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

APPLICATION OF TRACE DELAWARE TREATING SERVICES, LLC FOR AUTHORIZATION TO INJECT, EDDY COUNTY, NEW MEXICO. CASE NO._____

APPLICATION FOR AUTHORIZATION TO INJECT

In accordance with 19.15.26 NMAC, Trace Delaware Treating Services, LLC ("Trace") (OGRID No. 334091) files this application with the Oil Conservation Division ("Division") seeking authorization to drill, complete, and operate an acid gas injection ("AGI") well at its Trace Delaware Heritage Treating Facility located in Eddy County, New Mexico. In support of this Application, Trace states the following.

1. The proposed Hatch AGI #1 well ("Well") will be located in Section 31, Township 18 South, Range 31 East, in Eddy County, New Mexico. The Well is designed to address the anticipated sour gas disposal needs of the Trace Delaware Heritage Treating Facility.

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 deviated and directionally drilled from a surface hole located at approximately 458' FSL and 2,527' FWL (Unit O) to a bottom hole located approximately 2,484' to the northeast (Unit I) in Section 31, Township 18 South, Range 31 East.[1]

[1] The approximate geographic coordinates for the surface location are 32.697902, -103.908681 (NAD83), within Section 31 of Township 18 South, Range 31 East, and the AGI well will be directionally drilled to a bottom-hole location at approximately 32.703198, -103.903585 (NAD83) within the same section.

4. The Well will inject treated acid gas ("TAG") into the Siluro-Devonian formations, including the Devonian, Wristen, and Fusselman formations, at a depth of approximately 13,341' to 14,226' TVD.

5. Trace is requesting a maximum daily injection rate of 12 million standard cubic feet per day (MMscf/D).

6. The Well's maximum surface injection pressure will be approximately 4,445 pounds per square inch gauge.

7. The surface hole location of the Well is within the Trace Delaware Heritage Treating Facility's boundary.

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

9. The proposed Well will allow Trace to safely dispose of TAG in a manner that will improve operational stability and minimize the potential for exposure to facility personnel.

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

WHEREFORE, Trace 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 Trace's C-108 application for authorization to inject.

Respectfully submitted,

HARDY MCLEAN LLC

/s/ Dana S. Hardy

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ATTORNEYS FOR TRACE DELAWARE TREATING SERVICES, LLC

TRACE MIDSTREAM

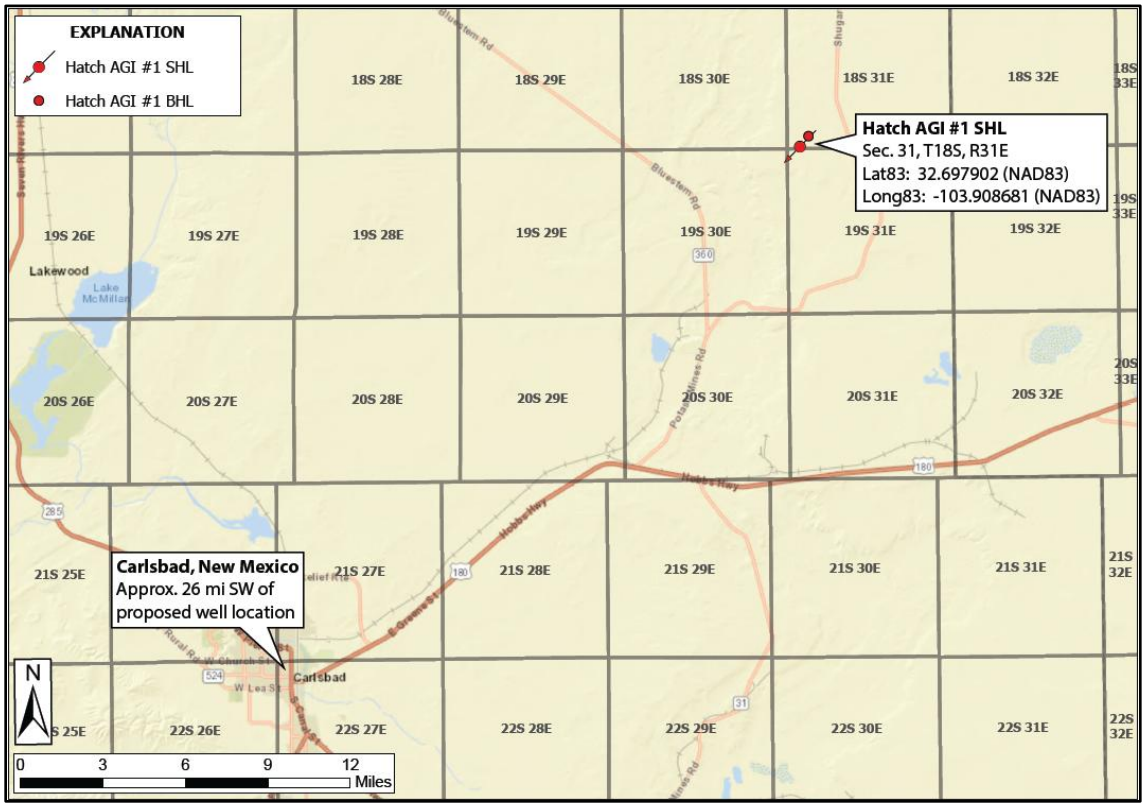
GEOLEX INCORPORATED

APPLICATION FOR UIC CLASS II AGI WELL

TRACE DELAWARE TREATING SERVICES, LLC
(OGRID #334091)

PROPOSED HATCH AGI # 1
Section 31, Township 18 South, Range 31 East

Surface Latitude (NAD83): 32.697902
Surface Longitude (NAD83): -103.908681



MARCH 2026

Prepared for:

Trace Delaware Treating Services, LLC
840 Gessner Road, Suite 530
Houston, Texas 77024
(281) 657-3611

Prepared by:

Geolex, Inc.®
500 Marquette Ave NW, Suite 1350
Albuquerque, New Mexico 87102
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EXHIBIT A

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: Trace Delaware Treating Services, LLC [OGRID #334091]

ADDRESS: 840 Gessner Road, Suite 530; Houston, TX 77024

CONTACT PARTY: David Dell'Osso PHONE: (281)657-3611

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? _____Yes ___X___No
If yes, give the Division order number authorizing the project: _____

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.
Section 5.0; Appendix A

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 5.0; 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 1.0, 2.0, and 3.0**
2. Whether the system is open or closed; **Sections 1.0, 2.0, and 4.0**
3. Proposed average and maximum injection pressure; **Sections 1.0 and 3.0**
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, **Sections 3.0 and 4.0**
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 3.0 and 4.0**

*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.
Section 4.0

IX. Describe the proposed stimulation program, if any.
Section 3.0

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

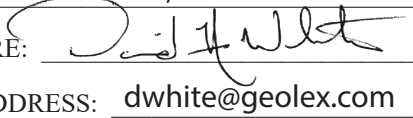
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
Section 4.0

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 7.0

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
Appendix B

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: David A. White, P.G. TITLE: Consultant to Trace Delaware

SIGNATURE:  DATE: March 26, 2026

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: Original and one copy to Santa Fe with one copy to the appropriate District Office

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1.0 EXECUTIVE SUMMARY

On behalf of Trace Delaware Treating Services, LLC ("Trace Delaware", or "Trace"; OGRID #334091), Geolex, Inc.® (Geolex) has prepared and is hereby submitting a complete C-108 application for approval to drill, complete, and operate an acid gas (CO_2 and H_2S) injection well in Section 31, Township 18 South, Range 31 East, approximately 26 miles northeast of the city of Carlsbad, in Eddy County New Mexico (Figure 1). The proposed well, Hatch AGI #1, will provide Trace with the ability to safely dispose of acid gas in a manner proven to improve and maintain operational stability and minimize the potential for exposure to facility personnel.

The proposed Hatch AGI #1 well is designed to address the anticipated sour gas disposal needs of the Trace Delaware Heritage Treating Facility. In submitting this application, Trace seeks approval to dispose of up to twelve (12) million standard cubic feet (MMSCFD) per day (approximately 4,527 barrels per day) of treated acid gas (TAG) into the Siluro-Devonian formations for a period of at least 30 years. The TAG stream is anticipated to consist of approximately 70% carbon dioxide (CO_2) and approximately 30% hydrogen sulfide (H_2S), with trace concentrations (less than 1%) of hydrocarbons (C_1-C_7). When operating at full capacity, the proposed Hatch AGI #1 well will permanently sequester approximately 487 tons of CO_2 and approximately 162 tons of H_2S daily.

To minimize surface and subsurface interference and ensure access to quality reservoir, Hatch AGI #1 will be drilled as a deviated injection well. The approximate geographic coordinates for the surface location are 32.697902, -103.908681 (NAD83), within Section 31 of Township 18 South, Range 31 East, and the AGI well will be directionally drilled to a bottom-hole location at approximately 32.703198, -103.903585 (NAD83) within the same section. Surface lands and subsurface minerals at the well site, proposed bottom hole location, and throughout Section 31, are federally owned. Prior to and throughout the development process for this C-108 application, Trace and Geolex have been collaborating and coordinating with Bureau of Land Management (BLM) staff regarding the proposed Hatch AGI #1 well project.

To ensure adequate isolation of groundwater resources, producing intervals, and potential high-pressure depth intervals, the Hatch AGI #1 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. To monitor down-hole conditions, the proposed AGI well will incorporate pressure and temperature sensors in the injection tubing immediately overlying the injection reservoir. All down-hole components (i.e., permanent injection packer and bottom-hole PT sensors) will be constructed of appropriate CRA materials similar to casing and tubing materials described above.

The proposed open-hole injection zone will target geologic formations of the Siluro-Devonian, including the Devonian, Wristen, and Fusselman formations, between approximately 13,619 to 14,504 feet MD (or 13,341 to 14,226 ft TVD). Analyses of these geologic units confirm that they act as excellent closed-system reservoirs that will accommodate the anticipated and future needs of Trace Delaware for the disposal of acid gas and sequestration of CO_2 from the future gas-treatment facility.

In the area of the proposed AGI #1 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 approximately 95 feet in thickness. Additionally, more than 938 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 1,038 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 Morrow Formation, lies approximately 1,135 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 within the modeled plume area.

The proposed maximum allowable operating pressure (MAOP) requested for the Hatch AGI #1 is approximately 4,445 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 189°F and 6,287 psi, each MMSCF of TAG will occupy a reservoir volume of approximately 376 barrels.

As it is critical to verify that the proposed Siluro-Devonian injection reservoir can accommodate the requested 12 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 through geophysical log analytical and mapping methods and regional, sidewall core data, characterization of the proposed Siluro-Devonian injection reservoir, with respect to porosity development and the interconnectivity of porous strata, has been completed. 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 Trace Delaware.

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 Hatch AGI #1, the resultant TAG plume is anticipated to occupy a maximum area of approximately six square miles and would extend a maximum of approximately 1.79 miles northeast from the AGI #1 bottom-hole location. Gas saturation values are expected to range from approximately 0 to 51% with diffuse concentrations (i.e., less than 5%) 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 Hatch AGI #1 well.

To evaluate the potential for induced seismicity in response to injection operations, at the proposed rate of up to 12 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 analysis of seismic data, structural mapping, and published fault data (Horne et al. 2021), 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 Hatch AGI #1 well, as well as additional offset saltwater disposal (SWD) wells, demonstrate that operation of the deep

AGI well, as proposed, is not anticipated to materially contribute to the total risk for injection-induced fault slip in the area.

Within the one-mile area of review (AOR) there are 103 wells, which most commonly were completed to produce from the Artesia Group (i.e., Tan-Queen), Bone Spring, Wolfcamp Formation, and Morrow Formation plays. It should be noted that for the proposed Hatch AGI #1, 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 103 wells, 35 are active, 17 are permitted, and 51 are plugged. Based on available NMOCD records and reviewed well files, none of the wells within the one-mile or two-mile areas of review penetrate the proposed Siluro-Devonian injection zone. The nearest well which penetrates the proposed injection zone is the Hackberry 16 SWD #1 (API: 30-015-41783), located approximately 3.5 miles from the Hatch AGI #1 well location.

The area surrounding the proposed injection site is arid and there are no natural bodies of water within several miles of the Trace Delaware Heritage Facility and proposed Hatch AGI #1 well. A search of the New Mexico Office of the State Engineer's files shows four (4) 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 0.76 miles away from the Hatch AGI #1 surface location and has a total depth of 105 feet below the ground surface (bgs). All water wells within a two-mile radius are shallow (i.e., 55 to 500 feet bgs) and will be protected via the proposed Hatch AGI #1 casing design, which includes installation of surface casing from the surface to an approximately depth of 560 feet (within the Rustler Formation), 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, Trace Delaware Treating Services, LLC has determined that the proposed Hatch AGI #1 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 Hatch AGI #1 well (Section 3.0)
- An overview of the acid gas characteristics and modeling and 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 4.9)
- 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 NMOCC or NMOCD hearing, and a draft public notice.
- **Appendix C:** Request letter for permission to sample and analyze groundwater and proof of mailing documents (USPS Certified Mail).
- **Appendix D:** Example schematics illustrating corrosion-resistant dry acid gas injection tree and down-hole AGI well components (i.e., permanent packer, PT gauge, casing/tubing, etc.)

3.0 PROPOSED CONSTRUCTION AND OPERATION OF HATCH AGI #1

The proposed AGI well, Hatch AGI #1, is intended to service Trace Delaware Treating Services, LLC's proposed Heritage Treating Facility and will be constructed on the facility property in Section 31 of Township 18 South, Range 31 East, approximately 26 miles northeast from the city of Carlsbad in Eddy County, New Mexico (Figure 1). The well will be drilled as a deviated well from the approximate surface geographic coordinates of 32.697902, -103.908681 (NAD83) to a bottom-hole location approximately 2,484 feet to the northeast at 32.703198, -103.903585 (NAD83), as shown in Figure 2.

TAG to be injected via Hatch AGI #1 will be routed from the adjacent Trace Heritage Treating Facility via on-site compression facilities that will compress and dehydrate the acid gas. The compressed TAG will then be transmitted to the AGI #1 injection tree via high-pressure, AAMP (formerly "NACE") compliant 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 HATCH AGI #1

The location of the proposed Hatch AGI #1 well is shown in Figure 2, and a general schematic of the injection system is shown in Figure 3. The Hatch AGI #1 well will be drilled to a total depth of approximately 14,504 ft MD (measured depth), or 14,226 TVD (true vertical depth) within the lower Fusselman Formation. The injection interval (approximately 13,619 to 14,504 ft MD) will be completed as an open-hole injection interval that includes the Devonian, Wristen, and Fusselman formations.

The AGI facilities and well will be integrated components of the Trace Heritage Treating Facility design and the proposed AGI #1 well will be the primary sour gas disposal method for the facility. The proposed well schematic for the Hatch AGI #1 well is illustrated in Figure 4 and is designed to accommodate the injection of up to 12 MMSCFD per day of TAG for a design life of at least 30 years.

Hatch AGI #1 will utilize a five-string casing design to ensure the protection and isolation of shallow groundwater resources, potentially elevated hydrogen sulfide within reservoir waters (e.g. San Andres), oil and gas producing intervals, potential intervals of high-pressure conditions, and potential intervals of lost circulation. The surface casing (20-inch) will be set at approximately 560 feet MD, within the Rustler Formation to isolate shallow groundwater resources of the Dockum Group Aquifer. The first intermediate casing string (16-inch) will be set at approximately 2,040 feet MD, to cement and isolate anhydrite- and salt-bearing units (i.e., Rustler Fm. and Salado) overlying the Artesia Group and the San Andres Formation. The second intermediate casing string (13 3/8-inch) will provide isolation of lateral, back-reef stratigraphic equivalents of the Capitan Reef, a known and confirmed interval of lost circulation, and the San Andres Formation, a potential hazard for hydrogen sulfide. The base of this second intermediate section will be set at approximately 4,746 ft MD, 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 10,080 ft. MD to aid in the isolation of the lower pressured Delaware Mountain Group and Bone Spring Formation from the underlying, potentially 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 13,619 ft MD. The injection interval will be drilled as a 5 7/8-inch open hole interval to a depth of approximately 14,504 ft MD in the lower Fusselman Formation.

As shown in Figures 3 and 4, the Hatch AGI #1 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 Hatch AGI #1 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 (Dockum Group 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 Hatch AGI #1 well, 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. 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. A schematic of the proposed well is shown in Figure 4 and the Hatch AGI #1 casing plan is summarized in Table 1.

Table 1. Hatch AGI #1 proposed casing schedule

Casing	Hole Size (in.)	Csg. Size (in.)	Pounds Per Foot	Grade	Thread	Top (ft. MD)	Bottom (ft. MD)
Proposed Casing Schedule							
Conductor	36	30	118	-	Welded	0	120’
Surface	24	20	94	J-55	BTC	0	560’
1st Intermediate	17.5	16	84	L-80	FJ	0	2,040’
2nd Intermediate	14.75	13.325	72	HCL-80	FJ	0	4,746’
3rd Intermediate	12.25	9.625	53.5	HPL80	BTC	0	10,080’
Production	8.75	7	32	SS95	VA Superior	0	13,319’
Production (CRA)	8.75	7	32	G3 (CRA)	VAM*	13,319’	13,619’
Proposed Injection Tubing							
Tubing	N/A	3.5	10.2	SS-95/T-95	VA Superior*	0	13,319’
Tubing (CRA)	N/A	3.5	10.2	G3 (CRA)	VAM*	13,319’	13,619’

*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 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 Hatch AGI #1 well, this includes the strategic use of acid-resistant cement (e.g., Halliburton WellLock Resin, LockCem, or equivalent) across the San Andres Formation, to ensure well integrity across potential hydrogen sulfide-bearing formation fluids. Additionally, CRA casing, tubing, and acid-resistant cement will be utilized at the base of the 7-inch production casing to protect lower-well

components and ensure long-term physical 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 Hatch AGI #1 casing strings.

Table 2. Hatch AGI #1 proposed cementing program

Casing String	Stage #	Cement Type	No. of Sacks	Density (#/gal)	Coverage Interval (ft. MD)
Conductor	1	Redimix	-	-	0' – 120'
Surface	1	Lead: Extend Cem C Tail: HalCem	Lead:550 Tail: 350	Lead: 13.5 Tail: 14.8	0' – 560'
1st Intermediate	1	Lead: EconoCem Tail: HalCem	Lead: 310 Tail: 285	Lead: 12.9 Tail: 14.8	0' – 2,040'
2nd Intermediate	1	Lead: NeoCem Tail: CorrosaCem	Lead: 485 Tail: 325	Lead: 12.0 Tail: 13.5	0' – 4,746'
3rd Intermediate	1	Lead: NeoCem Tail: NeoCem	Lead: 1855 Tail: 295	Lead: 12.0 Tail: 13.2	0' – 10,080'
Production	1	Lead: WellLock Resin (or equivalent)	Lead: 12 bbls	12.4	0' – 13,619'
	2	Lead: NeoCem	Lead: 1,535	Lead: 13.5	
	3	Lead: NeoCem Tail: VersaCem	Lead: 695 Tail: 55	Lead: 11.5 Tail: 13.5	

For the purposes of monitoring down-hole injection conditions and long-term evolution of the Siluro-Devonian injection reservoir, Hatch AGI #1 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 runs 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 Hatch AGI #1 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 (AAMP, 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 Hatch AGI #1 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 in case the wing valve does not close properly. After the AGI well is drilled and tested to assure that it will be capable of accepting the proposed volume of fluid (without using acid gas), it will be completed with the approved injection equipment for the acid gas stream.

Appendix D includes preliminary and example design documents for key Hatch AGI well components that will be utilized in construction of the proposed well, including the CRA permanent injection packer and the dry acid gas injection tree. Relevant information regarding valve pressure ratings and material trim class has been included.

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 560 to 14,504 feet MD. 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) and sonic dipole 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 within the injection zone and caprock intervals.

3.3 RESERVOIR STIMULATION, TESTING, AND PRESSURE MONITORING

Upon the completion of geophysical logging for 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.

Spot acid treatment, which will be completed prior to the SRT, will utilize approximately 3,000 gallons of 15% hydrochloric acid (HCl) that will be displaced along the open-hole injection interval for approximately 24 hours. The purpose of this treatment is to clean 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 then 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 HCl acid (15%) 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 at an approximate depth of 13,599 feet MD. For long-term monitoring of down-hole conditions, the Hatch AGI #1 well 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 have 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 have developed a process to ensure that necessary data are collected in the event of bottom-hole sensor failure. 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 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 Hatch AGI #1 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 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 fill in data for relevant reservoir analysis

9. After approximately ten (10) years of operation, perform another detailed 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 Hatch AGI #1 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 will be approximately 12 MMSCF per day. Pressure reduction valves and controls will be incorporated to ensure that the 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 Hatch AGI #1 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 12 MMSCF per day composed of 70% CO_2 and 30% H_2S. Specific gravities of TAG were determined for the conditions at the wellhead (1,800 psi, 120 °F), the total depth of the well (6,287 psi, 189°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 4,445 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 (TVD 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 = 0.65, and SG_{Tag} at bottom = 0.82; see Table 3)

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

$$SG_{Tag} = 0.73242\ldots$$
$$D_{Top} = 13{,}341 feet\ TVD$$

THEREFORE:

$$PG = 0.2 + 0.433\ (1.04 - 0.73242\ldots)$$

$$PG = 0.33318\ldots$$

AND

$$IP_{Max} = 0.33318\ldots \frac{psi}{ft}\ x\ 13{,}341\ ft\ TVD$$

$$\boldsymbol{IP_{Max} = 4{,}445\ psi}$$

Based on this determination, Trace Delaware requests approval for a surface injection MAOP of 4445 psig for the proposed Hatch AGI #1 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
12.0	30	70	323,297	974,126	1,297,422

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
120.0	1,800	12.0	70:30	1,297,422	645.84	0.65	5.39	32,164	5,729

Conditions at Bottom of Well

TD		TAG							
Temp F	Pressure psi	$Depth_{Top}$ Ft TVD	$Depth_{Bot}$ Ft TVD	Thickness ft	Density kg/m^3	SG	Density lbs/gal	Volume ft^3	Volume bbl
189.3	6,287	13,341	14,226	885	819.00	0.82	6.84	25,364	4,517

Conditions in Reservoir at Equilibrium

Reservoir Mid		TAG			
Temp F	Pressure psi	SG	Density lbs/gal	Volume ft^3	Volume bbl
185.6	6,096	0.82	6.82	25,416	4,527

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

4.1 GENERAL GEOLOGIC SETTING AND SURFICIAL GEOLOGY

The proposed Hatch AGI #1 well location (S31, T18S, R31E, as shown in Figure 1) lies on the north-northeastern margin of the Delaware Basin (Figure 5) and within the Pecos Valley drainage basin. Generally, the area is characterized by stabilized eolian sand deposits overlying Quaternary alluvium and locally developed caliche-cemented surfaces that form subtle topographic highs. The surface expression is gently undulating with relatively low relief. Drainage features are present, with surface runoff occurring through shallow, discontinuous channels and areas of localized infiltration. Vegetation is sparse and consistent with semi-arid conditions, consisting primarily of grasses and low shrubs. The greater region is underlain by evaporite-bearing formations that may locally influence surface conditions; however, no prominent karst features have been identified in preliminary site evaluations completed by Trace Delaware and in collaboration with the Bureau of Land Management (BLM). The proposed well site is underlain by recent Quaternary sediments. The thick sequences of Permian strata underlying these deposits are generally described below.

4.2 BEDROCK GEOLOGY

The Trace Delaware Heritage Treating Facility and the proposed Hatch AGI #1 well are located along the northern margin of the Delaware Basin (Figure 5), which covers a large area of southeastern New Mexico and West 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 was further deepened via basin subsidence.

Figure 6 illustrates a generalized Permian Basin stratigraphic column showing the anticipated formations and lithologies that underlie 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 Devonian, Wristen and Fusselman formations, 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 entire Siluro-Devonian geologic interval that could lead to enhanced vertical and horizontal permeability. Within the shelf area of the Hatch AGI #1, carbonate buildups within the Wristen formation have been identified which are in turn, enhanced by the same karst-related secondary porosity mechanisms of the Fusselman and Devonian intervals.

The sub-Woodford Shale Paleozoic rocks extend down to the Ordovician Simpson Formation, which is separated from underlying basement rock by a limited interval of Early Ordovician sandstones and granite wash. The Granite Wash and remnant Ellenburger is overlain by approximately 213 feet of Ordovician Simpson Group sandstones, shale, and tight limestones, as well as approximately 240 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 overlie 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 nearly one hundred feet of shale and basinal limestones of the Upper Mississippian Barnett Formation. The overlying Pennsylvanian Morrow, Atoka, and Strawn formations complete the pre-Permian section. Within these geologic intervals, oil and gas resources have commonly been produced from the Artesia Group (i.e., Tansill, Yates, Seven Rivers, Queen), the Bone Spring Formation, the Wolfcamp Formation, and Morrow Formation plays. Active oil and gas production within the one-mile area of review dominantly occurs from the Artesia Group and Bone Spring Formation, with less frequent (i.e., five wells) production from the Morrow Formation. The deepest currently producing formation, the Morrow Formation, is approximately 1,098 feet above the proposed Hatch AGI #1 injection zone.

4.3 LITHOLOGIC AND RESERVOIR CHARACTERISTICS OF THE SILURO-DEVONIAN FORMATIONS

The proposed injection interval for the Hatch AGI #1 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 Hatch AGI #1 location, Geolex determined that the Devonian and Silurian injection reservoirs exhibited sufficient porosity potential to accommodate the disposal needs of the Trace Delaware Heritage 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 13,341 to 14,226 feet TVD (13,619 to 14,504 ft. MD). The proposed injection zone consists of approximately 885 feet of Siluro-Devonian strata, comprised predominantly of porous carbonates (resulting from numerous subaerial exposure events) that would readily accept TAG for permanent sequestration. 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 95 feet thick in this area. The Woodford Shale is overlain, in turn, by approximately 938 feet of tight shales and carbonates of the Barnett and Osage formations. These units provide excellent, and multiple 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 Hatch AGI #1 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 primary caprock. The proposed Hatch AGI well location lies within a local structural low that is sufficiently offset from local structural features and interpreted faults. Geophysical logs from nearby wells and additional subsurface data confirm several intervals within the proposed injection zone that exhibit significant porosity development. Furthermore, available data demonstrate that low-porosity and low-permeability attributes of the proposed caprock intervals are laterally continuous within the greater project area.

Table 4. Anticipated formation tops at the proposed Hatch AGI #1 location

Formation	Depth (MD)	Depth (TVD)	Formation	Depth (MD)	Depth (TVD)
Dockum Group	121	121	Bone Spring	6,301	6,206
Rustler	547	547	Wolfcamp	10,060	9,868
Salado	753	753	Strawn	11,101	10,883
Tansill	2,036	2,036	Atoka	11,304	11,080
Yates	2,263	2,263	Morrow	11,612	11,414
Seven Rivers	2,733	2,730	Barnett	12,564	12,308
Queen	3,193	3,178	Osage	12,968	12,701
Grayburg	3,582	3,558	Woodford	13,524	13,246
San Andres	3,889	3,856	Devonian	13,619	13,341
DMG	4,739	4,685	Wristen	13,719	13,441
Brushy Canyon	5,270	5,202	Fusselman	14,149	13,871
			Well Total Depth	**14,504**	**14,226**

4.3.1 INJECTION RESERVOIR FRACTURE PRESSURE DETERMINATION

For previous AGI wells, New Mexico Oil Conservation Division (NMOCD) has requested analysis to empirically determine 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, made available within the analog well of Zia AGI D #2 (API: 30-025-42207) has been utilized to calculate breakdown pressures within analogous (and proximal) reservoir of the Siluro-Devonian.

