GW - 52

MONITORING REPORTS

DATE: 1999

Enron Gas
Pipeline Group
P. O. Box 1188
Houston, TX 77251-1188

June 30, 1999

Mr. William C. Olson
Environmental Bureau
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Phase IV Assessment Report, Ground Water Monitoring Report,
& Phase V Ground Water Assessment Work Plan
Compressor Station No. 9 -- Roswell, NM
Transwestern Pipeline Company

Dear Bill,

Enclosed for your review is the Phase IV Assessment Report, Ground Water Monitoring Report, and Phase V Ground Water Assessment Work Plan for the subject facility.

If you have any questions or comments regarding this report and work plan, please contact me at (713) 646-7644 or George Robinson at (713) 646-7327.

Sincerely,

Bill Kendrick
Director, Environmental Affairs

gcr/BK

c w/attachment: Larry Campbell — Transwestern Pipeline Company
George Robinson — Cypress Engineering

PHASE IV ASSESSMENT REPORT,

GROUND WATER MONITORING REPORT,

& PHASE V ASSESSMENT WORK PLAN

FOR

ROSWELL COMPRESSOR STATION NO. 9

Volume I: Report Text, Figures, Tables, & Attachments #1 - #3

Prepared for:

Transwestern Pipeline Company

Prepared by:

Cypress Engineering Services, Inc.

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June 1, 1999

TABLE OF CONTENTS

Section **Page**

LIST OF FIGURES

Figure

LIST OF TABLES

Table

LIST OF ATTACHMENTS

Report Volume I

1 Soil Boring Log and Well Completion Details for the Additional Monitor Wells

2 Completed State Engineer Well Record Forms for the Additional Monitor Wells

3 Soil Boring Logs for the Background Soil Sample Soil Borings

Report Volume II

4 Laboratory Reports for the May 1998 Ground Water Sampling Event

5 Laboratory Reports for the May 1998 Off Site Water Well Sampling Event

6 Laboratory Reports for the August 1998 Ground Water Sampling Event

Report Volume III

7 Laboratory Reports for the September 1998 Monitor Well Soil Borings and Background Soil Samples

8 Laboratory Reports for the October 1998 Ground Water Sampling Event

9 Laboratory Reports for the December 1998 Ground Water Sampling Event

10 Laboratory Reports for the March 1999 Ground Water Sampling Event

1. INTRODUCTION

This report and work plan has been prepared for the continued investigation and evaluation of hydrocarbon affected soil and ground water at Transwestern Pipeline Company's (TPC) Roswell Compressor Station No. 9.

A phased approach has been implemented for the assessment of potentially affected soil and ground water at the site. In general, the objective of Phase I, completed in August 1995, was to characterize the nature of affected soil immediately beneath the former impoundments. The objective of Phase II of investigation, completed in September 1996, was to evaluate two additional potential source areas and to further assess the lateral and vertical extent of affected soil and ground water. The objective of Phase III of investigation, completed in August 1997, and Phase IV of investigation, completed in September 1998, was to further assess the lateral and vertical extent of affected soil and ground water. The objective of Phase V of investigation will be to complete the assessment of the lateral extent of affected ground water. This phase will include the installation of three additional shallow ground water monitor wells within the uppermost aquifer. Subsequent phases may be required to complete assessment activities and to address corrective actions that may be required to meet soil and ground water cleanup criteria. A scope of work for subsequent phases will be prepared and submitted to the OCD for review and approval.

2. PHASE IV SOIL ASSESSMENT ACTIVITIES

2.1 Characterization of Affected Soil for Remedial Measures Study

This aspect of the Phase IV soil assessment plan was not completed in the course of the most recent assessment activities and will be completed if necessary at a later date.

2.2 Determination of Site-Specific Background Metals Concentrations in Soil

Several of the metal constituents detected in soil samples collected in the course of prior assessments are also known to occur naturally in soil. Therefore, in order to objectively evaluate laboratory analyses for metal constituents in potentially affected soil samples, Transwestern collected soil samples in the course of the Phase IV assessment program for the determination of site specific background concentrations of selected metal constituents.

2.2.1 Constituents subject to evaluation

Background soil concentrations were determined for the following metal constituents: Al, Sb, As, Ba, Be, Cd, Cr (total), Cr (VI), Co, Cu, Pb, Hg, Se, Tl, Ag, Ni, Sn, V, and Zn.

2.2.2 Soil sampling program

Number/frequency of samples

Transwestern collected 16 soil samples from 8 soil borings (two samples from each soil boring) which were presumed to be uncontaminated by facility operations. Each sample was delivered to a laboratory for analysis for each of the 19 metal constituents subject to evaluation.

Location/depths of samples

The eight surface locations are indicated in Figure 1 as soil boring locations BG1 through BG8. Two samples were collected from each boring from the interval of 10-14 feet below ground surface. This sampling depth was chosen to correspond with the depth of the most highly affected soil in the immediate vicinity of the former impoundments.

Consideration was given to the selection of surface sample locations farther removed from the former impoundment area. However, prior soil assessment activities have indicated that the near surface alluvial sediments in the vicinity of the site vary considerably within relatively short distances, laterally as well as vertically. As a result, although samples collected from locations farther removed from the former impoundment area would more assuredly produce "clean" samples, these samples would not likely be representative of affected soil in their elemental makeup. Therefore, Transwestern chose background sample locations at a relatively close distance to the former impoundments and imposed certain criteria on the use of sample data as discussed below.

In order to better assure only "clean" samples are utilized in the determination of background concentrations, samples from each location were submitted to a laboratory for determination of Total Petroleum Hydrocarbons (TPH) by method 418.1. Prior soil assessment activities have indicated that near surface soils (that is, < 15 ft. bgs) outside the immediate vicinity of the former impoundments have been relatively free of organic contaminants. Furthermore, inorganic contaminants would not reasonably be expected to be present at this site in the absence of organic contaminants. Therefore, any samples collected from a location which also contained a reported TPH concentration > 50 mg/kg were excluded from the dataset for determination of background concentrations.

Sample collection methods

Soil sampling was performed by hollow stem auger drilling techniques and a split-barrel sampler as described in Section 3.4 of the Phase IV assessment plan. A soil boring log for each of the eight background soil sample borings is included as Attachment #3.

2.2.3 Laboratory Results for Background Soil Samples

The laboratory results for background soil samples are presented in Table 9 of this report. Three of the sixteen samples collected were excluded from use in the determination of mean and variance due to an elevated concentration of TPH.

2.2.4 Determination of Mean and Variance

The mean and variance was determined for each of the 19 metal constituents using the analytical data obtained from 13 of the background samples (excludes the three which exceeded the TPH criteria for use). The mean and variance calculated for each metal constituent is listed in Table 9.

3. PHASE IV GROUND WATER ASSESSMENT ACTIVITIES

3.1 Installation of Two Additional Monitor Wells into the Uppermost Aquifer

Two additional ground water monitor wells were installed into the uppermost aquifer in September 1998. The locations of the wells are indicated as MW-26 and MW-27 in Figure 1. These wells were installed with the purpose of delineating the lateral extent of dissolved phase contaminants in the uppermost aquifer. A boring log and completion diagram for each monitor well is included as Attachment #1. A completed State Engineer Well Record for each of monitor well is included as Attachment #2. Results for ground water sampling of these two wells is included in Section 4 of this report.

3.2 Installation of Two Additional Monitor Wells into the Regional Aquifer

Two additional ground water monitor wells were installed into the regional aquifer in September 1998. The locations of the wells are indicated as MW-24D and MW-25D in Figure 1. These wells were installed for the purpose of confirming that the vertical extent of dissolved phase contaminants is limited to the uppermost aquifer. A boring log and completion diagram for each monitor well is included as Attachment #1. A completed State Engineer Well Record for each of monitor well is included as Attachment #2. Results for ground water sampling of these two wells is included in Section 4 of this report.

4. RESULTS OF ROUTINE GROUND WATER MONITORING

4.1 Quarterly Ground Water Sampling Events

Five quarterly sampling events have been completed subsequent to the last report of ground water monitoring activities.

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. The measured depth to water and the corresponding water table elevation for each monitor well is presented in Table 1.

In the course of each sampling event, ground water samples were collected from all monitor wells with the exception of those wells with accumulated PSH in the well casing. A measurable thickness of PSH was indicated in five monitor wells in the course of the last sample event, and as a result, ground water samples were not collected from these wells. A summary of field measured ground water quality parameters (pH, temperature, electrical conductivity, dissolved oxygen, and turbidity) obtained in the course of sampling is presented in Table 5.

Ground water samples from each monitor well were delivered to a laboratory for analysis for VOCs, PAHs, major ions, TDS, and those metals regulated under WQCC 82-1 Part 3-103 A & B. An updated summary of analytical results for organic compounds is presented in Table 2. An updated summary of analytical results for inorganic constituents is presented in Table 3. Copies of the laboratory reports for all ground water sampling events are included as attachments to this report.

4.2 Results/Conclusions from Ground Water Sampling Events

4.2.1 Occurrence and Direction of Ground Water Flow

A water table elevation map for the uppermost aquifer based on measurements obtained during the October 11, 1998 sampling event is included as Figure 2. The apparent direction of ground

water flow is consistent with water table elevation maps previously developed for this site. Furthermore, the direction of ground water flow indicated in Figure 2 is consistent with the distribution of dissolved phase organic contaminants in the uppermost aquifer.

Water table elevation maps for the regional aquifer based on measurements obtained during the October 19, 1998 sampling event and the December 21, 1998 sampling event are included as Figure 3 and Figure 4, respectively. The measured fluctuations in elevation and flow direction in the regional aquifer are due to natural seasonal fluctuations.

4.2.2 Lateral Extent of Phase Separated Hydrocarbon

The lateral extent of PSH in the uppermost aquifer 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 as shown in Figure 5. The southern extent of PSH in the uppermost aquifer has yet to be defined. This will be addressed by the Phase V work plan.

No PSH has been indicated in any of the regional aquifer monitor wells.

4.2.3 Condition of Affected Ground Water

A summary of analytical results for organic compounds is presented in Table 2. The more recent results are consistent with previous sample events. A map indicating the relative distribution of benzene, 1,1-dichloroethane, 1,1-dichloroethene, and 1,1,1-trichloroethane concentrations in the uppermost aquifer, based on measurements obtained during the March 1999 sampling event, is included as Figure 5.

There have been no detections of organic contaminants in ground water samples collected from the regional aquifer.

A summary of analytical results for inorganic constituents is presented in Table 3. A map indicating the relative distribution of TDS, chloride, sulfate, and arsenic concentrations in the uppermost aquifer, based on measurements obtained during the March 1999 sampling event, is included as Figure 6.

A summary of the detection frequency for metal constituents in ground water is included in Table 10. A brief discussion of the occurrence of each metal constituent is provided as follows:

Arsenic – Of the 164 groundwater samples analyzed for arsenic, 21 analyses indicated the presence of arsenic above the reported detection limit. The maximum detected concentration of arsenic was 0.02 mg/L. None of the 21 reported detections were above the NMWQCC standard of 0.10 mg/L. The 21 reported detections were fairly evenly distributed among samples collected from 15 different monitor wells with the greatest frequency of detection at monitor well MW-23D where 3 of 7 samples were reported with detectable concentrations. These sample results indicate that none of the monitor wells, including the five wells known to be affected by organic contaminants, appear to be affected by potential arsenic contamination associated with facility operations. As a result, arsenic has been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Barium – Of the 164 groundwater samples analyzed for barium, 118 analyses indicated the presence of barium above the reported detection limit. The maximum detected concentration of barium was 0.21 mg/L. None of the 118 reported detections were above the NMWQCC standard of 1.0 mg/L. The 118 reported detections were fairly evenly distributed among samples collected from all 22 monitor wells. These sample results indicate that none of the monitor wells, including the five wells known to be affected by organic contaminants, appear to be affected by potential barium contamination associated with facility operations. As a result, barium has been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Cadmium – Of the 164 groundwater samples analyzed for cadmium, none of the analyses indicated the presence of cadmium above the reported detection limit. These sample results indicate that none of the monitor wells, including the five wells known to be affected by organic contaminants, appear to be affected by potential cadmium contamination associated with facility operations. As a result, cadmium has been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Chromium – Of the 164 groundwater samples analyzed for chromium, 5 analyses indicated the presence of chromium above the reported detection limit. The maximum detected concentration of chromium was 0.02 mg/L. None of the 5 reported detections were above the NMWQCC standard of 0.05 mg/L. The 5 reported detections were fairly evenly distributed among samples collected from 3 different monitor wells with the greatest frequency of detection at monitor well MW-18 where 3 of 7 samples were reported with detectable concentrations. These sample results indicate that none of the monitor wells, including the five wells known to be affected by organic contaminants, appear to be affected by potential chromium contamination associated with facility operations. As a result, chromium has been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Lead – Of the 164 groundwater samples analyzed for lead, 5 analyses indicated the presence of lead above the reported detection limit. The maximum detected concentration of lead was 0.008 mg/L. None of the 5 reported detections were above the NMWQCC standard of 0.05 mg/L. The 5 reported detections were evenly distributed among samples collected from 5 different monitor wells. These sample results indicate that none of the monitor wells, including the five wells known to be affected by organic contaminants, appear to be affected by potential lead contamination associated with facility operations. As a result, lead has been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Mercury – Of the 164 groundwater samples analyzed for mercury, 8 analyses indicated the presence of mercury above the reported detection limit. The 8 reported detections were evenly distributed among samples collected from 8 different monitor wells. The maximum detected concentration of mercury was 0.0033 mg/L. The one detection of mercury at 0.0033 mg/L was the only detection of the 8 reported detections above the NMWQCC standard of 0.002 mg/L. The detection of mercury at 0.0033 mg/L was from a sample collected from monitor well MW-13. Seven other samples collected from monitor well MW-13 were non-detect for mercury. These sample results indicate that none of the monitor wells, including the five wells known to be affected by organic contaminants, appear to be affected by potential mercury contamination associated with facility operations. As a result, mercury has been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Selenium – Of the 164 groundwater samples analyzed for selenium, 6 analyses indicated the presence of selenium above the reported detection limit. The maximum detected concentration of selenium was 0.020 mg/L. None of the 6 reported detections were above the NMWQCC standard of 0.05 mg/L. The 6 reported detections were distributed among samples collected from 3 different monitor wells with the greatest frequency of detection at monitor well MW-5 where 4 of 7 samples were reported with detectable concentrations. These sample results indicate that none of the monitor wells, including the five wells known to be affected by organic contaminants, appear to be affected by potential selenium contamination associated with facility operations. As a result, selenium has been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Silver – Of the 164 groundwater samples analyzed for silver, none of the analyses indicated the presence of silver above the reported detection limit. These sample results indicate that none of the monitor wells, including the five wells known to be affected by organic contaminants, appear to be affected by potential silver contamination associated with facility operations. As a result, silver has been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Copper – Of the 162 groundwater samples analyzed for copper, 9 analyses indicated the presence of copper above the reported detection limit. The maximum detected concentration of copper was 0.05 mg/L. None of the 9 reported detections were above the NMWQCC standard of 1.0 mg/L. The 9 reported detections were fairly evenly distributed among samples collected from 7 different monitor wells with the greatest frequency of detection at monitor well MW-20 where 2 of 7 samples were reported with detectable concentrations and at monitor well MW-24D where 2 of 3 samples were reported with detectable concentrations. These sample results indicate that none of the monitor wells, including the five wells known to be affected by organic contaminants, appear to be affected by potential copper contamination associated with facility operations. As a result, copper has been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Iron – Of the 142 groundwater samples analyzed for iron, 92 analyses indicated the presence of iron above the reported detection limit. The maximum detected concentration of iron was 16.50 mg/L; the next highest detected concentration of iron was 1.85 mg/L. Detected concentrations of iron above the NMWQCC standard of 1.0 mg/L appear to be limited to just one monitor well, MW-13. Monitor well MW-13 is also known to be affected by organic contaminants. As a result, iron has not been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Manganese – Of the 123 groundwater samples analyzed for manganese, 71 analyses indicated the presence of manganese above the reported detection limit. The maximum detected concentration of manganese was 2.40 mg/L; the next highest detected concentration of manganese was 1.50 mg/L. Detected concentrations of manganese above the NMWQCC standard of 0.20 mg/L appear to be limited to five monitor wells: MW-7, MW-12, MW-13, MW-21, and MW-24D. Monitor wells MW-12, MW-13, and MW-21 are also known to be affected by organic contaminants. As a result, manganese has not been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Zinc – Of the 162 groundwater samples analyzed for zinc, 52 analyses indicated the presence of zinc above the reported detection limit. The maximum detected concentration of zinc was 0.39 mg/L. None of the 52 reported detections were above the NMWQCC standard of 10 mg/L. The 52 reported detections were fairly evenly distributed among samples collected from 21 of the 22 monitor wells. These sample results indicate that none of the monitor wells, including the five wells known to be affected by organic contaminants, appear to be affected by potential zinc contamination associated with facility operations. As a result, zinc has been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

Aluminum – Of the 6 groundwater samples analyzed for aluminum, all 6 analyses indicated the presence of aluminum above the reported detection limit. The maximum detected concentration of aluminum was 3.13 mg/L. None of the 6 reported detections were above the NMWQCC standard of 5 mg/L. The 6 reported detections were evenly distributed among samples collected from 6 monitor wells. Analysis of groundwater samples for aluminum was discontinued after one of the earlier sample events since the NMWQCC standard for aluminum only applied to water for irrigation use. Likewise, aluminum has been excluded from the routine groundwater sample analysis plan as outlined in Section 4.3.4.

4.3 Planned Changes to the Ground Water Monitoring Program

4.3.1 Inclusion of Additional Monitor Wells

The monitoring program will be modified to include the monitor wells to be completed within the uppermost aquifer in the course of the Phase V and subsequent assessment activities.

