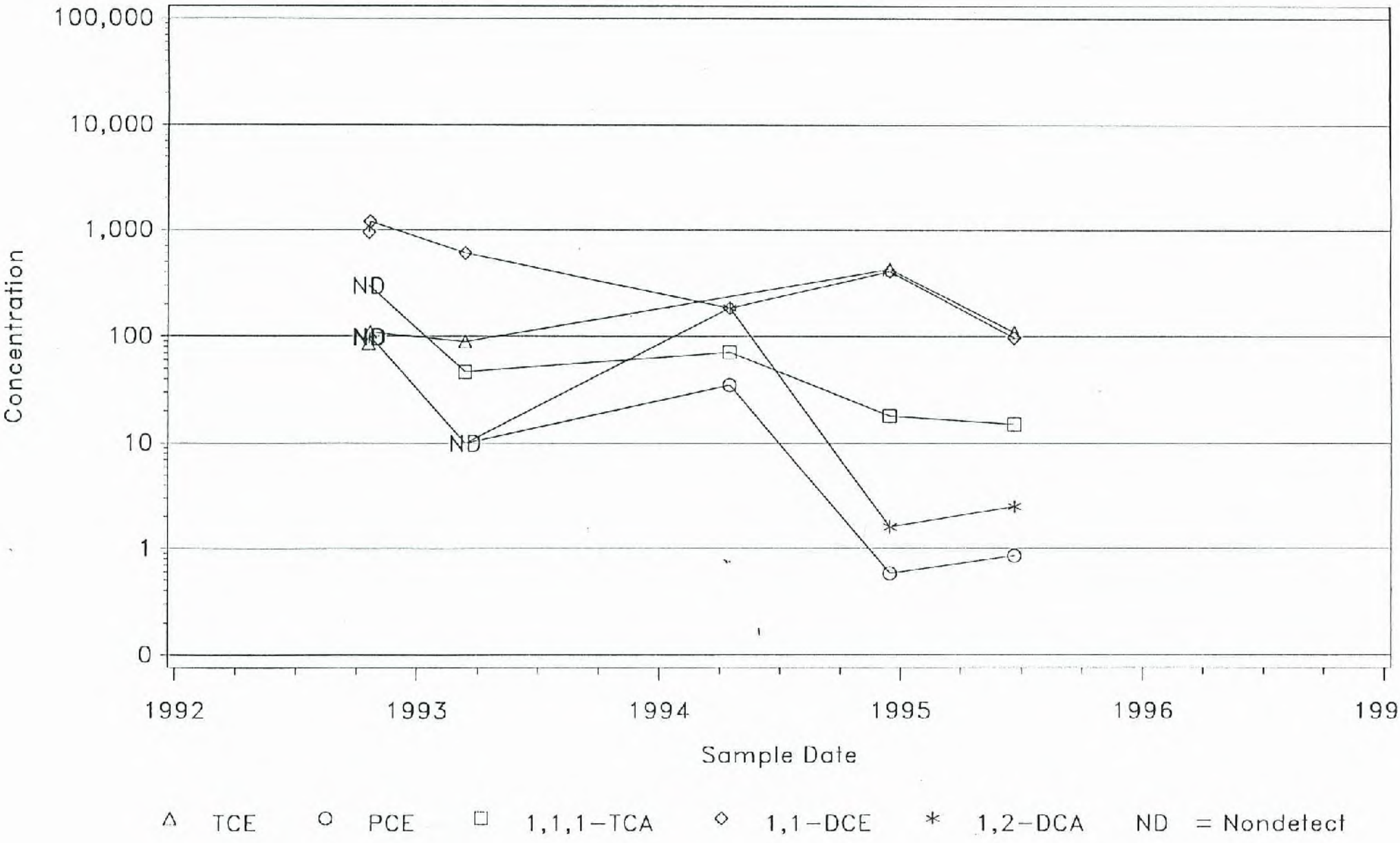


△ TCE ○ PCE □ 1,1,1-TCA ◇ 1,1-DCE * 1,2-DCA ND = Nondetect

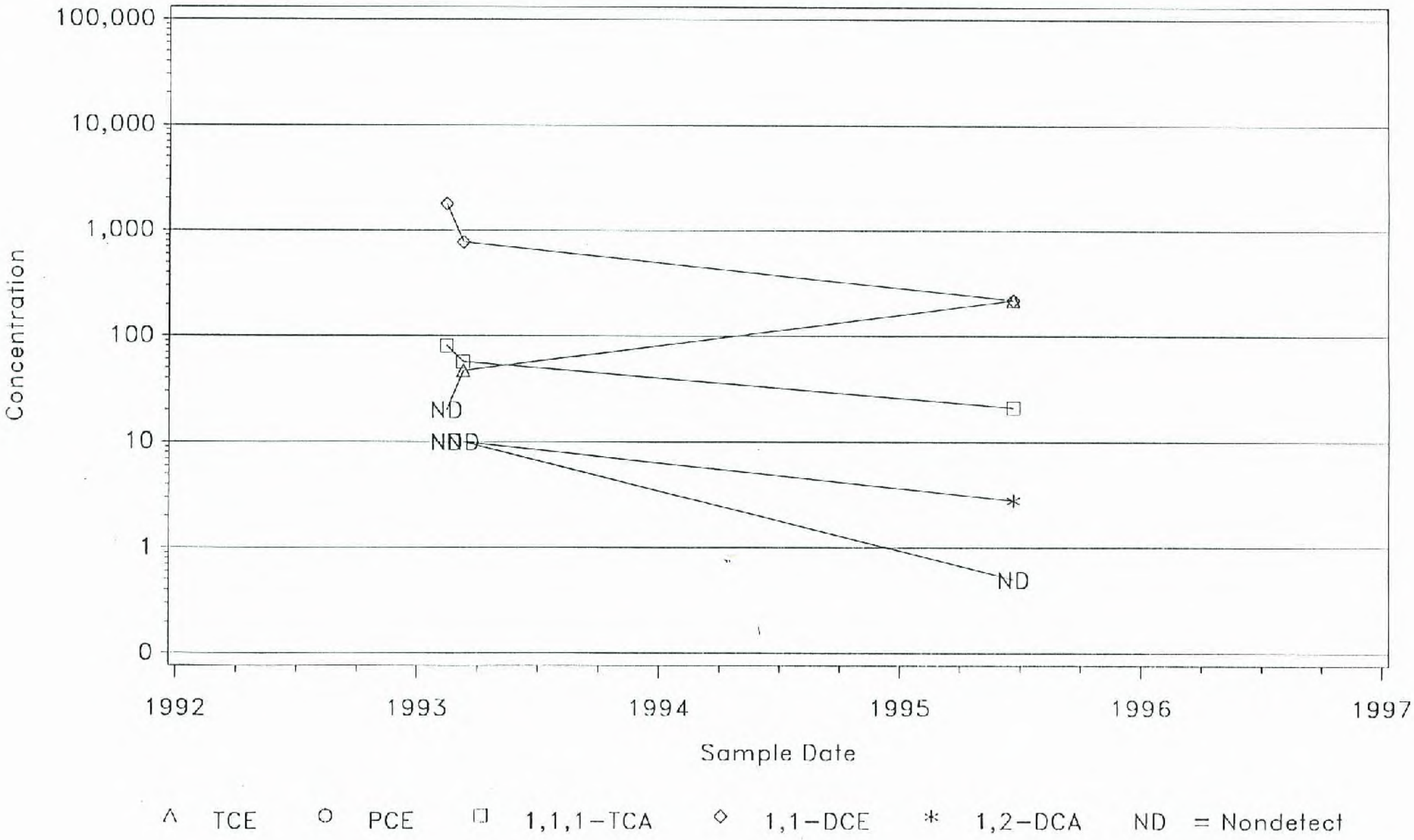
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