

**GW - 52**

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# **MONITORING REPORTS**

**DATE:**  
**2000**

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# **Annual Report of Groundwater Remediation Activities**

**Transwestern Pipeline Company  
Roswell Compressor Station  
Chaves County, New Mexico**

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**ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION**

**Submitted to:  
New Mexico Oil Conservation Division**

**February 20, 2001**

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## TABLE OF CONTENTS

Section	Page
1. Additional Assessment Activities.....	1
1.1 Installation of Additional Monitor Wells.....	1
2. Groundwater Monitoring Activities .....	1
2.1 Semiannual Groundwater Sampling Events .....	1
2.2 Results/Conclusions from Groundwater Sampling Events .....	2
2.2.1 Occurrence and Direction of Groundwater Flow .....	2
2.2.2 Lateral Extent of Phase Separated Hydrocarbon.....	2
2.2.3 Condition of Affected Groundwater.....	2
3. Status of Remediation Activities .....	2
3.1 Remediation Activities Completed through January 2001 .....	2
3.2 Current Status of Remediation Activities .....	2
3.3 Remediation Activities Planned for 2001 .....	3
4. Proposed Modifications .....	3
4.1 Proposed Modifications to the Routine Groundwater Sampling Plan .....	3
4.2 Proposed Modifications to the Remediation System .....	3
4.2.1 Physical Modifications to the System .....	3
4.2.2 Operational Modifications to the System.....	3
4.3 Proposed Reporting Frequency .....	3
5. Progress Toward Project Completion.....	3

## **LIST OF FIGURES**

### **Figure**

- 1** Monitor Well and Soil Boring Locations
- 2** Potentiometric Surface Elevations in the Uppermost Aquifer - November 19, 2000
- 3** Distribution of Dissolved Phase Organics in the Uppermost Aquifer - November, 2000
- 4** Locations of Proposed Monitor Wells in the Uppermost Aquifer

## **LIST OF TABLES**

### **Table**

- 1** Summary of Groundwater Surface Elevations
- 2** Summary of Field Measured Parameters
- 3** Summary of Groundwater Analyses – Organics
- 4** Summary of Groundwater Analyses – Inorganics
- 5** Summary of Completion Details for Soil Borings Completed as Wells
- 6** Monitor Well Sampling Locations, Frequency, and Sample Analysis Plan
- 7** Summary of Analytical Results for Phase V Assessment Soil Samples

## **LIST OF ATTACHMENTS**

- 1** Soil Boring Logs and State Well Completion Reports
- 2** Laboratory Reports

## **1. Additional Assessment Activities**

### **1.1 Installation of Additional Monitor Wells**

Three additional monitor wells were installed on November 14-18, 2000. The locations of the new wells are indicated in Figure 1 as wells MW-28, MW-29, and MW-30. A copy of the soil boring logs and State well completion reports are included in Attachment #1. A summary of well completion details is presented in Table 5. These wells were installed in order to delineate the lateral extent of affected groundwater within the uppermost aquifer.

One soil sample was collected from each boring at a depth just above the anticipated depth to groundwater. Soil samples were submitted to a laboratory for analysis for VOCs, SVOCs, TPH, and selected metals. Laboratory results indicate that the soil samples were unaffected by hydrocarbons. A summary of laboratory results for the soil samples is presented in Table 7. A copy of the laboratory report is included in an attachment to this report.

Groundwater samples were collected from the new wells subsequent to installation. Laboratory analytical results indicate affected groundwater at one of the three well locations. The results for groundwater sampling activities are discussed further in the next section of this report.

## **2. Groundwater Monitoring Activities**

### **2.1 Semianual Groundwater Sampling Events**

Three sampling events have been completed since the last report of groundwater remediation activities. These events were completed on September 8, 1999, March 29, 2000, and November 18, 2000.

Prior to sampling, the depth to water, and the depth to hydrocarbon where phase separated hydrocarbon (PSH) was present, was determined for each monitor well and recovery well. The measured depths and the corresponding water table elevation for each monitor well and recovery well are presented in Table 1.

In the course of each sample event, groundwater samples were collected from monitor wells in accordance with the sample analysis plan presented in the last annual report. As a matter of standard operating procedure, samples were not collected from monitor wells with PSH accumulated in the well casing. Groundwater samples were delivered to a laboratory for analysis in accordance with the sample analysis plan. A summary of field measured groundwater quality parameters obtained in the course of sampling is presented in Table 2. An updated summary of analytical results for organic compounds is presented in Table 3. An updated summary of analytical results for inorganic constituents is presented in Table 4.

Copies of the laboratory reports for the three semiannual groundwater sampling events are included in an attachment to this report.

## **2.2 Results/Conclusions from Groundwater Sampling Events**

### ***2.2.1 Occurrence and Direction of Groundwater Flow***

A water table elevation map based on measurements obtained on November 19, 2000 is included as Figure 2. The information presented in Figure 2 appears to define a complex groundwater system with some areas of low flow and other areas of preferential flow. However, the apparent direction of groundwater flow is consistent with water table elevation maps previously developed for this site and is also consistent with the distribution of contaminants in the uppermost aquifer.

### ***2.2.2 Lateral Extent of Phase Separated Hydrocarbon***

The lateral extent of PSH is currently defined by the occurrence of PSH at the water table in wells MW-1B, MW-2, MW-16, and MW-27, and the absence of PSH in all other wells. The thickness of accumulated PSH in wells is presented in Table 1.

### ***2.2.3 Condition of Affected Groundwater***

The primary constituent of concern is benzene. Additional constituents of concern are 111-trichloroethane, 11-dichloroethane, and 11-dichloroethene. A diagram indicating the distribution of these constituents in groundwater is included as Figure 3. Only two organic constituents, benzene and 11-dichloroethene, have been measured at concentrations above NMWQCC standards. A sufficient history of constituent concentrations has yet to be developed in order to evaluate natural attenuation processes.

## **3. Status of Remediation Activities**

### **3.1 Remediation Activities Completed through January 2001**

The following remediation activities were completed between June 1999 and January 2001:

- 1) Three additional monitor wells were installed in November 2000. There are currently a total of 30 wells at the site: 6 on-site monitor wells; 3 on-site recovery wells; 18 off-site monitor wells; and 3 off-site deep monitor wells.
- 2) The recovery system was operated almost continuously during the reporting period until the system was shutdown on September 8, 2000. The system was shut down due to problems with the skimmer pumps used to recover PSH. New pumps were purchased to replace the old pumps, however, installation was put on hold after discovering that only one of the three recovery wells would accumulate any significant amount of PSH.
- 3) Three semiannual groundwater sampling events have been completed.

### **3.2 Current Status of Remediation Activities**

The recovery system is currently shut down pending installation of a full scale remediation system.

### **3.3 Remediation Activities Planned for 2001**

At least three additional monitor wells will be installed in order to delineate the lateral extent of affected groundwater within the uppermost aquifer. A full scale remediation system is anticipated to be in operation by year-end 2001. In addition, the groundwater sampling program will be continued.

## **4. Proposed Modifications**

### **4.1 Proposed Modifications to the Routine Groundwater Sampling Plan**

Sampling locations, frequency, and the sample analysis plan will continue as outlined in Table 6.

### **4.2 Proposed Modifications to the Remediation System**

#### ***4.2.1 Physical Modifications to the System***

There are no proposed physical modifications to the recovery system at this time.

#### ***4.2.2 Operational Modifications to the System***

There are no proposed operational modifications to the recovery system at this time.

### **4.3 Proposed Reporting Frequency**

Annual reporting will continue with the next scheduled report submitted to the NMOCD by February 28, 2002.

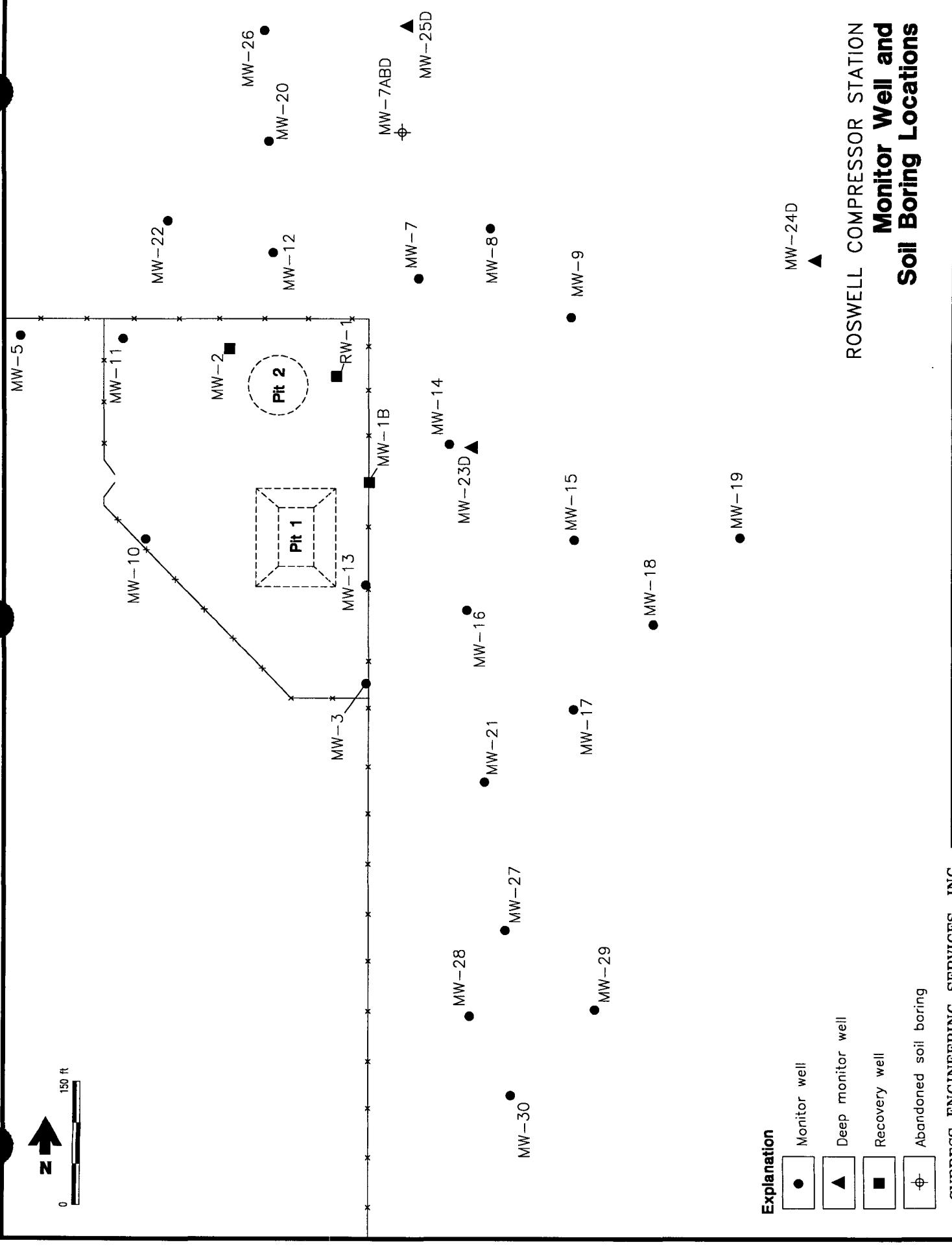
## **5. Progress Toward Project Completion**

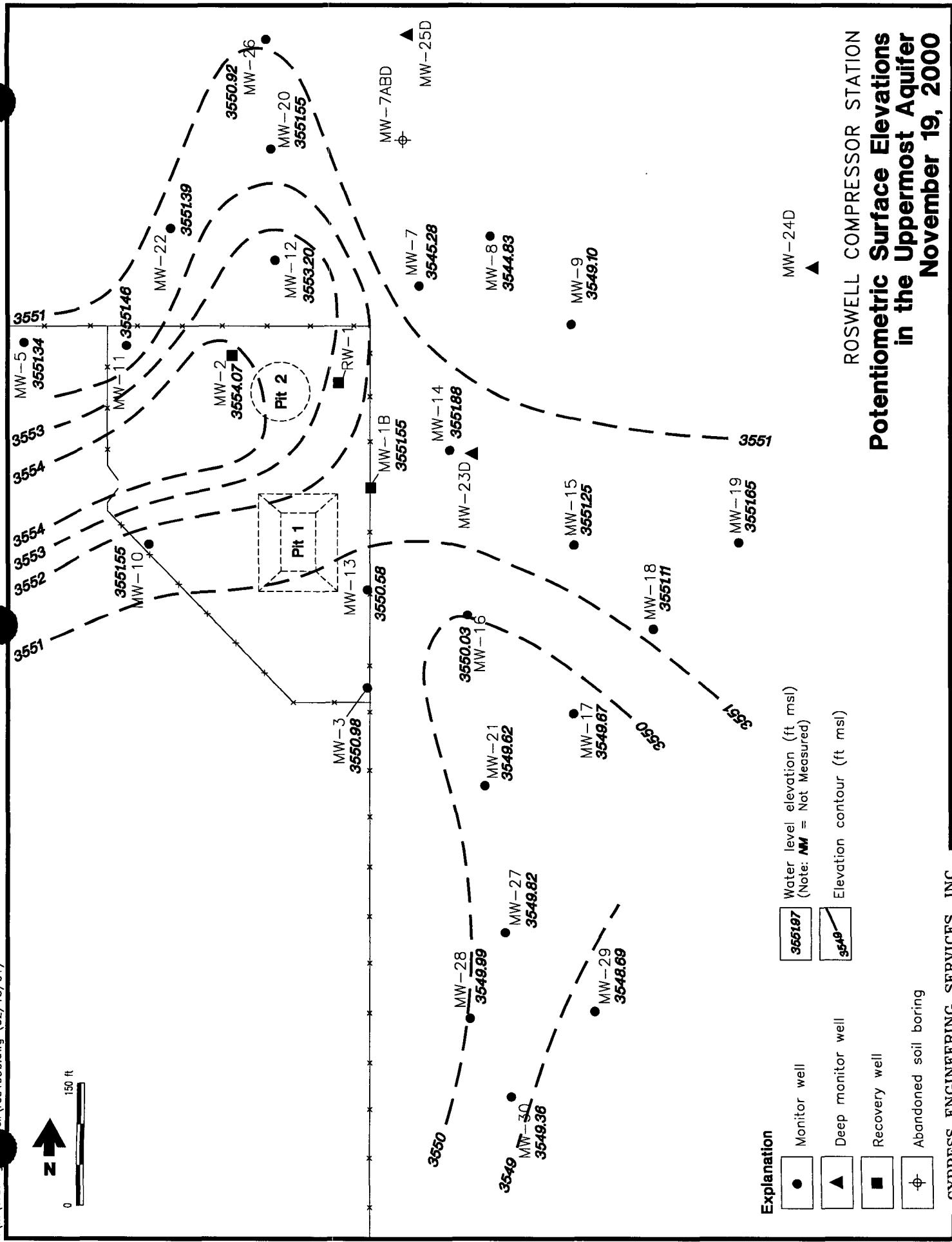
Active operation of the recovery system has been discontinued pending installation of a full scale remediation system. This is anticipated to be accomplished within the next twelve months.

**Annual Report of Groundwater Remediation Activities**

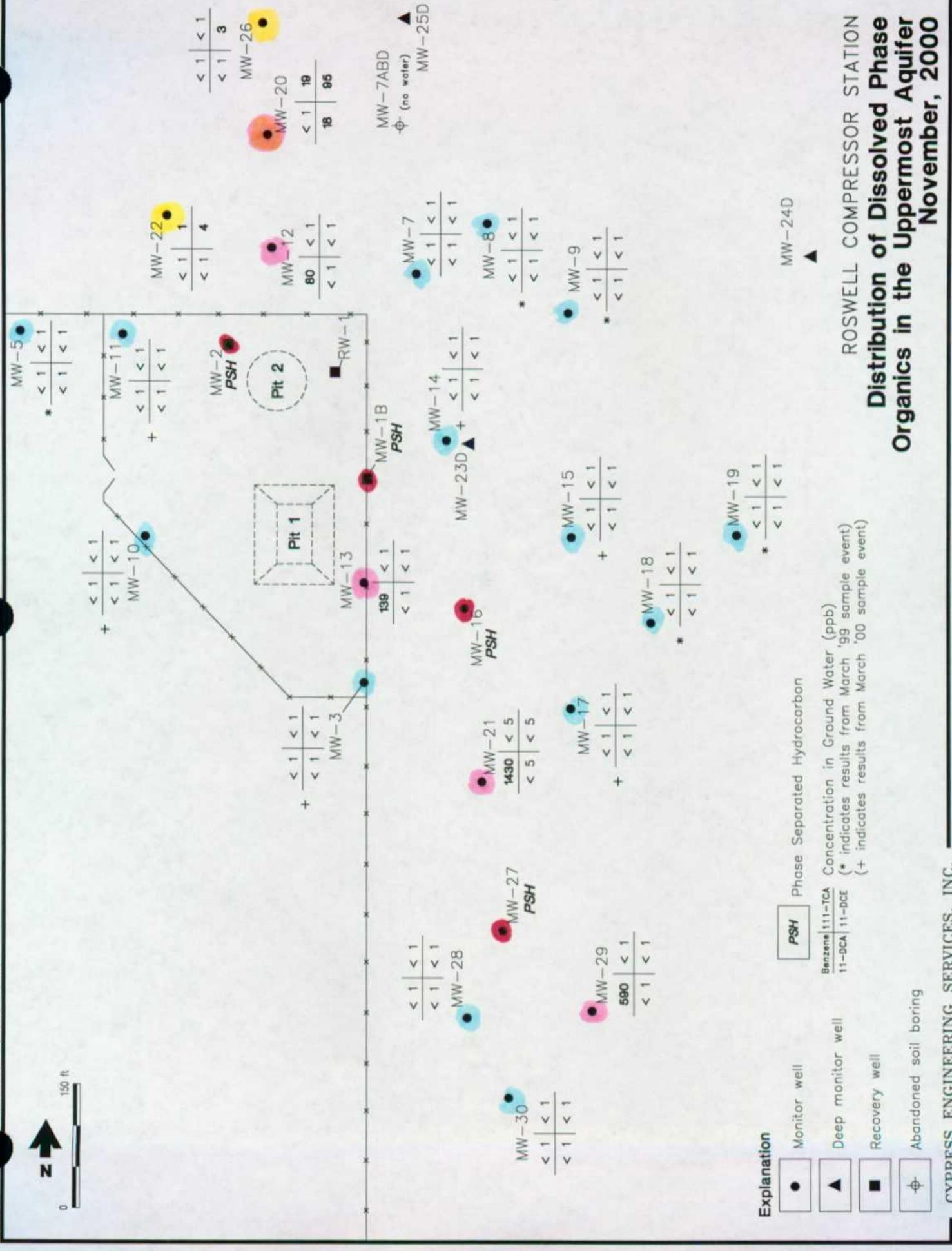
**Transwestern Pipeline Company  
Roswell Compressor Station**