4.3.2 Disposal of Monitor Well Purge Water

Purge water collected from "clean" monitor wells will be discharged to the ground surface at the well location upon completion of sampling activities at the well. A "clean" well will be defined for this purpose as a well for which ground water samples have not indicated the presence of an organic contaminant above the NMWQCC ground water standards or a detection of a halogenated organic contaminant within the last three sample events. This definition would

exclude as "clean" monitor wells MW-12, 13, 20, 21, and 22. Purge water from these monitor wells will be accumulated in one or more 55 gallon drums until the completion of sampling activities and then managed appropriately.

4.3.3 Sampling Frequency

Transwestern proposes to move to the following schedule for ground water sampling:

Well ID	Frequency	Comment
MW-5	None	10 events, organics all non-detect, well MW-11 provides a "clean" sample point between MW-5 and the release area
MW-6	None	10 events, organics all non-detect, well MW-10 provides a "clean" sample point between MW-6 and the release area
MW-8	None	9 events, organics all non-detect with just one exception, well MW-7 provides a "clean" sample point between MW-8 and the release area
MW-9	None	9 events, organics all non-detect, wells MW-7 & MW-14 provide "clean" sample points between MW-9 and the release area
MW-18	None	7 events, organics all non-detect, wells MW-15 and MW-17 provide "clean" sample points between MW-18 and the release area
MW-19	None	8 events, organics all non-detect with just one exception, well MW-15 provides a "clean" sample point between MW-19 and the release area
MW-3	Annual	10 events, organics all non-detect, MW-3 defines the "clean" perimeter of the contaminant plume
MW-10	Annual	8 events, organics all non-detect, MW-10 defines the "clean" perimeter of the contaminant plume and is an upgradient well
MW-11	Annual	8 events, organics all non-detect, MW-11 defines the "clean" perimeter of the contaminant plume
MW-14	Annual	8 events, organics all non-detect with just one exception, MW-14 defines the "clean" perimeter of the contaminant plume
MW-15	Annual	8 events, organics all non-detect with just one exception, MW-15 defines the "clean" perimeter of the contaminant plume
MW-17	Annual	8 events, organics all non-detect with just one exception, MW-17 defines the "clean" perimeter of the contaminant plume
MW-23D	Annual	5 events, organics all non-detect, monitors quality of the regional aquifer
MW-24D	Annual	3 events, organics all non-detect, monitors quality of the regional aquifer
MW-25D	Annual	3 events, organics all non-detect, monitors quality of the regional aquifer
MW-7	Semiannual	9 events, organics all non-detect with just one exception, MW-7 is located in close proximity to the release area
MW-12	Semiannual	Well MW-12 is affected by organic contaminants
MW-13	Semiannual	Well MW-13 is affected by organic contaminants
MW-20	Semiannual	Well MW-20 is affected by organic contaminants
MW-21	Semiannual	Well MW-21 is affected by organic contaminants
MW-22	Semiannual	Well MW-22 is affected by organic contaminants
MW-26	Quarterly	3 events, organics all non-detect, MW-26 defines the "clean" perimeter at the northern end of the contaminant plume, will move to semiannual sampling upon completion of the next sampling event
MW-28	Quarterly	Proposed well
MW-29	Quarterly	Proposed well
MW-30	Quarterly	Proposed well

4.3.4 Sample Analysis Plan

Transwestern proposes to move to the following sample analysis plan:

Well ID	Frequency	Sample Analysis Plan
MW-5	None	None
MW-6	None	None
MW-8	None	None
MW-9	None	None
MW-18	None	None
MW-19	None	None
MW-3	Annual	VOCs by Method 8260, TDS, chloride, & sulfate
MW-10	Annual	VOCs by Method 8260, TDS, chloride, & sulfate
MW-11	Annual	VOCs by Method 8260, TDS, chloride, & sulfate
MW-14	Annual	VOCs by Method 8260, TDS, chloride, & sulfate
MW-15	Annual	VOCs by Method 8260, TDS, chloride, & sulfate
MW-17	Annual	VOCs by Method 8260, TDS, chloride, & sulfate
MW-23D	Annual	VOCs by Method 8260
MW-24D	Annual	VOCs by Method 8260
MW-25D	Annual	VOCs by Method 8260
MW-7	Semiannual	VOCs by Method 8260 & annually: TDS, chloride, sulfate, iron, & manganese
MW-12	Semiannual	VOCs by Method 8260 & annually: TDS, chloride, sulfate, iron, & manganese
MW-13	Semiannual	VOCs by Method 8260 & annually: TDS, chloride, sulfate, iron, & manganese
MW-20	Semiannual	VOCs by Method 8260 & annually: TDS, chloride, sulfate, iron, & manganese
MW-21	Semiannual	VOCs by Method 8260 & annually: TDS, chloride, sulfate, iron, & manganese
MW-22	Semiannual	VOCs by Method 8260 & annually: TDS, chloride, sulfate, iron, & manganese
MW-26	Quarterly	VOCs by Method 8260 & annually: TDS, chloride, sulfate, iron, & manganese
MW-28 (new well)	Quarterly	VOCs by Method 8260, PAHs by Method 8270 & annually: TDS, chloride, sulfate, iron, & manganese
MW-29 (new well)	Quarterly	VOCs by Method 8260, PAHs by Method 8270 & annually: TDS, chloride, sulfate, iron, & manganese
MW-30 (new well)	Quarterly	VOCs by Method 8260, PAHs by Method 8270 & annually: TDS, chloride, sulfate, iron, & manganese

4.3.5 Routine Reporting of Monitoring Activities

Transwestern proposes to implement annual reporting of ground water monitoring activities. The next annual report will be submitted to the OCD by July 31, 2000.

5. PHASE V GROUND WATER ASSESSMENT PLAN

The current ground water monitoring network consists of twenty-two wells completed within the uppermost aquifer, three wells completed within the deeper regional aquifer, and one well completed within a perched zone (Figure 1). Information collected from additional monitor wells will help to refine the current picture of ground water flow direction, and the nature, rate, and extent of ground water contamination in the uppermost aquifer.

5.1 Installation of Additional Ground Water Monitor Wells

Three additional ground water monitor wells will be installed in the uppermost aquifer to further delineate the extent of PSH and the dissolved-phase plume to the south of existing monitor well MW-27. The proposed location of these three wells is indicated in Figure 7. In addition to the three wells indicated in Figure 7, additional monitor wells may be installed if warranted based on field observations.

Prior to well installation, soil borings will be drilled to the total depth, approximately 10 feet below the water table, at each location with minimum 6-inch-O.D. augers. Soil samples will be collected at 10-foot intervals during the drilling of the pilot hole and field headspace screening will be performed using a PID. At a minimum, one soil sample from each boring will be collected for laboratory analyses; the sample collected from a depth nearest to the capillary fringe of the uppermost aquifer (or at total depth if water is not present in the soil boring). Soil samples will be submitted for analyses for TPH, VOCs, SVOCs, and selected metals (those metals listed in Section 2.2.1). Soil grab samples will also be collected periodically during drilling to better define the geologic conditions at the site.

The monitor wells will be installed within the hollow-stem augers following the completion of the soil boring. Immediately prior to well construction, the total depth of the borehole will be determined using a weighted steel tape or tag line.

The monitor wells will be constructed of 2-inch diameter schedule 40 PVC pipe and will include, in ascending order, a flush-threaded silt trap (sump) at the bottom, 10 to 25 feet of flush-threaded 0.01-inch machine-slotted PVC screen, and blank casing from the top of the screen to ground surface. No more than 15 feet of screen will be installed below the water table.

Once the well casing has been lowered to the bottom of the borehole, a sandpack consisting of 12-20 silica sand will be poured down the annulus of the auger in 3-foot lifts. After each 3-foot interval is filled, the augers will be pulled up approximately the same distance. This procedure will be repeated until the sand pack level is approximately 2 feet above the top of the screened section. The annular space above the sand pack will then be filled with a minimum 2-foot-thick pelletized bentonite seal, which will be hydrated with distilled water. The remaining annular space will be filled with a cement/bentonite slurry grout consisting of approximately 3 percent bentonite by weight. The top of the well casing will be protected by a PVC cap, and the exposed casing will be protected by a locking steel shroud or well vault. A concrete pad will then be constructed around the shroud or well vault.

Immediately following well installation, the new monitor wells will be developed following the procedures outlined in Section 5.2.

Ground water samples will be collected following the procedures outlined in Section 5.3. Ground water samples will be submitted to a laboratory for analysis per the sample analysis plan presented in Section 4.3.4.

5.2 Monitor Well Development Procedures

The newly installed monitor wells will be developed by a sequence of surging and pumping and/or bailing. Initially, the wells will be surged to dislodge any smeared material on the borehole wall that would otherwise inhibit ground water flow and to remove fine particles from the formation surrounding the borehole. The suspended sediments will be removed by bailing, pumping, or air lifting. During well development, pH, temperature, specific conductance, and

turbidity will be monitored periodically to determine when the wells have been sufficiently developed. Development will be considered complete when the water becomes relatively clear and water quality parameters have stabilized to within ± 5 percent over three consecutive measurements.

5.3 Ground Water Sampling Procedures

Prior to ground water sample collection, the following preparations will be made:

1. The area around the wellhead will be inspected for integrity, cleanliness, and signs of possible contamination.
2. The static water level will be measured to the nearest 0.01 foot using an electrical water level sounder. The presence of any obvious contamination on the water level sounder will be noted in the field logbook. The sounder will be decontaminated between wells, as described in Section 5.4, in order to prevent cross contamination.
3. Prior to purging the wells, a clear bailer, hydrocarbon indicating paste, or an interface probe will be used to check for the presence of PSH. The presence or absence of PSH will be recorded in the field logbook, as well as the thickness of PSH, if any.
4. The well will then be purged to remove standing/stagnant water in order to ensure the collection of representative ground water samples. Monitor wells with dedicated bladder pumps will be purged at a rate equal to or greater than the anticipated sample collection flow rate. Monitor wells without dedicated bladder pumps will be purged by hand bailing with dedicated, disposable polyethylene bailers. The field parameters pH, electric conductivity, dissolved oxygen, and temperature will be measured throughout the purging process at a frequency of at least once per casing volume. Purging will continue for a minimum of three casing volumes and until the field parameters remain stable to within ±5 percent over at least one casing volume, except if the well is a very poor producer. In this case, the well will be purged dry once prior to sample collection. All fluids produced during purging will be contained for later disposal as described in Section 5.5.

Following purging, unfiltered ground water samples will be collected as soon as possible using either a dedicated bladder pump or a dedicated disposable polyethylene bailer. Under no circumstances will the well be allowed to stand for more than three hours after well purging before collecting samples. The only exception is for very low-yield wells that are pumped dry under normal purging and sampling rates. In this case, the well will be pumped dry and allowed to recover until sufficient water is present in the well to allow a sample to be collected.

In the event that a sample is turbid (i.e., > 50 NTU), a note will be placed on the sample COC that instructs the laboratory to filter the sample prior to analyses for inorganic constituents.

The samples will be collected in order of decreasing volatility, with samples for VOC analysis being collected first. The pumping rate during sample collection of VOC samples at monitor wells with a dedicated bladder pump will be maintained at 100 milliliters (mL) per minute or less to minimize volatilization. All samples will be collected in precooled, acidified, certified-clean 40-mL glass vials with septum caps supplied by the laboratory. Following collection of the VOC samples, the SVOC, metals, and other samples will be collected in appropriate containers.

The sample coolers with the associated chain-of-custody forms will be shipped to the laboratory using an overnight commercial carrier. The fastest possible shipping method will be used, and all sample shipments will be carefully tracked to ensure that samples arrive intact and that all holding times are met.

5.4 Decontamination Procedures

All non-disposable field equipment that may potentially come in contact with contaminated ground water or soils will be decontaminated in order to minimize the potential for cross-contamination between sampling locations. Clean latex or plastic gloves will be worn during all decontamination operations. The following sequence of decontamination procedures will be followed prior to each sampling and/or testing event:

1. Wash the equipment in a solution of non-phosphate detergent (Liquinox®) and distilled/deionized water. Use a clean Nalgene® tub to contain the wash solution and a scrub brush to mechanically remove loose particles.
2. Rinse the equipment twice with distilled/deionized water.
3. Allow the equipment to air dry before the next use.

5.5 Management of Investigation-Derived Wastes

A variety of wastes will be generated during the implementation of the ground water assessment plan. These wastes include soil cuttings, decontamination fluids, used PPE, and ground water produced during well development and purging.

Hydrocarbon contaminated soils, as determined by field headspace screening (PID headspace measurement > 100 ppmv), will be segregated from soils determined by field screening not to be contaminated (PID headspace measurement < 100 ppmv). Soils segregated by field screening techniques will await analytical results before a plan for final disposition is prepared.

A management plan for the final disposition of investigation derived wastes (IDW) will be prepared and submitted to the OCD for approval.

PPE and dry waste associated with these activities will be disposed of in a sanitary landfill.

5.6 Reporting Requirements

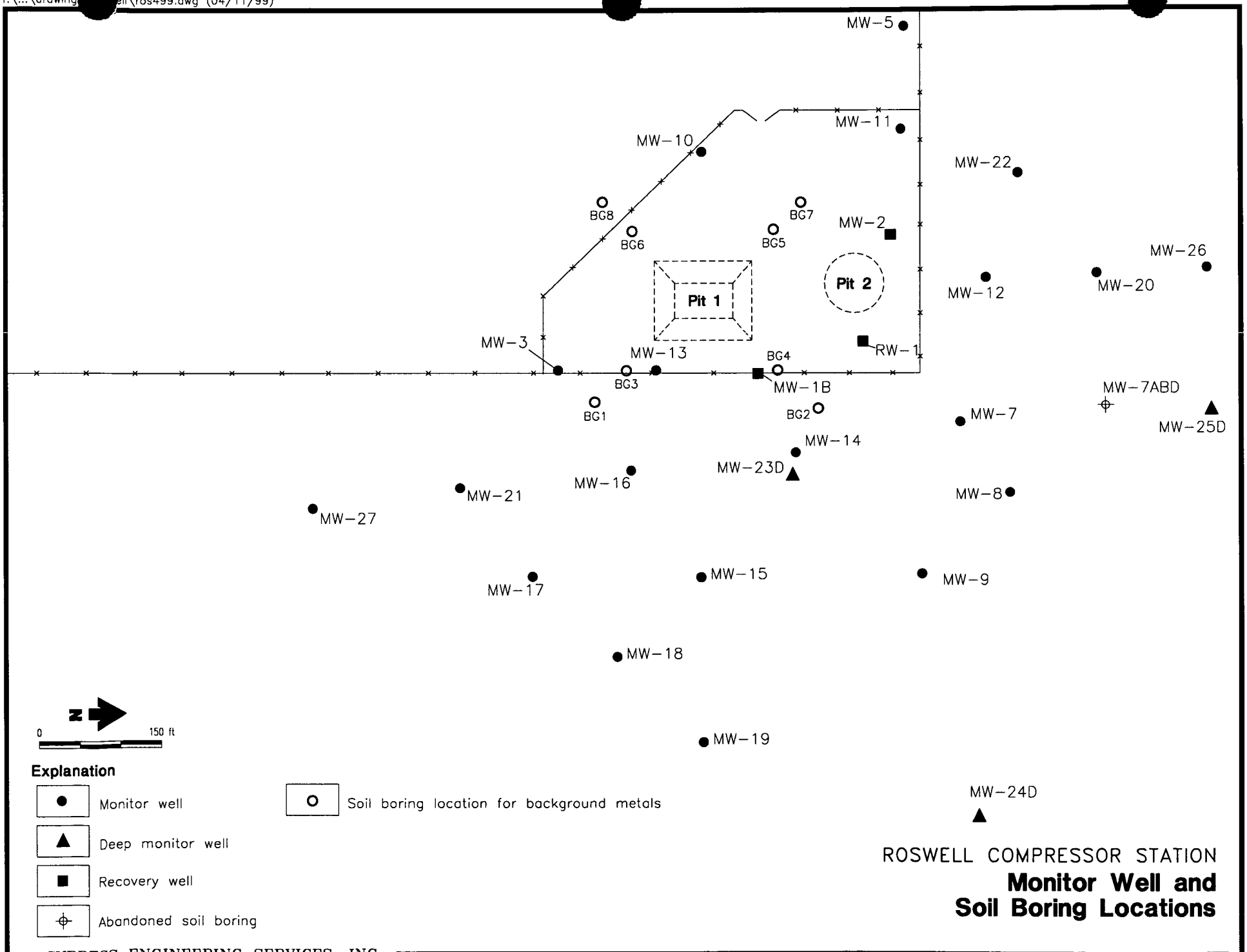
Following completion of the Phase V ground water assessment, the results of the assessment activities will be summarized in a report submitted to the OCD along with copies of the laboratory results for the ground water samples analyzed.

The report will include the following information, as applicable:

- ground water sampling information
    1) monitor well ID
    2) sample date - time
    3) field observations (i.e., presence of PSH, turbidity, odor, etc.)
    4) sample parameters/methods
    5) sample container types
    6) sample handling procedures
    7) copy of chain of custody
    8) sample results & detection limits
    9) any pertinent QA/QC information
- comparison of constituents detected with previous sample results, action levels, and/or background levels and any QA/QC concerns
- water table elevation map indicating hydraulic gradient and ground water flow direction
- PSH distribution map indicating the lateral estimated extent of PSH at the water table
- contaminant distribution map(s) showing the concentrations and horizontal extent of contamination for key hazardous constituents identified from laboratory analysis
- discussion and results from any aquifer testing.