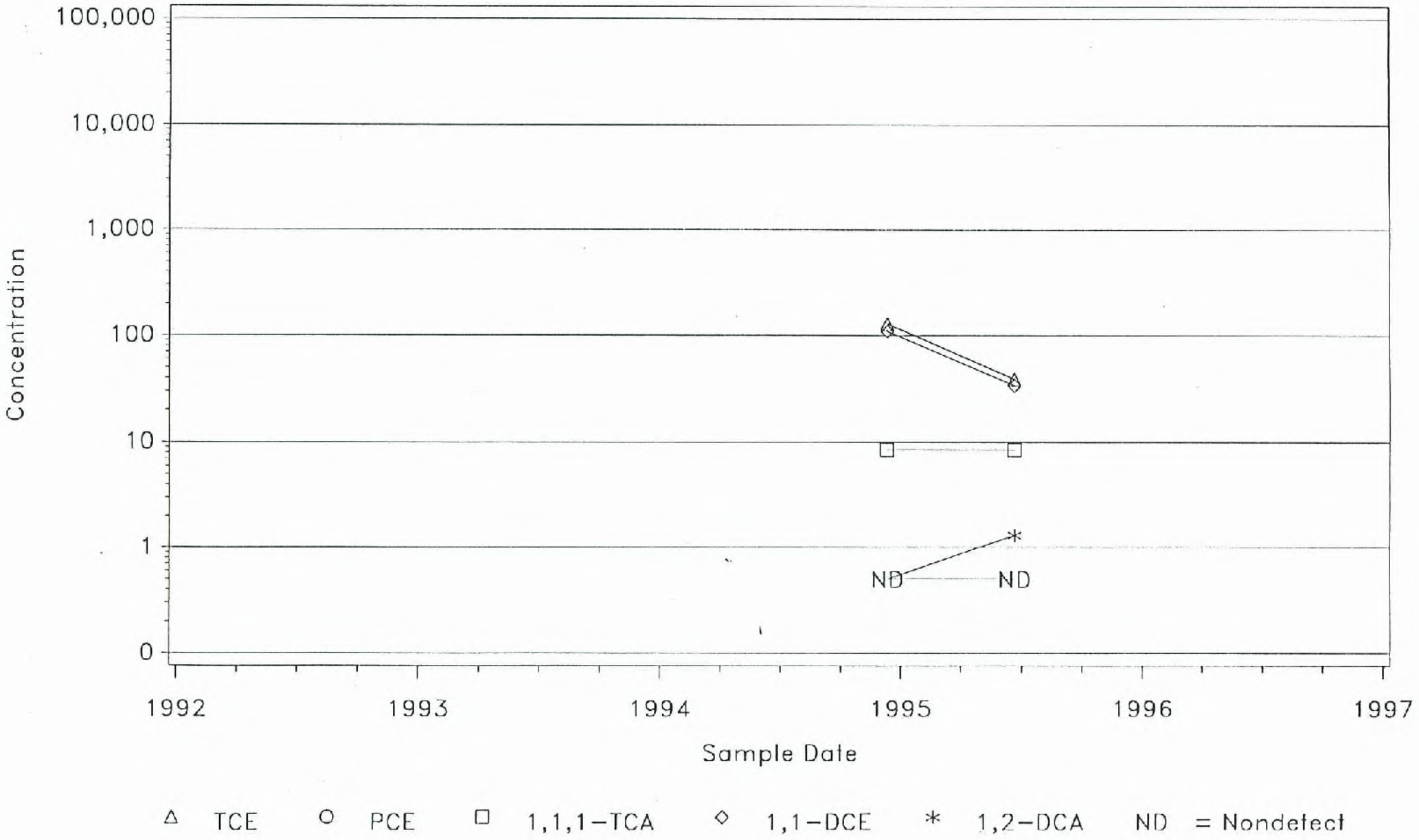
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WATER QUALITY HYDROGRAPH
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APPENDIX D

