

**GW - 22**

**REPORTS**

**YEAR(S):**

**2007**

**Price, Wayne, EMNRD**

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**From:** Price, Wayne, EMNRD  
**Sent:** Tuesday, December 11, 2007 12:21 PM  
**To:** 'dharris@frontierfieldservices.com'  
**Cc:** mark@laenvironmental.com  
**Subject:** Frontier Field Services Empire Abo Plant GW-022

Dear Mr. Harris:

OCD is in receipt of the December 10, 2007 Interim Groundwater report which recommends additional installation of monitor and recovery wells. OCD hereby approves of the path forward plan.

Please be advised that OCD approval of this plan does not relieve the owner/operator of responsibility should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Wayne Price-Environmental Bureau Chief  
Oil Conservation Division  
1220 S. Saint Francis  
Santa Fe, NM 87505  
E-mail [wayne.price@state.nm.us](mailto:wayne.price@state.nm.us)  
Tele: 505-476-3490  
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2007 DEC 10 AM 11:34

December 10, 2007

**VIA: Hand Delivery**

Mr. Wayne Price, Chief  
Environmental Bureau  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: Interim Groundwater Monitoring Report  
Frontier Field Services, LLC, Empire Abo Gas Plant, (GW-022),  
Unit I (NE/4, SE/4), Section 3, Township 18 South, Range 37 East  
Eddy County, New Mexico**

Dear Mr. Price:

The enclosed report is submitted to the New Mexico Oil Conservation Division (OCD) on behalf of Frontier Field Services, LLC (Frontier) by Larson & Associates, Inc. (LAI), its consultant, to convey interim results of groundwater monitoring for the Empire Abo Gas Plant (Facility) located in Eddy County, New Mexico. The report presents results of groundwater samples that were collected during the first (1sr), second (2<sup>nd</sup>) and third (3<sup>rd</sup>) quarters of 2007, as well as a work plan to conduct additional investigations to assess groundwater and vadose zone contamination. Your approval of the work plan is requested. Please contact Mr. David Harris with Frontier at (505) 677-2192 or email [dharris@frontierfieldservices.com](mailto:dharris@frontierfieldservices.com), if you have questions. I may be reached with questions at (432) 687-0901 or email [mark@laenvironmental.com](mailto:mark@laenvironmental.com).

Sincerely,

*Larson & Associates, Inc.*

A handwritten signature in black ink, appearing to read "Mark J. Larson".

Mark J. Larson, P.G., C.P.G., C.G.W.P.  
Sr. Project Manager / President

Encl.

Cc: Mike Hicks – Frontier  
Chad Cagle – Frontier  
David Harris – Frontier  
Tim Gum – OCD District 2

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2007 DEC 10 AM 11:35

**INTERIM GROUNDWATER MONITORING REPORT  
FRONTIER FIELD SERVICES, LLC  
EMPIRE ABO GAS PLANT (GW-022)  
EDDY COUNTY, NEW MEXICO**

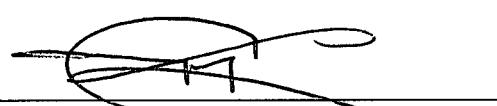
**Prepared for:**

**Frontier Field Services, LLC  
257 Empire Road  
Artesia, New Mexico  
(505) 677-2192**

**Prepared by:**

**Larson & Associates, Inc.  
507 N. Marienfeld Street  
Suite 202  
Midland, Texas  
(432) 687-0901**

**December 1, 2007**



**Mark J. Larson, P.G., C.P.G., C.G.W.P.  
Senior Project Manager / President**

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**Interim Groundwater Monitoring Report**

**Frontier Field Services, LLC**

**Empire ABO Gas Plant (GW-022)**

**Eddy County, New Mexico**

**December 1, 2007**

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## **1.0 INTRODUCTION**

This report is submitted to the New Mexico Oil Conservation Division (OCD) on behalf of Frontier Field Services, LLC (Frontier) by Larson & Associates, Inc. (LAI), its consultant, to present the interim results of groundwater monitoring at its Empire Abo Gas Plant (Facility). Groundwater monitoring was performed in accordance with a plan that was submitted to the OCD in the major modification for discharge permit GW-022 (“*Major Modification Discharge Permit GW-022, Empire Abo Gas Plant, Eddy County, New Mexico, February 8, 2007*”).

### **1.1 Background**

The Facility is located in unit I (NE/4, SE/4), Section 3, Township 18 South, Range 27 East, in Eddy County, New Mexico. The Facility is positioned at latitude 32° 46' 37.4" north and longitude 104° 15' 32.7" west. On December 6, 2006, the OCD issued a letter requiring Frontier to submit a major modification for discharge permit GW-022 to address technical deficiencies that OCD noted from its review of a renewal application submitted by the previous owner, BP America Production Company, on August 16, 2004. The OCD required Frontier to submit, among other things, a groundwater monitoring plan pursuant to WQCC 20.6.2.3107 NMAC (*Monitoring, Reporting, and Other Requirements*) and a groundwater investigation and abatement plan. Figure 1 presents a location and topographic map. Contact information for Frontier is as follows:

Name:	Mr. David Harris
Title:	Plant Manager
Physical Address:	257 Empire Road Artesia, New Mexico
Mailing Address:	Drawer 70 Artesia, New Mexico 88211-0070
Office Telephone:	(505) 677-2192
Fax:	(505) 677-5152
Email:	<a href="mailto:dharris@frontierfieldservices.com">dharris@frontierfieldservices.com</a>

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**Frontier Field Services, LLC**  
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## **2.0 GROUNDWATER MONITORING SYSTEM**

The groundwater monitoring system consists of twenty-seven (27) 4-inch wells, eight (8) nests consisting of a 2-inch well and 1-inch piezometers and five (5) 2-inch piezometers. The monitoring wells and piezometers range in depth from approximately 20.63 feet below ground surface (bgs) at location MW-02-11 to 114.75 feet bgs at location MW-03-04. Figure 2 presents a Facility drawing showing the locations of the monitoring wells and piezometers.

Groundwater samples were collected from the wells and piezometers on March 26 and 27, 2007 (1<sup>st</sup> Quarter), June 18 through 20, 2007 (2<sup>nd</sup> Quarter) and September 17 through 18, 2007 (3<sup>rd</sup> Quarter). Groundwater monitoring activities consisted of the following:

- Measuring depth-to-ground water and phase-separated hydrocarbons (PSH) using an electronic oil and water interface probe;
- Collecting groundwater samples from the wells and piezometers (excluding wells and piezometers that recorded PSH); and
- Conducting laboratory analysis for volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), dissolved metals (arsenic, barium, cadmium, chromium, lead, magnesium, mercury, potassium, selenium, silver and sodium, major anions and cations (alkalinity, chloride, nitrate, and sulfate) and total dissolved solids (TDS).

## **3.0 INTERIM GROUNDWATER MONITORING RESULTS**

### **3.1 Hydrocarbon Product and Groundwater Flow Assessment**

Measurements of PSH were obtained during each event using a Heron Instruments electronic oil and water interface probe that was thoroughly cleaned between locations using a solution of potable water and laboratory-grade detergent (Alkonox®) and rinsed with distilled water. The measurements were collected from the top of casing and are summarized on Table 1. Figure 3, Figure 4 and Figure 5 present apparent PSH

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thickness measurements from March 26 and 27, 2007), June 18, 2007 and September 17, 2007, respectively.

On March 26 and 27, 2007 (Figure 3) the apparent PSH thickness ranged from 0.1 feet in well MW-03-03 to 3.57 feet in well MW-02-09. On June 18, 2007 (Figure 4) the apparent PSH thickness ranged from 0.14feet in well EB-03 to 5.64 feet in well MW-02-10. On September 17, 2007 (Figure 5) the apparent PSH thickness ranged from 0.007 feet in well MW-08 to 6.28 feet in well MW-02-10. The PSH occurs beneath the Facility, but was also observed southeast of the Facility in well EB-03, which suggests that the PSH is migrating with groundwater.

LAI evaluated the vertical position of the well and piezometer screens using hydrographs that were constructed from available well and piezometers records. The depth of the screen, groundwater and PSH show that thirteen (13) wells and piezometers (MW-02, MW-02-04, MW-02-09, MW-02-11, MW-03, MW-03-03, MW-06, EB-01, EB-02, EB-04, EB-05, P-02 and P-05) have screens that are submerged below the water table. The submerged screens prevent PSH from entering the well unless the water table is lowered. Eight (8) wells and piezometers (MW-02-10, MW-02-12, MW-02-13, MW-02-14, MW-03-04, MW-04, MW-09, and EB-03) had screens that were submerged below the water table, yet PSH was present in the casing. The PH is likely due to capture after the water table was lowered during sampling. Appendix A presents the hydrographs.

Groundwater occurs in the Permian-age Tansil formation (Artesia group), which consists of dolomite, limestone and gypsum that is interbedded with sandstone. The average depth to groundwater during the monitoring period ranged from approximately 7.64 feet bgs at MW-7 to 61.55 feet bgs at P-03. The groundwater level was generally consistent between events except for minor variations that may be attributed to aquifer fluctuation, recharge and discharge. The measurements also suggest that groundwater occurs in voids and fractures. Figure 6, Figure 7 and Figure 8 present contoured

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drawings for depth to groundwater measurements from March 26 and 27, 2007, June 18, 2007 and September 17, 2007, respectively.

The general direction and gradient of groundwater flow during the monitoring period was from northwest to southeast at approximately 0.04 feet per foot, respectively. The groundwater surface was elevated near well MW-07 and may be attributed to groundwater movement in voids and fractures. The groundwater elevation was corrected for PSH using a specific gravity of 0.70. Figure 9, Figure 10 and Figure 11, present corrected and contoured drawings for groundwater elevations observed on March 26 and 27, 2007, June 18, 2007 and September 19, 2007, respectively.

### **3.2 Groundwater Samples**

On March 26 and 27, 2007, June 18 through 20, 2007 and September 17 through 18, 2007, LAI personnel collected groundwater samples from the wells and piezometers, except where PSH was observed. The samples were collected after purging approximately three (3) casing volumes of groundwater using dedicated disposable polyethylene bailers or pumping with electric submersible pumps. The water was placed in a portable tank and discharged to the Facility's process water system for disposal. The electric submersible pumps and tubing were thoroughly cleaned between locations by washing in a solution of potable water and laboratory grade (Alkonox®) detergent and rinsing with distilled water. The samples were collected using dedicated disposable polyethylene bailers, which were carefully lowered into wells and the samples gently poured into laboratory preserved containers. The containers were sealed, labeled, chilled in an ice chest and delivered under chain of custody control to DHL Analytical Laboratories, Inc., located in Round Rock, Texas. The laboratory analyzed the samples for VOC using method SW-846-8260, SVOC by method SW-846-8270, dissolved metals, major ions and anions and TDS. Table 2 presents a summary of the laboratory analysis. Appendix B presents the laboratory reports.

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Benzene, ethylbenzene and xylene are VOC that were reported in samples at concentrations above the New Mexico Water Quality Control Commission (WQCC) human health standards of 0.01 milligrams per liter (mg/L) 0.75 mg/L and 0.62 mg/L, respectively. Benzene was reported above 0.01 milligrams per liter (mg/L) in samples MW-02-06, MW-02-07, MW-02-15, MW-02-18, MW-03-01, MW-03-03, MW-07, EB-03, EB-08 and P-03. The highest benzene concentration occurred in sample MW-02-18 at 8.08 mg/L (March 28, 2007), 6.63 mg/L (June 19, 2007) and 6.06 mg/L (September 18, 2007). Benzene was detected in down gradient sample P-03 (0.0154 mg/L) above the WQCC standard on September 17, 2007. Frontier will continue to monitor the benzene.

Ethylbenzene was only reported above 0.75 mg/L in sample EB-08 (1.48 mg/L) on June 18, 2007. Ethylbenzene was reported in sample EB-08 at 0.973 mg/L on September 17, 2007. Xylene was only reported above 0.62 mg/L in samples MW-02-06 (0.8112 mg/L) and EB-08 (1.564 mg/L to 2.543 mg/L). Sample EB-08 reported the highest xylene concentration (2.543 mg/L) on June 18, 2007. Seventeen (17) other VOC were reported at concentrations below available WQCC human health standards. Figure 12, Figure 13 and Figure 14 present numerical values for benzene concentrations reported in the samples on March 26 and 27, 2007, June 18 through 20, 2007 and September 17 and 18, 2007, respectively. Frontier will continue to monitor ethylbenzene and xylene.

Naphthalene was only reported above the WQCC human health standard of 0.03 mg/L in samples MW-03-01 (0.0482 mg/L) and EB-08 (0.0846 mg/L). Seven (7) other SVOC were reported at low concentrations, for which no WQCC standards are available.

Dissolved chromium and selenium were reported above the WQCC human health standard of 0.05 mg/L. The chromium was reported in sample EB-04 between 0.0518 mg/L to 0.0718 mg/L. The Facility is not the source for the chromium since EB-04 is cross-gradient and the remaining samples reported no chromium. A producing oil and gas well is located near EB-04 and could be a source for the chromium. Frontier will

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continue to monitor groundwater for chromium. Dissolved selenium was reported above 0.05 mg/L in sample EB-08 between 0.105 mg/L to 0.0856 mg/L. The source for the selenium is not known and Frontier will continue to monitor groundwater for selenium.

Seven (7) samples (MW-02-02, MW-02-05, MW-08, EB-04, EB-08, P-03 and P-04) reported chloride above the WQCC domestic water quality standard of 250 mg/L. The highest chloride was highest in samples MW-02-02 and MW-02-05 from the north end of the Facility. The source for the chloride is not known and Frontier proposes to conduct additional investigations to evaluate the area north of the Facility. Chloride was also reported above 250 mg/L in sample P-04 (516 mg/L to 618 mg/L) located down gradient from the Facility. The source for the chloride in sample P-04 is not known. Figure 15, Figure 16 and Figure 17 present contoured drawings for chloride reported in samples from March 26 and 27, 2007, June 18 through 20, 2007 and September 17 and 18, 2007, respectively. Frontier will continue to monitor the groundwater for chloride.

Sulfate and TDS was reported in all samples above the WQCC domestic water quality standards of 600 mg/L and 1,000 mg/L, respectively. The average sulfate concentration during the monitoring period ranged from 954 mg/L (MW-03-03) to 394,000 mg/L (MW-02-05). The average TDS concentration during the monitoring period ranged from 2500 mg/L (MW-02) to 569,000 mg/L (MW-02-05). Sulfate and TDS were highest in samples MW-02-02 and MW-02-05 from the north end of the Facility. Frontier proposes to conduct additional investigations north of the Facility. Figure 18, Figure 19 and Figure 20 present contoured drawings for the sulfate reported in samples on March 26 and 27, 2007, June 18 through 20, 2007 and September 17 and 18, 2007, respectively. Figure 21, Figure 22 and Figure 23 present contoured drawings for the TDS reported in samples on March 26 and 27, 2007, June 18 through 20, 2007 and September 17 and 18, 2007, respectively. Frontier will continue to monitor groundwater for sulfate and TDS.

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#### **4.0 PROPOSED INVESTIGATIONS**

Additional investigations will include an electromagnetic (EM) terrain conductivity survey of the area north of the Facility to determine a possible source for the chloride, sulfate and TDS. Install wells where submerged well screens and PSH was observed to assess PSH thickness and distribution. Calculate PSH thickness from bailout tests. Install additional monitoring wells north, west and southeast of the Facility to assess groundwater quality.

##### **4.1 Electromagnetic (EM) Terrain Conductivity Survey**

The EM survey is a qualitative method that measures the electrical properties of soil, rock and groundwater. The EM measurements are compared to background to locate areas of elevated conductivity that may coincide with sources for the elevated chloride, sulfate and TDS. The EM readings are displayed in millimhos per meter (mmhos/m) on a digital receiver console. The EM survey will be performed over an area measuring approximately 1800 x 1800 feet and the final area will be determined by the observed measurements. The survey will be conducted using EM-31 and EM-34 terrain conductivity meters manufactured by Geonics Limited, located in Missasauga, Ontario, Canada. The EM-31 meter has exploration capabilities ranging from 0 to approximately 9 feet bgs in the horizontal dipole (HD) mode and 0 to approximately 19 feet bgs in the vertical dipole (VD) mode. The EM-34 meter has exploration capabilities from 0 to approximately 25 feet bgs in the HD mode and 10-meter coil spacing, 0 to approximately 50 feet bgs in the VD mode and 10-meter coil spacing, 0 to approximately 50 feet bgs in the HD mode and 20-meter coil spacing, 0 to approximately 100 feet bgs in the VD mode and 20-meter coil spacing, 0 to approximately 100 feet bgs in the HD mode and 40-meter coil spacing, and 0 to approximately 200 feet bgs in the VD mode and 40-meter coil spacing. Initial measurements will be collected using grids measuring approximately 200 x 200 feet and refined using grids measuring approximately 50 x 50 feet. The EM survey results will be presented on colored contoured drawings to show areas of elevated conductivity that may coincide with a source for the chloride, sulfate and TDS.

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Background will be measured at a location that is free of cultural interference (i.e., buildings, metal, pipelines, power lines, etc.). Figure 24 presents the proposed EM survey area.

#### **4.2 Hydrocarbon Product Observation and Recovery Wells**

Fourteen (14) wells will be installed to assess the distribution and thickness of PSH. The wells will be drilled using a rotary or hollow stem auger rig and advanced to depths equal to nearby wells. The wells will be constructed using 4-inch diameter PVC casing and screen. The screens will extend from the bottom of the borings to approximately 7 feet above the observed groundwater surface. Graded silica sand will be placed around screens from the bottom of the borings to approximately 3 feet above the screens. The remaining annulus will be filled to approximately 1-foot bgs with bentonite chips and the wells will be secured with locking steel above-grade covers anchored in concrete. Geological logs will be prepared according to industry standards from samples that will be collected for headspace analysis according to OCD guidelines, and possibly laboratory analysis. The samples may be analyzed by a laboratory for benzene, toluene, ethylbenzene and xylene (BTEX) and total petroleum hydrocarbons (TPH) based on field observations and headspace readings. The drill cuttings will be placed on the ground adjacent to the wells until disposal is arranged. The wells will be developed to remove fine grained material, which will be placed in a portable tank and discharged in the Facility's process water system for disposal. A New Mexico licensed professional land surveyor will survey the wells for top of casing and ground elevation, which will be referenced to a USGS datum. Figure 24 presents tentative locations for the PSH observation and recovery wells.

#### **4.3 Bailout Tests**

Bailout tests will be performed to calculate the actual PSH thickness in the Tansil formation. The tests will be performed by bailing as much PSH as possible from the wells and recording PSH and groundwater recovery using an electronic oil and water interface

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probe. The PSH and groundwater measurements will be collected at precise intervals until an inflection point is observed. The inflection point occurs when the PSH thickness in the well is equal to the PSH thickness in the formation. The actual PSH thickness in the formation will be calculated using the method developed by Gruszczenski (1987).

#### **4.4 Monitoring Wells**

Four (4) monitoring wells will be installed north, west and southeast of the Facility to assess groundwater quality. The wells will be drilled using a rotary or hollow stem auger rig and advanced to depths equal to nearby wells. The wells will be constructed using 4-inch schedule 40 PVC casing and screen. The screens will extend from the bottom of the borings to approximately 7 feet above the observed ground water level. Graded silica sand will be placed around the screens to approximately 3 feet above the screens. The remaining annulus will be filled with bentonite chips to approximately 1-foot bgs and the wells will be secured with locking steel covers anchored in concrete. Geological logs will be prepared according to industry practices from samples that will be collected for headspace analysis, according to OCD guidelines, and possibly laboratory analysis. The samples may be analyzed for BTEX and TPH based on field observations and headspace readings. The drill cuttings will be placed on the ground adjacent to the wells until disposal is arranged. Additional wells may be installed based on field observations. The wells will be developed to remove fine grained sediment, which will be contained in a portable tank and discharged in the Facility's process water system for disposal. A New Mexico licensed professional land surveyor will survey the wells for top of casing and ground elevation, which will be referenced to a USGS datum. Figure 24 presents the approximate locations for the wells.

#### **4.5 Groundwater Samples**

Frontier proposes to modify the parameter list based on the interim groundwater monitoring results. Groundwater sample will be collected from the existing and new monitoring wells, excluding wells with PSH, and analyzed for BTEX, dissolved metals

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(arsenic, barium, cadmium, chromium, lead, magnesium, mercury, potassium, selenium, silver and sodium, major anions and cations (alkalinity, chloride, nitrate, sulfate) and TDS. Groundwater samples will be collected on a quarterly (4 times per year) schedule beginning in January 2008. The samples will be collected after purging the wells using low-flow, hand bailing or pumping techniques. The groundwater samples will be carefully transferred into laboratory preserved containers from the low-flow pump discharge or dedicated disposable bailers, labeled, chilled in an ice chest, delivered under chain of custody control to DHL Laboratories, Inc. Quality assurance and quality control (QA/QC) samples will be collected to verify the field and laboratory procedures. The metals samples will be filtered according to EPA protocol. The laboratory reports will be reviewed for completeness and the results tabulated.

#### **4.6 Horizontal Hydraulic Conductivity (Slug) Tests**

Horizontal hydraulic conductivity (slug) tests will be performed in select wells to calculate an average hydraulic conductivity for the Tansil formation. The slug tests will be used for designing the PSH recovery system. The slug tests will be performed by inserting (falling head) and removing (rising head) a weighted PVC tube (slug) or by depressing the water column using compressed air. The water level changes will be recorded using a pressure transducer placed near the bottom of the wells and the data will be stored in a data logger and transferred to a PC. The average horizontal hydraulic conductivity will be calculated using the Bower and Rice or equivalent method.

#### **4.7 Aerial Photographs**

Aerial photographs will be reviewed to assess possible sources for the PSH and groundwater contaminants. Soil borings may be drilled at locations determined to be possible sources for the contaminants. The borings will be drilled using a rotary or hollow stem auger rig. Geological logs will be prepared according to industry practices from samples that will be collected for headspace analysis, according to OCD guidelines, and possibly laboratory analysis. The samples may be analyzed for BTEX and TPH based

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on field observations and headspace readings. The drill cuttings will be placed on the ground adjacent to the borings until disposal is arranged. The borings will be plugged according to New Mexico State Engineer rules.

**4.8    Report**

An interim report will be prepared and submitted to the OCD and will include groundwater maps, laboratory reports, bailout and slug test results and abatement plan for the PSH, dissolved BTEX and vadose zone contaminants.

## **TABLES**

**Table 1**  
**Monitor Well Completion and Gauging Summary**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Well Information							Groundwater Data					
Well ID	Date Drilled	Drilled Depth (bgs)	Well Diameter (inches)	Surface Elevation	Screen Interval (bgs)	Casing Stickup	TOC Elevation	Date Gauged	Well Depth from TOC	Depth to Product	Depth to Water	Corrected Water Elevation
MW-02		38	4	3545.3	19 - 34	2.89	3548.19	--	37.92	--	32.75	3,515.44
								2/13/2007	--			--
								3/26/2007	--			3,515.34
								6/18/2007	--			3,514.29
								9/17/2007	--			3,514.36
MW-02-02	10/6/1992	45	4	3549.3	35 - 45	2.96	3,552.26	10/6/1992	--	--	39	3,513.26
								3/26/2007	48.65	--		3,525.76
								6/18/2007	--			3,525.40
								9/17/2007	--			3,525.26
MW-02-03	9/28/1992	105	4	3553.0	95 - 105	3.03	3,556.03	9/28/1992	--	--	97	3,459.03
								2/12/2007	--			3,492.87
								3/27/2007	108.50	--		3,493.07
								6/18/2007	--			3,493.77
								9/17/2007	--			3,493.95
MW-02-04	9/30/1992	55	4	3550.9	45 - 55	2.89	3,553.79	9/30/1992	--	--	50	3,503.79
								3/26/2007	61.60	--		3,500.44
								6/18/2007	--			3,503.12
								9/17/2007	--			3,502.10
MW-02-05	10/6/1992	50	4	3549.9	40 - 50	2.79	3,552.69	10/6/1992	--	--	43	3,509.69
								3/26/2007	52.31	--		3,525.48
								6/18/2007	--			3,525.29
								9/17/2007	--			3,525.13
MW-02-06	9/29/1992	21	4	3548.3	11 - 21	2.52	3,550.82	9/29/1992	--	--	18	3,532.82
								3/26/2007	23.90	--		3,532.64
								6/18/2007	--			3,534.34
								9/17/2007	--			3,535.22
MW-02-07	10/5/1992	63	4	3544.2	53 - 63	2.80	3,547.00	10/5/1992	--	--	57	3,490.00
								3/26/2007	63.80	--		3,500.25
								6/18/2007	--			3,501.11
								9/17/2007	--			3,502.69
MW-02-09	10/7/1992	40	4	3543.5	30 - 40	3.02	3,546.52	10/7/1992	43.97	--	31	3,515.52
								3/27/2007	--			3,510.61
								6/18/2007	35.45	--		3,511.02
								9/17/2007	35.66	--		3,509.94

**Table 1**  
**Monitor Well Completion and Gauging Summary**  
**Frontier Field Services - Empire Abo Gas Plant (SW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Well Information							Groundwater Data						
Well ID	Date Drilled	Drilled Depth (ftgs)	Well Diameter (inches)	Surface Elevation	Screen Interval (ftgs)	Casing Stickup	TOC Elevation	Date Gauged	Well Depth from TOC	Depth to Product	Depth to Water	Corrected Water Elevation	
MW-02-10	9/29/1992	75	4	3545.4	65 - 75	3.00	3,548.40	9/29/1992	--	--	64.00	3,484.40	
MW-02-11	9/29/1992	20	4	3544.0	10 - 20	2.79	3,546.79	9/29/1992	--	52.38	--	<3492.86	
MW-02-12	10/1/1992	80	4	3540.3	70 - 80	3.02	3,543.32	10/1/1992	--	52.74	58.38	3,493.97	
MW-02-13	10/7/1992	46	4	3542.7	36 - 46	2.89	3,545.59	10/7/1992	--	52.48	58.76	3,494.04	
MW-02-14	10/5/1992	73	4	3541.3	63 - 73	3.23	3,544.53	10/5/1992	--	--	--	--	
MW-02-15	10/2/1992	70	4	3540.2	60 - 70	3.09	3,543.29	10/2/1992	--	--	41.20	42.65	
MW-02-16	9/30/1992	80	4	3541.0	70 - 80	3.24	3,544.24	9/30/1992	75.95	--	41.25	42.23	
MW-02-18	10/7/1992	36	4	3542.7	25 - 36	5.00	3,547.70	10/7/1992	--	--	46.40	46.78	
								6/18/2007	--	--	46.44	46.89	
								9/17/2007	--	--	46.09	46.58	
									--	--	46.40	47.00	
									--	--	50.76	3,492.53	
									--	--	50.73	3,492.56	
									--	--	50.78	3,492.51	
									--	--	55.92	3,488.32	
									--	--	55.59	3,488.65	
									--	--	55.09	3,489.15	
									--	--	55.18	3,489.06	
									--	--	30.00	3,517.70	
									--	--	21.84	3,525.86	
									--	--	21.36	3,526.34	
									--	--	17.48	3,530.22	
									--	--	20.23	3,527.47	

**Table 1**  
**Monitor Well Completion and Gauging Summary**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Well Information								Groundwater Data				
Well ID	Date Drilled	Drilled Depth (ftes)	Well Diameter (inches)	Surface Elevation	Screen Interval (ftes)	Casing Stickup	TOC Elevation	Date Gauged	Well Depth from TOC	Depth to Product	Depth to Water	Corrected Water Elevation
MW-03		91.46	4	3552.4	69 - 89	2.90	3,555.30	3/27/2007 6/18/2007 9/17/2007	63.30 -- --	-- 58.74 58.39	59.51 59.23 59.46	3,495.79 3,496.41 3,496.59
MW-03-01	72.8	4	3539.9	50 - 70	2.66	3,542.56	3/27/2007 6/18/2007 9/17/2007	73.40 -- --	-- -- --	43.78 43.65 43.22	3,498.78 3,498.91 3,499.34	
MW-03-02	102	4	3538.6	60 - 100	2.48	3,541.08	3/27/2007 6/18/2007 9/17/2007	105.75 -- --	-- -- --	56.33 56.13 56.19	3,484.75 3,484.95 3,484.89	
MW-03-03	82.21	4	3542.3	55 - 80	2.42	3,544.72	3/26/2007 6/18/2007 9/17/2007	85.40 -- --	-- 59.59 --	-- 59.60 58.96	-- 3,485.13 3,485.76	
MW-03-04	112.4	4	3555.7	65 - 110	2.75	3,558.45	3/26/2007 6/18/047 9/17/2007	117.50 -- --	-- 60.85 60.68	-- 60.98 61.51	-- 3,497.56 3,497.52	
MW-04	60.6	4	3547.8	45 - 60	3.19	3,550.99	3/26/2007 6/18/2007 9/17/2007	62.59 -- --	-- 60.28 47.18	-- 61.44 48.23	-- 3,497.82 3,503.50	
MW-05	92.5	4	3540.6	71 - 96	3.17	3,543.77	3/27/2007 6/18/2007 9/17/2007	95.30 -- --	-- -- emulsion	-- 54.69 44.41	-- 3,489.08 3,489.55	
MW-06	53.37	4	3541.8	30 - 50	2.70	3,544.50	3/27/2007 6/18/2007 9/17/2007	76.90 -- --	-- 35.93 37.89	-- 36.10 37.96	-- 3,500.69 3,508.52	
MW-07	26.4	4	3546.0	11 - 26	0.49	3,546.49	3/26/2007 6/18/2007 9/17/2007	26.35 -- --	-- -- --	8.20 8.13 8.06	3,538.29 3,538.36 3,538.43	

**Table 1**  
**Monitor Well Completion and Gauging Summary**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**

Well Information										Groundwater Data				
Well ID	Date Drilled	Drilled Depth (ftgs)	Well Diameter (inches)	Surface Elevation	Screen Interval (ftgs)	Casing Stickup	TOC Elevation	Date Gauged	Well Depth from TOC	Depth to Product	Depth to Water	Corrected Water Elevation		
MW-08		82.05	4	3540.5	69 - 89	3.23	3,543.73	2/13/2007 3/27/2007 6/18/2007 9/17/2007	86.45	--	--	54.19 54.62 53.20 53.29	3,489.54 3,489.11 3,490.53 3,490.44	
MW-09		73.54	4	3540.4	51 - 71	2.42	3,542.82	2/13/2007 3/27/2007 6/18/2007 9/17/2007	75.80	--	--	44.05 43.88 43.90 43.34	3,498.49 3,498.83 3,498.92 3,499.33	
EB-01	3/29/2004	40.25	1	3491.5	--	0.65	3,492.15	3/29/2004 3/26/2007 6/18/2007 9/17/2007	37.05	--	--	23.71 23.06 22.81	3,468.44 3,469.09 3,469.34	
EB-02	3/29/2004	55	2	3522.6	35 - 55	2.74	3,525.34	3/29/2004 3/26/2007 6/18/2007 9/17/2007	57.47	--	--	43.83 43.02 42.68	3,481.51 3,482.32 3,482.66	
EB-03	3/30/2004	66	2	3517.8	46 - 66	3.25	3,521.05	3/30/2004 3/26/2007 6/18/2007 9/17/2007	69.84	--	--	46.35 45.55 46.16	3,474.92 3,475.60 3,475.14	
EB-04	3/31/2004	62.7	2	3505.3	31 - 51	3.08	3,508.38	3/31/2004 3/26/2007 6/18/2007 9/17/2007	53.91	--	--	40.91 40.19 40.51	3,467.47 3,468.19 3,467.87	
EB-05	3/31/2004	54	2	3523.7	44 - 54	2.91	3,526.61	3/31/2004 3/26/2007 6/18/2007 9/17/2007	57.93	--	--	35.08 35.61 35.79	3,491.53 3,491.00 3,490.82	
EB-06	3/31/2004	83	1	3555.6	--	1.03	3,556.63	3/31/2004 3/26/2007 6/18/2007 9/17/2007	58.35	--	--	54.39 54.37 54.66	3,502.24 3,502.26 3,501.97	
EB-07	4/1/2004	54	2	3501.3	44 - 54	2.67	3,503.97	4/1/2004 3/26/2007 6/18/2007 9/17/2007	56.08	--	--	35.74 33.82 34.64	3,468.23 3,470.15 3,469.33	

**Table 1**  
**Monitor Well Completion and Gauging Summary**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Well Information							Groundwater Data					
Well ID	Date Drilled	Drilled Depth (bgs)	Well Diameter (inches)	Surface Elevation	Screen Interval (bgs)	Casing Stickup	TOC Elevation	Date Gauged	Well Depth from TOC	Depth to Product	Depth to Water	Corrected Water Elevation
EB-08	4/2/2006	81	2	3533.8	66 - 81	3.27	3,537.07	4/2/2006 3/26/2007 6/18/2007 9/17/2007	86.22	--	--	57.19 56.47 56.85
P-01	12/29/2005	50	2	3527.9	40 - 50	2.31	3,530.21	12/29/2005 3/26/2007 6/18/2007 9/17/2007	54.60	--	--	3,479.88 3,480.60 3,480.22
P-02	12/27/2005	22.5	2	3542.3	19.5 - 22.5	2.43	3,544.73	12/27/2005 3/26/2007 6/18/2007 9/17/2007	27.45	--	--	3,500.48 3,501.28 3,500.98
P-03	12/27/2005	78	2	3534.4	58 - 78	2.43	3,536.83	12/27/2005 3/26/2007 6/18/2007 9/17/2007	78.65	--	--	22.22 19.90 20.98
P-04	12/28/2005	61	2	3513.5	51 - 61	2.27	3,515.77	12/28/2005 3/26/2007 6/18/2007 9/17/2007	61.65	--	--	3,522.51 3,524.83 3,523.75
P-05	12/28/2005	48	2	3504.9	35 - 45	2.58	3,507.48	12/28/2005 3/26/2007 6/18/2007 9/17/2007	47.35	--	--	3,471.38 3,473.68 3,473.49

**Notes**

All values are in feet, unless otherwise noted.

bgs - below ground surface

TOC - top of casing

Elevations are above mean sea level referenced to 1984 Geodetic Datum.

Wells drilled and installed by Alan Eades and Atkins Engineering. Schedule 40 threaded PVC casing and screen set.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	MW-02 3/27/07	MW-02 6/18/07	MW-02-02 3/27/07	MW-02-02 6/19/07	MW-02-02 9/18/07	MW-02-03 3/29/07	MW-02-03 6/20/07	MW-02-03 9/18/07	MW-02-04 3/28/07
1,1,1-Trichloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2,2-Tetrachloroethane	0.06	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Trichloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethane	0.025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethene	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloropropene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,3-Trichlorobenzene	-	<0.002	<0.002	<0.002	<0.004	<0.002	<0.002	<0.002	<0.002	<0.02
1,2,3-Trichloropropane	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.003
1,2,4-Trichlorobenzene	-	<0.002	<0.002	<0.002	<0.004	<0.002	<0.002	<0.002	<0.002	<0.02
1,2,4-Trimethylbenzene	-	<0.002	<0.002	<0.002	<0.004	<0.002	<0.002	<0.002	<0.002	<0.02
1,2-Dibromo-3-Chloropropane	-	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.03
1,2-Dibromoethane (EDB)	--	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.002
1,2-Dichlorobenzene (ortho)	-	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003	<0.003
1,2-Dichloroethane (EDC)	0.01	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003	<0.003
1,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.002
1,2-Dibromoethane (EDB)	--	<0.002	<0.002	<0.002	<0.004	<0.002	<0.002	<0.002	<0.002	<0.02
1,3,5-Trimethylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003	<0.003
1,3-Dichlorobenzene (meta)	--	<0.0003	<0.0003	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.002
1,3-Dichloropropane	--	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003	<0.003
1,4-Dichlorobenzene (para)	--	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.002
2,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.002
2-Butanone	--	<0.005	<0.005	<0.005	<0.01	<0.01	<0.005	<0.005	<0.005	<0.05
2-Chloroethyl vinyl ether	--	<0.005	<0.005	<0.005	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005
2-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003	<0.003
2-Hexanone	--	<0.005	<0.005	<0.005	<0.01	<0.01	<0.005	<0.005	<0.005	<0.05
4-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003	<0.003
4-Methyl-2-pentanone	--	<0.005	<0.005	<0.005	<0.01	<0.01	<0.005	<0.005	<0.005	<0.05
Acetone	--	<0.0002	<0.0002	<0.0002	0.005	0.00668	<0.005	<0.005	<0.005	0.00576
Benzene	0.01	<0.0002	<0.0002	<0.0002	0.00066	<0.002	<0.002	<0.002	<0.002	<0.002
Bromobenzene	--	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.002
Bromochloromethane	--	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.002
Bromodichloromethane	--	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.002
Bromoform	--	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.002
Bromomethane	--	<0.0003	<0.0003	<0.0003	<0.0006	<0.0006	<0.0003	<0.0003	<0.0003	<0.003
Carbon disulfide	--	<0.005	<0.005	<0.005	<0.01	<0.01	<0.005	<0.005	<0.005	<0.05
Carbon tetrachloride	0.01	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.002
Chlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.002

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	MW-02 3/27/07	MW-02 6/18/07	MW-02 9/17/07	MW-02 3/27/07	MW-02 6/19/07	MW-02-02 9/18/07	MW-02-02 3/29/07	MW-02-03 6/20/07	MW-02-03 9/18/07	MW-02-04 3/28/07
Chloroethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003
Chloroform	0.1	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003
Chloromethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003
cis-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002
cis-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002
Dibromo-chloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002
Dibromomethane	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002
Dichlorodifluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	9.75	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003
Hexachlorobutadiene	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001
Iodomethane	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Isopropylbenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0012	<0.0006	<0.0006	<0.0006	<0.0006
Methyl tert-butyl ether	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	0.1	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.005	<0.0025	<0.0025	<0.0025	<0.0025
n-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0005	<0.0003	<0.0003	<0.0003	<0.0003
n-Propylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003
Naphthalene	0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.0003	<0.0003	<0.0003	<0.0003
o-Xylene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003
p-Isopropyltoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003
sec-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003
Styrene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002
tert-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	<0.0003	<0.0003	<0.0003
Tetrachloroethene	--	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0014	<0.0007	<0.0007	<0.0007	<0.0007
Toluene	0.75	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0014	<0.0007	<0.0007	<0.0007	<0.0007
trans-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002
trans-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002
Trichloroethene	0.1	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0014	<0.0007	<0.0007	<0.0007	<0.0007
Trichlorofluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002
Xylenes (total)	0.62	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0018	<0.0009	<0.0009	<0.0009	<0.0009
Vinyl chloride	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	MW-02-04 6/18/07	MW-02-04 9/18/07	MW-02-05 3/27/07	MW-02-05 6/19/07	MW-02-05 9/18/07	MW-02-06 3/28/07	MW-02-06 6/20/07	MW-02-06 9/18/07	MW-02-07 3/28/07	MW-02-07 6/19/07
1,1,1,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.01	<0.001	<0.001	<0.002	<0.002
1,1,1-Trichloroethane	0.06	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.01	<0.001	<0.001	<0.002	<0.002
1,1,2,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.01	<0.001	<0.001	<0.002	<0.002
1,1,2-Trichloroethane	0.01	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.01	<0.001	<0.001	<0.002	<0.002
1,1-Dichloroethane	0.025	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.01	<0.001	<0.001	<0.002	<0.002
1,1-Dichloroethene	0.005	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.01	<0.001	<0.001	<0.002	<0.002
1,1-Dichloropropene	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.01	<0.001	<0.001	<0.002	<0.002
1,2,3-Trichlorobenzene	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.1	<0.01	<0.01	<0.02	<0.02
1,2,3-Trichloropropane	-	<0.0003	<0.0003	<0.003	<0.0003	<0.0003	<0.015	<0.0015	<0.0015	<0.003	<0.003
1,2,4-Trichlorobenzene	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.1	<0.01	<0.01	<0.02	<0.02
1,2,4-Trimethylbenzene	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.109	<0.0737	<0.0639	<0.081	0.0429
1,2-Dibromo-3-Chloropropane	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.15	<0.015	<0.015	<0.03	<0.03
1,2-Dibromoethane (EDB)	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.01	<0.001	<0.001	<0.002	<0.002
1,2-Dichlorobenzene (ortho)	-	<0.0003	<0.0003	<0.003	<0.0003	<0.0003	<0.015	<0.0015	<0.0015	<0.003	<0.003
1,2-Dichloroethane (EDC)	0.01	<0.0003	<0.0003	<0.003	<0.0003	<0.0003	<0.015	<0.0015	<0.0015	<0.003	<0.003
1,2-Dichloropropane	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.001	<0.001	<0.002	<0.002
1,3,5-Trimethylbenzene	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0015	<0.0015	<0.003	<0.003
1,3-Dichlorobenzene (meta)	-	<0.0003	<0.0003	<0.003	<0.0003	<0.0003	<0.01	<0.001	<0.001	<0.002	<0.002
1,3-Dichloropropane	-	<0.002	<0.0002	<0.002	<0.0002	<0.0002	<0.0015	<0.0015	<0.0015	<0.003	<0.003
1,4-Dichlorobenzene (para)	-	<0.0003	<0.0003	<0.003	<0.0003	<0.0003	<0.01	<0.001	<0.001	<0.002	<0.002
2,2-Dichloropropane	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.005	<0.005	<0.005	<0.025	<0.025
2-Butanone	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.025
2-Chloroethyl vinyl ether	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chlorotoluene	-	<0.003	<0.003	<0.005	<0.005	<0.005	<0.003	<0.003	<0.003	<0.005	<0.005
2-Hexanone	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
4-Chlorotoluene	-	<0.0003	<0.0003	<0.003	<0.0003	<0.0003	<0.015	<0.0015	<0.0015	<0.003	<0.003
4-Methyl-2-pentanone	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
Acetone	-	0.00467	0.00550	<0.05	0.00639	<0.005	<0.005	<0.005	<0.025	<0.025	<0.05
Benzene	0.01	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.002
Bromobenzene	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.002
Bromoform	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.002
Bromochloromethane	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.002
Bromodichloromethane	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.002
Bromomethane	-	<0.0003	<0.0003	<0.003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.015	<0.003
Carbon disulfide	-	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.025	<0.025	<0.05
Carbon tetrachloride	0.01	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.002
Chlorobenzene	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.002

Table 2

**Summary of Analytical Results for Groundwater Samples  
Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	MW-02-04 9/18/07	MW-02-04 9/18/07	MW-02-05 3/27/07	MW-02-05 6/19/07	MW-02-05 9/18/07	MW-02-06 3/28/07	MW-02-06 6/20/07	MW-02-06 9/18/07	MW-02-06 9/18/07	MW-02-07 3/28/07	MW-02-07 6/19/07
Chloroethane	-	<0.0003	<0.0003	<0.003	<0.0003	<0.0003	<0.0015	<0.0015	<0.0015	<0.0015	<0.003	<0.003
Chloroform	0.1	<0.0003	<0.0003	<0.003	<0.0003	<0.0003	<0.0015	<0.0015	<0.0015	<0.0015	<0.003	<0.003
Chloromethane	-	<0.0003	<0.0003	<0.003	<0.0003	<0.0003	<0.0015	<0.0015	<0.0015	<0.0015	<0.003	<0.003
cis-1,2-Dichloroethene	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
cis-1,3-Dichloropropene	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
Dibromo-chloromethane	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
Dibromomethane	0.0001	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
Dichlorodifluoromethane	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
Ethylbenzene	9.75	0.00041	<0.0003	<0.003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.148	0.421
Hexachlorobutadiene	-	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.296	0.133
Iodomethane	-	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
Isopropylbenzene	-	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0492	0.0583
m,p-Xylene	-	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.222	0.328
Methyl tert-butyl ether	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015
Methylene chloride	0.1	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.125	<0.125
n-Butylbenzene	-	<0.003	<0.003	<0.005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015
n-Propylbenzene	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.037	<0.025
Naphthalene	0.03	<0.005	<0.003	<0.005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.0305	0.0313
o-Xylene	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.025	<0.025
p-Isopropyltoluene	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.015	0.0882
sec-Butylbenzene	-	<0.003	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.015	<0.0088
Styrene	-	<0.002	<0.002	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.001
tert-Butylbenzene	-	<0.003	<0.003	<0.002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.0026
Tetrachloroethene	-	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.035	<0.0035
Toluene	0.75	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	0.243	0.0467
trans-1,2-Dichloroethene	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.001
trans-1,3-Dichloropropene	-	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.035	<0.0035
Trichloroethene	0.1	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.001
Xylenes (total)	0.62	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	0.222	0.8112
Vinyl chloride	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	MW-02-07 9/18/07	MW-02-15 3/29/07	MW-02-15 6/20/07	MW-02-15 9/18/07	MW-02-16 3/29/07	MW-02-16 6/19/07	MW-02-16 9/18/07
1,1,1,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
1,1,1-Trichloroethane	0.06	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
1,1,2,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
1,1,2-Trichloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
1,1-Dichloroethane	0.025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
1,1-Dichloroethene	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
1,1-Dichloropropene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
1,2,3-Trichlorobenzene	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01
1,2,3-Trichloropropane	-	<0.003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
1,2,4-Trichlorobenzene	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01
1,2,4-Trimethylbenzene	-	0.0812	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01
1,2-Dibromo-3-Chloropropane	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015
1,2-Dibromoethane (EDB)	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
1,2-Dichlorobenzene (ortho)	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
1,2-Dichloroethane (EDC)	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
1,2-Dichloropropane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
1,3,5-Trimethylbenzene	-	0.0234	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01
1,3-Dichlorobenzene (meta)	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
1,3-Dichloropropane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
1,4-Dichlorobenzene (para)	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
2,2-Dichloropropane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
2-Butanone	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025
2-Chloroethyl vinyl ether	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025
2-Chlorotoluene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
2-Hexanone	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025
4-Chlorotoluene	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.0015
4-Methyl-2-pentanone	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025
Acetone	-	<0.005	0.0168	<0.005	<0.005	0.00512	<0.005	<0.025
Benzene	0.01	1.50	0.0193	0.0268	0.0410	<0.0002	0.00032	<0.001
Bromobenzene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
Bromochloromethane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
Bromodichloromethane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
Bromoform	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
Bromomethane	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
Carbon disulfide	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025
Carbon tetrachloride	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
Chlorobenzene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NIMWQCC Standard	MW-02-07 9/18/07	MW-02-15 3/29/07	MW-02-15 6/20/07	MW-02-15 9/18/07	MW-02-16 3/29/07	MW-02-16 6/19/07	MW-02-16 9/18/07
Chloroethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
Chloroform	0.1	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
Chloromethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
cis-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
cis-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
Dibromochloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
Dibromomethane	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
Dichlorodifluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
Ethylbenzene	9.75	0.138	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
Hexachlorobutadiene	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
Iodomethane	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025
Isopropylbenzene	--	0.0197	0.00431	0.00348	0.00426	<0.0002	0.00068	<0.001
m,p-Xylene	--	0.311	0.00357	0.0028	0.00419	<0.0006	<0.0006	<0.003
Methyl tert-butyl ether	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
Methylene chloride	0.1	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0125
n-Butylbenzene	--	0.00930	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.025
n-Propylbenzene	--	<0.0003	0.00045	0.00045	<0.0003	<0.0003	<0.0003	<0.0015
Naphthalene	0.03	0.0118	<0.005	<0.005	<0.003	<0.005	<0.005	<0.0015
o-Xylene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
p-Isopropyltoluene	--	0.00366	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0015
sec-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0005	<0.0015
Styrene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
tert-Butylbenzene	--	<0.0003	<0.0003	0.0008	0.000840	0.00118	0.00072	0.00495
Tetrachloroethene	--	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0035
Toluene	0.75	0.00130	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0035
trans-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
trans-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
Trichloroethene	0.1	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0035
Trichlorofluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001
Xylenes (total)	0.62	0.311	0.00357	<0.0009	0.00419	<0.0009	<0.0009	<0.0045
Vinyl chloride	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	MW-02-18 3/28/07	MW-02-18 6/19/07	MW-02-18 9/18/07	MW-02-18 3/28/07	MW-03-01 6/19/07	MW-03-01 9/18/07	MW-03-02 3/29/07	MW-03-02 6/19/07	MW-03-03 3/28/07	MW-03-03 6/19/07
1,1,1,2-Tetrachloroethane	0.01	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,1-Trichloroethane	0.06	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2,2-Tetrachloroethane	0.01	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Trichloroethane	0.01	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethane	0.025	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethene	0.005	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloropropene	-	<0.01	<0.02	<0.01	<0.01	<0.02	<0.002	<0.002	<0.002	<0.02	<0.02
1,2,3-Trichlorobenzene	-	<0.1	<0.2	<0.01	<0.01	<0.02	<0.002	<0.002	<0.002	<0.02	<0.02
1,2,3-Trichloropropane	-	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.0003	<0.003	<0.003
1,2,4-Trichlorobenzene	-	<0.1	<0.2	<0.01	<0.01	<0.02	<0.002	<0.002	<0.002	<0.02	<0.02
1,2,4-Trimethylbenzene	-	<0.1	<0.2	<0.015	<0.015	<0.03	<0.003	<0.003	<0.003	<0.03	<0.03
1,2-Dibromo-3-Chloropropane	-	<0.15	<0.3	<0.015	<0.015	<0.166	<0.0235	<0.114	<0.002	<0.02	<0.02
1,2-Dibromoethane (EDB)	-	<0.01	<0.02	<0.015	<0.015	<0.015	<0.002	<0.002	<0.002	<0.02	<0.02
1,2-Dichlorobenzene (ortho)	-	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.0003	<0.003	<0.003
1,2-Dichloroethane (EDC)	0.01	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.0003	<0.003	<0.003
1,2-Dichloropropane	-	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
1,3,5-Trimethylbenzene	-	<0.1	<0.2	<0.01	<0.0136	<0.02	<0.00979	<0.002	<0.002	<0.0484	<0.02
1,3-Dichlorobenzene (meta)	-	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.0003	<0.003	<0.003
1,3-Dichloropropane	-	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
1,4-Dichlorobenzene (para)	-	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.0003	<0.003	<0.003
2,2-Dichloropropane	-	<0.01	<0.02	<0.001	<0.001	<0.025	<0.0002	<0.0002	<0.0002	<0.002	<0.002
2-Butanone	-	<0.25	<0.5	<0.025	<0.025	<0.05	<0.005	<0.005	<0.005	<0.05	<0.05
2-Chloroethyl vinyl ether	-	<0.25	<0.5	<0.025	<0.025	<0.05	<0.005	<0.005	<0.005	<0.05	<0.05
2-Chlorotoluene	-	<0.015	<0.03	<0.0015	<0.0015	<0.005	<0.0003	<0.0003	<0.0003	<0.005	<0.005
2-Hexanone	-	<0.25	<0.5	<0.025	<0.025	<0.05	<0.005	<0.005	<0.005	<0.05	<0.05
4-Chlorotoluene	-	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.0003	<0.003	<0.003
4-Methyl-2-pentanone	-	<0.25	<0.5	<0.025	<0.025	<0.05	<0.005	<0.005	<0.005	<0.05	<0.05
Acetone	-	<0.25	<0.5	<0.025	<0.025	<0.05	<0.005	<0.005	<0.005	<0.05	<0.05
Benzene	0.01	<b>8.08</b>	<b>6.63</b>	<b>6.06</b>	<b>0.320</b>	<b>0.0897</b>	<b>0.280</b>	<b>&lt;0.0002</b>	<b>&lt;0.0002</b>	<b>1.02</b>	<b>0.913</b>
Bromobenzene	-	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
Bromochloromethane	-	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
Bromodichloromethane	-	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
Bromoform	-	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
Bromomethane	-	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.0003	<0.003	<0.003
Carbon disulfide	-	<0.25	<0.5	<0.025	<0.025	<0.05	<0.005	<0.005	<0.005	<0.05	<0.05
Carbon tetrachloride	0.01	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.002	<0.002
Chlorobenzene	-	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.0002	<0.002	<0.002