FIGURES

f:\...\drawing ell\ros499.dwg (04/11/99)



Explanation

- Monitor well
- Deep monitor well
- Recovery well
- Abandoned soil boring
- Soil boring location for background metals

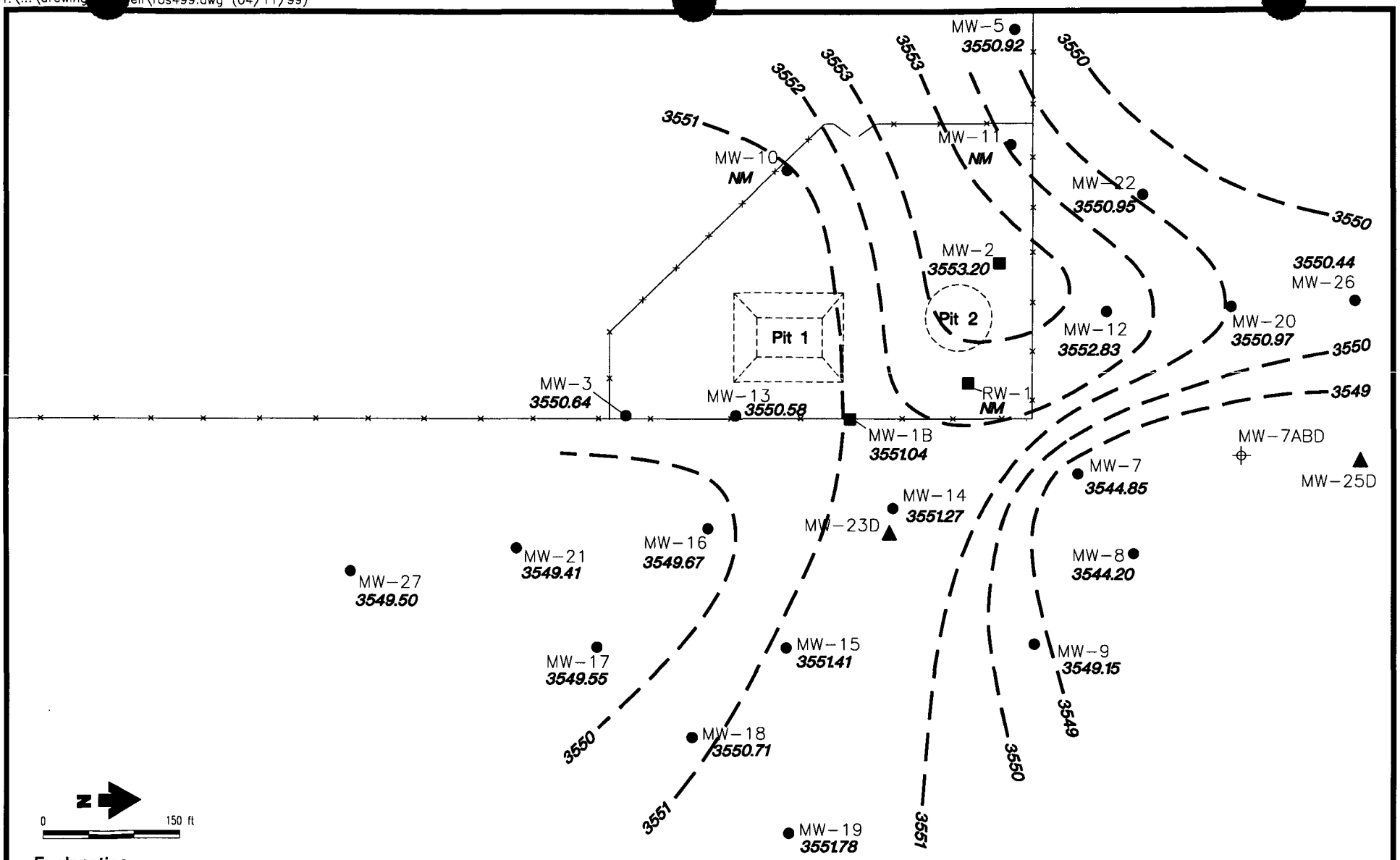
ROSWELL COMPRESSOR STATION

Monitor Well and Soil Boring Locations

CYPRESS ENGINEERING SERVICES, INC.

Figure 1

f:\...\drawing ell\ros499.dwg (04/11/99)



Explanation

- Monitor well
- Deep monitor well
- Recovery well
- Abandoned soil boring
- 355197 — Water level elevation (ft msl) (Note: NM = Not Measured)
- 3549 — Elevation contour (ft msl)

ROSWELL COMPRESSOR STATION

Potentiometric Surface Elevations in the Uppermost Aquifer October 11, 1998

CYPRESS ENGINEERING SERVICES, INC.

Figure 2

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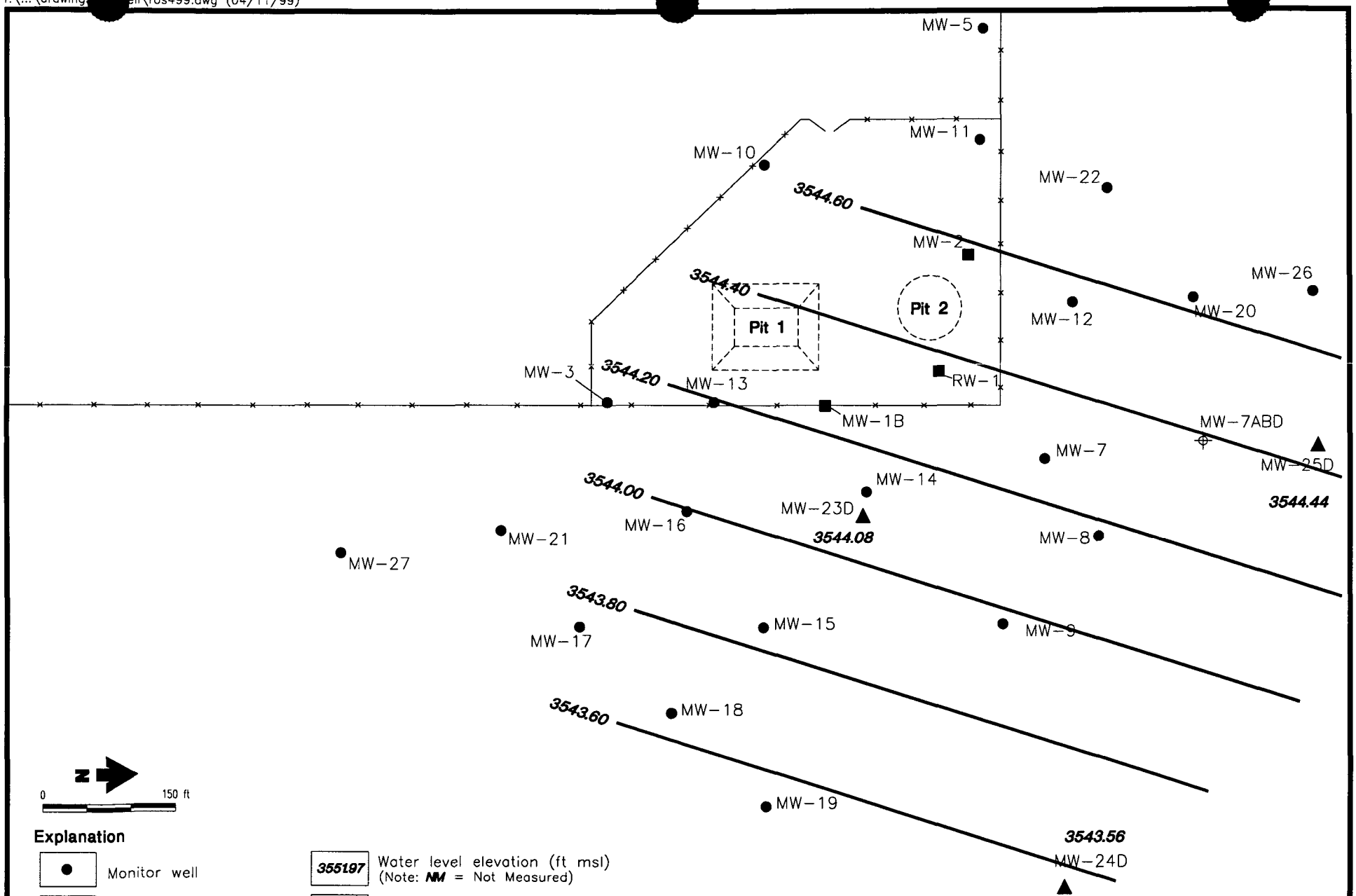
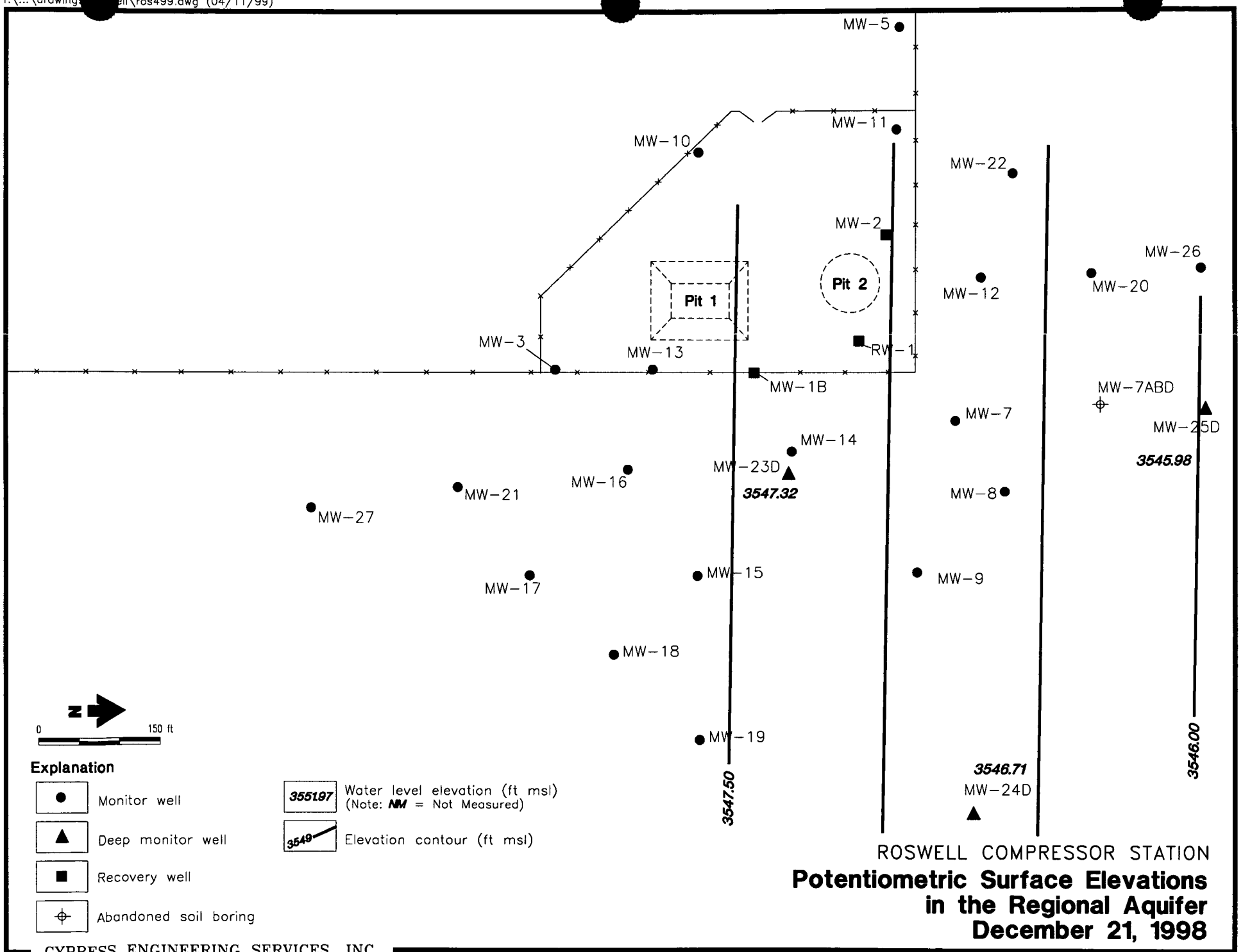


ROSWELL COMPRESSOR STATION

Potentiometric Surface Elevations in the Regional Aquifer October 19, 1998

CYPRESS ENGINEERING SERVICES, INC.

Figure 3



ROSWELL COMPRESSOR STATION

Potentiometric Surface Elevations in the Regional Aquifer December 21, 1998

CYPRESS ENGINEERING SERVICES, INC.

Figure 4

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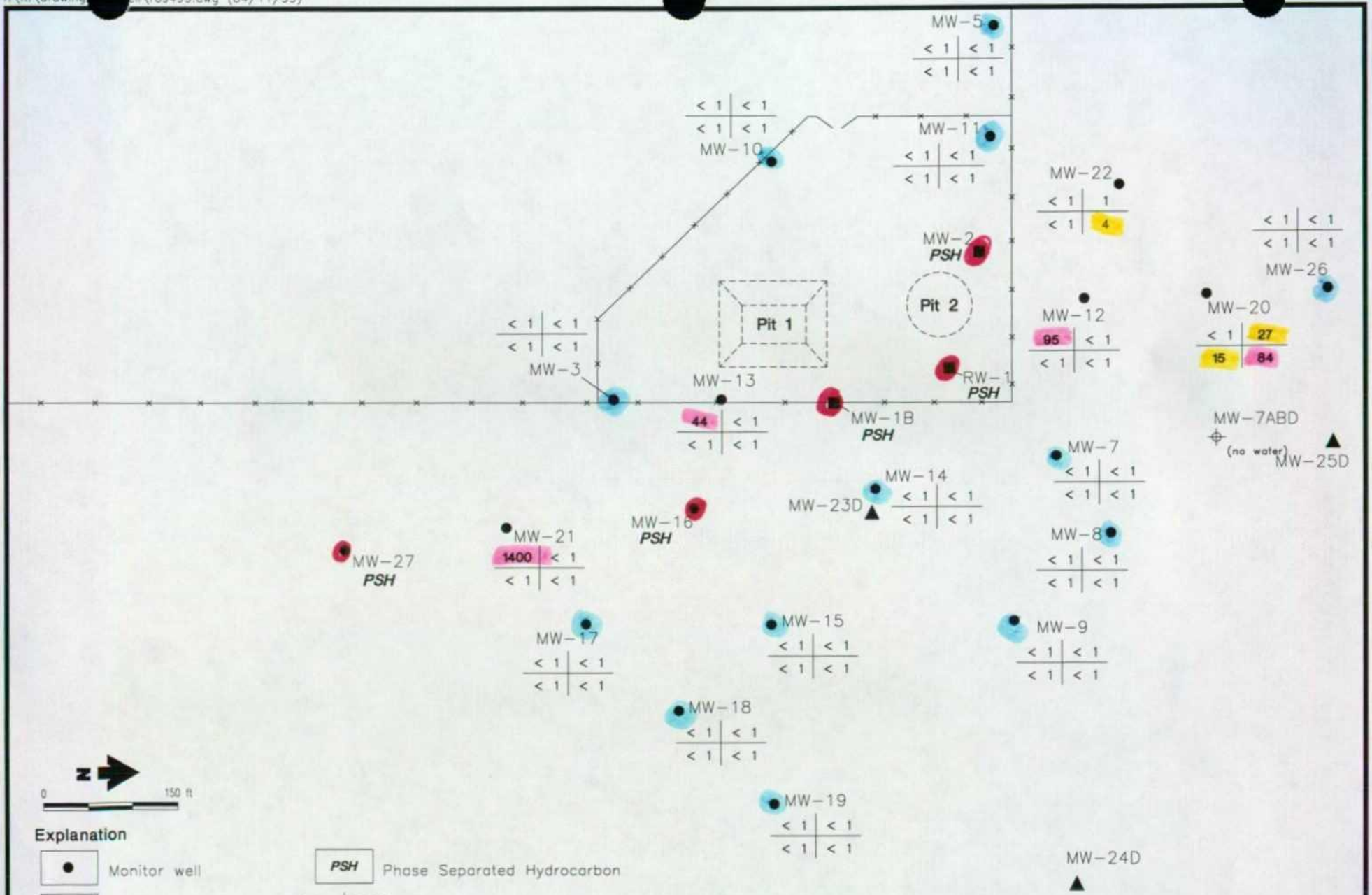

Explanation

- Monitor well
- Deep monitor well
- Recovery well
- Abandoned soil boring
- PSH — Phase Separated Hydrocarbon
- Benzene | 111-TCA / 11-DCA | 11-DCE — Concentration in Ground Water (ppb)

ROSWELL COMPRESSOR STATION

Distribution of Dissolved Phase Organics in the Uppermost Aquifer March, 1999

CYPRESS ENGINEERING SERVICES, INC.