SAMPLING PROCEDURES

APPENDIX D

STANDARD OPERATING PROCEDURE (SOP)

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STANDARD OPERATING PROCEDURE (SOP)
BEAUMONT No. 1

1.0 GROUNDWATER SAMPLE COLLECTION

1.1 GENERAL STATEMENT

Representative groundwater samples will be collected for chemical analysis. Although the groundwater sampling program for this site is not currently regulated, the sampling protocol is based upon the recommendations found in "Representative Sampling of Groundwater for Hazardous Substances, Interim Final" (CalEPA, 1994). Samples will be analyzed for VOCs according to EPA Method 8010 and EPA Method 8020. The water quality parameters temperature, pH, and specific electrical conductivity (EC) will also be measured while attempting to purge a minimum of three (3) well volumes. Stabilized parameters measured during purging operations prior to sampling will be used to indicate that freshly drawn water which is representative of the aquifer is being sampled. Water quality parameters will be measured using the procedures detailed in the water quality parameter measurement SOP (Section 2.0). Cascading of water will be avoided in low-yielding wells. If a well goes dry during pumping, the water sample may be collected as soon as a sufficient volume of groundwater has entered the well to enable the collection of the necessary samples. Results of groundwater sample laboratory analyses will be used to determine the chemical characteristics of the groundwater and to further delineate the extent of the hydrocarbon plumes.

1.2 OBJECTIVE

In general, data resulting from the collection and analysis of groundwater samples will be used to monitor the distribution of chemical compounds and/or constituents in the hydrogeologic units of study. In addition, groundwater samples may be collected to satisfy the following objectives:

- Track chemical compound concentrations and/or define source areas.
- Monitor a specific hydrogeologic unit independent of other units.
- Establish baseline information for each well.
- Monitor the effects of containment/reclamation wellfield operations during remedial activities.
- Confirm or refute anomalous analytical results from a previous sampling event.
- Monitor the general groundwater chemistry in the area.

1.3 EQUIPMENT AND/OR INSTRUMENTATION

Sample containers required for collection of water samples for chemical analysis are specified in Table B-1. Information on water quality parameter measurement instrumentation is specified in Section 2.0 Basic purging and sampling equipment will consist of a submersible pump, water level meter, hoses, water quality parameter kit, disposable sampling bailers, and tanks to capture and transport purge water for treatment. Some wells will be purged and sampled using a smeel rig crew. Most samples will be collected from the discharge of the submersible pump, through a stream spitter. In low-yield wells that have been purged nearly dry and which recharge at a very slow rate, a disposable Teflon bailor may be used to collect the groundwater samples.

1.4 PREPARATION

Prior to commencing the bi-annual sampling event for a project, the following information will be determined:

- daily sampling schedule;
- analyte list for each well;
- number of sample containers needed per well and in total;
- QC wells for 10% of each analyte group (duplicates, equipment blanks, MS/MSDs for VOAs, etc.);
- QC wells for each day of sampling (field blanks).

The following procedures will be used during preparation for groundwater sample collection:

- Review project objectives, sample location, sampling procedures, preservation, special handling requirements, packaging, shipping, analytical parameters (equipment calibration, operation, and data recording) and detection limits, and sampling schedule with personnel.
- Review health and safety procedures and attend the daily tailgate meeting.
- Inform laboratory of expected number of samples and sample shipment schedules.
- Obtain laboratory-cleaned sample vials.
- Obtain from the laboratory containers of organic-free water for preparation of field blanks.
- Obtain from the laboratory enough trip blank water vials containing organic-free water for each ice chest containing samples to be analyzed for VOCs. The purpose of the blank is to identify potential contamination associated with container preparation and sample transport.