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMW/QCC Standard	MW-02-18 3/28/07	MW-02-18 6/19/07	MW-02-18 9/18/07	MW-03-01 3/28/07	MW-03-01 6/19/07	MW-03-01 9/18/07	MW-03-02 3/29/07	MW-03-02 6/19/07	MW-03-03 3/28/07	MW-03-03 6/19/07
Chloroethane	--	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.003	<0.0003	<0.003
Chloroform	0.1	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.003	<0.003	<0.003
Chloromethane	--	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.003	<0.0003	<0.003
cis-1,2-Dichloroethene	--	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.002
cis-1,3-Dichloropropene	--	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.002
Dibromochloromethane	--	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.002
Dibromoethane	0.0001	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.002
Dichlorodifluoromethane	--	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.002
Ethylbenzene	9.75	0.400	0.405	0.328	0.0788	0.0149	0.0513	<0.0003	0.00086	0.346	0.119
Hexachlorobutadiene	--	<0.05	<0.1	<0.005	<0.005	<0.01	<0.001	<0.001	<0.001	<0.001	<0.01
Iodomethane	--	<0.25	<0.5	<0.025	<0.025	<0.05	<0.005	<0.005	<0.005	<0.005	<0.05
Isopropylbenzene	--	0.048	0.074	0.0465	0.0579	0.017	0.0625	<0.0002	0.001	0.106	0.0403
m,p-Xylene	--	0.188	0.192	0.147	0.22	0.0598	0.192	0.00077	<0.0006	0.396	0.187
Methyl tert-butyl ether	--	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.003	<0.003	<0.003
Methylene chloride	0.1	<0.125	<0.25	<0.0125	<0.0125	<0.025	<0.0025	<0.0025	<0.025	<0.025	<0.025
n-Butylbenzene	--	<0.015	<0.03	<0.025	<0.0055	<0.003	0.00770	<0.0003	0.0111	<0.003	<0.003
n-Propylbenzene	--	0.032	<0.03	0.00300	0.0504	0.013	0.00215	<0.0003	0.0003	0.0794	0.0239
Naphthalene	0.03	<0.25	<0.5	<0.0362	<0.025	<0.05	0.0482	<0.005	<0.005	<0.05	<0.05
o-Xylene	--	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.003	<0.003	<0.003
p-Isopropyltoluene	--	<0.015	<0.03	<0.00630	0.0067	<0.003	0.00349	<0.0003	0.0003	0.0222	0.0071
sec-Butylbenzene	--	<0.015	<0.03	<0.0015	<0.0015	<0.003	<0.0003	<0.0003	<0.003	<0.003	<0.003
Styrene	--	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.002	<0.002	<0.002
tert-Butylbenzene	--	<0.015	<0.03	<0.0015	0.0038	<0.002	0.00120	0.0008	0.00064	0.0075	0.0045
Tetrachloroethene	--	<0.035	<0.07	<0.0035	<0.0035	<0.007	<0.0007	<0.0007	<0.007	<0.007	<0.007
Toluene	0.75	<0.035	<0.07	<0.0035	<0.0035	<0.007	<0.0007	<0.0007	<0.007	<0.007	<0.007
trans-1,2-Dichloroethene	--	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropene	--	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.002	<0.002	<0.002
Trichloroethene	0.1	<0.035	<0.07	<0.0035	<0.0035	<0.007	<0.0007	<0.0007	<0.007	<0.007	<0.007
Trichlorofluoromethane	--	<0.01	<0.02	<0.001	<0.001	<0.002	<0.0002	<0.0002	<0.002	<0.002	<0.002
Xylenes (total)	0.62	0.188	0.192	0.147	0.22	0.0598	0.192	0.00077	<0.0009	0.396	0.187
Vinyl chloride	0.001	<0.005	<0.01	<0.0005	<0.0005	<0.001	<0.0001	<0.0001	<0.001	<0.001	<0.001

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMW/QCC Standard	MW-03-03 9/18/07	MW-05 3/29/07	MW-05 6/19/07	MW-05 9/18/07	MW-05 3/28/07	MW-07 6/19/07	MW-07 9/18/07	MW-07 3/28/07	MW-08 6/19/07	MW-08 9/18/07
1,1,1,2-Tetrachloroethane	0.01 <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,1-Trichloroethane	0.06 0.000240	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2,2-Tetrachloroethane	0.01 <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Trichloroethane	0.01 <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethane	0.025 <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethene	0.005 <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloropropene	- <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,3-Trichlorobenzene	- <0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003	<0.0003
1,2,3-Trichloropropane	- <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,4-Trichlorobenzene	- 0.0478	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,4-Trimethylbenzene	- <0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dibromo-3-Chloropropane	- <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,2-Dibromoethane (EDB)	- <0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichlorobenzene (ortho)	- <0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloroethane (EDC)	0.01 <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,2-Dichloropropane	- <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,3,5-Trimethylbenzene	- 0.00709	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,3-Dichlorobenzene (meta)	- <0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003	<0.0003
1,3-Dichloropropane	- <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
1,4-Dichlorobenzene (para)	- <0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003	<0.0003
2,2-Dichloropropane	- <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
2-Chloroethyl vinyl ether	- <0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005
2-Butanone	- <0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005
2-Chlorotoluene	- <0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003	<0.0003
2-Hexanone	- <0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005
4-Chlorotoluene	- <0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003	<0.0003
4-Methyl-2-pentanone	- <0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005
Acetone	- <0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.005	<0.05	<0.005	<0.005	<0.0002	<0.0005
Benzene	0.01 0.983	<0.0002	<0.0002	<0.0002	<0.0002	0.000800	0.839	0.791	1.26	<0.0002	0.00056
Bromobenzene	- <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
Bromochloromethane	- <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
Bromodichloromethane	- <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
Bromoform	- <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
Bromomethane	- <0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003	<0.0003
Carbon disulfide	- <0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005
Carbon tetrachloride	- 0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
Chlorobenzene	- <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	MW-03-03 9/18/07	MW-05 3/29/07	MW-05 6/19/07	MW-05 9/18/07	MW-05 3/28/07	MW-07 6/19/07	MW-07 9/18/07	MW-08 3/28/07	MW-08 6/19/07	MW-08 9/18/07
Chloroethane	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003
Chloroform	0.1	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003
Chloromethane	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003
cis-1,2-Dichloroethene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002
cis-1,3-Dichloropropene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002
Dibromochloromethane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002
Dibromoethane	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002
Dichlorodifluoromethane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002
Ethylbenzene	9.75	0.110	<0.0003	<0.0003	<0.0003	<0.0003	0.0211	0.0304	0.0369	<0.0003	0.0005
Hexachlorobutadiene	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.001
Iodomethane	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.005
Isopropylbenzene	-	0.0580	<0.0002	<0.0002	<0.0002	<0.0002	0.0076	0.00690	0.00052	0.00078	0.000670
m,p-Xylene	-	0.179	<0.0006	<0.0006	<0.0006	<0.0006	0.0178	0.0175	0.0291	0.00075	<0.0006
Methyl tert-butyl ether	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003
Methylene chloride	0.1	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.025	<0.025	<0.0025	<0.0025	<0.0025
n-Butylbenzene	-	<0.005	<0.0003	<0.0003	<0.0003	<0.0003	<0.005	<0.005	<0.0003	<0.0003	<0.0005
n-Propylbenzene	-	0.00119	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003
Naphthalene	0.03	0.0291	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.005	<0.005	<0.0003
o-Xylene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003
p-Isopropyltoluene	-	0.00172	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003
sec-Butylbenzene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.003	<0.003	<0.0003	<0.0003	<0.0003
Styrene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002
tert-Butylbenzene	-	0.00114	<0.0003	<0.0003	<0.0003	<0.0003	<0.002	<0.002	<0.0003	<0.0003	0.00046
Tetrachloroethene	-	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.007	<0.007	<0.0007	<0.0007	<0.0007
Toluene	0.75	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.007	<0.007	<0.0007	<0.0007	<0.0007
trans-1,2-Dichloroethene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002
trans-1,3-Dichloropropene	-	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.007	<0.007	<0.0007	<0.0007	<0.0007
Trichloroethene	0.1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0002	<0.0002
Trichlorofluoromethane	-	<0.0009	<0.0009	<0.0009	<0.0009	<0.0012	0.0178	0.0175	0.0291	0.00075	0.00113
Xylenes (total)	0.62	0.179	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.001	<0.0001	<0.0001	<0.0001
Vinyl chloride	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.001	<0.0001	<0.0001	<0.0001

**Notes**

Volatiles analyzed via EPA SW846 Method 8260B by DHL Analytical, Inc.

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	EB-01 3/27/07	EB-01 6/18/07	EB-01 9/17/07	EB-02 3/27/07	EB-02 6/18/07	EB-02 9/17/07	EB-03 3/27/07	EB-03 6/18/07	EB-04 3/27/07	EB-04 6/18/07	EB-04 9/17/07
1,1,1,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,1-Trichloroethane	0.06	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Trichloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethane	0.025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethene	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,2,3-Tetrachlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,3-Trichloropropane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2,4-Trichlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,4-Trimethylbenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2-Dibromo-3-Chloropropane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dibromoethane (EDB)	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2-Dichlorobenzene (ortho)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloroethane (EDC)	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,3,5-Trimethylbenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,3-Dichlorobenzene (meta)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,3-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,4-Dichlorobenzene (para)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2-Butanone	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2-Chloroethyl vinyl ether	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2-Hexanone	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
4-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
4-Methyl-2-pentanone	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Acetone	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Benzene	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromochloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromodichloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromoform	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromomethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Carbon disulfide	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Carbon tetrachloride	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	EB-01 3/27/07	EB-01 6/18/07	EB-01 9/17/07	EB-02 3/27/07	EB-02 6/18/07	EB-02 9/17/07	EB-02 3/27/07	EB-03 6/18/07	EB-04 3/27/07	EB-04 6/18/07	EB-04 9/17/07
Chloroethane	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloroform	0.1	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloromethane	-	<0.0003	<0.0003	<0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
cis-1,2-Dichloroethene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
cis-1,3-Dichloropropene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromochloromethane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromoethane	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dichlorodifluoromethane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	9.75	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Hexachlorobutadiene	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Iodomethane	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Isopropylbenzene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	-	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Methyl tert-butyl ether	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	0.1	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
n-Butylbenzene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
n-Propylbenzene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Naphthalene	0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
o-Xylene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
p-Isopropyltoluene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
sec-Butylbenzene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Styrene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
tert-Butylbenzene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Tetrachloroethene	-	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Toluene	0.75	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
trans-1,2-Dichloroethene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
trans-1,3-Dichloropropene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Trichloroethene	0.1	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Trichlorofluoromethane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Xylenes (total)	0.62	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Vinyl chloride	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	EB-05 3/26/07	EB-05 6/18/07	EB-05 9/17/07	EB-06 3/26/07	EB-06 6/18/07	EB-06 9/17/07	EB-07 3/27/07	EB-07 6/18/07	EB-07 9/17/07
1,1,1,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,1-Trichloroethane	0.06	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Trichloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethane	0.025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethene	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,3-Trichlorobenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2,3-Trichloropropane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2,4-Trichlorobenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2,4-Trimethylbenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromo-3-Chloropropane	--	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dibromoethane (EDB)	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2-Dichlorobenzene (ortho)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloroethane (EDC)	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,3,5-Trimethylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,3-Dichlorobenzene (meta)	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,3-Dichloropropane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,4-Dichlorobenzene (para)	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2,2-Dichloropropane	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Butanone	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2-Chloroethyl vinyl ether	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chlorotoluene	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
4-Methyl-2-pentanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Acetone	--	0.00546	<0.005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Benzene	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromochloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromodichloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromoform	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromomethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Carbon disulfide	--	<0.005	<0.005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Carbon tetrachloride	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	EB-05 3/26/07	EB-05 6/18/07	EB-05 9/17/07	EB-06 3/26/07	EB-06 6/18/07	EB-06 9/17/07	EB-07 3/27/07	EB-07 6/18/07	EB-07 9/17/07
Chloroethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloroform	0.1	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloromethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
cis-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
cis-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromoethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromomethane	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dichlorodifluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethybenzene	9.75	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Hexachlorobutadiene	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Iodomethane	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Isopropylbenzene	--	0.00123	0.00093	0.000890	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Methyl tert-butyl ether	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	0.1	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
n-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
n-Propylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Naphthalene	0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
o-Xylene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
p-isopropyltoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
sec-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Styrene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
tert-Butylbenzene	--	0.00102	0.00071	0.000820	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Tetrachloroethene	--	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Toluene	0.75	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
trans-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
trans-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Trichloroethene	0.1	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Trichlorofluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Xylenes (total)	0.62	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Vinyl chloride	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Volatile analyzed via EPA SW846 Method 8260B by DHL Analytical, Inc.

All values reported in Milligrams per liter (mg/l., parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	EB-08 3/27/07	EB-08 6/18/07	EB-08 9/17/07
1,1,1,2-Tetrachloroethane	0.01	<0.02	<0.0002	<0.001
1,1,1-Trichloroethane	0.06	<0.02	0.00021	<0.001
1,1,2,2-Tetrachloroethane	0.01	<0.02	<0.0002	<0.001
1,1,2-Trichloroethane	0.01	<0.02	<0.0002	<0.001
1,1-Dichloroethane	0.025	<0.02	0.0002	<0.001
1,1-Dichloroethene	0.005	<0.02	<0.0002	<0.001
1,1-Dichloropropene	--	<0.02	<0.0002	<0.001
1,2,3-Trichlorobenzene	--	<0.2	<0.002	<0.01
1,2,3-Trichloropropane	--	<0.03	<0.0003	<0.0015
1,2,4-Trichlorobenzene	--	<0.2	<0.002	<0.01
1,2,4-Trimethylbenzene	--	0.239	0.312	0.245
1,2-Dibromo-3-Chloropropane	--	<0.3	<0.003	<0.015
1,2-Dibromoethane (EDB)	--	<0.02	<0.0002	<0.001
1,2-Dichlorobenzene (ortho)	--	<0.03	0.00083	<0.0015
1,2-Dichloroethane (EDC)	0.01	<0.03	<0.0003	<0.0015
1,2-Dichloropropane	--	<0.02	<0.0002	<0.001
1,3,5-Trimethylbenzene	--	<0.02	0.109	0.0722
1,3-Dichlorobenzene (meta)	--	<0.03	<0.0003	<0.0015
1,3-Dichloropropane	--	<0.02	<0.0002	<0.001
1,4-Dichlorobenzene (para)	--	<0.03	<0.0003	<0.0015
2,2-Dichloropropane	--	<0.02	<0.0002	<0.001
2-Butanone	--	<0.5	<0.005	<0.025
2-Chloroethyl vinyl ether	--	<0.5	<0.005	<0.025
2-Chlorotoluene	--	<0.03	<0.0003	<0.0015
2-Hexanone	--	<0.5	0.00714	<0.025
4-Chlorotoluene	--	<0.03	<0.0003	<0.0015
4-Methyl-2-pentanone	--	<0.5	<0.005	<0.025
Acetone	--	<0.5	<0.0002	<0.025
Benzene	0.01	<b>4.59</b>	<b>4.95</b>	<b>3.84</b>
Bromobenzene	--	<0.02	<0.0002	<0.001
Bromochloromethane	--	<0.02	<0.0002	<0.001
Bromodichloromethane	--	<0.02	<0.0002	<0.001
Bromoform	--	<0.02	<0.0002	<0.001
Bromomethane	--	<0.03	<0.0003	<0.0015
Carbon disulfide	--	<0.5	0.00596	<0.025
Carbon tetrachloride	0.01	<0.02	<0.0002	<0.001
Chlorobenzene	--	<0.02	<0.0002	<0.001

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	EB-08 3/27/07	EB-08 6/18/07	EB-08 9/17/07
Chloroethane	-	<0.03	<0.0003	<0.0015
Chloroform	0.1	<0.03	<0.0003	<0.0015
Chloromethane	-	<0.03	<0.0003	<0.0015
cis-1,2-Dichloroethene	-	<0.02	<0.0002	<0.001
cis-1,3-Dichloropropene	-	<0.02	<0.0002	<0.001
Dibromo-chloromethane	-	<0.02	<0.0002	<0.001
Dibromomethane	0.0001	<0.02	<0.0002	<0.001
Dichlorodifluoromethane	-	<0.02	<0.0002	<0.001
Ethylbenzene	9.75	1.3	1.48	0.973
Hexachlorobutadiene	-	<0.1	<0.001	<0.005
Iodomethane	-	<0.5	<0.005	<0.025
(Isopropyl)benzene	-	0.083	0.128	0.100
m,p-Xylene	-	1.79	2.20	1.35
Methyl tert-butyl ether	-	<0.03	<0.0003	<0.0015
Methylene chloride	0.1	<0.25	<0.0025	<0.0125
n-Butylbenzene	-	<0.03	0.00653	0.0574
n-Propylbenzene	-	0.073	0.1414	0.00670
Naphthalene	0.03	<0.5	0.0838	0.0846
o-Xylene	-	0.239	0.343	0.214
p-Isopropyltoluene	-	<0.03	0.0245	0.0163
sec-Butylbenzene	-	<0.03	<0.0003	<0.0015
Styrene	-	<0.02	<0.0002	<0.001
tert-Butylbenzene	-	<0.03	<0.0003	<0.0015
Tetrachloroethene	-	<0.07	<0.0007	<0.0035
Toluene	0.75	0.524	0.676	0.429
trans-1,2-Dichloroethene	-	<0.02	<0.0002	<0.001
trans-1,3-Dichloropropene	-	<0.02	<0.0002	<0.001
Trichloroethene	0.1	<0.07	<0.0007	<0.0035
Trichlorofluoromethane	-	<0.02	<0.0002	<0.001
Xylenes (total)	0.62	2.029	2.543	1.564
Vinyl chloride	0.001	<0.01	<0.0001	<0.0005

**Notes**

Volatile analyzed via EPA SW846 Method 8260B by DHL Analytical, Inc.  
 All values reported in Milligrams per liter (mg/L parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	P-01 3/26/07	P-01 6/18/07	P-01 9/17/07	P-02 3/27/07	P-02 6/19/07	P-02 9/17/07	P-03 3/27/07	P-03 6/18/07	P-03 9/17/07
1,1,1,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,1-Trichloroethane	0.06	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Trichloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethane	0.025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethene	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,3-Trichlorobenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2,3-Trichloropropane	--	<0.003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2,4-Trichlorobenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2,4-Trimethylbenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromo-3-Chloropropane	--	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dibromoethane (EDB)	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2-Dichlorobenzene (ortho)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloroethane (EDC)	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,3,5-Trimethylbenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene (meta)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,3-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,4-Dichlorobenzene (para)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2-Butanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chloroethyl vinyl ether	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2-Hexanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
4-Methyl-2-pentanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Acetone	--	0.0075	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0117	<0.005
Benzene	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00206	0.00507	0.0154
Bromobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromochloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromodichloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromoform	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromomethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Carbon disulfide	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Carbon tetrachloride	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQC Standard	P-01 3/26/07	P-01 6/18/07	P-01 9/17/07	P-02 3/27/07	P-02 6/19/07	P-02 9/17/07	P-03 3/27/07	P-03 6/18/07	P-03 9/17/07
Chloroethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloroform	0.1	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloromethane	--	<0.0003	<0.0003	<0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
cis-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
cis-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromo-chloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromomethane	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dichlorodifluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	9.75	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.45	0.00309	<0.0003	<0.0003
Hexachlorobutadiene	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Iodomethane	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Isopropylbenzene	--	0.0285	0.0220	0.0229	<0.0002	0.0622	0.0344	0.00055	0.00164	0.00154
m,p-Xylene	--	<0.0006	<0.0006	<0.0006	<0.0006	0.206	0.00750	<0.0006	<0.0006	<0.0006
Methyl tert-butyl ether	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	0.1	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
n-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0005	<0.0003	0.0059	<0.005	<0.0003	<0.0003
n-Propylbenzene	--	<0.0003	0.00077	0.000680	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Naphthalene	0.03	<0.005	0.00045	<0.0003	<0.005	<0.0003	0.000780	<0.005	<0.005	<0.0003
o-Xylene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
p-Isopropyltoluene	--	<0.0003	0.00062	<0.0003	<0.0003	0.0115	0.000970	<0.0003	<0.0003	<0.0003
sec-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Styrene	--	<0.0002	<0.0002	<0.0002	<0.0003	<0.0003	<0.0005	<0.00132	<0.00078	<0.00064
tert-Butylbenzene	--	0.00167	0.00136	0.00122	<0.0003	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Tetrachloroethene	--	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Toluene	0.75	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
trans-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
trans-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Trichloroethene	0.1	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Trichlorofluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Xylenes (total)	0.62	<0.0009	<0.0009	<0.0009	<0.0009	0.206	0.0075	<0.0009	<0.0009	0.00154
Vinyl chloride	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

Table 2

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	P-04 3/27/07	P-04 6/18/07	P-04 9/17/07	P-04 3/27/07	P-05 6/18/07	P-05 9/17/07
1,1,1,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,1-Trichloroethane	0.06	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Trichloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethane	0.025	0.00039	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethylene	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,3-Trichlorobenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2,3-Trichloropropane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2,4-Trichlorobenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2,4-Trimethylbenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromo-3-Chloropropane	--	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dibromoethane (EDB)	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2-Dichlorobenzene (ortho)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloroethane (EDC)	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,3,5-Trimethylbenzene	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene (meta)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,3-Dichloropropane	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,4-Dichlorobenzene (para)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2,2-Dichloropropane	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2-Butanone	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chloroethyl vinyl ether	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chlorotoluene	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2-Hexanone	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4-Chlorotoluene	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
4-Methyl-2-pentanone	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Acetone	--	0.0203	<0.005	<0.005	0.0239	<0.005	<0.005
Benzene	0.01	<0.0002	<0.0002	0.000410	<0.0002	<0.0002	<0.0002
Bromobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromochloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromodichloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromoform	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromomethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Carbon disulfide	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Carbon tetrachloride	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

**Table 2**

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	P-04 3/27/07	P-04 6/18/07	P-04 9/17/07	P-04 9/27/07	P-05 6/18/07	P-05 9/17/07
Chloroethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloroform	0.1	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloromethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
cis-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
cis-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromochloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromomethane	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dichlorodifluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	9.75	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Hexachlorobutadiene	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Iodomethane	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Isopropylbenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Methyl tert-butyl ether	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	0.1	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
n-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
n-Propylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Naphthalene	0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
o-Xylene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
p-Isopropyltoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
sec-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Styrene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
tert-Butylbenzene	--	0.00097	0.00058	0.000600	0.00012	0.00088	0.000950
Tetrachloroethene	--	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Toluene	0.75	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
trans-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
trans-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Trichloroethene	0.1	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Trichlorofluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Xylenes (total)	0.62	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Vinyl chloride	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Volatile analytes analyzed via EPA SW846 Method 8260B by DHL Analytical, Inc.  
All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	Trip Blank-01 3/26/07	Trip Blank-01 6/18/07	Trip Blank-01 9/17/07	Trip Blank-01 3/27/07	Trip Blank-02 6/18/07	Trip Blank-02 9/18/07	Trip Blank-03 3/28/07	Trip Blank-03 6/19/07
1,1,1,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,1-Trichloroethane	0.06	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Trichloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethane	0.025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethylene	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,3-Trichlorobenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2,3-Trichloropropane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2,4-Trichlorobenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2,4-Trimethylbenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromo-3-Chloropropane	--	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dibromoethane (EDB)	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2-Dichlorobenzene (ortho)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloroethane (EDC)	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,3,5-Trimethylbenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene (meta)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,3-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,4-Dichlorobenzene (para)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2-Butanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chloroethyl vinyl ether	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2-Hexanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
4-Methyl-2-pentanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Acetone	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Benzene	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromochloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromodichloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromoform	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromomethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Carbon disulfide	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Carbon tetrachloride	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Table 2

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	Trip Blank-01 3/26/07	Trip Blank-01 6/18/07	Trip Blank-01 9/17/07	Trip Blank-01 3/27/07	Trip Blank-02 6/18/07	Trip Blank-02 9/18/07	Trip Blank-02 3/28/07	Trip Blank-03 6/19/07
Chloroethane	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloroform	0.1	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloromethane	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
cis-1,2-Dichloroethene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
cis-1,3-Dichloropropene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromochloromethane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromomethane	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dichlorodifluoromethane	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	9.75	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Hexachlorobutadiene	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Iodomethane	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Isopropylbenzene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	-	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Methyl tert-butyl ether	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	0.1	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
n-Butylbenzene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
n-Propylbenzene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Naphthalene	0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
o-Xylene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
p-Isopropyltoluene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
sec-Butylbenzene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Styrene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
tert-Butylbenzene	-	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Tetrachloroethene	-	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Toluene	0.75	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
trans-1,2-Dichloroethene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
trans-1,3-Dichloropropene	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Trichlorodifluoromethane	0.1	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Xylenes (total)	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Yxenes	0.62	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Vinyl chloride	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	Trip Blank-04 3/29/07	Trip Blank-04 6/20/07
1,1,1,2-Tetrachloroethane	0.01	<0.0002	<0.0002
1,1,1-Trichloroethane	0.06	<0.0002	<0.0002
1,1,2,2-Tetrachloroethane	0.01	<0.0002	<0.0002
1,1,2-Trichloroethane	0.01	<0.0002	<0.0002
1,1-Dichloroethane	0.025	<0.0002	<0.0002
1,1-Dichloroethene	0.005	<0.0002	<0.0002
1,1-Dichloropropene	--	<0.0002	<0.0002
1,2,3-Trichlorobenzene	--	<0.002	<0.002
1,2,3-Trichloropropane	--	<0.0003	<0.0003
1,2,4-Trichlorobenzene	--	<0.002	<0.002
1,2,4-Trimethylbenzene	--	<0.002	<0.002
1,2-Dibromo-3-Chloropropane	--	<0.003	<0.003
1,2-Dibromoethane (EDB)	--	<0.0002	<0.0002
1,2-Dichlorobenzene (ortho)	--	<0.0003	<0.0003
1,2-Dichloroethane (EDC)	0.01	<0.0003	<0.0003
1,2-Dichloropropane	--	<0.0002	<0.0002
1,3,5-Trimethylbenzene	--	<0.002	<0.002
1,3-Dichlorobenzene (meta)	--	<0.0003	<0.0003
1,3-Dichloropropane	--	<0.0002	<0.0002
1,4-Dichlorobenzene (para)	--	<0.0003	<0.0003
2,2-Dichloropropane	--	<0.0002	<0.0002
2-Butanone	--	<0.005	<0.005
2-Chloroethyl vinyl ether	--	<0.005	<0.005
2-Chirotoluene	--	<0.0003	<0.0003
2-Hexanone	--	<0.005	<0.005
4-Chirotoluene	--	<0.0003	<0.0003
4-Methyl-2-pentanone	--	<0.005	<0.005
Acetone	--	<0.0002	<0.0002
Benzene	0.01	<0.0002	<0.0002
Bromobenzene	--	<0.0002	<0.0002
Bromochloromethane	--	<0.0002	<0.0002
Bromodichloromethane	--	<0.0002	<0.0002
Bromotform	--	<0.0002	<0.0002
Bromomethane	--	<0.0003	<0.0003
Carbon disulfide	--	<0.005	<0.005
Carbon tetrachloride	0.01	<0.0002	<0.0002
Chlorobenzene	--	<0.0002	<0.0002

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	Trip Blank-04 3/29/07	Trip Blank-04 6/20/07
Chloroethane	--	<0.0003	<0.0003
Chloroform	0.1	<0.0003	<0.0003
Chloromethane	--	<0.0003	<0.0003
cis-1,2-Dichloroethene	--	<0.0002	<0.0002
cis-1,3-Dichloropropene	--	<0.0002	<0.0002
Dibromochloromethane	--	<0.0002	<0.0002
Dibromomethane	0.0001	<0.0002	<0.0002
Dichlorodifluoromethane	--	<0.0002	<0.0002
Ethylbenzene	9.75	<0.0003	<0.0003
Hexachlorobutadiene	--	<0.001	<0.001
Iodomethane	--	<0.005	<0.005
Isopropylbenzene	--	<0.0002	<0.0002
m,p-Xylene	--	<0.0006	<0.0006
Methyl tert-butyl ether	--	<0.0003	<0.0003
Methylene chloride	0.1	<0.0025	<0.0025
n-Butylbenzene	--	<0.0003	<0.0003
n-Propylbenzene	--	<0.0003	<0.0003
Naphthalene	0.03	<0.005	<0.005
o-Xylene	--	<0.0003	<0.0003
p-Isopropyltoluene	--	<0.0003	<0.0003
sec-Butylbenzene	--	<0.0003	<0.0003
Styrene	--	<0.0002	<0.0002
tert-Butylbenzene	--	<0.0003	<0.0003
Tetrachloroethene	--	<0.0007	<0.0007
Toluene	0.75	<0.0007	<0.0007
trans-1,2-Dichloroethene	--	<0.0002	<0.0002
trans-1,3-Dichloropropene	--	<0.0007	<0.0007
Trichloroethene	0.1	<0.0002	<0.0002
Trichlorofluoromethane	--	<0.0009	<0.0009
Xylenes (total)	0.62	<0.0001	<0.0001
Vinyl chloride	0.001	<0.0001	<0.0001

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	Duplicate-01 (EB-07) 3/27/07	Duplicate-01 (EB-06) 6/18/07	Duplicate-01 (MW-02-04) 9/17/07	Duplicate-02 (MW-08) 3/28/07	Duplicate-02 (MW-05) 6/19/07	Duplicate-02 (MW-02-03) 9/18/07	Equipment Rinse-01 3/28/07	Equipment Rinse-01 6/18/07
1,1,1,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,1-Trichloroethane	0.06	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Trichloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethane	0.025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethene	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,3-Trichlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,3-Trichloropropane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2,4-Trichlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,4-Trimethylbenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2-Dibromo-3-Chloropropane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dibromoethane (EDB)	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2-Dichlorobenzene (ortho)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloroethane (EDC)	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,3,5-Trimethylbenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,3-Dichlorobenzene (meta)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,3-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,4-Dichlorobenzene (para)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2-Butanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chloroethyl vinyl ether	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2-Hexanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
4-Methyl-2-pentanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Acetone	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Benzene	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromoform	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromomethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Carbon disulfide	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Carbon tetrachloride	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	Duplicate-01 (EB-07) 3/27/07	Duplicate-01 (EB-06) 6/18/07	Duplicate-01 (MW-02-04) 9/17/07	Duplicate-02 (MW-08) 3/28/07	Duplicate-02 (MW-05) 6/19/07	Duplicate-02 (MW-02-03) 9/18/07	Equipment Rinse-01 3/28/07	Equipment Rinse-01 6/18/07
Chloroethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloroform	0.1	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloromethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
cis-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
cis-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromochloromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromomethane	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dichlorodifluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	9.75	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Hexachlorobutadiene	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Iodomethane	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Isopropylbenzene	--	<0.0002	<0.0002	<0.0002	0.00054	<0.0002	0.000610	<0.0002	<0.0002
m,p-Xylene	--	<0.0006	<0.0006	<0.0006	0.00086	<0.0006	0.00120	<0.0006	<0.0006
Methyl tert-butyl ether	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	0.1	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
n-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
n-Propylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Naphthalene	0.03	<0.005	<0.005	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
o-Xylene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
p-Isopropyltoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
sec-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Styrene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
tert-Butylbenzene	--	0.00069	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Tetrachloroethene	--	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Toluene	0.75	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	0.00362	0.00181
trans-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
trans-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Trichloroethene	0.1	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Trichlorofluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Xylenes (total)	0.62	<0.0009	<0.0009	<0.0009	0.00086	<0.0009	0.0012	<0.0009	<0.0009
Vinyl chloride	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	Equipment Rinse-01 9/17/07	Equipment Rinse-02 3/29/07	Equipment Rinse-01 3/28/07	Field Blank-01 6/20/07	Field Blank-01 9/18/07	Field Blank-01 9/18/07	Field Blank-02 3/29/07
1,1,1,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,1-Trichloroethane	0.06	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2,2-Tetrachloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1,2-Trichloroethane	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethane	0.025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloroethylene	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,1-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2,3-Trichlorobenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2,3-Trichloropropane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2,4-Trichlorobenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2,4-Trimethylbenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromo-3-Chloropropane	--	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dibromoethane (EDB)	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,2-Dichlorobenzene (ortho)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloroethane (EDC)	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,3,5-Trimethylbenzene	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene (meta)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
1,3-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1,4-Dichlorobenzene (para)	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2,2-Dichloropropane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2-Butanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chloroethyl vinyl ether	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2-Hexanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4-Chlorotoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
4-Methyl-2-pentanone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Acetone	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Benzene	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromoform	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bromomethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Carbon disulfide	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Carbon tetrachloride	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chlorobenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Volatile Organic Compounds	NMWQCC Standard	Equipment Rinse-01 9/17/07	Equipment Rinse-02 3/29/07	Equipment Rinse-02 3/28/07	Field Blank-01 6/20/07	Field Blank-01 9/18/07	Field Blank-01 9/18/07	Field Blank-02 3/29/07
Chloroethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloroform	0.1	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chloromethane	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
cis-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
cis-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromoethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromochloromethane	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dibromomethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Dichlorodifluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	9.75	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Hexachlorobutadiene	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Iodomethane	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Isopropylbenzene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Methyl tert-butyl ether	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	0.1	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
n-Butylbenzene	--	<0.0005	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
n-Propylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Naphthalene	0.03	<0.0003	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
p-Isopropyltoluene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
sec-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Styrene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
tert-Butylbenzene	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Tetrachloroethene	--	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Toluene	0.75	0.000840	0.00473	0.00545	<0.0007	0.0128	0.00569	
trans-1,2-Dichloroethene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
trans-1,3-Dichloropropene	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Trichloroethene	0.1	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Trichlorofluoromethane	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Xylenes (total)	0.62	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Vinyl chloride	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Volatiles analyzed via EPA SW846 Method 8260B by DHL Analytical, Inc.  
All values reported in Milligrams per liter (mg/l, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

Table 2

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polycyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	MW-02 3/27/07	MW-02 6/18/07	MW-02 9/17/07	MW-02 3/27/07	MW-02-02 6/19/07	MW-02-02 9/18/07	MW-02-02 3/29/07	MW-02-03 3/29/07	MW-02-03 6/19/07
Acenaphthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[a]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[a]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[g,h,i]perylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenanthrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polycyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	MW-02-03 9/18/07	MW-02-04 3/28/07	MW-02-04 6/18/07	MW-02-04 9/17/07	MW-02-04 3/27/07	MW-02-05 6/19/07	MW-02-05 9/18/07	MW-02-06 3/28/07
Acenaphthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Acenaphthylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Benz[a]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Benz[a]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Benz[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Benz[g,h]perylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Benz[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Chrysene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Dibenz[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Fluorene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Naphthalene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00357
Phenanthrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005
Pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.000967

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - indicate the value is less than Method Detection Limit MDL.

Table 2

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polycyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	MW-02-06 6/19/07	MW-02-06 9/18/07	MW-02-07 3/28/07	MW-02-07 6/19/07	MW-02-07 9/18/07	MW-02-07 3/29/07	MW-02-15 6/20/07	MW-02-15 9/18/07
Acenaphthene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[a]anthracene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[a]pyrene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[g,h,i]perylene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Florene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.03	0.00332	0.00146	0.0023	0.00322	0.00355	<0.0001	<0.0001	<0.0001
Phenanthrene	0.03	<0.0001	<0.0001	<0.0002	0.000149	0.000164	<0.0001	<0.0001	<0.0001
Pyrene	0.03	0.00103	0.000162	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polyyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	MW-02-16 3/29/07	MW-02-16 6/19/07	MW-02-16 9/18/07
Acenaphthene	0.03	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.03	<0.0001	<0.0001	<0.0001
Anthracene	0.03	<0.0001	<0.0001	<0.0001
Benzo[a]anthracene	0.03	<0.0001	<0.0001	<0.0001
Benzo[a]pyrene	0.03	<0.0001	<0.0001	<0.0001
Benzo[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0001
Benzo[g,h,i]perylene	0.03	<0.0001	<0.0001	<0.0001
Benzo[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0001
Chrysene	0.03	<0.0001	<0.0001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0001
Fluoranthene	0.03	<0.0001	<0.0001	<0.0001
Fluorene	0.03	<0.0001	<0.0001	<0.0001
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	<0.0001
Naphthalene	0.03	<0.0001	0.000431	<0.0001
Phenanthrene	0.03	<0.0001	<0.0001	<0.0001
Pyrene	0.03	<0.0001	<0.0001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

Table 2

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polycyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	MW-02-18 3/28/07	MW-02-18 6/19/07	MW-02-18 9/18/07	MW-03-01 3/28/07	MW-03-01 6/19/07	MW-03-01 9/18/07	MW-03-02 3/29/07	MW-03-02 6/19/07
Acenaphthene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[a]anthracene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[a]pyrene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[b]fluoranthene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[g,h,i]perylene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[k]fluoranthene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.03	<0.0002	<0.0001	<0.0001	0.00105	0.000493	0.001102	0.000192	0.000292
Indeno[1,2,3-cd]pyrene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001
Naphthalene	0.03	0.000636	0.000754	0.000374	0.0016	0.000702	0.00235	<0.0001	<0.0001
Phenanthrene	0.03	<0.0002	<0.0001	<0.0001	0.000767	0.000478	0.00121	<0.0001	<0.0001
Pyrene	0.03	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polycyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	MW-03-03 3/28/07	MW-03-03 6/19/07	MW-03-03 9/18/07	MW-03-03 3/29/07	MW-05 6/19/07	MW-05 9/18/07	MW-07 3/28/07	MW-07 6/19/07
Acenaphthene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Acenaphthylene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Anthracene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Benzol[a]anthracene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Benzol[a]pyrene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Benzol[b]fluoranthene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Benzol[g,h,i]perylene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Benzol[k]fluoranthene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Chrysene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Fluoranthene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Fluorene	0.03	0.00188	0.000302	0.000166	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Indeno[1,2,3-cd]pyrene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Naphthalene	0.03	0.00377	0.00115	0.000775	<0.0001	<0.0001	<0.0001	0.0011	0.00164
Phenanthrene	0.03	0.00276	0.000501	0.000239	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Pyrene	0.03	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polyyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	MW-07 9/18/07	MW-07 3/28/07	MW-08 6/19/07	MW-08 6/19/07	MW-08 9/18/07
Acenaphthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[a]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[a]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[g,h,i]perylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.03	<u>0.000399</u>	<0.0001	<0.0001	<0.0001	<0.0001
Phenanthrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polycyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	EB-01 3/27/07	EB-01 6/18/07	EB-01 9/17/07	EB-02 3/27/07	EB-02 6/18/07	EB-02 9/17/07	EB-03 3/27/07	EB-04 3/27/07
Acenaphthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Acenaphthylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Benzo[a]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Benzo[a]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Benzo[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Benzol[g,h,i]perylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Benzo[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Chrysene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Florene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Naphthalene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001
Phenanthrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00115	<0.0001
Pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).  
 Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polycyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	EB-04 6/18/07	EB-04 9/17/07	EB-05 3/26/07	EB-05 6/18/07	EB-05 9/17/07	EB-05 3/26/07	EB-06 6/18/07	EB-06 9/17/07
Acenaphthene	0.03	<0.0001	<0.0001	0.000115	0.0001	0.000165	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[a]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[a]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[g,h,i]perylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenanthrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polycyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	EB-07 3/27/07	EB-07 6/18/07	EB-07 9/17/07	EB-07 3/27/07	EB-08 6/18/07	EB-08 9/17/07
Acenaphthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[a]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.000108
Benz[al]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[g,h,i]perylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	0.00185	0.00222
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00152
Naphthalene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	0.0317	0.0504
Phenanthrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	0.00173	0.00221
Pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polyyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	P-01 3/26/07	P-01 6/18/07	P-01 9/17/07	P-02 3/27/07	P-02 6/19/07	P-02 9/17/07	P-03 3/27/07	P-03 6/18/07	P-03 9/17/07
Acenaphthene	0.03	0.000173	0.000247	0.000224	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[a]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[a]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[g,h,i]perylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.03	<0.0001	0.000185	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenzo[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.03	0.00351	0.00174	0.000355	<0.0001	0.00113	0.000766	<0.0001	<0.0001	<0.0001
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	0.000169	<0.0001	0.00371	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.03	<0.0001	<0.0001	0.00112	0.000154	0.000478	<0.0001	<0.0001	<0.0001	<0.0001
Phenanthrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

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Table 2

**Summary of Analytical Results for Groundwater Samples  
Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polyyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	P-04 3/27/07	P-04 6/18/07	P-04 9/17/07	P-04 3/27/07	P-05 6/18/07	P-05 9/17/07
Acenaphthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzol[a]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzol[a]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzol[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzol[g,h,i]perylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzol[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.03	0.000257	0.000161	0.000124	<0.0001	<0.0001	<0.0001
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenanthrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas  
All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

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**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polycyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	Duplicate-01 (EB-07)	Duplicate-01 (EB-06)	Duplicate-01 (MW-04)	Duplicate-02 (MW-08)	Duplicate-02 (MW-05)	Duplicate-02 (MW-03)	Equipment Rinse-01 3/28/07
Acenaphthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[a]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[a]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzol[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzol[g,h,i]perylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzol[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenanthrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Polycyclic Aromatic Hydrocarbons (PAHs)	NMWQCC Standard	Equipment Rinse-01 6/18/07	Equipment Rinse-01 9/17/07	Equipment Rinse-01 3/29/07	Equipment Rinse-02 3/28/07	Field Blank-01 6/20/07	Field Blank-01 9/18/07	Field Blank-01 3/29/07
Acenaphthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[a]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[a]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benz[b]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzog[h]perylene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo[k]fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenz[a,h]anthracene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Indeno[1,2,3-cd]pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenanthrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	0.03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

**Notes**

Semivolatiles analyzed via EPA SW846 Method 8270C by DHL Analytical, Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

Blue indicates the compound was detected.

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	MW-02 3/27/07	MW-02 6/18/07	MW-02 9/17/07	MW-02 3/27/07	MW-02-02 6/19/07	MW-02-02 9/18/07	MW-02-02 3/29/07	MW-02-03 6/20/07	MW-02-03 9/18/07	MW-02-04 3/28/07
Arsenic	0.1	0.0198	0.0159	0.00887	0.0485	<0.1	<0.02	0.00369	0.00283	<0.002	0.00339
Barium	1	0.1550	0.0982	0.0677	<0.03	<0.15	<0.03	0.0102	0.00972	0.00813	0.0210
Cadmium	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.015	<0.003	<0.003	<0.0003	<0.0003	<0.0003
Calcium	--	555	620	536	256	329	263	474	567	561	510
Chromium	0.05	0.00265	0.00228	<0.002	<0.02	<0.2	<0.02	0.0484	0.0467	0.0429	<0.002
Lead	0.05	<0.0003	<0.0003	<0.0003	<0.0003	<0.015	<0.006	<0.003	0.000334	<0.0003	<0.0003
Magnesium	--	65.3	77.6	40.3	49.500	43,200	39400	120	126	117	116
Mercury	0.002	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Potassium	--	9.72	8.25	4.68	1,840	1,930	1910	5.02	4.88	3.62	13.2
Selenium	0.05	0.00926	0.01820	0.00686	<0.02	0.10500	<0.04	0.00513	0.00426	0.00758	<0.002
Silver	0.05	<0.001	<0.001	<0.01	<0.01	<0.05	<0.01	<0.001	<0.001	<0.001	<0.001
Sodium	--	131	113	51.8	53,600	30,200	25700	55.6	69.0	67.9	69.9

**Notes**

Metals analyzed via EPA SW846 Method 6020 by DHL Analytical Inc., Round Rock, Texas  
 Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas  
 All values reported in Milligrams per liter (mg/l, parts per million).

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	MW-02-04 6/18/07	MW-02-04 9/17/07	MW-02-05 3/27/07	MW-02-05 6/19/07	MW-02-05 9/18/07	MW-02-06 3/28/07	MW-02-06 6/20/07	MW-02-06 9/18/07	MW-02-07 3/28/07	MW-02-07 6/19/07
Arsenic	0.1	<0.002	0.00393	0.0422	<0.1	<0.02	0.00783	0.00289	0.00214	0.00354	0.00356
Barium	1	0.0204	0.0210	<0.03	<0.15	<0.03	0.0245	0.0243	0.0225	0.0262	0.0267
Cadmium	0.01	<0.0003	<0.0003	<0.003	<0.015	<0.003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Calcium	—	612	574	260	325	288	480	604	596	522	545
Chromium	0.05	<0.002	<0.002	<0.02	<0.2	<0.02	<0.002	<0.002	0.00233	<0.002	0.00361
Lead	0.05	<0.0003	<0.0003	<0.003	<0.015	<0.015	<0.006	<0.0003	0.000413	<0.0003	<0.0003
Magnesium	—	120	121	50,800	43,600	42,800	206	140	146	71.8	67.7
Mercury	0.002	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Potassium	—	11.7	10.4	1,190	1,180	1,180	8.52	8.08	7.17	8.85	8.94
Selenium	0.05	0.00377	0.00617	<0.02	<0.1	<0.02	<0.002	<0.002	0.00615	<0.002	<0.002
Silver	0.05	<0.001	<0.001	<0.01	<0.05	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	—	78.4	75.0	53,200	28,900	28,500	58.4	31.8	29.9	114	111

**Notes**

Metals analyzed via EPA SW846 Method 6020 by DHL Analytical Inc., Round Rock, Texas

Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	MW-02-07 9/18/07	MW-02-15 3/29/07	MW-02-15 6/20/07	MW-02-15 9/18/07	MW-02-15 3/29/07	MW-02-16 6/19/07	MW-02-16 6/19/07	MW-02-16 9/18/07
Arsenic	0.1	0.00247	0.0143	0.0147	0.00978	0.0140	0.0089	<0.002	<0.002
Barium	1	0.0238	0.0188	0.016	0.0139	0.01	0.01	0.0125	0.0125
Cadmium	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Calcium	--	579	564	626	595	490	584	569	569
Chromium	0.05	0.00449	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Lead	0.05	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Magnesium	--	64.2	68.5	73.7	64.5	126	138	136	136
Mercury	0.002	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Potassium	--	7.28	7.15	6.65	5.88	5.71	7.50	5.02	5.02
Selenium	0.05	0.00568	<0.002	<0.002	0.00636	<0.002	<0.002	0.00609	0.00609
Silver	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	--	112	150	168	153	332	380	345	345

**Notes**

Metals analyzed via EPA SW846 Method 6020 by DHL Analytical Inc., Round Rock, Texas

Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas

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**Table 2**

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	MW-02-18 3/28/07	MW-02-18 6/19/07	MW-02-18 9/18/07	MW-03-01 3/28/07	MW-03-01 6/19/07	MW-03-01 9/18/07	MW-03-02 3/29/07	MW-03-02 6/19/07	MW-03-03 3/28/07
Arsenic	0.1	0.00389	<0.002	<0.002	0.00720	0.00677	0.00341	0.00259	0.00201	0.00512
Barium	1	0.0182	0.0193	0.0128	0.0247	0.0224	0.0199	0.0229	0.0181	0.0254
Cadmium	0.01	0.000323	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Calcium	—	515	557	535	571	603	570	544	539	405
Chromium	0.05	<0.002	<0.002	<0.002	<0.002	0.00201	<0.002	<0.002	<0.002	<0.002
Lead	0.05	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Magnesium	—	262	260	227	60	68.4	59.5	104	113	86.8
Mercury	0.002	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Potassium	—	2.76	3.37	2.49	7.95	7.75	6.27	6.46	5.53	9.52
Selenium	0.05	<0.002	<0.002	0.00612	<0.002	<0.002	0.00628	<0.002	<0.002	<0.002
Silver	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	—	115	104	88.3	143	156	148	276	333	148

**Notes**

Metals analyzed via EPA SW846 Method 6020 by DHL Analytical Inc., Round Rock, Texas

Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

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Table 2

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	MW-03-03 6/19/07	MW-03-03 9/18/07	MW-05 3/29/07	MW-05 6/19/07	MW-05 9/18/07	MW-07 3/28/07	MW-07 6/19/07	MW-07 6/19/07	MW-07 9/18/07
Arsenic	0.1	0.00328	0.00276	0.00233	0.00252	<0.002	0.00245	0.00238	<0.002	<0.002
Barium	1	0.0248	0.0229	0.0145	0.0124	0.0113	0.016	0.0258	0.0221	<0.0003
Cadmium	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Calcium	—	456	425	558	555	542	491	613	622	622
Chromium	0.05	<0.002	<0.002	<0.002	<0.002	<0.002	0.0254	0.0247	0.0374	0.0374
Lead	0.05	<0.0003	<0.0003	<0.0003	<0.0003	0.00119	<0.0003	<0.0003	<0.0003	<0.0003
Magnesium	—	94.8	83.3	136	136	130	128	33.3	39.0	39.0
Mercury	0.002	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Potassium	—	8.47	7.61	5.69	5.56	4.53	14.4	8.94	7.96	7.96
Selenium	0.05	<0.002	0.00649	<0.002	0.002	0.00418	<0.002	<0.001	<0.001	0.00589
Silver	0.05	<0.001	<0.001	<0.001	<0.001	199	203	188	74.2	<0.001
Sodium	—	178	146	199	203	188	74.2	74.2	74.2	41.2

**Notes**

Metals analyzed via EPA SW846 Method 6020 by DHL Analytical Inc., Round Rock, Texas

Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas

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**Table 2**

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	MW-08 3/28/07	MW-08 6/19/07	MW-08 9/18/07
Arsenic	0.1	0.00726	0.00491	0.00436
Barium	1	0.0205	0.0189	0.0174
Cadmium	0.01	<0.0003	<0.0003	<0.0003
Calcium	—	479	496	490
Chromium	0.05	<0.002	<0.002	<0.002
Lead	0.05	<0.0003	<0.0003	<0.0003
Magnesium	—	122	136	127
Mercury	0.002	<0.00008	<0.00008	<0.00008
Potassium	—	6.85	6.93	5.39
Selenium	0.05	<0.002	<0.002	0.00512
Silver	0.05	<0.001	<0.001	<0.001
Sodium	—	286	303	288

**Notes**

Metals analyzed via EPA SW846 Method 6020 by DHL Analytical Inc., Round Rock, Texas  
 Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas  
 All values reported in Milligrams per liter (mg/L, parts per million).

