

GW - 114

MONITORING REPORTS

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**QUARTERLY REPORT
AND
ADDITIONAL INVESTIGATION
AND REMEDIATION
DOWELL SCHLUMBERGER INCORPORATED
ARTESIA, NEW MEXICO**

February 27, 1998

Prepared For:

Dowell, a division of Schlumberger
Technology Corporation
300 Schlumberger Drive
Sugar Land, Texas 77478

Prepared By:



611 Skyline Road
Laramie, Wyoming 82070

701 Antler Drive
Suite 233
Casper, WY 82601

1901 Energy Court
Suite 270
Gillette, WY 82718

1849 Terra Avenue
Sheridan, WY 82801

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- A - Lithologic and Well Completion Logs
- B - Laboratory Analytical Reports
- C - Isoconcentration Maps and Plots of Static Water Versus Halocarbon Concentrations

1.0 INTRODUCTION

1.0 INTRODUCTION

This report documents investigation and remediation activities at the Dowell, a division of Schlumberger Technology Corporation facility in Artesia, New Mexico in 1997. Included in the report are ground-water and air quality monitoring for 1997, soil vapor extraction (SVE) system operation and maintenance (O & M) activities, land farm monitoring, and a summary of fieldwork performed. All tables and figures are attached at the back of the document.

2.0 SUMMARY OF FIELDWORK

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Field work conducted by Western Water Consultants, Inc. (WWC) during the 4 quarters of 1997 consisted of ground-water monitoring, operation and maintenance of the SVE systems, and installation of 3 new ground-water monitoring wells, and land farm monitoring. The analytical data for the first three quarters of 1997 are presented in the reports dated March 18, 1997, May 19, 1997, and September 8, 1997.

2.1 Monitoring Well Installation

From March 3-4, 1997, three additional 2-inch diameter ground-water monitoring wells (MW-25, MW-26, and MW-27) were installed at the facility. The monitoring wells were located northeast and east of existing perimeter wells (MW-21, MW-22, and MW-23) to evaluate the downgradient extent of hydrocarbon impacts (Figure 1).

An air rotary drill rig with a 5 1/8-inch diameter drag bit was used to drill the wells. Total depths of the wells were 25 feet below ground surface. To eliminate the potential for cross-contamination between wells, drilling equipment was decontaminated prior to beginning each well borehole.

Drill cuttings were logged by a WWC geologist for sediment type, grain size, color, structure, moisture, and indication of hydrocarbons. A gravel lense encountered in MW-22 was also present when monitoring wells MW-25 and MW-26 were drilled but was absent in MW-27. The lithology was otherwise consistent with other areas of the property. Lithologic and well completion data are illustrated on well logs in Appendix A.

The monitoring wells were developed by purging a minimum of 10 well volumes of water from each well using disposable polyethylene bailers. Purge water was disposed in a stock tank on site. The top of casing elevations for the monitoring wells were surveyed and referenced to a temporary benchmark at the northeast corner of the shop facility (Figure 2). This is the same benchmark used to establish elevation during earlier surveys of the site wells. The temporary benchmark is given the arbitrary elevation of 100.00 feet.

2.2 Field Screening

The presence or absence of hydrocarbons was determined by visual and olfactory inspection of the cuttings and by screening with an Environmental Instruments 580D photoionization detector (PID) during logging. Evidence of hydrocarbon contamination was not observed or detected with the PID during the drilling process.

2.3 Static Water Level

Static water levels were measured 4 times in 1997 from all new and existing monitoring wells with an oil/water interface probe. The latest water level measurements are presented in Table 1 along with historic water level data for comparison. A map of the potentiometric surface generated from the 4th quarter static water level data is depicted on Figure 2. The ground-water flow direction is to the northeast, consistent with earlier determinations of ground-water flow.

In addition to static water level measurements, dissolved oxygen measurements from monitoring well were collected with a Yellowstone Instruments dissolved oxygen meter during the fourth quarter sampling of 1997. These measurements were used to construct a dissolved oxygen map across the facility (Figure 3).

2.4 Ground-water Sampling

Ground-water samples were collected from all new and existing wells during quarterly monitoring events in 1997. Three well volumes of ground-water were purged from each well using dedicated polyethylene bailers prior to sampling. Purge water was placed into two galvanized steel stock tanks located near the wash bay and allowed to evaporate.

Ground-water samples were analyzed for volatile aromatic and chlorinated hydrocarbons by EPA Method 8260. During the fourth quarter monitoring event duplicate samples were collected from MW-13 and MW-25. The analytical results for all monitoring events are summarized in Table 2. Laboratory analytical reports for the fourth quarter are presented in Appendix B. Laboratory analytical reports for the other sampling events have been provided in previous reports.

2.5 Land Farm Monitoring

During 1997, the land farm was tilled and watered 3-4 times a month to aerate the soil and provide adequate moisture. Four composite samples from each quadrant of the land farm were collected and submitted for analysis by modified 8015 for total petroleum hydrocarbons(TPH). Results of the soil sampling are presented on Table 3. As shown on Table 3 the TPH in each of the 4 quadrants was below 100ppm after the October sampling. The NMOCD authorized the removal of the upper 6 inches of treated soil in a letter dated November 24, 1997. Once the upper 6 inches is removed treatment will begin on the remaining soil. Laboratory data sheets are presented in Appendix B.

3.0 RESULTS AND DISCUSSION

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Table 2 shows contaminant levels in most monitoring wells remained in the range of historic concentration variations. Aromatic concentrations increased in monitoring wells MW-3 and MW-12 during the fourth quarter but remain within the historical trends. Plots were constructed for static water levels versus halocarbon concentrations in each monitoring well to show yearly and historical trends. The plots illustrate total halocarbon declines in monitoring wells MW-2, 6, 7, 11, 13, 14, 17D, 17B and 21 for the past year. These plots also show the historical declines in MW-6, 11, 13, 14, and 15.

To illustrate the areal extent of both aromatic and halocarbon contamination, isoconcentration maps were constructed. Low levels are still present in down-gradient perimeter wells. As shown on Figure 3 the depressed dissolved oxygen levels continue to correlate with areas impacted by contaminants. The depressed oxygen levels indicate oxygen is being used by aerobic microbes to biodegrade the aromatic hydrocarbons. This in turn provides a reducing anaerobic environment for the biodegradation of the halocarbons. The isoconcentration maps and plots are presented as Appendix C.

4.0 OPERATION AND MAINTENANCE OF SHOP AND WASH BAY SVE SYSTEMS

4.0 OPERATION AND MAINTENANCE OF SHOP AND WASH BAY SVE SYSTEMS

The Dowell facility in Artesia has 2 SVE systems which have been in operation since January 31, 1994. One system is located at the northeast corner of the truck maintenance shop, the other system is located on the north side of the truck wash bay in the northeast corner of the property (Figure 1).

4.1 Overall Operation

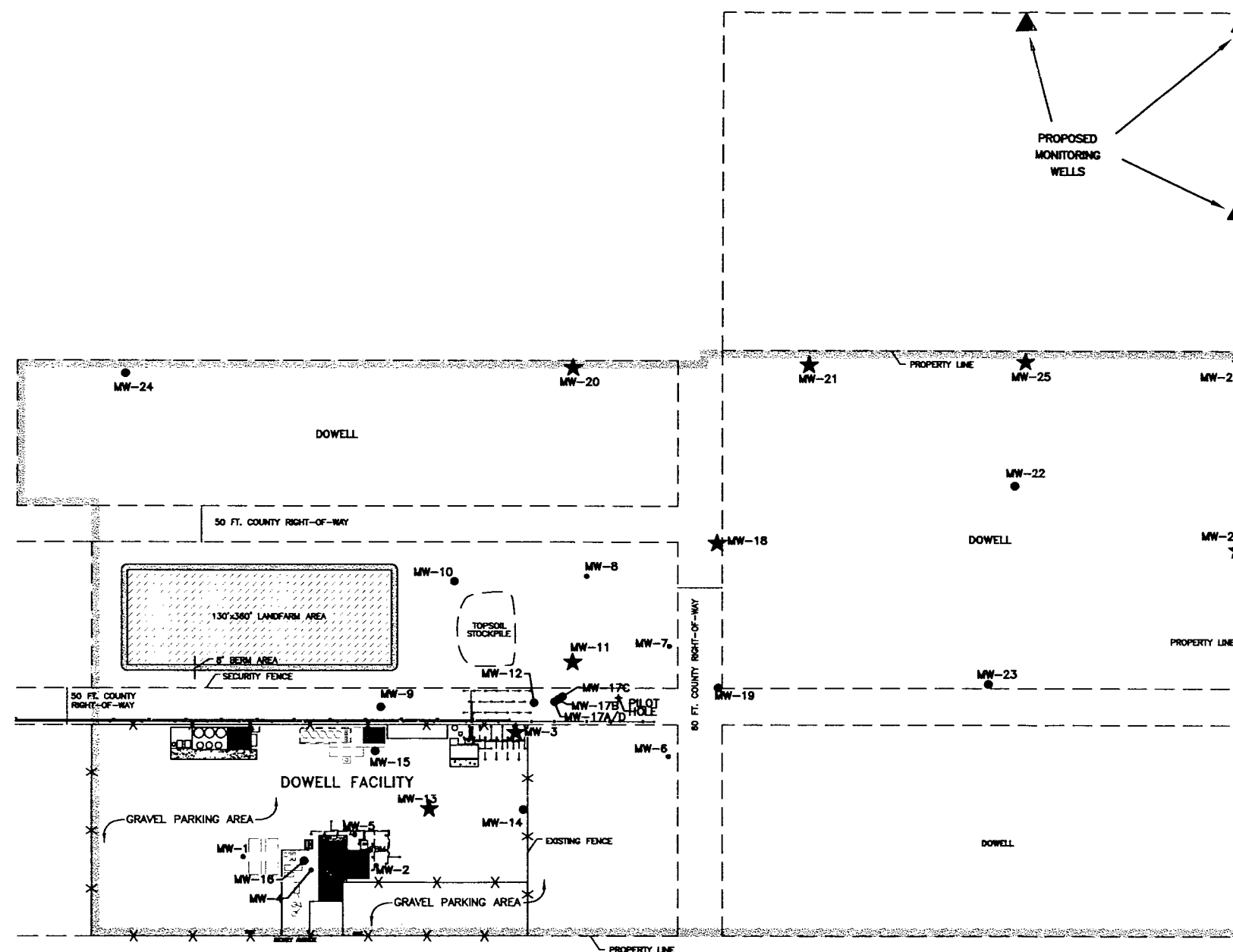
Both the wash bay and the maintenance shop SVE systems have operated almost continuously in 1997 and are checked on a quarterly basis. To monitor system operation, vacuum measurements are collected which are presented in Tables 4 (maintenance shop SVE system), and 5 (wash bay SVE system). The concentrations of volatile organic components in the extracted soil vapor, and in the exhaust vapor, are measured with a PID each quarter. These data are presented in Tables 6 (maintenance shop system) and 7 (wash bay system). Air samples of the vapors are collected quarterly for laboratory analysis using EPA Method 8260. An air sample was not analyzed for the last quarter of 1997 due to transportation problems to the lab. Analytical data for the air samples are summarized in Table 8. Copies of the laboratory analytical reports are presented in Appendix B.

5.0 RECOMMENDATIONS

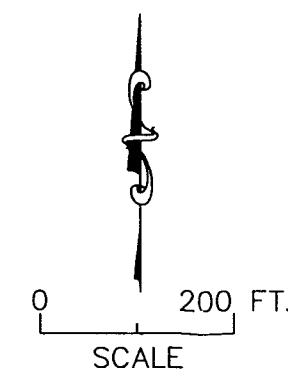
5.0 RECOMMENDATIONS

Because hydrocarbons are present in the ground-water of the perimeter monitoring wells, Dowell is planning to install three additional monitoring wells at the locations shown on Figure 1 as soon as access can be gained to the property. The new monitoring wells would be properly installed and developed with ground-water samples collected and analyzed by EPA Method 8260. Ground-water monitoring will continue to be performed quarterly but only the wells indicated on Figure 1 will be sampled. All of the existing monitoring wells will be sampled during the fourth quarter monitoring event. Static water levels will be collected in all wells every quarter and air quality monitoring will remain the same.

FIGURES



EXPLANATION	
 MW-12	WWC MONITORING WELL LOCATION AND IDENTIFICATION
 MW-6	REED AND ASSOCIATES MONITORING WELL LOCATION AND IDENTIFICATION
★	MONITORING WELLS TO BE SAMPLED QUARTERLY
• TBM	TEMPORARY BENCH MARK
---	AIR PIPING
•	SVE EXTRACTION WELL



BASE MAP MODIFIED FROM REED & ASSOCIATES

FIGURE 1
SITE MAP AND
PROPOSED WELL LOCATIONS

DOWELL, A DIVISION OF
SCHLUMBERGER TECHNOLOGY CORPORATION
ARTESIA, NEW MEXICO

Western
Water
Consultants, Inc.  WWC Engineering
Engineering Environmental Mining Water Resources



- MW-12 85.15 WWC MONITORING WELL LOCATION AND IDENTIFICATION
 GROUND-WATER ELEVATION
 MW-6 83.88 REED AND ASSOCIATES MONITORING WELL
 LOCATION AND IDENTIFICATION
 GROUND-WATER ELEVATION
 TBM TEMPORARY BENCH MARK
 -85.0- POTENTIOMETRIC SURFACE CONTOUR
 AIR PIPING
 SVE EXTRACTION WELL



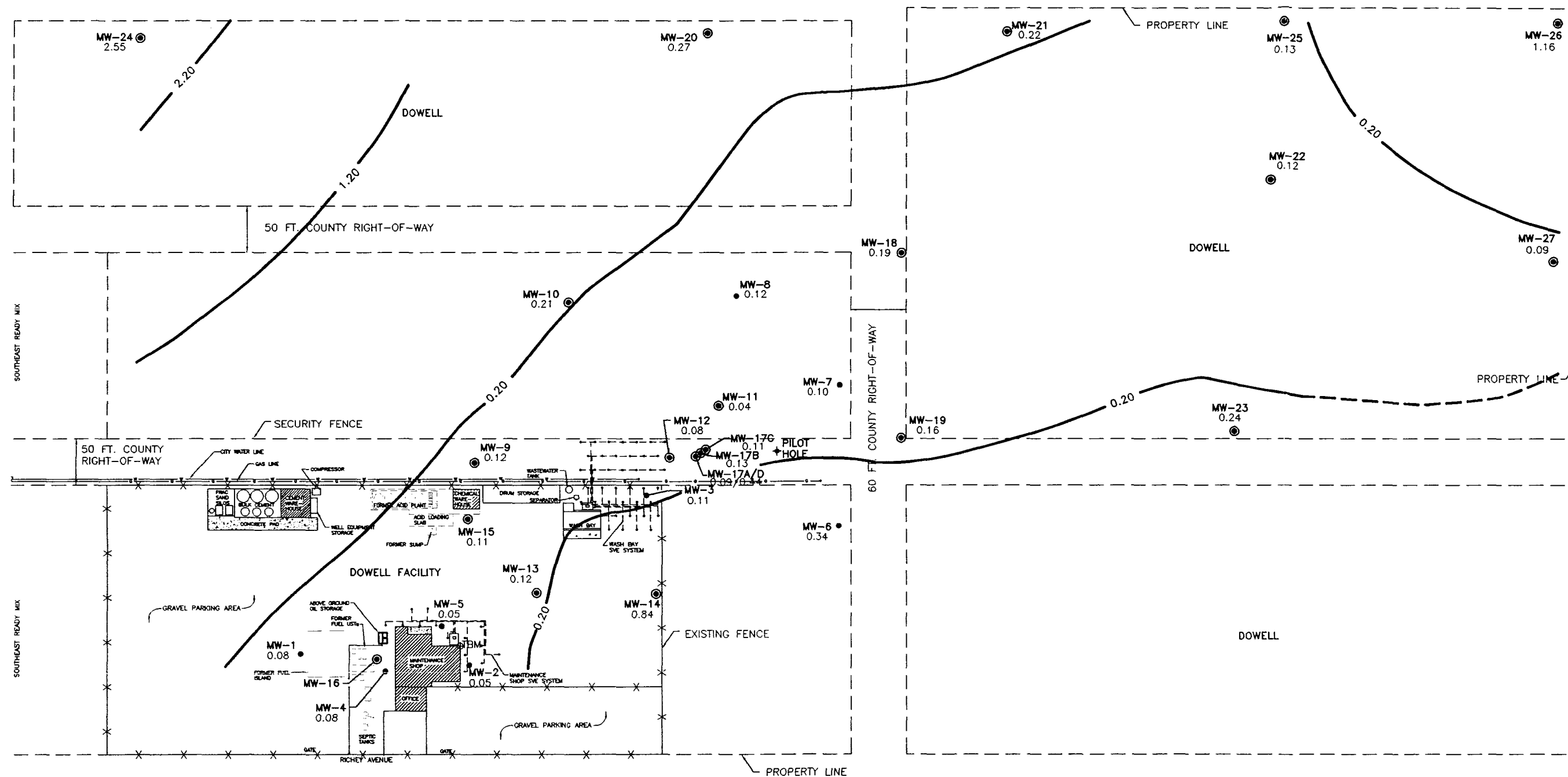
A horizontal scale bar with a vertical tick mark at the left end labeled '0' and another vertical tick mark at the right end labeled '120 FT.'. Below the bar, the word 'SCALE' is written in capital letters.

BASE MAP MODIFIED FROM REED & ASSOCIATES

FIGURE 2
SITE MAP WITH
POTENTIOMETRIC SURFACE
(10/16/97)

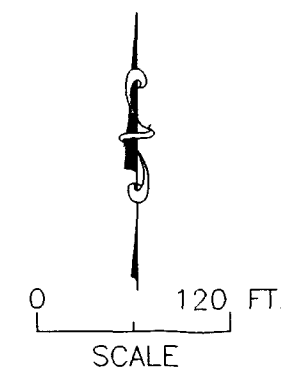
DOWELL, A DIVISION OF
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ARTESIA, NEW MEXICO

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EXPLANATION

- MW-12 0.02 WWC MONITORING WELL LOCATION AND IDENTIFICATION
DISSOLVED OXYGEN CONCENTRATION
- MW-6 0.11 REED AND ASSOCIATES MONITORING WELL
LOCATION AND IDENTIFICATION
DISSOLVED OXYGEN CONCENTRATION
- TBM TEMPORARY BENCH MARK
- 1.20 DISSOLVED OXYGEN CONCENTRATION CONTOUR
- AIR PIPING
- SVE EXTRACTION WELL



BASE MAP MODIFIED FROM REED & ASSOCIATES

FIGURE 3
DISSOLVED OXYGEN MAP
(10/16/97)

DOWELL, A DIVISION OF
SCHLUMBERGER TECHNOLOGY CORPORATION
ARTESIA, NEW MEXICO

Western
Water
Consultants, Inc. WWC Engineering
Engineering Environmental Mining Water Resources

TABLES

TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
DOWELL, ARTESIA, NEW MEXICO.

WELL NUMBER	DATE MEASURED	TOTAL WELL DEPTH (Ft)	MEASURING POINT	MEASURING POINT ELEVATION* (ft)	DEPTH TO GROUND WATER (ft)	STATIC WATER ELEVATION (Ft)	DIFFERENCE FROM PRIOR MEASUREMENT
MW-1	01/23/91	30.00	Protective Casing	100.56	17.41	83.15	
	09/13/91				16.04	84.52	1.37
	11/22/91				14.50	86.06	1.54
	03/16/93				13.72	86.84	0.78
	01/09/94				14.62	85.94	-0.90
	04/19/94				14.48	86.08	0.14
	07/20/94				14.38	86.18	0.10
	10/24/94				14.73	85.83	-0.35
	01/24/95				14.20	86.36	0.53
	04/02/95				14.37	86.19	-0.17
	07/31/95				14.76	85.80	-0.39
	10/16/95				14.64	85.92	0.12
	01/10/96				14.59	85.97	0.05
	04/09/96				14.77	85.79	-0.18
	07/20/96				15.84	84.72	-1.07
	10/21/96				14.07	86.49	1.77
	01/21/97				13.24	87.32	0.83
	04/08/97				12.97	87.59	0.27
	07/29/97				13.87	86.69	-0.90
	10/16/97				12.26	88.30	1.61
MW-2	01/23/91	30.00	Protective Casing	99.56	16.95	82.61	
	09/13/91				15.01	84.55	1.94
	11/22/91				13.76	85.80	1.25
	03/16/93				13.16	86.40	0.60
	01/09/94				13.91	85.65	-0.75
	04/19/94				13.80	85.76	0.11
	07/20/94				13.65	85.91	0.15
	10/24/94				13.88	85.68	-0.23
	01/24/95				13.41	86.15	0.47
	04/02/95				13.67	85.89	-0.26
	07/31/95				13.81	85.75	-0.14
	10/16/95				13.78	85.78	0.03
	01/10/96				13.80	85.76	-0.02
	04/09/96				13.98	85.58	-0.18
	07/20/96				14.92	84.64	-0.94
	10/21/96				13.15	86.41	1.77
	01/21/97				12.41	87.15	0.74
	04/08/97				12.21	87.35	0.20
	07/29/97				13.15	86.41	-0.94
	10/16/97				11.63	87.93	1.52
MW-3	01/23/91	30.00	Protective Casing	98.33	17.28	81.05	
	09/13/91				14.66	83.67	2.62
	11/22/91				13.63	84.70	1.03
	03/16/93				12.89	85.44	0.74
	01/09/94				13.66	84.67	-0.77
	04/19/94				NM	NM	NM
	07/20/94				13.18	85.15	na
	10/24/94				13.27	85.06	-0.09
	01/24/95				13.23	85.10	0.04
	04/02/95				13.60	84.73	-0.37
	07/31/95				13.34	84.99	0.26
	10/16/95				13.38	84.95	-0.04
	01/10/96				13.85	84.48	-0.47
	04/09/96				13.91	84.42	-0.06
	07/20/96				14.55	83.78	-0.64
	10/21/96				12.90	85.43	1.65
	01/21/97				12.42	85.91	0.48
	04/08/97				12.43	85.90	-0.01
	07/29/97				13.18	85.15	-0.75
	10/16/97				11.83	86.50	1.35
MW-4	01/23/91	50.00	Protective Casing	103.18	20.17	83.01	
	09/13/91				18.54	84.64	1.63
	11/22/91				17.15	86.03	1.39
	03/16/93				16.49	86.69	0.66
	01/09/94				17.28	85.90	-0.79
	04/19/94				17.15	86.03	0.13
	07/20/94				16.99	86.19	0.16
	10/24/94				17.25	85.93	-0.26
	01/24/95				16.78	86.40	0.47
	04/02/95				16.98	86.20	-0.20
	07/31/95				17.26	85.92	-0.28
	10/16/95				17.01	86.17	0.25
	01/10/96				16.95	86.23	0.06
	04/09/96				17.15	86.03	-0.20
	07/20/96				18.08	85.10	-0.93
	10/21/96				16.28	86.90	1.80

TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
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WELL NUMBER	DATE MEASURED	TOTAL WELL DEPTH (Ft)	MEASURING POINT	MEASURING POINT ELEVATION* (ft)	DEPTH TO GROUND WATER (ft)	STATIC WATER ELEVATION (Ft)	DIFFERENCE FROM PRIOR MEASUREMENT
MW-4 Cont.	01/21/97				15.37	87.81	0.91
	04/08/97				15.14	88.04	0.23
	07/29/97				16.05	87.13	-0.91
	10/16/97				14.44	88.74	1.61
MW-5	01/23/91	30.00	Protective Casing	99.87	17.20	82.67	
	09/13/91				15.52	84.35	1.68
	11/22/91				14.19	85.68	1.33
	03/16/93				13.47	86.40	0.72
	01/09/94				14.31	85.56	-0.84
	04/19/94				14.17	85.70	0.14
	07/20/94				13.97	85.90	0.20
	10/24/94				14.21	85.66	-0.24
	01/24/95				13.78	86.09	0.43
	04/02/95				14.05	85.82	-0.27
	07/31/95				14.17	85.70	-0.12
	10/16/95				14.07	85.80	0.10
	01/10/96				14.11	85.76	-0.04
	04/09/96				14.31	85.56	-0.20
	07/20/96				15.20	84.67	-0.89
	10/21/96				13.44	86.43	1.76
	01/21/97				12.69	87.18	0.75
	04/08/97				12.52	87.35	0.17
	07/29/97				13.37	86.50	-0.85
	10/16/97				11.82	88.05	1.55
MW-6	01/23/91	35.00	Protective Casing	100.84	19.59	81.25	
	09/13/91				17.43	83.41	2.16
	11/21/91				16.30	84.54	1.13
	03/16/93				15.57	85.27	0.73
	01/09/94				16.42	84.42	-0.85
	04/19/94				16.29	84.55	0.13
	07/19/94				15.79	85.05	0.50
	10/24/94				15.83	85.01	-0.04
	01/24/95				15.94	84.90	-0.11
	04/02/95				16.38	84.46	-0.44
	07/31/95				15.88	84.96	0.50
	10/16/95				16.01	84.83	-0.13
	01/10/96				16.52	84.32	-0.51
	04/09/96				16.70	84.14	-0.18
	07/21/96				17.26	83.58	-0.56
	10/21/96				15.62	85.22	1.64
	01/21/97				15.21	85.63	0.41
	04/08/97				15.30	85.54	-0.09
	07/29/97				16.01	84.83	-0.71
	10/16/97				15.01	85.83	1.00
MW-7	01/23/91	35.00	Protective Casing	100.23	19.01	81.22	
	09/13/91				17.43	82.80	1.58
	11/21/91				16.00	84.23	1.43
	03/16/93				14.91	85.32	1.09
	01/09/94				15.99	84.24	-1.08
	04/19/94				15.83	84.40	0.16
	07/19/94				15.24	84.99	0.59
	10/24/94				15.32	84.91	-0.08
	01/24/95				15.54	84.69	-0.22
	04/02/95				16.00	84.23	-0.46
	07/31/95				15.57	84.66	0.43
	10/16/95				15.61	84.62	-0.04
	01/10/96				16.13	84.10	-0.52
	04/09/96				16.30	83.93	-0.17
	07/21/96				16.81	83.42	-0.51
	10/21/96				15.15	85.08	1.66
	01/21/97				14.81	85.42	0.34
	04/08/97				14.91	85.32	-0.10
	07/29/97				15.48	84.75	-0.57
	10/16/97				14.52	85.71	0.96
MW-8	01/23/91	35.00	Protective Casing	101.47	20.16	81.31	
	09/13/91				18.80	82.67	1.36
	11/21/91				17.29	84.18	1.51
	03/16/93				16.03	85.44	1.26
	01/09/94				17.23	84.24	-1.20
	04/19/94				17.05	84.42	0.18
	07/19/94				16.50	84.97	0.55
	10/24/94				16.56	84.91	-0.06
	01/24/95				16.79	84.68	-0.23
	04/02/95				17.24	84.23	-0.45
	07/31/95				16.94	84.53	0.30

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DOWELL, ARTESIA, NEW MEXICO.

WELL NUMBER	DATE MEASURED	TOTAL WELL DEPTH (Ft)	MEASURING POINT	MEASURING POINT ELEVATION* (ft)	DEPTH TO GROUND WATER (ft)	STATIC WATER ELEVATION (Ft)	DIFFERENCE FROM PRIOR MEASUREMENT
MW-8 Cont.	10/16/95				16.88	84.59	0.06
	01/10/96				17.38	84.09	-0.50
	04/09/96				17.54	83.93	-0.16
	07/21/96				18.10	83.37	-0.56
	10/21/96				16.40	85.07	1.70
	11/22/96				16.42	85.05	-0.02
	01/21/97				16.05	85.42	0.37
	04/08/97				16.11	85.36	-0.06
	07/29/97				16.69	84.78	-0.58
	10/16/97				15.69	85.78	1.00
MW-9	01/26/91	30.00	Protective Casing	102.18	20.08	82.10	
	09/13/91				18.93	83.25	1.15
	11/21/91				17.35	84.83	1.58
	03/16/93				16.19	85.99	1.16
	01/09/94				17.31	84.87	-1.12
	04/19/94				17.33	84.85	-0.02
	07/19/94				16.85	85.33	0.48
	10/24/94				17.05	85.13	-0.20
	01/24/95				16.92	85.26	0.13
	04/02/95				17.23	84.95	-0.31
	07/31/95				17.30	84.88	-0.07
	10/16/95				17.16	85.02	0.14
	01/10/96				17.39	84.79	-0.23
	04/09/96				17.58	84.60	-0.19
	07/21/96				18.38	83.80	-0.80
	10/21/96				16.65	85.53	1.73
	01/21/97				16.12	86.06	0.53
	04/08/97				16.04	86.14	0.08
	07/29/97				16.67	85.51	-0.63
	10/16/97				15.29	86.89	1.38
MW-10	01/26/91	30.00	Protective Casing	101.34	19.68	81.66	
	09/13/91				18.56	82.78	1.12
	11/21/91				16.96	84.38	1.60
	03/16/93				15.64	85.70	1.32
	01/09/94				16.89	84.45	-1.25
	04/19/94				16.73	84.61	0.16
	07/19/94				16.29	85.05	0.44
	10/24/94				16.39	84.95	-0.10
	01/24/95				16.48	84.86	-0.09
	04/02/95				16.88	84.46	-0.40
	07/31/95				16.82	84.52	0.06
	10/16/95				16.65	84.69	0.17
	01/10/96				17.01	84.33	-0.36
	04/09/96				17.20	84.14	-0.19
	07/21/96				17.85	83.49	-0.65
	10/21/96				16.13	85.21	1.72
	01/21/97				15.73	85.61	0.40
	04/08/97				15.70	85.64	0.03
	07/29/97				16.28	85.06	-0.58
	10/16/97				15.16	86.18	1.12
MW-11	01/26/91	30.00	Protective Casing	100.60	19.27	81.33	
	09/13/91				17.81	82.79	1.46
	11/21/91				16.35	84.25	1.46
	03/16/93				15.20	85.40	1.15
	01/09/94				16.31	84.29	-1.11
	04/19/94				16.17	84.43	0.14
	07/19/94				15.63	84.97	0.54
	10/24/94				15.72	84.88	-0.09
	01/24/95				15.89	84.71	-0.17
	04/02/95				16.33	84.27	-0.44
	07/31/95				16.03	84.57	0.30
	10/16/95				16.00	84.60	0.03
	01/10/96				16.45	84.15	-0.45
	04/09/96				16.62	83.98	-0.17
	07/21/96				17.21	83.39	-0.59
	10/21/96				15.52	85.08	1.69
	01/21/97				15.15	85.45	0.37
	04/08/97				15.19	85.41	-0.04
	07/29/97				15.78	84.82	-0.59
	10/16/97				14.75	85.85	1.03
MW-12	01/26/91	34.00	Protective Casing	100.69	19.24	81.45	
	09/13/91				17.59	83.10	1.65
	11/21/91				16.21	84.48	1.38
	03/16/93				15.22	85.47	0.99
	01/09/94				16.25	84.44	-1.03

TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
DOWELL, ARTESIA, NEW MEXICO.

WELL NUMBER	DATE MEASURED	TOTAL WELL DEPTH (Ft)	MEASURING POINT	MEASURING POINT ELEVATION* (ft)	DEPTH TO GROUND WATER (ft)	STATIC WATER ELEVATION (Ft)	DIFFERENCE FROM PRIOR MEASUREMENT
MW-12 Cont.	04/19/94				16.13	84.56	0.12
	07/19/94				15.63	85.06	0.50
	10/24/94				15.73	84.96	-0.10
	01/24/95				15.80	84.89	-0.07
	04/02/95				16.23	84.46	-0.43
	07/31/95				15.96	84.73	0.27
	10/16/95				15.93	84.76	0.03
	01/10/96				16.35	84.34	-0.42
	04/09/96				16.52	84.17	-0.17
	07/21/96				17.15	83.54	-0.63
	10/21/96				15.48	85.21	1.67
	01/21/97				15.04	85.65	0.44
	04/08/97				15.10	85.59	-0.06
	07/29/97				15.73	84.96	-0.63
	10/16/97				14.57	86.12	1.16
MW-13	09/13/91	45.00	Protective Casing	99.25	15.10	84.15	
	11/21/91				13.95	85.30	1.15
	03/16/93				13.22	86.03	0.73
	01/09/94				14.03	85.22	-0.81
	04/19/94				13.90	85.35	0.13
	07/20/94				13.70	85.55	0.20
	10/24/94				13.86	85.39	-0.16
	01/24/95				13.56	85.69	0.30
	04/02/95				13.87	85.38	-0.31
	07/31/95				13.84	85.41	0.03
	10/16/95				13.83	85.42	0.01
	01/10/96				14.02	85.23	-0.19
	04/09/96				14.20	85.05	-0.18
	07/20/96				15.04	84.21	-0.84
	10/21/96				13.31	85.94	1.73
	01/21/97				12.70	86.55	0.61
	04/08/97				12.48	86.77	0.22
	07/29/97				13.43	85.82	-0.95
	10/16/97				12.02	87.23	1.41
MW-14	09/13/91	35.00	Protective Casing	98.74	14.60	84.14	
	11/21/91				13.61	85.13	0.99
	03/16/93				13.00	85.74	0.61
	01/09/94				13.71	85.03	-0.71
	04/19/94				13.63	85.11	0.08
	07/20/94				13.39	85.35	0.24
	10/24/94				13.48	85.26	-0.09
	01/25/95				13.26	85.48	0.22
	04/02/95				13.61	85.13	-0.35
	07/31/95				13.44	85.30	0.17
	10/16/95				13.52	85.22	-0.08
	01/10/96				13.76	84.98	-0.24
	04/09/96				13.96	84.78	-0.20
	07/20/96				14.74	84.00	-0.78
	10/21/96				13.03	85.71	1.71
	01/21/97				12.47	86.27	0.56
	04/08/97				12.44	86.30	0.03
	07/29/97				13.30	85.44	-0.86
	10/16/97				11.93	86.81	1.37
MW-15	09/13/91	34.00	Protective Casing	100.05	16.30	83.75	
	11/21/91				15.01	85.04	1.29
	03/16/93				13.95	86.10	1.06
	01/09/94				14.91	85.14	-0.96
	04/19/94				14.80	85.25	0.11
	07/20/94				14.56	85.49	0.24
	10/24/94				14.73	85.32	-0.17
	01/24/95				16.00	84.05	-1.27
	04/02/95				14.80	85.25	1.20
	07/31/95				14.82	85.23	-0.02
	10/16/95				14.74	85.31	0.08
	01/10/96				14.95	85.10	-0.21
	04/09/96				15.11	84.94	-0.16
	07/20/96				15.96	84.09	-0.85
	10/21/96				14.22	85.83	1.74
	01/21/97				13.64	86.41	0.58
	04/08/97				13.53	86.52	0.11
	07/29/97				14.32	85.73	-0.79
	10/16/97				12.90	87.15	1.42
MW-17D	04/02/95	19.00	Protective Casing	101.29	16.80	84.49	
	07/31/95				16.48	84.81	0.32
	10/16/95				16.51	84.78	-0.03

TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
DOWELL, ARTESIA, NEW MEXICO.

WELL NUMBER	DATE MEASURED	TOTAL WELL DEPTH (Ft)	MEASURING POINT	MEASURING POINT ELEVATION* (ft)	DEPTH TO GROUND WATER (ft)	STATIC WATER ELEVATION (Ft)	DIFFERENCE FROM PRIOR MEASUREMENT
MW-17D Cont.	01/10/96				16.90	84.39	-0.39
	04/09/96				17.10	84.19	-0.20
	07/21/96				17.70	83.59	-0.60
	10/21/96				16.02	85.27	1.68
	01/21/97				15.60	85.69	0.42
	04/08/97				15.64	85.65	-0.04
	07/29/97				16.32	84.97	-0.68
	10/16/97				15.11	86.18	1.21
MW-17A	04/02/95	26.00	Protective Casing	100.57	16.06	84.52	
	07/31/95				15.75	84.82	0.30
	10/16/95				15.77	84.80	-0.02
	01/10/96				16.18	84.39	-0.41
	04/09/96				16.37	84.20	-0.19
	07/21/96				16.98	83.59	-0.61
	10/21/96				15.30	85.27	1.68
	01/21/97				14.88	85.69	0.42
	04/08/97				14.92	85.65	-0.04
	07/29/97				15.59	84.98	-0.67
	10/16/97				14.41	86.16	1.18
MW-17B	04/02/95	34.00	Protective Casing	101.28	16.79	84.49	
	07/31/95				16.50	84.78	0.29
	10/16/95				16.51	84.77	-0.01
	01/10/96				16.92	84.36	-0.41
	04/09/96				17.10	84.18	-0.18
	07/21/96				17.71	83.57	-0.61
	10/21/96				16.02	85.26	1.69
	01/21/97				15.64	85.64	0.38
	04/08/97				15.67	85.61	-0.03
	07/29/97				16.30	84.98	-0.63
	10/16/97				15.16	86.12	1.14
MW-17C	04/02/95	61.00	Protective Casing	101.33	16.93	84.40	
	07/31/95				16.66	84.67	0.27
	10/16/95				16.64	84.69	0.02
	01/10/96				17.08	84.25	-0.44
	04/09/96				17.25	84.08	-0.17
	07/21/96				17.85	83.48	-0.60
	10/21/96				16.17	85.16	1.68
	01/21/97				15.75	85.58	0.42
	04/08/97				15.80	85.53	-0.05
	07/29/97				16.46	84.87	-0.66
	10/16/97				15.33	86.00	1.13
MW-18	04/02/95	28.00	Protective Casing	98.72	14.77	83.95	
	07/31/95				14.21	84.51	0.56
	10/16/95				14.25	84.47	-0.04
	01/10/96				14.90	83.82	-0.65
	04/09/96				15.05	83.67	-0.15
	07/21/96				15.44	83.28	-0.39
	10/21/96				13.78	84.94	1.66
	11/22/96				13.84	84.88	-0.06
	01/21/97				13.54	85.18	0.30
	04/08/97				13.66	85.06	-0.12
	07/29/97				14.13	84.59	-0.47
	10/16/97				13.34	85.38	0.79
MW-19	04/02/95	28.00	Protective Casing	99.08	14.86	84.22	
	07/31/95				14.29	84.79	0.57
	10/16/95				14.39	84.69	-0.10
	01/10/96				14.98	84.10	-0.59
	04/09/96				15.14	83.94	-0.16
	07/21/96				15.62	83.46	-0.48
	10/21/96				14.00	85.08	1.62
	11/22/96				14.03	85.05	-0.03
	01/21/97				13.69	85.39	0.34
	04/08/97				13.76	85.32	-0.07
	07/29/97				14.37	84.71	-0.61
	10/16/97				13.47	85.61	0.90
MW-20	11/22/96	28.00	Protective Casing	101.09	16.28	84.81	
	01/21/97				16.08	85.01	0.20
	04/08/97				16.04	85.05	0.04
	07/29/97				16.46	84.63	-0.42
	10/16/97				15.76	85.33	0.70
MW-21	11/22/96	25.00	Protective Casing	98.88	14.36	84.52	
	01/21/97				14.26	84.62	0.10

TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
DOWELL, ARTESIA, NEW MEXICO.

WELL NUMBER	DATE MEASURED	TOTAL WELL DEPTH (Ft)	MEASURING POINT	MEASURING POINT ELEVATION* (ft)	DEPTH TO GROUND WATER (ft)	STATIC WATER ELEVATION (Ft)	DIFFERENCE FROM PRIOR MEASUREMENT
MW-21 Cont.	04/08/97			98.89	14.41	84.48	-0.14
	07/29/97				14.54	84.35	-0.13
	10/16/97				14.18	84.71	0.36
MW-22	11/22/96	24.50	Protective Casing	97.16	12.88	84.28	
	01/21/97				12.94	84.22	-0.06
	04/08/97			97.14	13.42	83.72	-0.50
	07/29/97				13.16	83.98	0.26
	10/16/97				13.23	83.91	-0.07
MW-23	11/22/96	25.00	Protective Casing	97.33	12.72	84.61	
	01/21/97				12.59	84.74	0.13
	04/08/97			97.30	13.07	84.23	-0.51
	07/29/97				13.14	84.16	-0.07
	10/16/97				13.06	84.24	0.08
MW-24	11/22/96	27.00	Protective Casing	103.42	17.91	85.51	
	01/21/97				17.56	85.86	0.35
	04/08/97			103.41	17.40	86.01	0.15
	07/29/97				17.72	85.69	-0.32
	10/16/97				16.58	86.83	1.14
MW-25	04/08/97	25.00	Protective Casing	97.64	14.23	83.41	-
	07/29/97				13.77	83.87	0.46
	10/16/97				13.99	83.65	-0.22
MW-26	04/08/97	25.00	Protective Casing	96.11	13.06	83.05	-
	07/29/97				12.23	83.88	0.83
	10/16/97				12.75	83.36	-0.52
MW-27	04/08/97	25.00	Protective Casing	96.17	13.06	83.11	-
	07/29/97				12.21	83.96	0.85
	10/16/97				12.79	83.38	-0.58

NOTES:

NM = not measured

* = measured from a temporary benchmark of arbitrary elevation = 100.00 feet.
Benchmark is located on the concrete right up against the east shop wall,
at the northeast corner of the shop.

