



Application for Authorization To Inject Proposed Targa Monument AGI #3

Targa Monument AGI #3

905'FSL & 2362' FEL
Section 36, T19S, R36E
Lea County, New Mexico



December 2, 2016

Prepared For:

Targa Midstream Services LLC
1000 Louisiana, Suite 4300
Houston, Texas 77022-5032

Prepared By:

Geolex, Inc.
500 Marquette Avenue, NW, #1350
Albuquerque, New Mexico 87102
(505)-842-8000

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance ☒ Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes ☒ No
- II. OPERATOR: Targa Midstream Services LLC
ADDRESS: 1000 Louisiana, Suite 4300, Houston, TX 77022-5036
CONTACT PARTY: Alberto A. Gutierrez, R.G. - GEOLEX, INC. aag@geolex.com PHONE: (505)-842-8000
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary. **A CROSS REFERENCE TO THE APPLICABLE SECTIONS OR APPENDICES IN THE ATTACHED C108 APPLICATION FOR EACH ROMAN NUMERAL BELOW IS SPECIFIED BY SECTION AND/OR APPENDIX NUMBERS.**
- IV. Is this an expansion of an existing project? ☒ Yes _____ No
If yes, give the Division order number authorizing the project: Order R-13053 (additional well after replacement of failed well bore in API #3002540002)
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. **SECTIONS 5 and 6; APPENDICES A and B.**
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
SECTION 5; APPENDIX A.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected; **SECTIONS 1, 2, and 3**
 2. Whether the system is open or closed; **SECTIONS 1, 2, 4 and 7**
 3. Proposed average and maximum injection pressure; **SECTIONS 1 and 3**
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, **SECTIONS 3 and 4**
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). **SECTIONS 3 and 4**
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. **SECTIONS 4 and 5 and APPENDIX A**
- IX. Describe the proposed stimulation program, if any. N/A
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). **WELL IS NOT YET DRILLED**
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. **SECTION 4.**
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
SECTION 7
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. **APPENDIX B**
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Alberto A. Gutierrez, C.P.G. TITLE: President, Geolex, Inc.®; Consultant to DCP Midstream LP
- SIGNATURE:  DATE: 11/30/2016
- E-MAIL ADDRESS: aag@geolex.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: **SEE ATTACHED APPLICATION**

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III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

AGI #3 Surface: 905' FSL, 2362' FEL Section 36, T19S, R36 E, - SECTIONS 1, 3 and 4. (Vertical Well)

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined. **SEE SECTION 3 FOR PROPOSED WELL DESIGN. FINAL AS-BUILTS WILL BE SUBMITTED WHEN PROPOSED WELL IS DRILLED AND COMPLETED.**

(3) A description of the tubing to be used including its size, lining material, and setting depth. **SECTION 3 AND FIGURE 7 FOR PROPOSED WELL DESIGN**

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used. **SECTION 3**

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name. **SECTIONS 1 and 4**

(2) The injection interval and whether it is perforated or open-hole. **SECTION 3**

(3) State if the well was drilled for injection or, if not, the original purpose of the well. **N/A- WELL NOT YET DRILLED**

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations. **N/A**

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any. **SECTIONS 4 and 5; APPENDICES A and B**

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location. **(APPENDIX C)**

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include: **(APPENDIX C)**

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

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- **Appendix A:** Information on Oil and Gas Wells within Two Miles of Proposed Targa AGI #3
- **Appendix B:** Land Information on Tracts within One-Half Mile of Proposed Targa AGI #3
- **Appendix C:** Copies of Notice Letters, Documentation, and Affidavit of Publication of Newspaper Notice

1.0 EXECUTIVE SUMMARY

On behalf of Targa Midstream Services LP (Targa), Geolex, Inc.® (Geolex) has prepared and is hereby submitting a complete C-108 application for approval to drill, complete and operate an additional (redundant) acid gas injection well (Targa Monument AGI #3) at the Targa Monument Gas Plant in Section 36, T19S, R36E approximately 2.5 miles west of Monument in Lea County, New Mexico (Figure 1).

Until recently Targa was injecting approximately 2.5 million standard cubic feet per day (MMSCFD) of treated acid gas (TAG) in Monument AGI #1 (API # 3002540002) under NMOCC Order R-13052.

Mechanical issues compromised the operations of Monument AGI #1, and after consultation with the NMOCD Director and technical staff, Targa received administrative approval (Order SWD-1654) to replace the damaged (now plugged and abandoned in September-2016) Targa Monument AGI #1 with a replacement well (API # 3002543470). No additional injection capacity or increased pressures were requested.

The Targa Monument AGI #3 well will be drilled at a surface location approximately 905 feet from the south line (FSL) and 2362 feet from the east line (FEL) of Section 36, Township 19 South, and Range 36 East in Lea County, New Mexico (Figure 2). Monument AGI #3 is designed as a vertical well with a bottom hole location essentially identical to the surface location. However, after AGI #2 has been completed and surveyed, Targa may slightly deviate AGI #3 to assure that there is no danger of any physical interference between the wells.

The proposed redundant well AGI #3 will be completed in the originally approved injection zone for the AGI #1 (Order R-13052) (the Devonian Wrusten, and Fusselman), at vertical depths of approximately 8,300 to 9,200 feet as was the original well. Analysis of the reservoir characteristics of these units confirms that these zones act as excellent closed-system reservoirs that will accommodate the future needs of Targa for disposal of acid gas and sequestration of H₂S and CO₂ from the Targa Plant.

Geolex has reviewed all of the operators within one-half mile of the proposed redundant AGI #3 well to capture additional operators. A total of five operators were identified, of which three currently operate active wells. Only two operators (Apache Corporation and Targa) have wells penetrating the injection zone.

Targa needs to continue to safely inject up to a maximum of 2.5 MMSCFD of treated acid gas (TAG) for at least 30 years. Under normal operations it is anticipated that the TAG will be injected primarily into the new Targa Monument AGI #2, maintaining AGI #3 as a redundant well. Geologic studies conducted for the selection of this location demonstrate that the proposed injection zone is readily capable of accepting and containing the proposed acid gas and CO₂ injection volumes within NMOCD's recommended maximum injection pressures.

In preparing this C-108 application, Geolex conducted a detailed examination of all of the elements required to be evaluated in order to prepare and obtain approval for this application for injection. The elements of this evaluation included:

- Identification and characterization of all hydrocarbon-producing zones of wells that surround and are present on the proposed plant site (no changes from the original application).

- The depths of perforated pay intervals in those wells relative to the depth of the target injection zones: Devonian, Wristen, and Fusselman (no changes from the original application).
- The past and current uses of the proposed injection interval (no changes from the original application).
- Total feet of net porosity in the proposed Devonian, Wristen and Fusselman injection intervals (no changes from the original application).
- The stratigraphic and structural setting of the targeted injection zone relative to any nearby active or plugged wells, and other wells penetrating the interval (no changes from the original application).
- The identification of surface owners within a one-half mile radius of the proposed injection well and they are the same as identified in the original application.
- The identification of all wells within a two-mile radius and of all operators, and of all wells within a one-mile area of review penetrating the injection zone was completed and is identical to those wells identified in the original application.
- Identification and characterization of all active and plugged wells within the one-mile area of review of the proposed injection well. Only the plugging and abandonment of the AGI#1 and the drilling of AGI#2 (currently underway) have changed since the original application for the AGI#1.
- The details of the proposed injection operation, including general well design and average and maximum daily rates of injection and injection pressures as set forth in SWD 1654, Administrative Order IPI-416 and Order R-13052.
- Sources and predicted composition of injection fluid and compatibility with the formation fluid of the injection zone (no changes from the original application).
- Location and identification of any fresh water bearing zones in the area and the depth and quality of available groundwater in the vicinity of the proposed well, including a determination that there are no structures which could possibly communicate the disposal zone with any known sources of drinking water.
- A Rule 11 Plan has been approved for the facility. Prior to the initial injection from the new Targa Monument AGI #3, the Rule 11 Plan will be amended to reflect the changes in operations. Since we are requesting no change in the amount or concentrations of H₂S in the TAG stream, no change is required in the approved Rule 11 H₂S Contingency Plan. However, if the well is successfully completed in the Devonian, Wristen, and Fusselman interval, the Rule 11 plan will be amended to reflect this change. The revised Rule 11 Plan will be submitted to NMOCD for the file prior to commencement of TAG injection into the Targa Monument AGI #3 well. No changes are planned to the volumes and H₂S concentrations of the TAG.

Based upon this detailed evaluation, as summarized in this application, Targa has determined that the proposed AGI well is a safe and environmentally-sound replacement well for the disposal of acid gas into the already-approved injection zone. Furthermore, the project provides additional environmental benefit by permanently sequestering a significant volume of CO₂ which would otherwise be released to the atmosphere if H₂S was flared or if a sulfur reduction unit (SRU) was operated at the Plant.

At the anticipated reservoir conditions of 125° F and 3,800 psi, each MMSCFD of TAG will occupy a volume of 2,548 cubic feet (454 barrels). At the anticipated maximum operational capacity of 2.5 MMSCFD, the compressed TAG will occupy 6,370 cubic feet (1,134 barrels) per day. After 30 years of operation, the TAG will occupy an area of approximately 220 acres in the proposed injection zone, or a radius of approximately 1,740 feet (0.33 miles) from the Targa Monument AGI #3 well (see Sections 3.1 and 3.2).

The proposed well will be constructed using a three-casing string design, with the intermediate casing advanced to a depth of approximately 8,200 feet (in the cap rock) to assure isolation of the current injection zone during drilling and completion (Section 3.3). The well will also be completed incorporating Corrosion Resistant Alloys (CRA) in the tubing and casing, and corrosion-resistant cement will be used for the lower half of the intermediate and production strings. In addition, the replacement well will include bottom-hole pressure and temperature monitoring equipment.

Our research has identified porous and permeable carbonate units within this proposed injection zone including the Devonian, Wristen, and Fusselman formations, located approximately 8,800 to 9,200 feet below the plant. These formations are sufficiently isolated from active pay zones above by hundreds of feet of tight, Mississippian limestones and shales, including the immediately overlying Woodford Shale.

One hundred and twenty seven recorded wells were identified in the one-mile radius of the proposed AGI location (see Section 5.0). Of these wells, 94 are active, 27 are plugged and abandoned, 4 are temporarily plugged, and 2 are new proposed wells (not drilled). A complete list and maps showing the locations of these wells are included in Appendix A.

There are 9 wells that penetrate the injection zone, not including the recently plugged Targa Monument AGI #1. Of these wells 4 are currently active. Two have been plugged back to approximately 3,400 to 3,900 feet and are producing from the Eumont-Seven Rivers formations, one well has been plugged back to the Monument-Abo Formation (6,965 to 7,685 feet), and the remaining well is completed in the deeper McKee-Ellenburger Formation (9,490 to 9,800 feet), approximately 500 feet below the current injection zone (8,350 to 9,208 feet). Completion and/or plugging diagrams for these wells are included in Appendix A. All of these wells within one mile of the proposed Targa Monument AGI #3 are properly completed and/or plugged, and pose no risks to act as potential conduits that would allow escape of injection fluids from the proposed injection zone.

There is no current production in the proposed injection zone in the one-mile area and the zone was approved for acid gas injection in Order R-13052.

There are 31 recorded wells within one-half mile of the proposed AGI #3. Of these, 23 are active, 5 are plugged and abandoned, 2 are temporarily abandoned, and one is permitted but not drilled. These wells are operated by Apache Corporation, Chevron USA, Targa Midstream Services LLC, and XTO Energy, Inc.

Details on all operators, lessees, and surface and mineral owners within the one-half mile area of interest are included in Appendix B.

There is no permanent body of surface water within several miles of the plant. A search of the New Mexico State Engineer's files shows 31 water wells within one mile of the proposed AGI (see Section 4.6). Data from these wells show that groundwater occurs at a depth of approximately 35 to 50 feet, and is hosted by alluvium. Available analyses of groundwater in the alluvium, from a well in Section 29, T19S, R37E (approximately 7 miles east of the proposed AGI well) showed a specific conductivity of 865 micromhos (Nicholson and Clebsch, 1961).

2.0 INTRODUCTION AND ORGANIZATION OF THIS C-108 APPLICATION

The completed NMOCD Form C-108 is included before the Table of Contents of this document and references appropriate sections where data required to be submitted are included herein.

This application organizes and details all of the information required by NMOCD and NMOCC to evaluate and approve the submitted Form C-108 – Application for Authorization to Inject. This information is presented in the following categories:

- A detailed description of the location, construction and operation of the proposed injection well (Section 3.0) – Replacement well adjacent to original approved well
- A summary of the regional and local geology, the hydrogeology, and the location of drinking water wells within the area of review (Section 4.0)
- The identification, location, status, production zones, and other relevant information on oil and gas wells within the area of review (Section 5.0)
- The identification and required notification for operators and surface land owners that are located within the area of review (Section 6.0)
- An affirmative statement, based on the analysis of geological conditions at the site, that there is no hydraulic connection between the proposed injection zone and any known sources of drinking water (Section 7.0)
- References used in preparing this report (Section 8).

In addition, this application includes the following supporting information:

- **Appendix A:** Information on Oil and Gas Wells within Two Miles of Proposed Targa AGI #3
- **Appendix B:** Land Information on Tracts within One-Half Mile of Proposed Targa AGI #3
- **Appendix C:** Copies of Notice Letters, Documentation, and Affidavit of Publication of Newspaper Notice

3.0 PROPOSED CONSTRUCTION AND OPERATION OF TARGA MONUMENT AGI #3

The Targa Monument AGI #3 will be drilled at 905 feet from the south line (FSL) and 2362 feet from the east line (FEL) of Section 19 T19S, R32E. The location is shown Figure 2, along with the associated Targa AGI #1 and AGI #2.

TAG from the plant's sweeteners will be routed to a central compressor facility, located southwest of the well head. Compressed TAG will then be routed to the wells via high-pressure rated lines. Figure 3 summarizes the injection system design elements, and Figure 4 details the proposed well elements. Design details are provided in Section 3.3 below.

3.1 CALCULATED MAXIMUM INJECTION PRESSURE

The NMOCD Administrative Order IPI-416 (June 14, 2012; Appendix F) approves a maximum allowable operation pressure (MAOP) of 3,000 psi. Targa Midstream requests no change in the currently approved MAOP for Targa Monument AGI #3.

3.2 INJECTION VOLUME CALCULATIONS

Table 1 below summarizes the calculations used to determine the radius of injection after 30 years of operating at an average rate of 2.5 MMSCFD.

Review of available log data and other geological information indicates that there is approximately 157 feet of reservoir rock in the proposed injection zone with an average porosity of 7.2 percent or more. Incorporating the calculated residual water (S_w) of 0.35, this yields a net available porosity of 7.3 feet.

Based on these values, the injection plume is calculated to cover approximately 220 acres, with a radius of 1,740 feet (0.33 miles). The calculated plume is shown in Figure 3. This figure shows that the calculated plume is well within the one-half mile area of review.

Table 1: Calculated Injection Area and Radius

PROPOSED INJECTION STREAM CHARACTERISTICS					
TAG	H ₂ S	CO ₂	H ₂ S	CO ₂	TAG
Gas vol MMSCFD	conc. mol %	conc. mol %	Inject rate lb/day	Inject rate lb/day	Inject rate lb/day
2.5	18	82	42715	251281	293997

CONDITIONS AT WELL HEAD									
Well Head Conditions			TAG						
Temp F	Pressure psi	Gas vol MMSCFD	Comp. CO ₂ :H ₂ S	Inject Rate lb/day	Density ¹ kg/m ³	SG ²	density lb/gal	volume ft ³	volume bbl
100	1800	2.5	82:18	293997	643.00	0.64	5.37	7321	1304

CONDITIONS AT BOTTOM OF WELL									
Injection Zone Conditions					TAG				
Temp F	Pressure ³ psi	Depth ⁴ ft	Depth ⁴ ft	Thickness ⁴ ft	Density ¹ kg/m ³	SG ²	density lb/gal	volume ft ³	volume bbl
125	3800	8350	9200	157.00	739.00	0.74	6.17	6370	1134

CONDITIONS IN RESERVOIR AT EQUILIBRIUM									
Injection Reservoir Conditions					TAG				
Temp ⁵ F	Pressure ⁶ psi	Ave. Porosity ⁶ %	Sw ⁶	Porosity ft	Density ¹ kg/m ³	SG ²	density lb/gal	volume ft ³	volume bbl
125	3800	7.2	0.35	7.3	739.00	0.74	6.17	6370	1134

CONSTANTS			
		SCF/mol	
Molar volume at STD:		0.7915	
		g/mol	lb/mol
Molar weight of H ₂ S		34.0809	0.0751
Molar weight of CO ₂		44.0096	0.0970
Molar weight of H ₂ O		18.015	0.0397

CALCULATION OF MAXIMUM INJECTION PRESSURE LIMITATION

SG_{TAG} = 0.691

PG = 0.2 + 0.433 (1.04-SG_{TAG}) = 0.3511 psi/ft

IP_{max} = PG * Depth = 2932 psi

Where: SG_{TAG} is specific gravity of TAG; PG is calculated pressure gradient; and IP_{max} is calculated maximum injection pressure.

CALCULATION OF 30 YEAR AREA OF INJECTION			
Cubic Feet/day (5.6146 ft ³ /bbl)	6370 ft ³ /day		
Cubic Feet/30 years	69794532 ft ³ /30 years		
Area = V/Net Porosity (ft)	9498956 ft ² /30 years		
Area = V/Net Porosity (ft) (43560 ft ² /acr)	218.1 acres/30 years		
Radius =	1739 ft		
Radius =	0.33 miles		

¹ Density calculated using CSMGem software

² Specific gravity calculated assuming a constant density for water

³ PP is taken from well tests of Linam AGI #1

⁴ Thickness is the net thickness of the beds with >7% porosity

⁵ Reservoir temp. is extrapolated from bottomhole temp. measured in logs

⁶ Porosity is estimated using geophysical logs from nearby wells

3.3 WELL DESIGN

The AGI facilities and wells are integrated components of the Targa Gas Plant design. The schematic of the AGI facilities and tie-in to the Targa Gas Plant are shown in Figure 3, and the preliminary well design for the new injection well is shown on Figure 4.

The well will have three strings of the telescoping casing cemented to the surface and will include a subsurface safety valve on the production tubing to assure that fluid cannot flow back out of the well in the event of a failure of the injection equipment (Figure 4). In addition, the annular space between the production tubing and the well bore will be filled with an inert fluid (corrosion-inhibited diesel fuel) as a further safety measure which is consistent with injection well designs which have been previously approved by NMOCD for acid gas injection.

The well will be advanced vertically to its anticipated total depth of approximately 9,200 feet. The injection zone (8,350 to 9,200 feet) will be completed as an open hole interval.

Design and material considerations include: Placement of Subsurface Safety Valve (SSSV) and the packer; triple casing through freshwater resources (Ogallala and Santa Rosa Formations – groundwater; Rustler – saline groundwater); characterization of the zone of injection; and a total depth (TD) ensuring

identification of the reservoir. All casing strings will be cemented to the surface and the cement jobs will be verified by pressure testing. Radial 360° cement bond logs will be conducted for all casing strings as well.

A suitable drilling rig will be chosen for the job that will include an appropriate blowout preventer and choke manifold for any unforeseen pressures encountered. Visual inspections of cement returns to the surface will be noted in both the conductor and surface pipe casing jobs. Casing and cement integrity will be demonstrated by pressure-testing and 360-degree cement bond logging after each cement job.

The three casing strings shown in Figure 4 are summarized below:

1. Surface casing to the base of the Rustler Formation, approximately 1,050 feet depth, will be installed to protect fresh water in the Ogallala and Santa Rosa Formations. The borehole for the surface casing will be drilled with a 17 ½ -inch bit to a depth of approximately 1,050 feet (above the uppermost salt beds), and 13 3/8-inch, 48 ppf, H-40, STC casing will be installed and cemented to the surface with approximately 1,089 sacks of Class C cement.
2. The intermediate casing will isolate the Salado salt beds, as well as any production zones above the injection zone. The intermediate casing is also constructed to provide a safe penetration into the cap rock above the injection zone. It will be drilled with a 12 ¼ -inch bit to a depth of approximately 8,200 feet and will be constructed and installed in two segments:
 - A. The first segment will consist of 9 5/8-inch casing, using 40.0 ppf, L-80, STC casing to approximately 5,025 feet, and approximately 130 feet of 48.0 ppf L-80 STC casing.
 - B. A diverter valve assembly (approximately 56 feet long) will be installed between the segments.
 - C. The second segment will be constructed of 40.0 ppf L-80 LTC casing to 8,200 feet.
 - D. All casing will be cemented to the surface in two stages with approximately 1,645 sacks of Class C cement.
3. The production casing will be emplaced in a 8 ¾ inch borehole and will be constructed and installed in 2 segments:
 - A. The first segment will comprise approximately 8,000 feet of 7-inch, 26.0 ppf, L-80 ULTRA FJ casing.
 - B. The second segment (8,000 to 8,300 feet) will include a 300-foot section of 7-inch 29.0 ppf 28CR ULTRA FJ Corrosive Resistant Alloy (CRA) material. This segment is designed to protect the casing from potential corrosion from the acid gasses injected into this interval from the existing AGI #1.
 - C. All casing will be cemented to the surface with approximately 950 sacks of Class H cement.