Figure 5

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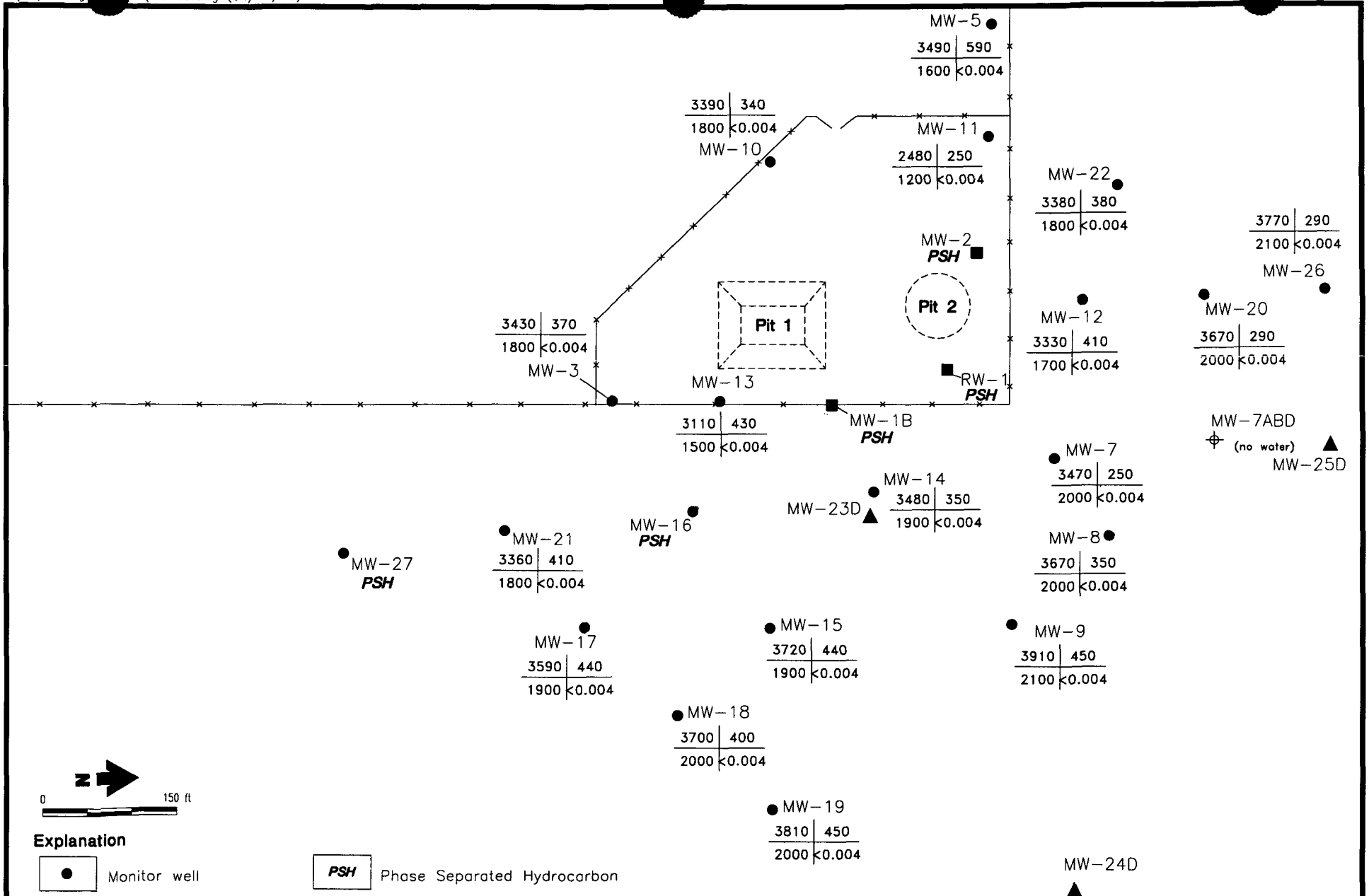
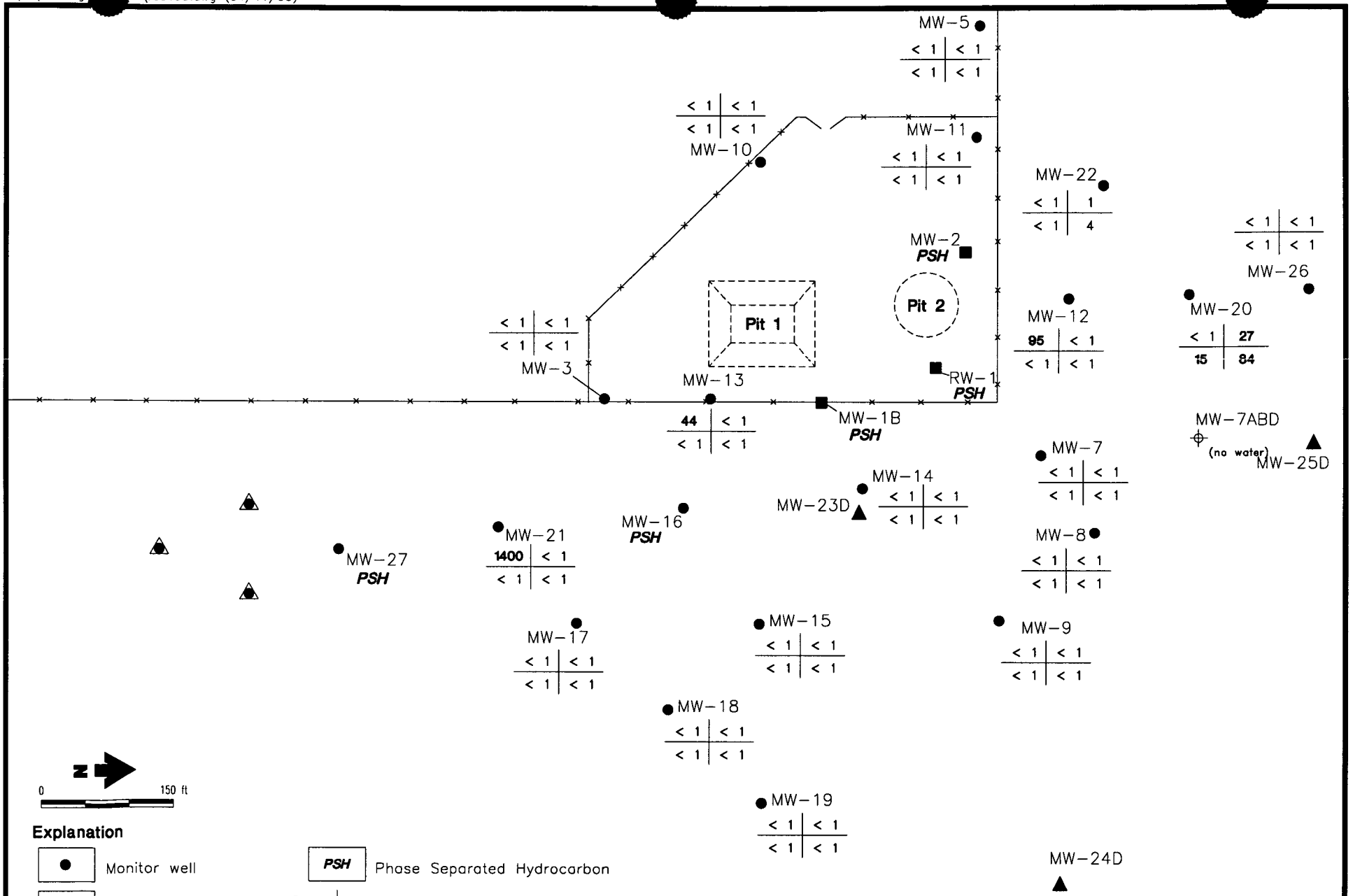


ROSWELL COMPRESSOR STATION

Distribution of Dissolved Phase Inorganics in the Uppermost Aquifer March 1999

CYPRESS ENGINEERING SERVICES, INC.

Figure 6



Explanation

- Monitor well
- Deep monitor well
- Recovery well
- Abandoned soil boring
- PSH — Phase Separated Hydrocarbon
- Benzene | 111-TCA / 11-DCA | 11-DCE — Concentration in Ground Water (ppb)
- Proposed monitor well location

ROSWELL COMPRESSOR STATION

Locations of Proposed Monitor Wells in the Uppermost Aquifer

CYPRESS ENGINEERING SERVICES, INC.

Figure 7

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
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
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
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' 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

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-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
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
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
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

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-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
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
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
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

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-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
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
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
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

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
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
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
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

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
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
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
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	3605.23 (b)	(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	3605.00 (c)	(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
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
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

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)
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

Table 2. Summary of Ground Water Analyses - Organics
Compressor Station No. 9 - Roswell, NM

Well ID	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-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
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 2. Summary of Ground Water Analyses - Organics
Compressor Station No. 9 - Roswell, NM

Well ID	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
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
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

Table 2. Summary of Ground Water Analyses - Organics
Compressor Station No. 9 - Roswell, NM

Well ID	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
	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-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
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
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
MW-14	09/24/96	**2** [a]	< 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

Table 2. Summary of Ground Water Analyses - Organics
Compressor Station No. 9 - Roswell, NM

Well ID	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
	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
MW-15	09/25/96	4 [a]	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
MW-17	09/24/96	2 [a]	< 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
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

Table 2. Summary of Ground Water Analyses - Organics
Compressor Station No. 9 - Roswell, NM

Well ID	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
	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
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
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	**7**	< 5	NA
	12/28/98	**1400**	**1**	< 1	**61**	< 20	< 1	< 1	< 1	< 1	**9**	**8.8**	NA
	03/26/99	**1400**	< 1	< 1	**28**	< 20	< 1	< 1	< 1	< 1	**5**	**7.1**	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
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

Table 2. Summary of Ground Water Analyses - Organics
Compressor Station No. 9 - Roswell, NM

Well ID	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
	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
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
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
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

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

[a] Analyte present in method blank

[b] Total Naphthalene = Naphthalene + 1-Methylnapthalene + 2-Methylnapthalene

[c] Water sample collected through layer of phase separated hydrocarbon accumulated in monitor well casing

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

Well ID	Sampling Date	Major Ions (mg/L)									Metals (mg/L)												
		TDS	Chloride	Sulfate	NO_2/NO_3 - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as $CaCO_3$)	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-3	03/23/94 [c]	NA	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 [b]	**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 [b]	**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 [b]	**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 [b]	**3450**	**370**	**1,840**	1.1	790 [d]	3.0	180	290 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-5	03/23/94 [c]	NA	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 [b]	**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 [b]	**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 [b]	**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 [b]	**3700**	**560**	**1,730**	3.6	780 [d]	2.6	200	270 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-6	08/22/95 [b]	**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 [b]	**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 [b]	**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 [b]	**3090**	**300**	**1,620**	1.2	550 [d]	3.1	170	170 [d]	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 [c]	**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 [b]	**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

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

Well ID	Sampling Date	Major Ions (mg/L)									Metals (mg/L)												
		TDS	Chloride	Sulfate	NO_2/NO_3 - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as $CaCO_3$)	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
	08/11/98 [b]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**3580**	**250**	**1,810**	< 0.05	790 [d]	6.4	260	180 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-8	08/22/95 [b]	**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 [b]	**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 [b]	**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 [b]	**3740**	**320**	**1,810**	0.10	610 [d]	3.4	210	180 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-9	08/23/95 [b]	**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 [b]	**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 [b]	**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 [b]	**4000**	**440**	**1,930**	0.36	610 [d]	5.5	190	270 [d]	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

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

Well ID	Sampling Date	Major Ions (mg/L)									Metals (mg/L)												
		TDS	Chloride	Sulfate	NO_2/NO_3 - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as $CaCO_3$)	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
	01/29/98 [c]	**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 [b]	**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 [b]	**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 [c]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**3520**	**340**	**1,890**	0.74	600 [d]	3.5	146	225 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-11	09/19/96 [b]	**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 [b]	**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 [b]	**3530**	**370**	**1,900**	0.67	630 [d]	2.6	140	360 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-12	09/17/96 [b]	**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 [b]	**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 [b]	**3340**	**390**	**1,630**	0.40	880 [d]	2.6	180	330 [d]	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

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

Well ID	Sampling Date	Major Ions (mg/L)									Metals (mg/L)												
		TDS	Chloride	Sulfate	NO_2/NO_3 - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as $CaCO_3$)	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
Dup (MW-24)	11/04/97 [b]	**3400**	**400**	**1,760**	0.40	710 [d]	2.4	150	320 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-13	09/19/96 [b]	**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 [b]	**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 [b]	**3760**	**460**	**1,720**	< 0.05	680 [d]	3.0	150	200 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-14	09/24/96 [b]	**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 [b]	**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 [b]	**3500**	**360**	**1,600**	0.13	780 [d]	4.1	190	220 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-15	09/25/96 [b]	**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

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

Well ID	Sampling Date	Major Ions (mg/L)									Metals (mg/L)												
		TDS	Chloride	Sulfate	NO_2/NO_3 - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as $CaCO_3$)	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
	08/08/97 [b]	**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 [b]	**3820**	**450**	**1,900**	0.43	750 [d]	3.8	210	330 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-17	09/24/96 [b]	**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 [b]	**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 [b]	**3770**	**430**	**2,000**	0.74	770 [d]	2.5	210	330 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-18	08/09/97 [b]	**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 [b]	**3850**	**390**	**2,020**	0.69	760 [d]	6.4	210	330 [d]	78	< 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 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**3920**	**430**	**1,880**	0.82	710 [d]	3.4	210	320 [d]	100	< 0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.03	< 0.01	< 0.0002	< 0.04	< 0.01	0.02	NA

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

Well ID	Sampling Date	Major Ions (mg/L)									Metals (mg/L)												
		TDS	Chloride	Sulfate	NO_2/NO_3 - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as $CaCO_3$)	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
	01/27/98 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-20	08/07/97 [b]	**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 [b]	**3710**	**290**	**1,950**	0.23	670 [d]	2.6	140	270 [d]	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 [c]	**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 [b]	**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 [b]	**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 [b]	**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
	12/28/98 [b]	**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
Dup (MW-28)	12/28/98 [b]	**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 [b]	**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
MW-21	08/07/97 [b]	**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 [b]	**3700**	**410**	**1,760**	0.36	810 [d]	4.0	190	260 [d]	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
	01/30/98 [c]	**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
Dup (MW-24)	01/30/98 [c]	**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 [b]	**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 [b]	**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 [b]	**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 [b]	**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
MW-22	08/07/97 [b]	**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	< 0.0002	< 0.01	< 0.01	0.08	NA
	11/03/97 [b]	**3570**	**380**	**1,840**	0.85	780 [d]	3.6	160	290 [d]	132	< 0.03	0.04	< 0.01	< 0.01	< 0.01	**3.3**	< 0.03	0.07	< 0.0002	< 0.04	< 0.01	< 0.03	NA
	01/29/98 [c]	**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	< 0.0002	< 0.1	< 0.01	< 0.02	NA

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

Well ID	Sampling Date	Major Ions (mg/L)									Metals (mg/L)												
		TDS	Chloride	Sulfate	NO_2/NO_3 - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as $CaCO_3$)	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
	05/28/98 [b]	**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	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	08/14/98 [b]	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 [c]	**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	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	12/27/98 [b]	**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	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/25/99 [b]	**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	< 0.0002	< 0.010	< 0.003	< 0.01	NA
MW-23D	08/06/97 [b]	**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	< 0.0002	< 0.01	< 0.01	0.02	NA
	11/05/97 [b]	**3880**	**330**	**1,900**	< 0.05	600 [d]	3.5	215	300 [d]	128	< 0.03	0.02	< 0.01	< 0.01	< 0.01	0.38	< 0.03	0.11	< 0.0002	< 0.04	< 0.01	0.07	NA
	01/28/98 [c]	**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	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	05/27/98 [c]	**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	< 0.0002	< 0.1	< 0.01	< 0.02	NA
	08/11/98 [b]	**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	< 0.0002	< 0.005	< 0.01	< 0.02	NA
	12/23/98 [b]	**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	< 0.0002	< 0.010	< 0.003	0.030	NA
	04/5/99 [b]	**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	< 0.0002	< 0.020	< 0.003	< 0.01	NA
MW-24D	10/29/98 [c]	**3300**	**350**	**1,880**	< 0.1	NA	NA	NA	NA	157	0.009	0.015	< 0.005	< 0.01	NA	NA	< 0.005	NA	< 0.0002	< 0.005	< 0.01	NA	NA
	10/29/98 [b]	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**	< 0.0002	< 0.005	< 0.01	0.05	NA
	12/23/98 [c]	**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	< 0.0002	< 0.010	< 0.003	< 0.01	NA
	03/30/99 [b]	**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**	< 0.0002	< 0.010	< 0.003	< 0.01	NA
MW-25D	10/29/98 [c]	**3000**	**340**	**2,470**	< 0.1	NA	NA	NA	NA	121	0.006	0.007	< 0.005	< 0.01	NA	NA	< 0.005	NA	< 0.0002	< 0.005	< 0.01	NA	NA
	10/29/98 [b]	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	< 0.0002	< 0.005	< 0.01	0.03	NA
	12/23/98 [b]	**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	< 0.0002	< 0.010	< 0.003	0.011	NA
	03/30/99 [b]	**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	< 0.0002	< 0.010	< 0.003	< 0.010	NA
MW-26	10/29/98 [c]	**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 [b]	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 [b]	**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 [b]	**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

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

Well ID	Sampling Date	Major Ions (mg/L)									Metals (mg/L)												
		TDS	Chloride	Sulfate	NO_2/NO_3 - N, total	Calcium	Potassium	Magnesium	Sodium	Total alkalinity (as $CaCO_3$)	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

NOTES:

NA - A result for this constituent is not available

[a] Water sample collected through layer of phase separated hydrocarbon accumulated in monitor well casing

[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 4. Summary of Analytical Results for Additional Organic Compounds Not Listed in Table 2 Compressor Station No. 9 - Roswell, NM

Well ID	Date	Compound	Concentration (µg/L)	Reporting Limit (µg/L)
MW-12	12/28/98	Isopropylbenzene	2	1
	03/26/99	Isopropylbenzene	2	1
Dup (MW-28)	03/26/99	Isopropylbenzene	2	1
MW-21	12/28/98	Isopropylbenzene	4	1
	12/28/98	n-Propylbenzene	1	1
	03/26/99	Isopropylbenzene	4	1
MW-25D	12/23/98	Phenanthrene	0.1	0.1

Table 5. Summary of Field Measured Parameters
Compressor Station No. 9 - Roswell, NM