The Zia AGI D #2 is located approximately 6.7 miles to the southeast of the proposed Hatch AGI #1 and is characterized by similar Siluro-Devonian injection zone characteristics, including pressure conditions, lithology, and porosity and permeability attributes. Critically, the Zia AGI D #2 well data also include a sonic dipole log which 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 the Zia D AGI #2 Sonic Dipole)

Resultant Fracture Gradient calculations of the Siluro-Devonian injection reservoir are presented within Figure 11. Formation average fracture gradients range from a minimum of 0.668 psi/ft to a maximum of 0.706 psi/ft for an overall Siluro-Devonian average of 0.683 psi/ft. Based upon the proposed surface MAOP of 4,445 psig, pressures at bottom hole (14,226' TVD) will have an absolute maximum 0.63 psi/ft at bottom hole pressure of 8,969 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 Zia D AGI#2 and are anticipated to be reasonable estimates of breakdown pressures of the targeted reservoirs. However, after drilling of the proposed Hatch AGI #1, a full suite of geophysical logs, including sonic dipole, will be logged allowing a more precise calculation of local formation breakdown pressure. In addition, following drilling activities, step-rate injection tests will evaluate and attempt to confirm that bottomhole pressures at MAOP will not exceed breakdown pressures of 0.683 psi/ft.

4.4 CHEMISTRY OF SILURO-DEVONIAN RESERVOIR FLUIDS

A review of formation waters from the U.S. Geological Survey National Produced Water Geochemical Database, v.2.3 identified 6 wells Siluro-Devonian produced water analyses within approximately 12 miles of the proposed Hatch AGI #1 well. These wells are represented by a total of 20 samples collected from drill stem tests, wellheads, stock tanks, and separators. The results of sample analyses are summarized in the following Table 5.

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

API	Concentration (parts per million)						
	TDS	HCO_3	Ca	Cl	Mg	Na	SO_4
3001510765	23883	580.71	1108	13017.6	148.48	7726.15	1301.76
3001510465	20669	644.14	865.63	11176	149.35	6738.11	1097.28
3001505614	33697	249.86	4104	19607.55	649.22	7592.96	1494.02
3001505614	52472	761.28	9670	33927.92	4648.8	2747.68	715.52
3001505614	27365	609.96	2453	15914.04	1974.72	4784.82	1628.94
3001505614	30502	274.43	5745	19607.55	2226.18	2223.1	425.98
3001505614	30708	549.89	6053	19607.55	2226.18	1931.26	339.97
3001505614	31613	687.1	1600	17429.5	432.13	9740.29	1724.42
3001503537	29011	520	1110	16000	180	-	1500
3001505614	32744	469.7	1828	17150	479.9	9749.1	3063
3001505614	32515	457	2937	19200	1191	-	873
3001505614	31456	685	2046	16980	75	-	1340
3001505614	17219	231	3979	10750	1117	-	518
3001505615	28898	942	1352	16380	435	-	1382
3001505615	27603	291	1712	16400	544	-	610
3001505689	40731	1073	1610	23530	279	-	619
3001505689	39813	1051	1504	22960	185	-	623
3001505819	24313	469	1926	13960	44	-	730

These analyses show Total Dissolved Solids (TDS) in the area of the proposed AGI well ranging from 17219 to 52472 parts per million (PPM) with an average of 30,845 PPM. The primary constituent in the sampled formation waters is the chloride ion, with an average concentration of 17,978 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 of the proposed Hatch AGI #1 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 two (2) water wells or points of diversion located within a one-mile radius of the Hatch AGI #1 modified area of review. Of these wells, the closest is located approximately 0.76 miles to the south of the Hatch AGI #1 surface-hole location (Figure 12; Table 6). All wells within the two-mile radius are relatively shallow, with depths ranging from approximately 55 feet to 500 feet in alluvium and Triassic redbeds. Shallow groundwater resources will be fully protected by multiple strings of telescoping casing, all of which will be cemented back to surface. As illustrated in Figure 4, design considerations for the Hatch AGI #1 well include a five-string casing design, including a surface casing interval that extends to approximately 560 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 Hatch AGI #1 surface- and bottom-hole locations (Retrieved from the New Mexico Office of the State Engineer's Files on February 11, 2026)

POD	USE	Owner	Well Depth (ft)	Water Depth (ft)	Latitude (NAD83)	Longitude (NAD83)
CP 2080 POD1	Monitoring	Devon Energy	105	-	32.68695	-103.906542
CP 2060 POD1	Monitoring	Devon Energy	55	60	32.715661	-103.8953

In lieu of recent groundwater sample collection and chemical analysis, Geolex conducted a review of *Geology and Ground-Water Resources of Eddy County, New Mexico* (Hendrickson and Jones, 1952) to identify published groundwater data representative of nearby water wells in the area of the proposed Hatch AGI #1 well. Table 7 summarizes the wells identified in this review and the results of those chemical analyses. Additionally, a request (see Appendix C) to sample and analyze groundwater from an off-setting groundwater well was sent, in the hope of yielding additional analytical information.

Table 7. Chemical analysis results of samples collected from nearby water wells (Hendrickson and Jones, 1952. *Geology and Ground-Water Resources of Eddy County, NM*)

Historical Owner	Location (T-R-S)	Depth (ft)	Ca (eq)	Na+K	HCO_3	SO_4	Cl	NO_3	Hardness	Unit
Unknown	17S-31E-34	-	106	138	265	423	54	0.1	433	Dockum
John Lusk	19S-31E-28	-	139	56	219	398	55	21	569	Dockum
John Lusk	19S-31E-33	160	504	46	191	2160	60	136	2500	Dockum

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 12 MMSCFD of TAG, within anticipated surface operating pressure limitations, Trace Delaware has completed detailed reservoir characterization, reservoir modeling, and injection simulation evaluations, which leverage licensed three-dimensional (3D) seismic survey data and all available local subsurface 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 12 MMSCFD.

From petrophysical, stratigraphic, and seismic survey analysis, significant porosity development produced from karst dissolution processes is apparent and is highly interconnected across the greater project area. Porosity development is most significant in the depth intervals of the upper Devonian, Wristen, and Fusselman formations strata. Based on mapped acoustic impedance attributes, which are directly related to porosity within the injection reservoir, Siluro-Devonian porosity attributes were determined to range from less than 1% to approximately 16%, with an average porosity of 4.6%. 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.

In addition to providing a more accurate characterization of reservoir attributes, the analysis of seismic survey data yields a better understanding of subsurface faults and reservoir geometry within the project area. Figure 13 includes a map of fault features interpreted through the analysis of seismic data. Generally, faults within the project area trend northwest to southeast or north to south. In total, nine faults are interpreted, which have been further subdivided into 34 fault segments, for the purpose of evaluating induced seismicity risk (discussed further in Section 4.9). For all interpreted faults, the magnitude of offset (or fault throw) is less than the combined thickness of the Woodford Shale and Barnett/Osage primary and secondary confining units, 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 12 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 Trace Delaware.

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 12 MMSCFD, Geolex collaborated with Sproule-ERCE to develop a reservoir characterization model and complete injection simulation forecasts,

informed by and incorporating licensed seismic survey data and the resultant mapped porosity attributes. This modeling evaluation was completed utilizing Schlumberger Petrel to construct a geologic simulation grid informed by available well log data and mapped seismic impedance attributes, which are directly related to porosity within the injection reservoir. Schlumberger's Eclipse platform was then utilized to complete injection simulations representative of the injection scenario proposed for the Hatch AGI #1 well (i.e., up to 12 MMSCFD).

The reservoir characterization model is comprised of 288 simulation layers characterizing 7 discrete depth intervals identified within the Siluro-Devonian reservoir. In total, the model grid is comprised of 4,100,544 cells. The reservoir characterization model includes nearby subsurface faults identified in seismic survey analysis, additional faults interpreted by local operators, and relevant off-setting 3rd-party injection wells.

As described previously in Section 4.6, porosity attributes within the reservoir model are based on mapped acoustic impedance attributes, which directly relate to porosity within the carbonate and dolomitic strata of the injection reservoir. Impedance attributes derived from high-resolution seismic trace inversion were transformed to porosity through direct correlation with geophysical log porosity, and the range of porosity was limited to measurements observed in wireline logs. Utilizing this method, Siluro-Devonian reservoir porosity was determined to range from less than 1% to approximately 20%, with an average porosity of 4.6%. The distribution of porosity within the reservoir model is shown in Figure 14.

In defining permeability attributes, multiple data sources were utilized to identify baseline relationships between porosity and permeability, including injection reservoir test data, DST, injection well operating data, sidewall core porosity and permeability data, and published core-analysis data (e.g., Lucia et al., 1995). Permeability within the reservoir model, averaged by zone, ranges from less than 1 millidarcies (i.e nanodarcy) to 400 millidarcies (mD), with an average model permeability of 8.25 mD. The total model (all zones) permeability distribution is shown in Figure 14 and Table 8 below summarizes geologic model zones defined, zone thickness, and average model porosity and permeability, by zone.

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

Zone #	Thickness	Average Porosity (%)	Avg. Permeability (mD)
1 – Devonian	136	3.7	24.6
2 – upper Wristen	213	4.7	6.24
3 - lower Wristen	176	5.8	7.58
4 - upper Fusselman	228	2.4	7.17
5 – lower Fusselman	152	3.7	0.11

With the constructed geologic model, injection operations for the proposed Hatch AGI #1 wells 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 12 MMSCFD. Reservoir pressure conditions initially reflect a normally pressured system (0.456 psi/ft.) and to ensure a conservative estimate of plume size, the injection simulations do not consider acid gas dissolution into existing formation fluids.

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 Hatch AGI #1 well at a daily injection volume of up to 12 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 six square miles generally extending up to 1.79 miles from the Trace Delaware Heritage Treating Facility. For all case simulations, results indicate that injection operations, up to 12 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 only diffuse concentrations of acid gas injectate will exhibit a dispersion pattern such that gas could potentially reach local fault features to the northeast and east. In the unlikely event that acid gas injectate could migrate to the northeastern, prominent fault system, an existing Wristen and Simpson gas field (greater than 2.6 miles from the proposed AGI well location) shows structural trapping that includes a three-way closure geometry within the relative prominent structural high. Three-way closure necessitates either sealing faults or laterally adjacent sealing lithologies. Therefore, migrating fluids will not encounter vertical conduits beyond the caprock into overlying strata. Based on this analysis, we determined these sealed faults could not result in an escape of TAG from the injection zone.

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 15, 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 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 Hatch AGI #1 well. This estimate (1) identifies all known Siluro-Devonian fault systems within approximately six miles of the Hatch AGI #1 BHL, (2) models the impact of seven injection wells over a 30-year injection period during proposed AGI operations and includes prior historical SWD injection volume, and (3) estimates the fault slip probability associated with the seven-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 review of internal work (described previously in Section 4.6), Geolex identified nine faults, located within approximately six (6) miles of the Hatch AGI #1, and generally striking northwest to southeast, and northeast to southwest (Figure 11). Due to the substantial distance of the Hatch AGI #1 to known faults (greater than four miles) and considering the relatively small injection volume proposed for the Hatch AGI well (equivalent to approximately 4,527 barrels per day), operation, as proposed, 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 18 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 seven-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, as well as additional off-setting AGI wells, were 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	1.1	0.105	psi ft^{-1}	Nearby well estimate
Max Horizontal Stress Direction	N60E	0	Deg.	Lund Snee & Zoback, 2018
Reference Depth	13,784	0	ft	Nearby well evaluation
Initial Res. Pressure Gradient	0.44	0.0456	psi ft^{-1}	Nearby Well Evaluation
A_Φ Parameter	0.65	0.065	-	Lund Snee & Zoback, 2018
Reference Friction Coefficient (μ)	0.6	0.06	-	Standard Value
Hydrologic				
Aquifer Thickness	885	155	ft	Nearby well evaluation
Porosity Average	4.6	0.46	%	Nearby well evaluation
Permeability Average	8.25	0.875	mD	Petrophysical analysis of nearby well data, calibrated to analog core data
Material properties				
Density (Water)	1,040	20	kg m^{-3}	Adjusted to reported salinities
Dynamic Viscosity (Water)	0.0008	0.00008	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 @ 185.6 °F, 6,096 psi				
Density	817.30	-	kg m^{-3}	AQUAlibrium™
Dynamic Viscosity	0.0000829	-	Pa.s	AQUAlibrium™

Daily maximum injection volumes utilized in the FSP model range from 4,527 to 20,000 bpd (Table 10). In submission of this application, Trace Delaware is requesting approval to operate the proposed Hatch AGI #1 well for a period of at least 30 years, however, this simulation includes a historical matching period of thirteen additional years to ensure all results consider the impact of injection wells that have been previously operating, since as early as 2013. Based on these modeling and operating parameters, two case simulations to assess induced seismicity risk were developed, including:

(1) all wells operating at their maximum allowable operating rates (i.e., Scenario 1), and
(2) all wells operating at their maximum allowable injection rates and excluding the proposed Hatch AGI #1 (i.e., Scenario 2).

Simulation results in both scenarios show zero probability of slip for the majority of faults segments modeled, however, one segment (Fault Segment #19) in close proximity to injection wells is predicted to have a 0.23 probability of slip in response to simulated injection conditions. For Scenario 1, Figure 19

shows the resultant pressure front, single well radial solutions, and the predicted pressure change at fault segment midpoints. Additionally, Figure 20 shows the model-predicted fault slip potential for Scenario 1, which includes the proposed Hatch AGI #1 well.

As the Hatch AGI #1 is located a significant distance from any known faults, additional simulation (i.e., Scenario 2) was completed that excludes Hatch AGI #1 to evaluate potential contribution to the total risk for injection-induced slip along this feature. Figure 21 shows the resultant pressure front and model-predicted fault slip potential, for Scenario 2 (i.e., when the proposed Hatch AGI #1 is excluded).

For both scenarios 1 and 2, the predicted pressure change along each fault segment, model-derived pressure change necessary to induce slip, and model-predicted actual change are summarized in Table 10 below. As indicated, Scenarios 1 and 2 generate nearly identical probability estimates regardless of the Hatch AGI #1 operating status, which demonstrates the negligible impact operation of the proposed AGI has on the total induced-seismicity risk.

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

#	API	Well Name	Latitude (NAD83)	Longitude (NAD83)	Volume (bbls/day)	Start Year	End Year
1	TBD	Hatch AGI #1	32.697902	-103.908681	4527	2026	2056
2	30-015-41783	Hackberry 16 SWD #1	32.652154	-103.471636	10,000	2015	2056
3	TBD	Kings Landing AGI #1	32.659640	-103.859005	8,871	2026	2056
4	TBD	Kings Landing AGI #2	32.660600	-103.858248	8,871	2026	2056
5	30-015-38978	Apache State SWD #3	32.806450	-103.914528	20,000	2013	2056
6	30-015-28698	Santo Nino 29 FED SWD #1	32.7204323	-103.9918213	20,000	2014	2056
7	30-015-38977	Apache ST SWD #1	32.796471	-103.923317	20,000	2013	2056

Table 11. Summary of model simulation results showing the required pressure change to induce fault slip, actual pressure changes as predicted by the FSP model, and probability of fault slip at the end of the 30-year injection scenario. Results for Scenario 1 and Scenario 2 are identical in model results.

Fault Segment #	ΔPressure necessary to induce slip	Actual ΔPressure at fault midpoint at year 2055	Fault Slip Potential at year 2057	Fault Slip Potential at year 2057 (excluding Hatch AGI #1)
1	5,786	106	0.00	0.00
2	5,716	84	0.00	0.00
3	4,917	77	0.00	0.00
4	2,317	71	0.00	0.00
5	4,961	66	0.00	0.00
6	4,917	64	0.00	0.00
7	6,205	65	0.00	0.00
8	5,446	67	0.00	0.00
9	1,120	74	0.00	0.00
10	4,037	73	0.00	0.00
11	2,839	72	0.00	0.00
12	4,433	71	0.00	0.00
13	3,090	117	0.00	0.00
14	3,296	61	0.00	0.00
15	2,366	66	0.00	0.00
16	985	65	0.00	0.00
17	1,431	62	0.00	0.00
18	912	347	0.00	0.00
19	750	642	0.26	0.26*
20	1,053	601	0.00	0.00
21	800	431	0.00	0.00
22	5,455	61	0.00	0.00
23	1,925	60	0.00	0.00
24	1,384	58	0.00	0.00
25	1,117	27	0.00	0.00
26	2,346	40	0.00	0.00
27	1,309	48	0.00	0.00
28	4,390	54	0.00	0.00
29	6,067	62	0.00	0.00
30	4,602	98	0.00	0.00
31	5,922	149	0.00	0.00
32	4,193	171	0.00	0.00
33	2,449	144	0.00	0.00
34	5,890	219	0.00	0.00

*Note that there is effectively no difference in the potential for slip along Fault Segment #19 regardless of the operational status of the proposed Hatch AGI #1 well.

Generally, faults considered in this assessment are predicted by the FSP model to have zero probability for injection-induced slip, with the exception of Fault Segment #19 which is located greater than 3.83 miles from the Hatch AGI #1 well but in close proximity to three other injection wells. As simulation results demonstrate (i.e., Scenarios 1 and 2), the proposed Hatch AGI #1 well is not predicted to contribute in any appreciable way to the probability for slip along this feature. Furthermore, radial pressure solutions calculated for each injection well illustrate that operation of the Hatch AGI #1 well will have little impact on pressure conditions near any faults within the greater project area. As such, operation of the Hatch AGI #1 well, as proposed, will not contribute to the risk for local induced-seismic activity.

5.0 OIL AND GAS WELLS IN THE HATCH AGI #1 AREA OF REVIEW

In support of this application, Geolex conducted, on behalf of Trace Delaware, a detailed review of the area within one and two miles of the proposed Hatch AGI #1 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 NMOCC 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 Hatch AGI #1 well, and along the deviated wellbore path.

5.1 OIL AND GAS WELLS IN THE HATCH AGI #1 AREA OF REVIEW

Appendix A summarizes in detail all NMOCD recorded wells within a one- and two-mile radius of the proposed deviated Hatch AGI #1. 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 103 wells within a one-mile radius of the proposed Hatch AGI #1 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 20. Of these wells, 35 are active and 51 have been plugged. Additionally, there are 17 wells that have been permitted but have not yet been drilled or completed. Specific information relating to active and plugged wells is summarized. Active wells are primarily producing from the Artesia Group (i.e., Tan-Queen) along shallow depth intervals, as well as the Bone Spring pools, all of which, overlie and are isolated from the proposed injection zone.

Table 12. All wells located within the Hatch AGI #1 modified one mile area of review (as shown in Figures 12 and 22)

API	Well Name	Associated Pools	Well Type	Well Status	Latitude (NAD83)	Longitude (NAD83)	Depth (ft)	Mi from AGI SHL
30-015-05651	Donnelly Kenwood Fed. B #001	Grayburg	Oil	Plugged	32.698510	-103.909460	3655	0.06
30-015-05755	USA Federal #001	Yates-Queen	Oil	Plugged	32.695780	-103.911610	3495	0.22
30-015-41248	Hackberry 6 Federal Com #004h	Bone Spring	Oil	Active	32.695640	-103.912100	8785	0.25
30-015-31925	Oxy Boot Jack Fed #001	Morrow	Gas	Plugged	32.693980	-103.906670	12340	0.29
30-015-31647	West Shugart 31 Federal Com #001	Morrow, B. Spring	Gas	Active	32.701580	-103.911610	12530	0.31
30-015-05657	Saunders Shugart #1	Queen	Oil	Plugged	32.702140	-103.906680	2708	0.31
30-015-05658	Culwin Queen Unit #007	Ya-7Riv-Qu-Gr	Inj.	Plugged	32.698500	-103.915050	3144	0.37
30-015-40050	Samantha 31 6 Federal Com #001H	Bone Spring	Oil	Active	32.699410	-103.915510	8768	0.41
30-015-05748	Culwin Queen Unit #014	Ya-7Riv-Qu-Gr	Inj.	Active	32.695780	-103.915900	3151	0.45
30-015-05653	Culwin Queen Unit #006	Ya-7Riv-Qu-Gr	Oil	Active	32.702130	-103.915050	3480	0.47
30-015-05751	Vandagriff #001	-	Oil	Plugged	32.691250	-103.906660	850	0.47
30-015-26353	Aceite Federal #001	Ya-7Riv-Qu-Gr	Oil	Plugged	32.691250	-103.912030	6285	0.50
30-015-38221	West Shugart 31 Federal Com #005H	Bone Spring	Oil	Active	32.702150	-103.901470	8749	0.51
30-015-10191	Pure FED #001	Qu-Pen-GR	Oil	Plugged	32.705770	-103.906720	4000	0.55
30-015-38315	Wizard Federal Com #005H	Bone Spring	Oil	Active	32.696660	-103.918170	8613	0.56
30-015-56392	Easy Peasy 32 33 Federal Com #628H	Bone Spring	Oil	New	32.700330	-103.899520	0	0.56
30-015-56389	Easy Peasy 32 33 Federal Com #527H	Bone Spring	Oil	New	32.700390	-103.899520	0	0.56
30-015-56391	Easy Peasy 32 33 Federal Com #626H	Bone Spring	Oil	New	32.700440	-103.899520	0	0.56
30-015-57111	Easy Peasy 32 33 Federal Com #525H	Bone Spring	Oil	New	32.700500	-103.899520	0	0.56
30-015-05743	Pan American Fed #001	Ya-7R-Qu-Gr	Oil	Plugged	32.695800	-103.899170	3531	0.57
30-015-31821	West Shugart 31 Federal #002	Morrow, B. Spring	Gas	Plugged	32.706540	-103.910520	12300	0.60
30-015-04576	Culwin Queen Unit #008	Ya-7Riv-Qu-Gr	Oil	Active	32.698500	-103.919120	3200	0.61
30-015-05741	Pan American Federal	Ya-7Riv-Qu-Gr	Oil	Plugged	32.693990	-103.899160	2734	0.62
30-015-04584	Culwin Queen Unit #013	Ya-7Riv-Qu-Gr	Oil	Active	32.694870	-103.919120	3339	0.64
30-015-05750	Texaco FED #001	Queen	Oil	Plugged	32.688550	-103.905580	3449	0.67
30-015-04580	Culwin Queen Unit #005	Ya-7Riv-Qu-Gr	Oil	Active	32.702130	-103.919110	3169	0.67
30-015-56080	Jakku 36 Federal Com #134H	Bone Spring	Oil	New	32.703290	-103.918420	0	0.68
30-015-56077	Jakku 36 Federal Com #133H	Bone Spring	Oil	New	32.703270	-103.918520	0	0.68
30-015-56074	Jakku 36 Federal Com #114H	Bone Spring	Oil	New	32.703260	-103.918610	0	0.69

API	Well Name	Associated Pools	Well Type	Well Status	Latitude (NAD83)	Longitude (NAD83)	Depth (ft)	Mi from AGI SHL
30-015-10492	New Mexico Y State #004	Ya-7Riv-Qu-Gr	Oil	Plugged	32.699440	-103.897030	3602	0.69
30-015-56072	Jakku 36 Federal Com #113H	Bone Spring	Oil	New	32.703250	-103.918710	0	0.69
30-015-26964	Culwin Queen Unit #020	Ya-7Riv-Qu-Gr	Oil	Active	32.700170	-103.920330	3400	0.70
30-015-31875	Wizard Federal Com #002	Morrow	Gas	Active	32.694800	-103.920140	12300	0.70
30-015-31937	Oxy Bits State #001	Morrow	Gas	Plugged	32.701630	-103.919940	12280	0.70
30-015-56954	Easy Peasy 32 33 Federal Com #624H	Bone Spring	Oil	New	32.704680	-103.899530	0	0.71
30-015-56388	Easy Peasy 32 33 Federal Com #523H	Bone Spring	Oil	New	32.704730	-103.899530	0	0.71
30-015-56390	Easy Peasy 32 33 Federal Com #622H	Bone Spring	Oil	New	32.704790	-103.899530	0	0.71
30-015-56387	Easy Peasy 32 33 Federal Com #521H	Bone Spring	Oil	New	32.704840	-103.899530	0	0.72
30-015-31020	Hackberry 6 Federal #001	Bone Spring	Gas	Plugged	32.687640	-103.906650	12272	0.72
30-015-23762	Mesquite OG ST #001	Ya-Qu-Gr	Oil	Plugged	32.701250	-103.897030	3800	0.72
30-015-37785	West Shugart 31 Federal Com #004	Bone Spring	Oil	Active	32.706670	-103.915420	8803	0.72
30-015-04586	Culwin Queen Unit #015	Ya-7Riv-Qu-Gr	Oil	Active	32.691240	-103.919130	3141	0.76
30-015-05754	Federal G #1	Queen	Oil	Plugged	32.688510	-103.915920	3362	0.77
30-015-04579	Culwin Queen Unit #001	Ya-7Riv-Qu-Gr	Oil	Active	32.704850	-103.919110	3410	0.77
30-015-05749	Federal G	Queen	Oil	Plugged	32.688560	-103.901290	3450	0.77
30-015-31419	Hackberry 6 Federal #002	Morrow	Gas	Active	32.687610	-103.914350	12300	0.78
30-015-05654	Federal E #002	Ya-7Riv-Qu-Gr	Oil	Plugged	32.709400	-103.910520	3650	0.80
30-015-05656	Federal F #002	Ya-7Riv-Qu-Gr	Oil	Active	32.709400	-103.906690	3656	0.80
30-015-04578	Culwin Queen Unit #004	Ya-7Riv-Qu-Gr	Oil	Active	32.701230	-103.922330	3145	0.83
30-015-04577	Culwin Queen Unit #009	Ya-7Riv-Qu-Gr	Oil	Active	32.698170	-103.923020	3193	0.84
30-015-05666	Monterey B State #001	Ya-7Riv-Qu-Gr	Oil	Plugged	32.698530	-103.893810	3550	0.87
30-015-36068	Kc Strip State #002	Morrow	Gas	Active	32.699440	-103.893810	12275	0.87
30-015-05655	Federal F #001	Ya-7Riv-Qu-Gr	Oil	Active	32.709410	-103.902400	3695	0.87
30-015-04583	Culwin Queen Unit #012	Ya-7Riv-Qu-Gr	Oil	Active	32.694870	-103.923420	3320	0.88
30-015-37350	West Shugart 31 Federal Com #003	Bone Spring	Oil	Active	32.709390	-103.916050	13344	0.90
30-015-05661	Monterey ST #003E	Ya-Qu-Gr	Oil	Plugged	32.706700	-103.897030	3677	0.91
30-015-05652	Pure-FED #1	Queen	Oil	Plugged	32.710300	-103.914220	3597	0.91
30-015-35550	Blue Thunder 5 Federal Com #002	Morrow	Gas	New	32.693420	-103.893790	0	0.92
30-015-38543	Wizard Federal Com #006H	Bone Spring	Oil	Active	32.696660	-103.924480	8688	0.92
30-015-04571	Culwin Queen Unit #002	Ya-7Riv-Qu-Gr-Pen	Oil	Active	32.704830	-103.922330	4053	0.93