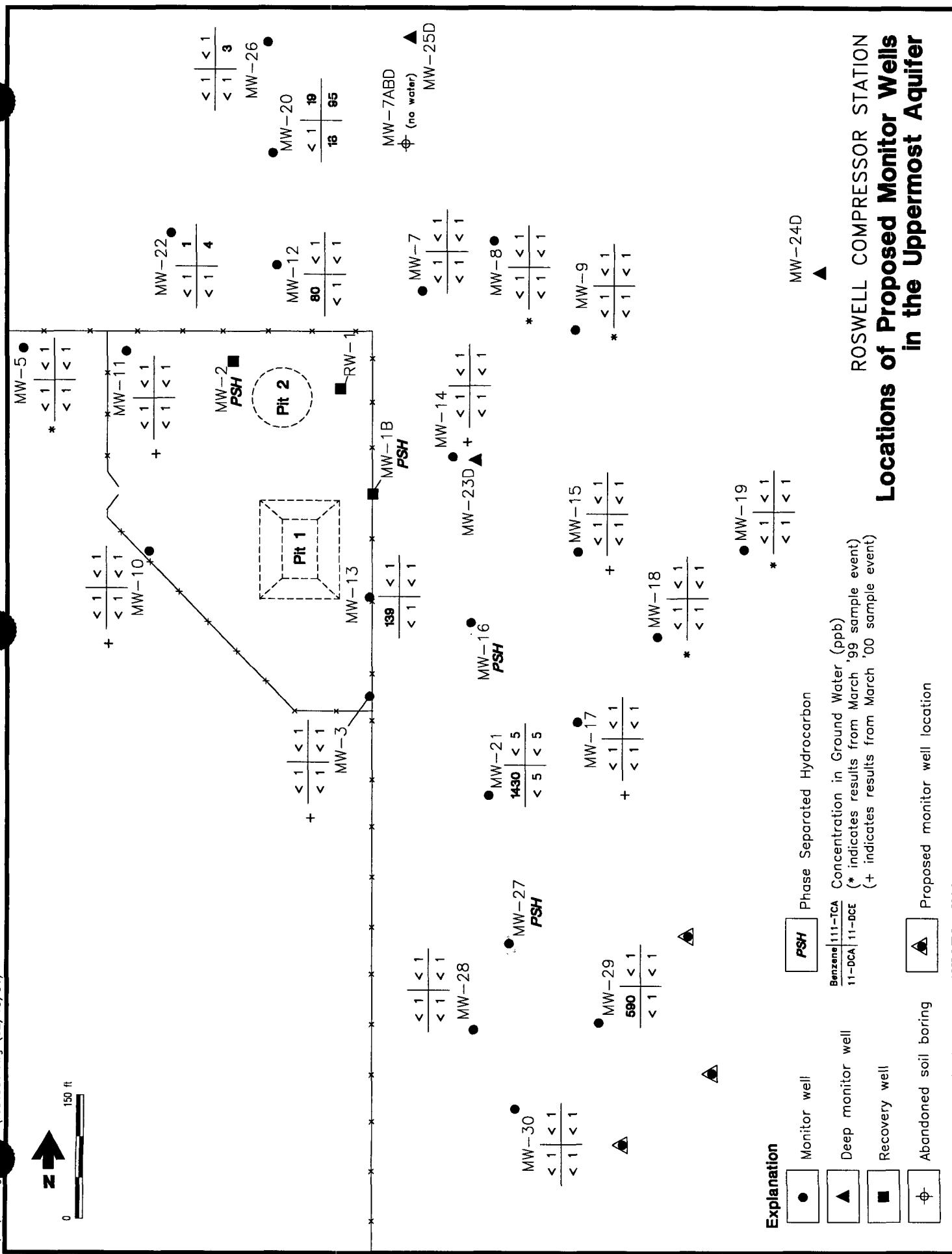
**Figures**





**Figure 2**





**Figure 4**

**Annual Report of Groundwater Remediation Activities**

**Transwestern Pipeline Company  
Roswell Compressor Station**

**Tables**

**Table 1. Summary of Ground Water Surface Elevations  
Compressor Station No. 9 - Roswell, NM**

Well ID	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-1 B	09/27/96	3609.96	-	61.60	2.33	3550.13
	10/31/97		58.37	59.76	1.39	3551.26
	01/26/98		58.20	60.80	2.60	3551.14
	05/25/98		58.28	60.38	2.10	3551.18
	08/10/98		58.64	59.05	0.41	3551.22
	10/11/98		58.20	61.20	3.00	3551.04
	03/21/99		60.45	60.46	0.01	3549.51
	09/07/99		(a)	60.15	(a)	3549.81
	11/19/00		57.87	60.13	2.26	3551.55
MW-2	09/27/96	3611.76	-	62.00	2.33	3551.53
	10/31/97		58.36	59.60	1.24	3553.10
	01/26/98		58.20	59.85	1.65	3553.16
	05/25/98		58.42	58.79	0.37	3553.25
	08/10/98		58.25	58.55	0.30	3553.44
	10/11/98		58.20	59.70	1.50	3553.20
	03/21/99		58.35	58.37	0.02	3553.41
	09/07/99		61.25	61.27	0.02	3550.51
	11/19/00		57.67	57.74	0.07	3554.07
MW-3	09/27/96	3614.87	(a)	64.79	(a)	3550.08
	07/23/97		(a)	64.19	(a)	3550.68
	08/19/97		(a)	64.36	(a)	3550.51
	10/30/97		(a)	64.22	(a)	3550.65
	01/26/98		(a)	64.34	(a)	3550.53
	05/25/98		(a)	64.20	(a)	3550.67
	08/10/98		(a)	64.06	(a)	3550.81
	10/11/98		(a)	64.23	(a)	3550.64
	12/21/98		(a)	64.25	(a)	3550.62
	03/23/99		(a)	64.24	(a)	3550.63
	09/07/99		(a)	63.99	(a)	3550.88
	03/27/00		(a)	63.85	(a)	3551.02
	11/19/00		(a)	63.85	(a)	3551.02
MW-5	09/27/96	3612.77	(a)	62.32	(a)	3550.45
	07/23/97		(a)	61.95	(a)	3550.82
	08/19/97		(a)	62.05	(a)	3550.72
	10/30/97		(a)	61.98	(a)	3550.79
	01/26/98		(a)	61.90 <sup>7</sup> Top of Pump	(a)	NA
	05/25/98		(a)	61.97	(a)	3550.80
	08/10/98		(a)	61.81	(a)	3550.96
	10/11/98		(a)	61.85	(a)	3550.92
	12/21/98		(a)	61.89	(a)	3550.88
	03/23/99		(a)	61.80	(a)	3550.97
	09/07/99		(a)	61.59	(a)	3551.18
	03/27/00		(a)	61.45	(a)	3551.32
	11/19/00		(a)	61.43	(a)	3551.34

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Compressor Station No. 9 - Roswell, NM**

Well ID	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-6	09/27/96	3618.62	(a)	61.85	(a)	3556.77
	07/23/97		(a)	61.81	(a)	3556.81
	08/19/97		(a)	61.73	(a)	3556.89
	10/30/97		(a)	61.62	(a)	3557.00
	01/26/98		(a)	61.64	(a)	3556.98
	05/25/98		(a)	61.63	(a)	3556.99
	08/10/98		(a)	61.70	(a)	3556.92
	10/11/98		(a)	61.72	(a)	3556.90
	12/21/98		(a)	61.74	(a)	3556.88
	03/23/99		(a)	61.78	(a)	3556.84
	09/07/99		(a)	61.65	(a)	3556.97
	03/27/00		(a)	61.13	(a)	3557.49
	11/19/00		(a)	61.11	(a)	3557.51
MW-7	09/27/96	3599.20	(a)	54.74	(a)	3544.46
	07/23/97		(a)	52.89	(a)	3546.31
	08/19/97		(a)	53.57	(a)	3545.63
	10/30/97		(a)	53.00	(a)	3546.20
	01/26/98		(a)	51.45	(a)	3547.75
	05/25/98		(a)	51.76	(a)	3547.44
	08/10/98		(a)	54.11	(a)	3545.09
	10/11/98		(a)	54.35	(a)	3544.85
	12/21/98		(a)	52.69	(a)	3546.51
	03/23/99		(a)	51.24	(a)	3547.96
	09/07/99		(a)	52.33	(a)	3546.87
	03/27/00		(a)	50.63	(a)	3548.57
	11/19/00		(a)	53.92	(a)	3545.28
MW-8	09/27/96	3595.80	(a)	51.98	(a)	3543.82
	07/23/97		(a)	50.14	(a)	3545.66
	08/19/97		(a)	50.92	(a)	3544.88
	10/30/97		(a)	50.18	(a)	3545.62
	01/26/98		(a)	48.52	(a)	3547.28
	05/25/98		(a)	49.02	(a)	3546.78
	08/10/98		(a)	51.40	(a)	3544.40
	10/11/98		(a)	51.60	(a)	3544.20
	12/21/98		(a)	49.84	(a)	3545.96
	03/23/99		(a)	48.30	(a)	3547.50
	09/07/99		(a)	49.42	(a)	3546.38
	03/27/00		(a)	47.63	(a)	3548.17
	11/19/00		(a)	50.97	(a)	3544.83

**Table 1. Summary of Ground Water Surface Elevations  
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Well ID	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-9	09/27/96	3599.35	(a)	50.27	(a)	3549.08
	07/23/97		(a)	50.07	(a)	3549.28
	08/19/97		(a)	50.09	(a)	3549.26
	10/30/97		(a)	50.18	(a)	3549.17
	01/26/98		(a)	50.10	(a)	3549.25
	05/25/98		(a)	50.13	(a)	3549.22
	08/10/98		(a)	50.18	(a)	3549.17
	10/11/98		(a)	50.20	(a)	3549.15
	12/21/98		(a)	50.26	(a)	3549.09
	03/23/99		(a)	50.19	(a)	3549.16
	09/07/99		(a)	50.17	(a)	3549.18
	03/27/00		(a)	50.17	(a)	3549.18
	11/19/00		(a)	50.25	(a)	3549.10
MW-10	09/27/96	3617.85	(a)	67.21	(a)	3550.64
	07/23/97		(a)	66.83	(a)	3551.02
	08/19/97		(a)	66.93	(a)	3550.92
	10/30/97		(a)	66.83	(a)	3551.02
	01/26/98		(a)	66.58 Top of Pump	(a)	NA
	05/25/98		(a)	66.91	(a)	3550.94
	08/10/98		(a)	66.65	(a)	3551.20
	10/11/98		(a)	66.59 Top of Pump	(a)	NA
	12/21/98		(a)	66.79	(a)	3551.06
	03/23/99		(a)	66.72	(a)	3551.13
	09/07/99		(a)	66.49	(a)	3551.36
	03/27/00		(a)	66.34	(a)	3551.51
	11/19/00		(a)	66.30	(a)	3551.55
MW-11	09/27/96	3613.31	(a)	62.90	(a)	3550.41
	07/23/97		(a)	62.44	(a)	3550.87
	08/19/97		(a)	62.53	(a)	3550.78
	10/30/97		(a)	62.40	(a)	3550.91
	01/26/98		(a)	62.20 Top of Pump	(a)	NA
	05/25/98		(a)	62.22	(a)	3551.09
	08/10/98		(a)	62.18	(a)	3551.13
	10/11/98		(a)	62.21 Top of Pump	(a)	NA
	12/21/98		(a)	62.42	(a)	3550.89
	03/23/99		(a)	62.26	(a)	3551.05
	09/07/99		(a)	62.01	(a)	3551.30
	03/27/00		(a)	61.77	(a)	3551.54
	11/19/00		(a)	61.85	(a)	3551.46

**Table 1. Summary of Ground Water Surface Elevations  
Compressor Station No. 9 - Roswell, NM**

Well ID	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-12	09/27/96	3606.38	(a)	55.58	(a)	3550.80
	07/23/97		(a)	53.99	(a)	3552.39
	08/19/97		(a)	53.96	(a)	3552.42
	10/30/97		(a)	53.61	(a)	3552.77
	01/26/98		(a)	53.55	(a)	3552.83
	05/25/98		(a)	53.36	(a)	3553.02
	08/10/98		(a)	53.30	(a)	3553.08
	10/11/98		(a)	53.55	(a)	3552.83
	12/21/98		(a)	53.65	(a)	3552.73
	03/23/99		(a)	53.50	(a)	3552.88
	09/07/99		(a)	52.79	(a)	3553.59
	03/27/00		(a)	52.46	(a)	3553.92
	11/19/00		(a)	53.18	(a)	3553.20
MW-13	09/27/96	3612.46	(a)	62.30	(a)	3550.16
	07/23/97		(a)	61.85	(a)	3550.61
	08/19/97		(a)	61.95	(a)	3550.51
	10/30/97		(a)	61.68	(a)	3550.78
	01/26/98		(a)	61.90	(a)	3550.56
	05/25/98		(a)	61.79	(a)	3550.67
	08/10/98		(a)	61.78	(a)	3550.68
	10/11/98		(a)	61.88	(a)	3550.58
	12/21/98		(a)	61.71	(a)	3550.75
	03/23/99		(a)	61.83	(a)	3550.63
	09/07/99		(a)	61.64	(a)	3550.82
	03/27/00		(a)	61.33	(a)	3551.13
	11/19/00		(a)	61.48	(a)	3550.98
MW-14	09/27/96	3604.83	(a)	53.38	(a)	3551.45
	07/23/97		(a)	53.33	(a)	3551.50
	08/19/97		(a)	53.06	(a)	3551.77
	10/30/97		(a)	53.20	(a)	3551.63
	01/26/98		(a)	53.41	(a)	3551.42
	05/25/98		(a)	53.40	(a)	3551.43
	08/10/98		(a)	53.43	(a)	3551.40
	10/11/98		(a)	53.56	(a)	3551.27
	12/21/98		(a)	53.53	(a)	3551.30
	03/23/99		(a)	53.55	(a)	3551.28
	09/07/99		(a)	53.41	(a)	3551.42
	03/27/00		(a)	53.05	(a)	3551.78
	11/19/00		(a)	52.95	(a)	3551.88

**Table 1. Summary of Ground Water Surface Elevations  
Compressor Station No. 9 - Roswell, NM**

Well ID	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-15	09/27/96	3610.43	(a)	58.77	(a)	3551.66
	07/23/97		(a)	58.75	(a)	3551.68
	08/19/97		(a)	58.84	(a)	3551.59
	10/30/97		(a)	58.83	(a)	3551.60
	01/26/98		(a)	58.97	(a)	3551.46
	05/25/98		(a)	58.96	(a)	3551.47
	08/10/98		(a)	58.92	(a)	3551.51
	10/11/98		(a)	59.02	(a)	3551.41
	12/21/98		(a)	59.04	(a)	3551.39
	03/23/99		(a)	59.09	(a)	3551.34
	09/07/99		(a)	58.98	(a)	3551.45
	03/27/00		(a)	59.03	(a)	3551.40
	11/19/00		(a)	59.18	(a)	3551.25
MW-16	09/27/96	3612.41	-	67.16	4.01	3548.30
	07/23/97		-	66.46	4.87	3549.65
	08/19/97		-	66.54	4.89	3549.59
	10/31/97		61.58	66.32	4.74	3549.69
	01/26/98		61.55	66.12	4.57	3549.76
	05/25/98		61.56	66.09	4.53	3549.76
	08/10/98		61.49	66.31	4.82	3549.76
	10/11/98		61.59	66.38	4.79	3549.67
	12/21/98		61.59	66.17	4.58	3549.72
	03/23/99		61.42	65.97	4.55	3549.90
	09/07/99		61.40	66.14	4.74	3549.87
	03/27/00		61.14	65.71	4.57	3550.17
	11/19/00		61.30	65.79	4.49	3550.03
MW-17	09/27/96	3608.48	(a)	59.30	(a)	3549.18
	07/23/97		(a)	58.79	(a)	3549.69
	08/19/97		(a)	58.94	(a)	3549.54
	10/30/97		(a)	58.85	(a)	3549.63
	01/26/98		(a)	58.90	(a)	3549.58
	05/25/98		(a)	58.83	(a)	3549.65
	08/10/98		(a)	58.78	(a)	3549.70
	10/11/98		(a)	58.93	(a)	3549.55
	12/21/98		(a)	58.97	(a)	3549.51
	03/23/99		(a)	58.87	(a)	3549.61
	09/07/99		(a)	58.72	(a)	3549.76
	03/27/00		(a)	58.56	(a)	3549.92
	11/19/00	3608.43 (d)	(a)	58.76	(a)	3549.67