Well ID	Date	pH	Temperature °C	Electrical Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU/FTU)	Remarks
MW-3	11/03/97	7.21	19.2	3,620	4.5	1.31	Clear
	01/27/98	7.28	18.5	3,630	5.0	4.31	Clear
	05/26/98	7.18	21.4	3,980	5.6	8.04	Clear
	08/13/98	7.19	22.2	3,930	6.1	5.06	Clear
	12/24/98	7.26	16.5	3,940	4.9	5.34	Clear
	03/24/99	7.13	19.7	3,980	--/6.0	7.34	Clear
MW-5	10/31/97	7.12	19.9	4,020	7.0	--	Clear
	01/27/98	7.38	17.7	1,980	7.8	7.82	Clear
	05/26/98	7.13	24.4	4,100	10.0	6.80	Clear
	08/11/98	7.18	20.7	4,210	8.3	5.99	Clear
	12/22/98	7.17	14.6	4,680	6.5/7.0	5.36	Clear
	03/23/99	7.10	19.4	4,360	8.4	3.37	Clear
MW-6	10/31/97	7.21	21.6	3,180	6.9	--	Clear
	01/26/98	7.23	17.3	3,200	6.4	6.08	Clear
	05/26/98	7.19	21.2	3,450	8.2	4.67	Clear
	08/11/98	7.24	22.4	3,430	9.0/8.0	8.03	Clear
	12/22/98	7.29	15.7	3,740	6.7	13.72	Clear
	03/23/99	7.20	19.9	3,460	8.0/7.0	4.93	Clear
MW-7	11/03/97	7.28	18.1	3,540	2.5	11.30	Clear
	01/29/98	7.25	18.4	3,540	1.8	5.68	Clear
	05/28/98	7.14	23.5	3,820	3.6	9.35	Clear
	08/14/98	7.23	21.7	3,770	3.6/2.6	6.89	Clear
	12/27/98	7.20	17.5	3,790	2.7	6.09	Clear
	03/25/99	7.14	17.6	3,780	3.0/3.4	4.40	Clear, Bailed down
MW-8	11/02/97	7.16	18.5	3,730	4.4	6.91	Clear
	01/29/98	7.17	19.8	3,730	4.2	2.41	Clear
	05/28/98	7.11	19.8	4,000	4.7	4.66	Clear
	08/14/98	7.10	20.6	3,970	4.3	4.62	Clear
	12/27/98	7.14	19.1	4,010	4.7	5.54	Clear
	03/25/99	7.07	18.4	4,040	4.0/3.8	4.15	Clear
MW-9	11/02/97	7.32	18.6	4,110	5.5	180	Cloudy
	01/29/98	7.35	16.9	4,090	3.9	--	Slightly Turbid
	05/28/98	7.25	20.8	4,440	6.0	62	Cloudy
	08/14/98	7.23	21.4	4,400	5.3	91/80	Cloudy, (80 FTU dissolved metals reading)
	12/27/98	7.35	17.9	4,400	5.3	97	Cloudy
	03/24/99	7.31	18.9	4,430	--/7.0	84	Cloudy, Bailed down
MW-10	11/01/97	7.14	19.7	3,600	6.9	3.40	Clear
	01/27/98	7.20	19.6	3,570	5.9	0.31	Clear
	05/26/98	7.16	22.7	3,900	7.2	2.60	Clear
	08/13/98	7.12	20.1	3,840	6.1/6.0	0.92	Clear

Table 5. Summary of Field Measured Parameters
Compressor Station No. 9 - Roswell, NM

Well ID	Date	pH	Temperature °C	Electrical Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU/FTU)	Remarks
	12/22/98	7.18	14.7	4,190	5.9	3.18	Clear
	03/23/99	7.09	18.9	3,900	6.1/6.0	2.38	Clear
MW-11	11/01/97	7.21	19.5	3,640	7.1	4.40	Clear
	01/27/98	7.25	17.8	3,610	6.7	2.71	Clear
	05/26/98	7.24	21.6	3,950	7.9	30.01	Clear
	08/13/98	7.26	20.3	3,890	7.9	5.52	Clear
	12/22/98	7.25	15.6	3,610	5.4	10.19	Clear
	03/24/99	7.25	20.1	3,030	--/7.0	8.68	Clear
MW-12	11/04/97	7.29	20.1	3,790	3.4	1.77	Clear, Odor
	01/30/98	7.16	18.7	3,540	1.2	--	Clear, Odor
	05/28/98	7.19	20.8	3,850	2.4	2.83	Clear
	08/15/98	7.19	20.6	3,900	2.5	3.87	Clear, Odor
	12/28/98	7.24	17.8	3,820	0.7	2.83	Clear
	03/26/99	7.11	18.2	3,930	1.7/1.2	1.55	Clear, Odor
MW-13	11/04/97	7.10	19.8	3,840	1.1	1.76	Clear, Odor
	01/30/98	6.99	18.7	3,780	0.2	--	Clear, Odor
	05/28/98	6.98	21.8	4,070	2.4	10.24	Clear, Sewage Odor
	08/15/98	6.92	20.8	4,140	1.1/0	6.89	Clear, Sewage Odor
	12/27/98	6.98	19.2	3,940	0.9	10.47	Clear, Odor
	03/26/99	--	18.8	3,980	0.6/0.4	7.96	Clear, Odor, turns black in air
MW-14	11/02/97	7.16	18.5	3,620	2.1	1.09	Clear
	01/29/98	7.20	17.9	3,600	3.2	2.32	Clear
	05/27/98	7.18	24.8	3,890	5.0	2.11	Clear
	08/11/98	7.17	25.1	3,880	5.0	4.76	Clear
	12/23/98	7.15	18.4	3,890	2.4	2.10	Clear
	03/25/99	7.13	18.7	3,900	3.7	1.17	Clear
MW-15	11/02/97	7.32	20.1	3,970	3.6	1.54	Clear
	01/28/98	7.41	17.7	3,930	3.6	2.36	Clear
	01/27/98	7.28	22.1	4,330	4.1	1.82	Clear
	08/13/98	7.24	20.7	4,270	4.4	1.57	Clear
	12/24/98	7.24	15.5	4,160	5.4	1.49	Clear
	03/24/99	7.16	19.9	4,310	--/6.0	1.71	Clear
MW-17	11/02/97	7.26	18.5	3,910	5.8	1.20	Clear
	01/28/98	7.01	18.2	3,880	4.9	2.71	Clear
	05/27/98	7.25	21.9	4,250	6.3	1.95	Clear
	08/13/98	7.28	20.1	4,210	6.7	1.65	Clear
	12/24/98	7.25	17.7	4,220	4.5	3.30	Clear
	03/25/99	7.21	18.6	4,260	5.6	1.32	Clear w/ flec's, Sewage Odor
MW-18	11/01/97	7.41	18.6	3,850	7.6	0.73	Clear
	01/28/98	7.36	17.6	3,810	7.6	0.63	Clear

Table 5. Summary of Field Measured Parameters
Compressor Station No. 9 - Roswell, NM

Well ID	Date	pH	Temperature °C	Electrical Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU/FTU)	Remarks
	05/27/98	7.55	21.1	4,170	8.2	2.81	Clear
	08/13/98	7.55	21.8	4,130	8.3/8.0	1.08	Clear
	12/24/98	7.44	14.5	4,030	6.0	0.72	Clear
	03/24/99	7.45	19.8	4,180	--/8.0	1.47	Clear, Bailed down
MW-19	11/01/97	7.33	19.1	4,080	8.0	0.85	Clear
	01/27/98	7.31	18.2	4,030	6.2	4.03	Clear
	05/27/98	7.20	19.4	4,400	7.2	3.06	Clear
	08/13/98	7.28	20.8	4,370	8.0	2.25	Clear
	12/23/98	7.41	16.2	4,390	6.8	6.97	Clear
	03/24/99	7.23	18.7	4,380	--/7.2	9.08	Clear
MW-20	11/03/97	6.90	18.6	3,750	1.4	12.6	Clear
	11/03/97	6.86	18.2	3,710	1.0	--	Clear
	05/29/98	6.81	20.8	4,000	3.9	4.11	Clear, Slightly cloudy at end
	08/15/98	6.86	20.5	4,060	2.6	13.57	Clear
	12/28/98	6.88	18.5	4,060	2.2/1.8	9.30	Clear
	03/26/99	6.78	18.1	4,130	1.5	3.23	Clear
MW-21	11/04/97	7.29	20.1	3,790	3.4	1.77	Clear, Odor
	01/30/98	7.20	17.6	3,690	1.4	2.78	Clear, Odor
	05/28/98	7.21	20.6	3,990	2.7	3.57	Clear, Odor
	08/15/98	7.16	20.8	4,000	2.7/2.2	2.32	Clear w/ dark flec's, Odor
	12/28/98	7.25	18.0	3,990	0.8	4.39	Clear, Odor, turns black in air
	03/26/99	7.17	18.4	4,030	0.6	3.81	Clear, Odor, turns black in air
MW-22	11/03/97	7.22	18.5	3,700	7.0	260.0	Cloudy
	01/29/98	7.22	18.2	3,660	6.5	10.35	Clear
	05/28/98	7.18	22.8	3,940	8.6	48.03	Clear
	08/14/98	7.20	20.5	3,970	8.6	168.0	Cloudy
	12/27/98	7.25	19.9	3,940	8.0	12.00	Clear
	03/25/99	7.19	17.4	3,980	7.0	1.19	Clear
MW-23D	11/05/97	7.55	18.1	2,550	2.8	87.5	Slightly to Mod. Milky, Sulfur Smell
	01/28/98	8.06	18.6	3,820	4.8	>200	Silty
	05/27/98	7.61	23.2	4,150	7.1	--	Turbid
	08/11/98	7.22	19.9	4,130	4.2	17.81	Clear
	12/23/98	7.50	16.6	4,210	4.6	43.94	Clear
	04/05/99	7.18	18.8	4,160	5.6	--	Clear
MW-24D	10/29/98	7.43	18.5	2,930	5.44	--	Silty
	12/23/98	7.49	16.7	3,840	4.2	>1000	Turbid, Bailed down
	03/30/99	6.98	18.4	3,750	4.6	--	Turbid, Bailed down
MW-25D	10/29/98	7.80	18.6	3,370	4.87	--	Silty
	12/23/98	7.67	16.9	3,820	4.6	77	Clear, Bailed down
	03/30/99	7.36	18.1	3,790	4.1	--	Turbid, Bailed down

Table 5. Summary of Field Measured Parameters
Compressor Station No. 9 - Roswell, NM

Well ID	Date	pH	Temperature °C	Electrical Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU/FTU)	Remarks
MW-26	10/29/98	7.20	18.8	3,620	4.61	--	Clear
	12/27/98	7.13	19.4	4,130	4.90	83	Cloudy/Turbid, Bailed down
	03/25/99	7.09	18.4	4,170	4.8	35.38	Clear initial/cloudy last, bailed down

Table 6. Summary of Well Construction Details
Compressor Station No. 9 - Roswell, NM

Well ID	Completion Date	Location [a] (ft)		Measuring Point Elevation [b] (ft msl)	Total Depth of Boring (ft bgs)	Casing Diameter (inches)	Screen Interval (ft bgs)	Top of Sand Pack (ft bgs)
		North	East					
SVE-1A	09/21/96	1,793.70	114.40	3,616.50	30	2	20-30	19
SVE-2A	09/20/96	1,735.90	178.90	3,615.70	30	2	20-30	17.5
SVE-3	09/16/96	1,881.00	176.60	3,614.51	62.3	2	32.0-62.3	29.5
MW-1	07/21/92	2,001.40	217.60	NA	68	4	28-68	25.2
MW-1B	04/21/93	1,854.00	265.50	3,609.96	65.5	2	55-65	53
MW-2	04/21/93	2,034.30	102.40	3,611.76	65	2	55-65	53
MW-3	04/26/93	1,629.77	265.23	3,614.87	72.5	2	60-70	58
MW-5	04/28/93	2,049.70	-150.96	3,612.77	70	2	60-70	58
MW-6	12/01/94	1,607.40	-266.20	3,618.62	79	2	59.9-74.9	57.1
MW-7	08/22/95	2,118.00	328.40	3,599.20	70.5	2	50-70	48.1
MW-8	08/16/95	2,178.00	414.70	3,595.80	76.8	2	59-74	57.2
MW-9	08/18/95	2,071.40	512.90	3,599.35	70	2	50-70	47.9
MW-10	09/10/96	1,804.76	0.14	3,617.85	74.5	2	57-72	55.3
MW-11	09/16/96	2,046.04	-27.10	3,613.31	72	2	54-69	51.5
MW-12	09/11/96	2,149.13	152.94	3,606.38	64	2	44-64	42
MW-13	09/13/96	1,749.33	265.05	3,612.46	72	2	57-72	55
MW-14	09/10/96	1,918.87	365.40	3,604.83	64.5	2	49.5-64.5	48
MW-15	09/20/96	1,803.83	516.97	3,610.43	68.5	2	38.5-68.5	37
MW-16	09/19/96	1,718.88	387.35	3,612.41	71.4	2	46.4-71.4	45.5
MW-17	09/21/96	1,598.72	516.35	3,608.48	70	2	53-68	50.9
MW-18	09/25/96	1,701.47	613.38	3,609.73	71	2	54-69	51.6
MW-19	09/26/96	1,806.45	717.41	3,608.17	69.5	2	54.5-69.5	51
MW-20	08/04/97	2,283.22	148.03	3,600.65	64	2	46.8-61.8	43.9
MW-21	08/06/97	1,511.01	408.66	3,612.01	75	2	54-74	51.7
MW-22	08/04/97	2,187.66	26.69	3,606.04	68	2	50-65	49
MW-26	09/01/98	2,416.94	142.26	3,597.75	65	2	43-63	41
MW-27	09/02/98	1,332.63	433.96	3,615.11	75	2	55-75	53

Table 6. Summary of Well Construction Details
Compressor Station No. 9 - Roswell, NM

Well ID	Completion Date	Location [a] (ft)		Measuring Point Elevation [b] (ft msl)	Total Depth of Boring (ft bgs)	Casing Diameter (inches)	Screen Interval (ft bgs)	Top of Sand Pack (ft bgs)
		North	East					
MW-23D	07/29/97	1,914.95	393.65	3,605.00	194	4	167-187	164
MW-24D	09/10/98	2,139.77	807.92	3,595.95	180	4	146-176	143
MW-25D	09/09/98	2,422.12	314.82	3,592.99	150	4	119-149	117

[a] Coordinates are relative to facility grid
[b] Measuring point is top of PVC casing
ft msl = Feet above mean sea level
ft bgs = Feet below ground surface
NA = Not available

Table 7. Summary of Abandoned Soil Borings
Compressor Station No. 9 - Roswell, NM

Well ID	Source [a]	Completion Date	Location (ft)		Measuring Point Elevation [b] (ft msl)	Total Depth (ft bgs)
			North	East		
SB-9-06	HLA	04/03/90	NA	NA	NA	29.0
SB-9-07	HLA	04/03/90	NA	NA	NA	38.5
P9-OS-349	HLA	05/02/90	NA	NA	NA	40.0
P9-OS-377	HLA	05/02/90	NA	NA	NA	30.0
SG-09-91	HLA	05/15/90	NA	NA	NA	33.0
SG-09-331	HLA	05/16/90	NA	NA	NA	43.0
SG-09-337	HLA	05/17/90	NA	NA	NA	33.0
SG-09-358	HLA	05/17/90	NA	NA	NA	30.0
SG-09-360	HLA	05/16/90	NA	NA	NA	34.5
SG-09-370	HLA	05/16/90	NA	NA	NA	24.0
Pit 1	Metric	07/16/91	1,798.00	176.60	3,615.72	47.8
Pit 2	Metric	07/17/91	1,995.00	216.60	3,615.72	71.6
Pit 3 (BH-1)	Metric	07/18/91	1,918.00	131.50	3,615.71	32.8
Pit 3 (BH-2)	Metric	07/18/91	1,948.00	138.50	3,615.68	29.5
SG 86	Metric	07/22/91	1,710.00	268.20	3,613.52	40.7
SG 91	Metric	07/22/91	2,053.20	66.50	3,612.28	33.0
SG 349	Metric	07/25/91	2,160.20	79.00	3,615.56	30.4
SG 360	Metric	07/25/91	2,261.50	166.80	3,610.83	29.4
SG 361	Metric	07/25/91	2,261.50	277.80	3,610.15	41.3
OS BH-1	Metric	07/22/91	1,664.90	375.90	3,622.30	35.7
OS BH-2	Metric	07/24/91	1,826.00	379.00	3,618.39	70.6
OS BH-3	Metric	07/26/91	2,108.70	495.10	3,607.04	55.0
OS BH-4	Metric	07/29/91	2,181.60	386.60	3,604.95	31.0
OS BH-5	Metric	07/30/91	1,992.00	389.50	3,611.12	24.8
OS BH-6	Metric	07/30/91	1,817.50	460.90	3,619.15	72.6
OS BH-7	Metric	07/31/91	1,827.60	505.70	3,616.69	40.3
OS BH-8	Metric	07/31/91	1,671.90	460.80	3,620.04	49.9
OS BH-9	Metric	08/01/91	1,891.60	467.20	3,614.77	49.7
BH-10	Metric	11/15/91	NA	NA	3,617.33	37.8
BH-11	Metric	11/15/91	NA	NA	3,617.60	37.8
SB-1A	B&R	04/20/93	NA	NA	3,613.48 [c]	41.5
SB-1C	B&R	04/29/93	NA	NA	3,606.08 [c]	36.0
SB-4	B&R	04/25/93	NA	NA	3,604.78 [c]	75
RB-1	B&R	06/13/93	1,914.00	222.00	3,613.22 [c]	36.3
RB-2	B&R	06/12/93	1,962.00	254.00	3,611.11 [c]	34.5
RB-3	B&R	06/12/93	1,953.00	220.00	3,612.76 [c]	42
RB-4	B&R	06/13/93	1,943.00	175.00	3,614.41 [c]	39
RB-5	B&R	06/13/93	2,027.00	213.00	3,608.61 [c]	32
RB-6	B&R	NA	1,989.00	206.00	3,613.36 [c]	38.5
Pit 1, NW	DBS&A (I)	08/18/95	1,812.30	172.90	3,615.68	12.0