Following the installation, cementing and testing of the production string, a final open-hole injection interval from approximately 8,300 to 9,200 feet will be advanced using a 6.0 inch bit.

The proposed open hole logging suite for the TD run consists of a Dual Induction, Density-Neutron-Gamma Ray, Porosity and Fracture Matrix Identification (FMI) log in the injection zone.

Once the cement has set up, the tubing adaptor for the wellhead will be welded on the wellhead and the rig will be released. A casing integrity test (pressure test) will be performed to test the casing just prior to releasing the rig. After a successful test and the drilling rig released, a work-over rig will be mobilized to location and a cement bond log will be run to ascertain the quality of the cement bond of the production casing. It is important that a good bond be established around the injection interval as well as below the

CRA joint to minimize any chances that acid gases mixed with formation water do not travel up the outside of the casing and negatively impact the integrity of the casing job.

Once the integrity of the cement job has been determined a temporary string of removable packer and tubing will be run, and injection tests (step tests) will be performed to determine the final injection pressures and volumes.

Once the reservoir has been tested, the final tubing string will be emplaced. The tubing schedule is:

1. 3 ½ - inch 9.3 ppf L-80 VAM TOP from 0 to 250 feet
2. Subsurface Safety Valve Assembly, 250 to 280 feet
3. 3 ½ - inch 9.3 ppf L-80 VAM TOP from 280 to 8,000 feet
4. 3 ½ - inch 9.3 ppf Incoloy or equivalent CRA material VAM TOP from 8,000 to 8,300 feet
5. Bottom hole pressure/temperature sub (Halliburton)
6. 7 inch 26 32# BWD Incoloy 925 Permanent Packer at ~8,300 feet

Permanent, continuous-recording sensors will be incorporated into the packer assembly and appropriate connections will be run through the annulus and out of the well head. These sensors will provide real-time temperature and pressure in the reservoir. Data will be transmitted to the plant's control room for observation, analysis, and recording. Section 3.4 below addresses how that data will be used and supplemented in the event of downhole sensor failure.

The SSSV will be run into the well at a depth of approximately 250 feet. A ¼-inch stainless steel line will connect the SSSV to a hydraulic panel at the surface.

The National Association of Corrosion Engineers (NACE) issues guidelines for metals exposed to various corrosive gases like the ones in this well. For a H₂S/CO₂ stream of acid gas that is de-watered at the surface through successive stages of compression, downhole components such as the SSSV and packer need to be constructed of Inconel 925. The CRA joints will be constructed of a similar alloy from a manufacturer such as Sumitomo. A product like Incoloy (with 46% nickel content) will likely be used. The gates, bonnets, and valve stems within the Christmas tree will be nickel coated as well.

The rest of the Christmas tree will be made of standard carbon steel components and outfitted with annular pressure gauges that report operating pressure conditions in real time to a gas control center located remotely from the wellhead. In the case of abnormal pressures or any other situation requiring immediate action, the acid gas injection process can be stopped at the compressor and the wellhead. An emergency shutdown (ESD) valve and a Fisher control valve control compressor backpressure, and both are pneumatically operated on the well head. The SSSV provides a redundant safety feature to shut in the well in case the wing valve does not close properly. After the AGI well is drilled and tested to assure that it will be able to accept the volume of injection fluid (without using acid gas), it will be completed with the approved injection equipment for the acid gas stream.

3.4 RESERVOIR TESTING AND PRESSURE MONITORING

The Targa Monument AGI #3 will be equipped with bottom hole pressure and temperature monitoring equipment. This equipment is designed to provide real-time monitoring of reservoir conditions as it is installed immediately above the packer. While this equipment is useful in gathering data that will ultimately be used to evaluate reservoir and well performance, it is only a portion of the overall data collection and analysis program to evaluate the reservoir over time and to compare the predicted reservoir performance discussed above in Section 3.2 with actual performance at any future reporting period.

The collection and analysis of injection and annular pressure data has a two-fold purpose. The primary purpose being to provide an early warning of any mechanical well issues which may arise and the second purpose is to provide data for reservoir performance evaluation. While the initial purpose of monitoring the mechanical integrity of the well only requires the surface injection pressure, temperature, rate and annular pressure monitoring, the bottom hole data provides the ability to analyze the performance of the reservoir. Surface pressure/temperature/annular pressure monitoring equipment has extremely high reliability. In contrast, our initial experience with bottom hole pressure/temperature monitoring equipment has shown that this equipment is more complex and suffers from periodic data collection and transmission issues.

While Targa will use its best efforts to improve performance and reliability, we have developed a process to assure necessary data are collected in the event of bottom hole sensor failures. The simultaneous collection of the surface and bottom hole data allows us develop empirical relationships with actual observed data that, in conjunction with the use of established models (such as Aqualibrium™ or equivalent) will allow us to fill in gaps when bottom hole data loss occurs due to sensor or data transmission failures. This approach will allow us to provide NMOCD with reliable monitoring data and interpretations and provides the basis for the reservoir evaluation which will be performed periodically during the lifetime of the well.

Below is a summary of the overall data collection and analysis program proposed for this well and reservoir.

1. Install work string and packer; swab and collect formation fluid samples; verify lack of economical hydrocarbons.
2. Obtain initial bottom hole pressure and temperature after drilling (during logging).
3. Perform detailed SRT and 10 day falloff test to provide baseline reservoir data prior to injection.
4. Monitor surface parameters (injection pressure, temperature and rate, and annular pressure) to provide early warning system for any potential mechanical issues in the well.
5. Monitor bottom hole pressure/temperature with a device to provide real time reservoir condition data for analysis of reservoir performance.
6. Use bottom hole reservoir and surface pressure/temperature data to develop well-specific empirical relationship between observed surface and bottom hole data.
7. Use TAG/wellbore models to predict bottom hole P/T conditions based on surface data and test with empirical relationships observed in #5 above to calibrate models.
8. Use surface data along with tools in #5 and #6 above to fill in missing bottom hole data when data drops or sensor failure occurs.

4.0 REGIONAL AND LOCAL GEOLOGY AND HYDROGEOLOGY

4.1 GENERAL GEOLOGIC SETTING/SURFICIAL GEOLOGY

The Targa Gas Plant is located in Section 36, T 19 S, R 36 E, in Lea County, New Mexico, about 9 miles west of Hobbs (Figure 1). The Plant location is within a portion of the Pecos River basin referred to as the Querecho Plains reach (Nicholson & Clebsch, 1961). This area is relatively flat and largely covered by sand dunes underlain by a hard caliche surface. The dune sands are locally stabilized with shin oak, mesquite and some burr-grass. There are no natural surface bodies of water or groundwater discharge sites within one mile of the Plant and where drainages exist in interdunal areas, they are ephemeral, discontinuous, dry washes. The proposed well site is underlain by Quaternary alluvium overlying the Triassic redbeds of the Santa Rosa Formation (Dockum Group), both of which are local sources of groundwater. The thick sequences of Permian through Ordovician rocks that underlie these deposits are described generally below.

4.2 BEDROCK GEOLOGY

The Plant and the proposed well are located at the northern margin of the Delaware Basin, a sub-basin of the larger, encompassing Permian Basin, which covers a large area of southeastern New Mexico and western Texas. The Permian Basin lies within the area of the larger, ancestral (pre-Mississippian) Tabosa Basin, which covered an area that included the entire present-day Permian Basin area and beyond. The Tabosa Basin was a shallow sub-tropical basin throughout the period between the Ordovician and early Mississippian (Osagean).

The entire lower Paleozoic interval (Ellenburger through Devonian) was periodically subjected to subaerial exposure and prolonged periods of karsting, most especially in the Fusselman and Devonian. The result of this exposure was development of systems of karst-related secondary porosity, which included solution-enlargement of fractures and vugs, and development of small cavities and caves. Particularly in the Fusselman, solution features from temporally-distinct karst events became interconnected with each successive episode, so there could be some degree of vertical continuity in parts of the Fusselman section that could lead to enhanced vertical and horizontal permeability.

The Silurian Fusselman and Wristen, and Devonian Thirty-one Formations overlie the Montoya, and are comprised of interbedded dolomites and dolomitic limestones that are capped by the Woodford Shale. The Woodford shale is overlain by several hundred feet of Osagean limestone, which is overlain by several hundred feet of shales and basinal limestones of the Upper Mississippian Chester Formation. The proposed Silurian-Devonian injection zone does not produce economic hydrocarbons for more than 15 miles away from the well site.

There have been no commercially significant deposits of oil or gas found in the Devonian or Silurian rocks (the proposed injection zone), in the vicinity of the well. Adjacent wells have shown that these formations are "wet," and there is no current or foreseeable production at these depths within the one-half mile radius of review. In fact, these zones are routinely approved as produced-water disposal zones in this area.

4.3 LITHOLOGIC AND RESERVOIR CHARACTERISTICS OF THE SILURO-DEVONIAN FORMATIONS

The proposed injection interval includes the Devonian Thirty-one, and Silurian Wristen and Fusselman Formations, collectively referred to as the Siluro-Devonian. Based on the geologic analyses of the subsurface and previous experience at the Targa Gas Plant, we recommend acid gas injection and CO₂ sequestration in the Siluro-Devonian Formations. The proposed injection interval includes a number of intervals of dolomites and dolomitic limestones with moderate to high primary porosity, and secondary, solution-enlarged porosity that is related to karst events that periodically occurred throughout the section, most notably in the Fusselman Formation. These karst events produced solution cavities and enlarged fractures throughout the section, which can be substantial enough to provide additional permeability that is not readily apparent on well logs. The porous zones are separated by tight limestones and dolomites.

The Siluro-Devonian interval has excellent cap rocks above, below and between the individual porous carbonate units. There are no producing zones within or below the Siluro-Devonian in the area of the proposed well, and the injection interval is separated from the nearest producing zone (Morrow) by 20 feet of Woodford shale, 550 feet of tight Osagean limestones, and nearly 350 feet of tight Chesterian shales and deep water limestones. It lays a minimum of 1,200 feet above the Precambrian basement.

The Monument Plant lies over an area where the western edge of the Central Basin Platform meets the eastern side of the Delaware Basin (Figure 5). The structure in this area is dominated by a set of major down-to-the-west normal faults, and many cross-faults. The elevation of top of the Devonian runs from about -4,000 feet on the east to deeper than -11,000 feet on the west. The plant area and the proposed AGI #3 sit above an uplifted fault block with elevations between -4,300 and -4,900 feet. Faults that have been identified in the area only penetrate to the lower part of the Woodford Shale, and would not serve as potential vertical conduits because of the thick, tight cap rock above, and tight rocks below. The high net porosity of the proposed injection zone indicates that the injected H₂S and CO₂ will be easily contained close to the injection well.

The red line SD-SD' in Figure 5 is the location of the cross section shown in Figure 6. This section illustrates the structural setting of the Monument site, and the relative thicknesses of the proposed injection zones. Figure 7 shows the interpreted thickness of the Silurian-Devonian section. The Monument site is in an area where 800 to 900 feet of reservoir rock is present. Although much thicker zones exist to the east, west, and south of the Monument plant, the available reservoir is adequate for the proposed injection rates and volumes.

Figure 8 shows the estimated net thickness of beds with porosity greater than 5% in the area adjacent to the proposed AGI #3 location. A more detailed calculation (see Table 1) indicated a total of 157 feet of reservoir rock with an porosity of 7.2%, and residual water (Sw) of 0.35. This results in a net available porosity of 7.3 feet.

Geolex's geological analyses confirm that the Siluro-Devonian interval is the most promising deep injection zone (beneath existing production) in the vicinity of the Targa Plant. This preliminary analysis is confirmed by Geolex's detailed geological analysis, including the analysis of the geophysical logs collected from nearby wells. The zone has the requisite high porosity and permeability and is bounded by tight limestones and shales above and below. These are ideal H₂S and CO₂ sequestration conditions.

The overlying Chester, Osage and Woodford Formations provide over 1,000 feet of shale and intervening tight limestones, providing an effective seal on the top of the injection zone. The proposed injection interval is located more than 1,000 feet below the Morrow Formation, which is the deepest potential pay zone in the area. There are no pay zones below the injection zone in the area.

4.4 INJECTIVITY OF THE SILURO-DEVONIAN INTERVAL

No direct measurements have been made of the injection zone porosity or permeability. However, satisfactory injectivity of the injection zone can be inferred from the performance of the former Targa Monument AGI #1. The zone will be logged in the replacement AGI well to obtain site-specific data for the new well.

4.5 FORMATION FLUID CHEMISTRY

A review of formation waters from the U.S. Geological Survey National Produced Waters Geochemical Database v2.1 (10/16/2014) identified 10 wells with analyses from drill stem test fluids collected from the Devonian, Silurian-Devonian or Fusselman Formations, in wells within approximately 12 miles of the proposed Targa Monument AGI #3 (Townships 18 to 20 South and Ranges 30 to 33 East).

These analyses showed Total Dissolved Solids ranging from 20,669 to 40,731 milligrams per liter (mg/l) with an average of 28,942 mg/l. The primary anion is chloride, and the concentrations range from 11,176 to 23,530 mg/l with an average of 16,170 mg/l. No collection of formation fluids will be attempted due to the proximity of the original AGI #1 well.

4.6 GROUNDWATER HYDROLOGY IN THE VICINITY OF THE PROPOSED INJECTION WELL

Based on the New Mexico Water Rights Database from the New Mexico Office of the State Engineer, there are 31 water wells within one mile of the proposed Targa Monument AGI #3. These wells are summarized in Table 2 and their locations are showed in Figure 9.

The area surrounding the proposed injection wells is arid and there are no bodies of surface water within a five-mile radius. There are no changes here from the original application.

Table 2: Water Wells Identified by the New Mexico State Engineer's Files within One Mile of the Proposed Targa Monument AGI #3 Well

OWNER	POD Number	Well Depth (ft)	Water Depth (ft)	Distance (Miles)
VERSADO GAS PROCESSORS LLC	13817			0.08
INTERA INCORPORATED	12993			0.28
NM ENERGY, MIN & NAT RES OIL CONSERVATION DIVISION	12993			0.30
NEW MEXICO OIL CONSERVATION	12432	45	35	0.33
NEW MEXICO OIL CONSERVATION	12433	43	38	0.33
NM ENERGY, MIN & NAT RES OIL CONSERVATION DIVISION	12993			0.33
NEW MEXICO OIL CONSERVATION	12434	43	38	0.34
CLIMAX CHEMICAL COMPANY	4716			0.36
GULF OIL CORPORATION	1269	65	50	0.38
GULF OIL CORPORATION	1270	56	48	0.40
W C BYRD	3815	60	40	0.40
W C BYRD	3814	60	40	0.40
INTERA INCORPORATED	12993			0.40
NEW MEXICO OIL CONSERVATION	12431	44	38	0.41
INTERA INCORPORATED	12993			0.43
NATURAL GASOLINE CORPORATION	47			0.43
NEW MEXICO OIL CONSERVATION	12430	42	37	0.45
NEW MEXICO OIL CONSERVATION	12435	43	37	0.48
INTERA INCORPORATED	12993			0.49
NM ENERGY, MIN & NAT RES OIL CONSERVATION DIVISION	12993			0.49
NM ENERGY, MIN & NAT RES OIL CONSERVATION DIVISION	12993			0.50
MORNA OIL PROD & DRILLING CORP	6748	80	44	0.63
THOMAS F. WELCH & ASSOCIATES	5766			0.64
THOMAS F. WELCH & ASSOCIATES	5766			0.64
AMERADA PETROLEUM CORPORATION	3188			0.64
CLIMAX CHEMICAL COMPANY	4755			0.69
INTERA INCORPORATED	12993			0.70
THOMAS F. WELCH & ASSOCIATES	5766			0.73
GEOMONITORING SERVICES	13523	46	35	0.82
THOMAS F. WELCH & ASSOCIATES	5766			0.89
CLIMAX CHEMICAL COMPANY	4715			0.94

Our analysis confirms that the proposed well poses no risk of contaminating groundwater in the area. There are no potential conduits that would allow migration of injected fluids to fresh-water zones.

5.0 OIL AND GAS WELLS IN THE TARGA MONUMENT AGI #3 AREA OF REVIEW

Within two miles of the proposed Targa Monument AGI #3 there are 458 recorded oil and/or gas wells. Of these, 127 lie within one mile of the proposed well. Of these wells, 94 are active, 27 are plugged and abandoned, 4 are temporarily plugged, and 2 are new proposed wells (not drilled). A complete list (Table A1) and maps (Figures A1 and A2) showing the locations of these wells are included in Appendix A.

Including the former Targa Monument AGI #1, there are 10 wells within one mile penetrating the injection zone (Figure A2). Table 3 below summarizes the status of these wells. Review of the NMOCD files for these wells indicates that their completions and/or plugging methods protect upper and lower zoned from migration of the injection fluids.

**TABLE 3: Wells Penetrating Injection Zone within One Mile of the Proposed Targa Monument
AGI #3**

API	OPERATOR	DEPTH	WELLNAME	STATUS	Notes
3002540002	TARGA RESOURCES	9200	MONUMENT AGI #1	Plugged	Pumped cmt 3,500' to surface.
3002512473	APACHE CORP	10255	STATE F GAS COM 005	Active	Plugged back to Eumont/Seven Rivers at 3,400' (in 5 1/2" casing) 9/11/96. CIBP's w/cmt @ 7,800', 6,850', 5,640', 3,420'.
3002512478	APACHE CORP	9822	NORTH MONUMENT G/SA UNIT 032	Plugged	CIBP w/cmt @ 9,475'; squeezed cmt plugs @ 7,590', 7,160', 5,710'. CIBP w/cmt @ 4,500'; Spot cmt @ 2,900', 2,345', 1,330', 367' to surface.
3002512481	APACHE CORP	10100	NORTH MONUMENT G/SA UNIT 285	Active	Plugged & abandoned 3/5/59. Spot cmt @ 9,900', 9,755', 6,305', and 5,655' 3,780'. Re-entered and recompleted 3,930' in Eunice Monument 2/14/96; Re-entered and attempted to re-plugged deeper zones per NMOCD Order R-13052 2/2011. Unsuccessful, released rig May 2011. Well returned to production 7/15/11. Requirement to re-plug well rescinded per Order R-13052 (Reopened) 11/17/2011.
3002520517	APACHE CORP	9900	NORTH MONUMENT G/SA UNIT 286	TA	Dry hole; P&A w/spot plugs @ 10,080', 9,790', 9068', 8,180', 7,865', 6,770', 6,205', 5,642', 5,075', 3,750', 1,450' to surface, 12/28/62. Re-entered 6/7/95 cleaned to 3,760' (Eunice Monument). Not perforated. Status Temporary Abandoned.
3002505780	ATLANTIC RICHFIELD	9900	J R PHILLIPS A 008	Plugged	CIBP w/cmt @ 9,475'; squeezed cmt plugs @ 7,652', 5,742', 4,897', 3,442', 2,097', 880', 81' to surface.
3002523632	ARCO PERMIAN	9650	J R PHILLIPS A 009	Plugged	CIBP's w/cmt @ 9435', 6,620', 6,186', 5,655', 5,255', 5,069'; Cmt plugs @ 3,645', 1,1125', 610', Surface.
3002504134	APACHE CORP	9953	J R PHILLIPS 005	Active	Recompleted 7/12/98; CIBP at 7,785', perforated 6,965' to 7,685'.
3002504136	APACHE CORP	10214	J R PHILLIPS 007	Active	Temp. abandoned 8/6/92, CIBP's w/cmt @ 9,700', 6,700', 6,275', 5,590'. Recompleted in Paddock 5,264' to 5,530' 3/2010
3002505964	CHEVRON U S A INC	9814	J R PHILLIPS 011	Active	Producing in McKee-Ellenburger 9,490' to 9,800'.

6.0 IDENTIFICATION AND REQUIRED NOTIFICATION OF OPERATORS, SUBSURFACE LESSEES, AND SURFACE OWNERS WITHIN THE AREA OF REVIEW

Geolex has reviewed the land status and operators within one-half mile of the proposed replacement well, and two of the three operators identified in the original Order (Apache Corporation and XTO) remain on the list of operators of record. Three additional operators/lease holders, however, are located within the one-half mile radius of the new replacement well. They are Lea Co. New Mexico Exploration and Production, LLC; Jack Huff Energy and Targa Midstream Services, LLC. There are only two operators within the one-half mile radius with wells penetrating the injection zone (Targa and Apache).