1.5 SAMPLE CONTAINERS, PRESERVATION AND TRANSMITTAL

The laboratory prepares the 40-ml glass vials and septa used for collecting samples for VOC analysis. The vials are washed with detergent, rinsed with organic-free water, and dried for one hour at 105°C. Vials to be used for EPA Method 8010/8020 will be preserved with 1:1

hydrochloric acid. These vials will not be rinsed with sample water prior to collection of samples.

1.6 PROCEDURES

The following procedures will be used for collection of groundwater samples from monitoring wills by a 2-inch GROUNFOS submersible pump:

- Decontaminate the outside of the submersible pump and hoses according to Section 1.7.
- Whenever possible, position the truck and water tank such that the generator for the submersible pump is down-wind of the wellhead or vault.
- After opening the wellhead, check for volatile contaminants in the background air and in the wellhead with an OVA (HNu, PhotoVac, or equivalent device). If an elevated reading (with respect to the background) is obtained in the wellhead, step back and allow the vapors to dissipate. Leather work gloves should be worn to prevent cuts and scratches. Visually inspect the wellhead for spider webs, as black widow spiders may nest in the wellheads and vaults.
- Set up the table and chair, and arrange the flow meter and parameters kit in a safe manner around the open wellhead.
- Measure depth to water in the well to be sampled (Section 3.0). Before placing the probe in the well, make sure that the sounder is functional by turning the knob on the side and pressing the test button. Record the STATIC DTW (Depth To Water) on the top of the field data sheet.
- Calibrate the YSI 3500 water quality parameters instrument at the beginning of each day or if the instrument has been turn-off (Section 2.0). If the instrument has not been turned off, use the pH standard solution and take a reading. Record the measurement in the pH Calibration Log. Wet the rubber O-rings in the flow cell and insert the probes into their respective openings in the flow cell.
- Decontaminate the internal area of the pump and hoses and collect three (3) equipment blank VOA's according to Section 1.7.
- Carefully drop the submersible pump and hose into the well until it reaches the bottom of the well, then raise the pump approximately 5 feet and secure the reel mount.
- Connect the hoses between the pump and flow meter inlet (female end to pump, male to meter), and the flow meter outlet (female fitting) and purge tank. Connect the five foot clear PVC hose from the flow meter pipe the EC probe in the flow cell, and the 20 foot PVC hose from the flow cell center to the purge tank.
- Connect the electrical extension cord to the generator and the control box inside the back of the van. Check that the 115V/220V switch on the front of the generator is properly selected.

- Check to see that the generator has enough gasoline to complete the well purging and sampling and that the gasoline floe valve is open. Wear plastic gloves and safety glasses while handling gasoline.
- Fill in the following data on the field data sheet:

-- From the well construction table in the back of the field sampling notebook,

TD of casing

Screen interval

Purge pump hp and volts (all pump are 30 amps).

Fill in the date, page number, weather conditions, air monitoring readings for all but the discharge water, and complete the health and safety information.

Record the initial flowmeter reading in the first box under "Totalizer Flowmeter Reading". Also fill in the time that the pump will be turned on.

In the lower left hand corner, fill in the analytical parameters for which the well will be sampled (consult the analyte list in the front of the sampling book), the container type and preservative contained within (if applicable).

Calculate one and three well volumes (for a 2" well) as follows:

(TD OF CASING) - (STATIC DTW) = FT WATER [This distance is referred to as the water column],

(FT WATER) X 1.02 = GAL/1 CASING VOL (for 2" wells; use the Radian well volume table for larger casings),

(GAL/1 CASING VOL) X 3 = GAL/3 CASING VOL [This is the minimum volume to be pumped before sampling]

(GAS/3 CASING VOL) + (INITIAL FLOWMETER READING) = FLOWMETER TARGET.

If the well casing is larger than 2", use the Radian well volume chart in the Fieldbook ti determine the purge volume.

- Make sure that no plastic or flammable materials are near the generator exhaust. Start the generator. Then start the pump when the time is at 00 seconds.
- Adjust flow through the flow cell to about 1.5 gallons per minute. There should be bubbles suspended in the flow stream indicating flow. Check the outflow tube to gauge the flow rate if necessary.
- At the beginning of the purge, record the parameters from the YSI 3500, the time (at 00 seconds) and the flowmeter reading every one or two minutes until the flow the discharge rate (Q) stabilizes. If the purge and sample is done from the smeel rig, use a Hydac meter to measure groundwater parameters.
- Calculate the current volume and discharge as follows:

(CURRENT FLOWMETER)-(FIRST FLOWMETER) = GALLONS PURGED

(GALLONS PURGED)/(GAL/1CASING VOLUME) = CASING VOLUMES PURGED

[(CURRENT FLOWMETER)-(PREVIOUS FLOWMETER)]/ELAPSED TIME FROM PREVIOUS RECORDING = Q

- Purge with the submersible pump and attempt to purge at least three purge volumes have been removed. While pumping take frequent water level measurements to determine if the well is low-yielding. Also consult the pumping data from the December, 1994 sampling round to see if that well was previously pumped and to estimate the recharge rate. If the recharge rate is indicated to be slow, adjust the pumping rate accordingly. Consult the well construction data to see what the screened interval for the particular well is and use this to determine if pumping should be stopped. Avoid pumping any well completely dry because cascading of recharge water should be averted. If the recharge rate is good, ensure that the measured field parameters pH, EC, and temperature have stabilized (section 2.0), and that the flowmeter target has been attained.
- Follow the same procedure if using a smeel rig.
- During purging, the second team member should do the following preparation for sampling:

  Fill in the Chain-of-Custody record.
  Fill in custody seals (signature and date).
  Fill in the sample label.
  Take periodic water depth sounding at the request of the person recording parameters.
- If a field blank is to be collected for the well, prepare three field blank water vials of laboratory-approved organic-free water for analyses. Prepare the blanks approximately 10 minutes before the regular samples are to be collected and be sure to record the sample time as earlier than the regular sample. Identify the sample as a field blank. The field blank preparation will be alternated each day between each team.
- Reduce the submersible pump discharge to a gentle flow prior to collecting samples for VOC analysis, if applicable. Collect VOC water samples in appropriate sample containers from the discharge at the wellhead.
- If the well goes dry, allow the well to recharge until enough groundwater is present to collect the sample. If you cannot sample after one hour go collect the sample within one day with a disposable Teflon bailer and reel.
- Record the sampling time on the field data sheet and on all sample labels.
- Collect headspace-free water samples for EPA Method 8010/8020 analyses in pre-acidified 40-milliliter (ml) glass sample vials preserved with hydrochloric acid. Do not rinse the glass vials with discharge water prior to sample collection. To avoid aeration, hold the glass vial at an angle so the stream of water flows down the side. Fill the vial until it forms a positive meniscus to eliminate any air bubbles and replace the teflon-lined cap. Turn the vial upside down and tap it to check for air bubbles. If there is any headspace, discard the original vial and use a new pre-acidified vial. Repeat this procedure until a sample without headspace is obtained. Make a note in the field data sheet that effervescence in the water was observed.

- Collect three VOA's for each VOC analysis for each well sampled. Wrap the vials in bubble wrap, then place samples in a ziplock bag and immediately store on ice chest.
- If the well is a QC well, collect field duplicate samples and MS/MSD samples by filling routine and QC sample containers for a given analyte at the same time, filling

the same number of sample containers for the QC samples as the routine samples. Label duplicate and MS/MSD samples for the same analyses as the original samples. Send duplicate samples and MS/MSD samples along with the original samples to the primary laboratory. The locations for duplicate and MS/MSD sample collection will be determined prior to the sampling event.

- Seal the samples with custody seals and label.
- Upon completion of sampling, shut down pump by turning off the power switch on the face of the generator. Wait until the minute hand reaches " 0" before turning off the pump and generator.
- Record the time the pump was shut off (at 00 seconds), the final flowmeter reading, and calculate the final purge volume and average pump rate.
- Fill in the Field Blank and Duplicate Sample Logs. Complete the Groundwater Tracking Log when unloading purge water at the groundwater stripper treatment unit. These logs are located in field notebook.
- Record chain-of-custody documentation at each sample location prior to sampling at the next well. On the line for the equipment blank, mark "Hold" in the Comment section.
- Immediately after each groundwater sample is collected, either bring the sample to the refrigerator in the trailer for storage or call the field coordinator to pick it up. Three trip blank VOA's will be placed in the refrigerator along with the first groundwater sample. Samples will be stored in the onsite refrigerator for up to four days until they are shipped to the laboratory. This procedure will be repeated at the start of the fifth day of sampling.
- When the samples are prepared for shipping include the three trip blank VOA's that were placed in the refrigerator at the start of the sampling round along with the groundwater and QC samples in the sample container during packing.
- Prepare letters of transmittal and finalize chain-of-custody documentation.
- Place bubble wrap in the coolers to fill excess space and to ensure that samples are secure. Place the Transmittal Letter and the top two (retain the bottom gold copy for the field manager) copies of the chain-of-custody form in a one gallon plastic zip-lock bag and tape to inside of the lid. Close the cooler lid and place two custody seals either side of the locking mechanism across the cooler seal. Tape the cooler closed with strapping tape over the custody seals and around the cooler three times. Fill out a sample shipment form, and transport coolers to the shipping facility.

1.7 EQUIPMENT DECONTAMINATION AND DISPOSAL PROCEDURES

Teams 1 and 2. Prior to purging each well, the submersible pump and hoses must be decontaminated. Drive the van with the submersible pump and hoses to the catox unit. Turn on the system and use the HOTSI sprayer to wash the pump, frame, and hose. Unwind the pump and as much hose as went down the previous well before spraying. Scrub the pump and the frame. Use a screwdriver to remove the screw-like fixture at the end of the pump and wash the inside of the pump. Be very careful not to lose the fixture. You may refill the tap water bottle with treated water from the system. Then be sure to turn of the system.

Set up for sampling at the next well, then decontaminate the inside of the system as follows. Place the 3-piece PVC decon unit beside the pump and frame. Fill the tube marked "Soap and water" with alconox and tap water and flush 5 gallons of the solution through the pump and hose system and into the purge tank, followed by 5 gallons of tap water in the appropriate PVC tube and then by 5 gallons of distilled water. Before the distilled water is spent collect the equipment blank sample.

