

## AE Order Number Banner

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**Application Number: pSYS2602739216**

# Initial Application Part I

SWD-2687

TARGA MIDSTREAM SERVICES LLC [24650]

**Received: 12/19/2025**

|           |           |       |         |
|-----------|-----------|-------|---------|
| RECEIVED: | REVIEWER: | TYPE: | APP NO: |
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**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Geological & Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Applicant:** \_\_\_\_\_ **OGRID Number:** \_\_\_\_\_  
**Well Name:** \_\_\_\_\_ **API:** \_\_\_\_\_  
**Pool:** \_\_\_\_\_ **Pool Code:** \_\_\_\_\_

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW**

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]  
 A. Location - Spacing Unit - Simultaneous Dedication  
 NSL       NSP (PROJECT AREA)       NSP (PRORATION UNIT)       SD
- B. Check one only for [ I ] or [ II ]  
 [ I ] Commingling - Storage - Measurement  
 DHC    CTB    PLC    PC    OLS    OLM  
 [ II ] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX    PMX    SWD    IPI    EOR    PPR

- 2) **NOTIFICATION REQUIRED TO:** Check those which apply.  
 A.  Offset operators or lease holders  
 B.  Royalty, overriding royalty owners, revenue owners  
 C.  Application requires published notice  
 D.  Notification and/or concurrent approval by SLO  
 E.  Notification and/or concurrent approval by BLM  
 F.  Surface owner  
 G.  For all of the above, proof of notification or publication is attached, and/or,  
 H.  No notice required

| <u>FOR OCD ONLY</u>      |                              |
|--------------------------|------------------------------|
| <input type="checkbox"/> | Notice Complete              |
| <input type="checkbox"/> | Application Content Complete |

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

\_\_\_\_\_  
 Print or Type Name

\_\_\_\_\_  
Date

Matt Eales  
 Signature

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
e-mail Address

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  X  Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval?  X  Yes \_\_\_\_\_ No

II. OPERATOR:  Targa Midstream Services LLC

ADDRESS:  1000 Louisiana, Suite 4300, Houston, TX 77022-5036

CONTACT PARTY:  Matt Eales, meales@targaresources.com  PHONE:  832.496.7513

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?  X  Yes \_\_\_\_\_ No  
If yes, give the Division order number authorizing the project: **Order R-13053 (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:  Matt Eales  TITLE:  VP of Regulatory

SIGNATURE:  Matt Eales  DATE:  12/18/25

E-MAIL ADDRESS:  meales@targaresources.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**

DISTRIBUTION: File Electronically via OCD Permitting

Side 2

## 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 #2 Surface: 770' FSL, 2268' 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. **THESE PARTIES HAVE BEEN NOTIFIED (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:

**NOTICE HAS BEEN PUBLISHED (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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12/02/2016

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Geolex, Inc.

12/02/2016

## 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 Wristen, 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 H<sub>2</sub>S and CO<sub>2</sub> 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 CO<sub>2</sub> 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 H<sub>2</sub>S in the TAG stream, no change is required in the approved Rule 11 H<sub>2</sub>S 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 H<sub>2</sub>S 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 CO<sub>2</sub> which would otherwise be released to the atmosphere if H<sub>2</sub>S 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).

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12/02/2016

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

Geolex, Inc.

12/02/2016

### 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 <sub>2</sub> S | CO <sub>2</sub> | H <sub>2</sub> S      | CO <sub>2</sub>       | TAG                   |
| Gas vol<br>MMSCFD                         | conc.<br>mol %   | conc.<br>mol %  | inject rate<br>lb/day | inject rate<br>lb/day | inject rate<br>lb/day |
| 2.5                                       | 18               | 82              | 42715                 | 251281                | 293997                |

| CONDITIONS AT WELL HEAD |          |         |                                   |             |                      |                 |         |                 |        |
|-------------------------|----------|---------|-----------------------------------|-------------|----------------------|-----------------|---------|-----------------|--------|
| Well Head Conditions    |          |         | TAG                               |             |                      |                 |         |                 |        |
| Temp                    | Pressure | Gas vol | Comp                              | Inject Rate | Density <sup>1</sup> | SG <sup>2</sup> | density | volume          | volume |
| F                       | psi      | MMSCFD  | CO <sub>2</sub> :H <sub>2</sub> S | lb/day      | kg/m <sup>3</sup>    |                 | lb/gal  | ft <sup>3</sup> | 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                         | Pressure <sup>3</sup> | Depth <sub>top</sub> | Depth <sub>bottom</sub> | Thickness <sup>4</sup> | Density <sup>1</sup> | SG <sup>2</sup> | density | volume          | volume |
| F                            | psi                   | ft                   | ft                      | ft                     | kg/m <sup>3</sup>    |                 | lb/gal  | ft <sup>3</sup> | 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 <sup>5</sup>                      | Pressure <sup>3</sup> | Ave. Porosity <sup>6</sup> | Swr  | Porosity | Density <sup>1</sup> | SG <sup>2</sup> | density | volume          | volume |
| F                                      | psi                   | %                          |      | ft       | kg/m <sup>3</sup>    |                 | lb/gal  | ft <sup>3</sup> | 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 <sub>2</sub> S | 34.0809 | 0.0751 |  |
| Molar weight of CO <sub>2</sub>  | 44.0096 | 0.0970 |  |
| Molar weight of H <sub>2</sub> O | 18.015  | 0.0397 |  |

| CALCULATION OF MAXIMUM INJECTION PRESSURE LIMITATION |  |  |               |
|--|--|--|---------------|
| SG <sub>TAG</sub>                                    |  |  | 0.691         |
| PG = 0.2 + 0.433 (1.04-SG <sub>TAG</sub> )           |  |  | 0.3511 psi/ft |
| IP <sub>max</sub> = PG * Depth                       |  |  | 2932 psi      |

Where: SG<sub>TAG</sub> is specific gravity of TAG; PG is calculated pressure gradient; and IP<sub>max</sub> is calculated maximum injection pressure.

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

<sup>1</sup> Density calculated using CSMGem software  
<sup>2</sup> Specific gravity calculated assuming a constant density for water  
<sup>3</sup> PP is taken from well tests of Linam AGI #1  
<sup>4</sup> Thickness is the net thickness of the beds with >7% porosity  
<sup>5</sup> Reservoir temp. is extrapolated from bottomhole temp. measured in logs  
<sup>6</sup> 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

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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

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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 H<sub>2</sub>S/CO<sub>2</sub> 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.

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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 west 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 CO<sub>2</sub> 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 H<sub>2</sub>S and CO<sub>2</sub> 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 (S<sub>w</sub>) 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 H<sub>2</sub>S and CO<sub>2</sub> 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.

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**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 COMPAN7Y                           | 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.

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## **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.

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

| API        | OPERATOR              | DEPTH | WELLNAME                              | STATUS  | Notes  |
|------------|-----------------------|-------|---------------------------------------|---------|--|
| 3002540002 | TARGA<br>RESOURCES    | 9200  | MONUMENT<br>AGI #1                    | Plugged | Pumped cmt 3,500' to surface.  |
| 3002512473 | APACHE CORP           | 10255 | STATE F GAS<br>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<br>MONUMENT<br>G/SA UNIT<br>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<br>MONUMENT<br>G/SA UNIT<br>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<br>MONUMENT<br>G/SA UNIT<br>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<br>RICHFIELD | 9900  | J R PHILLIPS A<br>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<br>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<br>005                   | Active  | Recompleted 7/12/98; CIBP at 7,785', perforated 6,965' to 7,685'.  |
| 3002504136 | APACHE CORP           | 10214 | J R PHILLIPS<br>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<br>INC  | 9814  | J R PHILLIPS<br>011                   | Active  | Producing in McKee-Ellenburger 9,490' to 9,800'.   |

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## **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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## Figures

