STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

APPLICATION OF ENTERPRISE DELAWARE BASIN TREATING LLC FOR AUTHORIZATION TO INJECT, LEA COUNTY, NEW MEXICO. CASE NO._____

APPLICATION FOR AUTHORIZATION TO INJECT

In accordance with 19.15.26 NMAC, Enterprise Delaware Basin Treating LLC ("Enterprise") (OGRID No. 330718) files this application with the Oil Conservation Division ("Division") seeking authorization to drill, complete, and operate an additional redundant acid gas injection ("AGI") well at its Dark Horse Treating Facility located in Lea County, New Mexico. In support of this Application, Enterprise states the following.

1. The proposed Independence AGI #3 well ("Well") will be located in Section 20, Township 25 South, Range 36 East, in Lea County, New Mexico. The Well is designed to address the sour gas disposal needs of the Dark Horse Treating Facility, along with the existing Independence AGI #1 and #2 wells (collectively, the "Independence AGI Wells").

2. The Well is an Underground Injection Control Class II well subject to the requirements of 19.15.26 NMAC.

3. The Well will be a deviated injection well and will be directionally drilled from a surface location approximately 529' FNL and 1434' FWL (Unit C) in Section 20, Township 25 South, Range 36 East to a bottom hole location approximately 2064' FSL and 60' FWL (Unit L) in Section 17, Township 25 South, Range 36 East.[1]

4. The Well will be a redundant well.

[1] Approximate geographic coordinates for the surface location are 32.121677, -103.291049 (NAD83), and approximate geographic coordinates for the bottom hole location are approximately 32.128811, -103.295487 (NAD83).

5. The Well will inject treated acid gas ("TAG") into the Siluro-Devonian formations, including the Devonian, Wristen, and Fusselman formations, at depths of approximately 16,056' to 17,730' TVD.

6. Enterprise is requesting a combined allowable maximum daily injection rate of 45 million cubic feet per day (MMcf/D) to be shared between the proposed well and the existing Independence AGI #1 and #2 wells.

7. The Well's maximum surface injection pressure will be approximately 4,929 pounds per square inch gauge.

8. The surface and bottom hole locations of the Well are within the Dark Horse Treating Facility's boundary.

9. The complete C-108 for the Well is attached to this application as **Exhibit 1**.

10. The proposed Well, along with the existing Independence AGI #1 and #2 wells, will ensure Enterprise maintains the ability to safely dispose of acid gas in a manner proven to improve operational stability and minimize the potential for exposure to facility personnel.

11. Enterprise's request for authorization to inject TAG into the Well will prevent waste, protect correlative rights, and protect human health and the environment.

WHEREFORE, Enterprise requests that this application be set for hearing before the Division on the next available docket, and, after notice and hearing as required by law, the Division enter an order approving Enterprise's C-108 application for authorization to inject.

Respectfully submitted,

HARDY MCLEAN LLC

/s/ Dana S. Hardy

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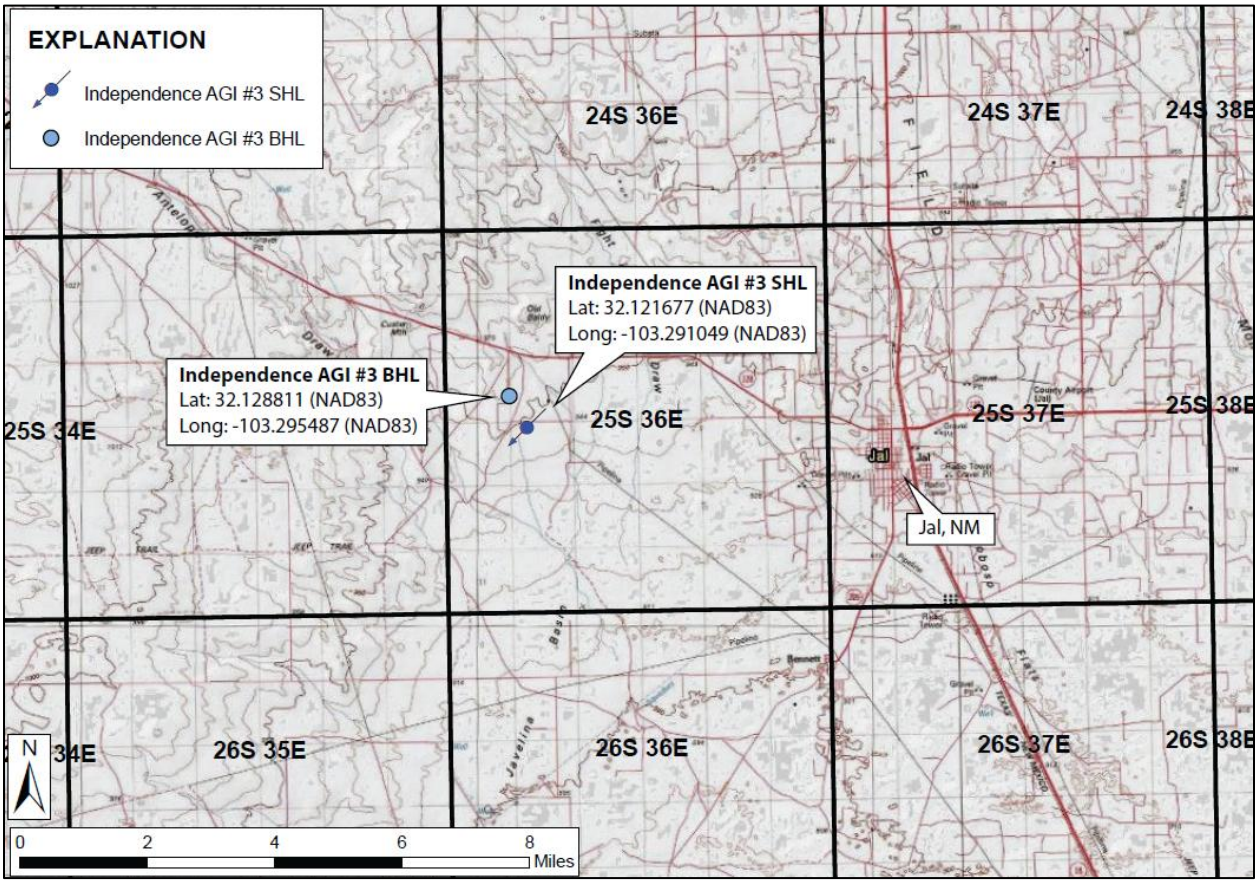
ATTORNEYS FOR ENTERPRISE DELAWARE BASIN TREATING LLC

APPLICATION FOR UIC CLASS II AGI WELL

ENTERPRISE DELAWARE BASIN TREATING LLC
(OGRID 330718)

PROPOSED INDEPENDENCE AGI #3
Section 20, Township 25 South, Range 36 East

Surface Hole Latitude (NAD83): 32.121677
Surface Hole Longitude (NAD83): -103.291049



SEPTEMBER 2025

Prepared for:

Enterprise Delaware Basin Treating LLC
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Houston, Texas 77210-4324
(713) 381-6500

Prepared by:

Geolex, Inc.®
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Albuquerque, New Mexico 87102
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EXHIBIT 1

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? _____Yes ___x___No

II. OPERATOR: Enterprise Delaware Basin Treating LLC [OGRID 330718]

ADDRESS: P.O. Box 4324, Houston, TX 77210

CONTACT PARTY: Andrew Lloyd PHONE: (713) 381-6550

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.

IV. Is this an expansion of an existing project? ___x___Yes _____No
If yes, give the Division order number authorizing the project: NMOCC Order R-21455; NMOCD Order SWD-2464

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 & 6; Appendices A & 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, 3**
2. Whether the system is open or closed; **Sections 1, 3, 4, 7**
3. Proposed average and maximum injection pressure; **Sections 1, 3, 4**
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, **Sections 3 & 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 & 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 3 & 4**

IX. Describe the proposed stimulation program, if any. **Section 3.3**

*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 NOT YET DRILLED**

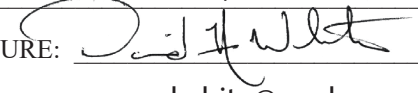
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. **Section 4.5**

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.

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: David A. White, P.G. TITLE: Consultant to Enterprise

SIGNATURE:  DATE: 9/12/2025

E-MAIL ADDRESS: dwhite@geolex.com

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

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.

(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.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

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

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.

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

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(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.

(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.

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.

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:

(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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1.0 EXECUTIVE SUMMARY

On behalf of Enterprise Delaware Basin Treating LLC (Enterprise), 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 (CO_2 and H_2S) injection well at their Dark Horse Treating Facility, in Lea County, New Mexico. The proposed well is to be located in Section 20 of Township 25 South, Range 36 East, approximately six (6) miles west of the city of Jal and on the existing Dark Horse Treating Facility property. The proposed AGI well is intended to provide additional acid gas disposal capacity at the Dark Horse Treating Facility, operational redundancy, and to further mitigate the potential for waste and atmospheric flaring. The proposed well, along with the existing Independence AGI #1 and #2 well (collectively, the Independence AGI wells), will ensure Enterprise maintains the ability to safely dispose of acid gas in a manner proven to improve operational stability and minimize the potential for exposure to facility personnel.

The proposed Independence AGI #3 well is designed to address the anticipated sour gas disposal needs of the Dark Horse Treating Facility. In submitting this application, Enterprise seeks approval to dispose of up to 45 million standard cubic feet per day (MMSCFD), or approximately 17,265 barrels per day, of treated acid gas (TAG) via the three Independence AGI wells for a period of at least 30 years. The TAG stream is anticipated to consist of approximately 70% carbon dioxide (CO_2) and 30% hydrogen sulfide (H_2S) with trace concentrations (less than 1%) of hydrocarbons (C_1-C_7). When operating at full capacity, the AGI wells will permanently sequester approximately 858 tons of CO_2 and 285 tons of H_2S daily.

To minimize surface and sub-surface interference and ensure access to quality reservoir, Independence AGI #3 will be drilled as a deviated injection well. The approximate geographic coordinates for the surface location are 32.121677, -103.291049 (NAD83), within Section 20 of Township 25 South, Range 36 East, and the AGI well will be directionally drilled to a bottom-hole location at approximately 32.128811, -103.295487 (NAD83) within Section 17 (T25S, R36E). To ensure adequate isolation of groundwater resources, producing intervals, and potential high-pressure depth intervals, the Independence AGI #3 well will be constructed utilizing a five-string casing design and all casing strings will be cemented to the surface. The integrity of cementing operations will be verified via visual inspection, as well as the collection of radial cement bond logs for all casing strings underlying the surface casing. The production casing and injection tubing will utilize approximately 300 feet of corrosion resistant alloy (CRA) materials in order to protect the well and lower well components from potentially corrosive conditions.

The proposed open-hole injection zone will target geologic formations of the Siluro-Devonian, including the Devonian, Wristen, and Fusselman formations, between depths of approximately 16,056 to 17,730 feet. Analyses of these geologic units confirm that they act as excellent closed-system reservoirs that will accommodate the anticipated and future needs of Enterprise for the disposal of acid gas and sequestration of CO_2 from the existing gas-treatment facility.

In the area of the proposed AGI #3 well, the Siluro-Devonian injection interval is overlain by the Woodford Shale, which serves as the primary upper confining layer, and is observed to be greater than 350 feet in thickness. Additionally, more than 750 feet of tight shale and carbonates of the Barnett and Osage formations, respectively, overlie the Woodford Shale and provide a significant interval of secondary confining strata. Combined with the low-permeability Woodford Shale, these units will provide more than 1,100 feet of confining strata that will sufficiently contain and prevent the upward migration of TAG. Within the project area, the closest overlying pay zone, the Strawn Formation, lies approximately 2,716 feet above the Siluro-Devonian. The vertical separation from active producing

zones, as well as the significantly thick primary and secondary caprock intervals ensure overlying production activities will be isolated and unaffected by TAG injection within the Siluro-Devonian.

Underlying the Siluro-Devonian injection zone, low porosity and low permeability carbonates and shales of the Montoya Formation and Simpson Group provide excellent lower confinement for the injection zones. These confining strata, and geologic intervals underlying them (i.e., Ellenburger Formation), have no current or historical production in this area.

The proposed maximum allowable surface operating pressure (MAOP) requested for the Independence AGI #3 is approximately 4,929 psig, which was determined by utilizing appropriate NMOCD-approved calculation methods that consider the specific gravity of the acid gas injection stream. At the anticipated bottom-hole conditions of 234°F and 7,720 psi, each MMSCF of TAG will occupy a reservoir volume of approximately 383 barrels.

As it is critical to verify that the proposed Siluro-Devonian injection reservoir can accommodate the requested 45 MMSCFD of TAG, within reasonable operating pressure limitations, a detailed geologic analysis of the project area has been completed. This analysis, which leverages geophysical logs, petrophysical analysis, and 3D seismic survey data, is the basis for which geologic reservoir modeling and injection simulation investigations have been completed. Analysis of these data has allowed for a detailed characterization of subsurface structure in the project area and characterization of the proposed Siluro-Devonian injection reservoir, with respect to porosity development and the interconnectivity of porous strata. Subsequent injection simulations completed to support this C-108 application clearly demonstrate that the proposed injection reservoir is fully capable of accommodating TAG injection, as proposed by Enterprise.

In accordance with the results of detailed geologic analyses, reservoir modeling and injection simulations have been completed to better understand and forecast plume characteristics and the migration of the resultant TAG plume after 30 years of injection operations. Following operation of the Independence AGI #3, along with the existing active Independence AGI #1 and #2 wells, the resultant TAG plume is anticipated to occupy a maximum area of approximately 10.5 square miles and would extend a maximum of approximately 2.35 miles from the Dark Horse Treating Facility. Gas saturation values are forecast to range from approximately 0 to 0.55% with diffuse concentrations (i.e., less than 10%) characterizing the plume margins. Comparison of these results to the locations of existing wells penetrating the Siluro-Devonian demonstrates that the migrating plume is not anticipated to encounter any nearby open wellbores, and thus, these wells are not anticipated to be impacted by the proposed operations of the Independence AGI wells.

To evaluate the potential for induced seismicity in response to injection operations, at the proposed rate of up to 45 MMSCFD, an induced seismicity risk assessment was completed. The analysis was completed utilizing the Stanford Center for Induced and Triggered Seismicity's Fault Slip Potential (FSP) modeling platform. While geologic analysis and reservoir characterization has produced a detailed characterization of faults within the project area, it should be noted that no faults exhibit offset sufficient to compromise the injection reservoir confining strata within the maximal area of the TAG plume. Results of the FSP analysis, which considers operation of the Independence AGI wells, as well as additional offset saltwater disposal (SWD) wells, demonstrates that operation of the AGI wells, as proposed, will not result in an elevated risk for injection-induced fault slip in the area.

Within the one-mile area of review (AOR) there are 32 wells, which most commonly were completed to produce from the Bone Spring and Wolfcamp Formation plays, and one saltwater disposal well is

injecting within Siluro-Devonian reservoirs. It should be noted that for the proposed Independence AGI #3, the one-mile area of review (AOR) has been extended to include a one-mile buffer area comprising the surface location, bottom-hole location, and around the deviated well path. Of these 32 wells, 24 are active or newly permitted and eight (8) have been successfully plugged or reflect cancelled well projects. Within a two-mile radius of the Independence AGI #3, there are four (4) wells which penetrate the proposed Siluro-Devonian injection zone. These include the redundant Independence AGI #1 (API: 30-025-48081) and AGI #2 (30-025-49974) wells, the active West Jal B Deep SWD #1 (API: 30-025-25046), and the plugged West Jal Unit #1 well (API: 30-025-21172). West Jal Unit #1 has been properly plugged and is not anticipated to be impacted by operation of the proposed AGI #3 well, nor will it serve as a conduit for fluids to escape the proposed injection zone. All relevant plugging reports and documents for these wells have been reviewed and are included in Appendix A.

The area surrounding the proposed injection site is arid and there are no natural bodies of water within several miles of the Dark Horse Treating Facility and proposed Independence AGI #3 well. A search of the New Mexico Office of the State Engineer's files shows 15 water wells or points of diversion within two miles of the proposed AGI surface- and bottom-hole locations. The closest water well is located approximately 0.34 miles away from the Independence AGI #3 surface location and has a total depth of 505 feet below the ground surface. All water wells within a two-mile radius are shallow and will be protected via the proposed Independence AGI #3 casing design, which includes installation of surface casing from the surface to an approximate depth of 1,250 feet, which will isolate and protect all shallow groundwater resources.

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

- Identification and characterization of all hydrocarbon-producing zones of wells that surround and are present on the plant's site

- The depths of perforated pay intervals in those wells relative to the depth of the target injection zone (Siluro-Devonian interval)

- The past and current uses of the proposed injection interval

- The stratigraphic and structural setting of the targeted zones relative to any nearby active or plugged wells, and other wells penetrating the interval

- The identification of and sample notification letter that will be sent to all surface owners, lessees, and operators within a one-mile radius of the proposed injection well

- Identification and characterization of all plugged and operating wells penetrating the proposed injection zone within a one- and two-mile radius of the proposed injection well

- The details of the proposed injection operation, including general well design and average maximum daily rates of injection and injection pressures

- An analysis of the potential for induced seismicity based on geologic review and mapping

- Reservoir injection simulations to evaluate the resultant effects of injection operations in the area after 30 years at the maximum daily injection rate and predict the resultant acid gas dispersion area and saturation characteristics

- Sources of injection fluid and compatibility with the formation fluid of the injection zone

- Location and identification of any freshwater-bearing zones in the area; 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

Based upon this detailed evaluation, Enterprise and Geolex have determined that the proposed Independence AGI #3 well is a safe and environmentally sound project for the disposal of TAG. Furthermore, our analyses demonstrate that the proposed injection well will not negatively affect any waters of the State, nor have any actual or potential impacts on production in the area. This application is fully protective of correlative rights.

2.0 INTRODUCTION AND ORGANIZATION OF THE 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.

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 Independence AGI #3 well (Section 3.0)

- An overview of the acid gas characteristics and modeling simulation results to predict the resultant acid gas plume and reservoir pressure effects from injection operations in the area of the proposed AGI well (Section 4.0)

- A summary of the regional and local geology, hydrogeology, and the location of drinking water wells within the area of review (Section 4.0)

- An analysis of susceptibility to formation breakdown during injection operations (Section 4.3)

- The identification, location, status, producing 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 landowners 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)

In addition, this application includes the following supporting information:

- **Appendix A:** Data tables showing all active, temporarily abandoned, abandoned, and plugged oil and gas wells within a two-mile radius and within the one-mile area of review, as well as associated plugging documents for relevant wells within two miles.

- **Appendix B:** Tables summarizing the operators, lessees, and surface owners in the one-mile radius area of review, an example of the notification letter that will be provided no less than 20 days prior to the NMOCD hearing, and a draft public notice.

- **Appendix C:** Summary of prior requests for permission to sample and analyze groundwater and proof of mailing documents (USPS Certified Mail).

3.0 PROPOSED CONSTRUCTION AND OPERATION OF INDEPENDENCE AGI #3

Independence AGI #3 is intended to service and provide operational redundancy for Enterprise's Dark Horse Gas Treating Facility and will be constructed on the facility property in Section 20 of Township 25 South, Range 36 East, approximately six (6) miles from the city of Jal in Lea County, New Mexico (Figure 1). The well will be drilled as a deviated well from the approximate surface geographic coordinates of 32.121677, -103.291049 (NAD83) to a bottom-hole location approximately 2,936 feet to the northwest at 32.128811, -103.295487 (NAD83), as shown in Figure 2.

TAG to be injected via the Independence AGI #3 will be routed from the adjacent Dark Horse Treating Facility to on-site compression facilities that will compress and dehydrate the acid gas. The compressed TAG will then be transmitted to the AGI #3 injection tree via high-pressure, AAMP-compliant (Formerly NACE) piping for injection. Design details for the proposed AGI well are provided in the following Sections 3.1 and 3.2.

3.1 PROPOSED DESIGN OF INDEPENDENCE AGI #3

The location of the proposed Independence AGI #3 well is shown in Figure 2, and a general schematic of the Independence AGI injection system (including Independence AGI #1 and #2 wells) is shown in Figure 3. The Independence AGI #3 well will be drilled to a total depth of approximately 17,730 ft TVD (true vertical depth) within the lower Fusselman Formation. The injection interval (approximately 16,056 to 17,730 feet TVD will be completed as an open-hole injection interval that includes the Devonian, Wristen, and Fusselman formations.

The AGI facilities and wells are integrated components of the Dark Horse Treating Facility design and the proposed AGI #3 well, along with the existing Independence AGI #1 and #2 wells, are to be the primary sour gas disposal method for the facility. The proposed well schematic for the Independence AGI #3 is illustrated in Figure 4 and is designed to accommodate TAG injection for a design life of no less than 30 years.

Independence AGI #3 will utilize a five-string casing design to ensure the protection and isolation of shallow groundwater resources, oil and gas producing intervals, potential intervals of high-pressure conditions, and potential intervals of lost circulation. The surface casing (24-inch) will be set at approximately 1,250 feet TVD, within the Rustler Formation to isolate shallow groundwater resources of the Dockum Group and Ogallala Aquifer. The first intermediate casing string (20-inch) will be set at approximately 3,500 feet TVD, to cement and isolate anhydrite- and salt-bearing units (i.e., Rustler Fm. and Salado) overlying the Artesia Group. The second intermediate casing string (13 5/8-inch) will provide isolation of the Capitan Reef, a known and confirmed interval of lost circulation. The base of this second intermediate section will be set at approximately 5,370 feet TVD, overlying strata of the Delaware Mountain Group. The third intermediate casing string will be 9 5/8-inches and will be set within the Wolfcamp Formation at approximately 11,610 feet TVD to aid in the isolation of the lower pressured Delaware Mountain Group and Bone Spring Formation from the underlying, higher-pressure zones of the Wolfcamp, Strawn, Atoka, and Morrow formations. The production casing will utilize 7-inch casing and will be set in a competent geologic unit within the Devonian at an approximate depth of 16,051 feet TVD. The injection interval will be drilled as a 5 7/8-inch open hole interval to a depth of approximately 17,730 feet TVD in the lower Fusselman Formation.

As shown in Figures 3 and 4, the Independence AGI #3 well design will include a subsurface safety valve (SSSV) on the production tubing to ensure that injected fluids are prevented from flowing back out of the well in the event of a failure of injection equipment. Additionally, the annular space between the production tubing and the wellbore will be filled with an inert fluid (i.e., corrosion-inhibited diesel fuel

with biocide additives) as a further safety measure. These practices are consistent with injection well designs previously supported by NMOCD and approved by the NMOCC for acid gas injection and conform to industry best practices for AGI well design.

Design and material considerations for Independence AGI #3 include: (1) Placement of a corrosion-resistant subsurface safety valve to provide down-hole isolation and a CRA permanent injection packer; (2) installation of multiple casing strings to isolate and protect shallow groundwater resources (i.e., Ogallala and Santa Rosa groundwater, Rustler Formation saline groundwater); (3) characterization of the zone of injection; and (4) a total depth ensuring accurate identification of the injection reservoir.

In constructing the proposed Independence AGI #3, a suitable drilling rig will be selected for the job that will include an appropriately sized blowout preventer and choke-manifold system for any unforeseen pressures encountered, and drilling operations will utilize a closed-loop system to manage drilling fluids. As necessary and based on the analysis of drilling fluid records, managed pressure drilling systems and protocols may be utilized to support drilling activities. Visual inspection of cement returns to the surface will be documented in cementing operations of all casing strings, and casing and cement integrity will be demonstrated by pressure testing and 360-degree cement bond logs recorded for each cement operation below the surface casing. A schematic of the proposed well is shown in Figure 4 and the Independence AGI #3 casing plan is summarized in Table 1.

Table 1. Independence AGI #3 proposed casing schedule

Casing	**Hole Size (in.)**	**Csg. Size (in.)**	**Pounds Per Foot**	**Grade**	**Thread**	**Top (ft., MD)**	**Bottom (ft., MD)**	**Length (ft., MD)**	**Length (ft., TVD)**
Proposed Casing									
Conductor (drilled and cemented)	36	30.0	118	-	Welded	0	122	122	122
Surface	26	24.0	186.4	X-65	XLF	0	1,250	1,250	1,250
1st Intermediate	22	20.0	133	NT-80DE	GB Butt 21	0	3,500	3,500	3,500
2nd Intermediate	17.5	13.625	88.2	Q-125HC	BTC	0	5,425	5,425	5,425
3rd Intermediate	12.25	9.625	53.5	L-80HC	BTC	0	9,000	9,000	8,824
3rd Intermediate	12.25	9.625	53.5	P-110HP	BTC	9,000	11,800	2,800	2,786
Production	8.5	7	32	P-110HC	Var. SC	0	16,042	16,042	15,751
Production	8.5	7	32	G3 (CRA)	VAM*	16,042	16,342	300	300
Proposed Tubing									
Inj. Tubing	N/A	3.5	9.2	L-80HC	VAM*	0	15,992	15,992	15,701
Inj. Tubing (CRA)	N/A	3.5	9.2	G3 (CRA)	VAM*	15,992	16,292	300	300

*Or equivalent gas-tight, premium thread connections

All casing strings will be cemented to the surface using appropriate conventional cement methods. The adequacy of cementing operations (with the exception of the conductor) will be confirmed through pressure testing of the casing and 360-degree cement bond logs will be recorded after the required amount of time has passed for cement to set. Once the integrity of cementing operations has been verified, drilling of the next casing interval will commence.

In accordance with AGI well best construction practices, acid resistant cement slurries and/or CRA casing will be utilized along key depth intervals in which corrosive conditions may potentially be present. For

the proposed Independence AGI #3 well, this includes incorporation of CRA casing, tubing, and acid-resistant cement at the base of the 7-inch production casing and 3.5-inch injection tubing to protect lower well components and ensure long-term well integrity. Depth intervals which incorporate acid-resistant cement slurries will utilize cement diverter tools (DVT) and external casing packers (ECP) to ensure successful placement and bonding of acid-resistant cement, where required. Table 2 summarizes the preliminary cementing program for all Independence AGI #3 casing strings.

Table 2. Independence AGI #3 proposed cementing program

Casing String	**Stage #**	**Cement Type**	**# Sacks**	**Density (#/gallon)**	**Coverage Interval (MD)**
Conductor	1	Redimix	-	-	
Surface	1	Lead: HalCem Tail: HalCem	Lead: 665 Tail: 357	Lead: 13.5 Tail: 14.8	0' – 1,250'
1st Intermediate	1	Lead: HalCem Tail: HalCem	Lead: 1,657 Tail: 207	Lead: 13.5 Tail: 14.8	0' – 3,500'
2nd Intermediate	1	Lead: NeoCem IL2 Tail: VersaCem H	Lead: 486 Tail: 200	Lead: 11.5 Tail: 14.5	3,750' – 5,425'
	2	Lead: EconoCem HLC Tail: HalCem C	Lead: 1,497 Tail: 200	Lead: 12.5 Tail: 14.5	0' – 3,750'
3rd Intermediate	1	Lead: NeoCem PL2 Tail: VersaCem H	Lead: 820 Tail: 275	Lead: 11.5 Tail: 14.5	7,300' – 11,800'
	2	Lead: EconoCem HLC Tail: VersaCem H	Lead: 2,596 Tail: 154	Lead: 12.5 Tail: 14.5	0' – 7,300'
Production	1	Lead: NeoCem PT2 Tail: LockCem	Lead: 44 Tail: 44	Lead: 13.2 Tail: 15.3	13,900' – 16,342'
	2	Tail: NeoCem PT	Tail: 1,701	Lead: 13.2	0' – 13,900'

*Denotes amount of cement in barrels

For the purposes of monitoring down-hole injection conditions and long-term evolution of the Siluro-Devonian injection reservoir, Independence AGI #3 will be completed with permanent down-hole pressure and temperature sensors installed on a mandrel immediately overlying the packer assembly. The associated sensor communication lines will be clamped to the injection tubing, within the annulus, and will be routed through termination blocks on the injection tree to a surface control panel, which will directly transmit data to the facility control room for observation, analysis, and recording.

The SSSV will be installed on the 3 ½-inch injection tubing at a depth of approximately 150 feet and connected to the surface wellhead via a ¼-inch Inconel 925 hydraulic line. From the surface, the line is run to a surface control panel through stainless steel line. The SSSV surface control panel will be integrated into the facility control system, such that the SSSV can be activated on-site, from the control room, or through an automated emergency shutdown (ESD) process. While additional isolation equipment will be incorporated into the Independence AGI #3 design (e.g., manual and automatic valves on injection tree), the SSSV is critical as it provides a subsurface isolation point, in the event physical damage to the wellhead or surface isolation points occurs.

The Association for Materials Protection and Performance (AMPP, formerly NACE) issues guidelines for metals exposed to various corrosive gases, such as those anticipated for this AGI well. For an H_2S-CO_2 stream of acid gas that is dewatered at the surface via successive stages of compression, down-hole components, such as the SSSV and packer should be constructed of Inconel 925 (or equivalent) grade materials. The CRA joints utilized in the Independence AGI #3 well will be constructed of a similar alloy, such as Sumitomo SM2550 (with 50% nickel content), G3, or other suitable material grade.

Additionally, the gates, bonnets, and valve stems within the injection tree will also be nickel coated, in accordance with the requirements of a dry acid gas injection tree.

The remainder of the injection tree will be constructed 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 can be shut in using a pneumatically operated wing valve on the injection tree. The SSSV provides a redundant safety feature to shut in the well below the ground surface in case the wing valve does not close properly or damage to the injection tree occurs. After the AGI well is drilled and tested to assure that it will be capable of accepting the proposed volume of injection fluid (without using acid gas), it will be completed with the approved injection equipment for the acid gas stream.

3.2 GEOPHYSICAL LOGGING

Prior to running the intermediate (1st, 2nd, and 3rd) and production casing strings, open-hole geophysical logging will be performed for the interval underlying the surface casing from approximately 1,250 to 17,730 feet TVD. The proposed open-hole logging suite will consist of the following: Gamma ray, formation density, resistivity, neutron porosity, sonic porosity, and 360-degree caliper measurements with integrated borehole volume. Additionally, Fullbore Formation MicroImager (FMI) logs will be recorded along the proposed Siluro-Devonian injection interval, as well as the overlying caprock (i.e., Woodford Shale) to verify the integrity and confirm the capability of overlying strata to properly confine and permanently sequester the injected TAG. Porosity and permeability characteristics of the proposed injection zone and overlying caprock strata will be further verified through collection and analysis of sidewall cores.

3.3 RESERVOIR STIMULATION, TESTING, AND PRESSURE MONITORING

Upon the completion of drilling, casing/cementing, and geophysical logging activities, reservoir stimulation and testing operations will be completed. These operations will include a spot-acid treatment to clean out the wellbore prior to reservoir testing, step-rate injection testing (SRT), followed by acid stimulation. In accordance with accepted stimulation procedures for AGI wells, the step-rate injection test will be conducted prior to acid stimulation activities, with the exception of low-volume, spot acid treatment to clean out and prepare the well for testing.