Team 3 (Smeel Rig). The decontamination procedure for the smeel rig crew is slightly different. Upon removal of the pump from each well, the pump and wire are rinsed with a steam cleaner. The pump is then lowered into a barrel of trisodium phosphate (TSP) and water. The pump is turned on and the solution allowed to recirculate for 1 to 2 minutes. Then the pump will be washed in a container of tap water. The pump is then removed and steamed again to remove any additional residue. Then a 5-gallon PVC container is filled with distilled water, the pump is lowered into the container, and an equipment blank is collected from the effluent.

Groundwater discharged during well evacuation and water sample collection will be contained and transported to the water treatment system. The water will be treated by the stripper system and reinjected into the ground.

All sampling and purging equipment is to be decontaminated at the end of the sampling round prior to use at another site.

1.8 DOCUMENTATION

A record of sample identification numbers will be maintained on standardized field data form. Additional field data include a record of significant events, observations, and measurements during sampling, such as personnel present, site condition, sampling procedures, measurement procedures and calibration records.

All entries of field data will be signed, dated, and kept as a permanent record. Erroneous entries will be corrected by crossing a line through the error and entering the correct information. Correction will be initialed by the person making the re-entry.

Sample identification documents will be prepared so that sample identification and chain-of-custody are maintained and sample disposition controlled. The sample identification documents to be used are:

- Sample identification label;
- Chain-of-custody records.

Sample documentation forms and labels will be completed with water-proof ink. The sample documentation forms accompany the samples to the laboratory. Copies of the sample documentation forms will be retained by the samplers and given to the field coordinator and then sent directly to the Lockheed QA manager for the project.

Pre-printed adhesive sample labels will be secured to the sample containers by field personnel. The following information will be recorded on the sample label:

- sample location/identifier;
- date and time sample was collected;
- analyses to be performed;
- preservation instructions;
- sampler's initials;
- any special instructions to laboratory personnel.

Official custody of samples will be maintained and documented from the time of sample collection until the validation of analytical results. The chain-of-custody record is the document that records the transfer of sample custody. The chain-of-custody record also serves to cross-reference the sample identifier assigned by the Lockheed QA Manager for the project with the sample identifier assigned by the laboratory. The chain-of-custody record includes the following information:

- sample location/identifier;
- date and time sample was collected;
- sampling personnel;
- shipping method and date;
- sample description;
- sample volume;
- number of containers;
- sample destination;
- preservative used;
- analyses to be performed;
- any unusual sampling or container conditions;
- special handling and reporting procedures;
- the identity of personnel relinquishing and accepting custody of the samples.

The sampling personnel will be responsible for the samples and will sign the chain-of-custody record to document sample transferral or transport. Samples will be packaged in sealed containers for transport and dispatched to the appropriate laboratory for analysis with a separate transmittal letter and chain-of-custody record accompanying each shipment. The method of transport, courier name(s), and other pertinent information will be entered on the transmittal letter accompanying the samples. During transport, samples will be accompanied by the chain-of-custody record.

Once received at the laboratory, laboratory custody procedures apply. It is the laboratory's responsibility to acknowledge receipt of samples and verify that the containers have not been opened or damaged. It is also the laboratory's responsibility to maintain custody and sample tracking records throughout sample preparation and analysis. A copy of the chain-of-custody record is then sent to the Lockheed QA Manager for the project.

1.9 QUALITY ASSURANCE

QA for groundwater samples collected during routine groundwater monitoring will be accomplished by following the procedure described in previous sections of this SOP and by monitoring laboratory QA procedures. In addition, the following field quality control methods will be implemented during sample collection:

- Collect one field duplicate sample for each analytical group for 10 percent of the samples collected during the sampling event. Analyze duplicate samples for the same analytes as the original samples. Send duplicate samples along with original samples to the primary laboratory. The duplicate sample measures the total system error, consisting of the precision of field sampling, sample preparation error and laboratory analysis techniques.

- Include three trip blank water VOA's containing organic-free water for VOC analyses to accompany the samples during storage in the onsite refrigerator and during shipping. The trip blanks will be prepared by the analytical laboratory using organic-free water. The purpose of the trip blanks to identify possible contamination associated with container preparation and sample transport. Visually check to see that the trip blank has no headspace. If it does, make a note on the chain-of-custody record.

- Include a field blank water bottle containing organic-free water for VOC analyses with each field team on alternating days. Sampling personnel will prepare three field blank VOA's from the field blank water at a sample location using organic-free water obtained from the analytical laboratory. The blanks will be prepared a few minutes prior to collection of the groundwater sample. The purpose of the field blank is to identify possible contamination associated with sample collection and transport.

- During equipment decontamination prior to purging each well, collect three equipment blank VOA's from the distilled water effluent. The purpose of the equipment blank is to identify possible cross contamination from the previous well.

- Prepare co-samples for EPA or other agencies during groundwater sampling, if required, by alternately filling agency and Lockheed sample containers in sequential order for each parameter until all containers are filled.

- Identify duplicates and blank samples according to the examples shown in "Description of the Beaumont QA Program Design" located before this SOP in the Fieldbook.