** = water level measurement may be in error

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
DOWELL, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL- BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1- TCA (mg/L)	1,1,2- TCA (mg/L)	TCE (mg/L)	PCE (mg/L)
MW-1	01/28/81	0.033	ND(0.005)	0.028	0.130	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	08/15/81	ND(0.001)	ND(0.001)	0.002	0.009	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	11/22/81	0.028	ND(0.001)	0.007	0.014	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	03/18/83	0.018	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	01/10/84	0.008	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	04/19/84	0.035	0.001J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	07/20/84	0.008	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	10/25/84	0.027	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	01/25/85	0.025	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	04/03/85	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	08/01/85	0.082	0.008	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	10/18/85	0.084	0.0037J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	01/10/86	0.078	0.007	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	04/13/86	0.048	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	07/21/86	0.040	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	10/22/86	0.027	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
MW-2	01/24/87	0.002	0.0005J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	04/09/87	0.008	0.002	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	07/30/87	0.018	0.004	ND(0.002)	ND(0.004)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
	10/17/87	0.028	0.003	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	01/28/81	0.210	0.590	0.071	1.700	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.110
	01/28/81	0.180	0.450	0.062	1.300	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.078
	08/15/81	0.120	0.050	0.008	0.690	ND(0.005)	0.005	0.023	ND(0.005)	ND(0.005)	0.150
	11/22/81	0.033	0.001	0.001	0.088	ND(0.001)	0.007	0.018	ND(0.001)	ND(0.001)	0.084
	03/18/83	0.019	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	0.002	0.003	ND(0.001)	ND(0.001)	0.028
	01/10/84	0.024	ND(0.001)	0.001	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.001	0.079
MW-3	04/19/84	0.045	0.004J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.001J	0.048
	07/20/84	0.043	0.005J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.001J	0.052
	10/25/84	0.045	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.021
	01/25/85	0.057	0.022	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.037
	04/03/85	0.050	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.079
	08/01/85	0.032	0.021	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.035
	10/18/85	0.078	0.040	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.033
	01/18/86	0.081	0.045	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.0023J	0.088
	04/13/86	0.220	0.200	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.0028J	0.087
	07/21/86	0.082	0.079	ND(0.005)	0.110	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.260
MW-3	10/22/86	0.014	0.012	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.140
	01/24/87	0.012	0.018	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.081
	04/09/87	0.015	0.029	ND(0.002)	ND(0.004)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.007	0.034
	07/30/87	0.010	0.045	ND(0.002)	ND(0.004)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.009	0.050
	10/17/87	0.004	0.024	ND(0.002)	ND(0.004)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.008	0.031
	01/28/81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/15/81	0.200	1.200	1.200	14.000	ND(0.2)	ND(0.2)	0.330	ND(0.2)	ND(0.2)	ND(0.2)
	11/22/81	0.110	0.680	0.530	6.800	0.004	0.190	0.110	0.002*	0.150	0.057
	03/18/83	ND(0.001)	1.000	0.850	8.600	ND(0.001)	ND(0.001)	0.280	ND(0.001)	ND(0.001)	ND(0.001)
	03/18/83	0.130	0.780	0.540	9.000	ND(0.001)	0.044	0.280	ND(0.001)	0.037	0.330

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
DOWELL, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL- BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1- TCA (mg/L)	1,1,2- TCA (mg/L)	TCE (mg/L)	POE (mg/L)
MW-3 Cont. *	01/10/84	0.140	1.000	0.700	11.000	0.190	ND(0.1)	ND(0.1)	0.210	ND(0.1)	ND(0.1)	ND(0.1)
	04/19/84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/20/84	0.082	0.480	0.180	3.000	0.077	0.002J	0.038	0.089	ND(0.005)	0.084	0.011
	10/25/84	0.130	0.980	0.250	4.200	0.200	ND(0.05)	0.051	ND(0.05)	ND(0.05)	0.130	0.21J
dup.	10/25/84	0.110	0.830	0.300	4.700	0.180	ND(0.05)	0.051	ND(0.05)	ND(0.05)	0.100	0.024J
	01/25/85	ND(1)	0.81J	ND(1)	7.100	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	04/03/85	0.047	0.450	ND(0.025)	1.300	0.100	ND(0.025)	0.110	ND(0.025)	ND(0.025)	0.150	ND(0.025)
dup.	04/03/85	0.047	0.450	ND(0.025)	1.200	0.100	ND(0.025)	0.120	ND(0.025)	ND(0.025)	0.150	ND(0.025)
	08/01/85	0.088	0.950	0.190	6.500	0.230	ND(0.05)	0.089	ND(0.05)	ND(0.05)	0.081	ND(0.05)
*	10/18/85	0.100	1.100	0.240	8.200	0.280	ND(0.05)	0.086	0.048J	ND(0.05)	0.089	0.042J
*	01/11/86	0.054	0.620	0.081	4.990	0.150	ND(0.05)	0.078	ND(0.05)	ND(0.05)	0.100	ND(0.05)
*	04/13/86	0.039	0.480	ND(0.005)	3.900	0.051	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
#	07/22/86	0.080	0.190	0.056	0.890	0.130	ND(0.005)	0.008	0.009	ND(0.005)	0.054	0.014
	10/22/86	ND(0.1)	0.580	ND(0.1)	3.500	0.150	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
	01/24/87	0.048	0.269	0.012	0.886	0.077	0.004	0.043	ND(0.010)	ND(0.010)	0.070	0.007J
	04/09/87	0.034	0.137	ND(0.010)	0.146	0.085	ND(0.010)	0.084	ND(0.010)	ND(0.010)	0.107	0.013
	07/30/87	0.019	0.177	ND(0.010)	0.644	0.057	ND(0.010)	0.043	ND(0.010)	ND(0.010)	0.103	0.035
	10/17/87	0.044	0.484	0.041	3.300	0.089	ND(0.020)	0.0158J	ND(0.020)	ND(0.020)	0.0182J	0.0158J
MW-4	01/28/91	0.088	0.011	ND(0.001)	0.025	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	08/15/91	0.280	ND(0.002)	ND(0.002)	0.015	0.008	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
	11/22/91	0.180	0.100	0.001	0.037	ND(0.001)	ND(0.001)	0.019	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	03/18/93	0.072	0.051	ND(0.001)	ND(0.005)	0.001	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	01/10/94	0.084	0.074	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	04/19/94	0.074	0.085	ND(0.005)	0.003J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	07/20/94	0.100	0.053	ND(0.005)	0.005	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	10/25/94	0.140	0.280	ND(0.005)	0.004J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	01/25/95	0.150	0.400	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)
	04/03/95	0.100	0.190	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	08/01/95	0.089	0.570	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
*	10/18/95	ND(0.005)	0.110	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
*	01/11/98	ND(0.005)	0.038	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
*	04/13/98	ND(0.005)	0.008	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
dup. *	04/13/98	ND(0.005)	0.007	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
#	07/21/98	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	10/22/98	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	01/24/97	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	04/09/97	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.004)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
	07/30/97	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	10/17/97	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.004)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
MW-5	01/28/91	0.014	ND(0.001)	ND(0.001)	ND(0.005)	0.004	ND(0.001)	0.002	0.001	ND(0.001)	ND(0.001)	0.010
	08/15/91	ND(0.001)	0.001	ND(0.001)	ND(0.005)	0.005	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.018
	11/22/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.005	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.018
	03/18/93	0.078	0.007	ND(0.001)	ND(0.005)	0.013	ND(0.001)	0.003	ND(0.001)	ND(0.001)	0.001	0.028
	01/10/94	0.025	ND(0.001)	ND(0.001)	ND(0.005)	0.008	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.028
	04/19/94	0.070	0.011	ND(0.005)	ND(0.005)	0.008	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.002J	0.015
	07/20/94	0.220	0.041	ND(0.005)	ND(0.005)	0.011	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.004J	0.025
	07/20/94	0.320	0.076	ND(0.005)	0.001J	0.028	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.008J	0.039
dup.	10/25/94	0.240	0.059	ND(0.005)	ND(0.005)	0.020	ND(0.005)	0.002J	ND(0.005)	ND(0.005)	0.008J	0.043
	01/25/95	0.460	0.130	ND(0.005)	ND(0.005)	0.023	ND(0.005)	0.002J	ND(0.005)	ND(0.005)	0.018	0.063

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
DOWELL, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL- BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1- TCA (mg/L)	1,1,2- TCA (mg/L)	TCE (mg/L)	PCE (mg/L)
MW-10	01/28/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	0.004	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	09/15/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	0.012	0.002	ND(0.001)	ND(0.001)	ND(0.001)
	11/22/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	0.029	0.005	ND(0.001)	ND(0.001)	ND(0.001)
	03/18/93	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	0.025	0.001	ND(0.001)	ND(0.001)	ND(0.001)
	01/10/94	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	0.021	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	04/19/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.022	0.001J	ND(0.005)	ND(0.005)	ND(0.005)
	07/20/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.052	0.004J	ND(0.005)	ND(0.005)	ND(0.005)
	10/25/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.051	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	01/25/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.042	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.057	0.005	ND(0.005)	ND(0.005)	ND(0.005)
	08/01/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.070	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	10/18/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.130	0.007	ND(0.005)	ND(0.005)	ND(0.005)
	01/10/96	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.063	0.008	ND(0.005)	ND(0.005)	ND(0.005)
	04/13/96	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.170	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	07/22/96	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	0.250	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
	01/24/97	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	0.0008J	ND(0.001)	0.181	0.005	ND(0.001)	ND(0.001)	ND(0.001)
dup.	04/09/97	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.004)	0.00084J	ND(0.002)	0.158	0.004	ND(0.002)	ND(0.002)	ND(0.002)
	07/30/97	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.010)	ND(0.005)	ND(0.005)	0.158	0.0036J	ND(0.005)	ND(0.005)	ND(0.005)
	10/17/97	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.020)	ND(0.010)	ND(0.010)	0.198	0.0038J	ND(0.010)	ND(0.010)	ND(0.010)
	01/28/91	0.010	ND(0.005)	ND(0.005)	ND(0.025)	0.045	ND(0.005)	0.310	ND(0.005)	ND(0.005)	0.140	0.360
	09/15/91	0.056	ND(0.001)	ND(0.001)	ND(0.005)	0.068	ND(0.001)	0.470	0.017	ND(0.001)	0.120	0.330
	11/22/91	0.048	ND(0.001)	ND(0.001)	ND(0.005)	0.052	ND(0.001)	0.390	0.018	ND(0.001)	0.110	0.320
	03/18/93	0.005	ND(0.001)	ND(0.001)	ND(0.005)	0.040	ND(0.001)	0.220	0.004	ND(0.001)	0.074	0.160
	01/10/94	0.005	ND(0.001)	ND(0.001)	ND(0.005)	0.042	ND(0.001)	0.250	ND(0.001)	ND(0.001)	0.083	0.320
	04/19/94	0.009	ND(0.005)	0.002J	ND(0.005)	0.042	ND(0.005)	0.170	0.006	ND(0.005)	0.079	0.170
	07/20/94	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	0.057	ND(0.025)	0.460	0.01J	ND(0.025)	0.120	0.360
	10/25/94	0.009	ND(0.005)	ND(0.005)	ND(0.005)	0.067	0.001J	0.220	ND(0.005)	ND(0.005)	0.110	0.300
	01/25/95	0.012	ND(0.005)	ND(0.005)	ND(0.005)	0.072	ND(0.005)	0.240	0.014	ND(0.005)	0.120	0.360
	04/03/95	0.009	ND(0.005)	ND(0.005)	ND(0.005)	0.062	ND(0.005)	0.410	0.013	ND(0.005)	0.100	0.430
	08/01/95	0.007	ND(0.005)	ND(0.005)	ND(0.005)	0.050	ND(0.005)	0.360	0.014	ND(0.005)	0.063	0.330
	10/18/95	0.0048J	ND(0.005)	ND(0.005)	ND(0.005)	0.051	ND(0.005)	0.310	0.015	ND(0.005)	0.071	0.340
dup.	01/11/96	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.043	ND(0.005)	0.270	0.010	ND(0.005)	0.057	0.330
	04/13/96	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.033	ND(0.005)	0.230	0.011	ND(0.005)	0.043	0.310
	07/22/96	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.240	ND(0.005)	ND(0.005)	0.020	0.230
	10/22/96	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	0.035	ND(0.005)	0.200	0.008	ND(0.005)	0.036	0.260
	01/24/97	0.002	ND(0.001)	ND(0.001)	ND(0.002)	0.029	0.0007J	0.157	0.008	ND(0.001)	0.026	0.212
	04/09/97	0.002	ND(0.002)	ND(0.002)	ND(0.004)	0.033	ND(0.002)	0.128	0.008	ND(0.002)	0.027	0.180
	07/30/97	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.010)	0.032	ND(0.005)	0.102	0.008	ND(0.005)	0.032	0.170
	10/17/97	0.0028J	ND(0.010)	ND(0.010)	ND(0.020)	0.048	ND(0.010)	0.142	0.0054J	ND(0.010)	0.031	0.063
	01/28/91	0.260	0.950	0.230	4.500	0.140	ND(0.025)	ND(0.025)	0.057	ND(0.025)	0.073	0.042
	09/15/91	0.150	0.620	0.630	2.200	0.120	ND(0.001)	0.300	0.110	ND(0.001)	0.200	0.061
	11/22/91	0.110	0.430	0.034	0.810	0.110	0.002	0.240	0.100	ND(0.001)	0.260	0.051
	03/18/93	0.160	0.800	0.034	1.000	0.120	ND(0.001)	0.039	0.055	ND(0.001)	0.036	0.018
	01/10/94	0.160	0.870	0.026	0.990	0.150	ND(0.01)	0.075	0.053	ND(0.01)	0.070	0.024
	04/19/94	0.110	0.110	0.049	0.250	0.110	0.002J	0.064	0.085	ND(0.005)	0.073	0.033

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
DOWELL, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL- BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1- TCA (mg/L)	1,1,2- TCA (mg/L)	TCE (mg/L)	PCE (mg/L)
MW-12 Cont.	07/20/84	0.180	0.720	0.071	0.610	0.150	ND(0.025)	0.073	0.075	ND(0.025)	0.086	0.022J
	10/25/84	0.086	0.660	ND(0.025)	0.100	0.160	ND(0.025)	0.085	ND(0.025)	ND(0.025)	0.120	0.015J
*	01/25/85	0.180	0.680	0.089	0.660	0.190	ND(0.005)	0.120	0.085	ND(0.005)	0.076	0.089
dup.	01/25/85	0.140	0.850	0.075	0.680	0.150	ND(0.005)	0.090	0.075	ND(0.005)	0.062	0.053
	04/03/85	0.150	0.790	0.200	1.100	0.160	ND(0.005)	0.110	0.086	ND(0.005)	0.043	0.056
	08/01/85	0.130	0.700	0.280	1.400	0.170	ND(0.025)	0.150	0.079	ND(0.025)	0.058	0.059
*	10/19/85	0.140	0.990	0.360	2.030	0.170	ND(0.005)	0.100	0.100	ND(0.005)	0.058	0.050
	01/11/86	0.100	0.680	0.180	1.840	0.140	ND(0.005)	0.067	0.059	ND(0.005)	0.080	0.048
*	04/13/86	0.098	0.620	0.180	0.690	0.150	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.023
#	07/22/86	0.130	0.920	0.310	1.790	0.160	ND(0.005)	0.087	0.170	ND(0.005)	0.045	0.046
	10/22/86	ND(0.1)	0.830	0.190	1.800	0.190	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
	01/24/87	0.093	0.822	0.133	1.738	0.162	ND(0.010)	0.046	0.060	ND(0.010)	0.037	0.039
	04/09/87	0.066	0.920	0.136	1.869	0.159	ND(0.020)	0.040	0.051	ND(0.020)	0.046	0.039
dup.	04/09/87	0.079	0.855	0.129	1.837	0.159	ND(0.010)	0.040	0.054	ND(0.010)	0.047	0.039
	07/30/87	0.060	0.669	0.127	2.264	0.136	ND(0.020)	0.035	0.062	ND(0.020)	0.036	0.043
	10/17/87	0.178	1.290	0.853	5.540	0.185	ND(0.050)	0.061	0.186	ND(0.050)	ND(0.050)	0.0445J
MW-13	08/15/81	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.030	0.002	0.038	0.005	ND(0.001)	0.004	0.240
	11/22/81	0.430	ND(0.001)	ND(0.001)	ND(0.005)	0.016	0.001	0.025	0.002	ND(0.001)	0.002	0.110
	03/19/83	0.033	ND(0.001)	ND(0.001)	ND(0.005)	0.013	ND(0.001)	0.014	ND(0.001)	ND(0.001)	0.002	0.062
dup.	03/19/83	0.034	ND(0.001)	ND(0.001)	ND(0.005)	0.013	0.001	0.015	ND(0.001)	ND(0.001)	0.002	0.066
	01/10/84	0.022	ND(0.001)	ND(0.001)	ND(0.005)	0.016	ND(0.001)	0.007	ND(0.005)	ND(0.005)	0.003	0.055
	04/19/84	0.013	ND(0.005)	ND(0.005)	ND(0.005)	0.011	0.001J	0.003J	ND(0.005)	ND(0.005)	0.003J	0.032
	07/20/84	0.016	ND(0.005)	ND(0.005)	ND(0.005)	0.016	0.001J	0.005J	ND(0.005)	ND(0.005)	0.004J	0.034
	10/25/84	0.011	ND(0.005)	ND(0.005)	ND(0.005)	0.013	ND(0.005)	0.004J	ND(0.005)	ND(0.005)	0.005	0.040
	01/22/85	0.008	ND(0.005)	ND(0.005)	ND(0.005)	0.015	ND(0.005)	0.002J	ND(0.005)	ND(0.005)	0.005	0.029
	04/03/85	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.013	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.022
	08/01/85	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.017	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.007	0.025
	10/18/85	0.0031J	ND(0.005)	ND(0.005)	ND(0.005)	0.015	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.008	0.020
	01/11/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.011	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.005	0.015
	04/13/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.011
	07/21/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.009	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.007	0.013
	10/22/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.007	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.008	0.010
	01/24/87	0.001	ND(0.001)	ND(0.001)	ND(0.002)	0.005	0.0004J	0.0004J	ND(0.001)	ND(0.001)	0.003	0.003
	04/09/87	0.001	ND(0.001)	ND(0.001)	ND(0.002)	0.004	ND(0.001)	0.00044J	ND(0.001)	ND(0.001)	0.005	0.005
dup.	04/09/87	0.002	ND(0.001)	ND(0.001)	ND(0.002)	0.005	ND(0.001)	0.0005J	ND(0.001)	ND(0.001)	0.006	0.005
	07/30/87	0.001	ND(0.001)	ND(0.001)	ND(0.002)	0.004	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.007	0.009
	10/17/87	0.00062J	ND(0.001)	ND(0.001)	ND(0.002)	0.003	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.006	0.009
dup.	10/17/87	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.004)	0.003	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.006	0.007
MW-14	08/15/81	0.022	ND(0.001)	ND(0.001)	ND(0.005)	0.130	0.002	0.300	0.014	0.001	0.002	0.460
	11/22/81	0.002	ND(0.001)	ND(0.001)	ND(0.005)	0.140	0.002	0.310	0.009	ND(0.001)	0.002	0.400
dup.	11/22/81	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.110	0.002	0.320	0.010	ND(0.001)	ND(0.001)	0.440
	03/18/83	0.020	ND(0.001)	ND(0.001)	ND(0.005)	0.080	0.001	0.160	0.004	ND(0.001)	0.002	0.210
	01/10/84	0.011	ND(0.001)	ND(0.001)	ND(0.005)	0.057	ND(0.001)	0.100	ND(0.001)	ND(0.001)	0.002	0.300
	04/19/84	0.005	ND(0.005)	ND(0.005)	ND(0.005)	0.058	ND(0.005)	0.056	0.001J	ND(0.005)	ND(0.005)	0.180
	07/20/84	0.01J	ND(0.025)	ND(0.025)	ND(0.025)	0.072	ND(0.025)	0.110	ND(0.025)	ND(0.025)	ND(0.025)	0.210
	10/25/84	0.010	ND(0.005)	ND(0.005)	ND(0.005)	0.079	0.001J	0.064	ND(0.005)	ND(0.005)	ND(0.005)	0.230
	04/03/85	0.004J	ND(0.005)	ND(0.005)	ND(0.005)	0.063	ND(0.005)	0.070	ND(0.005)	ND(0.005)	ND(0.005)	0.022
	08/01/85	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.063	ND(0.005)	0.058	ND(0.005)	ND(0.005)	ND(0.005)	0.130
		ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.074	ND(0.005)	0.072	ND(0.005)	ND(0.005)	ND(0.005)	0.068

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
DOWELL, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL- BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1- TCA (mg/L)	1,1,2- TCA (mg/L)	TCE (mg/L)	POE (mg/L)
MW-14 Cont.	10/18/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.062	ND(0.005)	0.044	ND(0.005)	ND(0.005)	ND(0.005)	0.087
dup.	01/11/98	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.051	ND(0.005)	0.038	ND(0.005)	ND(0.005)	ND(0.005)	0.081
	01/11/98	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.053	ND(0.005)	0.040	ND(0.005)	ND(0.005)	ND(0.005)	0.064
	04/13/98	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.051	ND(0.005)	0.045	ND(0.005)	ND(0.005)	ND(0.005)	0.057
dup.	07/21/98	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.048	ND(0.005)	0.037	ND(0.005)	ND(0.005)	ND(0.005)	0.055
	07/21/98	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.052	ND(0.005)	0.043	ND(0.005)	ND(0.005)	ND(0.005)	0.084
	10/22/98	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.058	ND(0.005)	0.049	ND(0.005)	ND(0.005)	ND(0.005)	0.082
dup.	01/24/97	0.0008J	ND(0.001)	ND(0.001)	ND(0.002)	0.040	0.0005J	0.023	ND(0.001)	ND(0.001)	ND(0.001)	0.014
	01/24/97	0.0008J	ND(0.001)	ND(0.001)	ND(0.002)	0.045	0.0005J	0.027	ND(0.001)	ND(0.001)	ND(0.001)	0.010
	04/09/97	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.010)	0.039	ND(0.005)	0.023	ND(0.005)	ND(0.005)	ND(0.005)	0.024
	07/30/97	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.010)	0.038	ND(0.005)	0.021	ND(0.005)	ND(0.005)	ND(0.005)	0.043
	10/17/97	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.010)	0.039	ND(0.005)	0.019	ND(0.005)	ND(0.005)	ND(0.005)	0.048
MW-15	08/15/91	0.002	0.010	ND(0.001)	0.006	0.028	0.001	0.005	ND(0.001)	ND(0.001)	ND(0.001)	0.004
	11/22/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.033	0.001	0.009	ND(0.001)	ND(0.001)	0.003	0.006
	03/18/93	0.001	0.002	ND(0.001)	ND(0.005)	0.082	0.001	0.013	ND(0.001)	ND(0.001)	0.008	0.009
dup.	01/10/94	ND(0.001)	0.008	ND(0.001)	ND(0.005)	0.048	ND(0.001)	0.009	ND(0.001)	ND(0.001)	0.004	0.013
	01/10/94	0.001	0.009	0.002	ND(0.005)	0.054	ND(0.001)	0.010	ND(0.001)	ND(0.001)	0.004	0.015
	04/19/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.027	ND(0.005)	0.005J	ND(0.005)	ND(0.005)	0.003J	0.008
	07/20/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.049	0.001J	0.008	ND(0.005)	ND(0.005)	0.004J	0.005
	10/25/94	0.001J	ND(0.005)	ND(0.005)	ND(0.005)	0.028	ND(0.005)	0.008	ND(0.005)	ND(0.005)	0.004J	0.008
	01/25/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.027	ND(0.005)	0.008	ND(0.005)	ND(0.005)	0.005	0.008
	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.020	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	08/01/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.022	ND(0.005)	0.006	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	10/18/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.015	ND(0.005)	0.0031J	ND(0.005)	ND(0.005)	0.004J	0.0018J
	01/10/96	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.013	ND(0.005)	0.0025J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	04/13/96	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.009	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	07/21/96	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.011	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	10/22/96	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.010	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
dup.	10/22/96	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.010	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
	01/24/97	0.0004J	ND(0.001)	ND(0.001)	ND(0.002)	0.012	0.0008J	0.001	ND(0.001)	ND(0.001)	0.0003J	0.0003J
	04/09/97	0.00063J	ND(0.001)	ND(0.001)	ND(0.002)	0.012	0.00058J	0.002	ND(0.001)	ND(0.001)	0.00073J	ND(0.001)
	07/30/97	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	0.005	ND(0.001)	0.00068J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	10/17/97	0.00042J	ND(0.001)	ND(0.001)	ND(0.002)	0.013	0.00091J	0.00076J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
MW-17D	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.062	ND(0.005)	0.018	0.012	ND(0.005)	0.019	0.014
	08/01/95	0.013	ND(0.005)	ND(0.005)	ND(0.005)	0.095	ND(0.005)	0.058	0.020	ND(0.005)	0.052	0.028
	10/18/95	0.007	ND(0.005)	ND(0.005)	ND(0.005)	0.087	ND(0.005)	0.044	0.015	ND(0.005)	0.047	0.054
dup.	01/11/98	0.006	ND(0.005)	ND(0.005)	ND(0.005)	0.066	ND(0.005)	0.036	0.012	ND(0.005)	0.046	0.043
#	01/11/98	0.006	ND(0.005)	ND(0.005)	ND(0.005)	0.050	ND(0.005)	0.032	0.009	ND(0.005)	0.038	0.039
	04/13/98	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.064	ND(0.005)	0.046	0.008	ND(0.005)	0.048	0.032
	07/22/98	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.077	ND(0.005)	0.053	0.009	ND(0.005)	0.060	0.037
	10/22/98	0.007	ND(0.005)	ND(0.005)	ND(0.005)	0.068	ND(0.005)	0.041	ND(0.005)	ND(0.005)	0.059	0.033
	01/24/97	0.004	ND(0.001)	ND(0.001)	ND(0.002)	0.052	0.0005J	0.023	0.004	ND(0.001)	0.039	0.022
	04/09/97	0.003	ND(0.001)	ND(0.001)	ND(0.002)	0.030	ND(0.001)	0.020	0.003	ND(0.001)	0.028	0.022
	07/30/97	0.003	ND(0.002)	ND(0.002)	ND(0.004)	0.029	ND(0.002)	0.013	0.00154J	ND(0.002)	0.028	0.018
	10/17/97	0.004	ND(0.002)	ND(0.002)	ND(0.004)	0.058	ND(0.002)	0.015	0.00130J	ND(0.002)	0.038	0.011
MW-17A	04/03/95	0.009	ND(0.005)	ND(0.005)	ND(0.005)	0.079	ND(0.005)	0.061	0.029	ND(0.005)	0.025	0.088
	08/01/95	0.010	ND(0.005)	ND(0.005)	ND(0.005)	0.085	ND(0.005)	0.075	0.025	ND(0.005)	0.037	0.064
	10/18/95	0.009	ND(0.005)	ND(0.005)	ND(0.005)	0.073	ND(0.005)	0.059	0.019	ND(0.005)	0.041	0.090

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
DOWELL, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL- BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1-TCA (mg/L)	1,1,2-TCA (mg/L)	TCE (mg/L)	PCE (mg/L)
dup. *	10/18/85	0.010	ND(0.005)	ND(0.005)	ND(0.005)	0.078	ND(0.005)	0.059	0.019	ND(0.005)	0.042	0.088
MW-17A Cont.	01/11/86	0.009	ND(0.005)	ND(0.005)	ND(0.005)	0.077	ND(0.005)	0.088	0.019	ND(0.005)	0.042	0.076
#	04/13/86	0.008	ND(0.005)	ND(0.005)	ND(0.005)	0.075	ND(0.005)	0.088	ND(0.005)	ND(0.005)	0.043	0.085
	07/22/86	0.008	ND(0.005)	ND(0.005)	ND(0.005)	0.078	ND(0.005)	0.088	0.012	ND(0.005)	0.051	0.077
	10/22/86	0.008	ND(0.005)	ND(0.005)	ND(0.005)	0.089	ND(0.005)	0.058	ND(0.005)	ND(0.005)	0.050	0.054
	01/24/87	0.008	ND(0.001)	ND(0.001)	0.0007J	0.058	ND(0.001)	0.044	0.007	ND(0.001)	0.045	0.049
04/09/87	07/30/87	0.007	ND(0.001)	ND(0.001)	ND(0.002)	0.065	0.00062J	0.051	0.008	ND(0.001)	0.051	0.051
	07/30/87	0.00435J	ND(0.005)	ND(0.005)	ND(0.010)	0.051	ND(0.005)	0.045	0.0038J	ND(0.005)	0.045	0.082
10/17/87		0.008	ND(0.005)	ND(0.005)	ND(0.010)	0.078	ND(0.005)	0.050	0.00285J	ND(0.005)	0.052	0.053
MW-17B	04/03/85	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.038	ND(0.005)	0.180	0.019	ND(0.005)	ND(0.005)	0.180
	08/01/85	0.008	ND(0.005)	ND(0.005)	ND(0.005)	0.040	ND(0.005)	0.190	0.020	ND(0.005)	0.038	0.180
dup. *	08/01/85	0.008	ND(0.005)	ND(0.005)	ND(0.005)	0.049	ND(0.005)	0.250	0.023	ND(0.005)	0.030	0.320
	10/18/85	0.008	ND(0.005)	ND(0.005)	ND(0.005)	0.048	ND(0.005)	0.210	0.024	ND(0.005)	0.034	0.370
	01/11/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.034	ND(0.005)	0.170	0.014	ND(0.005)	0.022	0.190
	04/13/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.030	ND(0.005)	0.180	ND(0.005)	ND(0.005)	0.013	0.270
	07/22/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.030	ND(0.005)	0.150	ND(0.005)	ND(0.005)	0.018	0.250
dup.	07/22/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.030	ND(0.005)	0.150	0.015	ND(0.005)	0.018	0.280
	10/22/86	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.038	ND(0.01)	0.190	ND(0.01)	ND(0.01)	0.030	0.250
	01/24/87	0.002	ND(0.002)	ND(0.002)	ND(0.004)	0.035	0.00068J	0.115	0.008	ND(0.002)	0.021	0.132
04/09/87	07/30/87	0.004	ND(0.005)	ND(0.005)	ND(0.010)	0.028	ND(0.005)	0.080	0.0035J	ND(0.005)	0.017	0.141
	10/17/87	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	0.053	ND(0.01)	0.103	ND(0.01)	ND(0.01)	0.027	0.149
MW-17C *	04/03/85	0.032	0.080	0.005	0.054	0.058	ND(0.005)	0.089	ND(0.005)	ND(0.005)	0.091	0.013
2nd *	04/03/85	0.034	0.057	ND(0.005)	0.045	0.063	ND(0.005)	0.110	ND(0.005)	ND(0.005)	0.085	0.017
*	08/01/85	0.022	0.047	ND(0.005)	ND(0.005)	0.073	ND(0.005)	0.140	ND(0.005)	ND(0.005)	0.120	0.012
*	10/18/85	0.019	0.028	ND(0.005)	ND(0.005)	0.063	0.0031J	0.120	ND(0.005)	ND(0.005)	0.140	0.024
*	01/11/86	0.020	0.035	ND(0.005)	ND(0.005)	0.058	ND(0.005)	0.130	ND(0.005)	ND(0.005)	0.120	0.015
*	04/13/86	0.011	0.008	ND(0.005)	ND(0.005)	0.057	ND(0.005)	0.130	ND(0.005)	ND(0.005)	0.100	0.013
#	07/22/86	0.018	ND(0.005)	ND(0.005)	ND(0.005)	0.058	ND(0.005)	0.120	ND(0.005)	ND(0.005)	0.120	0.014
	10/22/86	0.015	ND(0.005)	ND(0.005)	ND(0.005)	0.045	ND(0.005)	0.120	ND(0.005)	ND(0.005)	0.100	0.012
	01/24/87	0.009	ND(0.001)	ND(0.001)	ND(0.002)	0.051	0.003	0.089	ND(0.001)	ND(0.001)	0.078	0.005
04/09/87	07/30/87	0.011	ND(0.005)	ND(0.002)	ND(0.004)	0.049	0.002	0.105	ND(0.002)	ND(0.002)	0.100	0.008
	07/30/87	0.010	ND(0.005)	ND(0.005)	ND(0.010)	0.043	0.00225J	0.063	ND(0.005)	ND(0.005)	0.087	0.010
10/17/87		0.031	ND(0.01)	ND(0.01)	ND(0.02)	0.068	0.00300J	0.115	ND(0.01)	ND(0.01)	0.088	0.013
MW-18	04/03/85	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.017	ND(0.005)	0.083	ND(0.005)	ND(0.005)	0.034	0.071
	08/01/85	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.024	ND(0.005)	0.170	ND(0.005)	ND(0.005)	0.039	0.087
	10/18/85	0.0033J	ND(0.005)	ND(0.005)	ND(0.005)	0.018	ND(0.005)	0.150	ND(0.005)	ND(0.005)	0.042	0.130
	01/11/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.017	ND(0.005)	0.130	ND(0.005)	ND(0.005)	0.037	0.087
	04/13/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.016	ND(0.005)	0.170	ND(0.005)	ND(0.005)	0.034	0.120
	04/13/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.018	ND(0.005)	0.200	ND(0.005)	ND(0.005)	0.043	0.110
dup.	07/22/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.170	ND(0.005)	ND(0.005)	0.043	0.120
	10/22/86	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.020	ND(0.005)	0.180	ND(0.005)	ND(0.005)	0.042	0.120
	01/24/87	0.003	ND(0.001)	ND(0.001)	ND(0.002)	0.024	0.0006J	0.180	0.002	ND(0.001)	0.047	0.087
	04/09/87	0.003	ND(0.001)	ND(0.001)	ND(0.002)	0.022	0.00069J	0.155	0.002	ND(0.001)	0.044	0.116
	07/30/87	0.002	ND(0.002)	ND(0.002)	ND(0.004)	0.020	ND(0.002)	0.140	0.0011J	ND(0.002)	0.044	0.121
	10/17/87	0.00200J	ND(0.01)	ND(0.01)	ND(0.02)	0.028	ND(0.01)	0.157	ND(0.01)	ND(0.01)	0.044	0.071
MW-19	04/03/85	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.011	ND(0.005)	0.150	ND(0.005)	ND(0.005)	ND(0.005)	0.110

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
DOWELL, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL- BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1- TCA (mg/L)	1,1,2- TCA (mg/L)	TCE (mg/L)	PCE (mg/L)
MW-19 Cont.	08/01/85	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.014	ND(0.005)	0.170	ND(0.005)	ND(0.005)	ND(0.005)	0.140
	10/18/85	0.0024J	ND(0.005)	ND(0.005)	ND(0.005)	0.010	ND(0.005)	0.170	ND(0.005)	ND(0.005)	0.0038J	0.150
	01/11/88	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.010	ND(0.005)	0.110	ND(0.005)	ND(0.005)	ND(0.005)	0.100
	04/13/88	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.150	ND(0.005)	ND(0.005)	ND(0.005)	0.100
	07/22/88	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.009	ND(0.005)	0.150	ND(0.005)	ND(0.005)	ND(0.005)	0.110
	10/22/88	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.008	ND(0.005)	0.130	ND(0.005)	ND(0.005)	ND(0.005)	0.064
	01/24/87	0.001	ND(0.001)	ND(0.001)	ND(0.002)	0.008	ND(0.001)	0.122	0.0008J	ND(0.001)	0.003	0.093
	04/09/87	0.002	ND(0.001)	ND(0.001)	ND(0.002)	0.010	ND(0.001)	0.116	0.00088J	ND(0.001)	0.004	0.087
	07/30/87	0.002	ND(0.002)	ND(0.002)	ND(0.004)	0.008	ND(0.002)	0.116	ND(0.002)	ND(0.002)	0.005	0.098
	10/17/87	0.00280J	ND(0.01)	ND(0.01)	ND(0.02)	0.010	ND(0.01)	0.124	ND(0.01)	ND(0.01)	0.00850J	0.088
MW-20	11/20/88	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	01/24/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	04/09/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	07/30/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	10/17/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
MW-21	11/20/88	0.002	ND(0.001)	ND(0.001)	ND(0.001)	0.002	ND(0.001)	0.012	ND(0.001)	ND(0.001)	0.003	0.008
	01/24/87	0.002	ND(0.001)	ND(0.001)	ND(0.002)	0.003	ND(0.001)	0.019	ND(0.001)	ND(0.001)	0.004	0.008
	03/04/87	0.002	ND(0.001)	ND(0.001)	ND(0.002)	0.004	ND(0.001)	0.025	ND(0.001)	ND(0.001)	0.007	0.011
	04/09/87	0.00148J	ND(0.002)	ND(0.002)	ND(0.004)	0.003	ND(0.002)	0.021	ND(0.002)	ND(0.002)	0.005	0.008
	07/30/87	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.004)	0.0014J	ND(0.002)	0.011	ND(0.002)	ND(0.002)	0.003	0.007
MW-22	10/17/87	0.00052J	ND(0.002)	ND(0.002)	ND(0.004)	0.00088J	ND(0.002)	0.007	ND(0.002)	ND(0.002)	0.00144J	0.004
	11/20/88	0.014	ND(0.001)	ND(0.001)	ND(0.001)	0.010	ND(0.001)	0.083	ND(0.001)	ND(0.001)	0.012	0.053
	01/24/87	0.010	ND(0.001)	ND(0.001)	ND(0.002)	0.008	ND(0.001)	0.085	ND(0.001)	ND(0.001)	0.013	0.050
	01/24/87	0.011	ND(0.001)	ND(0.001)	ND(0.002)	0.011	ND(0.001)	0.098	ND(0.001)	ND(0.001)	0.013	0.065
	04/09/87	0.013	ND(0.001)	ND(0.001)	ND(0.002)	0.014	0.00072J	0.084	ND(0.001)	ND(0.001)	0.021	0.080
dup.	07/30/87	0.014	ND(0.002)	ND(0.002)	ND(0.004)	0.012	ND(0.002)	0.092	ND(0.002)	ND(0.002)	0.024	0.104
	10/17/87	0.016	ND(0.005)	ND(0.005)	ND(0.01)	0.014	ND(0.005)	0.107	ND(0.005)	ND(0.005)	0.028	0.117
MW-23	11/20/88	ND(0.001)	ND(0.001)	0.0008J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	01/24/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	03/04/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	04/09/87	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.004)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
	07/30/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
MW-24	10/17/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	11/20/88	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	01/24/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	04/09/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	07/30/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
MW-25	10/17/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	03/04/87	0.021	ND(0.001)	ND(0.001)	ND(0.001)	0.014	0.001	0.035	ND(0.001)	ND(0.001)	ND(0.001)	0.030
	04/09/87	0.015	ND(0.001)	ND(0.001)	ND(0.002)	0.015	0.00085J	0.035	ND(0.001)	ND(0.001)	0.008	0.020
	04/09/87	0.014	ND(0.001)	ND(0.001)	ND(0.002)	0.015	0.00078J	0.034	ND(0.001)	ND(0.001)	0.005	0.019
	07/30/87	0.023	ND(0.002)	ND(0.002)	ND(0.004)	0.011	0.00118J	0.031	ND(0.002)	ND(0.002)	0.005	0.035
dup.	10/17/87	0.026	ND(0.002)	ND(0.002)	ND(0.004)	0.011	0.00144J	0.027	ND(0.002)	ND(0.002)	0.004	0.035
	10/17/87	0.026	ND(0.002)	ND(0.002)	ND(0.004)	0.013	0.00148J	0.028	ND(0.002)	ND(0.002)	0.004	0.028

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
DOWELL, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL- BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1- TCA (mg/L)	1,1,2- TCA (mg/L)	TCE (mg/L)	PCE (mg/L)
MW-28 dup.	03/04/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	03/04/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	04/09/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	07/30/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	0.001	ND(0.001)	0.004	ND(0.001)	ND(0.001)	ND(0.001)	0.002
MW-27	10/17/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	0.001	ND(0.001)	0.004	ND(0.001)	ND(0.001)	0.00086J	0.004
	03/04/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	04/09/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	07/30/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	10/17/87	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)

Analytical method used prior to 10/85 = EPA Method 8240

Analytical method used during and after 10/85 = EPA Method 8280

NOTES:

mg/L = milligrams per liter (equivalent to parts per million)

dup. = duplicate sample

ND(0.001) = chemical not detected at concentration above detection limit shown in parentheses

J = chemical detected at concentration above instrument detection limit but below method detection limit

* = other chemicals also detected (see previous laboratory reports)

= other chemicals also detected (see laboratory analytical reports - Appendix A)

CHEMICAL ABBREVIATIONS:

1,1-DCA = 1,1-dichloroethane

1,2-DCA = 1,2-dichloroethane

1,1-DCE = 1,1-dichloroethene

1,1,1-TCA = 1,1,1-trichloroethane

1,1,2-TCA = 1,1,2-trichloroethane

TCE = trichloroethene

PCE = tetrachloroethene

Table 3. Results of soil samples collected from the land farm at the Dowell facility in Artesia, New Mexico

Date Sampled	Location (quadrant)			
	Northeast	Southeast	Northwest	Southwest
	Total Petroleum Hydrocarbons (ppm)			
1/21/97	291	30	417	166
5/26/97	428	161	348	136
*7/29/1997	179	41	141	75
**10/17/1997	99	58	62	33

Note: * - TPH as diesel

** - summation of both gasoline and diesel values

ppm - parts per million

TABLE 4. OPERATIONAL CONDITIONS, MAINTENANCE SHOP SVE SYSTEM,
DOWELL, ARTESIA, NEW MEXICO

SAMPLE DATE	HOUR METER	VACUUM (Inches of water)				ALL ZONES MANIFOLD BLOWER	
		ZONE 1 MANIFOLD	ZONE 1 BLOWER	ZONE 2 MANIFOLD	ZONE 2 BLOWER		
01/31/94	0.0						
02/01/94	5.1	44	48	48	50		
02/02/94	23.2			48	50		
02/03/94	47.8			41	46		
02/10/94	219.4			43	45		
02/16/94	362.1	30	35				
02/23/94	531.0			37	41		
03/04/94	748.6	27	32				
03/11/94	915.3			37	41		
03/18/94	1086.1	28	33				
03/28/94	1325.8	29	34				
04/08/94	1583.0			38	42		
04/19/94	1857.6	31	36	33	38		
05/06/94	2256.0	46	48	48	51		
05/18/94				47	49		
06/01/94				51	53		
06/16/94	3099.9	49	52	48	51		
07/06/94	3100.1	50	52	47	49		
07/21/94	3457.6	44	49	52	54		
08/09/94	3899.9	51	54	49	52		
09/07/94	4093.7	48	50	48	49		
09/30/94	4647.1	52	54	49	51		
10/11/94	4911.1	53	55	48	51		
11/03/94	5445.6	58	60	54	57		
12/05/94	6204.9	57	62	57	61		
01/25/95	7397.0	59	62	54	60		
04/05/95	9047.5	50	65	47	58		
05/09/95	9838.5	55	64	50	60		
06/18/95	10783.6	54	63	50	60		
07/11/95	11325.9	54	63	53	63		
10/18/95	13443.2	55	65	56	65		
11/15/95	14119.8	54	65 (60+)	54	65 (60+)		
11/30/95	14445.3	53	60+	54	60+		
01/11/96	15099.6			54	70		
06/17/96	15230.1	51	70	53	70		
07/24/96	16114.7	54	70	51	70		
10/22/96	18271.5	57	70	56	70		
04/09/97	21364.3					55	56
07/29/97	24000.6					39	54
10/17/97	24722.7					55	53
01/06/98	26658.9					58	60

**TABLE 5. OPERATIONAL CONDITIONS, WASH BAY SVE SYSTEM,
DOWELL, ARTESIA, NEW MEXICO**

SAMPLE DATE	HOUR METER	VACUUM (inches of water)					
		ZONE 1 MANIFOLD	ZONE 1 BLOWER	ZONE 2 MANIFOLD	ZONE 2 BLOWER	ZONE 3 MANIFOLD	ZONE 3 BLOWER
01/31/94	0.0						
02/01/94	5.3	43	44	41	42	43	44
02/02/94	20.6	40	42				
02/03/94	45.3	38	42			43	45
02/10/94	217.7	34	38				
02/16/94	359.7					41	43
02/23/94	528.5					39	42
03/04/94	746.2	32	36				
03/11/94	912.0					39	40
03/18/94	1083.9			33	37		
03/28/94	1322.8	32	36				
04/08/94	1581.2			32	36		
04/19/94	1855.2	31	34	33	36	35	38
05/06/94	2253.8	41	44	45	46	43	44
05/18/94						43	44
06/01/94		44	44				
06/16/94	3241.2	44	45	46	47	46	47
07/06/94	3712.1	43	44	44	45	45	45
07/21/94	3858.3	43	45	48	48	50	51
08/09/94	3859.7	43	44	45	46	45	46
09/07/94	4519.5	44	45	46	47		
09/30/94	5073.4	44	47	44	46	49	50
10/11/94	5328.8	48	50	41	44	48	50
11/03/94	5864.3	39	43	57	58	58	58
12/05/94	6546.8	57	58	57	58	58	59
01/25/95	7738.0	45	50	58	58	60	58

Note: In April 1995, the wash bay SVE system was expanded. Each of the three zones now has a south (S) and a north (N) subzone.

SAMPLE DATE	HOUR METER	VACUUM (inches of water)					
		ZONE 1 MANIFOLD	ZONE 1 BLOWER	ZONE 2 MANIFOLD	ZONE 2 BLOWER	ZONE 3 MANIFOLD	ZONE 3 BLOWER
04/05/95	8682.1	(S)42 (N)40	44	(S)54 (N)52	48	(S)55 (N)55	48
05/09/95	9489.0	(S)47 (N)45	42				
06/18/95	10424.0	(S)26 (N)25	30	(S)44 (N)42	44	(S)58 (N)53	38
07/11/95	10483.6	(S)42 (N)40	40	(S)43 (N)40	40	(S)45 (N)42	41

**TABLE 5. OPERATIONAL CONDITIONS, WASH BAY SVE SYSTEM,
DOWELL, ARTESIA, NEW MEXICO**

Note: Beginning in October 1995, vacuum was measured on the combined south subzones of Zones 1,2, and 3, and on the combined north subzones.

SAMPLE DATE	HOUR METER	VACUUM (inches of water)		
		BLOWER	MANIFOLD (Zones 1,2,3 combined)	
			SOUTH SUBZONES	NORTH SUBZONES
10/20/95	11774.0	46	60	57
11/15/95	12404.2	35	34	26
11/30/95	12756.7	37	35	35
01/11/96	13742.0	42	44	29
07/24/96	18411.0	39	56	42
10/22/96	20572.9	49	41	35
04/09/97	24621.7	41	33	28
07/30/97	27308.7	65	20	18
10/17/97	29169.7	65	20	19
01/06/98	31106.3	59	39	34

**TABLE 6. PID READINGS - VOLATILE ORGANIC COMPOUNDS,
MAINTENANCE SHOP SVE SYSTEM,
DOWELL, ARTESIA, NEW MEXICO**

SAMPLE DATE	HOUR METER	PID READING (ppm)			
		EXHAUST	ZONE 1	ZONE 2	ALL ZONES
02/03/94	47.8	0	4	35	
02/10/94	219.4	0	1	12	
02/16/94	362.1	0	1	6	
02/23/94	531.0	3	3	8	
03/04/94	748.6	0	1	6	
03/11/94	915.3	3	3	7	
03/18/94	1086.1	0	0	2	
03/28/94	1325.8	0	0	2	
04/08/94	1583.0	0	0	3.5	
05/18/94	—	0	—	—	
07/06/94	3100.1	0	0	0	
07/21/94	3457.6	0	0	0	
08/09/94	3899.9	0	0	1	
09/06/94	4093.7	0	0	1	
09/30/94	4647.1	0	0.5	1	
10/11/94	4911.1	3	1.8	1	
11/03/94	5445.6	22	4.5	6.3	
12/05/94	6204.9	4	2	5	
01/25/95	7397.0	11	0	50	
04/05/95	9047.5	21	5	5	
05/09/95	9838.5	1.4	0	3	
06/18/95	10783.6	3.6	6	8	
07/11/95	11325.9	1.6	2	2	
10/18/95	14119.8	0.6	0.2	0.8	
11/15/95	14445.2	2	1	1	
01/11/96	15099.6	—	0.2	2.3	
06/17/96	15230.1	—	0.5	3.0	
07/24/96	16114.7	2.8	7.3	11.9	
10/22/96	18271.5	2.9	2.7	4.3	
04/09/97	21364.3				1
07/30/97	24000.6				0
10/17/97	24722.7				0

NOTES:

PID = photoionization detector
ppm = parts per million
— = no data available

TABLE 7. PID READINGS - VOLATILE ORGANIC COMPOUNDS,
WASH BAY SVE SYSTEM,
DOWELL, ARTESIA, NEW MEXICO

SAMPLE DATE	HOUR METER	PID READING (ppm)			
		EXHAUST	ZONE 1	ZONE 2	ZONE 3
02/03/94	45.3	2	84	110	180
02/10/94	217.7	0	56	69	137
02/16/94	359.7	0	23	37	133
02/23/94	528.5	3	22	54	118
03/04/94	746.2	3	42	46	91
03/11/94	912.0	7	44	42	93
03/18/94	1083.9	40	33	44	77
03/28/94	1322.8	18	26	13	21
04/08/94	1581.2	7	29	39	67
05/18/94		0			
07/06/94	3712.1	1	24	66	135
07/21/94	3858.2	0	110	48	71
08/09/94	3859.7	1	31	67	126
09/06/94	4519.5	0	29	40	79
09/30/94	5073.4	44	33/51	69/133	95/161
10/11/94	5328.8	7	43	78	118
11/03/94	5864.3	8	151	434	745
12/05/94	6546.3	4	30	152	240
01/25/95	7738.0	2	35	200	220

Continued on next page

**TABLE 7. PID READINGS - VOLATILE ORGANIC COMPOUNDS,
WASH BAY SVE SYSTEM,
DOWELL, ARTESIA, NEW MEXICO**

Note: In April 1995, the wash bay SVE system was expanded.
Each of the three zones now has an old south (S) and a new north (N) subzone.