Appendix C contains copies of registered mail receipts, individual letter, and the newspaper affidavit of publication.

7.0 AFFIRMATIVE STATEMENT OF LACK OF HYDRAULIC CONNECTION BETWEEN PROPOSED INJECTION ZONE AND KNOWN SOURCES OF DRINKING WATER

As part of the work performed to support this application, a detailed investigation of the structure, stratigraphy and hydrogeology of the area surrounding the proposed Targa Monument AGI #3 well has been performed. The investigation included the analysis of available geologic data and hydrogeologic data from wells and literature identified in Sections 3, 4 and 5 above including related appendices. Based on this investigation and analysis of these data, it is clear that there are no open fractures, faults or other structures which could potentially result in the communication of fluids between the proposed injection zone with any known sources of drinking water or oil or gas production in the vicinity as described above in Sections 4 and 5 of this application.

8.0 REFERENCES

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- Silver, B.A., Todd, R.G., 1969. Permian cyclic strata, northern Midland and Delaware Basins, west Texas and southeastern New Mexico, *The American Association of Petroleum Geologists Bulletin* 53: 2223-2251.
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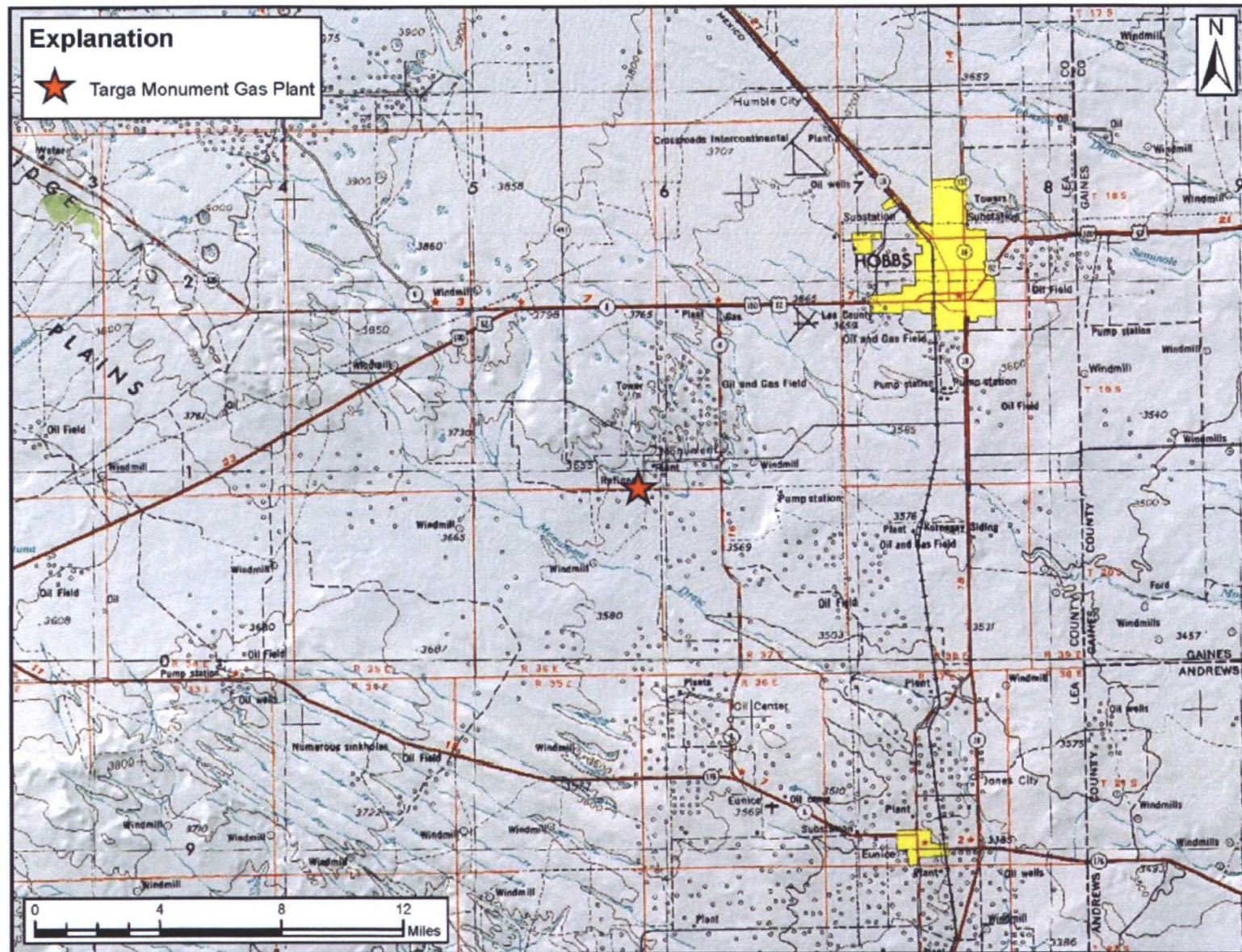


Figure 1: Targa Monument Gas Plant Location



Figure 2: Location of Proposed Targa Monument AGI #3 and Gas Plant Layout

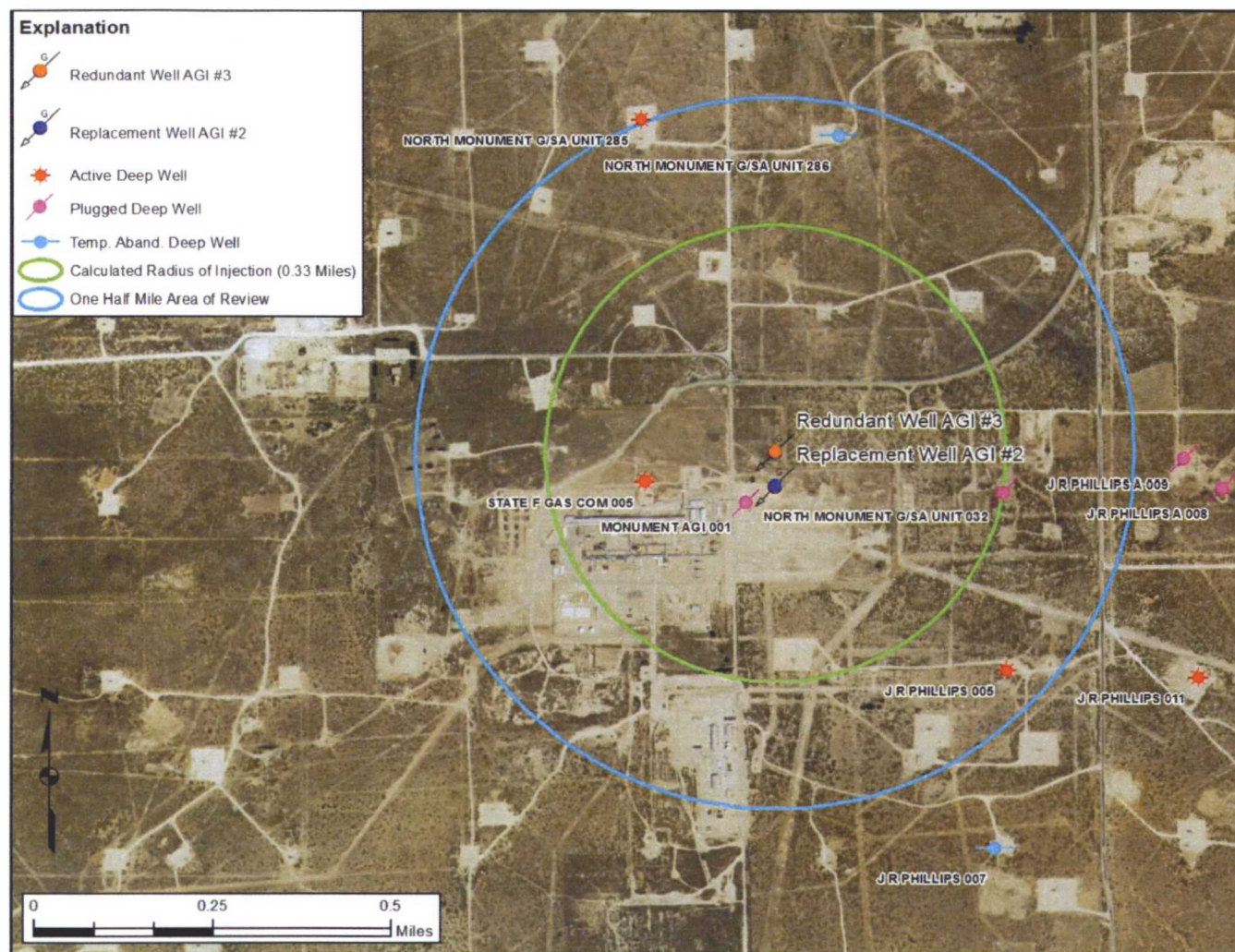


Figure 3: Calculated Area of Injection Plume after 30 Years of Operations at 2.5 MMSCFD

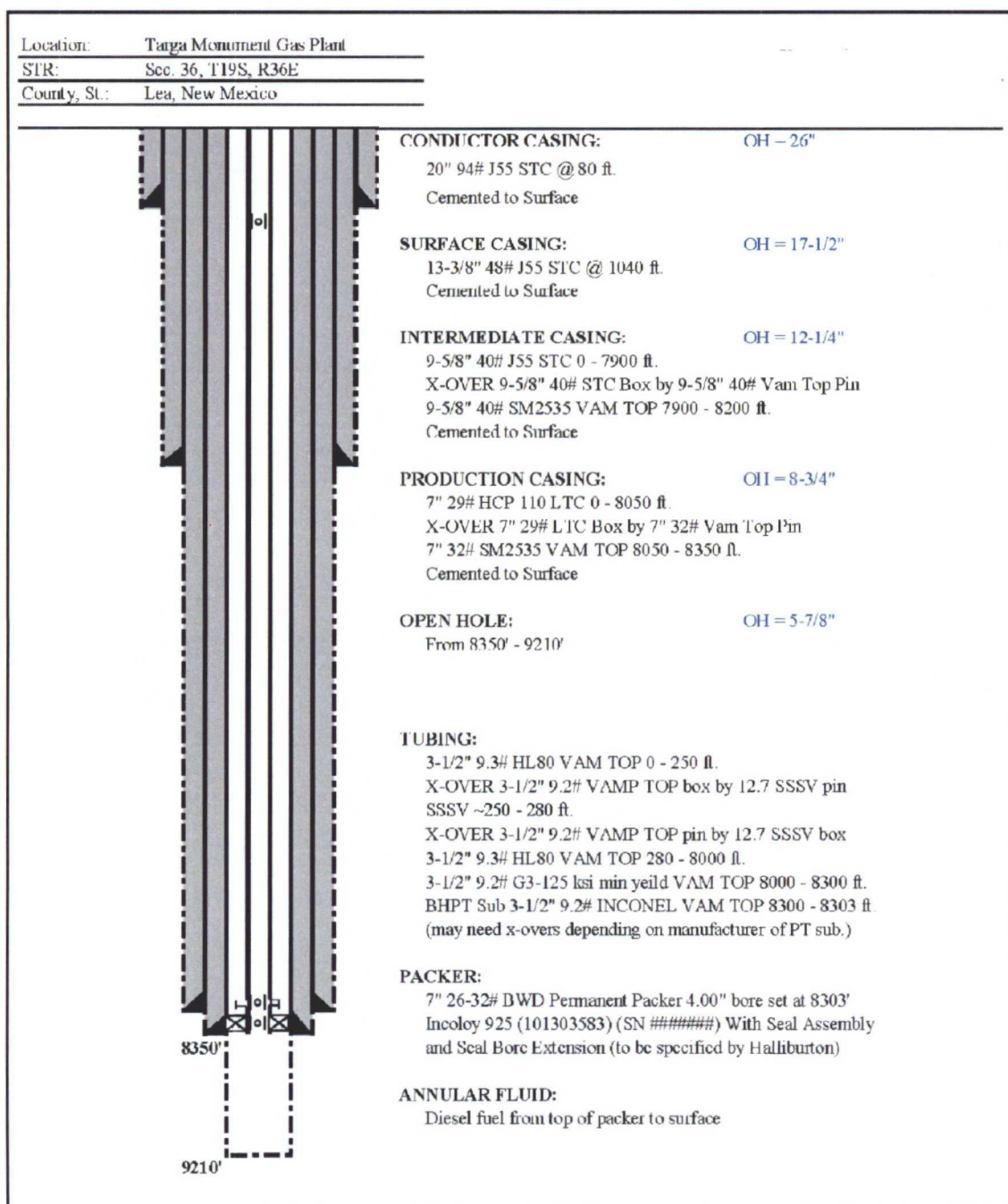
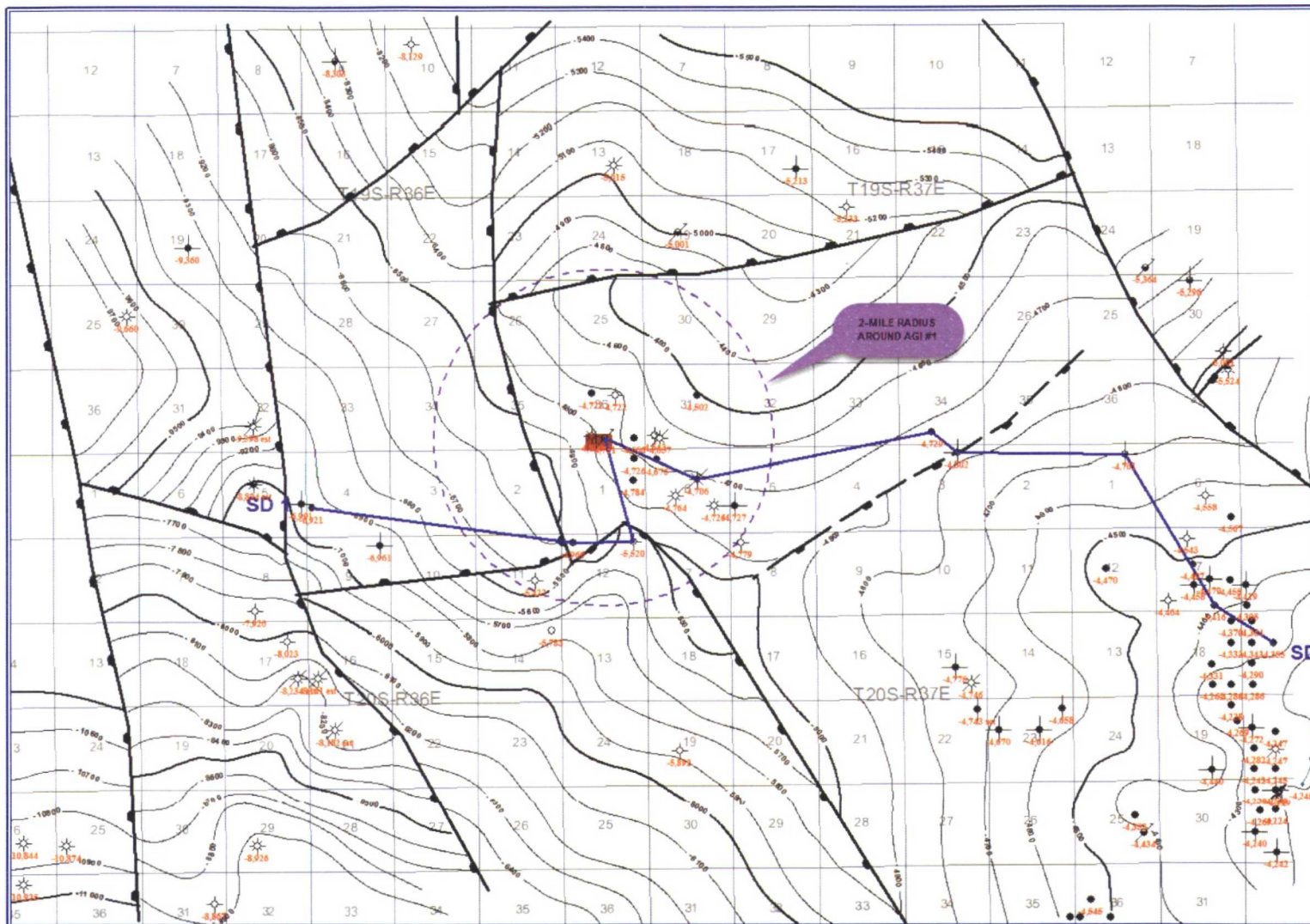


Figure 4: Schematic of Proposed Targa Monument AGI #3 Well Design



Contour Interval = 100 feet

Figure 5: Structure Contour Map Showing the Top of the Devonian

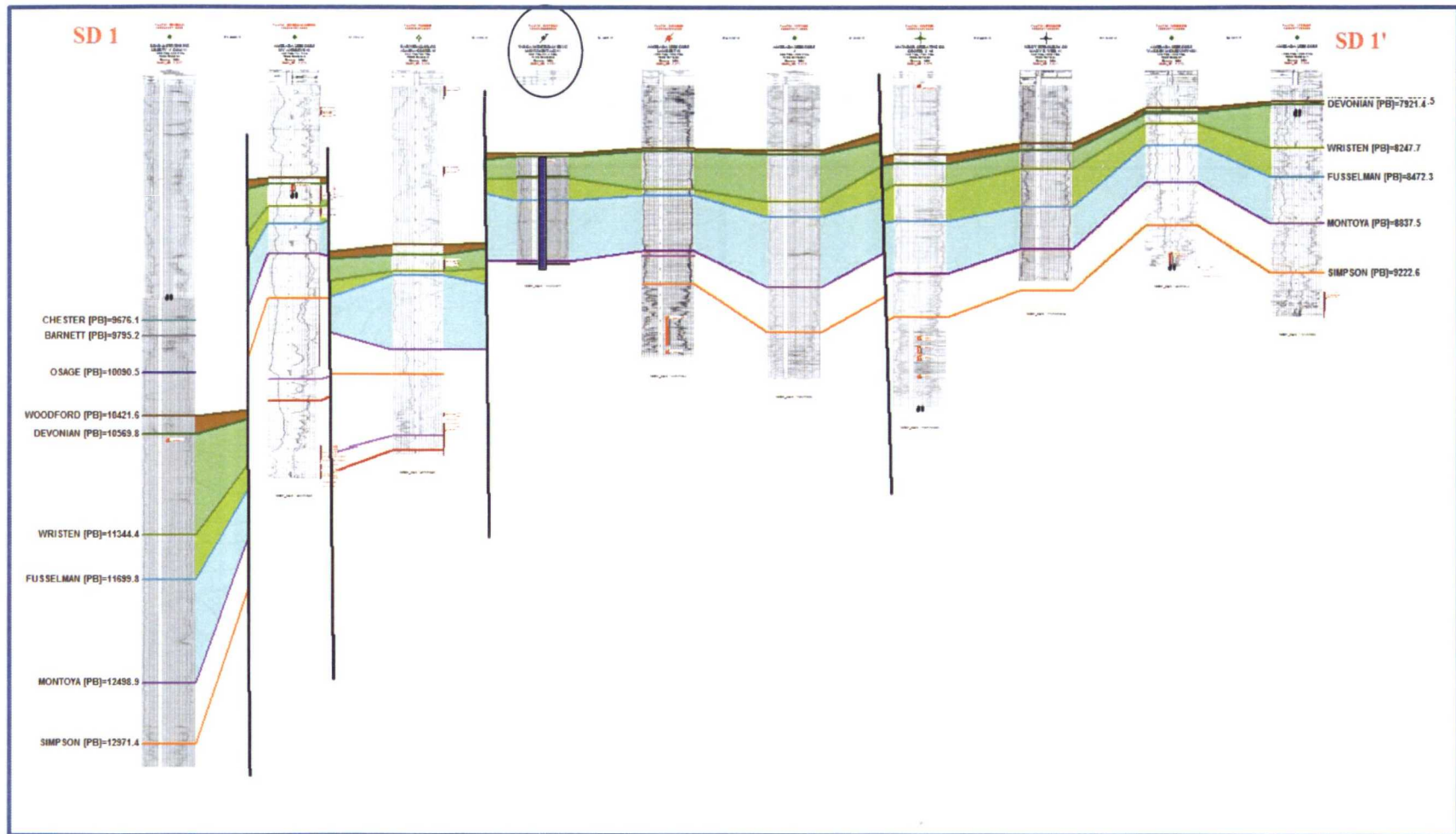


Figure 6: Structural Cross-Section Showing Faulting and Thickness Changes in the Proposed Injection Zone