- Prior to the start of the sampling event, sample locations for field blank preparation, and duplicate sample collection will be determined. Additionally, labeling procedures for all QC samples will be specified. This information will be contained in the sampling memorandum issued to field sampling personnel prior to the start of sampling activates.

- Chain-of-Custody forms and Well Sampling Information forms are to be checked for completeness and correctness of calculations and to confirm stability of observed parameters.

2.0 WATER QUALITY PARAMETER MEASUREMENT

2.1 GENERAL STATEMENT

The water quality parameters EC, pH, and temperature will be measured in groundwater while pumping at least three well volumes at each sampling location. These will generally be measured by a single instrument, the YSI 3500 at most wells. However, at wells purged using the smeel rig, a Hydac meter and sample beaker will be used. All equipment required for calibration and measurement of the water quality parameters, are referred to as the parameters kit.

2.2 OBJECTIVE

Water quality parameters will be measured to indicate the general water chemistry of the groundwater sample. Stabilization of these parameter is indicative of representative water from the aquifer or water source of interest.

2.3 EQUIPMENT AND/OR INSTRUMENTATION

Groundwater parameters will be measured from the submersible pump in a flow-through cell or transfer bottle. The flow-through cell will be equipped with temperature, EC, and pH electrodes. If the YSI 3500 fails to work properly for any of the parameters and one or more hand-held instruments are used, groundwater samples will be placed in a transfer bottle for measurement.

2.4 PROCEDURE

The pH meter will be recalibrated in pH 4 and pH 10 buffer solution before use at the start of each day at the first field location. These two pH values are expected to bracket the range of pH in groundwater samples collected in the study area. The pH 7 standard will be used when calibration each day and prior to purging at each well. The results are recorded on the pH Meter Calibration Log.

The YSI 3500 meter is calibrated as follows:

- Connect both temperature probe to the meter.
- Select pH setting, with shorting cap on terminal;
- Turn the CALIBRATE knob all the way to the left, then all the way to right, then adjust knob to the center of its range. Repeat with the SLOPE knob.
- With the shorting cap still in place, use the CALIBRATE knob to adjust the pH reading to 7.0.
- Remove shorting cap and connect the pH probe.
- Turn selector to pH ATC (Automatic Temperature Compensation);
- Rinse the pH probe and both temperature probes with DI water and gently shake off the excess.
- Immerse pH and temperature probes into the pH 4.0 solution;
- Use the CALIBRATE knob to abject the pH reading to 4.0.
- Rinse probes with distilled water and gently shake off the excess;
- Immerse pH and temperature probes into the pH 10.0 solution;
- Use the SLOPE knob to adjust to 10.0;
- Immerse pH and temperature probes into the pH 7.0 solution;
- Record the time, measurement, and standard used in the Calibration Log;
- Dispose of the used buffer solutions in the yellow HAZARDOUS WASTE trash bag. NEVER RE-USE THE SOLUTIONS at another well.

The YSI 3500 Conductivity meter is calibrated as follows:

- Fill a container (a 250 ml wide-mouth container for nitrate samples work well) with 450 or 1000 millimhos/centimeter electroconductivity (EC) solution;
- Rinse the conductivity and both temperature probes with DI water and gently shake off excess;
- Immerse the gray probe to the middle of the knurled (ridged) section, along with the temperature probes into the container of conductivity fluid;
- The number on the meter is in micromohs/centimeter, so multiply by 1000 and record the conductivity value on the EC Meter Calibration Log;
- Calibrated the conductivity meter prior to the start of the sampling event and after the sampling is complete.

When using hand-held instruments (Hydac):

- Calibrate the pH meter to standard solutions according to the manufacture's specifications;
- Calibrate the conductivity meter to standard solutions according to the manufacturer's specifications;
- Rinse the transfer bottle three times with sample water prior to filling. Fill the transfer bottle with sample water;

- Immediately submerge the probes and thermometer in the transfer bottle and record measurements on groundwater sampling information form after they have stabilized;
- Discard the water sample in the transfer bottle. This water will not be used to fill sample containers;
- After parameters are measured, decontaminate the transfer bottle, thermometer, and probes by rinsing with distilled water.

2.5 EQUIPMENT DECONTAMINATION AND WASTE DISPOSAL

The flow-through cells will be emptied and decontaminated after each use. The transfer bottle and the probes used for measurement of field parameters will be decontaminated before and after each measurement by rinsing with distilled water. In both cases, rinse water will be collected in containers along with discarded water samples. The discharged water will be treated and disposed of at the Lockheed groundwater treatment system.

2.6 DOCUMENTATION

Measurements of EC, pH and temperature will be recorded on the groundwater sampling field data form or aquifer test data forms. The following information will be recorded in the field notebook:

- sample location/identifier;
- date and time sample was collected;
- sampler's initials;
- type of meter, including name and model number.

2.7 QUALITY ASSURANCE

QA of field measurements will be accomplished by following the procedures described in this SOP and by following the manufacturer's operating instructions. Temperature, pH, and EC will be measured during each groundwater sampling event. Prior to measuring field parameters, field personnel will verify that the instruments and properly calibrated. Calibration documentation for each instrument will be maintained for reference purposes. Reference solutions for pH, and EC will be prepared and used to properly calibrate the instrument. The pH meter will be calibrated before each separate use. The conductivity meter will be calibrated at the start of each sampling day.