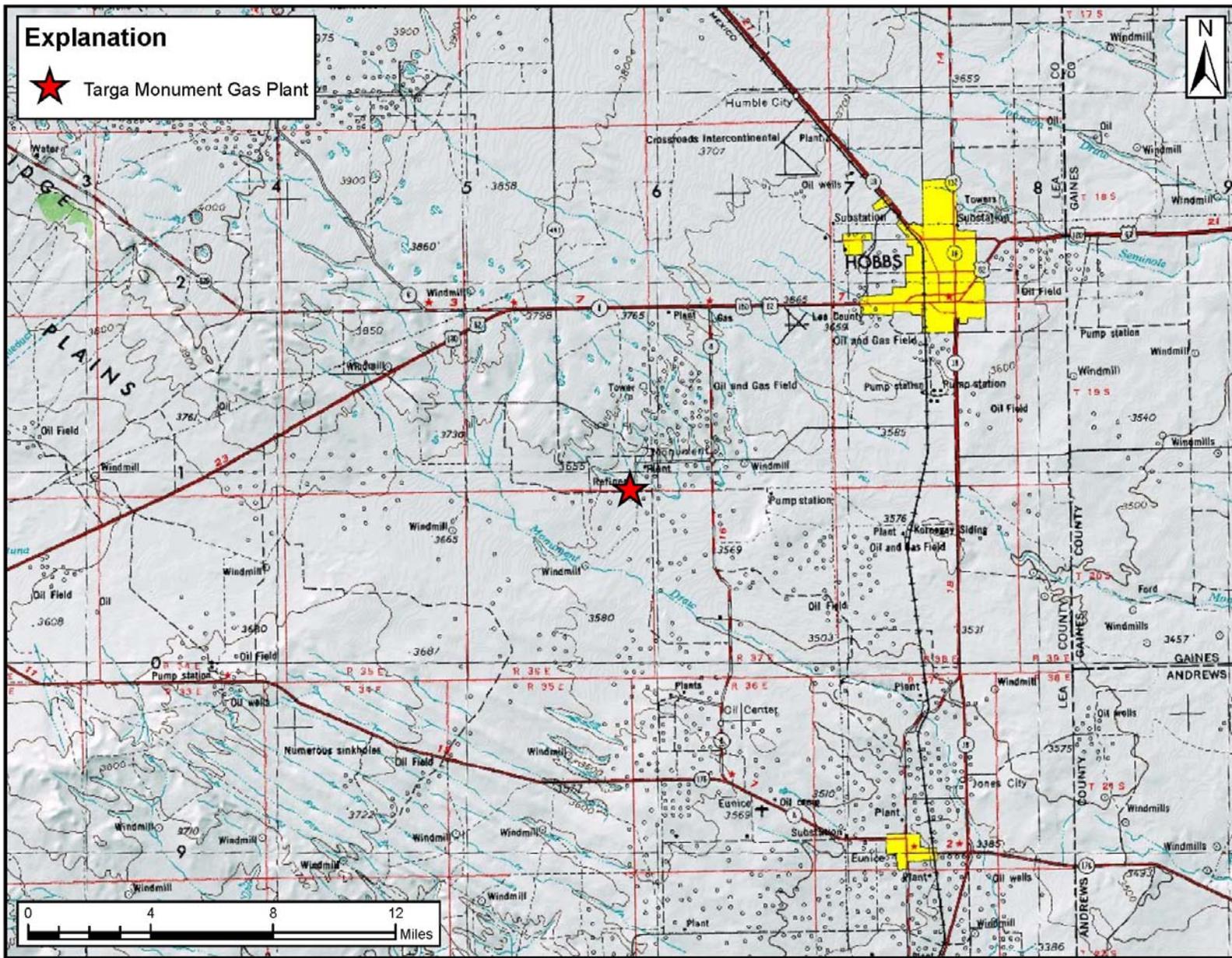


Figure 1: Targa Monument Gas Plant Location



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

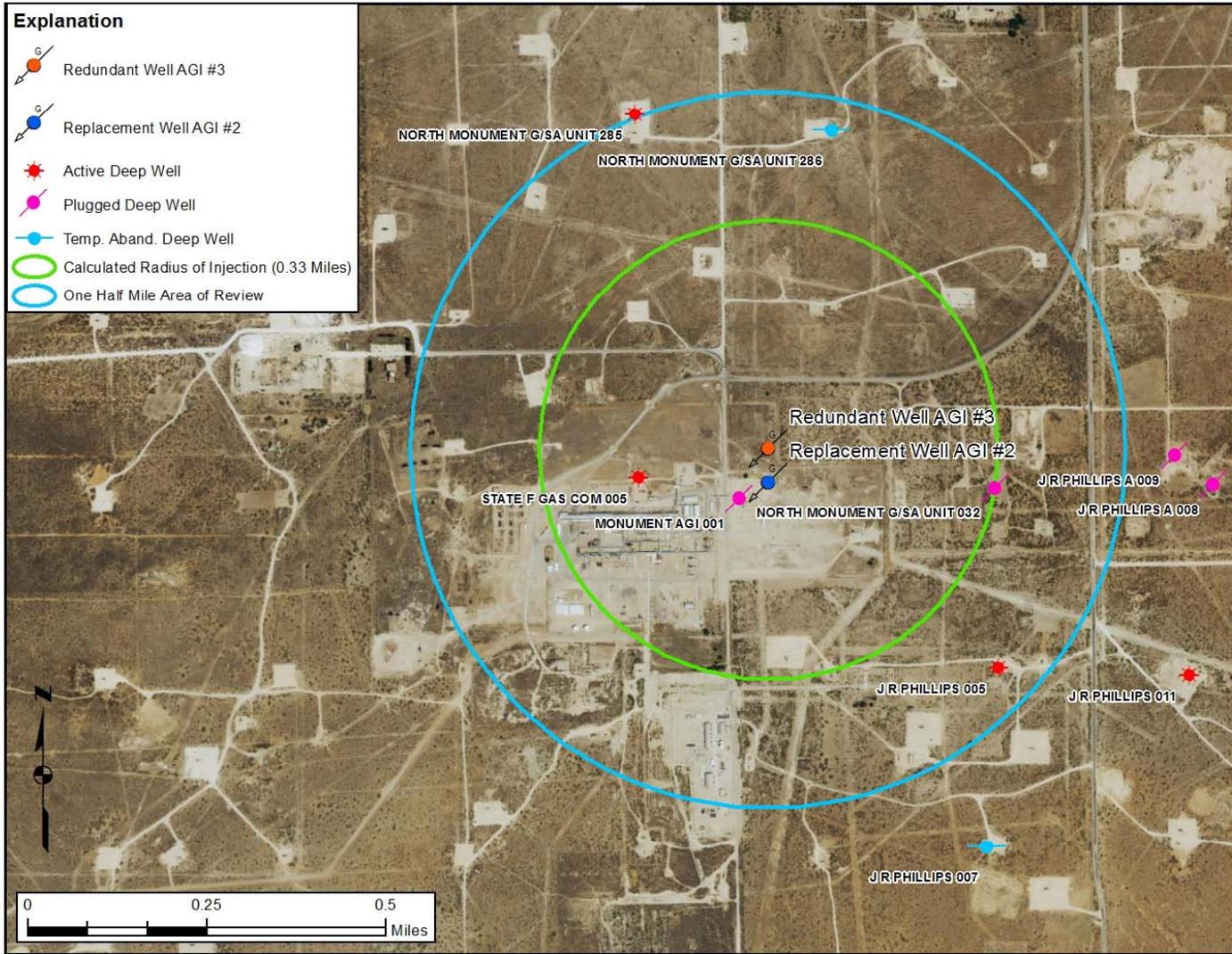


Figure 3: Calculated Area of Injection Plume after 30 Years of Operations at 2.5 MMSCFD