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**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	EB-01 3/27/07	EB-01 6/18/07	EB-01 9/17/07	EB-02 3/27/07	EB-02 6/18/07	EB-02 9/17/07	EB-03 3/27/07	EB-03 9/27/07	EB-04 6/18/07	EB-04 9/17/07
Arsenic	0.1	0.00298	0.00232	0.00308	<0.002	<0.002	<0.002	0.00342	0.00277	0.00288	
Barium	1	0.0122	0.0147	0.0156	0.0124	0.0156	0.0123	0.0202	0.0163	0.0165	0.0164
Cadmium	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Calcium	--	50.8	57.6	524	496	531	524	545	591	680	636
Chromium	0.05	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<b>0.0615</b>	<b>0.0718</b>
Lead	0.05	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<b>0.0518</b>
Magnesium	--	132	135	132	198	305	228	30	126	138	
Mercury	0.002	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Potassium	--	3.56	4.39	4.13	10.1	9.1	8.77	3.93	6.3	6.07	5.44
Selenium	0.05	0.00663	0.00637	0.00901	0.00328	0.00485	0.00631	<0.002	0.00242	<0.002	0.00606
Silver	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	--	22.2	22.2	94.3	131	135	152	56.5	208	232	214

**Notes**

Metals analyzed via EPA SW846 Method 6020 by DHL Analytical Inc., Round Rock, Texas  
 Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas  
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**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	EB-05 3/26/07	EB-05 6/18/07	EB-05 9/17/07	EB-06 3/26/07	EB-06 6/18/07	EB-06 9/17/07	EB-07 3/27/07	EB-07 6/18/07	EB-07 9/17/07	EB-08 3/27/07
Arsenic	0.1	<0.002	<0.002	<0.002	0.00375	<0.002	<0.002	0.02580	0.02730	0.0211	0.00543
Barium	1	0.0290	0.0281	0.0258	0.0155	0.0174	0.0151	0.0158	0.0163	0.0164	0.0259
Cadmium	0.01	<0.0003	<0.0003	<0.0003	0.000503	0.000301	<0.0003	0.000394	<0.0003	0.000320	<0.0003
Calcium	--	682	623	602	684	600	573	562	643	612	646
Chromium	0.05	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Lead	0.05	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00474	0.00197	<0.0003	0.000464	<0.0003
Magnesium	--	12.4	14.3	18.8	142	127	118	97	107	99.6	123
Mercury	0.002	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Potassium	--	3.16	3.27	3.33	4.74	4.85	3.68	2.68	2.98	2.65	6.78
Selenium	0.05	<0.002	<0.002	0.00525	0.00411	0.00325	0.00676	<0.002	0.00567	<0.002	<0.002
Silver	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	--	39.7	46.3	41.6	48.4	39.8	33.8	108	117	109	238

**Notes**

Metals analyzed via EPA SW846 Method 6020 by DHL Analytical Inc., Round Rock, Texas  
 Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas

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**Table 2**

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	EB-08 6/18/07	EB-08 9/17/07
Arsenic	0.1	0.00360	0.00454
Barium	1	0.0239	0.0209
Cadmium	0.01	<0.0003	<0.0003
Calcium	—	757	689
Chromium	0.05	<0.002	<0.002
Lead	0.05	<0.0003	<0.0003
Magnesium	—	130	128
Mercury	0.002	<0.00008	0.000354
Potassium	—	7.04	5.61
Selenium	0.05	<b>0.08560</b>	0.00687
Silver	0.05	<0.001	<0.001
Sodium	—	262	223

**Notes**

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 Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas  
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**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	P-01 3/26/07	P-01 6/18/07	P-01 9/17/07	P-02 3/27/07	P-02 6/19/07	P-02 9/17/07	P-02 3/27/07	P-03 6/18/07	P-03 9/17/07	P-04 3/27/07
Arsenic	0.1	0.00327	0.00355	<0.002	0.00256	0.00405	0.00206	0.0326	0.028	0.0248	0.0694
Barium	1	0.0262	0.0246	0.0259	0.0154	0.0167	0.0166	0.0254	0.0246	0.0230	0.0243
Cadmium	0.01	<0.0003	<0.0003	0.000644	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Calcium	--	692	610	604	512	564	553	549	664	628	592
Chromium	0.05	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Lead	0.05	<0.0003	<0.0003	0.000800	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Magnesium	--	17.9	17.9	23.1	20.1	179	175	238	269	256	218
Mercury	0.002	<0.00008	<0.00008	0.000172	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Potassium	--	3.2	3.25	3.21	4.14	4.25	3.59	4.77	5.32	4.50	7.68
Selenium	0.05	<0.002	<0.002	0.00544	<0.002	<0.002	0.00456	<0.002	<0.002	0.00521	<0.002
Silver	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	--	42.6	45.7	56.5	48.5	39.1	37.9	106	151	162	217

**Notes**

Metals analyzed via EPA SW846 Method 6020 by DHL Analytical Inc., Round Rock, Texas

Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas

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**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	P-04 6/18/07	P-04 9/17/07	P-04 3/27/07	P-05 6/18/07	P-05 9/17/07
Arsenic	0.1	0.0496	0.0280	0.00579	0.00225	0.00241
Barium	1	0.0219	0.0198	0.0164	0.0134	0.0148
Cadmium	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Calcium	--	682	611	558	603	594
Chromium	0.05	<0.002	<0.002	<0.002	<0.002	<0.002
Lead	0.05	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Magnesium	--	212	178	52	60.4	51.0
Mercury	0.002	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Potassium	--	7.84	6.60	3.52	3.02	2.83
Selenium	0.05	<0.002	0.00609	<0.002	<0.002	0.00497
Silver	0.05	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	--	225	204	73.7	84.9	71.2

**Notes**

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Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas

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**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	Duplicate-01 (EB-07) 3/27/07	Duplicate-01 (EB-06) 6/18/07	Duplicate-01 (MW-02-04) 9/17/07	Duplicate-02 (MW-08) 3/28/07	Duplicate-02 (MW-05) 6/19/07	Duplicate-02 (MW-02-03) 9/18/07	Equipment Rinse-01 3/28/07	Equipment Rinse-01 6/18/07
Arsenic	0.1	0.0261	0.0171	0.00245	0.00734	0.00260	<0.002	<0.002	<0.002
Barium	1	0.0159	0.101	0.0210	0.0136	0.00813	<0.003	<0.003	<0.003
Cadmium	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Calcium	--	611	617	573	470	607	529	<0.1	<0.1
Chromium	0.05	<0.002	0.00247	<0.002	<0.002	<0.002	0.0426	<0.002	<0.002
Lead	0.05	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Magnesium	--	96.7	79.9	118	132	134	119	<0.1	<0.1
Mercury	0.002	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Potassium	--	2.75	8.48	10.4	6.87	7.21	3.75	<0.1	<0.1
Selenium	0.05	<0.002	0.01	0.00621	<0.002	<0.002	0.00761	<0.002	<0.002
Silver	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	--	109	111	79.3	285	232	68.8	<0.1	<0.1

**Notes**

Metals analyzed via EPA SW846 Method 6020 by DHL Analytical Inc., Round Rock, Texas

Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas

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**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Dissolved Metals	NMWQCC Standard	Equipment Rinse-01 9/17/07	Equipment Rinse-02 3/29/07	Field Blank-01 3/28/07	Field Blank-01 6/20/07	Field Blank-01 9/18/07	Field Blank-01 3/29/07	Field Blank-02 3/29/07
Arsenic	0.1	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Barium	1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Cadmium	0.01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Calcium	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium	0.05	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Lead	0.05	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Magnesium	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mercury	0.002	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Potassium	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Selenium	0.05	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Silver	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	--	<0.1	<0.1	<0.1	<0.1	2.49	<0.1	<0.1

**Notes**

Metals analyzed via EPA SW846 Method 6020 by DHL Analytical Inc., Round Rock, Texas

Mercury analyzed via EPA SW846 Method 7470A by DHL Analytical Inc., Round Rock, Texas

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Table 2

**Summary of Analytical Results for Groundwater Samples  
Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds Other Than Metals	NMWQCC Standard	MW-02 3/27/07	MW-02 6/18/07	MW-02 9/17/07	MW-02 3/27/07	MW-02-02 6/19/07	MW-02-02 9/18/07	MW-02-02 3/29/07	MW-02-03 6/20/07	MW-02-03 9/18/07
Alkalinity, Bicarbonate	-	163	298	218	5,350	9,390	1,710	137	158	154
Alkalinity, Carbonate	-	<10	<10	<10	736	<10	3,580	<10	<10	<10
Alkalinity, Hydroxide	-	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Total	-	163	298	218	6,090	9,390	5280	137	158	154
Chloride	250	151	139	61.2	9,350	16,300	11,500	51.7	60.1	57.4
Nitrate - N	10	7.19	3.42	3.31	<10	<10	<10	5.56	4.39	5.38
Sulfate	600	1,650	1,750	1,350	392,000	221,000	299,000	1,960	1,840	1,870
Total Dissolved Solids	1,000	3,030	3,170	2,500	554,000	388,000	531,000	2,990	3,100	3,040

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds Other Than Metals	NMWQCC Standard	MW-02-04 3/28/07	MW-02-04 6/18/07	MW-02-04 9/17/07	MW-02-05 3/27/07	MW-02-05 6/19/07	MW-02-05 9/18/07	MW-02-06 3/28/07	MW-02-06 6/20/07	MW-02-06 9/18/07
Alkalinity, Bicarbonate	—	279	294	288	4,720	8,900	1,320	687	480	547
Alkalinity, Carbonate	—	<10	<10	<10	2,320	3,720	4,510	<10	<10	<10
Alkalinity, Hydroxide	—	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Total	—	279	294	288	7,040	12,600	5,830	687	480	547
Chloride	250	82.3	96.0	103	4,620	7,880	4,910	30.3	23.3	25.4
Nitrate - N	10	0.129	<0.1	<0.1	<10	<10	0.177	0.177	0.289	0.111
Sulfate	600	1,750	1,840	1,800	394,000	244,000	317,000	1,730	1,690	1,790
Total Dissolved Solids	1,000	3,150	3,130	3,250	569,000	387,000	553,000	3,560	3,230	3,270

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

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**Table 2**

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds	NMWQCC Standard	MW-02-07 3/28/07	MW-02-07 6/19/07	MW-02-07 9/18/07	MW-02-07 3/29/07	MW-02-15 6/20/07	MW-02-15 9/18/07	MW-02-15 9/18/07	MW-02-16 6/19/07	MW-02-16 9/18/07
Other Than Metals	—	631	664	643	336	346	366	818	756	802
Alkalinity, Bicarbonate	—	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Carbonate	—	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Hydroxide	—	631	664	643	336	346	366	818	756	802
Alkalinity, Total	—	250	109	110	126	168	167	181	206	175
Chloride	10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrate - N	600	1,190	1,280	1,330	1,800	1,660	1,670	1,940	1,810	1,860
Sulfate	1,000	2,650	2,740	2,770	3,090	3,240	3,180	3,800	3,900	3,870
Total Dissolved Solids										

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

&lt; values - Indicate the value is less than Method Detection Limit MDL.

Table 2

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds Other Than Metals	NMWQCC Standard	MW-02-18 3/28/07	MW-02-18 6/19/07	MW-02-18 9/18/07	MW-03-01 3/28/07	MW-03-01 6/19/07	MW-03-01 9/18/07	MW-03-02 3/29/07	MW-03-02 6/19/07	MW-03-03 3/28/07
Alkalinity, Bicarbonate	--	747	641	675	463	455	410	637	685	665
Alkalinity, Carbonate	--	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Hydroxide	--	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Total	--	747	641	675	463	455	410	637	685	665
Chloride	250	148	121	121	170	192	192	204	174	201
Nitrate - N	10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sulfate	600	2,050	1,970	1,980	1,420	1,510	1,440	1,840	1,600	964
Total Dissolved Solids	1,000	4,190	3,820	4,080	3,000	3,090	2,870	3,560	3,420	2,420

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Organic Compounds Other Than Metals	NMWQCC Standard	MW-03-03 6/19/07	MW-03-03 9/18/07	MW-05 3/29/07	MW-05 6/19/07	MW-05 9/18/07	MW-05 3/28/07	MW-07 6/19/07	MW-07 9/18/07
Alkalinity, Bicarbonate	--	660	635	540	514	530	435	559	651
Alkalinity, Carbonate	--	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Hydroxide	--	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Total	--	660	635	540	514	530	435	559	651
Chloride	250	231	228	159	146	156	31.1	31.4	23.7
Nitrate - N	10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sulfate	600	954	963	1,910	1,740	1,810	1,950	1,580	1,490
Total Dissolved Solids	1,000	2,520	2,480	3,440	3,540	3,450	3,280	2,880	2,890
<b>Notes</b>									

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

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**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds Other Than Metals	NMWQCC Standard	MW-08 3/28/07	MW-08 6/19/07	MW-08 9/18/07
Alkalinity, Bicarbonate	--	485	464	468
Alkalinity, Carbonate	--	<10	<10	<10
Alkalinity, Hydroxide	--	<10	<10	<10
Alkalinity, Total	--	485	464	468
Chloride	250	320	344	317
Nitrate - N	10	<0.1	<0.1	<0.1
Sulfate	600	1,650	1,640	1,550
Total Dissolved Solids	1,000	3,500	3,400	3,420

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

< values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds Other Than Metals	NMWQCC Standard	3/27/07	EB-01 6/18/07	EB-01 9/17/07	EB-01 3/27/07	EB-02 6/18/07	EB-02 9/17/07	EB-02 3/27/07	EB-03 3/27/07	EB-04 3/27/07	EB-04 6/18/07
Alkalinity, Bicarbonate	-	101	118	112	318	339	307	293	254	250	<10
Alkalinity, Carbonate	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Hydroxide	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Total	-	101	118	112	318	339	307	293	254	250	250
Chloride	250	30	130	122	106	111	110	65.1	645	662	662
Nitrate - N	10	7.37	7.05	7.64	3.91	2.93	4.05	<0.1	2.51	2.51	2.90
Sulfate	600	1,790	2,000	1,870	2,260	2,090	2,360	1,430	1,710	1,700	1,700
Total Dissolved Solids	1,000	2,890	3,250	3,250	3,730	3,610	3,740	2,610	3,770	3,800	3,800

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

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Table 2

**Summary of Analytical Results for Groundwater Samples  
Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds	NMWQCC Standard	9/17/07	EB-04 3/26/07	EB-05 6/18/07	EB-05 9/17/07	EB-05 3/26/07	EB-06 6/18/07	EB-06 9/17/07	EB-07 3/27/07	EB-07 6/18/07
Other Than Metals										
Alkalinity, Bicarbonate	-	244	167	183	228	108	107	96.8	415	414
Alkalinity, Carbonate	-	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Hydroxide	-	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Total	-	244	167	183	228	108	107	96.8	415	414
Chloride	250	664	41	53	79.0	160	167	162	174	187
Nitrate - N	10	3.23	<0.1	<0.1	<0.1	4.61	4.74	5.25	<0.1	<0.1
Sulfate	600	1,660	1,400	1,450	1,560	1,740	1,790	1,730	1,610	1,680
Total Dissolved Solids	1,000	3,880	2,420	2,430	2,550	3,020	2,990	3,050	3,230	3,180

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

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**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds Other Than Metals	NMWQCC Standard	EB-07 9/17/07	EB-08 3/27/07	EB-08 6/18/07	EB-08 9/17/07
Alkalinity, Bicarbonate	--	400	947	966	764
Alkalinity, Carbonate	--	<10	<10	<10	<10
Alkalinity, Hydroxide	--	<10	<10	<10	<10
Alkalinity, Total	--	400	947	966	764
Chloride	250	182	504	487	418
Nitrate - N	10	<0.1	<0.1	<0.1	<0.1
Sulfate	600	1,800	1,720	1,610	1,840
Total Dissolved Solids	1,000	3,200	4,200	4,130	3,940

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

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Table 2

**Summary of Analytical Results for Groundwater Samples  
Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds Other Than Metals	NMWQCC Standard	P-01 3/26/07	P-01 6/18/07	P-01 9/17/07	P-02 3/27/07	P-02 6/19/07	P-02 9/17/07	P-03 3/27/07	P-03 6/18/07	P-03 9/17/07
Alkalinity, Bicarbonate	--	215	221	272	333	441	398	475	479	460
Alkalinity, Carbonate	--	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Hydroxide	--	<10	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Total	--	215	221	272	333	441	398	475	479	460
Chloride	250	40.5	51.3	2600	63.1	55.8	55.8	324	445	514
Nitrate - N	10	0.153	0.304	0.234	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sulfate	600	1,330	1,430	1540	2,000	1,770	1,840	1,990	2,030	2,180
Total Dissolved Solids	1,000	2,410	2,440	2,600	3,520	3,380	3,370	4,020	4,120	4,150

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

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**Table 2**

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds Other Than Metals	NMWQCC Standard	P-04 3/27/07	P-04 6/18/07	P-04 9/17/07	P-04 3/27/07	P-05 3/27/07	P-05 6/18/07	P-05 9/17/07
Alkalinity, Bicarbonate	--	553	493	408	290	270	270	298
Alkalinity, Carbonate	--	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Hydroxide	--	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Total	--	553	493	408	290	270	270	298
Chloride	250	618	570	516	87.3	103	103	97.1
Nitrate - N	10	<0.1	<0.1	0.226	<0.1	0.414	0.414	<0.1
Sulfate	600	1,860	1,900	1,810	1,520	1,600	1,520	1,520
Total Dissolved Solids	1,000	4,450	4,150	3,980	2,840	2,800	2,800	2,800

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

&lt; values - Indicate the value is less than Method Detection Limit MDL.

Table 2

**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds Other Than Metals	NMWQCC Standard	Duplicate-01 (EB-07) 3/27/07	Duplicate-01 (EB-06) 6/18/07	Duplicate-01 (MW-02-04) 9/17/04	Duplicate-01 (MW-08) 3/28/07	Duplicate-02 (MW-05) 6/19/07	Duplicate-02 (MW-02-03) 9/18/07	Equipment Rinse-01 3/28/07	Equipment Rinse-01 6/18/07
Alkalinity, Bicarbonate	--	416	300	284	485	532	152	<10	<10
Alkalinity, Carbonate	--	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Hydroxide	--	<10	<10	<10	<10	<10	<10	<10	<10
Alkalinity, Total	--	416	300	284	485	532	152	<10	<10
Chloride	250	176	138	102	323	153	56.2	<0.3	0.331
Nitrate - N	10	<0.1	3.47	<0.1	<0.1	<0.1	5.43	<0.1	<0.1
Sulfate	600	1,620	1,710	1,770	1,670	1,870	1,850	<1	1.76
Total Dissolved Solids	1,000	3,190	3,100	3,170	3,470	3,640	3,060	<10	<10

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/L, parts per million).

&lt; values - Indicate the value is less than Method Detection Limit MDL.

**Table 2**  
**Summary of Analytical Results for Groundwater Samples**  
**Frontier Field Services - Empire Abo Gas Plant (GW-022)**  
**257 Empire Road**  
**Artesia, New Mexico**

Inorganic Compounds Other Than Metals	NMWQCC Standard	Equipment Rinse-01 9/17/07	Equipment Rinse-02 3/29/07	Field Blank-01 3/28/07	Field Blank-01 6/20/07	Field Blank-01 9/18/07	Field Blank-01 3/29/07
Alkalinity, Bicarbonate	--	<10	<10	<10	<10	<10	<10
Alkalinity, Carbonate	--	<10	<10	<10	<10	<10	<10
Alkalinity, Hydroxide	--	<10	<10	<10	<10	<10	<10
Alkalinity, Total	--	<10	<10	<10	<10	<10	<10
Chloride	250	<0.3	<0.3	2.36	<0.3	<0.3	<0.3
Nitrate - N	10	<0.1	<0.1	0.19	<0.1	<0.1	<0.1
Sulfate	600	<1	<1	<1	<1	<1	<1
Total Dissolved Solids	1,000	<10	<10	<10	65.0	<10	<10

**Notes**

Alkalinity analyzed via EPA Method 310.1 by DHL Analytical Inc., Round Rock, Texas

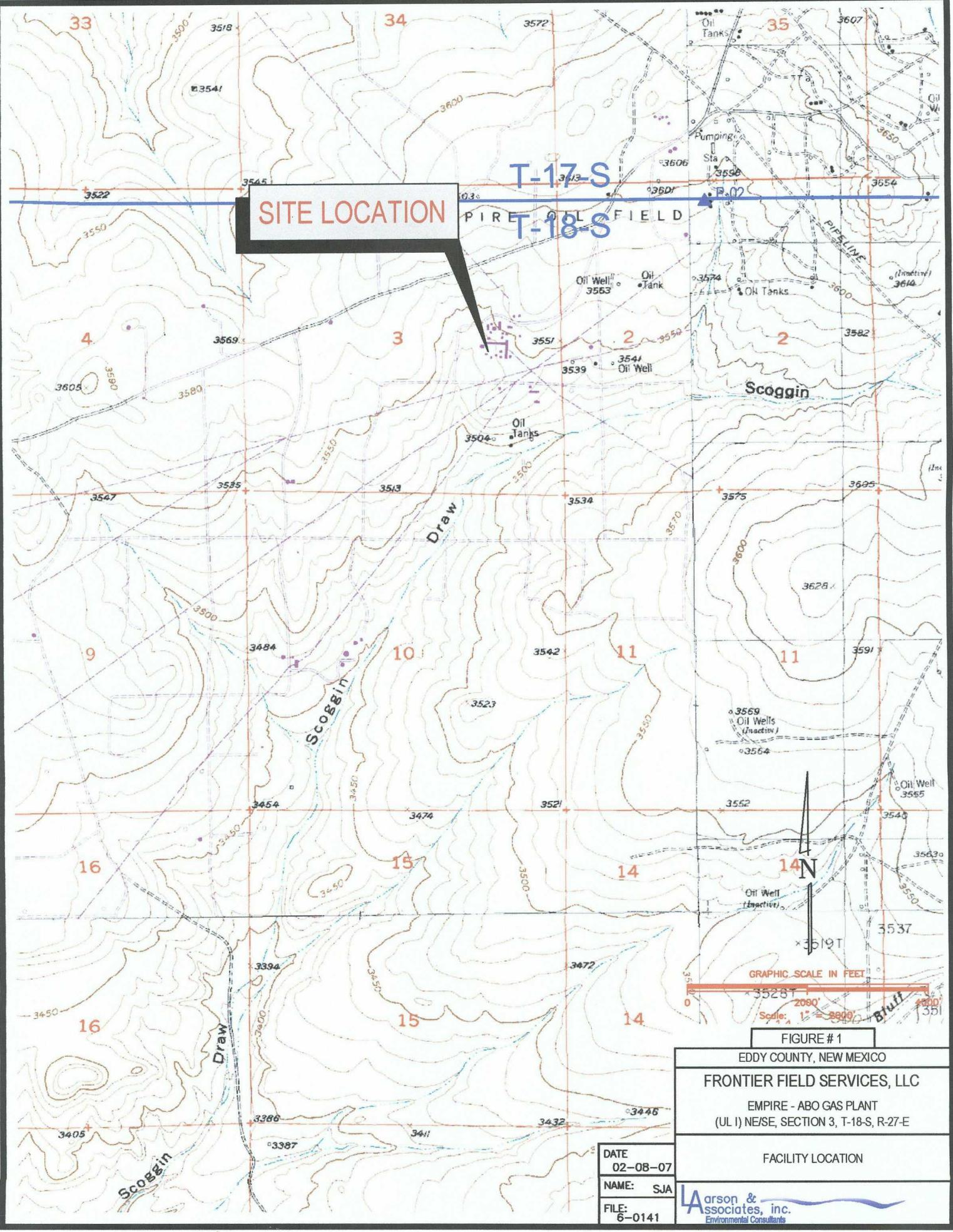
Anions analyzed via EPA Method 300 by DHL Analytical Inc., Round Rock, Texas

TDS analyzed via EPA Method 160.1 by DHL Analytical Inc., Round Rock, Texas

All values reported in Milligrams per liter (mg/l, parts per million).

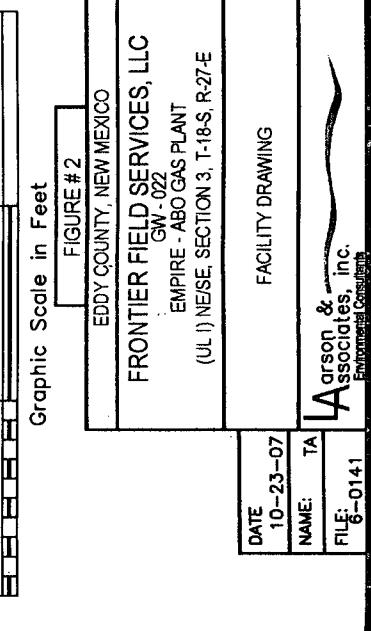
< values - Indicate the value is less than Method Detection Limit MDL.

## **FIGURES**



## MONITORING WELL DATA

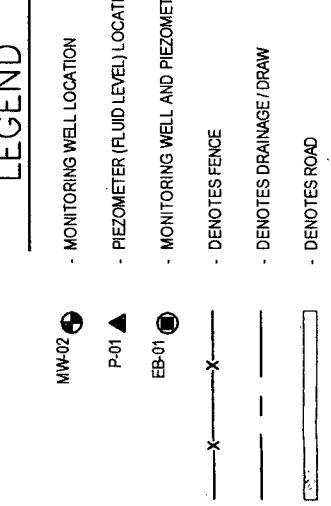
WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MW-02-02	3548.19	3545.3'
MW-02-02	3552.26	3549.3'
MW-02-03	3556.03	3553.0'
MW-02-04	3553.79	3550.9'
MW-02-05	3552.69	3549.9'
MW-02-06	3550.82	3548.2'
MW-02-07	3547.00	3544.2'
MW-02-09	3546.52	3543.5'
MW-02-10	3548.40	3545.4'
MW-02-11	3546.79	3544.0'
MW-02-12	3543.32	3540.3'
MW-02-13	3545.59	3542.7'
MW-02-14	3544.53	3541.3'
MW-02-15	3543.29	3540.2'
MW-02-16	3544.24	3541.0'
MW-02-18	3547.70	3542.7'
MW-03-01	3555.39	3552.4'
MW-03-02	3542.56	3539.9'
MW-03-03	3541.08	3538.6'
MW-03-04	3544.72	3542.3'
MW-03-04	3558.45	3555.7'
MW-04-04	3550.98	3547.5'
MW-04-05	3543.77	3540.6'
MW-04-06	3544.50	3541.8'
MW-04-07	3546.49	3546.0'
MW-04-08	3543.73	3540.5'
MW-04-09	3542.82	3540.4'
P-01	3530.21	3527.9'
P-02	3544.73	3542.3'
P-03	3536.53	3534.4'
P-04	3515.77	3513.5'
P-05	3507.48	3504.9'
EB-01	3492.15	3491.5'
EB-02	3525.34	3522.6'
EB-03	3521.05	3517.8'
EB-04	3508.38	3505.3'
EB-05	3526.61	3523.7'
EB-06	3556.83	3555.6'
EB-07	3503.97	3501.3'
EB-08	3537.07	3533.8'



Graphic Scale in Feet  
FIGURE #2

EDDY COUNTY, NEW MEXICO  
FRONTIER FIELD SERVICES, LLC  
GW-022  
EMPIRE ABO GAS PLANT  
(UL 1) NESE, SECTION 3, T-18-S, R-27-E

DATE: 10-23-07  
NAME: TA  
FILE: G-0141  
FACILITY DRAWING  
Aarson & Associates, Inc.  
Engineering Consultants



## MONITORING WELL DATA

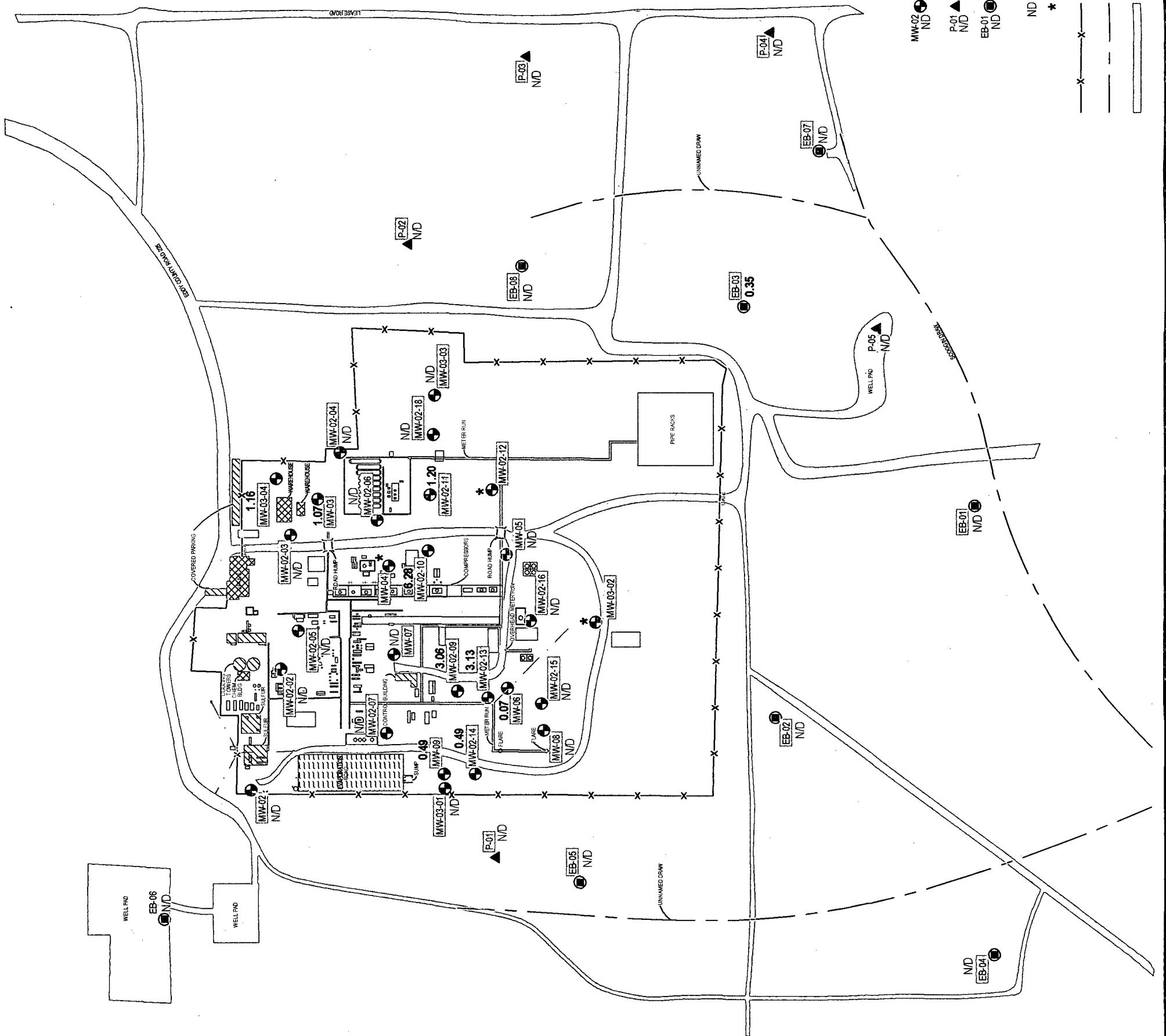
WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MW-02	3548.19'	3545.3'
MW-02-02	3552.26'	3549.3'
MW-02-03	3558.03'	3553.0'
MW-02-04	3553.79'	3550.9'
MW-02-05	3552.69'	3549.9'
MW-02-06	3550.82'	3548.3'
MW-02-07	3547.00'	3544.2'
MW-02-09	3548.52'	3543.5'
MW-02-10	3548.40'	3545.4'
MW-02-11	3546.76'	3544.0'
MW-02-12	3543.32'	3540.3'
MW-02-13	3545.59'	3542.7'
MW-02-14	3544.53'	3541.3'
MW-02-15	3543.29'	3540.2'
MW-02-16	3544.24'	3541.0'
MW-02-18	3547.70'	3542.7'
MW-03	3555.30'	3552.4'
MW-03-01	3542.56'	3539.9'
MW-03-02	3541.08'	3538.8'
MW-03-03	3544.72'	3542.3'
MW-03-04	3558.45'	3555.7'
MW-04	3550.96'	3547.8'
MW-05	3543.77'	3540.8'
MW-06	3544.50'	3541.8'
MW-07	3546.49'	3546.0'
MW-08	3543.73'	3540.5'
MW-09	3542.82'	3540.4'
P-01	3550.21'	3547.9'
P-02	3544.73'	3542.3'
P-03	3536.83'	3534.4'
P-04	3515.77'	3513.5'
P-05	3507.48'	3504.8'
EB-01	3492.15'	3491.5'
EB-02	3525.34'	3522.8'
EB-03	3521.05'	3517.8'
EB-04	3508.38'	3505.3'
EB-05	3526.61'	3523.7'
EB-06	3556.63'	3555.6'
EB-07	3503.97'	3501.3'
EB-08	3537.07'	3533.8'
EB-09	N/D	N/D
EB-10	N/D	N/D
EB-11	N/D	N/D
EB-12	N/D	N/D
EB-13	N/D	N/D
EB-14	N/D	N/D
EB-15	N/D	N/D
EB-16	N/D	N/D
EB-17	N/D	N/D
EB-18	N/D	N/D
EB-19	N/D	N/D
EB-20	N/D	N/D
EB-21	N/D	N/D
EB-22	N/D	N/D
EB-23	N/D	N/D
EB-24	N/D	N/D
EB-25	N/D	N/D
EB-26	N/D	N/D
EB-27	N/D	N/D
EB-28	N/D	N/D
EB-29	N/D	N/D
EB-30	N/D	N/D
EB-31	N/D	N/D
EB-32	N/D	N/D
EB-33	N/D	N/D
EB-34	N/D	N/D
EB-35	N/D	N/D
EB-36	N/D	N/D
EB-37	N/D	N/D
EB-38	N/D	N/D
EB-39	N/D	N/D
EB-40	N/D	N/D
EB-41	N/D	N/D
EB-42	N/D	N/D
EB-43	N/D	N/D
EB-44	N/D	N/D
EB-45	N/D	N/D
EB-46	N/D	N/D
EB-47	N/D	N/D
EB-48	N/D	N/D
EB-49	N/D	N/D
EB-50	N/D	N/D
EB-51	N/D	N/D
EB-52	N/D	N/D
EB-53	N/D	N/D
EB-54	N/D	N/D
EB-55	N/D	N/D
EB-56	N/D	N/D
EB-57	N/D	N/D
EB-58	N/D	N/D
EB-59	N/D	N/D
EB-60	N/D	N/D
EB-61	N/D	N/D
EB-62	N/D	N/D
EB-63	N/D	N/D
EB-64	N/D	N/D
EB-65	N/D	N/D
EB-66	N/D	N/D
EB-67	N/D	N/D
EB-68	N/D	N/D
EB-69	N/D	N/D
EB-70	N/D	N/D
EB-71	N/D	N/D
EB-72	N/D	N/D
EB-73	N/D	N/D
EB-74	N/D	N/D
EB-75	N/D	N/D
EB-76	N/D	N/D
EB-77	N/D	N/D
EB-78	N/D	N/D
EB-79	N/D	N/D
EB-80	N/D	N/D
EB-81	N/D	N/D
EB-82	N/D	N/D
EB-83	N/D	N/D
EB-84	N/D	N/D
EB-85	N/D	N/D
EB-86	N/D	N/D
EB-87	N/D	N/D
EB-88	N/D	N/D
EB-89	N/D	N/D
EB-90	N/D	N/D
EB-91	N/D	N/D
EB-92	N/D	N/D
EB-93	N/D	N/D
EB-94	N/D	N/D
EB-95	N/D	N/D
EB-96	N/D	N/D
EB-97	N/D	N/D
EB-98	N/D	N/D
EB-99	N/D	N/D
EB-100	N/D	N/D
EB-101	N/D	N/D
EB-102	N/D	N/D
EB-103	N/D	N/D
EB-104	N/D	N/D
EB-105	N/D	N/D
EB-106	N/D	N/D
EB-107	N/D	N/D
EB-108	N/D	N/D
EB-109	N/D	N/D
EB-110	N/D	N/D
EB-111	N/D	N/D
EB-112	N/D	N/D
EB-113	N/D	N/D
EB-114	N/D	N/D
EB-115	N/D	N/D
EB-116	N/D	N/D
EB-117	N/D	N/D
EB-118	N/D	N/D
EB-119	N/D	N/D
EB-120	N/D	N/D
EB-121	N/D	N/D
EB-122	N/D	N/D
EB-123	N/D	N/D
EB-124	N/D	N/D
EB-125	N/D	N/D
EB-126	N/D	N/D
EB-127	N/D	N/D
EB-128	N/D	N/D
EB-129	N/D	N/D
EB-130	N/D	N/D
EB-131	N/D	N/D
EB-132	N/D	N/D
EB-133	N/D	N/D
EB-134	N/D	N/D
EB-135	N/D	N/D
EB-136	N/D	N/D
EB-137	N/D	N/D
EB-138	N/D	N/D
EB-139	N/D	N/D
EB-140	N/D	N/D
EB-141	N/D	N/D
EB-142	N/D	N/D
EB-143	N/D	N/D
EB-144	N/D	N/D
EB-145	N/D	N/D
EB-146	N/D	N/D
EB-147	N/D	N/D
EB-148	N/D	N/D
EB-149	N/D	N/D
EB-150	N/D	N/D
EB-151	N/D	N/D
EB-152	N/D	N/D
EB-153	N/D	N/D
EB-154	N/D	N/D
EB-155	N/D	N/D
EB-156	N/D	N/D
EB-157	N/D	N/D
EB-158	N/D	N/D
EB-159	N/D	N/D
EB-160	N/D	N/D
EB-161	N/D	N/D
EB-162	N/D	N/D
EB-163	N/D	N/D
EB-164	N/D	N/D
EB-165	N/D	N/D
EB-166	N/D	N/D
EB-167	N/D	N/D
EB-168	N/D	N/D
EB-169	N/D	N/D
EB-170	N/D	N/D
EB-171	N/D	N/D
EB-172	N/D	N/D
EB-173	N/D	N/D
EB-174	N/D	N/D
EB-175	N/D	N/D
EB-176	N/D	N/D
EB-177	N/D	N/D
EB-178	N/D	N/D
EB-179	N/D	N/D
EB-180	N/D	N/D
EB-181	N/D	N/D
EB-182	N/D	N/D
EB-183	N/D	N/D
EB-184	N/D	N/D
EB-185	N/D	N/D
EB-186	N/D	N/D
EB-187	N/D	N/D
EB-188	N/D	N/D
EB-189	N/D	N/D
EB-190	N/D	N/D
EB-191	N/D	N/D
EB-192	N/D	N/D
EB-193	N/D	N/D
EB-194	N/D	N/D
EB-195	N/D	N/D
EB-196	N/D	N/D
EB-197	N/D	N/D
EB-198	N/D	N/D
EB-199	N/D	N/D
EB-200	N/D	N/D
EB-201	N/D	N/D
EB-202	N/D	N/D
EB-203	N/D	N/D
EB-204	N/D	N/D
EB-205	N/D	N/D
EB-206	N/D	N/D
EB-207	N/D	N/D
EB-208	N/D	N/D
EB-209	N/D	N/D
EB-210	N/D	N/D
EB-211	N/D	N/D
EB-212	N/D	N/D
EB-213	N/D	N/D
EB-214	N/D	N/D
EB-215	N/D	N/D
EB-216	N/D	N/D
EB-217	N/D	N/D
EB-218	N/D	N/D
EB-219	N/D	N/D
EB-220	N/D	N/D
EB-221	N/D	N/D
EB-222	N/D	N/D
EB-223	N/D	N/D
EB-224	N/D	N/D
EB-225	N/D	N/D
EB-226	N/D	N/D
EB-227	N/D	N/D
EB-228	N/D	N/D
EB-229	N/D	N/D
EB-230	N/D	N/D
EB-231	N/D	N/D
EB-232	N/D	N/D
EB-233	N/D	N/D
EB-234	N/D	N/D
EB-235	N/D	N/D
EB-236	N/D	N/D
EB-237	N/D	N/D
EB-238	N/D	N/D
EB-239	N/D	N/D
EB-240	N/D	N/D
EB-2		

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MW-02	3548.19	3545.3'
MW-02-02	3532.26	3549.3'
MW-02-03	3536.03	3553.0'
MW-02-04	3533.78	3550.9'
MW-02-05	3532.69	3549.9'
MW-02-06	3530.82	3548.3'
MW-02-07	3537.00	3544.2'
MW-02-08	3536.52	3543.5'
MW-02-10	3548.40	3545.4'
MW-02-11	3548.78	3544.0'
MW-02-12	3543.32	3540.3'
MW-02-13	3545.59	3542.7'
MW-02-14	3544.53	3541.3'
MW-02-15	3543.28	3542.3'
MW-02-16	3544.24	3541.0'
MW-02-18	3537.70	3542.7'
MW-03	3555.30	3552.4'
MW-03-01	3542.56	3539.9'
MW-03-02	3541.08	3536.6'
MW-03-03	3544.72	3542.3'
MW-03-04	3558.45	3555.7'
MW-04	3560.98	3547.8'
MW-05	3543.77	3540.6'
MW-06	3544.6	3541.8'
MW-07	3548.49	3546.0'
MW-08	3543.73	3540.5'
MW-09	3542.82	3540.4'
P-01	3530.21	3527.9'
P-02	3544.73	3542.3'
P-03	3536.83	3534.4'
P-04	3515.77	3513.5'
P-05	3507.48	3504.9'
EB-01	3491.5	3491.5'
EB-02	3525.34	3522.6'
EB-03	3521.05	3517.8'
EB-04	3508.38	3505.3'
EB-05	3526.61	3523.7'
EB-06	3558.63	3565.6'
EB-07	3503.97	3501.3'
EB-08	3537.07	3533.8'
EB-09	N/D	N/D
EB-10	N/D	N/D
EB-11	N/D	N/D
EB-12	N/D	N/D
EB-13	N/D	N/D
EB-14	N/D	N/D
EB-15	N/D	N/D
EB-16	N/D	N/D
EB-17	N/D	N/D
EB-18	N/D	N/D
EB-19	N/D	N/D
EB-20	N/D	N/D
EB-21	N/D	N/D
EB-22	N/D	N/D
EB-23	N/D	N/D
EB-24	N/D	N/D
EB-25	N/D	N/D
EB-26	N/D	N/D
EB-27	N/D	N/D
EB-28	N/D	N/D
EB-29	N/D	N/D
EB-30	N/D	N/D
EB-31	N/D	N/D
EB-32	N/D	N/D
EB-33	N/D	N/D
EB-34	N/D	N/D
EB-35	N/D	N/D
EB-36	N/D	N/D
EB-37	N/D	N/D
EB-38	N/D	N/D
EB-39	N/D	N/D
EB-40	N/D	N/D
EB-41	N/D	N/D
EB-42	N/D	N/D
EB-43	N/D	N/D
EB-44	N/D	N/D
EB-45	N/D	N/D
EB-46	N/D	N/D
EB-47	N/D	N/D
EB-48	N/D	N/D
EB-49	N/D	N/D
EB-50	N/D	N/D
EB-51	N/D	N/D
EB-52	N/D	N/D
EB-53	N/D	N/D
EB-54	N/D	N/D
EB-55	N/D	N/D
EB-56	N/D	N/D
EB-57	N/D	N/D
EB-58	N/D	N/D
EB-59	N/D	N/D
EB-60	N/D	N/D
EB-61	N/D	N/D
EB-62	N/D	N/D
EB-63	N/D	N/D
EB-64	N/D	N/D
EB-65	N/D	N/D
EB-66	N/D	N/D
EB-67	N/D	N/D
EB-68	N/D	N/D
EB-69	N/D	N/D
EB-70	N/D	N/D
EB-71	N/D	N/D
EB-72	N/D	N/D
EB-73	N/D	N/D
EB-74	N/D	N/D
EB-75	N/D	N/D
EB-76	N/D	N/D
EB-77	N/D	N/D
EB-78	N/D	N/D
EB-79	N/D	N/D
EB-80	N/D	N/D
EB-81	N/D	N/D
EB-82	N/D	N/D
EB-83	N/D	N/D
EB-84	N/D	N/D
EB-85	N/D	N/D
EB-86	N/D	N/D
EB-87	N/D	N/D
EB-88	N/D	N/D
EB-89	N/D	N/D
EB-90	N/D	N/D
EB-91	N/D	N/D
EB-92	N/D	N/D
EB-93	N/D	N/D
EB-94	N/D	N/D
EB-95	N/D	N/D
EB-96	N/D	N/D
EB-97	N/D	N/D
EB-98	N/D	N/D
EB-99	N/D	N/D
EB-100	N/D	N/D
EB-101	N/D	N/D
EB-102	N/D	N/D
EB-103	N/D	N/D
EB-104	N/D	N/D
EB-105	N/D	N/D
EB-106	N/D	N/D
EB-107	N/D	N/D
EB-108	N/D	N/D
EB-109	N/D	N/D
EB-110	N/D	N/D
EB-111	N/D	N/D
EB-112	N/D	N/D
EB-113	N/D	N/D
EB-114	N/D	N/D
EB-115	N/D	N/D
EB-116	N/D	N/D
EB-117	N/D	N/D
EB-118	N/D	N/D
EB-119	N/D	N/D
EB-120	N/D	N/D
EB-121	N/D	N/D
EB-122	N/D	N/D
EB-123	N/D	N/D
EB-124	N/D	N/D
EB-125	N/D	N/D
EB-126	N/D	N/D
EB-127	N/D	N/D
EB-128	N/D	N/D
EB-129	N/D	N/D
EB-130	N/D	N/D
EB-131	N/D	N/D
EB-132	N/D	N/D
EB-133	N/D	N/D
EB-134	N/D	N/D
EB-135	N/D	N/D
EB-136	N/D	N/D
EB-137	N/D	N/D
EB-138	N/D	N/D
EB-139	N/D	N/D
EB-140	N/D	N/D
EB-141	N/D	N/D
EB-142	N/D	N/D
EB-143	N/D	N/D
EB-144	N/D	N/D
EB-145	N/D	N/D
EB-146	N/D	N/D
EB-147	N/D	N/D
EB-148	N/D	N/D
EB-149	N/D	N/D
EB-150	N/D	N/D
EB-151	N/D	N/D
EB-152	N/D	N/D
EB-153	N/D	N/D
EB-154	N/D	N/D
EB-155	N/D	N/D
EB-156	N/D	N/D
EB-157	N/D	N/D
EB-158	N/D	N/D
EB-159	N/D	N/D
EB-160	N/D	N/D
EB-161	N/D	N/D
EB-162	N/D	N/D
EB-163	N/D	N/D
EB-164	N/D	N/D
EB-165	N/D	N/D
EB-166	N/D	N/D
EB-167	N/D	N/D
EB-168	N/D	N/D
EB-169	N/D	N/D
EB-170	N/D	N/D
EB-171	N/D	N/D
EB-172	N/D	N/D
EB-173	N/D	N/D
EB-174	N/D	N/D
EB-175	N/D	N/D
EB-176	N/D	N/D
EB-177	N/D	N/D
EB-178	N/D	N/D
EB-179	N/D	N/D
EB-180	N/D	N/D
EB-181	N/D	N/D
EB-182	N/D	N/D
EB-183	N/D	N/D
EB-184	N/D	N/D
EB-185	N/D	N/D
EB-186	N/D	N/D
EB-187	N/D	N/D
EB-188	N/D	N/D
EB-189	N/D	N/D
EB-190	N/D	N/D
EB-191	N/D	N/D
EB-192	N/D	N/D
EB-193	N/D	N/D
EB-194	N/D	N/D
EB-195	N/D	N/D
EB-196	N/D	N/D
EB-197	N/D	N/D
EB-198	N/D	N/D
EB-199	N/D	N/D
EB-200	N/D	N/D
EB-201	N/D	N/D
EB-202	N/D	N/D
EB-203	N/D	N/D
EB-204	N/D	N/D
EB-205	N/D	N/D
EB-206	N/D	N/D
EB-207	N/D	N/D
EB-208	N/D	N/D
EB-209	N/D	N/D
EB-210	N/D	N/D
EB-211	N/D	N/D
EB-212	N/D	N/D
EB-213	N/D	N/D
EB-214	N/D	N/D
EB-215	N/D	N/D
EB-216	N/D	N/D
EB-217	N/D	N/D
EB-218	N/D	N/D
EB-219	N/D	N/D
EB-220	N/D	N/D
EB-221	N/D	N/D
EB-222	N/D	N/D
EB-223	N/D	N/D
EB-224	N/D	N/D
EB-225	N/D	N/D
EB-226	N/D	N/D
EB-227	N/D	N/D
EB-228	N/D	N/D
EB-229	N/D	N/D
EB-230	N/D	N/D
EB-231	N/D	N/D
EB-232	N/D	N/D
EB-233	N/D	N/D
EB-234	N/D	N/D
EB-235	N/D	N/D
EB-236	N/D	N/D
EB-237	N/D	N/D
EB-238	N/D	N/D
EB-239	N/D	N/D
EB-240	N/D	N/D
EB-241</td		

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MW-02	3548.19'	3545.3'
MW-02-02	3552.26'	3549.3'
MW-02-03	3558.03'	3553.0'
MW-02-04	3553.79'	3550.9'
MW-02-05	3552.69'	3549.9'
MW-02-06	3550.82'	3548.3'
MW-02-07	3547.00'	3544.2'
MW-02-08	3546.62'	3543.5'
MW-02-10	3548.40'	3545.4'
MW-02-11	3546.79'	3544.0'
MW-02-12	3543.32'	3540.3'
MW-02-13	3545.59'	3542.7'
MW-02-14	3544.53'	3541.3'
MW-02-15	3543.29'	3540.2'
MW-02-16	3544.24'	3541.0'
MW-02-18	3541.70'	3542.7'
MW-03	3555.90'	3552.4'
MW-03-01	3542.86'	3539.9'
MW-03-02	3541.08'	3538.6'
MW-03-03	3544.72'	3542.3'
MW-03-04	3558.45'	3555.7'
MW-04	3550.98'	3547.8'
MW-05	3543.77'	3540.6'
MW-06	3544.50'	3541.8'
MW-07	3546.49'	3546.0'
MW-08	3543.73'	3540.5'
MW-09	3542.82'	3540.4'
P-01	3530.21'	3527.9'
P-02	3544.73'	3542.3'
P-03	3536.53'	3534.4'
P-04	3515.77'	3513.5'
P-05	3507.48'	3504.9'
P-06	3492.15'	3491.5'
P-07	3525.24'	3522.6'
P-08	3521.05'	3517.8'
P-09	3508.38'	3505.3'
P-10	3526.61'	3523.7'
P-11	3556.83'	3555.6'
P-12	3503.97'	3501.3'
P-13	3537.07'	3533.8'



## LEGEND

- MW-02 ND: MONITORING WELL LOCATION AND APPARENT HYDROCARBON PRODUCT (PSH) THICKNESS (FEET). SEPTEMBER 17, 2007
- P-01 ND: PIEZOMETER (FLUID LEVEL) LOCATION AND APPARENT HYDROCARBON PRODUCT (PSH) NOT OBSERVED IN WELL
- EB-01 ND: MONITORING WELL AND PIEZOMETER NEST LOCATION
- \*: HYDROCARBON PRODUCT (PSH) OBSERVED IN WELL AS EMULSION
- X: DENOTES FENCE
- : DENOTES DRAINAGE / DRAWS
- : DENOTES ROAD