**Table 1. Summary of Ground Water Surface Elevations  
Compressor Station No. 9 - Roswell, NM**

Well ID	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-18	09/27/96	3609.73	(a)	dry	(a)	NA
	07/23/97		(a)	58.29	(a)	3551.44
	08/19/97		(a)	64.81	(a)	still recovering
	10/30/97		(a)	58.61	(a)	3551.12
	01/26/98		(a)	58.60	(a)	3551.13
	05/25/98		(a)	58.51	(a)	3551.22
	08/10/98		(a)	58.74	(a)	3550.99
	10/11/98		(a)	59.02	(a)	3550.71
	12/21/98		(a)	58.53	(a)	3551.20
	03/23/99		(a)	58.70	(a)	3551.03
	09/07/99		(a)	58.48	(a)	3551.25
	03/27/00		(a)	58.51	(a)	3551.22
	11/19/00		(a)	58.62	(a)	3551.11
MW-19	09/27/96	3608.17	(a)	57.95	(a)	3550.22
	07/23/97		(a)	56.03	(a)	3552.14
	08/19/97		(a)	56.20	(a)	3551.97
	10/30/97		(a)	56.17	(a)	3552.00
	01/26/98		(a)	56.28	(a)	3551.89
	05/25/98		(a)	56.29	(a)	3551.88
	08/10/98		(a)	56.38	(a)	3551.79
	10/11/98		(a)	56.39	(a)	3551.78
	12/21/98		(a)	56.41	(a)	3551.76
	03/23/99		(a)	56.41	(a)	3551.76
	09/07/99		(a)	56.35	(a)	3551.82
	03/27/00		(a)	56.37	(a)	3551.80
	11/19/00		(a)	56.52	(a)	3551.65
MW-20	08/19/97	3600.65	(a)	49.50	(a)	3551.15
	10/30/97		(a)	49.47	(a)	3551.18
	01/26/98		(a)	49.37	(a)	3551.28
	05/25/98		(a)	49.21	(a)	3551.44
	08/10/98		(a)	49.41	(a)	3551.24
	10/11/98		(a)	49.68	(a)	3550.97
	12/21/98		(a)	49.62	(a)	3551.03
	03/23/99		(a)	49.38	(a)	3551.27
	09/07/99		(a)	48.55	(a)	3552.10
	03/27/00		(a)	48.21	(a)	3552.44
	11/19/00		(a)	49.10	(a)	3551.55
MW-21	08/07/97	3612.01	(a)	63.64	(a)	3548.37
	10/30/97		(a)	62.58	(a)	3549.43
	01/26/98		(a)	62.76	(a)	3549.25
	05/25/98		(a)	62.57	(a)	3549.44
	08/10/98		(a)	62.47	(a)	3549.54
	10/11/98		(a)	62.60	(a)	3549.41
	12/21/98		(a)	62.59	(a)	3549.42
	03/23/99		(a)	62.50	(a)	3549.51
	09/07/99		(a)	62.27	(a)	3549.74
	03/27/00		(a)	62.10	(a)	3549.91
	11/19/00	3611.99 (d)	(a)	62.37	(a)	3549.62

**Table 1. Summary of Ground Water Surface Elevations  
Compressor Station No. 9 - Roswell, NM**

Well ID	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-22	08/19/97	3606.04	(a)	55.36	(a)	3550.68
	10/30/97		(a)	55.24	(a)	3550.80
	01/26/98		(a)	55.19	(a)	3550.85
	05/25/98		(a)	54.99	(a)	3551.05
	08/10/98		(a)	54.93	(a)	3551.11
	10/11/98		(a)	55.09	(a)	3550.95
	12/21/98		(a)	55.18	(a)	3550.86
	03/23/99		(a)	55.04	(a)	3551.00
	09/07/99		(a)	54.72	(a)	3551.32
	03/27/00		(a)	54.41	(a)	3551.63
	11/19/00		(a)	54.65	(a)	3551.39
MW-26	10/11/98	3597.75 (c)	(a)	47.31	(a)	3550.44
	10/29/98		(a)	47.53	(a)	3550.22
	12/21/98		(a)	47.24	(a)	3550.51
	03/23/99		(a)	46.86	(a)	3550.89
	09/07/99		(a)	46.07	(a)	3551.68
	03/27/00		(a)	45.70	(a)	3552.05
	11/19/00		(a)	46.83	(a)	3550.92
MW-27	10/11/98	3615.11 (c)	64.85	68.00	3.15	3549.50
	12/21/98		64.83	68.03	3.20	3549.51
	03/23/99		64.78	67.91	3.13	3549.58
	09/07/99		64.53	67.67	3.14	3549.83
	03/27/00		64.40	67.53	3.13	3549.96
	11/19/00	3615.11 (d)	64.59	67.51	2.92	3549.82
MW-28	11/19/00	3615.90 (d)	(a)	65.91	(a)	3549.99
MW-29	11/19/00	3613.54 (d)	(a)	64.85	(a)	3548.69
MW-30	11/19/00	3612.63 (d)	(a)	63.27	(a)	3549.36

**Table 1. Summary of Ground Water Surface Elevations  
Compressor Station No. 9 - Roswell, NM**

Well ID	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-23 D	08/19/97	3605.16	(a)	62.05	(a)	3543.11
	10/30/97		(a)	59.11	(a)	3546.05
	01/26/98		(a)	56.19	(a)	3548.97
	05/06/98		(a)	59.01	(a)	3546.22
	05/07/98		(a)	59.08	(a)	3546.15
	05/25/98		(a)	60.35	(a)	3544.88
	08/10/98		(a)	63.46	(a)	3541.77
	10/11/98		(a)	61.26	(a)	3543.74
	10/19/98		(a)	60.92	(a)	3544.08
	12/21/98		(a)	57.68	(a)	3547.32
	03/23/99		(a)	56.42	(a)	3548.58
	09/07/99		(a)	61.13	(a)	3543.87
	03/27/00		(a)	57.14	(a)	3547.86
	11/19/00		(a)	59.80	(a)	3545.20
MW-24 D	10/11/98	3595.95 (c)	(a)	52.70	(a)	3543.25
	10/19/98		(a)	52.39	(a)	3543.56
	10/29/98		(a)	51.51	(a)	3544.44
	12/21/98		(a)	49.24	(a)	3546.71
	03/23/99		(a)	47.80	(a)	3548.15
	09/07/99		(a)	52.21	(a)	3543.74
	03/27/00		(a)	48.19	(a)	3547.76
	11/19/00		(a)	51.19	(a)	3544.76
MW-25 D	10/11/98	3592.99 (c)	(a)	48.59	(a)	3544.40
	10/19/98		(a)	48.55	(a)	3544.44
	10/29/98		(a)	48.19	(a)	3544.80
	12/21/98		(a)	47.01	(a)	3545.98
	03/23/99		(a)	45.42	(a)	3547.57
	09/07/99		(a)	46.46	(a)	3546.53
	03/27/00		(a)	44.73	(a)	3548.26
	11/19/00		(a)	47.96	(a)	3545.03
Well #2	05/06/98	3615.28 (b)	(a)	65.48	(a)	3549.80
	05/07/98		(a)	65.51	(a)	3549.77
Well #5	05/06/98	3635.39 (b)	(a)	83.75	(a)	3551.64
	05/07/98		(a)	83.79	(a)	3551.60

**NOTES:**

PSH - Phase separated hydrocarbon

Corrections to ground water surface elevation for PSH is calculated assuming a specific gravity of 0.76

(NA) Information not available

(a) Not applicable since no measurable thickness of PSH is present

(b) Elevation based on survey by Wagener Engineering dated 5/6/98

(c) Elevation based on survey by Wagener Engineering dated 9/17/98

(d) Elevation based on survey by Wagener Engineering dated 11/29/00

**Table 2. Summary of Field Measured Parameters**  
**Compressor Station No. 9 - Roswell, NM**

Well ID	Date	Dissolved Oxygen (mg/L) Meter/Hach	pH	Temperature °C	Electrical Conductivity (µs/cm)	Turbidity (NTU/FTU)	Remarks
MW-3	11/03/97	4.5	7.21	19.2	3,620	1.31	Clear
	01/27/98	5.0	7.28	18.5	3,630	4.31	Clear
	05/26/98	5.6	7.18	21.4	3,980	8.04	Clear
	08/13/98	6.1	7.19	22.2	3,930	5.06	Clear
	12/24/98	4.9	7.26	16.5	3,940	5.34	Clear
	03/24/99	--/6.0	7.13	19.7	3,980	7.34	Clear
	09/07/99	9.0/7.0	7.17	20.6	3,800	--	Clear
	03/27/00	6.8	7.30	19.0	3,930	--	Clear
MW-5	10/31/97	7.0	7.12	19.9	4,020	--	Clear
	01/27/98	7.8	7.38	17.7	1,980	7.82	Clear
	05/26/98	10.0	7.13	24.4	4,100	6.80	Clear
	08/11/98	8.3	7.18	20.7	4,210	5.99	Clear
	12/22/98	6.5/7.0	7.17	14.6	4,680	5.36	Clear
	03/23/99	8.4	7.10	19.4	4,360	3.37	Clear
MW-6	10/31/97	6.9	7.21	21.6	3,180	--	Clear
	01/26/98	6.4	7.23	17.3	3,200	6.08	Clear
	05/26/98	8.2	7.19	21.2	3,450	4.67	Clear
	08/11/98	9.0/8.0	7.24	22.4	3,430	8.03	Clear
	12/22/98	6.7	7.29	15.7	3,740	13.72	Clear
	03/23/99	8.0/7.0	7.20	19.9	3,460	4.93	Clear
MW-7	11/03/97	2.5	7.28	18.1	3,540	11.30	Clear
	01/29/98	1.8	7.25	18.4	3,540	5.68	Clear
	05/28/98	3.6	7.14	23.5	3,820	9.35	Clear
	08/14/98	3.6/2.6	7.23	21.7	3,770	6.89	Clear
	12/27/98	2.7	7.20	17.5	3,790	6.09	Clear
	03/25/99	3.0/3.4	7.14	17.6	3,780	4.40	Clear, Bailed down
	09/07/99	2.5	7.18	20.0	3,810	--	Clear
	03/28/00	2.6	7.21	19.1	3,780	13.63	Clear
	11/18/00	--/3.8	7.31	18.6	3,430	--	Clear
MW-8	11/02/97	4.4	7.16	18.5	3,730	6.91	Clear
	01/29/98	4.2	7.17	19.8	3,730	2.41	Clear
	05/28/98	4.7	7.11	19.8	4,000	4.66	Clear
	08/14/98	4.3	7.10	20.6	3,970	4.62	Clear
	12/27/98	4.7	7.14	19.1	4,010	5.54	Clear
	03/25/99	4.0/3.8	7.07	18.4	4,040	4.15	Clear
MW-9	11/02/97	5.5	7.32	18.6	4,110	180	Cloudy
	01/29/98	3.9	7.35	16.9	4,090	--	Slightly Turbid
	05/28/98	6.0	7.25	20.8	4,440	62	Cloudy
	08/14/98	5.3	7.23	21.4	4,400	91/80	Cloudy, (80 FTU dissolved metals reading)
	12/27/98	5.3	7.35	17.9	4,400	97	Cloudy
	03/24/99	--/7.0	7.31	18.9	4,430	84	Cloudy, Bailed down

**Table 2. Summary of Field Measured Parameters**  
**Compressor Station No. 9 - Roswell, NM**

Well ID	Date	Dissolved Oxygen (mg/L) Meter/Hach	pH	Temperature °C	Electrical Conductivity (µs/cm)	Turbidity (NTU/FTU)	Remarks
MW-10	11/01/97	6.9	7.14	19.7	3,600	3.40	Clear
	01/27/98	5.9	7.20	19.6	3,570	0.31	Clear
	05/26/98	7.2	7.16	22.7	3,900	2.60	Clear
	08/13/98	6.1/6.0	7.12	20.1	3,840	0.92	Clear
	12/22/98	5.9	7.18	14.7	4,190	3.18	Clear
	03/23/99	6.1/6.0	7.09	18.9	3,900	2.38	Clear
	09/07/99	6.2/6.0	7.05	20.1	3,400	--	Clear
	03/27/00	5.8/5.5	7.17	19.4	3,860	--	Clear
MW-11	11/01/97	7.1	7.21	19.5	3,640	4.40	Clear
	01/27/98	6.7	7.25	17.8	3,610	2.71	Clear
	05/26/98	7.9	7.24	21.6	3,950	30.01	Clear
	08/13/98	7.9	7.26	20.3	3,890	5.52	Clear
	12/22/98	5.4	7.25	15.6	3,610	10.19	Clear
	03/24/99	-7.0	7.25	20.1	3,030	8.68	Clear
	09/07/99	6.7	7.27	19.5	3,200	--	Clear
	03/27/00	6.4	7.29	19.0	3,500	--	Clear
MW-12	11/04/97	3.4	7.29	20.1	3,790	1.77	Clear, Odor
	01/30/98	1.2	7.16	18.7	3,540	--	Clear, Odor
	05/28/98	2.4	7.19	20.8	3,850	2.83	Clear
	08/15/98	2.5	7.19	20.6	3,900	3.87	Clear, Odor
	12/28/98	0.7	7.24	17.8	3,820	2.83	Clear
	03/26/99	1.7/1.2	7.11	18.2	3,930	1.55	Clear, Odor
	09/07/99	0.7	7.45	20.6	3,960	--	Clear
	03/29/00	2.2/1.8	7.18	19.5	3,920	2.34	Clear, Odor
MW-13	11/04/97	1.1	7.10	19.8	3,840	1.76	Clear, Odor
	01/30/98	0.2	6.99	18.7	3,780	--	Clear, Odor
	05/28/98	2.4	6.98	21.8	4,070	10.24	Clear, Sewage Odor
	08/15/98	1.1/0	6.92	20.8	4,140	6.89	Clear, Sewage Odor
	12/27/98	0.9	6.98	19.2	3,940	10.47	Clear, Odor
	03/26/99	0.6/0.4	--	18.8	3,980	7.96	Clear, Odor, turns black in air
	09/08/99	1.5/2.0	6.90	20.1	4,020	--	Clear, Odor
	03/29/00	1.8/0	6.89	19.5	4,130	11.28	Clear, Odor
MW-14	11/02/97	2.1	7.16	18.5	3,620	1.09	Clear
	01/29/98	3.2	7.20	17.9	3,600	2.32	Clear
	05/27/98	5.0	7.18	24.8	3,890	2.11	Clear
	08/11/98	5.0	7.17	25.1	3,880	4.76	Clear
	12/23/98	2.4	7.15	18.4	3,890	2.10	Clear
	03/25/99	3.7	7.13	18.7	3,900	1.17	Clear
	09/07/99	5.8	7.09	21.0	3,930	--	Clear
	03/28/00	2.7	7.20	19.2	3,850	--	Clear

**Table 2. Summary of Field Measured Parameters**  
**Compressor Station No. 9 - Roswell, NM**

Well ID	Date	Dissolved Oxygen (mg/L) Meter/Hach	pH	Temperature °C	Electrical Conductivity (µs/cm)	Turbidity (NTU/FTU)	Remarks
MW-15	11/02/97	3.6	7.32	20.1	3,970	1.54	Clear
	01/28/98	3.6	7.41	17.7	3,930	2.36	Clear
	01/27/98	4.1	7.28	22.1	4,330	1.82	Clear
	08/13/98	4.4	7.24	20.7	4,270	1.57	Clear
	12/24/98	5.4	7.24	15.5	4,160	1.49	Clear
	03/24/99	--/6.0	7.16	19.9	4,310	1.71	Clear
	09/07/99	6.2	7.20	20.6	3,900	--	Clear
	03/28/00	5.0/4.6	7.25	19.2	4,240	--	Clear
MW-17	11/02/97	5.8	7.26	18.5	3,910	1.20	Clear
	01/28/98	4.9	7.01	18.2	3,880	2.71	Clear
	05/27/98	6.3	7.25	21.9	4,250	1.95	Clear
	08/13/98	6.7	7.28	20.1	4,210	1.65	Clear
	12/24/98	4.5	7.25	17.7	4,220	3.30	Clear
	03/25/99	5.6	7.21	18.6	4,260	1.32	Clear w/ floc's, Sewage Odor
	09/07/99	7.5/7.0	7.26	20.4	4,000	--	Clear
	03/28/00	5.7/4.8	7.26	19.3	4,190	--	Clear
MW-18	11/01/97	7.6	7.41	18.6	3,850	0.73	Clear
	01/28/98	7.6	7.36	17.6	3,810	0.63	Clear
	05/27/98	8.2	7.55	21.1	4,170	2.81	Clear
	08/13/98	8.3/8.0	7.55	21.8	4,130	1.08	Clear
	12/24/98	6.0	7.44	14.5	4,030	0.72	Clear
	03/24/99	--/8.0	7.45	19.8	4,180	1.47	Clear, Bailed down
MW-19	11/01/97	8.0	7.33	19.1	4,080	0.85	Clear
	01/27/98	6.2	7.31	18.2	4,030	4.03	Clear
	05/27/98	7.2	7.20	19.4	4,400	3.06	Clear
	08/13/98	8.0	7.28	20.8	4,370	2.25	Clear
	12/23/98	6.8	7.41	16.2	4,390	6.97	Clear
	03/24/99	--/7.2	7.23	18.7	4,380	9.08	Clear
MW-20	11/03/97	1.4	6.90	18.6	3,750	12.6	Clear
	11/03/97	1.0	6.86	18.2	3,710	--	Clear
	05/29/98	3.9	6.81	20.8	4,000	4.11	Clear, Slightly cloudy at end
	08/15/98	2.6	6.86	20.5	4,060	13.57	Clear
	12/28/98	2.2/1.8	6.88	18.5	4,060	9.30	Clear
	03/26/99	1.5	6.78	18.1	4,130	3.23	Clear
	09/08/99	1.5	6.79	19.2	4,040	--	Clear
	03/29/00	1.8	6.82	19.0	4,070	1.89	Clear
	11/15/00	1.8	6.76	18.5	3,680	--	Clear