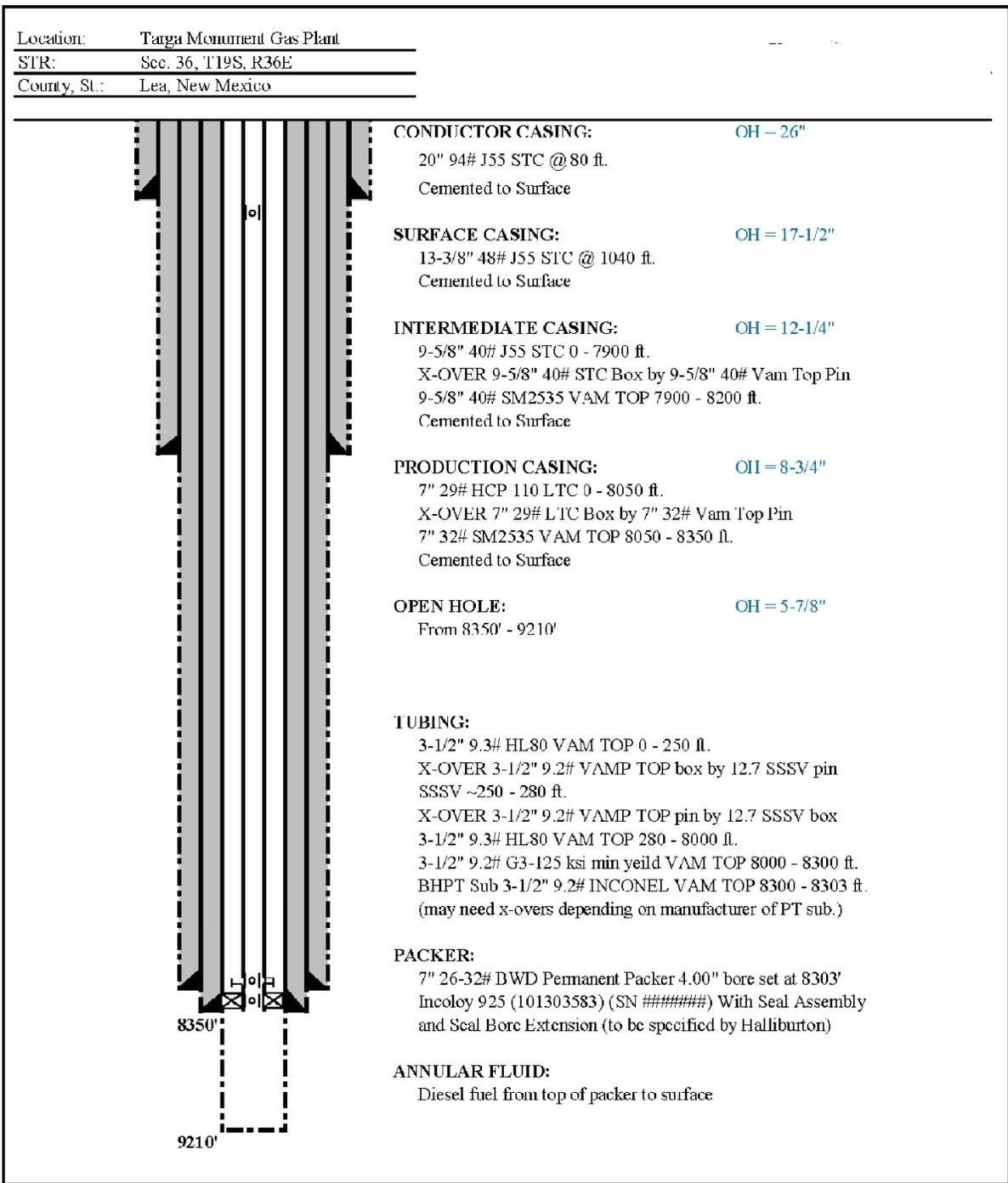
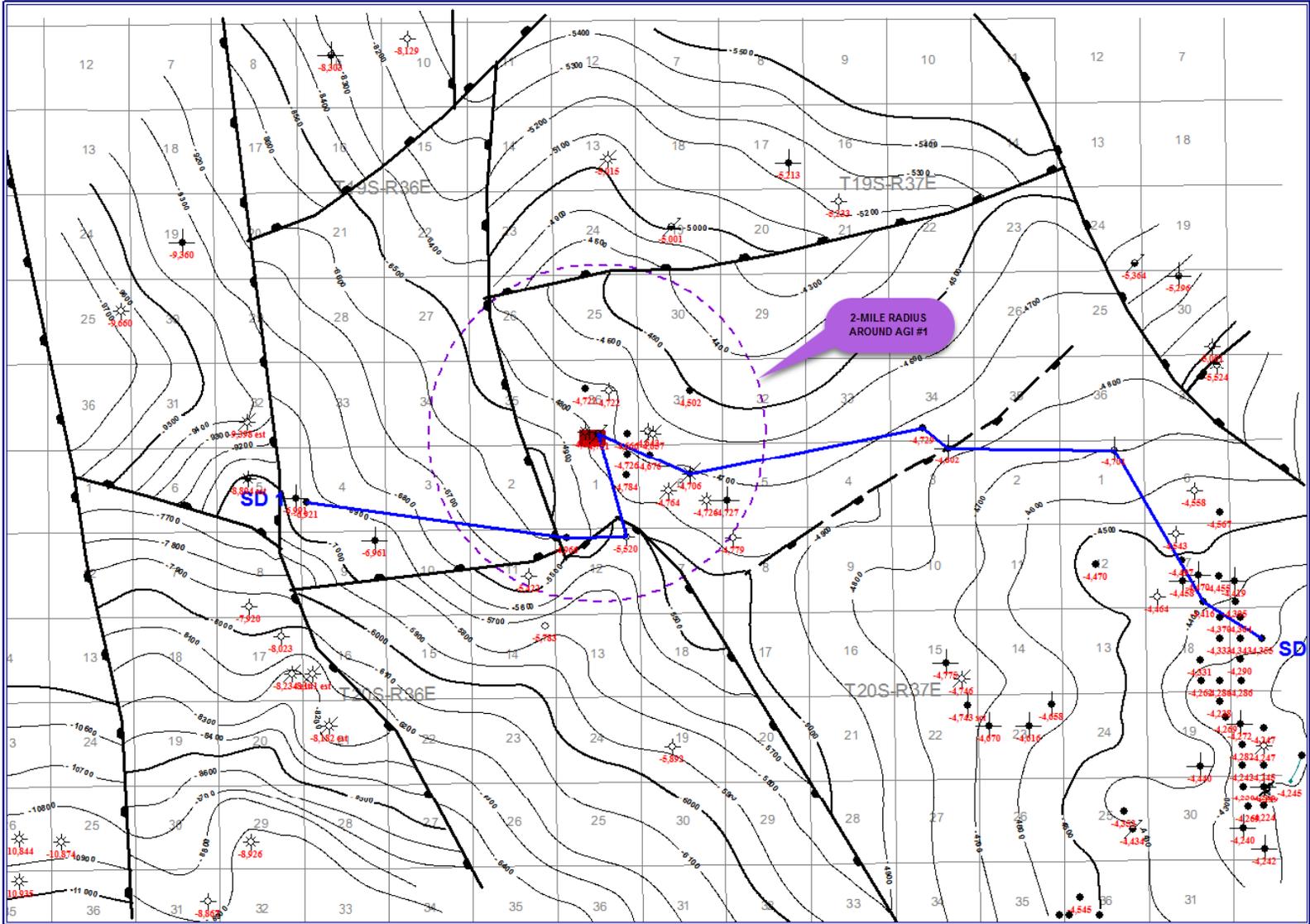