Prior to step-rate injection testing, a spot acid treatment will be performed in which approximately 3,000 gallons of 15% hydrochloric acid (HCl) will be displaced along the open-hole injection interval for approximately 24 hours, for the purposes of cleaning the wellbore of drilling fluids potentially invading porous intervals. Utilizing a temporary string comprised of a retrievable test packer and workstring tubing, a step-rate injection test will be performed to confirm the adequacy of injection pressure limitations and approved injection volume, and to ensure that the formation parting pressure (i.e., fracture pressure) is not reached during future TAG injection operations. Once the reservoir has been tested and safe operational conditions have been confirmed, the injection reservoir response to injection activities will be characterized through completion of a pressure fall-off test, in which the return to static pressure conditions is monitored via down-hole pressure gauges. Depending on actual reservoir porosity and permeability attributes, it is anticipated that fall-off testing activities will require approximately 3-10 days of down-hole monitoring.

Following the completion of reservoir testing activities (SRT and pressure fall-off monitoring), a complete acid stimulation of the open-hole interval will be completed. Approximately 40,000 gallons of 15% HCl and approximately 8,000 gallons of gelled 15% HCl acid will be injected into the reservoir to

open potential reservoir-bound fractures, secondary porosity zones, and dissolve any natural carbonate cement within the pore spaces of the Siluro-Devonian injection zone. As needed, diverter materials (e.g., rock salt) will be utilized to divert acid volumes away from high-porosity intervals and ensure complete stimulation of the open-hole interval.

Upon the completion of reservoir testing and stimulation activities, the final tubing string and permanent injection packer will be run and set approximately 30 feet above the base of the production casing. For long-term monitoring of down-hole conditions, Independence AGI #3 will be equipped with bottom-hole pressure and temperature instrumentation designed to provide real-time monitoring of reservoir conditions, as it is installed immediately above the permanent injection 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 in Sections 4.6 and 4.7) with actual performance in future reporting periods.

The collection and analysis of injection and annular pressure data has a two-fold purpose. First, to provide an early warning of any mechanical well integrity issues that may arise, and the second 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 and evaluate the performance of the Siluro-Devonian injection reservoir.

Surface pressure/temperature/annular pressure monitoring equipment has extremely high reliability, whereas our experience with bottom-hole pressure/temperature monitoring equipment has shown that this equipment is more complex and may suffer from periodic data collection and transmission issues. As such, we select bottom-hole monitoring equipment with redundant data backup capabilities, and we have developed data analysis procedures which ensure that necessary data are collected in the event of bottom-hole sensor failure. Specifically, the simultaneous collection of the surface- and bottom-hole data allows for the development of empirical relationships with actual observed data that, in conjunction with the use of established models (such as, AQUAlibrium™, NIST REFPROP, or equivalent) will allow data gaps to be filled if and when bottom-hole data loss occurs. This approach will allow us to provide NMOCD with reliable monitoring data and interpretations that provide the basis for reservoir evaluation performed periodically during the life of the Independence AGI #3 well.

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

1. Obtain measurements of initial bottom-hole pressure and temperature after drilling (during logging)

2. Perform detailed step-rate injection test and pressure fall-off test to provide baseline reservoir conditions prior to the commencement of TAG injection activities

3. Monitor surface parameters (injection pressure, temperature, injection rate, and annular pressure) to provide an early warning system for any potential mechanical integrity issues in the well

4. Monitor bottom-hole pressure and temperature with permanent sensors to provide real-time reservoir conditions for analysis of reservoir performance

5. Use bottom-hole reservoir and surface pressure and temperature data to develop a well-specific empirical relationship between observed surface- and bottom-hole conditions

6. Use TAG/wellbore model to predict bottom-hole conditions based on surface data and test with empirical relationships observed in #5 above to calibrate models

7. Use surface data and/or redundant data storage sources along with protocols described above to fill in missing bottom-hole data when data gaps or sensor failure occurs

8. In the event of an extended period of bottom-hole pressure/temperature sensor failure, perform periodic bottom-hole pressure monitoring using slickline pressure gauges when data from such temporary device is necessary to recover data for relevant reservoir analysis

9. After approximately ten (10) years of operation, perform an additional step-rate injection test and fall-off test to compare with baseline conditions prior to the commencement of TAG injection

3.4 INJECTION STREAM CHARACTERISTICS AND MAXIMUM ALLOWABLE OPERATING PRESSURE

The proposed Independence AGI #3 well has been designed and will be constructed such that it can be safely operated as an acid gas injection well to dispose of a mixed stream of TAG containing H_2S and CO_2. Based on current gas-treatment forecasting, the TAG stream is anticipated to be comprised of the following constituents:

- Carbon Dioxide (CO_2) 70%
- Hydrogen Sulfide (H_2S) 30%
- Trace Nitrogen and hydrocarbons (C_1-C_7) Less than 1%

The maximum total volume of TAG to be injected daily, via the three facility AGI wells (existing and proposed) will be approximately 45 MMSCF per day. Pressure reduction valves and controls will be incorporated to ensure that the Independence AGI #3 maximum surface injection pressure allowed by NMOCD will not be exceeded.

The specific gravity of TAG is dependent on the temperature and pressure conditions and the composition of the TAG mixture. It is most accurately calculated using a modification of the Peng-Robinson (PR) equation of state (EOS) model (Boyle and Carroll, 2002). We have calculated the specific gravity of the supercritical TAG phase for the proposed Independence AGI #3 well using the AQUAlibrium™ 3.1 software, which employs the modified PR EOS model (Table 3).

We have modeled the proposed maximum daily injection rate of 45 MMSCF per day composed of 70% CO_2 and 30% H_2S. Specific gravities of TAG were determined for the conditions at the wellhead (2,500 psi, 110 °F), the total depth of the well (7,720 psi, 234°F), and under average reservoir conditions (see Table 3).

To determine the proposed maximum surface injection pressure, we utilize the following NMOCD-approved method, which is based on the final specific gravity of the injection stream. Utilizing this method, we propose a maximum allowable operating pressure (MAOP) of approximately 4,929 psig, as determined by the following calculations:

MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP) DETERMINATION

$$IP_{Max} = PG\ (D_{Top})$$

WHERE: IP_{Max} = Maximum Surface Injection Pressure (psi)
PG = Pressure Gradient of Injection Fluid (psi/ft.)
D_{Top} = Depth at top of perforated interval of injection zone (ft.)

AND

$$PG = 0.2 + 0.433\ (\ 1.04 - SG_{Tag}\ )$$

WHERE: SG_{Tag} = Average specific gravity of treated acid gas in the tubing (SG_{Tag} at top = 0.78, and SG_{Tag} at bottom = 0.80; see Table 3)

For the maximum requested injection volume case, it is assumed that:

$$SG_{Tag} = 0.7925$$
$$D_{Top} = 16{,}056 feet$$

THEREFORE:

$$PG = 0.2 + 0.433\ (1.04 - 0.7925)$$

$$PG = 0.307$$

AND

$$IP_{Max} = 0.307 \frac{psi}{ft}\ x\ 16{,}056\ ft$$

$$\boldsymbol{IP_{Max} = 4{,}929\ psi}$$

Based on this determination, Enterprise requests approval for a surface injection MAOP of 4,929 psig for the proposed Independence AGI #3 well.

Table 3. Anticipated TAG stream characteristics at wellhead, bottom of well, and in reservoir at equilibrium conditions

Proposed Injection Stream Characteristics

TAG	H_2S	CO_2	H_2S	CO_2	TAG
Gas Volume $MMSCFD^{-1}$	Conc. Mol %	Conc. Mol %	Injection Rate lbs/day	Injection Rate lbs/day	Injection Rate lbs/day
45	30	70	1212363	3652971	4865334

Conditions at Wellhead

Wellhead		TAG							
Temp F	Pressure psi	Gas Vol $(MMSCFD)^{-1}$	Comp CO_2:H_2S	Inject Rate lbs/day	Density kg/m^3	SG	Density lbs/gal	Volume ft^3	Volume bbl
110	2500	45	70:30	4865334	782.08	0.78	6.53	99603	17740

Conditions at Bottom of Well

TD		TAG							
Temp F	Pressure psi	$Depth_{Top}$ ft	$Depth_{Bot}$ ft	Thickness ft	Density kg/m^3	SG	Density lbs/gal	Volume ft^3	Volume bbl
234	7720	16056	17730	1674.4	803.61	0.80	6.71	96934	17265

Conditions in Reservoir at Equilibrium

Reservoir Mid		TAG					
Temp F	Pressure psi	Avg. Porosity	Density kg/m^3	SG	Density lbs/gal	Volume ft^3	Volume bbl
222.9	7355	2.5	806.52	0.81	6.73	96585	17202

4.0 REGIONAL AND LOCAL GEOLOGY AND HYDROGEOLOGY, RESERVOIR CHARACTERIZATION AND INJECTION SIMULATION

4.1 GENERAL GEOLOGIC SETTING AND SURFICIAL GEOLOGY

The proposed Independence AGI #3 well surface location (S20, T25S, R36E, as shown in Figures 1 and 2) lies on the eastern flank of the Pecos River Basin within the Javelina Basin. Referred to as the South Plain by Nicholson & Clepsch (1961), the region exhibits irregular topography without integrated drainage. Surficial sediments commonly consist of unconsolidated alluvium and eolian sand in areas. There are no observed surface bodies of water, or groundwater discharge sites within one mile of the proposed location. The site overlies 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 rocks that underly these deposits are generally described below.

4.2 BEDROCK GEOLOGY

The Dark Horse Treating Facility and the proposed Independence AGI #3 well are located along the eastern margin of the Delaware Basin, a sub-basin of the larger, encompassing Permian Basin (Figure 5), which covers a large area of southeastern New Mexico and Texas. The Permian as we know today began to take form during the Middle to Late Mississippian, with various segments (Delaware Basin, Midland Basin, Central Basin Platform, and North Platform) arising from the ancestral Tabosa Basin. The Delaware Basin was subsequently deepened by periodic deformation during the Hercynian Orogeny of the Pennsylvanian through Early Permian. Following the orogeny, the Delaware Basin was structurally stable and was gradually filled by large quantities of clastic sediments while carbonates were deposited on the surrounding shelves and were further deepened via basin subsidence.

Figure 6 illustrates a generalized Permian Basin stratigraphic column showing the anticipated formations and lithologies that underly the proposed wellsite. The entire Lower Paleozoic interval (Ellenburger through Devonian) was periodically subjected to subaerial exposure and prolonged periods of karsting (i.e., dissolution of existing rock), most especially in the Fusselman, Wristen, and Devonian intervals. The result of this exposure was the development of systems of karst-related secondary porosity, which included solution-enlargement of fractures and vugs, and the development of small cavities and caves. Particularly in the Fusselman Formation, solution features from temporally distinct karst events became interconnected with each successive episode of subaerial exposure, so there is the potential for vertical continuity in parts of the Fusselman that could lead to enhanced vertical and horizontal permeability.

The sub-Woodford Shale Paleozoic rocks extend down to the Ordovician Ellenburger Formation, which is separated from underlying basement rock by a limited interval of Early Ordovician sandstones and granite wash. The Ellenburger is comprised of dolomites and limestones and can be several hundred feet thick. It is overlain by approximately 880 feet of Ordovician Simpson Group sandstones, shale, and tight limestones, as well as approximately 480 feet of basal Montoya cherty carbonates. Tight carbonates and abundant interbedded shale deposits within the Montoya and Simpson group serve as the underlying confining strata for the proposed Siluro-Devonian injection reservoir.

The Silurian Fusselman, Wristen, and Devonian Thirtyone formations overly the Montoya Formation 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 tight Osagean limestone and shale and basinal limestones of the Upper Mississippian Barnett Formation. The overlying Pennsylvanian Morrow, Atoka, and Strawn formations complete the pre-Permian section. Within this entire sequence, wells have produced gas from the Strawn, however, Strawn Formation gas production in the area is infrequent and all wells previously producing from the interval have been plugged and abandoned. Active oil and gas

production within the area of review of the proposed AGI well is found predominantly in the Tansill-Yates-Seven Rivers pools and horizontal plays (active and permitted) within the Bone Spring and Wolfcamp formations. The deepest currently producing formation, the Strawn Formation, is approximately 3,450 feet above the proposed injection zone.

The Siluro-Devonian injection zone does not produce economic hydrocarbons in the area of the proposed Independence AGI #3, as demonstrated through the collection of mudlogs, rotary sidewall cores, and the results of analyses completed following the drilling and completion of the Independence AGI #1 and AGI #2 wells.

4.3 LITHOLOGIC AND RESERVOIR CHARACTERISTICS OF THE SILURO-DEVONIAN FORMATIONS

The proposed injection interval for the Independence AGI #3 well includes the Devonian Thirtyone and Silurian Wristen and Fusselman formations (collectively referred to as Siluro-Devonian). These strata are comprised of carbonates with high permeability such as porous limestones or dolostones with moderate porosity that are well-demonstrated as capable injection reservoirs by numerous SWD and AGI wells in the basin. In evaluating the proposed Independence AGI #3 location, Geolex determined that the Devonian and Silurian injection reservoirs exhibited sufficient porosity potential to accommodate the disposal needs of the Dark Horse Treating Facility. Additional discussion regarding the evaluation of Siluro-Devonian reservoir characterization is included in Section 4.6.

Based on the geologic analysis of the subsurface, acid gas injection and CO_2 sequestration is recommended between the depths of approximately 16,056 to 17,730 feet TVD. The proposed injection zone consists of approximately 1,674 feet of Siluro-Devonian strata, comprised predominantly of porous carbonates (resulting from numerous subaerial exposure events) that would readily accept TAG for permanent sequestration. The quality and adequacy of the Siluro-Devonian for injection activities is further demonstrated by operation of the existing Independence AGI wells, which have serviced the Dark Horse Treating Facility since 2021, with no observations of diminishing reservoir performance. Figure 7 includes an interpreted type log, showing the lithology of the subsurface formations and anticipated formation-top depths are included in Table 4.

The primary caprock for the Siluro-Devonian injection reservoir is the Woodford Shale, approximately 355 feet thick in this area. The Woodford Shale is overlain, in turn, by approximately 750 feet of tight shales and carbonates of the Barnett and Osage formations. These units provide excellent primary and secondary geologic seals above the porous carbonates of the injection zone, ensuring that overlying pay intervals and shallow groundwater resources are adequately isolated from the proposed injection zone.

Figure 8 shows a structural contour map covering the area of the proposed Independence AGI #3 well and Figure 9 includes a structural cross section (A-A') which highlights the lateral extent of available Siluro-Devonian porosity and regional coverage of the overlying Woodford Shale caprock. The proposed AGI #3 well location lies down dip of a structural high to the northeast with the depth to Devonian strata increasing to the southwest (Figure 8). While faults have been identified in the greater project area, analysis of seismic survey data confirms there is no faulting that offsets the lateral continuity of the injection reservoir confining strata. Geophysical logs from included wells indicate several intervals within the proposed injection zone exhibiting significant porosity development and the anticipated low-porosity and low-permeability caprock is shown to be laterally continuous within the greater project area.

Table 4. Anticipated formation tops at the proposed Independence AGI #3 location

Formation	Depth (TVD)	Formation	Depth (TVD
Dockum Group	245	Wolfcamp	11,190
Ochoa-Dewey Lake	867	Strawn	12,118
Rustler	1,167	Atoka	12,667
Salado	1,716	Morrow	13,439
Tansill	3,354	Barnett	14,951
Yates	3,411	Osage (Miss Lime)	15,278
Capitan	3,936	Woodford	15,701
Bell Canyon	5,427	Devonian	16,056
Brushy Canyon	7,161	Wristen	16,463
Bone Spring	8,448	Fusselman	17,189

4.3.1 INJECTION RESERVOIR FRACTURE PRESSURE DETERMINATION

For previous AGI wells, the New Mexico Oil Conservation Division (NMOCD) has requested analysis to empirically verify that permitted maximum surface injection pressures do not exceed formation breakdown pressure during AGI operations. The preferred empirical analysis by NMOCD follows methodology presented within Eaton,1969 (*Eaton, B.A., 1969 Fracture gradient prediction and its application in oilfield operations).* For this empirical analysis (Eaton Method), the full suite of geophysical log, including sonic dipole collected during the drilling of Independence AGI #1, has been utilized to calculate breakdown pressures within analogous (and proximal) reservoir of the Siluro-Devonian.

Critically, the sonic dipole log recorded while drilling Independence AGI #1 allows the calculation of Poisson's ratio, a critical parameter of the calculation of fracture gradient within Eaton's methodology. Poisson's ratio (*v)* is calculated as follows:

$$v = \frac{\left[\left(\frac{Vp}{Vs}\right)^2 - 2\right]}{\left(2 \cdot \left[\left(\frac{Vp}{Vs}\right)^2 - 1\right]\right)}$$

Where:
V_p = Compressional velocity (1,000,000/DTC)
DTC = Compressional sonic log
V_s = Shear Velocity (1,000,000/DTS)
DTS = Shear sonic log

Assumptions for overburden pressure, pore pressure along with the calculated Poisson's ratio are utilized as parameters within Eaton's method and equation presented below:

$$Fracture\ Gradient\ = (OBG - PPG)\ x\ \left(\frac{v}{(1-v)}\right)\ + PPG$$

Where:

OBG = Overburden Stress Gradient (assumed as 1.05 psi/ft)

PPG = Pore Pressure Gradient (assumed as 0.456 psi/ft based upon offset wells)
V = Poisson's Ratio (calculated from Independence AGI #1 sonic dipole)

Resultant Fracture Gradient calculations of the Siluro-Devonian injection reservoir are presented within Figure 10. Formation average fracture gradients range from a minimum of 0.667 psi/ft to a maximum of 0.693 psi/ft. Based upon the proposed surface MAOP of 4,929 psig, pressures at bottom hole (17,730' TVD) will have an absolute maximum 0.582 psi/ft at bottom hole pressure of 10,314 PSI. Under worst case operating conditions, injection pressures will not exceed breakdown pressure of the injected reservoir.

Currently, estimated fracture gradients and breakdown pressures are based upon geophysical logs of the Independence AGI #1 and are reasonable estimates of breakdown pressures for the Independence AGI #3 targeted reservoirs. However, after drilling the Independence AGI #3, a full suite of geophysical logs, including sonic dipole, will be logged to further confirm the results of preliminary fracture gradient analysis. In addition, following drilling and completion of the AGI #3, step-rate injection tests will evaluate and attempt to confirm that bottomhole pressure at MAOP will not exceed breakdown pressures of 0.667 to 0.693 psi/ft.

4.4 CHEMISTRY OF SILURO-DEVONIAN RESERVOIR FLUIDS

A review of formation waters from the U.S. Geological Survey National Produced Waters Geochemical Database v. 2.3 identified 21 wells with analyses of fluid samples collected from the Siluro-Devonian geologic interval. These samples were collected from wells within approximately 15 miles of the proposed Independence AGI #3 and have been supplemented with samples collected from Independence AGI #1 (Section 20, T25S, R36E). Table 5 below summarizes the measured formation fluid characteristics.

Table 5. Summary of produced water analyses from nearby wells (U.S. Geological Survey National Produced Water Geochemical Database, v.2.3)

API	WELL NAME	CONCENTRATION (parts per million)							
		TDS	HCO3	Ca	Cl	K + Na	Mg	Na	SO4
3002548081	Ind. AGI 1	110000	342	5600	68000	32559	759	31800	664
3002510945	Hill-federal D 1	112959	288	6264	67390	34340	1912	-	2765
3002510947	EC Hill-federal 1	35639	-	1369	22070		592	11608	-
3002511126	JR Holt A3	116415	154	7501	71110	34680	1767	-	1203
3002511196	S. Mattix Unit 3	68431	990	3180	40960	21690	974	-	637
3002511202	S. Mattix Unit 11	67130	853	5075	40430	16950	2348	-	1474
3002511383	Hodges B 3	81712	722	4320	47500	25400	1030	-	2740
3002511556	Blocker-federal 4	57675	595	2850	34030	18370	619	-	1211
3002511747	Ab Coates FED D2	82794	977	2408	47200	28190	851	-	3168
3002511760	Ida Wimberley 5	63817	360	2774	35870	20750	621	-	3442
3002811763	Ida Wimberley 9	61040	900	2680	35600	19560	800	-	1500
3002511765	Carlson-federal A3	66418	690	3002	37650	20390	1339	-	3347
3002511812	Clyde Lanehart 1	99879	687	4753	60410	32610	828	-	591
3002511818	Copper 1	27506	1089	1384	15270	8144	540	-	1079
3002511863	Arnott Ramsay B3	158761	476	17240	100300	35400	5345	-	-
3002511886	Dabbs 1	101036	540	5393	61630	30380	2183	-	910
3002511890	Sam Dabbs 1	85150	675	5368	50260	25130	1395	-	2322
3002511907	Arnott Ramsay F9	58220	367	1546	32790	-	278	20430	2816
3002511950	Farnsworth FED 6	31931	302	7196	20450	1151	2241	-	591
3002512272	LE Elliott FED H1	58687	761	3004	35460	18980	482	-	-
3002512286	JB McGhee 1	62392	552	2696	34380	20060	702	-	4002
3002521601	North Custer Mt 1	>64,000	1610	2136	36230	21830	403	-	1950

These analyses show Total Dissolved Solids (TDS) in the area of the proposed AGI #3 well ranging from 27,506 to 158,761 parts per million (PPM) with an average of 75,981 PPM. The primary constituent in the sampled formation waters is the chloride ion, with an average concentration of 45,227 PPM. The closest well, the Independence AGI #1, located approximately 3,000 feet from the bottom-hole location of the proposed AGI #3 well, shows reservoir fluids with TDS values of 110,000 PPM and chloride ion concentrations of 68,000 PPM.

Based on these data, the Siluro-Devonian reservoir fluids are anticipated to be completely compatible with the acid gas injectate. However, an attempt will be made to sample formation fluids during drilling and completion operations to provide more site-specific fluid properties and verify our assessment of fluid compatibility.

4.5 GROUNDWATER HYDROLOGY IN THE VICINITY OF THE PROPOSED AGI WELL

Based on the New Mexico Water Rights Database from the New Mexico Office of the State Engineer, there are six (6) water wells or points of diversion located within a one-mile radius of the Independence AGI #3. Of these wells, the closest is located approximately 0.34 miles from the proposed Independence AGI #3 bottom-hole location (Figure 11; Table 6). All wells within the one-mile radius are shallow, extracting water from alluvium and the Triassic red beds along a depth interval from 240 to 600 feet below the ground surface. As previously described in Section 3.1, shallow groundwater resources will be fully protected and isolated by multiple strings of telescoping casing, all of which will be fully cemented back to surface. As illustrated in Figure 4, design considerations for the Independence AGI #3 well

includes a five-string casing design, including a surface casing interval that extends to approximately 1,250 feet within the Rustler Formation, effectively isolating shallow groundwater resources.

The area surrounding the proposed injection well is arid and there are no bodies of surface water within a two-mile radius.

Table 6. Water wells or points of diversion within one mile of the proposed Independence AGI #3 (Retrieved from the New Mexico Office of the State Engineer's Files on August 15, 2025)

POD #	Source	Use	Owner	LAT (NAD83)	LONG (NAD83)	Distance (miles)	Depth (feet)	Date Completed
CP 00177 POD 1	Shallow	Commercial	Intrepid Potash New Mexico LLC	32.138000	-103.294833	0.71	-	12/31/1969
CP 00465 POD 1	Shallow	Commercial	NGL South Ranch Inc.	32.121305	-103.297832	0.62	-	12/31/1969
CP 01170 POD 5	Shallow	Commercial	NGL South Ranch Inc.	32.121416	-103.296667	0.57	505	11/4/2014
CP 01923 POD 1	Shallow	Exploration	Ameredev Operating LLC	32.128486	-103.280171	0.64	-	9/20/2022
CP 01948 POD 1	Shallow	Monitoring	Ameredev Operating LLC	32.120930	-103.287483	0.54	-	2/14/2023
CP 01944 POD 1	Shallow	Monitoring	Ameredev Operating LLC	32.1087	-103.2917	0.91	-	2/16/2023

In lieu of recent groundwater sample collection and chemical analysis, Geolex conducted a review of *Geology and Ground-Water Conditions in Southern Lea County, New Mexico* (Nicholson and Clebsch, 1961) to identify published groundwater data representative of nearby water wells in the area of the proposed Independence AGI #3 well. Table 7 summarizes the four wells which were identified in this review and the results of those chemical analyses.

Table 7. Chemical analysis results of samples collected from water wells in the area of the proposed Independence AGI #3 (Nicholson and Clebsch, 1961. *Geology and Ground-Water Conditions in Southern Lea County, New Mexico*)

Historical Owner	Location (T-R-S)	Location (Qtr-Qtr)	Depth (ft)	Ca (ppm)	Mg (ppm)	Na+K (ppm)	HCO_3 (ppm)	SO_4 (ppm)	Cl (ppm)	NO_3 (ppm)
Sun Oil Co.	25-37-15	NE/4 NE/4	-	307	98	271	145	737	610	9
City of Jal	25-37-19	NE/4 NE/4	500	55	49	170	376	280	71	0.4
City of Jal	25-37-19	SE/4 NE/4	450	34	43	175	264	286	54	0.5
City of Jal	25-37-20	NW/4 SW/4	70	-	-	-	150	145	168	7.6

Our analysis confirms that the proposed well poses no risk of contaminating groundwater in the area as (1) the proposed well design includes material considerations to protect shallow groundwater resources and multiple casing strings that provide redundant physical barriers isolating groundwater, and (2) there are no identified conduits that would facilitate migration of injected fluids to freshwater-bearing depth intervals.

4.6 RESERVOIR CHARACTERIZATION TO SUPPORT GEO-MODELING AND INJECTION SIMULATION ASSESSMENT

As it is critical to verify that the proposed Siluro-Devonian injection reservoir can accommodate the requested 45 MMSCFD of TAG, within anticipated surface operating pressure limitations and for a period of no less than 30 years, Geolex has completed detailed reservoir characterization, reservoir modeling, and injection simulation evaluations, which leverage all available, local Siluro-Devonian well logs, including raster logs and LAS data, as well as licensed 3D seismic survey data. Analysis of these data has allowed for the development of a reservoir characterization model, structural mapping, and fault interpretations. Furthermore, through petrophysical analysis calibrated to an internal Geolex proprietary rock database, a detailed characterization of Siluro-Devonian porosity development and the interconnectivity of porous strata has been completed. Subsequent injection simulations clearly demonstrate the proposed Siluro-Devonian injection reservoir is capable of accommodating TAG injection up to 45 MMSCFD.

Geologic analysis of the Independence AGI #3 project area builds upon prior evaluations completed in support of the existing Independence AGI #1 and #2 wells, which included the detailed analysis, interpretation, and reprocessing of approximately 16 square miles of licensed 3D seismic survey data. Refinement of these analyses form the basis in confirming the Siluro-Devonian injection reservoir's capability of accommodating the proposed additional disposal volume (i.e., up to 45 MMSCFD) via the three-well AGI system (including the proposed AGI #3 and existing AGI #1 and #2 wells). Specifically, derivative information yielded from high-resolution seismic trace inversion methods, has allowed a more accurate characterization of porosity development within the Siluro-Devonian injection reservoir. Being sourced from 3D seismic survey data, the results of this analysis provides critical information regarding not only porosity development, but also the vertical and lateral continuity and interconnectivity of porous strata.

From seismic survey analysis, significant porosity development produced from karst dissolution processes is apparent and is highly interconnected across the greater project area. As anticipated, porosity development is most significant in the intervals of the upper Devonian and Fusselman formation strata. Based on mapped acoustic impedance attributes, which are directly related to porosity within the injection reservoir, porosity was determined to range from less than 1% to approximately 15%, with an average porosity of 2.5%. Impedance attributes derived from high-resolution seismic trace inversion were transformed to porosity through direct correlation with log porosity, and the transform function was limited to maximum porosity measurements observed in wireline porosity logs.

Figure 12 includes a map of fault features interpreted through the analysis of Independence AGI #3 project area. Generally, faults within the project area trend northwest to southeast, or less frequently, approximately northeast to southwest. In total, eight (8) faults are interpreted, which have been further subdivided into 31 fault segments, for the purpose of evaluating induced seismicity risk (discussed in Section 4.9). For all interpreted faults, the magnitude of offset (or fault throw) is less than the thickness of the Woodford Shale confining strata, and thus, does not compromise the ability to contain TAG within the proposed Siluro-Devonian injection reservoir.

From our review and analysis of all available geologic data, a reservoir characterization model was developed to be utilized for injection simulation investigations that assess the feasibility of TAG injection up to 45 MMSCFD. The results of these case simulations are discussed further in Section 4.7 and confirm the capability of the Siluro-Devonian injection reservoir in accommodating TAG injection volumes, as proposed and requested by Enterprise.

4.7 ACID GAS INJECTION MODELING AND SIMULATION

To simulate the proposed injection scenario and characterize the resultant TAG injection plume, after 30 years of operation at the maximum daily injection rate of 45 MMSCFD, Geolex collaborated with Sproule to develop a reservoir characterization model and complete injection plume forecasts, informed by and incorporating the geologic and petrophysical analysis and resultant mapped porosity of the proposed injection reservoir. This modeling evaluation was completed utilizing Schlumberger Petrel to construct a geologic simulation grid informed by the results of acoustic impedance mapping, available well log data and derived petrophysical analysis, and rock data from analog wells, whereas Schlumberger's Eclipse platform was then utilized to complete injection simulations representative of the injection scenario proposed for the Independence AGI #3.

The reservoir characterization model is comprised of 314 simulation layers characterizing eight (8) discrete depth intervals identified within the Siluro-Devonian reservoir and overlying Woodford Shale cap rock (Table 8). In total, the model grid is comprised of 3,761,092 cells. The geologic characterization model (or static model) includes nearby subsurface fault features, the existing Independence AGI #1 and Independence AGI #2 wells, and one active SWD well, the West Jal B Deep #1. West Jal B Deep #1 is located approximately 1 mile northeast of the Independence AGI wells and is authorized for produced water disposal within the Siluro-Devonian injection reservoir.

Porosity attributes within the reservoir characterization model are based on mapped acoustic impedance attributes, which directly relate to porosity within carbonate and dolomitic strata of the Siluro-Devonian reservoir. Impedance attributes derived from high-resolution seismic trace inversion were transformed to porosity through direct correlation with geophysical log porosity. While the distribution of model porosity was driven by mapped impedance attributes, the range of porosity values was limited to porosity measurement observed in wireline logs. Utilizing this method, Siluro-Devonian reservoir porosity was determined to range from less than 1% to 15%, with an average porosity of 2.5%. The distribution of porosity, by zone, is shown in Figure 13.

In defining model permeability attributes, multiple data sources were utilized to identify baseline relationships between porosity and permeability, including injection reservoir test data (i.e., step-rate and fall-off testing activities), DST, injection well operating data, and published and internal core-analysis data (e.g., Lucia et al., 1995). From this baseline, injection well history matching methods were utilized to further refine reservoir model permeability characteristics. Specifically, injection simulations were completed to replicate historic injection activities of Independence AGI #1, Independence AGI #2, and West Jal B Deep #1, the results of which were utilized to calibrate model permeability attributes. For all case simulations and forecasts presented in support of this C-108 application, history matching of injection well operating data was completed, and simulation accurately and successfully replicate observed and documented operating conditions of Independence AGI #1 and AGI #2 (from 2021 to present). Permeability distribution, by zone, is shown in Figure 14.