API	Well Name	Associated Pools	Well Type	Well Status	Latitude (NAD83)	Longitude (NAD83)	Depth (ft)	Mi from AGI SHL
30-015-26963	Culwin Queen Unit #019	Ya-7Riv-Qu-Gr	Inj.	Active	32.699560	-103.924650	3416	0.94
30-015-57029	Jakku 36 Federal Com #132H	Bone Spring	Oil	New	32.709360	-103.917720	0	0.95
30-015-56071	Jakku 36 Federal Com #131H	Bone Spring	Oil	New	32.709360	-103.917820	0	0.95
30-015-56070	Jakku 36 Federal Com #112H	Bone Spring	Oil	New	32.709360	-103.917910	0	0.96
30-015-10177	Monterey State #004	Ya-7Riv-Qu-Gr	Oil	Plugged	32.701260	-103.892740	2713	0.96
30-015-57030	Jakku 36 Federal Com #111H	Bone Spring	Oil	New	32.709360	-103.918010	0	0.96
30-015-04582	Culwin Queen Unit #016	Ya-7Riv-Qu-Gr	Oil	Active	32.691250	-103.923420	3330	0.97
30-015-05647	Benson Shugart Waterflood Unit #035	Ya-7Riv-Qu-Gr	Oil	Plugged	32.712120	-103.909440	99999	0.98
30-015-31715	Wizard Federal Com #001	Morrow, B. Spring	Gas	Plugged	32.686960	-103.919460	12260	0.98
30-015-05752	Hodges Federal #001	Ya-7Riv-Qu-Gr	Oil	Plugged	32.684940	-103.901280	3330	0.99
30-015-05642	Shugart B #002C	Qu-Gr	Oil	Plugged	32.712130	-103.905620	3675	1.00
30-015-05662	Monterey B State #002	Ya-7Riv-Qu-Gr	Oil	Plugged	32.709420	-103.898110	3500	1.00
30-015-05745	Featherstone FED #002	Ya-7R-Qu-Gr	Oil	Plugged	32.692180	-103.892720	3615	1.01
30-015-22167	Arco Hondo #001	Ya-7Riv-Qu-Gr	Oil	Active	32.710300	-103.918030	3875	1.01
30-015-05665	Monterey B State #004	Ya-7Riv-Qu-Gr	Oil	Plugged	32.705790	-103.893810	3681	1.02
30-015-05648	Benson Shugart Waterflood Unit #031	Ya-7Riv-Qu-Gr	Oil	Plugged	32.712110	-103.914810	2604	1.04
30-015-32113	Big Red Federal Com #001	Morrow	Gas	Plugged	32.713030	-103.911000	12245	1.05
30-015-10195	Monterey State #005	Ya-7Riv-Qu-Gr	Oil	Plugged	32.699440	-103.890590	2691	1.06
30-015-05641	Shugart #001C	Qu-Gr	Oil	Plugged	32.712130	-103.901340	3689	1.07
30-015-38294	West Shugart 32 State Com #001	Bone Spring	Oil	Active	32.710320	-103.897040	8838	1.09
30-015-05664	Monterey B State #003	Ya-7Riv-Qu-Gr	Oil	Plugged	32.709420	-103.894890	3676	1.13
30-015-30241	Shugart C #007	Ya-7Riv-Qu-Gr	Oil	Active	32.713940	-103.903480	3950	1.15
30-015-25966	Benson Shugart Waterflood Unit #030	Ya-7Riv-Qu-Gr	Inj.	Plugged	32.713760	-103.914800	6125	1.15
30-015-23105	Benson Shugart Waterflood Unit #032	Ya-7Riv-Qu-Gr	Oil	Plugged	32.714230	-103.913380	2700	1.16
30-015-05659	Monterey State #001	Ya-7Riv-Qu-Gr	Oil	Plugged	32.702580	-103.889510	3344	1.16
30-015-41525	Shaula 30 Federal Com #004H	Bone Spring	Oil	Active	32.713020	-103.899770	8753	1.16
30-015-05634	Shugart A #001	Ya-7Riv-Qu-Gr	Oil	Plugged	32.712140	-103.897040	3740	1.19
30-015-05667	New Mecico Y State #001	Ya-7Riv-Qu-Gr	Inj.	Plugged	32.706700	-103.890590	3756	1.22
30-015-42913	Flying Squirrel Federal #002H	Bone Spring	Oil	Active	32.714050	-103.899640	8789	1.23
30-015-39214	West Shugart 32 State Com #002H	Bone Spring	Oil	Active	32.710330	-103.893390	8849	1.24

API	Well Name	Associated Pools	Well Type	Well Status	Latitude (NAD83)	Longitude (NAD83)	Depth (ft)	Mi from AGI SHL
30-015-05650	Kenwood #4	Yates	Oil	Plugged	32.715750	-103.911580	2542	1.24
30-015-05644	Shugart C #004Y	Ya-7Riv-Qu-Gr	Oil	Active	32.715760	-103.905660	3689	1.24
30-015-30774	West Shugart 29 Federal #003	Delaware	Oil	Plugged	32.713950	-103.897040	6193	1.30
30-015-05643	Shugart C #003	Ya-7Riv-Qu-Gr	Inj.	Plugged	32.715760	-103.901340	3804	1.30
30-015-05635	Shugart A #002	Ya-7Riv-Qu-Gr	Oil	Plugged	32.712140	-103.892750	3724	1.35
30-015-05669	State 32 #001	Ya-7Riv-Qu-Gr	Oil	Plugged	32.710330	-103.890590	3673	1.36
30-015-42608	Flying Squirrel Federal #001H	Bone Spring	Oil	Active	32.716720	-103.901730	8810	1.36
30-015-05633	Shugart A #008	Ya-7R-Qu-Gr	Oil	Plugged	32.712150	-103.892490	2692	1.36
30-015-26667	Shugart A #011	Ya-7Riv-Qu-Gr	Oil	Plugged	32.713950	-103.894900	3921	1.37
30-015-10315	Shugart C #005	Ya-7Riv-Qu-Gr	Oil	Plugged	32.717580	-103.902410	3855	1.40
30-015-05638	Shugart A #005	Ya-7Riv-Qu-Gr	Oil	Plugged	32.715770	-103.897050	3807	1.41
30-015-30870	West Shugart 29 Federal #004	Delaware	Oil	Plugged	32.713500	-103.892750	5300	1.42
30-015-30798	West Shugart 29 Federal #002	Delaware	Oil	Plugged	32.716950	-103.898770	5350	1.43

Within two miles of the Hatch AGI #1 well, there are 357 wells (Appendix A, Figure A-1, Table A-1). Of these wells, there are 125 active wells, 56 permitted locations, and 163 wells that have been plugged and abandoned. Additionally, there is one temporarily abandoned well and 12 reclamation fund approved wells. Similar to the one-mile AOR, wells primarily produce from shallow geologic interval (i.e., Tansill-Yates-Seven Rivers), as well as the Bone Spring, Wolfcamp, and Morrow formations.

There are no wells within two miles of the proposed Hatch AGI #1 that penetrate the proposed Siluro-Devonian injection interval.

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 Eddy 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 Hatch AGI #1 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 Hatch AGI #1 location.

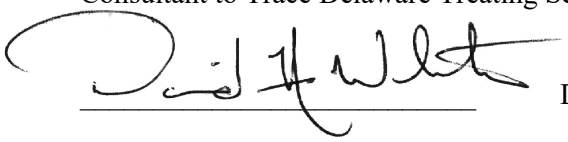
Upon issuance of an NMOCD or NMOCC hearing date to consider the matter of Trace Delaware's application, all interested parties identified will be provided with written notice of the associated hearing and will be provided complete copies of the Form C-108 application. Appendix B includes an example notification letter that will be provided to interested parties, as well as an example public notice that may be utilized by Division/Commission 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 Hatch AGI #1 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 Trace Delaware Treating Services, LLC



Date: 3/26/2026

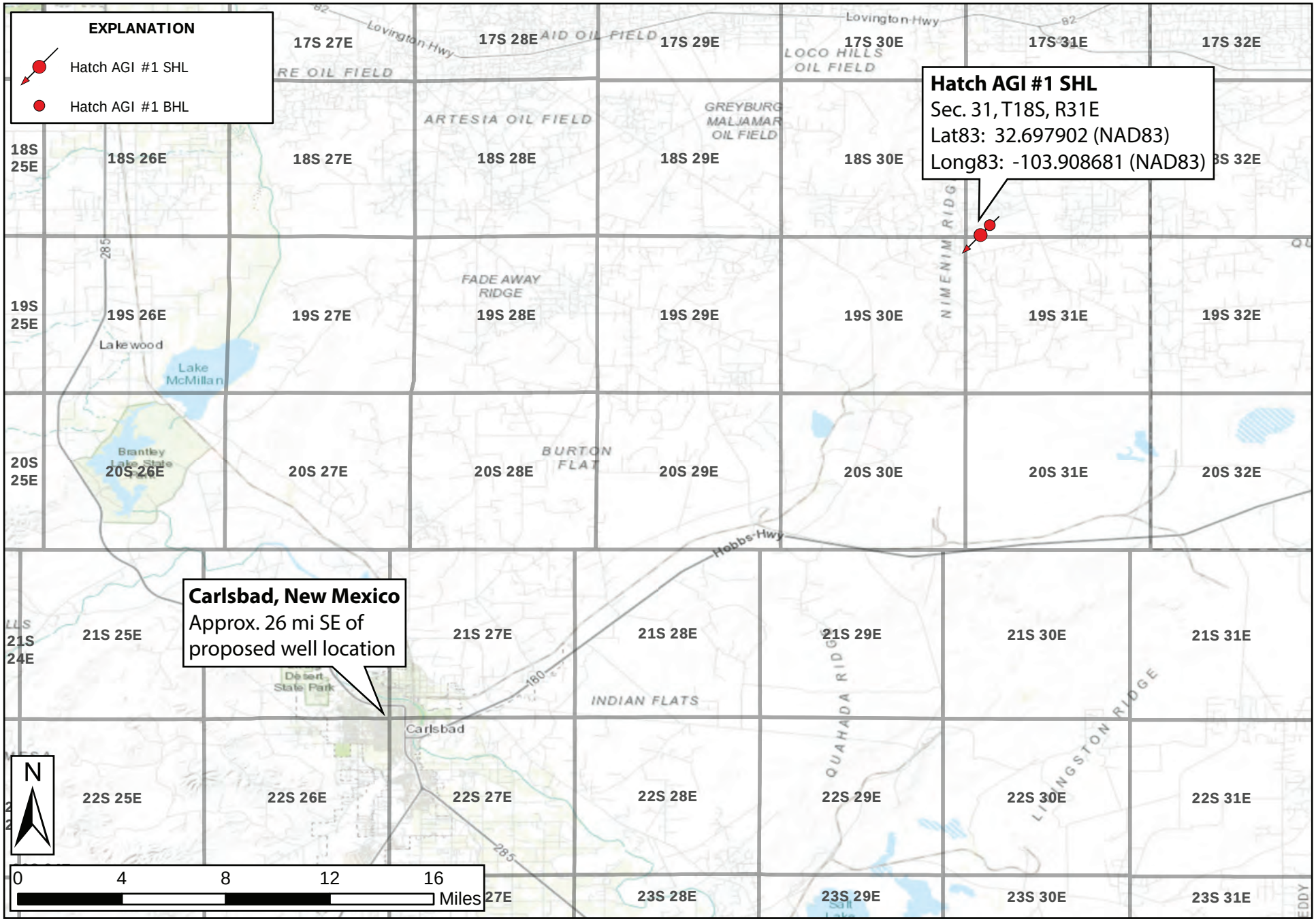


Figure 1. General location map showing the proposed Hatch AGI #1 well located in Section 31 of Township 18 South, Range 31 East, approximately 26 miles northeast of Carlsbad, NM.

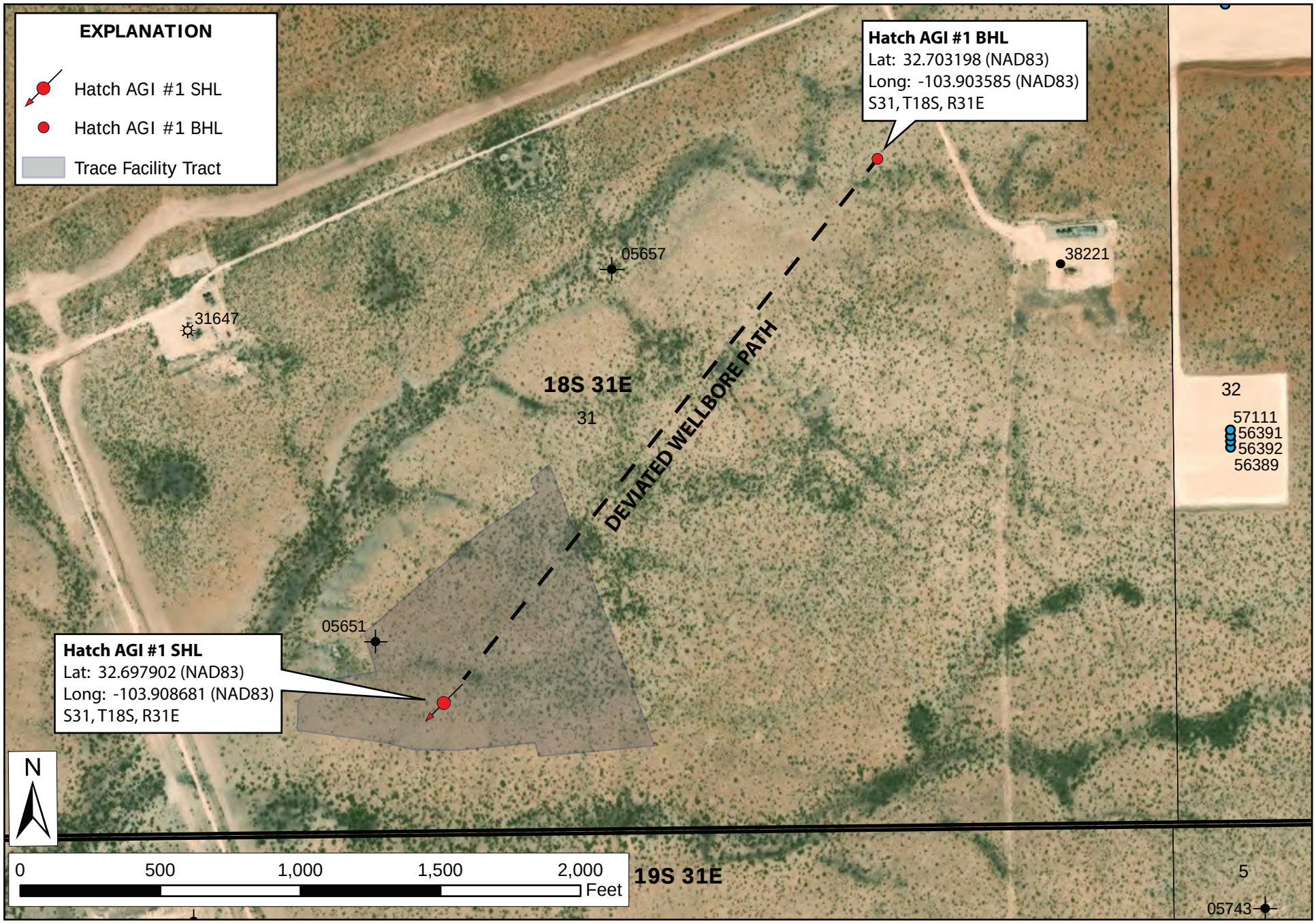


Figure 2. Detailed location map showing the proposed Hatch AGI #1 well and the surface area in which the Trace Facility is being constructed. Coordination with surface owner (BLM) began in Q4 2025 and has continued throughout the C-108 development process.

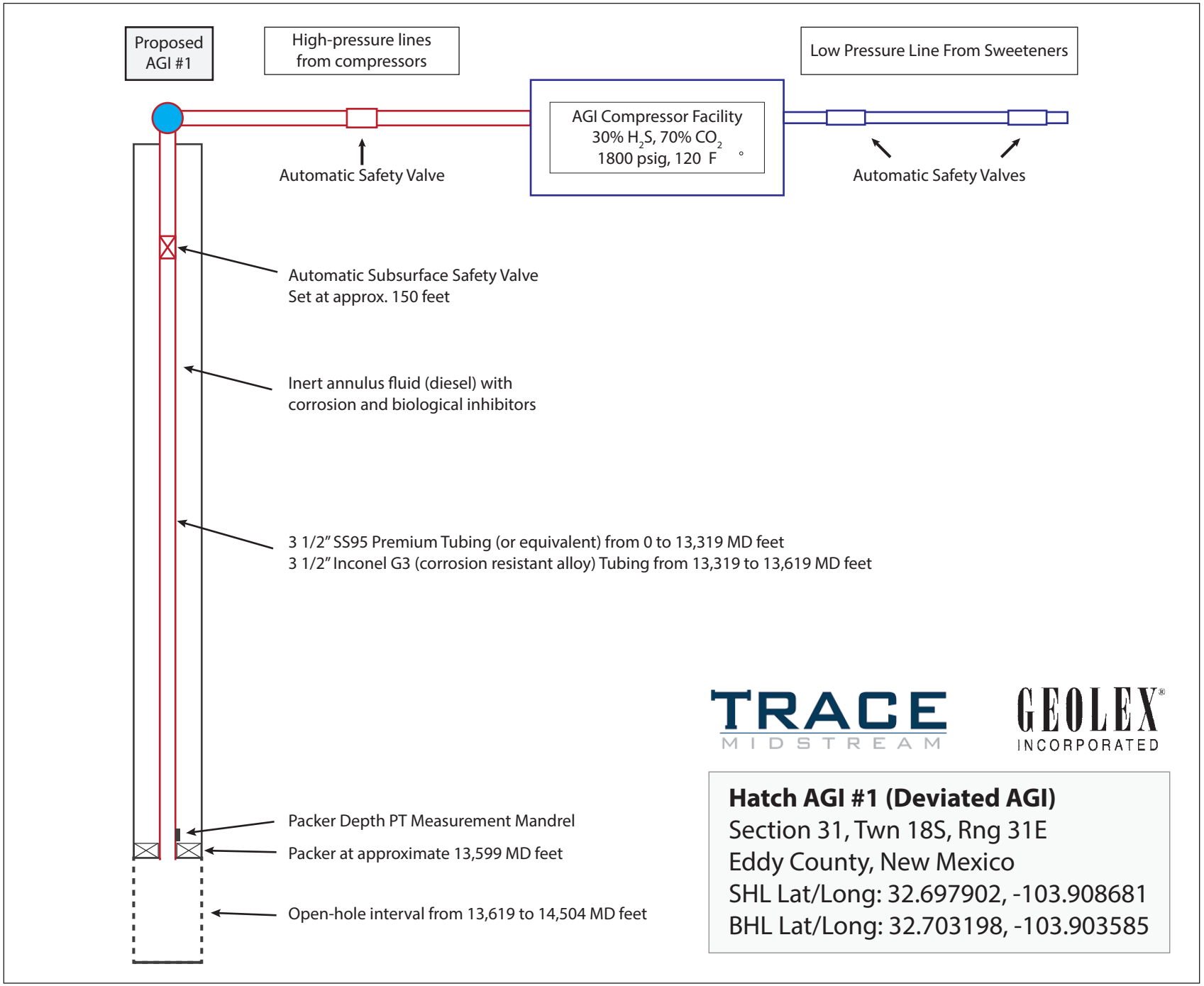


Figure 3. Schematic of surface facilities and proposed Hatch AGI #1

TRACE MIDSTREAM

Hatch AGI #001 - Preliminary Well Schematic

Trace Delaware Treating Services, LLC

S31, Township 18S, Range 31E

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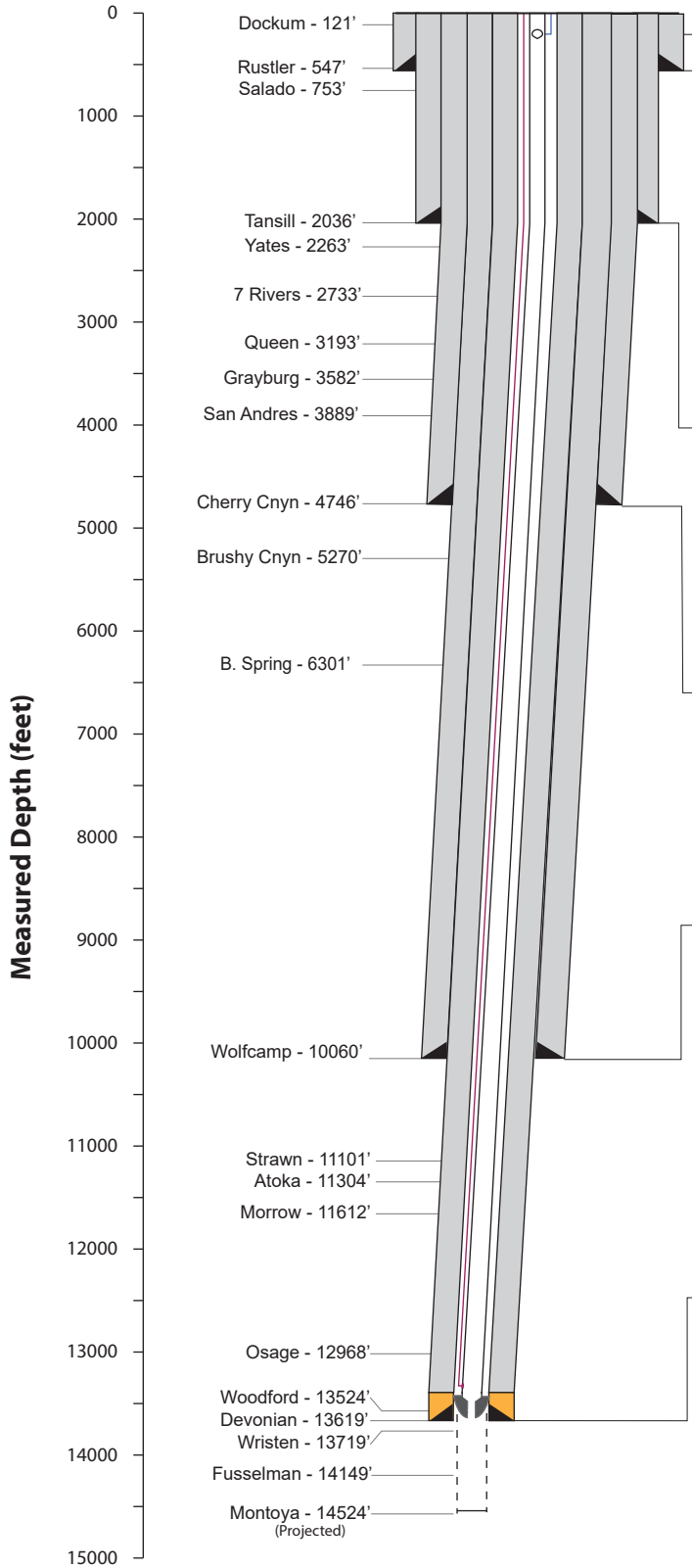

36" CONDUCTOR PIPE TO APPROX. 120'

SURFACE CASING

20", 94 #/ft., J-55, BTC from 0' to 560' MD
Subsurface Safety Valve set @ approx. 150'

Lead: 550 saks ExtendaCem	13.5 ppg
Tail: 350 sacks HalCem C	14.8 ppg

PROVIDES ISOLATION AND PROTECTION OF GROUNDWATER

1ST INTERMEDIATE CASING

16", 84 #/ft., L-80, FJ from 0' to 2,040' MD

Lead: 310 sacks EconoCem	12.9 ppg
Tail: 285 sacks HalCem C	14.8 ppg

PROVIDES PHYSICAL ISOLATION BETWEEN SALT AND GROUNDWATER AND FLUID PLAN FLEXIBILITY TO AVOID WASHOUT.