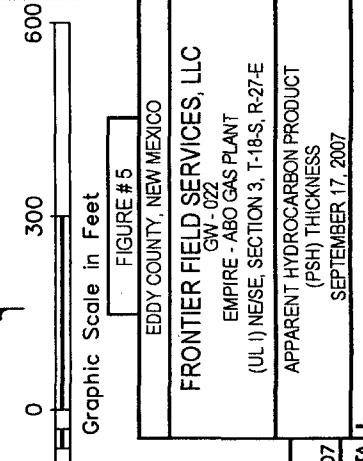


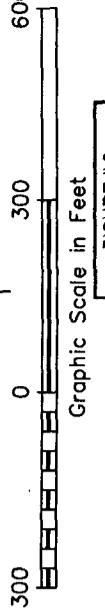
FIGURE #5  
FRONTIER FIELD SERVICES, LLC  
EDDY COUNTY, NEW MEXICO  
GW-022  
EMPIRE ABO GAS PLANT  
(UL 1) NESE, SECTION 3, T-18-S, R-27-E  
APPARENT HYDROCARBON PRODUCT  
(PSH) THICKNESS  
SEPTEMBER 17, 2007  
DATE: 10-23-07  
NAME: TA  
FILE: 6-0141  
Hargan & Associates, Inc.  
Engineering Consultants

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MWV-02	3548.18*	3545.3
MWV-02-02	3552.28	3548.3
MWV-02-03	3556.03	3553.0
MWV-02-04	3553.79	3550.8
MWV-02-05	3552.69	3548.9
MWV-02-06	3550.82	3548.3
MWV-02-07	3547.00	3544.2
MWV-02-08	3548.52	3543.5
MWV-02-10	3548.40	3545.4
MWV-02-11	3546.78	3544.0
MWV-02-12	3543.32	3540.3
MWV-02-13	3545.58*	3542.7
MWV-02-14	3544.53	3541.3
MWV-02-15	3543.28	3540.2
MWV-02-16	3544.24	3541.0
MWV-02-18	3547.70	3542.7
MWV-03	3555.30	3552.4
MWV-03-01	3542.56	3539.9
MWV-03-02	3541.68	3536.6
MWV-03-03	3544.72	3542.3
MWV-03-04	3558.45	3555.7
MWV-04	3550.98	3547.8
MWV-05	3543.77	3540.6
MWV-06	3544.50	3541.8
MWV-07	3546.48	3543.8
MWV-08	3543.73	3540.5
MWV-09	3542.82	3540.4
P-01	3550.21	3542.9
P-02	3544.73	3542.3
P-03	3538.83	3534.4
P-04	3515.77	3513.5
P-05	3507.48	3504.9
EB-01	3492.15	3491.5
EB-02	3525.34	3522.6
EB-03	3521.05	3517.8
EB-04	3508.38*	3505.3
EB-05	3526.61	3523.7
EB-06	3558.63	3555.6
EB-07	3503.97	3501.3
EB-08	3537.07	3533.8

## LEGEND

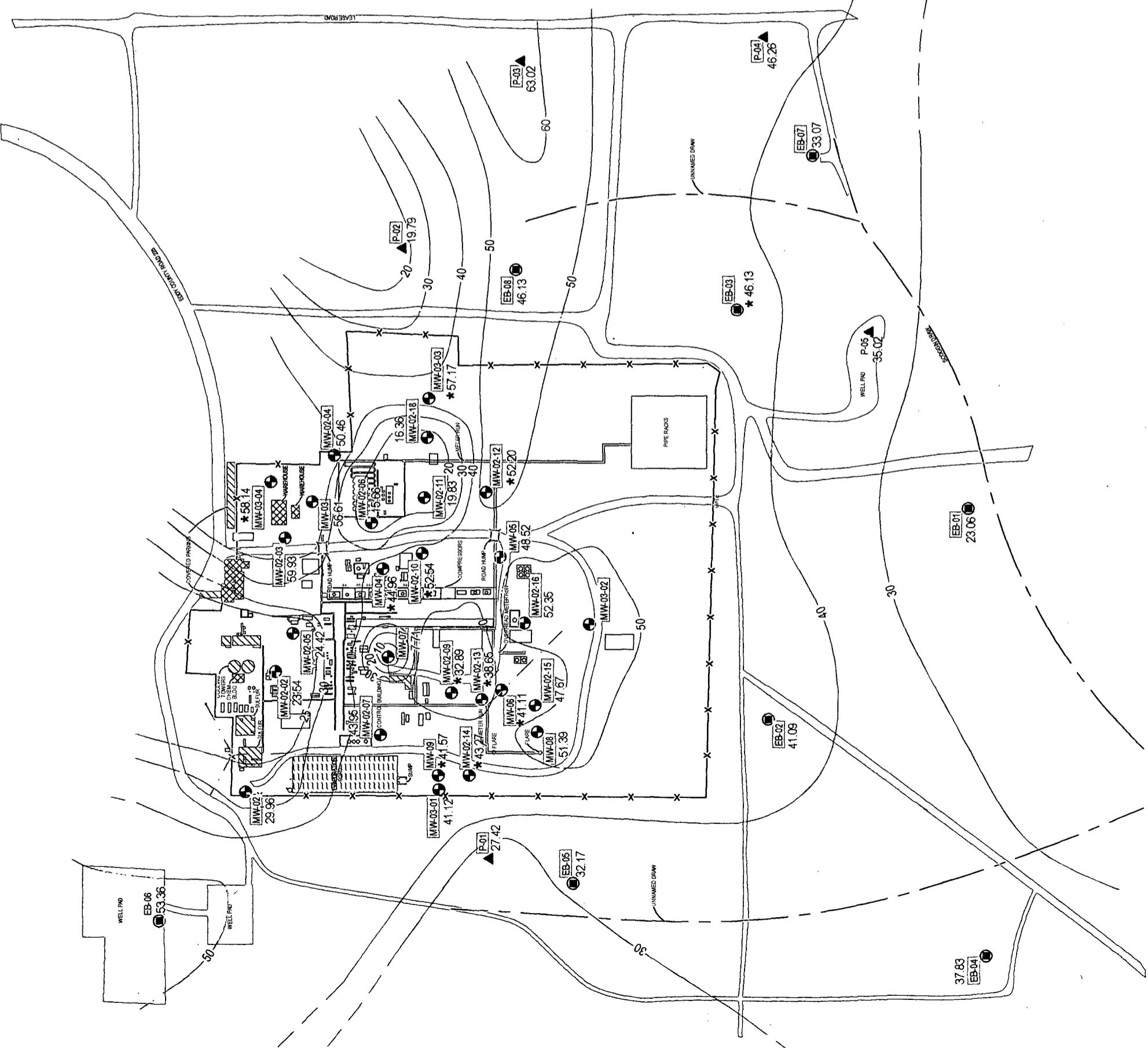
- MONITORING WELL LOCATION AND DEPTH TO GROUNDWATER, (FEET BGS), MARCH 26-27, 2007
- PIEZOMETER (FLUID LEVEL) LOCATION AND LOCATION AND DEPTH TO GROUNDWATER, (FEET BGS), MARCH 26-27, 2007
- CONTOUR OF DEPTH TO GROUND WATER, (FEET BGS), MARCH 26-27, 2007
- DEPTH TO GROUNDWATER MEASUREMENT CORRECTED FOR HYDROCARBON PRODUCT (PSH) IN WELL ASSUMING 0.70 SPECIFIC GRAVITY
- DENOTES FENCE
- DENOTES DRAINAGE / DRAW
- DENOTES ROAD



Graphic Scale in Feet

FIGURE #6  
EDDY COUNTY, NEW MEXICO  
FRONTIER FIELD SERVICES, LLC  
GW-022  
EMPIRE - ABO GAS PLANT  
(U.) NESE SECTION 3, T-18-S, R-27-E  
DEPTH TO GROUNDWATER MAP  
MARCH 26-27, 2007

DATE: 05-17-07  
NAME: SJA  
FILE: 6-0141



## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MWV-02	3548.19	3545.3
MWV-02-02	3552.26*	3549.3
MWV-02-03	3556.03*	3553.0
MWV-02-04	3563.79*	3550.9
MWV-02-05	3552.68*	3549.9
MWV-02-06	3550.82*	3548.3
MWV-02-07	3547.00*	3544.2
MWV-02-08	3546.52*	3543.5
MWV-02-10	3548.40	3545.4
MWV-02-11	3546.79*	3544.0
MWV-02-12	3543.32*	3540.3
MWV-02-13	3545.59*	3542.7
MWV-02-14	3544.53*	3541.3
MWV-02-15	3543.29*	3540.2
MWV-02-16	3544.24*	3541.0
MWV-02-18	3547.70*	3542.7
MWV-03	3555.30*	3552.4
MWV-03-01	3542.56*	3539.9
MWV-03-02	3541.08*	3538.6
MWV-03-03	3544.72*	3542.3
MWV-03-04	3553.45*	3555.7
MWV-04	3560.99*	3547.8
MWV-05	3543.77*	3540.6
MWV-06	3544.50*	3541.8
MWV-07	3546.49*	3546.0
MWV-08	3543.73*	3540.5
MWV-09	3542.82*	3540.4
P-01	3530.21*	3522.9
P-02	3544.73*	3542.3
P-03	3536.93*	3534.4
P-04	3515.77*	3513.5
P-05	3507.48*	3504.9
P-06	3492.15*	3491.5
P-07	3525.34*	3522.6
P-08	3521.05*	3517.8
P-09	3508.98*	3505.3
P-10	3526.61*	3523.7
P-11	3556.63*	3555.6
P-12	3503.97*	3501.3
P-13	3537.07*	3533.8
MWV-02	29.96	MWV-02
P-01	27.42	P-01
EB-01	23.06	EB-01
EB-03	43.75	EB-03
EB-04	43.15	EB-04
EB-05	33.85	EB-05
EB-06	22.41	EB-06
EB-07	26.62	EB-07
EB-08	26.20	EB-08
EB-09	26.70	EB-09
EB-10	37.11	EB-10
EB-11	37.70	EB-11
EB-12	40.28	EB-12
EB-13	50.01	EB-13
EB-14	51.85	EB-14
EB-15	53.66	EB-15
EB-16	53.85	EB-16
EB-17	53.28	EB-17
EB-18	47.84	EB-18
EB-19	49.97	EB-19
EB-20	43.98	EB-20
EB-21	43.26	EB-21
EB-22	43.48	EB-22
EB-23	43.13	EB-23
EB-24	34.72	EB-24
EB-25	32.48	EB-25
EB-26	32.01	EB-26
EB-27	31.99	EB-27
EB-28	31.01	EB-28
EB-29	24.61	EB-29
EB-30	24.26	EB-30
EB-31	23.90	EB-31
EB-32	23.60	EB-32
EB-33	23.26	EB-33
EB-34	23.01	EB-34
EB-35	22.76	EB-35
EB-36	22.51	EB-36
EB-37	22.26	EB-37
EB-38	22.01	EB-38
EB-39	21.76	EB-39
EB-40	21.51	EB-40
EB-41	21.26	EB-41
EB-42	21.01	EB-42
EB-43	20.76	EB-43
EB-44	20.51	EB-44
EB-45	20.26	EB-45
EB-46	20.01	EB-46
EB-47	19.76	EB-47
EB-48	19.51	EB-48
EB-49	19.26	EB-49
EB-50	19.01	EB-50
EB-51	18.76	EB-51
EB-52	18.51	EB-52
EB-53	18.26	EB-53
EB-54	18.01	EB-54
EB-55	17.76	EB-55
EB-56	17.51	EB-56
EB-57	17.26	EB-57
EB-58	17.01	EB-58
EB-59	16.76	EB-59
EB-60	16.51	EB-60
EB-61	16.26	EB-61
EB-62	16.01	EB-62
EB-63	15.76	EB-63
EB-64	15.51	EB-64
EB-65	15.26	EB-65
EB-66	15.01	EB-66
EB-67	14.76	EB-67
EB-68	14.51	EB-68
EB-69	14.26	EB-69
EB-70	14.01	EB-70
EB-71	13.76	EB-71
EB-72	13.51	EB-72
EB-73	13.26	EB-73
EB-74	13.01	EB-74
EB-75	12.76	EB-75
EB-76	12.51	EB-76
EB-77	12.26	EB-77
EB-78	12.01	EB-78
EB-79	11.76	EB-79
EB-80	11.51	EB-80
EB-81	11.26	EB-81
EB-82	11.01	EB-82
EB-83	10.76	EB-83
EB-84	10.51	EB-84
EB-85	10.26	EB-85
EB-86	10.01	EB-86
EB-87	9.76	EB-87
EB-88	9.51	EB-88
EB-89	9.26	EB-89
EB-90	9.01	EB-90
EB-91	8.76	EB-91
EB-92	8.51	EB-92
EB-93	8.26	EB-93
EB-94	8.01	EB-94
EB-95	7.76	EB-95
EB-96	7.51	EB-96
EB-97	7.26	EB-97
EB-98	7.01	EB-98
EB-99	6.76	EB-99
EB-100	6.51	EB-100
EB-101	6.26	EB-101
EB-102	6.01	EB-102
EB-103	5.76	EB-103
EB-104	5.51	EB-104
EB-105	5.26	EB-105
EB-106	5.01	EB-106
EB-107	4.76	EB-107
EB-108	4.51	EB-108
EB-109	4.26	EB-109
EB-110	4.01	EB-110
EB-111	3.76	EB-111
EB-112	3.51	EB-112
EB-113	3.26	EB-113
EB-114	3.01	EB-114
EB-115	2.76	EB-115
EB-116	2.51	EB-116
EB-117	2.26	EB-117
EB-118	2.01	EB-118
EB-119	1.76	EB-119
EB-120	1.51	EB-120
EB-121	1.26	EB-121
EB-122	1.01	EB-122
EB-123	0.76	EB-123
EB-124	0.51	EB-124
EB-125	0.26	EB-125
EB-126	0.01	EB-126
EB-127	-0.25	EB-127
EB-128	-0.51	EB-128
EB-129	-0.76	EB-129
EB-130	-1.01	EB-130
EB-131	-1.26	EB-131
EB-132	-1.51	EB-132
EB-133	-1.76	EB-133
EB-134	-2.01	EB-134
EB-135	-2.26	EB-135
EB-136	-2.51	EB-136
EB-137	-2.76	EB-137
EB-138	-3.01	EB-138
EB-139	-3.26	EB-139
EB-140	-3.51	EB-140
EB-141	-3.76	EB-141
EB-142	-4.01	EB-142
EB-143	-4.26	EB-143
EB-144	-4.51	EB-144
EB-145	-4.76	EB-145
EB-146	-5.01	EB-146
EB-147	-5.26	EB-147
EB-148	-5.51	EB-148
EB-149	-5.76	EB-149
EB-150	-6.01	EB-150
EB-151	-6.26	EB-151
EB-152	-6.51	EB-152
EB-153	-6.76	EB-153
EB-154	-7.01	EB-154
EB-155	-7.26	EB-155
EB-156	-7.51	EB-156
EB-157	-7.76	EB-157
EB-158	-8.01	EB-158
EB-159	-8.26	EB-159
EB-160	-8.51	EB-160
EB-161	-8.76	EB-161
EB-162	-9.01	EB-162
EB-163	-9.26	EB-163
EB-164	-9.51	EB-164
EB-165	-9.76	EB-165
EB-166	-10.01	EB-166
EB-167	-10.26	EB-167
EB-168	-10.51	EB-168
EB-169	-10.76	EB-169
EB-170	-11.01	EB-170
EB-171	-11.26	EB-171
EB-172	-11.51	EB-172
EB-173	-11.76	EB-173
EB-174	-12.01	EB-174
EB-175	-12.26	EB-175
EB-176	-12.51	EB-176
EB-177	-12.76	EB-177
EB-178	-13.01	EB-178
EB-179	-13.26	EB-179
EB-180	-13.51	EB-180
EB-181	-	

## MONITORING WELL DATA

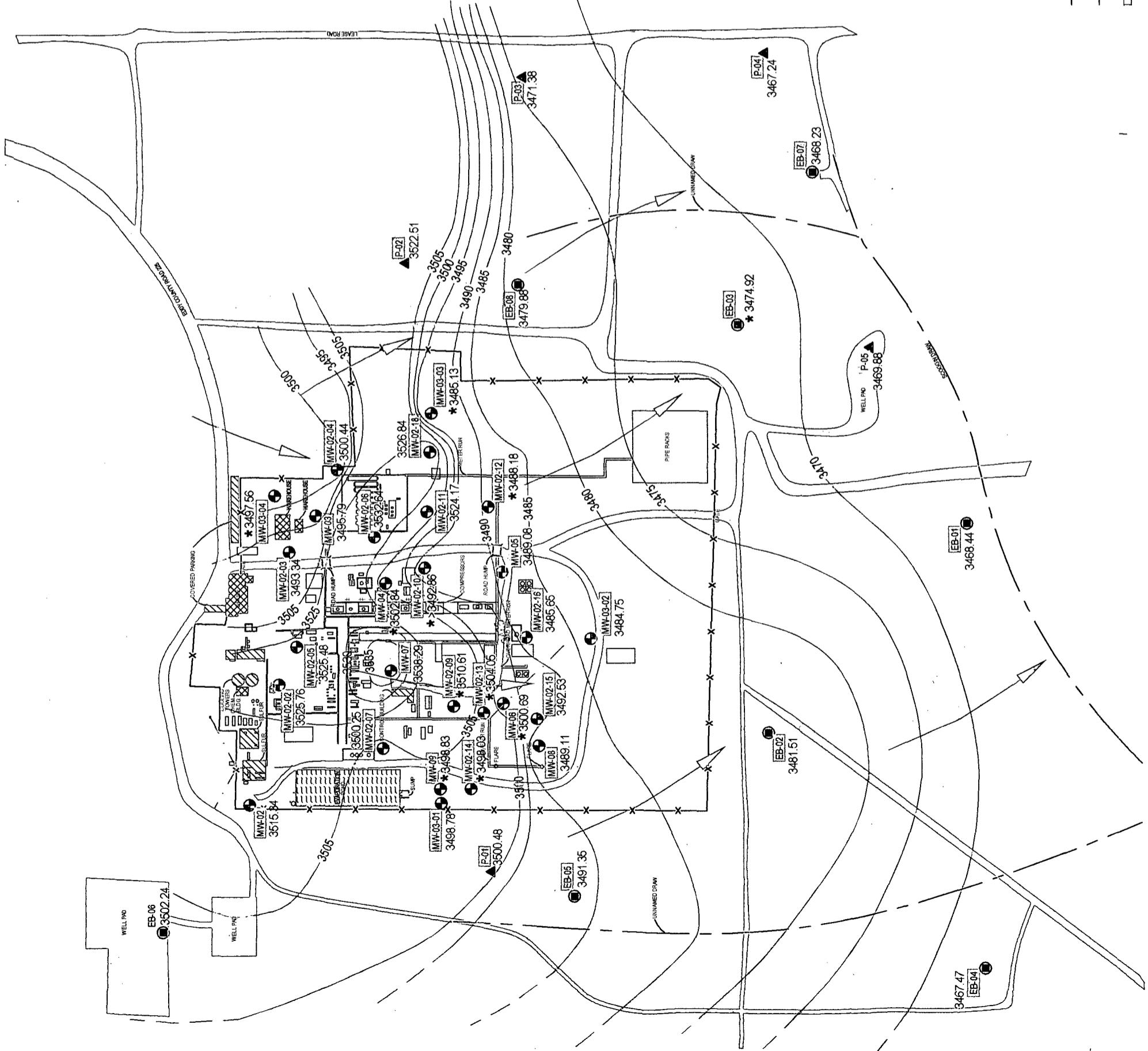
WELL NUMBER	TOP OF CASING ELEVATION (FEET AMSL)	GROUND ELEVATION (FEET) AMSL
MW-02	3548.19'	3545.3'
MW-02-02	3552.26'	3549.3'
MW-02-03	3556.03'	3553.0'
MW-02-04	3553.79'	3550.8'
MW-02-05	3552.69'	3549.8'
MW-02-08	3550.82'	3548.3'
MW-02-07	3547.00'	3544.2'
MW-02-09	3546.52'	3543.5'
MW-02-10	3548.40'	3545.4'
MW-02-11	3546.79'	3544.0'
MW-02-12	3543.32'	3540.3'
MW-02-13	3546.59'	3542.7'
MW-02-14	3544.53'	3541.3'
MW-02-15	3543.29'	3540.2'
MW-02-16	3544.24'	3541.0'
MW-02-18	3547.70'	3542.7'
MW-02-19	3555.30'	3552.4'
MW-03-01	3542.58'	3539.9'
MW-03-02	3541.08'	3538.6'
MW-03-03	3544.72'	3542.3'
MW-03-04	3558.45'	3555.7'
MW-04	3550.89'	3547.8'
MW-05	3543.77'	3540.6'
MW-06	3544.50'	3541.8'
MW-07	3546.49'	3546.0'
MW-08	3543.73'	3540.5'
MW-09	3542.82'	3540.4'
P-01	3530.21'	3527.9'
P-02	3544.73'	3542.3'
P-03	3538.83'	3534.4'
P-04	3515.77'	3513.5'
P-05	3507.48'	3504.9'
EB-01	3492.15'	3491.5'
EB-02	3525.34'	3522.6'
EB-03	3521.05'	3517.8'
EB-04	3508.38'	3505.3'
EB-05	3526.61'	3523.7'
EB-06	3556.63'	3555.6'
EB-07	3503.97'	3501.3'
EB-08	3531.07'	3533.8'
MW-02	30.94	30.94
P-05	44.61	44.61
P-04	44.73	44.73
EB-01	22.16	22.16
EB-02	39.94	39.94
EB-03	31.97	31.97
EB-04	34.61	34.61
EB-05	37.43	37.43
EB-06	45.90	45.90
EB-07	53.58	53.58
EB-08	60.91	60.91
EB-09	26.92	26.92
EB-10	32.88	32.88
EB-11	44.33	44.33
EB-12	51.94	51.94
EB-13	51.65	51.65
EB-14	51.36	51.36
EB-15	47.68	47.68
EB-16	40.56	40.56
EB-17	37.91	37.91
EB-18	33.41	33.41
EB-19	32.98	32.98
EB-20	32.20	32.20
EB-21	30.75	30.75
EB-22	24.77	24.77
EB-23	21.77	21.77
EB-24	18.33	18.33
EB-25	15.23	15.23
EB-26	13.08	13.08
EB-27	11.51	11.51
EB-28	10.00	10.00
EB-29	8.51	8.51
EB-30	7.00	7.00
EB-31	5.51	5.51
EB-32	4.00	4.00
EB-33	2.51	2.51
EB-34	1.00	1.00
EB-35	0.51	0.51
EB-36	0.00	0.00
EB-37	-0.51	-0.51
EB-38	-1.00	-1.00
EB-39	-2.51	-2.51
EB-40	-4.00	-4.00
EB-41	-5.51	-5.51
EB-42	-7.00	-7.00
EB-43	-8.51	-8.51
EB-44	-10.00	-10.00
EB-45	-11.51	-11.51
EB-46	-13.08	-13.08
EB-47	-15.23	-15.23
EB-48	-18.33	-18.33
EB-49	-21.77	-21.77
EB-50	-24.77	-24.77
EB-51	-30.75	-30.75
EB-52	-37.91	-37.91
EB-53	-51.94	-51.94
EB-54	-51.65	-51.65
EB-55	-51.36	-51.36
EB-56	-47.68	-47.68
EB-57	-30.00	-30.00
EB-58	-10.00	-10.00
EB-59	-0.51	-0.51
EB-60	0.00	0.00
EB-61	0.51	0.51
EB-62	1.00	1.00
EB-63	2.51	2.51
EB-64	4.00	4.00
EB-65	5.51	5.51
EB-66	7.00	7.00
EB-67	8.51	8.51
EB-68	10.00	10.00
EB-69	11.51	11.51
EB-70	13.08	13.08
EB-71	15.23	15.23
EB-72	18.33	18.33
EB-73	21.77	21.77
EB-74	24.77	24.77
EB-75	30.75	30.75
EB-76	37.91	37.91
EB-77	51.94	51.94
EB-78	51.65	51.65
EB-79	51.36	51.36
EB-80	47.68	47.68
EB-81	30.00	30.00
EB-82	10.00	10.00
EB-83	0.51	0.51
EB-84	0.00	0.00
EB-85	-0.51	-0.51
EB-86	-1.00	-1.00
EB-87	-2.51	-2.51
EB-88	-4.00	-4.00
EB-89	-5.51	-5.51
EB-90	-7.00	-7.00
EB-91	-8.51	-8.51
EB-92	-10.00	-10.00
EB-93	-11.51	-11.51
EB-94	-13.08	-13.08
EB-95	-15.23	-15.23
EB-96	-18.33	-18.33
EB-97	-21.77	-21.77
EB-98	-24.77	-24.77
EB-99	-30.75	-30.75
EB-100	-37.91	-37.91
EB-101	-51.94	-51.94
EB-102	-51.65	-51.65
EB-103	-51.36	-51.36
EB-104	-47.68	-47.68
EB-105	-30.00	-30.00
EB-106	-10.00	-10.00
EB-107	-0.51	-0.51
EB-108	0.00	0.00
EB-109	0.51	0.51
EB-110	1.00	1.00
EB-111	2.51	2.51
EB-112	4.00	4.00
EB-113	5.51	5.51
EB-114	7.00	7.00
EB-115	8.51	8.51
EB-116	10.00	10.00
EB-117	11.51	11.51
EB-118	13.08	13.08
EB-119	15.23	15.23
EB-120	18.33	18.33
EB-121	21.77	21.77
EB-122	24.77	24.77
EB-123	30.75	30.75
EB-124	37.91	37.91
EB-125	51.94	51.94
EB-126	51.65	51.65
EB-127	51.36	51.36
EB-128	47.68	47.68
EB-129	30.00	30.00
EB-130	10.00	10.00
EB-131	0.51	0.51
EB-132	0.00	0.00
EB-133	-0.51	-0.51
EB-134	-1.00	-1.00
EB-135	-2.51	-2.51
EB-136	-4.00	-4.00
EB-137	-5.51	-5.51
EB-138	-7.00	-7.00
EB-139	-8.51	-8.51
EB-140	-10.00	-10.00
EB-141	-11.51	-11.51
EB-142	-13.08	-13.08
EB-143	-15.23	-15.23
EB-144	-18.33	-18.33
EB-145	-21.77	-21.77
EB-146	-24.77	-24.77
EB-147	-30.75	-30.75
EB-148	-37.91	-37.91
EB-149	-51.94	-51.94
EB-150	-51.65	-51.65
EB-151	-51.36	-51.36
EB-152	-47.68	-47.68
EB-153	-30.00	-30.00
EB-154	-10.00	-10.00
EB-155	-0.51	-0.51
EB-156	0.00	0.00
EB-157	0.51	0.51
EB-158	1.00	1.00
EB-159	2.51	2.51
EB-160	4.00	4.00
EB-161	5.51	5.51
EB-162	7.00	7.00
EB-163	8.51	8.51
EB-164	10.00	10.00
EB-165	11.51	11.51
EB-166	13.08	13.08
EB-167	15.23	15.23
EB-168	18.33	18.33
EB-169	21.77	21.77
EB-170	24.77	24.77
EB-171	30.75	30.75
EB-172	37.91	37.91
EB-173	51.94	51.94
EB-174	51.65	51.65
EB-175	51.36	51.36
EB-176	47.68	47.68
EB-177	30.00	30.00
EB-178</td		

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET AMSL)	GROUND ELEVATION (FEET AMSL)
MW-02	3548.19	3545.3
MW-02-02	3552.26	3549.3
MW-02-03	3556.03	3553.0
MW-02-04	3553.78	3550.9
MW-02-05	3552.69	3549.9
MW-02-06	3550.82	3548.3
MW-02-07	3547.00	3544.2
MW-02-09	3546.52	3543.5
MW-02-10	3548.40	3545.4
MW-02-11	3546.78	3542.7
MW-02-12	3543.32	3540.3
MW-02-13	3545.58	3542.7
MW-02-14	3544.53	3541.3
MW-02-15	3543.29	3540.2
MW-02-16	3544.24	3541.0
MW-02-18	3547.70	3542.7
MW-03	3555.30	3552.4
MW-03-01	3542.56	3539.9
MW-03-02	3541.08	3538.6
MW-03-03	3544.72	3542.3
MW-03-04	3559.45	3555.7
MW-04	3550.88	3547.8
MW-05	3543.77	3540.6
MW-06	3544.50	3541.8
MW-07	3546.49	3548.0
MW-08	3543.73	3540.5
MW-09	3542.82	3540.4
P-01	3530.21	3527.9
P-02	3544.73	3542.3
P-03	3536.83	3534.4
P-04	3515.77	3513.5
P-05	3507.48	3504.9
P-06	3492.15	3491.5
P-07	3525.34	3522.6
P-08	3521.05	3517.8
P-09	3508.38	3505.3
P-10	3526.61	3523.7
P-11	3556.63	3555.6
P-12	3503.97	3501.3
P-13	3537.07	3533.8

## LEGEND

- MONITORING WELL LOCATION AND GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, (FEET AMSL), MARCH 26-27, 2007
- PIEZOMETER (FLUID LEVEL) LOCATION AND GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, (FEET AMSL), MARCH 26-27, 2007
- MONITORING WELL AND PIEZOMETER NEST LOCATION AND GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, (FEET AMSL), MARCH 26-27, 2007
- \* - APPARENT GROUNDWATER FLOW DIRECTION
- CONTOUR OF GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, (FEET AMSL), MARCH 26-27, 2007
- DENOTES FENCE
- DENOTES DRAINAGE / DRAW
- DENOTES ROAD

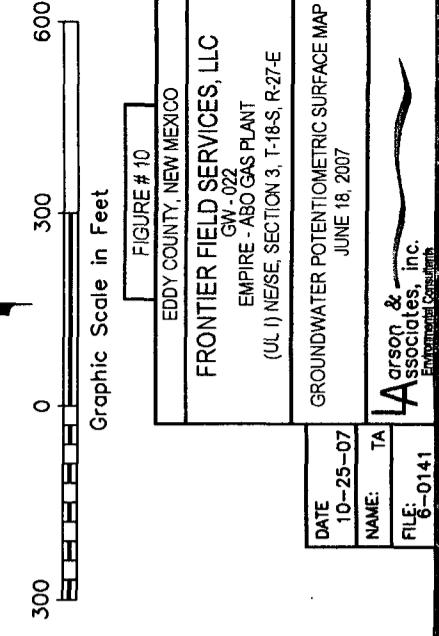
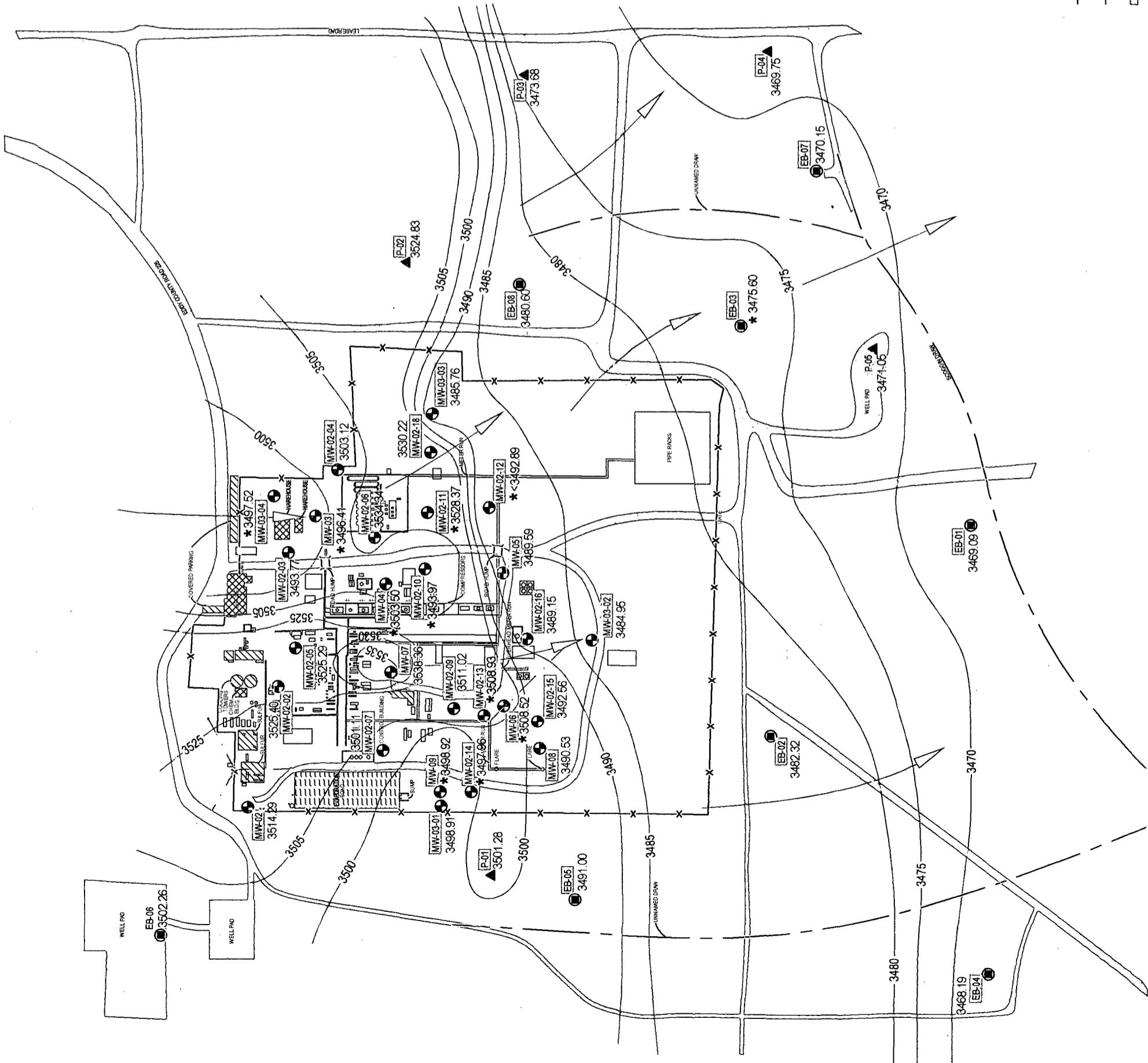


## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MW-02	3548.19	3545.3'
MW-02-02	3552.26	3549.3'
MW-02-03	3556.03	3553.0'
MW-02-04	3553.78	3550.9'
MW-02-05	3552.69	3549.9'
MW-02-06	3550.82	3548.3'
MW-02-07	3547.00	3544.2'
MW-02-09	3546.52	3543.5'
MW-02-10	3548.40	3545.4'
MW-02-11	3546.78	3544.0'
MW-02-12	3543.32	3540.3'
MW-02-13	3545.59	3542.7'
MW-02-14	3544.53	3541.3'
MW-02-15	3543.29	3540.2'
MW-02-16	3544.24	3541.0'
MW-02-18	3547.70	3547.7'
MW-03	3555.30	3552.4'
MW-03-01	3542.56	3539.9'
MW-03-02	3541.03	3538.6'
MW-03-03	3544.72	3542.3'
MW-03-04	3558.45	3555.7'
MW-04	3550.89	3547.8'
MW-05	3543.77	3540.6'
MW-06	3544.50	3541.8'
MW-07	3546.49	3548.0'
MW-08	3543.73	3540.5'
MW-09	3542.82	3540.4'
P-01	3530.21	3527.9'
P-02	3544.73	3542.3'
P-03	3536.83	3534.4'
P-04	3515.77	3513.5'
P-05	3507.48	3504.9'
EB-01	3492.15	3491.5'
EB-02	3525.34	3522.6'
EB-03	3521.05	3517.8'
EB-04	3508.35	3505.3'
EB-05	3526.61	3523.7'
EB-06	3556.63	3555.6'
EB-07	3503.97	3501.3'
EB-08	3537.07	3533.8'

## LEGEND

- MONITORING WELL LOCATION AND GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, (FEET AMSL), JUNE 18, 2007
- PIEZOMETER (FLUID LEVEL) LOCATION AND GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, (FEET AMSL), JUNE 18, 2007
- MONITORING WELL AND PIEZOMETER NEST LOCATION AND GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, (FEET AMSL), JUNE 18, 2007
- GROUNDWATER ELEVATION CORRECTED FOR HYDROCARBON PRODUCT (PSH) IN WELL ASSUMING 0.70 SPECIFIC GRAVITY
- APPARENT GROUNDWATER FLOW DIRECTION
- DENOTES FENCE
- DENOTES DRAINAGE / DRAW
- DENOTES ROAD



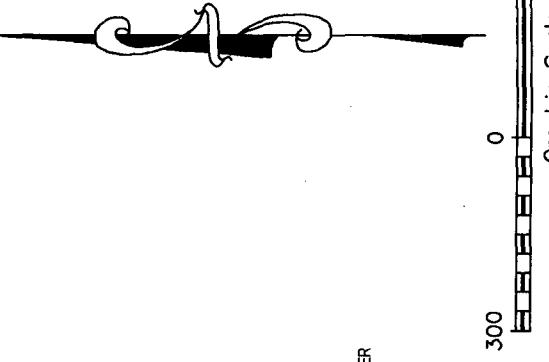
**FRONTIER FIELD SERVICES, LLC**  
EDDY COUNTY, NEW MEXICO  
**EMPIRE - ABO GAS PLANT**  
(UL 1) NESE, SECTION 3, T-18-S, R-27-E  
GROUNDWATER POTENTIOMETRIC SURFACE MAP  
JUNE 18, 2007

DATE: 10-25-07  
NAME: TA  
FILE: 6-0141

Arson & Associates, Inc.  
Environmental Consultants

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MW#-02	348'18"	3545.3'
MW#-02-02	3552.26'	3549.3'
MW#-02-03	3556.03'	3553.0'
MW#-02-04	3553.79'	3550.9'
MW#-02-05	3552.89'	3549.9'
MW#-02-06	3550.82'	3548.3'
MW#-02-07	3547.00'	3544.2'
MW#-02-09	3546.92'	3543.5'
MW#-02-10	3548.40'	3545.4'
MW#-02-11	3546.78'	3544.0'
MW#-02-12	3543.32'	3540.3'
MW#-02-13	3545.59'	3542.7'
MW#-02-14	3544.53'	3541.3'
MW#-02-15	3543.28'	3540.2'
MW#-02-16	3544.24'	3541.0'
MW#-02-18	3547.70'	3542.7'
MW#-03	3555.30'	3552.4'
MW#-03-01	3542.66'	3539.9'
MW#-03-02	3541.08'	3538.6'
MW#-03-03	3544.72'	3542.3'
MW#-03-04	3558.45'	3555.7'
MW#-04	3550.98'	3547.8'
MW#-05	3543.77'	3540.6'
MW#-06	3544.50'	3541.8'
MW#-07	3546.49'	3546.0'
MW#-08	3543.73'	3540.5'
MW#-09	3542.82'	3540.4'
P-01	3550.21'	3527.9'
P-02	3544.73'	3542.3'
P-03	3536.83'	3534.4'
P-04	3515.77'	3513.5'
P-05	3507.48'	3504.9'
E#-01	3492.15'	3491.5'
E#-02	3525.34'	3522.6'
E#-03	3521.05'	3517.8'
E#-04	3508.38'	3505.3'
E#-05	3528.61'	3523.7'
E#-06	3556.93'	3553.6'
E#-07	3503.97'	3501.3'
E#-08	3537.07'	3533.8'



**FIGURE # 11**

EDD COUNTY, NEW MEXICO	
<b>FRONTIER FIELD SERVICES, LLC</b>	
GW-022	
EMPIRE - ABO GAS PLANT	
(UL 1) NESE, SECTION 3, T-18-S, R-27-E	
GROUNDWATER POTENTIOMETRIC SURFACE MAP	
SEPTEMBER 17, 2007	
<b>DATE</b>	10-26-07
<b>NAME:</b>	TA
<b>FILE:</b>	6-0141

**LEGEND**

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET AMSL)	GROUND ELEVATION (FEET AMSL)
MW-02	3548.19	3545.3'
MW-02-02	3552.26	3549.3'
MW-02-03	3555.03	3553.0'
MW-02-04	3553.79	3550.8'
MW-02-05	3552.69	3549.8'
MW-02-06	3550.92	3548.3'
MW-02-07	3547.00	3544.2'
MW-02-08	3546.52	3543.5'
MW-02-10	3546.40	3545.4'
MW-02-11	3546.79	3544.0'
MW-02-12	3543.32	3540.3'
MW-02-13	3545.96	3542.7'
MW-02-14	3544.53	3541.3'
MW-02-15	3543.28	3540.2'
MW-02-16	3544.24	3541.0'
MW-02-18	3547.70	3542.7'
MW-03	3555.30*	3552.4'
MW-03-01	3542.56	3539.9'
MW-03-02	3541.08*	3538.6'
MW-03-03	3544.72*	3542.3'
MW-03-04	3558.45	3555.7'
MW-04	3550.89*	3547.8'
MW-05	3543.77	3540.6'
MW-06	3544.50	3541.8'
MW-07	3546.49	3546.0'
MW-08	3543.73*	3540.5'
MW-09	3542.82	3540.4'
P-01	3530.21*	3527.9'
P-02	3544.73*	3542.3'
P-03	3536.83*	3534.4'
P-04	3515.77*	3513.5'
P-05	3507.48*	3504.8'
EB-01	3492.15*	3491.5'
EB-02	3525.34*	3522.6'
EB-03	3521.05*	3517.8'
EB-04	3508.38*	3505.3'
EB-05	3526.61*	3523.7'
EB-06	3556.62*	3555.6'
EB-07	3503.97*	3501.3'
EB-08	3537.07*	3533.8'
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EB-200	<0.0002	
EB-201	<0.0002	
EB-202	<0.00	

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MWV-02	3546.19'	3545.3'
MWV-02-02	3552.26'	3549.3'
MWV-02-03	3556.03'	3553.0'
MWV-02-04	3553.79'	3550.8'
MWV-02-05	3552.68'	3549.9'
MWV-02-06	3550.82'	3548.3'
MWV-02-07	3547.00'	3544.2'
MWV-02-09	3546.52'	3543.5'
MWV-02-10	3548.40'	3545.4'
MWV-02-11	3546.79'	3544.0'
MWV-02-12	3543.32'	3540.3'
MWV-02-13	3545.59'	3542.7'
MWV-02-14	3544.53'	3541.3'
MWV-02-15	3543.29'	3540.2'
MWV-02-16	3544.24'	3541.0'
MWV-02-18	3547.70'	3542.7'
MWV-03	3555.30'	3552.4'
MWV-03-01	3542.56'	3539.9'
MWV-03-02	3541.08'	3538.6'
MWV-03-03	3544.72'	3542.3'
MWV-03-04	3553.45'	3555.7'
MWV-04	3550.99'	3547.8'
MWV-05	3543.77'	3540.6'
MWV-06	3544.50'	3541.6'
MWV-07	3546.49'	3546.0'
MWV-08	3543.73'	3540.5'
MWV-09	3542.82'	3540.4'
P-01	3530.21'	3527.9'
P-02	3544.73'	3542.3'
P-03	3536.85'	3534.4'
P-04	3515.77'	3513.5'
P-05	3507.48'	3504.9'
EB-01	3492.15'	3491.5'
EB-02	3525.34'	3522.6'
EB-03	3521.05'	3517.8'
EB-04	3508.38'	3505.3'
EB-05	3526.61'	3523.7'
EB-06	3556.53'	3555.6'
EB-07	3503.97'	3501.3'
EB-08	3537.07'	3533.8'
EB-09	3537.07'	3533.8'
EB-10	3537.07'	3533.8'
EB-11	3537.07'	3533.8'
EB-12	3537.07'	3533.8'
EB-13	3537.07'	3533.8'
EB-14	3537.07'	3533.8'
EB-15	3537.07'	3533.8'
EB-16	3537.07'	3533.8'
EB-17	3537.07'	3533.8'
EB-18	3537.07'	3533.8'
EB-19	3537.07'	3533.8'
EB-20	3537.07'	3533.8'
EB-21	3537.07'	3533.8'
EB-22	3537.07'	3533.8'
EB-23	3537.07'	3533.8'
EB-24	3537.07'	3533.8'
EB-25	3537.07'	3533.8'
EB-26	3537.07'	3533.8'
EB-27	3537.07'	3533.8'
EB-28	3537.07'	3533.8'
EB-29	3537.07'	3533.8'
EB-30	3537.07'	3533.8'
EB-31	3537.07'	3533.8'
EB-32	3537.07'	3533.8'
EB-33	3537.07'	3533.8'
EB-34	3537.07'	3533.8'
EB-35	3537.07'	3533.8'
EB-36	3537.07'	3533.8'
EB-37	3537.07'	3533.8'
EB-38	3537.07'	3533.8'
EB-39	3537.07'	3533.8'
EB-40	3537.07'	3533.8'
EB-41	3537.07'	3533.8'
EB-42	3537.07'	3533.8'
EB-43	3537.07'	3533.8'
EB-44	3537.07'	3533.8'
EB-45	3537.07'	3533.8'
EB-46	3537.07'	3533.8'
EB-47	3537.07'	3533.8'
EB-48	3537.07'	3533.8'
EB-49	3537.07'	3533.8'
EB-50	3537.07'	3533.8'
EB-51	3537.07'	3533.8'
EB-52	3537.07'	3533.8'
EB-53	3537.07'	3533.8'
EB-54	3537.07'	3533.8'
EB-55	3537.07'	3533.8'
EB-56	3537.07'	3533.8'
EB-57	3537.07'	3533.8'
EB-58	3537.07'	3533.8'
EB-59	3537.07'	3533.8'
EB-60	3537.07'	3533.8'
EB-61	3537.07'	3533.8'
EB-62	3537.07'	3533.8'
EB-63	3537.07'	3533.8'
EB-64	3537.07'	3533.8'
EB-65	3537.07'	3533.8'
EB-66	3537.07'	3533.8'
EB-67	3537.07'	3533.8'
EB-68	3537.07'	3533.8'
EB-69	3537.07'	3533.8'
EB-70	3537.07'	3533.8'
EB-71	3537.07'	3533.8'
EB-72	3537.07'	3533.8'
EB-73	3537.07'	3533.8'
EB-74	3537.07'	3533.8'
EB-75	3537.07'	3533.8'
EB-76	3537.07'	3533.8'
EB-77	3537.07'	3533.8'
EB-78	3537.07'	3533.8'
EB-79	3537.07'	3533.8'
EB-80	3537.07'	3533.8'
EB-81	3537.07'	3533.8'
EB-82	3537.07'	3533.8'
EB-83	3537.07'	3533.8'
EB-84	3537.07'	3533.8'
EB-85	3537.07'	3533.8'
EB-86	3537.07'	3533.8'
EB-87	3537.07'	3533.8'
EB-88	3537.07'	3533.8'
EB-89	3537.07'	3533.8'
EB-90	3537.07'	3533.8'
EB-91	3537.07'	3533.8'
EB-92	3537.07'	3533.8'
EB-93	3537.07'	3533.8'
EB-94	3537.07'	3533.8'
EB-95	3537.07'	3533.8'
EB-96	3537.07'	3533.8'
EB-97	3537.07'	3533.8'
EB-98	3537.07'	3533.8'
EB-99	3537.07'	3533.8'
EB-100	3537.07'	3533.8'
EB-101	3537.07'	3533.8'
EB-102	3537.07'	3533.8'
EB-103	3537.07'	3533.8'
EB-104	3537.07'	3533.8'
EB-105	3537.07'	3533.8'
EB-106	3537.07'	3533.8'
EB-107	3537.07'	3533.8'
EB-108	3537.07'	3533.8'
EB-109	3537.07'	3533.8'
EB-110	3537.07'	3533.8'
EB-111	3537.07'	3533.8'
EB-112	3537.07'	3533.8'
EB-113	3537.07'	3533.8'
EB-114	3537.07'	3533.8'
EB-115	3537.07'	3533.8'
EB-116	3537.07'	3533.8'
EB-117	3537.07'	3533.8'
EB-118	3537.07'	3533.8'
EB-119	3537.07'	3533.8'
EB-120	3537.07'	3533.8'
EB-121	3537.07'	3533.8'
EB-122	3537.07'	3533.8'
EB-123	3537.07'	3533.8'
EB-124	3537.07'	3533.8'
EB-125	3537.07'	3533.8'
EB-126	3537.07'	3533.8'
EB-127	3537.07'	3533.8'
EB-128	3537.07'	3533.8'
EB-129	3537.07'	3533.8'
EB-130	3537.07'	3533.8'
EB-131	3537.07'	3533.8'
EB-132	3537.07'	3533.8'
EB-133	3537.07'	3533.8'
EB-134	3537.07'	3533.8'
EB-135	3537.07'	3533.8'
EB-136	3537.07'	3533.8'
EB-137	3537.07'	3533.8'
EB-138	3537.07'	3533.8'
EB-139	3537.07'	3533.8'
EB-140	3537.07'	3533.8'
EB-141	3537.07'	3533.8'
EB-142	3537.07'	3533.8'
EB-143	3537.07'	3533.8'
EB-144	3537.07'	3533.8'
EB-145	3537.07'	3533.8'
EB-146	3537.07'	3533.8'
EB-147	3537.07'	3533.8'
EB-148	3537.07'	3533.8'
EB-149	3537.07'	3533.8'
EB-150	3537.07'	3533.8'
EB-151	3537.07'	3533.8'
EB-152	3537.07'	3533.8'
EB-153	3537.07'	3533.8'
EB-154	3537.07'	3533.8'
EB-155	3537.07'	3533.8'
EB-156	3537.07'	3533.8'
EB-157	3537.07'	3533.8'
EB-158	3537.07'	3533.8'
EB-159	3537.07'	3533.8'
EB-160	3537.07'	3533.8'
EB-161	3537.07'	3533.8'
EB-162	3537.07'	3533.8'
EB-163	3537.07'	3533.8'
EB-164	3537.07'	3533.8'
EB-165	3537.07'	3533.8'
EB-166	3537.07'	3533.8'
EB-167	3537.07'	3533.8'
EB-168	3537.07'	3533.8'
EB-169	3537.07'	3533.8'
EB-170	3	