Table 8. Summary of geologic model zone thickness and model porosity and permeability attributes

Zone #	Zone Top (ft. below Devonian)	Thickness (ft)	Avg. Porosity (%)	Avg. Permeability (mD)
1 (Woodford)	-314	314		
2	0	93	3	14.4
3	93	204	3	1.2
4	296	87	3	1.5
5	384	584	2	2.1
6	968	183	1	4.6

7	1151	159	3	14.9
8	1310	131	2	4.9
Zones 2-8	-	-	2.5	5

With the constructed geologic model, injection operations for the existing and proposed Independence AGI wells and the West Jal B Deep SWD #1 were simulated (i.e., dynamic modeling) utilizing the Schlumberger Eclipse platform. Dynamic modeling was utilized to simulate injection of a mixed acid gas stream containing approximately 30% H_2S and 70% CO_2 at a constant rate of 45 MMSCFD. Reservoir pressure conditions initially reflect a normally pressured system, in accordance with measurements taken while drilling Independence AGI #1, and the evolution of reservoir pressure is captured in model forecasts through the incorporation and history matching of Independence AGI #1 and AGI #2 historic operating data.. To ensure a conservative estimate of plume size, the injection simulations do not consider acid gas dissolution into existing formations.

In support of this C-108 application, two dynamic model simulations are presented, which estimate the size and characteristics of the resultant TAG injection plume, following operations of the Independence AGI #3 well, and the existing AGI #1 and AGI #2 wells, at a shared daily injection volume of up to 45 MMSCFD. Case 1 reflects injection well operations in a subsurface environment in which faults are fully transmissive of fluids, while Case 2 considers faults to be non-transmissive of fluids. From these simulation end members, conservative estimates of plume size and migration directions are identified.

The results of Case 1 and Case 2 injection simulations are illustrated in Figures 15 and 16, for transmissive and non-transmissive faults, respectively. Following the 30-year injection period, the resultant TAG plume is anticipated to occupy an area of approximately 10.5 square miles generally extending up to 2.35 miles from the Dark Horse Treating Facility. For all case simulations, results indicate that injection operations, up to 45 MMSCFD, can be maintained for the complete simulation period. Furthermore, injection activities at the proposed daily rates are sustained within anticipated and currently approved surface injection pressure limitations.

4.8 POTENTIAL FOR VERTICAL MIGRATION OF ACID GAS TO OVERLYING PRODUCTIVE ZONES

Results of the injection system simulations predict that some fraction of acid gas injectate will exhibit a dispersion pattern such that gas reaches the intersection point of local fault features in the area, however, no volume of acid gas is predicted to enter the uppermost model zone representing the Woodford Shale upper confining interval. Fault features may be interpreted to represent potential conduits allowing the vertical transmission of acid gas out of the injection reservoir and into overlying productive zones. To address this concern, Geolex incorporated reservoir data from the completion of Independence AGI #1 and reviewed available drilling fluid records in the area of the proposed Independence AGI #3. Additionally, published literature evaluating regional reservoir pressure conditions in the Delaware Basin were utilized.

Illustrated in Figure 17 are wells and associated drilling fluid densities utilized while drilling through overlying producing zones in the area of the Dark Horse Treating Facility. Above the proposed Siluro-Devonian injection reservoir mud weights utilized range from 11.9 to 15.1 pounds per gallon (ppg). For those wells identified that penetrate the proposed injection reservoir, fluid records indicate utilization of less dense fluids (Average of 9.0 ppg). These records support the interpretation that overlying producing zones in this area are over-pressured with respect to the target injection reservoir. Such interpretations were confirmed during drilling operations of AGI #1 and #2 as, even at 11.9 ppg, formation gas from

above the injection interval was routed to the flare suggesting the mud column was slightly underbalanced. In preparation for drilling of the proposed Independence AGI #3 local drilling fluids records and available drilling reports will be evaluated, and Enterprise will consult qualified drilling fluid engineers to develop a successful drilling fluids program. As necessary and based on the analysis of drilling fluid records, managed pressure drilling systems and protocols may be utilized to support drilling activities.

Over-pressured reservoir conditions within the Lower Bone Springs to Woodford formation strata have been recognized in many areas of the eastern Delaware Basin (Luo et al., 1994). Rittenhouse et al. (2016) generated a regional pore-pressure model of the Delaware Basin informed by over 23,700 drilling fluid recordings and more than 4,000 drill-stem and fracture injection tests. As shown in Figure 18, these compiled fluid records and testing operations indicate increased pore-pressure gradients from Lower Bone Springs to Woodford Formation strata expressed in the utilization of heavier drilling fluids. Normal pressure conditions are observed to return underlying the Woodford Shale.

Based on the record of local drilling fluids utilized and extensive records compiled by Rittenhouse et al. (2016), the proposed Siluro-Devonian injection reservoir at this location is anticipated to be under-pressured with respect to overlying strata. Under these conditions, there is no potential for the vertical migration of acid gas out of the target reservoir as the pressure differential between the over- and under-pressured intervals will act as a barrier impeding vertical migration, even along potential conduits.

4.9 INDUCED-SEISMICITY RISK ASSESSMENT

To evaluate the potential for seismic events in response to injected fluids, an induced-seismicity risk assessment was conducted in the area of the proposed Independence AGI #3. This estimate (1) identifies all known Siluro-Devonian fault systems within the Independence AGI well project area, (2) models the impact of six (6) injection wells over a 30-year injection period during proposed AGI operations and includes prior historical SWD injections, and (3) estimates the fault slip probability associated with the six-well injection scenario. The analysis was completed utilizing the Stanford Center for Induced and Triggered Seismicity's (SCITS) Fault Slip Potential (FSP) modeling platform.

Based on the detailed geologic analysis (described previously in Section 4.6), Geolex identified 11 faults, located within approximately three (3) miles of the Independence AGI #3, and generally striking north to south, and northwest to southeast (Figures 12 and 19). Due to the low number of injection wells in close proximity to these features, sufficient distance to known faults, and considering the relatively small injection volume proposed for the Independence AGI well system (equivalent to approximately 5,755 barrels per day, per well), operation of the Independence AGI #3 (and existing AGI #1 and #2 wells), is not anticipated to contribute significantly to the risk for injection-induced fault slip. To verify these structures would not be adversely affected by operation of the AGI wells, as proposed, a model simulation was performed.

To calculate the fault slip probability for this injection scenario, input parameters characterizing the local stress field, reservoir characteristics, subsurface features, and injected fluids are required. Parameters utilized and their sources for this study are included in Table 9 below. Additionally, Table 10 and Figure 19 detail the injection volume characteristics and geographic locations of injection wells included in this assessment.

For this study, limitations of the FSP model require a conservative approach be taken in determining the fault slip probability of the six-well injection scenario. Specifically, the FSP model is only capable of considering a single set of fluid characteristics and this study aims to model a scenario that includes saltwater disposal (SWD) wells and acid gas injection wells. To ensure a conservative fault slip

probability estimate, the proposed AGI well was modeled utilizing the fluid characteristics of produced water. This approach yields a more conservative model prediction as produced water displays greater density, dynamic viscosity, and is significantly less compressible than acid gas. Characteristics of acid gas at anticipated reservoir conditions, as modeled by AQUAlibrium™, are shown in Table 9.

Table 9. Input parameters and source material for FSP simulation

Modeled Parameter	**Input Value**	**Variability (+/-)**	**UOM**	**Source**
Stress				
Vertical Stress Gradient	1.05	0.105	psi ft^{-1}	Nearby well estimate
Max Horizontal Stress Direction	N75E	5	Deg.	Lund Snee & Zoback, 2018
Reference Depth	16,900	0	ft	Nearby well evaluation
Initial Res. Pressure Gradient	0.43	0.043	psi ft^{-1}	Nearby Well Evaluation
A_Φ Parameter	0.6	0.06	-	Lund Snee & Zoback, 2018
Reference Friction Coefficient (μ)	0.6	0.06	-	Standard Value
Hydrologic				
Aquifer Thickness	1,600	100	ft	Nearby well evaluation
Porosity Average	2.5	0.25	%	Nearby well evaluation
Permeability Average	5	0.5	mD	Petrophysical analysis of nearby well data, calibrated to analog core data
Material properties				
Density (Water)	1,040	40	kg m^{-3}	Adjusted to reported salinities
Dynamic Viscosity (Water)	0.0008	0.0001	Pa.s	Standard Value
Fluid Compressibility (water)	3.6×10^{-10}	0	Pa^{-1}	Standard Value
Rock Compressibility	1.08×10^{-9}	0	Pa^{-1}	Standard Value
Acid gas @ 234 °F,7,720 psi				
Density	803.61	-	kg m^{-3}	AQUAlibrium™
Dynamic Viscosity	0.0000816	-	Pa.s	AQUAlibrium™

Daily maximum injection volumes utilized in the FSP model range from 5,767 to 30,000 bpd (Table 10). In submission of this application, Enterprise is requesting approval to operate the proposed Independence AGI #3 well for a period of at least 30 years. This simulation includes a history matching period of ten additional years to ensure the simulation results also consider the historical impact of injection wells that have been operating since 2015. Figure 20 shows the resultant pressure front, single well radial solutions, and the predicted pressure change at the fault segment midpoints; Figure 21 shows the model-predicted fault slip potential for all wells operating at maximum capacity, and the predicted pressure change along each fault segment, model-derived pressure change required to induce slip, and model-predicted actual pressure change are summarized in Table 11 below.

Table 10. Location and operating parameters of injection wells modeled in FSP assessment

#	API	Well Name	LAT	LONG	Volume (bbls/day)	Start (year)	End (year)
1	-	Independence AGI #3	32.128811	-103.295487	5734	2025	2055
2	3002548081	Independence AGI #1	32.120269	-103.289948	5734	2021	2055
3	3002549974	Independence AGI #2	32.111575	-103.289295	5734	2023	2055
4	3002527085	Jal N. Ranch SWD #1	32.139347	-103.203911	10000*	2017	2055
5	3002525046	West Jal B Deep #1	32.132091	-103.280708	30000	2015	2055
6	3002543360	Kimberly SWD #1	32.083537	-103.194274	20000	2019	2055

*NMOCD records include no information regarding the maximum allowable injection volume

Generally, faults considered in this assessment are predicted by the Stanford FSP model to have low potential for injection-induced slip (Table 11, Figure 21). Table 11 summarizes the predicted pressure change along each fault segment and includes the model-derived pressure change necessary to induce slip for each feature. Fault-slip probability values range from 0.00 to 0.11 with the majority of fault segments predicted to have zero probability of slip (Table 11). All wells included in the simulation are assumed to be injecting at their maximum daily capacity in order to yield a more conservative prediction that ensures the operation of Independence AGI #3, with proposed shared daily allowable injection up to 45 MMSCF between three wells, will not pose a significant risk of initiating induced seismicity.

Table 11. Summary of model-simulation results showing the required pressure change to induce fault slip, actual change in pressure as predicted by the FSP model, probability of fault slip at the end of the 30-year injection scenario, and fault-slip probability when the proposed AGI is excluded from simulation.

Fault #	ΔPressure necessary to induce fault slip	Actual ΔPressure at 2055	Fault Slip Potential at 2055	FSP (excluding AGI)
1	1084	428	0.0	0.0
2	1420	460	0.01	0.0
3	1074	486	0.01	0.0
4	1084	607	0.02	0.0
5	1369	661	0.09	0.02
6	1160	667	0.11	0.04
7	1230	560	0.0	0.0
8	1274	496	0.01	0.01
9	1344	467	0.01	0.0
10	1774	399	0.0	0.0
11	2642	324	0.0	0.0
12	1253	278	0.0	0.0
13	1536	244	0.0	0.0
14	1118	214	0.0	0.0
15	1491	231	0.0	0.0
16	1197	255	0.0	0.0
17	1393	281	0.0	0.0
18	1154	309	0.0	0.0
19	3895	432	0.0	0.0
20	1350	405	0.0	0.0
21	6459	379	0.0	0.0
22	5165	402	0.0	0.0
23	1732	498	0.0	0.0
24	3264	443	0.0	0.0
25	6028	784	0.0	0.0
26	2415	829	0.0	0.0
27	4073	751	0.0	0.0

28	1500	512	0.02	0.0
29	1723	472	0.0	0.0
30	4322	404	0.0	0.0
31	6898	329	0.0	0.0

In summary, no structures included in the modeled simulations are predicted to be at an elevated risk for injection-induced slip in response to the injection scenario presented. Features estimated to have a non-zero slip potential are generally smaller-scale features and predicted probabilities are low. Furthermore, subsequent model simulations in which contribution from the proposed AGI is excluded illustrate that operation of the AGI well will have little impact on conditions near the identified faults in the area due to significantly lower proposed injection volumes in comparison to nearby SWD wells, however, any occurrence of seismicity in the area will be detected with the aid of the active seismic monitoring station, which is currently installed on the Dark Horse Treating Facility property.

5.0 OIL AND GAS WELLS IN THE INDEPENDENCE AGI #3 AREA OF REVIEW AND PROJECT AREA

In support of this application, Geolex conducted, on behalf of Enterprise, a detailed review of the area within one mile and two miles of the proposed Independence AGI #3 location. This review is necessary to ensure all oil and gas operators, and all interested parties have been identified, such that they can be provided notice of the NMOCD hearing to consider this matter and be provided complete copies of the C-108 application and request.

For the purposes of evaluating and identifying oil and gas activities, operators, and other interested parties within the project area, the one-mile Area of Review (AOR) is displayed as a one-mile buffer area around the surface- and bottom-hole location of the Independence AGI #3 well, and along the deviated wellbore path of Independence AGI #3.

5.1 OIL AND GAS WELLS IN THE INDEPENDENCE AGI #3 AREA OF REVIEW

Appendix A summarizes in detail all NMOCD recorded wells within a one- and two-mile radius of the proposed deviated Independence AGI #3. These wells are shown in Figure A-1 and include active, plugged, and permitted well locations. Table A-1 summarizes all wells within two miles of the proposed AGI well and wells located within one mile of the proposed AGI well are included in Table 14 below.

In total, there are 32 wells within a one-mile radius of the proposed Independence AGI #3 surface- and bottom-hole locations. Specific information relating to active, new, and plugged wells is summarized in Appendix A and Table 12, and their geographic locations are shown in Figure 22. Of these wells, 24 are active or newly permitted and eight (8) have been plugged or reflect cancelled well locations. Active wells are primarily producing from the Bone Spring and Wolfcamp pools, all of which, overly and are isolated from the proposed injection zone.

Table 12. Wells located within one mile of proposed Independence AGI #3

API	Well Name	Well Type	Well Status	LAT (NAD83)	LONG (NAD83)	Associated Pools	TVD (ft)
30-025-48081	INDEPENDENCE AGI #001	Injection	New	32.12084	-103.29103	Devonian-Fus.	0
30-025-49974	INDEPENDENCE FEE AGI #002	Salt Water Disposal	Active	32.12006	-103.29103	Devonian-Fus.	0
30-025-44108	SHIFT FEE WCB #001C	Oil	Cancelled	32.12417	-103.29691	Wolfcamp	0
30-025-09778	PRE-ONGARD WELL #001	Oil	Plugged	32.12124	-103.29781	-	3,891
30-025-20857	WEST JAL B #001	Salt Water Disposal	Active	32.12848	-103.28498	Delaware	12,275
30-025-21172	WEST JAL UNIT #001	Oil	Plugged	32.1176	-103.28074	Strawn	9,999
30-025-21039	PRE-ONGARD WELL #001	Oil	Plugged	32.1276	-103.30099	-	12,950
30-025-44107	BRANDY FEE WCB #001C	Oil	Cancelled	32.12418	-103.30299	Wolfcamp	0
30-025-52151	DOGWOOD 25 36 20 FEDERAL COM #113H	Oil	New	32.10916	-103.29013	Wolfcamp	0
30-025-52137	DOGWOOD 25 36 20 FEDERAL COM #093H	Oil	New	32.10916	-103.29006	-	0
30-025-52141	DOGWOOD 25 36 20 FEDERAL COM #124H	Oil	New	32.10916	-103.28998	Wolfcamp	0

30-025-52143	DOGWOOD 25 36 20 FEDERAL COM #104H	Oil	New	32.10916	-103.28993	Wolfcamp	0
30-025-49528	DOGWOOD 25 36 20 FEDERAL COM #112H	Oil	New	32.10916	-103.29237	Wolfcamp	0
30-025-53102	DOGWOOD 25 36 20 FEDERAL COM #122H	Oil	New	32.10915	-103.29439	Wolfcamp	0
30-025-53101	DOGWOOD 25 36 20 FEDERAL COM #111H	Oil	New	32.10915	-103.29452	Wolfcamp	0
30-025-38059	DINWIDDIE STATE COM #001	Gas	Plugged	32.12485	-103.27646	Strawn	12,192
30-025-52140	DOGWOOD 25 36 20 FEDERAL COM #115H	Oil	New	32.10916	-103.28436	Wolfcamp	0
30-025-52138	DOGWOOD 25 36 20 FEDERAL COM #095H	Oil	New	32.10916	-103.2843	WC, Bone Spring	0
30-025-25046	WEST JAL B DEEP #001	Salt Water Disposal	Active	32.13209	-103.28071	Strawn-Fus.	18,945
30-025-52145	DOGWOOD 25 36 20 FEDERAL COM #126H	Oil	New	32.10916	-103.28423	Wolfcamp	0
30-025-52016	DOGWOOD 25 36 20 FEDERAL COM #106H	Oil	New	32.10916	-103.28417	Wolfcamp	0
30-025-49626	DOGWOOD 25 36 20 FEDERAL COM #116H	Oil	New	32.10916	-103.28417	Wolfcamp	0
30-025-44109	CONVERT FEE WCB #001C	Oil	Cancelled	32.12935	-103.30543	Wolfcamp	0
30-025-46977	BLACK MARLIN FEDERAL COM #214H	Oil	Active	32.13713	-103.29999	Wolfcamp	11741
30-025-46976	BLACK MARLIN FEDERAL COM #204H	Oil	Active	32.13713	-103.30015	Wolfcamp	11640
30-025-48783	BLACK MARLIN FEDERAL COM #216H	Oil	Active	32.13736	-103.2996	Wolfcamp	12280
30-025-48781	BLACK MARLIN FEDERAL COM #206H	Oil	New	32.13712	-103.30032	Wolfcamp	0
30-025-48782	BLACK MARLIN FEDERAL COM #213H	Oil	Active	32.13713	-103.3004	Wolfcamp	12005
30-025-48780	BLACK MARLIN FEDERAL COM #203H	Oil	Active	32.13713	-103.30048	Wolfcamp	11786
30-025-48779	BLACK MARLIN FEDERAL COM #114H	Oil	New	32.13713	-103.30064	WC, Bone Spring	0
30-025-48778	BLACK MARLIN FEDERAL COM #113H	Oil	New	32.13713	-103.30072	WC, Bone Spring	0
30-025-44110	PINCH FEE WCB #001C	Oil	Cancelled	32.12923	-103.31103	Wolfcamp	0

Within two miles of the Independence AGI #3 well, there are 82 wells (Appendix A, Figure A-1, Table A-1). Of these wells, there are 21 active wells, 41 permitted locations, and 13 wells that have been plugged and abandoned. Additionally, there are seven (7) locations designated as cancelled wells. Within this AOR, active wells include one SWD completed to inject into the Siluro-Devonian (i.e., West Jal B Deep SWD #1) and 18 oil wells targeting the Bone Spring and Wolfcamp formations.

There are four wells within two miles of the proposed AGI location (both surface and bottom-hole) that penetrate the Siluro-Devonian injection interval (Table 13), two of which are the Independence AGI #1 and Independence AGI #2 wells. Of the remaining wells, one is an active SWD (West Jal B Deep #1) located approximately 0.93 miles from the proposed Independence AGI #3 SHL. This well was drilled to a total depth of 18,945 feet and is permitted to inject through perforated intervals of Strawn through Fusselman strata. Despite being granted approval for injection into the Fusselman (approved June 2014), NMOCD records document no reports of work to drill out plugged intervals at 14,200 feet. One Form C-103 (submitted November 2018) indicates the intent of BC&D Operating to drill out these intervals, but

no subsequent reports confirming completion of this work have been identified. Additionally, reported injection volumes for this well do not appear to exhibit any significant increase that might indicate this work was completed.

Table 13. Wells located within two miles of the Independence AGI #3 well that penetrate the proposed injection interval

API	Well Name	Pool	Status	LAT (NAD83)	LONG (NAD83)	TVD
3002521172	West Jal Unit #1	Del., Strawn	Plugged	32.117596	-103.280739	17086
3002525046	West Jal B Deep #1	Strawn-Fus.	Active	32.132091	-103.280708	18945
3002548081	Independence AGI #1	Devonian-Fus.	Active	32.120269	-103.289948	17709
3002549974	Independence AGI #2	Devonian-Fus.	Active	32.111575	-103.289295	17683

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

In developing this C-108 application, a detailed review of Lea County land records was completed to obtain a listing of all operators, oil and gas mineral leases, and surface owners within a one-mile radius of the proposed AGI well. Appendix B includes the results from that review.

Table B-1 summarizes the surface owners, operators, and lessees in the one-mile area of review. The table is inclusive of all persons that will be provided notice and a complete copy of the C-108 application. Figure B-1 shows the location of the surface owners and active operators, and Figure B-2 shows leaseholders and mineral ownership within one mile of the proposed Independence AGI #3 location.

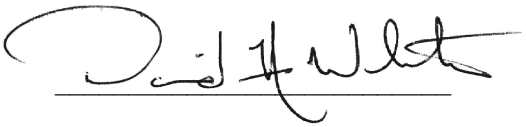
Upon issuance of an NMOCD hearing date to consider the matter of Enterprise's application, all interested parties identified will be provided with written notice of the associated NMOCD hearing and will be provided complete copies of the Form C-108 application. Appendix B includes an example notification letter that will be provided to interested parties, as well as an example public notice that may be utilized by Division staff or published in local newspapers, as necessary.

7.0 AFFIRMATIVE STATEMENT OF LACK OF HYDRAULIC CONNECTION BETWEEN THE 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 Independence AGI #3 well has been performed. The investigation included the analysis of available geologic data and hydrogeologic data from wells and literature identified in Section 3.0, 4.0, and 5.0 above, including related appendices. Based on this investigation and the 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 and any known sources of drinking water or oil/gas production in the vicinity, as described above in Section 4.0 and 5.0 of this application.

I have reviewed this information and affirm that it is correct to the best of my knowledge.

David A. White, P.G.
Vice President – Geolex, Inc.®
Consultant to Enterprise Delaware Basin Treating LLC



Date: 9/12/2025

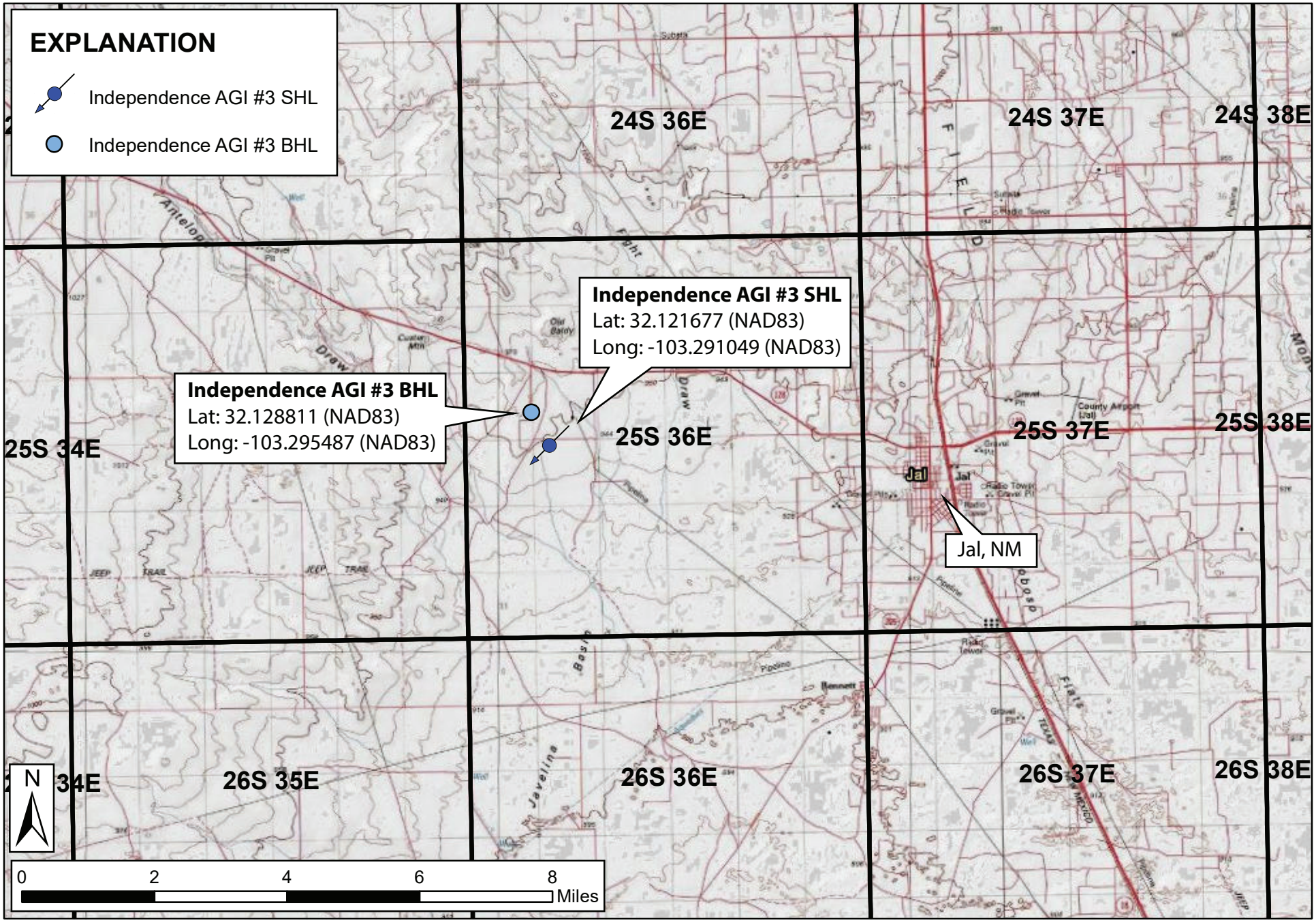


Figure 1. General location map for the proposed Independence AGI #3 well, approximately six (6) miles west of Jal, NM.

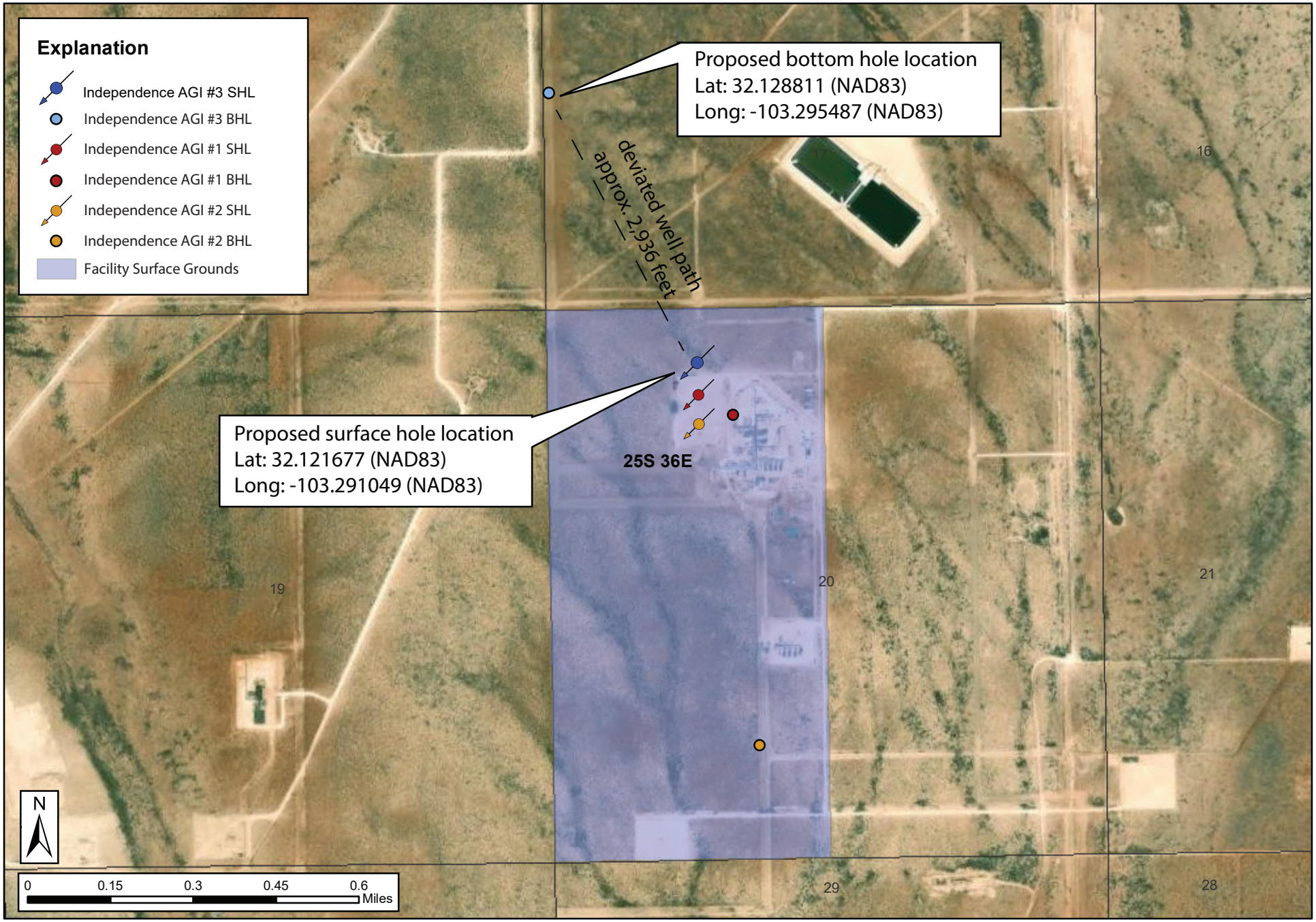


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Figure 2. Aerial photographic location map of the Dark Horse Treating Facility, surface and bottom-hole locations of the Independence AGI #1 & #2 wells, and the proposed surface and bottom-hole location for the Indepenence AGI #3 well.