Water quality parameter measurement data will be compared with previous data and examined for variations. If variations greater than 10 percent exist which cannot be accounted for by changes in field conditions and/or field measurement stabilization, the measurement instrument will be recalibrated and the measurements repeated. If large discrepancies exist from what is expected based on previous measurements, an alternative measuring device such as another thermometer, pH meter, or EC meter will be utilized to verify the data.

3.0 WATER LEVEL MEASUREMENTS

3.1 GENERAL STATEMENT

Water levels will be measured with a calibrated water level sounder. Water levels may be measured as part of groundwater sample collection, monitor well construction, water level monitoring, or aquifer testing and discharge measurement activities.

3.2 OBJECTIVE

Water levels will be measured in monitor wells prior to the start of the sampling round. Resulting data will be used in conjunction with measuring point elevation data to construct water level contour maps for the hydrogeologic units of interest at the Beaumont facility. These maps will be used in the interpretation of groundwater flow conditions in the hydrogeologic units of interest and the vertical gradients between units. The water level contour map will also be used in the interpretation of the distribution and movement of hydrocarbons. The water levels measured at the start of sampling at each well will only be used to calculate the amount of water to be purged, not for contouring.

3.3 EQUIPMENT AND/OR INSTRUMENTATION

The water level sounder used to measure water levels will be equipped with standard two-lead cable and marked in 1/10-foot increments. A standard weighted electrode will be attached to the end of the sounder cable.

3.4 PREPARATION

The water level sounder will be calibrated at least twice annually by comparing water level measurement made with the sounder against a water level measurement made with a steel tape, or by checking the distances between the sounder makings with a steel tape. Steel tapes will be checked for kinks and will have the first 5 to 10 feet chalked before each measurement.

The following procedures will be used during preparation for measuring water levels in wells:

- Identify the wells to be measured.
- Identify established measuring point for each well. The same measuring point must be used for all measurements at a well.
- Review the previous water level measurement for each well.
- Decontaminate the sounder by rinsing the probe with laboratory soap followed by a distilled water or deionized water rinse.

3.5 PROCEDURES

The following procedures will be used for measuring water levels in wells:

- Open the wellhead casing and/or well cap;
- Check for volatile contaminant vapor with an OVA or Microtip. Use appropriate respiratory protection, if necessary.
- Make sure that the sounder is functional, and lower the sounder down the well.
- Sound each well twice for depth to water. The variation between the two measurements must be less than 0.01 foot.
- Measure the distance from the water mark to nearest footage tab on the electric sounder in hundredth of feet.
- Record the depth to water, date, and time of measurement on the water level measurement form. Enter the whole footage value in the proper column, then the fractional footage in the next column, and finally the total column, then the fractional footage in the next column, and finally the total value in the next column. Examine the previous measured water level for the well. If the difference between the current water level measurement and the previous measurement varies by more than 1 foot, recheck the current measurement.
- Remove water level measurement equipment and decontaminate the bottom 5 feet of the sounder probe rinsing with a laboratory soap followed by a distilled water or deionized water rinse.
- Replace the plastic cap, and close the vault.

3.6 EQUIPMENT DECONTAMINATION AND WASTE DISPOSAL

The water level sounder will be decontaminated by rinsing the probe and bottom 5 feet of tape with a laboratory soap followed by a deionized or distilled water rinse.

3.7 DOCUMENTATION

All water level measurement will be recorded on a standard water level measurement form (Table B-14). The reported data will include depth to water in feet below the measuring point, the description of the measuring point, the date and time of the measurement, the calculated water level elevation, the method of the measurement and field personnel's initials. Water level measurements will be reported to the nearest 0.01 foot.

For water levels measurements during aquifer testing operations, depth to water and time measured will be recorded on aquifer test data forms.

Calibration of the sounders will be documented as outlined in the manufacturer's instructions.

3.9 QUALITY ASSURANCE

QA of water level measurement data will be accomplished by following the procedures described in this SOP. Calibration information will be entered onto a calibration form kept in a documentation notebook which will be carried with the instrument. In addition, the following QA procedures for water level measurements will be implemented:

- Measure water levels with a calibrated water level sounder or a steel tape. Prior to measuring water levels, verify that the instruments are properly calibrated.
- At each location and/or time interval, make at least two measurements during routine water level measurement activities. Measure water levels until two consecutive measurements are obtained which have a difference of less than 0.01 foot. The experienced field technician will determine which measurement to record. Record the measurement on the water level measurement form. Measure water levels to the nearest 0.01 foot.
- Compare measurement data to previous measurements obtained at the well. If the variation greater than 1.0 foot from the previous measurement exist, remeasure the water level. If variations from previous measurements greater than 1.0 foot exist which cannot be explained by groundwater changes or trends, repeat the measurements. If possible, use an alternative instrument to verify the accuracy of the data. Indicate the method(s) of water level measurement, the sounder or steel tape verification and any rechecked water levels in the comments section on the water level measurement form.