Figure 4: Schematic of Proposed Targa Monument AGI #3 Well Design



Contour Interval = 100 feet

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

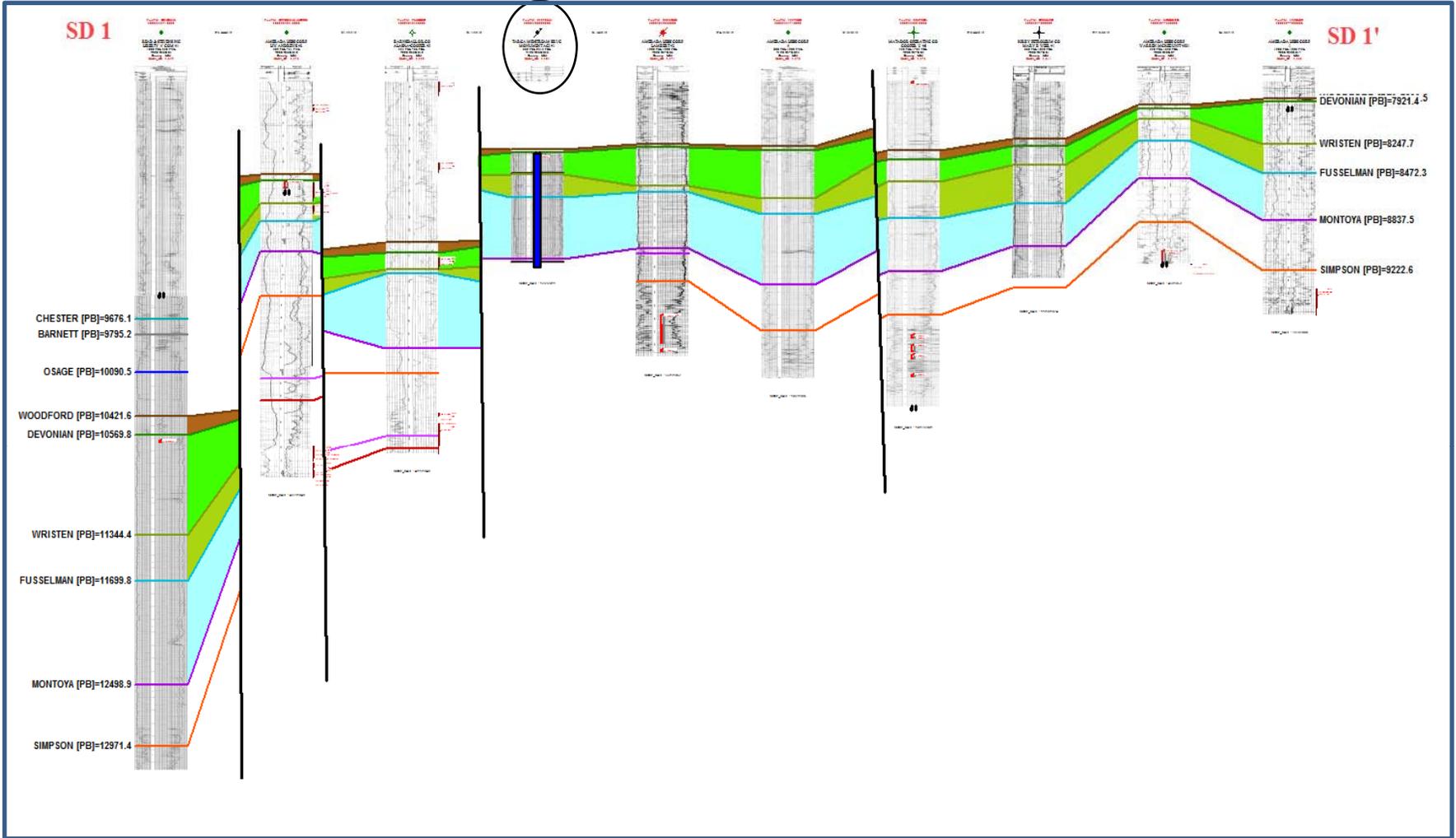


Figure 6: Structural Cross-Section Showing Faulting and Thickness Changes in the Proposed Injection Zone



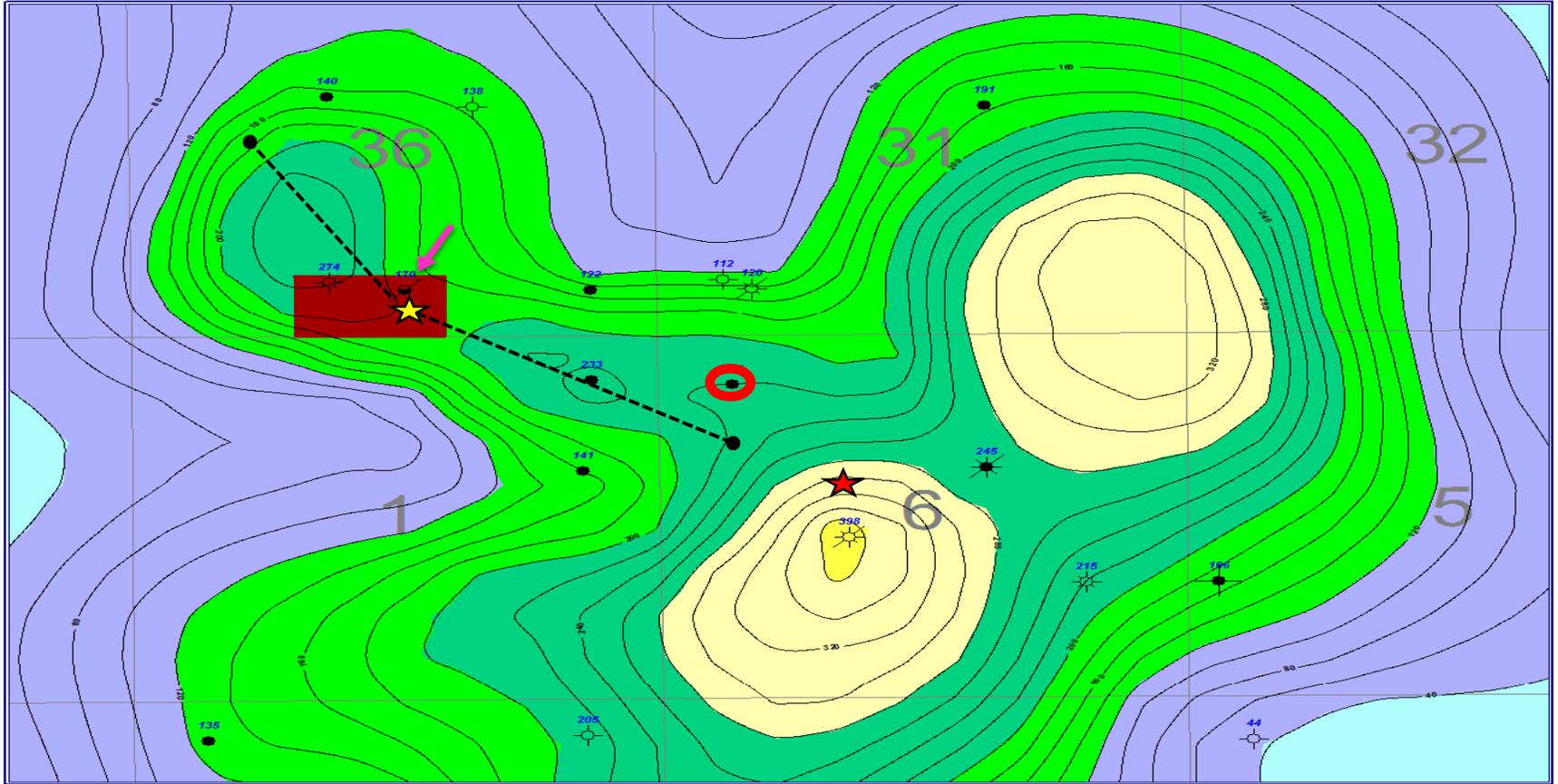


Figure 8: Total Thickness of Silurian-Devonian Beds with Porosity Greater than or Equal to 5 Percent