2ND INTERMEDIATE CASING

13.325", 72 #/ft., HCL-80, FJ from 0' to 4,746' MD

Lead: 485 sacks NeoCem	12.0 ppg
Tail: 325 sacks CorrosaCem	13.5 ppg

PROVIDES PHYSICAL ISOLATION OF POTENTIAL H2S-ENRICHED FLUIDS WITHIN THE SAN ANDRES FORMATION AND POTENTIAL LOST CIRCULATION ZONES.
*CEMENT WILL BE CORROSIVE RESISTANT (EG., CORROSA CEM, WELLLOCK RESIN)

3RD INTERMEDIATE CASING

9.625", 53.5 #/ft., HPL80, BTC from 0' to 10,080' MD

Lead: 1,855 sacks NeoCem	12.0 ppg
Tail: 295 sacks NeoCem	13.2 ppg

PROVIDES PHYSICAL ISOLATION OF PRODUCING AND INJECTION GEOLOGIC INTERVALS AND LOW FRACTURE PRESSURE INTERVALS

PRODUCTION CASING

7", 32 #/ft., SS95/T95, VA Superior from approx. 0' to 13,319' MD
7", 32 #/ft., G3 (CRA), VAM from approx. 13,319' to 13,619' MD

Stage 1: 12.0 barrels WellLock Resin	12.4 ppg
Stage 2: 1,535 sacks NeoCem	13.5 ppg
Stage 3 Lead: 695 sacks NeoCem	11.5 ppg
Stage 3 Tail: 55 sacks VersaCem	13.5 ppg

PROVIDES PHYSICAL ISOLATION OF KNOWN HIGH-PRESSURE INTERVALS WITHIN PENNSYLVANIAN GEOLOGIC SECTIONS PRIOR TO UNDER-PRESSURED LOWER PALEOZOIC STRATA

TUBING AND EQUIPMENT

3-1/2", 10.2 #/ft., SS95/T95 (or equivalent), VA Superior from 0' to 13,319' MD
3-1/2", 10.2 #/ft., Inconel G3 (CRA), VAMTOP from 13,319' to 13,619' MD
Halliburton BWD Permanent Packer set at approx. 13,599' MD
Halliburton P/T sensors on mandrel above packer

TD - 14,226' TVD (14,504' MD)
5-7/8" OPEN-HOLE INTERVAL FROM 13,619' - 14,504' MD

All depths are approximate and subject to change based on drilling and geology encountered

Revision 3/24/2026

Figure 4. Preliminary Hatch AGI #1 Well Schematic

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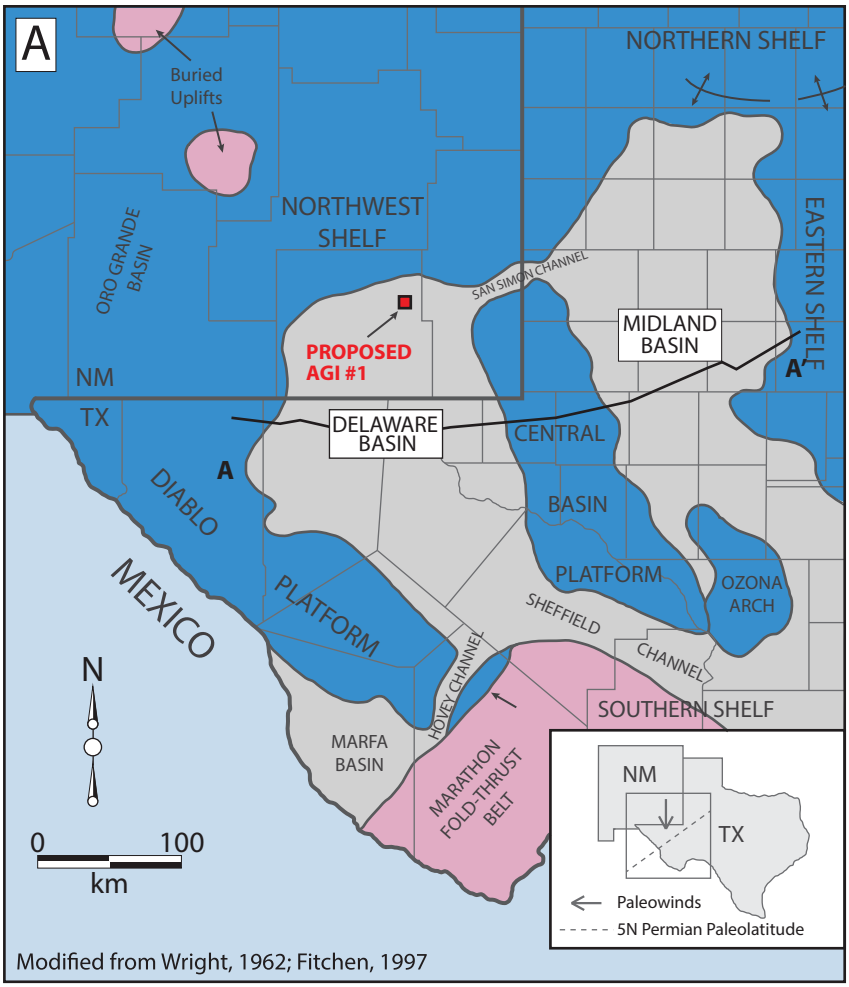

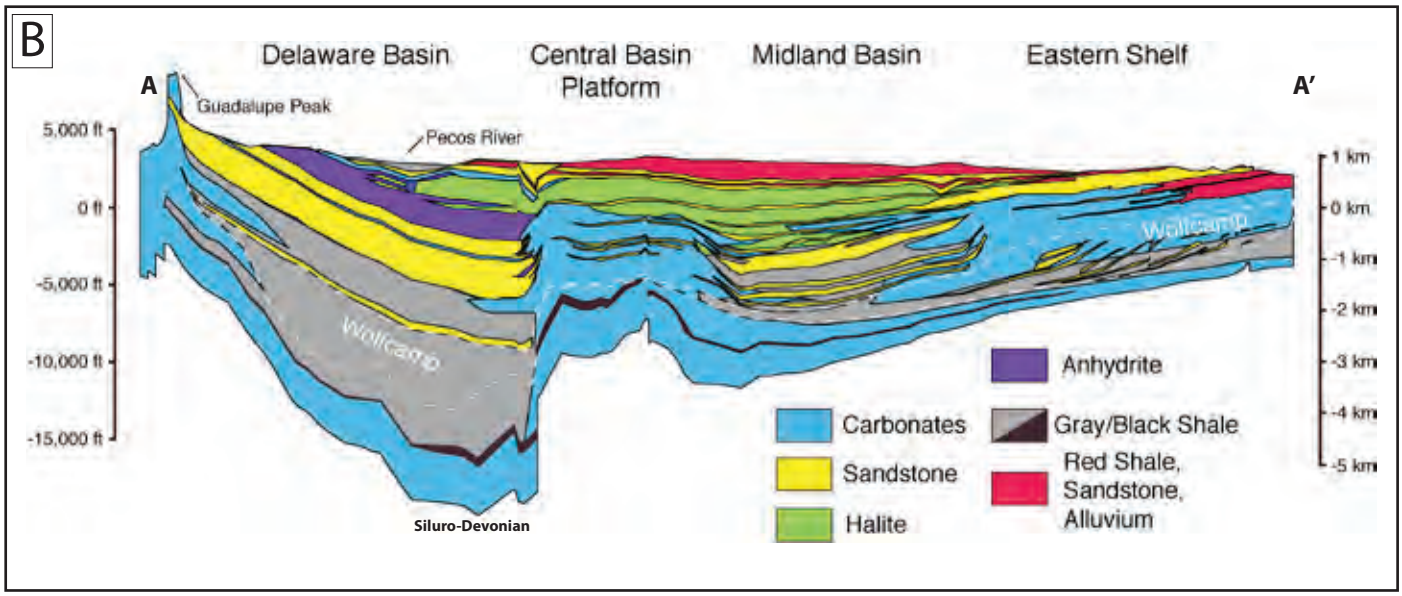

Figure 5. Structural setting (Panel A) and general lithology and schematic (Panel B) of the Perian Basin

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 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 — BEND	ATOKA — BEND	ATOKA — BEND	★ ATOKA — BEND	(ABSENT)
	MORROWAN	MORROW	(ABSENT)	(ABSENT ?)	★ MORROW	(ABSENT)
MISSISSIPPIAN	CHESTERIAN MERAMECIAN OSAGEAN KINDERHOOKIAN	CHESTER MERAMEC OSAGE KINDERHOOK	CHESTER MERAMEC OSAGE "BARNETT"	CHESTER MERAMEC OSAGE "BARNETT"	CHESTER MERAMEC OSAGE "BARNETT"	MERAMEC OSAGE "BARNETT"
			KINDERHOOK	KINDERHOOK	KINDERHOOK	KINDERHOOK
DEVONIAN		WOODFORD DEVONIAN	WOODFORD DEVONIAN	WOODFORD DEVONIAN	WOODFORD DEVONIAN	WOODFORD 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						

Figure 6. General stratigraphy and producing zones (red stars) in the immediate area of the proposed Hatch AGI #1 well (Yang and Dorobek, 1995)

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TYPE LOG -- GREENWOOD PRE-GRAYBURG UNIT 14

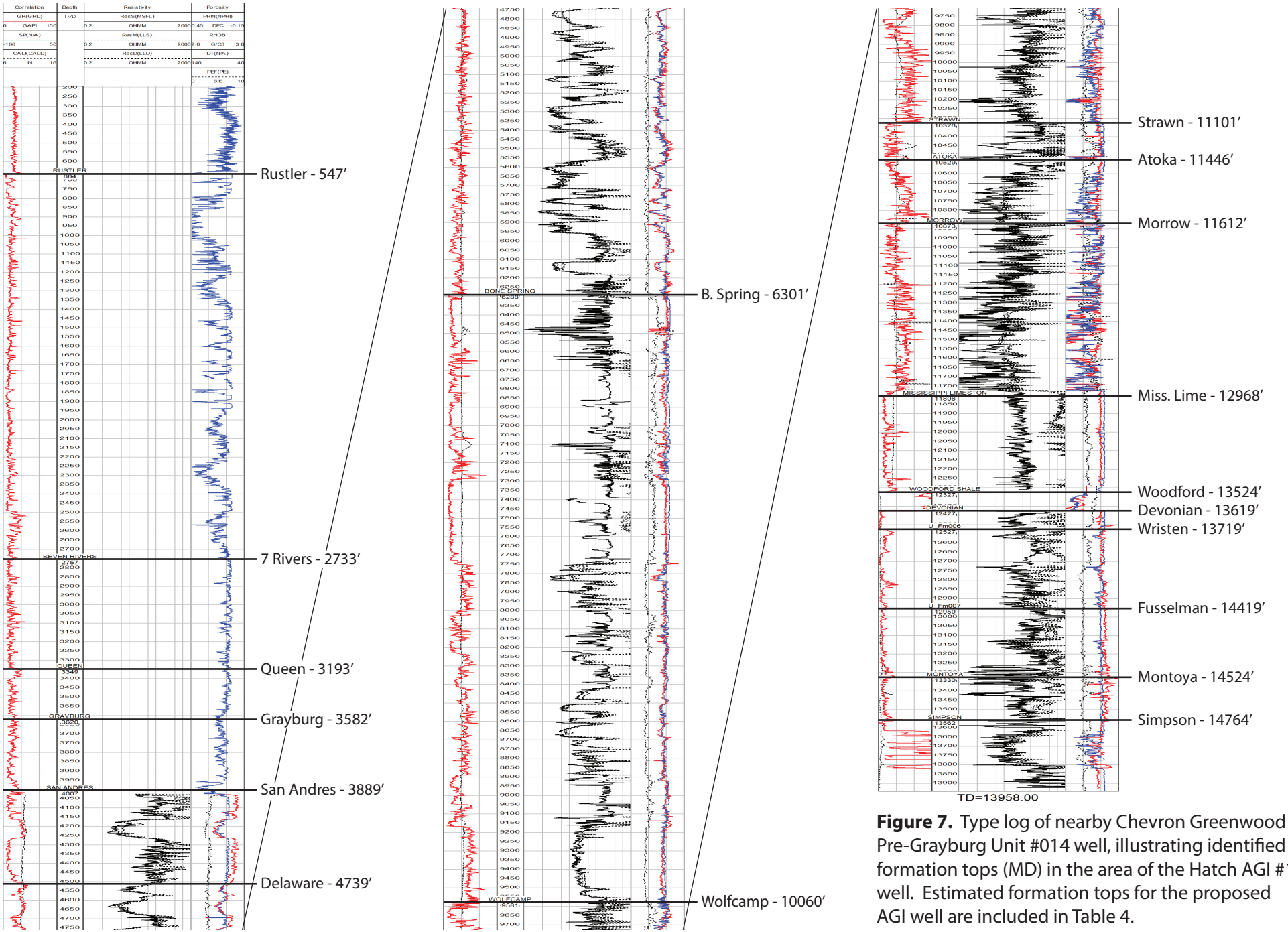

Figure 7. Type log of nearby Chevron Greenwood Pre-Grayburg Unit #014 well, illustrating identified formation tops (MD) in the area of the Hatch AGI #1 well. Estimated formation tops for the proposed AGI well are included in Table 4.

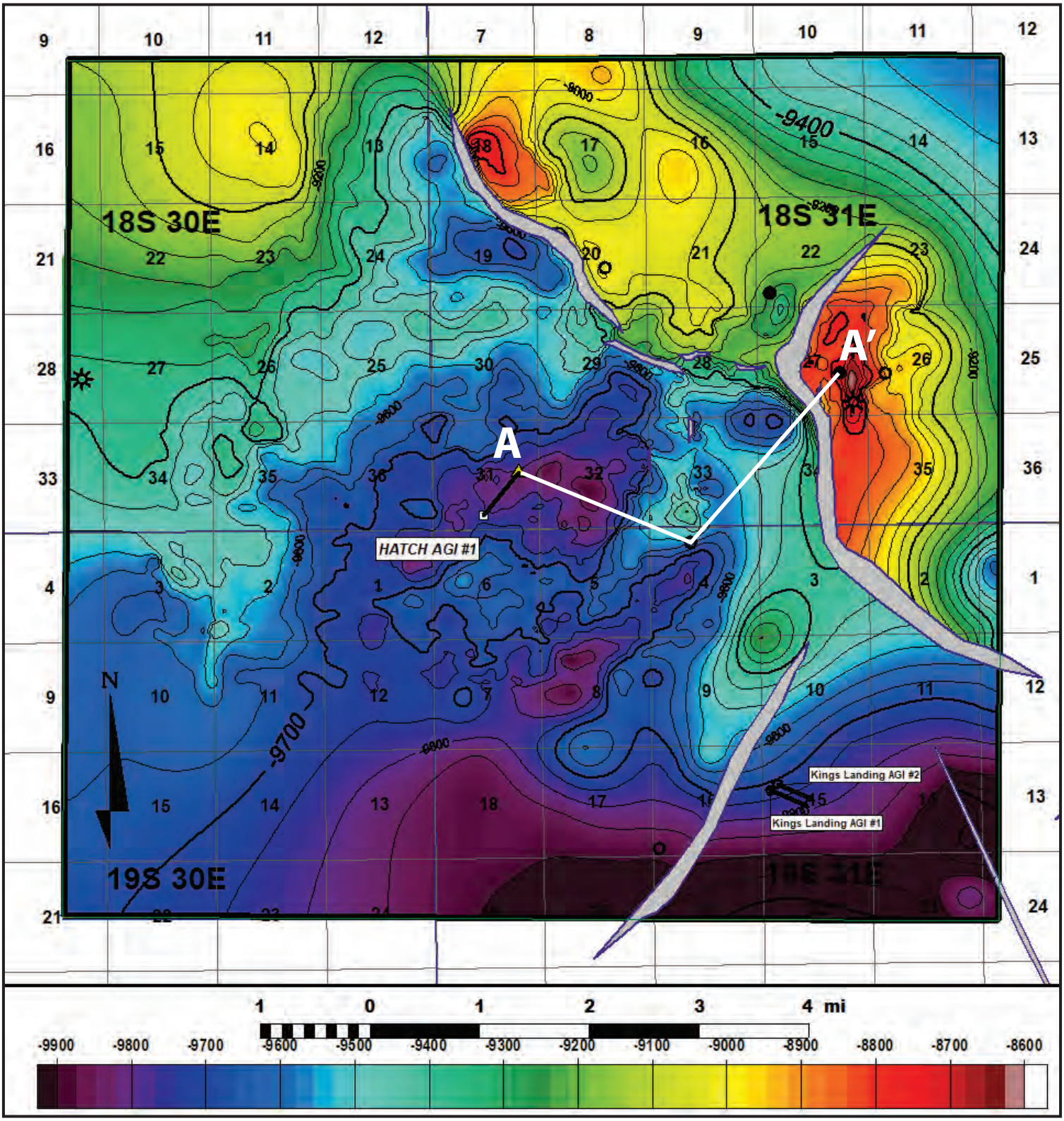

Figure 8. Local Devonian structure contour map (sub-sea) of the Hatch AGI #1 well illustrating the top of the Siluro-Devonian target injection reservoir. Cross section A-A' is shown in Figure 9 and Figure 10. Contour intervals (CI) are equal to 50 ft.

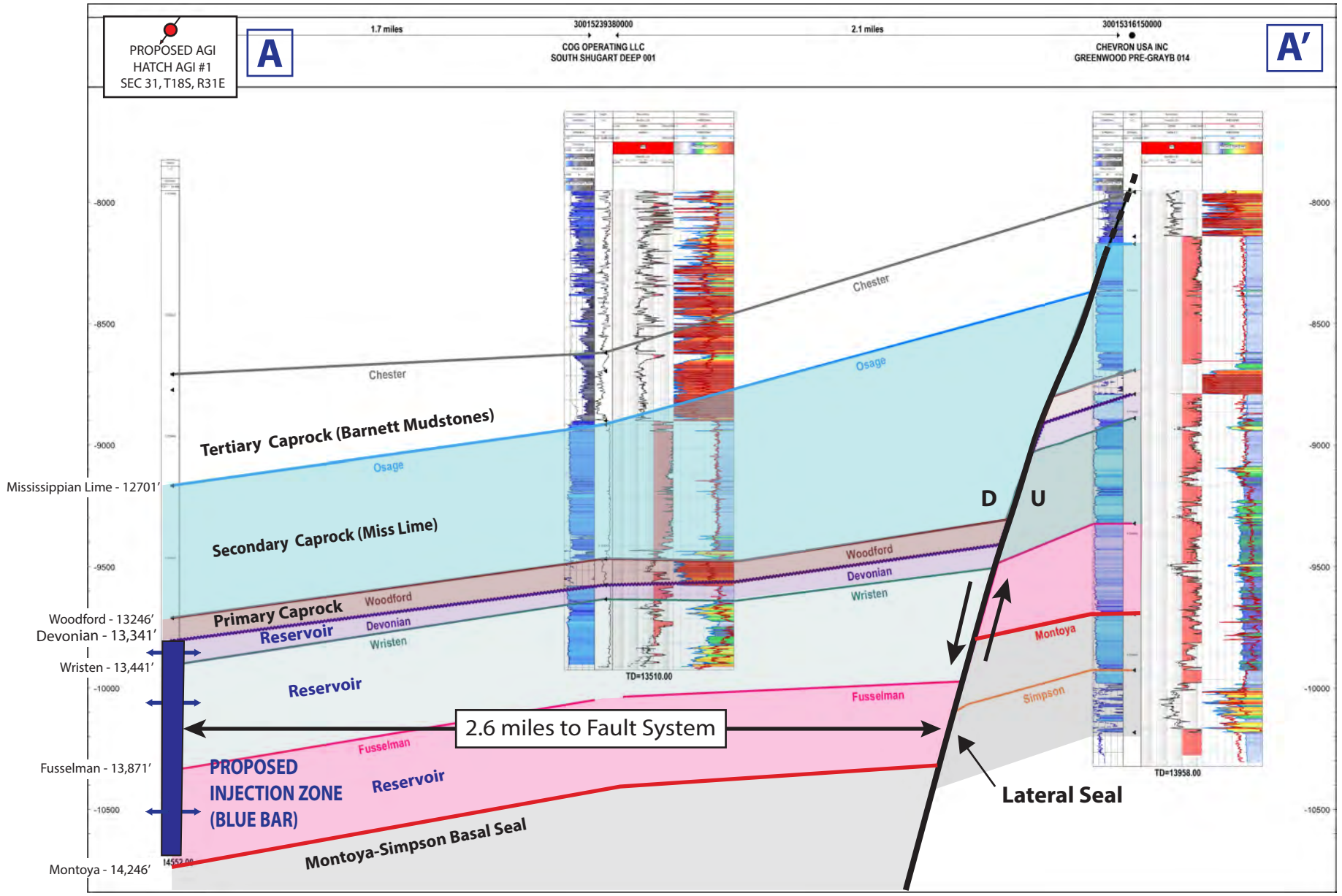

Figure 9. Structural Cross Section - Demonstration of TAG Injection Geologic System. A - A' showing regional structural profile and distance to well control and northeastern normal fault system (approximately 2.6 miles updip to northeast). Hatch AGI #1 is projected into cross-section as shown in Figure 8. Hatch AGI 1 formation tops are posted in TVD.

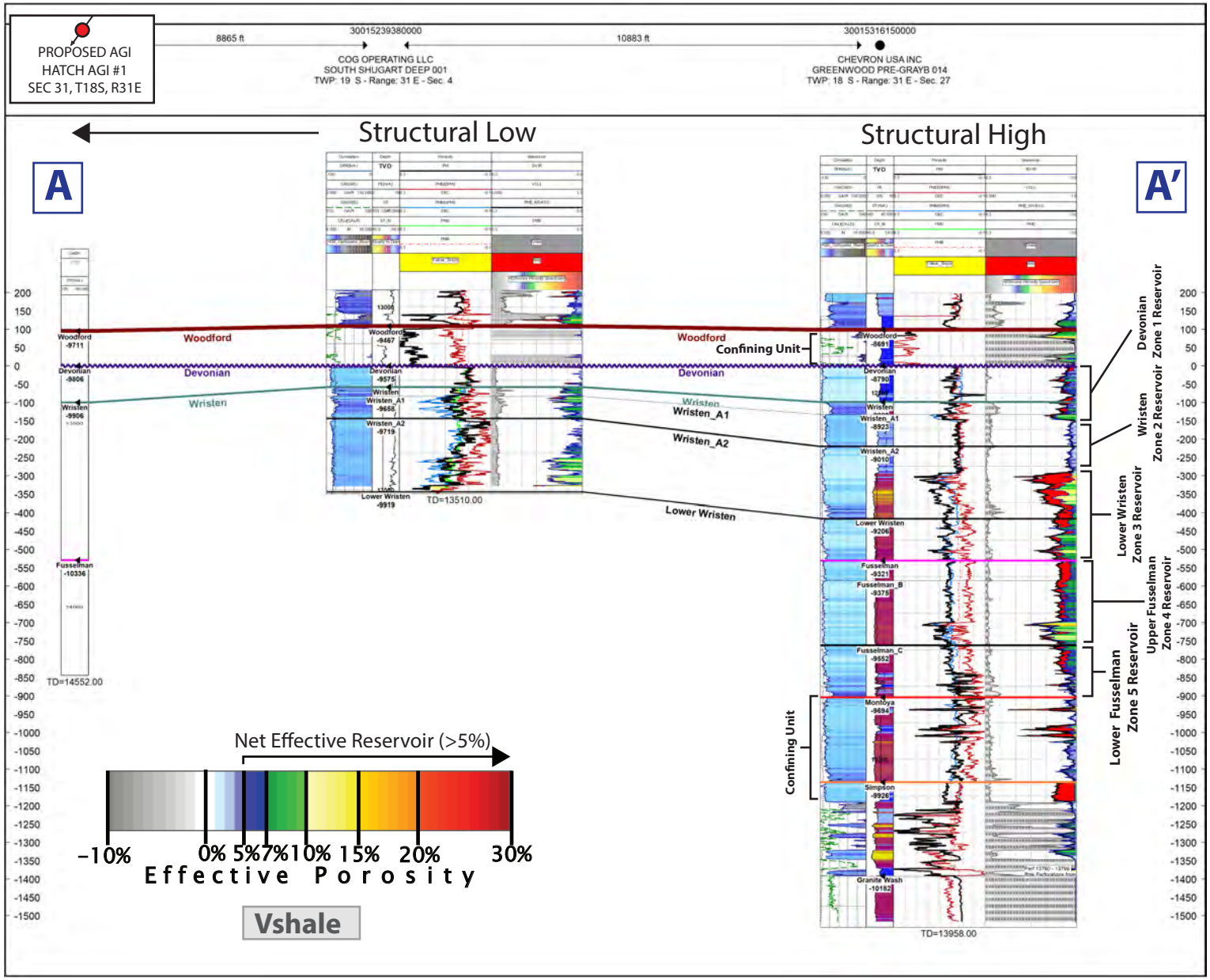

Figure 10. Stratigraphic Correlation Section - Siluro-Devonian Target Injection Reservoirs. Effective reservoirs are notated. Siluro-Devonian petrophysical model for effective porosity are shown on logs, and effective reservoir is observed within Devonian, lower Wristen, and lower and upper Fusselman. Net effective reservoir is defined as greater than or equal to 5% effective porosity.

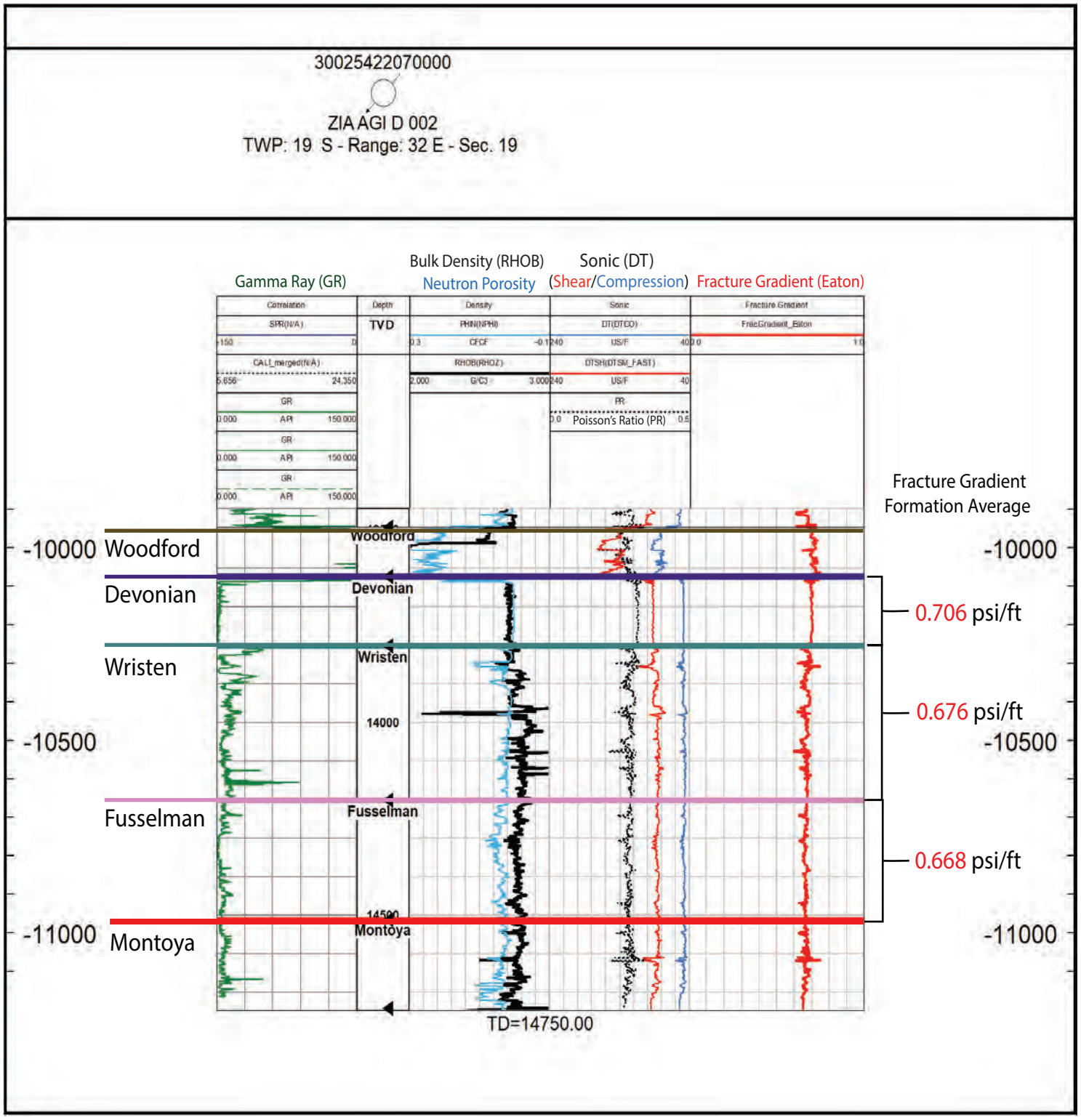

Figure 11. Fracture pressure gradient calculated from the Zia AGI D #2 (red trace). Average fracture gradient estimates range from 0.676 to 0.706 psi/ft. for Devonian through Montoya geologic strata.