**Table 2. Summary of Field Measured Parameters**  
**Compressor Station No. 9 - Roswell, NM**

Well ID	Date	Dissolved Oxygen (mg/L) Meter/Hach	pH	Temperature °C	Electrical Conductivity (µs/cm)	Turbidity (NTU/FTU)	Remarks
MW-21	11/04/97	3.4	7.29	20.1	3,790	1.77	Clear, Odor
	01/30/98	1.4	7.20	17.6	3,690	2.78	Clear, Odor
	05/28/98	2.7	7.21	20.6	3,990	3.57	Clear, Odor
	08/15/98	2.7/2.2	7.16	20.8	4,000	2.32	Clear w/ dark floc's, Odor
	12/28/98	0.8	7.25	18.0	3,990	4.39	Clear, Odor, turns black in air
	03/26/99	0.6	7.17	18.4	4,030	3.81	Clear, Odor, turns black in air
	09/07/99	0.0	7.29	20.5	3,890	--	Clear, Odor, turns black in air
	03/29/00	0.8/0.6	7.30	19.3	3,970	4.38	Clear, Odor, turns black in air
	11/18/00	~-0.3	7.43	19.0	3,570	--	Clear, strong sulfur smell
MW-22	11/03/97	7.0	7.22	18.5	3,700	260.0	Cloudy
	01/29/98	6.5	7.22	18.2	3,660	10.35	Clear
	05/28/98	8.6	7.18	22.8	3,940	48.03	Clear
	08/14/98	8.6	7.20	20.5	3,970	168.0	Cloudy
	12/27/98	8.0	7.25	19.9	3,940	12.00	Clear
	03/25/99	7.0	7.19	17.4	3,980	1.19	Clear
	09/08/99	7.6	7.20	19.4	3,900	--	Clear
	03/28/00	8.4	7.26	18.9	3,930	5.36	Clear
	11/15/00	6.5	7.20	16.7	1,343	--	Clear
MW-23D	11/05/97	2.8	7.55	18.1	2,550	87.5	Slightly to Mod. Milky, Sulfur Smell
	01/28/98	4.8	8.06	18.6	3,820	>200	Silty
	05/27/98	7.1	7.61	23.2	4,150	--	Turbid
	08/11/98	4.2	7.22	19.9	4,130	17.81	Clear
	12/23/98	4.6	7.50	16.6	4,210	43.94	Clear
	04/05/99	5.6	7.18	18.8	4,160	--	Clear
	05/02/00	4.3	7.41	19.5	3,920	--	Silty
MW-24D	10/29/98	5.44	7.43	18.5	2,930	--	Silty
	12/23/98	4.2	7.49	16.7	3,840	>1000	Turbid, Bailed down
	03/30/99	4.6	6.98	18.4	3,750	--	Turbid, Bailed down
	05/02/00	4.2	7.28	19.9	3,610	--	Very Silty
MW-25D	10/29/98	4.87	7.80	18.6	3,370	--	Silty
	12/23/98	4.6	7.67	16.9	3,820	77	Clear, Bailed down
	03/30/99	4.1	7.36	18.1	3,790	--	Turbid, Bailed down
	05/02/00	4.5	7.52	19.2	3,510	--	Turbid, Bailed down
MW-26	10/29/98	4.61	7.20	18.8	3,620	--	Clear
	12/27/98	4.9	7.13	19.4	4,130	83	Cloudy/Turbid
	03/25/99	4.8	7.09	18.4	4,170	35.38	Clear initial/cloudy last
	07/25/99	3.3	7.17	20.3	4,220	--	Clear, no odor
	09/07/99	8.4/7.0	7.11	19.7	4,170	--	Clear
	03/28/00	6.1/6.2	7.13	18.7	4,090	46.91	Clear
	11/15/00	6.8/7.0	7.11	18.4	3,730	--	Clear
MW-28	11/18/00	--	7.28	17.0	3,510	--	Silty
MW-29	11/19/00	--	7.60	17.9	2,320	--	Brown silty
MW-30	11/18/00	--	7.54	18.6	3,350	--	Silty

**Table 3. Summary of Ground Water Analyses - Organics  
Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	BTEX (ug/L)				Other VOCs (ug/L)					SVOC's (ug/L)		
		Benzene	Toluene	Ethylbenzene	Xylenes (total)	Methyl ethyl ketone (2-butaneone)	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Tri(methyl)benzene	Total Naphthalene <sup>(b)</sup>	4-Methylphenol (p-Cresol)
	NMWQCC Standard:	10	750	750	620	none	25	10	5	60	none	30	none
MW-3	04/30/93	< 5	< 5	< 5	NA	NA	< 5	< 5	< 5	< 5	NA	NA	NA
	08/22/95	< 5	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	09/10/96	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	07/30/97	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	11/03/97	< 5	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	NA
	01/27/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	05/26/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	08/13/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	12/24/98	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	03/24/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	09/07/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	NA	NA
	03/27/00	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	NA	NA
MW-5	04/30/93	< 5	< 5	< 5	NA	NA	< 5	< 5	< 5	< 5	NA	NA	NA
	08/22/95	< 5	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	09/10/96	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	07/25/97	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	10/31/97	< 5	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	NA
	01/27/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	05/26/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	08/11/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	12/22/98	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	03/23/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
MW-6	12/02/94	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.2	< 5	< 5	< 0.2	NA	NA	NA
	08/22/95	< 5	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	09/10/96	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	07/25/97	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	10/31/97	< 5	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	NA
	01/26/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	05/26/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	08/11/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	12/22/98	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	03/23/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA

**Table 3. Summary of Ground Water Analyses - Organics  
Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	BTEX (ug/L)				Other VOCs (ug/L)					SVOC's (ug/L)		
		Benzene	Toluene	Ethylbenzene	Xylenes (total)	Methyl ethyl ketone (2-butanone)	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	Total Naphthalene (b)	4-Methylphenol (p-Cresol)
	NMWQCC Standard:	10	750	750	620	none	25	10	5	60	none	30	none
MW-7	08/23/95	<5	<5	<5	<5	900	<5	<5	<5	<5	NA	<10	<10
	09/17/96	<1	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	07/31/97	<1	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	11/03/97	<5	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	NA
	01/29/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	05/28/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	08/14/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	12/27/98	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	03/25/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	09/07/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	NA	NA
	03/28/00	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	NA	NA
	11/18/00	<1.00	<1.00	<1.00	<1.00	<10.00	<1.00	<1.00	<1.00	<1.00	<1.00	NA	NA
Dup (MW-31)	11/18/00	<1.00	<1.00	<1.00	<1.00	<10.00	<1.00	<1.00	<1.00	<1.00	<1.00	NA	NA
MW-8	08/22/95	6	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	09/11/96	<1	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	08/01/97	<1	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	11/02/97	<5	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	NA
	01/29/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	05/28/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	08/14/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	12/27/98	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	03/25/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
MW-9	08/23/95	<5	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	09/11/96	<1	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	07/31/97	<1	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	11/02/97	<5	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	NA
	01/29/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	05/28/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	08/14/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	12/27/98	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	03/24/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA

**Table 3. Summary of Ground Water Analyses - Organics  
Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	BTEX (ug/L)				Other VOCs (ug/L)						SVOC's (ug/L)	
		Benzene	Toluene	Ethylbenzene	Xylenes (total)	Methyl ethyl ketone (2-butanone)	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Triethylbenzene	Total Naphthalene (b)	4-Methylphenol (p-Cresol)
	NMWQCC Standard:	10	750	750	620	none	25	10	5	60	none	30	none
MW-10	09/19/96	2	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	07/31/97	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	11/01/97	< 5	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	NA
	01/27/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	05/26/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	08/13/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	12/22/98	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	03/23/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	09/07/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	03/27/00	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
MW-11	09/19/96	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	07/30/97	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	11/01/97	< 5	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	NA
	01/27/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	05/26/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	08/13/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	12/22/98	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	03/24/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	09/07/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	03/27/00	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
MW-12	09/17/96	760	< 5	< 5	52	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	08/06/97	280	< 5	< 5	< 5	< 10	< 5	9	< 5	< 5	NA	< 10	< 10
	11/04/97	340	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	NA
dup (MW-24)	11/04/97	260	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	NA
	01/30/98	310	< 5	< 5	26	< 20	< 5	< 5	< 5	< 5	10	< 5	NA
	05/28/98	310	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	9	< 5	NA
	08/15/98	190	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	8	< 5	NA
dup (MW-28)	08/15/98	200	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	9	< 5	NA
	12/28/98	120	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	4	2.8	NA
	03/26/99	92	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	3	2.2	NA
dup (MW-28)	03/26/99	95	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	2	2.2	NA
	09/07/99	38	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	NA	NA
	03/29/00	92	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	NA	NA
	11/18/00	80.2	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	NA	NA

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Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	BTEX (ug/L)				Other VOCs (ug/L)						SVOC's (ug/L)	
		Benzene	Toluene	Ethylbenzene	Xylenes (total)	Methyl ethyl ketone (2-butanone)	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	Total Naphthalene (b)	4-Methylphenol (p-Cresol)
		NMWQCC Standard:	10	750	750	620	none	25	10	5	60	none	30
MW-13	09/19/96	4,600	9	<5	170	<100	<5	<5	<5	<5	NA	<10	<10
	08/09/97	2,400	<5	100	<5	<100	<5	41	<5	<5	NA	<10	<10
	11/04/97	590	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	NA
	01/29/98	61	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	05/28/98	140	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	08/15/98	30	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	12/27/98	58	1	<1	4	<20	<1	<1	<1	<1	<1	1.3	NA
	03/26/99	44	<1	<1	6	<20	<1	<1	<1	<1	<1	0.8	NA
	09/08/99	160	2	<1	4	<20	<1	<1	<1	<1	<1	NA	NA
	03/29/00	84	4.0	<1	4.0	<20	<1	<1	<1	<1	<1	NA	NA
MW-14	11/18/00	139	<1.00	<1.00	2.34	<10.00	<1.00	<1.00	<1.00	<1.00	<1.00	NA	NA
	09/24/96	2 <sup>(a)</sup>	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	08/01/97	<1	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	11/02/97	<5	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	NA
	01/29/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	05/27/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	08/11/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	12/23/98	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	03/25/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	09/07/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	NA	NA
MW-15	03/28/00	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	NA	NA
	09/25/96	4 <sup>(a)</sup>	6	<5	6	<100	<5	<5	<5	<5	NA	<10	<10
	08/08/97	<1	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	11/02/97	<5	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	NA
	01/28/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	05/27/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	08/13/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	12/24/98	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	03/24/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	09/07/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	NA	NA
	03/28/00	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	NA	NA

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Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	BTEX (ug/L)				Other VOCs (ug/L)					SVOC's (ug/L)		
		Benzene	Toluene	Ethylbenzene	Xylenes (total)	Methyl ethyl ketone (2-butanone)	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	Total Naphthalene (b)	4-Methylphenol (p-Cresol)
NMWQCC Standard:		10	750	750	620	none	25	10	5	60	none	30	none
MW-17	09/24/96	2 <sup>(a)</sup>	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	07/31/97	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	11/02/97	< 5	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	NA
	01/28/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	05/27/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	08/13/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	12/24/98	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	03/25/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	09/07/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	03/28/00	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	NA	NA
MW-18	08/09/97	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	11/01/97	< 5	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	NA
	01/28/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	05/27/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	08/13/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	12/24/98	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	03/24/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
MW-19	09/27/96	2	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	08/08/97	< 1	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	< 10
	11/01/97	< 5	< 5	< 5	< 5	< 100	< 5	< 5	< 5	< 5	NA	< 10	NA
	01/27/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	05/27/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	08/13/98	< 5	< 5	< 5	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 5	NA
	12/23/98	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA
	03/24/99	< 1	< 1	< 1	< 1	< 20	< 1	< 1	< 1	< 1	< 1	< 1	NA

**Table 3. Summary of Ground Water Analyses - Organics  
Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	BTEX (ug/L)				Other VOCs (ug/L)						SVOC's (ug/L)	
		Benzene	Toluene	Ethylbenzene	Xylenes (total)	Methyl ethyl ketone (2-butane)	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	Total Naphthalene (b)	4-Methylphenol (p-Cresol)
		10	750	750	620	none	25	10	5	60	none	30	none
MW-20	08/07/97	12	<5	<5	<5	<100	8	<5	39	22	NA	<10	<10
	11/03/97	<5	<5	<5	<5	<100	10	<5	86	28	NA	<10	NA
	01/29/98	<5	<5	<5	<5	<20	12	<5	72	<5	<5	<5	NA
	05/29/98	<5	<5	<5	<5	<20	15	<5	120	<5	<5	<5	NA
dup (MW-24)	05/29/98	<5	<5	<5	<5	<20	14	<5	140	29	<5	<5	NA
	08/15/98	<5	<5	<5	<5	<20	14	<5	100	28	<5	<5	NA
	12/28/98	<1	<1	<1	<1	<20	15	<1	83	27	<1	<1	NA
dup (MW-28)	12/28/98	<1	<1	<1	<1	<20	15	<1	83	27	<1	<1	NA
	03/26/99	<1	<1	<1	<1	<20	15	<1	84	27	<1	<1	NA
	09/08/99	<1	<1	<1	<1	<20	16	<1	100	26	<1	NA	NA
dup (MW-28)	09/08/99	<1	<1	<1	<1	<20	17	<1	110	26	<1	NA	NA
	03/29/00	<1	<1	<1	<1	<20	19	<1	110	24	<1	NA	NA
dup (MW-31)	03/29/00	<1	<1	<1	<1	<20	18	<1	110	22	<1	NA	NA
	11/15/00	<1.00	<1.00	<1.00	<1.00	<10.00	17.5	<1.00	94.5	18.7	<1.00	NA	NA
MW-21	08/07/97	370	<5	<5	<5	<100	<5	11	<5	<5	NA	<10	<10
	11/04/97	170	<5	<5	15	<100	<5	<5	<5	<5	NA	<10	NA
	01/30/98	700	<5	<5	26	<20	<5	<5	<5	<5	NA	<5	NA
dup (MW-24)	01/30/98	700	<5	<5	24	<20	<5	<5	<5	<5	<5	<5	NA
	05/28/98	790	<5	<5	34	<20	<5	<5	<5	<5	<5	<5	NA
	08/15/98	1000	<5	<5	68	<20	<5	<5	<5	<5	<5	7	<5
	12/28/98	1400	1	<1	61	<20	<1	<1	<1	<1	<1	9	8.8
	03/26/99	1400	<1	<1	28	<20	<1	<1	<1	<1	<1	5	7.1
	09/07/99	1500	<1	4	25	<20	<1	<1	<1	<1	<1	4	NA
	03/29/00	1700	<1	8.0	12	<20	<1	<1	<1	<1	<1	4.0	NA
	11/18/00	1430	<5.00	12.7	<10.0	<50.0	<5.00	<5.00	<5.00	<5.00	<5.00	NA	NA
MW-22	08/07/97	<1	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	11/03/97	<5	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	NA
	01/29/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	05/28/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	08/14/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	12/27/98	<1	<1	<1	<1	<20	<1	<1	4	1	<1	<1	NA
	03/25/99	<1	<1	<1	<1	<20	<1	<1	4	1	<1	<1	NA
	09/08/99	<1	<1	<1	<1	<20	<1	<1	5	2	<1	NA	NA
	03/28/00	<1	<1	<1	<1	<20	<1	<1	6.0	2.0	<1	NA	NA
	11/15/00	<1.00	<1.00	<1.00	<1.00	<10.00	<1.00	<1.00	4.29	1.08	<1.00	NA	NA

**Table 3. Summary of Ground Water Analyses - Organics  
Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	BTEX (ug/L)				Other VOCs (ug/L)					SVOC's (ug/L)		
		Benzene	Toluene	Ethylbenzene	Xylenes (total)	Methyl ethyl ketone (2-butane)	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	Total Naphthalene <sup>(b)</sup>	4-Methylphenol (p-Cresol)
	NMWQCC Standard:	10	750	750	620	none	25	10	5	60	none	30	none
MW-23D	08/06/97	<1	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	<10
	11/05/97	<5	<5	<5	<5	<100	<5	<5	<5	<5	NA	<10	NA
	01/28/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	05/27/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	08/11/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	NA
	12/23/98	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	04/05/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	05/02/00	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	NA	NA
MW-24D	10/29/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	NA	<5	NA
	12/23/98	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	03/30/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
(NMOCD)	03/30/99	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	NA
	05/02/00	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	NA	NA
MW-25D	10/29/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	NA	<5	NA
	12/23/98	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	03/30/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
(NMOCD)	03/30/99	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	NA
	05/02/00	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	NA	NA
MW-26	10/29/98	<5	<5	<5	<5	<20	<5	<5	<5	<5	NA	<5	NA
	12/27/98	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
	03/25/99	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1	<1	NA
(NMOCD)	03/30/99	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	NA
	07/25/99	<1	<1	<1	<1	<10	<1	<1	1	<1	<1	<1	NA
	09/07/99	<1	<1	<1	<1	<10	<1	<1	1	<1	<1	<1	NA
	03/28/00	<1	<1	<1	<1	<10	<1	<1	3.0	<1	<1	NA	NA
	11/15/00	<1.00	<1.00	<1.00	<1.00	<10.00	<1.00	<1.00	3.14	<1.00	<1.00	NA	NA

**Table 3. Summary of Ground Water Analyses - Organics  
Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	BTEX (ug/L)				Other VOCs (ug/L)						SVOC's (ug/L)	
		Benzene	Toluene	Ethylbenzene	Xylenes (total)	Methyl ethyl ketone (2-butanone)	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	Total Naphthalene <sup>(b)</sup>	4-Methylphenol (p-Cresol)
	NMWQCC Standard:	10	750	750	620	none	25	10	5	60	none	30	none
MW-28	11/18/00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	NA
MW-29	11/19/00	<b>590</b>	< 5.00	<b>57.8</b>	<b>23.2</b>	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00	18.7	< 0.100	NA
MW-30	11/18/00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 0.200	NA

NOTES:

Only constituents detected in one or more ground water samples are shown in this table

All results reported above the detection limit are shown in bold type

NA - An analytical result for this constituent was not reported by the laboratory

<sup>(a)</sup> Analyte present in method blank

<sup>(b)</sup> Total Naphthalene = Naphthalene + 1-Methylnaphthalene + 2-Methylnaphthalene