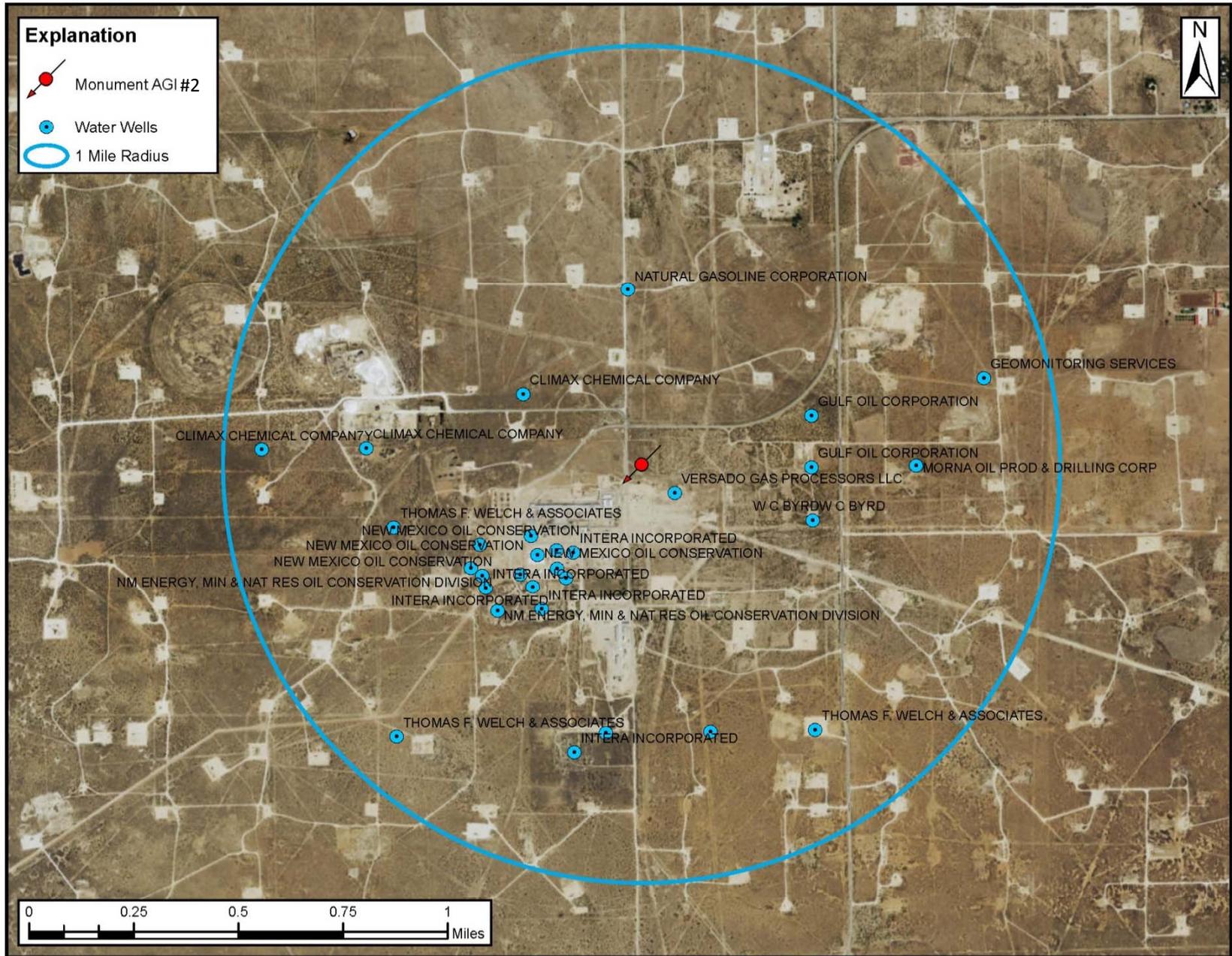


Figure 9: Water Wells within One Mile of Proposed AGI #3

## **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 |
| 300254002   | 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  |
| 3002523632  | 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        | ORYX 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        |
| <b>3002505936</b> | <b>UNION TEXAS PETROLEUM CORP</b>   | <b>10091</b> | <b>BRITT A COM 007</b>        | <b>G</b> | <b>Plugged</b>             | <b>1.08</b> |
| 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        |
| <b>3002505926</b> | <b>APACHE CORP</b>                  | <b>9870</b>  | <b>L M LAMBERT 002</b>        | <b>O</b> | <b>Active</b>              | <b>1.20</b> |
| 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                        | 0     | 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  | LM 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                      | 0     | G C MATHEWS 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 CADDIS 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 WULF 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                 | 3925 | 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**

| <b>OPERATOR</b>              | <b>ADDRESS</b>               |                          |           |    |       | <b>OGRID</b> |
|------------------------------|------------------------------|--------------------------|-----------|----|-------|--------------|
| 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         |