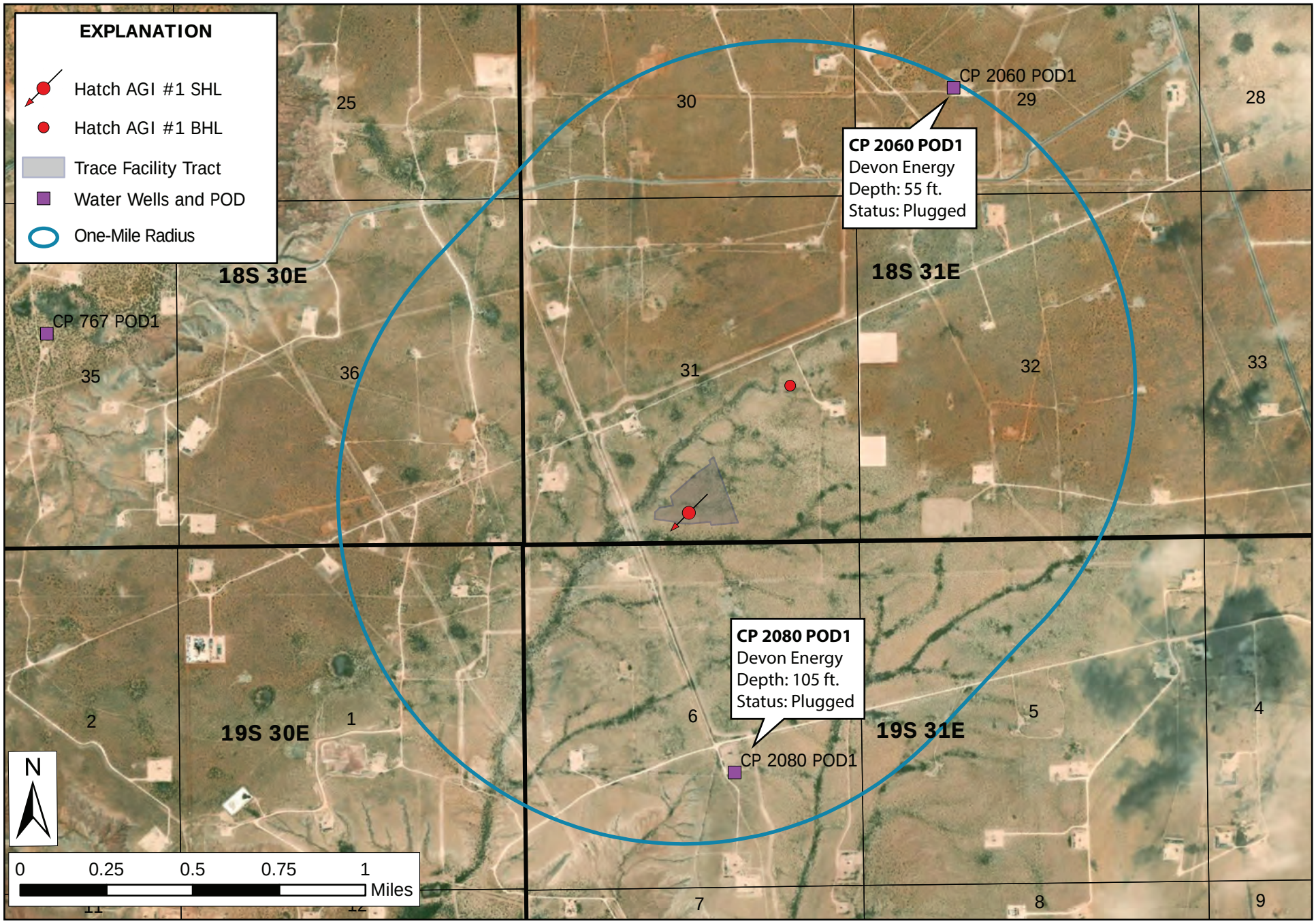

Figure 12. Water wells and points of diversion within one mile of the proposed Hatch AGI #1 well. Note that the AGI area of review has been modified to reflect a combined one-mile buffer zone aroudn the surface- and bottom-hole locations, and the anticipated wellbore path.

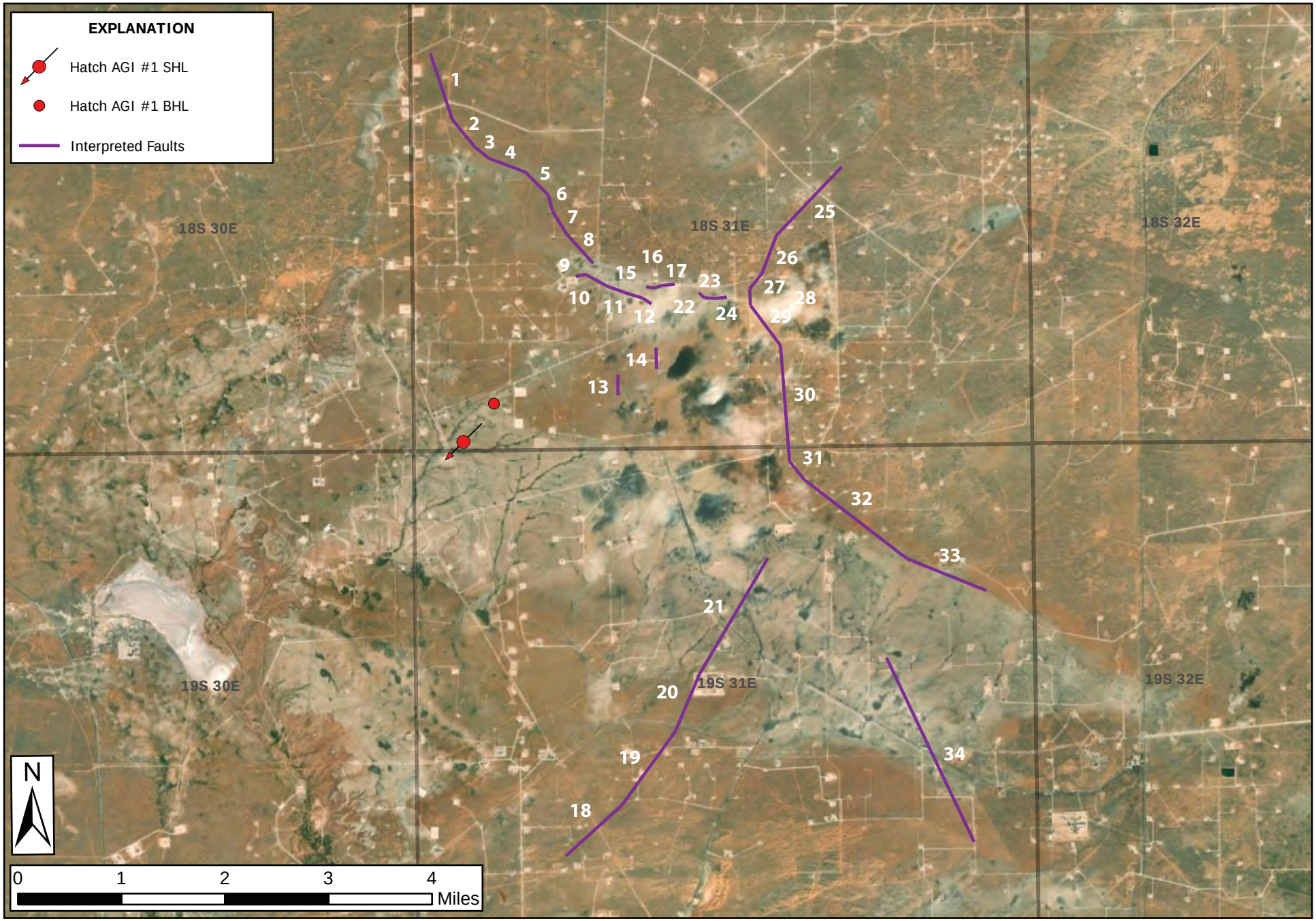

Figure 13. Subsurface fault features interpreted from 3D seismic survey analysis, well control, and published literature in the vicinity of the proposed Hatch AGI #1 well. Fault segments are annotated for reference in FSP simulation results regarding induced-seismicity risk.

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MODEL POROSITY DISTRIBUTION BY ZONE

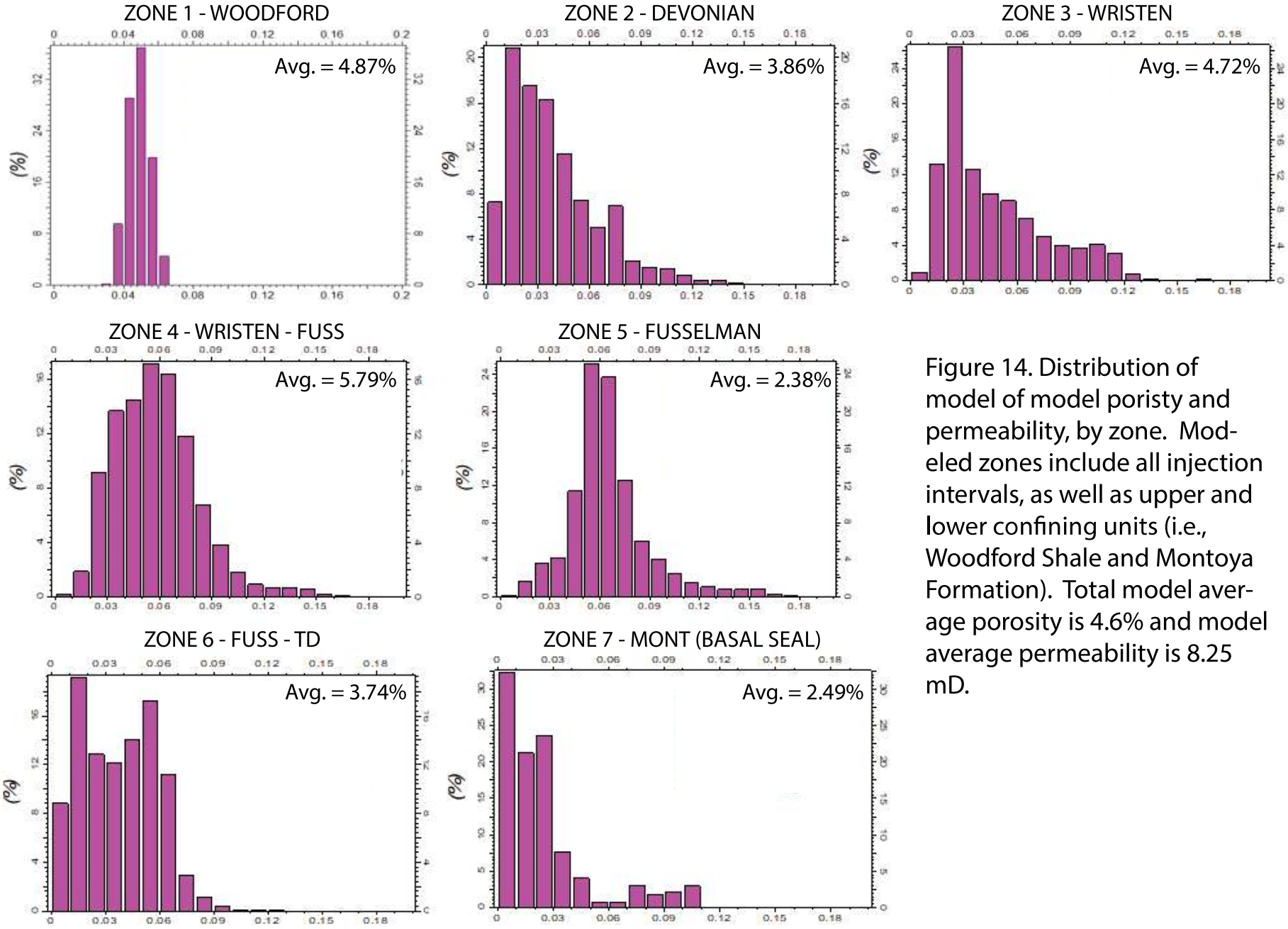

Figure 14. Distribution of model of model poristy and permeability, by zone. Modeled zones include all injection intervals, as well as upper and lower confining units (i.e., Woodford Shale and Montoya Formation). Total model average porosity is 4.6% and model average permeability is 8.25 mD.

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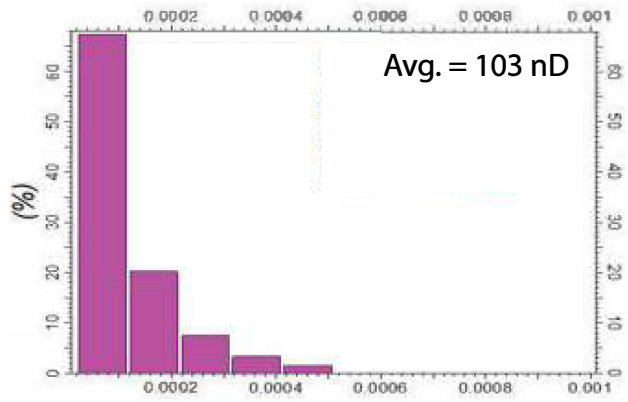
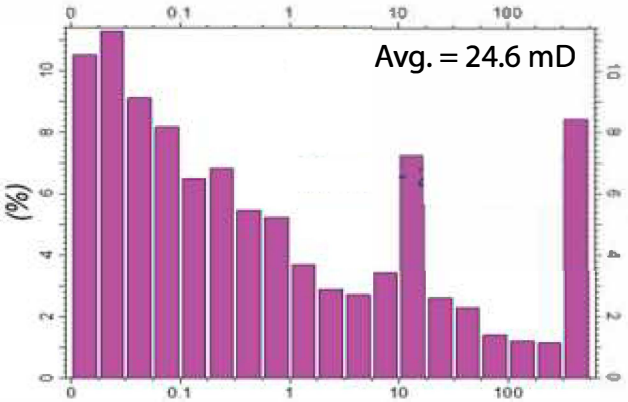
MODEL PERMEABILITY DISTRIBUTION BY ZONE

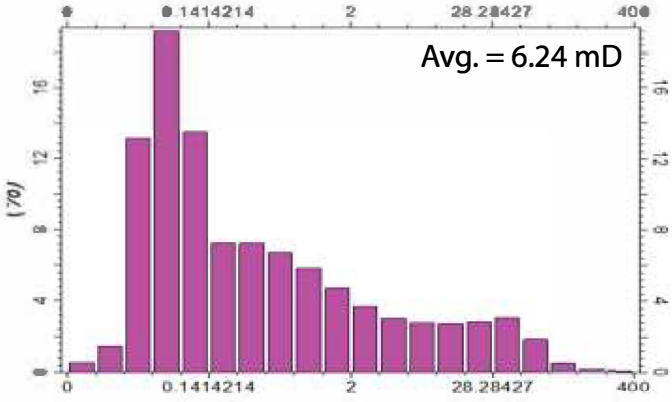
ZONE 1 - WOODFORD



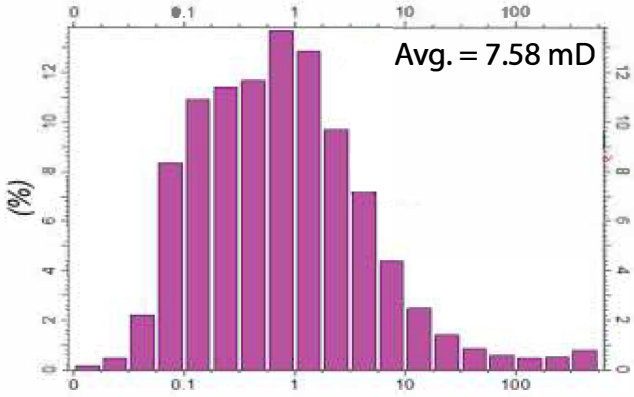
ZONE 2 - DEVONIAN



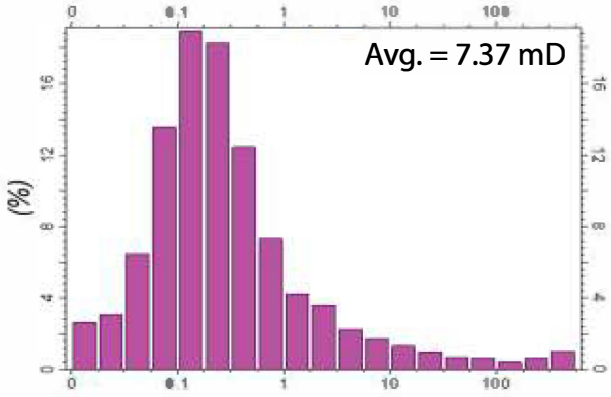
ZONE 3 - WRISTEN



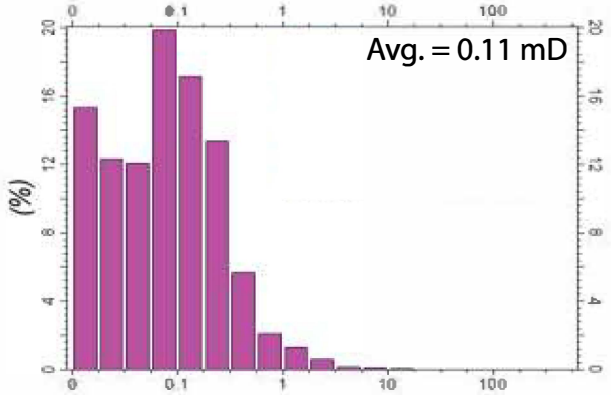
ZONE 4 - WRISTEN - FUSS



ZONE 5 - FUSSELMAN



ZONE 6 - FUSS - TD



ZONE 7 - MONT (BASAL SEAL)

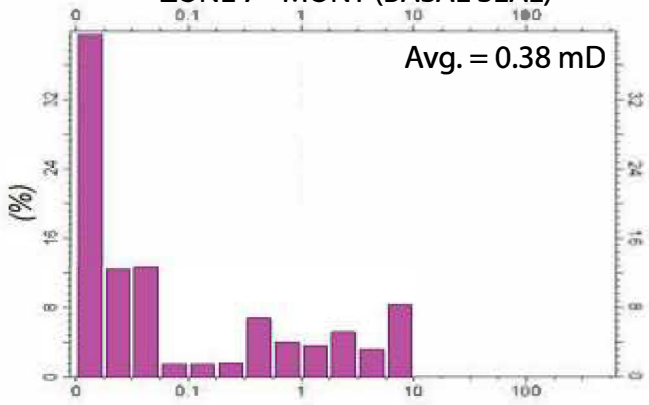


Figure 14 (cont'd). Distribution of model of model poristy and permeability, by zone. Modeled zones include all injection intervals, as well as upper and lower confining units (i.e., Woodford Shale and Montoya Formation). Total model average porosity is 4.6% and model average permeability is 8.25 mD.

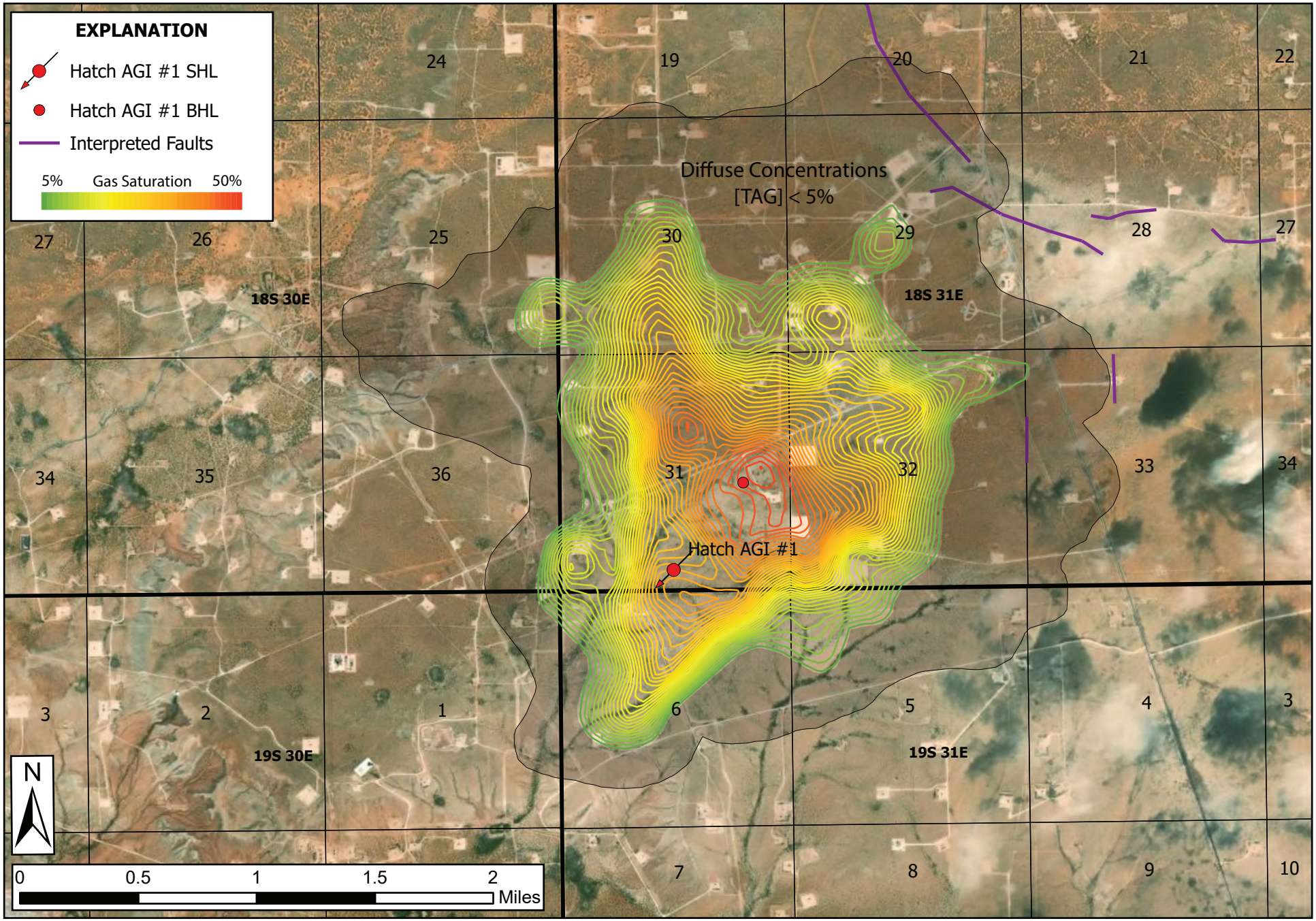


Figure 15. Summary of Eclipse simulation results for Case 1. This map displays the simulated plume after 30 years of continuous injection. Contours of gas saturation are depicted ranging from 0 to 51% gas saturation. The nearest off-set Siluro-Devonian wells, the Hackberry SWD and Kings Landing AGI are located approx. 4 miles SE off the mapped area.

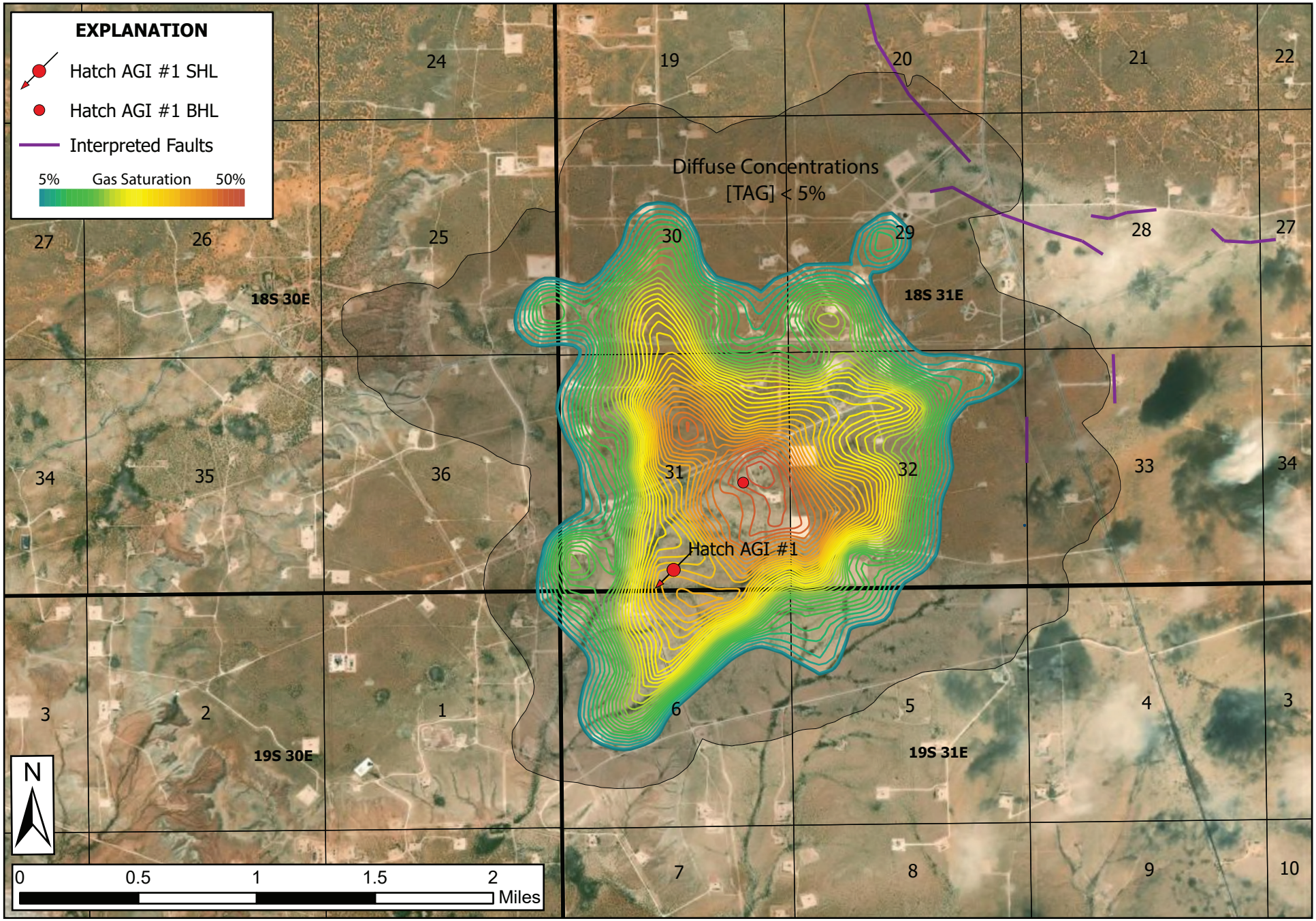


Figure 16. Summary of Eclipse simulation results for Case 2. This map displays the simulated plume after 30 years of continuous injection. Contours of gas saturation are depicted ranging from 0 to 51% gas saturation. The nearest off-set Siluro-Devonian wells, the Hackberry SWD and Kings Landing AGI are located approx. 4 miles SE off the mapped area.