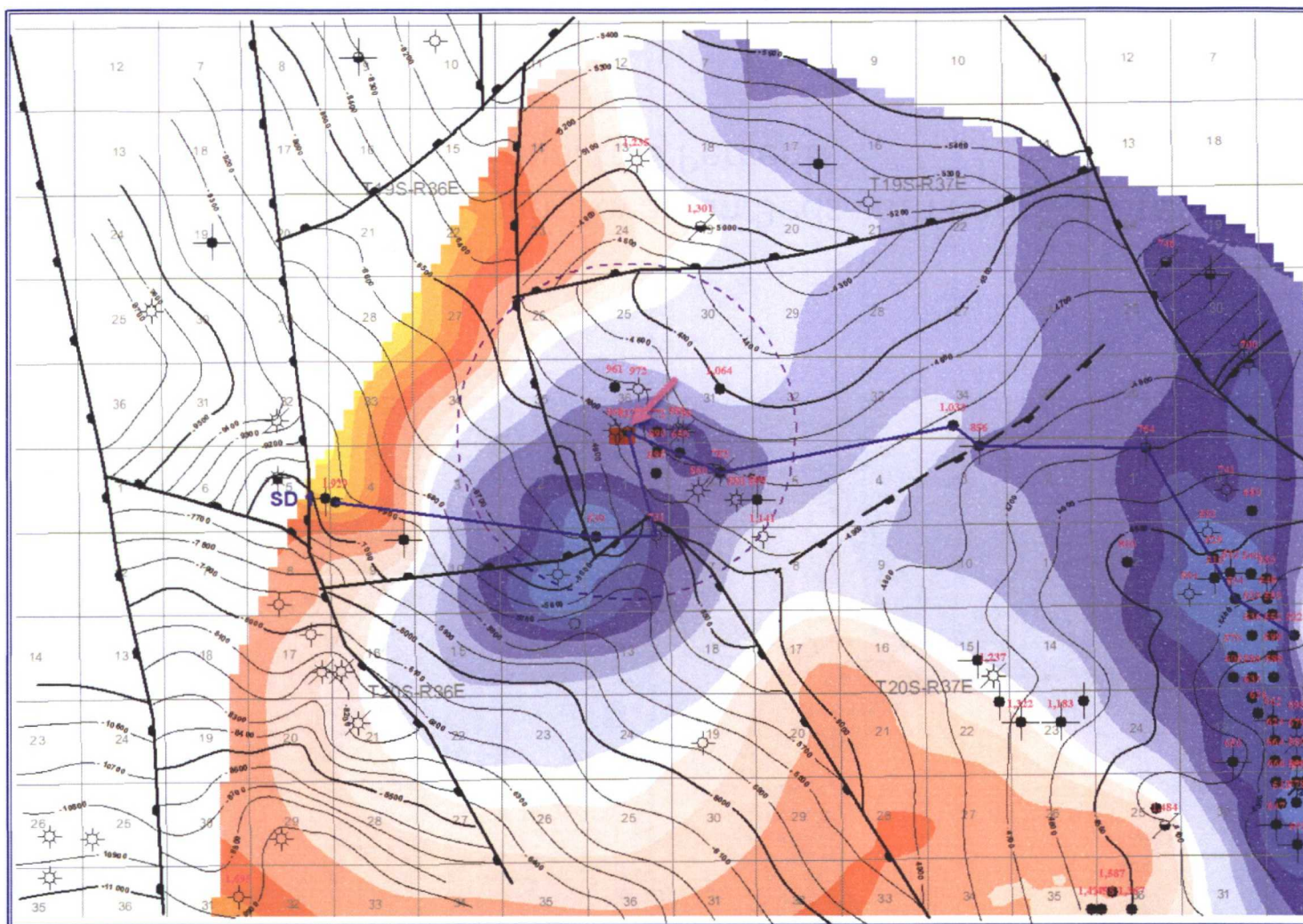


Figure 7: Thickness of Silurian-Devonian Section in the Vicinity of the Targa Monument Plant

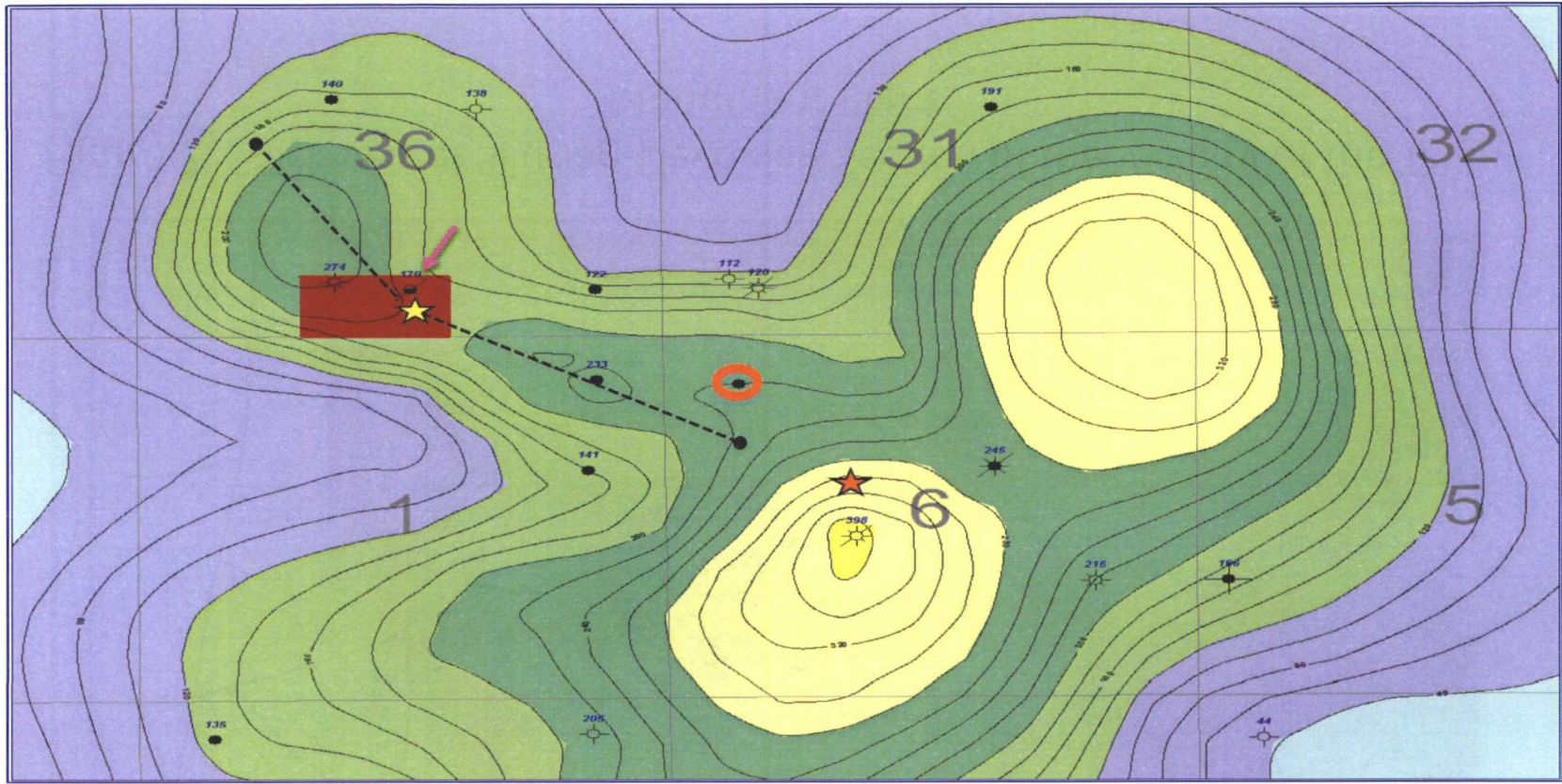


Figure 8: Total Thickness of Silurian-Devonian Beds with Porosity Greater than or Equal to 5 Percent

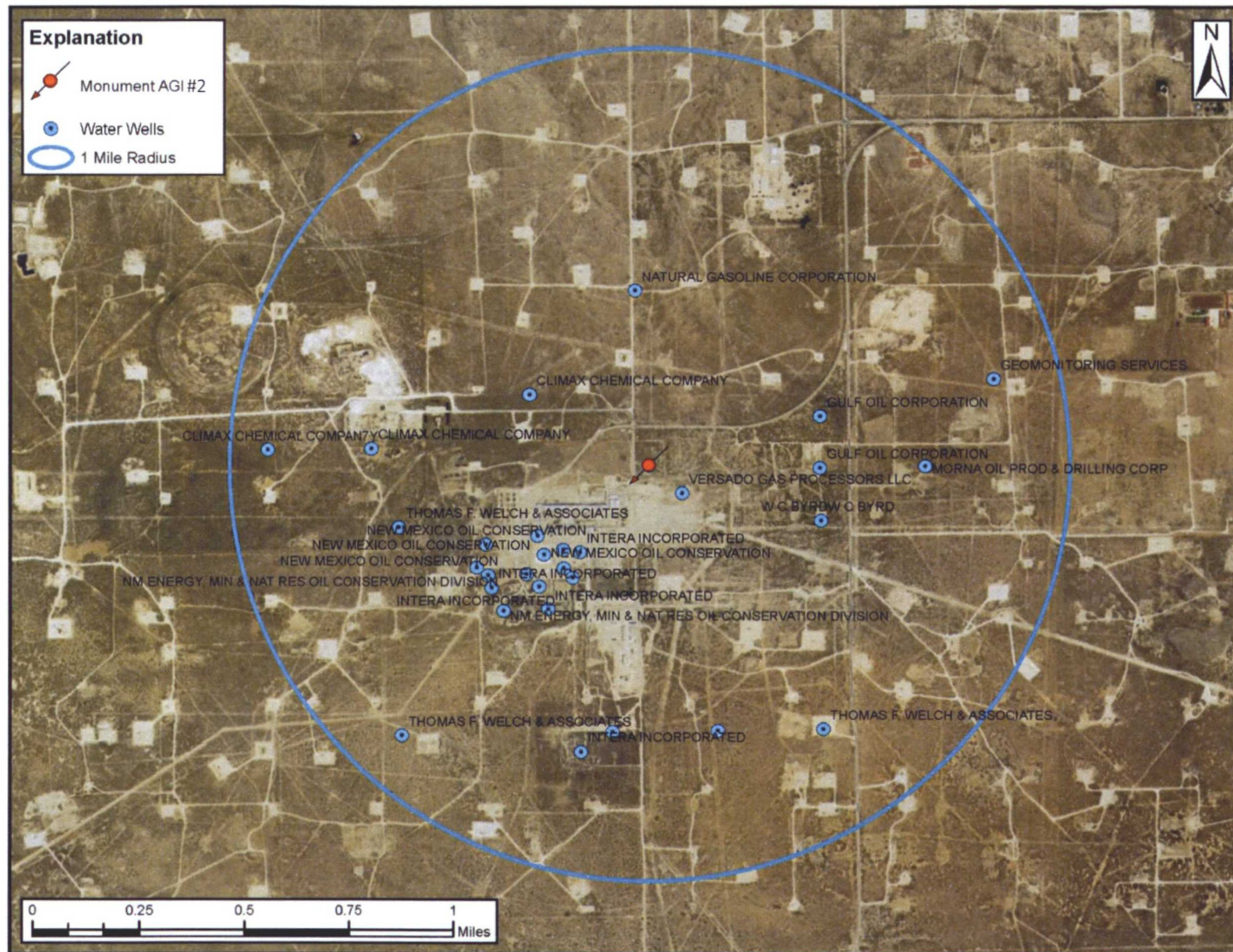


Figure 9: Water Wells within One Mile of Proposed AGI #3

APPENDIX A

Information on Oil and Gas Wells within Two Miles of Proposed Targa AGI #3

Table A1: Identified Wells within Two Miles of Proposed Targa AGI #3

**Table A2: Wells Penetrating injection Zone within One Mile of Proposed
Targa Monument AGI #3**

**Table A3: Operators within One Half Mile of Proposed Targa Monument
AGI #3**

Figure A1: Wells within Two Miles of Proposed Targa AGI #3

**Figure A2: Wells within One Mile of Proposed Targa AGI #3 Penetrating the
Injection Zone**

Table A1: Wells Within Two Miles of Proposed Targa AGI #3

API	OPERATOR	TVD DEPTH	WELL NAME	WELL TYPE	COMPL_STAT	Miles
3002540002	TARGA MIDSTREAM SERVICES LLC	9208	MONUMENT AGI 001	I	Active	0.00
3002512477	XTO ENERGY, INC	3915	GRAHAM STATE NCT F 004	G	Active	0.11
3002512472	APACHE CORP	3905	NORTH MONUMENT G/SA UNIT 014	O	Active	0.14
3002512473	APACHE CORP	10255	STATE F GAS COM 005	G	Active	0.14
3002512482	TARGA MIDSTREAM SERVICES LLC	7700	GRAHAM STATE NCT-F 007	S	Active	0.18
3002540615	APACHE CORP	7724	J R PHILLIPS 012	O	Active	0.24
3002504133	APACHE CORP	3900	J R PHILLIPS 004	O	Active	0.26
3002504142	APACHE CORP	3900	NORTH MONUMENT G/SA UNIT 003	O	Active	0.28
3002512476	XTO ENERGY, INC	3921	GRAHAM STATE NCT F 003	G	Active	0.28
3002504135	APACHE CORP	5207	J R PHILLIPS 006	O	Active	0.28
3002512471	APACHE CORP	3905	NORTH MONUMENT G/SA UNIT 011	I	Active	0.29
3002513229	TARGA MIDSTREAM SERVICES LLC	1799	LPG STORAGE WELL 002	M	Active	0.30
3002537985	APACHE CORP	4082	NORTH MONUMENT G/SA UNIT 343	O	Active	0.31
3002504143	APACHE CORP	5220	STATE D 005	O	Active	0.31
3002524166	APACHE CORP	3950	NORTH MONUMENT G/SA UNIT 010	O	Plugged	0.33
3002512478	APACHE CORP	9822	NORTH MONUMENT G/SA UNIT 032	O	Plugged	0.36
3002512479	CHEVRON U S A INC	5725	GRAHAM STATE NCT F 006	O	Plugged	0.36
3002512469	APACHE CORP	3903	STATE F GAS COM 001	G	Active	0.39
3002537984	APACHE CORP	4035	NORTH MONUMENT G/SA UNIT 342	O	TA	0.40
3002524422	APACHE CORP	4050	NORTH MONUMENT G/SA UNIT 013	I	Active	0.41
3002539148	APACHE CORP	7700	J R PHILLIPS 010	O	Active	0.41
3002512474	APACHE CORP	4024	NORTH MONUMENT G/SA UNIT 016	O	Active	0.42
3002504134	APACHE CORP	9953	J R PHILLIPS 005	O	Active	0.43
3002504130	APACHE CORP	3900	J R PHILLIPS GAS COM 001	G	Plugged	0.46
3002504139	APACHE CORP	3954	NORTH MONUMENT G/SA UNIT 004	O	Active	0.46
3002512470	APACHE CORP	3939	NORTH MONUMENT G/SA UNIT 012	O	Active	0.47
3002504138	APACHE CORP	5720	J R PHILLIPS 009	O	TA	0.48
3002541722	APACHE CORP	3957	NORTH MONUMENT G/SA UNIT 395	O	Active	0.49
3002541723	APACHE CORP	0	NORTH MONUMENT G/SA UNIT 396C	O	New (Not drilled or compl)	0.49
3002504144	APACHE CORP	7877	STATE D 006	O	Active	0.49
3002504132	APACHE CORP	3892	J R PHILLIPS GAS COM 003	G	Plugged	0.50
3002504141	APACHE CORP	3910	NORTH MONUMENT G/SA UNIT 006	O	Active	0.51
3002513228	TARGA MIDSTREAM SERVICES LLC	1906	LPG STORAGE WELL 001	M	Active	0.52
3002504137	APACHE CORP	5760	J R PHILLIPS 008	O	Active	0.52
3002512468	APACHE CORP	3908	NORTH MONUMENT G/SA UNIT 007	I	Active	0.52
3002512475	APACHE CORP	3908	NORTH MONUMENT G/SA UNIT 009	O	Active	0.53
3002520517	APACHE CORP	9900	NORTH MONUMENT G/SA UNIT 286	O	TA	0.53
3002512480	APACHE CORP	3939	NORTH MONUMENT G/SA UNIT 006	O	Active	0.53
3002539891	APACHE CORP	5816	J R PHILLIPS 011	O	Active	0.53
3002536674	APACHE CORP	3960	NORTH MONUMENT G/SA UNIT 334	O	Active	0.54
3002505768	HESS CORPORATION	3899	NORTH MONUMENT G/SA UNIT 029	O	Plugged	0.55
3002512481	APACHE CORP	10100	NORTH MONUMENT G/SA UNIT 285	O	Active	0.56
3002532361	APACHE CORP	3426	STATE F GAS COM 002	G	Active	0.56
3002505954	TEXACO EXPLORATION & PRODUCTION INC	0	J R PHILLIPS 001	O	Plugged	0.57
3002504136	APACHE CORP	10214	J R PHILLIPS 007	O	TA	0.60
3002504131	APACHE CORP	3890	J R PHILLIPS 002	O	Active	0.61
3002505772	APACHE CORP	5709	NORTH MONUMENT G/SA UNIT 013	O	Plugged	0.61
3002533632	ARCO PERMIAN	9650	J R PHILLIPS A 009	G	Plugged	0.61
3002512467	APACHE CORP	3915	STATE V 003	G	Active	0.62
3002536913	APACHE CORP	3960	NORTH MONUMENT G/SA UNIT 337	O	Active	0.62
3002504140	APACHE CORP	3915	NORTH MONUMENT G/SA UNIT 005	I	Active	0.63
3002505771	APACHE CORP	3915	NORTH MONUMENT G/SA UNIT 012	O	Active	0.63
3002535177	APACHE CORP	3986	NORTH MONUMENT G/SA UNIT 297	O	Active	0.64
3002512483	APACHE CORP	3928	NORTH MONUMENT G/SA UNIT 005	I	Active	0.64
3002504127	APACHE CORP	3929	NORTH MONUMENT G/SA UNIT 016	O	Active	0.64
3002524094	APACHE CORP	4030	NORTH MONUMENT G/SA UNIT 008	O	Active	0.65
3002505958	CHEVRON U S A INC	7750	J R PHILLIPS 005	O	Plugged	0.65
3002533359	XTO ENERGY, INC	3480	J R PHILLIPS 014	G	Active	0.66
3002505778	APACHE CORP	5792	J R PHILLIPS A 006	G	Active	0.66
3002505780	ATLANTIC RICHFIELD	9900	J R PHILLIPS A 008	G	Plugged	0.66
3002505964	CHEVRON U S A INC	9814	J R PHILLIPS 011	G	Active	0.67
3002504165	APACHE CORP	3945	NORTH MONUMENT G/SA UNIT 001	I	Active	0.69
3002512486	APACHE CORP	3935	NORTH MONUMENT G/SA UNIT 009	I	Active	0.69
3002535197	APACHE CORP	4009	NORTH MONUMENT G/SA UNIT 298	I	Active	0.70
3002540603	APACHE CORP	7802	J R PHILLIPS 018	O	Active	0.70
3002531593	JACK HUFF	3730	SHELL B STATE 001	O	Active	0.71
3002504147	APACHE CORP	5727	STATE H 003	O	Active	0.72
3002532299	CIMAREX ENERGY CO. OF COLORADO	3700	MAVEETY STATE GAS COM 009	G	Active	0.72
3002504146	APACHE CORP	3879	STATE H 002	O	Plugged	0.75
3002512722	CHEVRON U S A INC	7648	NEW MEXICO E STATE NCT-1 005	G	Active	0.75
3002504154	APACHE CORP	3890	NORTH MONUMENT G/SA UNIT 011	O	Active	0.76
3002504150	RICE OPERATING COMPANY	7625	E M E SWD 001	S	Active	0.77
3002537918	MONUMENT DISPOSAL, INC.	5000	MONUMENT 001	S	Plugged	0.77
3002512466	APACHE CORP	3930	NORTH MONUMENT G/SA UNIT 002B	I	Active	0.77
3002505959	CHEVRON U S A INC	7532	J R PHILLIPS 006	G	Active	0.77
3002504169	CIMAREX ENERGY CO. OF COLORADO	4000	STATE A 006	G	Active	0.77
3002533568	APACHE CORP	3535	STATE V 007	G	Active	0.77
3002505104	APACHE CORP	3947	NORTH MONUMENT G/SA UNIT 003	I	Active	0.77
3002541798	APACHE CORP	0	NORTH MONUMENT G/SA UNIT 397C	O	New (Not drilled or compl)	0.78
3002505956	APACHE CORP	3896	NORTH MONUMENT G/SA UNIT 005	O	Active	0.78
3002533306	CHEVRON U S A INC	6000	J R PHILLIPS 013	O	Plugged	0.79
3002505776	APACHE CORP	3920	NORTH MONUMENT G/SA UNIT 005	I	Active	0.79
3002505960	CHEVRON U S A INC	5725	J R PHILLIPS 007	O	Plugged	0.79
3002538316	APACHE CORP	4020	NORTH MONUMENT G/SA UNIT 362	O	Plugged	0.80
3002505779	HESS CORPORATION	5714	ARCO PHILLIPS A 007	O	Plugged	0.80
3002530248	MOMENTUM OPERATING CO INC	7725	SKELLY D STATE 004	G	Active	0.80
3002504167	APACHE CORP	3837	NORTH MONUMENT G/SA UNIT 008	O	Active	0.81
3002512461	APACHE CORP	3945	NORTH MONUMENT G/SA UNIT 008	O	Active	0.82
3002504149	MOMENTUM OPERATING CO INC	3886	SKELLY D STATE 002	O	Active	0.82
3002532899	CHEVRON U S A INC	3530	NEW MEXICO E STATE NCT-1 006	G	Active	0.83
3002504153	APACHE CORP	3910	NORTH MONUMENT G/SA UNIT 012	O	Active	0.84
3002533838	JACK HUFF	3800	SHELL B STATE 002	G	Active	0.84