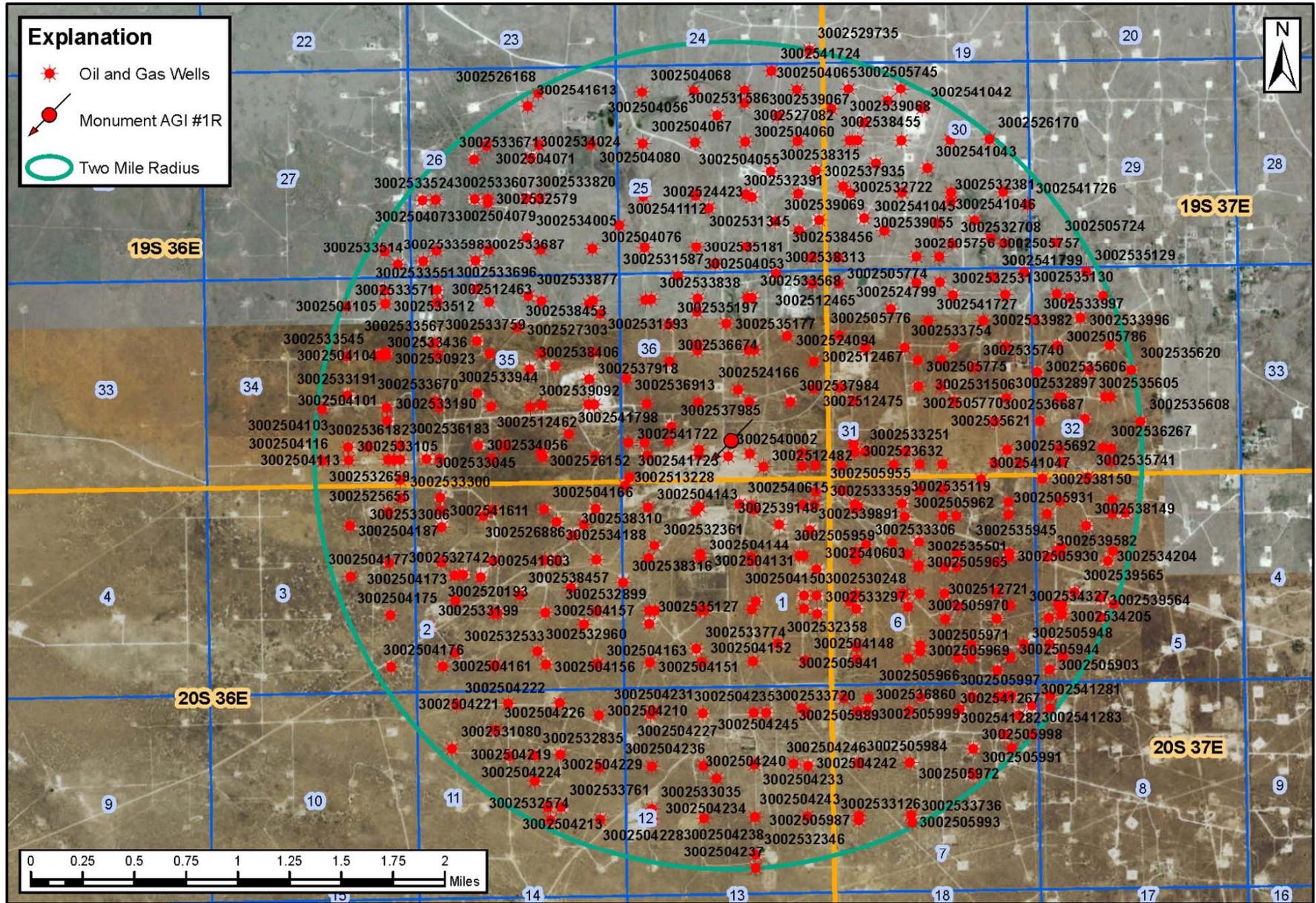


Figure A1: Oil and Gas Wells within Two Miles of Proposed AGI #3

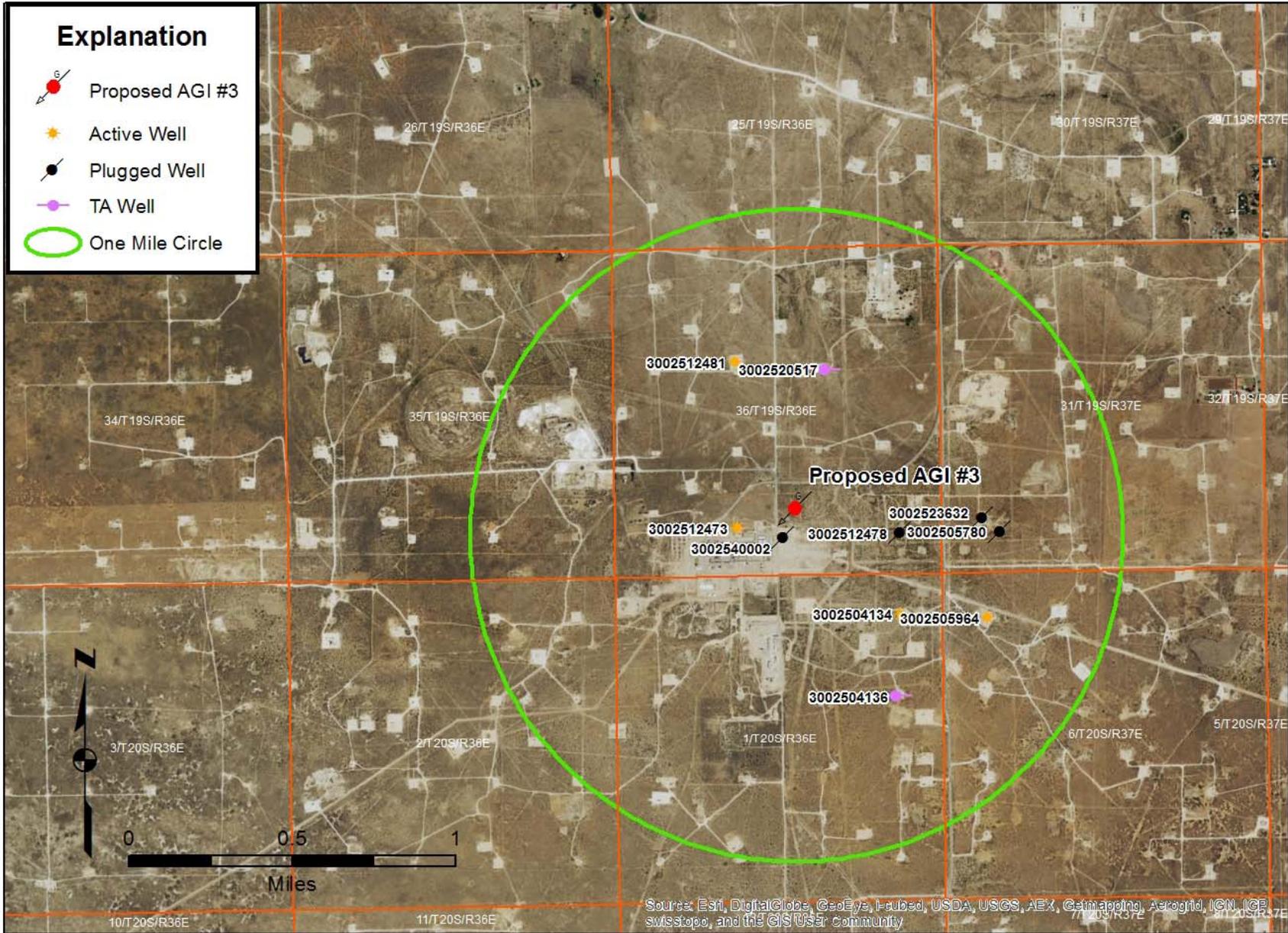


Figure A2: Oil and Gas Wells Penetrating the Injection Zone within One Mile of Proposed AGI #3

## **APPENDIX B**

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

#### **Table of Contents**

- 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**

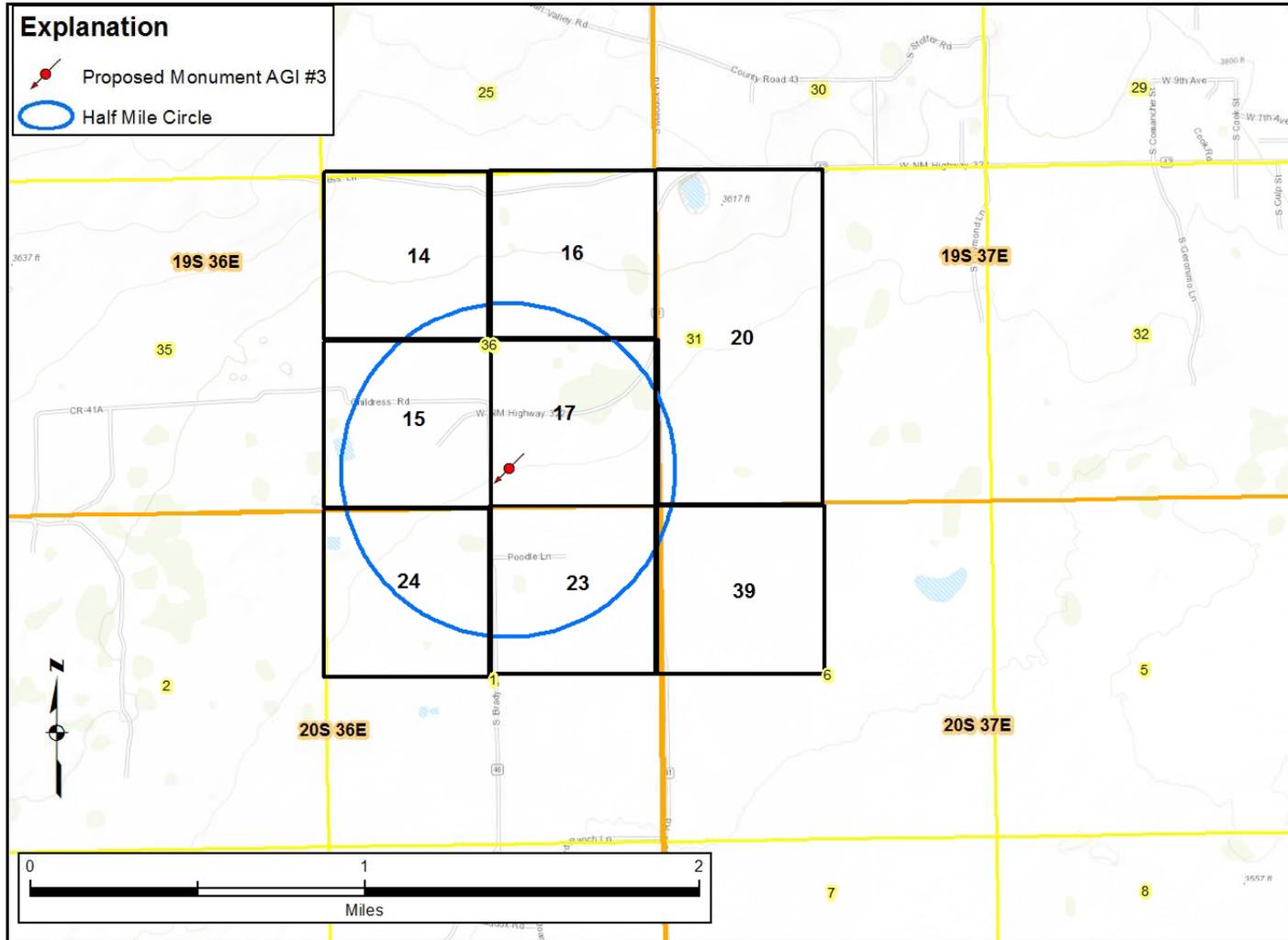


Figure B-1: Lease and Mineral Tract Locations  
(Please refer to Table B-1 for listing of leaseholders by Tract)