SAMPLE DATE	HOUR METER	PID READING (ppm)				COMMENTS
		EXHAUST	ZONE 1	ZONE 2	ZONE 3	
04/05/95	8682.1	0	46 (S)51 (N)218	119 (S)347 (N)125	199 (S)419 (N)408	combined north and south zones
04/06/95		0	62 (S)92 (N)301	156 (S)348 (N)567	194 (S)256 (N)767	combined north and south zones
05/09/95	9473.1	151	24 (S)42 (N)126	78 (S)125 (N)337	80 (S)217 (N)480	combined north and south zones
06/18/95	10418.5	78	23 (S)35 (N)153	122 (S)90 (N)267	168 (S)238 (N)368	combined north and south zones
07/11/95	10483.6	0	15 (S)5 (N)48	28 (S)48 (N)78	48 (S)65 (N)84	combined N/S subzones (with makeup air) no makeup air no makeup air
10/20/95	11774.0	2		660		combined Zones 1,2,3 (no makeup air) 0.5 hours after system startup
			(S)100 (N)480	(S)420 (N)640	(S)560 (N)800	0.5 hours after system startup
11/15/95	12404.2	341		313		combined Zones 1,2,3 (with makeup air)
				392		combined Zones 1,2,3 (no makeup air)
			(S)121 (N)203 (S)153 (N)241	(S)171 (N)448 (S)206 (N)442	(S)177 (N)406 (S)196 (N)469	with makeup air with makeup air no makeup air no makeup air
01/11/96	13742.0			124		combined - all zones
			(S)84 (N)37	(S)93 (N)112	(S)75 (N)119	

Continued on next page

**TABLE 7. PID READINGS - VOLATILE ORGANIC COMPOUNDS,
WASH BAY SVE SYSTEM,
DOWELL, ARTESIA, NEW MEXICO**

SAMPLE DATE	HOUR METER	PID READING (ppm)				COMMENTS
		EXHAUST	ZONE 1	ZONE 2	ZONE 3	
06/17/96				212		combined - all zones
07/24/96				156		combined - all zones
10/22/96				163		combined - all zones
04/09/97		29		38.9		combined - all zones
07/29/97				63		combined - all zones
10/17/97		18		20.5		combined - all zones

TABLE 8. SUMMARY OF LABORATORY ANALYTICAL -SVE SOIL VAPOR SAMPLES,
MAINTENANCE SHOP AND WASH BAY SVE SYSTEMS,
DOWELL, ARTESIA, NEW MEXICO

SVE ZONE	SAMPLE DATE	BENZENE (mg/m ³)	ETHYL- BENZENE (mg/m ³)	TOLUENE (mg/m ³)	XYLENES (mg/m ³)	1,1-DCA (mg/m ³)	1,2-DCA (mg/m ³)	1,1-DCE (mg/m ³)	1,1,1- TCA (mg/m ³)	1,1,2- TCA (mg/m ³)	TCE (mg/m ³)	PCE (mg/m ³)	2- UTANONE (mg/m ³)
MS-1	02/10/84	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	7.00
	02/16/84	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
	02/23/84	ND(0.5)	ND(0.5)	0.51	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	1.40
	03/04/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(1)
	03/11/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	3.00
	03/18/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	5.60	ND(1)	ND(1)	ND(0.5)	ND(1)
	03/28/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	1.10	ND(1)	ND(1)	ND(0.5)	ND(1)
	04/20/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	21.30	ND(1)	ND(1)	ND(0.5)	1.90
	05/06/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	6.20	ND(0.5)	ND(0.5)	ND(0.5)	ND(10)
	05/18/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	4.00	ND(0.5)	ND(0.5)	ND(10)	ND(10)
	06/01/84	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	4.00	ND(1)	ND(1)	ND(1)	ND(1)
	12/05/84	ND(0.001)	ND(0.001)	ND(0.001)	NA	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.20	NA
	10/18/85	ND(0.2)	2.02	ND(0.2)	8.07	ND(0.2)	ND(0.2)	ND(0.2)	4.98	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
	07/24/86	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(0.3)	ND(0.3)	ND(0.3)	1.70	ND(0.3)	ND(0.3)	0.40	NA
	10/22/86	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	1.61	ND(0.2)	ND(0.2)	0.41	ND(0.2)
	01/21/87	ND(1.0)	ND(1.0)	ND(1.0)	ND(2.0)	ND(1.0)	ND(1.0)	ND(1.0)	1.07	ND(1.0)	ND(1.0)	ND(1.0)	NA
MS-2	02/03/84	0.70	0.2J	ND(0.5)	ND(0.5)	1.60	ND(0.5)	ND(0.5)	2.20	ND(0.5)	0.68	140.00	ND(2)
	02/10/84	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	27.25	ND(2)
	02/16/84	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	14.50	ND(2)
	02/23/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	50.20	1.80
	03/04/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	8.50	ND(1)
	03/11/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	17.60	ND(1)
	03/18/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	15.90	ND(1)
	03/28/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	1.20	ND(1)	ND(1)	6.90	ND(1)
	04/08/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	2.50	ND(1)	ND(1)	12.10	2.50
	04/20/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	1.60	ND(0.5)	ND(0.5)	6.80	ND(10)
	05/06/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	4.00	ND(0.5)	ND(0.5)	6.90	ND(10)
	05/18/84	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	4.00	ND(1)	ND(1)	12.00	ND(1)
	06/01/84	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.31	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	09/07/84	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.93	ND(0.04)	ND(0.04)	0.07	ND(0.04)
	01/25/85	ND(0.04)	ND(0.04)	ND(0.04)	0.12	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.2)	ND(0.2)	ND(0.2)	1.68	ND(0.2)
	05/09/85	ND(0.2)	ND(0.2)	ND(0.2)	0.40	ND(0.2)	ND(0.2)	ND(0.2)	1.03	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
	10/18/85	ND(0.2)	2.14	ND(0.2)	8.62	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.3)	ND(0.3)	ND(0.3)	0.80	NA
MS-COMP	07/24/86	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(0.3)	ND(0.3)	ND(0.3)	0.24	ND(0.3)	ND(0.3)	0.66	ND(0.2)
	10/22/86	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	NA
	01/21/87	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	0.46J	ND(1.0)	ND(1.0)	ND(1.0)	NA
	04/09/87	ND(1.0)	ND(1.0)	ND(1.0)	ND(2.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	0.60J	NA
	07/29/87	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	NA
WB-1	02/10/84	ND(1)	3.57	2.98	12.60	ND(2)	ND(2)	ND(2)	4.07	ND(2)	ND(2)	ND(1)	ND(2)
	02/16/84	ND(1)	1.20	1.10	10.40	ND(2)	ND(2)	ND(2)	3.70	ND(2)	ND(2)	14.50	9.10
	02/23/84	ND(0.5)	2.20	2.40	18.30	ND(1)	ND(1)	ND(1)	6.10	ND(1)	ND(1)	ND(0.5)	ND(1)
	03/04/84	ND(0.5)	2.60	2.50	21.20	ND(1)	ND(1)	ND(1)	6.60	ND(1)	ND(1)	ND(0.5)	ND(1)
	03/11/84	ND(0.5)	2.60	2.90	16.10	ND(1)	ND(1)	ND(1)	9.30	ND(1)	ND(1)	17.60	4.10
	03/18/84	ND(0.5)	14.60	1.80	ND(0.5)	ND(1)	ND(1)	ND(1)	3.50	ND(1)	ND(1)	ND(0.5)	21.30
	03/28/84	ND(0.5)	0.90	1.20	8.00	ND(1)	ND(1)	ND(1)	3.40	ND(1)	ND(1)	ND(0.5)	ND(1)
	04/08/84	ND(0.5)	ND(0.5)	ND(0.5)	4.60	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(1)
	04/20/84	ND(0.5)	ND(0.5)	ND(0.5)	5.90	ND(1)	ND(1)	ND(1)	2.80	ND(1)	ND(1)	ND(0.5)	1.20
	05/06/84	ND(0.5)	1.10	1.70	5.80	ND(0.5)	ND(0.5)	ND(1)	3.90	ND(0.5)	ND(0.5)	ND(0.5)	ND(10)

TABLE 8. SUMMARY OF LABORATORY ANALYTICAL - SVE SOIL VAPOR SAMPLES,
MAINTENANCE SHOP AND WASH BAY SVE SYSTEMS,
DOWELL, ARTESIA, NEW MEXICO

SVE ZONE	SAMPLE DATE	BENZENE (mg/m ³)	ETHYL- BENZENE (mg/m ³)	TOLUENE (mg/m ³)	XYLENES (mg/m ³)	1,1-DCA (mg/m ³)	1,1-DCE (mg/m ³)	1,1,1-TCA (mg/m ³)	1,1,2-TCA (mg/m ³)	TCE (mg/m ³)	PCE (mg/m ³)	2-UTANONE (mg/m ³)
WB-1 Cont.	05/18/94	ND(0.5)	0.80	ND(0.5)	8.40	ND(0.5)	ND(1)	1.80	ND(0.5)	ND(0.5)	ND(0.5)	ND(10)
	06/01/94	ND(1)	3.00	ND(1)	6.00	ND(1)	ND(1)	4.00	ND(1)	ND(1)	2.00	ND(1)
	07/06/94	ND(1)	5.00	1.00	11.00	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	08/10/94	NA	NA	NA	NA	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	09/07/94	ND(0.001)	0.24	0.09	0.61	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	12/05/94	ND(0.001)	0.19	0.14	NA	ND(0.001)	ND(0.001)	0.27	ND(0.001)	ND(0.001)	0.04	NA
	01/25/95	ND(0.04)	0.16	0.12	1.19	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)
	05/09/95	ND(0.2)	0.78	0.80	8.24	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.28	ND(0.2)
WB-2	02/10/94	1.67	5.03	10.13	14.90	ND(2)	ND(2)	8.34	ND(2)	ND(2)	ND(2)	14.71
	02/16/94	ND(1)	3.00	4.80	29.90	ND(2)	ND(2)	6.50	ND(2)	ND(2)	14.50	6.70
	02/23/94	1.40	9.30	16.40	53.20	ND(1)	ND(1)	12.60	ND(1)	ND(1)	ND(0.5)	ND(1)
	03/04/94	ND(0.5)	5.30	9.50	39.70	ND(1)	ND(1)	12.10	ND(1)	ND(1)	ND(0.5)	ND(1)
	03/11/94	ND(0.5)	5.40	10.90	23.20	ND(1)	ND(1)	12.10	ND(1)	ND(1)	ND(0.5)	26.70
	03/18/94	0.70	4.80	9.60	28.10	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	18.70
	03/28/94	ND(0.5)	1.90	3.50	12.80	ND(1)	ND(1)	5.00	ND(1)	ND(1)	ND(0.5)	ND(1)
	04/08/94	ND(0.5)	1.10	1.50	8.40	ND(1)	ND(1)	2.00	ND(1)	ND(1)	ND(0.5)	ND(1)
	04/20/94	ND(0.5)	4.10	5.80	27.50	ND(1)	ND(1)	6.80	ND(1)	ND(1)	ND(0.5)	1.60
	05/06/94	ND(0.5)	3.70	4.50	30.00	ND(0.5)	ND(1)	3.00	ND(0.5)	ND(0.5)	ND(0.5)	ND(10)
	05/18/94	ND(0.5)	5.30	6.00	44.20	ND(0.5)	ND(1)	2.80	ND(0.5)	ND(0.5)	ND(0.5)	ND(10)
	06/01/94	ND(1)	7.00	ND(1)	15.00	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	07/06/94	ND(1)	5.00	8.00	42.00	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	08/10/94	NA	NA	NA	NA	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	09/07/94	ND(0.001)	0.45	0.41	4.12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	1.28
	12/05/94	0.24	1.40	1.66	NA	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.23	NA
	01/25/95	ND(0.04)	0.69	0.91	10.67	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)
	05/09/95	ND(0.2)	0.91	5.44	14.67	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
WB-3	02/03/94	5.50	22.00	78.00	153.00	1.20	2.80	26.00	ND(0.5)	ND(0.5)	5.20	ND(2)
	02/10/94	ND(1)	15.60	64.60	46.90	ND(2)	ND(2)	11.40	ND(2)	ND(2)	ND(2)	31.33
	02/16/94	ND(1)	ND(1)	25.70	44.50	ND(2)	ND(2)	11.00	ND(2)	ND(2)	ND(1)	ND(2)
	02/23/94	3.50	17.50	73.20	99.10	ND(1)	ND(1)	19.30	ND(1)	ND(1)	1.60	1.40
	03/04/94	2.10	10.60	44.90	60.90	ND(1)	ND(1)	14.70	ND(1)	ND(1)	ND(0.5)	ND(1)
	03/11/94	ND(0.5)	13.30	ND(0.5)	14.30	ND(1)	ND(1)	17.90	ND(1)	ND(1)	ND(0.5)	3.80
	03/18/94	ND(0.5)	10.10	36.30	57.20	ND(1)	ND(1)	11.00	ND(1)	ND(1)	ND(0.5)	46.40
	03/28/94	1.20	5.70	21.40	30.80	ND(1)	ND(1)	8.10	ND(1)	ND(1)	ND(0.5)	ND(1)
	04/08/94	ND(0.5)	1.50	2.40	9.40	ND(1)	ND(1)	11.10	ND(1)	ND(1)	ND(0.5)	ND(1)
	04/20/94	ND(0.5)	10.60	27.60	31.80	ND(1)	ND(1)	6.00	ND(0.5)	ND(0.5)	ND(0.5)	13.30
	05/06/94	ND(0.5)	6.80	17.50	38.90	ND(0.5)	ND(1)	1.90	ND(0.5)	ND(0.5)	ND(0.5)	ND(10)
	05/18/94	ND(0.5)	6.20	8.10	43.90	ND(0.5)	ND(1)	4.00	ND(0.5)	ND(0.5)	ND(0.5)	ND(10)
	06/01/94	ND(1)	4.00	7.00	34.00	ND(1)	ND(1)	3.00	ND(1)	ND(1)	ND(1)	ND(1)
	07/06/94	ND(1)	11.00	22.00	73.00	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	08/10/94	NA	NA	NA	NA	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	09/07/94	ND(0.001)	1.35	2.90	10.32	ND(0.001)	ND(0.001)	0.16	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
	12/05/94	0.54	2.62	5.86	NA	0.06	0.03	ND(0.001)	ND(0.001)	ND(0.001)	0.72	NA
	01/25/95	0.08	2.75	1.49	23.23	ND(0.04)	ND(0.04)	0.41	ND(0.04)	ND(0.04)	0.37	ND(0.04)
	05/09/95	ND(0.2)	2.30	5.00	25.72	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.40	ND(0.2)

TABLE 8. SUMMARY OF LABORATORY ANALYTICAL - SVE SOIL VAPOR SAMPLES,
MAINTENANCE SHOP AND WASH BAY SVE SYSTEMS,
DOWELL, ARTESIA, NEW MEXICO

SVE ZONE	SAMPLE DATE	BENZENE (mg/m ³)	ETHYL- BENZENE (mg/m ³)	TOLUENE (mg/m ³)	XYLENES (mg/m ³)	1,1-DCA (mg/m ³)	1,2-DCA (mg/m ³)	1,1-DCE (mg/m ³)	1,1,1- TCA (mg/m ³)	1,1,2- TCA (mg/m ³)	TCE (mg/m ³)	PCE (mg/m ³)	2- UTANONE (mg/m ³)
WB-N1	05/09/95	1.27	5.43	19.70	80.19	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	1.88	ND(0.2)
WB-N2	05/09/95	2.13	5.57	22.50	51.92	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	1.17	ND(0.2)
WB-N3	05/09/95	0.58	2.38	8.08	18.57	ND(0.2)	ND(0.2)	0.23	ND(0.2)	ND(0.2)	ND(0.2)	0.60	ND(0.2)
WB-COMP	10/20/95	1.03	9.38	18.30	90.90	ND(0.2)	ND(0.2)	0.26	4.41	ND(0.2)	ND(0.2)	2.38	ND(0.2)
	07/24/96	ND(0.3)	0.40	1.00	5.20	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	NA
	10/22/96	ND(0.2)	0.68	0.70	12.93	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.23	ND(0.2)
	01/21/97	ND(1.0)	ND(1.0)	ND(1.0)	5.41	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	NA
	04/09/97	ND(1.0)	ND(1.0)	ND(1.0)	3.75	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	NA
	07/29/97	ND(1.0)	ND(1.0)	ND(1.0)	10.07	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	NA

Prior to January 1995, the laboratory analytical method used was EPA Method 8240.

During and after January 1995, the laboratory analytical method used was EPA Method 8260.

See laboratory reports for concentrations of additional analytes.

In April 1995, the wash bay SVE system was expanded. Each of the three zones now consists of an old south (S) and a new north (N) zone.

NOTES:

mg/m³ = milligrams per cubic meter

* = units reported as "ppm" or "mg/L". Detection limit may be incorrect.

J = chemical present above instrument detection limit but below method detection limit

NA = not analyzed

MS = Maintenance Shop SVE system

WB = Wash Bay SVE system

WB-N1 = north subzone of Wash Bay Zone 1

WB-N2 = north subzone of Wash Bay Zone 2

WB-N3 = north subzone of Wash Bay Zone 3

WB-COMP = composite sample from Wash Bay zones 1, 2, and 3

MS-COMP = composite sample from Maintenance Shop zones 1 and 2

CHEMICAL ABBREVIATIONS:

1,1-DCA = 1,1-dichloroethane

1,2-DCA = 1,2-dichloroethane

1,1-DCE = 1,1-dichloroethene

1,1,1-TCA = 1,1,1-trichloroethane

1,1,2-TCA = 1,1,2-trichloroethane

TCE = trichloroethene

PCE = tetrachloroethene

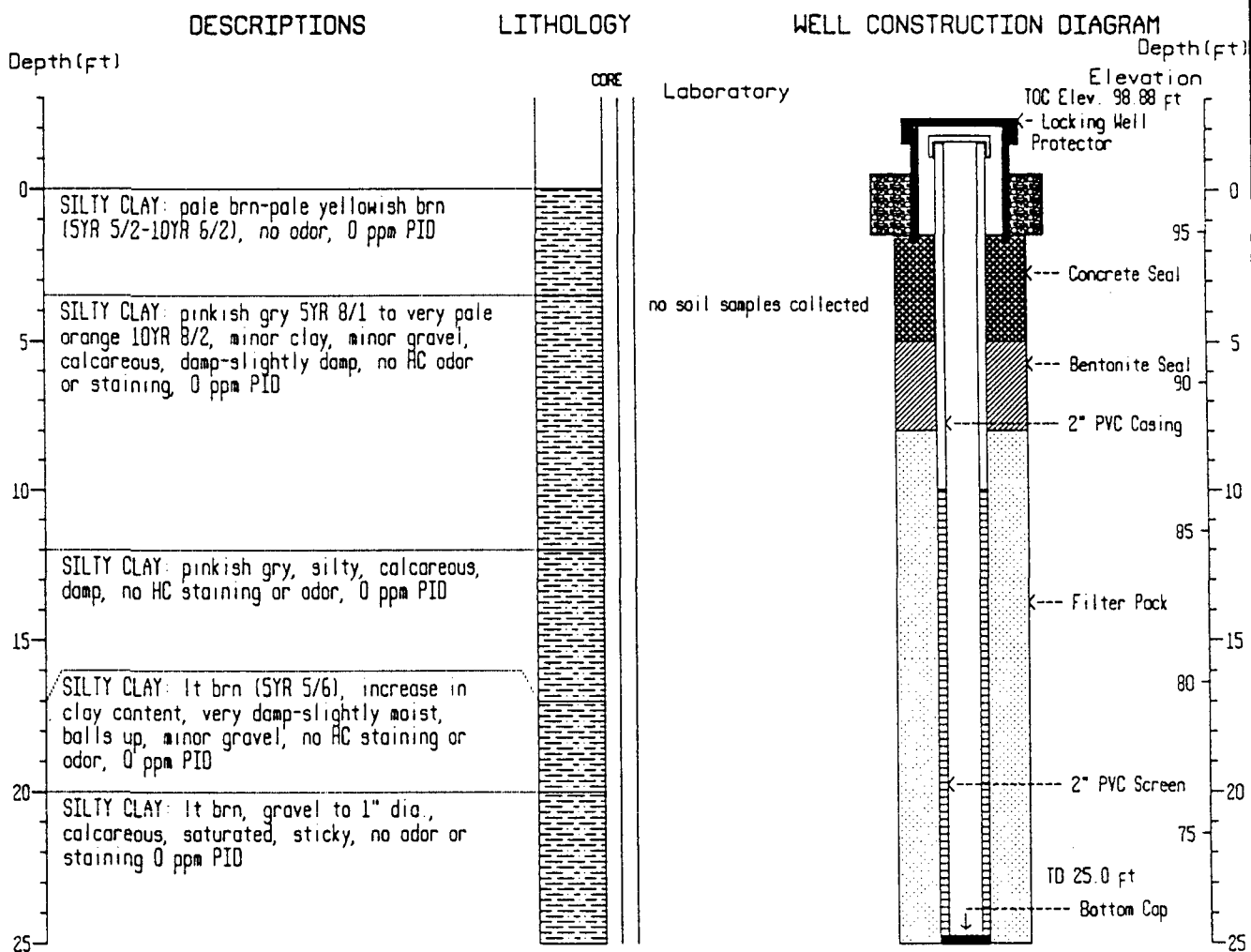
APPENDIX A

LITHOLOGIC AND WELL COMPLETION LOGS

MONITORING WELL MW-25

LOCATION: Dowell Schlumberger, Artesia, New Mexico
 North of MW-22
 T17S, R26E, Sec 4, SE 1/4, SW 1/4
 LOG: Western Water Consultants Inc. (Kevin Mattson)
 DRILLER: Scarborough Drilling (Lane Scarborough)
 STATE ENGINEER NO: NA
 INSTALLATION DATE: March 3, 1997

WELL OWNER: Dowell Schlumberger Inc. (JN 90-125)
 DRILLING METHOD: Air Rotary, 5.0" OD
 CASING: 2" Dia Flush Joint Sch 40 PVC
 SCREEN: Slotted Casing, 0.020 Inch Slots
 FILTER PACK: 8/16 Mesh Silica Sand
 WATER TABLE ELEVATION: NA
 (Reference Datum: Arbitrary = 100.00 feet)



MONITORING WELL MW-26

LOCATION: Dowell Schlumberger, Artesia, New Mexico

Very northeast corner of property

T17S, R26E, Sec 4, SE 1/4, SW 1/4

LOG: Western Water Consultants Inc. (Kevin Mattson)

DRILLER: Scarborough Drilling (Lane Scarborough)

STATE ENGINEER NO: NA

INSTALLATION DATE: March 3, 1997

WELL OWNER: Dowell Schlumberger Inc. (JN 90-125)

DRILLING METHOD: Air Rotary, 5.0" OD

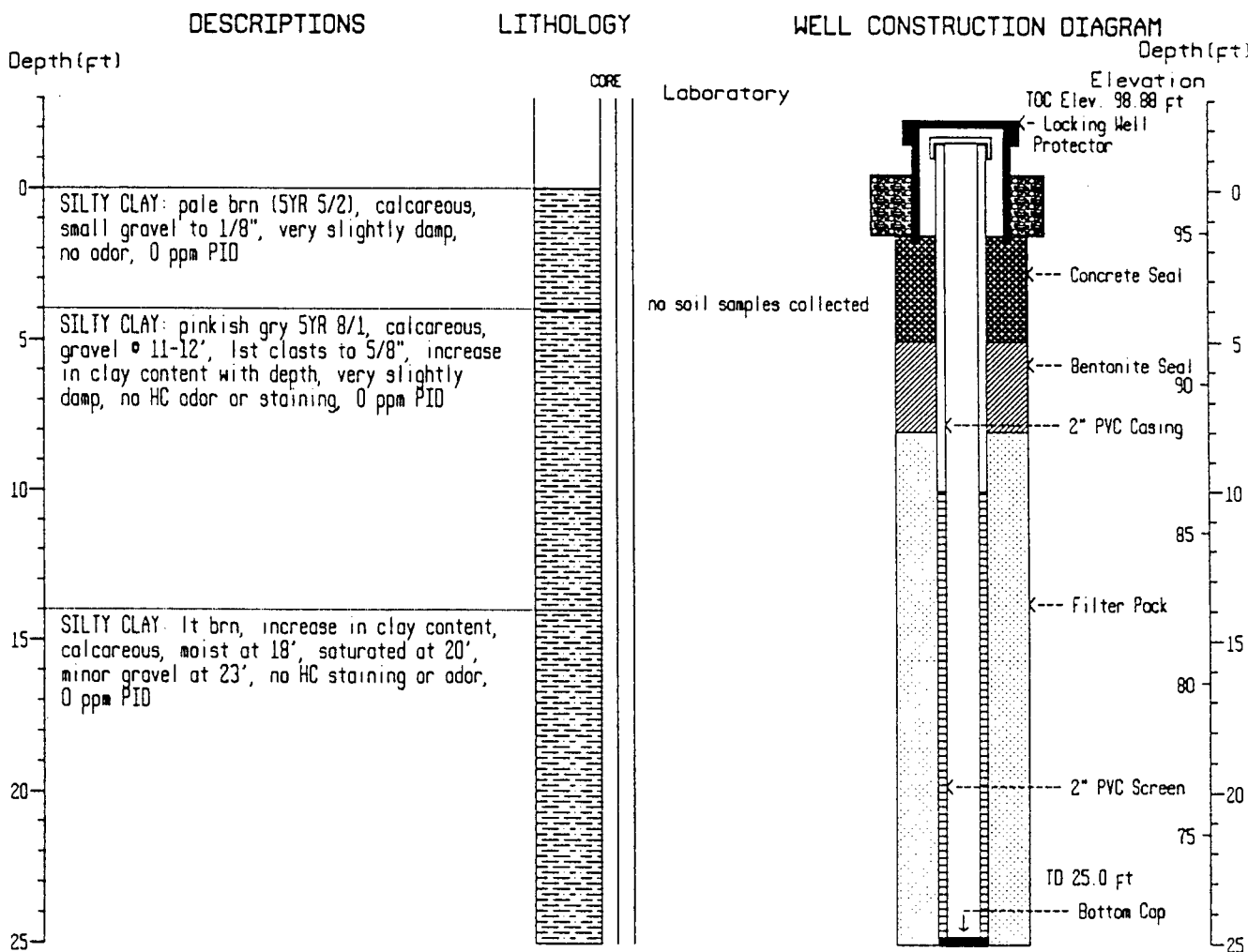
CASING: 2" Dia. Flush Joint Sch. 40 PVC

SCREEN: Slotted Casing, 0.020 Inch Slots

FILTER PACK: 8/16 Mesh Silica Sand

WATER TABLE ELEVATION: NA

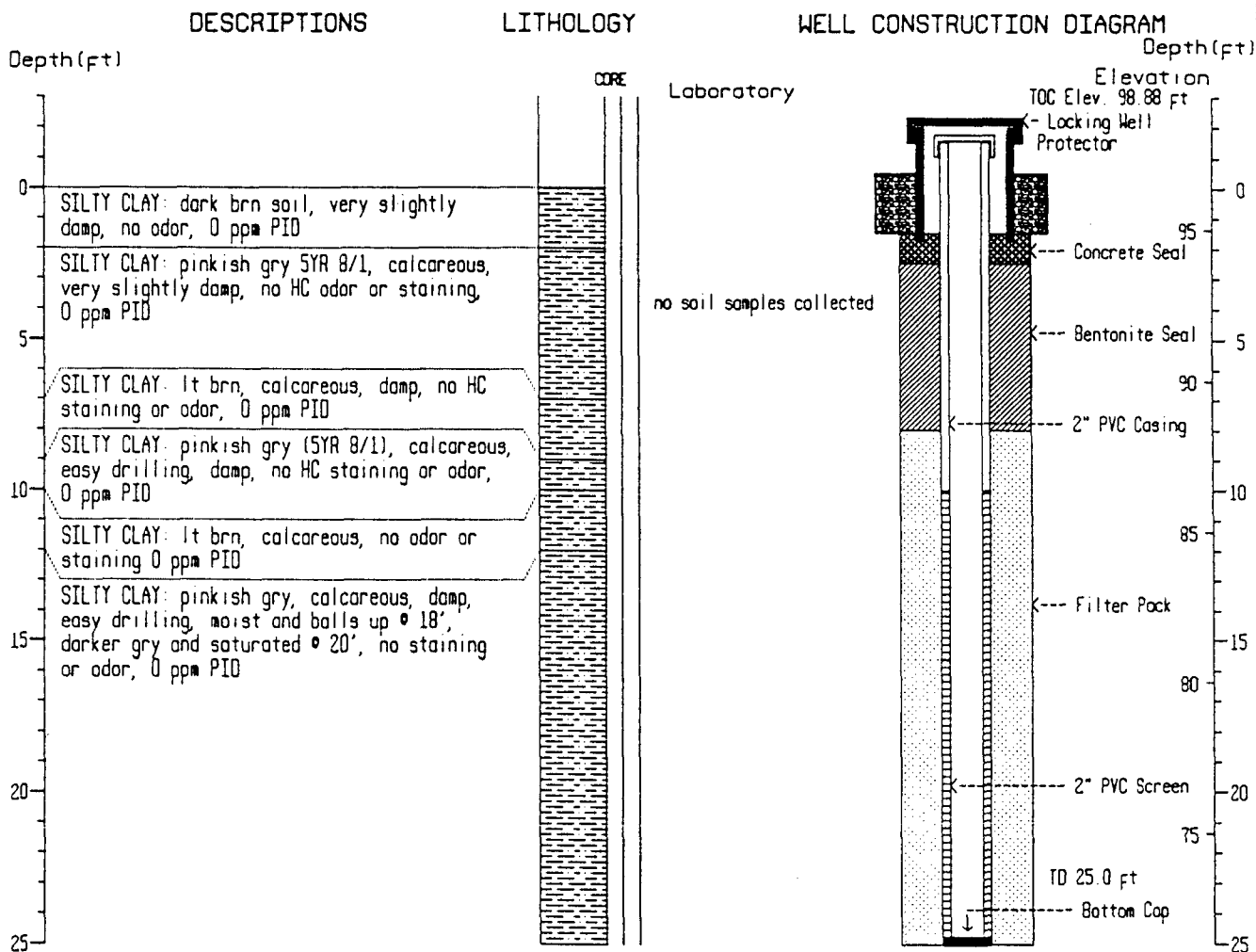
(Reference Datum: Arbitrary = 100.00 feet)



MONITORING WELL MW-27

LOCATION: Dowell Schlumberger, Artesia, New Mexico
 Along the east property line near the northeast corner
 T17S, R26E, Sec 4, SE 1/4, SW 1/4
 LOG: Western Water Consultants Inc. (Kevin Mattson)
 DRILLER: Scarborough Drilling (Lane Scarborough)
 STATE ENGINEER NO: NA
 INSTALLATION DATE: March 3, 1997

WELL OWNER: Dowell Schlumberger Inc. (JN 90-125)
 DRILLING METHOD: Air Rotary, 5.0" OD
 CASING: 2" Dia. Flush Joint Sch. 40 PVC
 SCREEN: Slotted Casing, 0.020 Inch Slots
 FILTER PACK: 8/16 Mesh Silica Sand
 WATER TABLE ELEVATION: NA
 (Reference Datum: Arbitrary = 100.00 feet)



APPENDIX B

LABORATORY ANALYTICAL REPORTS

**ENERGY LABORATORIES, INC.**

SHIPPING: 2393 SALT CREEK HIGHWAY • CASPER, WY 82601

MAILING: P.O. BOX 3258 • CASPER, WY 82602

E-mail: energy@trib.com • FAX: (307) 234-1639 • PHONE: (307) 235-0515 • TOLL FREE: (888) 235-0515

EPA METHOD 8260Client: **Western Water Consultants**

Sample ID: 90125-1.10/97

Laboratory ID: C97-63820

Matrix: Water

Dilution Factor: 1

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-1

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	1.0
74-87-3	Chloromethane	ND	1.0
75-01-4	Vinyl chloride (Chloroethene)	ND	1.0
74-83-9	Bromomethane	ND	1.0
75-00-3	Chloroethane	ND	1.0
75-69-4	Trichlorofluoromethane	ND	1.0
75-35-4	1,1 - Dichloroethene	ND	1.0
75-09-2	Methylene chloride (Dichloromethane)	ND	1.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	1.0
75-34-3	1,1 - Dichloroethane	ND	1.0
78-93-3	2 -Butanone (MEK)	ND	10.0
156-59-2	cis - 1,2 - Dichloroethene	ND	1.0
74-97-5	Bromochloromethane	ND	1.0
67-66-3	Chloroform (Trichloromethane)	ND	1.0
594-20-7	2,2 - Dichloropropane	ND	1.0
71-55-6	1,1,1 - Trichloroethane	ND	1.0
107-06-2	1,2 - Dichloroethane	1.45	1.0
563-58-6	1,1 - Dichloropropene	ND	1.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	1.0
71-43-2	Benzene	26.4	1.0
74-95-3	Dibromomethane	ND	1.0
78-87-5	1,2 - Dichloropropane	ND	1.0
79-01-6	Trichloroethene	ND	1.0
75-27-4	Bromodichloromethane	ND	1.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	1.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	1.0
79-00-5	1,1,2 - Trichloroethane	ND	1.0
108-88-3	Toluene	ND	1.0
106-93-4	1,2 - Dibromoethane	ND	1.0
142-28-9	1,3 - Dichloropropane	ND	1.0
124-48-1	Dibromochloromethane	ND	1.0
127-18-4	Tetrachloroethene	ND	1.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	1.0
108-90-7	Chlorobenzene	ND	1.0
100-41-4	Ethylbenzene	2.58	1.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	2.0
75-25-2	Bromoform (Tribromomethane)	ND	1.0
100-42-5	Styrene (Ethenylbenzene)	ND	1.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	1.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	1.0
96-18-4	1,2,3 - Trichloropropane	ND	1.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-1.10/97
Laboratory ID: C97-63820

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

MW-1

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	1.0
108-86-1	Bromobenzene	ND	1.0
103-65-1	n - Propylbenzene	ND	1.0
95-49-8	2 - Chlorotoluene	ND	1.0
106-43-4	4 - Chlorotoluene	ND	1.0
108-67-8	1,3,5 - Trimethylbenzene	ND	1.0
98-06-6	tert - Butylbenzene	ND	1.0
95-63-6	1,2,4 - Trimethylbenzene	ND	1.0
135-98-8	sec - Butylbenzene	ND	1.0
541-73-1	1,3 - Dichlorobenzene	ND	1.0
106-46-7	1,4 - Dichlorobenzene	ND	1.0
99-87-6	4-Isopropyltoluene	ND	1.0
95-50-1	1,2 - Dichlorobenzene	ND	1.0
104-51-8	n - Butylbenzene	ND	1.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	5.0
120-82-1	1,2,4 - Trichlorobenzene	ND	1.0
91-20-3	Naphthalene	ND	1.0
87-68-3	Hexachlorobutadiene	ND	1.0
87-61-6	1,2 3 - Trichlorobenzene	ND	1.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

<u>INTERNAL STANDARDS</u>	<u>AREA</u>	<u>ICAL / CCAL</u>	<u>PERCENT RECOVERY</u>	<u>ACCEPTANCE RANGE</u>
Pentafluorobenzene	779506	792953	98.3%	50 - 200 %
Fluorobenzene	1526590	1515940	101%	50 - 200 %
1,4 - Difluorobenzene	1473735	1453553	101%	50 - 200 %
Chlorobenzene - d5	1072710	1112136	96.5%	50 - 200 %
1,4 - Dichlorobenzene - d4	428525	446806	95.9%	50 - 200 %

<u>SYSTEM MONITORING COMPOUNDS</u>	<u>CONCENTRATION</u>	<u>PERCENT RECOVERY</u>	<u>ACCEPTANCE RANGE</u>
Dibromofluoromethane	10.6	106%	86 - 118 %
Toluene - d8	10.0	100%	88 - 110 %
4 - Bromofluorobenzene	10.3	103%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.1	101%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

Report File: R:\Reports\CLIENTS.97\Western_Water_Consumants\ORGANIC.CAS\97_63820.xls

Analyst: yw
Reviewed: sec



ENERGY LABORATORIES, INC.

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E-mail: energy@trib.com • FAX: (307) 234-1639 • PHONE: (307) 235-0515 • TOLL FREE: (888) 235-0515

EPA METHOD 8260

Client: **Western Water Consultants**
 Sample ID: 90125-2.10/97
 Laboratory ID: C97-63821
 Matrix: Water
 Dilution Factor: 2

mw-2

Date Sampled: 10/17/97
 Date Received: 10/21/97
 Date Analyzed: 10/22/97
 Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	2.0
74-87-3	Chloromethane	ND	2.0
75-01-4	Vinyl chloride (Chloroethene)	ND	2.0
74-83-9	Bromomethane	ND	2.0
75-00-3	Chloroethane	ND	2.0
75-69-4	Trichlorofluoromethane	ND	2.0
75-35-4	1,1 - Dichloroethene	ND	2.0
75-09-2	Methylene chloride (Dichloromethane)	ND	2.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	2.0
75-34-3	1,1 - Dichloroethane	1.08	J 2.0
78-93-3	2 -Butanone (MEK)	ND	20.0
156-59-2	cis - 1,2 - Dichloroethene	ND	2.0
74-97-5	Bromochloromethane	ND	2.0
67-66-3	Chloroform (Trichloromethane)	ND	2.0
594-20-7	2,2 - Dichloropropane	ND	2.0
71-55-6	1,1,1 - Trichloroethane	ND	2.0
107-06-2	1,2 - Dichloroethane	ND	2.0
563-58-6	1,1 - Dichloropropene	ND	2.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	2.0
71-43-2	Benzene	3.60	2.0
74-95-3	Dibromomethane	ND	2.0
78-87-5	1,2 - Dichloropropane	ND	2.0
79-01-6	Trichloroethene	7.78	2.0
75-27-4	Bromodichloromethane	ND	2.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	2.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	2.0
79-00-5	1,1,2 - Trichloroethane	ND	2.0
108-88-3	Toluene	ND	2.0
106-93-4	1,2 - Dibromoethane	ND	2.0
142-28-9	1,3 - Dichloropropane	ND	2.0
124-48-1	Dibromochloromethane	ND	2.0
127-18-4	Tetrachloroethene	31.1	2.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	2.0
108-90-7	Chlorobenzene	ND	2.0
100-41-4	Ethylbenzene	23.6	2.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	4.0
75-25-2	Bromoform (Tribromomethane)	ND	2.0
100-42-5	Styrene (Ethenylbenzene)	ND	2.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	2.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	2.0
96-18-4	1,2,3 - Trichloropropane	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-2.10/97
Laboratory ID: C97-63821

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

MW-2

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	5.78	2.0
108-86-1	Bromobenzene	ND	2.0
103-65-1	n - Propylbenzene	6.64	2.0
95-49-8	2 - Chlorotoluene	ND	2.0
106-43-4	4 - Chlorotoluene	ND	2.0
108-67-8	1,3,5 - Trimethylbenzene	ND	2.0
98-06-6	tert - Butylbenzene	ND	2.0
95-63-6	1,2,4 - Trimethylbenzene	ND	2.0
135-98-8	sec - Butylbenzene	12.2	2.0
541-73-1	1,3 - Dichlorobenzene	ND	2.0
106-46-7	1,4 - Dichlorobenzene	ND	2.0
99-87-6	4-Isopropyltoluene	ND	2.0
95-50-1	1,2 - Dichlorobenzene	ND	2.0
104-51-8	n - Butylbenzene	1.86 J	2.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	10.0
120-82-1	1,2,4 - Trichlorobenzene	ND	2.0
91-20-3	Naphthalene	ND	2.0
87-68-3	Hexachlorobutadiene	ND	2.0
87-61-6	1,2 3 - Trichlorobenzene	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS		ICAL / CCAL	PERCENT RECOVERY	ACCEPTANCE RANGE
	AREA	AREA		
Pentafluorobenzene	888431	792953	112%	50 - 200 %
Fluorobenzene	1653243	1515940	109%	50 - 200 %
1,4 - Difluorobenzene	1567739	1453553	108%	50 - 200 %
Chlorobenzene - d5	1168023	1112136	105%	50 - 200 %
1,4 - Dichlorobenzene - d4	464591	446806	104%	50 - 200 %
SYSTEM MONITORING COMPOUNDS		CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane		9.89	98.9%	86 - 118 %
Toluene - d8		10.3	103%	88 - 110 %
4 - Bromofluorobenzene		10.2	102%	86 - 115 %
1,2 - Dichlorobenzene - d4		9.90	99.0%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990



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EPA METHOD 8260

Client: **Western Water Consultants**

Sample ID: 90125-3.10/97

Laboratory ID: C97-63822

Matrix: Water

Dilution Factor: 20

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

MW-3

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	20.0
74-87-3	Chloromethane	ND	20.0
75-01-4	Vinyl chloride (Chloroethene)	ND	20.0
74-83-9	Bromomethane	ND	20.0
75-00-3	Chloroethane	ND	20.0
75-69-4	Trichlorofluoromethane	ND	20.0
75-35-4	1,1 - Dichloroethene	15.8	J 20.0
75-09-2	Methylene chloride (Dichloromethane)	ND	20.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	20.0
75-34-3	1,1 - Dichloroethane	69.2	20.0
78-93-3	2 -Butanone (MEK)	ND	200
156-59-2	cis - 1,2 - Dichloroethene	ND	20.0
74-97-5	Bromochloromethane	ND	20.0
67-66-3	Chloroform (Trichloromethane)	ND	20.0
594-20-7	2,2 - Dichloropropane	ND	20.0
71-55-6	1,1,1 - Trichloroethane	ND	20.0
107-06-2	1,2 - Dichloroethane	ND	20.0
563-58-6	1,1 - Dichloropropene	ND	20.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	20.0
71-43-2	Benzene	44.2	20.0
74-95-3	Dibromomethane	ND	20.0
78-87-5	1,2 - Dichloropropane	ND	20.0
79-01-6	Trichloroethene	18.2	J 20.0
75-27-4	Bromodichloromethane	ND	20.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	20.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	20.0
79-00-5	1,1,2 - Trichloroethane	ND	20.0
108-88-3	Toluene	41.2	20.0
106-93-4	1,2 - Dibromoethane	ND	20.0
142-28-9	1,3 - Dichloropropane	ND	20.0
124-48-1	Dibromochloromethane	ND	20.0
127-18-4	Tetrachloroethene	15.8	J 20.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	20.0
108-90-7	Chlorobenzene	ND	20.0
100-41-4	Ethylbenzene	464	20.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	1,250	40.0
75-25-2	Bromoform (Tribromomethane)	ND	20.0
100-42-5	Styrene (Ethenylbenzene)	ND	20.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	2,050	20.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	20.0
96-18-4	1,2,3 - Trichloropropane	ND	20.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-3.10/97
Laboratory ID: C97-63822

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

MW-3

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	208	20.0
108-86-1	Bromobenzene	ND	20.0
103-65-1	n - Propylbenzene	393	20.0
95-49-8	2 - Chlorotoluene	ND	20.0
106-43-4	4 - Chlorotoluene	ND	20.0
108-67-8	1,3,5 - Trimethylbenzene	2,020	20.0
98-06-6	tert - Butylbenzene	270	20.0
95-63-6	1,2,4 - Trimethylbenzene	2,100	20.0
135-98-8	sec - Butylbenzene	ND	20.0
541-73-1	1,3 - Dichlorobenzene	ND	20.0
106-46-7	1,4 - Dichlorobenzene	ND	20.0
99-87-6	4-Isopropyltoluene	ND	20.0
95-50-1	1,2 - Dichlorobenzene	ND	20.0
104-51-8	n - Butylbenzene	ND	20.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	100
120-82-1	1,2,4 - Trichlorobenzene	ND	20.0
91-20-3	Naphthalene	361	20.0
87-68-3	Hexachlorobutadiene	ND	20.0
87-61-6	1,2 3 - Trichlorobenzene	ND	20.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS		ICAL / CCAL	PERCENT RECOVERY	ACCEPTANCE RANGE
	AREA	AREA		
Pentafluorobenzene	609659	792953	76.9%	50 - 200 %
Fluorobenzene	1436452	1515940	94.8%	50 - 200 %
1,4 - Difluorobenzene	1334369	1453553	91.8%	50 - 200 %
Chlorobenzene - d5	991338	1112136	89.1%	50 - 200 %
1,4 - Dichlorobenzene - d4	352919	446806	79.0%	50 - 200 %
SYSTEM MONITORING COMPOUNDS		CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane		9.57	95.7%	86 - 118 %
Toluene - d8		9.95	99.5%	88 - 110 %
4 - Bromofluorobenzene		9.60	96.0%	86 - 115 %
1,2 - Dichlorobenzene - d4		9.62	96.2%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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EPA METHOD 8260Client: **Western Water Consultants**

Sample ID: 90125-4.10/97

Laboratory ID: C97-63823

Matrix: Water

Dilution Factor: 2

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw - A

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	2.0
74-87-3	Chloromethane	ND	2.0
75-01-4	Vinyl chloride (Chloroethene)	ND	2.0
74-83-9	Bromomethane	ND	2.0
75-00-3	Chloroethane	ND	2.0
75-69-4	Trichlorofluoromethane	ND	2.0
75-35-4	1,1 - Dichloroethene	ND	2.0
75-09-2	Methylene chloride (Dichloromethane)	ND	2.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	2.0
75-34-3	1,1 - Dichloroethane	ND	2.0
78-93-3	2 -Butanone (MEK)	ND	20.0
156-59-2	cis - 1,2 - Dichloroethene	ND	2.0
74-97-5	Bromochloromethane	ND	2.0
67-66-3	Chloroform (Trichloromethane)	ND	2.0
594-20-7	2,2 - Dichloropropane	ND	2.0
71-55-6	1,1,1 - Trichloroethane	ND	2.0
107-06-2	1,2 - Dichloroethane	ND	2.0
563-58-6	1,1 - Dichloropropene	ND	2.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	2.0
71-43-2	Benzene	ND	2.0
74-95-3	Dibromomethane	ND	2.0
78-87-5	1,2 - Dichloropropane	ND	2.0
79-01-6	Trichloroethene	ND	2.0
75-27-4	Bromodichloromethane	ND	2.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	2.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	2.0
79-00-5	1,1,2 - Trichloroethane	ND	2.0
108-88-3	Toluene	ND	2.0
106-93-4	1,2 - Dibromoethane	ND	2.0
142-28-9	1,3 - Dichloropropane	ND	2.0
124-48-1	Dibromochloromethane	ND	2.0
127-18-4	Tetrachloroethene	ND	2.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	2.0
108-90-7	Chlorobenzene	ND	2.0
100-41-4	Ethylbenzene	ND	2.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	4.0
75-25-2	Bromoform (Tribromomethane)	ND	2.0
100-42-5	Styrene (Ethenylbenzene)	ND	2.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	2.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	2.0
96-18-4	1,2,3 - Trichloropropane	ND	2.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-4.10/97
Laboratory ID: C97-63823

mw - x

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	2.0
108-86-1	Bromobenzene	ND	2.0
103-65-1	n - Propylbenzene	ND	2.0
95-49-8	2 - Chlorotoluene	ND	2.0
106-43-4	4 - Chlorotoluene	ND	2.0
108-67-8	1,3,5 - Trimethylbenzene	ND	2.0
98-06-6	tert - Butylbenzene	ND	2.0
95-63-6	1,2,4 - Trimethylbenzene	ND	2.0
135-98-8	sec - Butylbenzene	ND	2.0
541-73-1	1,3 - Dichlorobenzene	ND	2.0
106-46-7	1,4 - Dichlorobenzene	ND	2.0
99-87-6	4-Isopropyltoluene	ND	2.0
95-50-1	1,2 - Dichlorobenzene	ND	2.0
104-51-8	n - Butylbenzene	ND	2.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	10.0
120-82-1	1,2,4 - Trichlorobenzene	ND	2.0
91-20-3	Naphthalene	ND	2.0
87-68-3	Hexachlorobutadiene	ND	2.0
87-61-6	1,2 3 - Trichlorobenzene	ND	2.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

<u>INTERNAL STANDARDS</u>	<u>AREA</u>	<u>ICAL / CCAL</u> <u>AREA</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>ACCEPTANCE</u> <u>RANGE</u>
Pentafluorobenzene	904298	792953	114%	50 - 200 %
Fluorobenzene	1655919	1515940	109%	50 - 200 %
1,4 - Difluorobenzene	1564045	1453553	108%	50 - 200 %
Chlorobenzene - d5	1156391	1112136	104%	50 - 200 %
1,4 - Dichlorobenzene - d4	460939	446806	103%	50 - 200 %

<u>SYSTEM MONITORING COMPOUNDS</u>	<u>CONCENTRATION</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>ACCEPTANCE</u> <u>RANGE</u>
Dibromofluoromethane	9.78	97.8%	86 - 118 %
Toluene - d8	10.1	101%	88 - 110 %
4 - Bromofluorobenzene	10.1	101%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.67	96.7%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
Reviewed: sec