3002505777	APACHE CORP	3550	J R PHILLIPS B 005	G	Active	0.84
3002538310	APACHE CORP	4040	NORTH MONUMENT G/SA UNIT 351	O	Active	0.84
3002512484	APACHE CORP	3953	NORTH MONUMENT G/SA UNIT 004	O	Active	0.86
3002533251	APACHE CORP	3600	J R PHILLIPS A 010	G	Active	0.86
3002535119	CHEVRON U S A INC	7750	J R PHILLIPS 015	O	Active	0.87
3002533297	MOMENTUM OPERATING CO INC	6000	SKELLY D STATE 005	O	Active	0.88
3002534188	APACHE CORP	7700	APACHE STATE A 007	O	Plugged	0.89
3002504126	APACHE CORP	3936	NORTH MONUMENT G/SA UNIT 015	I	Active	0.90
3002505963	TEXACO EXPLORATION & PRODUCTION INC	0	J R PHILLIPS 010	G	Plugged	0.90
3002535127	CHEVRON U S A INC	7700	NEW MEXICO E STATE NCT-1 008	O	Active	0.90
3002531587	APACHE CORP	5150	NORTH MONUMENT G/SA UNIT 019	I	Active	0.90
3002505962	CHEVRON U S A INC	5696	J R PHILLIPS 009H	O	Active	0.90
3002526152	CIMAREX ENERGY CO. OF COLORADO	3800	MAVEETY STATE GAS COM 008	G	Plugged	0.91
3002538313	APACHE CORP	4060	NORTH MONUMENT G/SA UNIT 357	O	Active	0.91
3002505939	ENERVEST OPERATING L.L.C.	5770	BRITT A 6 003	O	Plugged	0.91
3002505940	CONOCO INC	0	BRITT A 6 004	G	Plugged	0.92
3002505769	APACHE CORP	3890	NORTH MONUMENT G/SA UNIT 014	G	Active	0.92
3002527303	APACHE CORP	3975	NORTH MONUMENT G/SA UNIT 001	I	Plugged	0.93
3002512465	APACHE CORP	3940	NORTH MONUMENT G/SA UNIT 001	I	Active	0.93
3002504166	APACHE CORP	3940	NORTH MONUMENT G/SA UNIT 002	O	Active	0.93
3002535181	APACHE CORP	4024	NORTH MONUMENT G/SA UNIT 930	O	Active	0.93
3002512462	APACHE CORP	3938	NORTH MONUMENT G/SA UNIT 010	O	Active	0.93
3002505955	APACHE CORP	3529	NORTH MONUMENT G/SA UNIT 003	G	Active	0.94
3002532358	APACHE CORP	3450	J R PHILLIPS GAS COM 004	G	Active	0.94
3002521886	ORXX ENERGY CO	4100	W B MAVEETY 007	I	Plugged	0.94
3002533774	CHEVRON U S A INC	7500	NEW MEXICO E STATE NCT-1 007	O	Plugged	0.95
3002505938	ENERVEST OPERATING L.L.C.	3895	BRITT A 6 002	G	Active	0.97
3002531611	CIMAREX ENERGY CO. OF COLORADO	3600	STATE A 007	G	Active	0.97
3002505770	APACHE CORP	3900	NORTH MONUMENT G/SA UNIT 011	I	Active	0.98
3002504164	APACHE CORP	3915	NORTH MONUMENT G/SA UNIT 009	I	Active	0.98
3002539092	APACHE CORP	0	W B MAVEETY 013	O	New (Not drilled or compl)	0.99
3002505957	TEXACO EXPLORATION & PRODUCTION INC	0	J R PHILLIPS 004	O	Plugged	0.99
3002505774	APACHE CORP	3935	NORTH MONUMENT G/SA UNIT 004	O	Active	0.99
3002532393	APACHE CORP	4080	NORTH MONUMENT G/SA UNIT 028	O	Active	0.99
3002532778	CHEVRON U S A INC	3700	W B MAVEETY 010	G	Active	0.99
3002504123	HESS CORPORATION	3978	W A WEIR NCT A 001	O	Plugged	0.99
3002504145	APACHE CORP	3877	STATE H 001	O	Active	1.00
3002533754	APACHE CORP	3650	J R PHILLIPS B 007	G	Active	1.00
3002504152	CHEVRON U S A INC	3892	NEW MEXICO E STATE NCT-1 002	G	Active	1.00
3002535501	CHEVRON U S A INC	7850	J R PHILLIPS 016	O	Plugged	1.01
3002504059	APACHE CORP	3998	NORTH MONUMENT G/SA UNIT 015	I	Active	1.02
3002504053	APACHE CORP	3939	NORTH MONUMENT G/SA UNIT 014	I	Active	1.02
3002504168	APACHE CORP	3912	NORTH MONUMENT G/SA UNIT 007	I	Active	1.02
3002505775	APACHE CORP	3930	NORTH MONUMENT G/SA UNIT 006	O	Active	1.03
3002512464	CHESAPEAKE OPERATING, INC.	3940	W B MAVEETY 005	G	Plugged	1.03
3002505758	APACHE CORP	3890	NORTH MONUMENT G/SA UNIT 015	G	Active	1.04
3002504063	APACHE CORP	3955	NORTH MONUMENT G/SA UNIT 016	O	Active	1.04
3002538406	APACHE CORP	7593	W B MAVEETY 012	O	Active	1.05
3002505925	APACHE CORP	3890	L M LAMBERT 001	G	Active	1.05
3002504148	MOMENTUM OPERATING CO INC	3890	SKELLY D STATE 001	O	Active	1.05
3002524799	APACHE CORP	4000	J R PHILLIPS B 006	G	Active	1.06
3002505965	TEXACO EXPLORATION & PRODUCTION INC	5250	J R PHILLIPS 012	O	Plugged	1.06
3002505961	APACHE CORP	5730	NORTH MONUMENT G/SA UNIT 283	G	Plugged	1.07
3002504151	APACHE CORP	3890	NORTH MONUMENT G/SA UNIT 013	O	Active	1.07
3002532341	APACHE CORP	3530	STATE J GAS COM 005	G	Plugged	1.07
3002505968	HESS CORPORATION	5730	BRITT A 003	O	Plugged	1.07
3002505935	APACHE CORP	3500	NORTH MONUMENT G/SA UNIT 002	G	Active	1.08
3002505936	UNION TEXAS PETROLEUM CORP	10091	BRITT A COM 007	G	Plugged	1.08
3002504129	ATLANTIC RICHFIELD	0	SELBY MAVEETY 001Y	O	Plugged	1.08
3002504128	SINCLAIR OIL & GAS COMPANY	2310	SELBY & MAVEETY A 001	O	Plugged	1.08
3002504064	APACHE CORP	3942	NORTH MONUMENT G/SA UNIT 013	I	Active	1.08
3002505762	XTO ENERGY, INC	3895	B V CULP NCT B 001	G	Active	1.08
3002505752	APACHE CORP	3940	NORTH MONUMENT G/SA UNIT 013	I	Active	1.10
3002505941	ENERVEST OPERATING L.L.C.	5730	BRITT A 6 005	O	Active	1.11
3002531506	APACHE CORP	4352	NORTH MONUMENT G/SA UNIT 010	O	Active	1.12
3002505759	APACHE CORP	3900	J R PHILLIPS A COM 001	G	Plugged	1.13
3002505967	HESS CORPORATION	3905	BRITT A 002	O	Plugged	1.14
3002505932	APACHE CORP	5715	L M LAMBERT 008	O	Active	1.14
3002505970	HESS CORPORATION	0	BRITT A 005	O	Plugged	1.14
3002504124	APACHE CORP	3940	NORTH MONUMENT G/SA UNIT 014	O	Active	1.14
3002531345	XTO ENERGY, INC	3650	GRAHAM STATE NCT C COM 011	G	Active	1.14
3002539069	APACHE CORP	4070	NORTH MONUMENT G/SA UNIT 376	O	Active	1.16
3002505937	ENERVEST OPERATING L.L.C.	3895	BRITT A 6 001	O	Plugged	1.16
3002504157	APACHE CORP	3900	NORTH MONUMENT G/SA UNIT 010	O	Active	1.16
3002541727	APACHE CORP	3975	NORTH MONUMENT G/SA UNIT 438	O	Active	1.17
3002504155	APACHE CORP	3970	NORTH MONUMENT G/SA UNIT 003	I	Active	1.17
3002512463	APACHE CORP	3972	NORTH MONUMENT G/SA UNIT 002	O	Active	1.17
3002504125	BP AMERICA PRODUCTION COMPANY	3992	SELBY MAVEETY 002	G	Plugged	1.17
3002505929	APACHE CORP	5710	NORTH MONUMENT G/SA UNIT 007G	O	Plugged	1.17
3002504163	APACHE CORP	3903	NORTH MONUMENT G/SA UNIT 016	O	Plugged	1.18
3002538453	APACHE CORP	4060	NORTH MONUMENT G/SA UNIT 355	O	TA	1.19
3002504076	GULF OIL CORP	3973	C T BATES 001	O	Plugged	1.20
3002524423	APACHE CORP	4100	STATE T 008	G	Plugged	1.20
3002505926	APACHE CORP	9870	L M LAMBERT 002	O	Active	1.20
3002534056	APACHE CORP	7550	SELBY MAVEETY 004	O	TA	1.21
3002505761	APACHE CORP	3964	NORTH MONUMENT G/SA UNIT 007	I	Active	1.21
3002538457	APACHE CORP	4030	NORTH MONUMENT G/SA UNIT 366	O	Active	1.21
3002526886	APACHE CORP	7979	MONUMENT ABO 001	O	TA	1.22
3002538456	APACHE CORP	4060	NORTH MONUMENT G/SA UNIT 361	O	Active	1.22
3002541047	APACHE CORP	4000	NORTH MONUMENT G/SA UNIT 394	O	Active	1.23
3002505934	APACHE CORP	5225	L M LAMBERT 010	O	Active	1.23
3002541112	APACHE CORP	4223	NORTH MONUMENT G/SA UNIT 002H	O	TA	1.23
3002505773	APACHE CORP	3925	NORTH MONUMENT G/SA UNIT 003	I	Active	1.24
3002533877	APACHE CORP	7610	W B MAVEETY 011	O	Plugged	1.24

3002505946	CHEVRON U S A INC	7400	G C MATTHEWS 005	O	Plugged	1.24
3002504159	APACHE CORP	3920	NORTH MONUMENT G/SA UNIT 006	O	Active	1.25
3002504232	APACHE CORP	3885	W P BYRD 001	O	Active	1.25
3002533944	APACHE CORP	7550	SELBY MAVEETY 003	O	Active	1.25
3002504235	APACHE CORP	3885	W P BYRD BATTERY 2 004	O	Active	1.25
3002504119	APACHE CORP	3945	W A WEIR GAS COM 004	G	Active	1.25
3002533720	APACHE CORP	3505	W P BYRD GAS COM 003	G	Active	1.25
3002532391	APACHE CORP	4142	NORTH MONUMENT G/SA UNIT 010	O	Active	1.26
3002535740	APACHE CORP	3910	NORTH MONUMENT G/SA UNIT 331	O	Active	1.27
3002504061	XTO ENERGY, INC	3975	GRAHAM STATE NCT C COM 008	G	Active	1.27
3002504245	SUNRAY OIL CO DX DIVISION	10625	COOPER A 009	O	Plugged	1.27
3002504054	APACHE CORP	4045	NORTH MONUMENT G/SA UNIT 011	I	Active	1.27
3002505765	XTO ENERGY, INC	5765	B V CULP NCT B 004	G	Active	1.29
3002504231	APACHE CORP	10827	H W ANDREWS 008	O	Active	1.29
3002504241	GRAHAM ROYALTY LTD	3890	ALASKA COOPER 001	O	Plugged	1.29
3002536687	APACHE CORP	3900	NORTH MONUMENT G/SA UNIT 335	O	Active	1.30
3002505989	MORGAN OPERATING, INC.	3775	COOPER B 012	G	Active	1.30
3002504227	APACHE CORP	3901	H W ANDREWS 001	G	Plugged	1.30
3002505969	HESS CORPORATION	5727	BRITT A 004	O	Plugged	1.30
3002504062	APACHE CORP	3965	NORTH MONUMENT G/SA UNIT 009	I	Active	1.31
3002505966	CIMAREX ENERGY CO. OF COLORADO	3906	BRITT A 001	O	Plugged	1.31
3002505951	CHEVRON U S A INC	5250	G C MATTHEWS 010	O	Plugged	1.31
3002504057	APACHE CORP	4001	NORTH MONUMENT G/SA UNIT 012	G	Plugged	1.32
3002532960	BURGUNDY OIL & GAS OF N M INC	3560	STATE J GAS COM 008	G	Plugged	1.32
3002505766	APACHE CORP	3915	NORTH MONUMENT G/SA UNIT 002	O	Active	1.32
3002505750	APACHE CORP	3933	NORTH MONUMENT G/SA UNIT 014	O	Active	1.32
3002539055	APACHE CORP	4040	NORTH MONUMENT G/SA UNIT 377	O	Active	1.32
3002505971	CIMAREX ENERGY CO. OF COLORADO	5215	BRITT A 006	G	Plugged	1.33
3002505743	OXY USA WTP LIMITED PARTNERSHIP	3554	STATE E 005	G	Active	1.33
3002512721	XTO ENERGY, INC	3885	G C MATTHEWS 002	G	Active	1.33
3002541603	APACHE CORP		MONUMENT ABO 003	O	Active	1.33
3002532531	APACHE CORP	3580	J R PHILLIPS A COM 002	G	Active	1.33
3002533759	APACHE CORP	7505	W A WEIR 014	O	Active	1.34
3002504156	APACHE CORP	3921	NORTH MONUMENT G/SA UNIT 015	I	Active	1.34
3002504069	APACHE CORP	3993	W A WEIR GAS COM 007	G	Active	1.35
3002525216	APACHE CORP	3500	STATE J GAS COM 004	G	Plugged	1.35
3002505764	APACHE CORP	3895	NORTH MONUMENT G/SA UNIT 016	I	Active	1.35
3002505988	MORGAN OPERATING, INC.	5717	COOPER B 010	O	Active	1.35
3002504158	APACHE CORP	3930	NORTH MONUMENT G/SA UNIT 011	I	Active	1.36
3002505927	APACHE CORP	3700	NORTH MONUMENT G/SA UNIT 001	I	Active	1.37
3002504121	APACHE CORP	3954	NORTH MONUMENT G/SA UNIT 003	O	Plugged	1.37
3002505763	APACHE CORP	3907	NORTH MONUMENT G/SA UNIT 009	I	Active	1.37
3002505931	APACHE CORP	5730	L M LAMBERT 007	O	Plugged	1.38
3002505985	THREE RIVERS OPERATING COMPANY LLC	3895	ALASKA COOPER 003	G	Plugged	1.38
3002538315	APACHE CORP	4090	NORTH MONUMENT G/SA UNIT 360	O	Active	1.39
3002505933	APACHE CORP	5235	L M LAMBERT 009	O	Active	1.39
3002533982	APACHE CORP	4025	NORTH MONUMENT G/SA UNIT 291	O	Active	1.39
3002504117	APACHE CORP	3836	NORTH MONUMENT G/SA UNIT 013	O	Plugged	1.39
3002504210	APACHE CORP	3895	H W ANDREWS 002	O	Active	1.40
3002505751	APACHE CORP	3965	NORTH MONUMENT G/SA UNIT 012	O	Active	1.40
3002532742	APACHE CORP	3600	STATE J GAS COM 007	G	Active	1.40
3002505755	APACHE CORP	3935	NORTH MONUMENT G/SA UNIT 015	I	Active	1.40
3002536860	LEGACY RESERVES OPERATING, LP	6600	COOPER 7 001	G	TA	1.40
3002533006	APACHE CORP	3685	W A WEIR GAS COM 009	G	Active	1.41
3002535692	CHEVRON U S A INC	7420	BAXTER CULP 31 005	O	Plugged	1.41
3002504162	APACHE CORP	3930	NORTH MONUMENT G/SA UNIT 004	O	Plugged	1.42
3002532722	OXY USA WTP LIMITED PARTNERSHIP	3750	STATE E 006	G	Plugged	1.42
3002504118	APACHE CORP	3945	NORTH MONUMENT G/SA UNIT 012	G	Active	1.42
3002541611	APACHE CORP	7800	MONUMENT ABO 004	O	New (Not drilled or compl)	1.43
3002505928	APACHE CORP	3880	L M LAMBERT 004	O	Plugged	1.44
3002534005	APACHE CORP	7550	W A WEIR 015	O	Active	1.44
3002505760	APACHE CORP	3905	NORTH MONUMENT G/SA UNIT 008	I	Active	1.44
3002537935	APACHE CORP	4168	NORTH MONUMENT G/SA UNIT 341	O	Active	1.44
3002505930	APACHE CORP	5650	NORTH MONUMENT G/SA UNIT 008	G	Plugged	1.44
3002533670	APACHE CORP	7600	W A WEIR 012	O	Active	1.44
3002520193	APACHE CORP	4050	NORTH MONUMENT G/SA UNIT 005	I	Active	1.44
3002504218	XTO ENERGY, INC	3894	EUNICE MONUMENT SOUTH UNIT B 850	O	Active	1.45
3002505952	CHEVRON U S A INC	5750	G C MATTHEWS 011	O	Plugged	1.46
3002533045	APACHE CORP	8092	MONUMENT ABO 35 002	O	Active	1.46
3002533696	APACHE CORP	7660	W A WEIR 013	O	Active	1.46
3002504171	UNION TEXAS PETROLEUM CORP	3910	STATE A 001	O	Plugged	1.48
3002505942	CHEVRON U S A INC	3884	G C MATTHEWS 001	O	Plugged	1.48
3002504120	APACHE CORP	3885	NORTH MONUMENT G/SA UNIT 005	G	Plugged	1.49
3002505949	GULF OIL CORP		O G C MATTHEWS 008	O	Plugged	1.49
3002532708	APACHE CORP	3760	ELLIOTT STATE 007	G	Active	1.49
3002505999	ENERVEST OPERATING L.L.C.	5713	BRITT 012	G	Active	1.49
3002504170	APACHE CORP	3847	NORTH MONUMENT G/SA UNIT 012	O	Active	1.50
3002504233	APACHE CORP	3880	W P BYRD 002	O	Active	1.50
3002504236	APACHE CORP	3875	W P BYRD BATTERY 2 005	O	Active	1.50
3002505990	ENERVEST OPERATING L.L.C.	3847	BRITT 002	O	Plugged	1.51
3002541045	APACHE CORP	4022	NORTH MONUMENT G/SA UNIT 392	O	Active	1.51
3002504160	APACHE CORP	3915	NORTH MONUMENT G/SA UNIT 014	O	Active	1.52
3002535621	APACHE CORP	3900	NORTH MONUMENT G/SA UNIT 327	O	Active	1.52
3002505947	CHEVRON U S A INC	9920	G C MATTHEWS 006	G	TA	1.52
3002504060	APACHE CORP	3975	NORTH MONUMENT G/SA UNIT 007	I	TA	1.52
3002533567	APACHE CORP	7525	W A WEIR 011	O	Active	1.52
3002504246	MORGAN OPERATING, INC.	3770	COOPER B 011	O	Plugged	1.52
3002504055	APACHE CORP	4030	STATE T 003	G	Active	1.52
3002538150	APACHE CORP	3984	NORTH MONUMENT G/SA UNIT 349	O	Active	1.52
3002504078	MARATHON OIL CO	3990	MCGRAIL STATE 001	G	Plugged	1.53
3002505749	APACHE CORP	3970	NORTH MONUMENT G/SA UNIT 011	O	Active	1.53
3002505950	CHEVRON U S A INC	5250	G C MATTHEWS 009	O	Plugged	1.53
3002505945	CHEVRON U S A INC	3897	G C MATTHEWS 004	O	Plugged	1.54
3002533687	APACHE CORP	8015	MCGRAIL STATE 010	O	Active	1.54