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MW-02-02	3548.18'	3545.3'
MW-02-02	3552.26'	3549.3'
MW-02-03	3556.03'	3553.0'
MW-02-04	3553.76'	3550.9'
MW-02-05	3552.68'	3549.9'
MW-02-06	3550.82'	3548.3'
MW-02-07	3547.06'	3544.2'
MW-02-09	3546.52'	3543.5'
MW-02-10	3548.40'	3545.4'
MW-02-11	3546.78'	3544.0'
MW-02-12	3543.32'	3540.3'
MW-02-13	3545.59'	3542.7'
MW-02-14	3544.55'	3541.3'
MW-02-15	3543.28'	3540.2'
MW-02-16	3544.24'	3541.0'
MW-02-18	3547.70'	3542.7'
MW-03	3555.30'	3552.4'
MW-03-01	3542.56'	3539.9'
MW-03-02	3541.03'	3538.6'
MW-03-03	3544.72'	3542.3'
MW-03-04	3558.45'	3555.7'
MW-04	3550.98'	3547.8'
MW-05	3543.77'	3540.6'
MW-06	3544.50'	3541.8'
MW-07	3546.49'	3548.0'
MW-08	3543.73'	3540.5'
MW-09	3542.82'	3540.4'
P-01	3530.21'	3527.9'
P-02	3544.73'	3542.3'
P-03	3536.83'	3534.4'
P-04	3515.77'	3513.5'
P-05	3507.48'	3504.9'
EB-01	3492.16'	3491.5'
EB-02	3525.34'	3522.6'
EB-03	3521.05'	3517.8'
EB-04	3508.38'	3505.3'
EB-05	3526.61'	3523.7'
EB-06	3556.63'	3555.6'
EB-07	3503.97'	3501.3'
EB-08	3537.07'	3533.8'
EB-09	<0.0002	0.0002
EB-10	<0.0002	0.0002
EB-11	<0.0002	0.0002
EB-12	<0.0002	0.0002
EB-13	<0.0002	0.0002
EB-14	<0.0002	0.0002
EB-15	<0.0002	0.0002
EB-16	<0.0002	0.0002
EB-17	<0.0002	0.0002
EB-18	<0.0002	0.0002
EB-19	<0.0002	0.0002
EB-20	<0.0002	0.0002
EB-21	<0.0002	0.0002
EB-22	<0.0002	0.0002
EB-23	<0.0002	0.0002
EB-24	<0.0002	0.0002
EB-25	<0.0002	0.0002
EB-26	<0.0002	0.0002
EB-27	<0.0002	0.0002
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EB-29	<0.0002	0.0002
EB-30	<0.0002	0.0002
EB-31	<0.0002	0.0002
EB-32	<0.0002	0.0002
EB-33	<0.0002	0.0002
EB-34	<0.0002	0.0002
EB-35	<0.0002	0.0002
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EB-37	<0.0002	0.0002
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EB-39	<0.0002	0.0002
EB-40	<0.0002	0.0002
EB-41	<0.0002	0.0002
EB-42	<0.0002	0.0002
EB-43	<0.0002	0.0002
EB-44	<0.0002	0.0002
EB-45	<0.0002	0.0002
EB-46	<0.0002	0.0002
EB-47	<0.0002	0.0002
EB-48	<0.0002	0.0002
EB-49	<0.0002	0.0002
EB-50	<0.0002	0.0002
EB-51	<0.0002	0.0002
EB-52	<0.0002	0.0002
EB-53	<0.0002	0.0002
EB-54	<0.0002	0.0002
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EB-56	<0.0002	0.0002
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EB-59	<0.0002	0.0002
EB-60	<0.0002	0.0002
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EB-62	<0.0002	0.0002
EB-63	<0.0002	0.0002
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EB-65	<0.0002	0.0002
EB-66	<0.0002	0.0002
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EB-68	<0.0002	0.0002
EB-69	<0.0002	0.0002
EB-70	<0.0002	0.0002
EB-71	<0.0002	0.0002
EB-72	<0.0002	0.0002
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EB-74	<0.0002	0.0002
EB-75	<0.0002	0.0002
EB-76	<0.0002	0.0002
EB-77	<0.0002	0.0002
EB-78	<0.0002	0.0002
EB-79	<0.0002	0.0002
EB-80	<0.0002	0.0002
EB-81	<0.0002	0.0002
EB-82	<0.0002	0.0002
EB-83	<0.0002	0.0002
EB-84	<0.0002	0.0002
EB-85	<0.0002	0.0002
EB-86	<0.0002	0.0002
EB-87	<0.0002	0.0002
EB-88	<0.0002	0.0002
EB-89	<0.0002	0.0002
EB-90	<0.0002	0.0002
EB-91	<0.0002	0.0002
EB-92	<0.0002	0.0002
EB-93	<0.0002	0.0002
EB-94	<0.0002	0.0002
EB-95	<0.0002	0.0002
EB-96	<0.0002	0.0002
EB-97	<0.0002	0.0002
EB-98	<0.0002	0.0002
EB-99	<0.0002	0.0002
EB-100	<0.0002	0.0002
EB-101	<0.0002	0.0002
EB-102	<0.0002	0.0002
EB-103	<0.0002	0.0002
EB-104	<0.0002	0.0002
EB-105	<0.0002	0.0002
EB-106	<0.0002	0.0002
EB-107	<0.0002	0.0002
EB-108	<0.0002	0.0002
EB-109	<0.0002	0.0002
EB-110	<0.0002	0.0002
EB-111	<0.0002	0.0002
EB-112	<0.0002	0.0002
EB-113	<0.0002	0.0002
EB-114	<0.0002	0.0002
EB-115	<0.0002	0.0002
EB-116	<0.0002	0.0002
EB-117	<0.0002	0.0002
EB-118	<0.0002	0.0002
EB-119	<0.0002	0.0002
EB-120	<0.0002	0.0002
EB-121	<0.0002	0.0002
EB-122	<0.0002	0.0002
EB-123	<0.0002	0.0002
EB-124	<0.0002	0.0002
EB-125	<0.0002	0.0002
EB-126	<0.0002	0.0002
EB-127	<0.0002	0.0002
EB-128	<0.0002	0.0002
EB-129	<0.0002	0.0002
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EB-139	<0.0002	0.0002
EB-140	<0.0002	0.0002
EB-141	<0.0002	0.0002
EB-142	<0.0002	0.0002
EB-143	<0.0002	0.0002
EB-144	<0.0002	0.0002
EB-145	<0.0002	0.0002
EB-146	<0.0002	0.0002
EB-147	<0.0002	0.0002
EB-148	<0.0002	0.0002
EB-149	<0.0002	0.0002
EB-150	<0.0002	0.0002
EB-151	<0.0002	0.0002
EB-152	<0.0002	0.0002
EB-153	<0.0002	0.0002
EB-154	<0.0002	0.0002
EB-155	<0.0002	0.0002
EB-156	<0.0002	0.0002
EB-157	<0.0002	0.0002
EB-158	<0.0002	0.0002
EB-159	<0.0002	0.0002
EB-160	<0.0002	0.0002
EB-161	<0.0002	0.0002
EB-162	<0.0002	0.0002
EB-163	<0.0002	0.0002
EB-164	<0.0002	0.0002
EB-165	<0.0002	0.0002
EB-166	<0.0002	0.0

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) A.M.S.L.	GROUND ELEVATION (FEET) A.M.S.L.
MW-02	3548.19'	3545.3'
MW-02-02	3552.26'	3549.3'
MW-02-03	3556.03'	3553.0'
MW-02-04	3553.79'	3550.9'
MW-02-05	3552.69'	3549.9'
MW-02-06	3550.82'	3548.3'
MW-02-07	3547.00'	3544.2'
MW-02-09	3546.52'	3543.5'
MW-02-10	3548.40'	3545.4'
MW-02-11	3546.79'	3544.0'
MW-02-12	3543.32'	3540.3'
MW-02-13	3545.58'	3542.7'
MW-02-14	3544.53'	3541.3'
MW-02-15	3543.29'	3540.2'
MW-02-16	3544.24'	3541.0'
MW-02-18	3547.70'	3542.7'
MW-03	3555.30'	3552.4'
MW-03-01	3542.56'	3539.9'
MW-03-02	3541.08'	3538.6'
MW-03-03	3544.72'	3542.3'
MW-03-04	3558.45'	3555.7'
MW-03-05	3550.88'	3547.8'
MW-05	3543.77'	3540.6'
MW-06	3544.50'	3541.3'
MW-07	3546.49'	3546.0'
MW-08	3543.73'	3540.5'
MW-09	3542.82'	3540.4'
P-01	3550.21'	3527.9'
P-02	3544.73'	3542.3'
P-03	3538.83'	3534.4'
P-04	3515.77'	3513.5'
P-05	3507.48'	3504.9'
EB-01	3492.15'	3491.5'
EB-02	3525.34'	3522.6'
EB-03	3521.05'	3517.6'
EB-04	3508.38'	3505.3'
EB-05	3526.61'	3523.7'
EB-06	3558.63'	3555.6'
EB-07	3503.97'	3501.3'
EB-08	3537.07'	3533.6'

## LEGEND

- MONITORING WELL LOCATION AND CHLORIDE CONCENTRATION IN GROUNDWATER, (MG/L), MARCH 26-27, 2007
- PIEZOMETER (FLUID LEVEL) LOCATION AND CHLORIDE CONCENTRATION IN GROUNDWATER, (MG/L), MARCH 26-27, 2007
- MONITORING WELL AND PIEZOMETER NEST LOCATION AND CHLORIDE CONCENTRATION IN GROUNDWATER, (MG/L), MARCH 26-27, 2007
- \* - HYDROCARBON PRODUCT (PSH) IN WELL, NO SAMPLE COLLECTED
- CONTOUR OF CHLORIDE CONCENTRATION IN GROUNDWATER, (MG/L), MARCH 26-27, 2007
- DENOTES FENCE
- DENOTES DRAINAGE / DRAWDOWN
- DENOTES ROAD

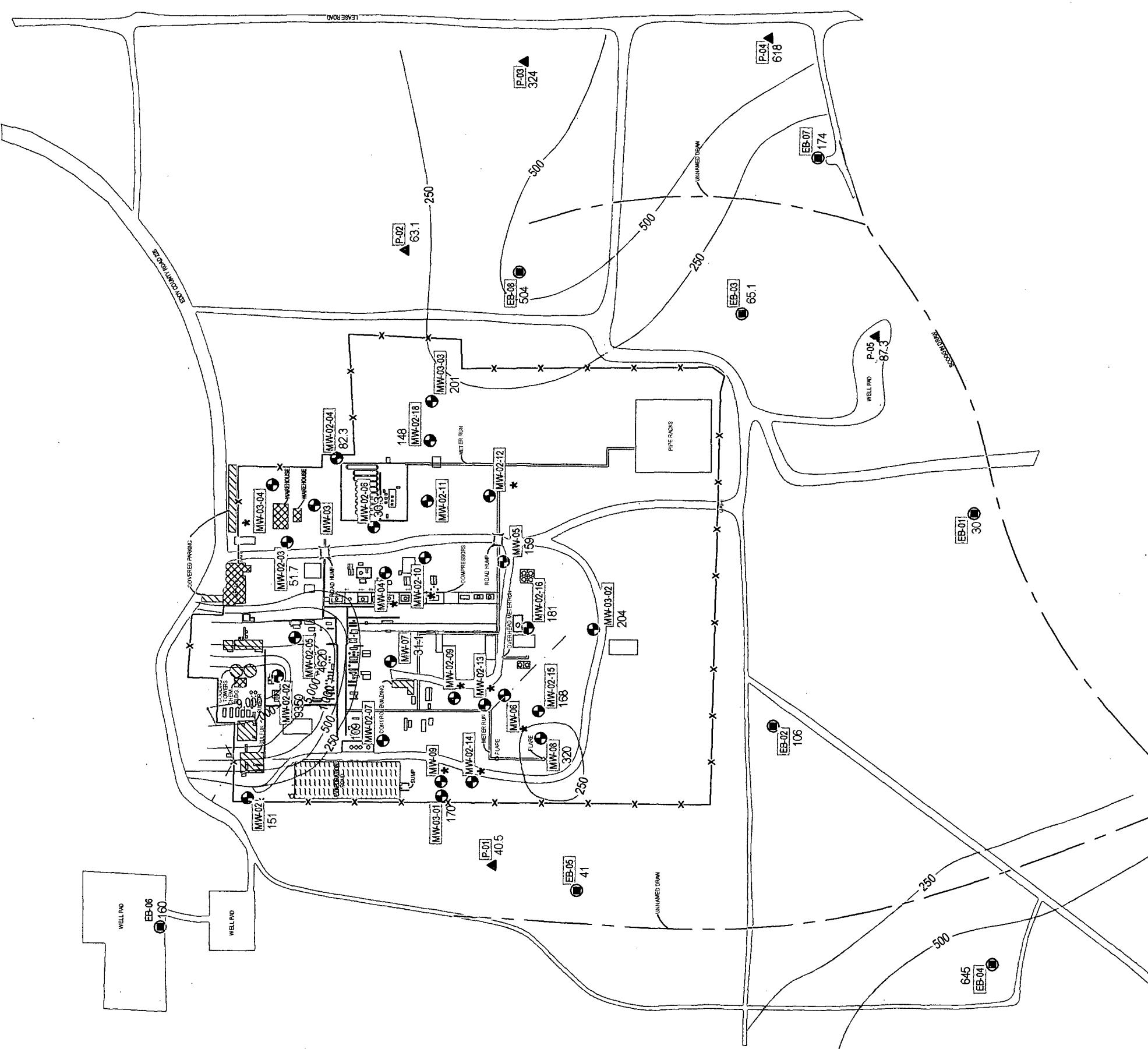


FIGURE # 15

FRONTIER FIELD SERVICES, LLC  
GW-02  
EMPIRE - ABO GAS PLANT  
(UL) NESE, SECTION 3, T-18-S, R-27-E

CHLORIDE CONCENTRATION IN GROUNDWATER  
MARCH 26-27, 2007  
NAME: SJA  
FILE: 6-0141  
DATE: 05-17-07  
Eddy County, New Mexico

WELL PAD  
EB-06  
EB-160



## MONITORING WELL DATA

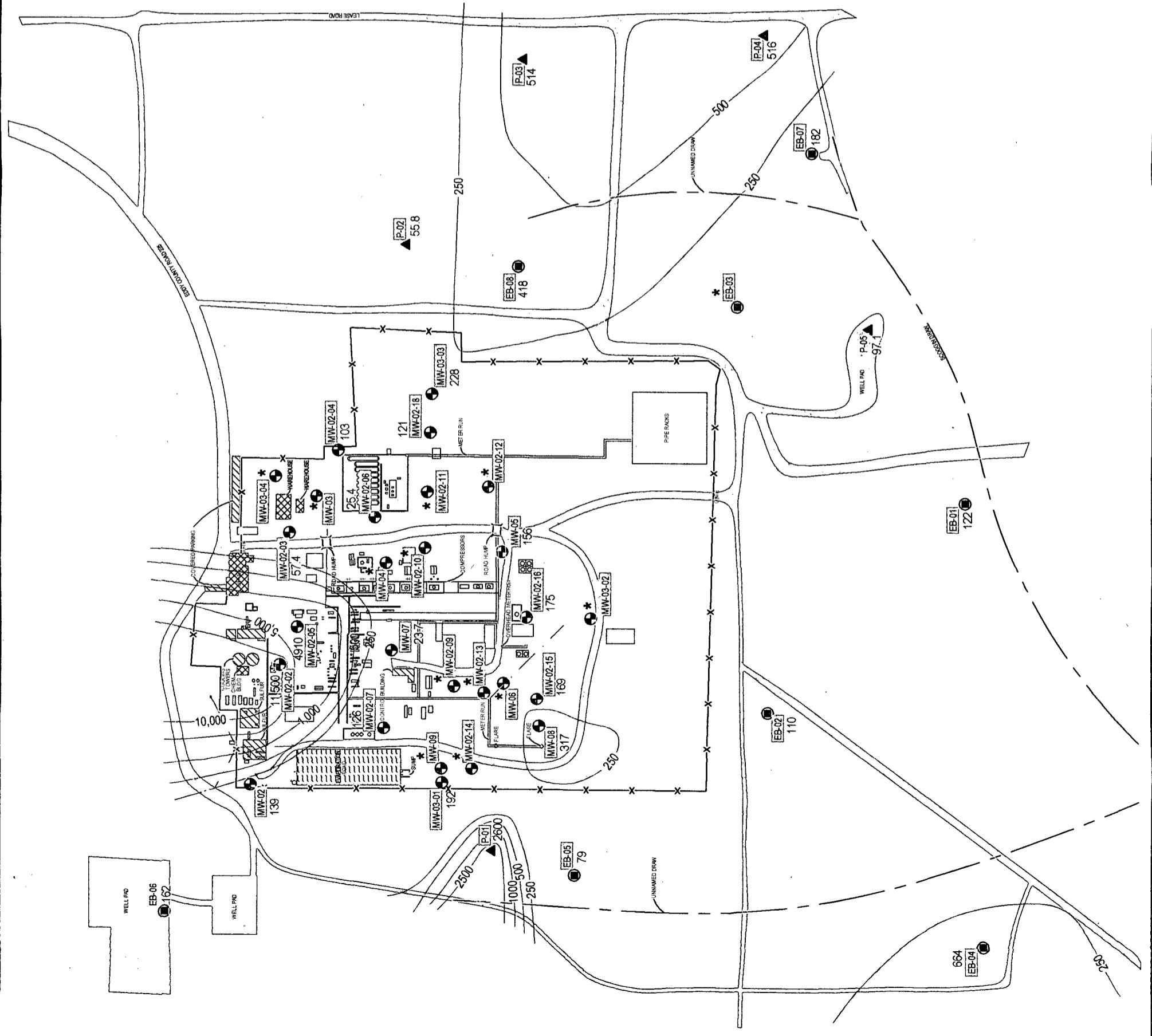
WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MWV-02	3548.19'	3545.3'
MWV-02-02	3552.26'	3549.3'
MWV-02-03	3553.03'	3553.0'
MWV-02-04	3553.79'	3550.9'
MWV-02-05	3552.58'	3549.9'
MWV-02-06	3550.62'	3548.3'
MWV-02-07	3547.00'	3544.2'
MWV-02-09	3546.52'	3543.5'
MWV-02-10	3546.40'	3545.0'
MWV-02-11	3546.79'	3544.0'
MWV-02-12	3543.32'	3540.3'
MWV-02-13	3545.59'	3542.7'
MWV-02-14	3544.53'	3541.3'
MWV-02-15	3543.29'	3540.2'
MWV-02-16	3544.24'	3541.0'
MWV-02-18	3547.70'	3542.7'
MWV-03	3555.30'	3552.4'
MWV-03-01	3542.56'	3539.9'
MWV-03-02	3541.08'	3538.6'
MWV-03-03	3544.72'	3542.3'
MWV-03-04	3558.45'	3555.7'
MWV-04	3550.98'	3547.8'
MWV-05	3543.77'	3540.6'
MWV-06	3544.50'	3541.8'
MWV-07	3546.49'	3546.0'
MWV-08	3543.73'	3540.5'
MWV-09	3542.82'	3540.4'
P-01	3530.21'	3527.9'
P-02	3544.73'	3542.3'
P-03	3536.83'	3534.4'
P-04	3515.77'	3513.5'
P-05	3507.48'	3504.9'
EB-01	3492.15'	3491.5'
EB-02	3525.34'	3522.6'
EB-03	3521.05'	3517.8'
EB-04	3508.38'	3505.3'
EB-05	3526.61'	3523.7'
EB-06	3556.63'	3555.6'
EB-07	3503.97'	3501.3'
EB-08	3537.07'	3533.8'
EB-09	3512.50'	3509.3'
EB-10	3521.00'	3517.8'
EB-11	3526.61'	3523.7'
EB-12	3503.97'	3501.3'
EB-13	3537.07'	3533.8'
EB-14	3512.50'	3509.3'
EB-15	3521.00'	3517.8'
EB-16	3526.61'	3523.7'
EB-17	3503.97'	3501.3'
EB-18	3537.07'	3533.8'
EB-19	3512.50'	3509.3'
EB-20	3521.00'	3517.8'
EB-21	3526.61'	3523.7'
EB-22	3503.97'	3501.3'
EB-23	3537.07'	3533.8'
EB-24	3512.50'	3509.3'
EB-25	3521.00'	3517.8'
EB-26	3526.61'	3523.7'
EB-27	3503.97'	3501.3'
EB-28	3537.07'	3533.8'
EB-29	3512.50'	3509.3'
EB-30	3521.00'	3517.8'
EB-31	3526.61'	3523.7'
EB-32	3503.97'	3501.3'
EB-33	3537.07'	3533.8'
EB-34	3512.50'	3509.3'
EB-35	3521.00'	3517.8'
EB-36	3526.61'	3523.7'
EB-37	3503.97'	3501.3'
EB-38	3537.07'	3533.8'
EB-39	3512.50'	3509.3'
EB-40	3521.00'	3517.8'
EB-41	3526.61'	3523.7'
EB-42	3503.97'	3501.3'
EB-43	3537.07'	3533.8'
EB-44	3512.50'	3509.3'
EB-45	3521.00'	3517.8'
EB-46	3526.61'	3523.7'
EB-47	3503.97'	3501.3'
EB-48	3537.07'	3533.8'
EB-49	3512.50'	3509.3'
EB-50	3521.00'	3517.8'
EB-51	3526.61'	3523.7'
EB-52	3503.97'	3501.3'
EB-53	3537.07'	3533.8'
EB-54	3512.50'	3509.3'
EB-55	3521.00'	3517.8'
EB-56	3526.61'	3523.7'
EB-57	3503.97'	3501.3'
EB-58	3537.07'	3533.8'
EB-59	3512.50'	3509.3'
EB-60	3521.00'	3517.8'
EB-61	3526.61'	3523.7'
EB-62	3503.97'	3501.3'
EB-63	3537.07'	3533.8'
EB-64	3512.50'	3509.3'
EB-65	3521.00'	3517.8'
EB-66	3526.61'	3523.7'
EB-67	3503.97'	3501.3'
EB-68	3537.07'	3533.8'
EB-69	3512.50'	3509.3'
EB-70	3521.00'	3517.8'
EB-71	3526.61'	3523.7'
EB-72	3503.97'	3501.3'
EB-73	3537.07'	3533.8'
EB-74	3512.50'	3509.3'
EB-75	3521.00'	3517.8'
EB-76	3526.61'	3523.7'
EB-77	3503.97'	3501.3'
EB-78	3537.07'	3533.8'
EB-79	3512.50'	3509.3'
EB-80	3521.00'	3517.8'
EB-81	3526.61'	3523.7'
EB-82	3503.97'	3501.3'
EB-83	3537.07'	3533.8'
EB-84	3512.50'	3509.3'
EB-85	3521.00'	3517.8'
EB-86	3526.61'	3523.7'
EB-87	3503.97'	3501.3'
EB-88	3537.07'	3533.8'
EB-89	3512.50'	3509.3'
EB-90	3521.00'	3517.8'
EB-91	3526.61'	3523.7'
EB-92	3503.97'	3501.3'
EB-93	3537.07'	3533.8'
EB-94	3512.50'	3509.3'
EB-95	3521.00'	3517.8'
EB-96	3526.61'	3523.7'
EB-97	3503.97'	3501.3'
EB-98	3537.07'	3533.8'
EB-99	3512.50'	3509.3'
EB-100	3521.00'	3517.8'
EB-101	3526.61'	3523.7'
EB-102	3503.97'	3501.3'
EB-103	3537.07'	3533.8'
EB-104	3512.50'	3509.3'
EB-105	3521.00'	3517.8'
EB-106	3526.61'	3523.7'
EB-107	3503.97'	3501.3'
EB-108	3537.07'	3533.8'
EB-109	3512.50'	3509.3'
EB-110	3521.00'	3517.8'
EB-111	3526.61'	3523.7'
EB-112	3503.97'	3501.3'
EB-113	3537.07'	3533.8'
EB-114	3512.50'	3509.3'
EB-115	3521.00'	3517.8'
EB-116	3526.61'	3523.7'
EB-117	3503.97'	3501.3'
EB-118	3537.07'	3533.8'
EB-119	3512.50'	3509.3'
EB-120	3521.00'	3517.8'
EB-121	3526.61'	3523.7'
EB-122	3503.97'	3501.3'
EB-123	3537.07'	3533.8'
EB-124	3512.50'	3509.3'
EB-125	3521.00'	3517.8'
EB-126	3526.61'	3523.7'
EB-127	3503.97'	3501.3'
EB-128	3537.07'	3533.8'
EB-129	3512.50'	3509.3'
EB-130	3521.00'	3517.8'
EB-131	3526.61'	3523.7'
EB-132	3503.97'	3501.3'
EB-133	3537.07'	3533.8'
EB-134	3512.50'	3509.3'
EB-135	3521.00'	3517.8'
EB-136	3526.61'	3523.7'
EB-137	3503.97'	3501.3'
EB-138	3537.07'	3533.8'
EB-139	3512.50'	3509.3'
EB-140	3521.00'	3517.8'
EB-141	3526.61'	3523.7'
EB-142	3503.97'	3501.3'
EB-143	3537.07'	3533.8'
EB-144	3512.50'	3509.3'
EB-145	3521.00'	3517.8'
EB-146	3526.61'	3523.7'
EB-147	3503.97'	3501.3'
EB-148	3537.07'	3533.8'
EB-149	3512.50'	3509.3'
EB-150	3521.00'	3517.8'
EB-151	3526.61'	3523.7'
EB-152	3503.97'	3501.3'
EB-153	3537.07'	3533.8'
EB-154	3512.50'	3509.3'
EB-155	3521.00'	3517.8'
EB-156	3526.61'	3523.7'
EB-157	3503.97'	3501.3'
EB-158	3537.07'	3533.8'
EB-159	3512.50'	3509.3'
EB-160	3521.00'	3517.8'
EB-161	3526.61'	3523.7'
EB-162	3503.97'	3501.3'
EB-163	3537.07'	3533.8'
EB-164	3512.50'	3509.3'
EB-165	3521.00'	3517.8'
EB-166	3526.61'	3523.7'
EB-167	3503.97'	3501.3'
EB-168	3537.07'	3533.8'
EB-169	3512.50'	3509.3'
EB-170	3	

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MWV-02	3548.19	3545.3
MWV-02-02	3552.26	3549.3
MWV-02-03	3558.03	3553.0
MWV-02-04	3553.79*	3550.9
MWV-02-05	3552.89	3549.9
MWV-02-06	3550.92	3548.3
MWV-02-07	3547.00	3544.2
MWV-02-09	3546.52	3543.5
MWV-02-10	3548.40	3545.4
MWV-02-11	3548.79	3544.0
MWV-02-12	3543.32	3540.3
MWV-02-13	3545.59	3542.7
MWV-02-14	3544.53*	3541.3
MWV-02-15	3543.29	3540.2
MWV-02-16	3544.24	3541.0
MWV-02-18	3547.70	3542.7
MWV-03	3555.30	3552.4
MWV-03-01	3542.56	3539.9
MWV-03-02	3541.08	3538.6
MWV-03-03	3544.72	3542.3
MWV-03-04	3558.45	3555.7
MWV-04	3550.98	3547.8
MWV-05	3543.77	3540.6
MWV-06	3544.50	3541.8
MWV-07	3546.49*	3546.0
MWV-08	3543.73	3540.5
MWV-09	3542.82	3540.4
P-01	3530.21	3527.9
P-02	3544.73	3542.3
P-03	3536.83	3534.4
P-04	3515.77	3513.5
P-05	3507.48	3504.9
PB-01	3492.15	3491.5
PB-02	3525.34	3522.6
PB-03	3521.05	3517.8
PB-04	3508.38	3505.3
PB-05	3526.61*	3523.7
PB-06	3556.63	3555.6
PB-07	3503.97	3501.3
PB-08	3531.07	3533.8

## LEGEND

- MONITORING WELL LOCATION AND CHLORIDE CONCENTRATION IN GROUNDWATER, (MG/L), SEPTEMBER 17-18, 2007
- PIEZOMETER (LIQUID LEVEL) LOCATION AND CHLORIDE CONCENTRATION IN GROUNDWATER, (MG/L), SEPTEMBER 17-18, 2007
- MONITORING WELL AND PIEZOMETER NEST LOCATION AND CHLORIDE CONCENTRATION IN GROUNDWATER, (MG/L), SEPTEMBER 17-18, 2007
- CONTOUR OF CHLORIDE CONCENTRATION IN GROUNDWATER, (MG/L), SEPTEMBER 17-18, 2007
- \* - HYDROCARBON PRODUCT (PSH) IN WELL, NO SAMPLE COLLECTED
- FENCE
- DENOTES ROAD
- DENOTES DRAINAGE/DRAW
- DENOTES ROAD



## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MWV-02	3548.19	3545.3
MWV-02-02	3552.26	3549.3
MWV-02-03	3558.03	3553.0
MWV-02-04	3553.79	3550.9
MWV-02-05	3552.89	3549.9
MWV-02-06	3550.62	3548.3
MWV-02-07	3547.00	3544.2
MWV-02-09	3546.52	3543.5
MWV-02-10	3548.40	3545.4
MWV-02-11	3546.79	3544.0
MWV-02-12	3543.32	3540.3
MWV-02-13	3545.59	3542.7
MWV-02-14	3544.53	3541.3
MWV-02-15	3543.29	3540.2
MWV-02-16	3544.24	3541.0
MWV-02-18	3541.70	3542.7
MWV-03	3555.30	3552.4
MWV-03-01	3542.56	3539.9
MWV-03-02	3541.08	3538.6
MWV-03-03	3544.72	3542.3
MWV-03-04	3553.45	3555.7
MWV-04	3550.98	3547.8
MWV-05	3543.77	3540.6
MWV-06	3544.50	3541.8
MWV-07	3546.49	3546.0
MWV-08	3543.73	3540.5
MWV-09	3542.82	3540.4
P-01	3530.21	3527.9
P-02	3544.73	3542.3
P-03	3536.83	3534.4
P-04	3515.77	3513.5
P-05	3507.48	3504.9
EB-01	3492.15	3491.5
EB-02	3525.34	3522.6
EB-03	3521.05	3517.8
EB-04	3508.38	3505.3
EB-05	3526.61	3523.7
EB-06	3556.63	3555.6
EB-07	3503.97	3501.3
EB-08	3531.07	3533.8

## LEGEND

- MW-02 1630 - MONITORING WELL LOCATION AND SULFATE CONCENTRATION IN GROUNDWATER, (MG/L), MARCH 26-27, 2007
- P-01 330 ▲ - PIEZOMETER (FLUID LEVEL) LOCATION AND SULFATE CONCENTRATION IN GROUNDWATER, (MG/L), MARCH 26-27, 2007
- EB-01 1790 ◑ - MONITORING WELL AND PIEZOMETER NEST LOCATION AND SULFATE CONCENTRATION IN GROUNDWATER, (MG/L), MARCH 26-27, 2007
- \* - HYDROCARBON PRODUCT (PSH) IN WELL, NO SAMPLE COLLECTED
- 1500 ↗ - CONTOUR OF SULFATE CONCENTRATION IN GROUNDWATER, (MG/L), MARCH 26-27, 2007
- X - DENOTES FENCE
- — - DENOTES DRAINAGE / DRAW
- - - DENOTES ROAD

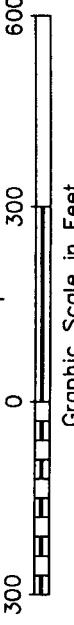
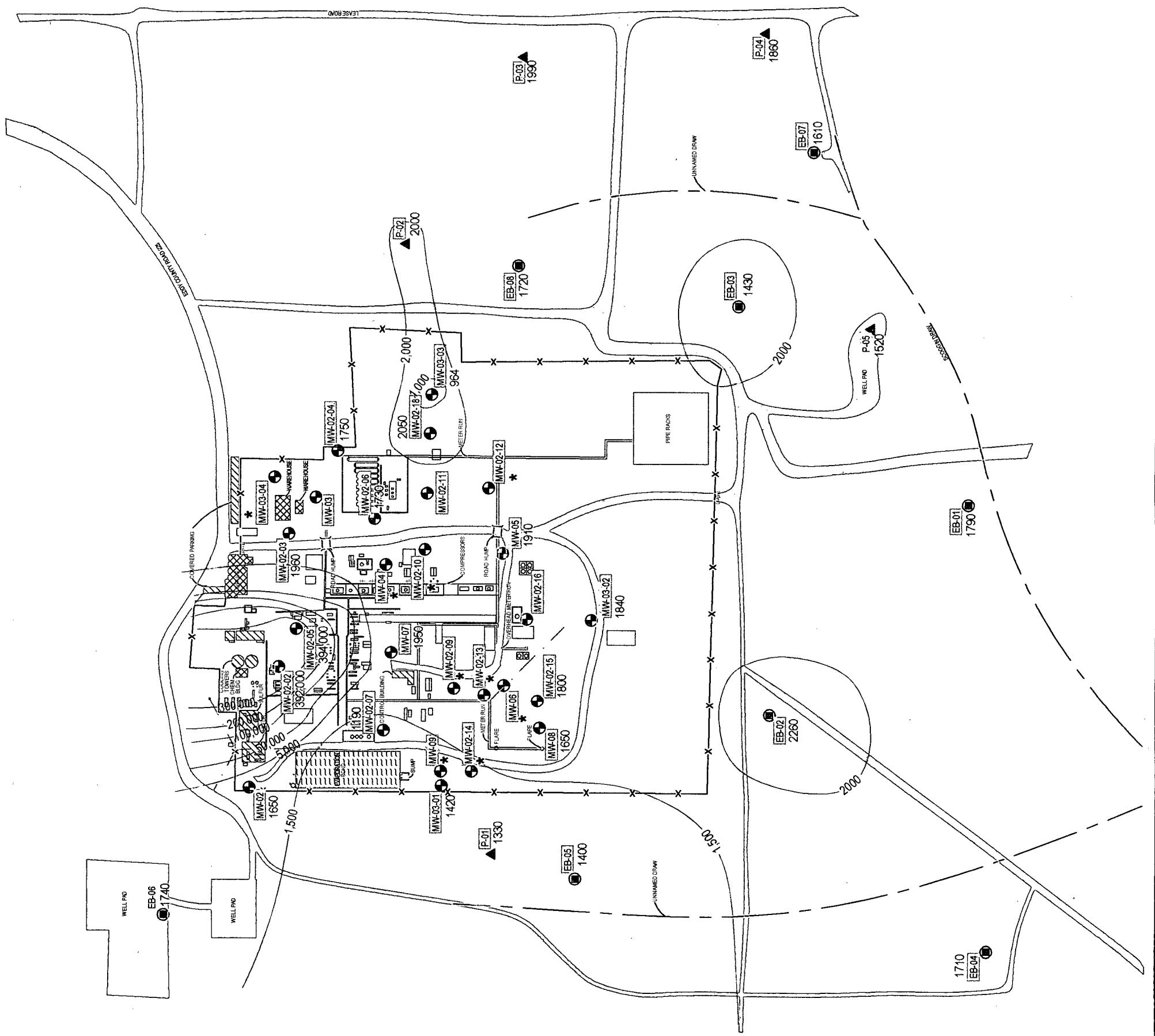


FIGURE # 18

FRONTIER FIELD SERVICES, LLC	EDDY COUNTY, NEW MEXICO
GM-022 EMPIRE ABO GAS PLANT (UL 1) NESE, SECTION 3, T-18-S, R-27-E	
SULFATE CONCENTRATION IN GROUNDWATER MARCH 26-27, 2007	

DATE 05-17-07  
NAME: SJA  
FILE: 6-0141  
Aarson & Associates, Inc.  
Engineering Consultants



## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MW-02	3648.19'	3545.3'
MW-02-02	3552.26'	3549.3'
MW-02-03	3558.03'	3553.0'
MW-02-04	3553.79'	3550.9'
MW-02-05	3552.69'	3549.9'
MW-02-06	3550.82'	3548.3'
MW-02-07	3547.00'	3544.2'
MW-02-08	3546.52'	3543.5'
MW-02-10	3548.40'	3545.4'
MW-02-11	3548.79'	3544.0'
MW-02-12	3543.32'	3540.3'
MW-02-13	3545.59'	3542.7'
MW-02-14	3544.53'	3541.3'
MW-02-15	3543.29'	3540.2'
MW-02-16	3544.24'	3541.0'
MW-02-18	3547.70'	3542.7'
MW-03	3555.30'	3552.4'
MW-03-01	3542.56'	3539.9'
MW-03-02	3541.08'	3538.8'
MW-03-03	3544.72'	3542.3'
MW-03-04	3553.45'	3555.7'
MW-04	3550.99'	3547.8'
MW-05	3543.77'	3540.6'
MW-06	3544.50'	3541.8'
MW-07	3546.49'	3548.0'
MW-08	3543.73'	3540.5'
MW-09	3542.82'	3540.4'
P-01	3530.21'	3527.9'
EB-01	3492.15'	3491.5'
EB-02	3525.34'	3522.6'
EB-03	3521.05'	3517.8'
EB-04	3508.38'	3505.3'
EB-05	3526.61'	3523.7'
EB-06	3556.63'	3555.6'
EB-07	3503.97'	3501.3'
EB-08	3531.07'	3533.8'
EB-09	3520.00'	3517.00'
EB-10	3520.00'	3517.00'
EB-11	3520.00'	3517.00'
EB-12	3520.00'	3517.00'
EB-13	3520.00'	3517.00'
EB-14	3520.00'	3517.00'
EB-15	3520.00'	3517.00'
EB-16	3520.00'	3517.00'
EB-17	3520.00'	3517.00'
EB-18	3520.00'	3517.00'
EB-19	3520.00'	3517.00'
EB-20	3520.00'	3517.00'
EB-21	3520.00'	3517.00'
EB-22	3520.00'	3517.00'
EB-23	3520.00'	3517.00'
EB-24	3520.00'	3517.00'
EB-25	3520.00'	3517.00'
EB-26	3520.00'	3517.00'
EB-27	3520.00'	3517.00'
EB-28	3520.00'	3517.00'
EB-29	3520.00'	3517.00'
EB-30	3520.00'	3517.00'
EB-31	3520.00'	3517.00'
EB-32	3520.00'	3517.00'
EB-33	3520.00'	3517.00'
EB-34	3520.00'	3517.00'
EB-35	3520.00'	3517.00'
EB-36	3520.00'	3517.00'
EB-37	3520.00'	3517.00'
EB-38	3520.00'	3517.00'
EB-39	3520.00'	3517.00'
EB-40	3520.00'	3517.00'
EB-41	3520.00'	3517.00'
EB-42	3520.00'	3517.00'
EB-43	3520.00'	3517.00'
EB-44	3520.00'	3517.00'
EB-45	3520.00'	3517.00'
EB-46	3520.00'	3517.00'
EB-47	3520.00'	3517.00'
EB-48	3520.00'	3517.00'
EB-49	3520.00'	3517.00'
EB-50	3520.00'	3517.00'
EB-51	3520.00'	3517.00'
EB-52	3520.00'	3517.00'
EB-53	3520.00'	3517.00'
EB-54	3520.00'	3517.00'
EB-55	3520.00'	3517.00'
EB-56	3520.00'	3517.00'
EB-57	3520.00'	3517.00'
EB-58	3520.00'	3517.00'
EB-59	3520.00'	3517.00'
EB-60	3520.00'	3517.00'
EB-61	3520.00'	3517.00'
EB-62	3520.00'	3517.00'
EB-63	3520.00'	3517.00'
EB-64	3520.00'	3517.00'
EB-65	3520.00'	3517.00'
EB-66	3520.00'	3517.00'
EB-67	3520.00'	3517.00'
EB-68	3520.00'	3517.00'
EB-69	3520.00'	3517.00'
EB-70	3520.00'	3517.00'
EB-71	3520.00'	3517.00'
EB-72	3520.00'	3517.00'
EB-73	3520.00'	3517.00'
EB-74	3520.00'	3517.00'
EB-75	3520.00'	3517.00'
EB-76	3520.00'	3517.00'
EB-77	3520.00'	3517.00'
EB-78	3520.00'	3517.00'
EB-79	3520.00'	3517.00'
EB-80	3520.00'	3517.00'
EB-81	3520.00'	3517.00'
EB-82	3520.00'	3517.00'
EB-83	3520.00'	3517.00'
EB-84	3520.00'	3517.00'
EB-85	3520.00'	3517.00'
EB-86	3520.00'	3517.00'
EB-87	3520.00'	3517.00'
EB-88	3520.00'	3517.00'
EB-89	3520.00'	3517.00'
EB-90	3520.00'	3517.00'
EB-91	3520.00'	3517.00'
EB-92	3520.00'	3517.00'
EB-93	3520.00'	3517.00'
EB-94	3520.00'	3517.00'
EB-95	3520.00'	3517.00'
EB-96	3520.00'	3517.00'
EB-97	3520.00'	3517.00'
EB-98	3520.00'	3517.00'
EB-99	3520.00'	3517.00'
EB-100	3520.00'	3517.00'
EB-101	3520.00'	3517.00'
EB-102	3520.00'	3517.00'
EB-103	3520.00'	3517.00'
EB-104	3520.00'	3517.00'
EB-105	3520.00'	3517.00'
EB-106	3520.00'	3517.00'
EB-107	3520.00'	3517.00'
EB-108	3520.00'	3517.00'
EB-109	3520.00'	3517.00'
EB-110	3520.00'	3517.00'
EB-111	3520.00'	3517.00'
EB-112	3520.00'	3517.00'
EB-113	3520.00'	3517.00'
EB-114	3520.00'	3517.00'
EB-115	3520.00'	3517.00'
EB-116	3520.00'	3517.00'
EB-117	3520.00'	3517.00'
EB-118	3520.00'	3517.00'
EB-119	3520.00'	3517.00'
EB-120	3520.00'	3517.00'
EB-121	3520.00'	3517.00'
EB-122	3520.00'	3517.00'
EB-123	3520.00'	3517.00'
EB-124	3520.00'	3517.00'
EB-125	3520.00'	3517.00'
EB-126	3520.00'	3517.00'
EB-127	3520.00'	3517.00'
EB-128	3520.00'	3517.00'
EB-129	3520.00'	3517.00'
EB-130	3520.00'	3517.00'
EB-131	3520.00'	3517.00'
EB-132	3520.00'	3517.00'
EB-133	3520.00'	3517.00'
EB-134	3520.00'	3517.00'
EB-135	3520.00'	3517.00'
EB-136	3520.00'	3517.00'
EB-137	3520.00'	3517.00'
EB-138	3520.00'	3517.00'
EB-139	3520.00'	3517.00'
EB-140	3520.00'	3517.00'
EB-141	3520.00'	3517.00'
EB-142	3520.00'	3517.00'
EB-143	3520.00'	3517.00'
EB-144	3520.00'	3517.00'
EB-145	3520.00'	3517.00'
EB-146	3520.00'	3517.00'
EB-147	3520.00'	3517.00'
EB-148	3520.00'	3517.00'
EB-149	3520.00'	3517.00'
EB-150	3520.00'	3517.00'
EB-151	3520.00'	3517.00'
EB-152	3520.00'	3517.00'
EB-153	3520.00'	3517.00'
EB-154	3520.00'	3517.00'
EB-155	3520.00'	3517.00'
EB-156	3520.00'	3517.00'
EB-157	3520.00'	3517.00'
EB-158	3520.00'	3517.00'
EB-159	3520.00'	3517.00'
EB-160	3520.00'	3517.00'
EB-161	3520.00'	3517.00'
EB-162	3520.00'	3517.00'
EB-163	3520.00'	3517.00'
EB-164	3520.00'	3517.00'
EB-165	3520.00'	3517.00'
EB-166	3520.00'	3517.00'
EB-167	3520.00'	3517.00'
EB-168	3520.00'	3517.00'
EB-169	3520.00'	3517.00'
EB-170	3520.00	

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MW-02	3548.18'	3545.3'
MW-02-02	3552.26'	3549.3'
MW-02-03	3556.03'	3553.0'
MW-02-04	3553.78'	3550.9'
MW-02-05	3552.88'	3549.9'
MW-02-06	3550.82'	3548.3'
MW-02-07	3547.00'	3544.2'
MW-02-08	3546.52'	3543.5'
MW-02-10	3548.40'	3545.4'
MW-02-11	3546.75'	3544.0'
MW-02-12	3543.32'	3540.3'
MW-02-13	3545.59'	3542.7'
MW-02-14	3544.53'	3541.3'
MW-02-15	3543.28'	3540.2'
MW-02-16	3544.24'	3541.0'
MW-02-18	3547.70'	3542.7'
MW-03	3555.30'	3552.4'
MW-03-01	3542.56'	3539.9'
MW-03-02	3541.08'	3538.6'
MW-03-03	3544.72'	3542.3'
MW-03-04	3558.45'	3555.7'
MW-04	3550.98'	3547.8'
MW-05	3543.77'	3540.6'
MW-06	3544.50'	3541.8'
MW-07	3546.49'	3546.0'
MW-08	3543.73'	3540.5'
MW-09	3542.82'	3540.4'
P-01	3530.21'	3527.9'
P-02	3544.73'	3542.3'
P-03	3536.83'	3534.4'
P-04	3515.77'	3513.5'
P-05	3507.48'	3504.9'
EB-01	3492.15'	3481.5'
EB-02	3525.34'	3522.6'
EB-03	3521.05'	3517.8'
EB-04	3508.38'	3505.3'
EB-05	3526.61'	3523.7'
EB-06	3556.63'	3555.6'
EB-07	3503.97'	3501.3'
EB-08	3537.07'	3533.8'

## LEGEND

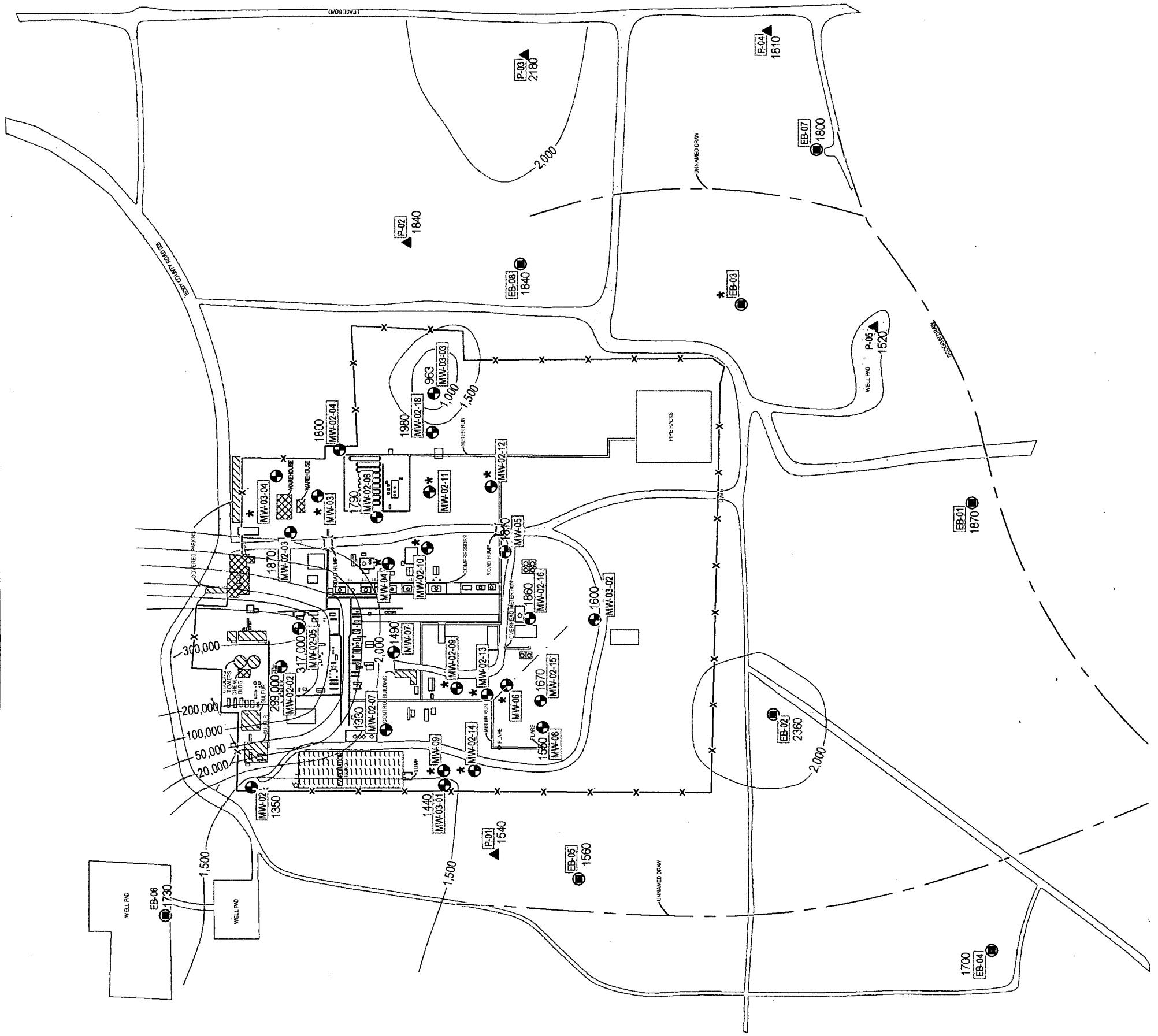
- MONITORING WELL LOCATION AND SULFATE CONCENTRATION IN GROUNDWATER (MGL), SEPTEMBER 17-18, 2007
- PIEZOMETER (FLUID LEVEL) LOCATION AND SULFATE CONCENTRATION IN GROUNDWATER (MGL), SEPTEMBER 17-18, 2007
- MONITORING WELL AND PIEZOMETER NEST LOCATION AND SULFATE CONCENTRATION IN GROUNDWATER (MGL), SEPTEMBER 17-18, 2007
- \* - HYDROCARBON PRODUCT (PSH) IN WELL, NO SAMPLE COLLECTED
- CONTOUR OF SULFATE CONCENTRATION IN GROUNDWATER (MGL), SEPTEMBER 17-18, 2007
- X - DENOTES FENCE
- - DENOTES DRAINAGE / DRAW
- - DENOTES ROAD

Graphic Scale in Feet  
FIGURE # 20

FRONTIER FIELD SERVICES, LLC  
GWA22  
EMPIRE - ABO GAS PLANT  
(UL 1 NESE, SECTION 3, T-18-S, R-27-E)

SULFATE CONCENTRATION IN GROUNDWATER  
SEPTEMBER 17-18, 2007  
DATE: 10-30-07  
NAME: TA  
FILE: 6-0141

Aaron & Associates, Inc.  
Environmental Consultants



## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MWV-02	3548.19'	3545.3'
MWV-02-02	3552.26'	3549.3'
MWV-02-03	3556.03'	3553.0'
MWV-02-04	3553.79'	3550.9'
MWV-02-05	3552.68'	3549.8'
MWV-02-06	3550.82'	3548.3'
MWV-02-07	3547.00'	3544.2'
MWV-02-09	3546.52'	3543.5'
MWV-02-10	3548.40'	3545.4'
MWV-02-11	3546.79'	3544.0'
MWV-02-12	3543.32'	3540.3'
MWV-02-13	3545.59'	3542.7'
MWV-02-14	3544.53'	3541.3'
MWV-02-15	3543.28'	3540.2'
MWV-02-16	3544.24'	3541.0'
MWV-02-18	3547.70'	3542.7'
MWV-03	3555.30'	3552.4'
MWV-03-01	3542.56'	3539.9'
MWV-03-02	3541.08'	3538.6'
MWV-03-03	3544.72'	3542.3'
MWV-03-04	3558.45'	3555.7'
MWV-04	3550.98'	3547.8'
MWV-05	3543.77'	3540.6'
MWV-06	3544.50'	3541.8'
MWV-07	3546.49'	3546.0'
MWV-08	3543.73'	3540.5'
MWV-09	3542.82'	3540.4'
P-01	3530.21'	3527.9'
P-02	3544.73'	3542.3'
P-03	3536.83'	3534.4'
P-04	3515.77'	3513.5'
P-05	3607.48'	3604.9'
EB-01	3492.15'	3491.5'
EB-02	3625.34'	3622.6'
EB-03	3621.05'	3617.8'
EB-04	3508.38'	3505.3'
EB-05	3626.61'	3623.7'
EB-06	3656.63'	3655.6'
EB-07	3503.97'	3501.3'
EB-08	3537.07'	3533.8'
MWV-02	3030	
EB-06	3020	
MWV-03	3000	
EB-01	2410	
MWV-02-04	3150	
MWV-02-18	4190	
MWV-02-05	3350	
MWV-02-11	3500	
MWV-02-06	3550	
MWV-02-12	3550	
MWV-02-07	3550	
MWV-02-13	3550	
MWV-02-08	3550	
MWV-02-14	3550	
MWV-02-15	3550	
MWV-02-16	3550	
MWV-02-17	3550	
MWV-02-19	3550	
MWV-02-20	3550	
MWV-03-01	3500	
MWV-03-04	3500	
MWV-03-05	3500	
MWV-03-06	3500	
MWV-03-07	3500	
MWV-03-08	3500	
MWV-03-09	3500	
MWV-03-10	3500	
MWV-03-11	3500	
MWV-03-12	3500	
MWV-03-13	3500	
MWV-03-14	3500	
MWV-03-15	3500	
MWV-03-16	3500	
MWV-03-17	3500	
MWV-03-18	3500	
MWV-03-19	3500	
MWV-03-20	3500	
P-02	4020	
P-03	4200	
P-04	4020	
P-05	4200	
P-06	4450	
P-07	4450	
P-08	4450	
EB-01	2610	
EB-02	3290	
EB-03	3290	
EB-04	3290	
EB-05	3290	
EB-06	3290	
EB-07	3290	
EB-08	3290	
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EB-10	3290	
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EB-167	3290	
EB-168	3290	
EB-169	3290	
EB-170	3290	
EB-171	3290	
EB-172	3290	
EB-173	3290	
EB-174	3290	
EB-175</td		