**Table 4. Summary of Ground Water Analyses - Inorganics  
Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	Major Ions (mg/L)									Metals (mg/L)												
		TDS	Chloride	Sulfate	NO <sub>2</sub> /NO <sub>3</sub> • N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as CaCO <sub>3</sub> )	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc	Aluminum
NMWQCC Standard:		1000	250	600	10	none	none	none	none	0.1	1.0	0.01	0.05	1.0	1.0	0.05	0.20	0.002	0.05	0.05	0.05	10	5
MW-3	03/23/94 <sup>c</sup>	NA	NA	NA	NA	NA	NA	NA	NA	<0.03	0.02	<0.01	<0.01	NA	NA	<0.03	NA	<0.0002	<0.05	<0.01	NA	NA	
	08/22/95 <sup>b</sup>	3650	405	1,800	0.8	587	3.2	136	215	116	<0.05	<0.01	<0.005	<0.01	<0.01	NA	<0.05	NA	0.0002	<0.1	<0.01	0.03	0.24
	09/10/96 <sup>b</sup>	3530	385	1,800	0.96	635	20	144	229	115	<0.05	0.02	<0.005	<0.01	<0.01	NA	<0.003	NA	<0.0002	<0.01	<0.01	<0.01	NA
	07/30/97 <sup>b</sup>	3560	409	1,680	1.1	804	<5	135	410	114	<0.01	<0.01	<0.005	<0.01	<0.01	<0.3	<0.003	NA	<0.0002	<0.01	<0.01	<0.01	NA
	11/03/97 <sup>b</sup>	3450	370	1,840	1.1	790 <sup>(d)</sup>	3.0	180	290 <sup>(d)</sup>	110	<0.03	0.04	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.0002	<0.04	<0.01	<0.03	NA
	01/27/98 <sup>c</sup>	2790	398	1,700	1.1	643	3	138	212	102	<0.1	0.014	<0.005	<0.01	<0.01	<0.02	<0.05	<0.005	<0.0002	<0.1	<0.01	<0.02	NA
	05/26/98 <sup>b</sup>	2700	430	2,100	1.2	NA	NA	NA	NA	108	<0.005	0.008	<0.005	<0.01	<0.01	<0.02	<0.05	<0.005	<0.0002	<0.005	<0.01	<0.02	NA
	08/13/98 <sup>b</sup>	3600	443	.95	1.1	594	3	121	205	111	0.007	0.010	<0.005	<0.01	<0.01	0.07	<0.005	<0.005	<0.0002	<0.005	<0.01	0.04	NA
	12/24/98 <sup>b</sup>	3390	390	1,900	1.1	563	3.4	121	220	111	<0.004	0.0133	<0.002	<0.005	<0.002	0.030	<0.025	<0.001	<0.0002	<0.010	<0.003	<0.01	NA
	03/24/99 <sup>b</sup>	3430	370	1,800	1.3	566	3.5	127	211	113	<0.004	0.0120	<0.002	<0.005	<0.002	0.042	<0.025	<0.001	<0.0002	<0.010	<0.003	<0.01	NA
	03/27/00 <sup>b</sup>	3460	410	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
MW-5	03/23/94 <sup>c</sup>	NA	NA	NA	NA	NA	NA	NA	NA	<0.03	0.01	<0.01	<0.01	NA	NA	<0.03	NA	<0.0002	<0.05	<0.01	NA	NA	
	08/22/95 <sup>b</sup>	3440	574	1,800	3.1	623	3.8	145	204	122	<0.05	<0.01	<0.005	<0.01	<0.01	NA	<0.05	NA	<0.0002	<0.1	<0.01	0.01	0.38
	09/10/96 <sup>b</sup>	3550	578	1,690	2.97	631	19	158	218	114	<0.05	0.01	<0.005	<0.01	<0.01	NA	<0.003	NA	<0.0002	0.02	<0.01	0.02	NA
	07/25/97 <sup>b</sup>	3960	622	1,720	3.7	916	<5	159	270	120	<0.01	<0.01	<0.005	<0.01	<0.01	0.26	<0.003	NA	<0.0002	0.02	<0.01	<0.01	NA
	10/31/97 <sup>b</sup>	3700	560	1,730	3.6	780 <sup>(d)</sup>	2.6	200	270 <sup>(d)</sup>	118	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.0002	<0.04	<0.01	<0.03	NA
	01/27/98 <sup>c</sup>	1180	260	700	1.8	300	<2	67.9	99.3	78	<0.1	0.047	<0.005	<0.01	<0.01	<0.02	<0.05	<0.005	<0.0002	<0.1	<0.01	<0.02	NA
	05/26/98 <sup>b</sup>	2200	570	1,900	3.5	NA	NA	NA	NA	110	<0.005	0.012	<0.005	<0.01	<0.01	0.04	<0.05	<0.005	<0.0002	<0.005	<0.01	<0.02	NA
	08/11/98 <sup>b</sup>	3400	520	1,500	3.7	588	3	144	193	121	<0.005	0.010	<0.005	<0.01	<0.01	0.06	<0.005	<0.005	<0.0002	0.016	<0.01	<0.02	NA
	12/22/98 <sup>b</sup>	3440	620	1,700	3.8	628	3	147	203	116	<0.004	0.0148	<0.002	<0.005	<0.002	0.026	<0.025	<0.005	<0.0002	<0.010	<0.003	<0.01	NA
	03/23/99 <sup>b</sup>	3490	590	1,600	3.9	607	3.2	150	217	116	<0.004	0.0142	<0.002	<0.005	<0.002	0.023	<0.025	<0.001	<0.0002	0.013	<0.003	<0.01	NA

**Table 4. Summary of Ground Water Analyses - Inorganics**  
**Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	Major Ions (mg/L)										Metals (mg/L)											
		TDS	Chloride	Sulfate	NO <sub>2</sub> /NO <sub>3</sub> - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as CaCO <sub>3</sub> )	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc	Aluminum
NMWQCC Standard:		1000	250	600	10	none	none	none	none	none	0.1	1.0	0.01	0.05	1.0	1.0	0.05	0.20	0.002	0.05	0.05	10	5
MW-6	08/22/95 <sup>b</sup>	2800	344	1,600	1	458	3.9	148	124	110	< 0.05	< 0.01	< 0.005	< 0.01	< 0.01	NA	< 0.05	NA	0.0005	< 0.1	< 0.01	0.03	0.69
	09/10/96 <sup>b</sup>	3040	333	1,490	0.98	488	19	154	182	99	< 0.05	0.01	< 0.005	< 0.01	< 0.01	NA	0.004	NA	< 0.0002	< 0.01	< 0.01	< 0.01	NA
	07/25/97 <sup>b</sup>	3420	344	1,650	1	778	5	217	236	112	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	0.32	< 0.003	NA	< 0.0002	< 0.01	< 0.01	0.01	NA
	10/31/97 <sup>b</sup>	3090	300	1,620	1.2	550 <sup>(d)</sup>	3.1	170	170 <sup>(d)</sup>	106	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	< 0.01	< 0.0002	< 0.04	< 0.01	< 0.03	NA
	01/26/98 <sup>c</sup>	2650	335	1,500	1.0	517	4	151	152	96	< 0.1	0.007	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	< 0.005	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	05/26/98 <sup>b</sup>	2600	340	1,900	1.1	NA	NA	NA	NA	102	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	0.04	< 0.05	< 0.005	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	08/11/98 <sup>b</sup>	2900	305	1,500	1.0	425	3	124	126	98	< 0.005	0.006	< 0.005	< 0.01	< 0.01	0.18	< 0.005	< 0.005	< 0.0002	< 0.005	< 0.01	0.02	NA
	12/22/98 <sup>b</sup>	2890	300	1,600	1.0	488	3.3	142	144	109	< 0.004	0.0099	< 0.002	< 0.005	< 0.002	0.064	< 0.025	0.0097	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/23/99 <sup>b</sup>	2960	300	1,600	1.0	476	3.7	146	153	108	< 0.004	0.0106	< 0.002	< 0.005	< 0.002	0.073	< 0.025	< 0.001	< 0.0002	< 0.010	< 0.003	< 0.01	NA
MW-7	08/23/95 <sup>b</sup>	3640	284	2,000	0.12	668	8.2	235	149	136	< 0.05	0.02	< 0.005	< 0.01	< 0.01	NA	< 0.05	NA	0.0004	< 0.1	< 0.01	0.02	1.39
	09/17/96 <sup>b</sup>	3760	273	2,140	0.07	648	20	198	145	110	< 0.05	0.02	< 0.005	< 0.01	< 0.01	NA	< 0.003	NA	< 0.0002	< 0.01	< 0.01	0.02	NA
	07/31/97 <sup>b</sup>	3700	313	1,930	< 0.05	191	< 20	84.3	95	112	< 0.05	< 0.05	< 0.02	< 0.05	< 0.05	0.3	< 0.02	NA	< 0.0002	< 0.05	< 0.05	< 0.05	NA
	11/03/97 <sup>b</sup>	3580	250	1,810	< 0.05	790 <sup>(d)</sup>	6.4	260	180 <sup>(d)</sup>	112	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	1.2	< 0.03	1.2	< 0.0002	< 0.04	< 0.01	< 0.03	NA
	01/29/98 <sup>c</sup>	2730	288	1,800	< 0.1	630	7	206	140	86	< 0.1	0.014	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	0.120	< 0.0002	< 0.1	< 0.01	0.03	NA
	05/28/98 <sup>b</sup>	3000	290	2,400	< 0.1	NA	NA	NA	NA	114	< 0.005	0.011	< 0.005	< 0.01	< 0.01	0.44	< 0.05	0.490	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	08/14/98 <sup>b</sup>	3800	301	2,300	< 0.1	572	8	180	130	108	< 0.005	0.012	< 0.005	< 0.01	< 0.01	0.30	< 0.005	0.428	< 0.0002	< 0.005	< 0.01	0.09	NA
	12/27/98 <sup>b</sup>	3440	260	2,000	0.01	556	6.65	0.176	141	120	< 0.004	0.0171	< 0.002	< 0.005	< 0.002	0.126	< 0.025	0.362	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/25/99 <sup>b</sup>	3470	250	2,000	0.02	232	5.28	158	110	116	< 0.004	0.0130	< 0.002	< 0.005	< 0.002	< 0.01	< 0.025	0.0285	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/28/00 <sup>b</sup>	3550	300	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.225	NA	0.0274	NA	NA	NA	NA	NA
MW-8	08/22/95 <sup>b</sup>	3640	362	2,000	0.1	587	3.7	193	117	134	< 0.05	< 0.01	< 0.005	< 0.01	< 0.01	NA	< 0.05	NA	0.0003	< 0.1	< 0.01	0.01	0.33
	09/19/96 <sup>b</sup>	3780	331	2,120	0.06	630	21	222	206	141	< 0.05	0.01	< 0.005	< 0.01	< 0.01	NA	< 0.003	NA	< 0.0002	< 0.01	< 0.01	< 0.01	NA
	08/01/97 <sup>b</sup>	3890	339	1,980	0.16	86.5	< 20	51.5	80	140	< 0.05	< 0.05	< 0.02	< 0.05	< 0.05	< 0.2	< 0.02	NA	< 0.0002	< 0.05	< 0.05	< 0.05	NA
	11/02/97 <sup>b</sup>	3740	320	1,810	0.10	610 <sup>(d)</sup>	3.4	210	180 <sup>(d)</sup>	136	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	< 0.01	< 0.0002	< 0.04	< 0.01	< 0.03	NA
	01/29/98 <sup>c</sup>	2960	347	1,900	0.1	634	3	219	168	96	< 0.1	< 0.005	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	< 0.005	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	05/27/98 <sup>b</sup>	2800	370	2,500	0.2	NA	NA	NA	NA	131	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	0.03	< 0.05	< 0.005	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	08/14/98 <sup>b</sup>	3800	355	2,100	< 0.1	604	4	188	135	204	< 0.005	0.006	< 0.005	< 0.01	< 0.01	0.11	< 0.005	0.009	< 0.0002	< 0.005	< 0.01	0.39	NA
	12/27/98 <sup>b</sup>	3650	350	2,100	0.21	554	3.7	191	184	137	< 0.004	0.0108	< 0.002	< 0.005	< 0.002	0.065	< 0.025	0.0028	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/25/99 <sup>b</sup>	3670	350	2,000	0.21	541	3.6	200	169	136	< 0.004	0.0103	< 0.002	< 0.005	< 0.002	< 0.01	< 0.025	< 0.001	< 0.0002	< 0.010	< 0.003	< 0.01	NA

**Table 4. Summary of Ground Water Analyses - Inorganics  
Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	Major Ions (mg/L)										Metals (mg/L)											
		TDS	Chloride	Sulfate	NO <sub>2</sub> /NO <sub>3</sub> - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as CaCO <sub>3</sub> )	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc	Aluminum
NMWQCC Standard:		1000	250	600	10	none	none	none	none	0.1	1.0	0.01	0.05	1.0	1.0	0.05	0.20	0.002	0.05	0.05	10	5	
MW-9	08/23/95 <sup>b</sup>	4060	391	2,200	0.38	896	17	232	230	124	<0.05	0.04	<0.005	<0.01	0.01	NA	<0.05	NA	0.0005	<0.1	<0.01	0.03	3.13
	09/19/96 <sup>b</sup>	3810	439	1,990	0.56	673	24	210	287	114	<0.05	0.05	<0.005	0.01	<0.01	NA	0.004	NA	<0.0002	<0.01	<0.01	0.02	NA
	07/31/97 <sup>b</sup>	4270	487	2,040	0.55	557	<20	174	362	126	<0.05	<0.05	<0.02	<0.05	<0.05	0.4	<0.02	NA	<0.0002	<0.05	<0.05	<0.05	NA
	11/02/97 <sup>b</sup>	4000	440	1,930	0.36	610 <sup>(d)</sup>	5.5	190	270 <sup>(d)</sup>	124	<0.03	<0.01	<0.01	<0.01	<0.01	1.4	<0.03	0.11	<0.0002	<0.04	<0.01	<0.03	NA
	01/29/98 <sup>c</sup>	3730	459	1,800	0.6	639	5	193	248	80	<0.1	0.008	<0.005	<0.01	<0.01	<0.02	<0.05	0.030	<0.0002	<0.1	<0.01	<0.02	NA
	05/28/98 <sup>b</sup>	3200	470	2,500	0.9	NA	NA	NA	NA	112	<0.005	0.013	<0.005	<0.01	<0.01	0.86	<0.05	0.070	<0.0002	<0.005	<0.01	<0.02	NA
	08/14/98 <sup>b</sup>	4200	479	2,000	1.1	554	6	174	240	105	0.007	0.015	<0.005	<0.01	<0.01	0.91	<0.005	0.046	<0.0002	<0.005	<0.01	0.03	NA
	08/14/98 <sup>c</sup>	NA	NA	NA	NA	619	5	206	261	NA	<0.005	0.007	<0.005	<0.01	<0.01	<0.02	<0.05	0.031	<0.0002	<0.005	<0.01	<0.02	NA
	12/27/98 <sup>c</sup>	3800	470	2,100	0.93	532	4.51	163	226	121	<0.004	0.0158	<0.002	<0.005	<0.002	<0.01	<0.025	0.0088	<0.0002	<0.010	<0.003	<0.01	NA
	03/24/99 <sup>b</sup>	3910	450	2,100	0.79	532	5.13	181	245	119	<0.004	0.0164	<0.002	<0.005	<0.002	0.502	<0.025	0.0326	<0.0002	<0.010	<0.003	<0.01	NA
MW-10	09/19/96 <sup>b</sup>	3390	367	3,360	0.75	634	6	153	179	133	<0.05	<0.01	<0.005	<0.01	<0.01	NA	<0.003	NA	<0.0002	<0.01	<0.01	0.02	NA
	07/31/97 <sup>b</sup>	3550	364	1,590	0.71	211	<20	62.3	146	138	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.02	NA	<0.0002	<0.05	<0.05	<0.05	NA
	11/01/97 <sup>b</sup>	3520	340	1,890	0.74	600 <sup>(d)</sup>	3.5	146	225 <sup>(d)</sup>	128	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.0002	<0.04	<0.01	<0.03	NA
	01/27/98 <sup>c</sup>	2910	350	1,700	0.7	607	4	138	197	120	<0.1	0.005	<0.005	<0.01	<0.01	<0.02	<0.05	<0.005	<0.0002	<0.1	<0.01	<0.02	NA
	05/26/98 <sup>b</sup>	3000	370	2,200	0.8	NA	NA	NA	NA	122	<0.005	0.006	<0.005	<0.01	<0.01	0.03	<0.05	<0.005	<0.0002	<0.005	<0.01	0.20	NA
	08/13/98 <sup>b</sup>	3300	372	1,900	0.7	563	5	130	201	121	0.007	0.007	<0.005	<0.01	<0.01	<0.02	<0.005	<0.005	<0.0002	<0.005	<0.01	0.04	NA
	12/22/98 <sup>b</sup>	3390	350	1,900	0.68	584	3.3	133	203	127	<0.004	0.0107	<0.002	<0.005	<0.002	0.034	<0.025	<0.005	<0.0002	<0.010	<0.003	<0.01	NA
	03/23/99 <sup>b</sup>	3390	340	1,800	0.68	569	3.8	134	211	127	<0.004	0.0104	<0.002	<0.005	<0.002	0.011	<0.025	<0.001	<0.0002	<0.010	<0.003	<0.01	NA
	03/27/00 <sup>b</sup>	3440	390	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

**Table 4. Summary of Ground Water Analyses - Inorganics  
Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	Major Ions (mg/L)										Metals (mg/L)											
		TDS	Chloride	Sulfate	NO <sub>2</sub> /NO <sub>3</sub> • N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as CaCO <sub>3</sub> )	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc	Aluminum
NMWQCC Standard:		1000	250	600	10	none	none	none	none	0.1	1.0	0.01	0.05	1.0	1.0	0.05	0.20	0.002	0.05	0.05	10	5	
MW-11	09/19/96 <sup>b</sup>	3480	400	2,480	0.71	642	< 5	144	202	116	< 0.05	< 0.01	< 0.005	< 0.01	< 0.01	NA	0.004	NA	< 0.0002	< 0.01	< 0.01	0.04	NA
	07/30/97 <sup>b</sup>	3550	405	1,680	0.7	748	8	132	545	106	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	0.07	< 0.003	NA	< 0.0002	< 0.01	< 0.01	0.01	NA
	11/01/97 <sup>b</sup>	3530	370	1,900	0.67	630 <sup>(d)</sup>	2.6	140	360 <sup>(d)</sup>	96	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	< 0.01	< 0.0002	< 0.04	< 0.01	< 0.03	NA
	01/27/98 <sup>c</sup>	2940	374	1,600	0.7	612	3	133	231	100	< 0.1	< 0.005	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	< 0.005	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	05/26/98 <sup>b</sup>	3000	400	2,100	0.7	NA	NA	NA	NA	103	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	0.17	< 0.05	< 0.005	< 0.0002	< 0.005	< 0.01	0.21	NA
	08/13/98 <sup>b</sup>	3300	390	1,900	0.6	585	4	121	229	102	0.006	0.007	< 0.005	< 0.01	< 0.01	0.14	< 0.005	0.012	< 0.0002	< 0.005	< 0.01	0.06	NA
	12/22/98 <sup>b</sup>	3780	300	1,500	1.1	468	3	98.3	183	110	< 0.004	0.0138	< 0.002	< 0.005	< 0.002	0.047	< 0.025	< 0.005	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/24/99 <sup>b</sup>	2480	250	1,200	1.1	403	3.4	88.1	172	106	< 0.004	0.0160	< 0.002	< 0.005	< 0.002	0.137	< 0.025	0.0021	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/27/00 <sup>b</sup>	3100	380	1,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-12	09/17/96 <sup>b</sup>	3670	431	1,810	0.36	688	16	127	247	110	< 0.05	0.02	< 0.005	< 0.01	< 0.01	NA	< 0.003	NA	< 0.0002	< 0.01	< 0.01	0.01	NA
	08/06/97 <sup>b</sup>	3670	435	1,640	0.41	605	< 5	123	236	106	< 0.01	0.01	< 0.005	< 0.01	< 0.01	0.52	< 0.003	NA	< 0.0002	< 0.01	< 0.01	< 0.01	NA
	11/04/97 <sup>b</sup>	3340	390	1,630	0.40	880 <sup>(d)</sup>	2.6	180	330 <sup>(d)</sup>	102	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	0.31	< 0.0002	< 0.04	< 0.01	< 0.03	NA
Dup (MW-24)	11/04/97 <sup>b</sup>	3400	400	1,760	0.40	710 <sup>(d)</sup>	2.4	150	320 <sup>(d)</sup>	102	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	0.43	< 0.0002	< 0.04	< 0.01	< 0.03	NA
	01/30/98 <sup>c</sup>	2680	421	1,600	0.3	625	2	120	209	74	< 0.1	< 0.005	< 0.005	< 0.01	< 0.01	0.05	< 0.05	0.444	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	05/28/98 <sup>b</sup>	3100	440	2,100	0.3	NA	NA	NA	NA	99	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	0.12	< 0.05	0.688	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	08/15/98 <sup>b</sup>	3200	408	2,000	0.4	616	3	118	194	111	0.005	0.005	< 0.005	< 0.01	< 0.01	0.13	< 0.005	0.678	< 0.0002	< 0.005	< 0.01	< 0.02	NA
Dup (MW-28)	08/15/98 <sup>b</sup>	3300	417	1,700	0.4	616	< 2	115	193	108	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	0.09	< 0.005	0.470	< 0.0002	0.005	< 0.01	0.02	NA
	12/28/98 <sup>b</sup>	3210	420	1,700	0.28	551	3.0	108	231	107	< 0.004	0.0083	< 0.002	< 0.005	< 0.002	0.114	< 0.025	0.667	< 0.0002	< 0.010	< 0.003	< 0.01	NA
Dup (MW-28)	03/26/99 <sup>b</sup>	3360	400	1,700	0.41	533	3.4	112	209	104	< 0.004	0.0086	< 0.002	< 0.005	< 0.002	0.110	< 0.025	0.790	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/26/99 <sup>b</sup>	3330	410	1,700	0.37	533	3.2	113	210	104	< 0.004	0.0084	< 0.002	< 0.005	< 0.002	0.103	< 0.025	0.759	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/29/00 <sup>b</sup>	3460	460	1,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.158	NA	1.18	NA	NA	NA	NA	NA	NA