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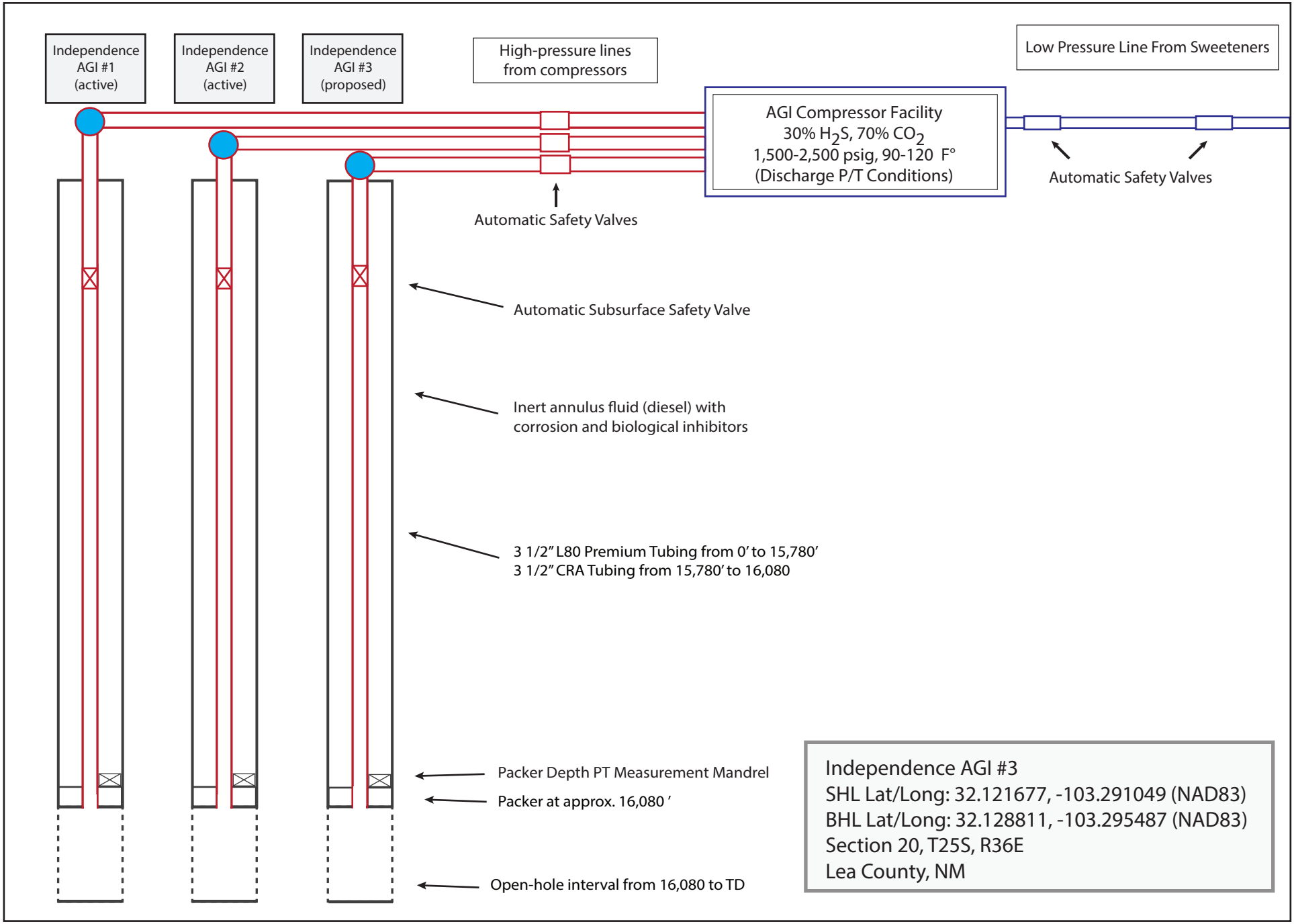

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Figure 3. Schematic of surface facilities, proposed Independence AGI #3 and existing Independence AGI # 1 & #2 wells.

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INDEPENDENCE AGI #3

Proposed Wellbore Schematic

Lat/Long NAD83: 32.121677, -103.291049

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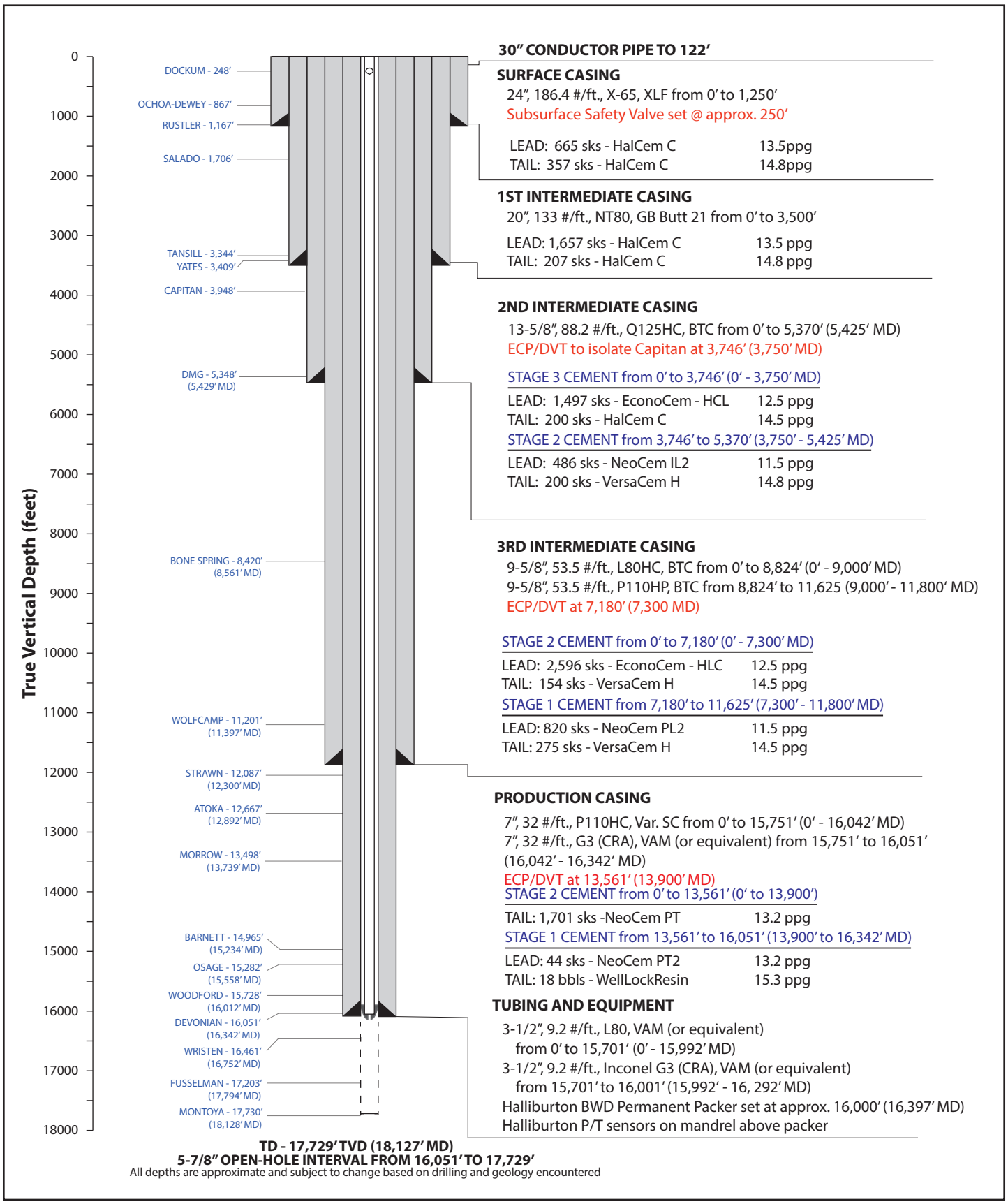

Figure 4. Proposed Independence AGI #3 well schematic.

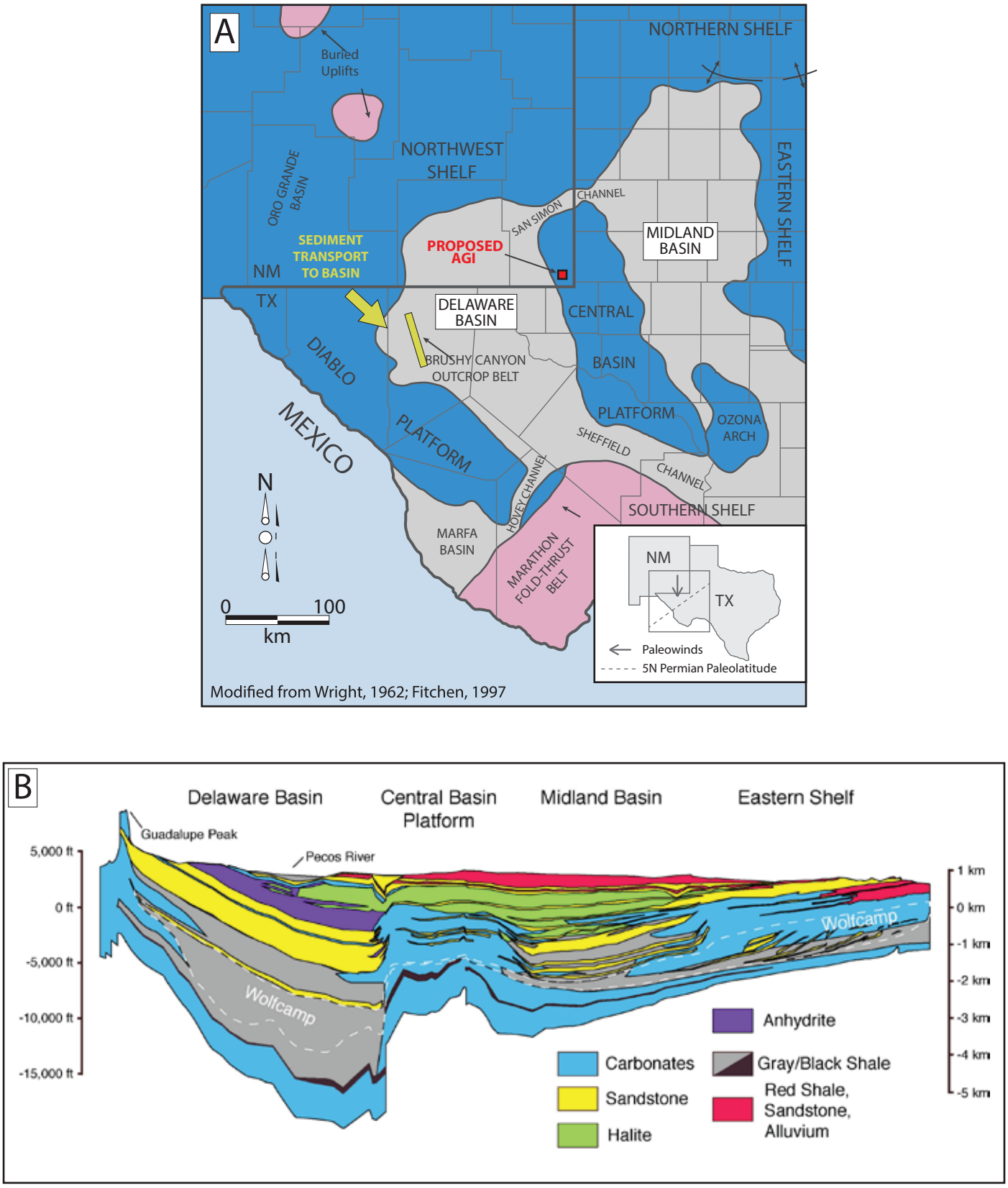

Figure 5. Structural setting (panel A) and general lithology (panel B) of the Permian Basin

Generalized stratigraphic correlation chart for the Permian Basin region

SYSTEM	SERIES/ STAGE	NORTHWEST SHELF	CENTRAL BASIN PLATFORM	MIDLAND BASIN & EASTERN SHELF	DELAWARE BASIN	VAL VERDE BASIN
PERMIAN	OCHOAN	DEWEY LAKE RUSTLER SALADO	DEWEY LAKE RUSTLER SALADO	DEWEY LAKE RUSTLER SALADO	DEWEY LAKE RUSTLER SALADO CASTILE	RUSTLER SALADO
	GUADALUPIAN	TANSILL YATES SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES GLORIETA	TANSILL YATES SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES GLORIETA	TANSILL YATES SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES SAN ANGELO	★DELAWARE MT. GROUP BELL CANYON CHERRY CANYON BRUSHY CANYON	TANSILL YATES SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES
	LEONARDIAN	CLEARFORK YESO WICHITA ABO	CLEARFORK WICHITA	LEONARD SPRABERRY, DEAN	★BONE SPRING	LEONARD
	WOLFCAMPIAN	WOLFCAMP	WOLFCAMP	WOLFCAMP	★WOLFCAMP	WOLFCAMP
PENNSYLVANIAN	VIRGILIAN	CISCO	CISCO	CISCO	CISCO	CISCO
	MISSOURIAN	CANYON	CANYON	CANYON	CANYON	CANYON
	DESMOINESIAN	STRAWN	STRAWN	STRAWN	★STRAWN	STRAWN
	ATOKAN	ATOKA	ATOKA	ATOKA	ATOKA	(ABSENT)
	MORROWAN	MORROW BEND	(ABSENT) BEND	(ABSENT ?) BEND	MORROW BEND	(ABSENT)
MISSISSIPPIAN	CHESTERIAN MERAMECIAN OSAGEAN KINDERHOOKIAN	CHESTER MERAMEC OSAGE KINDERHOOK WOODFORD	CHESTER MERAMEC OSAGE "BARNETT" KINDERHOOK WOODFORD	CHESTER MERAMEC OSAGE "BARNETT" KINDERHOOK WOODFORD	CHESTER MERAMEC OSAGE "BARNETT" KINDERHOOK WOODFORD	MERAMEC OSAGE "BARNETT" KINDERHOOK WOODFORD
DEVONIAN		DEVONIAN	DEVONIAN	DEVONIAN	DEVONIAN	DEVONIAN
SILURIAN		SILURIAN (UNDIFFERENTIATED)	SILURIAN SHALE FUSSELMAN	SILURIAN SHALE FUSSELMAN	MIDDLE SILURIAN FUSSELMAN	MIDDLE SILURIAN FUSSELMAN
ORDOVICIAN	UPPER	MONTOYA	MONTOYA	SYLVAN MONTOYA	SYLVAN MONTOYA	SYLVAN MONTOYA
	MIDDLE	SIMPSON	SIMPSON	SIMPSON	SIMPSON	SIMPSON
	LOWER	ELLENBURGER	ELLENBURGER	ELLENBURGER	ELLENBURGER	ELLENBURGER
CAMBRIAN	UPPER	CAMBRIAN	CAMBRIAN	CAMBRIAN	CAMBRIAN	CAMBRIAN
PRECAMBRIAN						

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Figure 6. General stratigraphy and producing zones (red stars) in the immediate area of the proposed AGI well. Source: Yang and Dorobek (1995).

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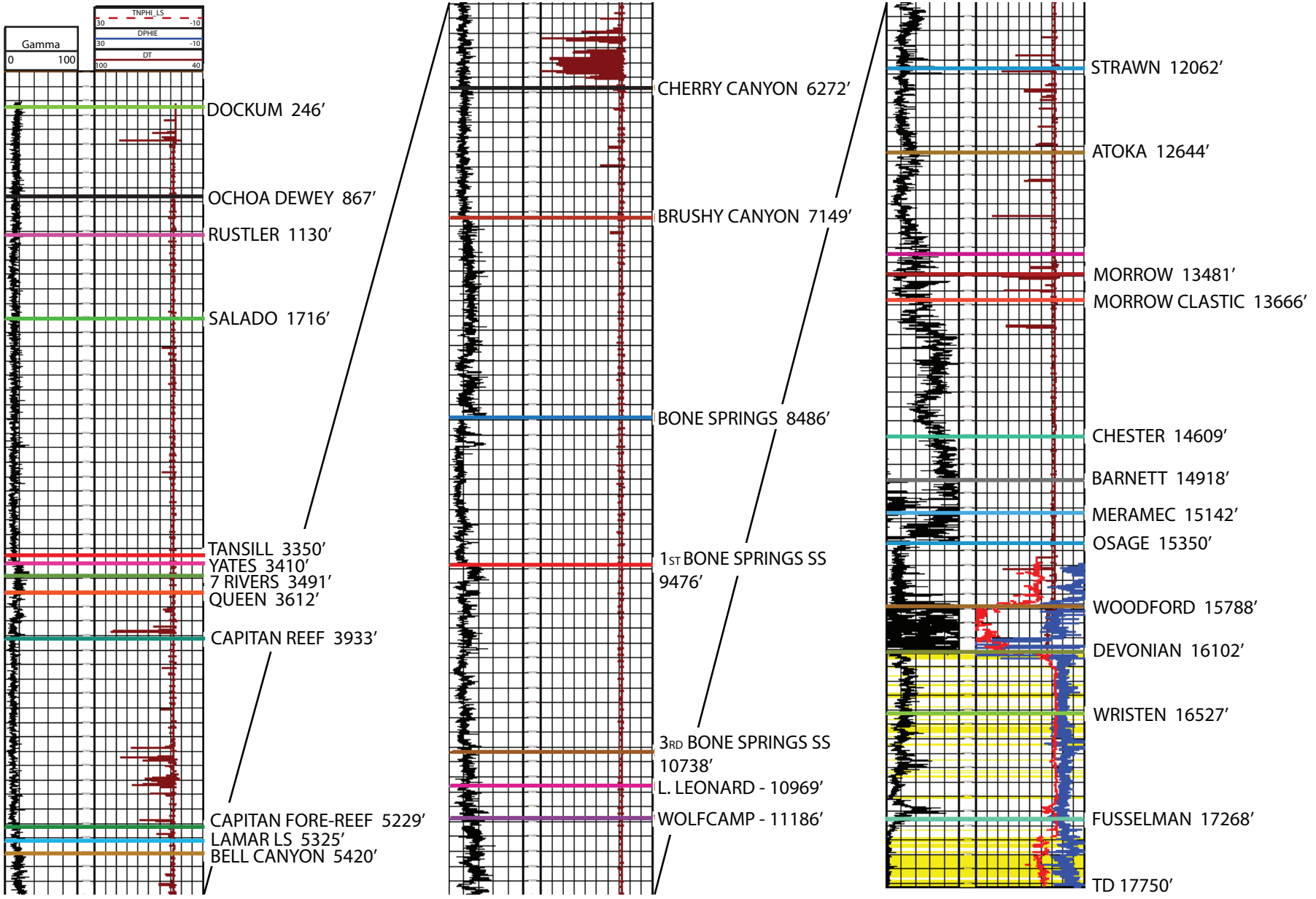

Figure 7. Type log of nearby well, Independence AGI #1 (API #30-025-48081), illustrating identified formation tops in TVD. Estimated formation tops for the proposed Independence AGI #3 are included in Table 6.

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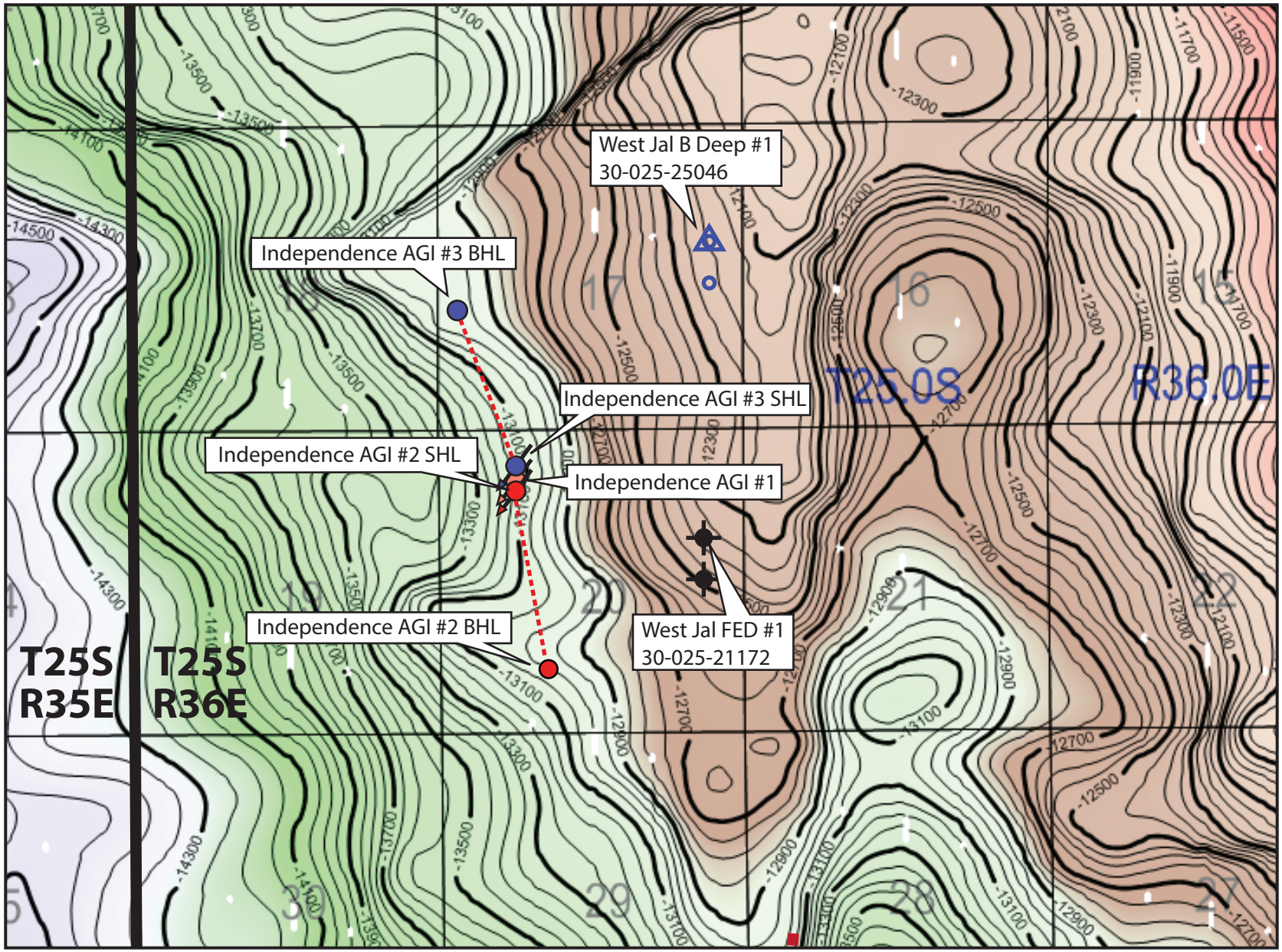

Figure 8. Structure contour map showing depths to the top of the Siluro-Devonian target reservoir

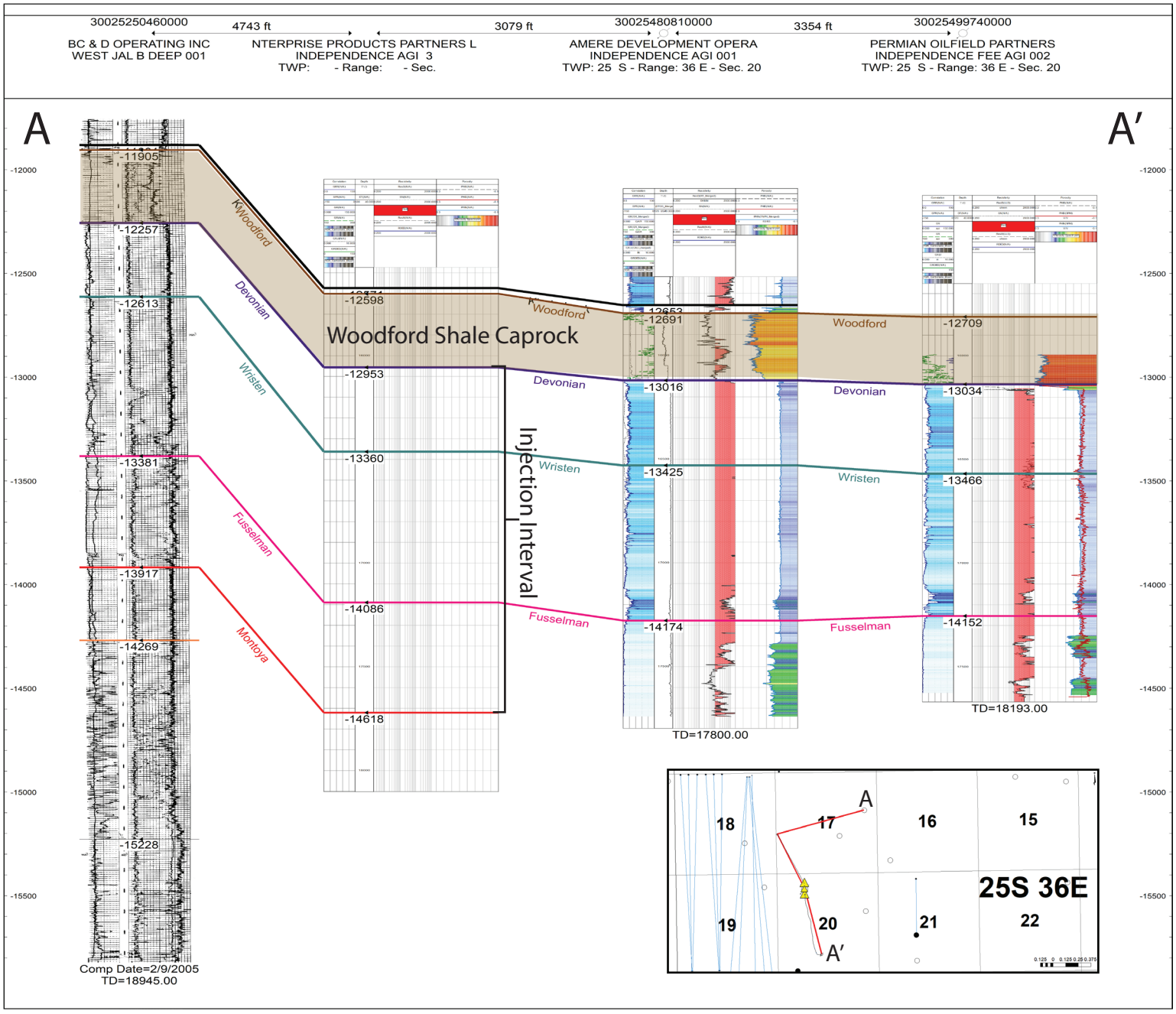

Figure 9. Structural cross section A-A′ illustrating the proposed Independence AGI#3 injection storage complex (ie., confining strata, reservoir interval, and overlying geologic strata). The confining strata is the Woodford Shale and Montoya formations. The injection reservoir is Thirty-one (Devonian), Wristen Fusselman formations.

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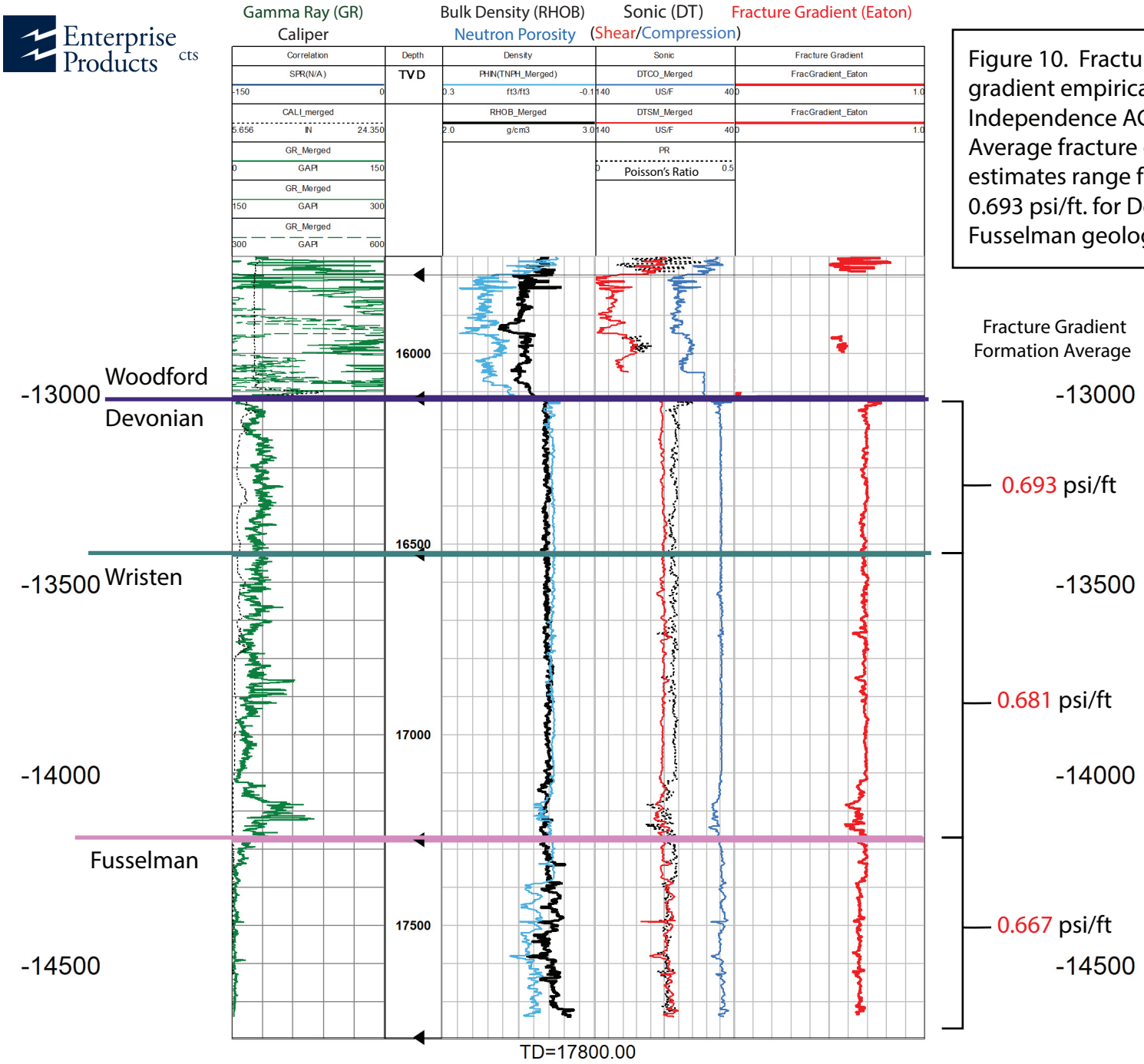


Figure 10. Fracture pressure gradient empirically derived for Independence AGI #1 (red trace). Average fracture gradient estimates range from 0.667 to 0.693 psi/ft. for Devonian through Fusselman geologic strata.