3002541799	APACHE CORP	3953	NORTH MONUMENT G/SA UNIT 437	O	Active	1.54
3002504242	LEGACY RESERVES OPERATING, LP	3890	ALASKA COOPER 004	G	Plugged	1.54
3002504077	APACHE CORP	3995	NORTH MONUMENT G/SA UNIT 810	O	TA	1.54
3002504229	APACHE CORP	3890	H W ANDREWS 005	O	Active	1.54
3002535606	APACHE CORP	3916	NORTH MONUMENT G/SA UNIT 326	O	Active	1.55
3002505767	APACHE CORP	3923	NORTH MONUMENT G/SA UNIT 001	I	Active	1.55
3002504066	APACHE CORP	3970	NORTH MONUMENT G/SA UNIT 008	O	Active	1.56
3002504240	APACHE CORP	3370	W P BYRD GAS COM 001	G	Active	1.56
3002504067	XTO ENERGY, INC	3990	WILLIAM WEIR 001	G	Active	1.56
3002505916	APACHE CORP	5755	BERTHA BARBER 011	G	Active	1.57
3002533820	CHEVRON U S A INC	7532	WEIR B 002	O	Plugged	1.58
3002531982	DAVID H ARRINGTON OIL & GAS INC	8050	FOSTER 003	O	Active	1.58
3002531589	APACHE CORP	4500	NORTH MONUMENT G/SA UNIT 022	O	Active	1.58
3002536183	CLIMAX CHEMICAL CO	2449	FOSTER SALINE WATER 002	M	Plugged	1.59
3002504122	APACHE CORP	3845	NORTH MONUMENT G/SA UNIT 004	O	Plugged	1.59
3002525655	CLIMAX CHEMICAL CO	2420	SALINE WATER WELL 004	M	Plugged	1.59
3002533300	APACHE CORP	7661	REED A-3 FEDERAL 016	O	Plugged	1.59
3002505793	APACHE CORP	3897	NORTH MONUMENT G/SA UNIT 013	I	Active	1.60
3002504221	XTO ENERGY, INC	3905	EUNICE MONUMENT SOUTH UNIT B 851	I	Active	1.60
3002505984	GRAHAM ROYALTY LTD	0	ALASKA COOPER 002	O	Plugged	1.61
3002532659	DAVID H ARRINGTON OIL & GAS INC	3882	FOSTER 004	G	Active	1.61
3002532385	APACHE CORP	3650	BERTHA BARBER 014	G	Active	1.61
3002505910	APACHE CORP	3954	NORTH MONUMENT G/SA UNIT 004	I	Active	1.62
3002533997	APACHE CORP	3930	NORTH MONUMENT G/SA UNIT 293	O	Active	1.62
3002533551	APACHE CORP	7550	W A WEIR 010	O	Active	1.62
3002505796	APACHE CORP	3906	NORTH MONUMENT G/SA UNIT 012	I	Active	1.62
3002539582	APACHE CORP	5888	BERTHA BARBER 024	O	Active	1.62
3002532533	APACHE CORP	3596	STATE J GAS COM 006	G	Plugged	1.63
3002504211	APACHE CORP	3890	H W ANDREWS 003	G	Active	1.63
3002505747	APACHE CORP	3971	NORTH MONUMENT G/SA UNIT 005	I	Active	1.63
3002532381	APACHE CORP	3700	ELLIOTT STATE 006	G	Active	1.64
3002530932	XTO ENERGY, INC	3600	STATE H 003	G	Active	1.64
3002504080	HESS CORPORATION	4004	NORTH MONUMENT G/SA UNIT 008	O	Plugged	1.65
3002504112	APACHE CORP	3957	NORTH MONUMENT G/SA UNIT 018	O	Active	1.65
3002531586	APACHE CORP	4500	NORTH MONUMENT G/SA UNIT 019	O	TA	1.65
3002532698	CONOCOPHILLIPS COMPANY	3730	STATE AC 007	G	Active	1.65
3002541046	APACHE CORP	4030	NORTH MONUMENT G/SA UNIT 393	O	Active	1.65
3002505757	APACHE CORP	3850	NORTH MONUMENT G/SA UNIT 016	O	Active	1.65
3002505914	MARATHON OIL CO	99	BERTHA BARBER 009	O	Plugged	1.66
3002505997	ENERVEST OPERATING L.L.C.	5720	BRITT 010	O	Plugged	1.66
3002504219	ATLANTIC RICHFIELD	3896	MARY J BYRD 002	O	Plugged	1.66
3002533190	APACHE CORP	8100	M E GAITHER 005	O	Active	1.66
3002539067	APACHE CORP	4080	NORTH MONUMENT G/SA UNIT 374	O	Active	1.66
3002505992	ENERVEST OPERATING L.L.C.	3877	BRITT 004	G	Active	1.66
3002504174	APACHE CORP	3906	NORTH MONUMENT G/SA UNIT 017	O	Plugged	1.66
3002505953	CHEVRON U S A INC	6550	G C MATTHEWS 012	G	Plugged	1.66
3002535945	CIMAREX ENERGY CO. OF COLORADO	99	BERTHA BARBER 020	O	Plugged	1.67
3002504101	APACHE CORP	3950	M E GAITHER 001	G	Active	1.67
3002533199	DAVID H ARRINGTON OIL & GAS INC	8090	E H CADDOIS 001	O	Plugged	1.67
3002505753	APACHE CORP	3945	NORTH MONUMENT G/SA UNIT 010	O	Active	1.67
3002505913	APACHE CORP	3900	BERTHA BARBER 008	G	Active	1.67
3002505944	GULF OIL CORP	0	G C MATTHEWS 003	O	Plugged	1.68
3002505786	APACHE CORP	3910	NORTH MONUMENT G/SA UNIT 005	I	Active	1.68
3002535130	APACHE CORP	3974	NORTH MONUMENT G/SA UNIT 296	O	Active	1.68
3002505756	MARATHON OIL CO	3933	ELLIOTT STATE 004	G	Plugged	1.68
3002532579	APACHE CORP	3850	MCGRAIL STATE 003	G	Active	1.69
3002541043	APACHE CORP	4037	NORTH MONUMENT G/SA UNIT 390	O	Active	1.69
3002505948	CHEVRON U S A INC	3736	G C MATTHEWS 007	O	Plugged	1.69
3002504079	APACHE CORP	4005	NORTH MONUMENT G/SA UNIT 011	O	Plugged	1.70
3002527082	XTO ENERGY, INC	3725	GRAHAM STATE NCT C COM 009	G	Active	1.71
3002504161	APACHE CORP	3920	NORTH MONUMENT G/SA UNIT 013	I	Active	1.71
3002504173	BURGUNDY OIL & GAS OF N M INC	3930	REED A 3 002	G	Active	1.72
3002505972	ENERVEST OPERATING L.L.C.	3881	BRITT 001	G	Active	1.72
3002504072	BRECK OPERATING CORP	3985	STATE A 26 001	O	Active	1.72
3002504104	APACHE CORP	3800	NORTH MONUMENT G/SA UNIT 017	O	Plugged	1.72
3002532835	APACHE CORP	3700	BYRD GAS COM 009	G	Active	1.72
3002534024	APACHE CORP	7550	W A WEIR B 006	O	Active	1.72
3002530923	XTO ENERGY, INC	3950	J W SMITH 007	G	Active	1.73
3002535607	APACHE CORP	3909	NORTH MONUMENT G/SA UNIT 328	O	Active	1.73
3002505917	MARATHON OIL CO	0	BERTHA BARBER (DO NOT USE) 012	G	Plugged	1.74
3002504226	ARCO PERMIAN	3650	BYRD GAS COM 007	G	Plugged	1.74
3002539068	APACHE CORP	4050	NORTH MONUMENT G/SA UNIT 375	O	Active	1.74
3002535741	APACHE CORP	3897	NORTH MONUMENT G/SA UNIT 332	O	Active	1.74
3002505746	APACHE CORP	3959	NORTH MONUMENT G/SA UNIT 006	O	Active	1.74
3002536182	CLIMAX CHEMICAL CO	2482	FOSTER SALINE WATER 001	M	Plugged	1.74
3002533035	APACHE CORP	3498	H W ANDREWS 015	G	Active	1.74
3002533607	APACHE CORP	7588	MCGRAIL STATE 009	O	Active	1.74
3002505974	APACHE CORP	3894	BERTHA J BARBER 002	O	Plugged	1.75
3002533598	CHEVRON U S A INC	7550	STATE A 26 006	O	Plugged	1.75
3002505915	MARATHON OIL CO	5742	BERTHA BARBER 010	O	Plugged	1.75
3002538455	APACHE CORP	4088	NORTH MONUMENT G/SA UNIT 359	O	Active	1.75
3002504234	APACHE CORP	3875	W P BYRD BATTERY 3 003	O	Active	1.75
3002504238	APACHE CORP	3880	W P BYRD A 001	O	Active	1.75
3002504070	APACHE CORP	4062	NORTH MONUMENT G/SA UNIT 007	O	Active	1.76
3002533436	APACHE CORP	7525	SMITH 008	O	Active	1.76
3002538149	APACHE CORP	3990	NORTH MONUMENT G/SA UNIT 346	O	TA	1.76
3002505911	MARATHON OIL CO	3890	BERTHA BARBER 006	O	Plugged	1.76
3002505977	CHEVRON U S A INC	5700	BERTHA J BARBER 009	O	Active	1.77
3002504058	APACHE CORP	4028	NORTH MONUMENT G/SA UNIT 002	O	Active	1.77
3002505787	APACHE CORP	3920	NORTH MONUMENT G/SA UNIT 004	I	Active	1.77
3002504056	APACHE CORP	4055	NORTH MONUMENT G/SA UNIT 003	O	Plugged	1.77
3002504243	MORGAN OPERATING, INC.	3890	COOPER B 005	O	Active	1.78
3002504222	XTO ENERGY, INC	4000	EUNICE MONUMENT SOUTH UNIT B 852	O	Active	1.78
3002534327	APACHE CORP	7800	BERTHA BARBER 018Y	O	Plugged	1.78

3002534205	MARATHON OIL CO	7800	BERTHA BARBER 018	O	Plugged	1.79
3002504228	APACHE CORP	3885	H W ANDREWS 004	O	Active	1.79
3002505978	CHESAPEAKE OPERATING, INC.	5250	BERTHA J BARBER 012	O	Plugged	1.79
3002504224	XTO ENERGY, INC	3901	EUNICE MONUMENT SOUTH UNIT B 856	O	Active	1.79
3002535605	APACHE CORP	3918	NORTH MONUMENT G/SA UNIT 325	O	Active	1.80
3002505902	RICE OPERATING COMPANY	5712	E M E SWD 005	S	Active	1.80
3002539565	APACHE CORP	7703	BERTHA BARBER 023	O	Active	1.80
3002504065	APACHE CORP	3988	NORTH MONUMENT G/SA UNIT 001	I	Active	1.80
3002504175	BURGUNDY OIL & GAS OF N M INC	3930	REED A 3 003	G	Active	1.81
3002504068	APACHE CORP	3980	NORTH MONUMENT G/SA UNIT 004	G	Plugged	1.81
3002536267	MATADOR OPERATING CO	99	BERTHA BARBER 022	O	Plugged	1.81
3002504105	RHOMBUS OPERATING CO LTD	3975	NORTHWEST EUMONT UNIT 153	I	Plugged	1.81
3002533013	APACHE CORP	3631	STATE U 003	O	Active	1.82
3002533996	APACHE CORP	3933	NORTH MONUMENT G/SA UNIT 292	O	Active	1.83
3002504220	XTO ENERGY, INC	4000	EUNICE MONUMENT SOUTH UNIT B 857	O	Active	1.83
3002504113	DAVID H ARRINGTON OIL & GAS INC	3953	FOSTER 002	G	Active	1.83
3002533105	DAVID H ARRINGTON OIL & GAS INC	8047	FOSTER 005	O	Plugged	1.84
3002533512	APACHE CORP	7493	SMITH 009	O	Active	1.84
3002505998	ENERVEST OPERATING L.L.C.	5700	BRITT 011	G	Plugged	1.84
3002505754	APACHE CORP	3940	NORTH MONUMENT G/SA UNIT 009	I	Active	1.84
3002532897	XTO ENERGY, INC	3650	STATE H 004	G	Active	1.84
3002533514	DAVID H ARRINGTON OIL & GAS INC	8020	ROYAL WULFF 001	O	Active	1.85
3002505987	MORGAN OPERATING, INC.	3885	COOPER B 007	O	Active	1.85
3002505794	APACHE CORP	3897	NORTH MONUMENT G/SA UNIT 014	I	Active	1.85
3002532384	APACHE CORP	3727	BERTHA BARBER 013	G	Active	1.85
3002504187	J R OIL, LTD. CO.	3905	REED SANDERSON UNIT 004	O	Active	1.86
3002504212	XTO ENERGY, INC	3890	EUNICE MONUMENT SOUTH UNIT B 858	O	Active	1.86
3002533191	APACHE CORP	8400	M E GAITHER 006	O	Active	1.86
3002505903	HESS CORPORATION	0	E S ADKINS 003	O	Plugged	1.87
3002505745	APACHE CORP	3975	NORTH MONUMENT G/SA UNIT 004	O	Active	1.87
3002505908	APACHE CORP	3894	NORTH MONUMENT G/SA UNIT 003	I	Active	1.87
3002505740	APACHE CORP	3964	NORTH MONUMENT G/SA UNIT 007	I	Active	1.87
3002505797	APACHE CORP	3901	NORTH MONUMENT G/SA UNIT 011	I	Active	1.87
3002533126	LEGACY RESERVES OPERATING, LP	3650	ALASKA COOPER 008	G	Active	1.87
3002541724	APACHE CORP	4019	NORTH MONUMENT G/SA UNIT 398	O	Active	1.87
3002532532	APACHE CORP	3760	BERTHA BARBER 015	G	Active	1.88
3002505748	CONOCOPHILLIPS COMPANY	3700	STATE AC COM 004	G	Plugged	1.88
3002533761	CONOCO INC	9195	KLEIN FEDERAL 001	O	Plugged	1.88
3002504073	BRECK OPERATING CORP	3993	STATE A 26 002	O	Active	1.88
3002541267	APACHE CORP	3956	BERTHA J BARBER 018	O	New (Not drilled or compl)	1.88
3002505901	HESS CORPORATION	0	E S ADKINS 001	O	Plugged	1.88
3002541726	APACHE CORP	3952	NORTH MONUMENT G/SA UNIT 436	O	Active	1.89
3002533671	APACHE CORP	7650	W A WEIR B 004	O	Active	1.89
3002505724	APACHE CORP	3935	NORTH MONUMENT G/SA UNIT 013	I	Active	1.89
3002541282	APACHE CORP	3954	BERTHA J BARBER 016	O	New (Not drilled or compl)	1.90
3002504071	APACHE CORP	4033	NORTH MONUMENT G/SA UNIT 006	O	Active	1.90
3002541281	APACHE CORP	3950	BERTHA J BARBER 015	O	New (Not drilled or compl)	1.90
3002533545	CHEVRON U S A INC	7690	J W SMITH 010	O	Plugged	1.90
3002534204	APACHE CORP	7800	BERTHA BARBER 017	O	Active	1.90
3002504213	XTO ENERGY, INC	3875	EUNICE MONUMENT SOUTH UNIT B 859	O	Active	1.91
3002505912	APACHE CORP	3895	NORTH MONUMENT G/SA UNIT 006	O	Plugged	1.92
3002504177	CONTINENTAL OIL	3923	REED A 3 005	O	Plugged	1.92
3002505781	APACHE CORP	3915	NORTH MONUMENT G/SA UNIT 006	I	Active	1.92
3002541042	APACHE CORP	4056	NORTH MONUMENT G/SA UNIT 389	O	Active	1.92
3002504176	BURGUNDY OIL & GAS OF N M INC	3889	REED A 3 004	O	Active	1.92
3002533919	APACHE CORP	7800	BERTHA BARBER 016	O	Plugged	1.93
3002533524	CHEVRON U S A INC	7700	STATE A 26 005	O	Plugged	1.93
3002504082	RHOMBUS OPERATING CO LTD	4002	NORTHWEST EUMONT UNIT 145	O	Active	1.93
3002532346	APACHE CORP	3415	W P BYRD GAS COM 002	G	Active	1.94
3002536134	CIMAREX ENERGY CO. OF COLORADO	6700	BERTHA BARBER 021	O	Active	1.94
3002506023	CHESAPEAKE OPERATING, INC.	5700	BERTHA J BARBER 008	O	Plugged	1.94
3002505991	ENERVEST OPERATING L.L.C.	3885	BRITT 003	G	Plugged	1.94
3002505993	ENERVEST OPERATING L.L.C.	3857	BRITT 005	G	Active	1.94
3002535129	APACHE CORP	3933	NORTH MONUMENT G/SA UNIT 295	O	Active	1.95
3002531080	XTO ENERGY, INC	4050	EUNICE MONUMENT SOUTH UNIT B 855	I	Active	1.95
3002541613	APACHE CORP	7800	W A WEIR B 007	O	Active	1.95
3002532574	CONOCOPHILLIPS COMPANY	3650	SANDERSON A 018	G	Active	1.96
3002504116	RHOMBUS OPERATING CO LTD	3961	NORTHWEST EUMONT UNIT 161	I	Active	1.96
3002505744	APACHE CORP	3970	NORTH MONUMENT G/SA UNIT 003	I	Active	1.96
3002539564	APACHE CORP	7700	BERTHA BARBER 022	O	Active	1.96
3002505979	CHESAPEAKE OPERATING, INC.	0	BERTHA J BARBER 014	O	Plugged	1.97
3002531503	APACHE CORP	4300	NORTH MONUMENT G/SA UNIT 003	I	Active	1.97
3002504103	RHOMBUS OPERATING CO LTD	3940	NORTHWEST EUMONT UNIT 160	O	Active	1.98
3002526168	APACHE CORP	3774	W A WEIR B 003	G	Active	1.98
3002506028	ATLANTIC RICHFIELD	0	BERTHA J BARBER 015	O	Plugged	1.98
3002533571	CHEVRON U S A INC	7900	J W SMITH 011	O	Plugged	1.98
3002526170	APACHE CORP	3570	APACHE STATE O 005	G	Active	1.98
3002533736	BURGUNDY OIL & GAS OF N M INC	5705	BARBER FEDERAL 001	O	Active	1.98
3002535620	APACHE CORP	3905	NORTH MONUMENT G/SA UNIT 324	O	Active	1.99
3002541283	APACHE CORP	0	BERTHA J BARBER 017C	O	New (Not drilled or compl)	1.99
3002505909	APACHE CORP	3895	BERTHA BARBER 004	O	Active	2.00
3002529735	APACHE CORP	3960	NORTH MONUMENT G/SA UNIT 032	O	Active	2.00
3002504237	APACHE CORP	3870	W P BYRD BATTERY 3 006	O	Active	2.00
3002535608	APACHE CORP	3896	NORTH MONUMENT G/SA UNIT 329	O	Active	2.00

Table A2: Wells Penetrating the Injection Zone within One Mile of Proposed Targa Monument AGI #3