**Table 4. Summary of Ground Water Analyses - Inorganics  
Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	Major Ions (mg/L)									Metals (mg/L)												
		TDS	Chloride	Sulfate	NO <sub>2</sub> /NO <sub>3</sub> - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as CaCO <sub>3</sub> )	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc	Aluminum
NMWQCC Standard:		1000	250	600	10	none	none	none	none	0.1	1.0	0.01	0.05	1.0	1.0	0.05	0.20	0.002	0.05	0.05	0.05	10	5
MW-13	09/19/96 <sup>b</sup>	2810	438	2,910	0.13	496	5	123	136	136	< 0.05	< 0.01	< 0.005	< 0.01	< 0.01	NA	< 0.003	NA	< 0.0002	< 0.01	< 0.01	0.01	NA
	08/09/97 <sup>b</sup>	3640	518	1,460	0.06	484	18	144	212	142	0.02	0.02	< 0.005	< 0.01	< 0.01	0.81	< 0.003	NA	< 0.0002	< 0.01	< 0.01	0.02	NA
	11/04/97 <sup>b</sup>	3760	460	1,720	< 0.05	680 <sup>(d)</sup>	3.0	150	200 <sup>(d)</sup>	152	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	0.67	< 0.03	2.4	< 0.0002	< 0.04	< 0.01	< 0.03	NA
	01/30/98 <sup>c</sup>	2970	490	1,500	< 0.1	707	3	143	174	113	< 0.1	0.009	< 0.005	< 0.01	< 0.01	0.86	< 0.05	1.50	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	05/28/98 <sup>b</sup>	2900	530	2,100	< 0.1	NA	NA	NA	NA	149	< 0.005	0.008	< 0.005	< 0.01	< 0.01	1.41	< 0.05	1.37	0.0033	< 0.005	< 0.01	< 0.02	NA
	08/15/98 <sup>b</sup>	3700	461	1,700	< 0.1	664	5	134	155	163	0.007	0.009	< 0.005	< 0.01	< 0.01	1.36	< 0.005	1.07	< 0.0002	< 0.005	< 0.01	0.06	NA
	12/27/98 <sup>b</sup>	3160	470	1,600	0.03	577	3.2	121	185	192	< 0.004	0.0150	< 0.002	< 0.005	< 0.002	1.56	< 0.025	1.95	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/26/99 <sup>b</sup>	3110	430	1,500	< 0.01	550	3.4	128	170	193	< 0.004	0.0140	< 0.002	< 0.005	< 0.002	1.46	< 0.025	1.84	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/29/00 <sup>b</sup>	3510	550	1,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.908	NA	1.75	NA	NA	NA	NA	NA	NA
MW-14	09/24/96 <sup>b</sup>	3580	364	2,000	0.31	668	6	154	149	98	< 0.05	0.03	< 0.005	< 0.01	< 0.01	NA	< 0.003	NA	< 0.0002	< 0.01	< 0.01	< 0.01	NA
	08/01/97 <sup>b</sup>	3710	360	1,630	0.32	672	< 20	155	180	110	< 0.05	< 0.05	< 0.02	< 0.05	< 0.05	< 0.02	< 0.02	NA	< 0.0002	< 0.05	< 0.05	< 0.05	NA
	11/02/97 <sup>b</sup>	3500	360	1,600	0.13	780 <sup>(d)</sup>	4.1	190	220 <sup>(d)</sup>	112	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	0.06	< 0.0002	< 0.04	< 0.01	< 0.03	NA
	01/29/98 <sup>c</sup>	2890	368	1,700	0.2	664	5	157	169	82	< 0.1	0.012	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	0.013	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	05/27/98 <sup>b</sup>	2700	380	2,200	0.3	NA	NA	NA	NA	112	< 0.005	0.009	< 0.005	< 0.01	< 0.01	0.05	< 0.05	0.007	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	08/11/98 <sup>b</sup>	3300	360	1,800	0.2	608	5	144	161	122	< 0.005	0.009	< 0.005	< 0.01	< 0.01	< 0.02	< 0.005	< 0.005	< 0.0002	< 0.005	< 0.01	0.03	NA
	12/23/98 <sup>b</sup>	3380	360	1,900	0.26	609	4.00	144	165	114	< 0.004	0.0125	< 0.002	< 0.005	< 0.002	< 0.01	< 0.025	< 0.005	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/25/99 <sup>b</sup>	3480	350	1,900	0.25	567	4.04	143	167	114	< 0.004	0.0126	< 0.002	< 0.005	< 0.002	0.011	< 0.025	< 0.001	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/28/00 <sup>b</sup>	3450	380	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
MW-15	09/25/96 <sup>b</sup>	3860	438	3,940	0.58	1,130	7	180	210	138	< 0.05	0.03	< 0.005	< 0.01	< 0.01	NA	< 0.003	NA	< 0.0002	< 0.01	< 0.01	0.08	NA
	08/08/97 <sup>b</sup>	3820	467	1,920	0.35	625	< 5	171	269	118	0.02	0.02	< 0.005	< 0.01	< 0.01	0.32	< 0.003	NA	< 0.0002	< 0.01	< 0.01	0.01	NA
	11/02/97 <sup>b</sup>	3820	450	1,900	0.43	750 <sup>(d)</sup>	3.8	210	330 <sup>(d)</sup>	114	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	0.01	< 0.0002	< 0.04	< 0.01	< 0.03	NA
	01/28/98 <sup>c</sup>	2970	453	1,800	0.4	638	4	174	259	82	< 0.1	0.010	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	0.015	< 0.0002	< 0.1	< 0.01	0.04	NA
	05/27/98 <sup>b</sup>	2900	500	2,300	0.5	NA	NA	NA	NA	110	< 0.005	0.009	< 0.005	< 0.01	< 0.01	0.04	< 0.05	0.006	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	08/13/98 <sup>b</sup>	3900	479	2,200	0.6	586	4	162	262	106	0.006	0.012	< 0.005	< 0.01	< 0.01	0.03	< 0.005	0.012	< 0.0002	< 0.005	< 0.01	0.20	NA
	12/24/98 <sup>b</sup>	3630	440	2,000	0.48	592	4.00	150	281	111	< 0.004	0.0133	< 0.002	< 0.005	< 0.002	0.013	< 0.025	0.0191	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/24/99 <sup>b</sup>	3720	440	1,900	0.50	578	4.57	162	262	111	< 0.004	0.0117	< 0.002	< 0.005	< 0.002	0.019	< 0.025	0.0130	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/28/00 <sup>b</sup>	3720	480	2,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

**Table 4. Summary of Ground Water Analyses - Inorganics**  
**Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	Major Ions (mg/L)										Metals (mg/L)											
		TDS	Chloride	Sulfate	NO <sub>2</sub> /NO <sub>3</sub> - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as CaCO <sub>3</sub> )	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc	Aluminum
NMWQCC Standard:		1000	250	600	10	none	none	none	none	none	0.1	1.0	0.01	0.05	1.0	1.0	0.05	0.20	0.002	0.05	0.05	10	5
MW-17	09/24/96 <sup>b</sup>	3660	437	2,000	0.71	626	< 5	170	218	138	< 0.05	< 0.01	< 0.005	< 0.01	< 0.01	NA	< 0.003	NA	< 0.0002	< 0.01	< 0.01	0.01	NA
	07/31/97 <sup>b</sup>	1570	445	1,820	0.71	221	< 20	71.1	175	96	< 0.05	< 0.05	< 0.02	< 0.05	< 0.05	< 0.2	< 0.02	NA	< 0.0002	< 0.05	< 0.05	< 0.05	NA
	11/02/97 <sup>b</sup>	3770	430	2,000	0.74	770 <sup>(d)</sup>	2.5	210	330 <sup>(d)</sup>	90	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	0.03	< 0.0002	< 0.04	< 0.01	< 0.03	NA
	01/28/98 <sup>c</sup>	2880	444	1,700	0.6	629	3	168	249	64	< 0.1	< 0.005	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	0.018	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	05/27/98 <sup>b</sup>	3000	470	1,500	0.6	NA	NA	NA	NA	89	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	0.011	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	08/13/98 <sup>b</sup>	3900	443	2,100	0.6	578	2	161	257	124	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	< 0.02	< 0.005	0.044	< 0.0002	< 0.005	< 0.01	0.09	NA
	12/24/98 <sup>b</sup>	3600	440	2,000	0.64	558	2.6	148	254	93	< 0.004	0.0079	< 0.002	< 0.005	< 0.002	< 0.01	< 0.025	0.0042	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/25/99 <sup>b</sup>	3590	440	1,900	0.66	535	3.0	152	240	91	< 0.004	0.0077	< 0.002	< 0.005	< 0.002	< 0.01	< 0.025	0.0259	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/28/00 <sup>b</sup>	3690	470	2,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-18	08/09/97 <sup>b</sup>	4240	NA	NA	NA	471	57	164	291	NA	0.02	0.02	< 0.005	0.02	< 0.01	1.09	< 0.003	NA	< 0.002	< 0.01	< 0.01	0.03	NA
	11/01/97 <sup>b</sup>	3850	390	2,020	0.69	760 <sup>(d)</sup>	6.4	210	330 <sup>(d)</sup>	78	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	< 0.01	< 0.0002	< 0.04	< 0.01	< 0.03	NA	
	01/28/98 <sup>c</sup>	3100	424	1,900	0.8	641	7	225	166	55	< 0.1	0.017	< 0.006	< 0.01	< 0.01	< 0.02	< 0.05	< 0.005	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	05/27/98 <sup>b</sup>	2800	430	1,800	0.8	NA	NA	NA	NA	69	< 0.005	0.015	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	< 0.005	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	08/13/98 <sup>b</sup>	3900	479	2,000	0.7	586	7	209	169	82	0.008	0.015	< 0.005	< 0.01	< 0.01	< 0.02	< 0.005	0.007	< 0.0002	< 0.005	< 0.01	0.08	NA
	12/24/98 <sup>b</sup>	3610	400	2,100	0.72	559	5.51	192	174	80	< 0.004	0.0184	< 0.002	0.0052	< 0.002	0.030	< 0.025	< 0.001	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/24/99 <sup>b</sup>	3700	400	2,000	0.66	544	5.77	203	163	84	< 0.004	0.0177	< 0.002	0.0094	< 0.002	< 0.01	< 0.025	< 0.001	< 0.0002	< 0.010	< 0.003	< 0.01	NA
MW-19	09/27/96 <sup>b</sup>	3850	459	2,100	0.82	981	5	226	240	196	< 0.05	0.01	< 0.005	< 0.01	< 0.01	NA	0.004	NA	< 0.0002	< 0.01	< 0.01	0.04	NA
	08/08/97 <sup>b</sup>	3990	536	2,030	0.88	622	11	170	252	122	0.01	0.01	< 0.005	< 0.01	< 0.01	0.08	< 0.003	NA	< 0.0002	< 0.01	< 0.01	< 0.01	NA
	11/01/97 <sup>b</sup>	3920	430	1,880	0.82	710 <sup>(d)</sup>	3.4	210	320 <sup>(d)</sup>	100	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	< 0.01	< 0.0002	< 0.04	< 0.01	< 0.02	NA	
	01/27/98 <sup>c</sup>	3330	469	1,900	0.9	620	5	196	285	97	< 0.1	0.009	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	< 0.005	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	05/27/98 <sup>b</sup>	3400	480	1,600	1.0	NA	NA	NA	NA	96	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	0.14	< 0.05	< 0.005	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	08/13/98 <sup>b</sup>	4000	443	2,000	0.8	589	4	161	252	113	0.007	0.009	< 0.005	< 0.01	< 0.01	0.05	< 0.005	< 0.005	< 0.0002	< 0.005	< 0.01	0.08	NA
	12/23/98 <sup>b</sup>	3740	460	2,100	0.84	582	3.3	169	261	104	< 0.004	0.0122	< 0.002	< 0.005	< 0.002	0.030	< 0.025	< 0.005	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/24/99 <sup>b</sup>	3810	450	2,000	0.84	540	3.7	169	268	105	< 0.004	0.0122	< 0.002	< 0.005	< 0.002	0.036	< 0.025	< 0.001	< 0.0002	< 0.010	< 0.003	< 0.01	NA

**Table 4. Summary of Ground Water Analyses - Inorganics  
Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	Major Ions (mg/L)									Metals (mg/L)												
		TDS	Chloride	Sulfate	NO <sub>2</sub> /NO <sub>3</sub> - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as CaCO <sub>3</sub> )	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc	Aluminum
NMWQCC Standard:		1000	250	600	10	none	none	none	none	0.1	1.0	0.01	0.05	1.0	1.0	0.05	0.20	0.002	0.05	0.05	10	5	
MW-20	08/07/97 <sup>b</sup>	3710	385	1,820	1.65	617	< 5	135	239	200	< 0.01	0.04	< 0.005	< 0.01	0.02	1.85	< 0.003	NA	< 0.0002	< 0.01	< 0.01	0.05	NA
	11/03/97 <sup>b</sup>	3710	290	1,950	0.23	670 <sup>(d)</sup>	2.6	140	270 <sup>(d)</sup>	208	< 0.03	< 0.01	< 0.01	< 0.01	0.02	0.39	< 0.03	< 0.01	< 0.0002	< 0.04	< 0.01	0.22	NA
	01/30/98 <sup>c</sup>	3090	306	1,700	2.8	680	3	137	238	155	< 0.1	< 0.005	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	< 0.005	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	05/29/98 <sup>b</sup>	3000	310	2,400	3.0	NA	NA	NA	NA	208	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	0.03	< 0.05	< 0.005	< 0.0002	< 0.005	< 0.01	< 0.02	NA
Dup (MW-24)	05/29/98 <sup>b</sup>	3200	320	2,400	3.0	NA	NA	NA	NA	198	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	0.09	< 0.05	< 0.005	0.0005	< 0.005	< 0.01	< 0.02	NA
	08/15/98 <sup>b</sup>	3700	301	2,200	2.2	673	4	130	214	242	0.007	0.006	< 0.005	< 0.01	< 0.01	0.26	< 0.005	< 0.005	< 0.0002	< 0.005	< 0.01	< 0.02	NA
Dup (MW-28)	12/28/98 <sup>b</sup>	3620	310	2,100	2.5	597	3.4	123	257	209	< 0.004	0.0107	< 0.002	< 0.005	< 0.002	0.238	< 0.025	0.0012	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	12/28/98 <sup>b</sup>	3660	310	2,000	2.5	598	3.3	119	258	210	< 0.004	0.0107	< 0.002	< 0.005	< 0.002	0.265	< 0.025	0.0043	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/26/99 <sup>b</sup>	3670	290	2,000	2.5	582	3.7	125	236	213	< 0.004	0.0090	< 0.002	< 0.005	< 0.002	0.044	< 0.025	< 0.001	< 0.0002	< 0.010	< 0.003	< 0.01	NA
Dup (MW-31)	03/29/00 <sup>b</sup>	3780	310	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.01	NA	< 0.001	NA	NA	NA	NA	NA
	03/29/00 <sup>b</sup>	3790	300	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.01	NA	< 0.001	NA	NA	NA	NA	NA
MW-21	08/07/97 <sup>b</sup>	3960	436	1,790	0.71	621	< 5	137	192	120	< 0.01	0.06	< 0.005	< 0.01	< 0.01	0.54	< 0.003	NA	< 0.0002	< 0.1	< 0.01	0.03	NA
	11/04/97 <sup>b</sup>	3700	410	1,760	0.36	810 <sup>(d)</sup>	4.0	190	260 <sup>(d)</sup>	118	< 0.03	0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	0.40	< 0.0002	< 0.04	< 0.01	< 0.03	NA
Dup (MW-24)	01/30/98 <sup>c</sup>	3020	440	1,700	< 0.1	654	4	153	199	88	< 0.1	0.029	< 0.005	< 0.01	< 0.01	0.21	< 0.05	0.835	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	01/30/98 <sup>c</sup>	2600	437	1,700	< 0.1	647	4	151	201	87	< 0.1	0.025	< 0.005	< 0.01	< 0.01	0.24	< 0.05	0.798	< 0.0002	< 0.1	< 0.01	0.03	NA
	05/28/98 <sup>b</sup>	3000	450	2,100	< 0.1	NA	NA	NA	NA	124	< 0.005	0.026	< 0.005	< 0.01	< 0.01	0.63	< 0.05	1.51	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	08/15/98 <sup>b</sup>	3400	408	1,900	< 0.1	647	3	144	196	146	0.006	0.020	< 0.005	< 0.01	< 0.01	0.66	< 0.005	1.34	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	12/28/98 <sup>b</sup>	3390	430	1,800	0.03	566	3.3	134	209	138	< 0.004	0.0245	< 0.002	< 0.005	0.0024	0.704	< 0.025	1.47	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/26/99 <sup>b</sup>	3360	410	1,800	< 0.01	548	3.4	138	192	139	< 0.004	0.0225	< 0.002	< 0.005	< 0.002	0.933	< 0.025	1.32	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/29/00 <sup>b</sup>	3440	470	1,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.98	NA	1.52	NA	NA	NA	NA	NA