Table 7. Summary of Abandoned Soil Borings
Compressor Station No. 9 - Roswell, NM

Well ID	Source [a]	Completion Date	Location (ft)		Measuring Point Elevation [b] (ft msl)	Total Depth (ft bgs)
			North	East		
Pit 1, SE	DBS&A (I)	08/18/95	1,798.20	181.50	3,615.61	14.0
Pit 2, NE	DBS&A (I)	08/17/95	1,990.30	174.70	3,614.81	20.0
Pit 2, SW	DBS&A (I)	08/18/95	1,970.10	150.20	3,616.05	6.0
MW-7ABD	DBS&A (I)	08/15/95	2,289.60	306.60	3,599.37	74.0
SVE-1	DBS&A (II)	09/21/96	1,800.63	117.01	3,617.00	60.0
SVE-2	DBS&A (II)	09/21/96	1,730.93	176.77	3,616.20	30.0
SG86-1	DBS&A (II)	09/24/96	1,718.39	264.18	3,613.60	32.0
SG86-2	DBS&A (II)	09/24/96	1,717.00	233.69	3,614.80	31.0
SG86-3	DBS&A (II)	09/24/96	NA	NA	NA	31.0
SG86-4	DBS&A (II)	09/24/96	1,718.47	304.81	3,613.10	30.0
Pit 3-1	DBS&A (II)	09/18/96	1,923.65	2.52	3,616.70	30.0
Pit 3-2	DBS&A (II)	09/18/96	1,922.92	-46.86	3,616.70	30.0
Pit 3-3	DBS&A (II)	09/18/96	1,874.31	6.83	3,617.70	30.0
Pit 3-4	DBS&A (II)	09/18/96	1,925.90	52.88	3,616.70	30.0
Pit 3-5	DBS&A (II)	09/18/96	1,973.38	-0.24	3,616.20	30.0
Soil Boring - 1	CES (IV)	09/03/98	1,674.33	303.81	3,614.20	14.0
Soil Boring - 2	CES (IV)	09/03/98	1,946.19	311.52	3,606.80	14.0
Soil Boring - 3	CES (IV)	09/03/98	1,713.10	265.57	3,613.90	14.0
Soil Boring - 4	CES (IV)	09/03/98	1,897.14	265.01	3,610.00	14.0
Soil Boring - 5	CES (IV)	09/03/98	1,891.98	94.51	3,617.20	14.0
Soil Boring - 6	CES (IV)	09/03/98	1,720.40	96.66	3,618.70	14.0
Soil Boring - 7	CES (IV)	09/03/98	1,925.23	61.67	3,616.90	14.0
Soil Boring - 8	CES (IV)	09/03/98	1,683.82	61.63	3,619.30	14.0

[a] HLA = Harding Lawson Associates, 1991
Metric = Metric Corporation, 1991
HB = Halliburton NUS, 1992
B & R = Brown & Root Environmental, 1993
DBS&A (I) = Daniel B. Stephens & Associates, Inc. 1994, 1995, 1996; Phase I
DBS&A (II) = Daniel B. Stephens & Associates, Inc. 1994, 1995, 1996; Phase II
CES (IV) = Cypress Engineering Services, Inc. 1998; Phase IV

[b] Measuring point is top of cement plug or ground surface

[c] Original survey to arbitrary datum corrected to elevations above sea level by referencing boring elevations to the surveyed elevation of MW-3 (3614.88 fmsl).

ft msl = Feet above mean sea level
ft bgs = Feet below ground surface
NA = Not available

Table 8. Summary of Analytical Results for Phase IV Assessment Soil Samples
Compressor Station No. 9 - Roswell, NM

Sample ID	Sampling Date	TPH (mg/kg)	VOC's (ug/Kg)	SVOC's (ug/Kg)	Metals (mg/Kg)																		
					Silver	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Chromium, Hexavalent	Chromium, Total	Copper	Mercury	Nickel	Lead	Antimony	Selenium	Tin	Thallium	Vanadium	Zinc
MW-26 (10-12')	09/01/98	15	all ND	all ND	< 1	6160	3.5	81.4	0.4	0.5	2	< 0.10	2	4	< 0.03	5	4.9	< 0.5	< 0.5	18	< 0.5	21.0	19
MW-26 (48-50')	09/01/98	10	all ND	all ND	< 1	1120	2.1	43.9	< 0.3	< 0.5	2	< 0.10	5	3	< 0.03	4	4.0	< 0.5	< 0.5	< 5	< 0.5	7.3	15
MW-27 (38-40')	09/02/98	10	all ND	all ND	< 1	6200	2.7	28.0	0.5	< 0.5	3	< 0.10	8	6	< 0.03	7	4.9	0.7	< 0.5	< 5	< 0.5	22.1	22
MW-27 (60-62')	09/02/98	NA	all ND	NA	< 1	11600	4.8	156	0.9	< 0.5	6	< 0.10	13	12	< 0.03	11	9.0	0.7	< 0.5	< 5	< 0.5	25.0	42

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

Table 9. Summary of Analytical Results for Background Soil Samples
Compressor Station No. 9 - Roswell, NM

Sample ID	Sampling Date	TPH (mg/kg)	Metals (mg/Kg)																		
			Silver	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Chromium, Hexavalent	Chromium, Total	Copper	Mercury	Nickel	Lead	Antimony	Selenium	Tin	Thallium	Vanadium	Zinc
Reference Background Mean[a]:			---	5.8%	5.5	580	0.68	---	7.1	---	41	21	0.046	15	17	0.47	0.23	0.9	---	70	55
Reference Background Upper Limit (MD2)[b]:			---	23%	22	1,710	3.6	---	28	---	200	90	0.25	66	55	2.2	1.3	4	---	270	180
EPA Region III Risk-Based Concentration[c]:			390	7.8%	0.43	5,500	1,600	39	4,700	390	78,000	3,100	---	1,600	---	31	390	47,000	5.5	550	23,000
BG-1A (10-12')	09/03/98	< 10	< 1	1520	3.9	96.9	< 0.3	< 0.5	2	< 0.10	2	4	< 0.03	3	5.0	< 0.5	< 0.5	< 5	< 0.5	15.5	13
BG-1B (12-14')	09/03/98	< 10	< 1	1130	10.2	280	< 0.3	< 0.5	2	< 0.10	< 1	3	< 0.03	2	6.2	0.5	< 0.5	< 5	< 0.5	10.5	23
BG-2A (10-12')	09/03/98	10	< 1	1400	3.1	97.4	< 0.3	< 0.5	1	< 0.10	1	3	< 0.03	< 2	4.8	< 0.5	< 0.5	< 5	< 0.5	17.4	11
BG-3A (10-12')	09/03/98	< 10	< 1	890	3.2	130	< 0.3	< 0.5	1	< 0.10	< 1	2	< 0.03	< 2	3.8	< 0.5	< 0.5	< 5	< 0.5	8.2	9
BG-3B (12-14')	09/03/98	< 10	< 1	1090	2.9	103	< 0.3	< 0.5	1	< 0.10	< 1	2	< 0.03	< 2	2.8	< 0.5	< 0.5	< 5	< 0.5	13.5	7
BG-4A (10-12')	09/03/98	< 10	< 1	2100	3.8	442	0.3	< 0.5	2	< 0.10	< 1	3	< 0.03	3	4.1	< 0.5	< 0.5	< 5	< 0.5	26.5	18
BG-4B (12-14')	09/03/98	< 10	< 1	2600	3.0	188	< 0.3	< 0.5	1	< 0.10	< 1	3	< 0.03	3	5.2	< 0.5	< 0.5	< 5	< 0.5	12.8	19
BG-6A (10-12')	09/03/98	< 10	< 1	580	3.4	177	< 0.3	< 0.5	1	< 0.10	1	3	< 0.03	2	4.1	0.6	< 0.5	< 5	< 0.5	9.7	11
BG-6B (12-14')	09/03/98	10	< 1	1250	4.6	253	< 0.3	< 0.5	2	< 0.10	< 1	4	< 0.03	3	13.3	< 0.5	< 0.5	< 5	< 0.5	13.6	16
BG-7A (10-12')	09/03/98	< 10	< 1	680	2.8	120	< 0.3	< 0.5	1	< 0.10	< 1	2	< 0.03	< 2	4.3	< 0.5	< 0.5	< 5	< 0.5	11.0	10
BG-7B (12-14')	09/03/98	< 10	< 1	930	2.2	306	< 0.3	< 0.5	1	< 0.10	< 1	3	< 0.03	2	3.3	< 0.5	< 0.5	< 5	< 0.5	12.5	14
BG-8A (10-12')	09/03/98	< 10	< 1	2720	3.2	84.1	< 0.3	< 0.5	2	< 0.10	2	3	< 0.03	2	3.7	< 0.5	< 0.5	< 5	< 0.5	21.5	11
BG-8B (12-14')	09/03/98	< 10	< 1	1450	2.8	195	< 0.3	< 0.5	1	< 0.10	< 1	2	< 0.03	< 2	3.1	< 0.5	< 0.5	< 5	< 0.5	14.2	11
Geometric Mean Concentration[d]:			---	1273	3.5	167	---	---	1.3	---	1.1	2.8	---	2.3	4.5	---	---	---	---	13.7	12.6
Geometric Deviation:			---	1.603	1.448	1.684	---	---	1.420	---	1.297	1.282	---	1.215	1.482	---	---	---	---	1.377	1.392
Upper Limit of 95% Confidence Interval:			---	3270	7.3	474	---	---	2.6	---	1.9	4.5	---	3.3	9.9	---	---	---	---	25.9	24.5

Table 9. Summary of Analytical Results for Background Soil Samples
Compressor Station No. 9 - Roswell, NM

Sample ID	Sampling Date	TPH (mg/kg)	Metals (mg/Kg)																		
			Silver	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Chromium, Hexavalent	Chromium, Total	Copper	Mercury	Nickel	Lead	Antimony	Selenium	Tin	Thallium	Vanadium	Zinc
Reference Background Mean[a]:			---	5.8%	5.5	580	0.68	---	7.1	---	41	21	0.046	15	17	0.47	0.23	0.9	---	70	55
Reference Background Upper Limit (MD2)[b]:			---	23%	22	1,710	3.6	---	28	---	200	90	0.25	66	55	2.2	1.3	4	---	270	180
EPA Region III Risk-Based Concentration[c]:			390	7.8%	0.43	5,500	1,600	39	4,700	390	78,000	3,100	---	1,600	---	31	390	47,000	5.5	550	23,000
Samples Excluded from Statistical Analysis Due to Elevated Concentration of Total Petroleum Hydrocarbons (TPH):																					
BG-2B (12-14')	09/03/98	70	< 1	2330	3.0	148	< 0.3	< 0.5	2	< 0.10	3	4	< 0.03	3	5.2	< 0.5	< 0.5	< 5	< 0.5	18.5	15
BG-5A (10-12')	09/03/98	1900	< 1	1440	21.8	129	< 0.3	1.2	2	< 0.10	11	10	0.03	3	19.0	1.3	< 0.5	6	< 0.5	11.4	162
BG-5B (12-14')	09/03/98	860	< 1	1650	3.2	207	< 0.3	< 0.5	2	< 0.10	2	4	< 0.03	3	5.0	< 0.5	< 0.5	< 5	< 0.5	8.5	24

Notes:

(a) - Geometric Mean concentration based on soil samples collected by USGS for Western U.S. Soils. Source: Schacklette, H.T. and J.G. Boerngen, 1984. Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States, USGS Prof. Paper 1270.

(b) - Upper Limit concentration of 95% range for Western U.S. Soils as reported by Schacklette and Boerngen.

(c) - Source: USEPA Region III Risk Based Concentration Table dated April 1, 1998. Listed concentrations are for Residential Soil.

(d) - Results reported at less than the detection limit are included at the detection limit in the geometric mean calculation. A mean was not calculated for elements with less than four measured concentrations reported above the detection limit.

Table 10. Summary of Detection Frequency for Metal Constituents in Ground Water
Compressor Station No. 9 - Roswell, NM

Metal Constituent (NMWQCC Standard)	Arsenic (A) (0.10 mg/L)			Barium (A) (1.0 mg/L)			Cadmium (A) (0.01 mg/L)			Chromium (A) (0.05 mg/L)			Lead (A) (0.05 mg/L)		
Well ID	Events	Detects	Max.	Events	Detects	Max.	Events	Detects	Max.	Events	Detects	Max.	Events	Detects	Max.
MW-3	10	1	0.007	10	8	0.02	10	0	---	10	0	---	10	0	---
MW-5	10	0	---	10	7	0.047	10	0	---	10	0	---	10	0	---
MW-6	9	0	---	9	5	0.0106	9	0	---	9	0	---	9	1	0.004
MW-7	9	0	---	9	7	0.02	9	0	---	9	0	---	9	0	---
MW-8	9	0	---	9	4	0.0108	9	0	---	9	0	---	9	0	---
MW-9	9	1	0.007	9	7	0.05	9	0	---	9	1	0.01	9	1	0.004
MW-10	8	1	0.007	8	5	0.0107	8	0	---	8	0	---	8	0	---
MW-11	8	1	0.006	8	3	0.0160	8	0	---	8	0	---	8	1	0.004
MW-12	8	1	0.005	8	5	0.02	8	0	---	8	0	---	8	0	---
MW-13	8	2	0.02	8	6	0.02	8	0	---	8	0	---	8	0	---
MW-14	8	0	---	8	6	0.03	8	0	---	8	0	---	8	0	---
MW-15	8	2	0.02	8	7	0.03	8	0	---	8	0	---	8	0	---
MW-17	8	0	---	8	2	0.0079	8	0	---	8	0	---	8	0	---
MW-18	7	2	0.02	7	6	0.02	7	0	---	7	3	0.02	7	0	---
MW-19	8	2	0.01	8	6	0.0122	8	0	---	8	0	---	8	1	0.004
MW-20	7	1	0.007	7	4	0.04	7	0	---	7	0	---	7	0	---
MW-21	7	1	0.006	7	7	0.06	7	0	---	7	0	---	7	0	---
MW-22	7	1	0.006	7	7	0.21	7	0	---	7	0	---	7	1	0.008
MW-23D	7	3	0.009	7	7	0.02	7	0	---	7	1	0.02	7	0	---
MW-24D	3	1	0.009	3	3	0.026	3	0	---	3	0	---	3	0	---
MW-25D	3	1	0.006	3	3	0.0133	3	0	---	3	0	---	3	0	---
MW-26	3	0	---	3	3	0.0213	3	0	---	3	0	---	3	0	---
Sub-Totals	**164**	**21**	**0.02**	**164**	**118**	**0.21**	**164**	**0**	**0.00**	**164**	**5**	**0.02**	**164**	**5**	**0.008**

Notes:
(A) Constituent listed under NMWQCC 82-1 Part 3, Section 3-103.A; Human health standards for groundwater.
(B) Constituent listed under NMWQCC 82-1 Part 3, Section 3-103.B; Other standards for domestic water supply.
(C) Constituent listed under NMWQCC 82-1 Part 3, Section 3-103.A; Standards for irrigation use.

Table 10. Summary of Detection Frequency for Metal Constituents in Ground Water
Compressor Station No. 9 - Roswell, NM

Metal Constituent (NMWQCC Standard)	Mercury (A) (0.002 mg/L)			Selenium (A) (0.05 mg/L)			Silver (A) (0.05 mg/L)			Copper (B) (1.0 mg/L)			Iron (B) (1.0 mg/L)		
Well ID	Events	Detects	Max.	Events	Detects	Max.	Events	Detects	Max.	Events	Detects	Max.	Events	Detects	Max.
MW-3	10	1	0.0002	10	0	---	10	0	---	9	0	---	7	3	0.07
MW-5	10	0	---	10	4	0.020	10	0	---	9	0	---	7	5	0.26
MW-6	9	1	0.0005	9	0	---	9	0	---	9	0	---	7	5	0.32
MW-7	9	1	0.0004	9	0	---	9	0	---	9	0	---	7	5	1.20
MW-8	9	1	0.0003	9	0	---	9	0	---	9	0	---	7	3	0.11
MW-9	9	1	0.0005	9	0	---	9	0	---	9	1	0.01	7	5	1.40
MW-10	8	0	---	8	0	---	8	0	---	8	0	---	7	3	0.034
MW-11	8	0	---	8	0	---	8	0	---	8	0	---	7	5	0.17
MW-12	8	0	---	8	1	0.005	8	0	---	8	0	---	7	6	0.52
MW-13	8	1	0.0033	8	0	---	8	0	---	8	0	---	7	7	1.56
MW-14	8	0	---	8	0	---	8	0	---	8	0	---	7	2	0.05
MW-15	8	0	---	8	0	---	8	0	---	8	0	---	7	5	0.32
MW-17	8	0	---	8	0	---	8	0	---	8	0	---	7	0	---
MW-18	7	0	---	7	0	---	7	0	---	7	0	---	7	2	1.09
MW-19	8	0	---	8	0	---	8	0	---	8	1	0.01	7	5	0.14
MW-20	7	1	0.0005	7	0	---	7	0	---	7	2	0.02	7	6	1.85
MW-21	7	0	---	7	0	---	7	0	---	7	1	0.0024	7	6	0.933
MW-22	7	1	0.0008	7	0	---	7	0	---	7	1	0.05	7	6	16.50
MW-23D	7	0	---	7	0	---	7	0	---	7	1	0.02	7	5	0.38
MW-24D	3	0	---	3	0	---	3	0	---	3	2	0.01	3	2	1.43
MW-25D	3	0	---	3	0	---	3	0	---	3	0	---	3	3	0.58
MW-26	3	0	---	3	1	0.007	3	0	---	3	0	---	3	3	1.13
Sub-Totals	**164**	**8**	**0.0033**	**164**	**6**	**0.020**	**164**	**0**	**0.00**	**162**	**9**	**0.05**	**142**	**92**	**16.50**

Notes:
(A) Constituent listed under NMWQCC 82-1 Part 3, Section 3-103.A; Human health standards for groundwater.
(B) Constituent listed under NMWQCC 82-1 Part 3, Section 3-103.B; Other standards for domestic water supply.
(C) Constituent listed under NMWQCC 82-1 Part 3, Section 3-103.A; Standards for irrigation use.