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EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-5.10/97
Laboratory ID: C97-63824
Matrix: Water
Dilution Factor: 2

mw-5

Date Sampled: 10/17/97
Date Received: 10/21/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	2.0
74-87-3	Chloromethane	ND	2.0
75-01-4	Vinyl chloride (Chloroethene)	ND	2.0
74-83-9	Bromomethane	ND	2.0
75-00-3	Chloroethane	ND	2.0
75-69-4	Trichlorofluoromethane	ND	2.0
75-35-4	1,1 - Dichloroethene	ND	2.0
75-09-2	Methylene chloride (Dichloromethane)	ND	2.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	2.0
75-34-3	1,1 - Dichloroethane	1.46 J	2.0
78-93-3	2 -Butanone (MEK)	ND	20.0
156-59-2	cis - 1,2 - Dichloroethene	ND	2.0
74-97-5	Bromochloromethane	ND	2.0
67-66-3	Chloroform (Trichloromethane)	ND	2.0
594-20-7	2,2 - Dichloropropane	ND	2.0
71-55-6	1,1,1 - Trichloroethane	ND	2.0
107-06-2	1,2 - Dichloroethane	ND	2.0
563-58-6	1,1 - Dichloropropene	ND	2.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	2.0
71-43-2	Benzene	15.6	2.0
74-95-3	Dibromomethane	ND	2.0
78-87-5	1,2 - Dichloropropane	ND	2.0
79-01-6	Trichloroethene	3.66	2.0
75-27-4	Bromodichloromethane	ND	2.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	2.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	2.0
79-00-5	1,1,2 - Trichloroethane	ND	2.0
108-88-3	Toluene	ND	2.0
106-93-4	1,2 - Dibromoethane	ND	2.0
142-28-9	1,3 - Dichloropropane	ND	2.0
124-48-1	Dibromochloromethane	ND	2.0
127-18-4	Tetrachloroethene	33.1	2.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	2.0
108-90-7	Chlorobenzene	ND	2.0
100-41-4	Ethylbenzene	47.9	2.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	4.0
75-25-2	Bromoform (Tribromomethane)	ND	2.0
100-42-5	Styrene (Ethenylbenzene)	ND	2.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	2.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	2.0
96-18-4	1,2,3 - Trichloropropane	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-5.10/97
Laboratory ID: C97-63824

mw-5

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	9.12	2.0
108-86-1	Bromobenzene	ND	2.0
103-65-1	n - Propylbenzene	18.5	2.0
95-49-8	2 - Chlorotoluene	ND	2.0
106-43-4	4 - Chlorotoluene	ND	2.0
108-67-8	1,3,5 - Trimethylbenzene	ND	2.0
98-06-6	tert - Butylbenzene	ND	2.0
95-63-6	1,2,4 - Trimethylbenzene	ND	2.0
135-98-8	sec - Butylbenzene	5.70	2.0
541-73-1	1,3 - Dichlorobenzene	ND	2.0
106-46-7	1,4 - Dichlorobenzene	ND	2.0
99-87-6	4-Isopropyltoluene	ND	2.0
95-50-1	1,2 - Dichlorobenzene	ND	2.0
104-51-8	n - Butylbenzene	ND	2.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	10.0
120-82-1	1,2,4 - Trichlorobenzene	ND	2.0
91-20-3	Naphthalene	ND	2.0
87-68-3	Hexachlorobutadiene	ND	2.0
87-61-6	1,2 3 - Trichlorobenzene	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	971442	792953	123%	50 - 200 %
Fluorobenzene	1755512	1515940	116%	50 - 200 %
1,4 - Difluorobenzene	1705209	1453553	117%	50 - 200 %
Chlorobenzene - d5	1255902	1112136	113%	50 - 200 %
1,4 - Dichlorobenzene - d4	497052	446806	111%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	9.73	97.3%	86 - 118 %
Toluene - d8	10.0	100%	88 - 110 %
4 - Bromofluorobenzene	9.81	98.1%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.77	97.7%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
Reviewed: sec

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EPA METHOD 8260Client: **Western Water Consultants**

Sample ID: 90125-6.10/97

Laboratory ID: C97-63825

Matrix: Water

Dilution Factor: 2

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-6

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION ($\mu\text{g/L}$)	LIMIT OF DETECTION ($\mu\text{g/L}$)
75-71-8	Dichlorodifluoromethane	ND	2.0
74-87-3	Chloromethane	ND	2.0
75-01-4	Vinyl chloride (Chloroethene)	ND	2.0
74-83-9	Bromomethane	ND	2.0
75-00-3	Chloroethane	ND	2.0
75-69-4	Trichlorofluoromethane	ND	2.0
75-35-4	1,1 - Dichloroethene	22.6	2.0
75-09-2	Methylene chloride (Dichloromethane)	ND	2.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	2.0
75-34-3	1,1 - Dichloroethane	11.2	2.0
78-93-3	2 -Butanone (MEK)	ND	20.0
156-59-2	cis - 1,2 - Dichloroethene	ND	2.0
74-97-5	Bromochloromethane	ND	2.0
67-66-3	Chloroform (Trichloromethane)	ND	2.0
594-20-7	2,2 - Dichloropropane	ND	2.0
71-55-6	1,1,1 - Trichloroethane	ND	2.0
107-06-2	1,2 - Dichloroethane	ND	2.0
563-58-6	1,1 - Dichloropropene	ND	2.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	2.0
71-43-2	Benzene	ND	2.0
74-95-3	Dibromomethane	ND	2.0
78-87-5	1,2 - Dichloropropane	ND	2.0
79-01-6	Trichloroethene	ND	2.0
75-27-4	Bromodichloromethane	ND	2.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	2.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	2.0
79-00-5	1,1,2 - Trichloroethane	ND	2.0
108-88-3	Toluene	ND	2.0
106-93-4	1,2 - Dibromoethane	ND	2.0
142-28-9	1,3 - Dichloropropane	ND	2.0
124-48-1	Dibromochloromethane	ND	2.0
127-18-4	Tetrachloroethene	6.88	2.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	2.0
108-90-7	Chlorobenzene	ND	2.0
100-41-4	Ethylbenzene	ND	2.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	4.0
75-25-2	Bromoform (Tribromomethane)	ND	2.0
100-42-5	Styrene (Ethenylbenzene)	ND	2.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	2.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	2.0
96-18-4	1,2,3 - Trichloropropane	ND	2.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-6.10/97
Laboratory ID: C97-63825

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-6

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	2.0
108-86-1	Bromobenzene	ND	2.0
103-65-1	n - Propylbenzene	ND	2.0
95-49-8	2 - Chlorotoluene	ND	2.0
106-43-4	4 - Chlorotoluene	ND	2.0
108-67-8	1,3,5 - Trimethylbenzene	ND	2.0
98-06-6	tert - Butylbenzene	ND	2.0
95-63-6	1,2,4 - Trimethylbenzene	ND	2.0
135-98-8	sec - Butylbenzene	ND	2.0
541-73-1	1,3 - Dichlorobenzene	ND	2.0
106-46-7	1,4 - Dichlorobenzene	ND	2.0
99-87-6	4-Isopropyltoluene	ND	2.0
95-50-1	1,2 - Dichlorobenzene	ND	2.0
104-51-8	n - Butylbenzene	ND	2.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	10.0
120-82-1	1,2,4 - Trichlorobenzene	ND	2.0
91-20-3	Naphthalene	ND	2.0
87-68-3	Hexachlorobutadiene	ND	2.0
87-61-6	1,2 3 - Trichlorobenzene	ND	2.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS		ICAL / CCAL	PERCENT RECOVERY	ACCEPTANCE RANGE
	AREA	AREA		
Pentafluorobenzene	771691	792953	97.3%	50 - 200 %
Fluorobenzene	1569165	1515940	104%	50 - 200 %
1,4 - Difluorobenzene	1528625	1453553	105%	50 - 200 %
Chlorobenzene - d5	1118555	1112136	101%	50 - 200 %
1,4 - Dichlorobenzene - d4	463011	446806	104%	50 - 200 %
SYSTEM MONITORING COMPOUNDS		CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane		11.3	113%	86 - 118 %
Toluene - d8		10.0	100%	88 - 110 %
4 - Bromofluorobenzene		10.7	107%	86 - 115 %
1,2 - Dichlorobenzene - d4		10.0	100%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990



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EPA METHOD 8260

Client: **Western Water Consultants**
 Sample ID: 90125-7.10/97
 Laboratory ID: C97-63826
 Matrix: Water
 Dilution Factor: 10

mw-7

Date Sampled: 10/17/97
 Date Received: 10/21/97
 Date Analyzed: 10/22/97
 Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	10.0
74-87-3	Chloromethane	ND	10.0
75-01-4	Vinyl chloride (Chloroethene)	ND	10.0
74-83-9	Bromomethane	ND	10.0
75-00-3	Chloroethane	ND	10.0
75-69-4	Trichlorofluoromethane	ND	10.0
75-35-4	1,1 - Dichloroethene	255	10.0
75-09-2	Methylene chloride (Dichloromethane)	ND	10.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	10.0
75-34-3	1,1 - Dichloroethane	28.5	10.0
78-93-3	2 -Butanone (MEK)	ND	100
156-59-2	cis - 1,2 - Dichloroethene	ND	10.0
74-97-5	Bromochloromethane	ND	10.0
67-66-3	Chloroform (Trichloromethane)	ND	10.0
594-20-7	2,2 - Dichloropropane	ND	10.0
71-55-6	1,1,1 - Trichloroethane	ND	10.0
107-06-2	1,2 - Dichloroethane	ND	10.0
563-58-6	1,1 - Dichloropropene	ND	10.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	10.0
71-43-2	Benzene	4.60	J 10.0
74-95-3	Dibromomethane	ND	10.0
78-87-5	1,2 - Dichloropropane	ND	10.0
79-01-6	Trichloroethene	19.6	10.0
75-27-4	Bromodichloromethane	ND	10.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	10.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	10.0
79-00-5	1,1,2 - Trichloroethane	ND	10.0
108-88-3	Toluene	ND	10.0
106-93-4	1,2 - Dibromoethane	ND	10.0
142-28-9	1,3 - Dichloropropane	ND	10.0
124-48-1	Dibromochloromethane	ND	10.0
127-18-4	Tetrachloroethene	153	10.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	10.0
108-90-7	Chlorobenzene	ND	10.0
100-41-4	Ethylbenzene	ND	10.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	20.0
75-25-2	Bromoform (Tribromomethane)	ND	10.0
100-42-5	Styrene (Ethenylbenzene)	ND	10.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	10.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	10.0
96-18-4	1,2,3 - Trichloropropane	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-7.10/97
Laboratory ID: C97-63826

mw-7

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	10.0
108-86-1	Bromobenzene	ND	10.0
103-65-1	n - Propylbenzene	ND	10.0
95-49-8	2 - Chlorotoluene	ND	10.0
106-43-4	4 - Chlorotoluene	ND	10.0
108-67-8	1,3,5 - Trimethylbenzene	ND	10.0
98-06-6	tert - Butylbenzene	ND	10.0
95-63-6	1,2,4 - Trimethylbenzene	ND	10.0
135-98-8	sec - Butylbenzene	ND	10.0
541-73-1	1,3 - Dichlorobenzene	ND	10.0
106-46-7	1,4 - Dichlorobenzene	ND	10.0
99-87-6	4-Isopropyltoluene	ND	10.0
95-50-1	1,2 - Dichlorobenzene	ND	10.0
104-51-8	n - Butylbenzene	ND	10.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	50.0
120-82-1	1,2,4 - Trichlorobenzene	ND	10.0
91-20-3	Naphthalene	ND	10.0
87-68-3	Hexachlorobutadiene	ND	10.0
87-61-6	1,2 3 - Trichlorobenzene	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

<u>INTERNAL STANDARDS</u>	<u>AREA</u>	<u>ICAL / CCAL</u> <u>AREA</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>ACCEPTANCE</u> <u>RANGE</u>
Pentafluorobenzene	783325	792953	98.8%	50 - 200 %
Fluorobenzene	1580678	1515940	104%	50 - 200 %
1,4 - Difluorobenzene	1546839	1453553	106%	50 - 200 %
Chlorobenzene - d5	1175263	1112136	106%	50 - 200 %
1,4 - Dichlorobenzene - d4	454781	446806	102%	50 - 200 %

<u>SYSTEM MONITORING COMPOUNDS</u>	<u>CONCENTRATION</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>ACCEPTANCE</u> <u>RANGE</u>
Dibromofluoromethane	11.3	113%	86 - 118 %
Toluene - d8	10.3	103%	88 - 110 %
4 - Bromofluorobenzene	10.7	107%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.0	100%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990



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EPA METHOD 8260

Client: **Western Water Consultants**
 Sample ID: 90125-8.10/97
 Laboratory ID: C97-63827
 Matrix: Water
 Dilution Factor: 2

mw-8

Date Sampled: 10/17/97
 Date Received: 10/21/97
 Date Analyzed: 10/22/97
 Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	2.0
74-87-3	Chloromethane	ND	2.0
75-01-4	Vinyl chloride (Chloroethene)	ND	2.0
74-83-9	Bromomethane	ND	2.0
75-00-3	Chloroethane	ND	2.0
75-69-4	Trichlorofluoromethane	ND	2.0
75-35-4	1,1 - Dichloroethene	104	2.0
75-09-2	Methylene chloride (Dichloromethane)	ND	2.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	2.0
75-34-3	1,1 - Dichloroethane	10.0	2.0
78-93-3	2 -Butanone (MEK)	ND	20.0
156-59-2	cis - 1,2 - Dichloroethene	ND	2.0
74-97-5	Bromochloromethane	ND	2.0
67-66-3	Chloroform (Trichloromethane)	ND	2.0
594-20-7	2,2 - Dichloropropane	ND	2.0
71-55-6	1,1,1 - Trichloroethane	ND	2.0
107-06-2	1,2 - Dichloroethane	ND	2.0
563-58-6	1,1 - Dichloropropene	ND	2.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	2.0
71-43-2	Benzene	0.76	2.0
74-95-3	Dibromomethane	ND	2.0
78-87-5	1,2 - Dichloropropane	ND	2.0
79-01-6	Trichloroethene	9.80	2.0
75-27-4	Bromodichloromethane	ND	2.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	2.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	2.0
79-00-5	1,1,2 - Trichloroethane	ND	2.0
108-88-3	Toluene	ND	2.0
106-93-4	1,2 - Dibromoethane	ND	2.0
142-28-9	1,3 - Dichloropropane	ND	2.0
124-48-1	Dibromochloromethane	ND	2.0
127-18-4	Tetrachloroethene	26.0	2.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	2.0
108-90-7	Chlorobenzene	ND	2.0
100-41-4	Ethylbenzene	ND	2.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	4.0
75-25-2	Bromoform (Tribromomethane)	ND	2.0
100-42-5	Styrene (Ethenylbenzene)	ND	2.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	2.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	2.0
96-18-4	1,2,3 - Trichloropropane	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-8.10/97
Laboratory ID: C97-63827

mw-8

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	2.0
108-86-1	Bromobenzene	ND	2.0
103-65-1	n - Propylbenzene	ND	2.0
95-49-8	2 - Chlorotoluene	ND	2.0
106-43-4	4 - Chlorotoluene	ND	2.0
108-67-8	1,3,5 - Trimethylbenzene	ND	2.0
98-06-6	tert - Butylbenzene	ND	2.0
95-63-6	1,2,4 - Trimethylbenzene	ND	2.0
135-98-8	sec - Butylbenzene	ND	2.0
541-73-1	1,3 - Dichlorobenzene	ND	2.0
106-46-7	1,4 - Dichlorobenzene	ND	2.0
99-87-6	4-Isopropyltoluene	ND	2.0
95-50-1	1,2 - Dichlorobenzene	ND	2.0
104-51-8	n - Butylbenzene	ND	2.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	10.0
120-82-1	1,2,4 - Trichlorobenzene	ND	2.0
91-20-3	Naphthalene	ND	2.0
87-68-3	Hexachlorobutadiene	ND	2.0
87-61-6	1,2 3 - Trichlorobenzene	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	548017	792953	69.1%	50 - 200 %
Fluorobenzene	1351837	1515940	89.2%	50 - 200 %
1,4 - Difluorobenzene	1266689	1453553	87.1%	50 - 200 %
Chlorobenzene - d5	954490	1112136	85.8%	50 - 200 %
1,4 - Dichlorobenzene - d4	336521	446806	75.3%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	10.2	102%	86 - 118 %
Toluene - d8	10.0	100%	88 - 110 %
4 - Bromofluorobenzene	10.3	103%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.78	97.8%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990



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EPA METHOD 8260

Client: **Western Water Consultants**

Sample ID: 90125-9.10/97

Laboratory ID: C97-63828

Matrix: Water

Dilution Factor: 1

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-9

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)		LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND		1.0
74-87-3	Chloromethane	ND		1.0
75-01-4	Vinyl chloride (Chloroethene)	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-00-3	Chloroethane	0.85	J	1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-35-4	1,1 - Dichloroethene	0.85	J	1.0
75-09-2	Methylene chloride (Dichloromethane)	ND		1.0
156-60-5	trans - 1, 2 - Dichloroethene	ND		1.0
75-34-3	1,1 - Dichloroethane	17.5		1.0
78-93-3	2 -Butanone (MEK)	ND		10.0
156-59-2	cis - 1,2 - Dichloroethene	ND		1.0
74-97-5	Bromochloromethane	ND		1.0
67-66-3	Chloroform (Trichloromethane)	ND		1.0
594-20-7	2,2 - Dichloropropane	ND		1.0
71-55-6	1,1,1 - Trichloroethane	ND		1.0
107-06-2	1,2 - Dichloroethane	ND		1.0
563-58-6	1,1 - Dichloropropene	ND		1.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND		1.0
71-43-2	Benzene	ND		1.0
74-95-3	Dibromomethane	ND		1.0
78-87-5	1,2 - Dichloropropane	ND		1.0
79-01-6	Trichloroethene	0.81	J	1.0
75-27-4	Bromodichloromethane	ND		1.0
10061-01-5	cis - 1,3 - Dichloropropene	ND		1.0
10061-02-6	trans - 1,3 - Dichloropropene	ND		1.0
79-00-5	1,1,2 - Trichloroethane	ND		1.0
108-88-3	Toluene	ND		1.0
106-93-4	1,2 - Dibromoethane	ND		1.0
142-28-9	1,3 - Dichloropropane	ND		1.0
124-48-1	Dibromochloromethane	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND		2.0
75-25-2	Bromoform (Tribromomethane)	ND		1.0
100-42-5	Styrene (Ethenylbenzene)	ND		1.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND		1.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND		1.0
96-18-4	1,2,3 - Trichloropropane	ND		1.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-9.10/97
Laboratory ID: C97-63828

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-9

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	1.0
108-86-1	Bromobenzene	ND	1.0
103-65-1	n - Propylbenzene	ND	1.0
95-49-8	2 - Chlorotoluene	ND	1.0
106-43-4	4 - Chlorotoluene	ND	1.0
108-67-8	1,3,5 - Trimethylbenzene	ND	1.0
98-06-6	tert - Butylbenzene	ND	1.0
95-63-6	1,2,4 - Trimethylbenzene	ND	1.0
135-98-8	sec - Butylbenzene	1.55	1.0
541-73-1	1,3 - Dichlorobenzene	ND	1.0
106-46-7	1,4 - Dichlorobenzene	ND	1.0
99-87-6	4-Isopropyltoluene	ND	1.0
95-50-1	1,2 - Dichlorobenzene	ND	1.0
104-51-8	n - Butylbenzene	ND	1.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	5.0
120-82-1	1,2,4 - Trichlorobenzene	ND	1.0
91-20-3	Naphthalene	ND	1.0
87-68-3	Hexachlorobutadiene	ND	1.0
87-61-6	1,2 3 - Trichlorobenzene	ND	1.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

<u>INTERNAL STANDARDS</u>	<u>AREA</u>	<u>ICAL / CCAL</u>	<u>PERCENT RECOVERY</u>	<u>ACCEPTANCE RANGE</u>
Pentafluorobenzene	879423	792953	111%	50 - 200 %
Fluorobenzene	1624357	1515940	107%	50 - 200 %
1,4 - Difluorobenzene	1534304	1453553	106%	50 - 200 %
Chlorobenzene - d5	1199108	1112136	108%	50 - 200 %
1,4 - Dichlorobenzene - d4	493874	446806	111%	50 - 200 %

<u>SYSTEM MONITORING COMPOUNDS</u>	<u>CONCENTRATION</u>	<u>PERCENT RECOVERY</u>	<u>ACCEPTANCE RANGE</u>
Dibromofluoromethane	10.8	108%	86 - 118 %
Toluene - d8	10.3	103%	88 - 110 %
4 - Bromofluorobenzene	11.0	110%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.1	101%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
Reviewed: sec



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EPA METHOD 8260

Client: **Western Water Consultants**

Sample ID: 90125-10.10/97

Laboratory ID: C97-63829

Matrix: Water

Dilution Factor: 10

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-10

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	10.0
74-87-3	Chloromethane	ND	10.0
75-01-4	Vinyl chloride (Chloroethene)	ND	10.0
74-83-9	Bromomethane	ND	10.0
75-00-3	Chloroethane	ND	10.0
75-69-4	Trichlorofluoromethane	ND	10.0
75-35-4	1,1 - Dichloroethene	196	10.0
75-09-2	Methylene chloride (Dichloromethane)	ND	10.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	10.0
75-34-3	1,1 - Dichloroethane	ND	10.0
78-93-3	2 -Butanone (MEK)	ND	100
156-59-2	cis - 1,2 - Dichloroethene	ND	10.0
74-97-5	Bromochloromethane	ND	10.0
67-66-3	Chloroform (Trichloromethane)	ND	10.0
594-20-7	2,2 - Dichloropropane	ND	10.0
71-55-6	1,1,1 - Trichloroethane	3.90	J 10.0
107-06-2	1,2 - Dichloroethane	ND	10.0
563-58-6	1,1 - Dichloropropene	ND	10.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	10.0
71-43-2	Benzene	ND	10.0
74-95-3	Dibromomethane	ND	10.0
78-87-5	1,2 - Dichloropropane	ND	10.0
79-01-6	Trichloroethene	ND	10.0
75-27-4	Bromodichloromethane	ND	10.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	10.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	10.0
79-00-5	1,1,2 - Trichloroethane	ND	10.0
108-88-3	Toluene	ND	10.0
106-93-4	1,2 - Dibromoethane	ND	10.0
142-28-9	1,3 - Dichloropropane	ND	10.0
124-48-1	Dibromochloromethane	ND	10.0
127-18-4	Tetrachloroethene	ND	10.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	10.0
108-90-7	Chlorobenzene	ND	10.0
100-41-4	Ethylbenzene	ND	10.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	20.0
75-25-2	Bromoform (Tribromomethane)	ND	10.0
100-42-5	Styrene (Ethenylbenzene)	ND	10.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	10.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	10.0
96-18-4	1,2,3 - Trichloropropane	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-10.10/97
Laboratory ID: C97-63829

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-10

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	10.0
108-86-1	Bromobenzene	ND	10.0
103-65-1	n - Propylbenzene	ND	10.0
95-49-8	2 - Chlorotoluene	ND	10.0
106-43-4	4 - Chlorotoluene	ND	10.0
108-67-8	1,3,5 - Trimethylbenzene	ND	10.0
98-06-6	tert - Butylbenzene	ND	10.0
95-63-6	1,2,4 - Trimethylbenzene	ND	10.0
135-98-8	sec - Butylbenzene	ND	10.0
541-73-1	1,3 - Dichlorobenzene	ND	10.0
106-46-7	1,4 - Dichlorobenzene	ND	10.0
99-87-6	4-Isopropyltoluene	ND	10.0
95-50-1	1,2 - Dichlorobenzene	ND	10.0
104-51-8	n - Butylbenzene	ND	10.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	50.0
120-82-1	1,2,4 - Trichlorobenzene	ND	10.0
91-20-3	Naphthalene	ND	10.0
87-68-3	Hexachlorobutadiene	ND	10.0
87-61-6	1,2 3 - Trichlorobenzene	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	619517	792953	78.1%	50 - 200 %
Fluorobenzene	1282684	1515940	84.6%	50 - 200 %
1,4 - Difluorobenzene	1236416	1453553	85.1%	50 - 200 %
Chlorobenzene - d5	947109	1112136	85.2%	50 - 200 %
1,4 - Dichlorobenzene - d4	359407	446806	80.4%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	11.6	116%	86 - 118 %
Toluene - d8	10.6	106%	88 - 110 %
4 - Bromofluorobenzene	10.8	108%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.90	99.0%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
Reviewed: sec



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EPA METHOD 8260

Client: **Western Water Consultants**
 Sample ID: 90125-11.10/97
 Laboratory ID: C97-63830
 Matrix: Water
 Dilution Factor: 10

MW-11

Date Sampled: 10/17/97
 Date Received: 10/21/97
 Date Analyzed: 10/22/97
 Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	10.0
74-87-3	Chloromethane	ND	10.0
75-01-4	Vinyl chloride (Chloroethene)	ND	10.0
74-83-9	Bromomethane	ND	10.0
75-00-3	Chloroethane	ND	10.0
75-69-4	Trichlorofluoromethane	ND	10.0
75-35-4	1,1 - Dichloroethene	142	10.0
75-09-2	Methylene chloride (Dichloromethane)	ND	10.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	10.0
75-34-3	1,1 - Dichloroethane	47.6	10.0
78-93-3	2 -Butanone (MEK)	ND	100
156-59-2	cis - 1,2 - Dichloroethene	ND	10.0
74-97-5	Bromochloromethane	ND	10.0
67-66-3	Chloroform (Trichloromethane)	ND	10.0
594-20-7	2,2 - Dichloropropane	ND	10.0
71-55-6	1,1,1 - Trichloroethane	5.40	J 10.0
107-06-2	1,2 - Dichloroethane	ND	10.0
563-58-6	1,1 - Dichloropropene	ND	10.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	10.0
71-43-2	Benzene	2.80	J 10.0
74-95-3	Dibromomethane	ND	10.0
78-87-5	1,2 - Dichloropropane	ND	10.0
79-01-6	Trichloroethene	31.1	10.0
75-27-4	Bromodichloromethane	ND	10.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	10.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	10.0
79-00-5	1,1,2 - Trichloroethane	ND	10.0
108-88-3	Toluene	ND	10.0
106-93-4	1,2 - Dibromoethane	ND	10.0
142-28-9	1,3 - Dichloropropane	ND	10.0
124-48-1	Dibromochloromethane	ND	10.0
127-18-4	Tetrachloroethene	63.4	10.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	10.0
108-90-7	Chlorobenzene	ND	10.0
100-41-4	Ethylbenzene	ND	10.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	20.0
75-25-2	Bromoform (Tribromomethane)	ND	10.0
100-42-5	Styrene (Ethenylbenzene)	ND	10.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	10.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	10.0
96-18-4	1,2,3 - Trichloropropane	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-11.10/97
Laboratory ID: C97-63830

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-11

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	10.0
108-86-1	Bromobenzene	ND	10.0
103-65-1	n - Propylbenzene	ND	10.0
95-49-8	2 - Chlorotoluene	ND	10.0
106-43-4	4 - Chlorotoluene	ND	10.0
108-67-8	1,3,5 - Trimethylbenzene	ND	10.0
98-06-6	tert - Butylbenzene	ND	10.0
95-63-6	1,2,4 - Trimethylbenzene	ND	10.0
135-98-8	sec - Butylbenzene	ND	10.0
541-73-1	1,3 - Dichlorobenzene	ND	10.0
106-46-7	1,4 - Dichlorobenzene	ND	10.0
99-87-6	4-Isopropyltoluene	ND	10.0
95-50-1	1,2 - Dichlorobenzene	ND	10.0
104-51-8	n - Butylbenzene	ND	10.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	50.0
120-82-1	1,2,4 - Trichlorobenzene	ND	10.0
91-20-3	Naphthalene	ND	10.0
87-68-3	Hexachlorobutadiene	ND	10.0
87-61-6	1,2 3 - Trichlorobenzene	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

<u>INTERNAL STANDARDS</u>	<u>AREA</u>	<u>ICAL / CCAL</u> <u>AREA</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>ACCEPTANCE</u> <u>RANGE</u>
Pentafluorobenzene	710288	792953	89.6%	50 - 200 %
Fluorobenzene	1439890	1515940	95.0%	50 - 200 %
1,4 - Difluorobenzene	1413554	1453553	97.2%	50 - 200 %
Chlorobenzene - d5	1089423	1112136	98.0%	50 - 200 %
1,4 - Dichlorobenzene - d4	415332	446806	93.0%	50 - 200 %

<u>SYSTEM MONITORING COMPOUNDS</u>	<u>CONCENTRATION</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>ACCEPTANCE</u> <u>RANGE</u>
Dibromofluoromethane	11.7	117%	86 - 118 %
Toluene - d8	9.99	99.9%	88 - 110 %
4 - Bromofluorobenzene	10.4	104%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.95	99.5%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
Reviewed: sec

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EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-12.10/97
Laboratory ID: C97-63831
Matrix: Water
Dilution Factor: 50

mw-12

Date Sampled: 10/17/97
Date Received: 10/21/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	50.0
74-87-3	Chloromethane	ND	50.0
75-01-4	Vinyl chloride (Chloroethene)	ND	50.0
74-83-9	Bromomethane	ND	50.0
75-00-3	Chloroethane	ND	50.0
75-69-4	Trichlorofluoromethane	ND	50.0
75-35-4	1,1 - Dichloroethene	61.0	50.0
75-09-2	Methylene chloride (Dichloromethane)	ND	50.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	50.0
75-34-3	1,1 - Dichloroethane	185	50.0
78-93-3	2 -Butanone (MEK)	ND	500
156-59-2	cis - 1,2 - Dichloroethene	ND	50.0
74-97-5	Bromochloromethane	ND	50.0
67-66-3	Chloroform (Trichloromethane)	ND	50.0
594-20-7	2,2 - Dichloropropane	ND	50.0
71-55-6	1,1,1 - Trichloroethane	186	50.0
107-06-2	1,2 - Dichloroethane	ND	50.0
563-58-6	1,1 - Dichloropropene	ND	50.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	50.0
71-43-2	Benzene	178	50.0
74-95-3	Dibromomethane	ND	50.0
78-87-5	1,2 - Dichloropropane	ND	50.0
79-01-6	Trichloroethene	ND	50.0
75-27-4	Bromodichloromethane	ND	50.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	50.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	50.0
79-00-5	1,1,2 - Trichloroethane	ND	50.0
108-88-3	Toluene	853	50.0
106-93-4	1,2 - Dibromoethane	ND	50.0
142-28-9	1,3 - Dichloropropane	ND	50.0
124-48-1	Dibromochloromethane	ND	50.0
127-18-4	Tetrachloroethene	44.5	J 50.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	50.0
108-90-7	Chlorobenzene	ND	50.0
100-41-4	Ethylbenzene	1,290	50.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	1,880	100
75-25-2	Bromoform (Tribromomethane)	ND	50.0
100-42-5	Styrene (Ethenylbenzene)	ND	50.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	3,660	50.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	50.0
96-18-4	1,2,3 - Trichloropropane	ND	50.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-12.10/97
Laboratory ID: C97-63831

mw-12

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)		LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	610		50.0
108-86-1	Bromobenzene	ND		50.0
103-65-1	n - Propylbenzene	1,170		50.0
95-49-8	2 - Chlorotoluene	ND		50.0
106-43-4	4 - Chlorotoluene	ND		50.0
108-67-8	1,3,5 - Trimethylbenzene	2,780		50.0
98-06-6	tert - Butylbenzene	508		50.0
95-63-6	1,2,4 - Trimethylbenzene	4,150		50.0
135-98-8	sec - Butylbenzene	24.5		50.0
541-73-1	1,3 - Dichlorobenzene	ND		50.0
106-46-7	1,4 - Dichlorobenzene	ND		50.0
99-87-6	4-Isopropyltoluene	28.0	J	50.0
95-50-1	1,2 - Dichlorobenzene	ND		50.0
104-51-8	n - Butylbenzene	22.0	J	50.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND		250
120-82-1	1,2,4 - Trichlorobenzene	ND		50.0
91-20-3	Naphthalene	573		50.0
87-68-3	Hexachlorobutadiene	ND		50.0
87-61-6	1,2 3 - Trichlorobenzene	ND		50.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	531293	792953	67.0%	50 - 200 %
Fluorobenzene	1319461	1515940	87.0%	50 - 200 %
1,4 - Difluorobenzene	1234294	1453553	84.9%	50 - 200 %
Chlorobenzene - d5	921263	1112136	82.8%	50 - 200 %
1,4 - Dichlorobenzene - d4	324511	446806	72.6%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	10.2	102%	86 - 118 %
Toluene - d8	10.2	102%	88 - 110 %
4 - Bromofluorobenzene	9.92	99.2%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.82	98.2%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990



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EPA METHOD 8260

Client: **Western Water Consultants**
 Sample ID: 90125-13.10/97
 Laboratory ID: C97-63832
 Matrix: Water
 Dilution Factor: 1

mw-13

Date Sampled: 10/17/97
 Date Received: 10/21/97
 Date Analyzed: 10/22/97
 Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	1.0
74-87-3	Chloromethane	ND	1.0
75-01-4	Vinyl chloride (Chloroethene)	ND	1.0
74-83-9	Bromomethane	ND	1.0
75-00-3	Chloroethane	ND	1.0
75-69-4	Trichlorofluoromethane	ND	1.0
75-35-4	1,1 - Dichloroethene	ND	1.0
75-09-2	Methylene chloride (Dichloromethane)	ND	1.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	1.0
75-34-3	1,1 - Dichloroethane	2.95	1.0
78-93-3	2 -Butanone (MEK)	ND	10.0
156-59-2	cis - 1,2 - Dichloroethene	ND	1.0
74-97-5	Bromochloromethane	ND	1.0
67-66-3	Chloroform (Trichloromethane)	ND	1.0
594-20-7	2,2 - Dichloropropane	ND	1.0
71-55-6	1,1,1 - Trichloroethane	ND	1.0
107-06-2	1,2 - Dichloroethane	ND	1.0
563-58-6	1,1 - Dichloropropene	ND	1.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	1.0
71-43-2	Benzene	0.62	J 1.0
74-95-3	Dibromomethane	ND	1.0
78-87-5	1,2 - Dichloropropane	ND	1.0
79-01-6	Trichloroethene	5.99	1.0
75-27-4	Bromodichloromethane	ND	1.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	1.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	1.0
79-00-5	1,1,2 - Trichloroethane	ND	1.0
108-88-3	Toluene	ND	1.0
106-93-4	1,2 - Dibromoethane	ND	1.0
142-28-9	1,3 - Dichloropropane	ND	1.0
124-48-1	Dibromochloromethane	ND	1.0
127-18-4	Tetrachloroethene	9.03	1.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	1.0
108-90-7	Chlorobenzene	ND	1.0
100-41-4	Ethylbenzene	ND	1.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	2.0
75-25-2	Bromoform (Tribromomethane)	ND	1.0
100-42-5	Styrene (Ethenylbenzene)	ND	1.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	1.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	1.0
96-18-4	1,2,3 - Trichloropropane	ND	1.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-13.10/97
Laboratory ID: C97-63832

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-13

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	1.0
108-86-1	Bromobenzene	ND	1.0
103-65-1	n - Propylbenzene	ND	1.0
95-49-8	2 - Chlorotoluene	ND	1.0
106-43-4	4 - Chlorotoluene	ND	1.0
108-67-8	1,3,5 - Trimethylbenzene	ND	1.0
98-06-6	tert - Butylbenzene	ND	1.0
95-63-6	1,2,4 - Trimethylbenzene	ND	1.0
135-98-8	sec - Butylbenzene	1.95	1.0
541-73-1	1,3 - Dichlorobenzene	ND	1.0
106-46-7	1,4 - Dichlorobenzene	ND	1.0
99-87-6	4-Isopropyltoluene	ND	1.0
95-50-1	1,2 - Dichlorobenzene	ND	1.0
104-51-8	n - Butylbenzene	ND	1.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	5.0
120-82-1	1,2,4 - Trichlorobenzene	ND	1.0
91-20-3	Naphthalene	ND	1.0
87-68-3	Hexachlorobutadiene	ND	1.0
87-61-6	1,2 3 - Trichlorobenzene	ND	1.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	659207	792953	83.1%	50 - 200 %
Fluorobenzene	1414176	1515940	93.3%	50 - 200 %
1,4 - Difluorobenzene	1355072	1453553	93.2%	50 - 200 %
Chlorobenzene - d5	1037187	1112136	93.3%	50 - 200 %
1,4 - Dichlorobenzene - d4	410057	446806	91.8%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	9.07	90.7%	86 - 118 %
Toluene - d8	10.1	101%	88 - 110 %
4 - Bromofluorobenzene	10.1	101%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.91	99.1%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

Report File: R:\Reports\CLIENTS\97\Western_Water_Consultants\ORGANIC CAS\97_63820.xls

Analyst: yw
Reviewed: sec



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EPA METHOD 8260

Client: **Western Water Consultants**

Sample ID: 90125-B.10/97

Laboratory ID: C97-63850

Matrix: Water

Dilution Factor: 2

*Duplicate of
mw-13*

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	2.0
74-87-3	Chloromethane	ND	2.0
75-01-4	Vinyl chloride (Chloroethene)	ND	2.0
74-83-9	Bromomethane	ND	2.0
75-00-3	Chloroethane	ND	2.0
75-69-4	Trichlorofluoromethane	ND	2.0
75-35-4	1,1 - Dichloroethene	ND	2.0
75-09-2	Methylene chloride (Dichloromethane)	ND	2.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	2.0
75-34-3	1,1 - Dichloroethane	3.46	2.0
78-93-3	2 -Butanone (MEK)	ND	20.0
156-59-2	cis - 1,2 - Dichloroethene	ND	2.0
74-97-5	Bromochloromethane	ND	2.0
67-66-3	Chloroform (Trichloromethane)	ND	2.0
594-20-7	2,2 - Dichloropropane	ND	2.0
71-55-6	1,1,1 - Trichloroethane	ND	2.0
107-06-2	1,2 - Dichloroethane	ND	2.0
563-58-6	1,1 - Dichloropropene	ND	2.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	2.0
71-43-2	Benzene	ND	2.0
74-95-3	Dibromomethane	ND	2.0
78-87-5	1,2 - Dichloropropane	ND	2.0
79-01-6	Trichloroethene	5.64	2.0
75-27-4	Bromodichloromethane	ND	2.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	2.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	2.0
79-00-5	1,1,2 - Trichloroethane	ND	2.0
108-88-3	Toluene	ND	2.0
106-93-4	1,2 - Dibromoethane	ND	2.0
142-28-9	1,3 - Dichloropropane	ND	2.0
124-48-1	Dibromochloromethane	ND	2.0
127-18-4	Tetrachloroethene	6.64	2.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	2.0
108-90-7	Chlorobenzene	ND	2.0
100-41-4	Ethylbenzene	ND	2.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	4.0
75-25-2	Bromoform (Tribromomethane)	ND	2.0
100-42-5	Styrene (Ethenylbenzene)	ND	2.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	2.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	2.0
96-18-4	1,2,3 - Trichloropropane	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-B.10/97
Laboratory ID: C97-63850

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

*Duplicate of
mw-13*

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	2.0
108-86-1	Bromobenzene	ND	2.0
103-65-1	n - Propylbenzene	ND	2.0
95-49-8	2 - Chlorotoluene	ND	2.0
106-43-4	4 - Chlorotoluene	ND	2.0
108-67-8	1,3,5 - Trimethylbenzene	ND	2.0
98-06-6	tert - Butylbenzene	ND	2.0
95-63-6	1,2,4 - Trimethylbenzene	ND	2.0
135-98-8	sec - Butylbenzene	1.62 J	2.0
541-73-1	1,3 - Dichlorobenzene	ND	2.0
106-46-7	1,4 - Dichlorobenzene	ND	2.0
99-87-6	4-Isopropyltoluene	ND	2.0
95-50-1	1,2 - Dichlorobenzene	ND	2.0
104-51-8	n - Butylbenzene	ND	2.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	10.0
120-82-1	1,2,4 - Trichlorobenzene	ND	2.0
91-20-3	Naphthalene	ND	2.0
87-68-3	Hexachlorobutadiene	ND	2.0
87-61-6	1,2 3 - Trichlorobenzene	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

<u>INTERNAL STANDARDS</u>	<u>AREA</u>	<u>ICAL / CCAL</u>	<u>PERCENT RECOVERY</u>	<u>ACCEPTANCE RANGE</u>
Pentafluorobenzene	504134	792953	63.6%	50 - 200 %
Fluorobenzene	1259378	1515940	83.1%	50 - 200 %
1,4 - Difluorobenzene	1189144	1453553	81.8%	50 - 200 %
Chlorobenzene - d5	905907	1112136	81.5%	50 - 200 %
1,4 - Dichlorobenzene - d4	310280	446806	69.4%	50 - 200 %

<u>SYSTEM MONITORING COMPOUNDS</u>	<u>CONCENTRATION</u>	<u>PERCENT RECOVERY</u>	<u>ACCEPTANCE RANGE</u>
Dibromofluoromethane	10.4	104%	86 - 118 %
Toluene - d8	10.3	103%	88 - 110 %
4 - Bromofluorobenzene	10.0	100%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.86	98.6%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
Reviewed: sec

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EPA METHOD 8260Client: **Western Water Consultants**

Sample ID: 90125-14.10/97

Laboratory ID: C97-63833

Matrix: Water

Dilution Factor: 5

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-1x

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	5.0
74-87-3	Chloromethane	ND	5.0
75-01-4	Vinyl chloride (Chloroethene)	ND	5.0
74-83-9	Bromomethane	ND	5.0
75-00-3	Chloroethane	ND	5.0
75-69-4	Trichlorofluoromethane	ND	5.0
75-35-4	1,1 - Dichloroethene	19.2	5.0
75-09-2	Methylene chloride (Dichloromethane)	ND	5.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	5.0
75-34-3	1,1 - Dichloroethane	38.5	5.0
78-93-3	2 -Butanone (MEK)	ND	50.0
156-59-2	cis - 1,2 - Dichloroethene	ND	5.0
74-97-5	Bromochloromethane	ND	5.0
67-66-3	Chloroform (Trichloromethane)	ND	5.0
594-20-7	2,2 - Dichloropropane	ND	5.0
71-55-6	1,1,1 - Trichloroethane	ND	5.0
107-06-2	1,2 - Dichloroethane	ND	5.0
563-58-6	1,1 - Dichloropropene	ND	5.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	5.0
71-43-2	Benzene	ND	5.0
74-95-3	Dibromomethane	ND	5.0
78-87-5	1,2 - Dichloropropane	ND	5.0
79-01-6	Trichloroethene	ND	5.0
75-27-4	Bromodichloromethane	ND	5.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	5.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	5.0
79-00-5	1,1,2 - Trichloroethane	ND	5.0
108-88-3	Toluene	ND	5.0
106-93-4	1,2 - Dibromoethane	ND	5.0
142-28-9	1,3 - Dichloropropane	ND	5.0
124-48-1	Dibromochloromethane	ND	5.0
127-18-4	Tetrachloroethene	48.4	5.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	5.0
108-90-7	Chlorobenzene	ND	5.0
100-41-4	Ethylbenzene	ND	5.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	10.0
75-25-2	Bromoform (Tribromomethane)	ND	5.0
100-42-5	Styrene (Ethenylbenzene)	ND	5.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	5.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	5.0
96-18-4	1,2,3 - Trichloropropane	ND	5.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-14.10/97
Laboratory ID: C97-63833

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-14

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	5.0
108-86-1	Bromobenzene	ND	5.0
103-65-1	n - Propylbenzene	ND	5.0
95-49-8	2 - Chlorotoluene	ND	5.0
106-43-4	4 - Chlorotoluene	ND	5.0
108-67-8	1,3,5 - Trimethylbenzene	ND	5.0
98-06-6	tert - Butylbenzene	ND	5.0
95-63-6	1,2,4 - Trimethylbenzene	ND	5.0
135-98-8	sec - Butylbenzene	ND	5.0
541-73-1	1,3 - Dichlorobenzene	ND	5.0
106-46-7	1,4 - Dichlorobenzene	ND	5.0
99-87-6	4-Isopropyltoluene	ND	5.0
95-50-1	1,2 - Dichlorobenzene	ND	5.0
104-51-8	n - Butylbenzene	ND	5.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	25.0
120-82-1	1,2,4 - Trichlorobenzene	ND	5.0
91-20-3	Naphthalene	ND	5.0
87-68-3	Hexachlorobutadiene	ND	5.0
87-61-6	1,2,3 - Trichlorobenzene	ND	5.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	696559	792953	87.8%	50 - 200 %
Fluorobenzene	1489602	1515940	98.3%	50 - 200 %
1,4 - Difluorobenzene	1406820	1453553	96.8%	50 - 200 %
Chlorobenzene - d5	1068064	1112136	96.0%	50 - 200 %
1,4 - Dichlorobenzene - d4	416453	446806	93.2%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	8.85	88.5%	86 - 118 %
Toluene - d8	10.1	101%	88 - 110 %
4 - Bromofluorobenzene	10.0	100%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.3	103%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990



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EPA METHOD 8260

Client: **Western Water Consultants**
 Sample ID: 90125-15.10/97
 Laboratory ID: C97-63834
 Matrix: Water
 Dilution Factor: 1

Date Sampled: 10/17/97
 Date Received: 10/21/97
 Date Analyzed: 10/22/97
 Date Reported: November 5, 1997

mw-15

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)		LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND		1.0
74-87-3	Chloromethane	ND		1.0
75-01-4	Vinyl chloride (Chloroethene)	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-35-4	1,1 - Dichloroethene	0.76	J	1.0
75-09-2	Methylene chloride (Dichloromethane)	ND		1.0
156-60-5	trans - 1, 2 - Dichloroethene	ND		1.0
75-34-3	1,1 - Dichloroethane	13.0		1.0
78-93-3	2 -Butanone (MEK)	ND		10.0
156-59-2	cis - 1,2 - Dichloroethene	0.77	J	1.0
74-97-5	Bromochloromethane	ND		1.0
67-66-3	Chloroform (Trichloromethane)	ND		1.0
594-20-7	2,2 - Dichloropropane	ND		1.0
71-55-6	1,1,1 - Trichloroethane	ND		1.0
107-06-2	1,2 - Dichloroethane	0.91	J	1.0
563-58-6	1,1 - Dichloropropene	ND		1.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND		1.0
71-43-2	Benzene	0.42	J	1.0
74-95-3	Dibromomethane	ND		1.0
78-87-5	1,2 - Dichloropropane	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-27-4	Bromodichloromethane	ND		1.0
10061-01-5	cis - 1,3 - Dichloropropene	ND		1.0
10061-02-6	trans - 1,3 - Dichloropropene	ND		1.0
79-00-5	1,1,2 - Trichloroethane	ND		1.0
108-88-3	Toluene	ND		1.0
106-93-4	1,2 - Dibromoethane	ND		1.0
142-28-9	1,3 - Dichloropropane	ND		1.0
124-48-1	Dibromochloromethane	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND		2.0
75-25-2	Bromoform (Tribromomethane)	ND		1.0
100-42-5	Styrene (Ethenylbenzene)	ND		1.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND		1.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND		1.0
96-18-4	1,2,3 - Trichloropropane	ND		1.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-15.10/97
Laboratory ID: C97-63834