**Table 4. Summary of Ground Water Analyses - Inorganics**  
**Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	Major Ions (mg/L)										Metals (mg/L)											
		TDS	Chloride	Sulfate	NO <sub>2</sub> /NO <sub>3</sub> - N, total	Calcium	Potassium	Magnesium	Sodium	Total Alkalinity (as CaCO <sub>3</sub> )	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc	Aluminum
NMWQCC Standard:		1000	250	600	10	none	none	none	none	none	0.1	1.0	0.01	0.05	1.0	1.0	0.05	0.20	0.002	0.05	0.05	10	5
MW-22	08/07/97 <sup>b</sup>	3630	377	1,780	0.76	727	6	143	233	302	< 0.01	0.21	< 0.005	< 0.01	0.05	16.5	0.008	NA	< 0.002	< 0.01	< 0.01	0.08	NA
	11/03/97 <sup>b</sup>	3570	380	1,840	0.85	780 <sup>(d)</sup>	3.6	160	290 <sup>(d)</sup>	132	< 0.03	0.04	< 0.01	< 0.01	< 0.01	3.3	< 0.03	0.07	< 0.002	< 0.04	< 0.01	< 0.03	NA
	01/29/98 <sup>c</sup>	2690	394	1,700	0.9	660	4	130	218	85	< 0.1	0.007	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	< 0.005	< 0.002	< 0.1	< 0.01	< 0.02	NA
	05/28/98 <sup>b</sup>	2700	410	2,200	0.9	NA	NA	NA	NA	107	< 0.005	0.009	< 0.005	< 0.01	< 0.01	0.96	< 0.05	0.015	< 0.002	< 0.005	< 0.01	< 0.02	NA
	09/14/98 <sup>b</sup>	NA	NA	NA	NA	573	3	109	206	NA	0.006	0.036	< 0.005	< 0.01	< 0.01	0.41	< 0.005	0.025	0.0008	< 0.005	< 0.01	0.09	NA
	08/14/98 <sup>c</sup>	3600	355	1,800	0.6	642	2	129	236	125	< 0.1	< 0.005	< 0.005	< 0.01	< 0.01	0.08	< 0.05	< 0.005	< 0.002	< 0.1	< 0.01	< 0.02	NA
	12/27/98 <sup>b</sup>	3390	390	1,900	0.85	577	2.9	111	234	114	< 0.004	0.0118	< 0.002	< 0.005	< 0.002	0.305	< 0.025	0.0068	< 0.002	< 0.010	< 0.003	< 0.01	NA
	03/25/99 <sup>b</sup>	3380	380	1,800	0.82	556	3.2	120	220	113	< 0.004	0.0087	< 0.002	< 0.005	< 0.002	0.043	< 0.025	< 0.001	< 0.002	< 0.010	< 0.003	< 0.01	NA
	03/28/00 <sup>b</sup>	3500	420	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.028	NA	< 0.001	NA	NA	NA	NA	NA
MW-23D	08/06/97 <sup>b</sup>	3800	344	1,980	< 0.05	624	8	178	231	124	< 0.01	0.02	< 0.005	0.02	< 0.01	0.11	< 0.003	NA	< 0.002	< 0.01	< 0.01	0.02	NA
	11/05/97 <sup>b</sup>	3880	330	1,900	< 0.05	600 <sup>(d)</sup>	3.5	215	300 <sup>(d)</sup>	128	< 0.03	0.02	< 0.01	< 0.01	< 0.01	0.38	< 0.03	0.11	< 0.002	< 0.04	< 0.01	0.07	NA
	01/28/98 <sup>c</sup>	3180	354	1,800	< 0.1	612	7	183	246	88	< 0.1	0.020	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	0.141	< 0.002	< 0.1	< 0.01	< 0.02	NA
	05/27/98 <sup>c</sup>	3000	350	1,800	< 0.1	NA	NA	NA	NA	90	0.005	0.013	< 0.005	< 0.01	< 0.01	< 0.02	< 0.05	0.094	< 0.002	< 0.1	< 0.01	< 0.02	NA
	08/11/98 <sup>b</sup>	3800	337	2,200	< 0.1	584	6	165	240	128	0.009	0.011	< 0.005	< 0.01	0.02	0.23	< 0.005	0.068	< 0.002	< 0.005	< 0.01	< 0.02	NA
	12/23/98 <sup>b</sup>	3650	330	2,100	0.03	581	3.6	177	240	127	< 0.004	0.0144	< 0.002	< 0.005	< 0.002	0.216	< 0.025	0.0783	< 0.002	< 0.010	< 0.003	0.030	NA
	04/05/99 <sup>b</sup>	3700	300	2,000	0.04	551	3.8	162	208	128	0.0049	0.0162	< 0.002	< 0.005	< 0.002	0.29	< 0.025	0.0641	< 0.002	< 0.020	< 0.003	< 0.01	NA
MW-24D	10/29/98 <sup>c</sup>	3300	350	1,880	< 0.1	NA	NA	NA	NA	157	0.009	0.015	< 0.005	< 0.01	NA	NA	< 0.005	NA	< 0.002	< 0.005	< 0.01	NA	NA
	10/29/98 <sup>b</sup>	NA	NA	NA	NA	622	5	99.5	208	NA	< 0.005	0.026	< 0.005	< 0.01	0.01	1.43	< 0.005	0.220	< 0.002	< 0.005	< 0.01	0.05	NA
	12/23/98 <sup>c</sup>	3220	330	1800	0.02	508	2.5	82.1	179	279	< 0.004	0.0172	< 0.002	< 0.005	0.0065	< 0.01	< 0.025	0.176	< 0.002	< 0.010	< 0.003	< 0.01	NA
	03/30/99 <sup>b</sup>	3360	330	1800	< 0.01	630	3.3	110	213	155	< 0.002	0.0183	< 0.002	< 0.005	< 0.002	0.698	< 0.025	0.261	< 0.002	< 0.010	< 0.003	< 0.01	NA
MW-25D	10/29/98 <sup>c</sup>	3000	340	2,470	< 0.1	NA	NA	NA	NA	121	0.006	0.007	< 0.005	< 0.01	NA	NA	< 0.005	NA	< 0.002	< 0.005	< 0.01	NA	NA
	10/29/98 <sup>b</sup>	NA	NA	NA	NA	596	4	162	161	NA	< 0.005	0.011	< 0.005	< 0.01	< 0.01	0.58	< 0.005	0.109	< 0.002	< 0.005	< 0.01	0.03	NA
	12/23/98 <sup>b</sup>	3450	320	2000	0.01	584	4.00	168	160	122	< 0.004	0.0133	< 0.002	< 0.005	< 0.002	0.327	< 0.025	0.108	< 0.002	< 0.010	< 0.003	0.011	NA
	03/30/99 <sup>b</sup>	3510	310	2000	< 0.01	589	4.38	167	158	121	< 0.002	0.0131	< 0.002	< 0.005	< 0.002	0.510	< 0.025	0.104	< 0.002	< 0.010	< 0.003	< 0.010	NA

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Compressor Station No. 9 - Roswell, NM**

Well	Sampling Date	Major Ions (mg/L)									Metals (mg/L)													
		TDS	Chloride	Sulfate	NO <sub>2</sub> /NO <sub>3</sub> - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as CaCO <sub>3</sub> )	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc	Aluminum	
NMWQCC Standard:		1000	250	600	10	none	none	none	none	none	0.1	1.0	0.01	0.05	1.0	1.0	0.05	0.20	0.002	0.05	0.05	0.05	10	5
MW-26	10/29/98 <sup>c</sup>	3500	320	2,080	5.1	NA	NA	NA	NA	134	< 0.005	0.009	< 0.005	< 0.01	NA	NA	< 0.005	NA	< 0.0002	0.007	< 0.01	NA	NA	
	10/29/98 <sup>b</sup>	NA	NA	NA	NA	650	5	132	215	NA	< 0.005	0.016	< 0.005	< 0.01	< 0.01	0.82	< 0.005	0.082	< 0.0002	< 0.005	< 0.01	< 0.02	NA	
	12/27/98 <sup>b</sup>	3780	300	2200	4.4	607	4.06	128	237	159	< 0.004	0.0213	< 0.002	< 0.005	< 0.002	1.13	< 0.025	0.0347	< 0.0002	< 0.010	< 0.003	< 0.01	NA	
	03/25/99 <sup>b</sup>	3770	290	2100	4.6	578	4.22	135	213	130	< 0.004	0.0137	< 0.002	< 0.005	< 0.002	0.394	< 0.025	0.0165	< 0.0002	< 0.010	< 0.003	< 0.01	NA	
	07/25/99 <sup>b</sup>	3800	280	2100	4.7	642	4.73	134	221	150	< 0.010	0.0322	< 0.002	< 0.005	< 0.002	2.55	< 0.025	0.0464	< 0.0002	< 0.010	< 0.003	0.013	NA	
	03/28/00 <sup>b</sup>	3810	330	2300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.558	NA	0.0104	NA	NA	NA	NA	NA	
MW-28	11/18/00 <sup>b</sup>	2500	383	2030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49.7	NA	1.40	NA	NA	NA	NA	
MW-29	11/19/00 <sup>b</sup>	1810	405	735	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	129	NA	3.63	NA	NA	NA	NA	
MW-30	11/18/00 <sup>b</sup>	3260	385	1970	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49.7	NA	1.38	NA	NA	NA	NA	

**NOTES:**

(a) NA - A result for this constituent is not available

(b) Results represent total metals analysis

(c) Results represent dissolved metals analysis on samples filtered in the lab

(d) Analyte present in method blank

**Table 5. Summary of Completion Details for Soil Borings Completed as Wells  
Compressor Station No. 9 - Roswell, NM**

Well	Source <sup>a</sup>	Date of Completion	Measuring Point Elevation (ft) <sup>b</sup>	Northing (ft)	Easting (ft)	Total Depth of Boring (ft bgs)	Measured Depth of Well (ft from TOC)	Surface Completion Type	Casing Diameter (in.)	Screen Interval (ft bgs)	Top of Sand Pack (ft bgs)
SVE-1A	Layne/DBS	09/21/96	3,616.50	1,793.70	114.40	30	na	Flush Mount	2	20-30	19
SVE-2A	Layne/DBS	09/20/96	3,615.70	1,735.90	178.90	30	na	Flush Mount	2	20-30	17.5
SVE-3	Layne/DBS	09/16/96	3,614.51	1,881.00	176.60	62.3	na	Flush Mount	2	32.0-62.3	29.5
RW-1	??-/Halliburton NUS	06/13/93	na	na	na	42.5	49.65	Flush Mount	na	na	na
MW-1	SH&B/Halliburton NUS	07/21/92	NA	2,001.40	217.60	68	na	Flush Mount	4	28-68	25.2
MW-1B	Layne/Halliburton NUS	04/21/93	3,609.96	1,854.00	265.50	65.5	64.65	Flush Mount	2	55-65	53
MW-2	Layne/Halliburton NUS	04/21/93	3,611.76	2,034.30	102.40	65	61.61	Flush Mount	2	55-65	53
MW-3	Layne/Halliburton NUS	04/26/93	3,614.87	1,629.77	265.23	72.5	na	Flush Mount	2	60-70	58
MW-5	Layne/Halliburton NUS	04/28/93	3,612.77	2,049.70	-150.96	70	na	Flush Mount	2	60-70	58
MW-6	Pool/DBS	12/01/94	3,618.62	1,607.40	-266.20	79	na	Flush Mount	2	59.9-74.9	57.1
MW-7	Harrison/DBS	08/22/95	3,599.20	2,118.00	328.40	70.5	na	Flush Mount	2	50-70	48.1
MW-8	Harrison/DBS	08/16/95	3,595.80	2,178.00	414.70	76.8	na	Flush Mount	2	59-74	57.2
MW-9	Harrison/DBS	08/18/95	3,599.35	2,071.40	512.90	70	na	Flush Mount	2	50-70	47.9
MW-10	Layne/DBS	09/10/96	3,617.85	1,804.76	0.14	74.5	na	Flush Mount	2	57-72	55.3
MW-11	Layne/DBS	09/16/96	3,613.31	2,046.04	-27.10	72	na	Flush Mount	2	54-69	51.5
MW-12	Layne/DBS	09/11/96	3,606.38	2,149.13	152.94	64	na	Flush Mount	2	44-64	42
MW-13	Layne/DBS	09/13/96	3,612.46	1,749.33	265.05	72	na	Flush Mount	2	57-72	55
MW-14	Layne/DBS	09/10/96	3,604.83	1,918.87	365.40	64.5	na	Flush Mount	2	49.5-64.5	48
MW-15	Layne/DBS	09/20/96	3,610.43	1,803.83	516.97	68.5	na	Flush Mount	2	38.5-68.5	37
MW-16	Layne/DBS	09/19/96	3,612.41	1,718.88	387.35	71.4	na	Flush Mount	2	46.4-71.4	45.5
MW-17	Layne/DBS	09/21/96	3,608.43	1,598.72	516.35	70	na	Flush Mount	2	53-68	50.9
MW-18	Layne/DBS	09/25/96	3,609.73	1,701.47	613.38	71	na	Flush Mount	2	54-69	51.6
MW-19	Layne/DBS	09/26/96	3,608.17	1,806.45	717.41	69.5	na	Flush Mount	2	54.5-69.5	51
MW-20	Layne/DBS	08/04/97	3,600.65	2,283.22	148.03	64	na	Flush Mount	2	46.8-61.8	43.9
MW-21	Layne/DBS	08/06/97	3,611.99	1,511.01	408.66	75	na	Flush Mount	2	54-74	51.7

**Table 5. Summary of Completion Details for Soil Borings Completed as Wells  
Compressor Station No. 9 - Roswell, NM**

Well	Source <sup>a</sup>	Date of Completion	Measuring Point Elevation (ft) <sup>b</sup>	Northing (ft)	Easting (ft)	Total Depth of Boring (ft bgs)	Measured Depth of Well (ft from TOC)	Surface Completion Type	Casing Diameter (in.)	Screen Interval (ft bgs)	Top of Sand Pack (ft bgs)
MW-22	Layne/DBS	08/04/97	3,606.04	2,187.66	26.69	68	na	Flush Mount	2	50-65	49
MW-26	GPI/CES	09/01/98	3,597.75	2,416.94	142.26	65	na	Flush Mount	2	43-63	41
MW-27	GPI/CES	09/02/98	3,615.11	1,332.63	433.96	75	na	Flush Mount	2	55-75	53
MW-28	GPI/CES	11/14/00	3,615.90	1,228.94	390.72	75	74.81	Flush Mount	2	60-75	58
MW-29	GPI/CES	11/18/00	3,613.54	1,237.26	542.28	75	74.45	Flush Mount	2	60-75	58
MW-30	GPI/CES	11/16/00	3,612.63	1,133.59	440.96	75	74.70	Flush Mount	2	60-75	58
MW-23D	GPI/CES	07/29/97	3,605.00	1,914.95	393.65	194	na	Flush Mount	4	167-187	164
MW-24D	GPI/CES	09/10/98	3,595.95	2,139.77	807.92	180	na	Flush Mount	4	146-176	143
MW-25D	GPI/CES	09/09/98	3,592.99	2,422.12	314.82	150	na	Flush Mount	4	119-149	117

NOTES:

(a) Driller/Consultant

(b) Survey by Wagener Engineering dated 5/6/98, 9/17/98, and 11/29/00

**Table 6. Monitor Well Sampling Locations, Frequency, and Sample Analysis Plan**  
**Compressor Station No. 9 - Roswell, NM**

Analytical Requirements				
Well ID	1st Semiannual Event	2nd Semiannual Event	Total Benzene (ppb) Most recent event	Comments
MW-1	none	none	na	well pugged and abandoned
MW-1B	none	none	na	PSH in well
MW-2	none	none	na	PSH in well
MW-3	VOCs, TDS, Cl, & SO4	none	<1	clean perimeter well
MW-5	none	none	<1	clean; outside clean perimeter well
MW-6	none	none	<1	clean; outside clean perimeter well
MW-7	VOCs, TDS, Cl, SO4, Fe & Mn	VOCs	<1	clean perimeter well
MW-8	none	none	<1	clean; outside clean perimeter well
MW-9	none	none	<1	clean; outside clean perimeter well
MW-10	VOCs, TDS, Cl, & SO4	none	<1	clean; upgradient perimeter well
MW-11	VOCs, TDS, Cl, & SO4	none	<1	clean perimeter well
MW-12	VOCs, TDS, Cl, SO4, Fe & Mn	VOCs	80	COCs: benzene; elevated Fe & Mn
MW-13	VOCs, TDS, Cl, SO4, Fe & Mn	VOCs	139	COCs: benzene; elevated Fe & Mn
MW-14	VOCs, TDS, Cl, & SO4	none	<1	clean perimeter well
MW-15	VOCs, TDS, Cl, & SO4	none	<1	clean perimeter well
MW-16	none	none	na	PSH in well
MW-17	VOCs, TDS, Cl, & SO4	none	<1	clean perimeter well
MW-18	none	none	<1	clean; outside clean perimeter well
MW-19	none	none	<1	clean; outside clean perimeter well
MW-20	VOCs, TDS, Cl, SO4, Fe & Mn	VOCs	<1	COCs: DCA, DCE, TCA; elevated Fe & Mn
MW-21	VOCs, TDS, Cl, SO4, Fe & Mn	VOCs	1430	COCs: benzene; elevated Fe & Mn
MW-22	VOCs, TDS, Cl, SO4, Fe & Mn	VOCs	<1	COCs: DCE, TCA; elevated Fe & Mn
MW-23D	VOCs	none	<1	clean deep well
MW-24D	VOCs	none	<1	clean deep well
MW-25D	VOCs	none	<1	clean deep well
MW-26	VOCs, TDS, Cl, SO4, Fe & Mn	VOCs	<1	COCs: DCE; elevated Fe & Mn
MW-27	none	none	na	PSH in well
MW-28	VOCs, TDS, Cl, SO4, Fe & Mn	VOCs, PAHs,	<1	New wells sampled quarterly for VOCs & PAHs and annually for TDS, Cl, SO4, Fe & Mn
MW-29	VOCs, TDS, Cl, SO4, Fe & Mn	VOCs, PAHs,	590	New wells sampled quarterly for VOCs & PAHs and annually for TDS, Cl, SO4, Fe & Mn
MW-30	VOCs, TDS, Cl, SO4, Fe & Mn	VOCs, PAHs,	<1	New wells sampled quarterly for VOCs & PAHs and annually for TDS, Cl, SO4, Fe & Mn