TRACE MIDSTREAM

GEOLEX INCORPORATED

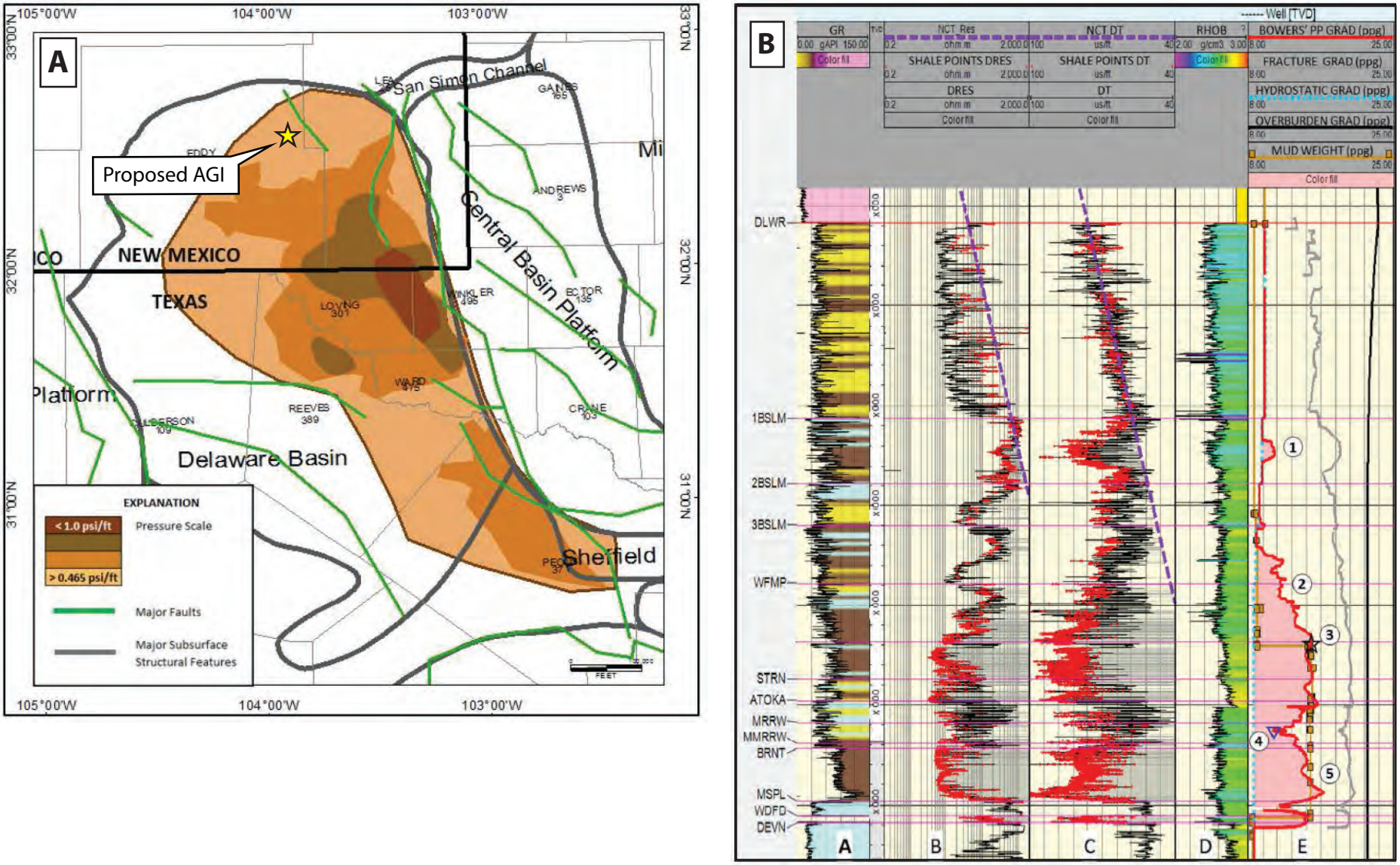


Figure 17. Mapped extent of present day overpressure in the Delaware Basin (Panel A) and example log response (Panel B) illustrating stratigraphic onset of over-pressured intervals and associated drilling fluid densities (modified from Rittenhouse et al., 2016)

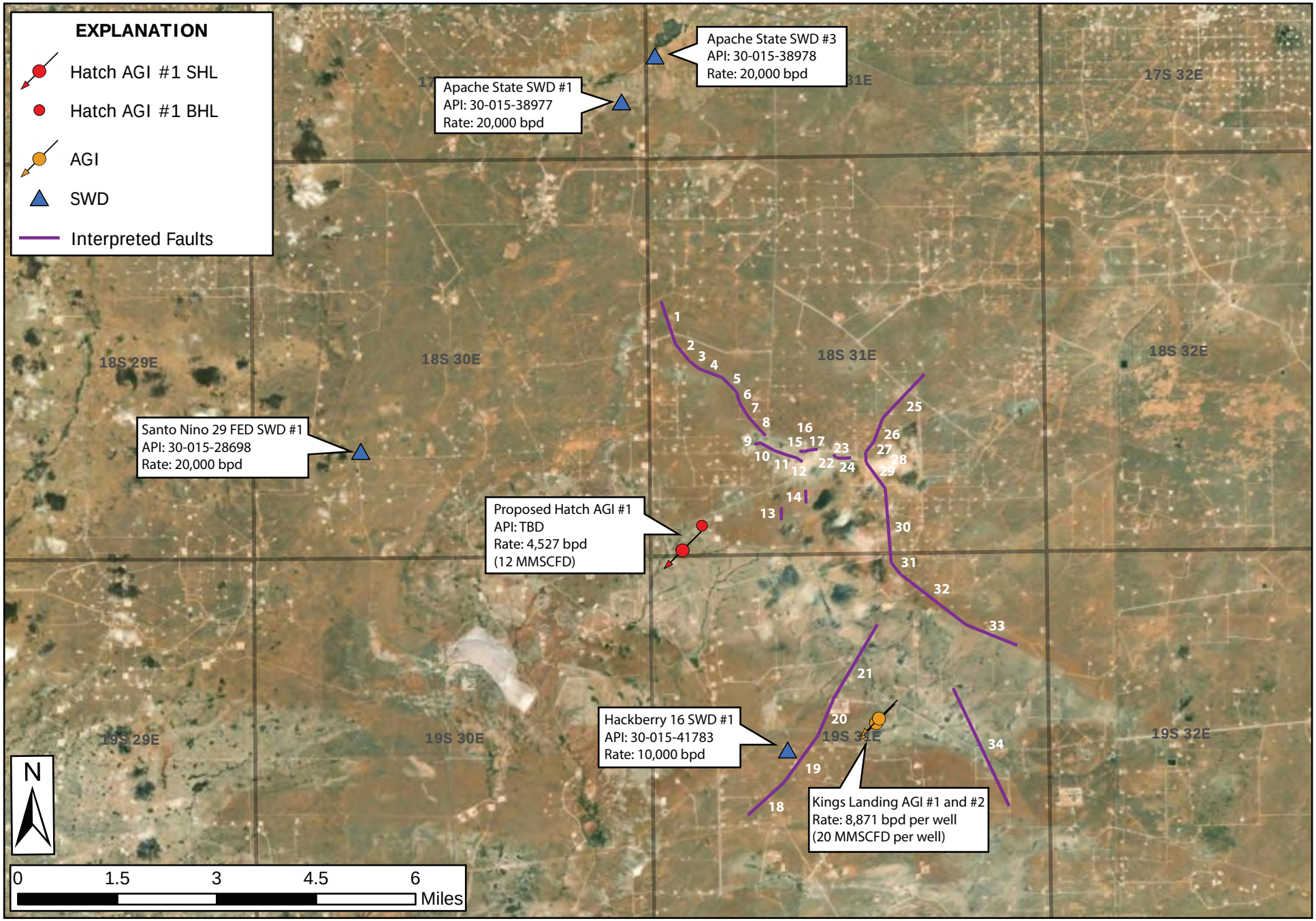


Figure 18. Injection wells and subsurface features in the vicinity of the proposed Hatch AGI #1

TRACE MIDSTREAM

GEOLEX INCORPORATED

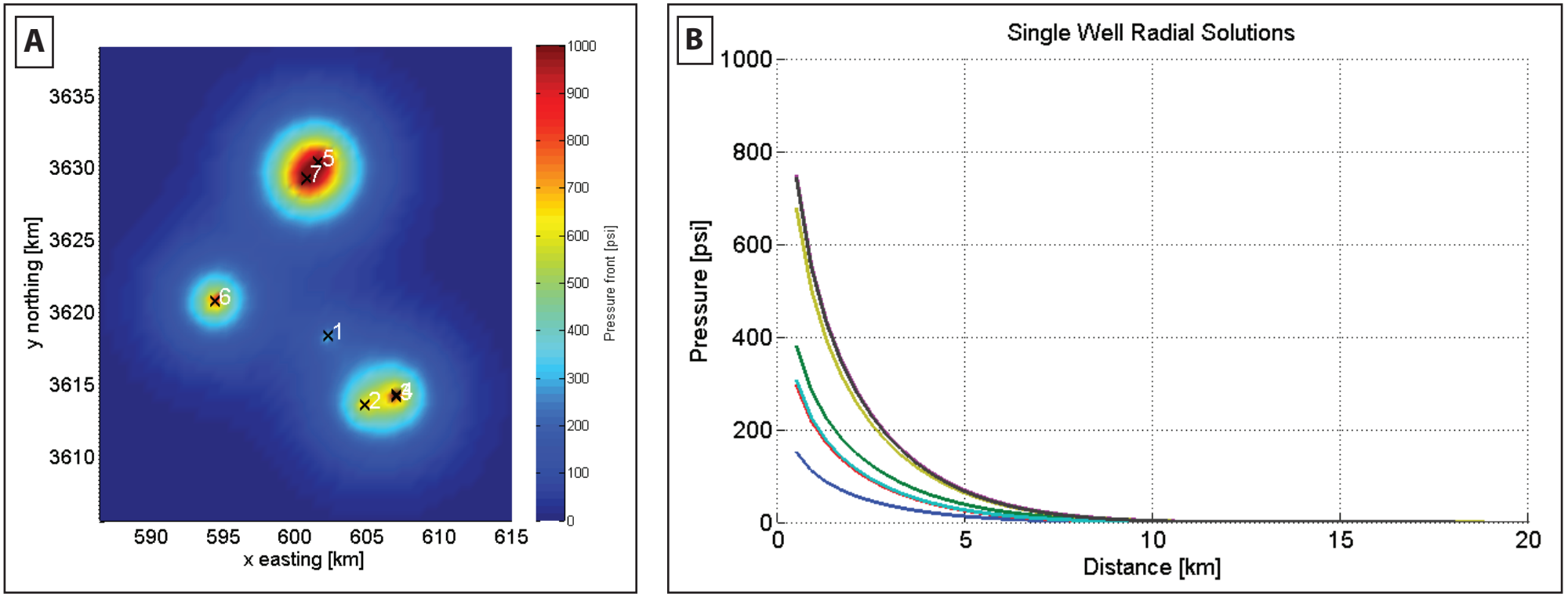


Figure 19. Summary of FSP model-predicted pressure front effects in the year 2057, resulting from injection activities of the proposed Hatch AGI #1 and additional nearby wells actively injecting, or proposed for injection into the Siluro-Devonian formations. Panel A shows mapped pressure increase associated with each simulated injection well, Panel B shows injection well pressure impacts with distance, and Panel 3 shows model-predicted pressure increase at fault midpoints.

TRACE MIDSTREAM

GEOLEX INCORPORATED

FSP ASSESSMENT - SCENARIO 1

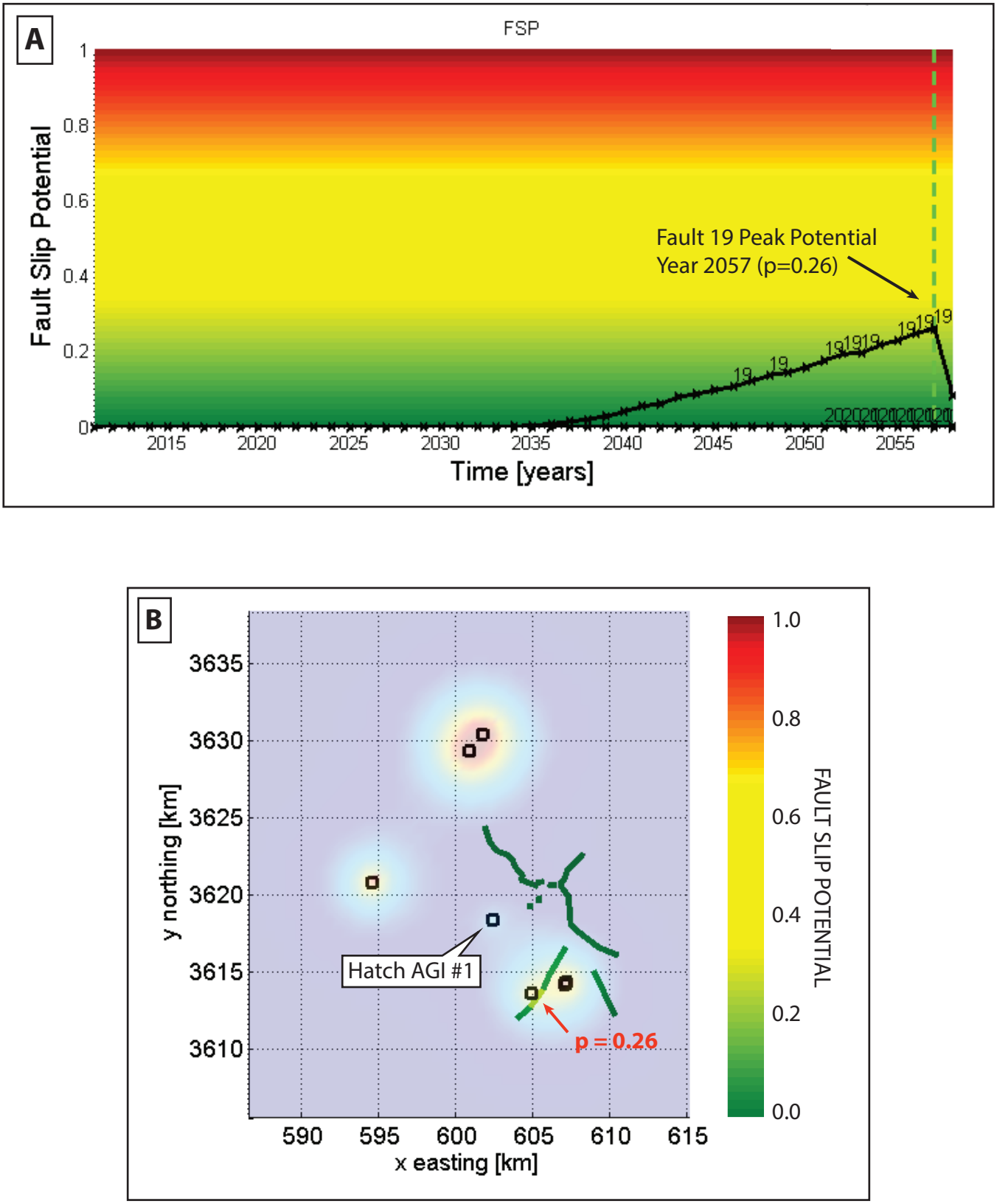
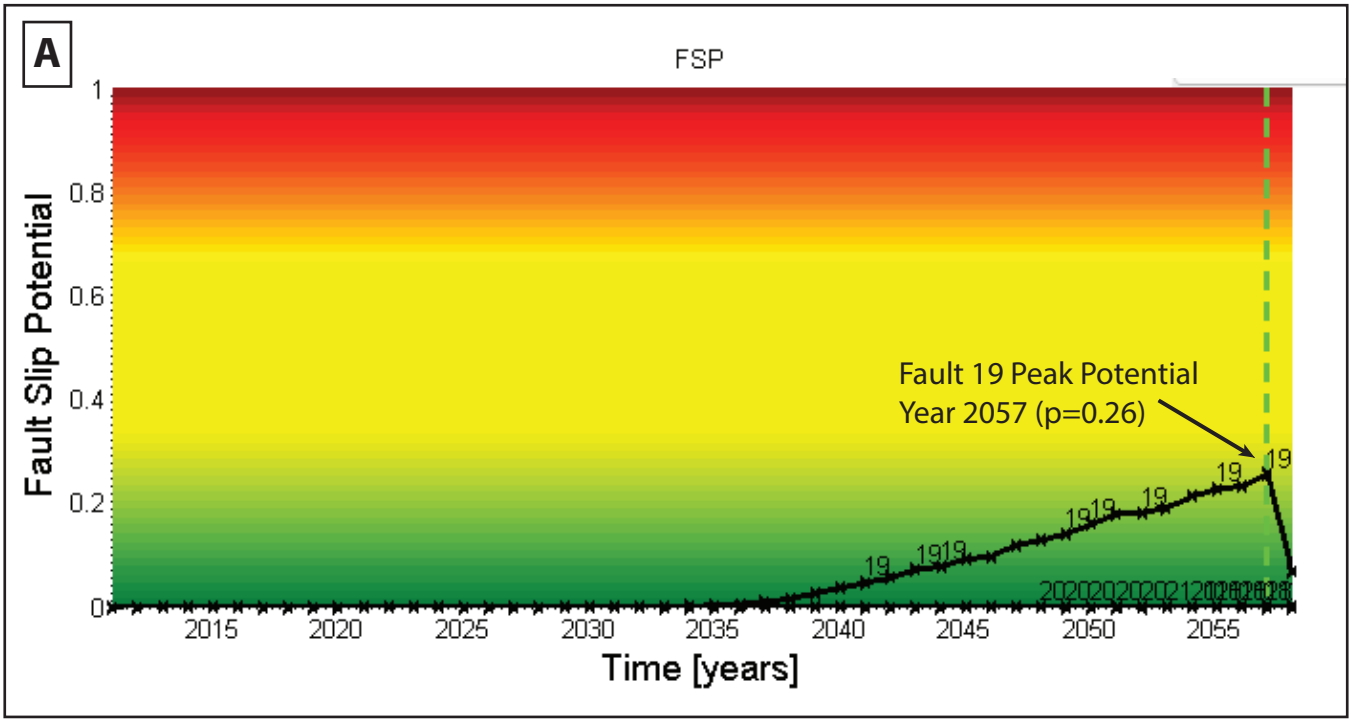


Figure 20. Scenario 1: Model-predicted fault slip potential after 30 years (Panel A) of maximum injection by proposed AGI and offset injection well activities. With the exception of Fault Segment #19, all faults modeled predict no probability of slip. Fault 19 is located proximal to three 3rd-party injection wells.

TRACE MIDSTREAM

GEOLEX INCORPORATED

FSP ASSESSMENT - SCENARIO 2



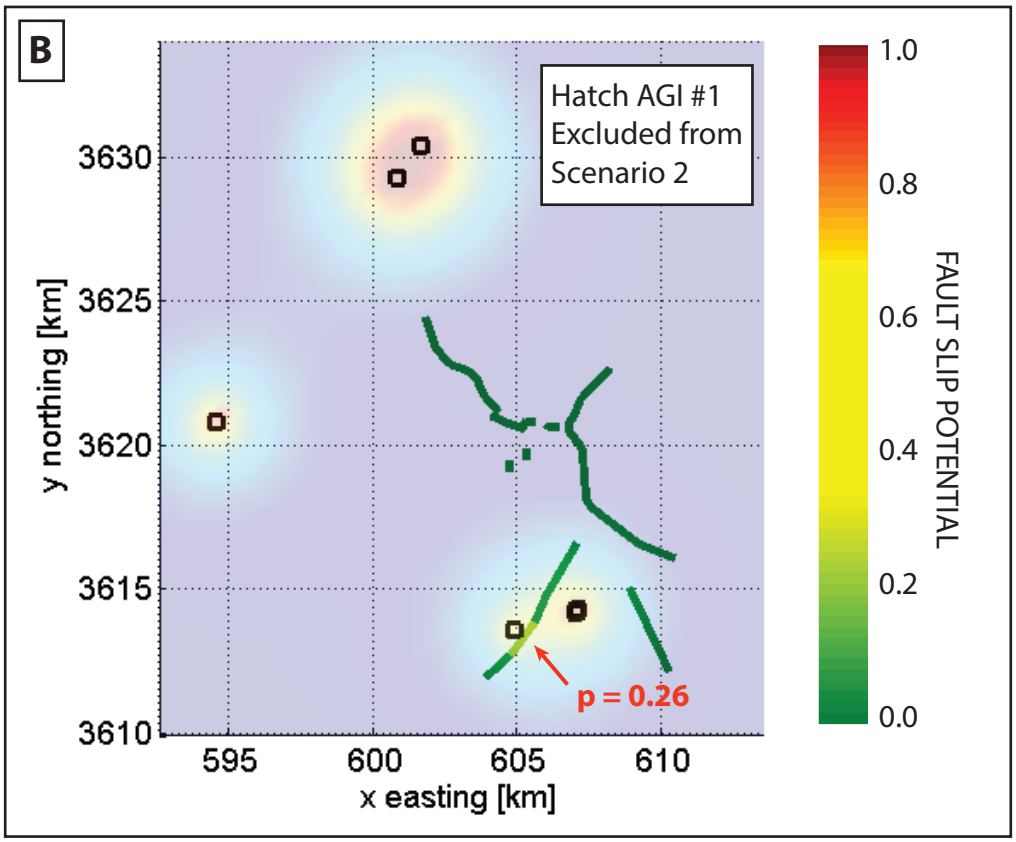


Figure 21. Scenario 2: Model-predicted fault slip potential after 30 years (Panel A) of maximum injection operations only reflective of nearby 3rd-party injection wells. This scenario excludes the proposed Hatch AGI #1 well and demonstrates that the proposed activities for the Hatch AGI are inconsequential with respect to the risk for fault slip.

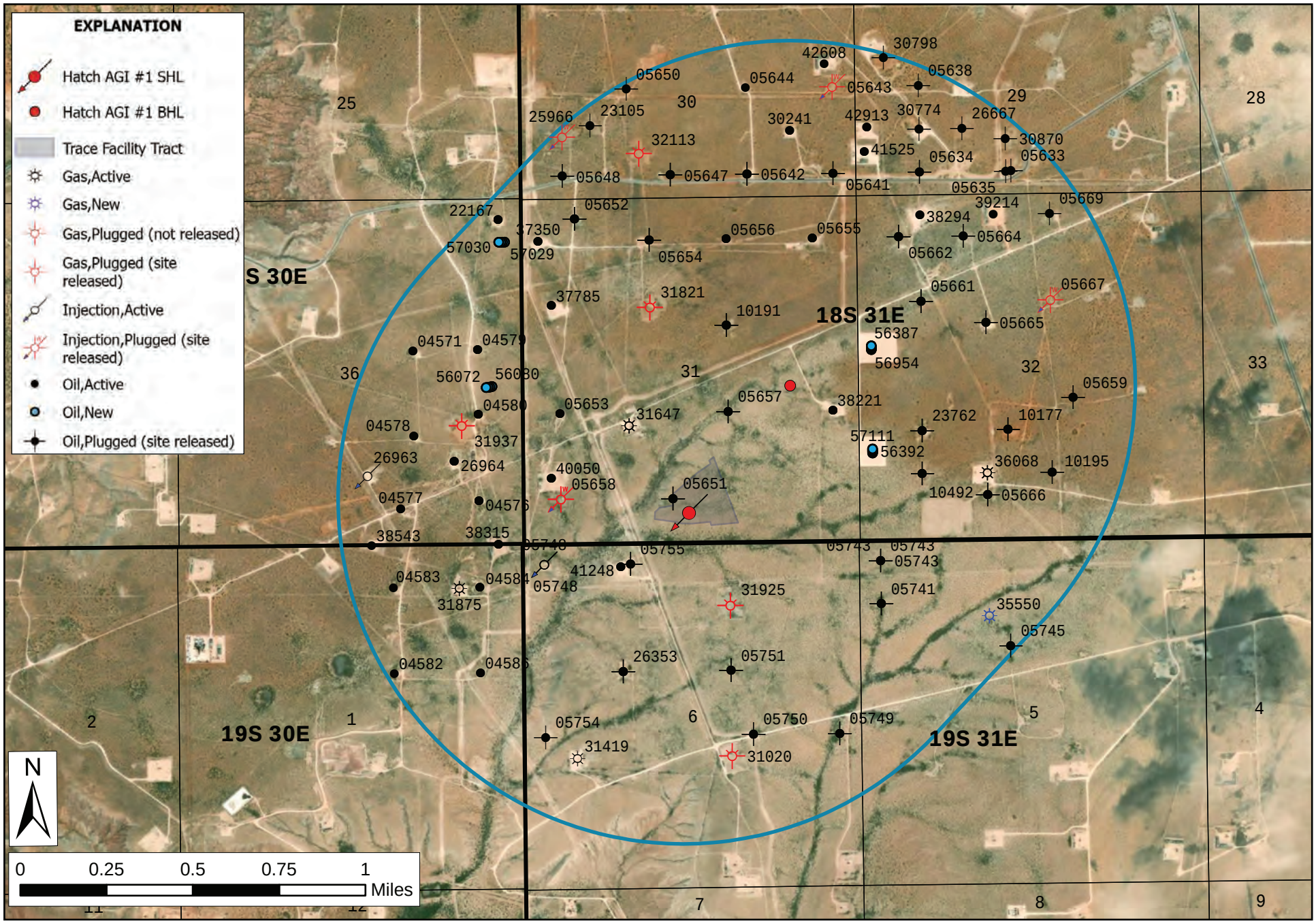


Figure 22. Alll wells of record within one mile of the proposed Hatch AGI #1 well. Note that the area of review has been modified to include a buffer zone around the AGI surface-hole and bottom-hole locations, and along the anticipated wellbore path.

APPENDIX A

INFORMATION ON ALL WELLS WITHIN TWO MILES OF THE PROPOSED HATCH AGI #1 WELL

Figure A-1: All wells located within two miles of the Hatch AGI #1

Table A-1: Tabulated summary of all wells within two miles of the proposed Hatch AGI #1 well

NOTE: THERE ARE NO WELLS THAT PENETRATE THE PROPOSED INJECTION RESERVOIR WITHIN TWO MILES AND THEREFORE, THERE ARE NO RELEVANT PLUGGING DOCUMENTS WITH RESPECT TO OFF-SETTING PENETRATIONS

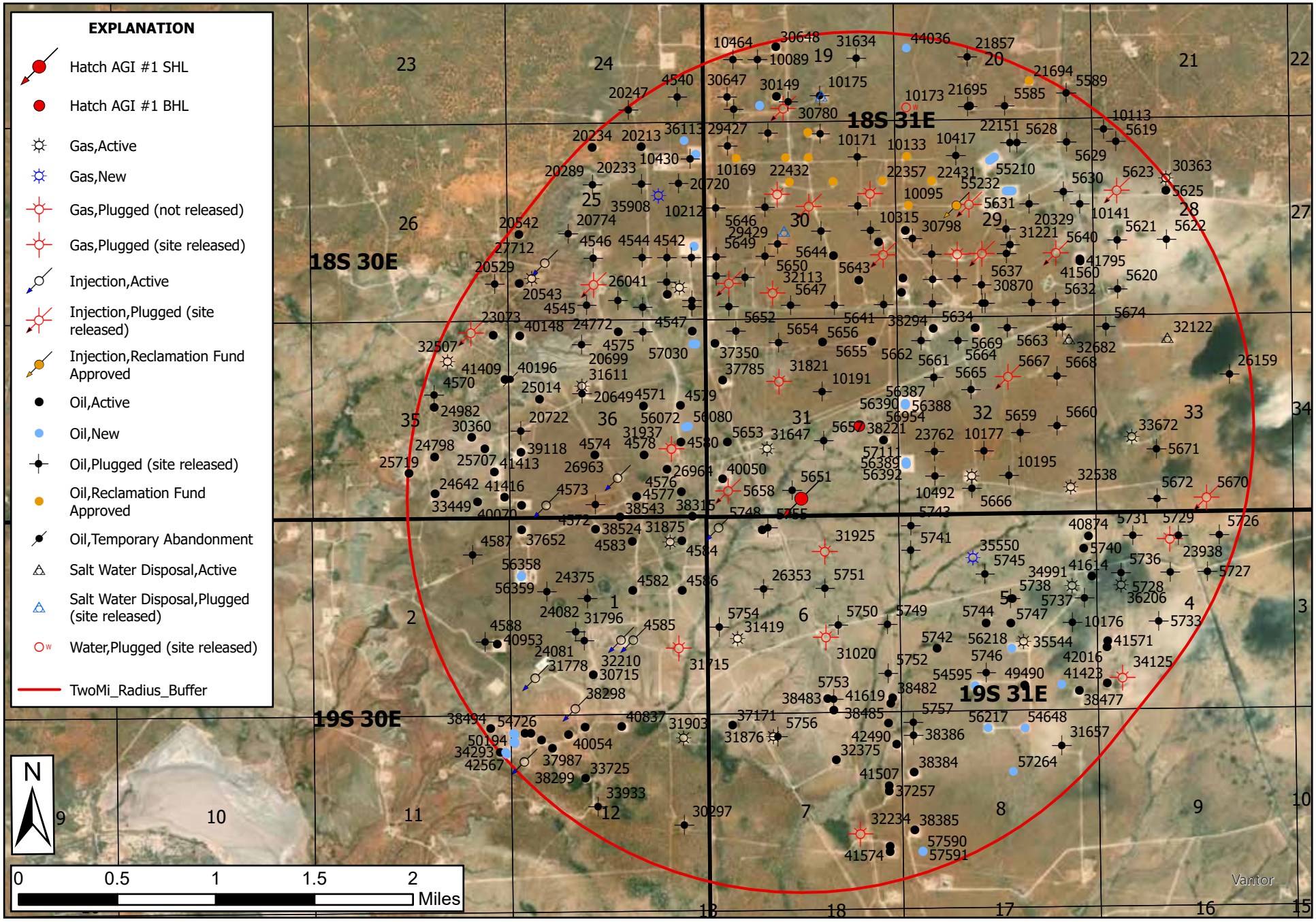


Figure A-1. All wells within two miles of the proposed Hatch AGI #1 well surface- and bottom-hole locations, labeled according to the last five digits of their API number (i.e., formated as 30-015-xxxxx). For reference, a complete list of all wells within two miles is included in Appendix A, Table A-1.