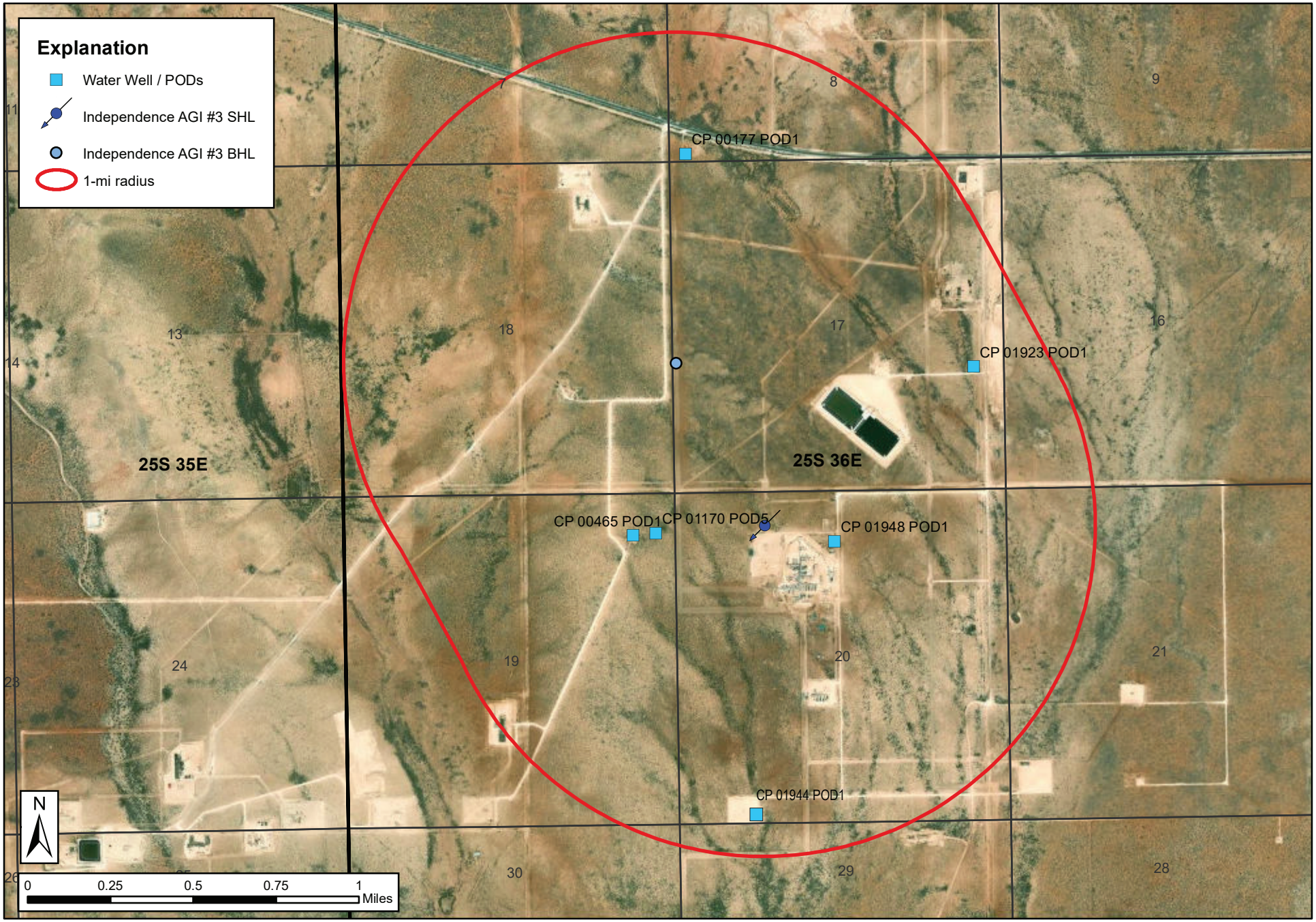


Figure 11. Water wells and points of diversion within one mile of the proposed Independence AGI #3

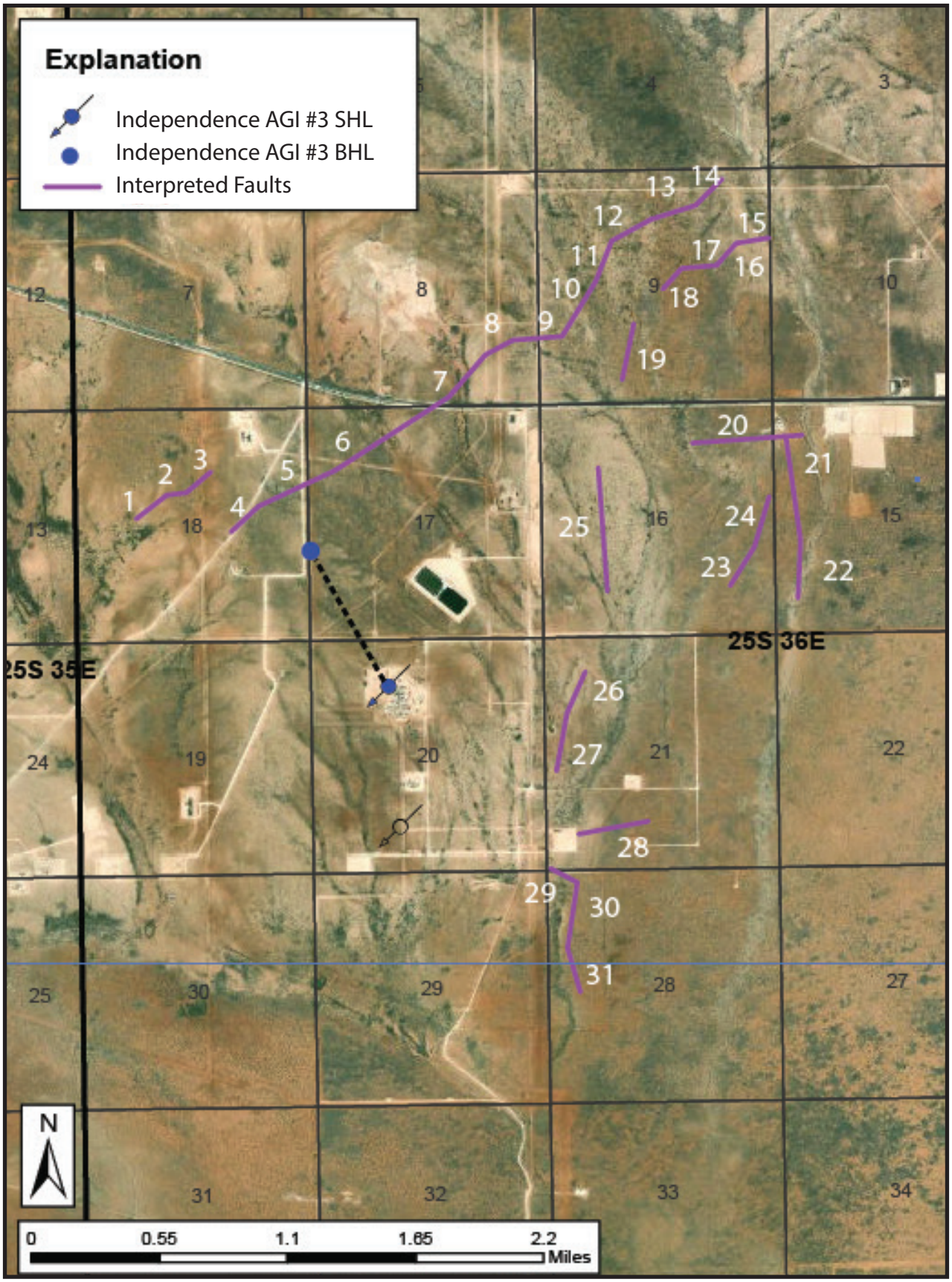


Figure 12. Subsurface fault features interpreted in the area of the proposed Independence AGI #3.

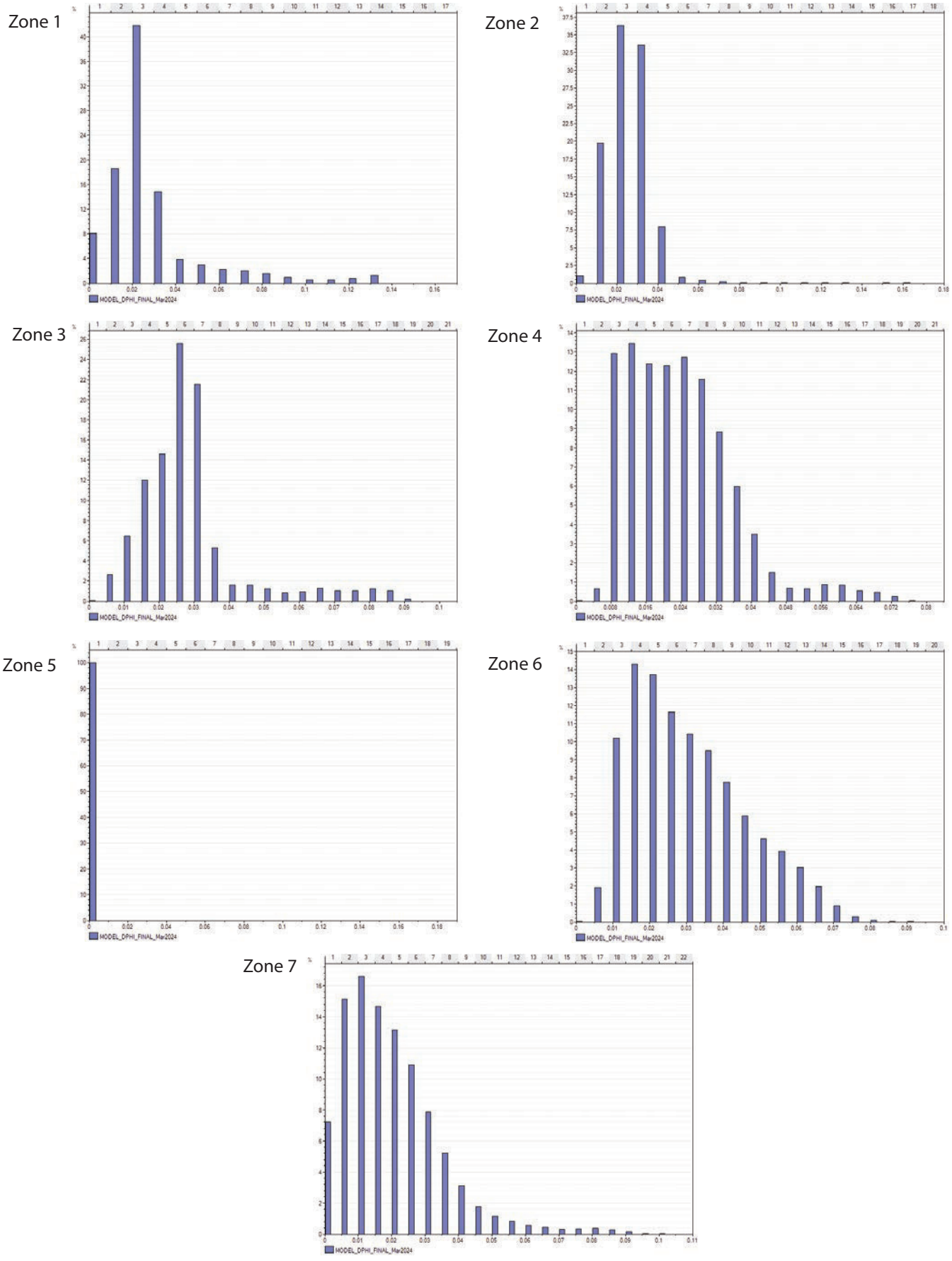


Figure 13. Porosity distribution within each of the Petrel geomodel reservoir zones.

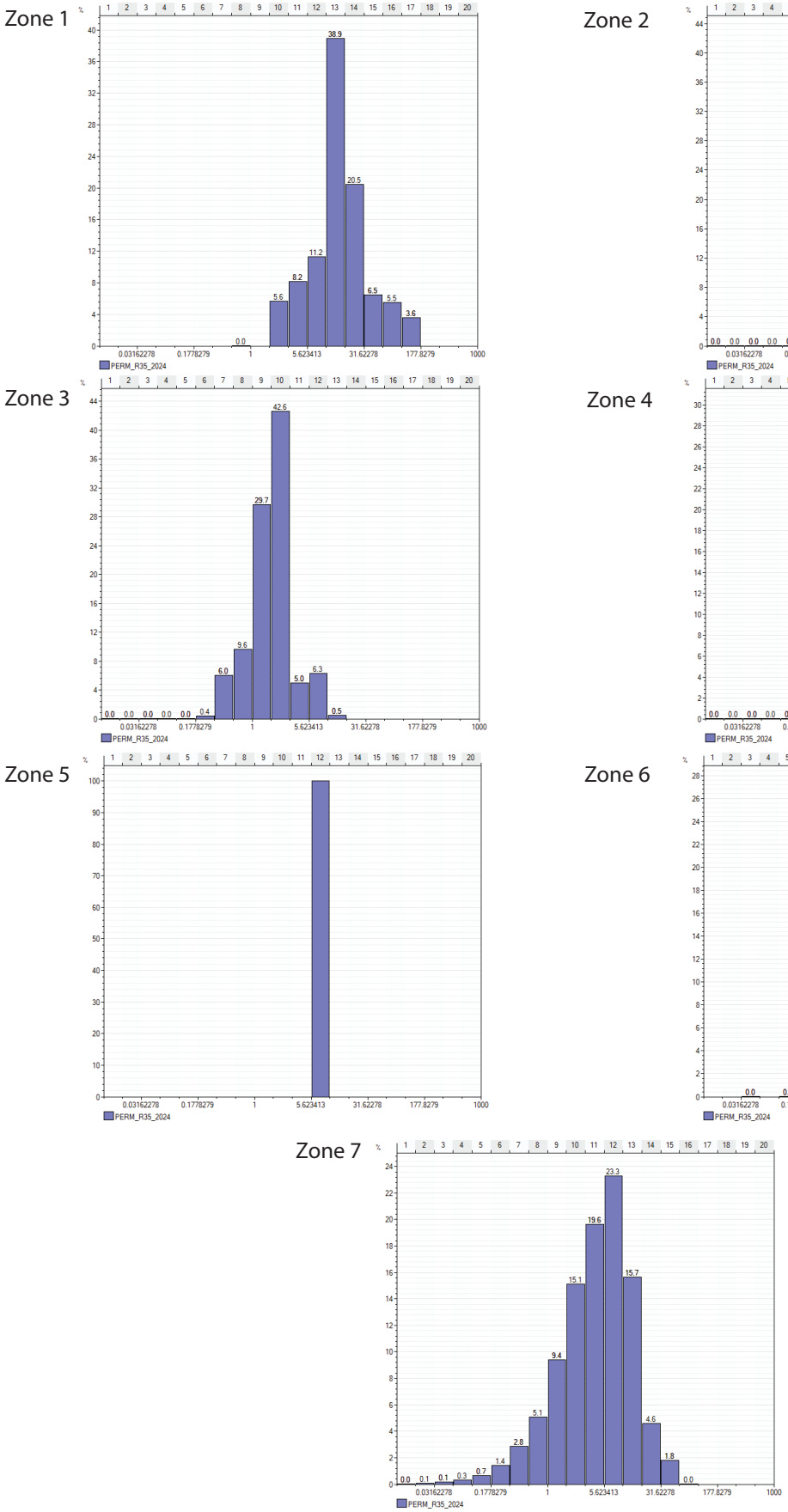


Figure 14. Permeability distribution within each of the seven (7) Petrel reservoir layers.

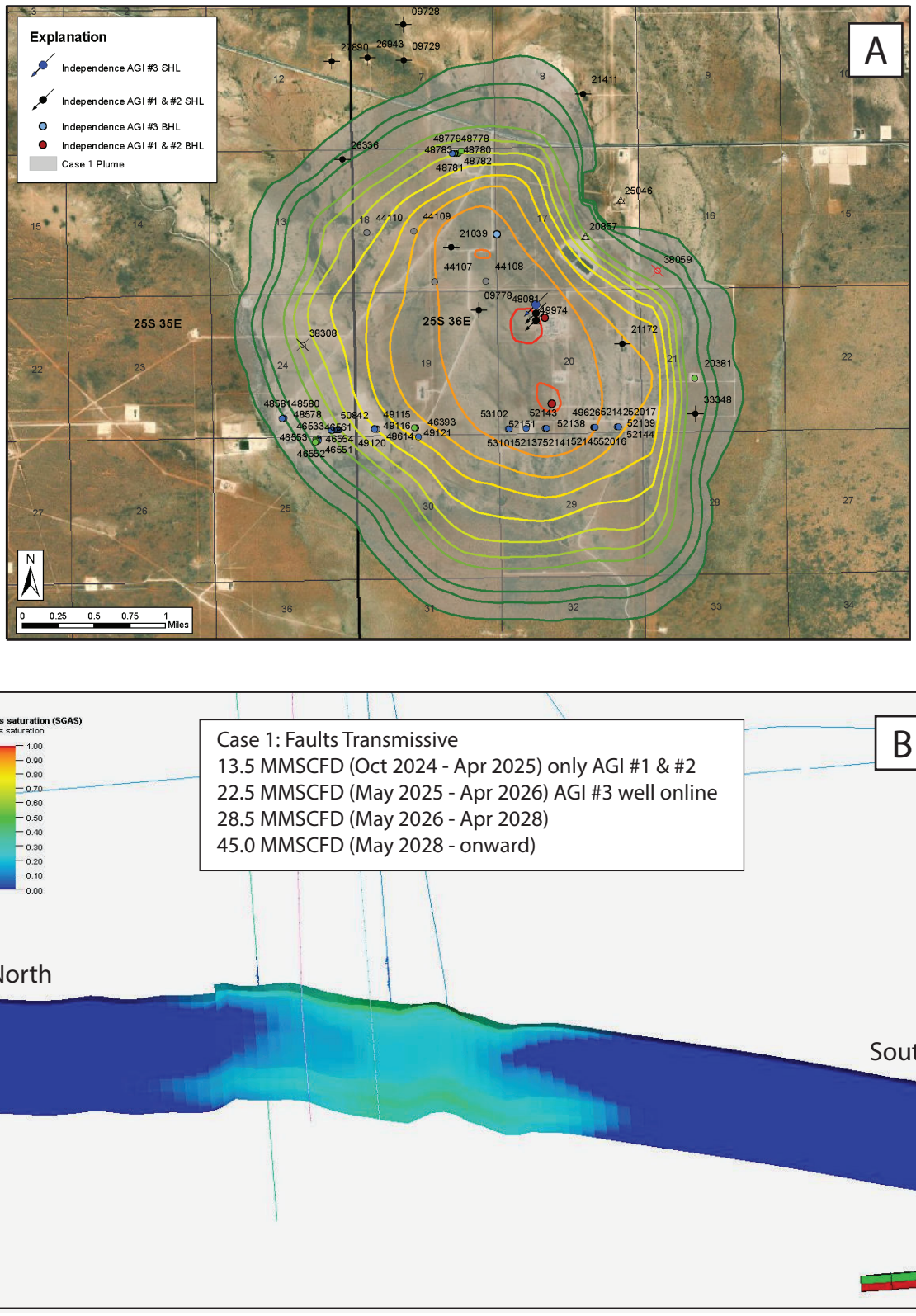
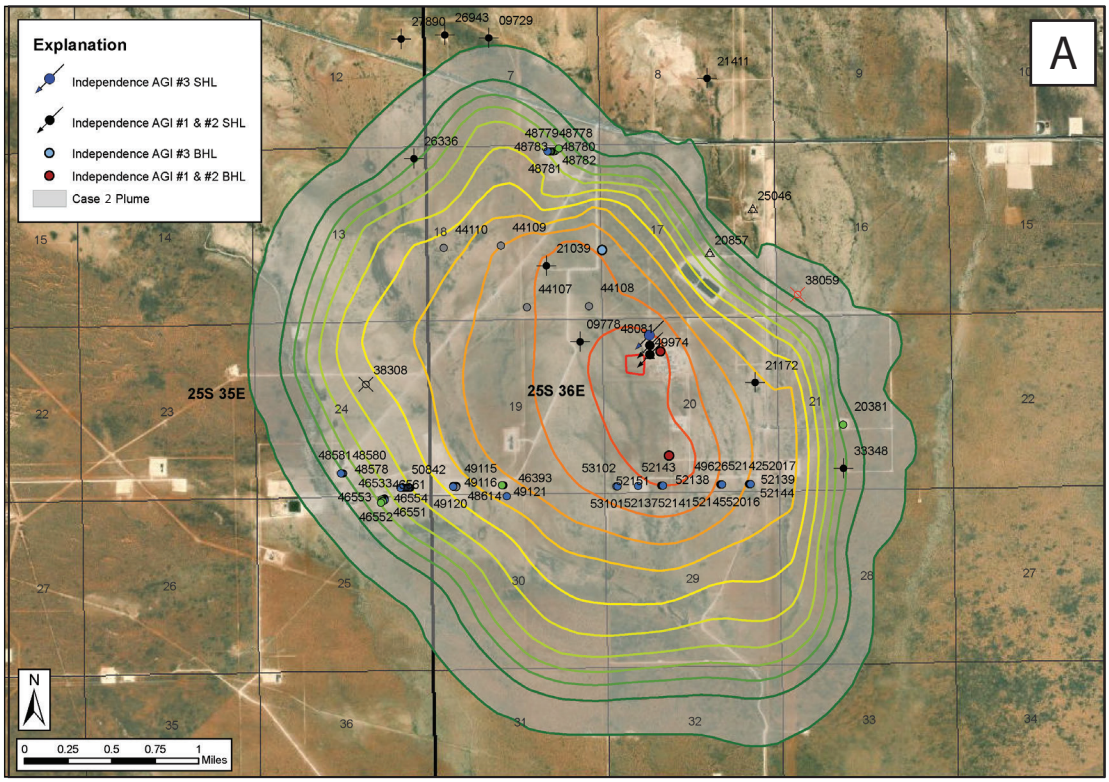


Figure 15. Summary of Eclipse simulation results for Case 1 (faults transmissive of fluids), showing gas saturation contours after 30 years of injection (panel A). Panel B shows the cross-sectional view of the resultant injection plume in the immediate vicinity of the Independence AGI wells.



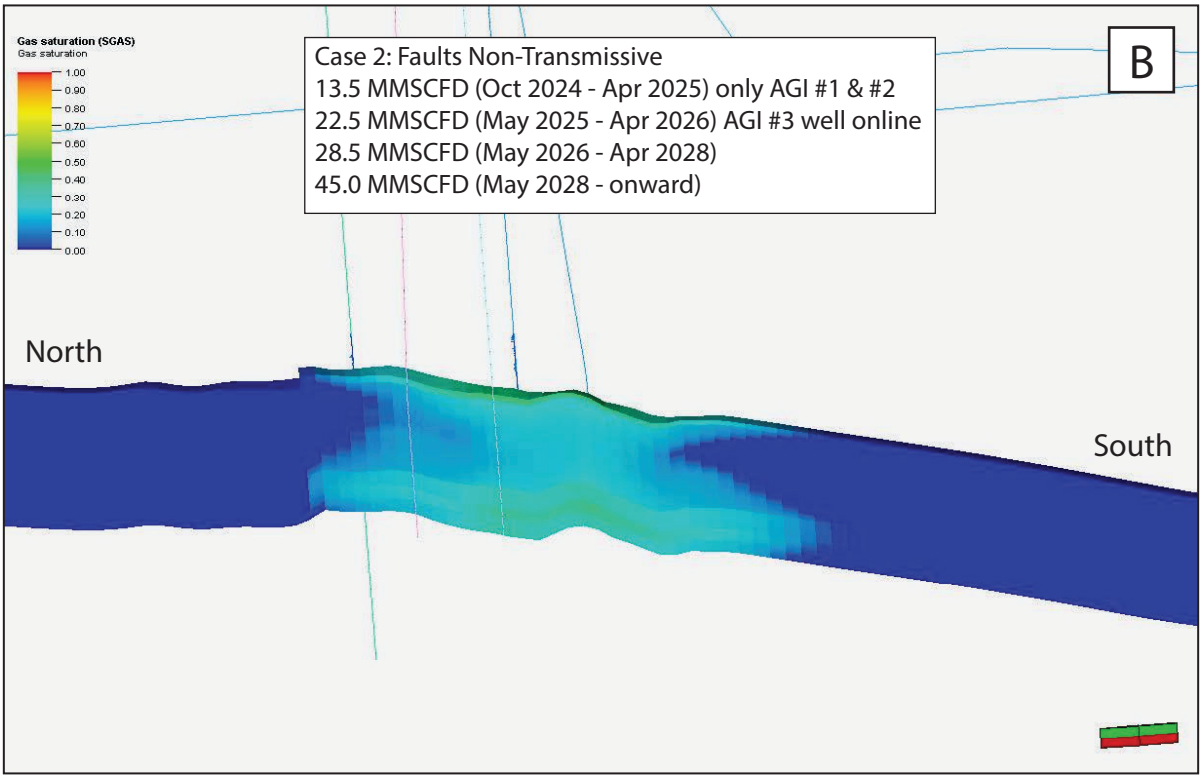


Figure 16. Summary of Eclipse simulation results for Case 2 (faults non-transmissive of fluids), showing gas saturation contours after 30 years of injection (panel A). Panel B shows the cross-sectional view of the resultant injection plume in the immediate vicinity of the Independence AGI wells.

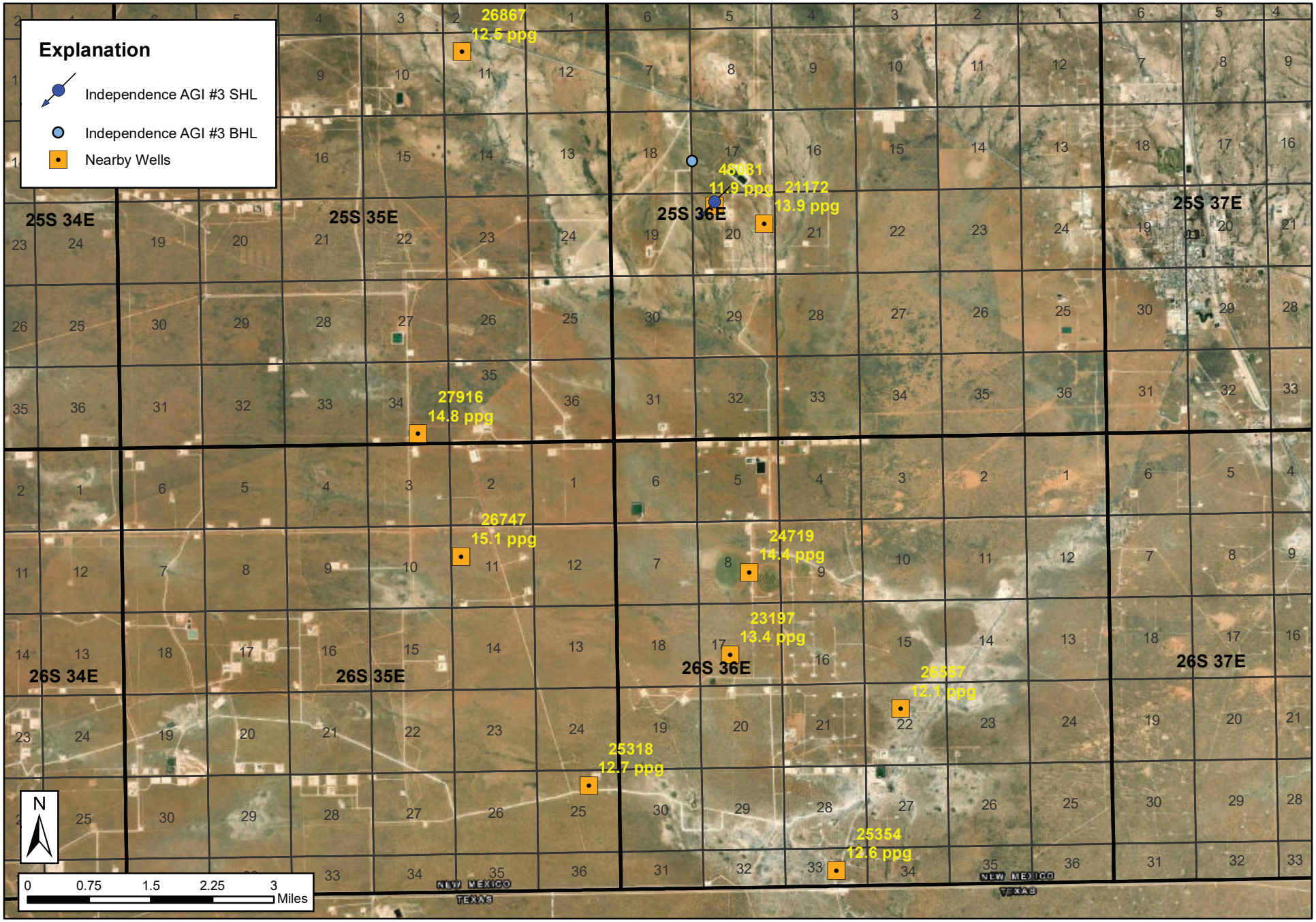


Figure 17. Location map summarizing drilling fluid weights utilized while drilling through overlying productive intervals and strata directly above the proposed injection zone. Labels denote the last five digits of the API # (30-025-XXXXX).