Table 10. Summary of Detection Frequency for Metal Constituents in Ground Water
Compressor Station No. 9 - Roswell, NM

Metal Constituent (NMWQCC Standard)	Manganese (B) (0.20 mg/L)			Zinc (B) (10 mg/L)			Aluminum (C) (5 mg/L)		
Well ID	Events	Detects	Max.	Events	Detects	Max.	Events	Detects	Max.
MW-3	6	0	---	9	2	0.04	1	1	0.24
MW-5	6	0	---	9	2	0.02	1	1	0.38
MW-6	6	1	0.0097	9	3	0.03	1	1	0.69
MW-7	6	6	0.490	9	4	0.09	1	1	1.39
MW-8	6	2	0.009	9	2	0.39	1	1	0.33
MW-9	6	6	0.070	9	3	0.03	1	1	3.13
MW-10	6	0	---	8	3	0.20	0	---	---
MW-11	6	2	0.012	8	4	0.21	0	---	---
MW-12	6	6	0.790	8	2	0.02	0	---	---
MW-13	6	6	2.40	8	3	0.06	0	---	---
MW-14	6	3	0.060	8	1	0.03	0	---	---
MW-15	6	6	0.0191	8	4	0.20	0	---	---
MW-17	6	6	0.044	8	2	0.09	0	---	---
MW-18	6	1	0.007	7	2	0.08	0	---	---
MW-19	6	0	---	8	3	0.08	0	---	---
MW-20	6	1	0.0043	7	2	0.22	0	---	---
MW-21	6	6	1.51	7	2	0.03	0	---	---
MW-22	6	4	0.070	7	2	0.09	0	---	---
MW-23D	6	6	0.141	7	3	0.07	0	---	---
MW-24D	3	3	0.261	3	1	0.05	0	---	---
MW-25D	3	3	0.109	3	2	0.03	0	---	---
MW-26	3	3	0.082	3	0	---	0	---	---
Sub-Totals	**123**	**71**	**2.400**	**162**	**52**	**0.39**	**6**	**6**	**3.13**

Notes:
(A) Constituent listed under NMWQCC 82-1 Part 3, Section 3-103.A; Human health standards for groundwater.
(B) Constituent listed under NMWQCC 82-1 Part 3, Section 3-103.B; Other standards for domestic water supply.
(C) Constituent listed under NMWQCC 82-1 Part 3, Section 3-103.A; Standards for irrigation use.

ATTACHMENTS

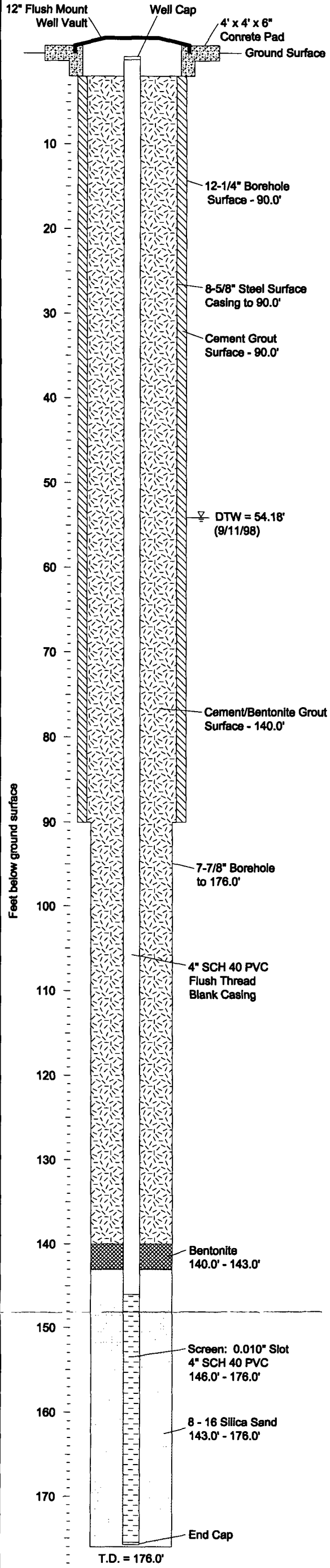
PHASE IV ASSESSMENT REPORT,
GROUND WATER MONITORING REPORT,
& PHASE V ASSESSMENT WORK PLAN

TRANSWESTERN PIPELINE COMPANY
ROSWELL COMPRESSOR STATION NO. 9

Attachment #1

Soil Boring and Completion Details for new Monitor Wells

roswell\mw24D.dwg (4/28/98)



PID Reading (ppm)	Sampling Device	Sample Interval (feet bgs)	Comments and Lithology
	Grab	90-100	Red brown clay/sand-gypsum mixture, some gravel to 1/2" diameter, white gypsum beads
	Grab	120-121	Red clay seam, sandy, damp
	Grab	122	Gypsum, hard drilling
	Grab	136	Tan to brown/light brown clayey sand, mixed with white gypsum beads, 20% pea size gravel
	Grab	140-150	Red brown clay mixed with sand and pea sized gravel: 60% clay, 20% gravel, 20% sand
	Grab	148	Dry
	Grab	152	Wet
	Grab	150-160	Clay, very plastic but sandy, 50% clay, 20% sand, 10% gypsum, 20% gravel
	Grab	160	Slightly damp, hard drilling
	Grab	160-176	Clay, red brown - dark brown, interbedded with gypsum, possible gray limestone, fine grain micrite

Driller: GeoProjects International
Drilling method: Air Rotary
Bit diameter: 12-1/4 in. O.D. & 7-7/8 in O.D.

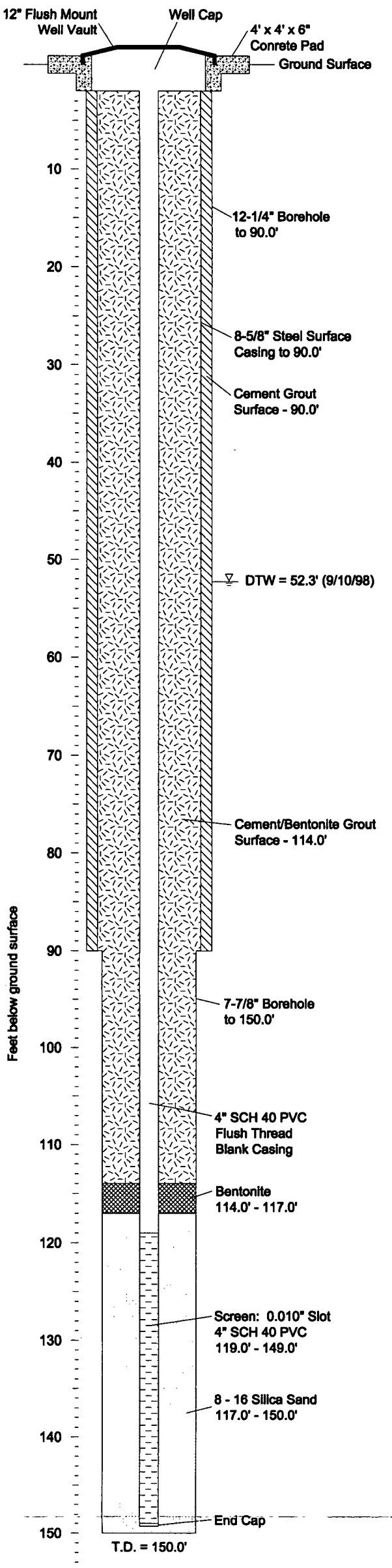
Log by: Clayton M. Barnhill, PG
Date completed: 9/11/98

TRANSWESTERN PIPELINE COMPANY
ROSWELL COMPRESSOR STATION

Well Log: MW-24D

CYPRESS ENGINEERING SERVICES, INC.

roswell\mw25D.dwg (04/29/99)



PID Reading (ppm)	Sampling Device	Sample Interval (feet bgs)	Comments and Lithology
0	Grab	0-10'	Tan brown silty gravel - gravel sand mixture; gravel is pea sized to pebble
0	Grab	10-20'	Tan brown silty sand and gravel mixture
0	Grab	20-25'	Same as above; 30% gravel to 1" diameter
0	Grab	25-30'	Medium grained, well sorted, red brown sand with gravel to 1" diameter
	Grab	30-35'	Same as above
		35-40'	Could not get returns
	Grab	40-45'	Gravelly sands
	Grab	45-50'	Gravelly sands
	Grab	50-55'	Clayey sands, gravel sand-clay mixture
	Grab	55-60'	Red tan clayey sand and white clay with some gypsum < 5%
	Grab	60-65'	Minor caliche, red clayey sand, medium to fine grained
	Grab	65-70'	White clay with minor gypsum and caliche
	Grab	70-80'	Silty sand with minor fine gravel
	Grab	80-85'	White gypsum with redish brown clayey sand, some gravel
	Grab	85-90'	Redish brown gravelly sands, minor gypsum
	Grab	90-100'	Red-brown clay sand, gypsum mixture; interbedded white gypsum beds 1-2 ft thick
	Grab	100-120'	50% clayey sand, 50% gypsum
	Grab	120-125'	Hard drilling, gray clay mixed with red sandstone layer (very thin bedded), damp clay 122', brown clay/sand mixture, clay 70%, medium to course grade sand 30%
	Grab	125-150'	Wet clay at 138 ft Brown clay, very wet at 150 ft

Driller: GeoProjects International
Drilling method: Air Rotary
Bit diameter: 12-1/4 in. O.D. & 7-7/8 in O.D.

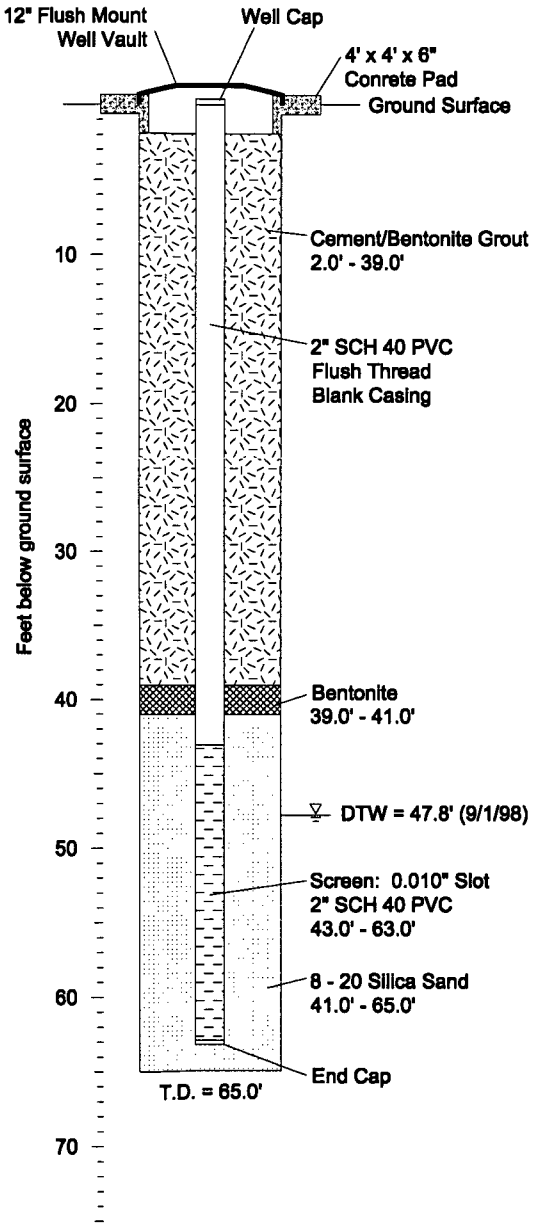
Log by: Clayton M. Barnhill, PG
Date completed: 9/9/98

TRANSWESTERN PIPELINE COMPANY
ROSWELL COMPRESSOR STATION

Well Log: MW-25D

CYPRESS ENGINEERING SERVICES, INC.

roswell\mw26.dwg (4/28/99)



PID Reading (ppm)	Sampling Device	Sample Interval (feet bgs)	Comments and Lithology
0	Grab	0-2	Tan brown silt & caliche, minor gravel <5% mixed with fine grain well sorted sand
0	Split Spoon	10-12	Tan brown silt, caliche, fine grain sand, gravel to 10% < 1/2" diameter
		13	Gravel to 1" diameter
0	Split Spoon	18-20	Fine grain sand, well sorted, silt & gravel to 40%
0	Grab	20.5	Coarse gravel to 2" mixed with pea sized gravel
	Grab	24	Clayey gravel
0	Grab	25.5	Clayey sandy gravel
0	Split Spoon	28-30	Clayey sand, red brown fine grain well sorted sand
0	Split Spoon	38-40	Light brown to reddish brown sandy - clayey sand
		40-45	Clayey sands - sand clay mixture, damp
0	Split Spoon	48-50	Light brown clayey sand, medium grain well sorted
0	Split Spoon	58-60	Fat clays mixed with clayey sands, tan to red brown, medium to fine grain well sorted sands.
0		63'	Clay

Driller: GeoProjects International
Drilling method: Hollow stem auger
Bit diameter: 8 in. O.D.

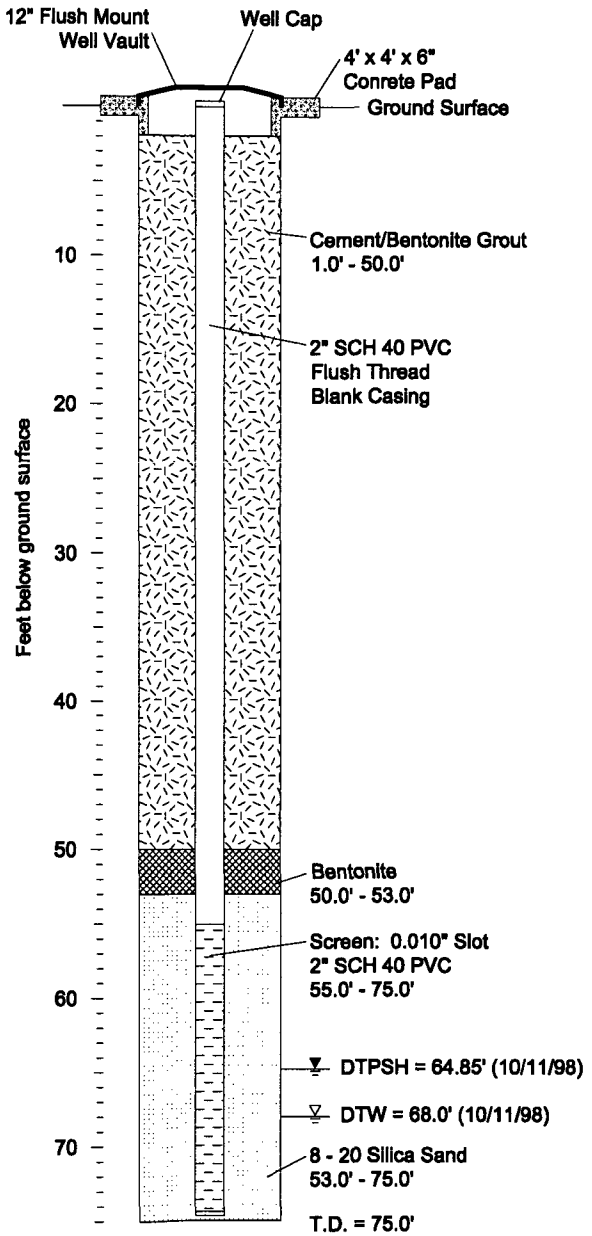
Log by: Clayton M. Barnhill, PG
Date completed: 9/1/98

TRANSWESTERN PIPELINE COMPANY
ROSWELL COMPRESSOR STATION

Well Log: MW-26

CYPRESS ENGINEERING SERVICES, INC.

roswell\mw27.dwg (4/28/98)



PID Reading (ppm)	Sampling Device	Sample Interval (feet bgs)	Comments and Lithology
0	Grab	0 - 5	Tan-brown silt, sand, caliche, 10% gravel to 1" diameter
0	Split Spoon	8-10	Tan brown, silt, sand, gravel mixture, 50% sand, 30% silt, 20% gravel to 2" diameter
0	Split Spoon	18-20	Tan brown silt sand gravel to 1" diameter
	Grab	20-30	Tan brown coarse gravel sand mixed with silt, gravel 50%
			Hard drilling at 28.5 - 30.7 ft
			Softer drilling at 32 ft
144	Split Spoon	38-40	Red - dark brown clayey sand - sand clay mixture, minor gravel
	Grab	40-50	Red - dark brown clayey sand: sand 80%, clay 20%
	Split Spoon	48-50	Red - dark brown clayey sand: sand 80%, clay 20%
	Grab	50-60	Red - dark brown clayey sand: sand 80%, clay 20%
1771	Split Spoon	60-62	50% clay, 50% medium sand, red - brown; clay has high plasticity
	Split Spoon	70-72	Red brown sand, medium grain, well sorted
45	Split Spoon	75-76	Hard, fat clay
		76-77	Clayey, well sorted sand, medium grain

Driller: GeoProjects International
Drilling method: Hollow stem auger
Bit diameter: 8 in. O.D.

Log by: Clayton M. Barnhill, PG
Date completed: 9/2/98

TRANSWESTERN PIPELINE COMPANY
ROSWELL COMPRESSOR STATION

Well Log: MW-27

CYPRESS ENGINEERING SERVICES, INC.