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-15

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	1.0
108-86-1	Bromobenzene	ND	1.0
103-65-1	n - Propylbenzene	ND	1.0
95-49-8	2 - Chlorotoluene	ND	1.0
106-43-4	4 - Chlorotoluene	ND	1.0
108-67-8	1,3,5 - Trimethylbenzene	ND	1.0
98-06-6	tert - Butylbenzene	ND	1.0
95-63-6	1,2,4 - Trimethylbenzene	ND	1.0
135-98-8	sec - Butylbenzene	ND	1.0
541-73-1	1,3 - Dichlorobenzene	ND	1.0
106-46-7	1,4 - Dichlorobenzene	ND	1.0
99-87-6	4-Isopropyltoluene	ND	1.0
95-50-1	1,2 - Dichlorobenzene	ND	1.0
104-51-8	n - Butylbenzene	ND	1.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	5.0
120-82-1	1,2,4 - Trichlorobenzene	ND	1.0
91-20-3	Naphthalene	ND	1.0
87-68-3	Hexachlorobutadiene	ND	1.0
87-61-6	1,2 3 - Trichlorobenzene	ND	1.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	775396	792953	97.8%	50 - 200 %
Fluorobenzene	1546639	1515940	102%	50 - 200 %
1,4 - Difluorobenzene	1479746	1453553	102%	50 - 200 %
Chlorobenzene - d5	1123073	1112136	101%	50 - 200 %
1,4 - Dichlorobenzene - d4	456241	446806	102%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	11.3	113%	86 - 118 %
Toluene - d8	10.6	106%	88 - 110 %
4 - Bromofluorobenzene	11.1	111%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.0	100%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990



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EPA METHOD 8260

Client: **Western Water Consultants**

Sample ID: 90125-17D.10/97

Laboratory ID: C97-63838

Matrix: Water

Dilution Factor: 2

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-17D

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	2.0
74-87-3	Chloromethane	ND	2.0
75-01-4	Vinyl chloride (Chloroethene)	ND	2.0
74-83-9	Bromomethane	ND	2.0
75-00-3	Chloroethane	ND	2.0
75-69-4	Trichlorofluoromethane	ND	2.0
75-35-4	1,1 - Dichloroethene	14.7	2.0
75-09-2	Methylene chloride (Dichloromethane)	ND	2.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	2.0
75-34-3	1,1 - Dichloroethane	55.5	2.0
78-93-3	2 -Butanone (MEK)	ND	20.0
156-59-2	cis - 1,2 - Dichloroethene	ND	2.0
74-97-5	Bromochloromethane	ND	2.0
67-66-3	Chloroform (Trichloromethane)	ND	2.0
594-20-7	2,2 - Dichloropropane	ND	2.0
71-55-6	1,1,1 - Trichloroethane	1.30	J 2.0
107-06-2	1,2 - Dichloroethane	ND	2.0
563-58-6	1,1 - Dichloropropene	ND	2.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	2.0
71-43-2	Benzene	4.48	2.0
74-95-3	Dibromomethane	ND	2.0
78-87-5	1,2 - Dichloropropane	ND	2.0
79-01-6	Trichloroethene	37.8	2.0
75-27-4	Bromodichloromethane	ND	2.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	2.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	2.0
79-00-5	1,1,2 - Trichloroethane	ND	2.0
108-88-3	Toluene	ND	2.0
106-93-4	1,2 - Dibromoethane	ND	2.0
142-28-9	1,3 - Dichloropropane	ND	2.0
124-48-1	Dibromochloromethane	ND	2.0
127-18-4	Tetrachloroethene	10.9	2.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	2.0
108-90-7	Chlorobenzene	ND	2.0
100-41-4	Ethylbenzene	ND	2.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	4.0
75-25-2	Bromoform (Tribromomethane)	ND	2.0
100-42-5	Styrene (Ethenylbenzene)	ND	2.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	2.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	2.0
96-18-4	1,2,3 - Trichloropropane	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-17D.10/97
Laboratory ID: C97-63838

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-17D

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	3.74	2.0
108-86-1	Bromobenzene	ND	2.0
103-65-1	n - Propylbenzene	ND	2.0
95-49-8	2 - Chlorotoluene	ND	2.0
106-43-4	4 - Chlorotoluene	ND	2.0
108-67-8	1,3,5 - Trimethylbenzene	ND	2.0
98-06-6	tert - Butylbenzene	ND	2.0
95-63-6	1,2,4 - Trimethylbenzene	6.20	2.0
135-98-8	sec - Butylbenzene	1.60 J	2.0
541-73-1	1,3 - Dichlorobenzene	ND	2.0
106-46-7	1,4 - Dichlorobenzene	ND	2.0
99-87-6	4-Isopropyltoluene	ND	2.0
95-50-1	1,2 - Dichlorobenzene	ND	2.0
104-51-8	n - Butylbenzene	ND	2.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	10.0
120-82-1	1,2,4 - Trichlorobenzene	ND	2.0
91-20-3	Naphthalene	1.68 J	2.0
87-68-3	Hexachlorobutadiene	ND	2.0
87-61-6	1,2 3 - Trichlorobenzene	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	694053	792953	87.5%	50 - 200 %
Fluorobenzene	1438372	1515940	94.9%	50 - 200 %
1,4 - Difluorobenzene	1371934	1453553	94.4%	50 - 200 %
Chlorobenzene - d5	1059415	1112136	95.3%	50 - 200 %
1,4 - Dichlorobenzene - d4	421375	446806	94.3%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	11.3	113%	86 - 118 %
Toluene - d8	10.5	105%	88 - 110 %
4 - Bromofluorobenzene	10.7	107%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.1	101%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990



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EPA METHOD 8260

Client: Western Water Consultants

Sample ID: 90125-17A.10/97

Laboratory ID: C97-63835

Matrix: Water

Dilution Factor: 5

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-17A

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	5.0
74-87-3	Chloromethane	ND	5.0
75-01-4	Vinyl chloride (Chloroethene)	ND	5.0
74-83-9	Bromomethane	ND	5.0
75-00-3	Chloroethane	ND	5.0
75-69-4	Trichlorofluoromethane	ND	5.0
75-35-4	1,1 - Dichloroethene	49.8	5.0
75-09-2	Methylene chloride (Dichloromethane)	ND	5.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	5.0
75-34-3	1,1 - Dichloroethane	78.9	5.0
78-93-3	2 -Butanone (MEK)	ND	50.0
156-59-2	cis - 1,2 - Dichloroethene	ND	5.0
74-97-5	Bromochloromethane	ND	5.0
67-66-3	Chloroform (Trichloromethane)	ND	5.0
594-20-7	2,2 - Dichloropropane	ND	5.0
71-55-6	1,1,1 - Trichloroethane	2.65	J 5.0
107-06-2	1,2 - Dichloroethane	ND	5.0
563-58-6	1,1 - Dichloropropene	ND	5.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	5.0
71-43-2	Benzene	6.20	5.0
74-95-3	Dibromomethane	ND	5.0
78-87-5	1,2 - Dichloropropane	ND	5.0
79-01-6	Trichloroethene	52.1	5.0
75-27-4	Bromodichloromethane	ND	5.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	5.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	5.0
79-00-5	1,1,2 - Trichloroethane	ND	5.0
108-88-3	Toluene	ND	5.0
106-93-4	1,2 - Dibromoethane	ND	5.0
142-28-9	1,3 - Dichloropropane	ND	5.0
124-48-1	Dibromochloromethane	ND	5.0
127-18-4	Tetrachloroethene	53.3	5.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	5.0
108-90-7	Chlorobenzene	ND	5.0
100-41-4	Ethylbenzene	ND	5.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	10.0
75-25-2	Bromoform (Tribromomethane)	ND	5.0
100-42-5	Styrene (Ethenylbenzene)	ND	5.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	5.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	5.0
96-18-4	1,2,3 - Trichloropropane	ND	5.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-17A.10/97
Laboratory ID: C97-63835

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

MW-17A

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	31.1	5.0
108-86-1	Bromobenzene	ND	5.0
103-65-1	n - Propylbenzene	ND	5.0
95-49-8	2 - Chlorotoluene	ND	5.0
106-43-4	4 - Chlorotoluene	ND	5.0
108-67-8	1,3,5 - Trimethylbenzene	ND	5.0
98-06-6	tert - Butylbenzene	ND	5.0
95-63-6	1,2,4 - Trimethylbenzene	ND	5.0
135-98-8	sec - Butylbenzene	10.9	5.0
541-73-1	1,3 - Dichlorobenzene	ND	5.0
106-46-7	1,4 - Dichlorobenzene	ND	5.0
99-87-6	4-Isopropyltoluene	ND	5.0
95-50-1	1,2 - Dichlorobenzene	ND	5.0
104-51-8	n - Butylbenzene	ND	5.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	25.0
120-82-1	1,2,4 - Trichlorobenzene	ND	5.0
91-20-3	Naphthalene	ND	5.0
87-68-3	Hexachlorobutadiene	ND	5.0
87-61-6	1,2,3 - Trichlorobenzene	ND	5.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS		ICAL / CCAL	PERCENT RECOVERY	ACCEPTANCE RANGE
	AREA	AREA		
Pentafluorobenzene	771331	792953	97.3%	50 - 200 %
Fluorobenzene	1529315	1515940	101%	50 - 200 %
1,4 - Difluorobenzene	1462000	1453553	101%	50 - 200 %
Chlorobenzene - d5	1120627	1112136	101%	50 - 200 %
1,4 - Dichlorobenzene - d4	427054	446806	95.6%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	11.0	110%	86 - 118 %
Toluene - d8	10.7	107%	88 - 110 %
4 - Bromofluorobenzene	10.6	106%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.1	101%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
Reviewed: sec

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EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-17B.10/97
Laboratory ID: C97-63836
Matrix: Water
Dilution Factor: 10

mw-17B

Date Sampled: 10/17/97
Date Received: 10/21/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	10.0
74-87-3	Chloromethane	ND	10.0
75-01-4	Vinyl chloride (Chloroethene)	ND	10.0
74-83-9	Bromomethane	ND	10.0
75-00-3	Chloroethane	ND	10.0
75-69-4	Trichlorofluoromethane	ND	10.0
75-35-4	1,1 - Dichloroethene	103	10.0
75-09-2	Methylene chloride (Dichloromethane)	ND	10.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	10.0
75-34-3	1,1 - Dichloroethane	53.0	10.0
78-93-3	2 -Butanone (MEK)	ND	100
156-59-2	cis - 1,2 - Dichloroethene	ND	10.0
74-97-5	Bromochloromethane	ND	10.0
67-66-3	Chloroform (Trichloromethane)	ND	10.0
594-20-7	2,2 - Dichloropropane	ND	10.0
71-55-6	1,1,1 - Trichloroethane	ND	10.0
107-06-2	1,2 - Dichloroethane	ND	10.0
563-58-6	1,1 - Dichloropropene	ND	10.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	10.0
71-43-2	Benzene	ND	10.0
74-95-3	Dibromomethane	ND	10.0
78-87-5	1,2 - Dichloropropane	ND	10.0
79-01-6	Trichloroethene	26.7	10.0
75-27-4	Bromodichloromethane	ND	10.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	10.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	10.0
79-00-5	1,1,2 - Trichloroethane	ND	10.0
108-88-3	Toluene	ND	10.0
106-93-4	1,2 - Dibromoethane	ND	10.0
142-28-9	1,3 - Dichloropropane	ND	10.0
124-48-1	Dibromochloromethane	ND	10.0
127-18-4	Tetrachloroethene	149	10.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	10.0
108-90-7	Chlorobenzene	ND	10.0
100-41-4	Ethylbenzene	ND	10.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	20.0
75-25-2	Bromoform (Tribromomethane)	ND	10.0
100-42-5	Styrene (Ethenylbenzene)	ND	10.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	10.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	10.0
96-18-4	1,2,3 - Trichloropropane	ND	10.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-17B.10/97
Laboratory ID: C97-63836

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-17B

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	10.0
108-86-1	Bromobenzene	ND	10.0
103-65-1	n - Propylbenzene	ND	10.0
95-49-8	2 - Chlorotoluene	ND	10.0
106-43-4	4 - Chlorotoluene	ND	10.0
108-67-8	1,3,5 - Trimethylbenzene	ND	10.0
98-06-6	tert - Butylbenzene	ND	10.0
95-63-6	1,2,4 - Trimethylbenzene	ND	10.0
135-98-8	sec - Butylbenzene	ND	10.0
541-73-1	1,3 - Dichlorobenzene	ND	10.0
106-46-7	1,4 - Dichlorobenzene	ND	10.0
99-87-6	4-Isopropyltoluene	ND	10.0
95-50-1	1,2 - Dichlorobenzene	ND	10.0
104-51-8	n - Butylbenzene	ND	10.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	50.0
120-82-1	1,2,4 - Trichlorobenzene	ND	10.0
91-20-3	Naphthalene	ND	10.0
87-68-3	Hexachlorobutadiene	ND	10.0
87-61-6	1,2 3 - Trichlorobenzene	ND	10.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	761493	792953	96.0%	50 - 200 %
Fluorobenzene	1534938	1515940	101%	50 - 200 %
1,4 - Difluorobenzene	1460354	1453553	100%	50 - 200 %
Chlorobenzene - d5	1090271	1112136	98.0%	50 - 200 %
1,4 - Dichlorobenzene - d4	414771	446806	92.8%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	10.9	109%	86 - 118 %
Toluene - d8	10.4	104%	88 - 110 %
4 - Bromofluorobenzene	10.5	105%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.1	101%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
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EPA METHOD 8260

Client: **Western Water Consultants**
 Sample ID: 90125-17C.10/97
 Laboratory ID: C97-63837
 Matrix: Water
 Dilution Factor: 10

mw-17C

Date Sampled: 10/17/97
 Date Received: 10/21/97
 Date Analyzed: 10/22/97
 Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	10.0
74-87-3	Chloromethane	ND	10.0
75-01-4	Vinyl chloride (Chloroethene)	ND	10.0
74-83-9	Bromomethane	ND	10.0
75-00-3	Chloroethane	ND	10.0
75-69-4	Trichlorofluoromethane	ND	10.0
75-35-4	1,1 - Dichloroethene	115	10.0
75-09-2	Methylene chloride (Dichloromethane)	ND	10.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	10.0
75-34-3	1,1 - Dichloroethane	66.0	10.0
78-93-3	2 -Butanone (MEK)	ND	100
156-59-2	cis - 1,2 - Dichloroethene	ND	10.0
74-97-5	Bromochloromethane	ND	10.0
67-66-3	Chloroform (Trichloromethane)	ND	10.0
594-20-7	2,2 - Dichloropropane	ND	10.0
71-55-6	1,1,1 - Trichloroethane	ND	10.0
107-06-2	1,2 - Dichloroethane	3.00	J 10.0
563-58-6	1,1 - Dichloropropene	ND	10.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	10.0
71-43-2	Benzene	30.5	10.0
74-95-3	Dibromomethane	ND	10.0
78-87-5	1,2 - Dichloropropane	ND	10.0
79-01-6	Trichloroethene	86.4	10.0
75-27-4	Bromodichloromethane	ND	10.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	10.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	10.0
79-00-5	1,1,2 - Trichloroethane	ND	10.0
108-88-3	Toluene	ND	10.0
106-93-4	1,2 - Dibromoethane	ND	10.0
142-28-9	1,3 - Dichloropropane	ND	10.0
124-48-1	Dibromochloromethane	ND	10.0
127-18-4	Tetrachloroethene	12.6	10.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	10.0
108-90-7	Chlorobenzene	ND	10.0
100-41-4	Ethylbenzene	ND	10.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	20.0
75-25-2	Bromoform (Tribromomethane)	ND	10.0
100-42-5	Styrene (Ethenylbenzene)	ND	10.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	10.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	10.0
96-18-4	1,2,3 - Trichloropropane	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-17C.10/97
Laboratory ID: C97-63837

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

MW-17C

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	10.0
108-86-1	Bromobenzene	ND	10.0
103-65-1	n - Propylbenzene	ND	10.0
95-49-8	2 - Chlorotoluene	ND	10.0
106-43-4	4 - Chlorotoluene	ND	10.0
108-67-8	1,3,5 - Trimethylbenzene	ND	10.0
98-06-6	tert - Butylbenzene	ND	10.0
95-63-6	1,2,4 - Trimethylbenzene	ND	10.0
135-98-8	sec - Butylbenzene	ND	10.0
541-73-1	1,3 - Dichlorobenzene	ND	10.0
106-46-7	1,4 - Dichlorobenzene	ND	10.0
99-87-6	4-Isopropyltoluene	ND	10.0
95-50-1	1,2 - Dichlorobenzene	ND	10.0
104-51-8	n - Butylbenzene	ND	10.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	50.0
120-82-1	1,2,4 - Trichlorobenzene	ND	10.0
91-20-3	Naphthalene	ND	10.0
87-68-3	Hexachlorobutadiene	ND	10.0
87-61-6	1,2 3 - Trichlorobenzene	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	691693	792953	87.2%	50 - 200 %
Fluorobenzene	1506483	1515940	99.4%	50 - 200 %
1,4 - Difluorobenzene	1427801	1453553	98.2%	50 - 200 %
Chlorobenzene - d5	1125255	1112136	101%	50 - 200 %
1,4 - Dichlorobenzene - d4	430475	446806	96.3%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	11.5	115%	86 - 118 %
Toluene - d8	10.7	107%	88 - 110 %
4 - Bromofluorobenzene	10.5	105%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.71	97.1%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
Reviewed: sec

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EPA METHOD 8260Client: **Western Water Consultants**

Sample ID: 90125-18.10/97

Laboratory ID: C97-63839

Matrix: Water

Dilution Factor: 10

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-18

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	10.0
74-87-3	Chloromethane	ND	10.0
75-01-4	Vinyl chloride (Chloroethene)	ND	10.0
74-83-9	Bromomethane	ND	10.0
75-00-3	Chloroethane	ND	10.0
75-69-4	Trichlorofluoromethane	ND	10.0
75-35-4	1,1 - Dichloroethene	157	10.0
75-09-2	Methylene chloride (Dichloromethane)	ND	10.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	10.0
75-34-3	1,1 - Dichloroethane	27.8	10.0
78-93-3	2 -Butanone (MEK)	ND	100
156-59-2	cis - 1,2 - Dichloroethene	ND	10.0
74-97-5	Bromochloromethane	ND	10.0
67-66-3	Chloroform (Trichloromethane)	ND	10.0
594-20-7	2,2 - Dichloropropane	ND	10.0
71-55-6	1,1,1 - Trichloroethane	ND	10.0
107-06-2	1,2 - Dichloroethane	ND	10.0
563-58-6	1,1 - Dichloropropene	ND	10.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	10.0
71-43-2	Benzene	2.00	J 10.0
74-95-3	Dibromomethane	ND	10.0
78-87-5	1,2 - Dichloropropane	ND	10.0
79-01-6	Trichloroethene	44.3	10.0
75-27-4	Bromodichloromethane	ND	10.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	10.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	10.0
79-00-5	1,1,2 - Trichloroethane	ND	10.0
108-88-3	Toluene	ND	10.0
106-93-4	1,2 - Dibromoethane	ND	10.0
142-28-9	1,3 - Dichloropropane	ND	10.0
124-48-1	Dibromochloromethane	ND	10.0
127-18-4	Tetrachloroethene	70.9	10.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	10.0
108-90-7	Chlorobenzene	ND	10.0
100-41-4	Ethylbenzene	ND	10.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	20.0
75-25-2	Bromoform (Tribromomethane)	ND	10.0
100-42-5	Styrene (Ethenylbenzene)	ND	10.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	10.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	10.0
96-18-4	1,2,3 - Trichloropropane	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-18.10/97
Laboratory ID: C97-63839

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-18

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	10.0
108-86-1	Bromobenzene	ND	10.0
103-65-1	n - Propylbenzene	ND	10.0
95-49-8	2 - Chlorotoluene	ND	10.0
106-43-4	4 - Chlorotoluene	ND	10.0
108-67-8	1,3,5 - Trimethylbenzene	ND	10.0
98-06-6	tert - Butylbenzene	ND	10.0
95-63-6	1,2,4 - Trimethylbenzene	ND	10.0
135-98-8	sec - Butylbenzene	ND	10.0
541-73-1	1,3 - Dichlorobenzene	ND	10.0
106-46-7	1,4 - Dichlorobenzene	ND	10.0
99-87-6	4-Isopropyltoluene	ND	10.0
95-50-1	1,2 - Dichlorobenzene	ND	10.0
104-51-8	n - Butylbenzene	ND	10.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	50.0
120-82-1	1,2,4 - Trichlorobenzene	ND	10.0
91-20-3	Naphthalene	ND	10.0
87-68-3	Hexachlorobutadiene	ND	10.0
87-61-6	1,2 3 - Trichlorobenzene	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	720548	792953	90.9%	50 - 200 %
Fluorobenzene	1439562	1515940	95.0%	50 - 200 %
1,4 - Difluorobenzene	1379419	1453553	94.9%	50 - 200 %
Chlorobenzene - d5	1034730	1112136	93.0%	50 - 200 %
1,4 - Dichlorobenzene - d4	383049	446806	85.7%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	11.0	110%	86 - 118 %
Toluene - d8	10.3	103%	88 - 110 %
4 - Bromofluorobenzene	10.5	105%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.2	102%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990



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EPA METHOD 8260

Client: **Western Water Consultants**

Sample ID: 90125-19.10/97

Laboratory ID: C97-63840

Matrix: Water

Dilution Factor: 10

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

MW-19

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	10.0
74-87-3	Chloromethane	ND	10.0
75-01-4	Vinyl chloride (Chloroethene)	ND	10.0
74-83-9	Bromomethane	ND	10.0
75-00-3	Chloroethane	ND	10.0
75-69-4	Trichlorofluoromethane	ND	10.0
75-35-4	1,1 - Dichloroethene	124	10.0
75-09-2	Methylene chloride (Dichloromethane)	ND	10.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	10.0
75-34-3	1,1 - Dichloroethane	10.0	10.0
78-93-3	2 -Butanone (MEK)	ND	100
156-59-2	cis - 1,2 - Dichloroethene	ND	10.0
74-97-5	Bromochloromethane	ND	10.0
67-66-3	Chloroform (Trichloromethane)	ND	10.0
594-20-7	2,2 - Dichloropropane	ND	10.0
71-55-6	1,1,1 - Trichloroethane	ND	10.0
107-06-2	1,2 - Dichloroethane	ND	10.0
563-58-6	1,1 - Dichloropropene	ND	10.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	10.0
71-43-2	Benzene	2.60	J 10.0
74-95-3	Dibromomethane	ND	10.0
78-87-5	1,2 - Dichloropropane	ND	10.0
79-01-6	Trichloroethene	6.50	J 10.0
75-27-4	Bromodichloromethane	ND	10.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	10.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	10.0
79-00-5	1,1,2 - Trichloroethane	ND	10.0
108-88-3	Toluene	ND	10.0
106-93-4	1,2 - Dibromoethane	ND	10.0
142-23-9	1,3 - Dichloropropane	ND	10.0
124-48-1	Dibromochloromethane	ND	10.0
127-18-4	Tetrachloroethene	66.0	10.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	10.0
108-90-7	Chlorobenzene	ND	10.0
100-41-4	Ethylbenzene	ND	10.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	20.0
75-25-2	Bromoform (Tribromomethane)	ND	10.0
100-42-5	Styrene (Ethenylbenzene)	ND	10.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	10.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	10.0
96-18-4	1,2,3 - Trichloropropane	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-19.10/97
Laboratory ID: C97-63840

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-19

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	10.0
108-86-1	Bromobenzene	ND	10.0
103-65-1	n - Propylbenzene	ND	10.0
95-49-8	2 - Chlorotoluene	ND	10.0
106-43-4	4 - Chlorotoluene	ND	10.0
108-67-8	1,3,5 - Trimethylbenzene	ND	10.0
98-06-6	tert - Butylbenzene	ND	10.0
95-63-6	1,2,4 - Trimethylbenzene	ND	10.0
135-98-8	sec - Butylbenzene	ND	10.0
541-73-1	1,3 - Dichlorobenzene	ND	10.0
106-46-7	1,4 - Dichlorobenzene	ND	10.0
99-87-6	4-Isopropyltoluene	ND	10.0
95-50-1	1,2 - Dichlorobenzene	ND	10.0
104-51-8	n - Butylbenzene	ND	10.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	50.0
120-82-1	1,2,4 - Trichlorobenzene	ND	10.0
91-20-3	Naphthalene	ND	10.0
87-68-3	Hexachlorobutadiene	ND	10.0
87-61-6	1,2,3 - Trichlorobenzene	ND	10.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	632189	792953	79.7%	50 - 200 %
Fluorobenzene	1364774	1515940	90.0%	50 - 200 %
1,4 - Difluorobenzene	1273868	1453553	87.6%	50 - 200 %
Chlorobenzene - d5	996305	1112136	89.6%	50 - 200 %
1,4 - Dichlorobenzene - d4	374044	446806	83.7%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	9.02	90.2%	86 - 118 %
Toluene - d8	10.2	102%	88 - 110 %
4 - Bromofluorobenzene	9.88	98.8%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.76	97.6%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

Report File: R:\Reports\CLIENTS.97\Western_Water_Consultants\ORGANIC.CAS\97_63820.xls

Analyst: yw
Reviewed: sec

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EPA METHOD 8260Client: **Western Water Consultants**

Sample ID: 90125-20.10/97

Laboratory ID: C97-63841

Matrix: Water

Dilution Factor: 1

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-20

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	1.0
74-87-3	Chloromethane	ND	1.0
75-01-4	Vinyl chloride (Chloroethene)	ND	1.0
74-83-9	Bromomethane	ND	1.0
75-00-3	Chloroethane	ND	1.0
75-69-4	Trichlorofluoromethane	ND	1.0
75-35-4	1,1 - Dichloroethene	ND	1.0
75-09-2	Methylene chloride (Dichloromethane)	ND	1.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	1.0
75-34-3	1,1 - Dichloroethane	ND	1.0
78-93-3	2 -Butanone (MEK)	ND	10.0
156-59-2	cis - 1,2 - Dichloroethene	ND	1.0
74-97-5	Bromochloromethane	ND	1.0
67-66-3	Chloroform (Trichloromethane)	ND	1.0
594-20-7	2,2 - Dichloropropane	ND	1.0
71-55-6	1,1,1 - Trichloroethane	ND	1.0
107-06-2	1,2 - Dichloroethane	ND	1.0
563-58-6	1,1 - Dichloropropene	ND	1.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	1.0
71-43-2	Benzene	ND	1.0
74-95-3	Dibromomethane	ND	1.0
78-87-5	1,2 - Dichloropropane	ND	1.0
79-01-6	Trichloroethene	ND	1.0
75-27-4	Bromodichloromethane	ND	1.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	1.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	1.0
79-00-5	1,1,2 - Trichloroethane	ND	1.0
108-88-3	Toluene	ND	1.0
106-93-4	1,2 - Dibromoethane	ND	1.0
142-28-9	1,3 - Dichloropropane	ND	1.0
124-48-1	Dibromochloromethane	ND	1.0
127-18-4	Tetrachloroethene	ND	1.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	1.0
108-90-7	Chlorobenzene	ND	1.0
100-41-4	Ethylbenzene	ND	1.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	2.0
75-25-2	Bromoform (Tribromomethane)	ND	1.0
100-42-5	Styrene (Ethenylbenzene)	ND	1.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	1.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	1.0
96-18-4	1,2,3 - Trichloropropane	ND	1.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-20.10/97
Laboratory ID: C97-63841

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-20

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	1.0
108-86-1	Bromobenzene	ND	1.0
103-65-1	n - Propylbenzene	ND	1.0
95-49-8	2 - Chlorotoluene	ND	1.0
106-43-4	4 - Chlorotoluene	ND	1.0
108-67-8	1,3,5 - Trimethylbenzene	ND	1.0
98-06-6	tert - Butylbenzene	ND	1.0
95-63-6	1,2,4 - Trimethylbenzene	ND	1.0
135-98-8	sec - Butylbenzene	ND	1.0
541-73-1	1,3 - Dichlorobenzene	ND	1.0
106-46-7	1,4 - Dichlorobenzene	ND	1.0
99-87-6	4-Isopropyltoluene	ND	1.0
95-50-1	1,2 - Dichlorobenzene	ND	1.0
104-51-8	n - Butylbenzene	ND	1.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	5.0
120-82-1	1,2,4 - Trichlorobenzene	ND	1.0
91-20-3	Naphthalene	ND	1.0
87-68-3	Hexachlorobutadiene	ND	1.0
87-61-6	1,2 3 - Trichlorobenzene	ND	1.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	598393	792953	75.5%	50 - 200 %
Fluorobenzene	1441123	1515940	95.1%	50 - 200 %
1,4 - Difluorobenzene	1350815	1453553	92.9%	50 - 200 %
Chlorobenzene - d5	1057578	1112136	95.1%	50 - 200 %
1,4 - Dichlorobenzene - d4	374907	446806	83.9%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	10.3	103%	86 - 118 %
Toluene - d8	10.0	100%	88 - 110 %
4 - Bromofluorobenzene	9.66	96.6%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.2	102%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
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EPA METHOD 8260

Client: **Western Water Consultants**

Sample ID: 90125-21.10/97

Laboratory ID: C97-63842

Matrix: Water

Dilution Factor: 2

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

MW-21

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	2.0
74-87-3	Chloromethane	ND	2.0
75-01-4	Vinyl chloride (Chloroethene)	ND	2.0
74-83-9	Bromomethane	ND	2.0
75-00-3	Chloroethane	ND	2.0
75-69-4	Trichlorofluoromethane	ND	2.0
75-35-4	1,1 - Dichloroethene	7.44	2.0
75-09-2	Methylene chloride (Dichloromethane)	ND	2.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	2.0
75-34-3	1,1 - Dichloroethane	0.98	J 2.0
78-93-3	2 -Butanone (MEK)	ND	20.0
156-59-2	cis - 1,2 - Dichloroethene	ND	2.0
74-97-5	Bromochloromethane	ND	2.0
67-66-3	Chloroform (Trichloromethane)	ND	2.0
594-20-7	2,2 - Dichloropropane	ND	2.0
71-55-6	1,1,1 - Trichloroethane	ND	2.0
107-06-2	1,2 - Dichloroethane	ND	2.0
563-58-6	1,1 - Dichloropropene	ND	2.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	2.0
71-43-2	Benzene	0.52	J 2.0
74-95-3	Dibromomethane	ND	2.0
78-87-5	1,2 - Dichloropropane	ND	2.0
79-01-6	Trichloroethene	1.44	J 2.0
75-27-4	Bromodichloromethane	ND	2.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	2.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	2.0
79-00-5	1,1,2 - Trichloroethane	ND	2.0
108-88-3	Toluene	ND	2.0
106-93-4	1,2 - Dibromoethane	ND	2.0
142-28-9	1,3 - Dichloropropane	ND	2.0
124-48-1	Dibromochloromethane	ND	2.0
127-18-4	Tetrachloroethene	3.88	2.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	2.0
108-90-7	Chlorobenzene	ND	2.0
100-41-4	Ethylbenzene	ND	2.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	4.0
75-25-2	Bromoform (Tribromomethane)	ND	2.0
100-42-5	Styrene (Ethenylbenzene)	ND	2.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	2.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	2.0
96-18-4	1,2,3 - Trichloropropane	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-21.10/97
Laboratory ID: C97-63842

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

MW-21

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	2.0
108-86-1	Bromobenzene	ND	2.0
103-65-1	n - Propylbenzene	ND	2.0
95-49-8	2 - Chlorotoluene	ND	2.0
106-43-4	4 - Chlorotoluene	ND	2.0
108-67-8	1,3,5 - Trimethylbenzene	ND	2.0
98-06-6	tert - Butylbenzene	ND	2.0
95-63-6	1,2,4 - Trimethylbenzene	ND	2.0
135-98-8	sec - Butylbenzene	ND	2.0
541-73-1	1,3 - Dichlorobenzene	ND	2.0
106-46-7	1,4 - Dichlorobenzene	ND	2.0
99-87-6	4-Isopropyltoluene	ND	2.0
95-50-1	1,2 - Dichlorobenzene	ND	2.0
104-51-8	n - Butylbenzene	ND	2.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	10.0
120-82-1	1,2,4 - Trichlorobenzene	ND	2.0
91-20-3	Naphthalene	ND	2.0
87-68-3	Hexachlorobutadiene	ND	2.0
87-61-6	1,2 3 - Trichlorobenzene	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	701536	792953	88.5%	50 - 200 %
Fluorobenzene	1477791	1515940	97.5%	50 - 200 %
1,4 - Difluorobenzene	1411959	1453553	97.1%	50 - 200 %
Chlorobenzene - d5	1064010	1112136	95.7%	50 - 200 %
1,4 - Dichlorobenzene - d4	400134	446806	89.6%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	8.70	87.0%	86 - 118 %
Toluene - d8	9.84	98.4%	88 - 110 %
4 - Bromofluorobenzene	9.61	96.1%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.88	98.8%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
Reviewed: sec



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EPA METHOD 8260

Client: **Western Water Consultants**
 Sample ID: 90125-22.10/97
 Laboratory ID: C97-63843
 Matrix: Water
 Dilution Factor: 5

MW-22

Date Sampled: 10/17/97
 Date Received: 10/21/97
 Date Analyzed: 10/22/97
 Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	5.0
74-87-3	Chloromethane	ND	5.0
75-01-4	Vinyl chloride (Chloroethene)	ND	5.0
74-83-9	Bromomethane	ND	5.0
75-00-3	Chloroethane	ND	5.0
75-69-4	Trichlorofluoromethane	ND	5.0
75-35-4	1,1 - Dichloroethene	107	5.0
75-09-2	Methylene chloride (Dichloromethane)	ND	5.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	5.0
75-34-3	1,1 - Dichloroethane	13.6	5.0
78-93-3	2 -Butanone (MEK)	ND	50.0
156-59-2	cis - 1,2 - Dichloroethene	ND	5.0
74-97-5	Bromochloromethane	ND	5.0
67-66-3	Chloroform (Trichloromethane)	ND	5.0
594-20-7	2,2 - Dichloropropane	ND	5.0
71-55-6	1,1,1 - Trichloroethane	ND	5.0
107-06-2	1,2 - Dichloroethane	ND	5.0
563-58-6	1,1 - Dichloropropene	ND	5.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	5.0
71-43-2	Benzene	16.0	5.0
74-95-3	Dibromomethane	ND	5.0
78-87-5	1,2 - Dichloropropane	ND	5.0
79-01-6	Trichloroethene	27.5	5.0
75-27-4	Bromodichloromethane	ND	5.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	5.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	5.0
79-00-5	1,1,2 - Trichloroethane	ND	5.0
108-88-3	Toluene	ND	5.0
106-93-4	1,2 - Dibromoethane	ND	5.0
142-28-9	1,3 - Dichloropropane	ND	5.0
124-48-1	Dibromochloromethane	ND	5.0
127-18-4	Tetrachloroethene	117	5.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	5.0
108-90-7	Chlorobenzene	ND	5.0
100-41-4	Ethylbenzene	ND	5.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	10.0
75-25-2	Bromoform (Tribromomethane)	ND	5.0
100-42-5	Styrene (Ethenylbenzene)	ND	5.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	5.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	5.0
96-18-4	1,2,3 - Trichloropropane	ND	5.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-22.10/97
Laboratory ID: C97-63843

mw-22

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	5.0
108-86-1	Bromobenzene	ND	5.0
103-65-1	n - Propylbenzene	ND	5.0
95-49-8	2 - Chlorotoluene	ND	5.0
106-43-4	4 - Chlorotoluene	ND	5.0
108-67-8	1,3,5 - Trimethylbenzene	ND	5.0
98-06-6	tert - Butylbenzene	ND	5.0
95-63-6	1,2,4 - Trimethylbenzene	ND	5.0
135-98-8	sec - Butylbenzene	ND	5.0
541-73-1	1,3 - Dichlorobenzene	ND	5.0
106-46-7	1,4 - Dichlorobenzene	ND	5.0
99-87-6	4-Isopropyltoluene	ND	5.0
95-50-1	1,2 - Dichlorobenzene	ND	5.0
104-51-8	n - Butylbenzene	ND	5.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	25.0
120-82-1	1,2,4 - Trichlorobenzene	ND	5.0
91-20-3	Naphthalene	ND	5.0
87-68-3	Hexachlorobutadiene	ND	5.0
87-61-6	1,2 3 - Trichlorobenzene	ND	5.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

<u>INTERNAL STANDARDS</u>	<u>AREA</u>	<u>ICAL / CCAL</u> <u>AREA</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>ACCEPTANCE</u> <u>RANGE</u>
Pentafluorobenzene	655707	792953	82.7%	50 - 200 %
Fluorobenzene	1416751	1515940	93.5%	50 - 200 %
1,4 - Difluorobenzene	1335910	1453553	91.9%	50 - 200 %
Chlorobenzene - d5	1021439	1112136	91.8%	50 - 200 %
1,4 - Dichlorobenzene - d4	384385	446806	86.0%	50 - 200 %

<u>SYSTEM MONITORING COMPOUNDS</u>	<u>CONCENTRATION</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>ACCEPTANCE</u> <u>RANGE</u>
Dibromofluoromethane	9.08	90.8%	86 - 118 %
Toluene - d8	10.1	101%	88 - 110 %
4 - Bromofluorobenzene	9.86	98.6%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.1	101%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

Report File: R:\Reports\CLIENTS\97\Western_Water_Consultants\ORGANIC.CAS\97_63820.xls

Analyst: yw
Reviewed: sec

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EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-23.10/97
Laboratory ID: C97-63844
Matrix: Water
Dilution Factor: 1

mw-23

Date Sampled: 10/17/97
Date Received: 10/21/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	1.0
74-87-3	Chloromethane	ND	1.0
75-01-4	Vinyl chloride (Chloroethene)	ND	1.0
74-83-9	Bromomethane	ND	1.0
75-00-3	Chloroethane	ND	1.0
75-69-4	Trichlorofluoromethane	ND	1.0
75-35-4	1,1 - Dichloroethene	ND	1.0
75-09-2	Methylene chloride (Dichloromethane)	ND	1.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	1.0
75-34-3	1,1 - Dichloroethane	ND	1.0
78-93-3	2 -Butanone (MEK)	ND	10.0
156-59-2	cis - 1,2 - Dichloroethene	ND	1.0
74-97-5	Bromochloromethane	ND	1.0
67-66-3	Chloroform (Trichloromethane)	ND	1.0
594-20-7	2,2 - Dichloropropane	ND	1.0
71-55-6	1,1,1 - Trichloroethane	ND	1.0
107-06-2	1,2 - Dichloroethane	ND	1.0
563-58-6	1,1 - Dichloropropene	ND	1.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	1.0
71-43-2	Benzene	ND	1.0
74-95-3	Dibromomethane	ND	1.0
78-87-5	1,2 - Dichloropropane	ND	1.0
79-01-6	Trichloroethene	ND	1.0
75-27-4	Bromodichloromethane	ND	1.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	1.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	1.0
79-00-5	1,1,2 - Trichloroethane	ND	1.0
108-88-3	Toluene	ND	1.0
106-93-4	1,2 - Dibromoethane	ND	1.0
142-28-9	1,3 - Dichloropropane	ND	1.0
124-48-1	Dibromochloromethane	ND	1.0
127-18-4	Tetrachloroethene	ND	1.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	1.0
108-90-7	Chlorobenzene	ND	1.0
100-41-4	Ethylbenzene	ND	1.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	2.0
75-25-2	Bromoform (Tribromomethane)	ND	1.0
100-42-5	Styrene (Ethenylbenzene)	ND	1.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	1.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	1.0
96-18-4	1,2,3 - Trichloropropane	ND	1.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-23.10/97
Laboratory ID: C97-63844

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-23

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	1.0
108-86-1	Bromobenzene	ND	1.0
103-65-1	n - Propylbenzene	ND	1.0
95-49-8	2 - Chlorotoluene	ND	1.0
106-43-4	4 - Chlorotoluene	ND	1.0
108-67-8	1,3,5 - Trimethylbenzene	ND	1.0
98-06-6	tert - Butylbenzene	ND	1.0
95-63-6	1,2,4 - Trimethylbenzene	ND	1.0
135-98-8	sec - Butylbenzene	ND	1.0
541-73-1	1,3 - Dichlorobenzene	ND	1.0
106-46-7	1,4 - Dichlorobenzene	ND	1.0
99-87-6	4-Isopropyltoluene	ND	1.0
95-50-1	1,2 - Dichlorobenzene	ND	1.0
104-51-8	n - Butylbenzene	ND	1.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	5.0
120-82-1	1,2,4 - Trichlorobenzene	ND	1.0
91-20-3	Naphthalene	ND	1.0
87-68-3	Hexachlorobutadiene	ND	1.0
87-61-6	1,2 3 - Trichlorobenzene	ND	1.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	640985	792953	80.8%	50 - 200 %
Fluorobenzene	1433594	1515940	94.6%	50 - 200 %
1,4 - Difluorobenzene	1341968	1453553	92.3%	50 - 200 %
Chlorobenzene - d5	986178	1112136	88.7%	50 - 200 %
1,4 - Dichlorobenzene - d4	347191	446806	77.7%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	9.48	94.8%	86 - 118 %
Toluene - d8	9.78	97.8%	88 - 110 %
4 - Bromofluorobenzene	9.87	98.7%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.5	105%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
Reviewed: sec



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EPA METHOD 8260

Client: **Western Water Consultants**

Sample ID: 90125-24.10/97

Laboratory ID: C97-63845

Matrix: Water

Dilution Factor: 1

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-2A

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	1.0
74-87-3	Chloromethane	ND	1.0
75-01-4	Vinyl chloride (Chloroethene)	ND	1.0
74-83-9	Bromomethane	ND	1.0
75-00-3	Chloroethane	ND	1.0
75-69-4	Trichlorofluoromethane	ND	1.0
75-35-4	1,1 - Dichloroethene	ND	1.0
75-09-2	Methylene chloride (Dichloromethane)	ND	1.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	1.0
75-34-3	1,1 - Dichloroethane	ND	1.0
78-93-3	2 -Butanone (MEK)	ND	10.0
156-59-2	cis - 1,2 - Dichloroethene	ND	1.0
74-97-5	Bromochloromethane	ND	1.0
67-66-3	Chloroform (Trichloromethane)	ND	1.0
594-20-7	2,2 - Dichloropropane	ND	1.0
71-55-6	1,1,1 - Trichloroethane	ND	1.0
107-06-2	1,2 - Dichloroethane	ND	1.0
563-58-6	1,1 - Dichloropropene	ND	1.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	1.0
71-43-2	Benzene	ND	1.0
74-95-3	Dibromomethane	ND	1.0
78-87-5	1,2 - Dichloropropane	ND	1.0
79-01-6	Trichloroethene	ND	1.0
75-27-4	Bromodichloromethane	ND	1.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	1.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	1.0
79-00-5	1,1,2 - Trichloroethane	ND	1.0
108-88-3	Toluene	ND	1.0
106-93-4	1,2 - Dibromoethane	ND	1.0
142-28-9	1,3 - Dichloropropane	ND	1.0
124-48-1	Dibromochloromethane	ND	1.0
127-18-4	Tetrachloroethene	ND	1.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	1.0
108-90-7	Chlorobenzene	ND	1.0
100-41-4	Ethylbenzene	ND	1.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	2.0
75-25-2	Bromoform (Tribromomethane)	ND	1.0
100-42-5	Styrene (Ethenylbenzene)	ND	1.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	1.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	1.0
96-18-4	1,2,3 - Trichloropropane	ND	1.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-24.10/97
Laboratory ID: C97-63845

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

MW-24

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	1.0
108-86-1	Bromobenzene	ND	1.0
103-65-1	n - Propylbenzene	ND	1.0
95-49-8	2 - Chlorotoluene	ND	1.0
106-43-4	4 - Chlorotoluene	ND	1.0
108-67-8	1,3,5 - Trimethylbenzene	ND	1.0
98-06-6	tert - Butylbenzene	ND	1.0
95-63-6	1,2,4 - Trimethylbenzene	ND	1.0
135-98-8	sec - Butylbenzene	ND	1.0
541-73-1	1,3 - Dichlorobenzene	ND	1.0
106-46-7	1,4 - Dichlorobenzene	ND	1.0
99-87-6	4-Isopropyltoluene	ND	1.0
95-50-1	1,2 - Dichlorobenzene	ND	1.0
104-51-8	n - Butylbenzene	ND	1.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	5.0
120-82-1	1,2,4 - Trichlorobenzene	ND	1.0
91-20-3	Naphthalene	ND	1.0
87-68-3	Hexachlorobutadiene	ND	1.0
87-61-6	1,2 3 - Trichlorobenzene	ND	1.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	588111	792953	74.2%	50 - 200 %
Fluorobenzene	1371026	1515940	90.4%	50 - 200 %
1,4 - Difluorobenzene	1293006	1453553	89.0%	50 - 200 %
Chlorobenzene - d5	978312	1112136	88.0%	50 - 200 %
1,4 - Dichlorobenzene - d4	361883	446806	81.0%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	9.80	98.0%	86 - 118 %
Toluene - d8	9.88	98.8%	88 - 110 %
4 - Bromofluorobenzene	9.82	98.2%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.2	102%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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Analyst: yw
Reviewed: sec



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EPA METHOD 8260

Client: **Western Water Consultants**

Sample ID: 90125-25.10/97

Laboratory ID: C97-63846

Matrix: Water

Dilution Factor: 2

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-25

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	2.0
74-87-3	Chloromethane	ND	2.0
75-01-4	Vinyl chloride (Chloroethene)	ND	2.0
74-83-9	Bromomethane	ND	2.0
75-00-3	Chloroethane	ND	2.0
75-69-4	Trichlorofluoromethane	ND	2.0
75-35-4	1,1 - Dichloroethene	27.1	2.0
75-09-2	Methylene chloride (Dichloromethane)	ND	2.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	2.0
75-34-3	1,1 - Dichloroethane	11.1	2.0
78-93-3	2 -Butanone (MEK)	ND	2.0
156-59-2	cis - 1,2 - Dichloroethene	ND	2.0
74-97-5	Bromochloromethane	ND	2.0
67-66-3	Chloroform (Trichloromethane)	ND	2.0
594-20-7	2,2 - Dichloropropane	ND	2.0
71-55-6	1,1,1 - Trichloroethane	ND	2.0
107-06-2	1,2 - Dichloroethane	1.44	2.0
563-58-6	1,1 - Dichloropropene	ND	2.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	2.0
71-43-2	Benzene	25.9	2.0
74-95-3	Dibromomethane	ND	2.0
78-87-5	1,2 - Dichloropropane	ND	2.0
79-01-6	Trichloroethene	4.10	2.0
75-27-4	Bromodichloromethane	ND	2.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	2.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	2.0
79-00-5	1,1,2 - Trichloroethane	ND	2.0
108-88-3	Toluene	ND	2.0
106-93-4	1,2 - Dibromoethane	ND	2.0
142-28-9	1,3 - Dichloropropane	ND	2.0
124-48-1	Dibromochloromethane	ND	2.0
127-18-4	Tetrachloroethene	34.6	2.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	2.0
108-90-7	Chlorobenzene	ND	2.0
100-41-4	Ethylbenzene	ND	2.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	4.0
75-25-2	Bromoform (Tribromomethane)	ND	2.0
100-42-5	Styrene (Ethenylbenzene)	ND	2.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	2.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	2.0
96-18-4	1,2,3 - Trichloropropane	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-25.10/97
Laboratory ID: C97-63846