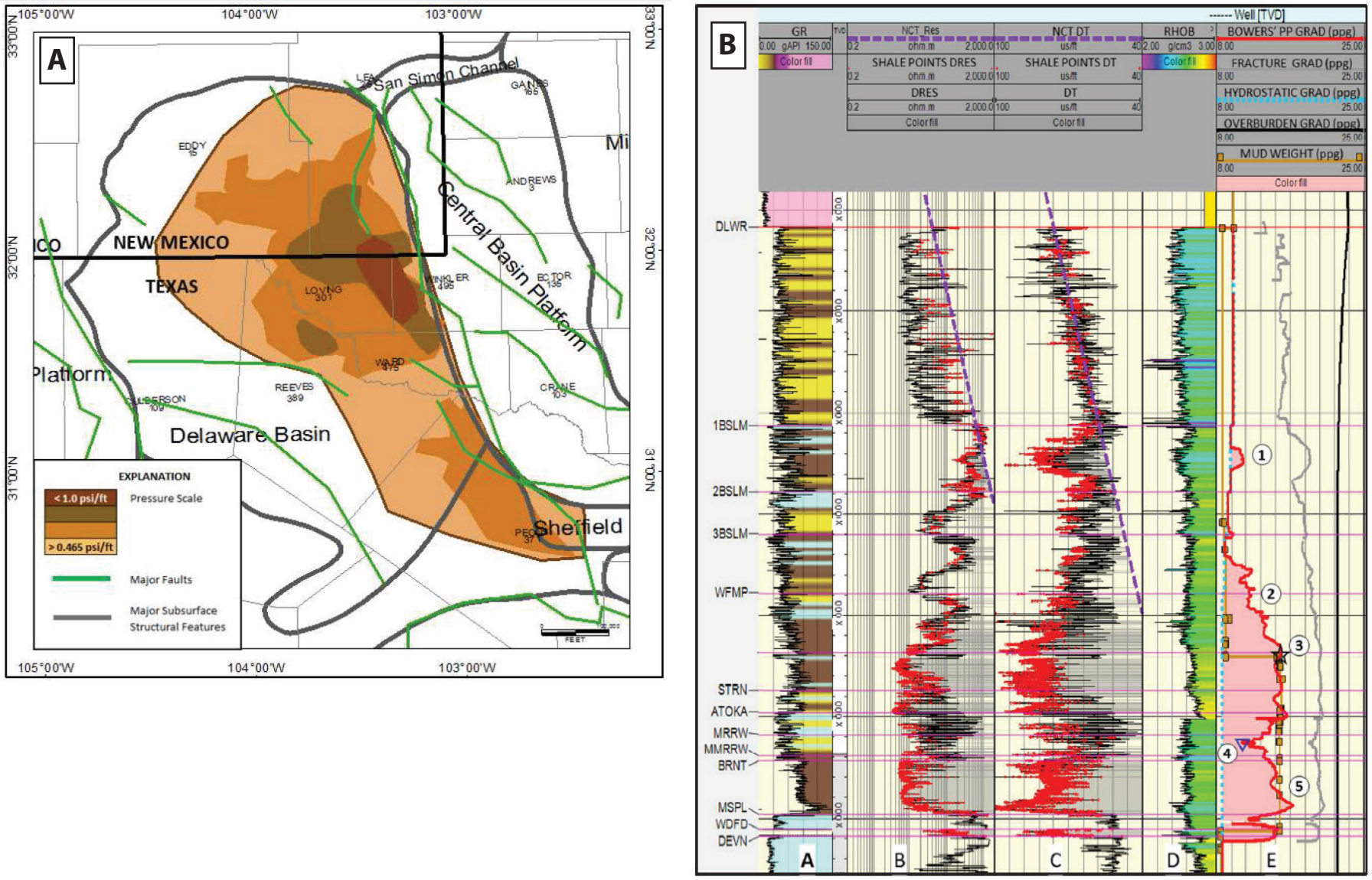


Figure 18. Mapped extent of present day overpressure in the Delaware Basin (Panel A) and example log response (Panel B) illustrating stratigraphic onset of over-pressured intervals and associated drilling fluid densities (modified from Rittenhouse et al., 2016)

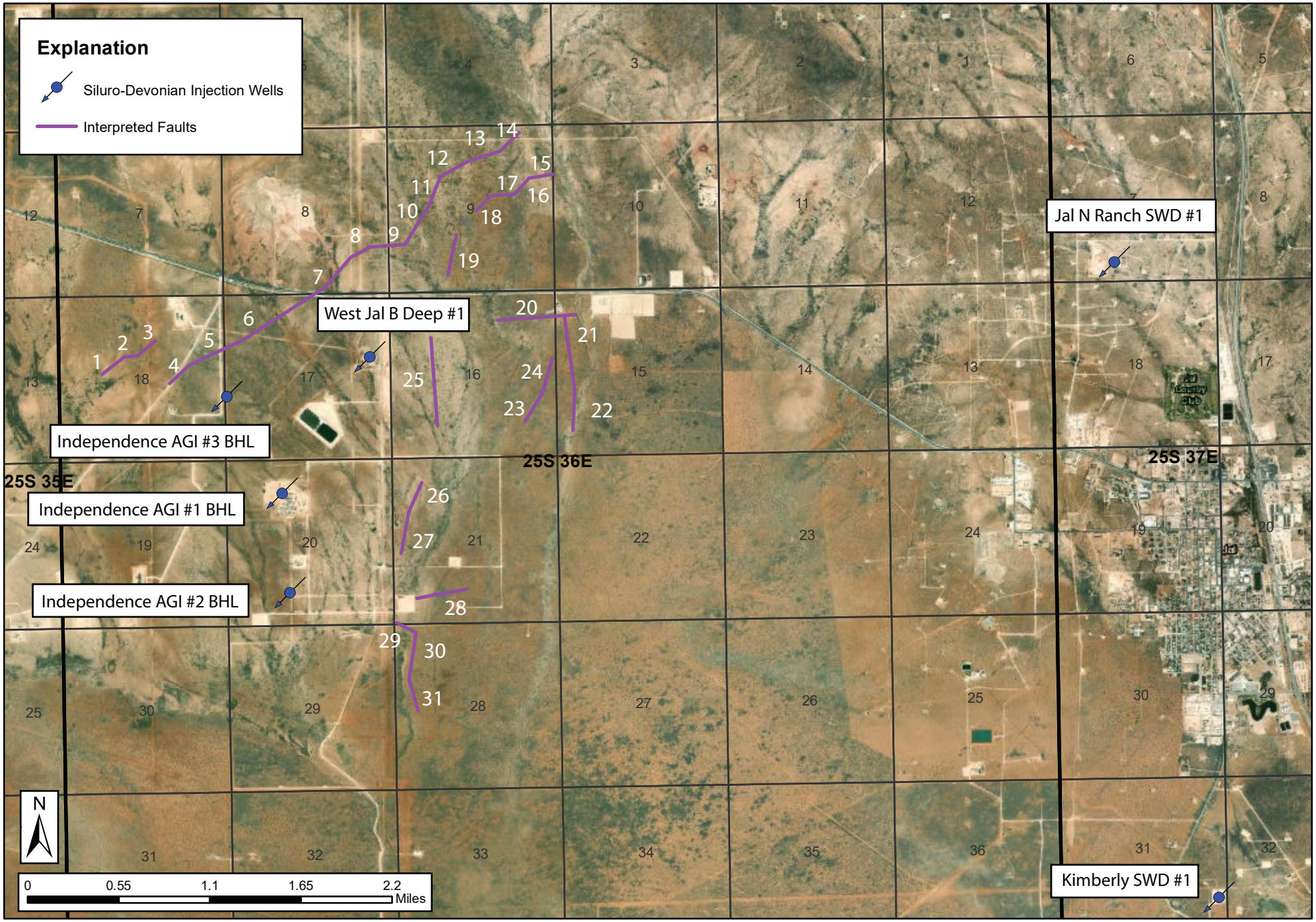


Figure 19. Subsurface fault features interpreted from 3D seismic survey data in the area of the Independence AGI wells and Siluro-Devonian injection wells used in the FSP assessment.

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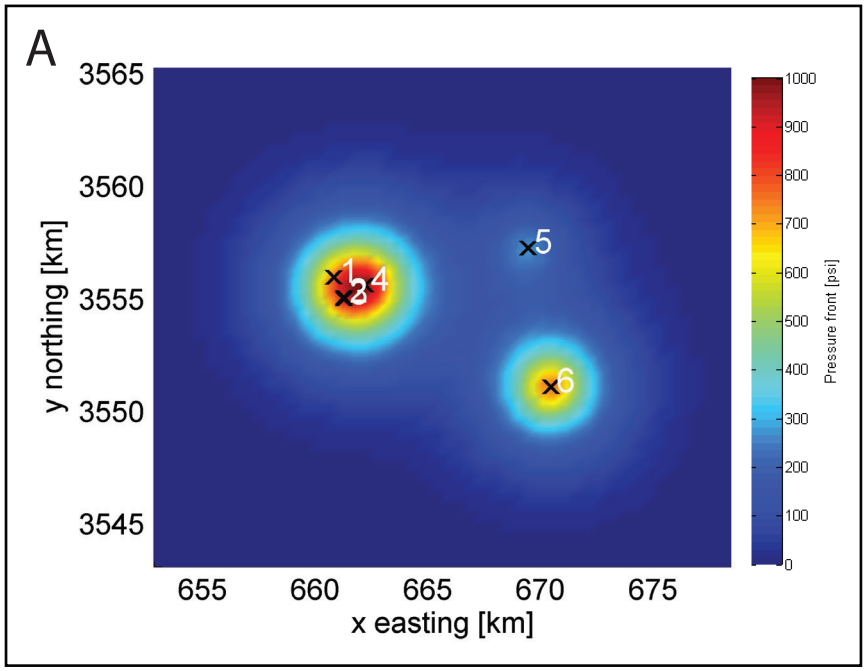
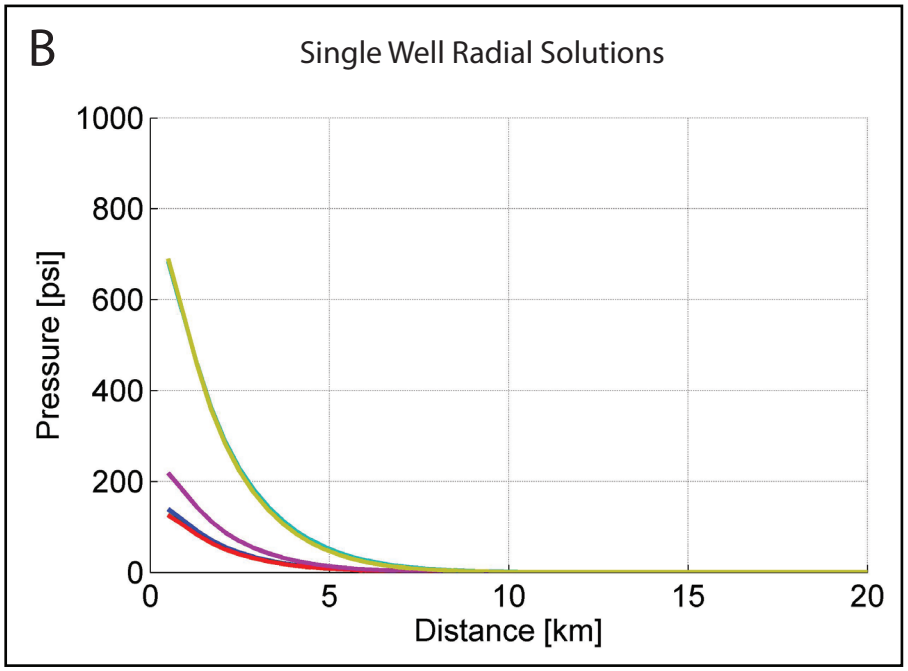




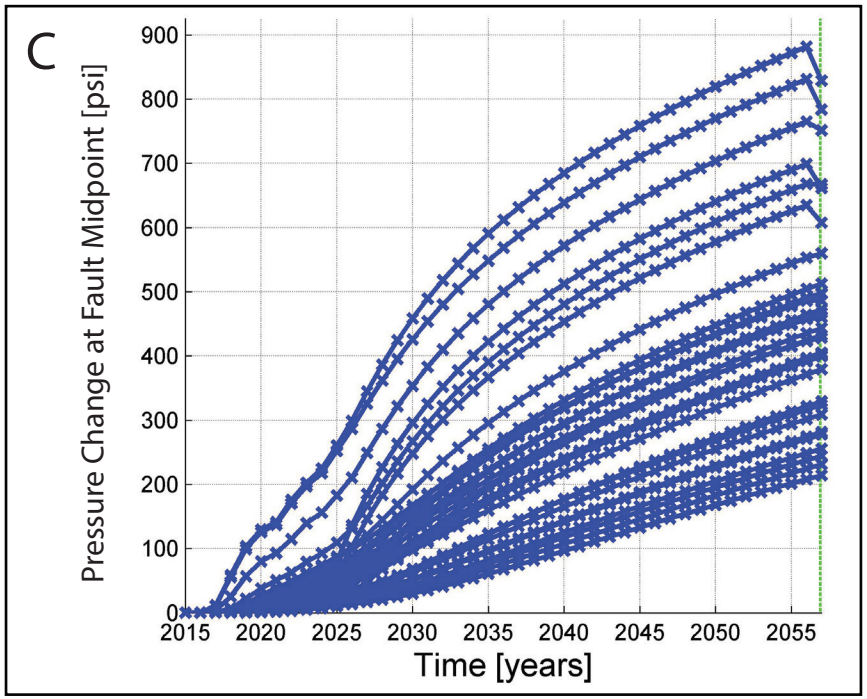
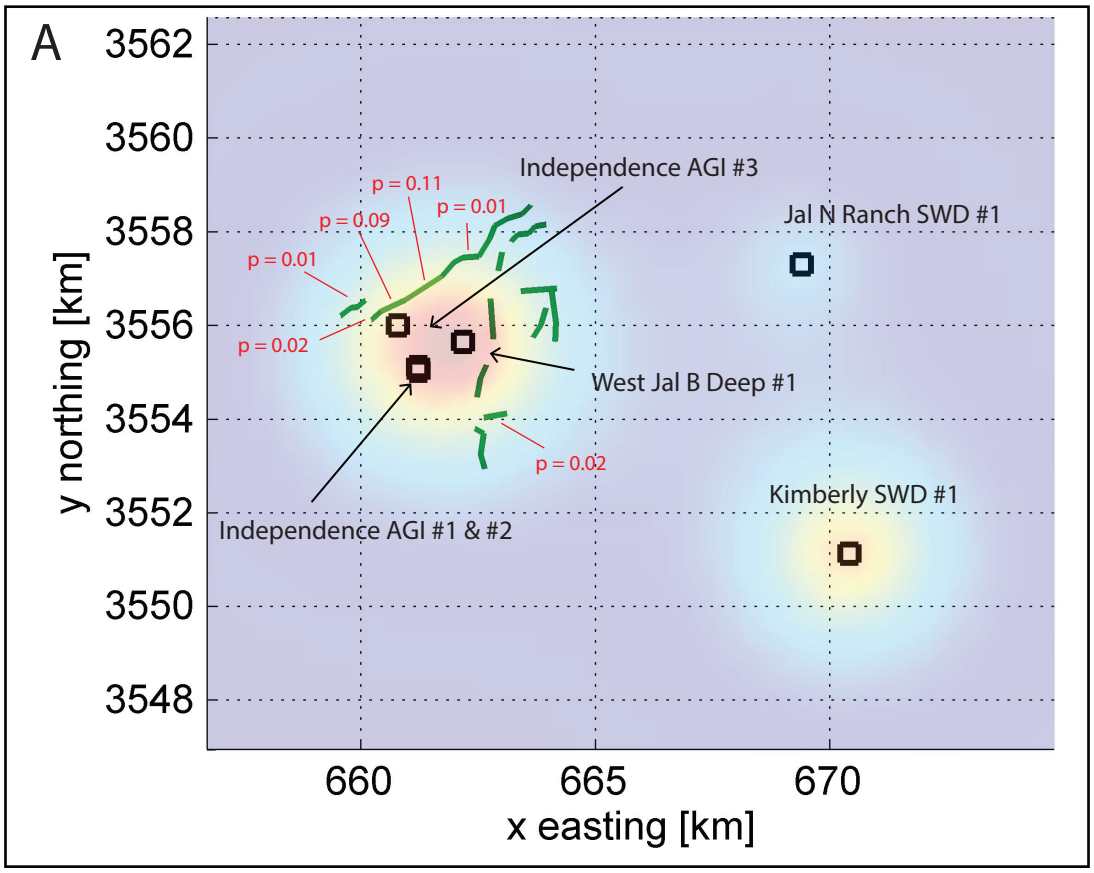


Figure 20. Summary of FSP model-predicted pressure front effects in the year 2055, resulting from injection activities of nearby wells (Panel A) that are actively injecting within the Siluro-Devonian formations. As shown in Panels B and C, the pressure increase along the faults in the area will not be significantly impacted by the addition of the Independence AGI #3 well and proposed combined maximum injection rate of 45 MMSCFD between all three Independence AGI wells.



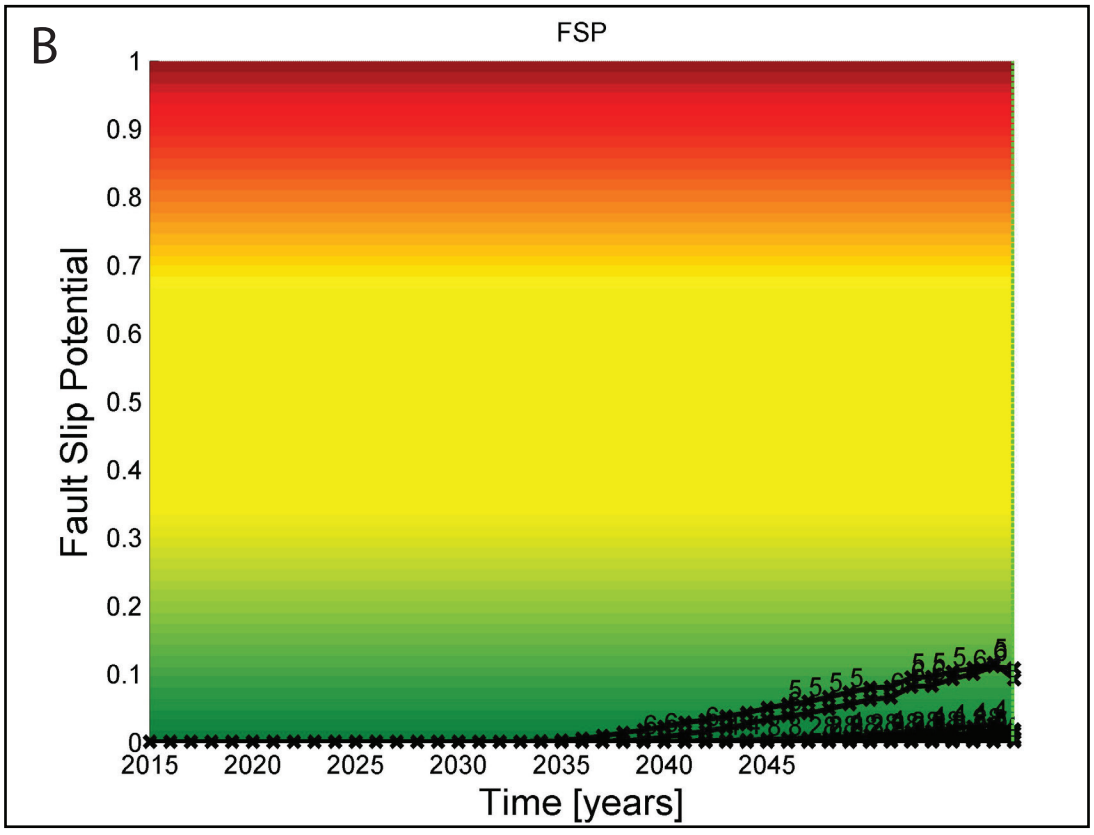


Figure 21. Model-predicted fault slip potential after 30 years of injection operations at maximum daily volume conditions for all wells.

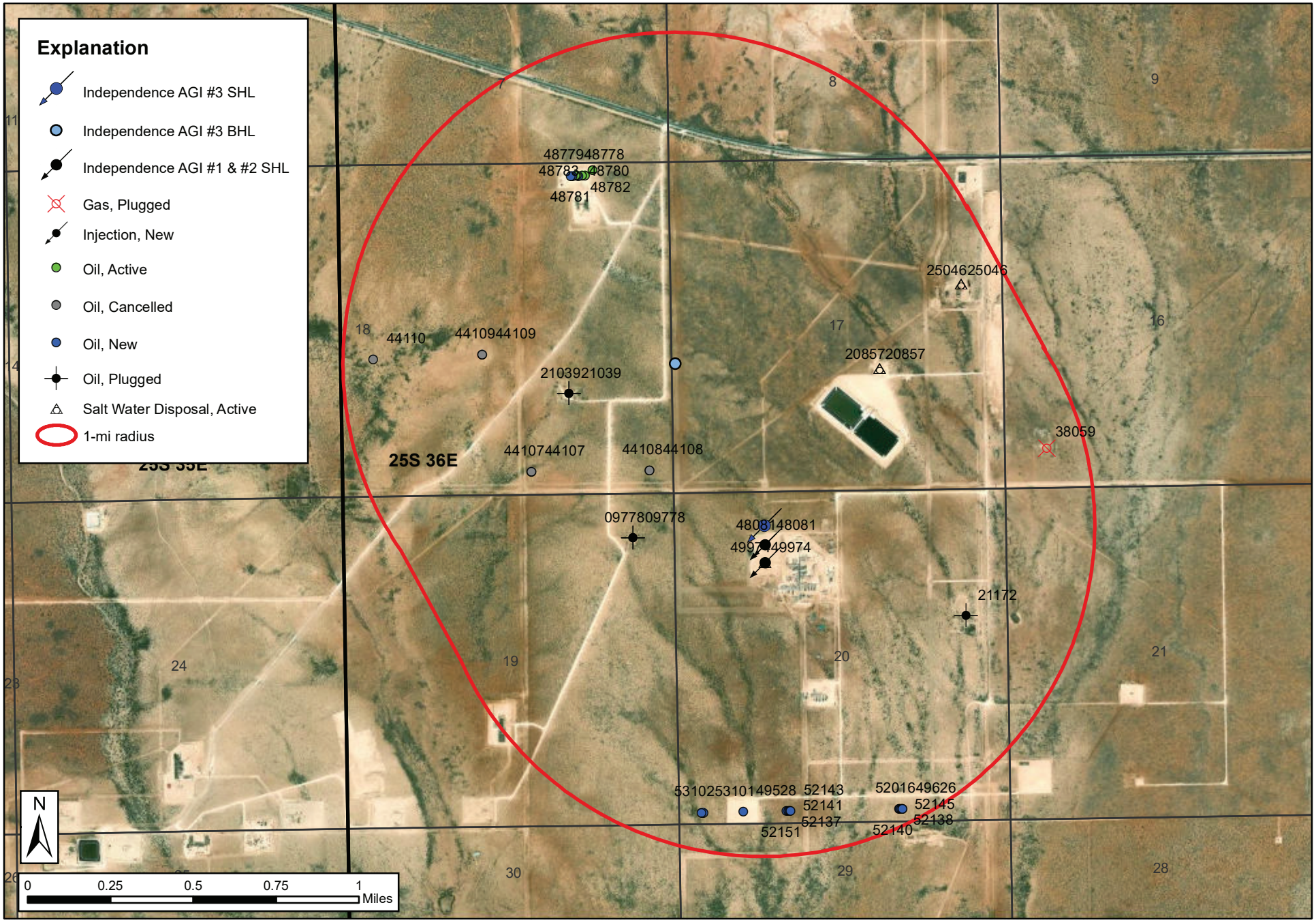


Figure 22. All wells located within one mile of the surface and bottom-hole location of the proposed Independence AGI #3 well, labeled according to the last five digits of their API number (30-025-XXXXX).

APPENDIX A

INFORMATION ON OIL AND GAS WELLS WITHIN TWO MILES AND ONE MILE OF THE PROPOSED INDEPENDENCE AGI #3 AND PLUGGING DATA FOR PLUGGED WELLS WITHIN ONE MILE OF THE PROPOSED AGI

Figure A-1:	All wells located within two miles of the proposed Independence AGI #3
Table A-1:	Wells located within two miles of the proposed Independence AGI #3
Attachment A-1:	Available NMOCD plugging documents for the West Jal Unit #1 (API # 30-025-21172)

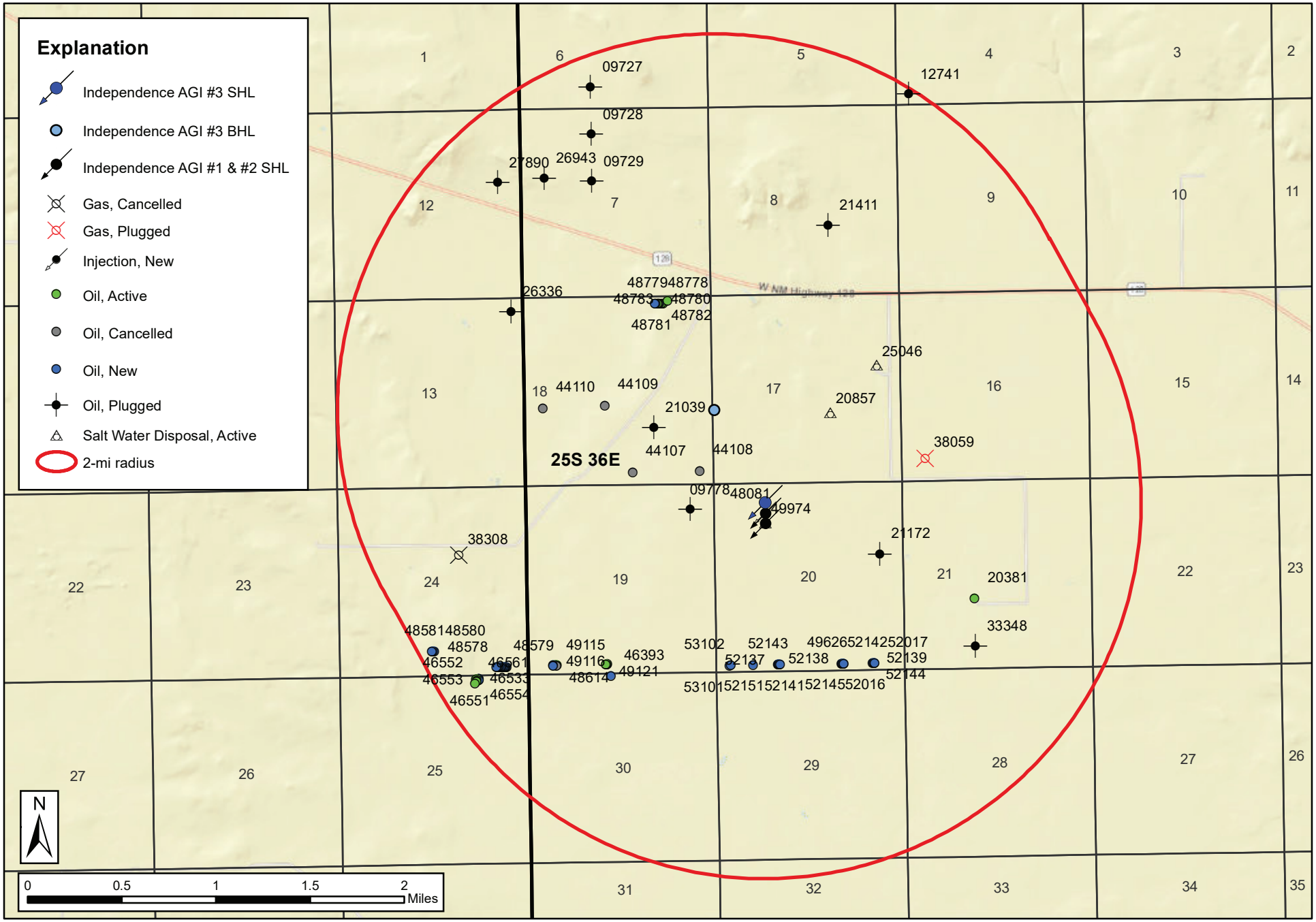


Figure A-1. All wells located within two miles of the proposed surface and bottom-hole location of the Independence AGI #3 well. Wells are labeled according to the last five digits of their API number (30-025-XXXXX).

Table A-1. All wells within two miles of the surface and bottom-hole location of the proposed Independence AGI #3 well.

API	Well Name	Well Type	Well Status	Operator Name	Lat (NAD83)	Long (NAD83)	SPUD Date	Measured Depth (ft)	Vertical Depth (ft)	Associated Pools	Plug Date
30-025-44108	SHIFT FEE WCB #001C	Oil	Cancelled	ONEENERGY PARTNERS OPERATING, LLC	32.12417	-103.29691	N/A	0	0	Wolfcamp	N/A
30-025-21039	PRE-ONGARD WELL #001	Oil	Plugged	PRE-ONGARD WELL OPERATOR	32.1276	-103.30099	-	0	12,950		-
30-025-09778	PRE-ONGARD WELL #001	Oil	Plugged	PRE-ONGARD WELL OPERATOR	32.12124	-103.29781	-	0	3,891		-
30-025-44107	BRANDY FEE WCB #001C	Oil	Cancelled	ONEENERGY PARTNERS OPERATING, LLC	32.12418	-103.30299	N/A	0	0	Wolfcamp	N/A
30-025-48081	INDEPENDENCE AGI #001	Injection	New	Pinon Midstream LLC	32.12084	-103.29103	12/25/2020	0	0	Devonian-Fusselman	N/A
30-025-20857	WEST JAL B #001	Salt Water Disposal	Active	BC & D OPERATING INC.	32.12848	-103.28498	3/12/1964	12,275	12,275	Delaware	N/A
30-025-44109	CONVERT FEE WCB #001C	Oil	Cancelled	ONEENERGY PARTNERS OPERATING, LLC	32.12935	-103.30543	N/A	0	0	Wolfcamp	N/A
30-025-49974	INDEPENDENCE FEE AGI #002	Salt Water Disposal	Active	Pinon Midstream LLC	32.12006	-103.29103	7/2/2022	18,193	0	Devonian-Fusselman	N/A
30-025-46977	BLACK MARLIN FEDERAL COM #214H	Oil	Active	Civitas Permian Operating, LLC	32.13713	-103.29999	5/22/2020	22,055	11,741	Wolfcamp	N/A
30-025-46976	BLACK MARLIN FEDERAL COM #204H	Oil	Active	Civitas Permian Operating, LLC	32.13713	-103.30015	8/16/2020	21,953	11,640	Wolfcamp	N/A
30-025-48783	BLACK MARLIN FEDERAL COM #216H	Oil	Active	Civitas Permian Operating, LLC	32.13736	-103.2996	8/29/2021	22,258	12,280	Wolfcamp	N/A
30-025-48781	BLACK MARLIN FEDERAL COM #206H	Oil	New	Civitas Permian Operating, LLC	32.13712	-103.30032	N/A	0	0	Wolfcamp	N/A
30-025-48782	BLACK MARLIN FEDERAL COM #213H	Oil	Active	Civitas Permian Operating, LLC	32.13713	-103.3004	8/28/2021	22,140	12,005	Wolfcamp	N/A
30-025-48780	BLACK MARLIN FEDERAL COM #203H	Oil	Active	Civitas Permian Operating, LLC	32.13713	-103.30048	8/27/2021	21,842	11,786	Wolfcamp	N/A
30-025-48779	BLACK MARLIN FEDERAL COM #114H	Oil	New	Civitas Permian Operating, LLC	32.13713	-103.30064	N/A	0	0	Wolfcamp, Bone Spring	N/A
30-025-48778	BLACK MARLIN FEDERAL COM #113H	Oil	New	Civitas Permian Operating, LLC	32.13713	-103.30072	N/A	0	0	Wolfcamp, Bone Spring	N/A
30-025-25046	WEST JAL B DEEP #001	Salt Water Disposal	Active	BC & D OPERATING INC.	32.13209	-103.28071	6/12/1975	18,945	18,945	Strawn-Fusselman	N/A
30-025-44110	PINCH FEE WCB #001C	Oil	Cancelled	ONEENERGY PARTNERS OPERATING, LLC	32.12923	-103.31103	N/A	0	0	Wolfcamp	N/A
30-025-38059	DINWIDDIE STATE COM #001	Gas	Plugged	COG OPERATING LLC	32.12485	-103.27646	8/25/2006	12,192	12,192	Strawn	12/12/2008
30-025-21172	WEST JAL UNIT #001	Oil	Plugged	TEXACO EXPLORATION & PRODUCTION INC	32.1176	-103.28074	N/A	9,999	9,999	Strawn	4/5/1984
30-025-21411	C ELLIOTT FEDERAL #001	Oil	Plugged	TEXACO EXPLORATION & PRODUCTION INC	32.14298	-103.28496	N/A	12,276	12,276	Strawn	6/26/1993
30-025-26336	PRE-ONGARD WELL #001	Oil	Plugged	PRE-ONGARD WELL OPERATOR	32.1367	-103.31378	-	0	3,686		-