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MWV-02	3548.19'	3545.3'
MWV-02-02	3552.26'	3549.3'
MWV-02-03	3556.03'	3553.0'
MWV-02-04	3553.79'	3550.9'
MWV-02-05	3552.69'	3549.9'
MWV-02-06	3550.92'	3548.3'
MWV-02-07	3547.00'	3544.2'
MWV-02-09	3546.52'	3543.5'
MWV-02-10	3548.40'	3545.4'
MWV-02-11	3546.79'	3544.0'
MWV-02-12	3543.32'	3540.3'
MWV-02-13	3545.59'	3542.7'
MWV-02-14	3544.53'	3541.3'
MWV-02-15	3543.28'	3540.2'
MWV-02-16	3544.24'	3541.0'
MWV-02-18	3547.70'	3542.7'
MWV-03	3555.30'	3552.4'
MWV-03-01	3542.56'	3539.8'
MWV-03-02	3541.05'	3538.6'
MWV-03-03	3544.72'	3542.3'
MWV-03-04	3558.45'	3555.7'
MWV-04	3550.86'	3547.8'
MWV-05	3543.77'	3540.6'
MWV-06	3544.56'	3541.8'
MWV-07	3546.48'	3546.0'
MWV-08	3543.73'	3540.5'
MWV-09	3542.82'	3540.4'
P-01	3530.21'	3527.9'
P-02	3544.73'	3542.3'
P-03	3536.83'	3534.4'
P-04	3515.77'	3513.5'
P-05	3507.48'	3504.9'
EB-01	3492.15'	3481.5'
EB-02	3525.34'	3522.6'
EB-03	3521.05'	3517.8'
EB-04	3508.38'	3505.3'
EB-05	3526.61'	3523.7'
EB-06	3556.63'	3555.6'
EB-07	3503.97'	3501.3'
EB-08	3537.07'	3533.8'
MWV-02	3170	MWV-02
P-01	1500	P-01
P-02	1770	P-02
P-03	2030	P-03
P-04	1900	P-04
EB-01	2520	EB-01
EB-02	2520	EB-02
EB-03	3130	EB-03
EB-04	3820	EB-04
EB-05	3820	EB-05
EB-06	3820	EB-06
EB-07	3820	EB-07
EB-08	4130	EB-08
EB-09	4130	EB-09
EB-10	4130	EB-10
EB-11	4130	EB-11
EB-12	4130	EB-12
EB-13	4130	EB-13
EB-14	4130	EB-14
EB-15	4130	EB-15
EB-16	4130	EB-16
EB-17	4130	EB-17
EB-18	4130	EB-18
EB-19	4130	EB-19
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EB-29	4130	EB-29
EB-30	4130	EB-30
EB-31	4130	EB-31
EB-32	4130	EB-32
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EB-38	4130	EB-38
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EB-74	4130	EB-74
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EB-77	4130	EB-77
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EB-109	4130	EB-109
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EB-122	4130	EB-122
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EB-124	4130	EB-124
EB-125	4130	EB-125
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EB-127	4130	EB-127
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EB-130	4130	EB-130
EB-131	4130	EB-131
EB-132	4130	EB-132
EB-133	4130	EB-133
EB-134	4130	EB-134
EB-135	4130	EB-135
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EB-137	4130	EB-137
EB-138	4130	EB-138
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EB-140	4130	EB-140
EB-141	4130	EB-141
EB-142	4130	EB-142
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EB-152	4130	EB-152
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EB-160	4130	EB-160
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EB-162	4130	EB-162
EB-163	4130	EB-163
EB-164	4130	EB-164
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EB-166	4130	EB-166
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EB-168	4130	EB-168
EB-169	4130	EB-169
EB-170	4130	EB-170
EB-171	4130	EB-171
EB-172	4130	EB-172
EB-173	4130	EB-173
EB-174	4130	EB-174
EB-175	4130	EB-175
EB-176	4130	EB-176
EB-177	4130	EB-177
EB-178	4130	EB-178
EB-179	4130	EB-179
EB-180	4130	

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MWV-02	3548.18'	3545.3'
MWV-02-02	3552.26'	3549.3'
MWV-02-03	3556.03'	3553.0'
MWV-02-04	3553.79'	3550.9'
MWV-02-05	3552.69'	3549.9'
MWV-02-06	3550.82'	3548.3'
MWV-02-07	3547.00'	3544.2'
MWV-02-08	3546.52'	3543.5'
MWV-02-10	3548.40'	3545.4'
MWV-02-11	3546.79'	3544.0'
MWV-02-12	3543.32'	3540.3'
MWV-02-13	3545.59'	3542.7'
MWV-02-14	3544.53'	3541.3'
MWV-02-15	3543.29'	3540.2'
MWV-02-16	3544.24'	3541.0'
MWV-02-18	3547.70'	3542.7'
MWV-03	3555.30'	3552.4'
MWV-03-01	3542.56'	3539.9'
MWV-03-02	3541.08'	3538.6'
MWV-03-03	3544.72'	3542.3'
MWV-03-04	3558.45'	3555.7'
MWV-03-06	3550.99'	3547.8'
MWV-04	3543.70'	3542.7'
MWV-05	3543.77'	3540.6'
MWV-06	3544.50'	3541.8'
MWV-07	3548.49'	3546.0'
MWV-08	3543.73'	3540.5'
MWV-09	3542.82'	3540.4'
P-01	3530.21'	3527.9'
P-02	3544.73'	3542.3'
P-03	3536.33'	3534.4'
P-04	3515.77'	3513.5'
P-05	3507.48'	3504.9'
P-06	3492.15'	3491.5'
P-07	3525.34'	3522.6'
P-08	3521.05'	3517.8'
E9-04	3508.38'	3505.3'
E9-05	3526.61'	3523.7'
E9-06	3556.63'	3555.6'
E9-07	3503.97'	3501.3'
E9-08	3537.07'	3533.8'
MW-02	2500	2500
P-01	1540	1540
EB-01	1870	1870
EB-02	2360	2360
EB-03	2800	2800
EB-04	2600	2600
EB-05	2900	2900
EB-06	3200	3200
EB-07	3400	3400
EB-08	3200	3200
EB-09	3400	3400
EB-10	3600	3600
EB-11	3800	3800
EB-12	4000	4000
EB-13	4200	4200
EB-14	4400	4400
EB-15	4600	4600
EB-16	4800	4800
EB-17	5000	5000
EB-18	5200	5200
EB-19	5400	5400
EB-20	5600	5600
EB-21	5800	5800
EB-22	6000	6000
EB-23	6200	6200
EB-24	6400	6400
EB-25	6600	6600
EB-26	6800	6800
EB-27	7000	7000
EB-28	7200	7200
EB-29	7400	7400
EB-30	7600	7600
EB-31	7800	7800
EB-32	8000	8000
EB-33	8200	8200
EB-34	8400	8400
EB-35	8600	8600
EB-36	8800	8800
EB-37	9000	9000
EB-38	9200	9200
EB-39	9400	9400
EB-40	9600	9600
EB-41	9800	9800
EB-42	10000	10000
EB-43	10200	10200
EB-44	10400	10400
EB-45	10600	10600
EB-46	10800	10800
EB-47	11000	11000
EB-48	11200	11200
EB-49	11400	11400
EB-50	11600	11600
EB-51	11800	11800
EB-52	12000	12000
EB-53	12200	12200
EB-54	12400	12400
EB-55	12600	12600
EB-56	12800	12800
EB-57	13000	13000
EB-58	13200	13200
EB-59	13400	13400
EB-60	13600	13600
EB-61	13800	13800
EB-62	14000	14000
EB-63	14200	14200
EB-64	14400	14400
EB-65	14600	14600
EB-66	14800	14800
EB-67	15000	15000
EB-68	15200	15200
EB-69	15400	15400
EB-70	15600	15600
EB-71	15800	15800
EB-72	16000	16000
EB-73	16200	16200
EB-74	16400	16400
EB-75	16600	16600
EB-76	16800	16800
EB-77	17000	17000
EB-78	17200	17200
EB-79	17400	17400
EB-80	17600	17600
EB-81	17800	17800
EB-82	18000	18000
EB-83	18200	18200
EB-84	18400	18400
EB-85	18600	18600
EB-86	18800	18800
EB-87	19000	19000
EB-88	19200	19200
EB-89	19400	19400
EB-90	19600	19600
EB-91	19800	19800
EB-92	20000	20000
EB-93	20200	20200
EB-94	20400	20400
EB-95	20600	20600
EB-96	20800	20800
EB-97	21000	21000
EB-98	21200	21200
EB-99	21400	21400
EB-100	21600	21600
EB-101	21800	21800
EB-102	22000	22000
EB-103	22200	22200
EB-104	22400	22400
EB-105	22600	22600
EB-106	22800	22800
EB-107	23000	23000
EB-108	23200	23200
EB-109	23400	23400
EB-110	23600	23600
EB-111	23800	23800
EB-112	24000	24000
EB-113	24200	24200
EB-114	24400	24400
EB-115	24600	24600
EB-116	24800	24800
EB-117	25000	25000
EB-118	25200	25200
EB-119	25400	25400
EB-120	25600	25600
EB-121	25800	25800
EB-122	26000	26000
EB-123	26200	26200
EB-124	26400	26400
EB-125	26600	26600
EB-126	26800	26800
EB-127	27000	27000
EB-128	27200	27200
EB-129	27400	27400
EB-130	27600	27600
EB-131	27800	27800
EB-132	28000	28000
EB-133	28200	28200
EB-134	28400	28400
EB-135	28600	28600
EB-136	28800	28800
EB-137	29000	29000
EB-138	29200	29200
EB-139	29400	29400
EB-140	29600	29600
EB-141	29800	29800
EB-142	30000	30000
EB-143	30200	30200
EB-144	30400	30400
EB-145	30600	30600
EB-146	30800	30800
EB-147	31000	31000
EB-148	31200	31200
EB-149	31400	31400
EB-150	31600	31600
EB-151	31800	31800
EB-152	32000	32000
EB-153	32200	32200
EB-154	32400	32400
EB-155	32600	32600
EB-156	32800	32800
EB-157	33000	33000
EB-158	33200	33200
EB-159	33400	33400
EB-160	33600	33600
EB-161	33800	33800
EB-162	34000	34000
EB-163	34200	34200
EB-164	34400	34400
EB-165	34600	34600
EB-166	34800	34800
EB-167	35000	35000
EB-168	35200	35200
EB-169	35400	35400
EB-170	35600	35600
EB-171	35800	35800
EB-172	36000	36000
EB-173	36200	36200
EB-174	36400	36400
EB-175	36600	36600
EB-176	36800	36800
EB-177		

## MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET) AMSL
MW-02	3548.19	3545.3
MW-02-02	3552.26	3549.3
MW-02-03	3556.03	3553.0
MW-02-04	3553.79	3550.9
MW-02-05	3552.69	3549.9
MW-02-06	3550.82	3548.3
MW-02-07	3547.00	3544.2
MW-02-08	3546.52	3543.5
MW-02-10	3548.40	3545.4
MW-02-11	3548.79	3544.0
MW-02-12	3543.32	3540.3
MW-02-13	3545.59	3542.7
MW-02-14	3544.53	3541.3
MW-02-15	3543.29	3540.2
MW-02-16	3544.24	3541.0
MW-02-18	3547.70	3542.7
MW-03	3555.30	3552.4
MW-03-01	3542.66	3539.3
MW-03-02	3541.08	3538.6
MW-03-03	3544.72	3542.3
MW-03-04	3558.45	3555.7
MW-04	3550.89	3547.8
MW-05	3543.77	3540.6
MW-06	3544.50	3541.8
MW-07	3546.49	3546.0
MW-08	3543.73	3540.5
MW-09	3542.82	3540.4
P-01	3630.21	3527.9
P-02	3544.73	3542.3
P-03	3538.83	3534.4
P-04	3515.77	3513.5
P-05	3507.48	3504.9
EB-01	3492.15	3491.5
EB-02	3525.34	3522.8
EB-03	3624.05	3617.8
EB-04	3608.38	3605.3
EB-05	3526.61	3523.7
EB-06	3556.63	3555.6
EB-07	3603.97	3601.3
EB-08	3537.07	3533.5



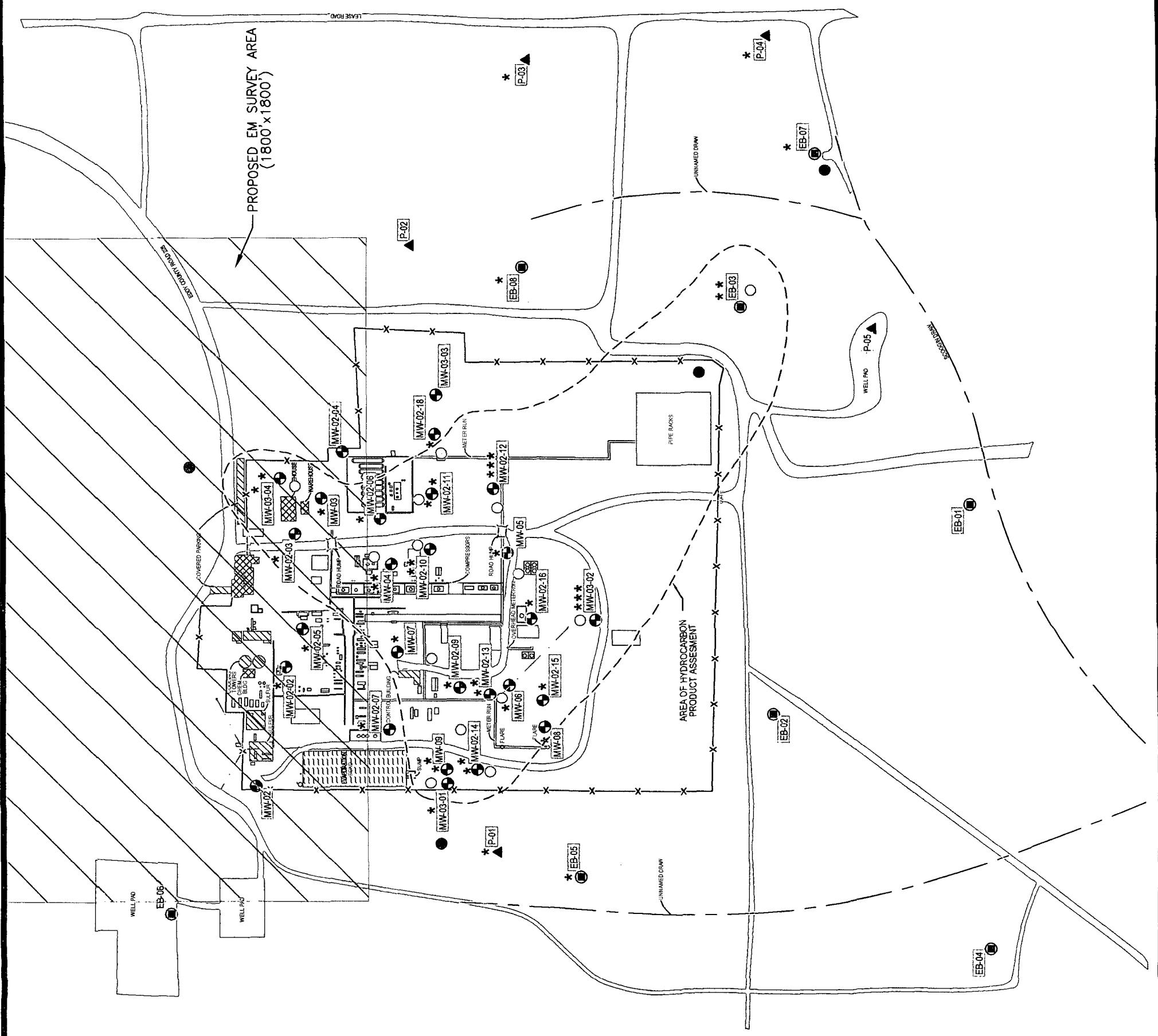
Graphic Scale in Feet  
300 0 300 600

FIGURE # 24

FRONTIER FIELD SERVICES, LLC	EDDY COUNTY, NEW MEXICO
GW-022	EMPIRE - ABO GAS PLANT
(U.L.) NESE, SECTION 3, T-18 S., R-27 E	
PROPOSED INVESTIGATION AREAS	
DATE: 10-30-07	NAME: TA
FILE: G-0141	Argon & Associates, Inc.
	Environmental Consultants

## LEGEND

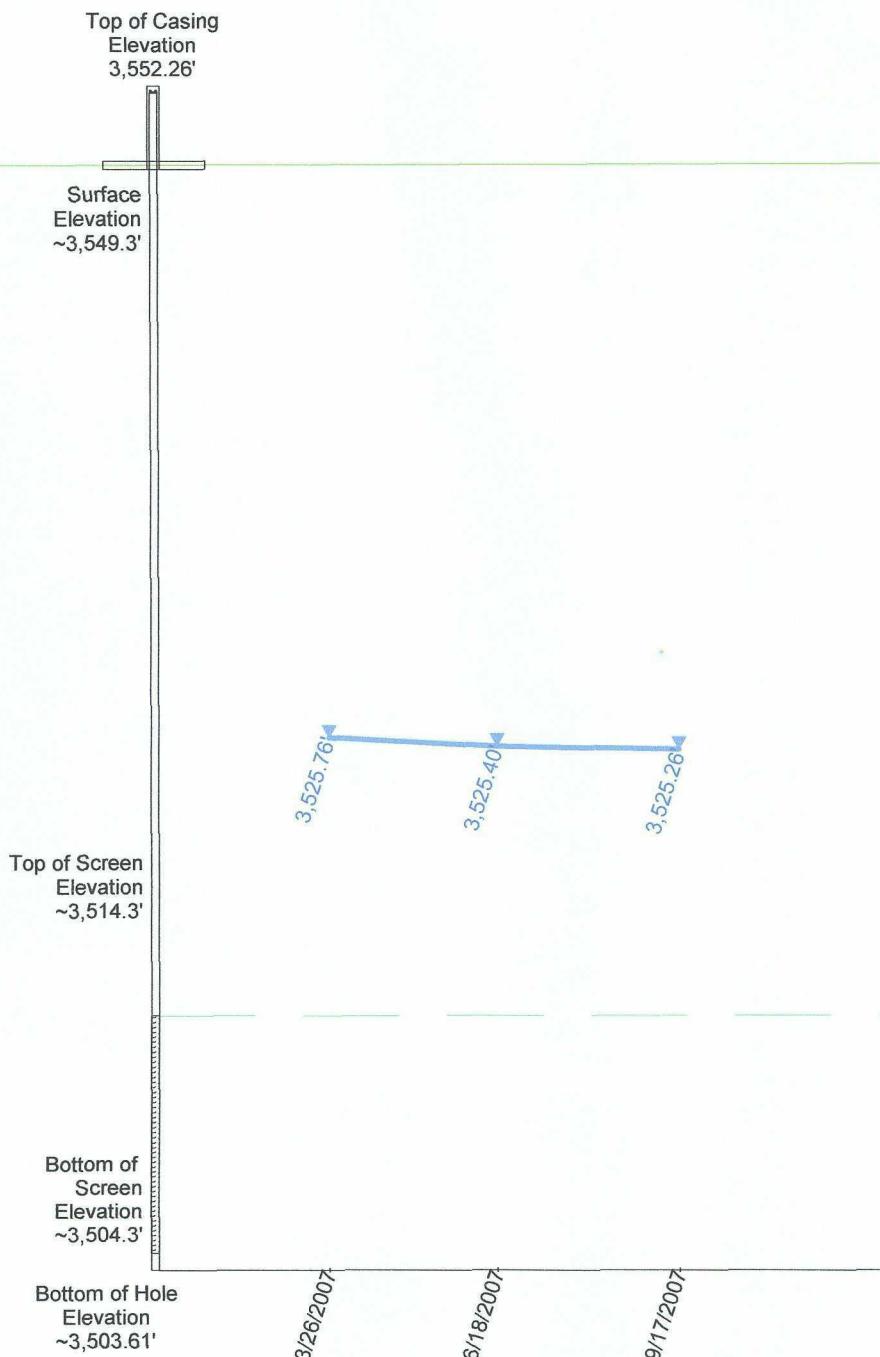
- MW-02 - MONITORING WELL LOCATION
- P-01 ▲ - PIEZOMETER (FLUID LEVEL) LOCATION
- EB-01 ◻ - MONITORING WELL AND PIEZOMETER NEST LOCATION
- \* - MONITORING WELL WITH SUBMERGED SCREEN
- \*\* - MONITORING WELL WITH MEASURABLE HYDROCARBON PRODUCT THICKNESS
- - PROPOSED HYDROCARBON PRODUCT ASSESSMENT AND RECOVERY WELL ( FULL PENETRATION AND SCREEN)
- - PROPOSED MONITORING WELL LOCATION
- - - - - DENOTES FENCE
- - - - - DENOTES DRAINAGE/DRAW
- - - - - DENOTES ROAD



## **APPENDICES**

## **APPENDIX A**

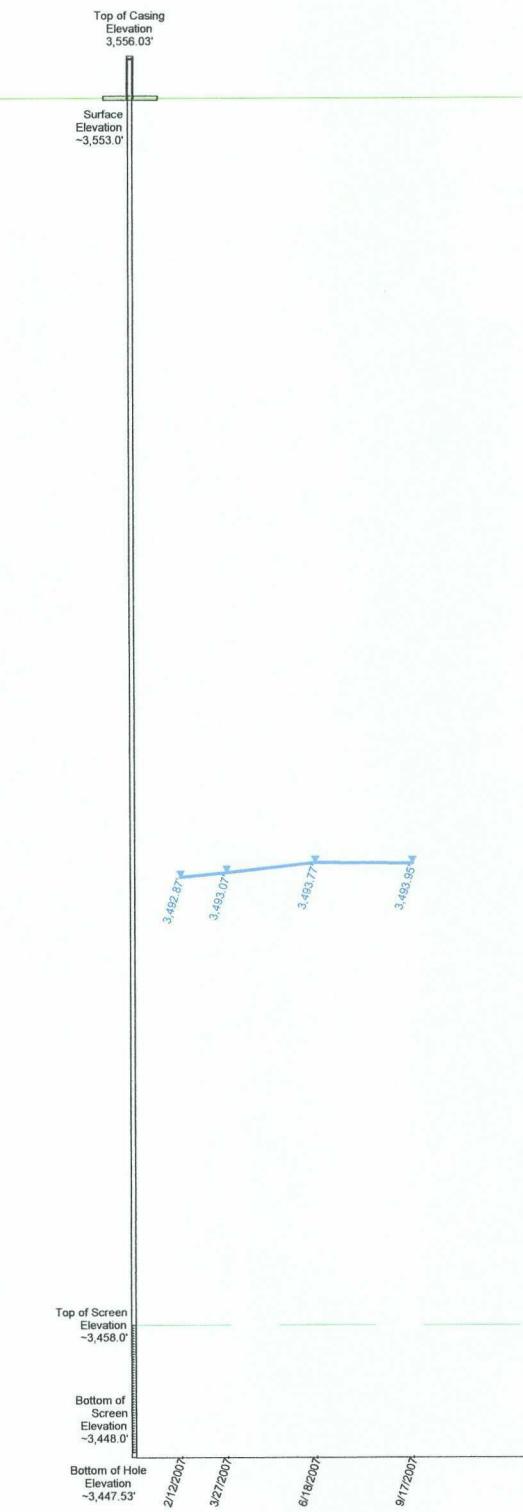
### **Hydrographs**



**MW-02-02  
GROUNDWATER HYDROGRAPH**

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

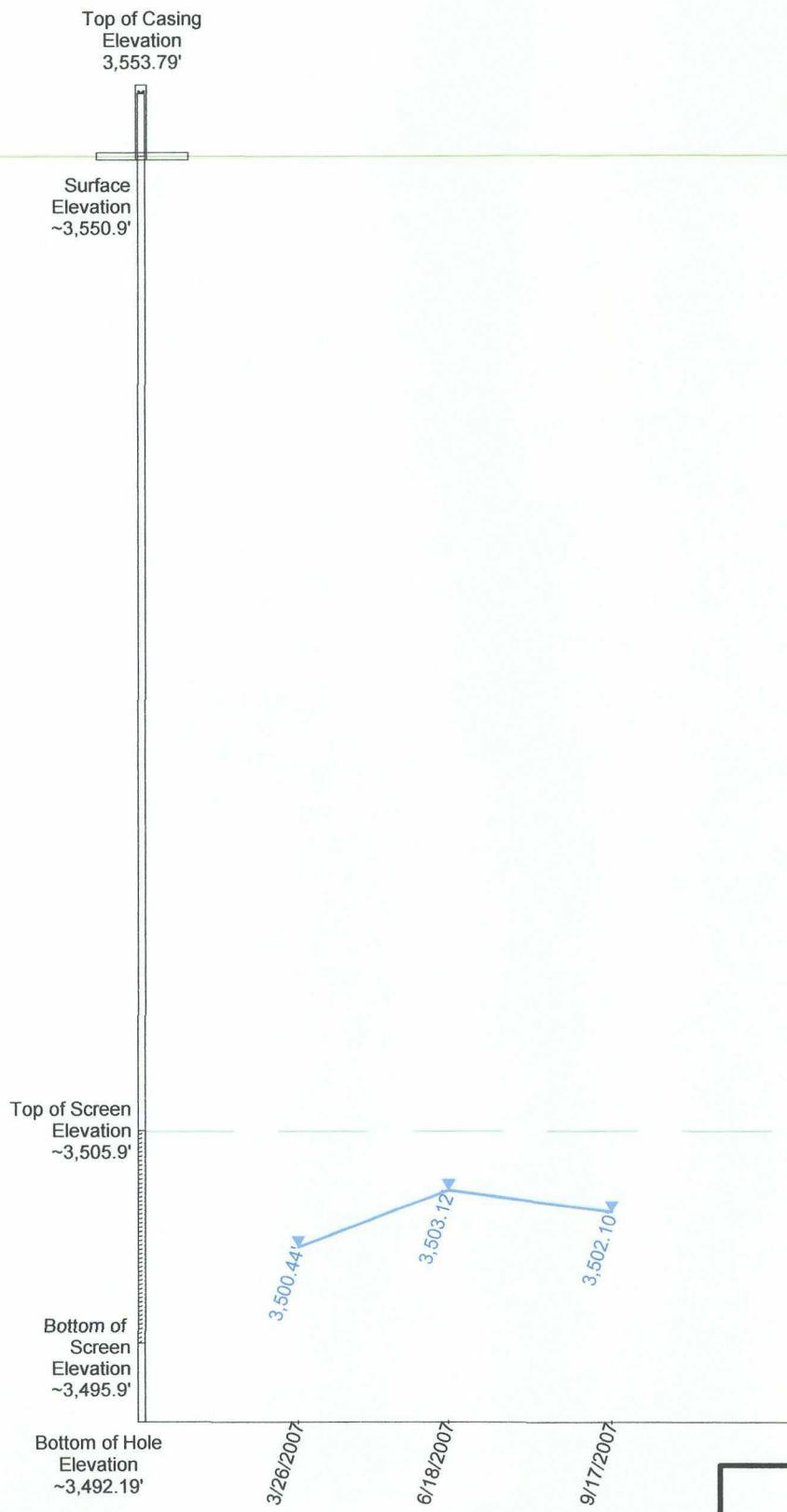
October 18, 2007      06-0141-01



MW-02-03  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

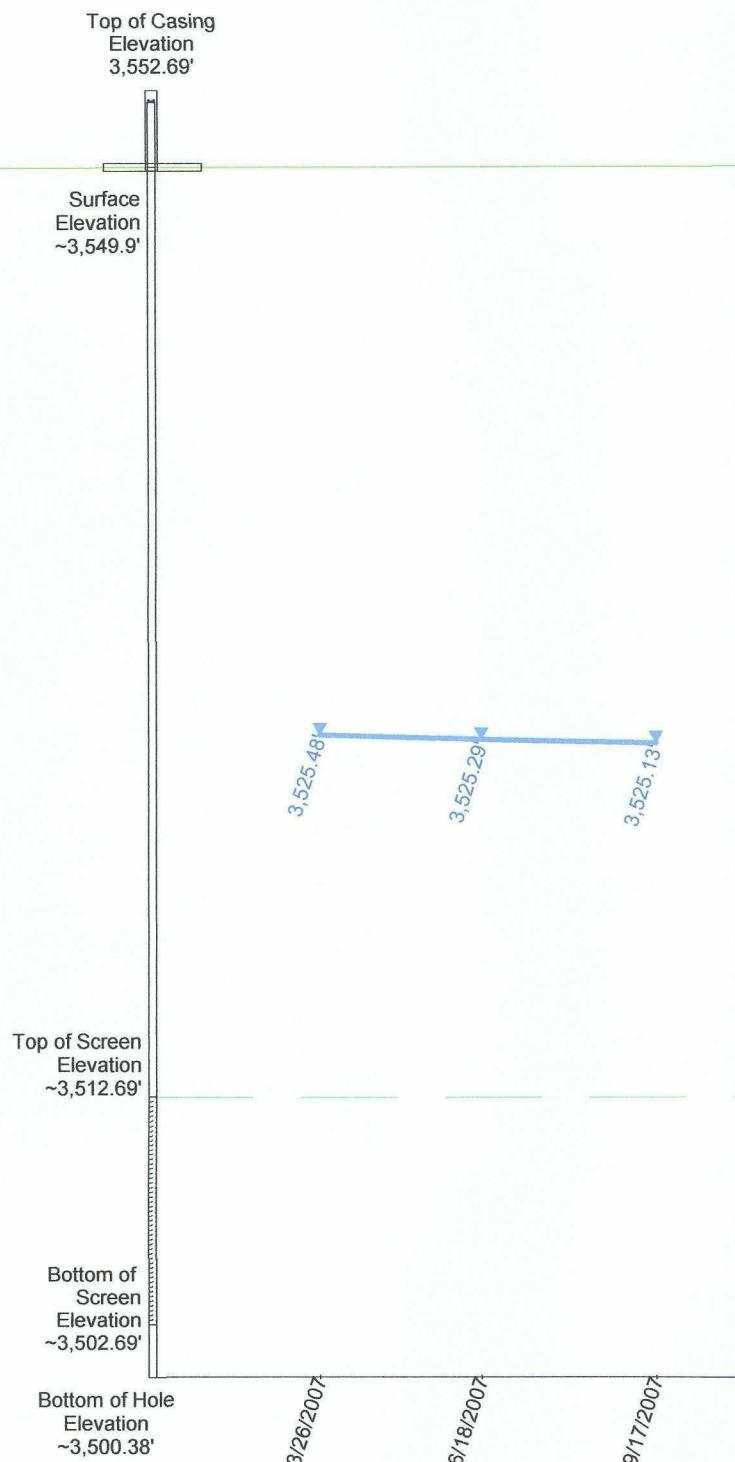
October 18, 2007	06-0141-01
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MW-02-04  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

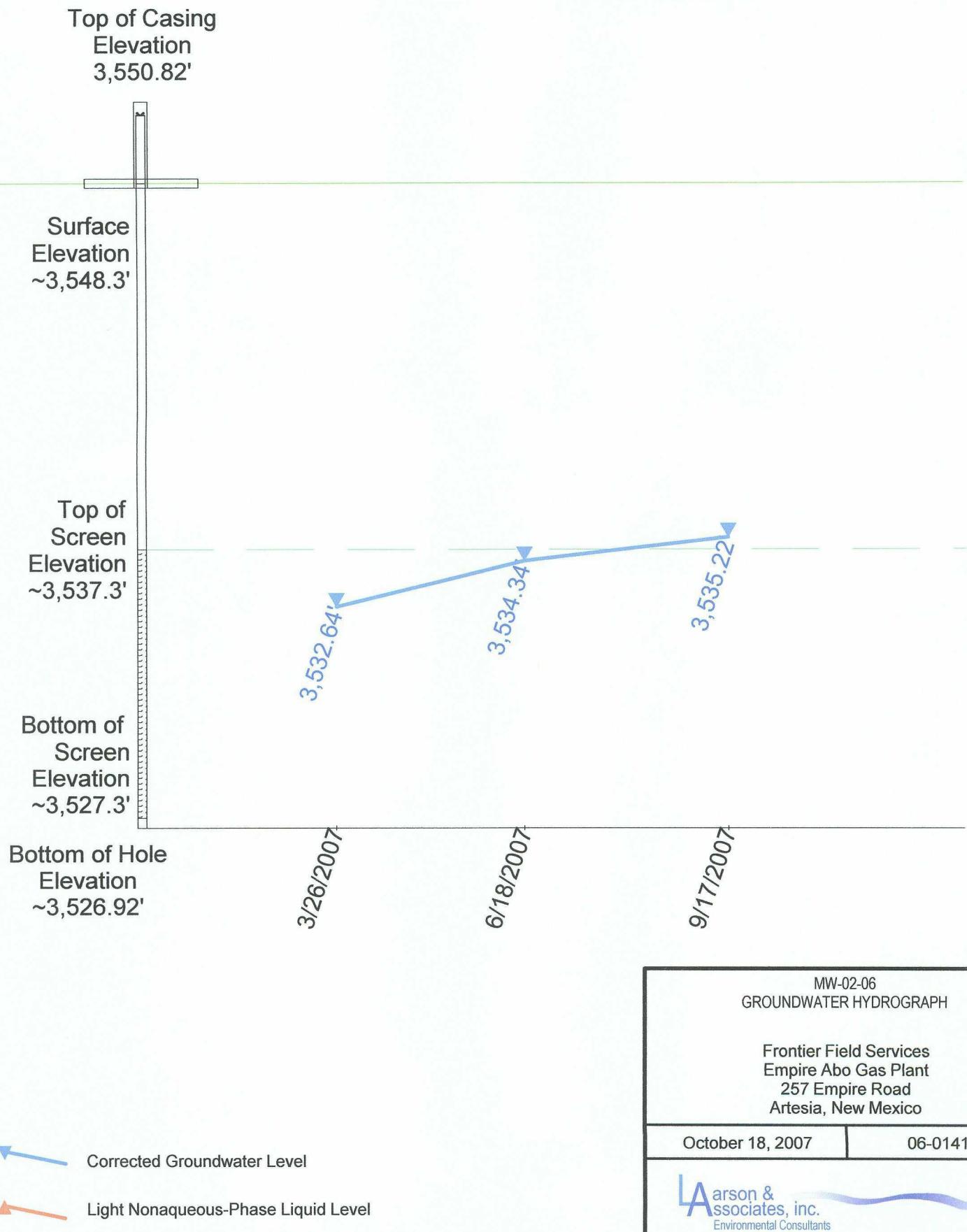
October 18, 2007	06-0141-01
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MW-02-05  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

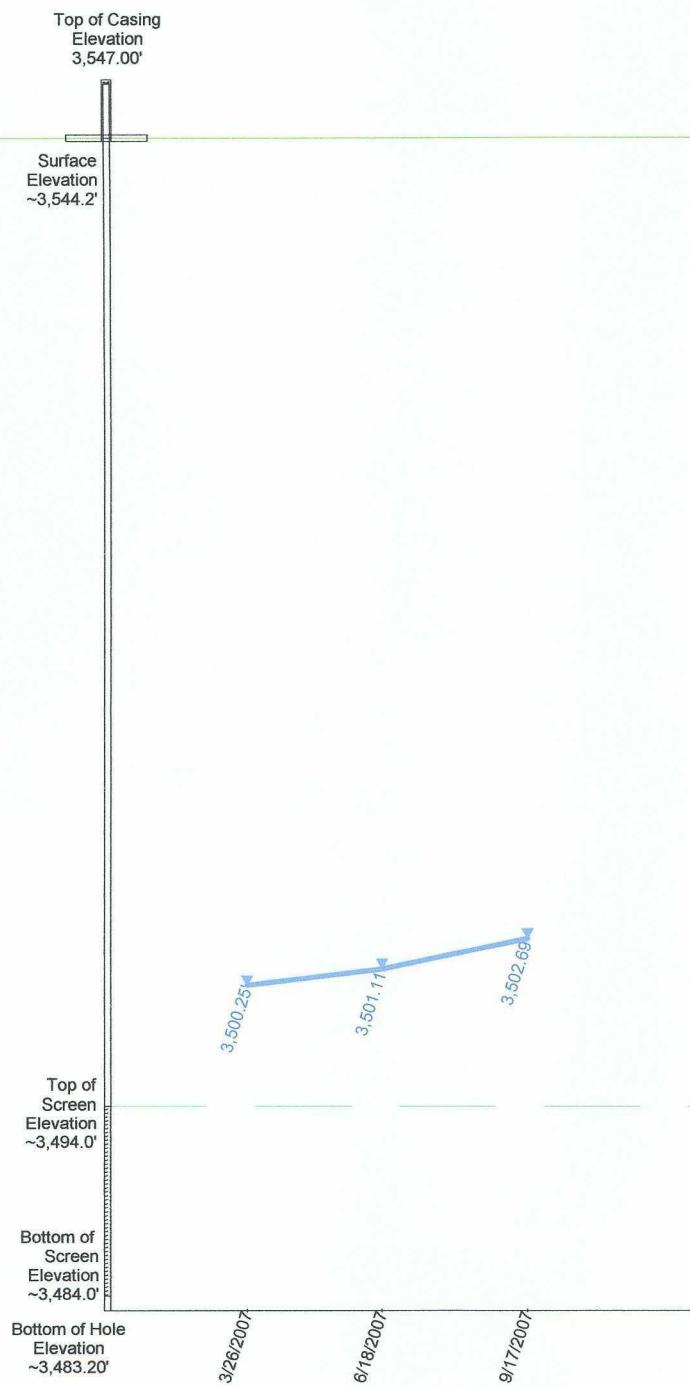
October 18, 2007	06-0141-01
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MW-02-06  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 18, 2007 06-0141-01



Corrected Groundwater Level  
Light Nonaqueous-Phase Liquid Level

MW-02-07  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 19, 2007	06-0141-01
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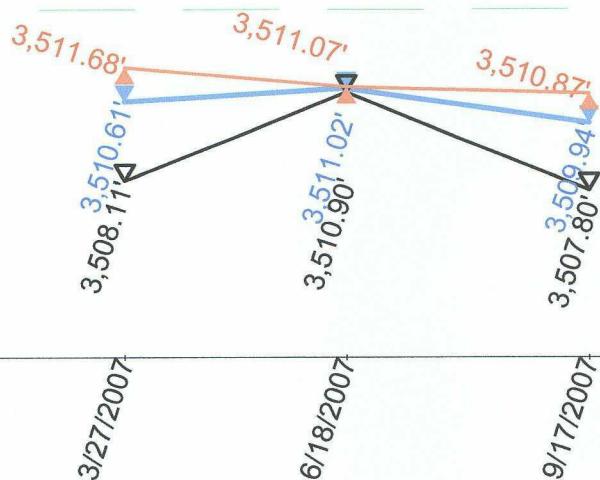
Top of Casing  
Elevation  
3,546.52'

Surface  
Elevation  
~3,543.5'

Top of  
Screen  
Elevation  
~3,513.5'

Bottom of  
Screen  
Elevation  
~3,503.5'

Bottom of Hole  
Elevation  
~3,502.55'



Uncorrected Groundwater Level

Corrected Groundwater Level

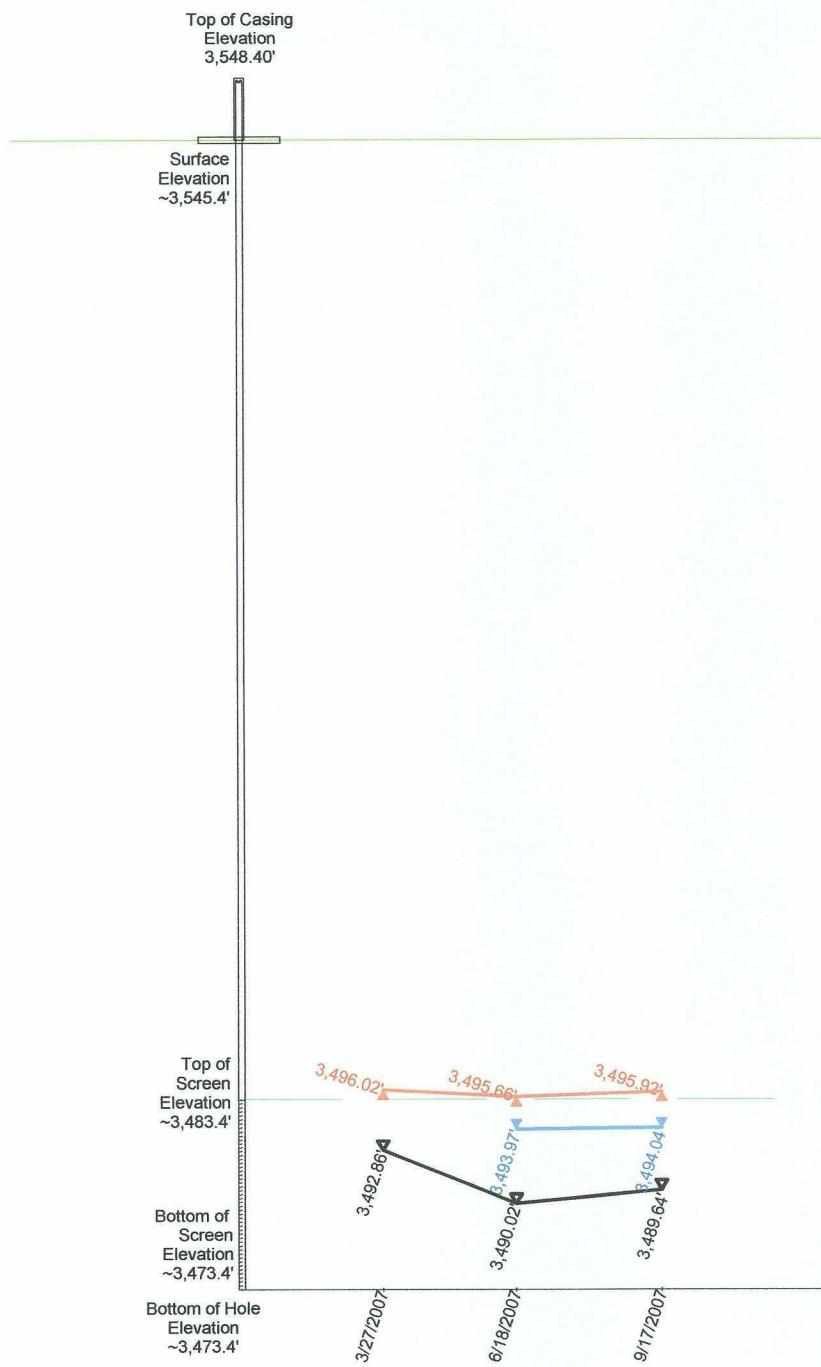
Light Nonaqueous-Phase Liquid Level

MW-02-09  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 19, 2007

06-0141-01



- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

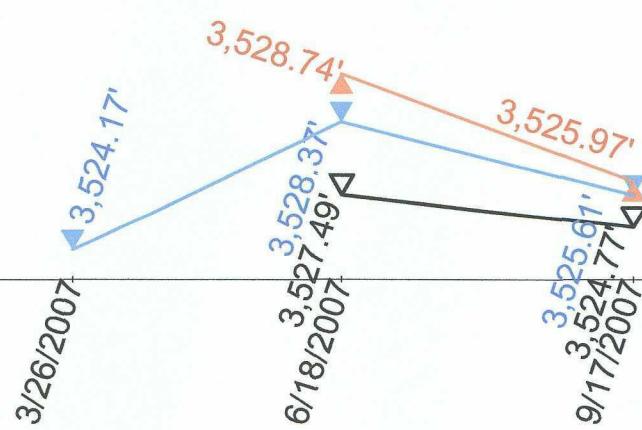
MW-02-10  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 19, 2007	06-0141-01
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Top of Casing  
 Elevation  
 3,546.79'  

  
 Surface  
 Elevation  
 ~3,544.0'  
  
 Top of  
 Screen  
 Elevation  
 ~3,534.0'  
  
 Bottom of  
 Screen  
 Elevation  
 ~3,524.0'  
  
 Bottom of Hole  
 Elevation  
 ~3,523.37'



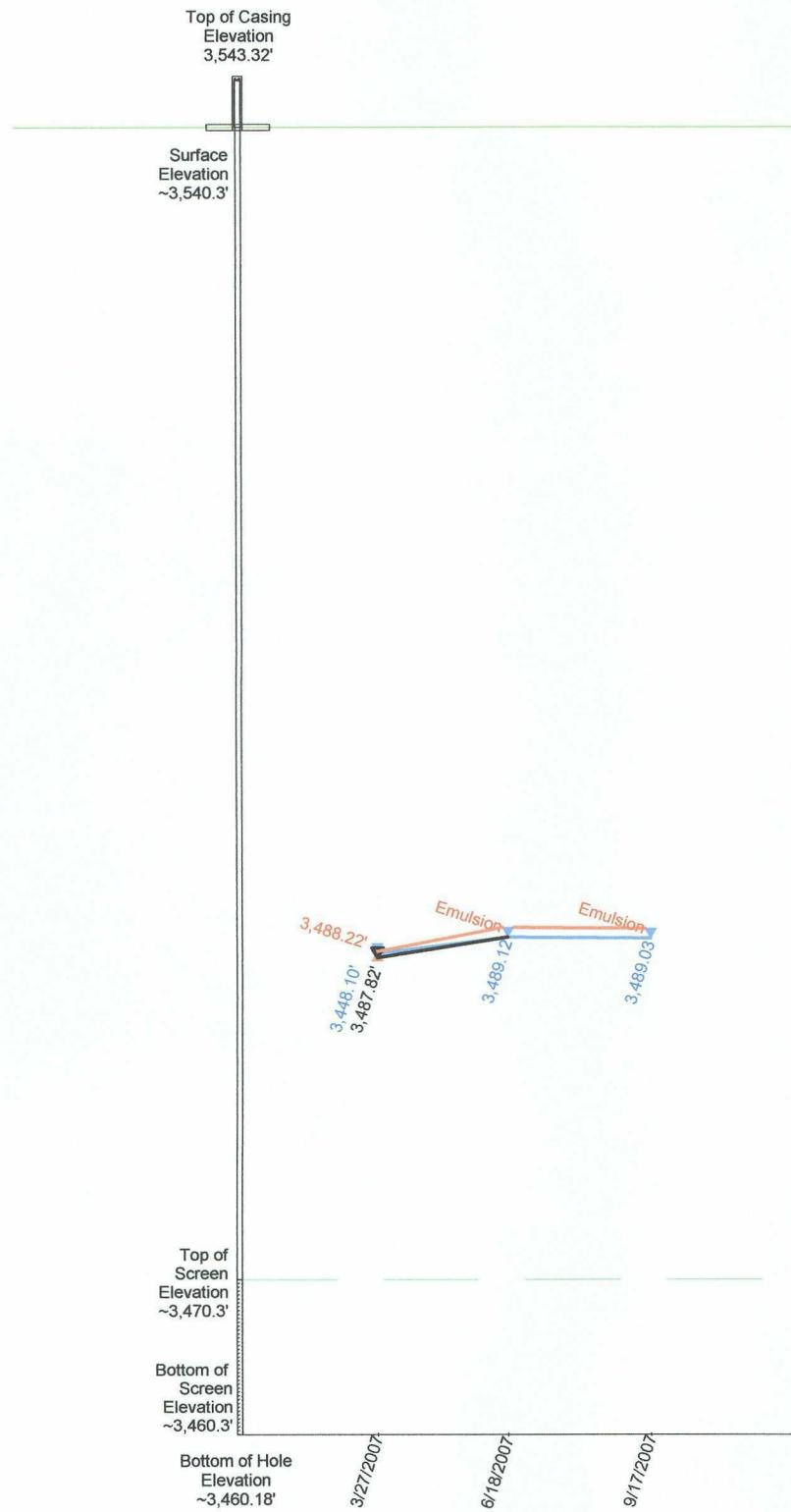
-  Uncorrected Groundwater Level
-  Corrected Groundwater Level
-  Light Nonaqueous-Phase Liquid Level

MW-02-11  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 19, 2007

06-0141-01

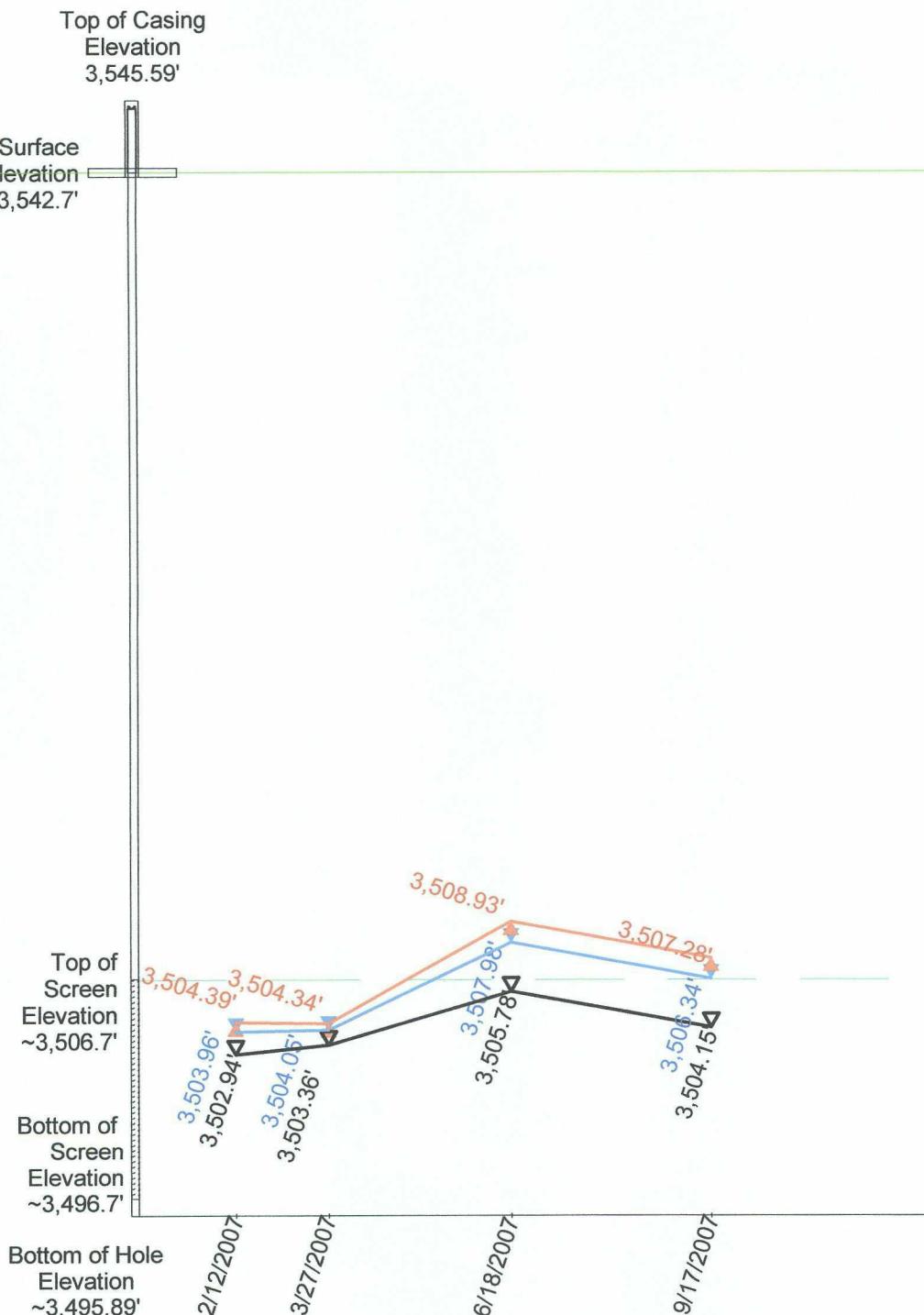


-  Uncorrected Groundwater Level
-  Corrected Groundwater Level
-  Light Nonaqueous-Phase Liquid Level