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-25

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	2.0
108-86-1	Bromobenzene	ND	2.0
103-65-1	n - Propylbenzene	ND	2.0
95-49-8	2 - Chlorotoluene	ND	2.0
106-43-4	4 - Chlorotoluene	ND	2.0
108-67-8	1,3,5 - Trimethylbenzene	ND	2.0
98-06-6	tert - Butylbenzene	ND	2.0
95-63-6	1,2,4 - Trimethylbenzene	ND	2.0
135-98-8	sec - Butylbenzene	ND	2.0
541-73-1	1,3 - Dichlorobenzene	ND	2.0
106-46-7	1,4 - Dichlorobenzene	ND	2.0
99-87-6	4-Isopropyltoluene	ND	2.0
95-50-1	1,2 - Dichlorobenzene	ND	2.0
104-51-8	n - Butylbenzene	ND	2.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	10.0
120-82-1	1,2,4 - Trichlorobenzene	ND	2.0
91-20-3	Naphthalene	ND	2.0
87-68-3	Hexachlorobutadiene	ND	2.0
87-61-6	1,2 3 - Trichlorobenzene	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	645160	792953	81.4%	50 - 200 %
Fluorobenzene	1394920	1515940	92.0%	50 - 200 %
1,4 - Difluorobenzene	1350782	1453553	92.9%	50 - 200 %
Chlorobenzene - d5	1096493	1112136	98.6%	50 - 200 %
1,4 - Dichlorobenzene - d4	372279	446806	83.3%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	9.69	96.9%	86 - 118 %
Toluene - d8	9.94	99.4%	88 - 110 %
4 - Bromofluorobenzene	8.85	88.5%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.1	101%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990



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EPA METHOD 8260

Client: **Western Water Consultants**

Sample ID: 90125-A.10/97

Laboratory ID: C97-63849

Matrix: Water

Dilution Factor: 2

*Duplicate of
MW-25*

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	2.0
74-87-3	Chloromethane	ND	2.0
75-01-4	Vinyl chloride (Chloroethene)	ND	2.0
74-83-9	Bromomethane	ND	2.0
75-00-3	Chloroethane	ND	2.0
75-69-4	Trichlorofluoromethane	ND	2.0
75-35-4	1,1 - Dichloroethene	27.5	2.0
75-09-2	Methylene chloride (Dichloromethane)	ND	2.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	2.0
75-34-3	1,1 - Dichloroethane	12.8	2.0
78-93-3	2 -Butanone (MEK)	ND	20.0
156-59-2	cis - 1,2 - Dichloroethene	ND	2.0
74-97-5	Bromochloromethane	ND	2.0
67-66-3	Chloroform (Trichloromethane)	ND	2.0
594-20-7	2,2 - Dichloropropane	ND	2.0
71-55-6	1,1,1 - Trichloroethane	ND	2.0
107-06-2	1,2 - Dichloroethane	1.46	J 2.0
563-58-6	1,1 - Dichloropropene	ND	2.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	2.0
71-43-2	Benzene	26.3	2.0
74-95-3	Dibromomethane	ND	2.0
78-87-5	1,2 - Dichloropropane	ND	2.0
79-01-6	Trichloroethene	4.10	2.0
75-27-4	Bromodichloromethane	ND	2.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	2.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	2.0
79-00-5	1,1,2 - Trichloroethane	ND	2.0
108-88-3	Toluene	ND	2.0
106-93-4	1,2 - Dibromoethane	ND	2.0
142-28-9	1,3 - Dichloropropane	ND	2.0
124-48-1	Dibromochloromethane	ND	2.0
127-18-4	Tetrachloroethene	27.8	2.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	2.0
108-90-7	Chlorobenzene	ND	2.0
100-41-4	Ethylbenzene	ND	2.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	4.0
75-25-2	Bromoform (Tribromomethane)	ND	2.0
100-42-5	Styrene (Ethenylbenzene)	ND	2.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	2.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	2.0
96-18-4	1,2,3 - Trichloropropane	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-A.10/97
Laboratory ID: C97-63849

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

*Duplicate CF
mw-25*

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	2.0
108-86-1	Bromobenzene	ND	2.0
103-65-1	n - Propylbenzene	ND	2.0
95-49-8	2 - Chlorotoluene	ND	2.0
106-43-4	4 - Chlorotoluene	ND	2.0
108-67-8	1,3,5 - Trimethylbenzene	ND	2.0
98-06-6	tert - Butylbenzene	ND	2.0
95-63-6	1,2,4 - Trimethylbenzene	ND	2.0
135-98-8	sec - Butylbenzene	ND	2.0
541-73-1	1,3 - Dichlorobenzene	ND	2.0
106-46-7	1,4 - Dichlorobenzene	ND	2.0
99-87-6	4-Isopropyltoluene	ND	2.0
95-50-1	1,2 - Dichlorobenzene	ND	2.0
104-51-8	n - Butylbenzene	ND	2.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	10.0
120-82-1	1,2,4 - Trichlorobenzene	ND	2.0
91-20-3	Naphthalene	ND	2.0
87-68-3	Hexachlorobutadiene	ND	2.0
87-61-6	1,2 3 - Trichlorobenzene	ND	2.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS		ICAL / CCAL	PERCENT RECOVERY	ACCEPTANCE RANGE
	AREA	AREA		
Pentafluorobenzene	565487	792953	71.3%	50 - 200 %
Fluorobenzene	1377521	1515940	90.9%	50 - 200 %
1,4 - Difluorobenzene	1290626	1453553	88.8%	50 - 200 %
Chlorobenzene - d5	961736	1112136	86.5%	50 - 200 %
1,4 - Dichlorobenzene - d4	336692	446806	75.4%	50 - 200 %
SYSTEM MONITORING COMPOUNDS		CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane		9.92	99.2%	86 - 118 %
Toluene - d8		9.77	97.7%	88 - 110 %
4 - Bromofluorobenzene		9.89	98.9%	86 - 115 %
1,2 - Dichlorobenzene - d4		10.0	100%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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EPA METHOD 8260Client: **Western Water Consultants**

Sample ID: 90125-26.10/97

Laboratory ID: C97-63847

Matrix: Water

Dilution Factor: 1

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-26

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	1.0
74-87-3	Chloromethane	ND	1.0
75-01-4	Vinyl chloride (Chloroethene)	ND	1.0
74-83-9	Bromomethane	ND	1.0
75-00-3	Chloroethane	ND	1.0
75-69-4	Trichlorofluoromethane	ND	1.0
75-35-4	1,1 - Dichloroethene	4.06	1.0
75-09-2	Methylene chloride (Dichloromethane)	ND	1.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	1.0
75-34-3	1,1 - Dichloroethane	1.22	1.0
78-93-3	2 -Butanone (MEK)	ND	10.0
156-59-2	cis - 1,2 - Dichloroethene	ND	1.0
74-97-5	Bromochloromethane	ND	1.0
67-66-3	Chloroform (Trichloromethane)	ND	1.0
594-20-7	2,2 - Dichloropropane	ND	1.0
71-55-6	1,1,1 - Trichloroethane	ND	1.0
107-06-2	1,2 - Dichloroethane	ND	1.0
563-58-6	1,1 - Dichloropropene	ND	1.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	1.0
71-43-2	Benzene	ND	1.0
74-95-3	Dibromomethane	ND	1.0
78-87-5	1,2 - Dichloropropane	ND	1.0
79-01-6	Trichloroethene	0.69	1.0
75-27-4	Bromodichloromethane	ND	1.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	1.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	1.0
79-00-5	1,1,2 - Trichloroethane	ND	1.0
108-88-3	Toluene	ND	1.0
106-93-4	1,2 - Dibromoethane	ND	1.0
142-28-9	1,3 - Dichloropropane	ND	1.0
124-48-1	Dibromochloromethane	ND	1.0
127-18-4	Tetrachloroethene	4.41	1.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	1.0
108-90-7	Chlorobenzene	ND	1.0
100-41-4	Ethylbenzene	ND	1.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	2.0
75-25-2	Bromoform (Tribromomethane)	ND	1.0
100-42-5	Styrene (Ethenylbenzene)	ND	1.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	1.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	1.0
96-18-4	1,2,3 - Trichloropropane	ND	1.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: 90125-26.10/97
Laboratory ID: C97-63847

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

mw-26

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	1.0
108-86-1	Bromobenzene	ND	1.0
103-65-1	n - Propylbenzene	ND	1.0
95-49-8	2 - Chlorotoluene	ND	1.0
106-43-4	4 - Chlorotoluene	ND	1.0
108-67-8	1,3,5 - Trimethylbenzene	ND	1.0
98-06-6	tert - Butylbenzene	ND	1.0
95-63-6	1,2,4 - Trimethylbenzene	ND	1.0
135-98-8	sec - Butylbenzene	ND	1.0
541-73-1	1,3 - Dichlorobenzene	ND	1.0
106-46-7	1,4 - Dichlorobenzene	ND	1.0
99-87-6	4-Isopropyltoluene	ND	1.0
95-50-1	1,2 - Dichlorobenzene	ND	1.0
104-51-8	n - Butylbenzene	ND	1.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	5.0
120-82-1	1,2,4 - Trichlorobenzene	ND	1.0
91-20-3	Naphthalene	ND	1.0
87-68-3	Hexachlorobutadiene	ND	1.0
87-61-6	1,2,3 - Trichlorobenzene	ND	1.0

ND - Analyte not detected at stated limit of detection

J - This flag indicates an estimated value for an analyte at less than the stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS		ICAL / CCAL	PERCENT RECOVERY	ACCEPTANCE RANGE
	AREA	AREA		
Pentafluorobenzene	648072	792953	81.7%	50 - 200 %
Fluorobenzene	1423467	1515940	93.9%	50 - 200 %
1,4 - Difluorobenzene	1359882	1453553	93.6%	50 - 200 %
Chlorobenzene - d5	1025875	1112136	92.2%	50 - 200 %
1,4 - Dichlorobenzene - d4	375495	446806	84.0%	50 - 200 %
SYSTEM MONITORING COMPOUNDS		CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane		9.53	95.3%	86 - 118 %
Toluene - d8		9.89	98.9%	88 - 110 %
4 - Bromofluorobenzene		9.94	99.4%	86 - 115 %
1,2 - Dichlorobenzene - d4		10.2	102%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990



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EPA METHOD 8260

Client: **Western Water Consultants**

Sample ID: 90125-27.10/97

Laboratory ID: C97-63848

Matrix: Water

Dilution Factor: 1

Date Sampled: 10/17/97

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

mw-27

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	1.0
74-87-3	Chloromethane	ND	1.0
75-01-4	Vinyl chloride (Chloroethene)	ND	1.0
74-83-9	Bromomethane	ND	1.0
75-00-3	Chloroethane	ND	1.0
75-69-4	Trichlorofluoromethane	ND	1.0
75-35-4	1,1 - Dichloroethene	ND	1.0
75-09-2	Methylene chloride (Dichloromethane)	ND	1.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	1.0
75-34-3	1,1 - Dichloroethane	ND	1.0
78-93-3	2 -Butanone (MEK)	ND	10.0
156-59-2	cis - 1,2 - Dichloroethene	ND	1.0
74-97-5	Bromochloromethane	ND	1.0
67-66-3	Chloroform (Trichloromethane)	ND	1.0
594-20-7	2,2 - Dichloropropane	ND	1.0
71-55-6	1,1,1 - Trichloroethane	ND	1.0
107-06-2	1,2 - Dichloroethane	ND	1.0
563-58-6	1,1 - Dichloropropene	ND	1.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	1.0
71-43-2	Benzene	ND	1.0
74-95-3	Dibromomethane	ND	1.0
78-87-5	1,2 - Dichloropropane	ND	1.0
79-01-6	Trichloroethene	ND	1.0
75-27-4	Bromodichloromethane	ND	1.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	1.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	1.0
79-00-5	1,1,2 - Trichloroethane	ND	1.0
108-88-3	Toluene	ND	1.0
106-93-4	1,2 - Dibromoethane	ND	1.0
142-28-9	1,3 - Dichloropropane	ND	1.0
124-48-1	Dibromochloromethane	ND	1.0
127-18-4	Tetrachloroethene	ND	1.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	1.0
108-90-7	Chlorobenzene	ND	1.0
100-41-4	Ethylbenzene	ND	1.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	2.0
75-25-2	Bromoform (Tribromomethane)	ND	1.0
100-42-5	Styrene (Ethenylbenzene)	ND	1.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	1.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	1.0
96-18-4	1,2,3 - Trichloropropane	ND	1.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: 90125-27.10/97
Laboratory ID: C97-63848

Date Sampled: 10/17/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

MW-27

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	1.0
108-86-1	Bromobenzene	ND	1.0
103-65-1	n - Propylbenzene	ND	1.0
95-49-8	2 - Chlorotoluene	ND	1.0
106-43-4	4 - Chlorotoluene	ND	1.0
108-67-8	1,3,5 - Trimethylbenzene	ND	1.0
98-06-6	tert - Butylbenzene	ND	1.0
95-63-6	1,2,4 - Trimethylbenzene	ND	1.0
135-98-8	sec - Butylbenzene	ND	1.0
541-73-1	1,3 - Dichlorobenzene	ND	1.0
106-46-7	1,4 - Dichlorobenzene	ND	1.0
99-87-6	4-Isopropyltoluene	ND	1.0
95-50-1	1,2 - Dichlorobenzene	ND	1.0
104-51-8	n - Butylbenzene	ND	1.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	5.0
120-82-1	1,2,4 - Trichlorobenzene	ND	1.0
91-20-3	Naphthalene	ND	1.0
87-68-3	Hexachlorobutadiene	ND	1.0
87-61-6	1,2 3 - Trichlorobenzene	ND	1.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS		ICAL / CCAL	PERCENT RECOVERY	ACCEPTANCE RANGE
	AREA	AREA		
Pentafluorobenzene	632191	792953	79.7%	50 - 200 %
Fluorobenzene	1446297	1515940	95.4%	50 - 200 %
1,4 - Difluorobenzene	1389126	1453553	95.6%	50 - 200 %
Chlorobenzene - d5	1032925	1112136	92.9%	50 - 200 %
1,4 - Dichlorobenzene - d4	390223	446806	87.3%	50 - 200 %
SYSTEM MONITORING COMPOUNDS		CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane		9.71	97.1%	86 - 118 %
Toluene - d8		9.74	97.4%	88 - 110 %
4 - Bromofluorobenzene		9.87	98.7%	86 - 115 %
1,2 - Dichlorobenzene - d4		10.2	102%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

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EPA METHOD 8260Client: **Western Water Consultants**

Sample ID: Trip Blank

Laboratory ID: C97-63850A

Matrix: Water

Dilution Factor: 1

Date Sampled: N/A

Date Received: 10/21/97

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	1.0
74-87-3	Chloromethane	ND	1.0
75-01-4	Vinyl chloride (Chloroethene)	ND	1.0
74-83-9	Bromomethane	ND	1.0
75-00-3	Chloroethane	ND	1.0
75-69-4	Trichlorofluoromethane	ND	1.0
75-35-4	1,1 - Dichloroethene	ND	1.0
75-09-2	Methylene chloride (Dichloromethane)	ND	1.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	1.0
75-34-3	1,1 - Dichloroethane	ND	1.0
78-93-3	2 -Butanone (MEK)	ND	10.0
156-59-2	cis - 1,2 - Dichloroethene	ND	1.0
74-97-5	Bromochloromethane	ND	1.0
67-66-3	Chloroform (Trichloromethane)	ND	1.0
594-20-7	2,2 - Dichloropropane	ND	1.0
71-55-6	1,1,1 - Trichloroethane	ND	1.0
107-06-2	1,2 - Dichloroethane	ND	1.0
563-58-6	1,1 - Dichloropropene	ND	1.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	1.0
71-43-2	Benzene	ND	1.0
74-95-3	Dibromomethane	ND	1.0
78-87-5	1,2 - Dichloropropane	ND	1.0
79-01-6	Trichloroethene	ND	1.0
75-27-4	Bromodichloromethane	ND	1.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	1.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	1.0
79-00-5	1,1,2 - Trichloroethane	ND	1.0
108-88-3	Toluene	ND	1.0
106-93-4	1,2 - Dibromoethane	ND	1.0
142-28-9	1,3 - Dichloropropane	ND	1.0
124-48-1	Dibromochloromethane	ND	1.0
127-18-4	Tetrachloroethene	ND	1.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	1.0
108-90-7	Chlorobenzene	ND	1.0
100-41-4	Ethylbenzene	ND	1.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	2.0
75-25-2	Bromoform (Tribromomethane)	ND	1.0
100-42-5	Styrene (Ethenylbenzene)	ND	1.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	1.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	1.0
96-18-4	1,2,3 - Trichloropropane	ND	1.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: Western Water Consultants
Sample ID: Trip Blank
Laboratory ID: C97-63850A

Date Sampled: N/A
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	1.0
108-86-1	Bromobenzene	ND	1.0
103-65-1	n - Propylbenzene	ND	1.0
95-49-8	2 - Chlorotoluene	ND	1.0
106-43-4	4 - Chlorotoluene	ND	1.0
108-67-8	1,3,5 - Trimethylbenzene	ND	1.0
98-06-6	tert - Butylbenzene	ND	1.0
95-63-6	1,2,4 - Trimethylbenzene	ND	1.0
135-98-8	sec - Butylbenzene	ND	1.0
541-73-1	1,3 - Dichlorobenzene	ND	1.0
106-46-7	1,4 - Dichlorobenzene	ND	1.0
99-87-6	4-Isopropyltoluene	ND	1.0
95-50-1	1,2 - Dichlorobenzene	ND	1.0
104-51-8	n - Butylbenzene	ND	1.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	5.0
120-82-1	1,2,4 - Trichlorobenzene	ND	1.0
91-20-3	Naphthalene	ND	1.0
87-68-3	Hexachlorobutadiene	ND	1.0
87-61-6	1,2 3 - Trichlorobenzene	ND	1.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	563662	792953	71.1%	50 - 200 %
Fluorobenzene	1332790	1515940	87.9%	50 - 200 %
1,4 - Difluorobenzene	1273422	1453553	87.6%	50 - 200 %
Chlorobenzene - d5	970835	1112136	87.3%	50 - 200 %
1,4 - Dichlorobenzene - d4	331538	446806	74.2%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	10.1	101%	86 - 118 %
Toluene - d8	10.1	101%	88 - 110 %
4 - Bromofluorobenzene	9.90	99.0%	86 - 115 %
1,2 - Dichlorobenzene - d4	10.8	108%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

Report File: R:\Reports\CLIENTS 97\Western_Water_Consumants\ORGANIC.CAS\97_63820.xls

Analyst: yw
Reviewed: sec

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EPA METHOD 8260Client: **Western Water Consultants**

Sample ID: Method Blank

Laboratory ID: MB1022C

Matrix: Water

Dilution Factor: 1

Date Sampled: N/A

Date Received: N/A

Date Analyzed: 10/22/97

Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
75-71-8	Dichlorodifluoromethane	ND	1.0
74-87-3	Chloromethane	ND	1.0
75-01-4	Vinyl chloride (Chloroethene)	ND	1.0
74-83-9	Bromomethane	ND	1.0
75-00-3	Chloroethane	ND	1.0
75-69-4	Trichlorofluoromethane	ND	1.0
75-35-4	1,1 - Dichloroethene	ND	1.0
75-09-2	Methylene chloride (Dichloromethane)	ND	1.0
156-60-5	trans - 1, 2 - Dichloroethene	ND	1.0
75-34-3	1,1 - Dichloroethane	ND	1.0
78-93-3	2 -Butanone (MEK)	ND	10.0
156-59-2	cis - 1,2 - Dichloroethene	ND	1.0
74-97-5	Bromochloromethane	ND	1.0
67-66-3	Chloroform (Trichloromethane)	ND	1.0
594-20-7	2,2 - Dichloropropane	ND	1.0
71-55-6	1,1,1 - Trichloroethane	ND	1.0
107-06-2	1,2 - Dichloroethane	ND	1.0
563-58-6	1,1 - Dichloropropene	ND	1.0
56-23-5	Carbon tetrachloride (Tetrachloromethane)	ND	1.0
71-43-2	Benzene	ND	1.0
74-95-3	Dibromomethane	ND	1.0
78-87-5	1,2 - Dichloropropane	ND	1.0
79-01-6	Trichloroethene	ND	1.0
75-27-4	Bromodichloromethane	ND	1.0
10061-01-5	cis - 1,3 - Dichloropropene	ND	1.0
10061-02-6	trans - 1,3 - Dichloropropene	ND	1.0
79-00-5	1,1,2 - Trichloroethane	ND	1.0
108-88-3	Toluene	ND	1.0
106-93-4	1,2 - Dibromoethane	ND	1.0
142-28-9	1,3 - Dichloropropane	ND	1.0
124-48-1	Dibromochloromethane	ND	1.0
127-18-4	Tetrachloroethene	ND	1.0
630-20-6	1,1,1,2 - Tetrachloroethane	ND	1.0
108-90-7	Chlorobenzene	ND	1.0
100-41-4	Ethylbenzene	ND	1.0
108-38-3	m,p - Xylenes (1,3- & 1,4-Dimethylbenzene)	ND	2.0
75-25-2	Bromoform (Tribromomethane)	ND	1.0
100-42-5	Styrene (Ethenylbenzene)	ND	1.0
95-47-6	o - Xylene (1,2-Dimethylbenzene)	ND	1.0
79-34-5	1,1,2,2 - Tetrachloroethane	ND	1.0
96-18-4	1,2,3 - Trichloropropane	ND	1.0

ND - Analyte not detected at stated limit of detection



EPA METHOD 8260

Client: **Western Water Consultants**
Sample ID: Method Blank
Laboratory ID: MB1022C

Date Sampled: N/A
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

C.A.S. #	TARGET COMPOUNDS	CONCENTRATION (µg/L)	LIMIT OF DETECTION (µg/L)
98-82-8	Isopropylbenzene (1-Methylethylbenzene)	ND	1.0
108-86-1	Bromobenzene	ND	1.0
103-65-1	n - Propylbenzene	ND	1.0
95-49-8	2 - Chlorotoluene	ND	1.0
106-43-4	4 - Chlorotoluene	ND	1.0
108-67-8	1,3,5 - Trimethylbenzene	ND	1.0
98-06-6	tert - Butylbenzene	ND	1.0
95-63-6	1,2,4 - Trimethylbenzene	ND	1.0
135-98-8	sec - Butylbenzene	ND	1.0
541-73-1	1,3 - Dichlorobenzene	ND	1.0
106-46-7	1,4 - Dichlorobenzene	ND	1.0
99-87-6	4-Isopropyltoluene	ND	1.0
95-50-1	1,2 - Dichlorobenzene	ND	1.0
104-51-8	n - Butylbenzene	ND	1.0
96-12-8	1,2 - Dibromo - 3 - chloropropane	ND	5.0
120-82-1	1,2,4 - Trichlorobenzene	ND	1.0
91-20-3	Naphthalene	ND	1.0
87-68-3	Hexachlorobutadiene	ND	1.0
87-61-6	1,2 3 - Trichlorobenzene	ND	1.0

ND - Analyte not detected at stated limit of detection

RUNTIME QUALITY ASSURANCE REPORT

INTERNAL STANDARDS	AREA	ICAL / CCAL AREA	PERCENT RECOVERY	ACCEPTANCE RANGE
Pentafluorobenzene	959731	792953	121.0%	50 - 200 %
Fluorobenzene	1639787	1515940	108.2%	50 - 200 %
1,4 - Difluorobenzene	1597642	1453553	109.9%	50 - 200 %
Chlorobenzene - d5	1229037	1112136	110.5%	50 - 200 %
1,4 - Dichlorobenzene - d4	511403	446806	114.5%	50 - 200 %

SYSTEM MONITORING COMPOUNDS	CONCENTRATION	PERCENT RECOVERY	ACCEPTANCE RANGE
Dibromofluoromethane	9.65	96.5%	86 - 118 %
Toluene - d8	9.75	97.5%	88 - 110 %
4 - Bromofluorobenzene	9.71	97.1%	86 - 115 %
1,2 - Dichlorobenzene - d4	9.95	99.5%	80 - 120 %

REFERENCES

Method 8260: Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Technique
Test Methods for Evaluating Solid Waste, SW-846, Third Edition, USEPA, November 1990

Report File: R:\Reports\CLIENTS.97\Western_Water_Consultants\ORGANIC.CAS\97_63820.xls

Analyst: yw
Reviewed: sec

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EPA METHOD 8260**QC RESULTS - MATRIX SPIKE (MS), MATRIX SPIKE DUPLICATE (MSD)**

Client: Western Water Consultants
Sample Set: C97-63820 through C97-63829
Laboratory ID: C97-63823 S
Matrix: Water

Date Sampled: 10/17/97
Date Received: 10/21/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

INTERNAL STANDARDS

	ICAL / CCAL	SPIKED SAMPLE		SPIKE DUPLICATE		ACCEPTANCE
	AREA	AREA	%	AREA	%	RANGE
Pentafluorobenzene	792953	595634	75.1%	672774	84.8%	50 - 200 %
Fluorobenzene	1515940	1345531	88.8%	1436841	94.8%	50 - 200 %
1,4 - Difluorobenzene	1453553	1286712	88.5%	1379027	94.9%	50 - 200 %
Chlorobenzene - d5	1112136	987578	88.8%	1025181	92.2%	50 - 200 %
1,4 - Dichlorobenzene-d4	446806	384191	86.0%	393972	88.2%	50 - 200 %

SYSTEM MONITORING COMPOUNDS

	SPIKED SAMPLE	PERCENT	SPIKE DUPLICATE	PERCENT	ACCEPTANCE
	CONCENTRATION	RECOVERY	CONCENTRATION	RECOVERY	RANGE
Dibromofluoromethane	9.65	96.5%	9.11	91.1%	86 - 118 %
Toluene - d8	10.0	100%	9.70	97.0%	88 - 110 %
4 - Bromofluorobenzene	9.85	98.5%	9.97	99.7%	86 - 115 %
1,2 - Dichlorobenzene-d4	10.2	102%	9.66	96.6%	80 - 120 %

SPIKED SAMPLE RESULTS

	SPIKED SAMPLE	ORIG. CONC.	SPIKE AMOUNT	PERCENT	ACCEPTANCE
	CONCENTRATION	(µg/L) *	(µg/L)	RECOVERY	RANGE
Vinyl chloride	8.55	ND	10.0	85.5%	80 - 120 %
1,1 - Dichloroethene	8.16	ND	10.0	81.6%	80 - 120 %
2 - Butanone (MEK)	11.3	ND	10.0	113%	80 - 120 %
Chloroform	9.22	ND	10.0	92.2%	80 - 120 %
1,2 - Dichloroethane	9.53	ND	10.0	95.3%	80 - 120 %
Carbon tetrachloride	9.04	ND	10.0	90.4%	80 - 120 %
Benzene	9.37	ND	10.0	93.7%	80 - 120 %
Trichloroethene	9.58	ND	10.0	95.8%	80 - 120 %
Tetrachloroethene	9.62	ND	10.0	96.2%	80 - 120 %
Chlorobenzene	10.1	ND	10.0	101%	80 - 120 %
1,4 - Dichlorobenzene	9.66	ND	10.0	96.6%	80 - 120 %

SPIKE DUPLICATE SAMPLE RESULTS

* Concentration does not include dilution correction

	SPIKE DUP	ORIG. CONC.	SPIKE	PERCENT	RPD
	CONCENTRATION	(µg/L) *	(µg/L)	RECOVERY	LIMITS
Vinyl chloride	8.06	ND	10.0	80.6%	5.7%
1,1 - Dichloroethene	8.92	ND	10.0	89.2%	9.3%
2 - Butanone (MEK)	11.7	ND	10.0	117%	3.6%
Chloroform	8.65	ND	10.0	86.5%	6.2%
1,2 - Dichloroethane	9.52	ND	10.0	95.2%	0.1%
Carbon tetrachloride	9.41	ND	10.0	94.1%	4.1%
Benzene	9.28	ND	10.0	92.8%	1.0%
Trichloroethene	9.74	ND	10.0	97.4%	1.7%
Tetrachloroethene	9.94	ND	10.0	99.4%	3.3%
Chlorobenzene	10.1	ND	10.0	101%	0.2%
1,4 - Dichlorobenzene	9.78	ND	10.0	97.8%	1.2%

MATRIX SPIKE: 0 of 22 Matrix Spike results are outside of established QC Limits
MATRIX SPIKE DUPLICATE: 0 of 11 Matrix Spike Duplicate results are outside of established QC Limits

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EPA METHOD 8260**QC RESULTS - MATRIX SPIKE (MS), MATRIX SPIKE DUPLICATE (MSD)**

Client: **Western Water Consultants**
Sample Set: C97-63830 through C97-63839
Laboratory ID: C97-63841 S
Matrix: Water

Date Sampled: 10/17/97
Date Received: 10/21/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

INTERNAL STANDARDS

	ICAL / CCAL	SPIKED SAMPLE		SPIKE DUPLICATE		ACCEPTANCE
	AREA	AREA	%	AREA	%	RANGE
Pentafluorobenzene	792953	640733	80.8%	644555	81.3%	50 - 200 %
Fluorobenzene	1515940	1396519	92.1%	1384177	91.3%	50 - 200 %
1,4 - Difluorobenzene	1453553	1334577	91.8%	1317396	90.6%	50 - 200 %
Chlorobenzene - d5	1112136	988121	88.8%	1024344	92.1%	50 - 200 %
1,4 - Dichlorobenzene-d4	446806	366880	82.1%	362331	81.1%	50 - 200 %

SYSTEM MONITORING COMPOUNDS

	SPIKED SAMPLE	PERCENT	SPIKE DUPLICATE	PERCENT	ACCEPTANCE
	CONCENTRATION	RECOVERY	CONCENTRATION	RECOVERY	RANGE
Dibromofluoromethane	8.99	89.9%	8.96	89.6%	86 - 118 %
Toluene - d8	9.73	97.3%	9.97	99.7%	88 - 110 %
4 - Bromofluorobenzene	9.89	98.9%	9.44	94.4%	86 - 115 %
1,2 - Dichlorobenzene-d4	9.81	98.1%	9.73	97.3%	80 - 120 %

SPIKED SAMPLE RESULTS

	SPIKED SAMPLE	ORIG. CONC.	SPIKE AMOUNT	PERCENT	ACCEPTANCE
	CONCENTRATION	(µg/L) *	(µg/L)	RECOVERY	RANGE
Vinyl chloride	8.66	ND	10.0	86.6%	80 - 120 %
1,1 - Dichloroethene	8.41	ND	10.0	84.1%	80 - 120 %
2 - Butanone (MEK)	10.9	ND	10.0	109%	80 - 120 %
Chloroform	8.91	ND	10.0	89.1%	80 - 120 %
1,2 - Dichloroethane	9.71	ND	10.0	97.1%	80 - 120 %
Carbon tetrachloride	9.81	ND	10.0	98.1%	80 - 120 %
Benzene	9.42	ND	10.0	94.2%	80 - 120 %
Trichloroethene	10.13	ND	10.0	101%	80 - 120 %
Tetrachloroethene	10.30	ND	10.0	103%	80 - 120 %
Chlorobenzene	10.24	ND	10.0	102%	80 - 120 %
1,4 - Dichlorobenzene	9.68	ND	10.0	96.8%	80 - 120 %

* Concentration does not include dilution correction

SPIKE DUPLICATE SAMPLE RESULTS

	SPIKE DUP	ORIG. CONC.	SPIKE	PERCENT	RPD	RPD
	CONCENTRATION	(µg/L) *	(µg/L)	RECOVERY	RPD	LIMITS
Vinyl chloride	8.62	ND	10.0	86.2%	0.5%	10 %
1,1 - Dichloroethene	8.55	ND	10.0	85.5%	1.7%	10 %
2 - Butanone (MEK)	11.2	ND	10.0	112%	3.2%	10 %
Chloroform	9.02	ND	10.0	90.2%	1.2%	10 %
1,2 - Dichloroethane	9.94	ND	10.0	99.4%	2.4%	10 %
Carbon tetrachloride	10.1	ND	10.0	101%	2.4%	10 %
Benzene	9.64	ND	10.0	96.4%	2.3%	10 %
Trichloroethene	10.4	ND	10.0	104%	2.2%	10 %
Tetrachloroethene	9.67	ND	10.0	96.7%	6.1%	10 %
Chlorobenzene	10.2	ND	10.0	102%	0.2%	10 %
1,4 - Dichlorobenzene	9.61	ND	10.0	96.1%	0.7%	10 %

MATRIX SPIKE: 0 of 22 Matrix Spike results are outside of established QC Limits
MATRIX SPIKE DUPLICATE: 0 of 11 Matrix Spike Duplicate results are outside of established QC Limits

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EPA METHOD 8260**QC RESULTS - MATRIX SPIKE (MS), MATRIX SPIKE DUPLICATE (MSD)**

Client: Western Water Consultants
Sample Set: C97-63840 through C97-63850A
Laboratory ID: C97-63845 S
Matrix: Water

Date Sampled: 10/17/97
Date Received: 10/21/97
Date Analyzed: 10/22/97
Date Reported: November 5, 1997

INTERNAL STANDARDS

	ICAL / CCAL	SPIKED SAMPLE		SPIKE DUPLICATE		ACCEPTANCE
	AREA	AREA	%	AREA	%	RANGE
Pentafluorobenzene	792953	558863	70.5%	607675	76.6%	50 - 200 %
Fluorobenzene	1515940	1427850	94.2%	1424116	93.9%	50 - 200 %
1,4 - Difluorobenzene	1453553	1315023	90.5%	1325531	91.2%	50 - 200 %
Chlorobenzene - d5	1112136	961259	86.4%	984594	88.5%	50 - 200 %
1,4 - Dichlorobenzene-d4	446806	332445	74.4%	355086	79.5%	50 - 200 %

SYSTEM MONITORING COMPOUNDS

	SPIKED SAMPLE	PERCENT	SPIKE DUPLICATE	PERCENT	ACCEPTANCE
	CONCENTRATION	RECOVERY	CONCENTRATION	RECOVERY	RANGE
Dibromofluoromethane	10.0	100%	9.67	96.7%	86 - 118 %
Toluene - d8	10.1	101%	9.92	99.2%	88 - 110 %
4 - Bromofluorobenzene	10.1	101%	10.2	102%	86 - 115 %
1,2 - Dichlorobenzene-d4	9.75	97.5%	9.27	92.7%	80 - 120 %

SPIKED SAMPLE RESULTS

	SPIKED SAMPLE	ORIG. CONC.	SPIKE AMOUNT	PERCENT	ACCEPTANCE
	CONCENTRATION	(µg/L) *	(µg/L)	RECOVERY	RANGE
Vinyl chloride	9.80	ND	10.0	98.0%	80 - 120 %
1,1 - Dichloroethene	8.96	ND	10.0	89.6%	80 - 120 %
2 - Butanone (MEK)	11.6	ND	10.0	116%	80 - 120 %
Chloroform	10.03	ND	10.0	100%	80 - 120 %
1,2 - Dichloroethane	9.33	ND	10.0	93.3%	80 - 120 %
Carbon tetrachloride	10.06	ND	10.0	101%	80 - 120 %
Benzene	9.47	ND	10.0	94.7%	80 - 120 %
Trichloroethene	9.61	ND	10.0	96.1%	80 - 120 %
Tetrachloroethene	8.48	ND	10.0	84.8%	80 - 120 %
Chlorobenzene	9.82	ND	10.0	98.2%	80 - 120 %
1,4 - Dichlorobenzene	9.30	ND	10.0	93.0%	80 - 120 %

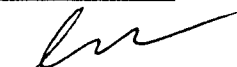
* Concentration does not include dilution correction

SPIKE DUPLICATE SAMPLE RESULTS

	SPIKE DUP	ORIG. CONC.	SPIKE	PERCENT	RPD
	CONCENTRATION	(µg/L) *	(µg/L)	RECOVERY	LIMITS
Vinyl chloride	9.70	ND	10.0	97.0%	10 %
1,1 - Dichloroethene	8.86	ND	10.0	88.6%	10 %
2 - Butanone (MEK)	11.8	ND	10.0	118%	10 %
Chloroform	9.96	ND	10.0	99.6%	10 %
1,2 - Dichloroethane	10.0	ND	10.0	100%	10 %
Carbon tetrachloride	9.73	ND	10.0	97.3%	10 %
Benzene	10.0	ND	10.0	100%	10 %
Trichloroethene	10.2	ND	10.0	102%	10 %
Tetrachloroethene	9.30	ND	10.0	93.0%	10 %
Chlorobenzene	10.4	ND	10.0	104%	10 %
1,4 - Dichlorobenzene	10.0	ND	10.0	100%	10 %

MATRIX SPIKE: 0 of 22 Matrix Spike results are outside of established QC Limits

MATRIX SPIKE DUPLICATE: 0 of 11 Matrix Spike Duplicate results are outside of established QC Limits

Report Approved By: 

Report File: R:\Reports\CLIENTS\97\Western_Water_Consultants\ORGANIC.CAS\97_63820.xls

Analyst: yw

Reviewed: sec

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File 90125.D

TOTAL TPH
EPA 8015 - MODIFIED CALIFORNIA METHOD
ANALYTICAL RESULTS

Client: Western Water Consultants
Project: 90125
Matrix: Soil

Date Sampled: 01/21/97
Date Received: 01/23/97
Date Reported: February 20, 1997

TOTAL TPH

Date of sample(s) extraction : 01/27/97

Extraction by: wd

Laboratory ID	Sample ID	Concentration mg/kg	Detection Limit, mg/kg	Date Analyzed
C97 - 11417	90125-LFNW-1/97	417	10	02/06/97
C97 - 11418	90125-LFSE-1/97	30	10	02/06/97
C97 - 11419	90125-LFNE-1/97	291	10	02/06/97
C97 - 11420	90125-LESW-1/97 *	166	10	02/06/97

* As per COC. Actual name presumed to be 90125-LFSW-1/97.

QUALITY ASSURANCE REPORT

Standard Addition Analysis (spike):

Laboratory ID	Sample ID	Spike amount, mg/kg	Original Response, mg/kg	Result Response, mg/kg	Recovery %	Acceptance Range, %	Date Analyzed
C97 - 11418 S	Spike	109	30	149	136%	60 - 140	02/06/97
C97 - 11418 SD	Spike Duplicate	109	30	130	120%	60 - 140	02/06/97
Duplicate RPD:					13.0%	0 - 20	

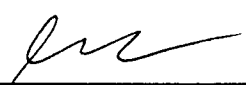
CCAL / QCS Standards:

Laboratory ID	Sample ID	Observed Response, mg/kg	Expected Response, mg/kg	Recovery %	Acceptance Range, %	Date Analyzed
5000 QCS	Restek 5000	318	250	127	60 - 140	02/06/97
2000 CCAL	DRO STD	126	100	126	70 - 130	02/06/97
2000 CCAL	DRO STD	94.0	100	94.0	70 - 130	02/07/97

Method 8015 Blank Analysis:

Laboratory ID	Sample ID	Concentration mg/kg	Detection Limit, mg/kg	Date Analyzed
MB0127	Method Blank	ND	10.0	02/06/97

ND - Analyte not detected at stated limit of detection

Report Approved By: 

Report File: F:\REPORTS\CLIENTS.97\WEST_WAT.ER\ORGANIC.CAS\97_11417.xls

Analyst: ELIR - sr
Reviewed: sec

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**TPH TOTAL, AND TPH AS DIESEL FUEL
EPA 8015 - MODIFIED CALIFORNIA METHOD
ANALYTICAL RESULTS**

Client: Western Water Consultants
Project: N/A
Matrix: Soil

Date Sampled: 05/26/97
Date Received: 05/28/97
Date Reported: June 6, 1997

TPH TOTAL, Total of Gasoline and Diesel TPH's

Laboratory ID	Sample ID	Concentration mg/kg	Detection Limit, mg/kg
C97 - 28017	90125-SE.5/97	161	10
C97 - 28018	90125-SW.5/97	136	10
C97 - 28019	90125-NW.5/97	348	10
C97 - 28020	90125-NE.5/97	428	10

TPH AS DIESEL FUEL

Date of sample(s) extraction : 06/03/97 **Extraction by:** WD

Laboratory ID	Sample ID	Concentration mg/kg	Detection Limit, mg/kg	Date Analyzed
C97 - 28017	90125-SE.5/97	157	10	06/05/97
C97 - 28018	90125-SW.5/97	132	10	06/05/97
C97 - 28019	90125-NW.5/97	341	10	06/05/97
C97 - 28020	90125-NE.5/97	420	10	06/05/97

QUALITY ASSURANCE REPORT, TPH AS DIESEL**Standard Addition Analysis (spike):**

Laboratory ID	Sample ID	Spike amount, mg/kg	Original Response, mg/kg	Result Response, mg/kg	Recovery %	Acceptance Range, %	Date Analyzed
C97 - 28020 S	Spike	2003	16	1830	90.6%	60 - 140	06/05/97
C97 - 28020 S	Spike Dup	2003	16	1811	89.6%	60 - 140	06/05/97
Duplicate RPD:					1.0%	0 - 20	

CCAL / QCS Standards:

Laboratory ID	Sample ID	Observed Response, mg/kg	Expected Response, mg/kg	Recovery %	Acceptance Range, %	Date Analyzed
5000 QCS	Restek 5000 Std.	5256	5000	105.1	60 - 140	06/05/97
2000 CCAL	DRO STD	1864	2000	93.2	70 - 130	06/05/97

Method 8015 Blank Analysis:

Laboratory ID	Sample ID	Concentration mg/kg	Detection Limit, mg/kg	Date Analyzed
MB0603	Method Blank	ND	10	06/05/97

ND - Analyte not detected at stated limit of detection

Report Approved By:

Report File: F:\REPORTS\CLIENTS.97\WEST_WAT.ER\ORGANIC.CAS\97_28017.xls

Analyst: wd
Reviewed: sec

COMPLETE ANALYTICAL SERVICES

**ENERGY LABORATORIES, INC.**

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EPA METHOD 8015 (Modified),TPH GRO
ANALYTICAL RESULTS

Client: Western Water Consultants
Project: N/A
Matrix: Soil

Date Sampled: 05/26/97
Date Received: 05/28/97
Date Reported: June 4, 1997

GASOLINE RANGE ORGANICS CONCENTRATION: 8015 TPH GRO

Laboratory ID	Sample ID	GRO mg/kg	Detection Limit, mg/kg	Surrogate Recovery		Date Analyzed
				ααα-Trifluoro-toluene	Acceptance range, %	
C97 - 28017	90125-SE.5/97	3.7	2.0	92	80 - 120 %	06/03/97
C97 - 28018	90125-SW.5/97	4.0	2.0	94	80 - 120 %	06/03/97
C97 - 28019	90125-NW.5/97	7.6	2.0	94	80 - 120 %	06/03/97
C97 - 28020	90125-NE.5/97	8.7	2.0	93	80 - 120 %	06/03/97

QUALITY ASSURANCE REPORT: 8015 GRO**MATRIX SPIKE ANALYSIS**

Laboratory ID	GRO Recovery, %	GRO Dup Recovery, %	Acceptance range, %	RPD, %	Acceptance range, %	Date Analyzed
C97 - 28020 S	63%	65%	40 - 80 %	3.2%	0 - 10 %	06/03/97

METHOD BLANK

Laboratory ID	Sample ID	GRO mg/kg	Surrogate Recovery		Date Analyzed
			ααα-Trifluoro-toluene	Acceptance range, %	
MB0602	Blank	< 2.0	112	80 - 120 %	06/02/97

Continuing Calibration and Second Source Checks

Laboratory ID	GRO Recovery, %	Acceptance range, %	Date Analyzed	Laboratory ID	GRO Recovery, %	Acceptance range, %
cc GRO CK STD	98%	75 - 125 %	06/02/97	lc GRO CK STD	61%	40 - 80 %

ND - Analyte not detected at stated limit of detection

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File 90125-D

**TPH AS DIESEL FUEL
EPA 8015 - MODIFIED CALIFORNIA METHOD
ANALYTICAL RESULTS**

Client: Western Water Consultants- Laramie
Project: N/A
Matrix: Soil

Date Sampled: 07/29/97
Date Received: 08/01/97
Date Reported: August 11, 1997

TPH AS DIESEL FUEL

Date of sample(s) extraction : 08/05/97 **Extraction by:** PF

Laboratory ID	Sample ID	First Analysis, Concentration, mg/kg	Second Analysis, Concentration, mg/kg	Duplicate RPD:	Detection Limit, mg/kg	Date Analyzed
C97 - 42031	90125-SE.7/97	37	41	9.1%	10	08/07/97
C97 - 42032	90125-SW.7/97	82	75	9.2%	10	08/07/97
C97 - 42033	90125-NE.7/97	175	179	1.8%	10	08/07/97
C97 - 42034	90125-NW.7/97	139	141	1.4%	10	08/07/97

QUALITY ASSURANCE REPORT

Standard Addition Analysis (spike):

Laboratory ID	Sample ID	Recovery %	Acceptance Range, %	Date Analyzed
C97 - 42034 S	Spike	113%	60 - 140	08/07/97
C97 - 42034 S	Spike Dup	93.5%	60 - 140	08/07/97
Duplicate RPD:		18.7%	0 - 20	

CCAL / QCS Standards:

Laboratory ID	Sample ID	Recovery %	Acceptance Range, %	Date Analyzed
5000 QCS	Restek 5000 Std.	87.9	60 - 140	08/07/97
2000 CCAL	DRO STD	96.3	70 - 130	08/07/97

Method 8015 Blank Analysis:

Laboratory ID	Sample ID	Concentration mg/kg	Detection Limit, mg/kg	Date Analyzed
MB0805	Method Blank	ND	10	08/07/97

ND - Analyte not detected at stated limit of detection

Report Approved By: K.A. Leach
Report File: F:\REPORTS\CLIENTS.97\AMOCO\CASPER_R.EF\ORGANIC.CAS\97_42031.xls