PHASE IV ASSESSMENT REPORT,
GROUND WATER MONITORING REPORT,
& PHASE V ASSESSMENT WORK PLAN

TRANSWESTERN PIPELINE COMPANY
ROSWELL COMPRESSOR STATION NO. 9

Attachment #2

Completed State Engineer Well Record Forms for new Monitor Wells

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Trans Western Pipeline Owner's Well No. MW-24D
Street or Post Office Address 6318 North Main Street
City and State Roswell New Mexico, 88201

Well was drilled under Permit No. BA 9558 and is located in the:

a. ____ ¼ NW ¼ SE ¼ SW ¼ of Section 21 Township 9S Range 24E 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 License No. WD 1311

Address 8834 Circle Drive Austin Texas 78736

Drilling Began 9/10/98 Completed 9/11/98 Type tools Air Rotary Size of hole 8 in.

Elevation of land surface or N/A at well is ____ ft. Total depth of well 176 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 152 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
140	160	20	Clay, w/Sand, Red-Brown	N/A

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
	SCH 40 PVC	Riser	0	146	146			
	SCH 40 PVC	Screen	146	176	20	PVC	146	176

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
0	140	8	1.5	36.65	Surface Pump - Cement
140	143	8	N/A		Surface Drop - Bentonite
143	176	8	N/A		Silica Sand 8/10

Section 5. PLUGGING RECORD

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

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

FOR USE OF STATE ENGINEER ONLY

Date Received

Quad ____ FWL ____ FSL ____

File No. ____ Use ____ Location No. ____

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Trans Western Pipeline Owner's Well No. MW-25D
Street or Post Office Address 6318 North Main Street
City and State Roswell New Mexico, 88201

Well was drilled under Permit No. RA 9557 and is located in the:

a. ____ ¼ NW ¼ SE ¼ SW ¼ of Section 21 Township 9S Range 24E 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 License No. WD 1311

Address 8834 Circle Drive Austin, Texas 78736

Drilling Began 9/9/98 Completed 9/9/98 Type tools Air Rotary Size of hole 8 in.

Elevation of land surface or N/A at well is ____ ft. Total depth of well 150 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 123/124 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
50	55	5	Clayey Sands, w/ gravel	N/A
120	125	5	Clayey SAND, Gray w/ Red	N/A

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
4	SCH 40 PVC	Riser	0	119	119			
4	SCH 40 PVC	Screen	119	149	30	PVC	119	149

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
0	114	8	1	29.85	Surface Pump - Cement
114	117	8	N/A		Surface Drop - Bentonite
117	150	8	N/A		Silica Sand 8/16

Section 5. PLUGGING RECORD

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

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

FOR USE OF STATE ENGINEER ONLY

Date Received

Quad ____ FWL ____ FSL ____

File No. ____ Use ____ Location No. ____

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Transwestern Pipeline Owner's Well No. MW-26
Street or Post Office Address 6318 North Main Street
City and State Roswell New Mexico, 88201

Well was drilled under Permit No. N/A and is located in the:

a. ____ ¼ NW ¼ SE ¼ SW ¼ of Section 21 Township 9S Range 24E 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 License No. WD 1311

Address 8834 Circle Drive Austin Texas 78736

Drilling Began 9/1/98 Completed 9/1/98 Type tools Hollow Stem Auger Size of hole 8 in.

Elevation of land surface or N/A at well is ____ ft. Total depth of well 65 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 47.8 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
48	50	2	Clayey SAND, Light Brown	N/A

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
2	SCH 40 PVC	Riser	0	43	43			
2	SCH 40 PVC	Screen	43	63	20	PVC	43	63

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
0	38	8	1	12.38	Surface Pump / Cement
38	41	8	N/A		Surface Drop / Bentonite
41	65	8	N/A		Silica Sand 8/20

Section 5. PLUGGING RECORD

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

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

FOR USE OF STATE ENGINEER ONLY

Date Received

Quad ____ FWL ____ FSL ____

File No. ____ Use ____ Location No. ____

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Trans Western Pipeline Owner's Well No. MW-27
Street or Post Office Address 6318 North Main Street
City and State Roswell New Mexico, 88201

Well was drilled under Permit No. N/A and is located in the:

a. ____ ¼ ____ ¼ ____ ¼ ____ ¼ of Section ____ Township ____ Range ____ 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 License No. WD 1311

Address 8834 Circle Drive Austin, Texas 78736

Drilling Began 9/2/98 Completed 9/2/98 Type tools Hollow Stem Auger Size of hole 8 in.

Elevation of land surface or N/A at well is ____ ft. Total depth of well 75 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 63 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
60	62	2	Sand, Red - Brown	N/A

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
2	SCH 40 PVC	Riser	0	55	55			
2	SCH 40 PVC	Screen	55	75	20	PVC	55	75

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
0	50	8	1	16.29	Surface Pump - Cement
50	53	8	N/A		Surface Drop - Bentonite
53	75	8	N/A		Silica Sand 8/20

Section 5. PLUGGING RECORD

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

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

FOR USE OF STATE ENGINEER ONLY

Date Received

Quad ____ FWL ____ FSL ____

File No. ____ Use ____ Location No. ____

PHASE IV ASSESSMENT REPORT,
GROUND WATER MONITORING REPORT,
& PHASE V ASSESSMENT WORK PLAN

TRANSWESTERN PIPELINE COMPANY
ROSWELL COMPRESSOR STATION NO. 9

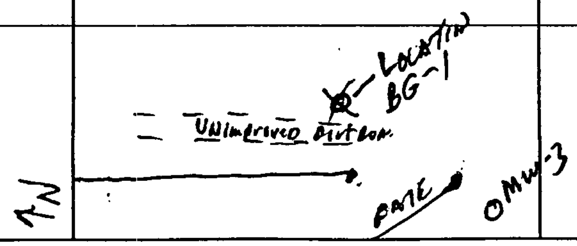
Attachment #3

Soil Boring Logs for the Background Soil Sample Soil Borings

Cypress Engineering Services

Boring ID: BG-1

Project:	BackGround Soil Sampling	Sheet:	1
Location:	TWP Roswell Station		
Client:	TWP / Enron Roswell Stn.	Job number:	
Driller:	Amadon Kinyon GeoProjects Inc.	Total depth:	14'
Drilling method:	Hollow Stem Auger / Split Spoon Sample	Boring diameter:	8" O.D. 4¼ I.D.
Boring date:	9/3/98	Logged by:	CMB
Water level:		Date measured:	

depth (ft)	SAMPLE interval	SAMPLE number	SAMPLE recovery (inches)	standard penetration test results	SOIL DESCRIPTION (Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content)	graphic log	COMMENTS (Monitoring well installation, geotechnical properties, analytical tests, instrumentation)
0–5					7:30 Started Drilling. Brown-Tan Silty Gravel Sand mixture Sand 40%, Gravel to 2" 30%, 30% Silt.		GM.
5–10					White-Tan Silty Gravel / Sand / Silt mixture Gravel 40% Sand 40% Silt 20% Gravel to 2"		GM
10–15 (10–12 @ 8:00; 12–14' @ 8:12)		~~BG~~ 1A / BG-1B	1.5 / 1.5	300 SPT Blows / 210 SPT Blows	Same as above	TD 14'	GM PID = 368 ppm (moisture) PID = 567 ppm (moisture?)
15–20							
20–25							
							

Cypress Engineering Services

Boring ID: BG-2

Project: Back Ground Soil Sampling
Location: TWP Roswell Station
Client: TWP
Driller: Amador Hinojosa GeoProjects International
Drilling method: Hollow Stem Auger / Split Spoon Sampler
Boring date: 9/3/98
Water level:

Sheet: 1
Job number:
Total depth: 14'
Boring diameter: 8" O.D. 4¼ I.D.
Logged by: CMD
Date measured:

depth (ft)	SAMPLE interval	SAMPLE number	SAMPLE recovery (inches)	standard penetration test results	SOIL DESCRIPTION Started @ 8:40 — Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic log	COMMENTS — Monitoring well installation, geotechnical properties, analytical tests, instrumentation
					Silty-Sandy-Gravel Mixture. Gravel 40% GM: Sand med fine-gr. well sorted Tan brown. 40%, 20% fine Silt. Gravel to 1"		GM
5					GM: SAME AS ABOVE GM- Tan Brown Gravel to 2"		GM.
10					SW: Gravelly Sands Little fines — Sand. 80% 20% Gravel to 1" Tan-brown. Med-Coarse Gr. Sand		SW
10-12 @9:03		BG2A	2.0	18? Spt Blows			PID = 28.6 (moisture?)
12-14 @9:12		BG2B	2.0	110 Spt Blows			PID = 368 ppm (moisture?)
15						TD 14'	
20							
					0'-86'N Dirt Road Fenceline ●MW1 ● RW13		

Cypress Engineering Services

Boring ID: BG-3

Project: Back Ground Soil Sampling
Location: TLP Roswell Station
Client: TLP
Driller: Amadour thru Geo Projects International
Drilling method: Hollow Stem Auger/Split Spoon Sample
Boring date: 9/3/98
Water level:

Sheet: 1
Job number:
Total depth: 14'
Boring diameter: 8" O.D. 4 1/4 I.D.
Logged by: CMB
Date measured:

depth (ft)	SAMPLE interval	SAMPLE number	SAMPLE recovery (inches)	standard penetration test results	SOIL DESCRIPTION: Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic log	COMMENTS: Monitoring well installation, geotechnical properties, analytical tests, instrumentation
5					0-2.5': Light Brown - Silty Gravel - Course Sand GM Silt Mixture 2.5-5.0': Light Brown to Tan Course Sand GM 10% Silt 70% Sand 20% Gravel		GM
10					SAME AS ABOVE All Tan brown - Mod gr. sand, silt, gravel to 1"		GM
10-12 @ 9:56 12-14 @ 10:10 15		BC 3A BB 3B	2.0' 2.0	224 50 Blows 350 Split Blows	GP: Poorly Graded Gravel Gravel to 2" mixed with pea sized gravel. 50% 40% Sand - med - gr. Tan brown - 10% Silt - Med - Course grained Sand Tan Brown mixed with 50% Gravel.	TD 14'	GP/SW PID: 65.7 ppm (moisture?) PID: 255 ppm (moisture?)

Inside Fence. BG-3 N →
OMW-3 Gate
OMW
← Fence

OUTSIDE Fence

Cypress Engineering Services

Boring ID: BG-4

Project: Back Ground Soil Sampling
Location: TWP Roswell Station
Client: TWP
Driller: Ama Dor - Hinojosa Geo Projects Inter
Drilling method: Hollow Stem Auger / Split Spoon Sample
Boring date: 9/3/08
Water level:

Sheet: 1
Job number:
Total depth: 141
Boring diameter: 8" O.D. 4¼ I.D.
Logged by: CMB
Date measured:

depth (ft)	SAMPLE interval	SAMPLE number	SAMPLE recovery (inches)	standard penetration test results	SOIL DESCRIPTION Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic log	COMMENTS Monitoring well installation, geotechnical properties, analytical tests, instrumentation
					0-5: lt. Brown to Tan-med- coarse gravel Sand. Mixed with gravel to 1" ~~little~~ ~80 NP% fines		~~GP~~ ~~GM~~ GM-
5					5-10 – Same as above light Tan to white.		GM
10							
10-12' @ 11:15		BG-4A	2.0	158 Spt. Blows	Same as above		GM PID: 92.2 (moisture?)
12'-14' @ 11:20		BG-4B	2.0	53 Spt Blow			PID: 48.9
15							TD 141
					← → Fence Outside Area BG-4 RW1B Inside Area RW1A		

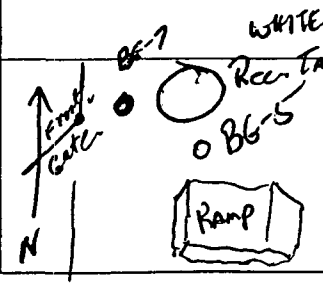
Cypress Engineering Services

Boring ID: B6-5

Project: Soil Background Sampling
Location: Twp Roswell Station
Client: Twp
Driller: Amadeo Rungia Geo Projects International
Drilling method: Hollow Stem Auger / Split Spoon Sampling
Boring date: 9/3/98
Water level:

Sheet: 1
Job number:
Total depth: 14'
Boring diameter: 8" O.D. 4 1/4" I.D.
Logged by: CMB
Date measured:

depth (ft)	SAMPLE interval	SAMPLE number	SAMPLE recovery (inches)	standard penetration test results	SOIL DESCRIPTION: Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic log	COMMENTS: Monitoring well installation, geotechnical properties, analytical tests, instrumentation
0					0-10': TAN TO LIGHT Brown med to Course grained Sand. 50% mixture WITH 40% Course Gravel to 2" and 10% fine		GM
5					Silt. From 5.5' - 10' old pit area. Dark Sand Pieces of Brick. OPEN No 5.5'-10' Recovery		GM. Old PIT? 5.5'-10.0'
10		B6-5A	2.0	128 SPT Blows	Gray Black "old pit?" From 10+11 @ 11-12 GM - Sandy Soil		PID 10'-12' = 313 PPM. PID 12'-14' = N/D. GM
10'-12' @ 11:56							
12'-14' @ 12:05		B6-5B	1.0	80 SPT Blows	12-14': Sandy - Gravelly Soil - Not Dark. Tan-Brown Med-grade Sand - Gravel to 1"	14 T.D.	
15							



Cypress Engineering Services

Boring ID: BG-6

Project: Back Ground Soil Sampling
Location: TWP Roswell Station
Client: TWP
Driller: Amador Hinojosa Geo Projects International
Drilling method: Hollow Stem Auger / Split Spoon
Boring date: 9/3/98
Water level:

Sheet: 1
Job number:
Total depth: 14'
Boring diameter: 8" O.D. 4 1/4" I.D.
Logged by: CMB
Date measured:

depth (ft)	SAMPLE interval	SAMPLE number	SAMPLE recovery (inches)	standard penetration test results	SOIL DESCRIPTION Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic log	COMMENTS Monitoring well installation, geotechnical properties, analytical tests, instrumentation
					Started @ 12:24		
					0-5 - Tan to white fine & med. gr. sand, some mixed with pebbles. little silt.		GM
5					GRAVEL SIZE INCREASES to UP TO 2" — otherwise SAME AS ABOVE		GM.
10							
10-12' @ 12:45		B6A	2.0	300 SPT Blows	SAME AS ABOVE.		GM PID 10'-12' = N/D
12'-14' @ 13:00		B6B	2.0	300 SPT Blows			PID 12'-14' = N/D
15						TD 14'	
					Fence B6B Gate in fence Staircase for 25/240		

→ 2

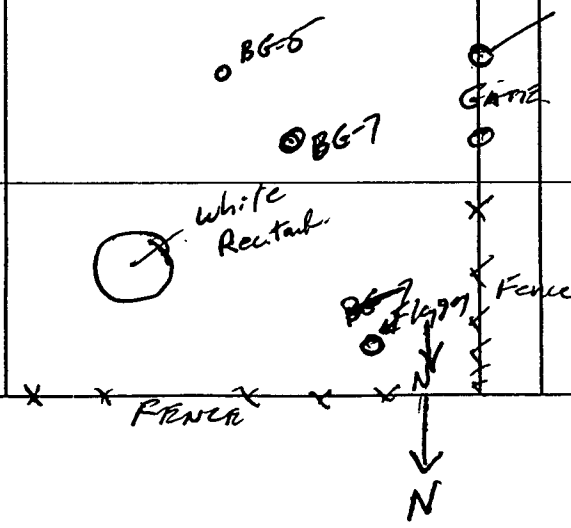
Cypress Engineering Services

Boring ID: BG-7

Project: Back Ground Soil Sampling
Location: TWP Roswell STATION
Client: TWP
Driller: Hinojosa Geo Projects International
Drilling method: Hollow STEM Auger / Split Spoon
Boring date: 9/3/98
Water level:

Sheet: 1
Job number:
Total depth: 14'
Boring diameter: 8" O.D. 4 1/4" I.D
Logged by: CMB
Date measured:

depth (ft)	SAMPLE interval	SAMPLE number	SAMPLE recovery (inches)	standard penetration test results	SOIL DESCRIPTION Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic log	COMMENTS Monitoring well installation, geotechnical properties, analytical tests, instrumentation
					Started @ 13:40		
					White to Tan med grained well sorted Sand mixed with Caliche and pebbles to 1" <20% Silts		GM
5					TAN - TO Brown. Med. Grained well sorted Sand mixed with Gravel to 1" -		GM
10							
10'-12' @ 14:00		BG 7A	2.0	185 SPT Blows	Med gr. to Coarse gr. Sand. 60% 40% Gravel to 1" little or no fines Tan Brown - 14' Color -		SW PID 10'-12' = N/D
12'-14' @ 14:05		BG 7B		180 SPT Blows		T.D @ 14'	PID 12'-14' = N/D
15							



Cypress Engineering Services

Boring ID: BG-8

Project: Back Ground Soil Sampling
Location: TWP Roswell Station
Client: TWP
Driller: Amadon Hino/USA GeoProjects International
Drilling method: Hollow Stem Auger / Split Spoon
Boring date: 9/3/98
Water level:

Sheet: 1
Job number:
Total depth: 14'
Boring diameter: 8" O.D. 4" I.D
Logged by: CMB
Date measured:

depth (ft)	SAMPLE interval	SAMPLE number	SAMPLE recovery (inches)	standard penetration test results	SOIL DESCRIPTION: Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic log	COMMENTS: Monitoring well installation, geotechnical properties, analytical tests, instrumentation
					STARTED @ 14:30 White, Tan, Brown, Sand Silt, Gravel Mixture - Sand 50% Gravel 40% Silt 10% - Some Caliche Gravel to 3" - Cobbles		GM
5					SAME AS ABOVE		GM
10					SAME AS ABOVE	TD 14'	GM PID 10'-12' = N/D PID 12'-14' = N/D
10'-12' @ 14:50 12'-14' @ 15:00 15		BG B4 BG B8		400 Soft Blows 386 of 1 Blows