MW-02-12  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 21, 2007	06-0141-01
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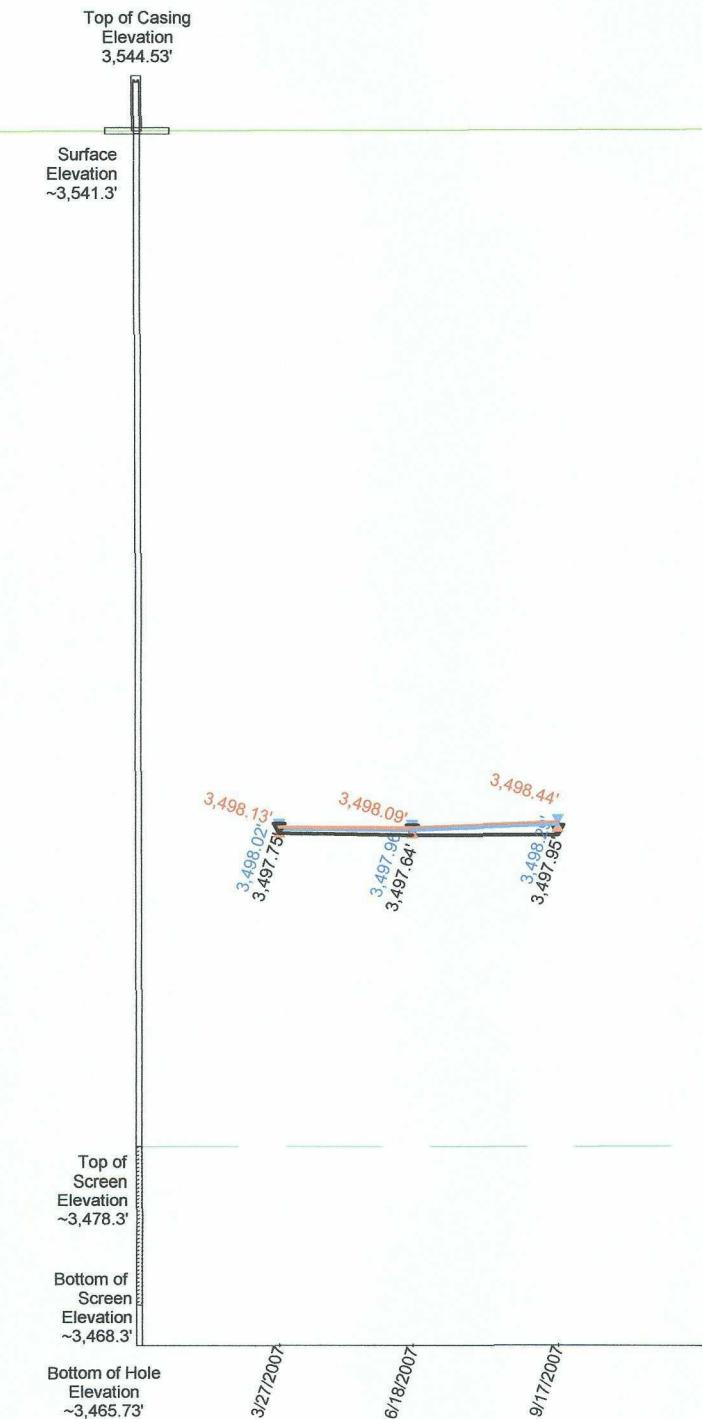


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

MW-02-13  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 21, 2007      06-0141-01

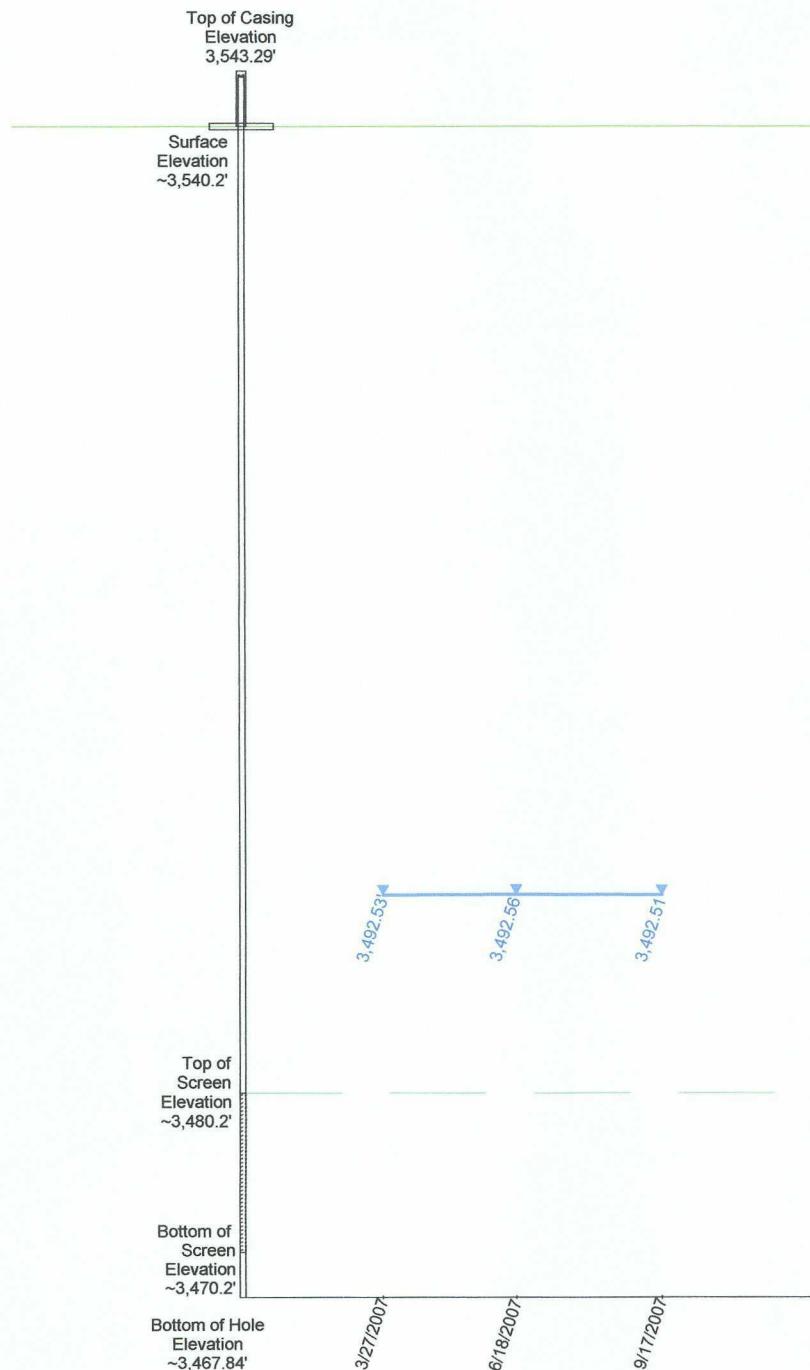


-  Uncorrected Groundwater Level
-  Corrected Groundwater Level
-  Light Nonaqueous-Phase Liquid Level

MW-02-14  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 21, 2007	06-0141-01
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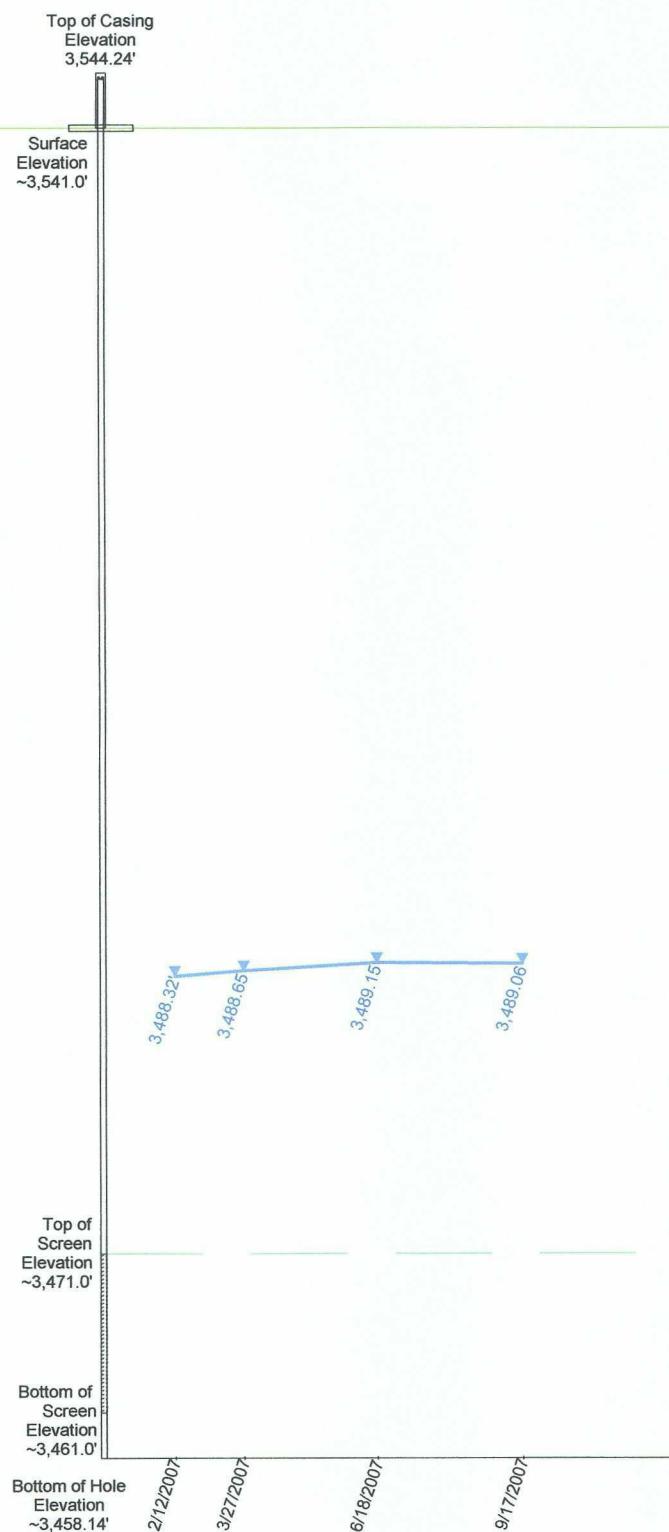
- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

MW-02-15  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 21, 2007

06-0141-01

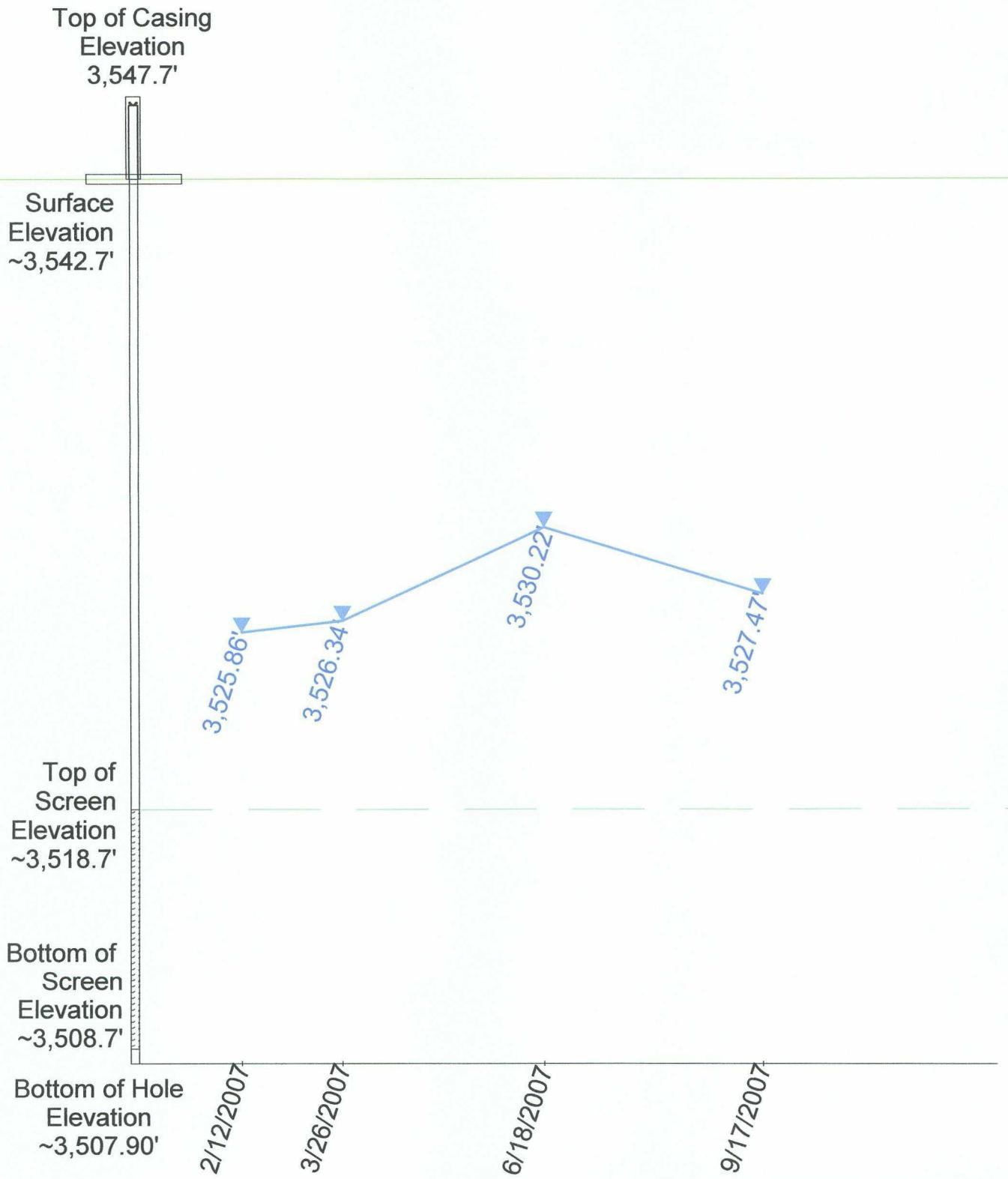


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

MW-02-16  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

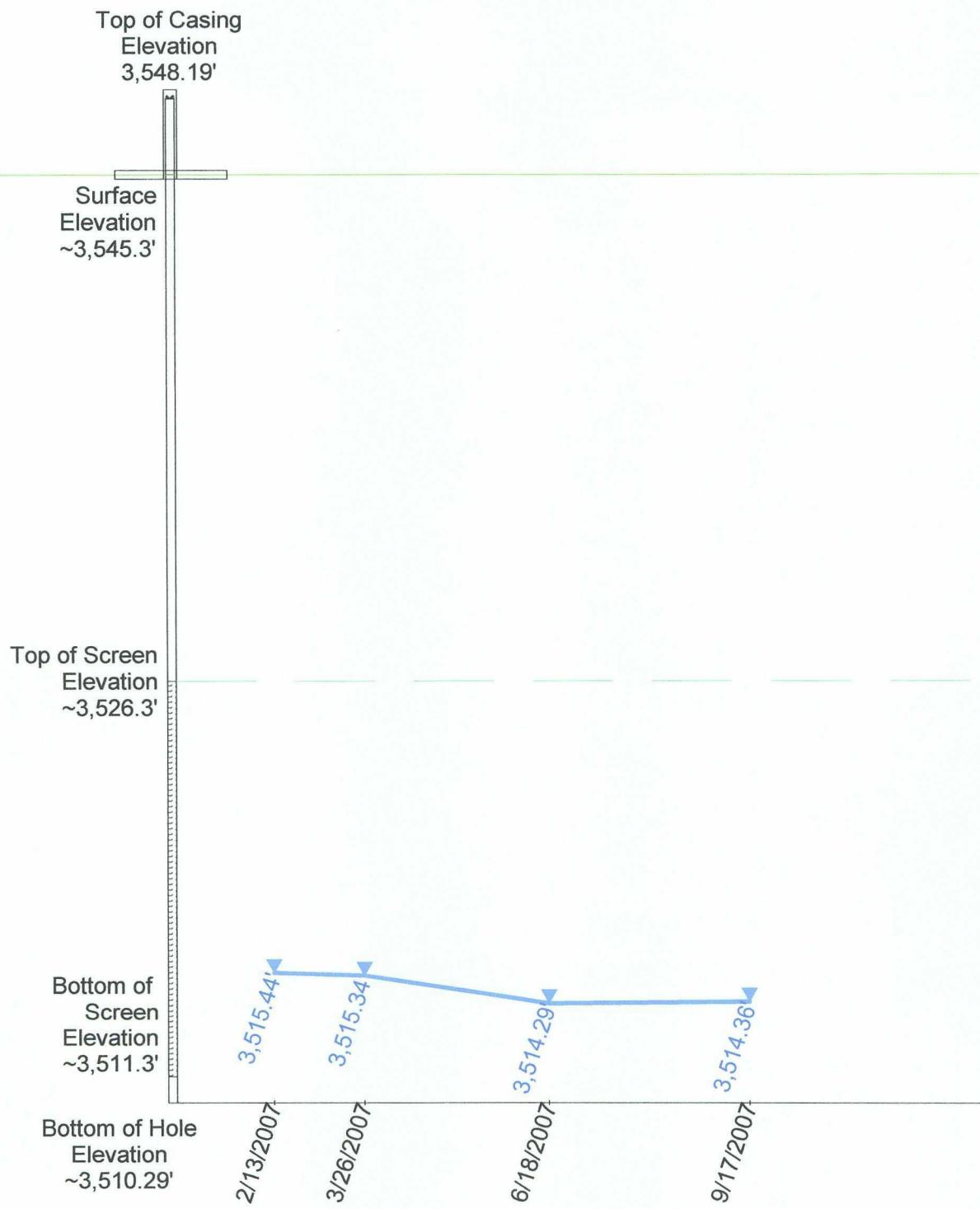
October 21, 2007	06-0141-01
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MW-02-18  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 25, 2007	06-0141-01
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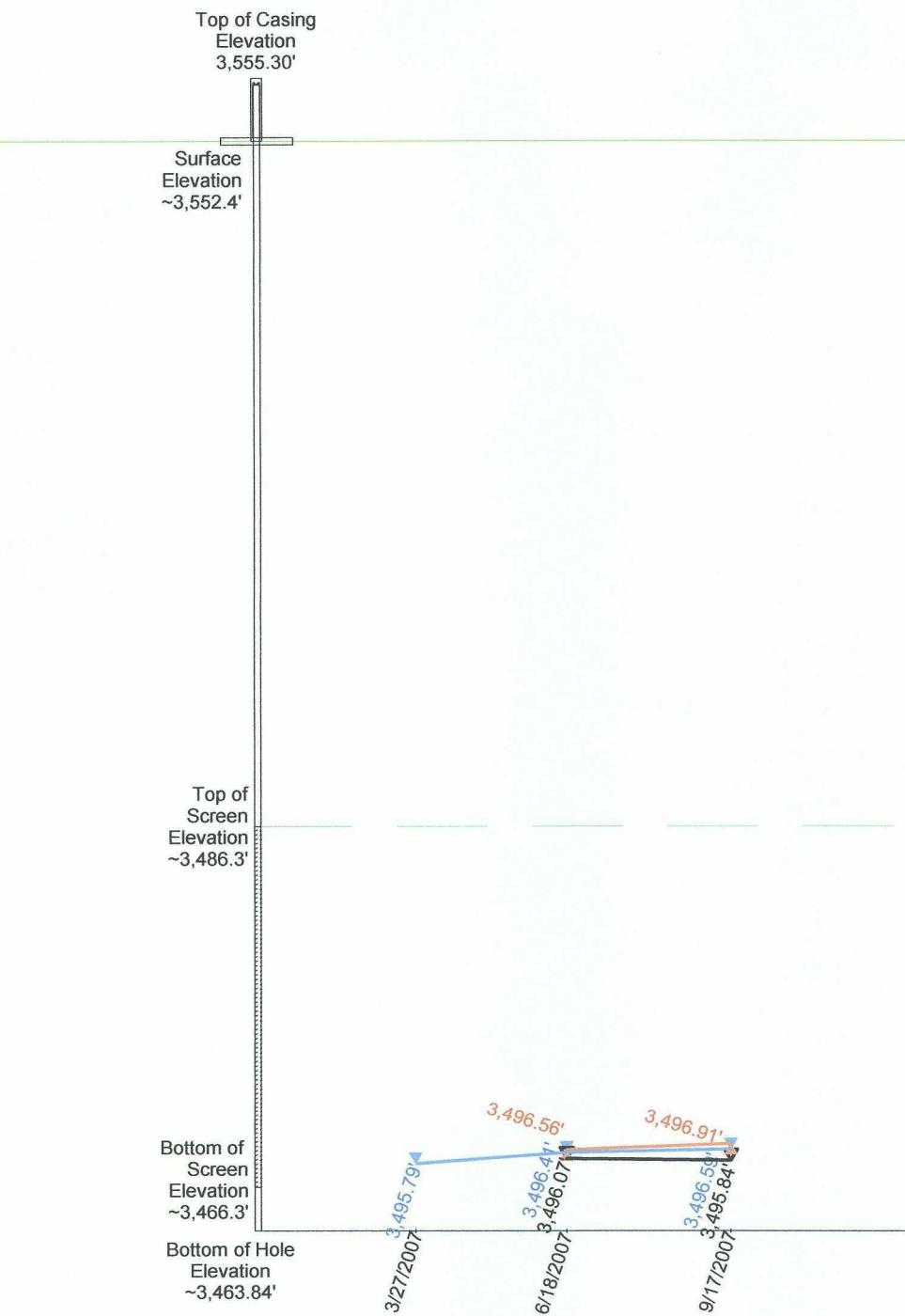


MW-02  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 18, 2007	06-0141-01
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-  Corrected Groundwater Level
-  Light Nonaqueous-Phase Liquid Level



Uncorrected Groundwater Level

Corrected Groundwater Level

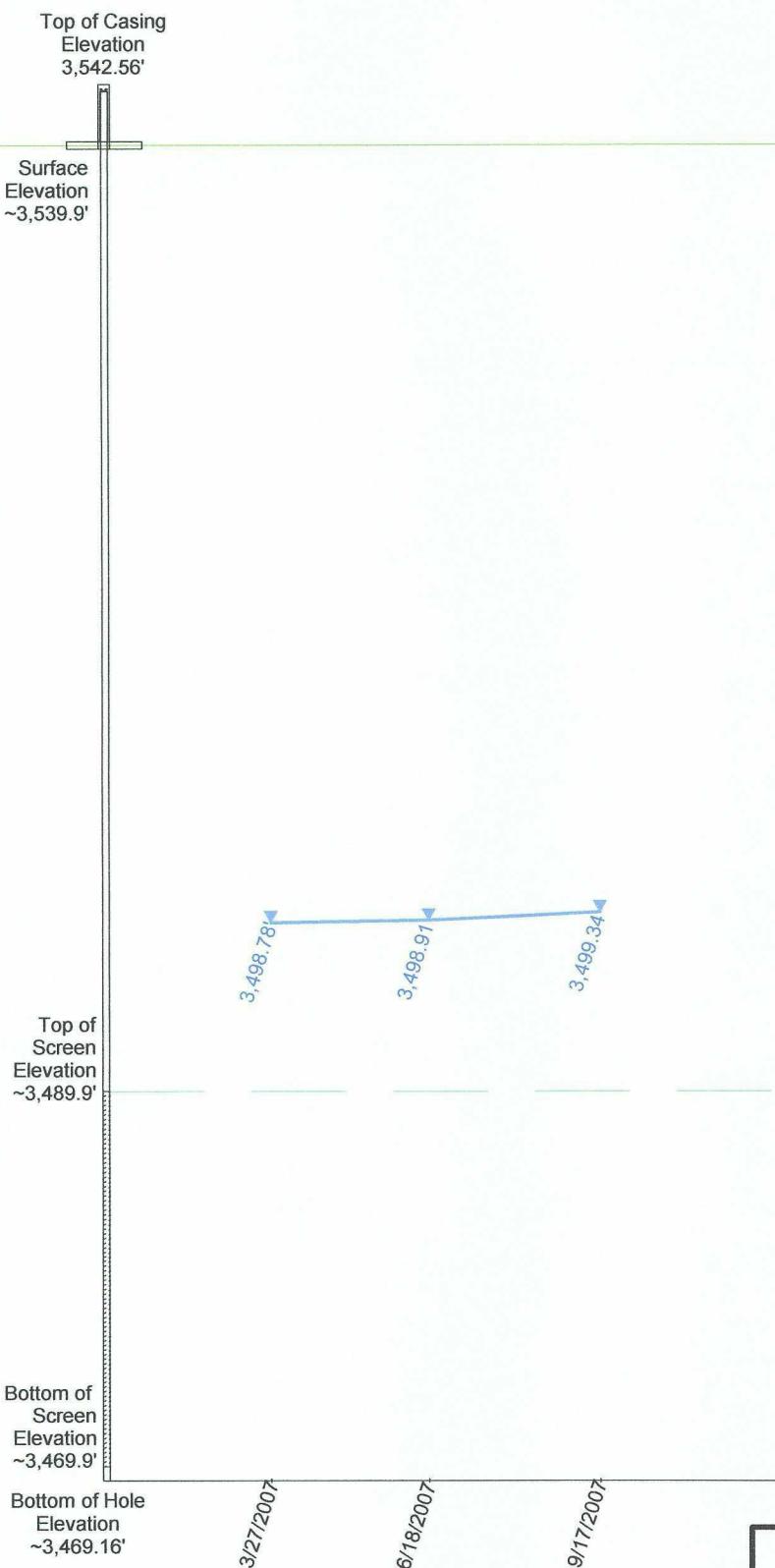
Light Nonaqueous-Phase Liquid Level

MW-03  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 26, 2007

06-0141-01

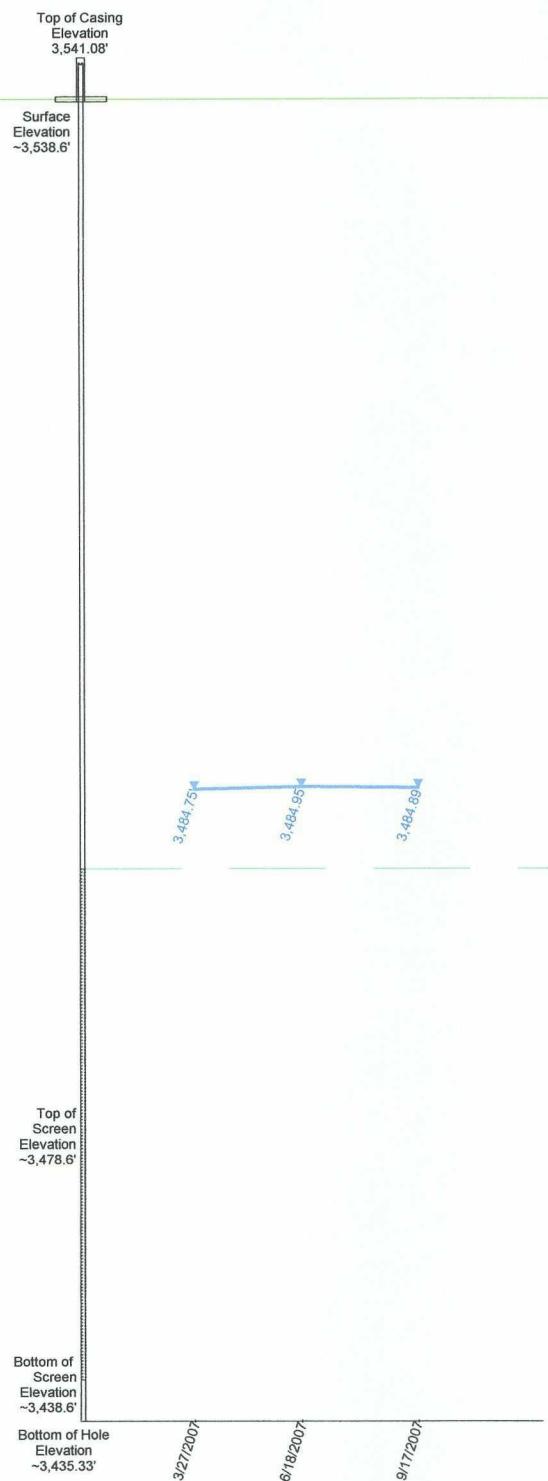


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

MW-03-01  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 26, 2007	06-0141-01
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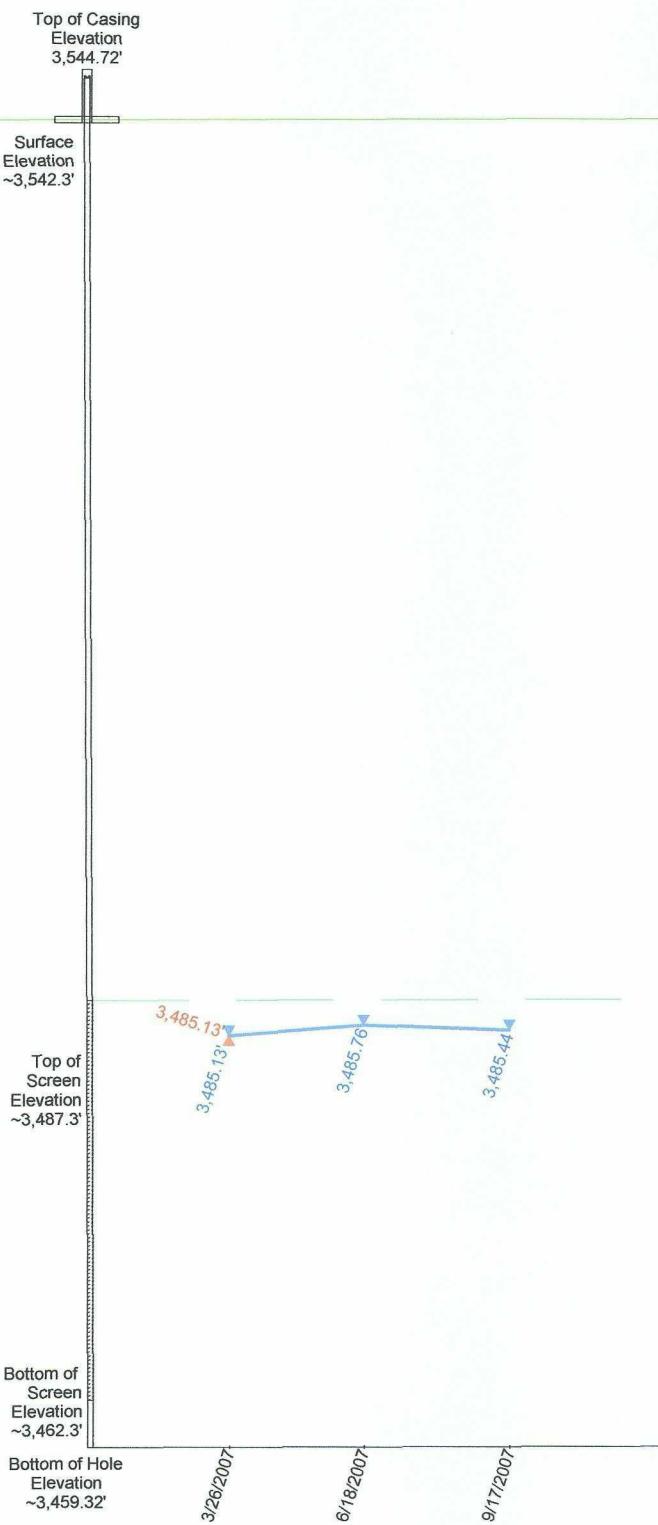


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

MW-03-02  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 26, 2007	06-0141-01
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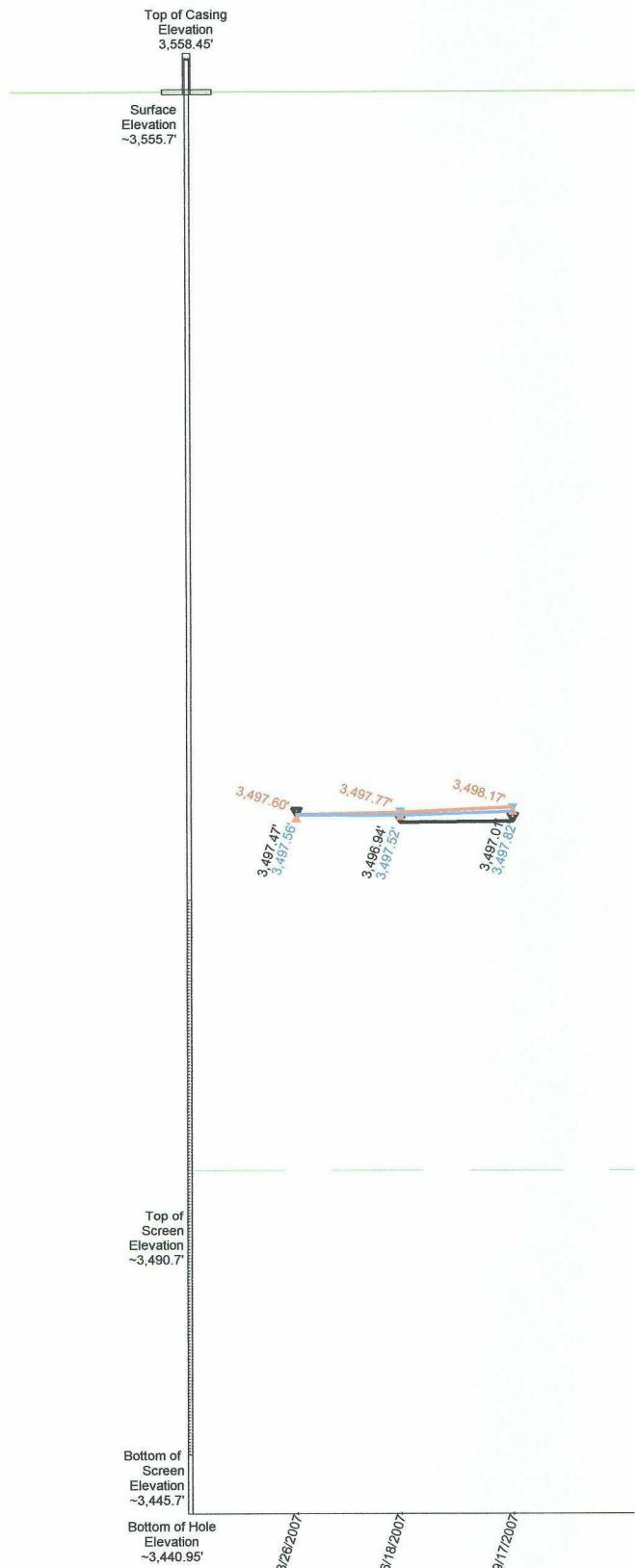
-  Uncorrected Groundwater Level
-  Corrected Groundwater Level
-  Light Nonaqueous-Phase Liquid Level

MW-03-03  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 26, 2007

06-0141-01

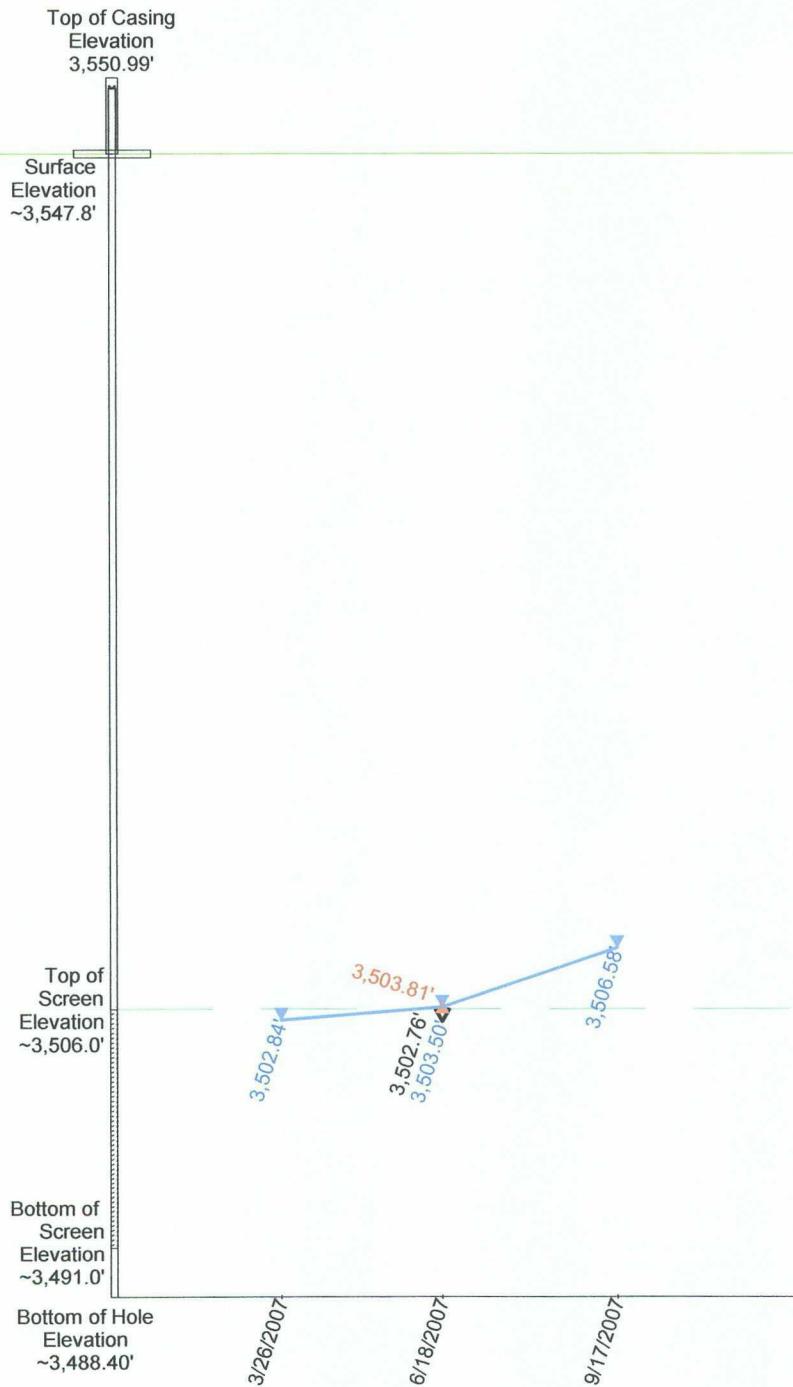


-  Uncorrected Groundwater Level
-  Corrected Groundwater Level
-  Light Nonaqueous-Phase Liquid Level

MW-03-04  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 26, 2007	06-0141-01
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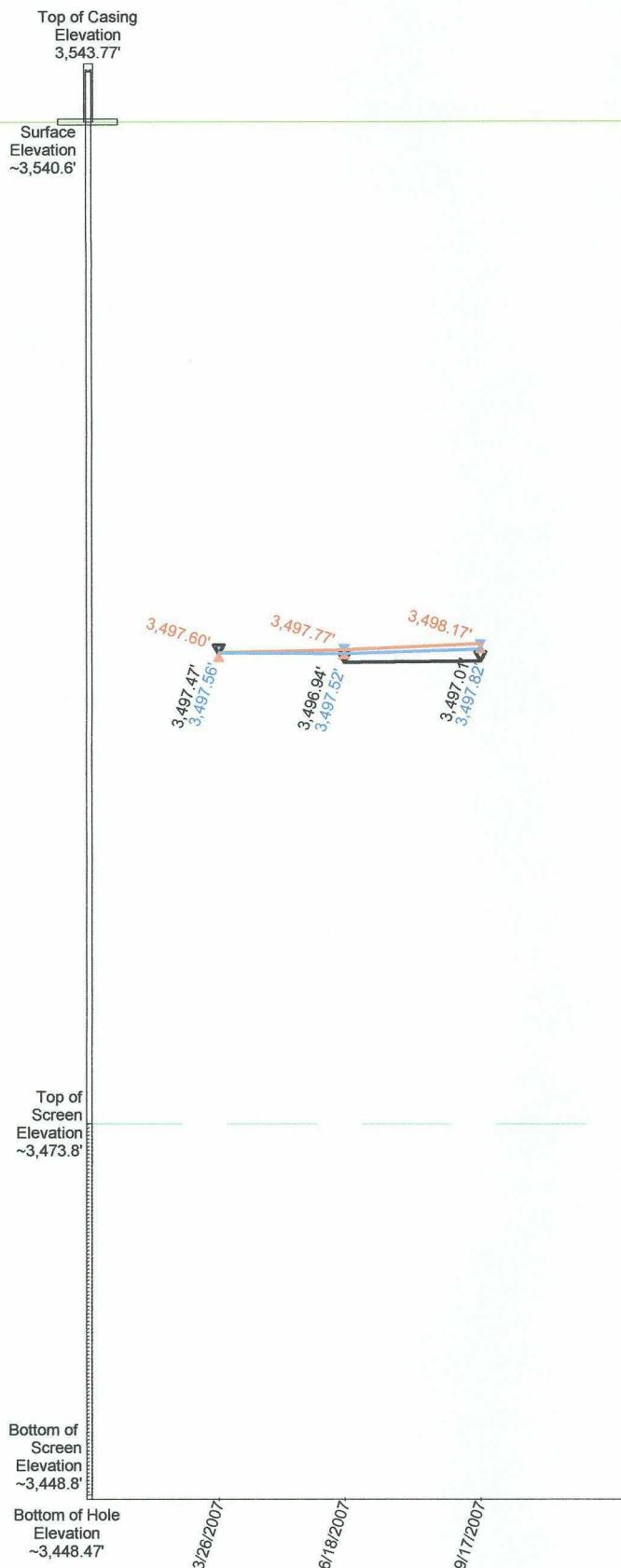


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

MW-04  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 30, 2007	06-0141-01
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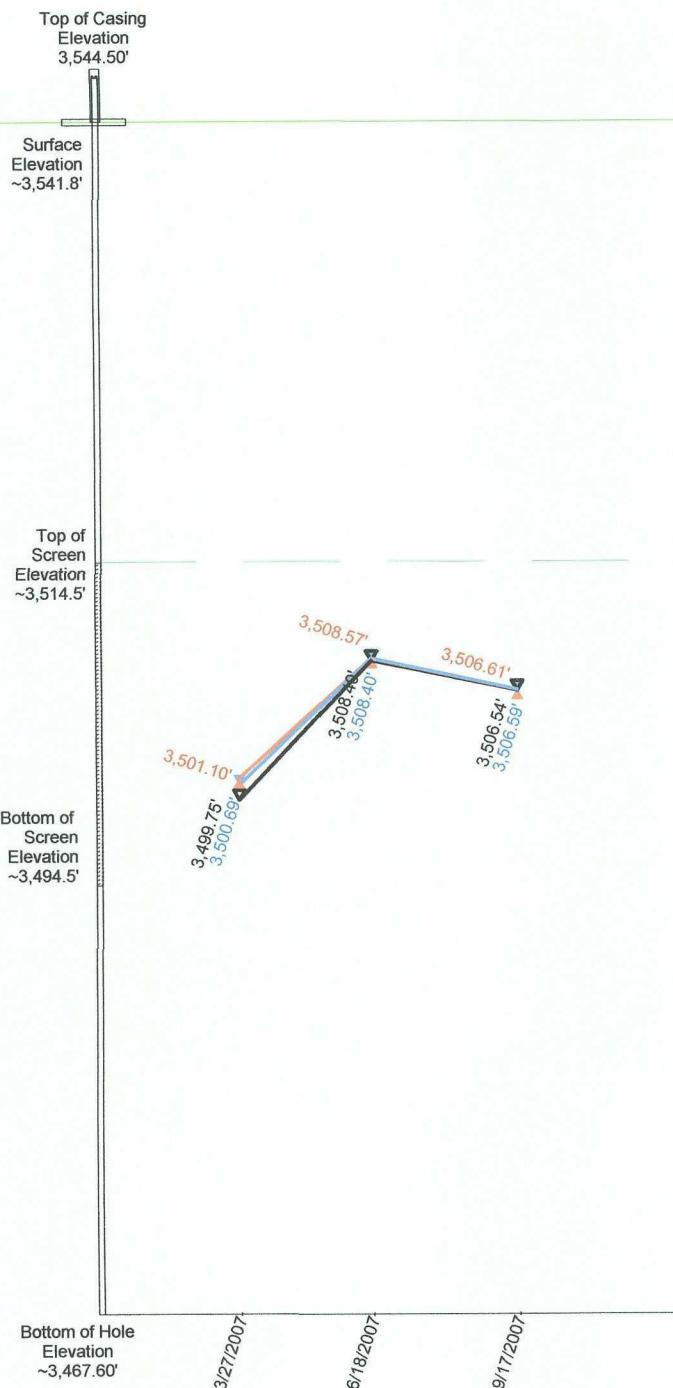


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

MW-05  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 31, 2007	06-0141-01
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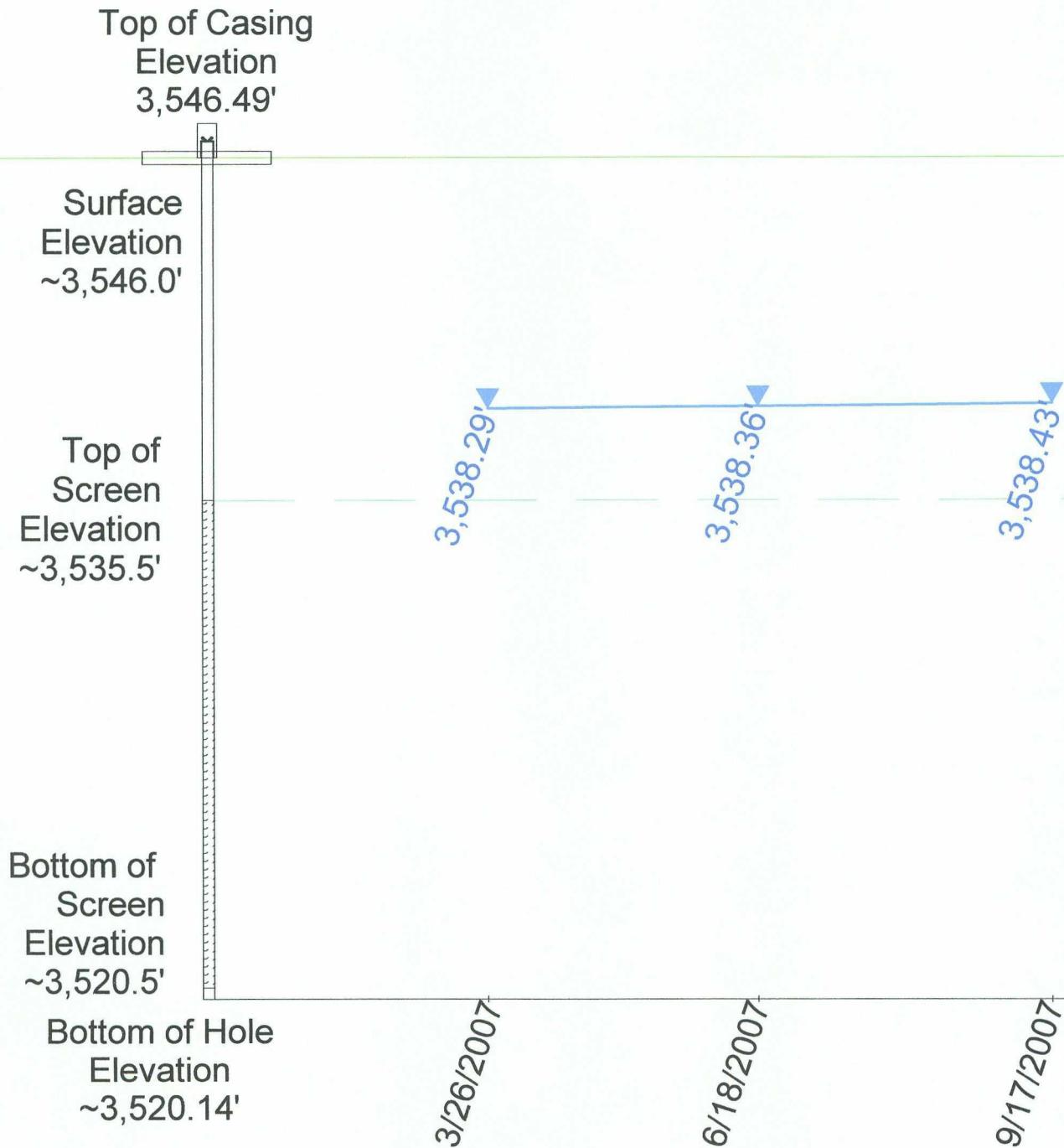


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

MW-06  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 31, 2007	06-0141-01
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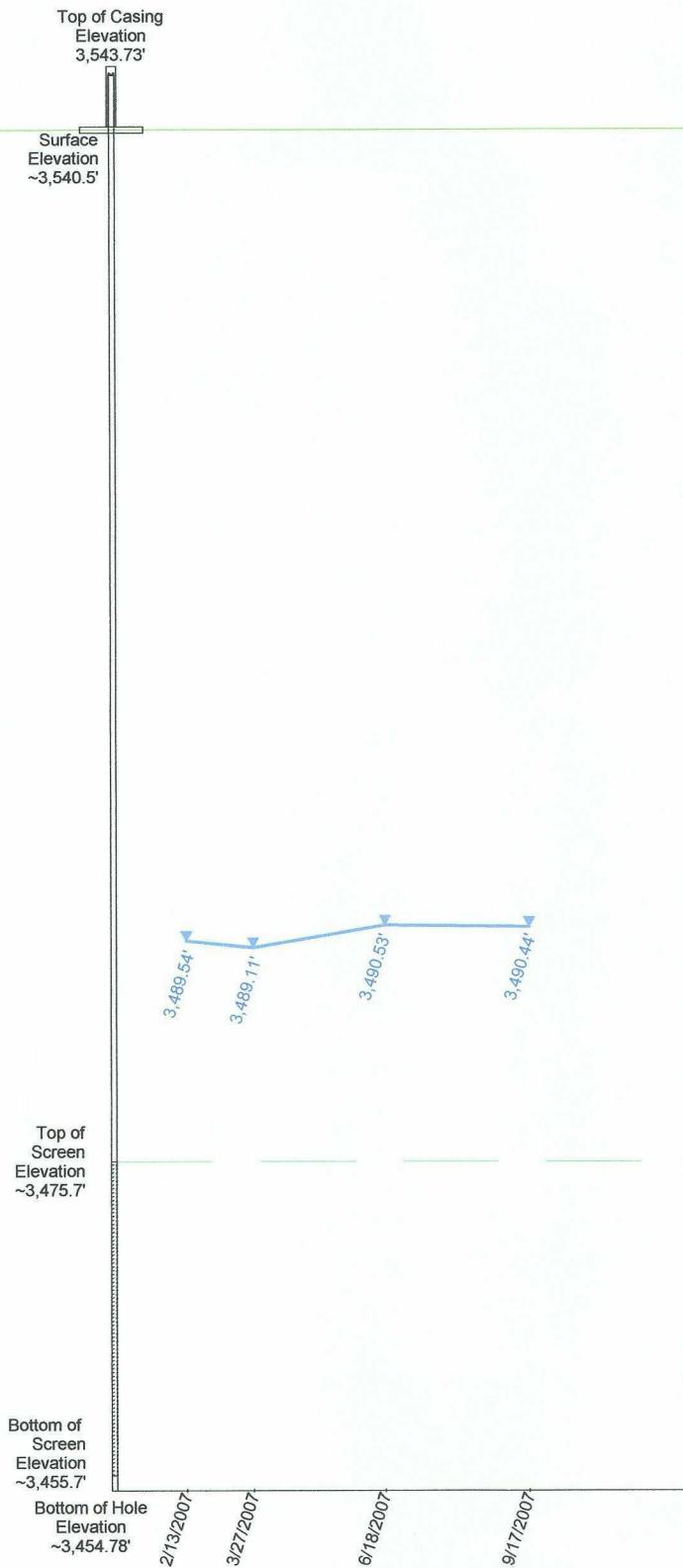