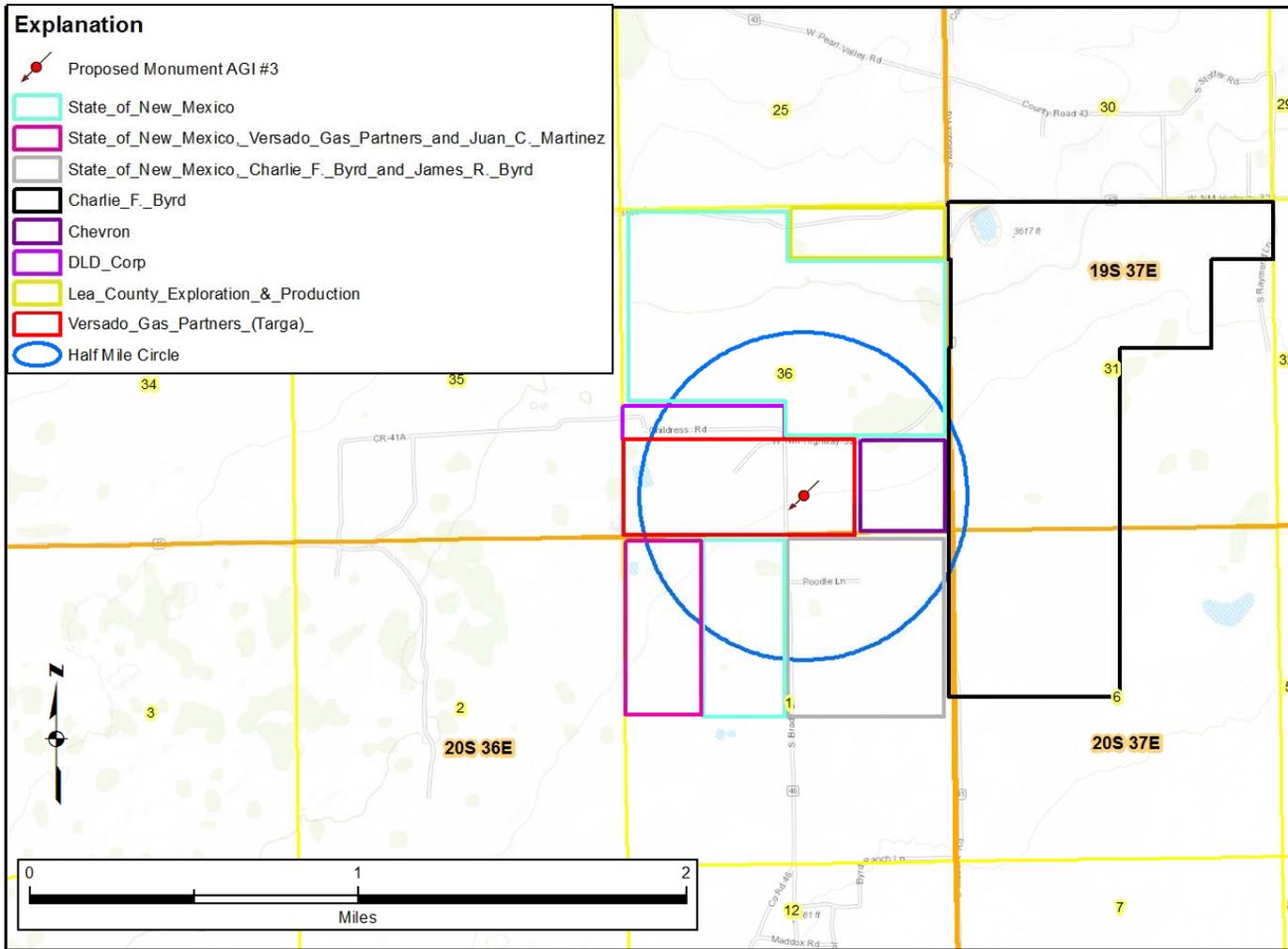


Figure B-2: Surface Owners within One Half Mile of Proposed Targa Monument AGI #3



## **One Mile Radius Report**

### **Section 25, T19S, R36E, Lea County, New Mexico**

**S2 of S2 – partially in 1 mile radius**

N2 – out of 1 mile radius

N2 of S2 – out of 1 mile radius

### **Operators as to the SE4 and the E2 of SW4**

#### **Apache Corporation**

303 Veterans Airpark Ln, Ste 3000

Midland, TX 79705

Phone: 432-818-1000

- Operations in T19S, R36S, Section 25
- (SE4 of SE4 – 40 ac) – Unit #016, Unit #361 and Unit #376

#### **Empire New Mexico LLC**

2200 S. Utica Place, Suite 150

Tulsa, OK 74114

Phone: 539-444-8002

- Operations in T19S, R36S, Section 25
- (SE4 and NE4 – 320 ac)

### **Mineral Interest Ownership as to the SE4 of SW4**

#### **State of New Mexico**

P O Box 1148

Santa Fe, NM 87501

Phone: 505-827-5760



**Mineral Interest Ownership as to the SW4 of SW4**

**Joyce Ann Brown, Trustee of the Joyce Ann Brown  
Revocable Trust udo 4/30/1993**  
P O Box 72  
Watrous, NM 87753

**Mary T Christmas**  
P O Box 848  
Alice, TX 78333

**Bradford Ace Christmas**  
P O Box 173  
Wagon Mound, NM 87752

**Candy Christmas**  
7210 SW 97<sup>th</sup> Place  
Ocala, FL 34476-1271

**Helen Jane Barby**  
P O Box 425  
Okarche, OK 73762

**Section 31, T19S, R37E, Lea County, New Mexico**

**NW4 – partially in 1 mile radius**  
**SW4 – all in 1 mile radius**  
E2 – outside of 1 mile radius

**Operators as to the NW4 and the SW4**

**Apache Corporation**  
303 Veterans Airpark Ln, Ste 3000  
Midland, TX 79705  
Phone: 432-818-1000

- Operations in T19S, R37S, Section 31
- (NW4 – 160 ac)
- (NW4 of SW4 – 40 ac)
- (SE4 of SW4 – 40 ac)



**Section 36, T19S, R36E, Lea County, New Mexico**

**NW4 – inside of 1 mile radius**

**NE4 – inside of 1 mile radius**

**SW4 - inside of 1 mile radius**

**SE4 - inside of 1 mile radius**

**Operators as to E2, SE4, NW4 of NE4 and SE4 of NE4**

**Apache Corporation**

303 Veterans Airpark Ln, Suite 3000  
Midland, TX 79705  
Phone: 432-818-1000

- Operations in T19S, R36S, Section 36
- (SE4 of SE4 – 40 ac)
- (NE4 of SE4 – 40 ac)
- (SE4 of SW4 – 40 ac)
- (SW4 – 160 ac) and (NW4 of Sec 1, T20S, R36E – 160 ac)
- (SW4 of SW4 – 40 ac)
- (NW4 of SW4 – 40 ac) – (Unit #343, Unit #012 and Unit #337))
- (SE4 of NE4 – 40 ac)
- (NW4 of NE4 – 40 ac) – (Unit #297 and Unit #357)
- (SE4 of NW4 – 40 ac) – (Unit #006 and Unit #285)
- (SW4 of NW4 – 40 ac)
- (NW4 of NW4 – 40 ac)

**Empire New Mexico LLC**

2200 S. Utica Place, Suite 150  
Tulsa, OK 74114  
Phone: 539-444-8002

- Operations in T19S, R36S, Section 36
- (SE4 – 160 ac)

**Jack Huff**

410 Veterans Airpark Lane  
Midland, TX 79705  
Phone: 432-683-9231

4605 Post Oak Place, Suite 221, Houston, TX 77027



- Operations in T19S, R36S, Section 36
- (NW4 – 160 ac)

### **Section 35, T19S, R36E, Lea County, New Mexico**

**NE4 – inside of 1 mile radius**

**SE4 – inside of 1 mile radius**

**NW4 – outside of 1 mile radius**

**SW4 – outside of 1 mile radius**

### **Operators as to E2**

#### **Southwest Royalties Inc.**

P O Box 53570

Midland, TX 79710

Phone: 432-685-9048

- Operations in T19S, R36S, Section 35
- (NE4 – 160 ac)