Analyst: wd
Reviewed: sec

**ENERGY LABORATORIES, INC.**

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**TPH AS DIESEL FUEL
EPA 8015 - MODIFIED CALIFORNIA METHOD
ANALYTICAL RESULTS**

Client:	Western Water Consultants- Laramie	Date Sampled:	10/17/97
Project:	90-125L.8	Date Received:	10/21/97
Matrix:	Soil	Date Reported:	October 31, 1997

TPH AS DIESEL FUEL

Date of sample(s) extraction : 10/27/97 **Extraction by:** KS

Laboratory	Sample	Concentration	Detection	Date
ID	ID	mg/kg	Limit, mg/kg	Analyzed
C97- 63870	90125-NE.10/97	99	10	10/27/97
C97- 63871	90125-SE.10/97	58	10	10/27/97
C97- 63872	90125-SW.10/97	33	10	10/27/97
C97- 63873	90125-NW.10/97	62	10	10/27/97

QUALITY ASSURANCE REPORT

Standard Addition Analysis (spike):

Laboratory	Sample	Recovery	Acceptance	Date
ID	ID	%	Range, %	Analyzed
C97 - 58896 S	Spike	69%	60 - 140	10/27/97
C97 - 58896 S	Spike Dup	74%	60 - 140	10/27/97
Duplicate RPD:		7.3%	0 - 20	

CCAL / QCS Standards:

Laboratory	Sample	Recovery	Acceptance	Date
ID	ID	%	Range, %	Analyzed
5000 QCS	Restek 5000 Std.	106	60 - 140	10/27/97
2000 CCAL	DRO STD	93	70 - 130	10/27/97

Method 8015 Blank Analysis:

Laboratory	Sample	Concentration	Detection	Date
ID	ID	mg/kg	Limit, mg/kg	Analyzed
MB1027	Method Blank	ND	10	10/27/97

ND - Analyte not detected at stated limit of detection

Report File: \\ELI_CA\reports\Reports\CLIENTS.97\WEST_WAT.ER\ORGANIC.CAS\97_63870.xls

Analyst:	wd
Reviewed:	sec

COMPLETE ANALYTICAL SERVICES

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File 90125.D

**EPA METHOD 8015 (Modified), TPH GRO
ANALYTICAL RESULTS**

Client: Western Water Consultants- Laramie
Project: 90-125L.8
Matrix: Soil

Date Sampled: 10/17/97
Date Received: 10/21/97
Date Reported: October 31, 1997

GASOLINE RANGE ORGANICS CONCENTRATION: 8015 TPH GRO

Laboratory ID	Sample ID	GRO mg/kg	Detection Limit, mg/kg	Surrogate Recovery		Date Analyzed
				ααα-Trifluoro-toluene	Acceptance range, %	
C97- 63870	90125-NE.10/97	< 2.0	2.0	106	80 - 120 %	10/24/97
C97- 63871	90125-SE.10/97	< 2.0	2.0	92	80 - 120 %	10/24/97
C97- 63872	90125-SW.10/97	< 2.0	2.0	97	80 - 120 %	10/24/97
C97- 63873	90125-NW.10/97	< 2.0	2.0	102	80 - 120 %	10/24/97

QUALITY ASSURANCE REPORT: 8015 GRO**MATRIX SPIKE ANALYSIS**

Laboratory ID	GRO Recovery, %	GRO Dup Recovery, %	Acceptance range, %	RPD, %	Acceptance range, %	Date Analyzed
C97 - 63873 S	63%	63%	40 - 80 %	0.3%	0 - 10 %	10/24/97

METHOD BLANK

Laboratory ID	Sample ID	GRO mg/kg	Surrogate Recovery		Date Analyzed
			ααα-Trifluoro-toluene	Acceptance range, %	
MB1024	Blank	< 2.0	118	80 - 120 %	10/24/97

Continuing Calibration and Second Source Checks

Laboratory ID	GRO Recovery, %	Acceptance range, %	Date Analyzed	Laboratory ID	GRO Recovery, %	Acceptance range, %
cc GRO CK STD	102%	75 - 125 %	10/24/97	lc GRO CK STD	63%	40 - 80 %

ND - Analyte not detected at stated limit of detectionReport Approved By: *R. A. Leary*

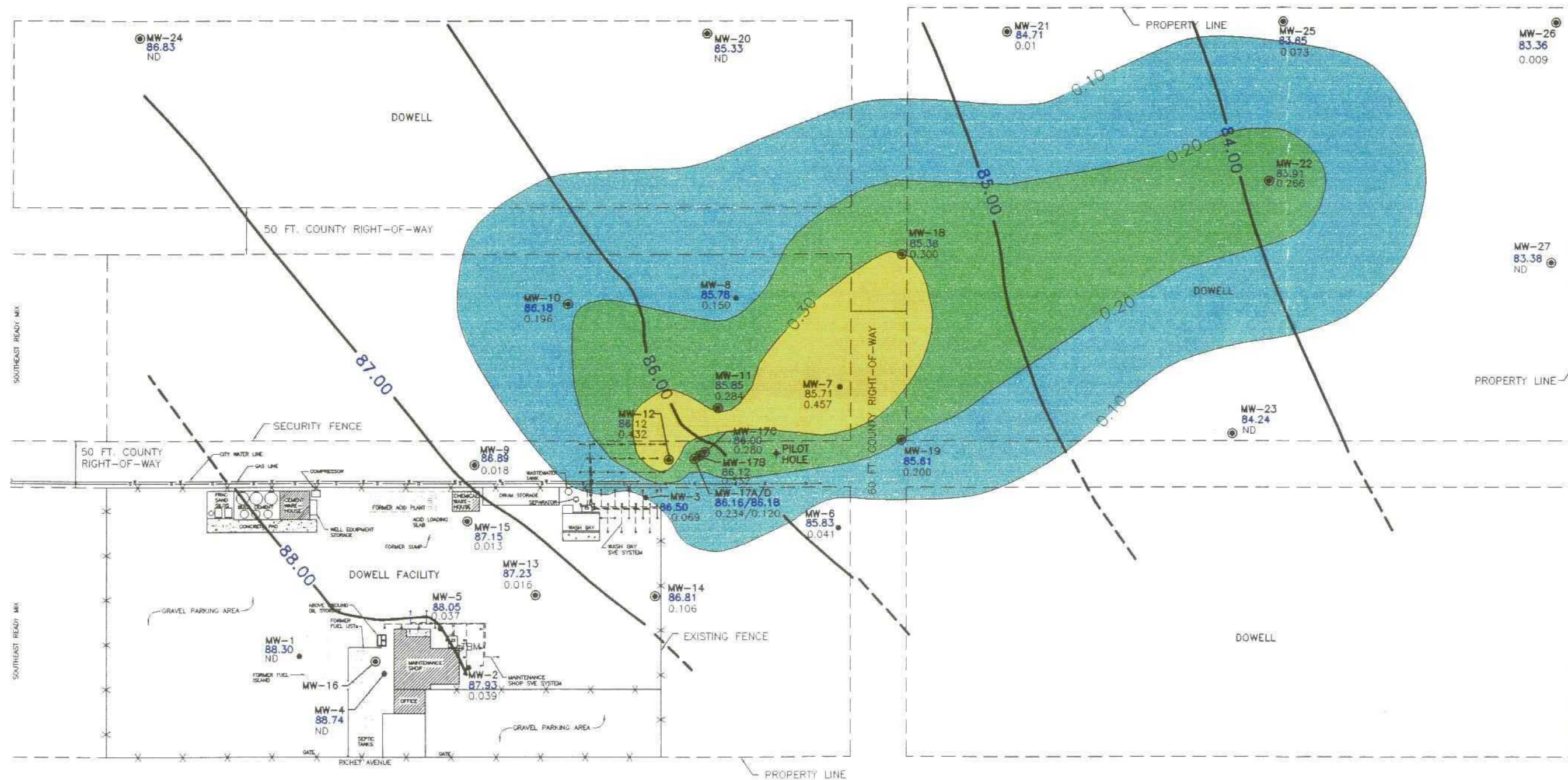
Report File: \\ELI_CA\reports\Reports\CLIENTS.97\WEST_WAT.ER\ORGANIC.CAS\97_63870.xls

Analyst: _____ wd
Reviewed: _____ sec

COMPLETE ANALYTICAL SERVICES

APPENDIX C

**ISOCONCENTRATION MAPS AND PLOTS
OF STATIC WATER VERSUS
HALOCARBON CONCENTRATIONS**



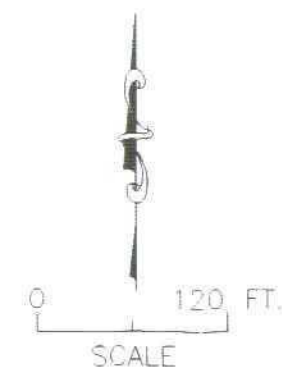
EXPLANATION

- MW-12**
 85.21
 0.19
 WWC MONITORING WELL LOCATION AND IDENTIFICATION
 GROUND-WATER ELEVATION
 TOTAL HALOCARBONS (mg/L)
- MW-6**
 85.22
 0.70
 REED AND ASSOCIATES MONITORING WELL
 LOCATION AND IDENTIFICATION
 GROUND-WATER ELEVATION
 TOTAL HALOCARBONS (mg/L)
- TBM**
 TEMPORARY BENCH MARK
- AIR PIPING
- SVE EXTRACTION WELL

TOTAL HALOCARBON CONCENTRATIONS (mg/L)

- 0.50
- 0.30
- 0.10

-83.00- POTENTIOMETRIC SURFACE CONTOUR



BASE MAP MODIFIED FROM REED & ASSOCIATES

**POTENTIOMETRIC SURFACE AND
TOTAL HALOCARBONS (10/17/97)**

DOWELL, A DIVISION OF
SCHLUMBERGER TECHNOLOGY CORPORATION
ARTESIA, NEW MEXICO

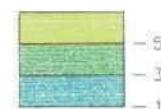
**Western
Water
Consultants, Inc.** **Engineering**

Engineering Environmental Mining Water Resources



- | | | |
|-----|-------|---|
| ● | MW-12 | WWC MONITORING WELL LOCATION AND IDENTIFICATION |
| | 85.21 | GROUND-WATER ELEVATION |
| | 2.82 | TOTAL BTEX (mg/L) |
| ● | MW-6 | REED AND ASSOCIATES MONITORING WELL LOCATION AND IDENTIFICATION |
| | 85.22 | GROUND-WATER ELEVATION |
| | ND | TOTAL BTEX (mg/L) |
| ⊕ | TBM | TEMPORARY BENCH MARK |
| --- | | AIR PIPING |
| ■ | | SVE EXTRACTION WELL |

TOTAL BTEX CONCENTRATIONS (mg/L)



-83.00- POTENTIOMETRIC SURFACE CONTOUR



BASE MAP MODIFIED FROM REED & ASSOCIATES

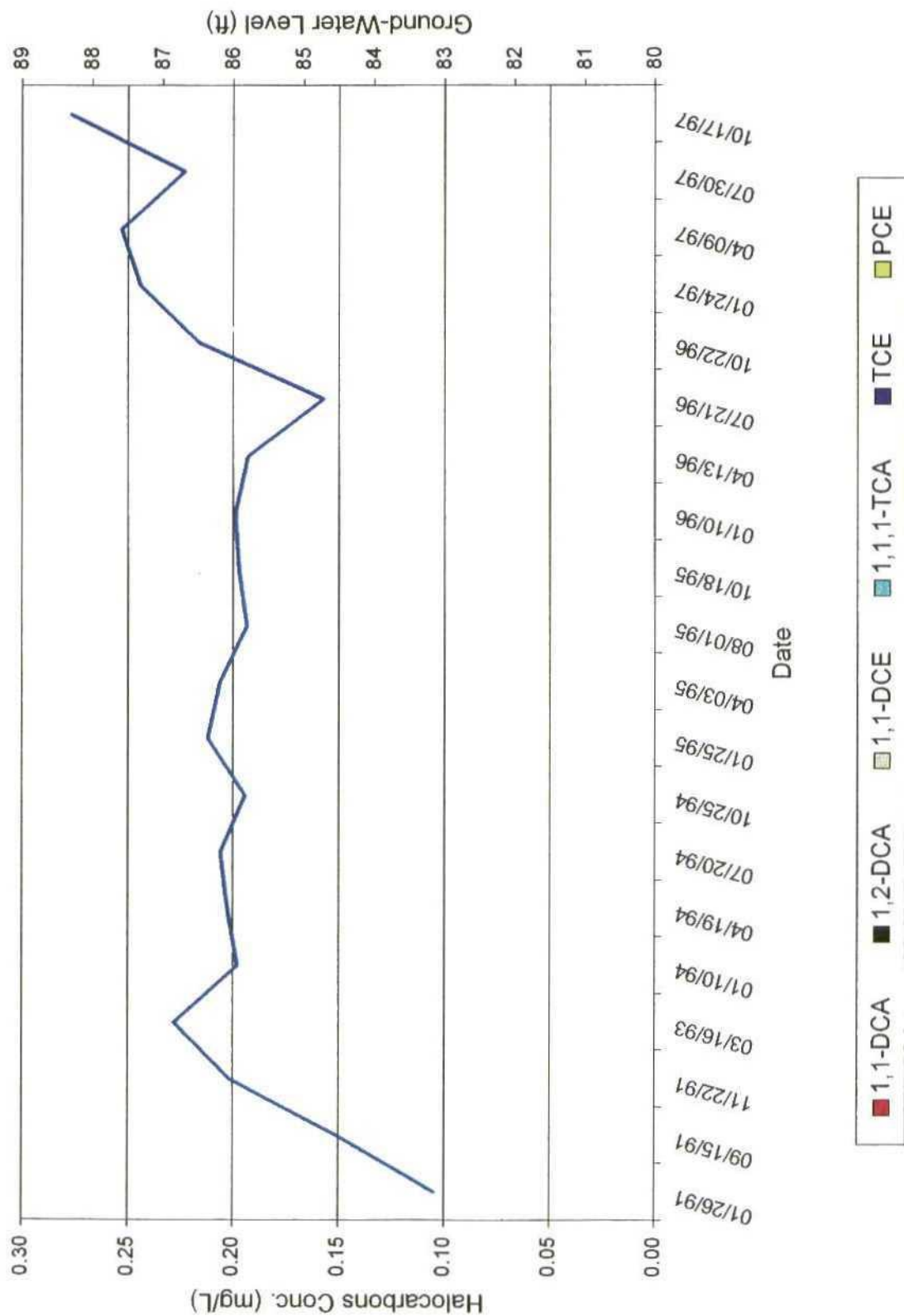
POTENTIOMETRIC SURFACE AND
TOTAL BTEX (10/17/97)

DOWELL, A DIVISION OF
SCHLUMBERGER TECHNOLOGY CORPORATION
ARTESIA, NEW MEXICO

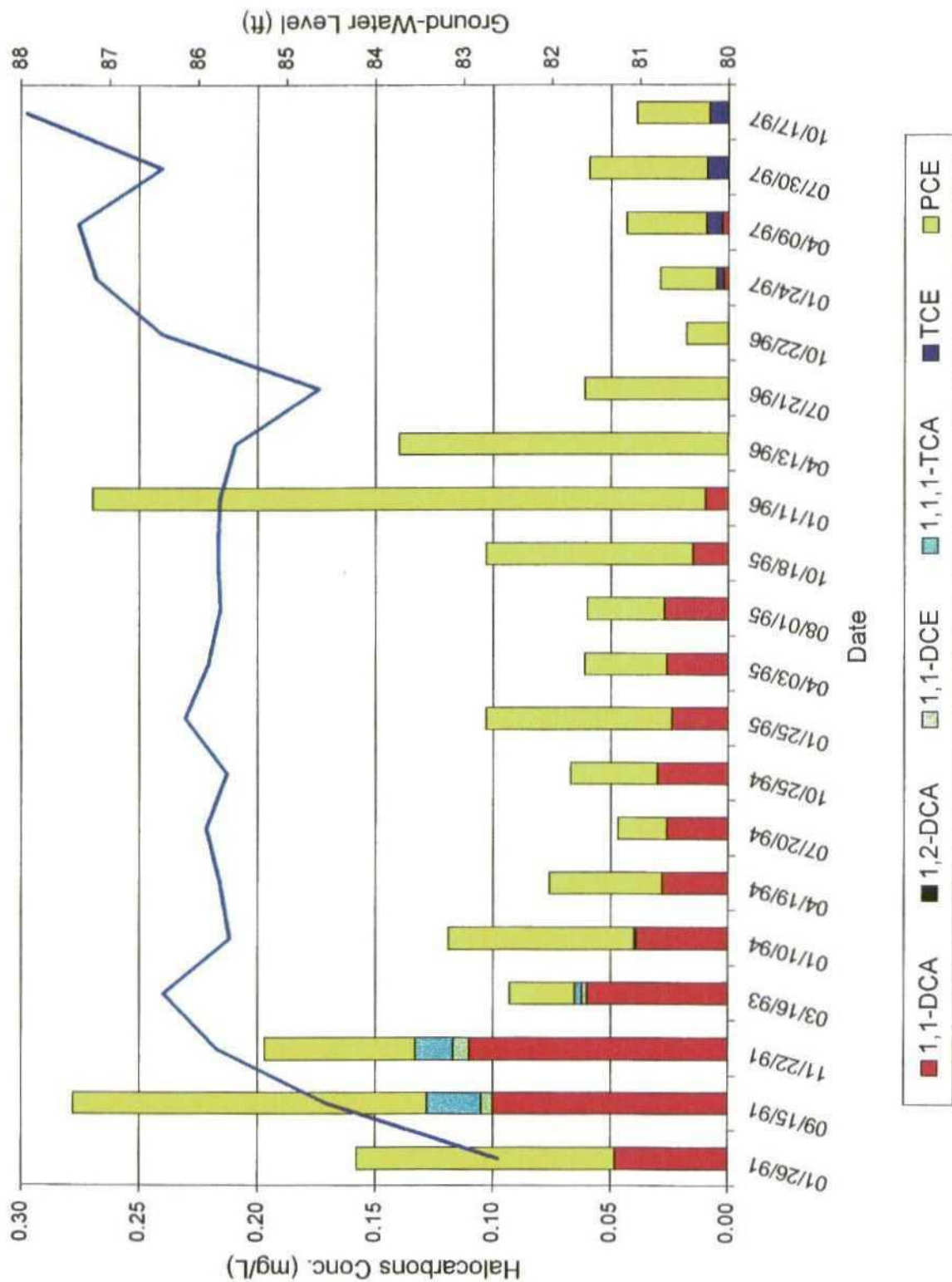
Western
Water
Consultants, Inc.  Engineering
Engineering Environmental Mining Water Resources

Monitoring Well MW-1

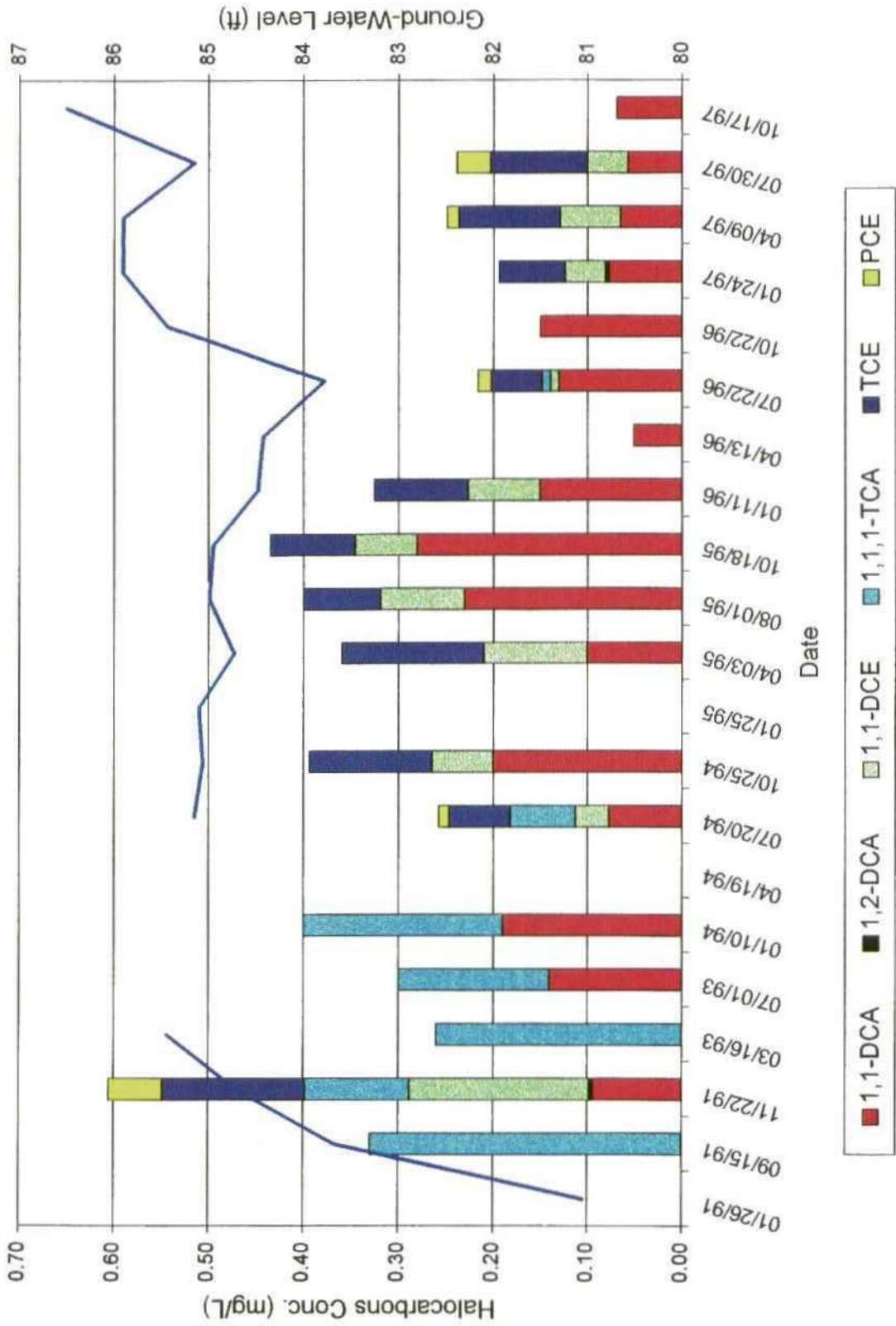
Halocarbons & Ground-Water Level



Monitoring Well MW-2 Halocarbons & Ground-Water Level

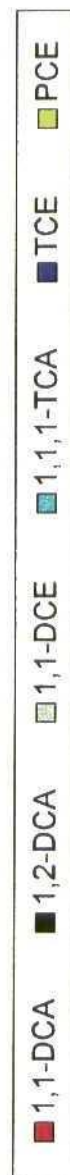


Monitoring Well MW-3

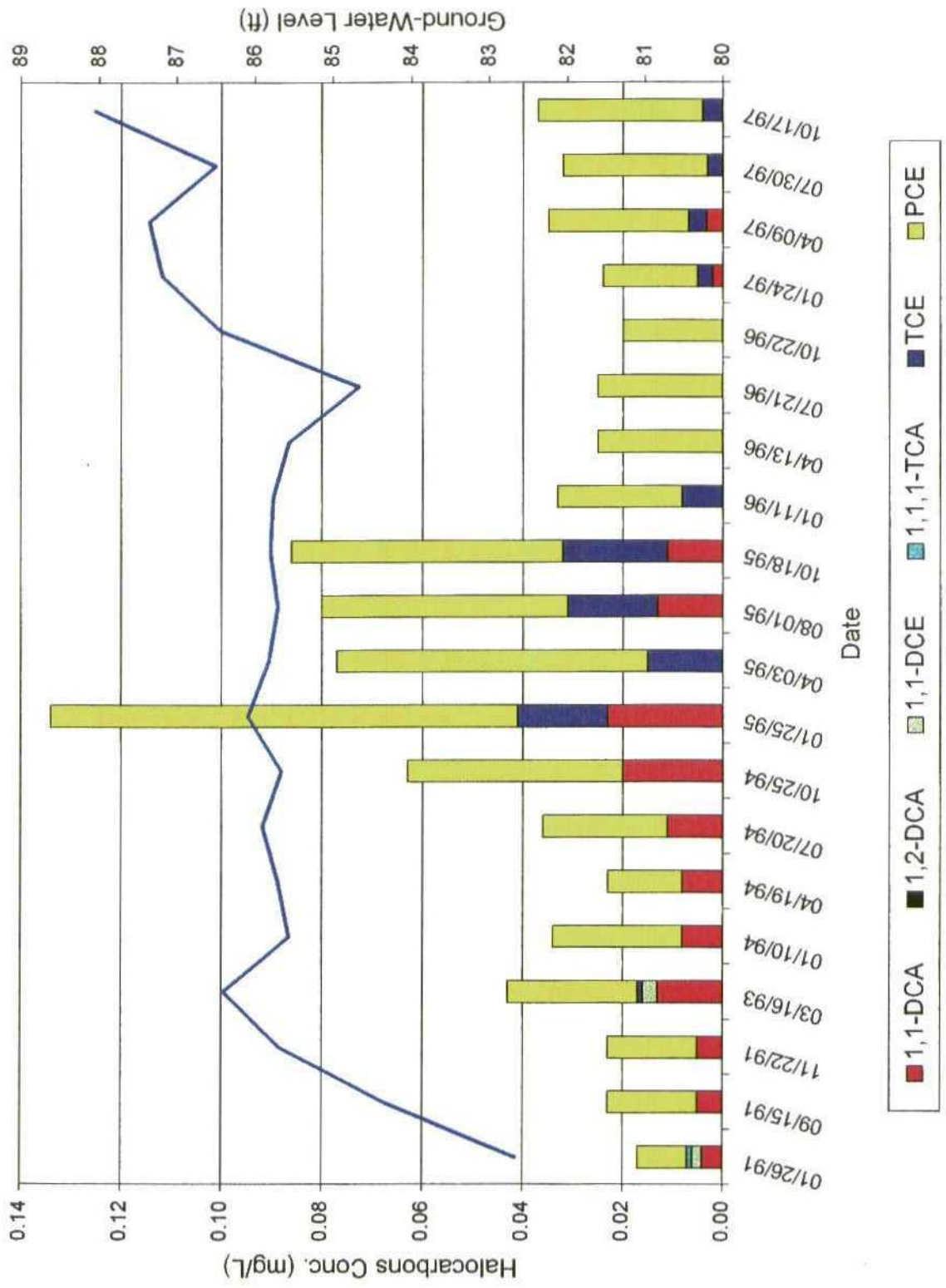


The chart displays two data series over time from January 1991 to October 1997. The primary data series is the Ground-Water Level (ft), shown as a blue line, which fluctuates between approximately 82.5 and 88.5 feet. The secondary data series is Halocarbons Concentration (mg/L), shown as blue bars, with values ranging from 0.000 to 0.008 mg/L. A green shaded region highlights a period of elevated halocarbon concentration from January 1991 to March 1993, with values between 0.008 and 0.012 mg/L.

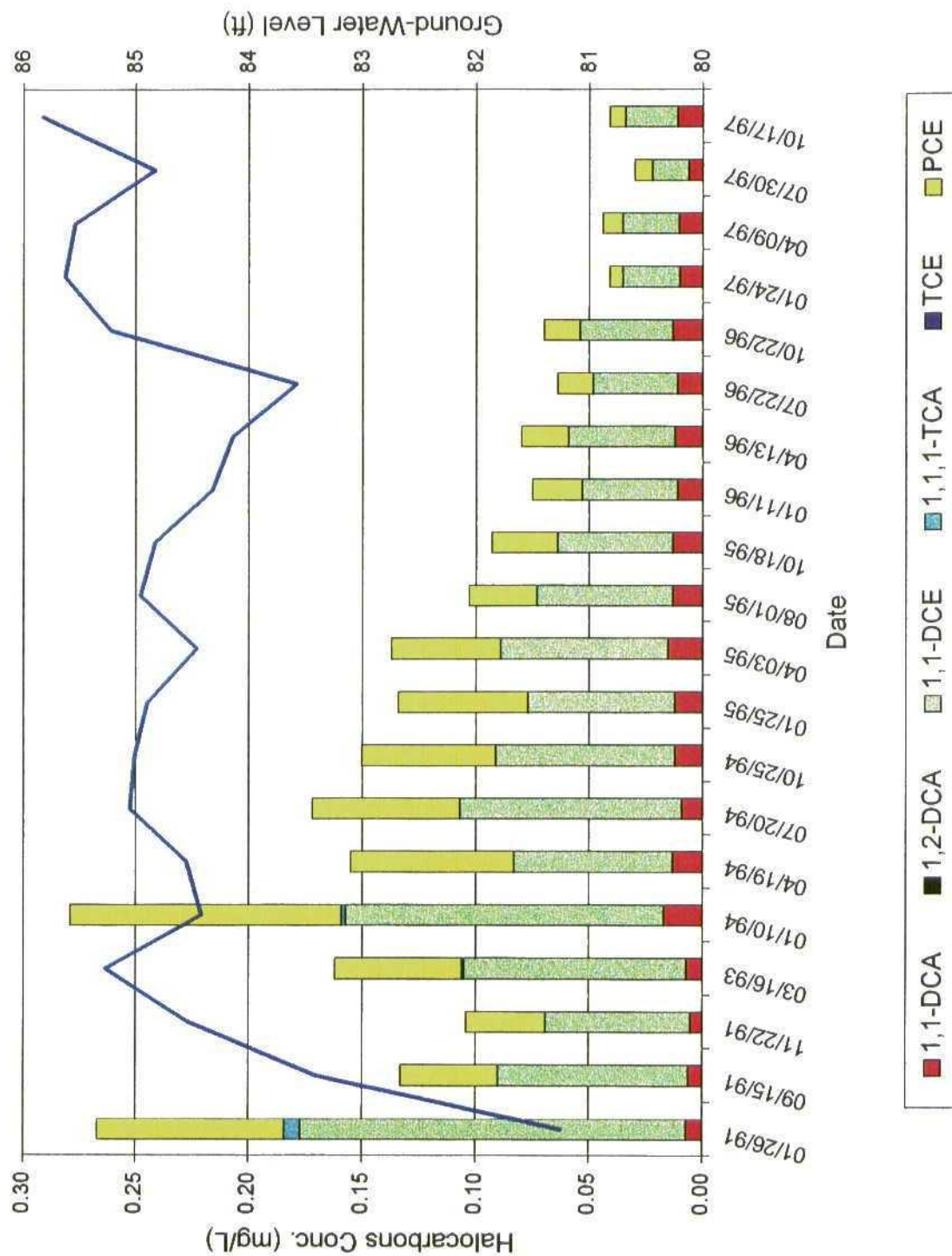
Date	Ground-Water Level (ft)	Halocarbons Conc. (mg/L)
01/26/91	82.5	0.008
09/15/91	83.5	0.008
11/22/91	84.5	0.008
03/16/93	86.5	0.002
01/10/94	87.5	0.000
04/19/94	87.5	0.000
07/20/94	87.5	0.000
10/25/94	87.5	0.000
01/25/95	87.5	0.000
04/03/95	87.5	0.000
08/01/95	87.5	0.000
10/18/95	87.5	0.000
01/11/96	87.5	0.000
04/13/96	87.5	0.000
07/21/96	87.5	0.000
10/22/96	87.5	0.000
01/24/97	87.5	0.000
04/09/97	87.5	0.000
07/30/97	87.5	0.000
10/17/97	87.5	0.000



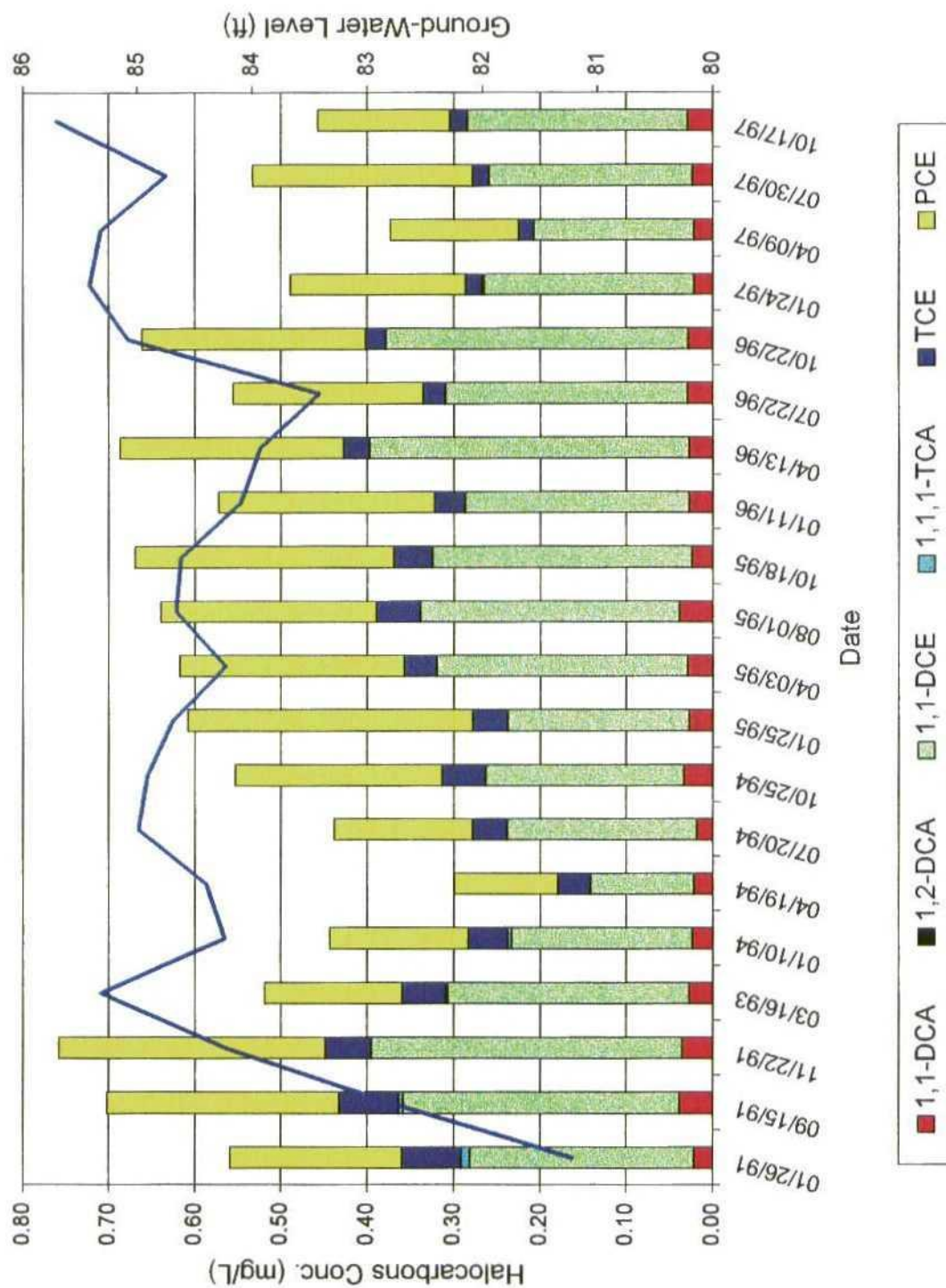
Monitoring Well MW-5 Halocarbons & Ground-Water Level



Monitoring Well MW-6



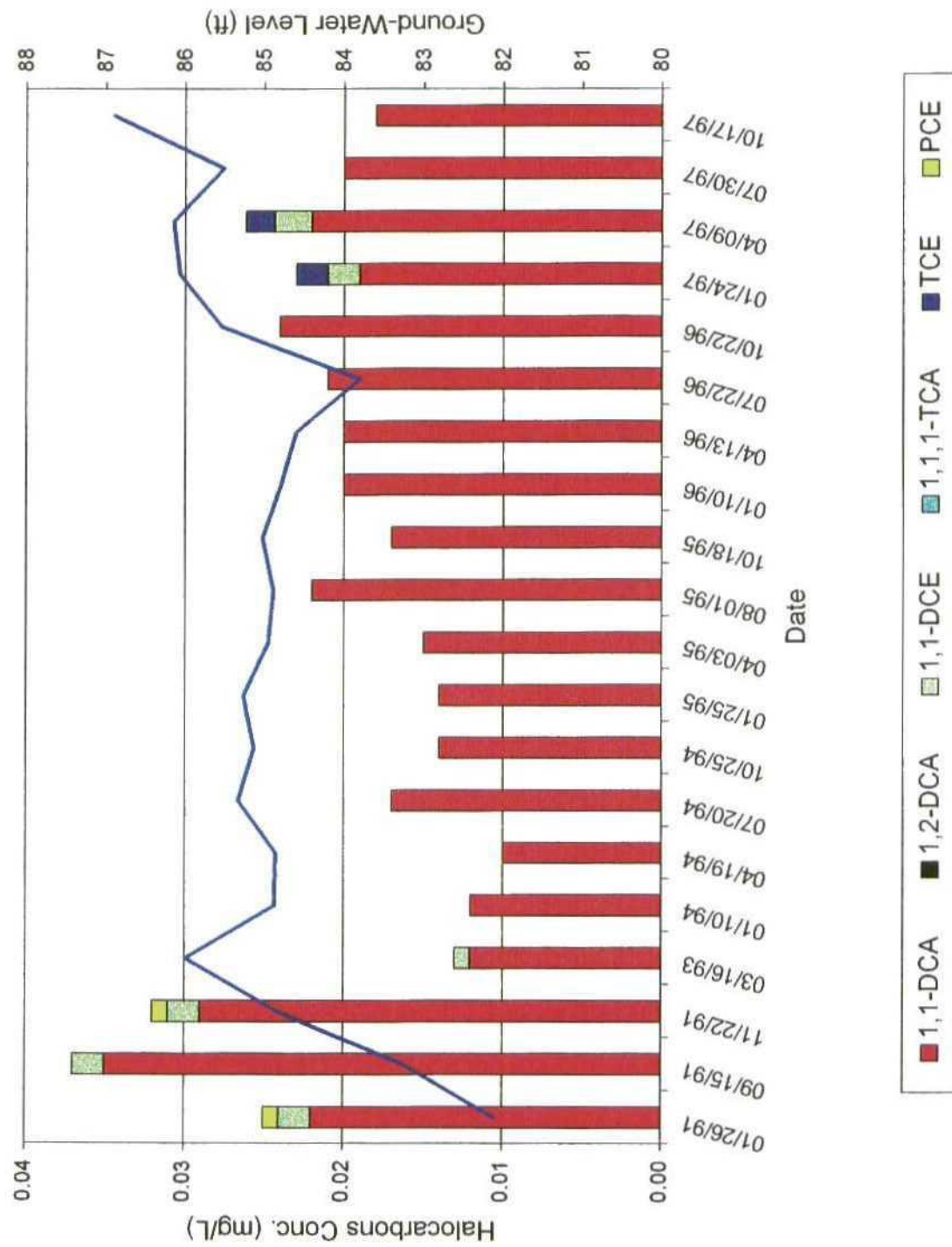
Monitoring Well MW-7 Halocarbons & Ground-Water Level



The chart displays the following data series:

- 1,1-DCA** (Red bars)
- 1,2-DCA** (Black bars)
- 1,1-DCE** (Light Green bars)
- 1,1,1-TCA** (Dark Green bars)
- TCE** (Dark Blue bars)
- PCE** (Yellow bars)
- Ground-Water Level (ft)** (Blue line)

The X-axis represents the Date, ranging from 01/26/91 to 10/17/97. The left Y-axis represents Halocarbons Conc. (mg/L), ranging from 0.00 to 0.04. The right Y-axis represents Ground-Water Level (ft), ranging from 80 to 88.

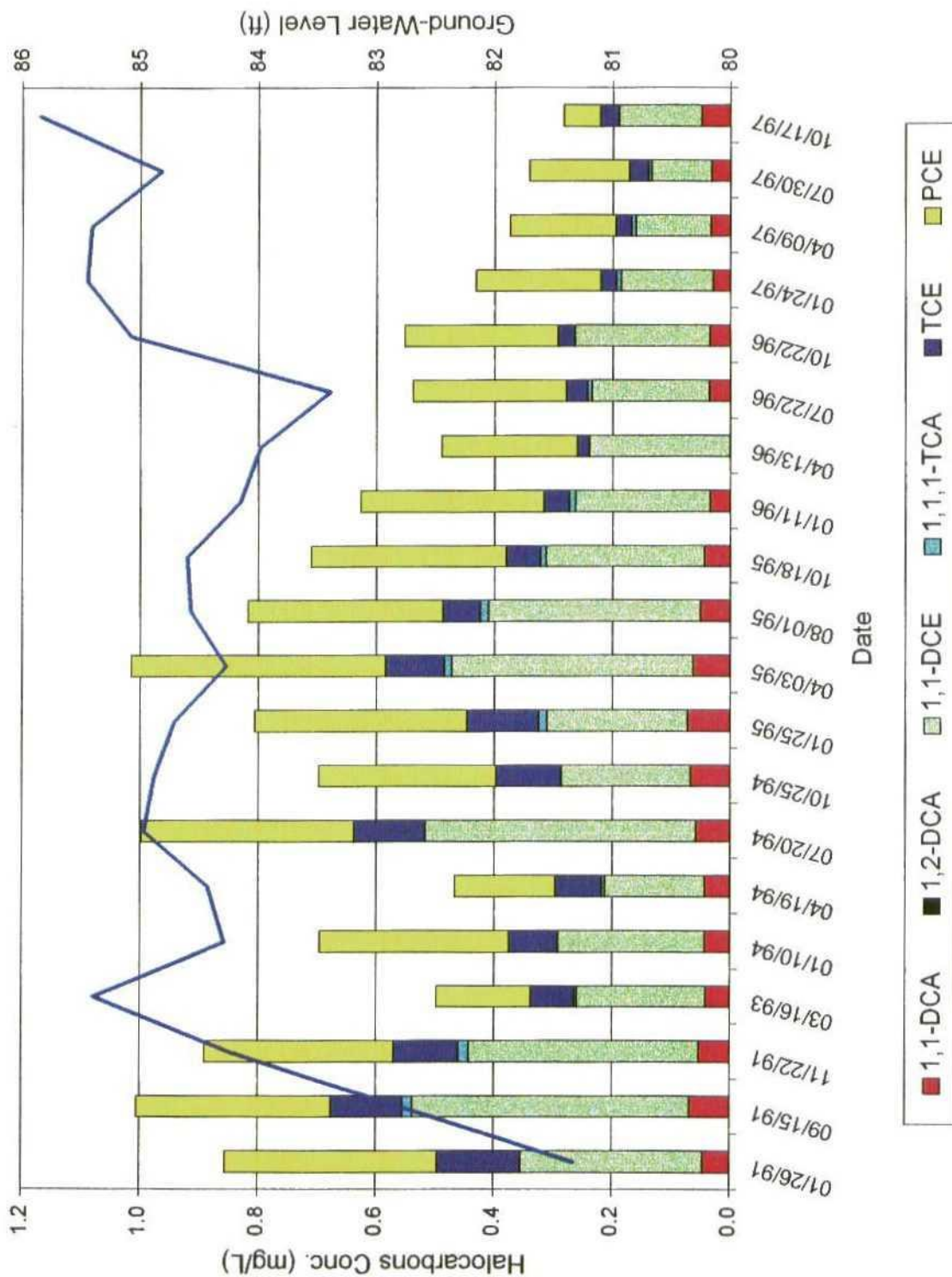


The chart displays two data series over time from January 1991 to October 1997. The top series, represented by green bars, shows the Halocarbon Concentration in mg/L. The bottom series, represented by a blue line, shows the Ground-Water Level in feet. The concentration peaks significantly around 1994-1995, while the water level drops sharply during the same period.