30-025-53101	DOGWOOD 25 36 20 FEDERAL COM #111H	Oil	New	MATADOR PRODUCTION COMPANY	32.10915	-103.29452	N/A	0	0	Wolfcamp	N/A
30-025-53102	DOGWOOD 25 36 20 FEDERAL COM #122H	Oil	New	MATADOR PRODUCTION COMPANY	32.10915	-103.29439	N/A	0	0	Wolfcamp	N/A
30-025-49528	DOGWOOD 25 36 20 FEDERAL COM #112H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.29237	11/26/2021	0	0	Wolfcamp	N/A
30-025-52151	DOGWOOD 25 36 20 FEDERAL COM #113H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.29013	N/A	0	0	Wolfcamp	N/A
30-025-52137	DOGWOOD 25 36 20 FEDERAL COM #093H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.29006	N/A	0	0		N/A
30-025-52141	DOGWOOD 25 36 20 FEDERAL COM #124H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.28998	N/A	0	0	Wolfcamp	N/A
30-025-52143	DOGWOOD 25 36 20 FEDERAL COM #104H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.28993	N/A	0	0	Wolfcamp	N/A
30-025-09729	PRE-ONGARD WELL #002	Oil	Plugged	PRE-ONGARD WELL OPERATOR	32.14665	-103.30627	-	0	3,540	Tansill	-
30-025-49196	BLUE MARLIN FEDERAL COM #212H	Oil	Active	Civitas Permian Operating, LLC	32.1094	-103.30554	8/22/2021	22,422	12,003	Wolfcamp	N/A
30-025-48615	BLUE MARLIN STATE #212H	Oil	Cancelled	TAP ROCK OPERATING, LLC	32.1094	-103.30559	N/A	0	0	Wolfcamp	N/A
30-025-49118	BLUE MARLIN FEDERAL COM #202H	Oil	Active	Civitas Permian Operating, LLC	32.1094	-103.30562	8/21/2021	21,929	11,539	Wolfcamp	N/A
30-025-49121	BLUE MARLIN FEDERAL COM #215H	Oil	Active	Civitas Permian Operating, LLC	32.1094	-103.3057	8/20/2021	22,188	11,720	Wolfcamp	N/A
30-025-52140	DOGWOOD 25 36 20 FEDERAL COM #115H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.28436	N/A	0	0	Wolfcamp	N/A
30-025-52138	DOGWOOD 25 36 20 FEDERAL COM #095H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.2843	N/A	0	0	Wolfcamp, Bone Spring	N/A
30-025-52145	DOGWOOD 25 36 20 FEDERAL COM #126H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.28423	N/A	0	0	Wolfcamp	N/A
30-025-52016	DOGWOOD 25 36 20 FEDERAL COM #106H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.28417	N/A	0	0	Wolfcamp	N/A
30-025-49626	DOGWOOD 25 36 20 FEDERAL COM #116H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.28417	N/A	0	0	Wolfcamp	N/A
30-025-46393	NANDINA 25 36 31 FEDERAL COM #124H	Oil	New	Ameredev New Mexico, LLC	32.10848	-103.30525	N/A	0	0	Wolfcamp	N/A
30-025-52144	DOGWOOD 25 36 20 FEDERAL COM #117H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.28154	N/A	0	0	Wolfcamp	N/A
30-025-52139	DOGWOOD 25 36 20 FEDERAL COM #097H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.28147	N/A	0	0	Wolfcamp, Bone Spring	N/A
30-025-52142	DOGWOOD 25 36 20 FEDERAL COM #128H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.28141	N/A	0	0	Wolfcamp	N/A
30-025-52017	DOGWOOD 25 36 20 FEDERAL COM #108H	Oil	New	MATADOR PRODUCTION COMPANY	32.10916	-103.28135	N/A	0	0	Wolfcamp	N/A
30-025-26943	PRE-ONGARD WELL #001	Oil	Plugged	PRE-ONGARD WELL OPERATOR	32.14694	-103.31057	-	0	3,555	Tansill	-
30-025-38308	DINWIDDIE 24 #001G	Gas	Cancelled	CHESAPEAKE OPERATING, INC.	32.11793	-103.31884	N/A	0	0	Morrow	N/A

30-025-49119	BLUE MARLIN FEDERAL COM #205H	Oil	Active	Civitas Permian Operating, LLC	32.10938	-103.31014	8/21/2021	21,980	11,533	Wolfcamp	N/A
30-025-49117	BLUE MARLIN FEDERAL COM #201H	Oil	Active	Civitas Permian Operating, LLC	32.10938	-103.31022	8/20/2021	21,985	11,613	Wolfcamp	N/A
30-025-49120	BLUE MARLIN FEDERAL COM #211H	Oil	Active	Civitas Permian Operating, LLC	32.10938	-103.3103	8/20/2021	22,554	12,148	Wolfcamp	N/A
30-025-48614	BLUE MARLIN STATE #211H	Oil	Cancelled	TAP ROCK OPERATING, LLC	32.10931	-103.31019	N/A	0	0	Wolfcamp	N/A
30-025-49116	BLUE MARLIN FEDERAL COM #112H	Oil	New	Civitas Permian Operating, LLC	32.10939	-103.31048	N/A	0	0	Wolfcamp, Bone Spring	N/A
30-025-49115	BLUE MARLIN FEDERAL COM #111H	Oil	New	Civitas Permian Operating, LLC	32.10932	-103.31048	N/A	0	0	Wolfcamp, Bone Spring	N/A
30-025-09728	PRE-ONGARD WELL #001	Oil	Plugged	PRE-ONGARD WELL OPERATOR	32.15028	-103.30627	-	0	4,055	Tansill	-
30-025-20381	HERKIMER BQF FEDERAL #001H	Oil	Active	MATADOR PRODUCTION COMPANY	32.11399	-103.27222	5/3/1963	10,121	8,515	Delaware	N/A
30-025-27890	PRE-ONGARD WELL #001	Oil	Plugged	PRE-ONGARD WELL OPERATOR	32.14667	-103.31483	-	0	3,700		-
30-025-50904	LOE FEDERAL COM #504H	Oil	New	Franklin Mountain Energy LLC	32.1093	-103.31466	N/A	0	0	Wolfcamp, Bone Spring	N/A
30-025-50903	LOE FEDERAL COM #503H	Oil	New	Franklin Mountain Energy LLC	32.1093	-103.31474	N/A	0	0	Wolfcamp, Bone Spring	N/A
30-025-50902	LOE FEDERAL COM #104H	Oil	New	Franklin Mountain Energy LLC	32.1093	-103.31482	N/A	0	0	Delaware	N/A
30-025-50901	LOE FEDERAL COM #103H	Oil	New	Franklin Mountain Energy LLC	32.1093	-103.3149	N/A	0	0	Delaware	N/A
30-025-48583	ZIA FEDERAL COM #706H	Oil	New	Franklin Mountain Energy LLC	32.1093	-103.31502	10/14/2021	0	0	Wolfcamp	N/A
30-025-48582	ZIA FEDERAL COM #604H	Oil	New	Franklin Mountain Energy LLC	32.1093	-103.31513	N/A	0	0	Wolfcamp, Bone Spring	N/A
30-025-48579	SANTA FE FEDERAL COM #705H	Oil	New	Franklin Mountain Energy LLC	32.1093	-103.31524	10/19/2021	0	0	Wolfcamp	N/A
30-025-48577	SANTA FE FEDERAL COM #603H	Oil	New	Franklin Mountain Energy LLC	32.1093	-103.31536	N/A	0	0	Wolfcamp, Bone Spring	N/A
30-025-50844	LOE FEDERAL COM #806H	Oil	New	Franklin Mountain Energy LLC	32.1093	-103.31547	N/A	0	0	Wolfcamp	N/A
30-025-50843	LOE FEDERAL COM #805H	Oil	New	Franklin Mountain Energy LLC	32.1093	-103.31555	N/A	0	0	Wolfcamp	N/A
30-025-50842	LOE FEDERAL COM #804H	Oil	New	Franklin Mountain Energy LLC	32.1093	-103.31563	N/A	0	0	Wolfcamp	N/A
30-025-33348	TEXACO WEST JAL 21 #001	Oil	Plugged	ENSERCH EXPLORATION INC.	32.11036	-103.27222	4/3/1996	7,700	7,700	N/A	4/25/1996
30-025-09727	PRE-ONGARD WELL #001	Oil	Plugged	PRE-ONGARD WELL OPERATOR	32.15391	-103.30626	-	0	3,750		-
30-025-50391	SIOUX 25 36 STATE FEDERAL COM #020H	Oil	New	CAZA OPERATING, LLC	32.10844	-103.31721	N/A	0	0	Upper Wolfcamp	N/A
30-025-50392	SIOUX 25 36 STATE FEDERAL COM #021H	Oil	New	CAZA OPERATING, LLC	32.10839	-103.31721	N/A	0	0	Wolfcamp, Bone Spring	N/A

30-025-50393	SIOUX 25 36 STATE FEDERAL COM #022H	Oil	New	CAZA OPERATING, LLC	32.10833	-103.31721	N/A	0	0	Upper Wolfcamp	N/A
30-025-50394	SIOUX 25 36 STATE FEDERAL COM #023H	Oil	New	CAZA OPERATING, LLC	32.10828	-103.31721	N/A	0	0	Wolfcamp, Bone Spring	N/A
30-025-46553	SIOUX 25 36 STATE FEDERAL COM #012H	Oil	Active	CAZA OPERATING, LLC	32.10836	-103.3174	2/1/2020	22,350	11,994	Wolfcamp, Bone Spring; Upper Wolfcamp	N/A
30-025-46552	SIOUX 25 36 STATE FEDERAL COM #011H	Oil	Active	CAZA OPERATING, LLC	32.10836	-103.3174	2/12/2020	22,160	12,077	Upper Wolfcamp	N/A
30-025-46551	SIOUX 25 36 STATE FEDERAL COM #009H	Oil	Active	CAZA OPERATING, LLC	32.10836	-103.31748	3/1/2020	21,945	11,894	Wolfcamp, Bone Spring	N/A
30-025-46554	SIOUX 25 36 STATE FEDERAL COM #013H	Oil	Active	CAZA OPERATING, LLC	32.10825	-103.3174	1/19/2020	21,962	11,725	Wolfcamp, Bone Spring; Upper Wolfcamp	N/A
30-025-46533	SIOUX 25 36 STATE FEDERAL COM #008H	Oil	Active	CAZA OPERATING, LLC	32.10819	-103.3174	12/27/2019	22,150	12,149	Upper Wolfcamp	N/A
30-025-46561	SIOUX 25 36 STATE FEDERAL COM #010H	Oil	Active	CAZA OPERATING, LLC	32.10808	-103.31756	2/21/2020	22,209	12,107	Upper Wolfcamp	N/A
30-025-48578	SANTA FE FEDERAL COM #704H	Oil	New	Franklin Mountain Energy LLC	32.11057	-103.32121	10/22/2021	0	0	Wolfcamp	N/A
30-025-12741	PRE-ONGARD WELL #001	Oil	Plugged	PRE-ONGARD WELL OPERATOR	32.15294	-103.27747	-	0	4,125		-
30-025-48581	TRINITY FEDERAL #703H	Oil	New	Franklin Mountain Energy LLC	32.11057	-103.32132	N/A	0	0	Wolfcamp	N/A
30-025-48580	TRINITY FEDERAL #602H	Oil	New	Franklin Mountain Energy LLC	32.11057	-103.32144	10/25/2021	0	0	Wolfcamp, Bone Spring	N/A

WEST JAL UNIT #1
(API 30-025-21172)

RELEVANT PLUGGING DOCUMENTS
(Retrieved from NMOCD records)

NOTE: Plugging diagram generated from description of plugging operations reported in available NMOCD records

N. M. OIL CONS. COMMISSION
P. O. BOX 1980
HOBBS, NEW MEXICO 88240

L-31

orm 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM 71792

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: [X] Oil Well [ ] Gas Well [X] Other Reentry

8. Well Name and No.: West Jal Federal #1

2. Name of Operator: MCH Petroleum Services

9. API Well No.: 30-025-21172

3. Address and Telephone No.: 708 W. Pine St. Midland, Tx 79705 915 683 4772

10. Field and Pool, or Exploratory Area: ~~Undesignated~~ W. Jal Delaware

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FNL 660' FEL Sec 20, T-25S, R-36E
H SENE Lea Co., NM

11. County or Parish, State: LEA, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[ ] Subsequent Report	[X] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other Reentry	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

MCH Petroleum Services proposes to reenter existing well originally drilled by Skelly Oil Company in 1961 and plug and abondoned by Texaco in 1983. MCH will drill out cement plugs and cibp @ 7,579' to a total depth of approx. 8,350' (inside casing). This will leave in place cibp at 9,500' and deeper. We will then test existing perforations @ 7,807'-7,857' and stimulate as necessary.

Mud Program: Fresh water will be used for the reentry inside casing.

BOP Program: BOP will be installed at the beginning and tested daily.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

14. I hereby certify that the foregoing is true and correct

Signed Craig Huber Title Owner Date 4/13/93

(This space for Federal or State office use)

Approved by /ORIG. SGD.) RICHARD L. MANUS Title AREA MANAGER Date JUN 4 1993

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Form 3160-3
(December 1990)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☐

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER Reentry SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR: MCH Petroleum Services

3. ADDRESS AND TELEPHONE NO.: 708 W. Pine St. Midland, Tx 79705 915 683 4772

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FNL, 660' FEL Sec 20 T-25S, R-36E Lea Co. NM
At proposed prod. zone: Same H SENE

5. LEASE DESIGNATION AND SERIAL NO.: NM 71792

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME, WELL NO.: West Jal Federal #1

9. API WELL NO.: 30-025-21172

10. FIELD AND POOL, OR WILDCAT: [redacted] W. Jal Delaware

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: S-20, T-25S, R-36E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 6 miles W. Jal, N.M.

12. COUNTY OR PARISH: Lea | 13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 660'

16. NO. OF ACRES IN LEASE: 600

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: 8350

20. ROTARY OR CABLE TOOLS: Pulling unit / Reverse unit

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3076' GL

22. APPROX. DATE WORK WILL START: ASAP (Prior to 6/1/93 exp.)

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26	20		869' (In Place)	1630 SX.
17 1/2	13 3/8	72, 68, 64	6300' (In Place)	3606 SX.
12 1/4	9 5/8	53.5, 47, 43.5	11,736 (In Place)	775 SX.
8 3/8	7	26	6735-12213 (Shot off @ 6735)	612 SX
6 1/4	5 1/2 (LNR.)	(unk.)	12,032-15,400	450 SX.
(unk)	3 1/2 (LNR.)	(unk.)	14,967-17,084	250 SX.

MCH Petroleum Services proposes to reenter existing well originally drilled by Skelly Oil Company in 1961 and plug and abondoned by Texaco in 1983. MCH will drill out cement plugs and cibp @ 7,579' to a total depth of approx. 8,350'(inside casing). This will leave in place cibp at 9,500' and deeper. We will then test existing perforations @ 7,807'-7,857' and stimulate as necessary.

Mud Program: Fresh water will be used for the reentry inside casing.

BOP Program: BOP will be installed at the beginning and tested daily.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Craig Huber TITLE Owner DATE 4/13/93

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY _____ TITLE _____ DATE _____

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5
(November 1983)
(Formerly 9-331)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

P.O. BOX 1980
HOBBS, NEW MEXICO 88240

5. LEASE DESIGNATION AND SERIAL NO.
NM-03429A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL [X] GAS WELL [ ] OTHER

7. UNIT AGREEMENT NAME
West Jal Unit

2. NAME OF OPERATOR
Getty Oil Company

8. FARM OR LEASE NAME

3. ADDRESS OF OPERATOR
P.O. Box 730, Hobbs, NM 88240

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
Unit Ltr. H, 1980' FNL & 660' FEL

10. FIELD AND POOL, OR WILDCAT
West Jal Delaware

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 20, T-25S, R-36E

BUREAU OF LAND MGMT. APR 7 DIST. 6 N. M. ROSWELL, NEW MEXICO

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3138' D.F.

12. COUNTY OR PARISH
Lea

13. STATE
NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	XX
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

3/26/84 Rigged up. Pulled rods and pump. Unseat tbg. anchor and install BOP.

3/28/84 Pulled 2 7/8" buttress & 2 3/8" tbg. anchor. Ran 7" CI plug, set @ 7579'. Ran 2 3/8" to 4290'. By Halliburton, circ. 191 bbls. gel brine, pulled tbg. Perfs 4-0.25" holes @ 6400'. Circ. out 7" between 9 5/8". Ran 2 7/8" to 7554'.

3/29/84 Rigged up csg. puller unit. Pulled tbg. Remove BOP & 7" tbg. spool.

3/30/84 Weld 7" pull nipple. Cut 7" csg. @ 6735'. Pulled 11 jts 7", 26#, P-110 csg. 8 rd.

3/31/84 Layed down total 163 jts (est. 6525') 7", 8rd casing. Nipple down 9 5/8" head.

4/2/84 Weld on 9 5/8" pulled nipple. Attempted to pull slips with 500,000#. Set off primer cord around head, no movement. Left soaking in penetrating oil.

4/3/84 Dug out 13 3/8" csg. unflange head. Move pipe 1" with 600,000#. Cut off. Pulled nipple, installed BOP. Ran tbg to 5216'.

4/4/84 Spot 20 sxs cement on top of CIBP 7579-7479'. Spot 100' plug (45 sxs) at 6758-6685', 6350-6250', 3325-3200', 1380-1270'. Remove csg. head.

4/5/84 Rigged down. Installed 20 sxs. Plugged 0-50'. Installed dry hole marker. P&A.

18. I hereby certify that the foregoing is true and correct

SIGNED Donald J. Steinmetz TITLE Area Superintendent DATE April 11, 1984

for Dale R. Crockett
(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE 6887

CONDITIONS OF APPROVAL, IF ANY:

Approved as to plugging of the well bore. Liability under bond is retained until surface restoration is completed.

0+6-BLM-Roswell 1-Mr. J.A.-Midland
1-File 1-Laura Richardson-Midland
1-Engr Jim 1-BB, 1-JA
1-Foreman CK 1-SH, 1-CP 1-Southland Royalty Company, 1-ARCO

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

N. M. OIL CONS. COMMISSION
P. O. BOX 1980
HOBBS, NEW MEXICO 88240

O+6 - BLM - P.O. Box 1857, Roswell, 1-File, 1-Engr.JIM, 1-Foreman CK

Form 9-331 Dec. 1973

1 - Laura Richardson-Midland

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BUREAU OF LAND MANAGEMENT RECEIVED JUL 25 1983 ROSWELL, NEW MEXICO DIST. 6 N. M.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well XX gas well ☐ other

2. NAME OF OPERATOR
Getty Oil Company

3. ADDRESS OF OPERATOR
P.O. Box 730 Hobbs, NM 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: Unit ltr. H, 1980' FNL & 660 FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
NM-03429A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
West Jal Unit

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
West Jal Delaware

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 20, 25S-36E

12. COUNTY OR PARISH
Lea

13. STATE
NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3138' D.F.

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	XX	☐
(other) Revised		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Revised procedure as per conversation with Mr. Peter Chester 7/18/83:

1. Install B.O.P.
2. Set C.I.B.P. at +7860 w/35' cement on top.
3. Perforate 2 holes @ 6375' & squeeze with sufficient cement to bring cement to 6225'.
4. Set cement plug 1230-1330' top of salt. (in & behind casing).
5. Set 50' surface plug.
6. Install dry hole marker.
7. Restore location.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Dale R. Crockett TITLE Area Superintendent DATE July 22, 1983

APPROVED

(This space for Federal or State office use)

(Orig. Sgd.) M. CHESTER
APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

SEP 14 1983

*See Instructions on Reverse Side

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [X] DIFF. RESVR. [X] Other

2. NAME OF OPERATOR: Shelly Oil Company

3. ADDRESS OF OPERATOR: P. O. Box 1351, Midland, Texas 79701

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: Unit Letter H, 1880' FNL and 660' FEL, Sec. 20-25S-36E
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: NM-03429-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: - - - - - -

7. UNIT AGREEMENT NAME: - - - - - -

8. FARM OR LEASE NAME: West Jal Unit

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Jal Delaware, West UNDESIGNATED

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 20-25S-36E

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: Lea | 13. STATE: New Mexico

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
- -	- -	5-26-74	3138' DF	- - -

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
17086'	9485' PBTD	- -	→	- -	- -

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 7807-7857' Delaware

25. WAS DIRECTIONAL SURVEY MADE: - - -

26. TYPE ELECTRIC AND OTHER LOGS RUN: None

27. WAS WELL CORED: - -

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
No Change					

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
-	-	-	-	-
-	-	-	-	-

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8" OD	7941'	- -
2-7/8" OD		- -

31. PERFORATION RECORD (*Interval, size and number*)
7807-7811', 7816-7818', 7853-7857', total 32 shots, 0.50" diameter, two shots per foot.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7807-7857'	750 gallons mud acid 5000 gallons 15% NE acid, 82 ball sealers, 90000# 20-40 sand, 9000 gallons lease oil

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or*)
5-28-74	Pumping	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
6-19-74	24	*		63	1	6	16

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
- -	65#		63	1	6	41*

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Used for Fuel — TEST WITNESSED BY

35. LIST OF ATTACHMENTS: None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED (Signed) D. R. Crow D. R. Crow TITLE Lead Clerk DATE 6-20-74

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
			1) Squeezed Pseudman perfs. 16,449-16,614' with 100 sacks Class "H" cement, 5/10% CFR-2. 2) Spotted 25 sacks cement 14,711-14,741', 25 sacks 11,924-12,082' and set cast iron bridge plug at 10,330' and spotted 4 sacks cement 10,310-10,330'. 3) Perforated 7" OD casing in First Bone Springs formation with two 0.48 diameter holes per foot at 10,112-10,122' and 10,128-10,132'. (28 shots total) 4) Treated First Bone Springs perfs. 10,112-10,132 with 5500 gallons acid and 68 ball sealers. 5) Swab tested First Bone Springs perfs. 10,112-10,132' May 14, 1974, to May 21, 1974, for no oil, 14 bbls. water and slight show of gas in 5 hours. 6) Set cast iron bridge plug at 9500' and cemented with 3 sacks cement plugging back to 9485'. 7) Perforated 7" OD casing in Delaware formation with two 0.50" diameter holes per foot at 7807-7811', 7816-7824' and 7853-7857'. (32 shots total) 8) Treated Delaware perfs. 7807-7857' with 750 gallons mud acid, 5000 gallons 15% NE acid, 9000 gallons gelled lease oil, 9000# 20-40 sand and 22 ball sealers. 9) Returned well to production status 5-28-74 pumping Delaware perfs. 7807-7857' for 63 bbls. oil, 6 bbls. water and 1 MCFGPD.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

8) Flowed 24-1/2 hours through 1" choke, making no oil, 45 bbls. load water, 393 bbls. formation water and gas at rate of 266 MCF per day. FTP 200#, CP 2300#.
9) Ran flow meter, Gradionometer and Temperature Survey to determine water entry.
10) Shut well in seven hours, then ran Base Temperature Log 16,000-17,020'. Water channelling from bottom of well bore to 16,508'.
11) Set cement retainer at 16,250' and squeezed perfs. 16,499-16,614' with 150 sacks Class "H" cement containing 4/10ths of 1% CFR-2 and 1% Halad 9. Squeeze failed. WOC 4 hours.
12) Resqueezed perfs. 16,449-16,614' with 50 sacks Class "H" cement with 1% Halad 9, 4/10ths of 1% CFR-2 and 1/4# Flocele per sack and 150 sacks Class "H" containing 1% Halad 9 and 4/10ths of 1% CFR-2. Squeeze failed.
13) Attempted to pull cement retainer - stuck.
14) Milled and pushed cement retainer from 16,250' to 16,490'. Recovered cement retainer.
15) Drilled and pushed junk to 16,930'.
16) Ran 254 jts. (14,793') of 2-7/8" OD tubing and set packer at 14,810'. Swabbed 9 hours, recovering 60 bbls. load water with good show of gas.
17) Treated perfs. 16,449-16,614' with 500 gals. 15% NE acid with 2 ball sealers. Swabbed 7 hours, recovering 1 bbl. load water, flowing gas at rate of 50 MCF per day.
18) Treated perfs. 16,449-16,614' with 5000 gals. 15% NE acid and 27 ball sealers.
19) Ran Temperature Survey 15,000-16,958'.
20) Tested well. Well flowed at rate of 910 MCF per day on 23/64" choke, no oil, FTP 310#. Pulled tubing and packer.
21) Reran 457 jts. (14,940') of 2-7/8" OD 7.9# DSS-HT Atlas-Bradford Condition "A" tubing and set at 14,967'.
22) Circulated hole with corrosion inhibitor water. Released rig 11-8-72. Flowed and tested well.
23) On Dec. 11, 1972, treated perfs 16,449-16,614' with 12,500 gals. of 1% KCL water with 62# friction reducer, 25 gals. Adofoam and 25 gals. scale inhibitor, 20,000 gals. 20% retarded acid with 100# friction reducer, 40 gals. Adofoam, 160 gals. acid inhibitor, 1000# fluid loss agent and 40 gals. scale inhibitor and 7 ball sealers. All fluid contained 400 S.C.F Nitrogen per barrel.
24) Testing well.

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions re-verse side)

COPY TO O.C.C.

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
NM-03429-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME
---

2. NAME OF OPERATOR
Skelly Oil Company

8. FARM OR LEASE NAME
West Jal Unit

3. ADDRESS OF OPERATOR
P. O. Box 1351, Midland, TExas 79701

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1980' FNL and 660' FEL Sec. 20-25S-36E

10. FIELD AND POOL, OR WILDCAT
Undesignated Fusselman

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 20-25S-36E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3076' GR

12. COUNTY OR PARISH
Lea

13. STATE
New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Clean out & deepen to 17,086'	☒		
(Other)	☐			(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

1) Rigged up rotary tools 7-28-72. Pulled tubing and packer.
2) Set cement retainer at 11,390' and squeezed Strawn 7" OD casing perfs. 11,510-11,741' with 100 sacks Class "H" cement containing 1% CFR-2 and 3# sand per sack. Squeeze failed. WOC 4 hours.
3) Resqueezed perfs. 11,510-11,741' with 100 sacks Class "H" cement containing 5/10% of 1% CFR-2 and 3# sand per sack. Squeezed at 6500#. Reversed out 15 sacks.
4) After WOC 12 hours, drilled cement retainer at 11,390' and cement 11,390-11,755' with 6-1/2" bit.
5) Tested squeeze job to 3000#; held okay.
6) Drilled cement 11,790-11,832' and tested old squeeze job on perfs. 11,736-11,815' to 3000#; held okay.
7) Drilled cement 11,832-11,844'; pushed plus-plug to 11,976'. Drilled plug. Tagged junk at 12,002' and pushed to 12,312'.
8) Cleaned to top of 5-1/2" OD liner at 12,032', set cement retainer at 11,820' and found casing perfs. 11,849-11,894' open.
9) Squeezed 5-1/2" casing perfs. 11,849-11,894' with 50 sacks Class "H" with 1% CFR-2 and 100 sacks Class "H" with 1% CFR-2 and 3# sand per sack.
10) Dumped 20 sacks cement on retainer at 11,820', plugging back to 11,717'. Reversed out 90 sacks cement. WOC 12 hours.

(continued on page 2)

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE Lead Clerk DATE Dec. 18, 1972

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED FOR RECORD
DEC 20 1972
U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

*See Instructions on Reverse Side

11) Drilled cement 11,708-11,820'; cement retainer 11,820-11,822' and cement 11,822-11,861'. Cleaned out to top of liner at 12,032'.
12) Tested squeeze job to 2500#; held okay.
13) Drilled junk 12,312-12,748.5'; cement 12,748.5-12,760'; junk to 12,762'; cement 12,762-13,030'.
14) Tested old squeezed perfs. 13,005-13,030' to 2500#; held okay.
15) Milled and drilled cast iron bridge plug at 13,174' and pushed to 13,395'.
16) Tested 5-1/2" OD liner perfs. 13,247-13,360' to 2900#; could not pump into perfs.
17) Milled cast iron bridge plug 13,396-13,400'.
18) Tested perfs. 13,462-13,472' to 2700#; could not pump into perfs.
19) Milled and drilled out cement retainer 13,517-13,524'; cement 13,524-13,532'; cement 15,050-15,353'.
20) Milled and drilled cast iron bridge plug 15,340-15,858'. Washed over fish 15,858'; recovered fish. Cleaned out to old TD of 15,958'.
21) Drilled 4-3/4" new hole 15,958-16,498'.
22) Ran Drill Stem Test No. 1 (Silurian) 15,400-16,498'.
23) Drilled 4-3/4" hole 16,498' to total depth of 17,086' at 11 p.m. October 4, 1972.

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instruction reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: NM - 03429 - A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: - - -

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME: - - -

2. NAME OF OPERATOR: Shelly Oil Company

8. FARM OR LEASE NAME: West Jal Unit

3. ADDRESS OF OPERATOR: P. O. Box 730 - Hobbs, New Mexico 88240

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1980' FNL and 660' FEL Section 20-25S-36E

10. FIELD AND POOL, OR WILDCAT: Strawn Formation

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 20-25S-36E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3102' DF

12. COUNTY OR PARISH: Lea

13. STATE: New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Cement, perforate & treat			☒
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

1) Perforated 2-7/8"OD tubing at 11,696',11,297', 10,574; 9698'; 8892';8707',8403'. Circulated to remove mud from annulus. Work began 1-29-69.
2) Pulled tubing
3) Ran 2-7/8"OD tubing with "RTTS" Packer. Set packer at 11,[illegible]'.
4) Squeezed 7"OD casing perforations 11,736-11,894' with 150 sacks class "H" Cement with 1% CFR-2 per sack, maximum pressure 4600#, failed. W.O.C. 4 hours. Broke formation down with 5000#.
5) Squeezed 7"OD casing perforations 11,736-11,894" with 50 sacks Class "H" cement with 1% CFR-2 and 5# No. 3 sand per sack. Displaced 35 sacks into formation. Pulled tubing and packer.
6) WOC 36 hours. Ran tubing with 6-1/8" bit. Top of cement inside 7"OD casing at 11,595'. Washed and circulated cement to 11,620'. Drilled cement 11,620-11,700'. Drilled packer 11,700-705'. Drilled cement 11,705-755'.
7) Tested casing to 3000#, held okay.
8) Spotted 12 bbls. acid 11,755-11,443'.
9) Perforated 7"OD casing with 2 shots per foot as follows:

11,510 - 513'	3'	6 shots
11,517- 527'	10'	20 shots
11,536 - 540'	4'	8 shots
11,550 - 556'	6'	12 shots
11,561 - 567'	6'	12 shots
11,575 - 579'	4'	8 shots
11,660 - 667'	7'	14 shots

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE District Production Manager DATE 3-10-69

(This space for Federal or State office use)

APPROVED BY _____ TITLE (ORIGINAL SIGNED) V. E. Fletcher DATE APPROVED

CONDITIONS OF APPROVAL, IF ANY:

MAR 11 1969

J. L. GORDON
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
~~73503~~ NM-03429-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME
---

2. NAME OF OPERATOR
Shelly Oil Company

8. FARM OR LEASE NAME
West Jal Unit

3. ADDRESS OF OPERATOR
P. O. Box 730 - Hobbs, New Mexico 88240

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface 1980 from North line and 660 from East line, Section 20

10. FIELD AND POOL, OR WILDCAT
Stream Formation

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
20-25S-36E

20-25S-36E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3092' DF

12. COUNTY OR PARISH
Lea

13. STATE
New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other) Cement, Perforate & Treat			X				

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Squeeze present perforated interval 11,736-11,852', below packer set at 11,700', with 125 sacks cement. Drill out to 11,790'. Perforate 11,510-11,783' with 2 shots per foot. Treat perforations 11,510-11,783' with 300 gallons 15% acid with 3 stage treatment using Dowell J-182 as diverting agent. Inject 72 barrels distillate to remove diverting agent. Swab and test.