#### **Apache Corporation**

303 Veterans Airpark Ln, Suite 3000

Midland, TX 79705

Phone: 432-818-1000

- Operations in T19S, R36S, Section 35
- (SE4 of NE4 – 40 ac)
- (NW4 of SE4 – 40 ac)
- (SE4 of SE4 – 40 ac)

#### **Hilcorp Energy Company**

1111 Travis Street

Houston, TX 77002

Phone: 713-209-2400

- Operations in T19S, R36S, Section 35
- (SW4 of NE4 – 40 ac)

#### **Forty Acres Energy, LLC**

11757 Katy Freeway, Suite 725

4605 Post Oak Place, Suite 221, Houston, TX 77027



Houston, TX 77079  
Phone: 832-706-0041

- Operations in T19S, R36S, Section 35
- (SE4 – 160 ac)

## **Section 2, T20S, R36E, Lea County, New Mexico**

**NE4 of SE4 - inside of 1 mile radius**  
**NE4 – inside of 1 mile radius**  
NW4 – outside of 1 mile radius  
SW4 - outside of 1 mile radius  
NW4 of SE4 – outside of 1 mile radius  
S2 of SE4 – outside of 1 mile radius

### **Operators as to E2**

**Forty Acres Energy, LLC**  
11757 Katy Freeway, Suite 725  
Houston, TX 77079  
Phone: 832-706-0041

- Operations in T20S, R36S, Section 2
- (NE4 – 160 ac)

**Apache Corporation**  
303 Veterans Airpark Ln, Suite 3000  
Midland, TX 79705  
Phone: 432-818-1000

- Operations in T20S, R36S, Section 2
- (NE4 of NE4 – 40 ac)
- (SE4 of NE4)

### **Mineral Interest Ownership as to the NE4 of SE4**

**State of New Mexico**  
P O Box 1148  
Santa Fe, NM 87501  
Phone: 505-827-5760

4605 Post Oak Place, Suite 221, Houston, TX 77027



**Section 1, T20S, R36E, Lea County, New Mexico**

**N2 – inside of 1 mile radius**  
**N2 of S2 - inside of 1 mile radius**  
**S2 of S2 – mostly inside of 1 mile radius**

S2 of S2 – partially outside of 1 mile radius

**Operators as to N2 and S2**

**Hilcorp Energy Company**

1111 Travis Street  
Houston, TX 77002  
Phone: 713-209-2400

- Operations in T20S, R36S, Section 1
- (NE4 – 160 ac)

**Apache Corporation**

303 Veterans Airpark Ln, Suite 3000  
Midland, TX 79705  
Phone: 432-818-1000

- Operations in T20S, R36S, Section 1
- (NW4 – 160 ac) and (SW4 of Sec 36, T19S, R36E – 160 ac)
- (SW4 of SE4 – 40 ac)
- (NE4 of SW4 – 40 ac)
- (NW4 of SW4 – 40 ac)

**Momentum Operating Co., Inc.**

P O Box 2439  
Albany, TX 76430  
Phone: 325-762-3331

- Operations in T20S, R36S, Section 1
- (NE4 of SE4 – 40 ac)
- (SE4 of SE4 – 40 ac)



**Southwest Royalties Inc.**

P O Box 53570  
Midland, TX 79710  
Phone: 432-685-9048

- Operations in T20S, R36S, Section 1
- (SW4 – 160 ac)

**Mineral Interest Ownership as to the NW4 of SE4**

**State of New Mexico**

P O Box 1148  
Santa Fe, NM 87501  
Phone: 505-827-5760

**Section 6, T20S, R37E, Lea County, New Mexico**

**NW4 – inside of 1 mile radius**  
**NW4 of SW4 – partially inside of 1 mile radius**  
SW4 of SW4 – mostly outside of 1 mile radius  
E2 – outside of 1 mile radius

**Operators as to NW4 and W2 of SW4**

**Forty Acres Energy, LLC**

11757 Katy Freeway, Suite 725  
Houston, TX 77079  
Phone: 832-706-0041

- Operations in T20S, R37S, Section 6
- (W2 of SW4 – 78 ac)

**Apache Corporation**

303 Veterans Airpark Ln, Suite 3000  
Midland, TX 79705  
Phone: 432-818-1000

- Operations in T20S, R37S, Section 6
- (SW4 of NW4 – 38.8 ac)

4605 Post Oak Place, Suite 221, Houston, TX 77027



**Southwest Royalties Inc.**

P O Box 53570

Midland, TX 79710

Phone: 432-685-9048

- Operations in T20S, R37S, Section 6
- (NW4 – 160 ac)

4605 Post Oak Place, Suite 221, Houston, TX 77027

## **APPENDIX C**

### **Copy of Notice Letter, Documentation, and Affidavit of Publication of Newspaper Notice**



December 17, 2025

VIA CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

RE: Targa Midstream Services LLC Application for Administrative Approval to Replace 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 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, Township 19 South, Range 36 East, Lea County, New Mexico. The 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/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. Targa's prior approval of its permit for the Monument AGI #3 has lapsed. Therefore, Targa is seeking reinstatement of the permit.

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. Matt Eales, at [meales@targaresources.com](mailto:meales@targaresources.com) or 832.496.7513.

Sincerely,

HARDY MCLEAN LLC

*/s/ Dana S. Hardy*  
Jaclyn M. McLean

ATTORNEYS FOR TARGA MIDSTREAM SERVICES LLC

125 Lincoln Avenue, Suite 223  
Santa Fe, NM 87501  
505-230-4410

HardyMcClean.com

**Writer:**  
Jaclyn M. McLean  
Managing Partner  
[jmclean@hardymclean.com](mailto:jmclean@hardymclean.com)

| Proof of Mailing - Targa Monument AGI 3 |             |                        |
|---|-------------|------------------------|
| Recipient                               | Date Mailed | USPS Tracking Number   |
| State of New Mexico                     | 12/17/2025  | 9414836208551292652462 |
| Apache Corporation                      | 12/17/2025  | 9414836208551292652455 |
| Joyce Ann Brown Trustee of the          | 12/17/2025  | 9414836208551292652431 |
| Empire New Mexico LLC                   | 12/17/2025  | 9414836208551292652448 |
| Mary T Christmas                        | 12/17/2025  | 9414836208551292652493 |
| Helen Jane Barby                        | 12/17/2025  | 9414836208551292652516 |
| Candy Christmas                         | 12/17/2025  | 9414836208551292652509 |
| Bradford Ace Christmas                  | 12/17/2025  | 9414836208551292652486 |
| Jack Huff                               | 12/17/2025  | 9414836208551292652523 |
| Southwest Royalty Inc.                  | 12/17/2025  | 9414836208551292652530 |
| Hilcorp Energy Company                  | 12/17/2025  | 9414836208551292652547 |
| Forty Acres Energy, LLC                 | 12/17/2025  | 9414836208551292652554 |
| Monument Operating Co, Inc              | 12/17/2025  | 9414836208551292652561 |

# 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 16, 2025  
and ending with the issue dated  
December 16, 2025.



Publisher

Sworn and subscribed to before me this  
16th day of December 2025.



Business Manager

My commission expires

January 29, 2027

(Seal) STATE OF NEW MEXICO  
NOTARY PUBLIC  
GUSSIE RUTH BLACK  
COMMISSION # 1087526  
COMMISSION EXPIRES 01/29/2027

**LEGAL NOTICE**  
December 16, 2025

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, Township 19 South, Range 36 East, 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/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. Matt Eales, at [meales@targaresources.com](mailto:meales@targaresources.com) or 832.496.7513. #00307054

67118479

00307054

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 publication has been made.

HARDY MCLEAN LLC  
125 LINCOLN AVE, STE. 223  
SANTA FE, NM 87501

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 536509

**CONDITIONS**

|  |  |
|--|--|
| Operator:<br>TARGA MIDSTREAM SERVICES LLC<br>811 Louisiana Street<br>Houston, TX 77002 | OGRID:<br>24650                                      |
|  | Action Number:<br>536509                             |
|  | Action Type:<br>[C-108] Fluid Injection Well (C-108) |

**CONDITIONS**

| Created By     | Condition | Condition Date |
|----------------|-----------|----------------|
| stacy.sandoval | None      | 1/27/2026      |