Notes:

- 1) nd - non-detect
- 2) na - not available; sample not collected or analysis not requested
- 3) VOCs - Volatile Organic Compounds by EPA Method 8260
- 4) PAHs - by EPA Method 8270 (including monomethylnaphthalene isomers 1- & 2- )

**Table 7. Summary of Analytical Results for Phase V Assessment Soil Samples**  
**Compressor Station No. 9 - Roswell, NM**

Sampling Date	Sample ID	TPH (mg/kg)	VOC's (ug/kg)	SVOC's (ug/kg)	Aluminum	Arsenic	Boron	Barium	Beryllium	Cadmium	Chromium, Hexavalent	Chromium, Total	Copper	Mercury	Nickel	Lead	Antimony	Selenium	Tin	Thallium	Vanadium	Zinc	Metals (mg/Kg)	
MW-28 (60-62)	11/14/00	ND	all ND	< 1.00	11200	1.75	85.8	< 0.500	3.23	NA	9.19	6.27	< 0.250	8.46	< 10.0	< 0.500	< 10.0	< 0.500	< 10.0	< 0.500	< 10.0	< 0.500	24.2	29.9
MW-29 (65-67)	11/18/00	ND	all ND	< 1.00	18700	3.02	246	< 0.500	4.43	NA	14.8	9.37	< 0.250	11.4	11.3	< 0.500	< 0.500	< 10.0	< 0.500	< 10.0	< 0.500	< 10.0	29.3	40.4
MW-30 (65-67)	11/16/00	ND	all ND	< 1.00	8100	2.15	224	< 0.500	< 0.500	2.73	NA	6.01	5.46	< 0.250	7.71	< 10.0	< 0.500	< 0.500	< 10.0	< 0.500	< 10.0	< 0.500	18.0	24.2

Notes:

all ND - Results were Non-Detect for all VOC's by Method 8260 and for all SVOC's by Method 8270

NA - An analytical result for this constituent was not reported by the laboratory

TPH for samples 11/00 were run by NW TPH-Gx and Dx methods

**Annual Report of Groundwater Remediation Activities**

**Transwestern Pipeline Company  
Roswell Compressor Station**

**Attachment #1**

**Soil Boring Logs and State Well Completion Reports**

# Cypress Engineering Services

Boring ID: MW-28

Project:

Monitor Well Drilling & Installation

Location:

Enron/Tapp Roswell Station 9

Sheet:

1 OF 2

Client:

Station 9

Job number:

Driller:

CES

Total depth:

Drilling method:

Amanita Hungaria, Jimmy, 89 ESIC

75'

Boring date:

HSA, Mobil Drill B-61.

8" O.D. / 4 1/4" I.D. Auger

Water level:

11/14/00.

CMB.

Logged by:

Date measured:

depth (ft)	SAMPLE			standard penetration test results	SOIL DESCRIPTION	graphic log	COMMENTS
	interval	number	recovery (inches)				
					Color, soil type, relative density or consistency, mineralogy. USGS classification moisture content		Monitoring well installation, geotechnical properties, analytical tests, instrumentation
0					0-12': Sand, Silt, Cobble, gravel. 30% gravel. Tan brown Sand /Silt.		All readings with Hua P10 ticks Calibrated to 100 KPa Solenylene. (GM)
10	10'-12'	18"	71 Spt Blows		Spt. Blows 71 1/2 foot. Split Spoon 10'-12': 12'-22': Tan to brown. Sand, Silt, gravel. to 21. 40%.		10'-12': P10 Reading N.O. (non-detect) (GM)
20	20'-22'	12"	300 spt Blows. 87-82'		Split Spoon: 20'-22': 300' Red. Clayey Sand. Slight plasticity		20'-22': P10 Reading N.O. (GM)
30	30'-32'	24"	80 spt Blows.		Split Spoon 30'-32': 80. Red clayey sand. plastic. /for clay. 80 spt Blows. Clay 60%		30'-32': P10 Reading N.O. (CL)
40	40'-42'	24"	110 spt Blows.		Split Spoon 40'-42': 110 spt Blows. Red /Clayey Sand decrease in clay fraction. Clay 20% Sand: med. gr. well sorted.		Sand / Red Clayey. decrease in clay fraction 40'-42': P10 Reading N.O. (CL)
50	50'-52'	24"	120 spt Blows		Split Spoon 50'-52': 120 spt Blows. Red fine to med. gr. Well sorted clayey sand. Clay 20-30% -		50'-52': P10 Reading 2.5 KPM. (CL)
60	50'-62' (60')	139 spt Blows			Split Spoon: 60'-62': Red fine to med gr. Sand. Clay 10%. Red clay, Sand. No staining or odor.		Sampled 2/403 (Glass Jar). No Preservative C 12:45 Appears clean / No odor or staining 60'-62': P10 Reading N.O.

# Cypress Engineering Services

Boring ID: MW-28

## Monitor Well Drilling & Installation

Project: Earon / Two Roswell stations

Location: Station 9

Client: CES

Driller: GPI, Amador Hinojosa, Jimmy. ISIDRO

Drilling method: HSA, mag. Dril B-61

Boring date:

Boring date: 11/17/00  
Water level: 65.91' 865

Sheet:

20F2

Job number:

Total depth:

751

Boring diameter

8" O.D. / 4 1/4" I.D.

\_ Logged by:

Date measured:

11714/00

# Cypress Engineering Services

Boring ID:

MW-29(A:B)

## MONITOR WELL DRILLING & INSTALLATION

Project: Enron/Twp Roswell station #9

Sheet:

1 OF 2

Location: STATION 9

Client: CES

Driller: GPI, Amador Hinjosa Jimmy, Esri, Inc.

Job number:

75' 34.5

Drilling method: HSA, Mobil Drill B-61

Total depth:

8"0.0./14<sup>1</sup>/<sub>4</sub>" I.D.

Boring date: 11/15/00

Boring diameter:

CMB

Water level:

Logged by:

Date measured:

depth (ft)	SAMPLE			standard penetration test results	SOIL DESCRIPTION	graphic log	COMMENTS
	interval	number	recovery (inches)				
					Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content		Monitoring well installation, geotechnical properties, analytical tests, instrumentation
10	10'-12'	24"	341 SPT Blows		0'-5': White Tan Sand, S, H, Gravel, Cobble, caliche. GM		All readings with Hsu P.D. Field calibrated to 100 ppm Isobutyl form.
20	20'-22'	31"	42 SPT Blows		10'-12': Rec-2.0' 341 SPT Blows. Gravel, Sand, Silt, Caliche.		10'-12': P.D. reading N.D. (Non-Detect)
30	30'-32'	4"	30 SPT Blows		Hand drilling - Cobble & gravel. Hard drilling 25.5-27'. Cobble?		20'-22': P.D. Reading 2.5 ppm.
40	40'-42'				6"- Har Rec. 6" @ 30'-32' Tan brown Sand & Silt/H mixed with 40% gravel & cobble. 31'-34.5 - Rock - Burned up		30'-32': P.D. Reading N.D. Bed rock? Conglomerate.
50	50'-52'				Hole Bit & Ruined / Auger - Abandoned Location @ 14:33 and		
60	60'-62'		SPT Blows		Moved. Hole South 101. - Same as above. abandoned @ 30'		

# Cypress Engineering Services

Boring ID: MW-29(c)

Monitor well Drilling & Installation

Project: EnviroTech Roswell Station #9  
 Location: Roswell Station 9 (50' east of original proposed location)  
 Client: CES  
 Driller: GPI, Amador Hinojosa, Jimmy, Isidro -  
 Drilling method: HSA, Mobil Drill B-61  
 Boring date: 11/17/00 - 11/18/00  
 Water level:

Sheet: 10F2

Job number:

Total depth:

75'

Boring diameter:

8" O.D. 14 1/4" I.O.

Logged by:

CMB.

Date measured:

depth (ft)	SAMPLE			Standard penetration test results	SOIL DESCRIPTION	graphic log	COMMENTS
	interval	number	recovery (inches)				
					0'-5': white to tan brown sand, Silt, gravel, cobbles, & caliche.		Monitoring well installation, geotechnical properties, analytical tests, instrumentation
10	10'-12'	24"	319 SFT Blows		Sand, Silt, gravel, cobbles. Gravel 40%. Tan brown sand & Silt.		(GM) F10 10'-12': PPM - 0 :
20	20'-22'	6"	400 SFT Blows		Sand, Silt, gravel, cobbles. Gravel 40-50%. Tan brown sand & Silt.		(GM) F10 20'-22': <del>PPM</del> - 1.5
30	30'-32'	245"	300 SFT Blows		Bedrock - Conglomerate with rounded cobbles to 2". 30'-32.5', Used Air Rotary to drill through. C32.5 Red clayey sand.		(GM) F10 30'-32' PPM - 0.6
40	40'-42'	24"	69 SFT Blows		Clayey Sand, 80% Clay. Red tan - Sand 20%		F10: 40'-42': CL/SW. PPM - 0.4
50	50'-52'	24"	117 SFT Blows		Red fat clay with 10-20% Sand		Fat Clay 50'-52' F10. 50'-52': CL/SW PPM - 0.2
60	60'-62'	24"	106 SFT Blows				

# Cypress Engineering Services

Boring ID: *MW-29 (c)*

## Monitor Well Drilling & Installation

Project: Enron/Twp Roswell Station 9

Location: Roswell Station 9 (So East of proposed initial Location)

Client: CF5

Driller: GPI, Amato Huijink, Jimmy, Isidor.

Drilling method: HSA, mobil Dril B-61

Boring date: 11/15/00 - 11/17/00 - 11/18/00

### Water level

Sheet:

2021

2012  
ESTATE

Job number:

Total depth: 75'

Boring diameter: 8"0.0. 4 $\frac{1}{4}$ " I.D.

Logged by: CMB

Date measured:

# Cypress Engineering Services

Boring ID: MW-30

*Monitor Well Drilling & Installing*

Project: Earon/Tup Roswell Station #9

Location: Station 9

Client: CES

Driller: GPI, Amaro Hinojosa, Jiminy, Isidro

Drilling method: HGA, Magic Drill B-61

Boring date: 11/16/00

Water level:

Sheet: 1 OF 2

Job number:

Total depth: 75'

Boring diameter: 8" O.D./4 1/4" I.D.

Logged by: CMB

Date measured:

depth (ft)	SAMPLE			standard penetration test results	SOIL DESCRIPTION	graphic log	COMMENTS
	interval	number	recovery (inches)				
10'					0'-12': Tan brown Sand Silt, gravel, and cobbles to 2" Gravel 40%		GM
10'-12'	22"	342 Spt Blows			12'-22': Tan brown Sand, med to fine gr. well sorted, Silt, and 40% Gravel / cobble to 2"		10'-12': F10 = PPM - Ø
20'	20'-22'	8"	400 Spt Blows		20'-22': 400 Spt Blows		GM
26'					26'-27' - Clay - . Fat clay mixed with red. (40%)		Fat clay? (H) CL / SW
30'	20'-32'	20"	108 Spt Blows		clayey sand. - 60%		30'-32': F10 = PPM - Ø
40'	40'-42'	20"	99 Spt Blows		Spl. t Spts: 40'-42': 99 Spt Blows - Rel. clayey sand - Clay 70% Sand 30%		40'-42': F10 = PPM - Ø
50'	50'-52'	20"	118 Spt Blows		Spl. t Spts: 50'-52': 118" Rel. clayey sand. 50% Clay		50'-52': F10 = CL / SW PPM - Ø
60'	60'-62'		168 Spt Blows				

# Cypress Engineering Services

Boring ID: MW-30

Project: Euron/Two Rivers Station #9

Project: Euron/Twp Koswci Staton #9

Location: Station 9

Client: CES

Driller: GPI, Amador Flugjagd, Timor, Isidor

Drilling method: HSA, mobil Dril B-61

Boring date: 11/16/02

Boring date: 11/16/10  
Water level:

Water level:

Sheet:

2022

STATE ENGINEER OFFICE  
WELL RECORD

## Section 1. GENERAL INFORMATION

(A) Owner of well Transwestern Pipeline Co. Owner's Well No. MW30  
 Street or Post Office Address 10381 N. Main St.  
 City and State Roswell New Mexico 88201

Well was drilled under Permit No. \_\_\_\_\_ and is located in the:

- a. SE 1/4 SW 1/4 1/4 1/4 of Section 21 Township 9 South Range 2T4E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in \_\_\_\_\_ County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in \_\_\_\_\_ the \_\_\_\_\_ Grant.

(B) Drilling Contractor Cooperativs International, Inc. License No. WD 1311

Address 5834 Circle Drive Austin TX 78736

Drilling Began 11/16/00 Completed 11/16/00 Type tools Hollow Stem Auger Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well, 75 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well \_\_\_\_\_ ft.

## Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			

## Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
<u>2</u>	<u>0.716</u>	<u>2</u>	<u>0</u>	<u>60</u>	<u>60</u>	<u>SCH 40 PVC Riser</u>	<u>n/a</u>	<u>n/a</u>
<u>2</u>	<u>0.716</u>	<u>2</u>	<u>60</u>	<u>75</u>	<u>15</u>	<u>SCH 40 PVC Screen</u>	<u>60</u>	<u>75</u>

## Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement	
				From	To
<u>0</u>	<u>50</u>	<u>8"</u>	<u>10 sks</u>	<u>17.82</u>	<u>Cement pumped from surface</u>
<u>50</u>	<u>58</u>	<u>8"</u>	<u>1 sk</u>	<u>.63</u>	<u>Bentonite Surface Drop</u>
<u>58</u>	<u>75</u>	<u>8"</u>	<u>10 sks</u>	<u>5.4</u>	<u>Sand Surface Drop</u>

## Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

## FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_ Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. \_\_\_\_\_ Use \_\_\_\_\_ Location No. \_\_\_\_\_

## **Section 6. LOG OF HOLE**

**Section 7. REMARKS AND ADDITIONAL INFORMATION**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

**INSTRUCTIONS:** This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

STATE ENGINEER OFFICE  
WELL RECORD

## Section 1. GENERAL INFORMATION

(A) Owner of well Transwestern Pipe Line Co. Owner's Well No. MW-29B  
 Street or Post Office Address 6381 Rt Main St.  
 City and State Chaves New Mexico 88201

Well was drilled under Permit No. \_\_\_\_\_ and is located in the:

- a. SE 1/4 SW 1/4 1/4 1/4 of Section 21 Township 9 South Range 2T4E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in \_\_\_\_\_ County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in \_\_\_\_\_  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Geoprojects International Inc License No. WD 1311

Address 8834 Circle Drive Austin Tx 78736

Drilling Began 11/15/00 Completed 11/15/00 Type tools Hollow Stem Size of hole 8 in.  
Roger

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 30 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well \_\_\_\_\_ ft.

## Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			

## Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To

## Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement	
				From	To
0	30	8	6 Sks	10.47	Surface Drop

## Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

## FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. \_\_\_\_\_ Use \_\_\_\_\_ Location No. \_\_\_\_\_

## Section 6. LOG OF HOLE

## **Section 7. REMARKS AND ADDITIONAL INFORMATION**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Dokument

**INSTRUCTIONS:** This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

## STATE ENGINEER OFFICE

## WELL RECORD

## Section 1. GENERAL INFORMATION

(A) Owner of well Transwestern Pipeline Co. Owner's Well No. MW-29A  
 Street or Post Office Address 6381 North Main St.  
 City and State Roswell New Mexico 88201

Well was drilled under Permit No. \_\_\_\_\_ and is located in the:

a. SE 1/4 SW 1/4 1/4 1/4 of Section 21 Township 9 South Range R74E N.M.P.M.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in \_\_\_\_\_ County.

d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in \_\_\_\_\_  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Geoprojects International, Inc. License No. WD 1311

Address BB34 Circle Drive Austin TX 78736

Drilling Began 11/15 Completed 11/15 Type tools Hollow Stem Auger Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well \_\_\_\_\_ ft.

Completed well is  shallow  artesian. Depth to water upon completion of well \_\_\_\_\_ ft.

## Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			

## Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To

## Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement	
				From	To
0	34.5	8	75ks	12	surface drop

## Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

## FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. \_\_\_\_\_ Use \_\_\_\_\_ Location No. \_\_\_\_\_

## Section 6. LOG OF HOLE

**Section 7. REMARKS AND ADDITIONAL INFORMATION**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

## Drillers

**INSTRUCTIONS:** This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

## STATE ENGINEER OFFICE

## WELL RECORD

## Section 1. GENERAL INFORMATION

(A) Owner of well Transwestern Pipeline Co. Owner's Well No. NW 29  
 Street or Post Office Address 6381 North Main St.  
 City and State Roswell New Mexico 88201

Well was drilled under Permit No. \_\_\_\_\_ and is located in the:

- a. SE 1/4 SW 1/4 1/4 1/4 of Section 21 Township 9 South Range 12 T 4 E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in \_\_\_\_\_ County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in \_\_\_\_\_  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Cenprojects International, Inc. License No. WA 1311  
 Address 2534 Circle Drive Austin, TX 78730

Drilling Began 11/17/00 Completed 11/18/00 Type tools Hollow Stem Auger Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 75 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well \_\_\_\_\_ ft.

## Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)

## Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
2	0.716	2	0	60	60	Riser SCH 40 PVC	n/a	n/a
2	0.716	2	60	75	15	Screen .010 SCH 40 PVC	60	75

## Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement	
					Top	Bottom
0	56	8"	10 sks	17.82	Cement	Pumped from Surface
56	58	8"	1 sk	.63	Bentonite	Surface Drop through HSA
58	75	8"	10 sks	5.4	Sands	Surface Drop through HSA

## Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

## FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_ Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. \_\_\_\_\_ Use \_\_\_\_\_ Location No. \_\_\_\_\_

## **Section 6. LOG OF HOLE**

**Section 7. REMARKS AND ADDITIONAL INFORMATION**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

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**Annual Report of Groundwater Remediation Activities**

**Transwestern Pipeline Company  
Roswell Compressor Station**

**Attachment #2**

**Laboratory Reports for Groundwater Sampling Events**