API	Well_Name	Type	Status	Operator	Lat83	Long83	ore_D	ease_Typ	MD	TVD	Associated_Pools	Plug_Date	Mi from SHL
30-015-05651	Donnelly Kenwood Fed. B #001	Oil	PA	Donnelly Drilling Co	32.69851	-103.90946		FED	3655	3655	Grayburg	2000-01-01	0.061910571
30-015-05755	USA FED #001	Oil	PA	Texaco Inc	32.69578	-103.91161		FED	3495	3495	Yates-Queen	2000-01-01	0.224457312
30-015-41248	HACKBERRY 6 FED COM #004H	Oil	Active	Permian Resources Operating, LLC	32.69564	-103.9121	H	FED	13082	8785	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	0.252666251
30-015-31925	OXY BOOT JACK FED #001	Gas	PA	OXY USA WTP LIMITED PARTNERSHI	32.69398	-103.90667	V	FED	12340	12340	[96785] HACKBERRY, MORROW, NORTH (G)	2002-11-06	0.294250885
30-015-31647	WEST SHUGART 31 FED COM #001	Gas	Active	Coterra Energy Operating Co.	32.70158	-103.91161		FED	12530	12530	[96785] HACKBERRY, MORROW, NORTH (G); [970	N/A	0.305676504
30-015-05657	Saunders Shugart #1	Oil	PA	Saunders	32.70214	-103.90668		FED	2708	2708	Queen	2001-01-01	0.314648779
30-015-05658	CULWIN QUEEN UNIT #007	INJ	PA	TRIGG FAMILY TRUST	32.6985	-103.91505	V	FED	3144	3144	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1995-05-10	0.373259525
30-015-40050	SAMANTHA 31 6 FED COM #001H	Oil	Active	Permian Resources Operating, LLC	32.69941	-103.91551		FED	14381	8768	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	0.411156185
30-015-05748	CULWIN QUEEN UNIT #014	INJ	Active	RAY WESTALL OPERATING, INC.	32.69578	-103.9159	V	FED	3151	3151	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.445061204
30-015-05653	CULWIN QUEEN UNIT #006	Oil	Active	RAY WESTALL OPERATING, INC.	32.70213	-103.91505	V	FED	3480	3480	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.471805942
30-015-05751	Vandagriff #001	Oil	PA	G.E. Bobb	32.69125	-103.90666		FED	850	850	-	2000-01-01	0.472879855
30-015-26353	ACEITE FED #001	Oil	PA	MANZANO OIL CORP	32.69125	-103.91203	V	FED	6285	6285	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2005-03-21	0.497779187
30-015-38221	WEST SHUGART 31 FED COM #005I	Oil	Active	Coterra Energy Operating Co.	32.70215	-103.90147	H	FED	12978	8749	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	0.512133752
30-015-10191	Pure FED #001	Oil	PA	Campana Petroleum Co	32.70577	-103.90672		FED	4000	4000	Qu-Penrose-GR	2000-01-01	0.554227873
30-015-38315	WIZARD FED COM #005H	Oil	Active	CHI OPERATING INC	32.69666	-103.91817	H	FED	13500	0	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	0.559233802
30-015-56392	EASY PEASY 32 33 FED COM #628H	Oil	New	MEWBOURNE OIL CO	32.70033	-103.89952	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	0.559360232
30-015-56389	EASY PEASY 32 33 FED COM #527H	Oil	New	MEWBOURNE OIL CO	32.70039	-103.89952	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	0.560612138
30-015-56391	EASY PEASY 32 33 FED COM #626H	Oil	New	MEWBOURNE OIL CO	32.70044	-103.89952	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	0.561676139
30-015-57111	EASY PEASY 32 33 FED COM #525H	Oil	New	MEWBOURNE OIL CO	32.7005	-103.89952	H	FED	0	0	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	0.562978538
30-015-05743	Pan American FED #001	Oil	PA	NE Salsich	32.6958	-103.89917		FED	3531	3531	Ya-7R-Qu-Gr	2000-01-01	0.572615957
30-015-31821	WEST SHUGART 31 FED #002	Gas	PA	CIMAREX ENERGY CO. OF COLORAD	32.70654	-103.91052	D	FED	12308	12300	[96785] HACKBERRY, MORROW, NORTH (G); [970	2017-05-12	0.604916299
30-015-04576	CULWIN QUEEN UNIT #008	Oil	Active	RAY WESTALL OPERATING, INC.	32.6985	-103.91912	V	State	3200	3200	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.6094394
30-015-05741	Pan American FEDI	Oil	PA	Curtis Hankamer	32.69399	-103.89916		FED	2734	2734	-	2000-01-01	0.616548694
30-015-04584	CULWIN QUEEN UNIT #013	Oil	Active	RAY WESTALL OPERATING, INC.	32.69487	-103.91912	V	FED	3339	3339	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.642822918
30-015-05750	Texaco FED #001	Oil	PA	Curtis Hankamer	32.68855	-103.90558		FED	3449	3449	Queen	2000-01-01	0.668854041
30-015-04580	CULWIN QUEEN UNIT #005	Oil	Active	RAY WESTALL OPERATING, INC.	32.70213	-103.91911	V	State	3169	3169	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.673778182
30-015-56080	JAKKU 36 FED COM #134H	Oil	New	Permian Resources Operating, LLC	32.70329	-103.91842	H	FED	0	0	[5200] BENSON, BONE SPRING; [37920] LEO, BON	N/A	0.678045422
30-015-56077	JAKKU 36 FED COM #133H	Oil	New	Permian Resources Operating, LLC	32.70327	-103.91852	H	FED	0	0	[5200] BENSON, BONE SPRING; [37920] LEO, BON	N/A	0.682176932
30-015-56074	JAKKU 36 FED COM #114H	Oil	New	Permian Resources Operating, LLC	32.70326	-103.91861	H	FED	0	0	[5200] BENSON, BONE SPRING; [37920] LEO, BON	N/A	0.686215931
30-015-10492	NEW MEXICO Y STATE #004	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.69944	-103.89703	V	State	3602	3602	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2009-07-29	0.686986273
30-015-56072	JAKKU 36 FED COM #113H	Oil	New	Permian Resources Operating, LLC	32.70325	-103.91871	H	FED	0	0	[5200] BENSON, BONE SPRING; [37920] LEO, BON	N/A	0.690763969
30-015-26964	CULWIN QUEEN UNIT #020	Oil	Active	RAY WESTALL OPERATING, INC.	32.70017	-103.92033	V	State	3400	3400	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.696323693
30-015-31875	WIZARD FED COM #002	Gas	Active	CHI OPERATING INC	32.6948	-103.92014	V	FED	12300	12300	[96785] HACKBERRY, MORROW, NORTH (G)	N/A	0.700743832
30-015-31937	OXY BITS STATE #001	Gas	PA	Permian Resources Operating, LLC	32.70163	-103.91994	V	State	12280	12280	[96785] HACKBERRY, MORROW, NORTH (G)	2017-06-01	0.704380764
30-015-56954	EASY PEASY 32 33 FED COM #624H	Oil	New	MEWBOURNE OIL CO	32.70468	-103.89953	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	0.708856554
30-015-56388	EASY PEASY 32 33 FED COM #523H	Oil	New	MEWBOURNE OIL CO	32.70473	-103.89953	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	0.7111317
30-015-56390	EASY PEASY 32 33 FED COM #622H	Oil	New	MEWBOURNE OIL CO	32.70479	-103.89953	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	0.713873772
30-015-56387	EASY PEASY 32 33 FED COM #521H	Oil	New	MEWBOURNE OIL CO	32.70484	-103.89953	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	0.716169471
30-015-31020	HACKBERRY 6 FED #001	Gas	PA	DEVON ENERGY PRODUCTION COM	32.68764	-103.90665	V	FED	12272	12272	[97056] HACKBERRY, BONE SPRING, NORTH	2023-12-01	0.71651806
30-015-23762	Mesquite OG ST #001	Oil	PA	Yates Petroleum Corp	32.70125	-103.89703		State	3800	3800	Ya-Qu-Gr	2000-01-01	0.716926724
30-015-37785	WEST SHUGART 31 FED COM #004	Oil	Active	Coterra Energy Operating Co.	32.70667	-103.91542		FED	12988	8803	[56405] SHUGART, BONE SPRING, NORTH; [97056	N/A	0.720587104
30-015-04586	CULWIN QUEEN UNIT #015	Oil	Active	RAY WESTALL OPERATING, INC.	32.69124	-103.91913	V	FED	3141	3141	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.762108226
30-015-05754	FED G #1	Oil	PA	J.I. O'Neilll	32.68851	-103.91592			3362	3362	Queen	2001-01-01	0.772048086
30-015-04579	CULWIN QUEEN UNIT #001	Oil	Active	RAY WESTALL OPERATING, INC.	32.70485	-103.91911	V	State	3410	3410	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.773526679
30-015-05749	FED G	Oil	PA	Culwin	32.68856	-103.90129			3450	3450	-	2001-01-01	0.774110136
30-015-31419	HACKBERRY 6 FED #002	Gas	Active	Permian Resources Operating, LLC	32.68761	-103.91435	V	FED	12300	12300	[78000] HACKBERRY, MORROW (GAS); [96785] HA	N/A	0.781882441
30-015-05654	FED E #002	Oil	PA	BXP Operating, LLC	32.7094	-103.91052	V	FED	3650	3650	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2022-12-07	0.799594554
30-015-05656	FED F #002	Oil	Active	BXP Operating, LLC	32.7094	-103.90669	V	FED	3656	3656	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.800842363
30-015-04578	CULWIN QUEEN UNIT #004	Oil	Active	RAY WESTALL OPERATING, INC.	32.70123	-103.92233	V	State	3145	3145	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.827474889
30-015-04577	CULWIN QUEEN UNIT #009	Oil	Active	RAY WESTALL OPERATING, INC.	32.69817	-103.92302	V	State	3193	3193	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.835413513
30-015-05666	MONTEREY B STATE #001	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.69853	-103.89381	V	State	3550	3550	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2013-07-26	0.867386225
30-015-36068	KC STRIP STATE #002	Gas	Active	CHI OPERATING INC	32.69944	-103.89381	V	State	12275	12275	[85300] SHUGART, MORROW (GAS)	N/A	0.872777695
30-015-05655	FED F #001	Oil	Active	BXP Operating, LLC	32.70941	-103.9024	V	FED	3695	3695	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.873420196
30-015-04583	CULWIN QUEEN UNIT #012	Oil	Active	RAY WESTALL OPERATING, INC.	32.69487	-103.92342	V	FED	3320	3320	[56430] SHUGART YATES (DO NOT USE); [56439] S	N/A	0.883496272
30-015-37350	WEST SHUGART 31 FED COM #003	Oil	Active	Coterra Energy Operating Co.	32.70939	-103.91605		FED	13344	13344	[56405] SHUGART, BONE SPRING, NORTH	N/A	0.900546352
30-015-05661	Monterey ST #003E	Oil	PA	WE Bakke Operating	32.7067	-103.89703		State	3677	3677	Ya-Qu-Gr	2000-01-01	0.91012826
30-015-05652	Pure-FED #1	Oil	PA	Ray Hall	32.7103	-103.91422		FED	3597	3597	Queen	2000-01-01	0.91326241
30-015-35550	BLUE THUNDER 5 FED COM #002	Gas	New	COG OPERATING LLC	32.69342	-103.89379	V	FED	0	0	[80840] LUSK, MORROW, WEST (GAS)	N/A	0.920699383
30-015-38543	WIZARD FED COM #006H	Oil	Active	CHI OPERATING INC	32.69666	-103.92448	H	FED	13387	0	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	0.924199084
30-015-04571	CULWIN QUEEN UNIT #002	Oil	Active	RAY WESTALL OPERATING, INC.	32.70483	-103.92233	V	State	4053	4053	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.927394069
30-015-26963	CULWIN QUEEN UNIT #019	INJ	Active	RAY WESTALL OPERATING, INC.	32.69956	-103.92465	V	State	3416	3416	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.937165477
30-015-57029	JAKKU 36 FED COM #132H	Oil	New	Permian Resources Operating, LLC	32.70936	-103.91772	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	0.94903649
30-015-56071	JAKKU 36 FED COM #131H	Oil	New	Permian Resources Operating, LLC	32.70936	-103.91782	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	0.952280262
30-015-56070	JAKKU 36 FED COM #112H	Oil	New	Permian Resources Operating, LLC	32.70936	-103.91791	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	0.955220101
30-015-10177	MONTEREY STATE #004	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.70126	-103.89274	V	State	2713	2713	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2010-10-30	0.957056889
30-015-57030	JAKKU 36 FED COM #111H	Oil	New	Permian Resources Operating, LLC	32.70936	-103.91801	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	0.958509682
30-015-04582	CULWIN QUEEN UNIT #016	Oil	Active	RAY WESTALL OPERATING, INC.	32.69125	-103.92342	V	FED	3330	3330	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	0.97305113
30-015-05647	BENSON SHUGART WATERFLOOD	Oil	PA	MANZANO OIL CORP	32.71212	-103.90944	V	FED	3661	3661	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1994-03-16	0.980772478
30-015-31715	WIZARD FED COM #001	Gas	PA	CHI OPERATING INC	32.68696	-103.91946	V	FED	12260	12260	[5200] BENSON, BONE SPRING; [96785] HACKBER	2016-12-15	0.98082279
30-015-05752	HODGES FED #001	Oil	PA	SWR OPERATING CO	32.68494	-103.90128	V	FED	3330	3330	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2002-03-06	0.991365598
30-015-05642	Shugart B #002C	Oil	PA	Iverson & Welch	32.71213	-103.90562		FED	3675	3675	Qu-Gr	2000-01-01	0.996554422

30-015-05662	MONTEREY B STATE #002	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.70942	-103.89811	V	State	3500	3500	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2013-07-29	1.004618004
30-015-05745	Featherstone FED #002	Oil	PA	WC Welch	32.69218	-103.89272		FED	3615	3615	Ya-7R-Qu-Gr	2000-01-01	1.009815579
30-015-22167	ARCO HONDO #001	Oil	Active	RAY WESTALL OPERATING, INC.	32.7103	-103.91803	V	State	3410	3410	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.013147648
30-015-05665	MONTEREY B STATE #004	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.70579	-103.89381	V	State	3681	3681	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2013-08-03	1.022745715
30-015-38483	HELIOS 6 FED COM #002H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.68313	-103.90655	H	FED	13080	8804	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.024924445
30-015-05742	FEATHERSTONE FED #001	Oil	Active	CAMERON OIL & GAS INC	32.68676	-103.89699	V	FED	3466	3466	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.025985019
30-015-05753	PAYNE FED A #1	Oil	PA	ERNEST A. HANSON	32.6831	-103.90604		FED	3310	3310		2000-01-01	1.030990757
30-015-05648	BENSON SHUGART WATERFLOOD	Oil	PA	CHESAPEAKE OPERATING, INC.	32.71211	-103.91481	V	FED	2604	2604	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2012-06-12	1.042122596
30-015-04572	CULWIN QUEEN UNIT #010	Oil	PA	RAY WESTALL OPERATING, INC.	32.6976	-103.92661	V	State	3150	3150	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2021-10-27	1.04452632
30-015-32113	BIG RED FED COM #001	Gas	PA	CHI OPERATING INC	32.71303	-103.911	V	FED	12245	12245	[96785] HACKBERRY, MORROW, NORTH (G)	2016-07-19	1.051176596
30-015-38524	CRESCENT HALE 1 FED COM #002	Oil	Active	Coterra Energy Operating Co.	32.69579	-103.92661		FED	13268	8702	[5200] BENSON, BONE SPRING	N/A	1.054382724
30-015-10195	MONTEREY STATE #005	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.69944	-103.89059	V	State	2691	2691	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2009-03-04	1.059195382
30-015-04574	CULWIN QUEEN UNIT #003	Oil	Active	RAY WESTALL OPERATING, INC.	32.70123	-103.92661	V	State	3142	3142	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.069236002
30-015-05641	Shugart #001C	Oil	PA	Iverson & Welch	32.71213	-103.90134		FED	3689	3689	Qu-Gr	2000-01-01	1.069667005
30-015-42316	HELIOS 6 FED COM #004H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.68227	-103.90604	H	FED	12427	0	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.087562971
30-015-38294	WEST SHUGART 32 STATE COM #0	Oil	Active	Coterra Energy Operating Co.	32.71032	-103.89704		State	13354	8838	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.091864604
30-015-38482	HELIOS 6 FED COM #001H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.68315	-103.90091		FED	13325	13325	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.112308936
30-015-04585	CULWIN QUEEN UNIT #017	INJ	Active	RAY WESTALL OPERATING, INC.	32.68759	-103.92342	V	FED	3340	3340	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.114173058
30-015-04547	BENSON SHUGART WATERFLOOD	Oil	PA	CHESAPEAKE OPERATING, INC.	32.71211	-103.91803	V	FED	2564	2564	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2006-08-11	1.120305747
30-015-05664	MONTEREY B STATE #003	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.70942	-103.89489	V	State	3676	3676	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2009-02-19	1.129344689
30-015-05744	FEATHERSTONE #001	Oil	Active	SLAYTON RESOURCES INC	32.68858	-103.89271	V	FED	3738	3738	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.130370892
30-015-41619	HELIOS 6 FED COM #003H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.68275	-103.90107	H	FED	12587	7766	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.133856858
30-015-30241	SHUGART C #007	Oil	Active	R & M Oil, LLC	32.71394	-103.90348	V	FED	3950	3950	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.145940155
30-015-21911	BENSON SHUGART WATERFLOOD	Oil	PA	CHESAPEAKE OPERATING, INC.	32.71258	-103.91803	V	FED	3800	3800	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2007-08-01	1.148709892
30-015-25966	BENSON SHUGART WATERFLOOD	INJ	PA	CHESAPEAKE OPERATING, INC.	32.71376	-103.9148	V	FED	6125	6125	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2012-06-06	1.149395794
30-015-23105	BENSON SHUGART WATERFLOOD	Oil	PA	CHESAPEAKE OPERATING, INC.	32.71423	-103.91338	V	FED	2700	2700	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2012-06-22	1.157936566
30-015-05659	MONTEREY STATE #001	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.70258	-103.88951	V	State	3344	3344	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2009-02-27	1.16239488
30-015-32210	BENSON DELAWARE UNIT #030	INJ	Active	CHI OPERATING INC	32.68759	-103.9245	V	FED	5500	5500	[97083] BENSON, DELAWARE(O)	N/A	1.163344367
30-015-41525	SHAULA 30 FED COM #004H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.71302	-103.89977	H	FED	13726	8753	[56405] SHUGART, BONE SPRING, NORTH	N/A	1.163936384
30-015-04575	STATE 'RD' #9	Oil	PA	HONDO OIL & GAS COMPANY	32.7103	-103.92233			2571	2571		2000-01-01	1.167024756
30-015-05739	DONNELLY PAN AMERICAN #001Y	Oil	Active	TOM R CONE	32.69037	-103.8904	V	FED	3540	3540	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.184534228
30-015-05634	SHUGART A #001	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.71214	-103.89704	V	FED	3740	3740	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2010-08-04	1.192676284
30-015-24082	HALE FED #002	Oil	PA	MACK ENERGY CORP	32.6907	-103.92737	V	FED	3439	3439	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1995-11-20	1.19625058
30-015-37171	STRAWBERRY 7 FED #003	Oil	Active	DEVON ENERGY PRODUCTION COM	32.68126	-103.91485	V	FED	9720	9720	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.201202188
30-015-32763	BENSON SHUGART WATERFLOOD	Oil	PA	CHESAPEAKE OPERATING, INC.	32.71434	-103.91588	V	FED	3900	3900	[5300] BENSON, QUEEN-GRAYBURG, NORTH	2012-06-19	1.207816916
30-015-05756	RUBYE #1	Oil	PA	KERSEY & COMPANY	32.68036	-103.91093			3328	3328		2000-01-01	1.215277169
30-015-05667	NEW MECICO Y STATE #001	INJ	PA	SOUTHLAND ROYALTY CO	32.7067	-103.89059	V	State	3756	3756	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1991-06-29	1.215822712
30-015-31876	STRAWBERRY 7 FEDERL COM #001	Gas	Active	DEVON ENERGY PRODUCTION COM	32.68036	-103.91131	V	FED	12531	12531	[96785] HACKBERRY, MORROW, NORTH (G); [970	N/A	1.217861922
30-015-38485	STRAWBERRY 7 FED #007	Oil	Active	DEVON ENERGY PRODUCTION COM	32.68128	-103.90129	V	FED	9900	9900	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.22313096
30-015-42913	FLYING SQUIRREL FED #002H	Oil	Active	COG OPERATING LLC	32.71405	-103.89964	H	State	13315	8789	[56405] SHUGART, BONE SPRING, NORTH	N/A	1.231074112
30-015-20649	TEXACO STATE BJ #001	Oil	PA	EOG RESOURCES INC	32.70576	-103.92767	V	State	3715	3715	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2019-07-25	1.231520458
30-015-32201	OXY XICA FED COM #001	Gas	Active	NSP Resources, LLC	32.7135	-103.9191	V	FED	12240	12240	[96785] HACKBERRY, MORROW, NORTH (G)	N/A	1.234307068
30-015-39214	WEST SHUGART 32 STATE COM #0	Oil	Active	CHI OPERATING INC	32.71033	-103.89339	H	State	13174	0	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.23566782
30-015-05747	FEATHERSTONE #004	Oil	Active	SLAYTON RESOURCES INC	32.68858	-103.89055	V	FED	3625	3625	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.236008642
30-015-32790	BENSON SHUGART WATERFLOOD	Oil	Active	NSP Resources, LLC	32.71302	-103.92017	V	FED	3850	3850	[5300] BENSON, QUEEN-GRAYBURG, NORTH	N/A	1.238161218
30-015-05650	Kenwood #4	Oil	PA	Silverthorne	32.71575	-103.91158		FED	2542	2542	Yates	2000-01-01	1.241382969
30-015-05644	SHUGART C #004Y	Oil	Active	KERSEY & COMPANY	32.71576	-103.90566	V	FED	3689	3689	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.243065693
30-015-31611	OXY SMOKEY ST #1 #001	Gas	Active	Permian Resources Operating, LLC	32.70631	-103.92767	V	State	12290	12290	[96785] HACKBERRY, MORROW, NORTH (G)	N/A	1.248645446
30-015-24772	ARCO #001	Oil	Active	RAY WESTALL OPERATING, INC.	32.7103	-103.92447	V	State	2560	2560	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.255253346
30-015-04541	BENSON SHUGART WATERFLOOD	Oil	PA	CHESAPEAKE OPERATING, INC.	32.71211	-103.92232	V	FED	2533	2533	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2007-03-07	1.260805214
30-015-05757	ENGLISH FED "B"	Oil	PA	ERNEST A. HANSON	32.68131	-103.89912		FED	3252	3252		2000-01-01	1.271289452
30-015-05746	FED FEATHERSTONE #3	Oil	PA	W.C. WELCH	32.68495	-103.89269		FED	3552	3552		2000-01-01	1.289780942
30-015-20290	CREEK AL FED #009	Oil	PA	EOG Y RESOURCES, INC.	32.71395	-103.9202	V	FED	3594	3594	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2008-03-03	1.293435496
30-015-04573	CULWIN QUEEN UNIT #011	INJ	Active	RAY WESTALL OPERATING, INC.	32.6976	-103.9309	V	State	3166	3166	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.294381669
30-015-54595	RAINMAKER FED #002	Oil	New	Manzanita Operating, LLC	32.684	-103.8937	V	FED	0	0	[97083] BENSON, DELAWARE(O)	N/A	1.295537284
30-015-29429	WEST SHUGART 30 FED #009	Oil	PA	DEVON ENERGY PRODUCTION COM	32.71666	-103.91051	V	FED	10350	10350	[96686] SHUGART WOLFCAMP,WEST	2022-03-23	1.296922235
30-015-30774	WEST SHUGART 29 FED #003	Oil	PA	DEVON ENERGY PRODUCTION COM	32.71395	-103.89704	V	FED	6193	6193	[96914] SHUGART DELAWARE,WEST	2025-10-27	1.297190824
30-015-05649	BENSON SHUGART WATERFLOOD	Oil	PA	CHEVRON U S A INC	32.71574	-103.91588	V	FED	2542	2542	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2023-03-20	1.2986977
30-015-05643	SHUGART C #003	INJ	PA	SOUTHLAND ROYALTY CO	32.71576	-103.90134	V	FED	3804	3804	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1993-10-07	1.302727709
30-015-56218	RAINMAKER FED #003	Oil	New	Manzanita Operating, LLC	32.68672	-103.89049	V	FED	0	0	[97083] BENSON, DELAWARE(O)	N/A	1.30998606
30-015-24081	HALE FED #001	Oil	PA	MACK ENERGY CORP	32.68759	-103.9277	V	FED	3500	3500	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-09-08	1.315927146
30-015-38386	DOMINO AOJ FED COM #012H	Oil	PA	EOG RESOURCES INC	32.6804	-103.89912		FED	13140	13140	[97056] HACKBERRY, BONE SPRING, NORTH	2024-08-28	1.327926956
30-015-31796	MUNCHKIN FED #003	Oil	PA	CHI OPERATING INC	32.68827	-103.92844	V	FED	6603	6603	[5200] BENSON, BONE SPRING	2002-02-06	1.328416778
30-015-42490	STRAWBERRY 7 FED COM #011H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.67974	-103.90059	H	FED	12446	7800	[29345] HACKBERRY, BONE SPRING; [97056] HAC	N/A	1.336788976
30-015-32375	STRAWBERRY 7 FED #002	Oil	Active	DEVON ENERGY PRODUCTION COM	32.67862	-103.90587	V	FED	12411	12411	[96785] HACKBERRY, MORROW, NORTH (G); [970	N/A	1.338134165
30-015-35544	BLUE THUNDER 5 FED COM #003	Gas	Active	COG OPERATING LLC	32.68718	-103.88947	V	FED	12350	12350	[80840] LUSK, MORROW, WEST (GAS)	N/A	1.340793045
30-015-21426	BENSON SHUGART WATERFLOOD	Oil	PA	CHESAPEAKE OPERATING, INC.	32.71574	-103.91802	V	FED	3800	3800	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2008-11-07	1.344122729
30-015-05635	SHUGART A #002	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.71214	-103.89275	V	FED	3724	3724	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2013-09-05	1.350478798
30-015-05660	MONTEREY-STATE 2-1	Oil	PA	W. E. BAKKE	32.70308	-103.8863		State	2708	2708		2000-01-01	1.351717522
30-015-31903	LAND RUSH 12 FED COM #002	Gas	Active	JKM ENERGY, LLC	32.68034	-103.91914	V	FED	12260	12260	[96785] HACKBERRY, MORROW, NORTH (G)	N/A	1.354349782
30-015-10369	BENSON SHUGART WATERFLOOD	SWD	PA	CHESAPEAKE OPERATING, INC.	32.71756	-103.90992	V	FED	3755	3755	[96108] SWD, GRAYBURG	2006-07-28	1.356464448
30-015-05669	STATE 32 #001	Oil	PA	ENERGY RESOURCES CORP	32.71033	-103.89059	V	State	3673	3673	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1985-04-19	1.357940979