Date	Halocarbon Conc. (mg/L)	Ground-Water Level (ft)
01/26/91	0.01	80.5
09/15/91	0.02	81.5
11/22/91	0.04	82.5
03/16/93	0.03	83.5
01/10/94	0.02	84.5
04/19/94	0.02	84.5
07/20/94	0.05	84.0
10/25/94	0.05	83.5
01/25/95	0.04	83.0
04/03/95	0.06	82.5
08/01/95	0.13	82.0
10/18/95	0.13	82.0
01/10/96	0.04	82.5
04/13/96	0.14	83.0
07/22/96	0.15	83.5
10/22/96	0.15	84.0
01/24/97	0.13	84.5
04/09/97	0.13	85.0
07/30/97	0.14	85.5
10/17/97	0.14	86.0

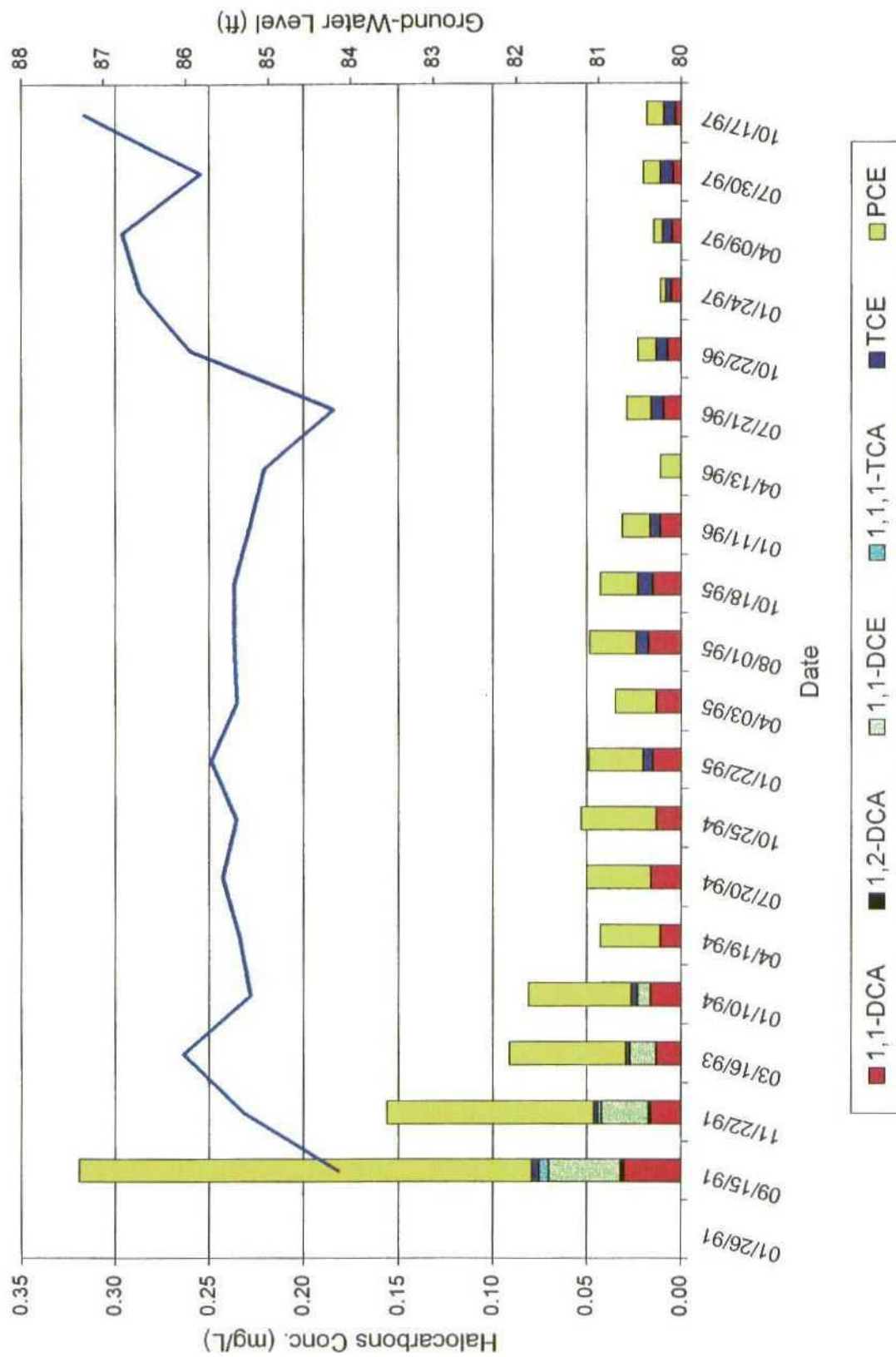


Monitoring Well MW-11

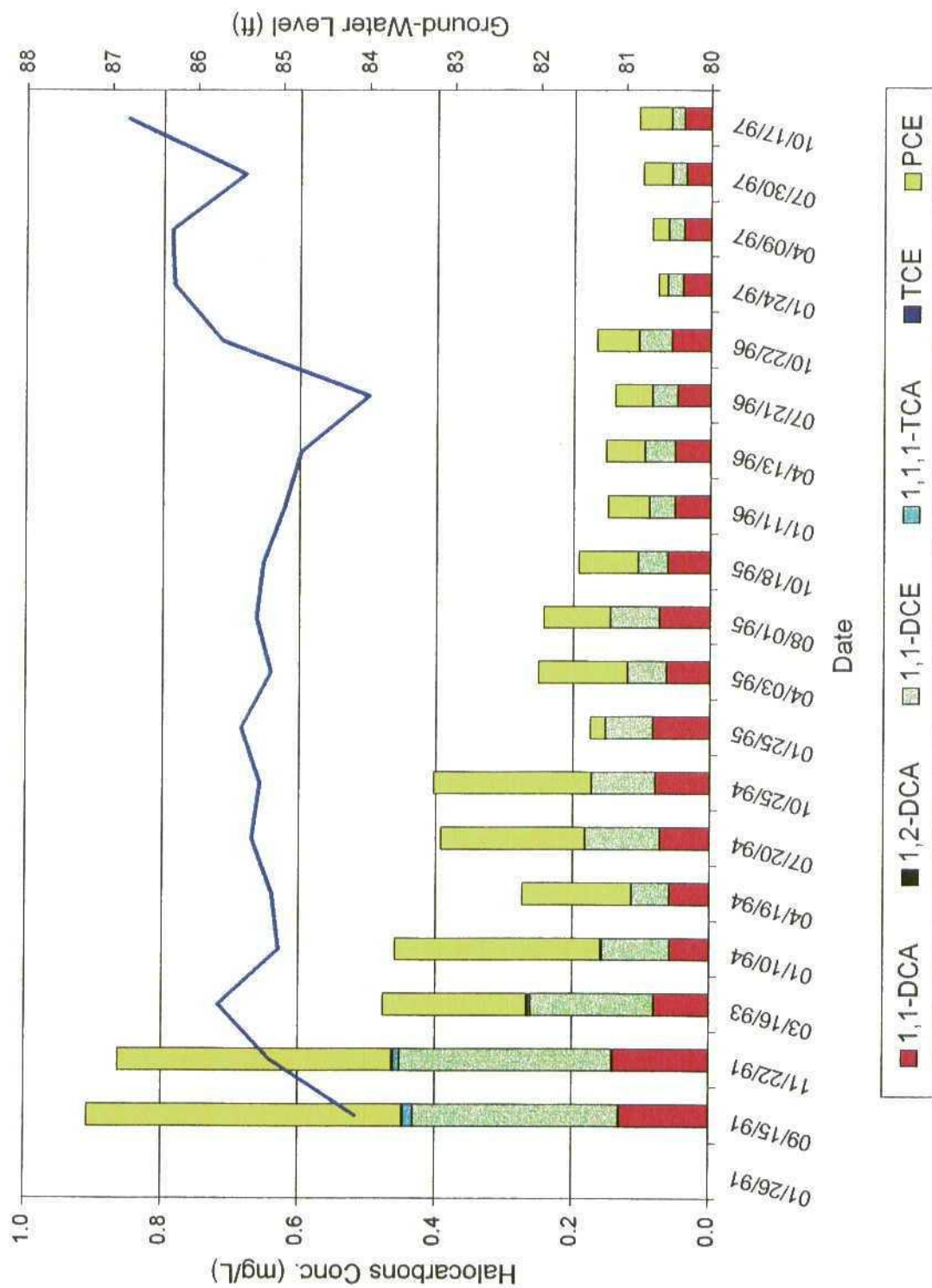


Monitoring Well MW-13

Halocarbons & Ground-Water Level

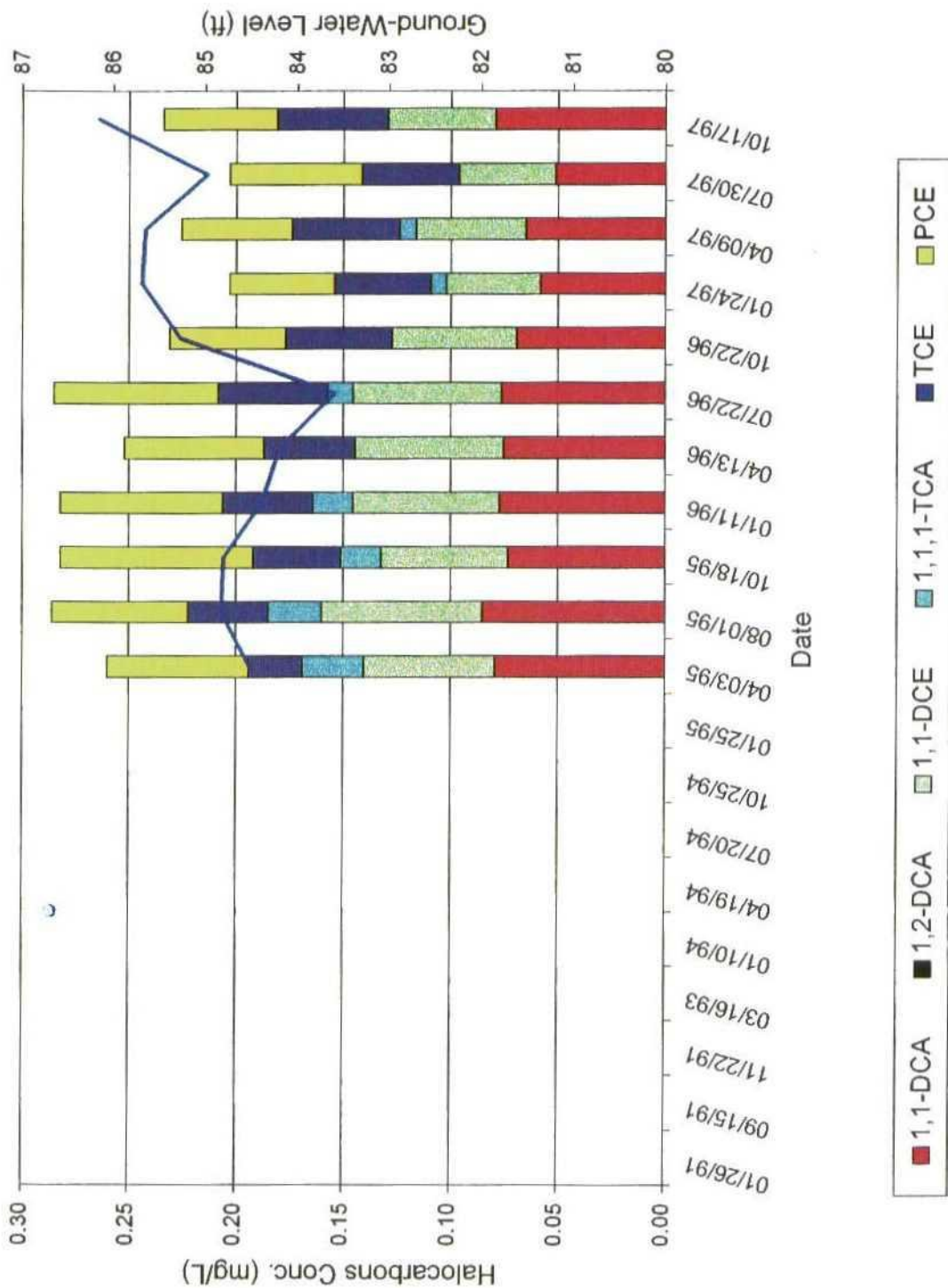


Monitoring Well MW-14

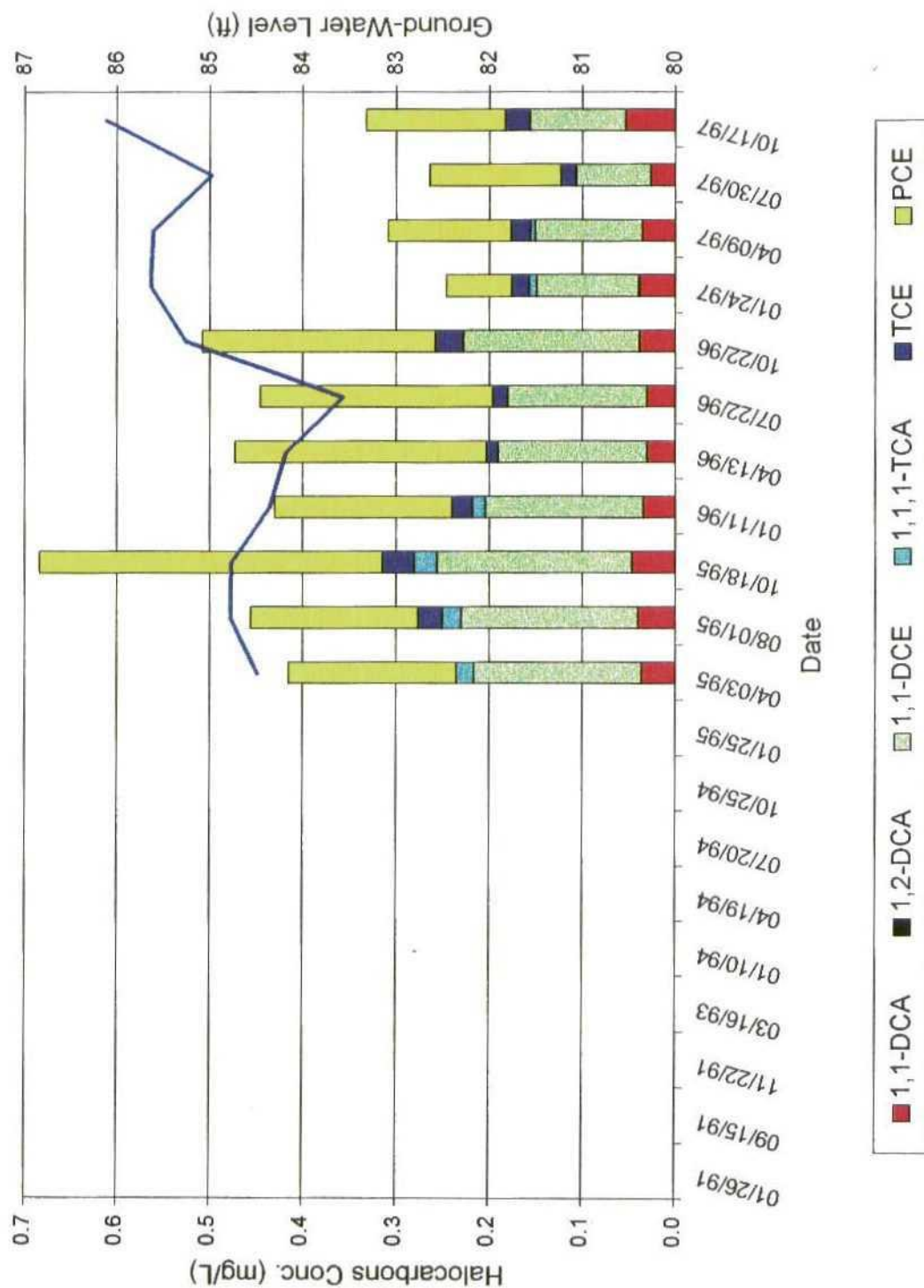


Monitoring Well MW-17A

Halocarbons & Ground-Water Level

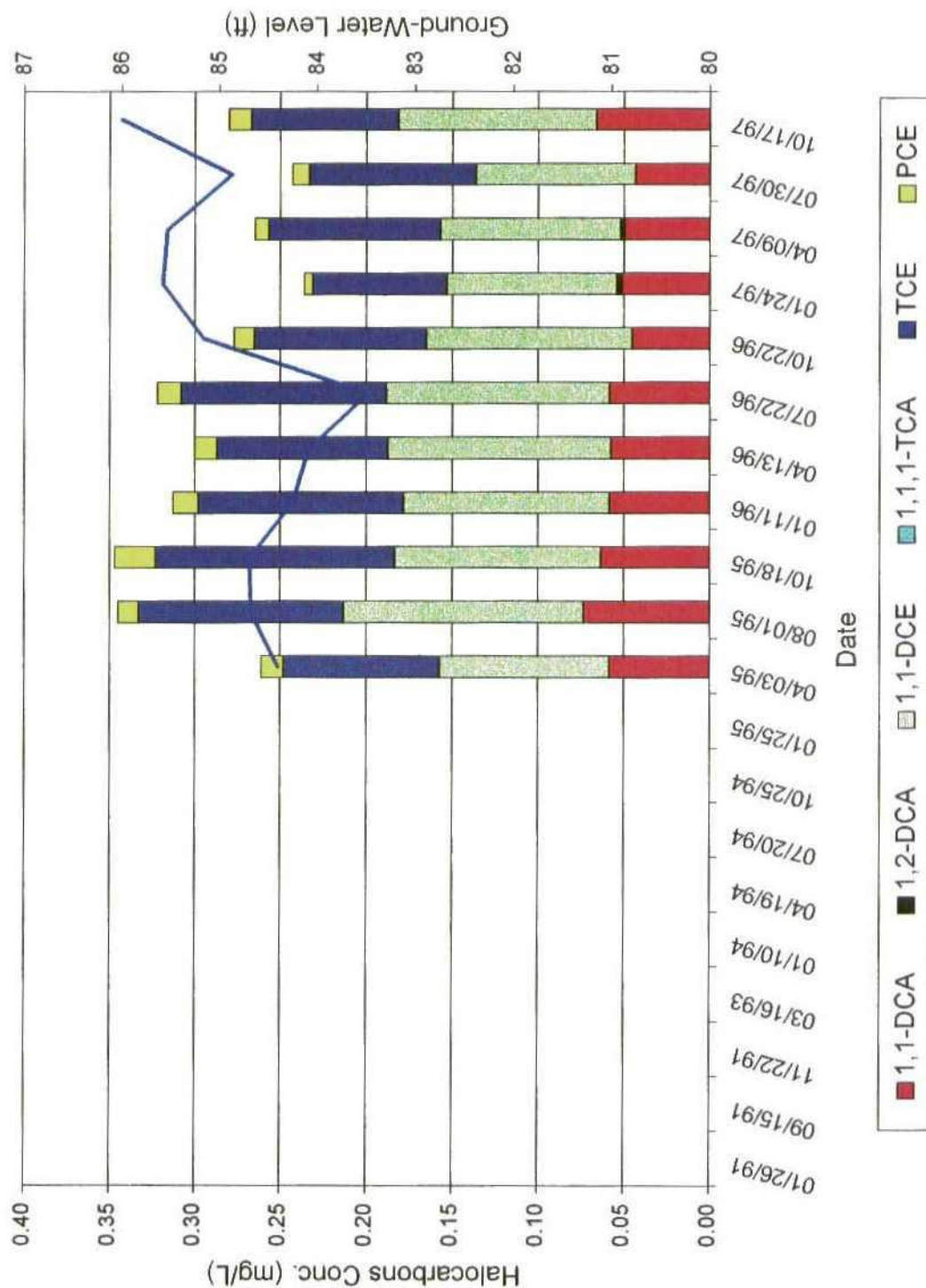


Monitoring Well MW-17B Halocarbons & Ground-Water Level



Monitoring Well MW-17C

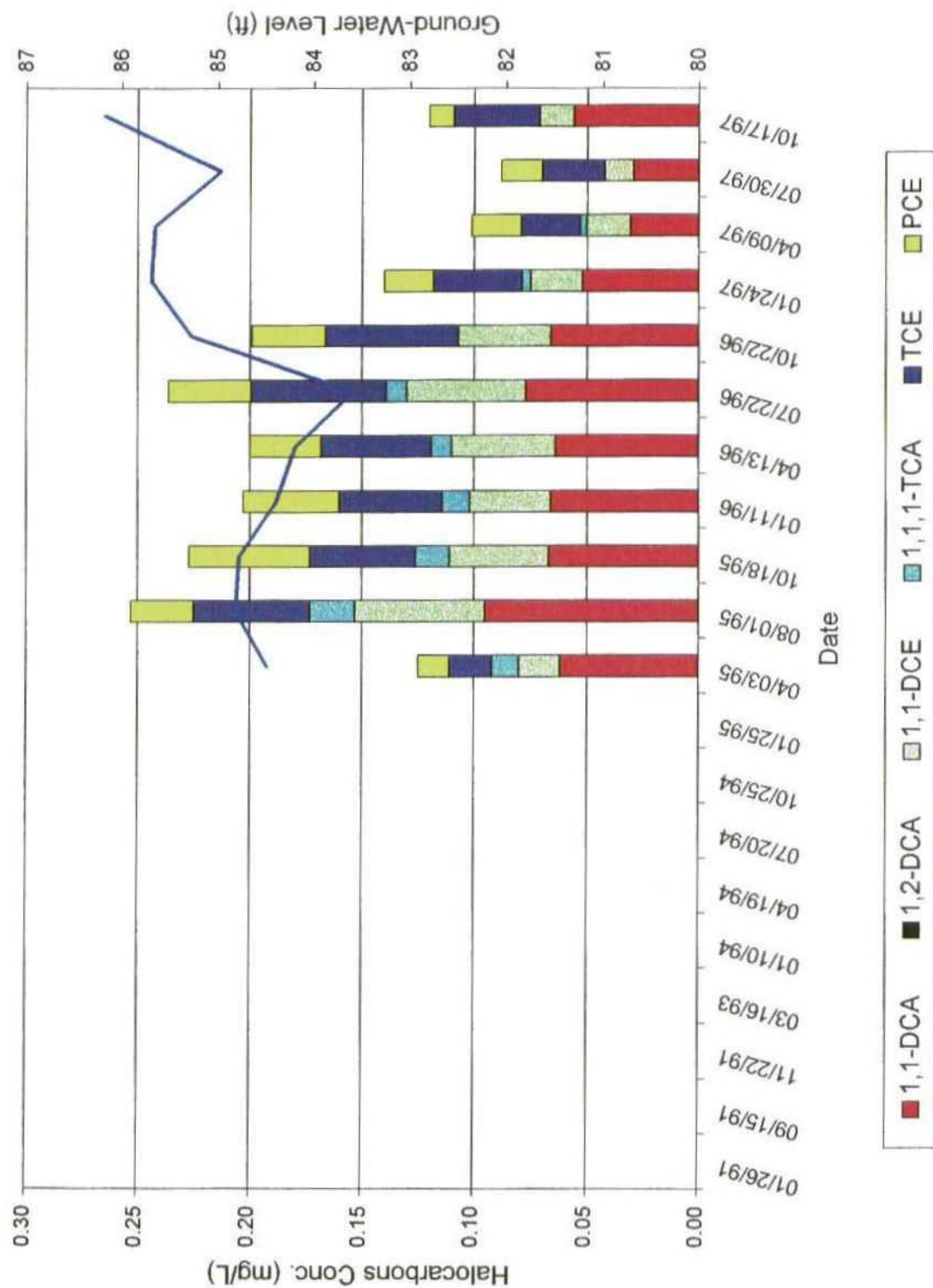
Halocarbons & Ground-Water Level



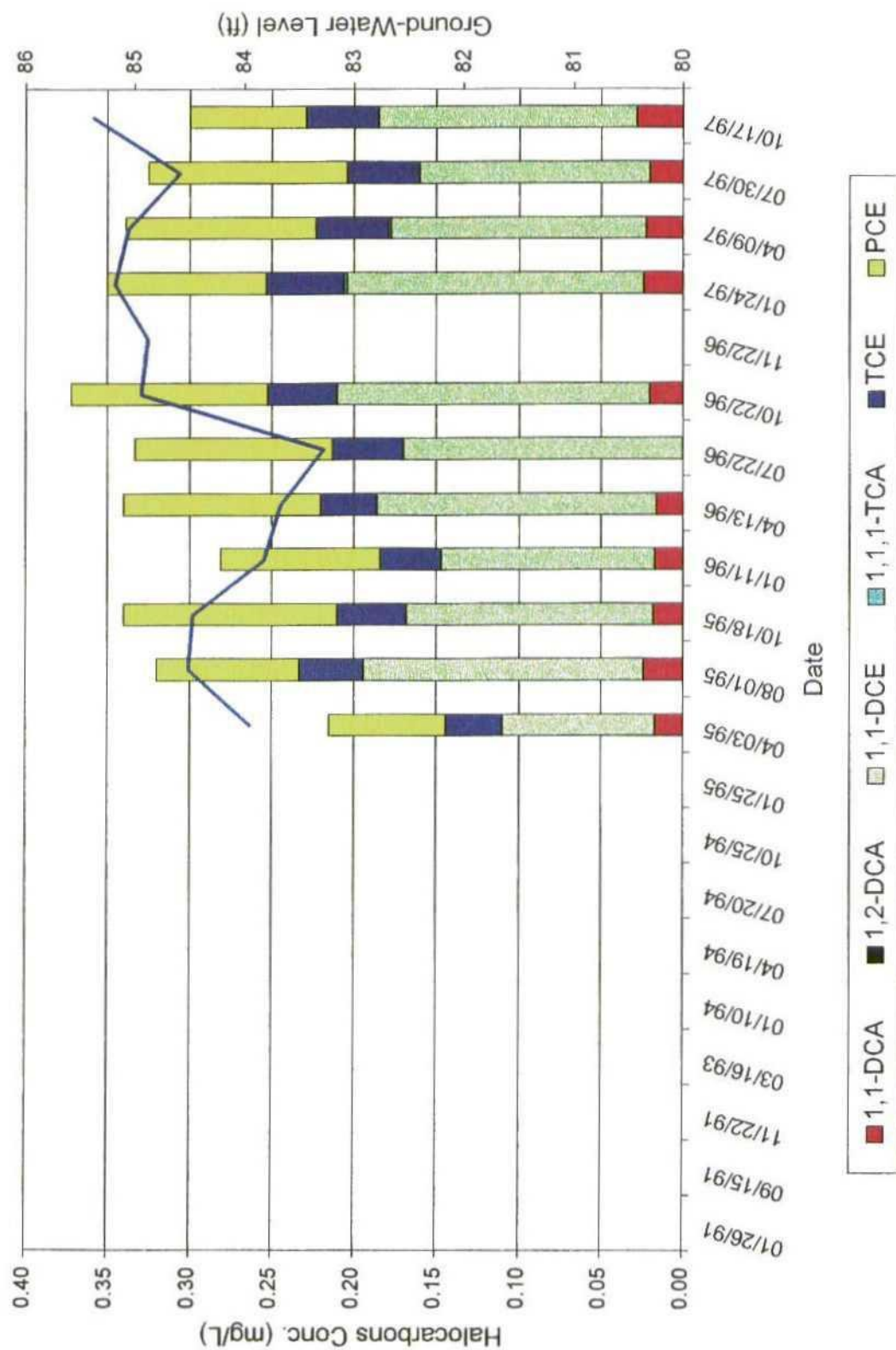
The chart displays the concentration of six halocarbons in groundwater over time, along with the groundwater level. The x-axis represents the date from 01/26/91 to 10/17/97. The left y-axis represents Halocarbons Concentration (mg/L) from 0.00 to 0.30. The right y-axis represents Ground-Water Level (ft) from 80 to 87. The legend identifies the following components:

- 1,1-DCA (Red)
- 1,2-DCA (Black)
- 1,1,1-TCA (Light Green)
- 1,1,1-TCE (Dark Blue)
- 1,1,1-TCE (Light Blue)
- PCE (Yellow)

The ground-water level (blue line) shows a general downward trend from approximately 86.5 ft in 1991 to 85.5 ft in 1997, with a notable peak in late 1995. The halocarbon concentrations are stacked horizontally for each date, with 1,1-DCA being the most prevalent component.



Monitoring Well MW-18 Halocarbons & Ground-Water Level



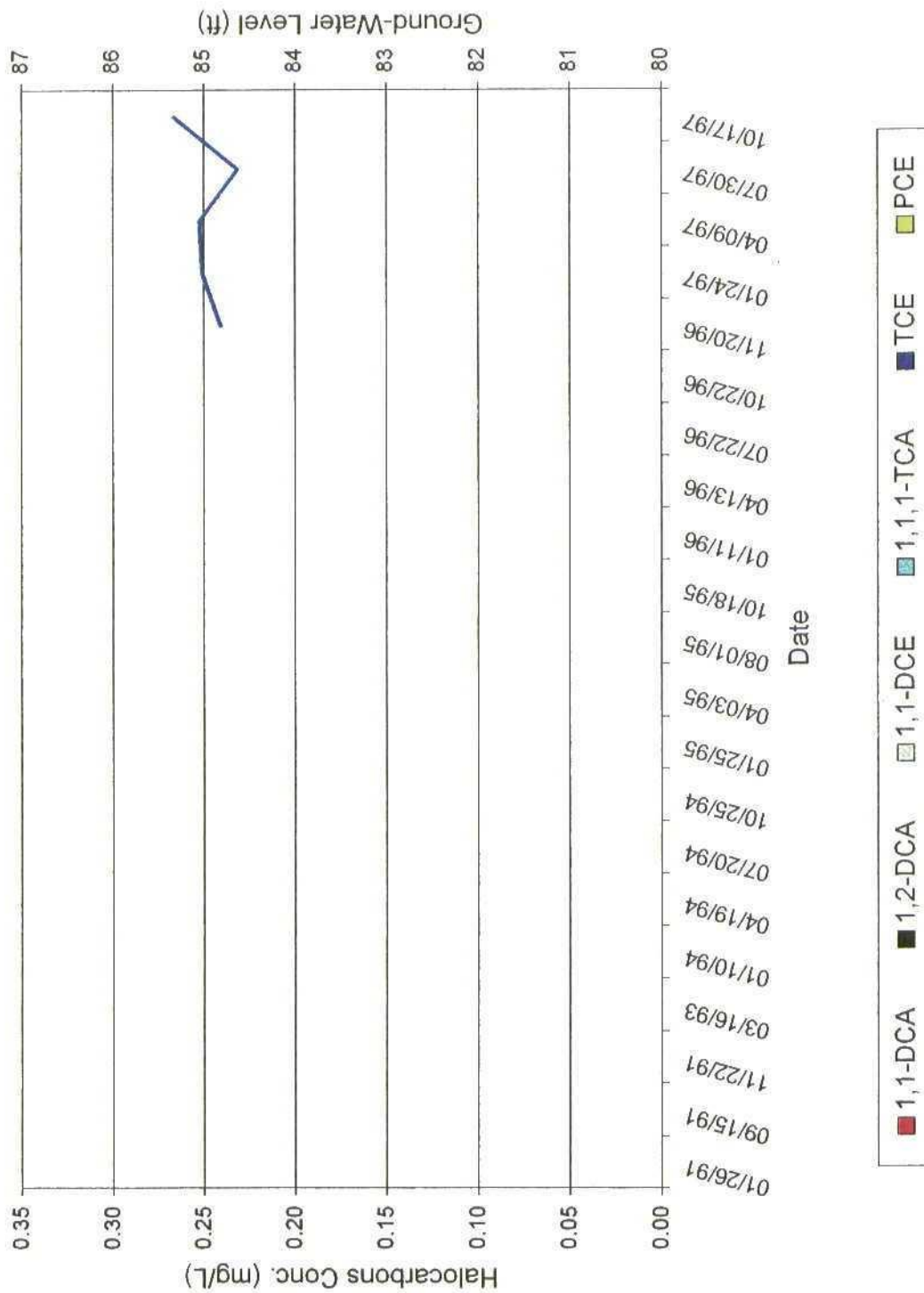
The chart displays the following data series:

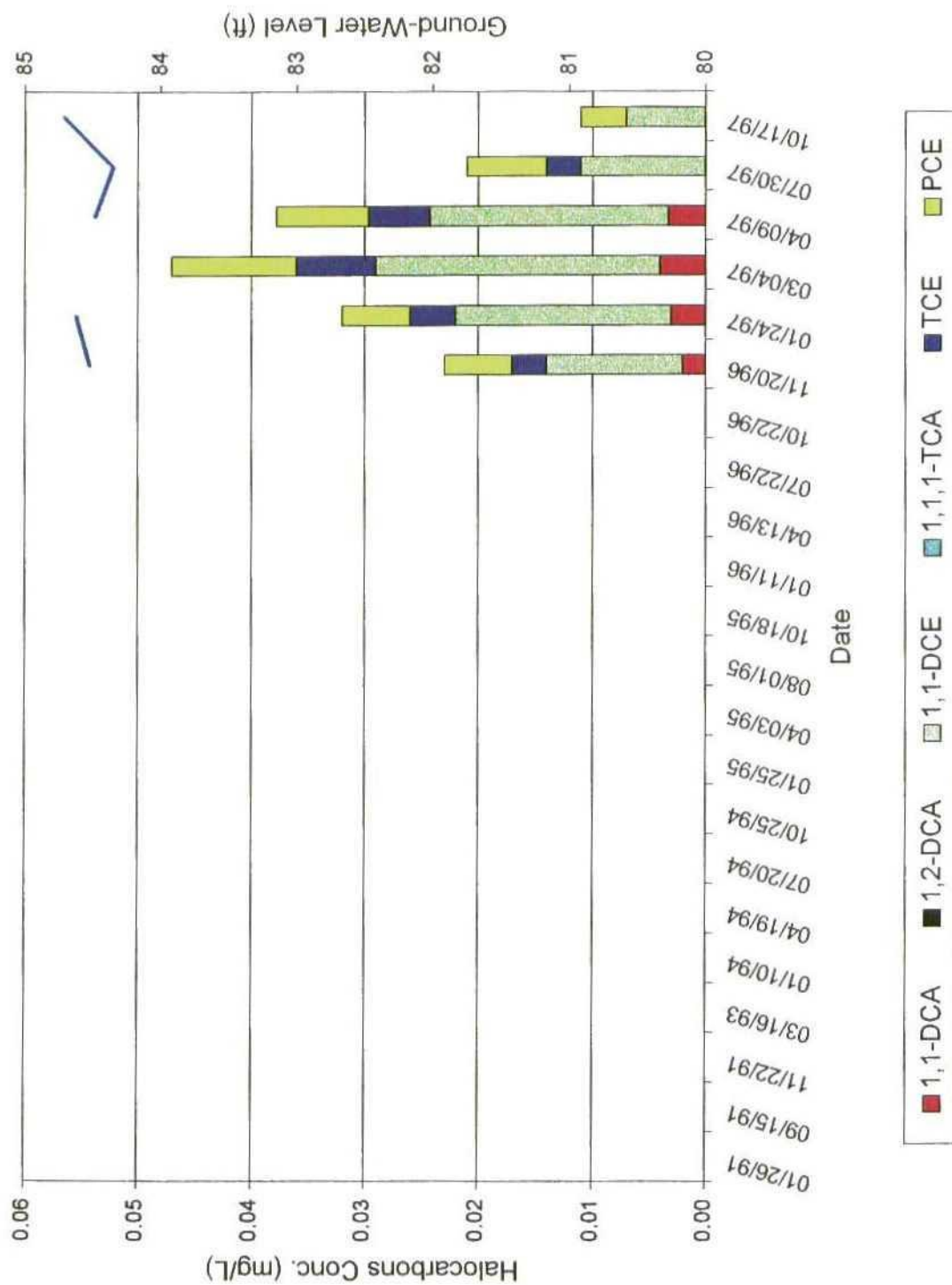
- 1,1-DCA:** Red bars
- 1,2-DCA:** Black bars
- 1,1,1-DCE:** White bars
- 1,1,1-TCA:** Light blue bars
- TCE:** Dark blue bars
- PCE:** Yellow bars
- Ground-Water Level (ft):** Blue line

The X-axis represents the Date, ranging from 01/26/91 to 10/17/97. The left Y-axis represents Halocarbons Conc. (mg/L), ranging from 0.00 to 0.35. The right Y-axis represents Ground-Water Level (ft), ranging from 80 to 87.

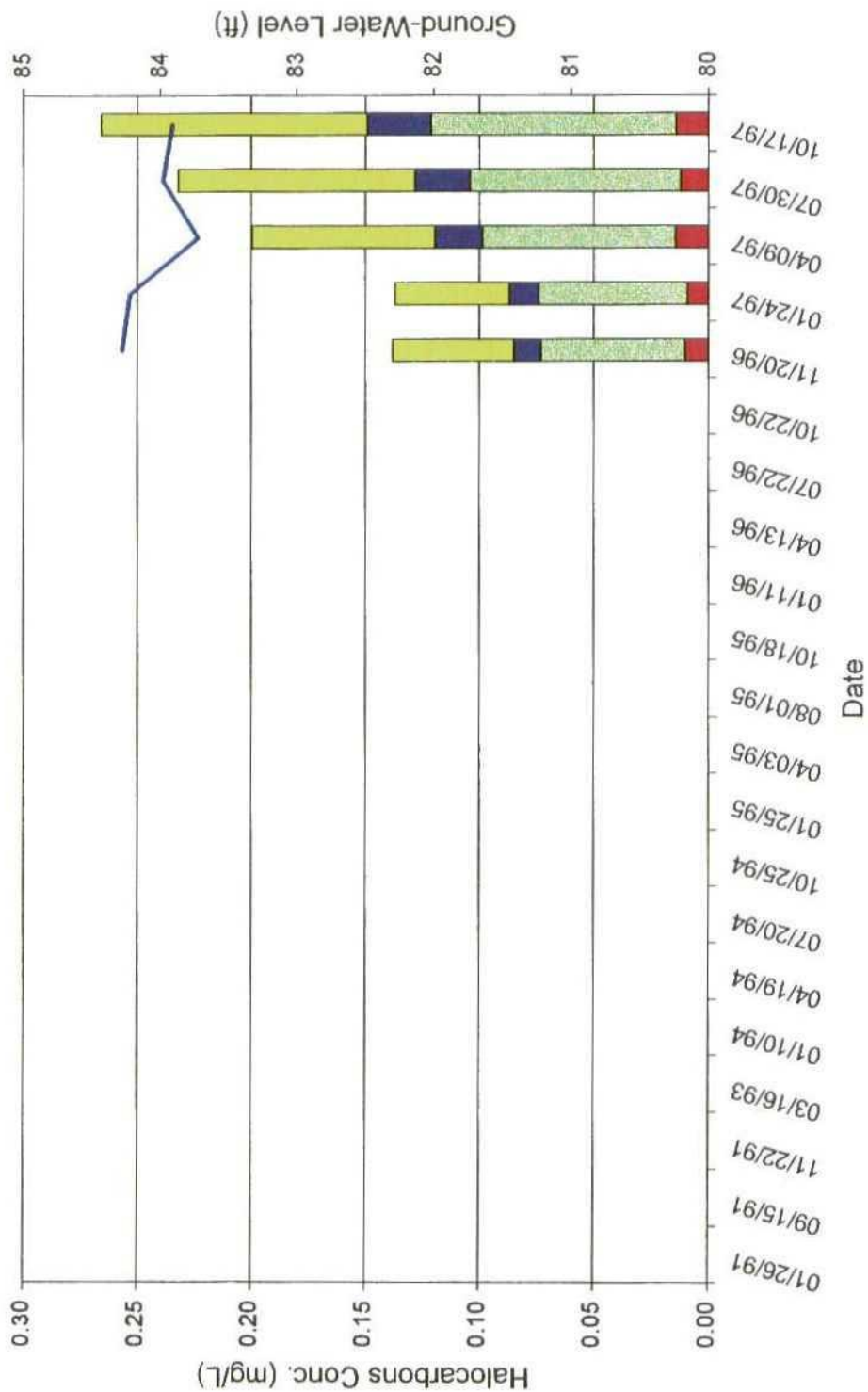
Monitoring Well MW-20

Halocarbons & Ground-Water Level



[illegible]

Monitoring Well MW-22 Halocarbons & Ground-Water Level



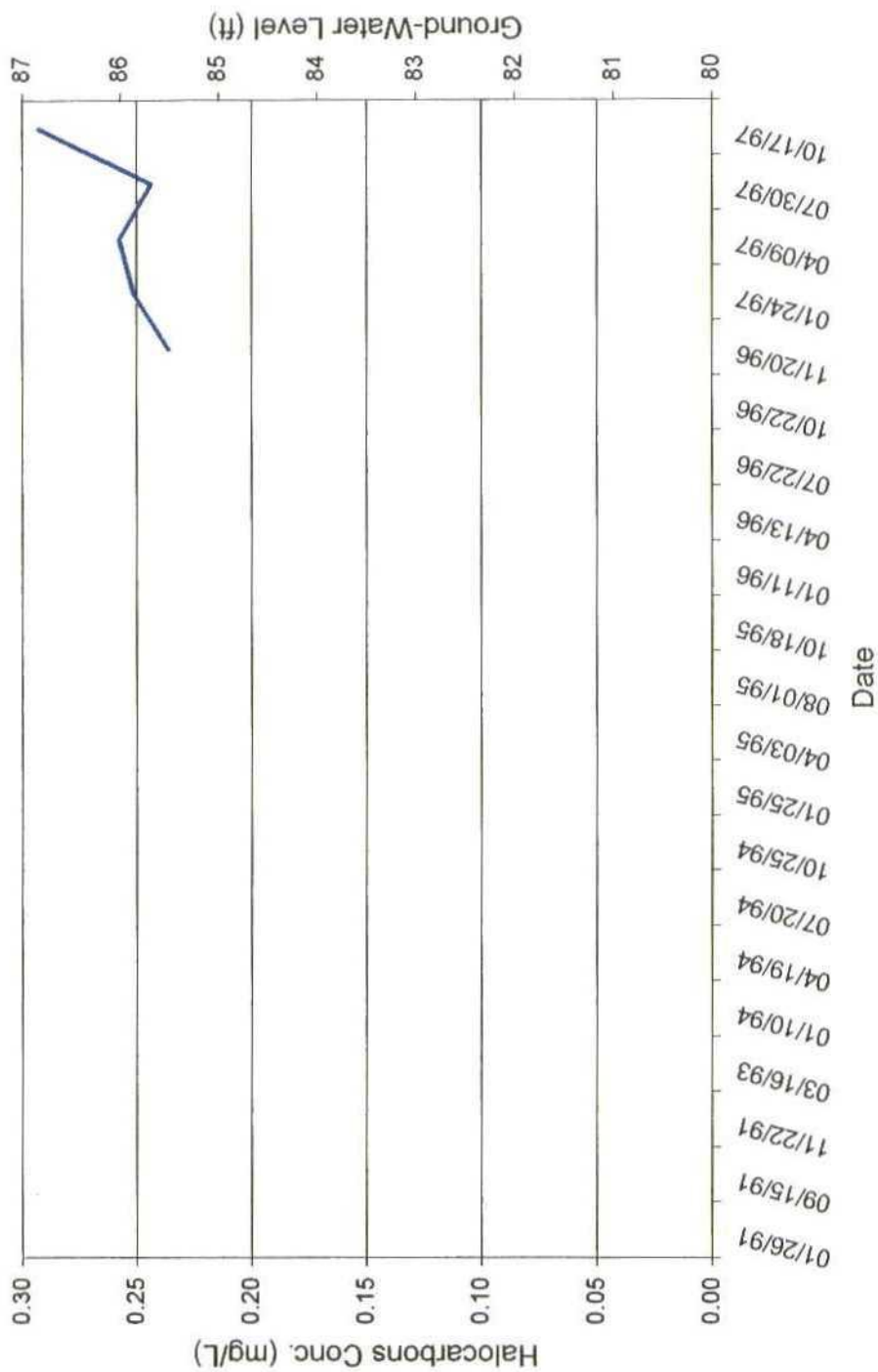
The graph displays two data series over time from 01/26/91 to 10/17/97. The left y-axis represents Halocarbons Concentration in mg/L, ranging from 0.00 to 0.30. The right y-axis represents Ground-Water Level in feet, ranging from 80 to 85. The Halocarbons concentration (blue line) is mostly near zero, with a significant spike to about 0.27 mg/L in late 1996. The Ground-Water Level (black line) fluctuates between approximately 83.5 and 84.5 feet.

Date	Halocarbons Conc. (mg/L)	Ground-Water Level (ft)
01/26/91	0.00	83.5
09/15/91	0.00	83.5
11/22/91	0.00	83.5
03/16/93	0.00	83.5
01/10/94	0.00	83.5
04/19/94	0.00	83.5
07/20/94	0.00	83.5
10/25/94	0.00	83.5
01/25/95	0.00	83.5
04/03/95	0.00	83.5
08/01/95	0.00	83.5
10/18/95	0.00	83.5
01/11/96	0.00	83.5
04/13/96	0.00	83.5
07/22/96	0.00	83.5
10/22/96	0.00	83.5
11/20/96	0.00	83.5
01/24/97	0.00	83.5
03/04/97	0.00	83.5
04/09/97	0.00	83.5
07/30/97	0.00	83.5
10/17/97	0.00	83.5



Monitoring Well MW-24

Halocarbons & Ground-Water Level



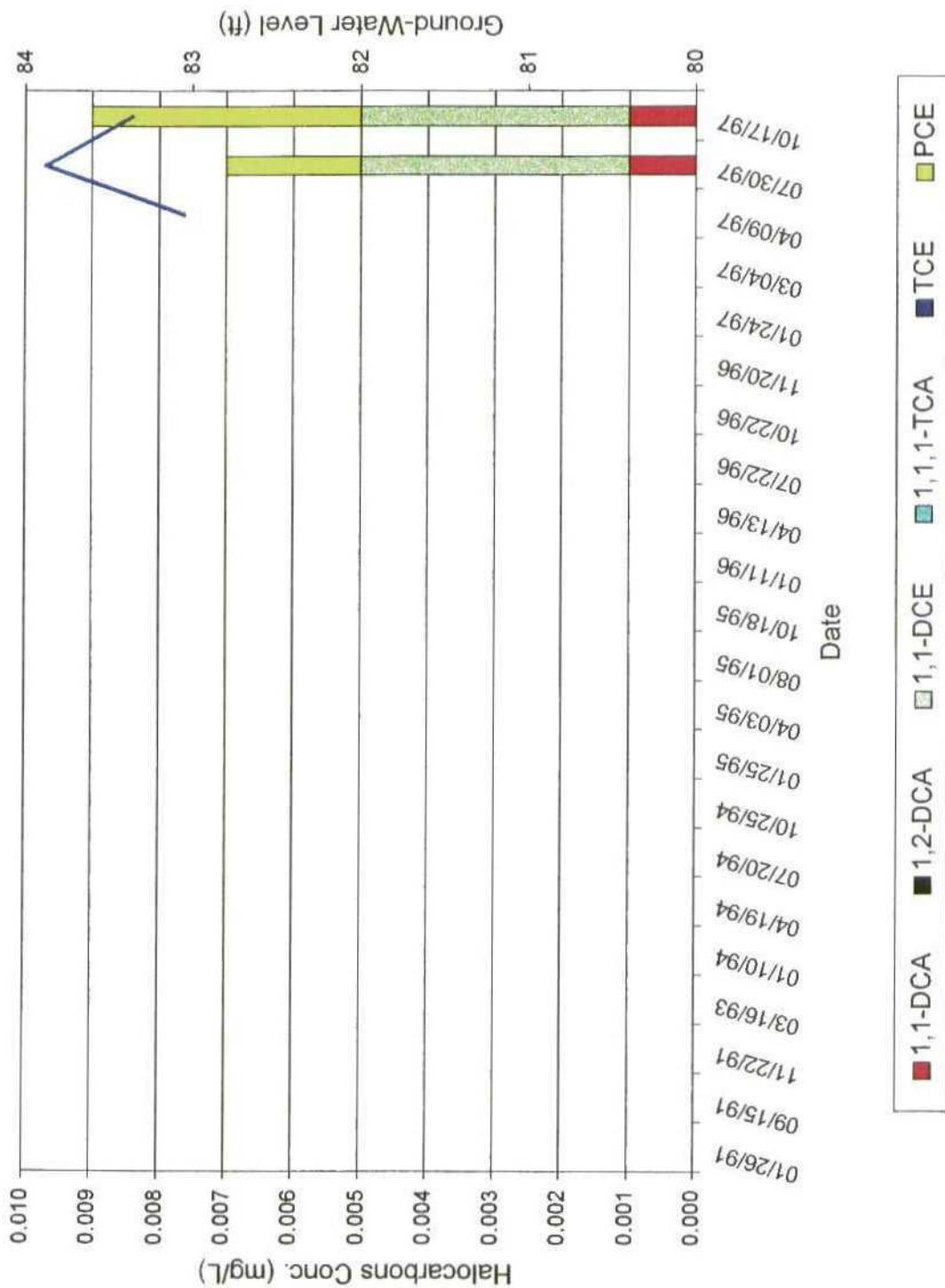
The chart displays the following data series:

- Halocarbons Conc. (mg/L):** Stacked bar chart showing concentrations of 1,1-DCA, 1,2-DCA, 1,1,1-DCE, 1,1,1-TCA, TCE, and PCE.
- Ground-Water Level (ft):** Line graph showing the water level over time, with a blue line and a downward-pointing arrow indicating the measurement direction.

The legend identifies the halocarbons by color:

- 1,1-DCA (Red)
- 1,2-DCA (Black)
- 1,1,1-DCE (White)
- 1,1,1-TCA (Green)
- TCE (Blue)
- PCE (Yellow)

Monitoring Well MW-26 Halocarbons & Ground-Water Level



Monitoring Well MW-27

Halocarbons & Ground-Water Level