18. I hereby certify that the foregoing is true and correct

SIGNED (signed) C. R. DAVIS TITLE District Operations Manager DATE 1/24/69

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____
CONDITIONS OF APPROVAL, IF ANY:

APPROVED

JAN 2[illegible]

J. L. GORDON
ACTING DISTRICT ENGINEER

RT/jc

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: Skelly Oil Company

3. ADDRESS OF OPERATOR: P. O. Box 730 - Hobbs, New Mexico 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1980' from North line and 660' from East line

5. LEASE DESIGNATION AND SERIAL NO.: NM - 03429-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: - -

7. UNIT AGREEMENT NAME: - -

8. FARM OR LEASE NAME: West Jal Unit

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Jal Strawn West

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 20-25S-36E

14. PERMIT NO.: - -

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3138'

12. COUNTY OR PARISH: Lea

13. STATE: New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Eliminate water production			☒
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

(1) Moved in and rigged up workover rig 10-21-68
(2) Set Schlumberger "plus" plug in 7"OD casing at 11,844'.
(3) Dumped 5' cement on top of plug, filling from 11,844' to 11,839'.
(4) Dumped 200 lbs. Hydromite on top of "plus" plug, filling back to 11,832'.
(5) Swabbed well.
(6) Apparent communications still exist between upper and lower perforations behind 7"OD casing. Objective to shut off lower perforations 11,860 - 11,894' and to decrease water production unsuccessful.
(7) Well returned to producing status 10-27-68 flowing 150 MCF gas per day through 7" OD casing perforations 11,736 - 11,894'.

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE District Production Manager DATE 10-30-68

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

APPROVED
NOV 1968
J. L. GORDON
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
NM - 03429 - A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
-----

7. UNIT AGREEMENT NAME
-----

8. FARM OR LEASE NAME
West Jal Unit

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Jal Strawn West

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 20-25S-36E

12. COUNTY OR PARISH
Lea

13. STATE
New Mexico

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR
SKELLY OIL COMPANY

3. ADDRESS OF OPERATOR
P. O. Box 730 - Hobbs, New Mexico 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface

1980' FNL & 660' FEL Sec. 20-25S-36E

14. PERMIT NO.
-----

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3138' DF

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Clean, Determine Water Source, Eliminate Water Production			X
(Other)	☐		☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Moved in and rigged up Workover Rig. Killed well. Ran 1-5/8" drill pipe and fishing tools to top of fish at 9901', pushed to 9991', caught fish, circulated and pulled out of hole. Recovered 2 strings of fishing tools previously left in hole. Reran 1-5/8" drill pipe several times with fishing tools and recovered 1786' in several pieces of 5/16" wire line, and a chemical cutter.

Tagged bottom of 2-7/8"OD tubing at 11,715'. Knocked off one foot of tubing and a bull plug that had been previously cut off. Pushed and drove bull plug to 12,482'. Hit firm fill-up of formation cavings and left one-foot piece of 2-7/8"OD tubing and bull plug in hole at 12,482', leaving tubing open-ended at 11,715' with full 2-7/8" opening. Pulled drill pipe and fishing tools and installed Xmas tree. Ran Gradiomanometer, Continuous Flowmeter and Packer Flowmeter to determine water source. Surveys indicated water source being produced through casing perforations 11,883-11,894'.

Set packer at 11,883'. Returned to production status November 19, 1967, producing 38 bbls. oil, 800 bbls. water and 2,000 MCF gas per day from the Strawn Gas Pool through perforations 11736-11894' through 7"OD casing.

18. I hereby certify that the foregoing is true and correct

SIGNED (ORIGINAL SIGNED) V. E. Fletcher TITLE District Superintendent DATE April 25, 1968

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
APR 26 1968
J. L. GORDON
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☒ DEEP-EN ☒ PLUG BACK ☐ DIFF. RESVR. ☒ Other

2. NAME OF OPERATOR: Skelly Oil Company

3. ADDRESS OF OPERATOR: P. O. Box 1351, Midland, Texas 79701

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 1980' FNL and 660' FEL Sec. 20-25S-36E
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: NM-03429-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ---

7. UNIT AGREEMENT NAME: ---

8. FARM OR LEASE NAME: West Jal Unit

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Undesignated Fusselman

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 20-25S-36E

14. PERMIT NO. / DATE ISSUED

12. COUNTY OR PARISH: Lea

13. STATE: New Mexico

15. DATE ~~SPUDDED~~ started	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
7-28-72	11-1-72	10-4-72	3076' GR	---

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
17,086'	17,020'	---	→	15,958-17,086'	---

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 16,449-16,614' (Fusselman)

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: BHC Sonic Gamma Ray with Caliper, Dual Laterolog, Continuous Dipmeter, Compensated Neutron & Formation Density

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	94#	869'	26"	1630 sacks	None
13-3/8"	72,61 & 68#	6300'	17-1/2"	3206 sacks	None
9-5/8"	53.5 & 47#	11,732'	12-1/4"	975 sacks	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
		(See attachment)		

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	14,967'	None

31. PERFORATION RECORD (*Interval, size and number*)
16,449-16,614' (Fourteen .33" holes over 165' interval)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
11,510-11,741'	200 sacks Class "H" Cement
11,849-11,894'	150 sacks Class "H" Cement
16,449-16,614'	350 sacks Class "H" Cement
	(See attachment)

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
11-1-72	Flowing	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
11-14-72	24	24/64"	→	-0-	5950	216	----

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
1900#	---	→	-0-	5950	216	---

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Sold

TEST WITNESSED BY

35. LIST OF ATTACHMENTS: 2 copies each: Borehole Compensated Sonic Log - Gamma Ray, Compensated Neutron-Formation Density, Dual Laterolog, Gammatron

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED C.J. Love TITLE Dist. Prod. Manager DATE Dec. 20, 1972

*(See Instructions and Spaces for Additional Data on Reverse Side)

30-025-21042

Set Baker Cast Iron Bridge Plug at 13,400'. Spotted 2 sacks cement on top of bridge plug from 13,400' to 13,386'. Perforated 5-1/2" OD liner with 4 holes at 13,210' and squeezed with 85 sacks of cement. Drilled out cement to 13,386'. Perforated 5-1/2" liner with 4 shots per foot as follows: 13,247-13,270', 13,272-13,275', 13,286-13,292', 13,298-13,320', 13,326-13,329', 13,343-13,345', 13,356-13,360' for a total of 63' and 252 holes. Treated through 5-1/2" OD casing liner perfs. 13,247-13,360' (intervals) with 2500 gallons Mud Acid. Tested well several hours with volume to small to measure. Treated through 5-1/2" OD casing liner perfs. 13,247-13,360' (intervals) with 2500 gallons Mud Acid. Tested well several hrs. with volume to small to measure. Treated through 5-1/2" OD casing liner perfs. 13,247-13,360' (intervals) with 10,000 gallons 15% Regular Acid. Tested well several hours with volume to small to measure. Set Baker Cast Iron Model "N" Bridge Plug at 13,180'. Dumped 2 sacks of cement on top of plug, which plug well back from 13,180' to 13,166'. Perforated 5-1/2" OD liner with 4 holes per foot from 13,005' to 13,030' for a total of 25' and 100 holes. Treated through 5-1/2" OD liner perfs. 13,005-13,030' with 5,000 gallons 15% Regular Acid. Tested well several hours with volume too small to measure. We temporarily abandoned the testing of the Morrow Zone at this time. Set Halliburton "DC" Cement Retainer at 12,790' and squeezed 85 sacks of cement into 5-1/2" OD liner perfs. 13,005-13,030'. Plugged back total depth 12,790'. Perforated 7" OD casing with 4 holes per foot as follows: 11,736-11,741', 11,781-11,787', 11,808-11,815', 11,849-11,852', 11,860-11,894' for a total of 55' and 220 holes. Set Baker Model "F" Production Packer at 11,700'. Ran 2-7/8" OD 6.40# Buttress thread N-80 tubing to 11,715' and seated in Baker Model "F" Production Packer at 11,700' with perfs. 11,711-11,715'. Otis landing nipple position No. 1 at 11,709'. Otis side door shift valve at 11,698'. Otis landing nipple position No. 2 at 10,700'. Otis landing nipple position No. 3 at 9700'. Opened well up and flowed to pit to clean up. Shut well in for 89 hours. After 89 hours with dead weight T.P. 6218# flowed and tested well in the following manner:

Flowed 1-3/4 hours on 10/64" choke, opening TP 6218# (DW), FTP 6156psi., gas volume 2,737 MCFPD and 7.60 bbls. of 52 degree corrected gravity condensate.
Next two hours flowed through 12/64" choke, FTP 6075 psi. (DW), gas volume 4563 MCFPD and and 6.60 bbls. of condensate.
Next two hours flowed through 14/64" choke, FTP 5995 psi. (DW), gas volume 6025 MCFPD and 8.70 bbls. of condensate.
Next one and one half hours flowed through 16/64" choke, FTP 5915 psi. (DW), gas volume 8009 MCFPD and undetermined amount of condensate to pits.
Established 24 hour New Mexico Conservation Commission AOF Potential of 310,000 MCFPD.
Completed January 22, 1963, as a "Wildcat" completion in Strawn (Pennsylvanian) formation.
Total condensate recovery during 7-1/4 hrs. test was 22.80 bbls. to tank and undetermined amount to pits.

Well now shut in - Waiting on gas connection.

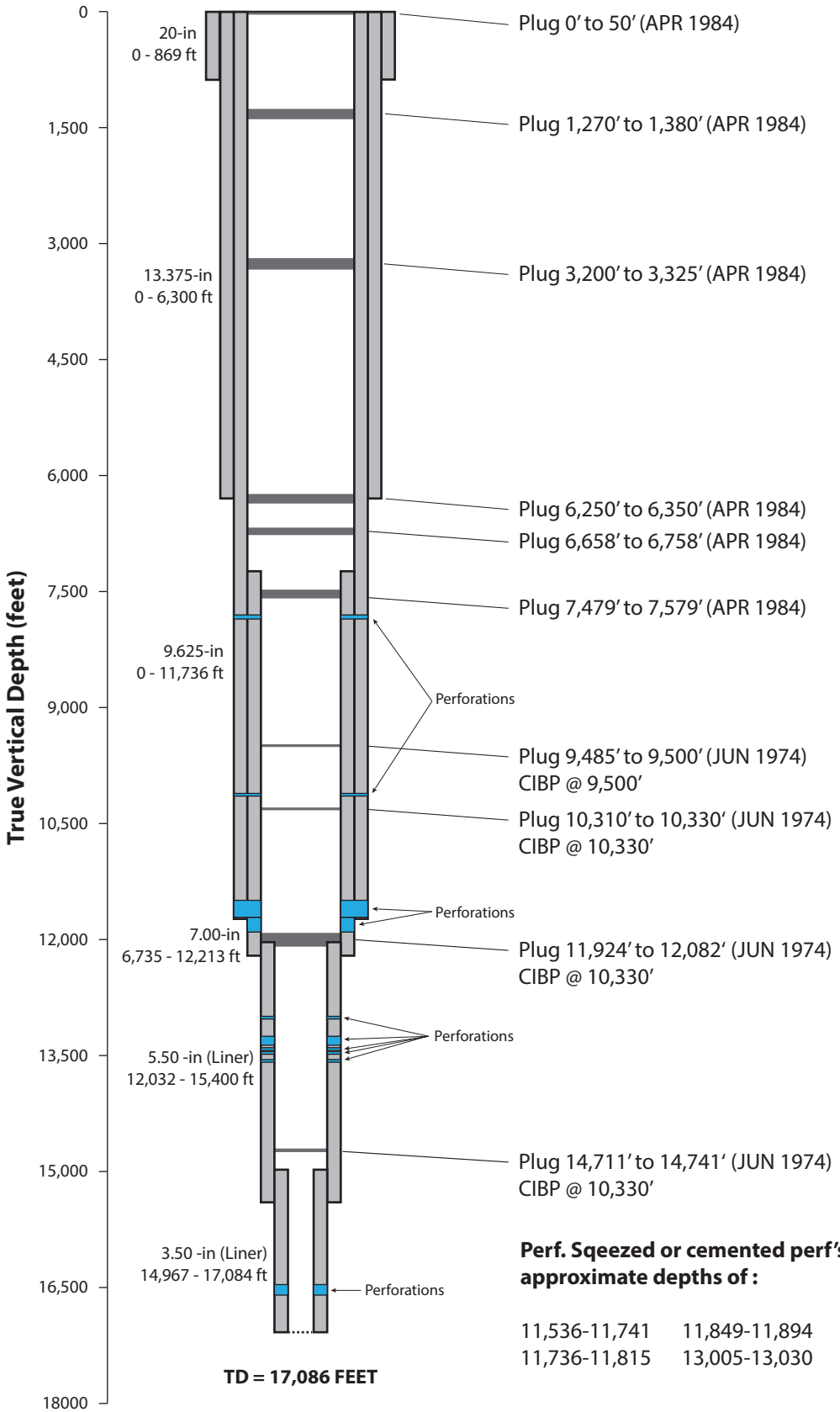
FORMATION RECORD

From	To	Feet	
0	12,058	12,058	
12,058	12,152	94	
12,152	12,477	325	Lime & Shale - Top Atoka 12,152'
12,477	13,366	889	Sand - Top Morrow 12,477'
13,366	14,583	1,217	Shale - Top Barnett Shale 13,366'
14,583	14,685	102	Lime - Top Mississippian 14,853'
14,685	15,138	453	Chert - Top Cherty 14,685'
15,138	15,518	380	Shale - Top Woodford 15,138
15,518	15,958	440	Lime & Dolmite - Top Devonian 15,518'
[illegible]	15,958		Total Depth
	12,790		Plugged Back Total Depth

Geological Tops by Schlumberger Gamma Ray Sonic Log

TEXACO EXPLORATION AND PROD. - WEST JAL UNIT #1 PLUGGING DIAGRAM

Lease Name:	West Jal Unit #1	**Footage:**	1980 FNL and 660 FEL
API:	30-025-21172	**Well Type:**	Oil
Location:	Sec. 20, T25S, R36E	**Total Depth:**	17,086'
County, State:	Lea County, New Mexico	**Coordinates:**	32.117596, -103.280739 (NAD83)



Perf. Sqeezed or cemented perf's tested at approximate depths of :

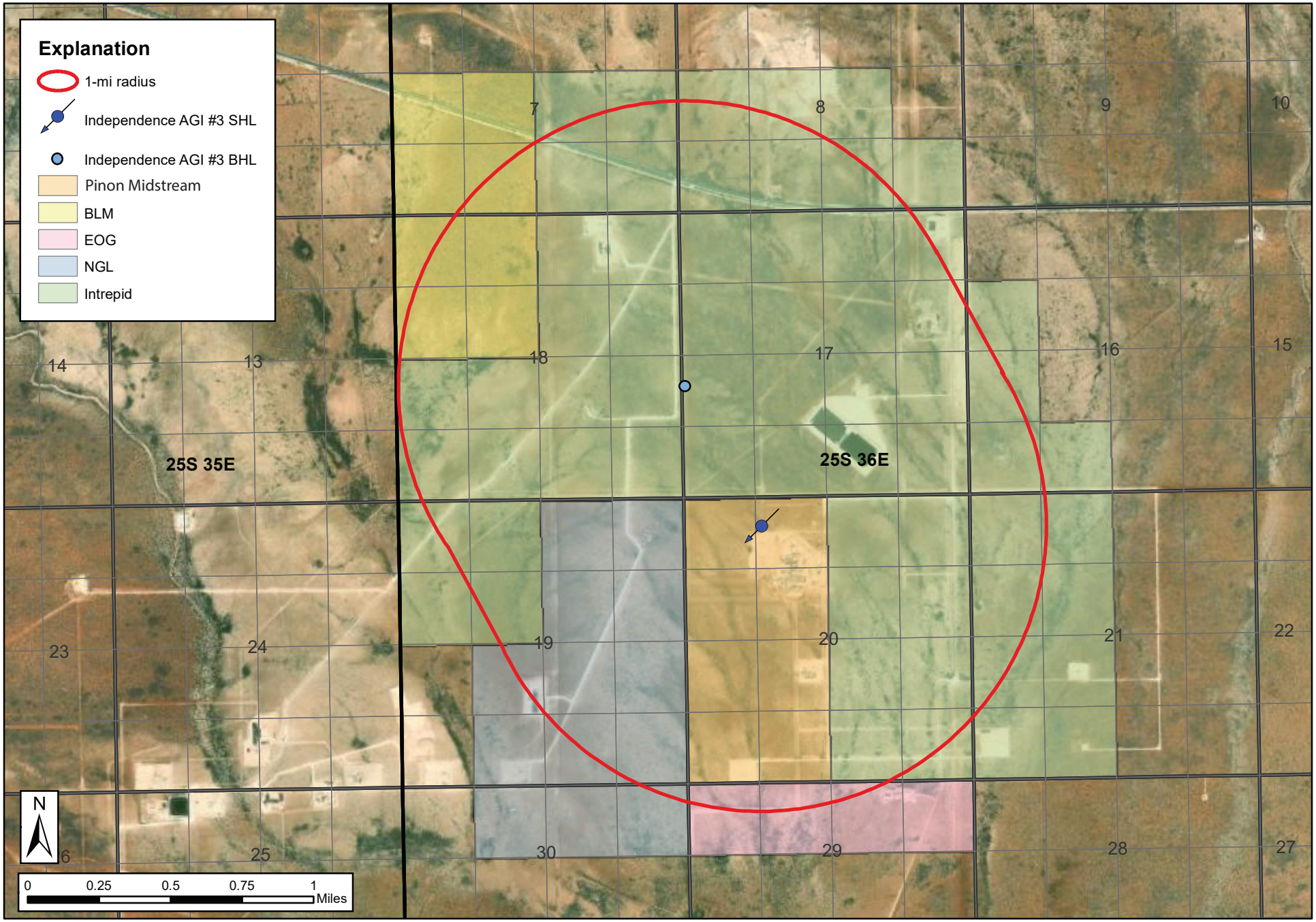
11,536-11,741	11,849-11,894	13,410	16,449-16,614
11,736-11,815	13,005-13,030	13,560	

*Schematic is properly scaled

APPENDIX B

IDENTIFICATION OF OPERATORS, LESSEES, SURFACE OWNERS, AND OTHER INTERESTED PARTIES WITHIN ONE MILE OF THE PROPOSED INDEPENDENCE AGI #3; NOTIFICATION LETTERS, PROOF OF DELIVERY AND AFFIDAVIT OF PUBLICATION

Figure B-1:	Surface owners and operators within a one-mile radius of the proposed Independence AGI #3 surface- and bottom-hole location
Figure B-2:	Lessees and mineral ownership within a one-mile radius of the proposed Independence AGI #3 surface- and bottom-hole location
Table B-1:	Summary List of surface owners, lessees, and mineral rights owners within one mile of the proposed Independence AGI #3 surface- and bottom-hole location, whom were provided notification and a complete copy of the C-108 application
Attachment B1:	Sample notice letter to be delivered to interested parties
Attachment B2:	Sample public notice of NMOCD hearing



Enterprise Products

Figure B-1. Surface ownership within one mile of the proposed Independence AGI #3 surface and bottom-hole locations.

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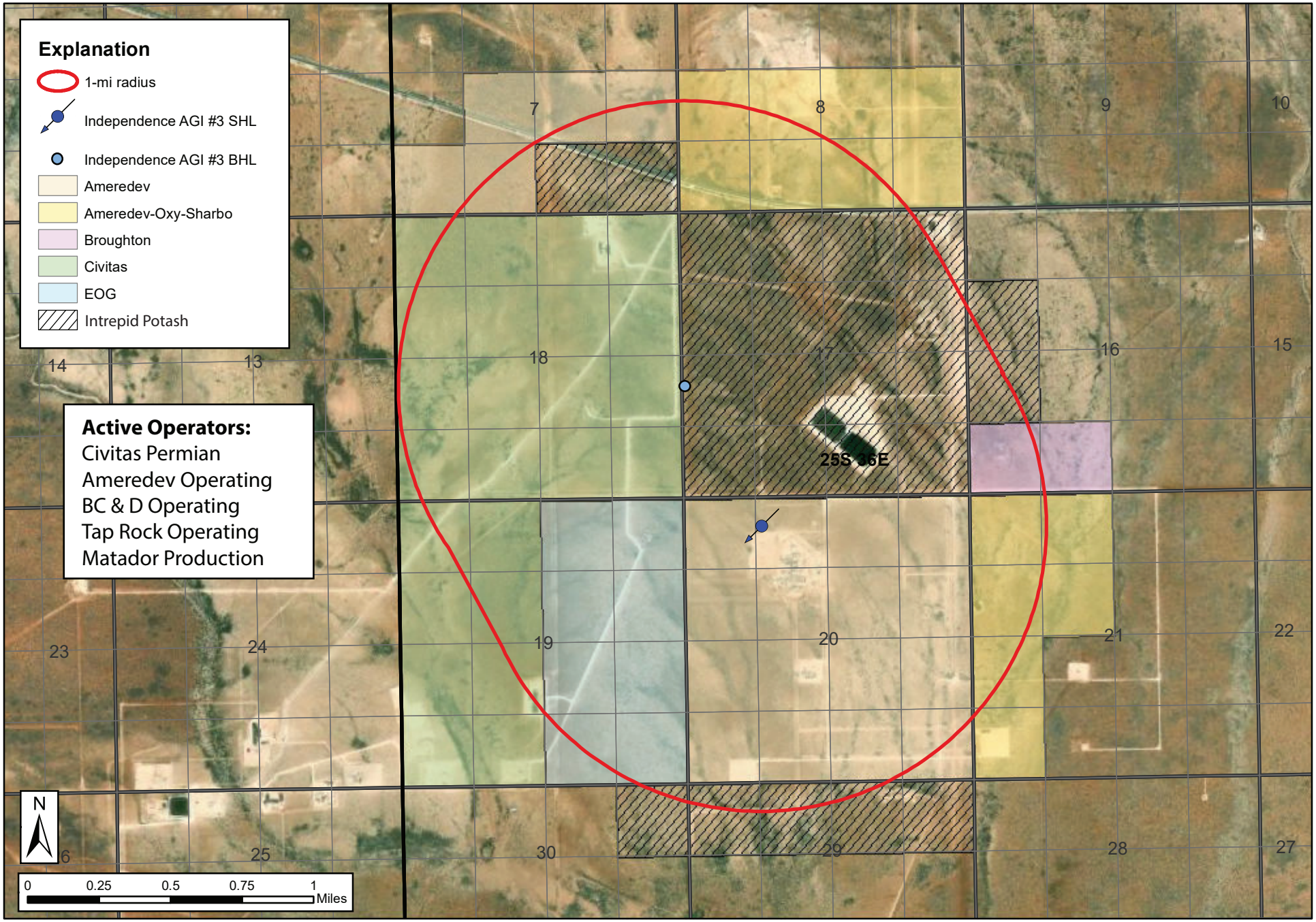

Enterprise Products

Figure B-2. Active operators, lessees, and mineral ownership within one mile of the proposed surface and bottom-hole location of Independence AGI #3.

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TABLE B-1. Summary list of surface owners, operators, lessees, and mineral owners within one mile of the proposed Independence AGI #3 well

Surface Owners:

EOG Resources, Inc.
5509 Champions Drive
Midland, TX 79706
(432) 686-3600

Intrepid Potash – New Mexico, LLC
1996 Potash Mines Rd.
Carlsbad, NM 88221
(575) 887-5591

Bureau of Land Management
301 Dinosaur Trail
Santa Fe, NM 87508
(505) 954-2000

NGL Water Solutions Permian, LLC
865 North Albion Street, Suite 500
Denver, CO 80220
(303) 968-0887

Ameredev II, LLC
2901 Via Fortuna, Suite 600
Austin, TX 78746

Active Operators:

Ameredev II, LLC
2901 Via Fortuna, Suite 600
Austin, TX 78746

BC & D Operating, Inc.
1008 West Broadway
Hobbs, NM 88240
(575) 393-2727

Matador Production Company
5400 LBJ Freeway, Suite 1500
Dallas, TX 75240

Civitas Permian Operating, LLC
555 17th Street, Suite 3700
Denver, CO 80202

Tap Rock Operating
523 Park Point Drive, Suite 200
Golden, CO 80401

Lessees:

Ameredev II, LLC
2901 Via Fortuna, Suite 600
Austin, TX 78746

Broughton Petroleum, Inc.
1225 N. Loop West, Suite 1055
Houston, TX 77008

Sharbo Energy LLC
P.O. Box 840
Artesia, NM 88211

EOG Resources, Inc.
5509 Champions Drive
Midland, TX 79706

Oxy Y-1 Co.
5 Greenway Plaza, Suite 110
Houston, TX 77046

Civitas Permian Operating, LLC
555 17th Street, Suite 3700
Denver, CO 80202

Mineral Rights Owners:

Bureau of Land Management
301 Dinosaur Trail
Santa Fe, NM 87508
(505) 954-2000

Allison Marks
New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87504-1148

ATTACHMENT B1

Sample notice letter to be delivered to interested parties

MONTH XX, 2025

Party to be notified
Address
Address

VIA FEDERAL EXPRESS
RETURN RECEIPT REQUESTED

RE: ENTERPRISE DELAWARE BASIN TREATING, LLC PROPOSED INDEPENDENCE AGI #3 WELL

To Whom It May Concern:

This letter is to advise you that Enterprise Delaware Basin Treating LLC (Enterprise) intends to file the enclosed C-108 application (Application for Authorization to Inject) with the New Mexico Oil Conservation Division (NMOCD) seeking approval to drill and operate an acid gas injection (AGI) well, the Independence AGI #3 well, at their active Dark Horse Gas Treatment Facility. The proposed well is intended to provide a redundant well option for the existing AGI operations and increase the total sour gas treatment and permanent sequestration at the treatment facility.

The proposed well (Independence AGI #3) will be a deviated well, with a surface location approximately 530 feet from the north line and 1,434 feet from the west line of Section 20, Township 25S, Range 36E. The bottom-hole location is proposed to be located 2,063 feet from the south line and 75 feet from the west line of Section 17, T25S, R36E, approximately 2,936 feet north-northwest of the surface location. The Independence AGI #3 well will inject waste carbon dioxide and hydrogen sulfide into the Devonian through Fusselman geologic formations through an open-hole completion, at a depth of approximately 17,730 feet. The maximum allowable surface pressure will not exceed 4,929 psig, and combined, the three-well AGI system (Independence AGI #1, Independence AGI #2, and Independence AGI #3), will not exceed a daily injection volume of 45 million standard cubic feet (MMSCF).

In accordance with application requirements of the NMOCD, you are being provided this notice and a copy of the complete application, as you are an interested party within one (1) mile of the proposed AGI well location. Interested parties must file any objections or requests for hearing of administrative applications within fifteen (15) days from the date in which this application was mailed to them. These requests should be submitted to the New Mexico Oil Conservation Division: 1220 South St. Francis Drive, Santa Fe, New Mexico 87505.

If you have any questions concerning this application, you may contact David White, P.G. at Geolex, Inc.; 500 Marquette Ave NW, Suite 1350, Albuquerque, New Mexico 87102; (505) 842-8000.

Sincerely,
Geolex, Inc.®

David White, P.G.
Vice President, Consultant to Enterprise
Enclosure: C-108 Application for Authority to Inject

ATTACHMENT B2

Sample public notice of NMOCD hearing

Enterprise Delaware Basin Treating, LLC, P.O. Box 4324, Houston, Texas 77210 filed Form C-108 (Application for Authorization to Inject) on XX/XX/2025, with the New Mexico Oil Conservation Division (NMOCD) seeking administrative approval for the proposed acid gas injection (AGI) well, Independence AGI #3. The proposed well will be a deviated well, with a surface location of approximately 530 feet FNL and 1,434 feet FWL of Section 20, Township 25 South, Range 36 East, and a proposed bottom-hole location of 2,063 feet FSL and 75 feet FWL of Section 17, T25S, R36E in Lea County, New Mexico. The well will provide a redundant option to dispose of waste carbon dioxide and hydrogen sulfide into the Devonian through Fusselmen Geologic formations through an open-hole completion, at a depth of approximately 17,730 feet. The maximum allowable surface pressure will not exceed 4,929 psig, and the AGI three-well system will not exceed 45 million standard cubic feet per day (MMSCFD). Interested parties must file any objections or request for hearing within 15 days with the Oil Conservation Division: 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. Additional information can be obtained from the applicant's agent, Geolex, Inc.® at 500 Marquette Ave NW, Albuquerque, New Mexico 87102.

APPENDIX C

REQUEST TO SAMPLE AND ANALYZE GROUNDWATER FROM EXISTING WATER WELL

GEOLEX®
INCORPORATED

Alberto A. Gutiérrez, C.P.G.

November 11, 2021 VIA U.S. POSTAL SERVICE

Jim Winter
NGL South Ranch, Inc.
3773 Cherry Creek North Drive, Suite 1000
Denver, CO 80209

RE: WATER WELL (CP-01170 POD 5 & CP-00465 POD 1) STATUS INQUIRY AND REQUEST FOR GROUNDWATER SAMPLE

Dear Mr. Winter,

On behalf of Piñon Midstream, LLC (Piñon), we (Geolex, Inc.®) are contacting you in the hopes that you may provide us with information regarding the current operational status of water wells in which NGL South Ranch, Inc. is documented as the owner of record. If the current state of the well permits, we respectfully request permission to collect and analyze a groundwater sample from one or both of these wells.

As recorded in the files of the New Mexico Office of the State Engineer (NMOSE), the well file numbers are CP-01170 POD 5 and CP-00465 POD 1 and both well locations are documented as being within the NE/4 of the NE/4 of Section 19, Township 25 South, Range 36 East. The coordinates of the two wells, as documented by NMOSE records are as follows:

CP-01170 POD 5 -- 32.121415, -103.296676 (NAD83)
CP-00465 POD 1 -- 32.121304, -103.297834 (NAD83)

Piñon is requesting permission to sample and analyze groundwater from these wells, in order to provide the New Mexico Oil Conservation Division (NMOCD) with required groundwater data in the area of their proposed Independence AGI #2 well. This well is to be located on the surface tract of their Dark Horse Gas Treatment Facility in Section 20 of Township 25 South, Range 36 East.

If you have any questions concerning this inquiry or would like to further discuss our request, you may contact Alberto A. Gutiérrez, R.G., or myself at (505)842-8000 at Geolex, Inc.®; 500 Marquette Avenue NW, Suite 1350; Albuquerque, New Mexico 87102.

Sincerely,
Geolex, Inc.®

David A. White
Consultant to Piñon Midstream

P:\21-026 Pinon AGI #2 eval-permitting\Reports\C-108\Water Well Sample Request\FW Sample Request (NGL).docx

GEOLEX®
INCORPORATED

500 Marquette Ave. NW, Ste. 1350
Albuquerque, NM 87102

FOREVER / USA

JIM WINTER
NGL SOUTH RANCH INC
3773 CHERRY CREEK N. DR. #1000
DENVER CO 80209