-  Uncorrected Groundwater Level
-  Corrected Groundwater Level
-  Light Nonaqueous-Phase Liquid Level

MW-07  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 31, 2007	06-0141-01
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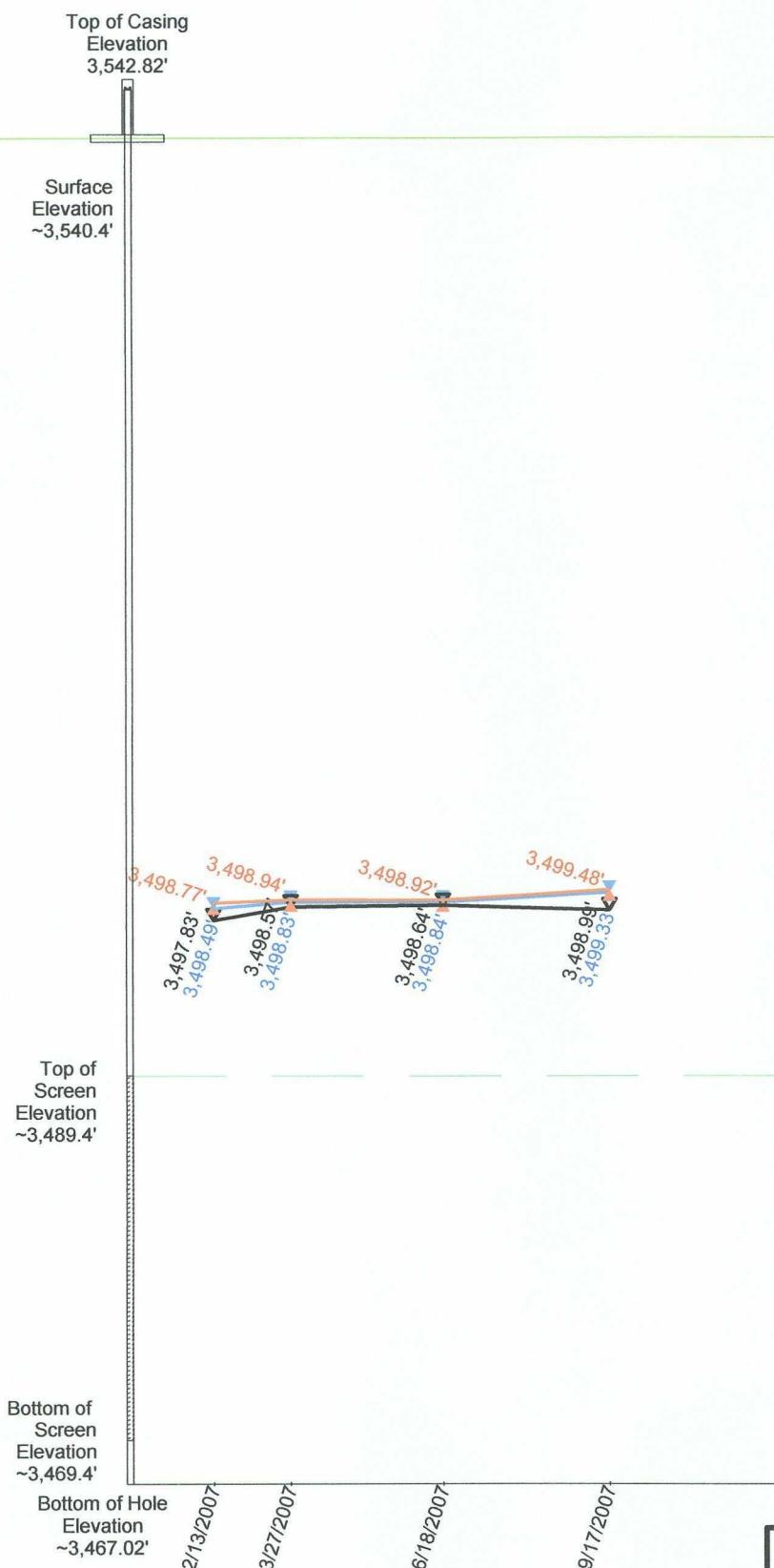


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

MW-08  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 31, 2007	06-0141-01
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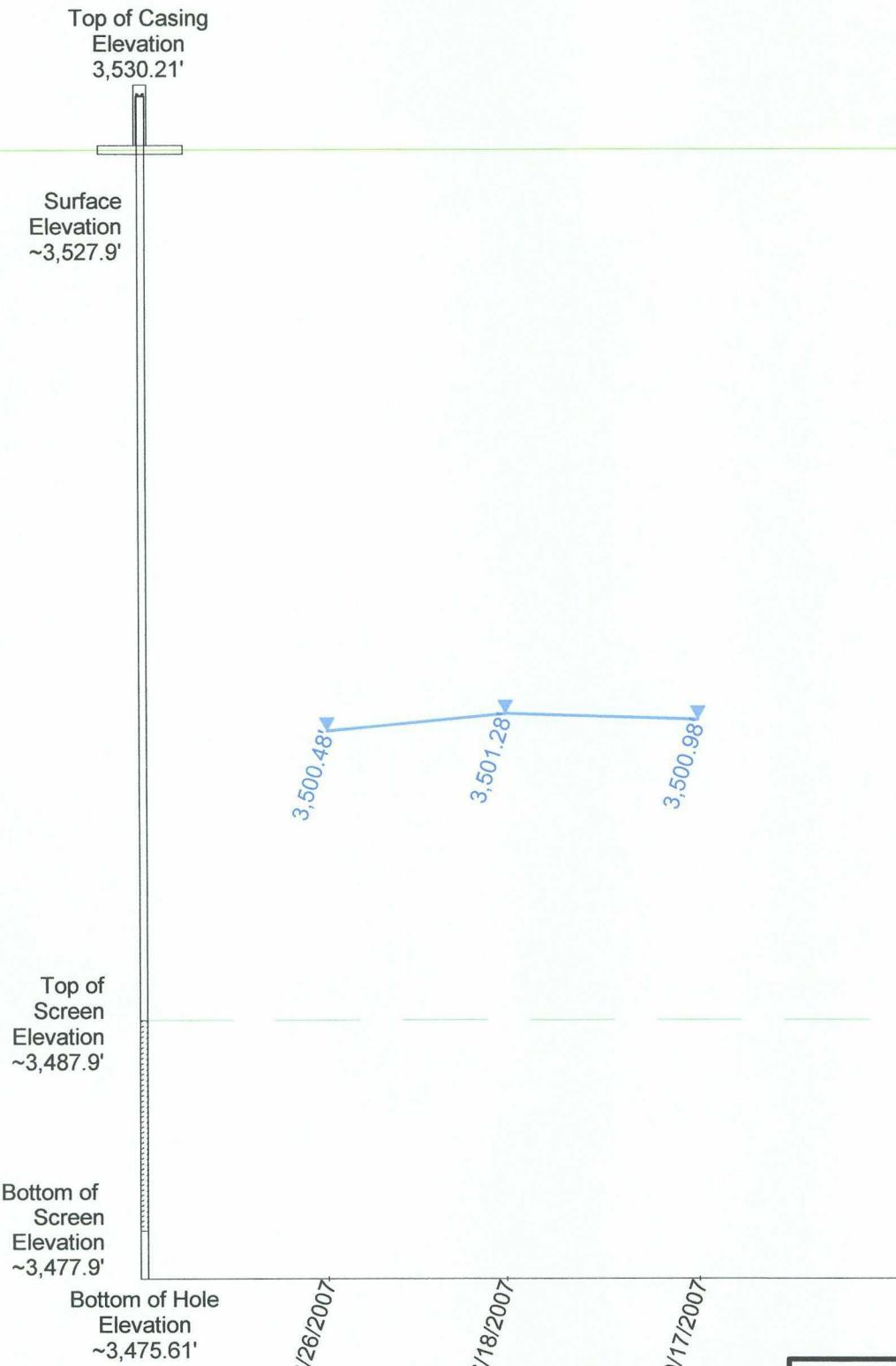


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

MW-09  
GROUNDWATER HYDROGRAPH

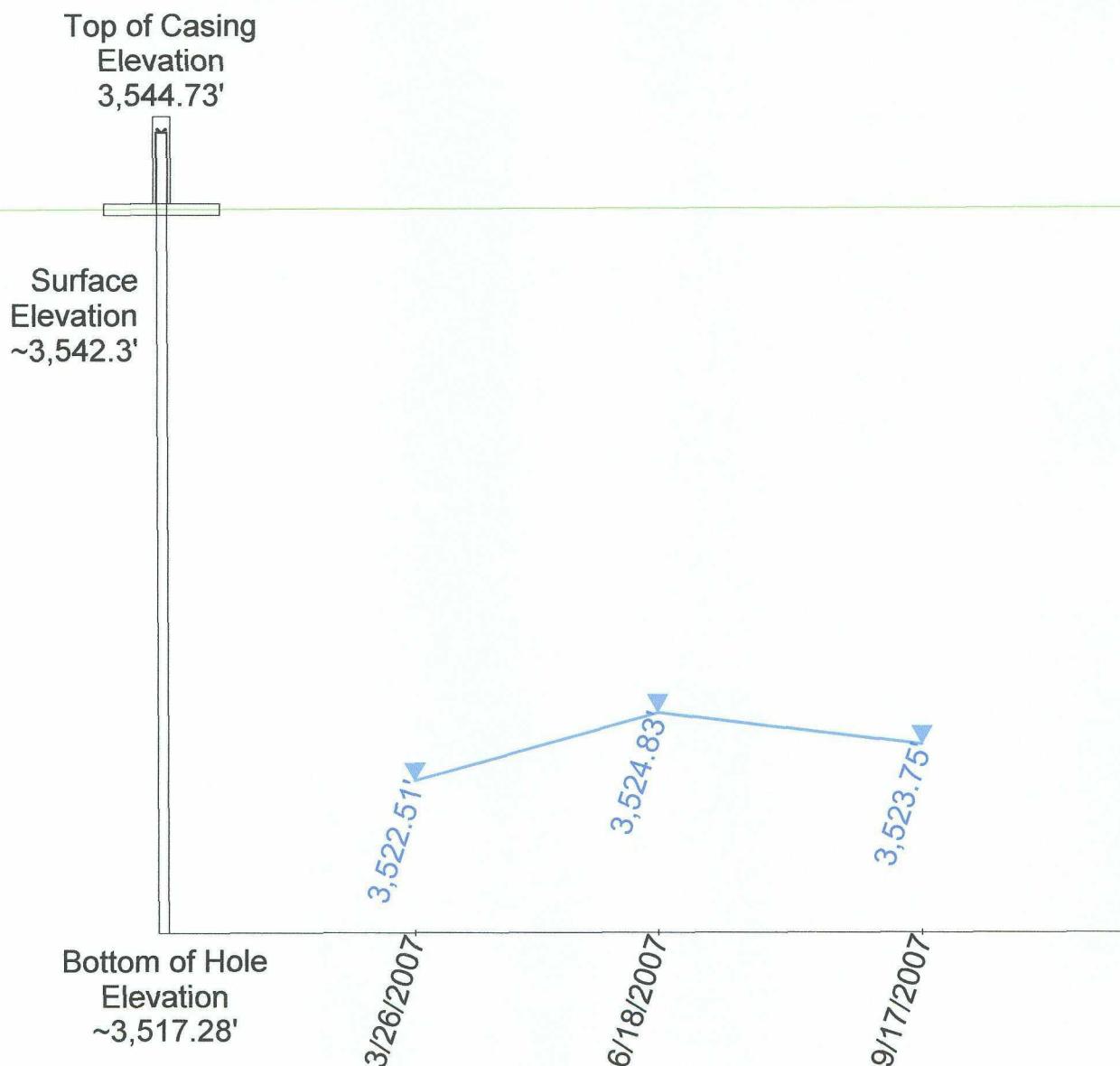
Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

October 31, 2007	06-0141-01
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- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

P-01 GROUNDWATER HYDROGRAPH	
Frontier Field Services Empire Abo Gas Plant 257 Empire Road Artesia, New Mexico	
November 5, 2007	06-0141-01
<b>Larson &amp; Associates, inc.</b> <small>Environmental Consultants</small>	

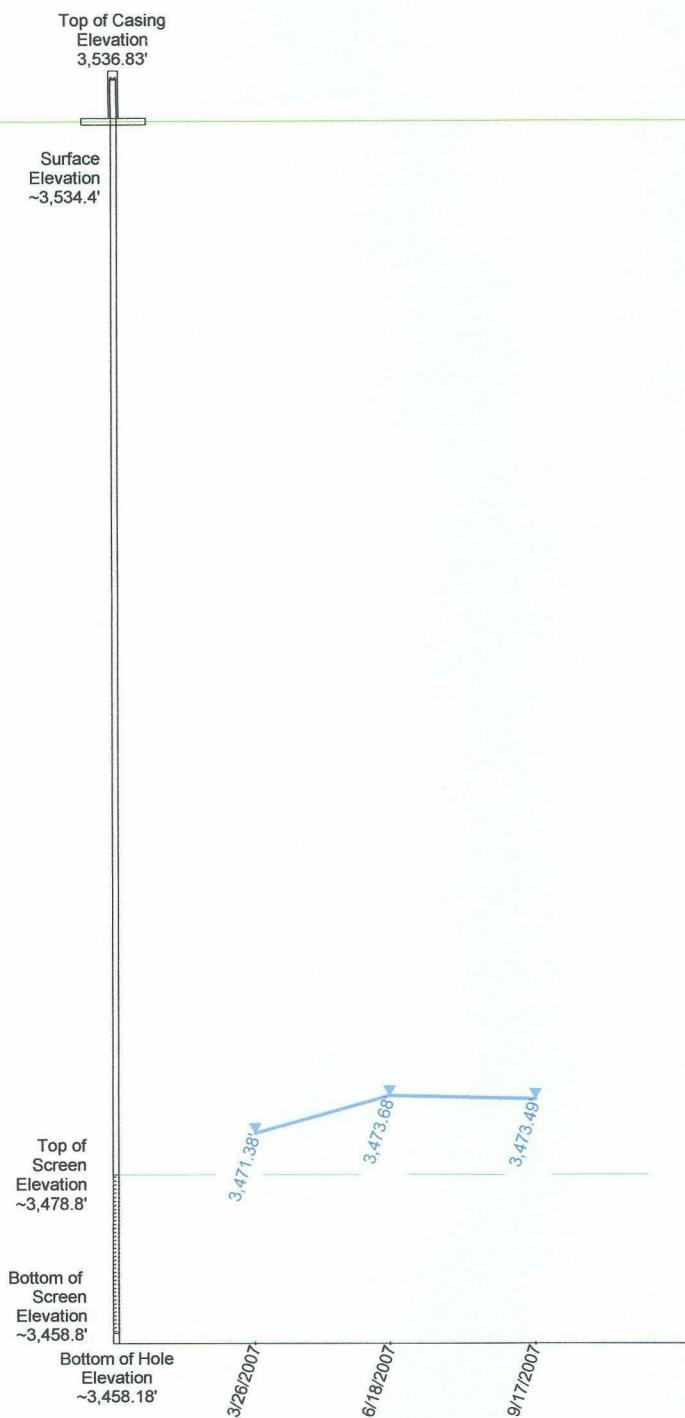


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

P-02  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

November 5, 2007	06-0141-01
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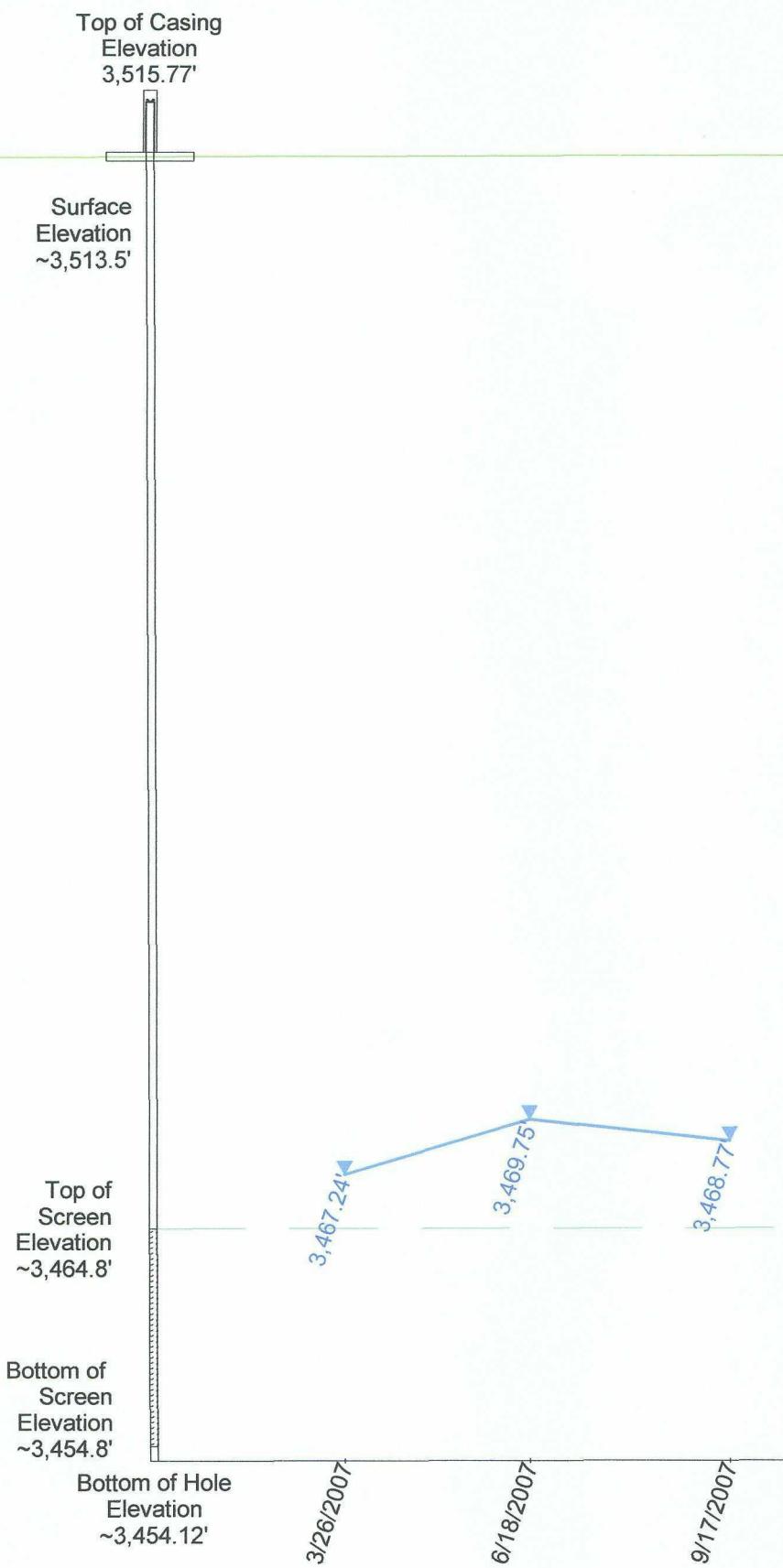


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

P-03  
GROUNDWATER HYDROGRAPH

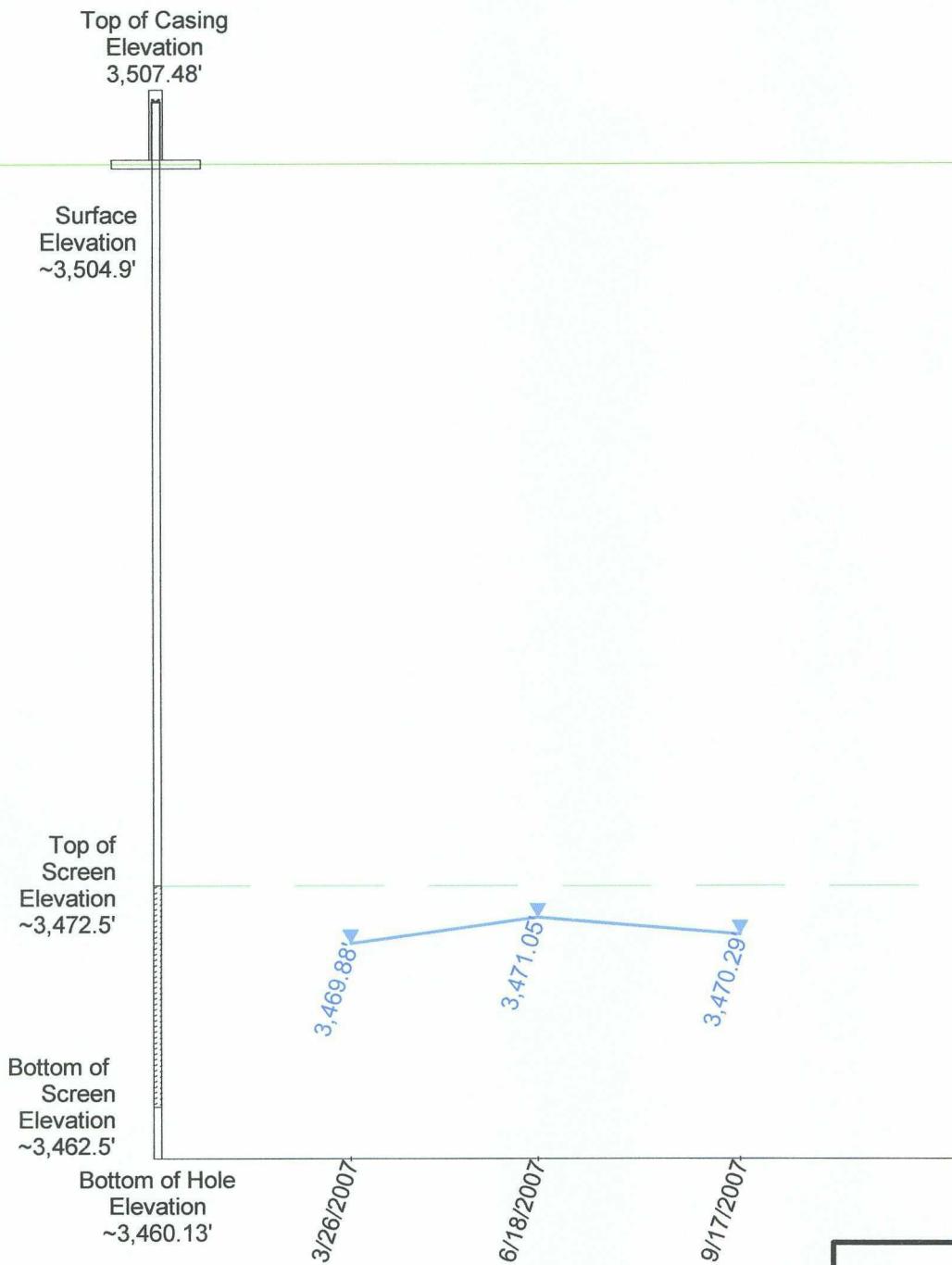
Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

November 5, 2007	06-0141-01
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- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

P-04 GROUNDWATER HYDROGRAPH	
Frontier Field Services Empire Abo Gas Plant 257 Empire Road Artesia, New Mexico	
November 5, 2007	06-0141-01
	

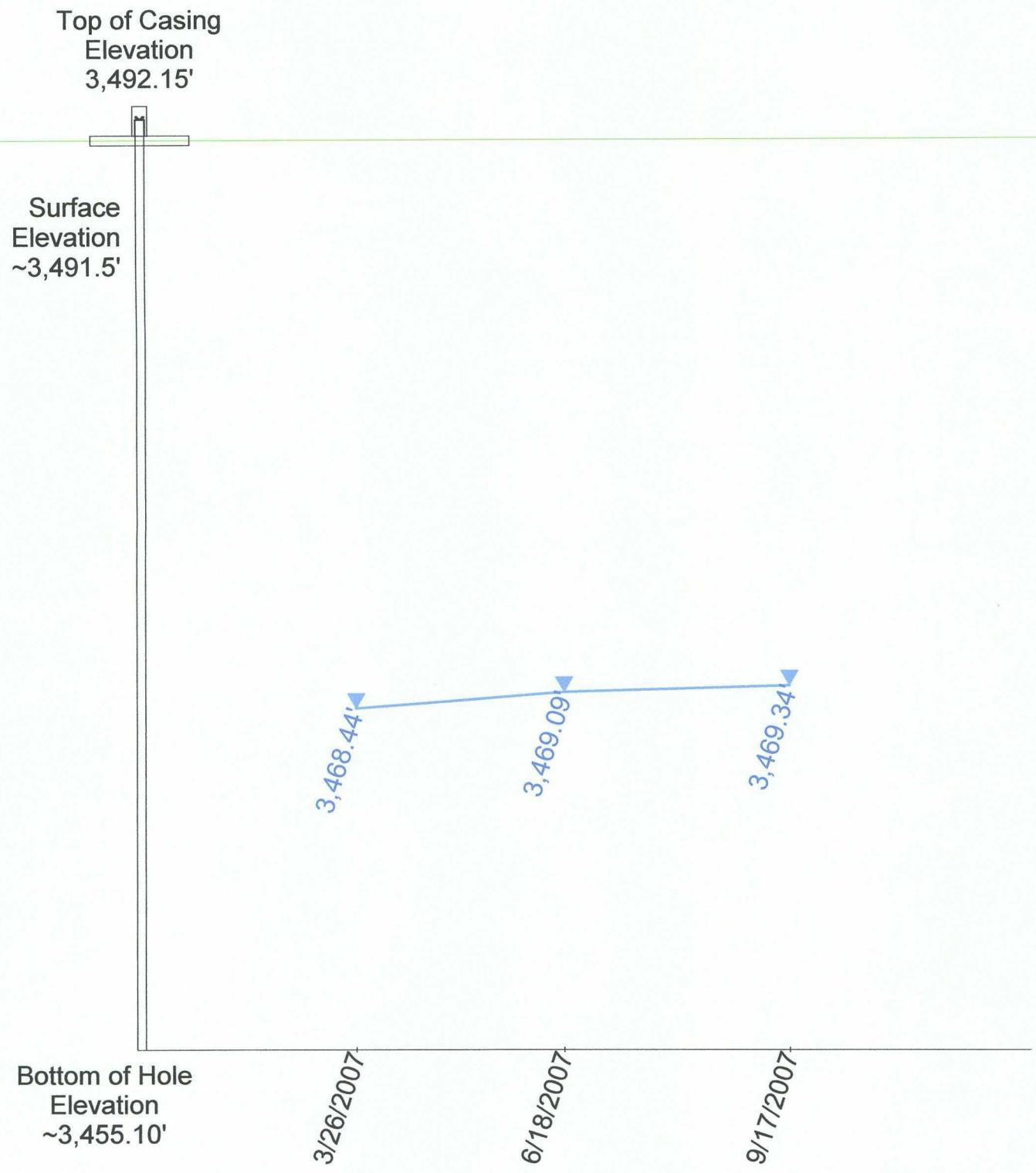


P-05  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

November 5, 2007

06-0141-01

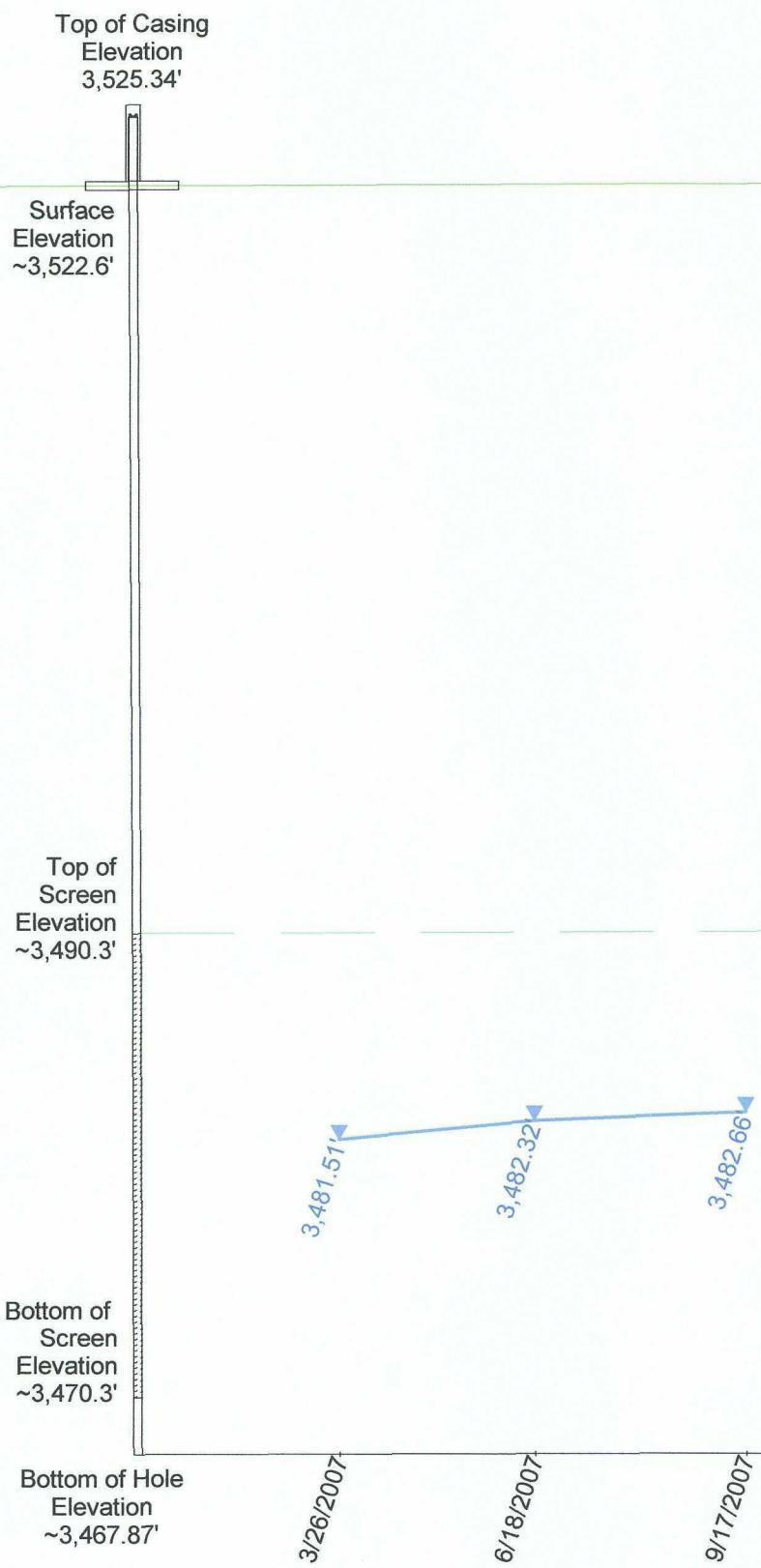


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

EB-01  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

November 1, 2007	06-0141-01
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Uncorrected Groundwater Level



Corrected Groundwater Level



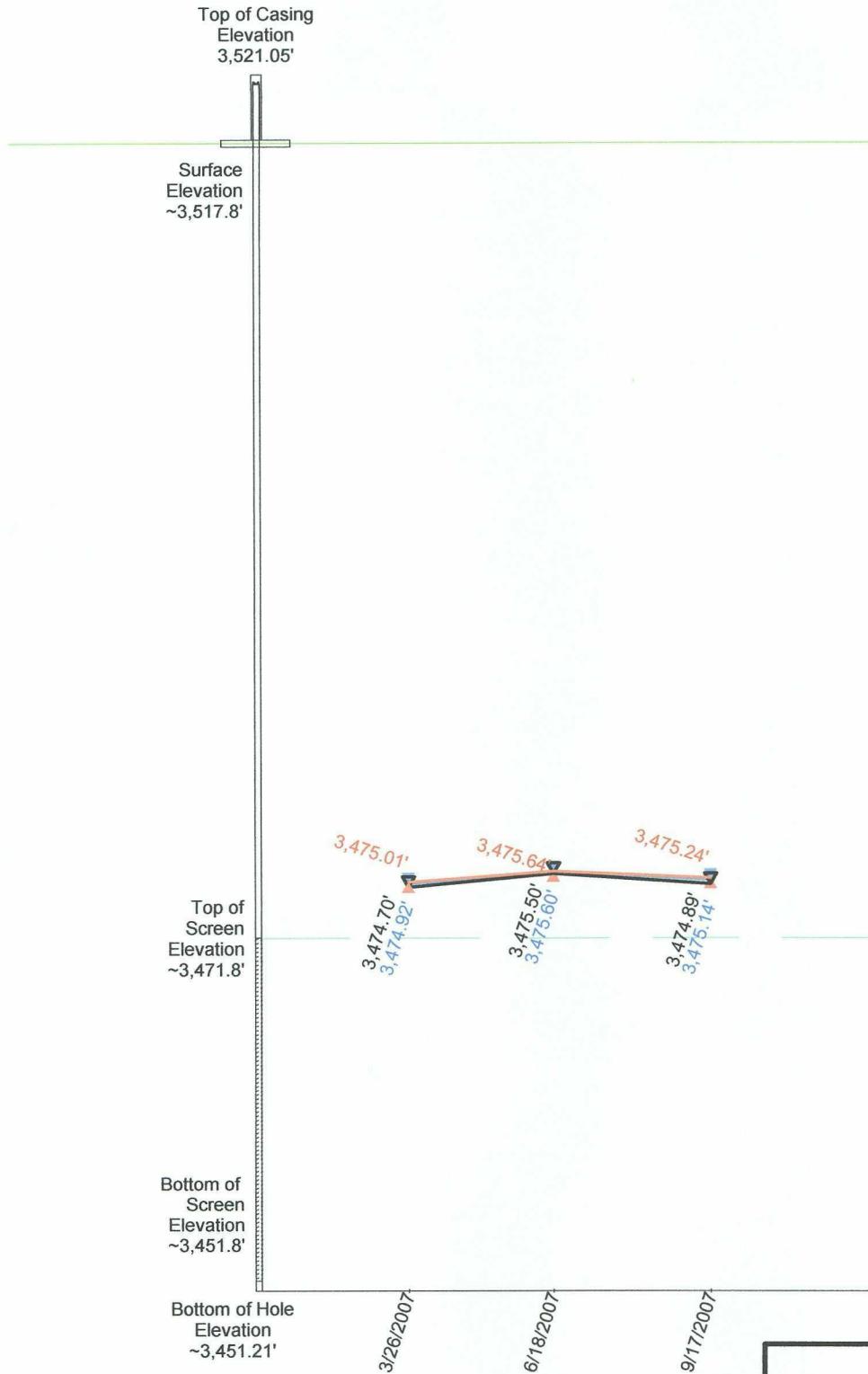
Light Nonaqueous-Phase Liquid Level

EB-02  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

November 1, 2007

06-0141-01

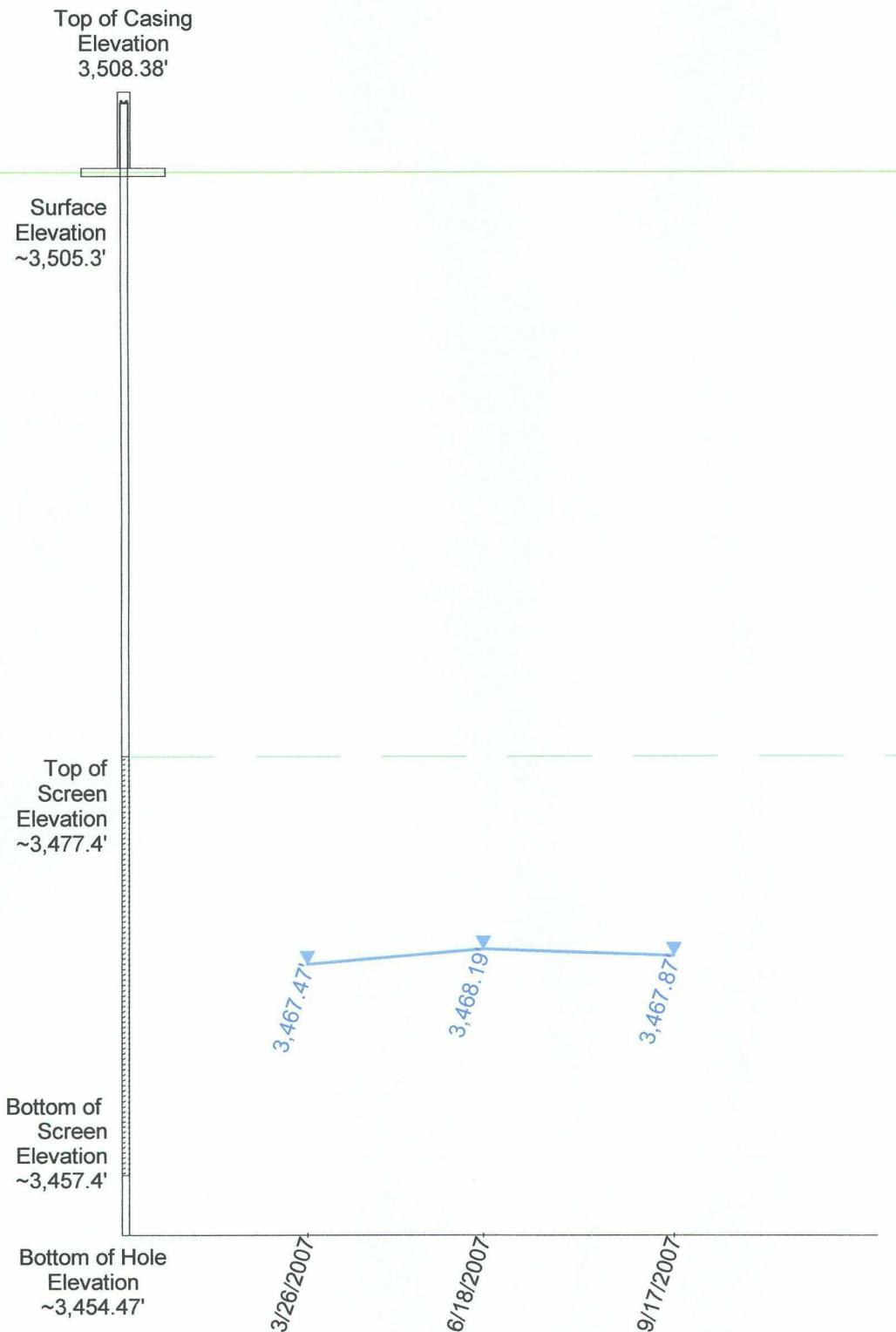


- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

EB-03  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

November 1, 2007	06-0141-01
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Uncorrected Groundwater Level

Corrected Groundwater Level

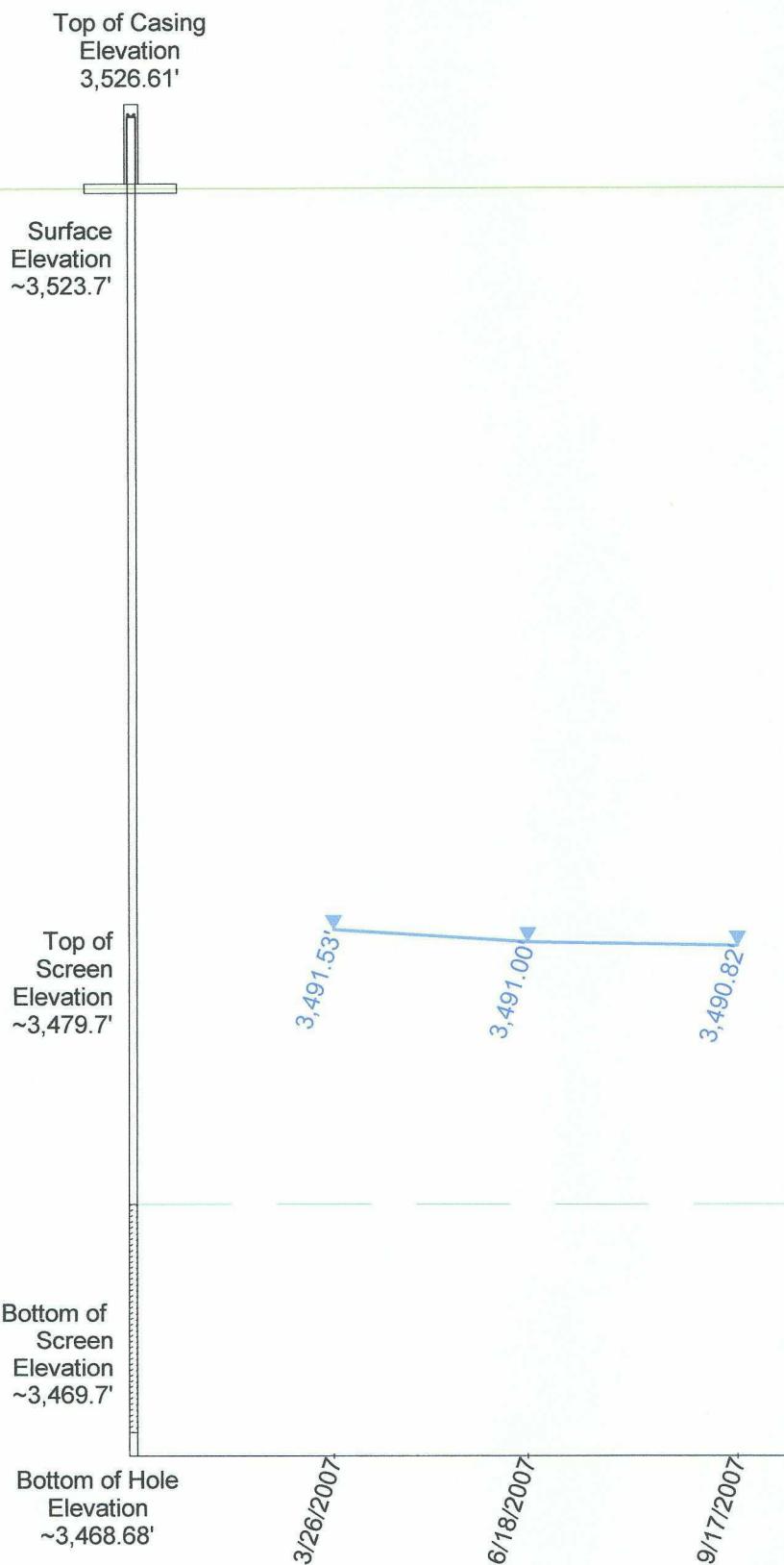
Light Nonaqueous-Phase Liquid Level

EB-04  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

November 1, 2007

06-0141-01



- Uncorrected Groundwater Level
- Corrected Groundwater Level
- Light Nonaqueous-Phase Liquid Level

EB-05 GROUNDWATER HYDROGRAPH	
Frontier Field Services Empire Abo Gas Plant 257 Empire Road Artesia, New Mexico	
November 1, 2007	06-0141-01
	

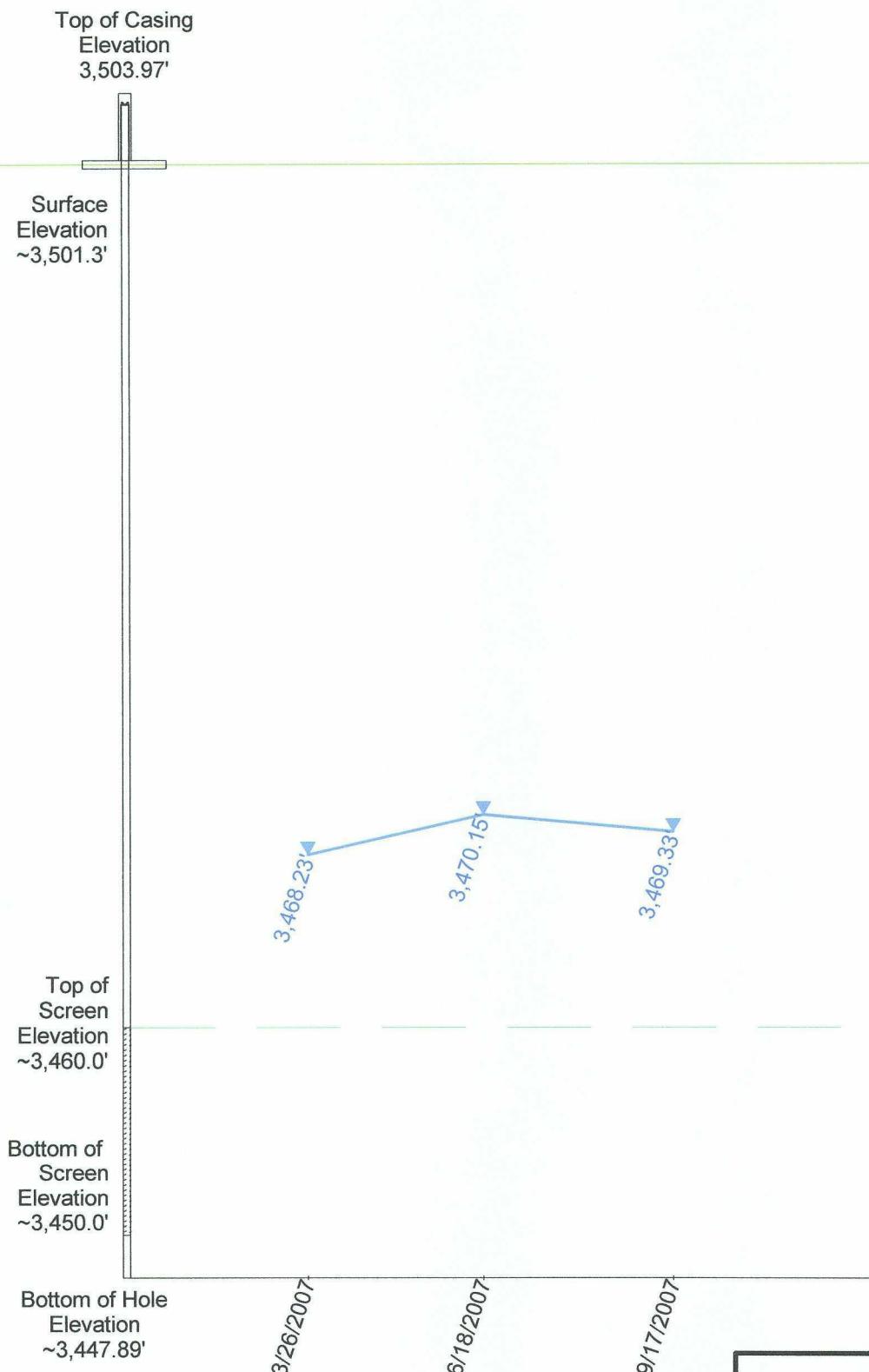


-  Uncorrected Groundwater Level
-  Corrected Groundwater Level
-  Light Nonaqueous-Phase Liquid Level

EB-06  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

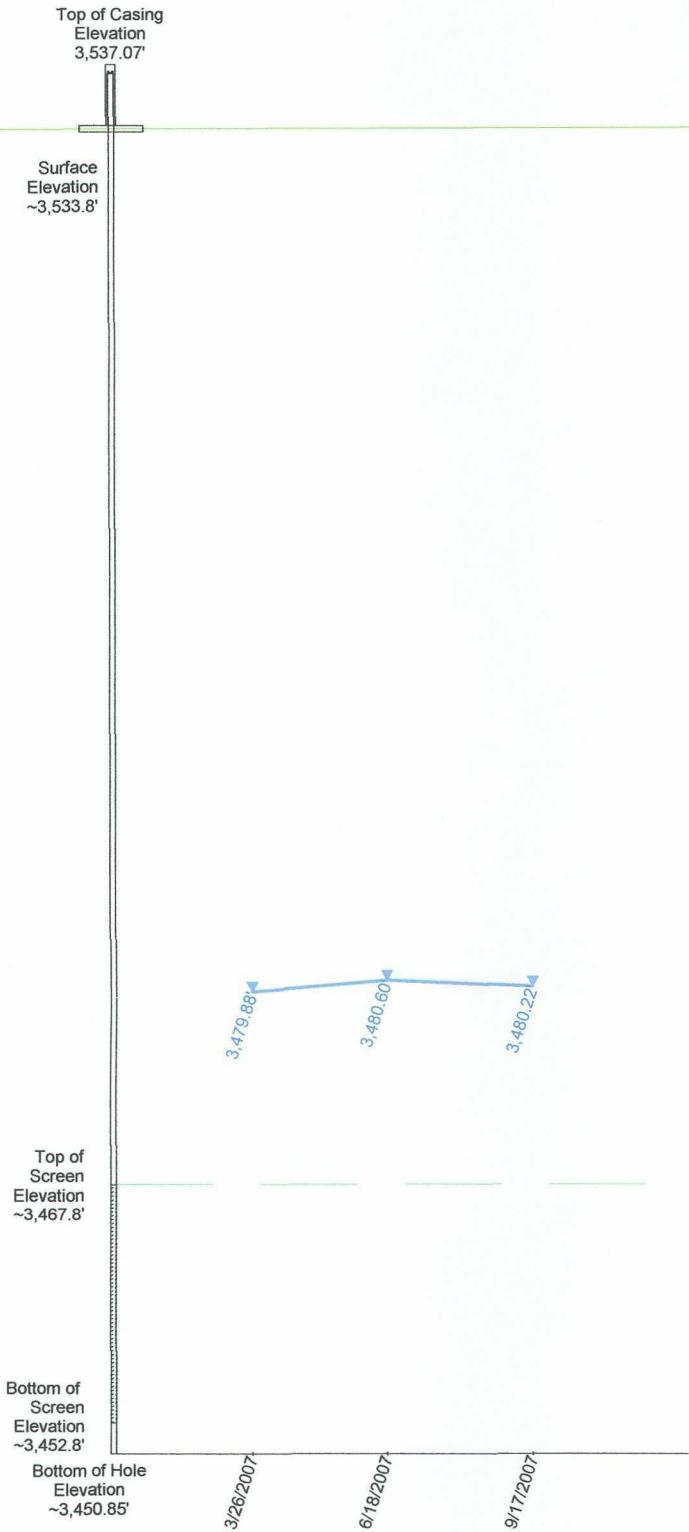
November 1, 2007	06-0141-01
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EB-07  
GROUNDWATER HYDROGRAPH

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

November 1, 2007	06-0141-01
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**EB-08  
GROUNDWATER HYDROGRAPH**

Frontier Field Services  
Empire Abo Gas Plant  
257 Empire Road  
Artesia, New Mexico

November 2, 2007	06-0141-01
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## **APPENDIX B**

### **Laboratory Reports**