API	OPERATOR	PLUG_DATE	SPUD_DATE	TVD_DEPTH	WELL_NAME	WELL_TYPE	COMPL_STAT	COUNTY	LATITUDE	LONGITUDE
3002540002	TARGA MIDSTREAM SERVICES LLC	9/13/2016	21-Mar-11	9208	MONUMENT AGI 001	I	Plugged	Lea	32.61123145	-103.3075149
3002512473	APACHE CORP		2-May-48	10255	STATE F GAS COM 005	G	Active	Lea	32.61170528	-103.3099364
3002512478	APACHE CORP	5-Jul-12	2/22/1948	9822	NORTH MONUMENT G/SA UNIT 032	O	Plugged	Lea	32.6113661	-103.3013947
3002512481	APACHE CORP		7-Jan-59	10100	NORTH MONUMENT G/SA UNIT 285	O	Active	Lea	32.61906674	-103.3098964
3002520517	APACHE CORP		28-Dec-62	9900	NORTH MONUMENT G/SA UNIT 286	O	TA	Lea	32.61865867	-103.3052063
3002505780	ATLANTIC RICHFIELD	2-Jan-00	2-Jan-00	9900	J R PHILLIPS A 008	G	Plugged	Lea	32.61136443	-103.2961668
3002523632	ARCO PERMIAN	27-Jan-99	11-Jan-71	9650	J R PHILLIPS A 009	G	Plugged	Lea	32.61196999	-103.2970866
3002504134	APACHE CORP		8-May-47	9953	J R PHILLIPS 005	O	Active	Lea	32.60773782	-103.3014047
3002504136	APACHE CORP		12/22/1977	10214	J R PHILLIPS 007	O	TA	Lea	32.60410936	-103.3017491
3002505964	CHEVRON U S A INC		2/20/1958	9814	J R PHILLIPS 011	G	Active	Lea	32.60752788	-103.2968443

Table A3: Operators within One Half Mile of Proposed Targa Monument AGI #3

OPERATOR	ADDRESS					OGRID
Apache Corporation	303 VETERANS AIRPARK LANE	SUITE 3000	MIDLAND	TX	79705	873
Chevron USA, Inc.	CHEVRON U S A INC	1400 SMITH	HOUSTON	TX	77002	4323
Targa Midstream Services, LP	TARGA MIDSTREAM SERVICES LLC	1000 LOUISIANA, STE 4300	HOUSTON	TX	77002	24650
XTO Energy, Inc.	XTO ENERGY, INC	PO BOX 6501	ENGLEWOOD	CO	80155	5380

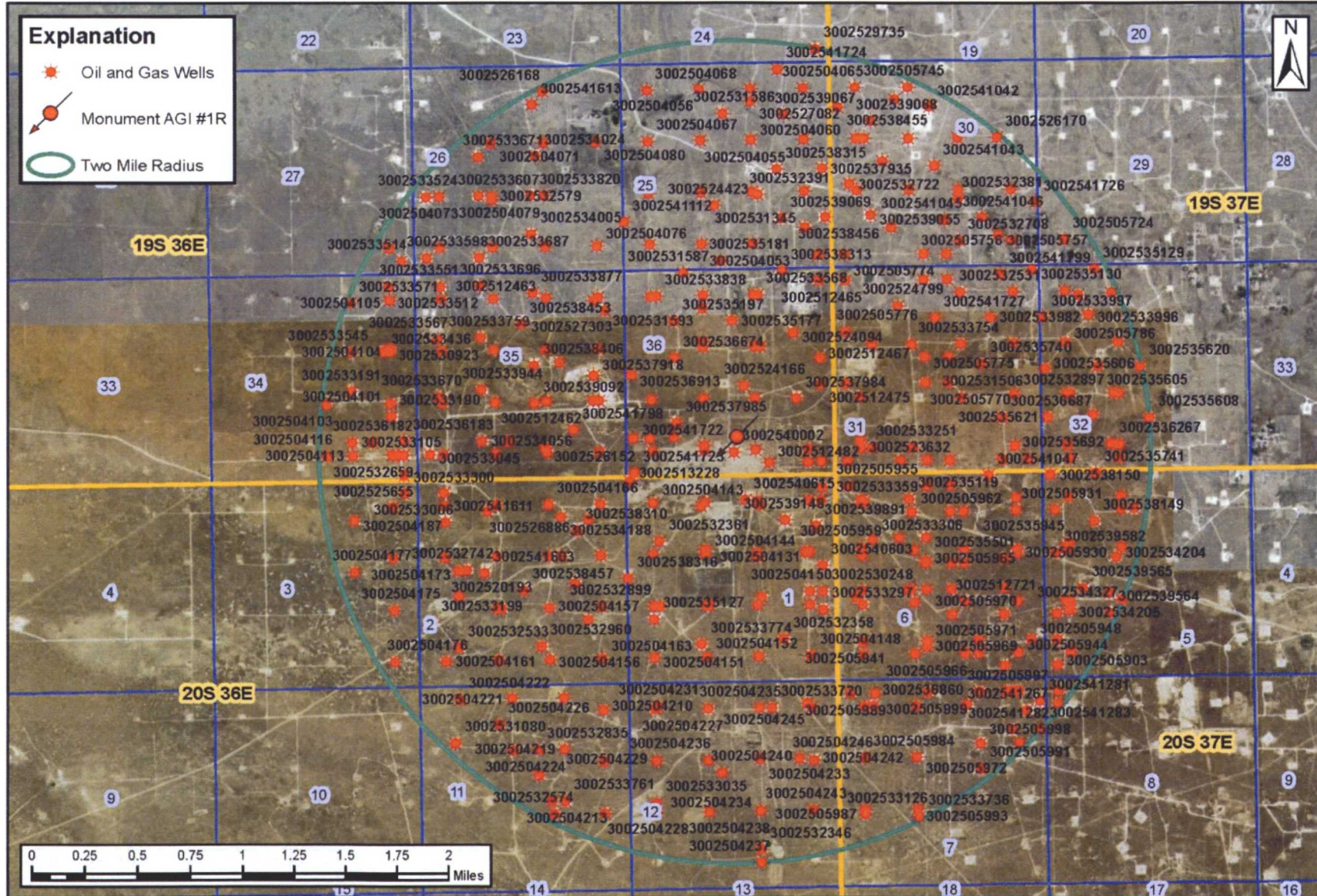


Figure A1: Oil and Gas Wells within Two Miles of Proposed AGI #3

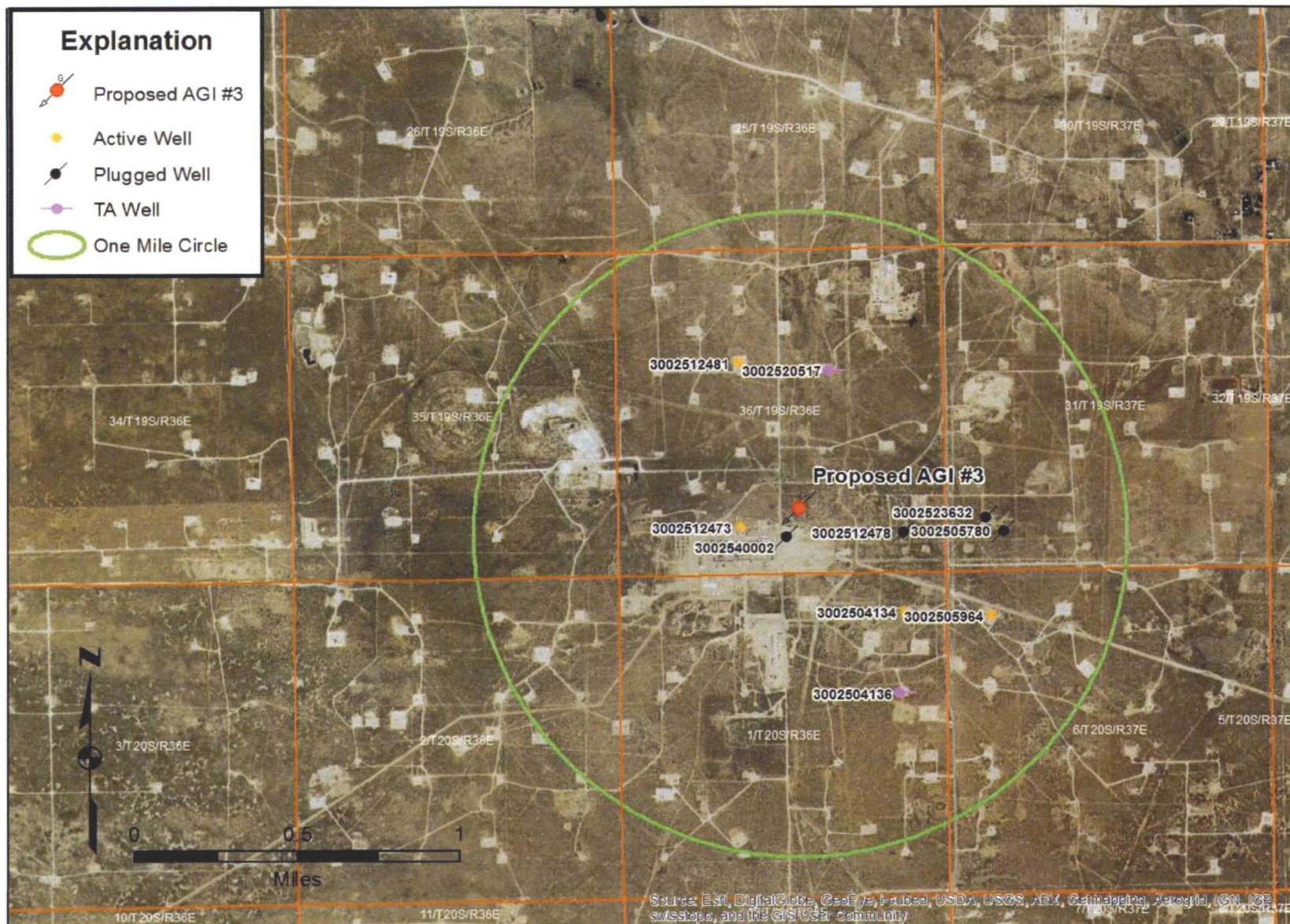


Figure A2: Oil and Gas Wells Penetrating the Injection Zone within One Mile of Proposed AGI #3

APPENDIX B

Land Information on Tracts within One-Half Mile Of Proposed Targa AGI #3

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- 1. Figure B-1 Map Showing Lease and Mineral Tract Locations**
- 2. Figure B-2 Map Showing Surface Owners within One Half Mile of Proposed Targa Monument AGI #3**
- 3. Table B-1 Information on Land within a One-Half Mile Radius of Proposed AGI #3 Showing:**
 - a) Surface Ownership**
 - b) List of Operators**
 - c) Mineral and Leasehold Ownership by Tract
(Assembled by J. Bar Cane, Inc. and Used as Basis for
Figures B-1 and B-2)**
- 4. Certification from J Bar Cane, Inc.**

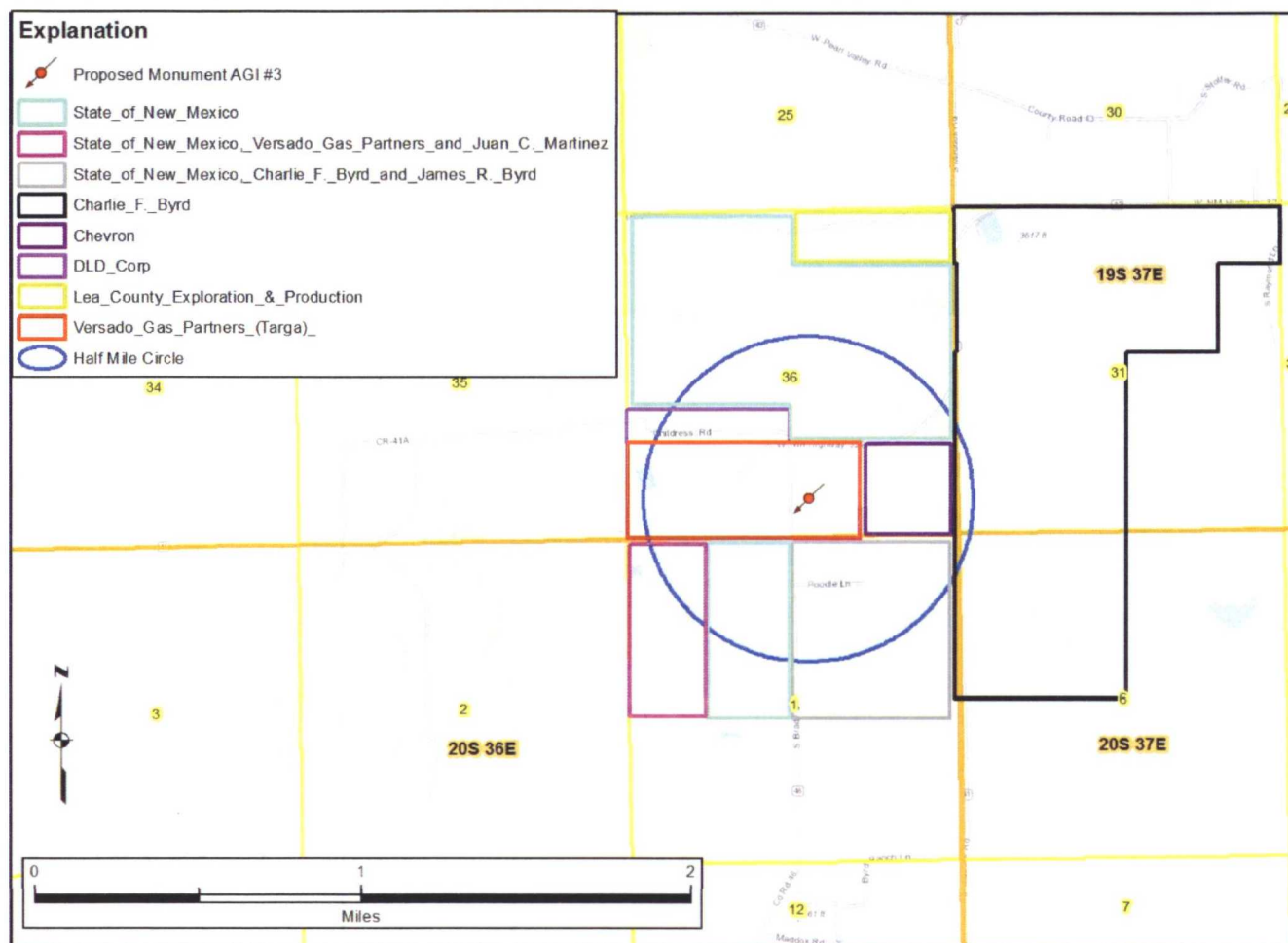
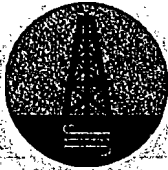


Figure B-2: Surface Owners within One Half Mile of Proposed Targa Monument AGI #3

TABLE B-1



J Bar Cane, Inc.

Oil & Gas Properties / Petroleum and Mineral Land Services

3660 HIGHWAY 41 Stanley, New Mexico 87056-9708

Office: 505-832-1478 Fax: 505-832-1479 Email: jmr@jbarcane.com

Information on Land within a One-Half (.5) Mile Radius of Proposed Targa AGI #3

Table of Contents

I. Surface Owners.....	pg. 2
II. List of Operators.....	pg. 4
III. Land Information by Tract.....	pg. 5

TABLE B-1**Surface Ownership**

Surface Owner	Legal	Acres
State of New Mexico New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe, NM 87501	<u>T19S-R36E</u> Section 25: SE/4, E/2SW/4	240.00
	Section 36: NW/4, S/2NE/4, N/2SE/4, N/2N/2SW/4	360.00
	<u>T20S-R36E</u> Section 1: Pt. W/2NE/4, Pt. NW/4, SW/4, Pt. SE/4	463.65
DLD Corporation & Any Successors-in Interest/Assignees 1314 Brittany Hobbs, NM 88240	<u>T19S-R36E</u> Section 36: S/2N/2SW/4 Parcel #: 4000428830001	40.00
Versado Gas Processors, LLC 1900 Dalrock Rd. Rowlett, TX 75088	<u>T19S-R36E</u> Section 36: S/2SW/4, SW/4SE/4 Parcel #: 4000423510003	120.00
	<u>T20S-R36E</u> Section 1: Pt. N/2NE/4NW/4 Parcel #: 4000423510004	18.13
Chevron USA, Inc. P.O. Box 285 Houston, TX 77001	<u>T19S-R36E</u> Section 36: SE/4SE/4 Parcel #: 4000409030001	40.00
Charlie F. Byrd, et al P.O. Box 32 Monument, NM 88265	<u>T19S-R37E</u> Section 31: W/2, W/2NE/4, Pt. E/2NE/4 Parcel #: 4000402920004	460.44
	<u>T20S-R37E</u> Section 6: Lots 3 – 5, SE/4NW/4 Parcel #: 4000402920002	157.77

TABLE B-1

James R. Byrd P.O. Box 32 Monument, NM 88265	<u>T20S-R36E</u> Section 1: Pt. NE/4 Parcel #: 4000792560001	33.93
Juan Carlos Martinez 210 W. Chance Dr. Hobbs, NM 88242	<u>T20S-R36E</u> Section 1: Pt. NW/4 Parcel #: 4000407150001	9.56

TABLE B-1**All Operators**

	Name	Address
1.	Apache Corporation	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265
2.	LeaCo. New Mexico Exploration and Production, LLC	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265
3.	XTO Energy, Inc.	3000 N. Garfield St., Suite 175 Midland, TX 79705 200 N. Loraine St., Suite 800 Midland, TX 79701
4.	Jack Huff	P.O. Box 50190 Midland, TX 79710
5.	Targa Midstream Services, LLC	1000 Louisiana St., Suite 4300 Houston, TX 77002

TABLE B-1

Tract #14

Township 19 South, Range 36 East, N.M.P.M.

Section 36: NW/4

Lea County, N.M.

Containing 160.00 acres, more or less

Mineral Ownership

Ownership	Fraction	Interest	Acres	Lease Status
State of New Mexico 310 Old Santa Fe Trail Santa Fe, NM 87501	8/8	1.0000	160.00	<i>Held By Production</i> <u>Lease:</u> B-1167-48 <u>Date:</u> 9/6/1932
	8/8	1.0000	160.00	

Leasehold Operator(s)

NW/4

Operator	Address
Apache Corporation	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265
LeaCo. New Mexico Exploration and Production, LLC	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265

TABLE B-1

Jack Huff	P.O. Box 50190 Midland, TX 79710
-----------	-------------------------------------

TABLE B-1**Tract #15****Township 19 South, Range 36 East, N.M.P.M.****Section 36: SW/4****Lea County, N.M.****Containing 160.00 acres, more or less****Mineral Ownership**

Ownership	Fraction	Interest	Acres	Lease Status
State of New Mexico 310 Old Santa Fe Trail Santa Fe, NM 87501	8/8	1.0000	160.00	<i>Held By Production</i> <u>Lease:</u> B-869-3 <u>Date:</u> 5/6/1932
	8/8	1.0000	160.00	

Leasehold Operator(s)**SW/4**

Operator	Address
Apache Corporation	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265
LeaCo, New Mexico Exploration and Production, LLC	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265

TABLE B-1

Targa Midstream Services, LLC

1000 Louisiana St., Suite 4300
Houston, TX 77002

TABLE B-1**Tract #16****Township 19 South, Range 36 East, N.M.P.M.****Section 36: NE/4****Lea County, N.M.****Containing 160.00 acres, more or less****Mineral Ownership**

Ownership	Fraction	Interest	Acres	Lease Status
State of New Mexico, 310 Old Santa Fe Trail Santa Fe, NM 87501	8/8	1:0000	160.00	<i>Held By Production</i> Lease: B-1626-2 Date: 1/16/1933
	8/8	1:0000	160.00	

Leasehold Operator(s)**NE/4**

Operator	Address
Apache Corporation	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265
LeaCo. New Mexico Exploration and Production, LLC	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265

TABLE B-1**Tract #17****Township 19 South, Range 36 East, N.M.P.M.****Section 36: SE/4****Lea County, N.M.****Containing 160.00 acres, more or less****Mineral Ownership**

Ownership	Fraction	Interest	Acres	Lease Status
State of New Mexico 310 Old Santa Fe Trail Santa Fe, NM 87501	8/8	1.0000	160.00	<i>Held By Production</i> <u>Lease:</u> A-1543-1 <u>Date:</u> 12/29/1928
	8/8	1.0000	160.00	

Leasehold Operator(s)**SE/4**

Operator	Address
Apache Corporation	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265
LeaCo. New Mexico Exploration and Production, LLC	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265

TABLE B-1

Targa Midstream Services, LLC	1000 Louisiana St., Suite 4300 Houston, TX 77002
XTO Energy, Inc.	3000 N. Garfield St., Suite 175 Midland, TX 79705 200 N. Loraine St., Suite 800 Midland, TX 79701

TABLE B-1**Tract #20****Township 19 South, Range 37 East, N.M.P.M.****Section 31: Lots 1 – 4, E/2W/2****Lea County, N.M.****Containing 314.44 acres, more or less****Mineral Ownership**

Ownership	Fraction	Interest	Acres	Lease Status
<i>Original Lessor</i> Joseph R. Phillips, et ux	8/8	1.0000	314.44	<i>Held By Production</i> Lease: J.R. Phillips Date: 5/25/1926
	8/8	1.0000	314.44	

Leasehold Operator(s)**Lots 1 – 4, E/2W/2**

Operator	Address
Apache Corporation	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265
LeaCo. New Mexico Exploration and Production, LLC	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265

TABLE B-1

Tract #23

Township 20 South, Range 36 East, N.M.P.M.

Section 1: Lots 1 & 2, S/2NE/4

Lea County, N.M.

Containing 160.07 acres, more or less

Mineral Ownership

Ownership	Fraction	Interest	Acres	Lease Status
Original Lessor Joseph R. Phillips	8/8	1.0000	160.07	Held By Production Lease: J.R. Phillips Date: 5/25/1926
	8/8	1.0000	160.07	

Leasehold Operator(s)

Lots 1 & 2, S/2NE/4

Operator	Address
Apache Corporation	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265
LeaCo. New Mexico Exploration and Production, LLC	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265

TABLE B-1**Tract #24****Township 20 South, Range 36 East, N.M.P.M.****Section 1: Lots 3 & 4, S/2NW/4****Lea County, N.M.****Containing 160.21 acres, more or less****Mineral Ownership**

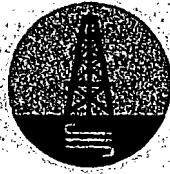
Ownership	Fraction	Interest	Acres	Lease Status
State of New Mexico 310 Old Santa Fe Trail Santa Fe, NM 87501	8/8	1:0000	160.21	<i>Held By Production</i> Lease: B-154-6 Date: 8/14/1931
	8/8	1:0000	160.21	

Leasehold Operator(s)**Lots 3 & 4, S/2NW/4**

Operator	Address
Apache Corporation	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265
LeaCo. New Mexico Exploration and Production, LLC	6120 S. Yale Ave., Suite 1500 Tulsa, OK 74136 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 17 Hess Lane Monument, NM 88265 P.O. Box Drawer D Monument, NM 88265

TABLE B-1

Targa Midstream Services, LLC	1000 Louisiana St., Suite 4300 Houston, TX 77002
-------------------------------	---



J Bar Cane, Inc.

Oil & Gas Properties / Petroleum and Mineral Land Services
3660 HIGHWAY 41 Stanley, New Mexico 87056-9708
Office: 505-832-1478 Fax: 505-832-1479 Email: jmr@jbarcane.com

November 5, 2016

Ms. Julie Gutierrez
Geolex, Inc.
500 Marquette Ave. NW, Ste. #1350
Albuquerque, NM 87102

Re: Land Information for the 1.25-Mile Radius Encompassing Monument AGI #1 Well

T19S-R36E: Lea County, New Mexico

Section 25: S2, containing 320 acres, more or less
Section 26: SE, containing 160 acres, more or less
Section 35: All, containing 640 acres, more or less
Section 36: All, containing 640 acres, more or less

T19S-R37E: Lea County, New Mexico

Section 30: SW, containing 160 acres, more or less
Section 31: All, containing 640 acres, more or less

T20S-R36E: Lea County, New Mexico

Section 1: All, containing 640 acres, more or less
Section 2: E2, NW, containing 480 acres, more or less
Section 12: N2N2, containing 160 acres, more or less

T20S-R37E: Lea County, New Mexico

Section 6: All, containing 640 acres, more or less

Julie,
Pursuant to your request we have conducted research on the above referenced lands. Please find accompanying this cover letter; a written report and excel spreadsheet with our findings on the requested lands. A description of our methodology used to obtain the information can be found below.

The written report provides a list of all the surface owners, surface lessees, mineral leases, and operators of record within the 1.25-mile radius of the Monument AGI #1

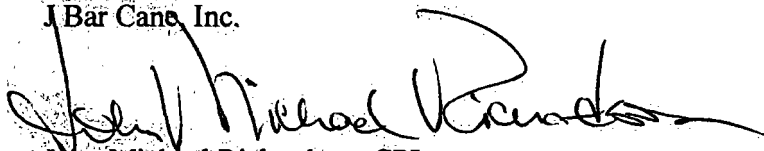
Well. The excel spreadsheet is comprised of tabs that list all relevant mineral leases, operators, well information and surface ownership information. Full names and legal mailing addresses have been provided for any person or entity found to have an operating or surface interest within the 1.25-mile radius.

The following methodology was performed to obtain the information:

1. Via the Federal Bureau of Land Management's (BLM) website, Master Title and Oil & Gas Plats were examined to identify and classify surface and mineral ownership as either federal, state, or private (fee). The surface and mineral estates located within the 1.25-mile radius were found to include federal, state and fee ownership.
2. For those federal and state owned mineral tracts, J Bar Cane, Inc. contracted Federal Abstract Company out of Santa Fe, N.M. to build leasehold ownership reports based on the records submitted to the New Mexico State Land Office and the BLM's New Mexico State Office.
3. Mineral lease verification was performed on the referenced lands in the public records of the Lea County Clerk's Office in Lovington, New Mexico.
4. The title information provided by Federal Abstract Company was then tracked against the records of Lea County to ensure no title discrepancies.
5. Operator and well information were compiled through examination of the New Mexico Oil Conservation Division website (www.emnrd.state.nm.us), then tracked against the Lea County records to verify accuracy.
6. All mineral interests located within the 1.25-mile radius are currently under lease and held by production. Therefore, no title work was performed to verify individual working and mineral interests or their respective proportions of ownership.
7. Surface information for state lands was compiled via the New Mexico State Land Office's online records database (www.nmstatelands.org).
8. Surface ownership for the fee lands were reported on from the Lea County Assessor's Office in Lovington, NM.
9. Any addresses not found in the public records or provided by any governmental agency were found via internet research.
10. All information contained in the Federal Abstracts provided by Federal Abstract Company is current up to October 4, 2016.
11. All information found in the Lea County Public Records is current up to October 28, 2016.

Should you have any questions or concerns, please do not hesitate to contact me.

Sincerely,
J Bar Cane, Inc.



John Michael Richardson, CPL
President

Copies of Notice Letters, Documentation, and Affidavit of Publication of Newspaper Notice

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...the ...

December 5, 2016

Apache Corporation
303 Veterans Airpark Lane, Ste. 1000
Houston, TX 79705

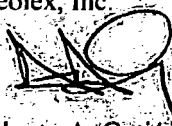
VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RE: Targa Midstream Services LLC Application for Authorization to Inject Proposed Targa Monument AGI #3

TARGA MIDSTREAM SERVICES LLC, whose address is 1000 Louisiana, Suite 4300, Houston, TX 77022-5036, proposes to drill a redundant injection well to be used to dispose of acid gases from its natural gas plant operations in Monument, New Mexico. This redundant well will be the Monument AGI #3, located approximately 905 feet from the south line (FSL) and 2,362 feet from the east line (FEL) of Section 36, T19S, R36E in Lea County, New Mexico. This proposed redundant well will incorporate all other parameters such as the injection zone, depths, pressure and rates currently approved under NMOCD Order R-13052. The injection interval will be in the Devonian/Fusselman formations at a depth of approximately 8,350 to 9,200 feet. The average injection rate will be approximately 2.5 million standard cubic feet per day of acid gases, at a maximum surface pressure of 3,000 psig. Interested parties must file objections with the New Mexico Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

Inquiries regarding this application should be directed to Mr. Alberto A. Gutierrez or Mr. James C. Hunter at Geolex Inc, 500 Marquette Ave. NW, Albuquerque New Mexico 87102; (505)-842-8000.

Sincerely,
Geolex, Inc



Alberto A. Gutierrez, C.P.G.
President
Consultant to Targa Midstream Services LLC

Enclosure: Application for Authorization to Inject Targa Monument AGI #3

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December 5, 2016

Lea Co. New Mexico Exploration & Production, LLC
303 Veterans Airpark Lane, Suite 1000
Midland, TX 79705

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RE: Targa Midstream Services LLC Application for Authorization to Inject Proposed Targa Monument AGI #3

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Sincerely,
Geolex, Inc.



Alberto A. Gutiérrez, C.P.G.
President
Consultant to Targa Midstream Services LLC

Enclosure: Application for Authorization to Inject Targa Monument AGI #3

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December 5, 2016

XTO Energy, Inc.
3000 N. Garfield St., Suite 175
Midland, TX 79705

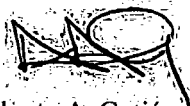
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Sincerely,
Geolex, Inc.



Alberto A. Gutiérrez, C.P.G.
President

Consultant to Targa Midstream Services LLC

Enclosure: Application for Authorization to Inject Targa Monument AGI #3

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December 5, 2016

Mr. Jack Huff
P.O. Box 50190
Midland, Texas 79710

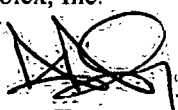
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RE: Targa Midstream Services LLC Application for Authorization to Inject Proposed Targa Monument AGI #3

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Sincerely,
Geolex, Inc.



Alberto A. Gutiérrez, C.P.G.
President
Consultant to Targa Midstream Services LLC

Enclosure: Application for Authorization to Inject Targa Monument AGI #3

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December 5, 2016

State of New Mexico
New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RE: Targa Midstream Services LLC Application for Authorization to Inject Proposed Targa Monument AGI #3

TARGA MIDSTREAM SERVICES LLC, whose address is 1000 Louisiana, Suite 4300, Houston, TX 77022-5036, proposes to drill a redundant injection well to be used to dispose of acid gases from its natural gas plant operations in Monument, New Mexico. This redundant well will be the Monument AGI #3, located approximately 905 feet from the south line (FSL) and 2,362 feet from the east line (FEL) of Section 36, T19S, R36E in Lea County, New Mexico. This proposed redundant well will incorporate all other parameters such as the injection zone, depths, pressure and rates currently approved under NMOCDC Order R-13052. The injection interval will be in the Devonian/Fusselman formations at a depth of approximately 8,350 to 9,200 feet. The average injection rate will be approximately 2.5 million standard cubic feet per day of acid gases, at a maximum surface pressure of 3,000 psig. Interested parties must file objections with the New Mexico Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

Inquiries regarding this application should be directed to Mr. Alberto A. Gutierrez or Mr. James C. Hunter at Geolex Inc, 500 Marquette Ave. NW, Albuquerque New Mexico 87102, (505)-842-8000.

Sincerely,
Geolex, Inc.



Alberto A. Gutierrez, C.P.G.
President
Consultant to Targa Midstream Services LLC

Enclosure: Application for Authorization to Inject Targa Monument AGI #3

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December 5, 2016

DLD Corporation
And Any Successors-in Interest/Assignees
1314 Brittany
Hobbs, New Mexico 88240

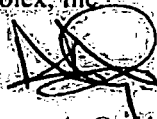
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Sincerely,
Geolex, Inc.



Alberto A. Gutierrez, C.P.G.
President
Consultant to Targa Midstream Services LLC

Enclosure: Application for Authorization to Inject Targa Monument AGI #3

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December 5, 2016

Versado Gas Producers, LLC
1900 Dalrock Road
Rowlett Texas, 75088

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RE: Targa Midstream Services LLC Application for Authorization to Inject Proposed Targa Monument AGI #3

TARGA MIDSTREAM SERVICES LLC, whose address is 1000 Louisiana, Suite 4300, Houston, TX 77022-5036, proposes to drill a redundant injection well to be used to dispose of acid gases from its natural gas plant operations in Monument, New Mexico. This redundant well will be the Monument AGI #3, located approximately 905 feet from the south line (FSL) and 2,362 feet from the east line (FEL) of Section 36, T19S, R36E in Lea County, New Mexico. This proposed redundant well will incorporate all other parameters such as the injection zone, depths, pressure and rates currently approved under NMOCD Order R-13052. The injection interval will be in the Devonian/Fusselman formations at a depth of approximately 8,350 to 9,200 feet. The average injection rate will be approximately 2.5 million standard cubic feet per day of acid gases, at a maximum surface pressure of 3,000 psig. Interested parties must file objections with the New Mexico Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

Inquiries regarding this application should be directed to Mr. Alberto A. Gutierrez or Mr. James C. Hunter at Geolex, Inc., 500 Marquette Ave. NW, Albuquerque New Mexico 87102; (505)-842-8000.

Sincerely,
Geolex, Inc.



Alberto A. Gutierrez, C.P.G.
President
Consultant to Targa Midstream Services LLC

Enclosure: Application for Authorization to Inject Targa Monument AGI #3

G:\16-011\Reports\NewWellC-108\Appendices\AppendixC\Versado Letter.docx

December 5, 2016

Chevron USA, Inc.
P.O. Box 285
Houston, Texas 77001

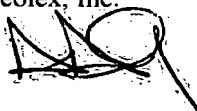
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Enclosure: Application for Authorization to Inject Targa Monument AGI #3

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December 5, 2016

Mr. Charlie F. Byrd
P.O. Box 32
Monument, New Mexico 88265

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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Enclosure: Application for Authorization to Inject Targa Monument AGI #3

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December 5, 2016

Mr. James R. Byrd
P.O. Box 32
Monument, New Mexico 88265

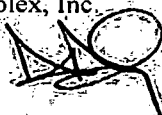
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President
Consultant to Targa Midstream Services LLC

Enclosure: Application for Authorization to Inject Targa Monument AGI #3

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December 5, 2016

Mr. Juan Carlos Martinez
210 W. Chance Dr.
Hobbs, New Mexico 88242

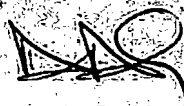
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Enclosure: Application for Authorization to Inject Targa Monument AGI #3

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or PO Box No. **P.O. Box 285**
City, State, ZIP+4 **Houston TX 77001**

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Street, Apt. No.,
or PO Box No. **1314 Brigham**
City, State, ZIP+4 **Hobbs NM 88240**

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Street, Apt. No.,
or PO Box No. **1900 Dalrock Rd.**
City, State, ZIP+4 **Rowlett TX 75088**

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Sent To: **XTO Energy Inc.**
Street, Apt. No.,
or PO Box No. **3000 N. Gatefield #175**
City, State, ZIP+4 **Midland TX 79705**

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City, State, ZIP+4 **Houston TX 77005**

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Sent To: State of NM - N.M. State Land Office
 Street, Apt. No., or PO Box No. 310 Old Santa Fe Trail
 City, State, ZIP+4 Santa Fe NM 87501
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Restricted Delivery Fee (Endorsement Required)	\$0.00	
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Sent To: Mr. Jack Huff
 Street, Apt. No., or PO Box No. PO Box 50190
 City, State, ZIP+4 Midland TX 79710
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Sent To: Mr. Charlie F. Byrd
 Street, Apt. No., or PO Box No. PO Box 32
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 Street, Apt. No., or PO Box No. PO Box 32
 City, State, ZIP+4 Monument NM 88265
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Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
December 08, 2016
and ending with the issue dated
December 08, 2016.


Publisher

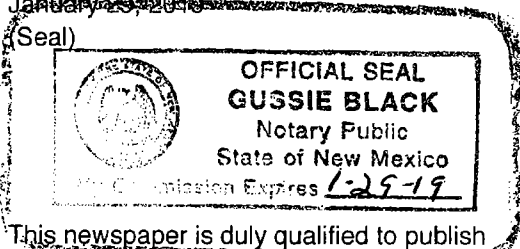
Sworn and subscribed to before me this
8th day of December 2016.


Business Manager

My commission expires

~~January 23, 2019~~

(Seal)



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGALS

LEGAL NOTICE December 8, 2016

TARGA MIDSTREAM SERVICES LLC, whose address is 1000 Louisiana, Suite 4300, Houston, TX 77022-5036, proposes to drill a redundant injection well which will be used as a backup to the permitted Monument AGI#2 to dispose acid gases from its natural gas plant operations in Monument, New Mexico. This well will be the Monument AGI #3, located approximately 905 feet from the south line (FSL) and 2362 feet from the east line (FEL) of Section 36, T19S, R36E in Lea County, New Mexico. This proposed redundant AGI#3 well will incorporate all other parameters such as the injection zone, depths, pressure and rates currently approved under NMOCD Order R-13052 and SWD-1654. The injection interval will be in the Devonian/Fuselman formations at a depth of approximately 8,350 to 9,200 feet. The average injection rate will be approximately 2.5 million standard cubic feet per day of acid gases, at a maximum surface pressure of 3,000 psig. Interested parties must file objections with the New Mexico Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

Inquiries regarding this application should be directed to Mr. Alberto A. Gutierrez or Mr. James C. Hunter at Geolex Inc. 500 Marquette Ave. NW, Albuquerque, New Mexico 87102, (505) 842-8000 #31405

67101169

00185611

ALBERTO A. GUTIERREZ
GEOLEX, INC.
500 MARQUETTE AVE. NW, SUITE 1350
ALBUQUERQUE, NM 87102



C-108 Review Checklist:

Received 12/12/2016 Add. Request: Hearing followup / Comm. meetingReply Date: 4/24/17Suspended: NA [Ver 16]ORDER TYPE: WFX / PMX / SWDNumber: 1671Order Date: 4/24/17Legacy Permits/Orders: R-13052Well No. 3Well Name(s): Monument AGI DAPI: 30-0 25-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)Footages 905' FSL / 2362' FEL Lot 0 or Unit 0 Sec 36 Tsp AS Rge 36E County LeaGeneral Location: northeast of gas plant / ~300' of Pool: AGI: Devonian-Fuselman Pool No.: NABLM 100K Map: Monument AGI No. 3 Operator: Targa Midstream Services GRID: 24650 Contact: Gabe / A. GutierrezCOMPLIANCE RULE 5.9: Total Wells: 8 Inactive: OK Fincl Assur: Yes Compl. Order? NA IS 5.9 OK? Yes Date: 4/24/2017WELL FILE REVIEWED ☐ Current Status: NAWELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: NAPlanned Rehab Work to Well: NA - new drill

Well Construction Details		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned ☒ or Existing ☐ Surface		17 1/2 / 13 3/8	0 to 1040			Cmt to surface
Planned ☐ or Existing ☒ Interm/Prod		12 1/4 / 9 5/8	0 to 7900	No	Use No. 2 actuals	Cmt to surface
Planned ☐ or Existing ☒ Interm/Prod		8 3/4 / 7	0 to 8050	No		Cmt to surface
Planned ☐ or Existing ☐ Prod/Liner						
Planned ☐ or Existing ☐ Liner						
Planned ☒ or Existing ☐ OP / PERF		5 7/8	openhole	Inj Length		

Injection Lithostratigraphic Units:		Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.			Mississippian (right)	
Confining Unit: Litho. Struc. Por.			Woodford	
Proposed Inj Interval TOP:		8350	Devonian	8350
Proposed Inj Interval BOTTOM:		9210	Fuselman	
Confining Unit: Litho. Struc. Por.			Montoya	9210
Adjacent Unit: Litho. Struc. Por.			Ellenburger	

Completion/Operation Details:	
Drilled TD	PBTD
NEW TD <u>9210</u>	NEW PBTD
NEW Open Hole ☒ or NEW Perfs ☐	
Tubing Size <u>3 1/2</u> in. Inter Coated? <u>Comp.</u>	
Proposed Packer Depth	ft
Min. Packer Depth	(100-ft limit)
Proposed Max. Surface Press.	<u>3000</u> psi
Admin. Inj. Press.	<u>3000</u> (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P NA Noticed? ☐ BLM Sec Ord ☐ WIPP ☐ Noticed? ☐ Salt/Salado T: NA B: NA NW: Cliff House fm NA

FRESH WATER: Aquifer Ogallala / Santa Rosa Max Depth <400' HYDRO AFFIRM STATEMENT By Qualified Person ☒

NMOSE Basin: Lea CAPITAN REEF: thru adj. NA No. GW Wells in 1-Mile Radius? None FW Analysis? Previously submitted

Disposal Fluid: Formation Source(s) TAG / Process Facility Analysis? NA On Lease ☐ Operator Only ☒ or Commercial ☐

Disposal Interval: Inject Rate (Avg Max BWPD): 2.5 MMSCFD Protectable Waters? No Source: Previous wells System: Closed or Open

HC Potential: Producing Interval? No Formerly Producing? No Method: Logs/DST/P&A/Other To Be Tested 2-Mile Radius Pool Map ☒

AOR Wells: 1/2-M. Radius Map? ☒ Well List? Yes Total No. Wells Penetrating Interval: 10 Horizontals? 0

Penetrating Wells: No. Active Wells 6 Num Repairs? 0 on which well(s)? - Diagrams? -

Penetrating Wells: No. P&A Wells 4 Num Repairs? 0 on which well(s)? - Diagrams? -

NOTICE: Newspaper Date 12/08/2016 Mineral Owner: SLC X-TO / JLD / James B. / Martinez / Hupe Surface Owner: Kraus N. Date: 12/6/2016

RULE 26.7(A): Identified Tracts? Yes Affected Persons: Apache / Chevron USA / Versado / Lea Co NM N. Date: 12/6/2016

Order Conditions: Issues: None - standard COA used in SWD-1654 / well has sameAdd Order Cond: [Same COA as SWD-1654] Construction