30-015-42608	FLYING SQUIRREL FED #001H	Oil	Active	COG OPERATING LLC	32.71672	-103.90173	H	FED	13897	8810	[56405] SHUGART, BONE SPRING, NORTH	N/A	1.358427455
30-015-10316	SHUGART C #6	Oil	PA	Iverson & Welch	32.71757	-103.90671		FED	3848	3848		2000-01-01	1.360093102
30-015-20699	TEXACO STATE BJ #2	Oil	PA	Yates Petroleum Corp	32.7094	-103.92767		State	3700	3700		2000-01-01	1.360557459
30-015-05633	Shugart A #008	Oil	PA	Southland Royalty Co	32.71215	-103.89249		FED	2692	2692	Ya-7R-Qu-Gr	2000-01-01	1.361425961
30-015-26667	SHUGART A #011	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.71395	-103.8949	V	FED	3921	3921	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2013-09-08	1.366485067
30-015-32538	KC STRIP STATE #001	Gas	Active	CHI OPERATING INC	32.69855	-103.88522	V	State	12191	12191	[85300] SHUGART, MORROW (GAS)	N/A	1.367403407
30-015-25025	BENSON SHUGART WATERFLOOD	Oil	PA	CHEVRON U S A INC	32.71261	-103.92447	V	FED	3975	3975	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2013-08-03	1.368538528
30-015-24375	HALE FED #003	Oil	PA	MACK ENERGY CORP	32.69125	-103.93091	V	FED	3155	3155	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1995-11-15	1.37345319
30-015-30715	BENSON DELAWARE UNIT #001	Oil	Active	CHI OPERATING INC	32.68506	-103.92695	V	FED	6707	6707	[97083] BENSON, DELAWARE(O)	N/A	1.383732079
30-015-53693	CORONA 25 26 FED COM #528H	Oil	New	MEWBOURNE OIL CO	32.7165	-103.9178	H	FED	0	0	[54600] SANTO NINO, BONE SPRING; [56405] SHU	N/A	1.387206653
30-015-53680	CORONA 25 26 FED COM #525H	Oil	New	MEWBOURNE OIL CO	32.71658	-103.9178	H	FED	0	0	[54600] SANTO NINO, BONE SPRING; [56405] SHU	N/A	1.392299393
30-015-04542	BENSON SHUGART WATERFLOOD	Oil	PA	CHEVRON U S A INC	32.71574	-103.92017	V	FED	2547	2547	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2023-04-06	1.399488118
30-015-10315	SHUGART C #005	Oil	PA	SDX RESOURCES INC	32.71758	-103.90241	V	FED	3855	3855	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2004-02-26	1.404270148
30-015-05638	SHUGART A #005	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.71577	-103.89705	V	FED	3807	3807	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2012-01-28	1.405323186
30-015-40070	SMOKEY BITS STATE COM #005H	Oil	Active	Permian Resources Operating, LLC	32.69761	-103.93304		State	12945	8748	[5200] BENSON, BONE SPRING	N/A	1.419013384
30-015-25014	ARCO #002	Oil	Active	RAY WESTALL OPERATING, INC.	32.70541	-103.93138	V	State	3950	3950	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.419799311
30-015-30870	WEST SHUGART 29 FED #004	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.7135	-103.89275	V	FED	5300	5300	[96914] SHUGART DELAWARE,WEST	2009-08-17	1.420004654
30-015-37652	CRESCENT HALE 1 FED COM #001	Oil	Active	Coterra Energy Operating Co.	32.69579	-103.93305		FED	13127	8698	[5200] BENSON, BONE SPRING	N/A	1.426880337
30-015-30798	WEST SHUGART 29 FED #002	Oil	PA	DEVON ENERGY PRODUCTION COM	32.71695	-103.89877	V	FED	5350	5350	[96914] SHUGART DELAWARE,WEST	2021-11-23	1.433878044
30-015-05668	NEW MEXICO Y STATE #003	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.70671	-103.8863	V	State	3350	3350	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2010-03-12	1.438111507
30-015-39118	SMOKEY BITS STATE COM #003H	Oil	Active	Permian Resources Operating, LLC	32.70151	-103.93304		State	12906	8730	[5200] BENSON, BONE SPRING	N/A	1.440500033
30-015-34991	BLUE THUNDER 5 FED COM #001	Gas	Active	COG OPERATING LLC	32.69129	-103.88519	V	FED	12310	12310	[80840] LUSK, MORROW, WEST (GAS)	N/A	1.442197215
30-015-05740	FEATHERSTONE #002	Oil	Active	SLAYTON RESOURCES INC	32.69401	-103.88413	V	FED	3307	3368	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.455058333
30-015-41553	SHAULA 30 FED COM #003H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.71758	-103.89938	H	FED	13640	8782	[56405] SHUGART, BONE SPRING, NORTH	N/A	1.460156911
30-015-20722	TEXACO STATE BK #001	Oil	PA	EOG Y RESOURCES, INC.	32.70305	-103.93304	V	State	3718	3718	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2010-10-08	1.462553198
30-015-04544	BENSON SHUGART WATERFLOOD	Oil	PA	CHEVRON U S A INC	32.71574	-103.92232	V	FED	2530	2530	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2015-07-20	1.463500127
30-015-04545	BENSON SHUGART WATERFLOOD	Oil	PA	CHESAPEAKE OPERATING, INC.	32.71231	-103.92715	V	FED	3260	3260	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2006-08-08	1.463862806
30-015-40874	BLUE THUNDER 5 FED COM #007H	Oil	Active	COG OPERATING LLC	32.69492	-103.88371	V	FED	13331	8812	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.469047441
30-015-29948	WEST SHUGART 29 FED #001	Gas	PA	DEVON ENERGY PRODUCTION COM	32.71577	-103.8949	V	FED	10308	10308	[96816] WILDCAT SHUGART, BONE SPRING,WES	2025-02-12	1.469794603
30-015-40837	CRESENT HALE 12 FED COM #003	Oil	Active	Coterra Energy Operating Co.	32.68124	-103.92451		FED	12989	8747	[5200] BENSON, BONE SPRING	N/A	1.472128835
30-015-56358	TIN MAN 1 6 FED COM #601H	Oil	New	MEWBOURNE OIL CO	32.6924	-103.93312	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	1.473099663
30-015-56359	TIN MAN 1 6 FED COM #623H	Oil	New	MEWBOURNE OIL CO	32.69234	-103.93312	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	1.47416828
30-015-49490	RAINMAKER FED #001	Oil	Active	Manzanita Operating, LLC	32.684	-103.88941	V	FED	5620	5612	[97083] BENSON, DELAWARE(O)	N/A	1.475504422
30-015-05645	SHUGART D #001	INJ	PA	SDX RESOURCES INC	32.71939	-103.90778	V	FED	3829	3829	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2000-05-30	1.481548866
30-015-05646	SHUGART D #2-D	Oil	PA	Southland Royalty Co	32.71938	-103.91158		FED	3747	3747		2000-01-01	1.489522756
30-015-38384	DOMINO AOJ FED #011H	Oil	Active	EOG RESOURCES INC	32.67768	-103.8991		FED	13085	8827	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.500523877
30-015-56217	HAYMAKER FED #002	Oil	New	Manzanita Operating, LLC	32.68084	-103.89262	V	FED	0	0	[97083] BENSON, DELAWARE(O)	N/A	1.502158371
30-015-41416	MISTY 35 FED COM #003H	Oil	Active	Permian Resources Operating, LLC	32.69821	-103.93451	H	FED	13306	8660	[37920] LEO, BONE SPRING, SOUTH	N/A	1.504651337
30-015-26041	BENSON SHUGART WATERFLOOD	INJ	PA	CHESAPEAKE OPERATING, INC.	32.71376	-103.92659	V	FED	6050	6050	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2012-05-16	1.51066378
30-015-10210	SHUGART D #4	Oil	PA	Southland Royalty Co	32.71939	-103.90349		FED	3847	3847		2000-01-01	1.51118176
30-015-10176	SEELEY FED #1	Oil	PA	CACTUS DRILLING COMPANY	32.68859	-103.88519		FED	3842	3842		2000-01-01	1.51126967
30-015-05737	FEATHERSTONE #001	Oil	PA	SWR OPERATING CO	32.69038	-103.88412	V	FED	3793	3793	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2004-09-28	1.521657397
30-015-41507	STRAWBERRY 7 FED COM #008H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.6767	-103.90128	H	FED	12289	7921	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.522675537
30-015-41614	BLUE THUNDER 5 FED COM #006H	Oil	Active	COG OPERATING LLC	32.69195	-103.88346	H	FED	13375	8815	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.525308922
30-015-05636	SHUGART A #003	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.71215	-103.88845	V	FED	3763	3763	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2010-03-04	1.533854892
30-015-10212	SHUGART "D" #3	Oil	PA	Southland Royalty Co	32.71938	-103.91587			3854	3854		2000-01-01	1.53800621
30-015-05637	SHUGART A #004	INJ	PA	CIMAREX ENERGY CO. OF COLORAD	32.71577	-103.89275	V	FED	3734	3734	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2012-10-31	1.541759732
30-015-29166	WEST SHUGART 30 FED #001	Gas	PA	DEVON ENERGY PRODUCTION COM	32.72029	-103.91051	V	FED	12250	12250	[56405] SHUGART, BONE SPRING, NORTH; [85305	2022-08-26	1.546288927
30-015-37257	STRAWBERRY 7 FED COM #005H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.67627	-103.90128		FED	13115	8790	[55670] SEVEN RIVERS, YESO (ABOLISHED); [970	N/A	1.551108912
30-015-05663	NEW MEXICO STATE "Y" #2	Oil	PA	Southland Royalty Co	32.71034	-103.88631		State	3743	3743		2000-01-01	1.559726067
30-015-41413	MISTY 35 FED COM #004H	Oil	Active	Permian Resources Operating, LLC	32.70006	-103.93537	H	FED	13232	8610	[37920] LEO, BONE SPRING, SOUTH	N/A	1.561696342
30-015-38298	BENSON DELAWARE UNIT #015	INJ	Active	CHI OPERATING INC	32.68256	-103.92853	V	FED	5198	5198	[97083] BENSON, DELAWARE(O)	N/A	1.566341589
30-015-32682	PORTERHOUSE STATE COM #001	SWD	Active	RAY WESTALL OPERATING, INC.	32.70943	-103.88523	V	State	12210	12210	[85300] SHUGART, MORROW (GAS); [96110] SWD,	N/A	1.580229948
30-015-10130	KENWOOD #001Y	Oil	RFA	LLJ VENTURES, LLC DBA MARKER O	32.7194	-103.8991	V	FED	3839	3839	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31	1.582948598
30-015-20657	NEW MEXICO Y STATE #005	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.71034	-103.88579	V	State	2779	2779	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2016-06-25	1.585118522
30-015-29487	WEST SHUGART 30 FED #010	Gas	PA	DEVON ENERGY PRODUCTION COM	32.7203	-103.90242	V	FED	12250	12250	[56405] SHUGART, BONE SPRING, NORTH; [85305	2022-01-07	1.585817718
30-015-40196	SMOKEY BITS STATE COM #002H	Oil	TA	Permian Resources Operating, LLC	32.70688	-103.93387	H	State	13073	8625	[5200] BENSON, BONE SPRING	1999-12-31	1.592299179
30-015-33380	BENSON DELAWARE UNIT #004	Oil	Active	CHI OPERATING INC	32.68124	-103.9277	V	FED	5526	5526	[97083] BENSON, DELAWARE(O)	N/A	1.595120197
30-015-22432	SHUGART D #012	Oil	RFA	LLJ VENTURES, LLC DBA MARKER O	32.7212	-103.90943	V	FED	3839	3839	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31	1.605901158
30-015-04546	BENSON SHUGART WATERFLOOD	Oil	PA	CHEVRON U S A INC	32.71574	-103.92659	V	FED	2520	2520	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2023-05-08	1.612079614
30-015-22199	SHUGART D #010	Oil	RFA	LLJ VENTURES, LLC DBA MARKER O	32.7212	-103.90564	V	FED	3840	3840	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31	1.615057137
30-015-41409	IVORE 35 FED COM #002H	Oil	Active	Permian Resources Operating, LLC	32.70688	-103.93436	H	FED	13218	8495	[5200] BENSON, BONE SPRING	N/A	1.618635078
30-015-05639	SHUGART A #006	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.71577	-103.8906	V	FED	2649	2649	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2013-08-28	1.620220127
30-015-57263	RAINMAKER FED #004	Oil	New	Manzanita Operating, LLC	32.684	-103.88619	V		0	0	[97083] BENSON, DELAWARE(O)	N/A	1.622804283
30-015-25707	CULWIN 35 FED #001	Oil	Active	ZIMMERMAN OIL & GAS EXPLORATIC	32.7018	-103.93618	V	FED	3450	3450	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.624145125
30-015-54648	HAYMAKER FED #001	Oil	New	Manzanita Operating, LLC	32.68084	-103.8894	V	FED	0	0	[97083] BENSON, DELAWARE(O)	N/A	1.625644006
30-015-31778	BENSON DELAWARE UNIT #002	INJ	Active	CHI OPERATING INC	32.68486	-103.93199	V	FED	5350	5350	[97083] BENSON, DELAWARE(O)	N/A	1.628000862
30-015-05632	SHUGART A #007	Oil	PA	CIMAREX ENERGY CO. OF COLORAD	32.71215	-103.88631	V	FED	2705	2705	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2013-09-15	1.631570751
30-015-33449	CULWIN 35 FED #003Q	Oil	Active	ZIMMERMAN OIL & GAS EXPLORATIC	32.69786	-103.93687	V	FED	3926	3926	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.641973293
30-015-40148	SMOKEY BITS STATE COM #006H	Oil	Active	Permian Resources Operating, LLC	32.7101	-103.93304		State	12804	8617	[5200] BENSON, BONE SPRING; [97056] HACKBER	N/A	1.649109021
30-015-22357	SHUGART D #011	Oil	RFA	LLJ VENTURES, LLC DBA MARKER O	32.72121	-103.90134	V	FED	3840	3840	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31	1.661953192
30-015-05736	CARPER-MALONE #1	Oil	PA	KENNNEDY OIL CO. INC.	32.6922	-103.88091		FED	3765	3765		2000-01-01	1.664723273

30-015-31221	WEST SHUGART 29 FED #005	Oil	PA	DEVON ENERGY PRODUCTION COM	32.71641	-103.89028	V	FED	5300	5300	[96914] SHUGART DELAWARE,WEST	2001-07-01	1.665901302
30-015-36206	FIREFOX FED #001	Gas	Active	COG OPERATING LLC	32.6913	-103.88091	V	FED	12350	12350	[80840] LUSK, MORROW, WEST (GAS); [85300] SH	N/A	1.680431567
30-015-40054	CRESCENT HALE 12 FED #002	Oil	Active	Coterra Energy Operating Co.	32.6807	-103.92915		FED	12899	8686	[5200] BENSON, BONE SPRING	N/A	1.680919878
30-015-10095	KENWOOD #003	INJ	RFA	LLJ VENTURES, LLC DBA MARKER O	32.7194	-103.89491	V	FED	3854	3854	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31	1.684540073
30-015-04587	STATE #1	Oil	PA	A.J. HARDENDORF	32.69398	-103.93734			3310	3310		2000-01-01	1.691063359
30-015-05731	NICKSON A #001	Oil	PA	SWR OPERATING CO	32.69493	-103.87984	V	FED	3589	3589	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2004-07-07	1.692483049
30-015-35908	CREEK AL FED COM #020	Gas	New	EOG RESOURCES INC	32.72028	-103.92085	V	FED	0	0	[96785] HACKBERRY, MORROW, NORTH (G)	N/A	1.697002047
30-015-30360	CULWIN 35 FED #002	Oil	Active	ZIMMERMAN OIL & GAS EXPLORATIC	32.70264	-103.93733	V	FED	3850	3850	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.700399624
30-015-33672	BLIND SQUIRREL FED #001	Gas	Active	COG OPERATING LLC	32.70218	-103.87986	V	FED	12330	12330	[85300] SHUGART, MORROW (GAS)	N/A	1.70457587
30-015-40953	WEST SHUGART 2 19 30 STATE #00	Oil	Active	NSP Resources, LLC	32.68742	-103.93527		State	12935	8663	[5200] BENSON, BONE SPRING	N/A	1.708802559
30-015-41571	FIREFOX FED COM #004H	Oil	Active	COG OPERATING LLC	32.68719	-103.88214	H	FED	13365	8904	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.713133061
30-015-38477	BLUE THUNDER 5 FED COM #004H	Oil	Active	COG OPERATING LLC	32.68356	-103.88465		FED	12955	8815	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.713362633
30-015-20720	CREEK AL FED #011	Oil	PA	EOG Y RESOURCES, INC.	32.72119	-103.91909	V	FED	3728	3728	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2006-06-09	1.715308384
30-015-05631	SHUGART (APCO) A #004	INJ	PA	SOUTHLAND ROYALTY CO	32.7194	-103.89383	V	FED	3650	3650	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1993-10-13	1.715385135
30-015-26666	SHUGART A #010	Oil	PA	CIMAREX ENERGY CO. OF COLORAL	32.71759	-103.89061	V	FED	4010	4010	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2013-09-11	1.717071407
30-015-42016	BLUE THUNDER 5 FED COM #005H	Oil	Active	COG OPERATING LLC	32.68672	-103.8822	H	FED	13705	8888	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.724198259
30-015-32234	OXY SHORTCAKE FED #001	Gas	PA	DEVON ENERGY PRODUCTION COM	32.67312	-103.90383	V	FED	9890	12330	[96785] HACKBERRY, MORROW, NORTH (G); [970	2021-11-04	1.730214901
30-015-10224	SHUGART D #005	Oil	RFA	LLJ VENTURES, LLC DBA MARKER O	32.72301	-103.90778	V	FED	3865	3865	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31	1.730800882
30-015-10225	SHUGART D #006	Oil	RFA	LLJ VENTURES, LLC DBA MARKER O	32.72301	-103.90975	V	FED	3857	3857	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31	1.731121495
30-015-22431	KENWOOD #005	Oil	RFA	LLJ VENTURES, LLC DBA MARKER O	32.72121	-103.89705	V	FED	3855	3855	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31	1.743046472
30-015-57264	HAYMAKER FED #003	Oil	New	Manzanita Operating, LLC	32.67765	-103.89046	V		0	0	[97083] BENSON, DELAWARE(O)	N/A	1.75289394
30-015-10171	SHUGART "D" #8	Oil	PA	Southland Royalty Co	32.72302	-103.9035			3850	3850		2000-01-01	1.756810803
30-015-04588	STATE "2" #1	Oil	PA	WESTWATER CORPORATION	32.68758	-103.93628		State	3485	3485		2000-01-01	1.757819684
30-015-10169	SHUGART D #007	Oil	RFA	LLJ VENTURES, LLC DBA MARKER O	32.72301	-103.91405	V	FED	3817	3817	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31	1.758027202
30-015-30297	LAND RUSH 12 FED COM #001	Oil	PA	CHI OPERATING INC	32.67395	-103.91915	V	FED	12300	12300	[5200] BENSON, BONE SPRING; [78000] HACKBER	2006-06-21	1.758898708
30-015-32298	OXY XICA FED #002	Gas	Active	NSP Resources, LLC	32.71426	-103.93196	V	FED	12230	12230	[96785] HACKBERRY, MORROW, NORTH (G)	N/A	1.763202528
30-015-27712	BENSON SHUGART WATERFLOOD	INJ	Active	NSP Resources, LLC	32.71542	-103.93081	V	FED	3550	3550	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.765859034
30-015-41410	IVORE 35 FED COM #003H	Oil	Active	Permian Resources Operating, LLC	32.71015	-103.93536	H	FED	12940	8468	[5200] BENSON, BONE SPRING	N/A	1.768350691
30-015-05674	SHUGART "B" #5	Oil	PA	SIRGO OPERATING, INC.	32.71034	-103.88201		FED	3855	3855		2000-01-01	1.774323477
30-015-38385	DOMINO AOJ FED COM #010H	Oil	Active	EOG RESOURCES INC	32.67341	-103.89909		FED	13170	13170	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.777135238
30-015-20774	BENSON SHUGART WATERFLOOD	Oil	PA	CHEVRON U S A INC	32.71756	-103.92873	V	FED	3650	3650	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2025-04-02	1.78837251
30-015-37987	BENSON DELAWARE UNIT #021	Oil	Active	CHI OPERATING INC	32.67967	-103.93056	V	FED	5270	5270	[97083] BENSON, DELAWARE(O)	N/A	1.789222344
30-015-20233	BENSON SHUGART WATERFLOOD	Oil	PA	CHEVRON U S A INC	32.72119	-103.92231	V	FED	3710	3710	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2016-08-06	1.790203805
30-015-33725	BENSON DELAWARE UNIT #005	Oil	Active	CHI OPERATING INC	32.67747	-103.9277	V	FED	5400	5400	[97083] BENSON, DELAWARE(O)	N/A	1.791090085
30-015-05640	SHUGART A #009	INJ	PA	CIMAREX ENERGY CO. OF COLORAL	32.71578	-103.88631	V	FED	3820	3820	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2012-11-12	1.793199303
30-015-20543	BENSON SHUGART WATERFLOOD	Oil	Active	NSP Resources, LLC	32.71393	-103.93303	V	FED	3558	3558	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.797508428
30-015-33881	BENSON DELAWARE UNIT #006	Oil	Active	CHI OPERATING INC	32.68032	-103.9315	V	FED	5400	5400	[97083] BENSON, DELAWARE(O)	N/A	1.798175818
30-015-05672	SHUGART B #003	Oil	PA	SWR OPERATING CO	32.69765	-103.87771	V	FED	3815	3815	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2004-06-01	1.804218108
30-015-41423	FIREFOX 4 FED COM #005H	Oil	Active	COG OPERATING LLC	32.68408	-103.88221		FED	13375	8869	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.812267997
30-015-10430	CREEK AL FED #001	Oil	PA	EOG Y RESOURCES, INC.	32.723	-103.91801	V	FED	3789	3789	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2008-01-13	1.812647316
30-015-39025	CRESCENT HALE 12 FED #001	Oil	Active	Coterra Energy Operating Co.	32.68081	-103.93242	H	FED	12962	8728	[5200] BENSON, BONE SPRING	N/A	1.816086542
30-015-10133	KENWOOD #002	Oil	RFA	LLJ VENTURES, LLC DBA MARKER O	32.72303	-103.8992	V	FED	3870	3870	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31	1.817322918
30-015-05671	SHUGART "B" #2-B	Oil	PA	Iverson & Welch	32.70128	-103.87771		FED	4498	4498		2000-01-01	1.819084544
30-015-31657	DOMINO AOJ FED COM #005	Oil	PA	EOG RESOURCES INC	32.67952	-103.88623	V	FED	12400	12400	[80840] LUSK, MORROW, WEST (GAS)	2020-04-07	1.820363149
30-015-38195	STRAWBERRY 7 FED COM #006H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.67222	-103.90126		FED	13189	8750	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.821050112
30-015-53691	CORONA 25 26 FED COM #001H	Oil	New	MEWBOURNE OIL CO	32.72326	-103.91756	H	FED	0	0	[54600] SANTO NINO, BONE SPRING; [56405] SHU	N/A	1.822132972
30-015-53694	CORONA 25 26 FED COM #521H	Oil	New	MEWBOURNE OIL CO	32.72334	-103.91756	H	FED	0	0	[54600] SANTO NINO, BONE SPRING	N/A	1.827418329
30-015-29427	WEST SHUGART 30 FED #004	Oil	PA	COLGATE OPERATING, LLC	32.72392	-103.91479	V	FED	10350	10350	[56405] SHUGART, BONE SPRING, NORTH	2023-09-27	1.82765102
30-015-37333	BENSON DELAWARE UNIT #014	Oil	Active	CHI OPERATING INC	32.68082	-103.93294	V	FED	5256	5256	[97083] BENSON, DELAWARE(O)	N/A	1.838818023
30-015-41574	STRAWBERRY 7 FED COM #009H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.67181	-103.90126	H	FED	12290	0	[97056] HACKBERRY, BONE SPRING, NORTH	N/A	1.848499581
30-015-30776	WEST SHUGART 30 FED #003	Oil	PA	COLGATE OPERATING, LLC	32.72475	-103.90672	V	FED	8420	8420	[56405] SHUGART, BONE SPRING, NORTH	2023-09-20	1.853400201
30-015-22436	SHUGART D #013	Oil	RFA	LLJ VENTURES, LLC DBA MARKER O	32.72483	-103.90779	V	FED	3850	3850	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31	1.856112674
30-015-41560	SARGAS 28 FED COM #004H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.71517	-103.8842	H	FED	13860	8782	[56400] SHUGART, BONE SPRING	N/A	1.857199654
30-015-24642	RITZ FED #001	Oil	Active	RAY WESTALL OPERATING, INC.	32.69852	-103.94056	V	FED	3914	3914	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.857402492
30-015-30533	SHUGART WEST 30C FED #001	Oil	PA	MARATHON OIL PERMIAN LLC	32.72483	-103.91125	V	FED	8450	8450	[56405] SHUGART, BONE SPRING, NORTH; [96816	2018-08-09	1.861404006
30-015-41795	SARGAS 28 FED COM #003H	Oil	Active	DEVON ENERGY PRODUCTION COM	32.71531	-103.88421	H	FED	13738	8838	[56400] SHUGART, BONE SPRING	N/A	1.862946996
30-015-34125	BLUE THUNDER 4 FED #001	Gas	PA	COG OPERATING LLC	32.68447	-103.88088	V	FED	13300	13300	[80840] LUSK, MORROW, WEST (GAS); [97703] WC	2025-03-18	1.865166132
30-015-24798	RITZ FED #002	Oil	Active	RAY WESTALL OPERATING, INC.	32.70124	-103.94055	V	FED	3914	3914	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A	1.87052141
30-015-33933	BENSON DELAWARE UNIT #007	Oil	PA	CHI OPERATING INC	32.67534	-103.92664		FED	5366	5366	[97083] BENSON, DELAWARE(O)	2012-03-09	1.873377315
30-015-55232	SILVER 29 28 FED COM #132H	Oil	New	Permian Resources Operating, LLC	32.72038	-103.89058	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A	1.873613495
30-015-23073	BENSON SHUGART WATERFLOOD	INJ	PA	CHESAPEAKE OPERATING, INC.	32.7103	-103.93732	V	FED	3611	3611	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2008-09-11	1.874150107
30-015-55253	SILVER 29 28 FED COM #131H	Oil	New	Permian Resources Operating, LLC	32.72039	-103.89047	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A	1.877794221
30-015-23938	SOUTH SHUGART DEEP #001	Gas	PA	COG OPERATING LLC	32.69466	-103.87663	V	FED	13510	13510	[85300] SHUGART, MORROW (GAS)	2019-08-08	1.880356887
30-015-55229	SILVER 29 28 FED COM #122H	Oil	New	Permian Resources Operating, LLC	32.72039	-103.89036	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A	1.881420794
30-015-54726	TIN MAN 1 6 FED COM #616H	Oil	New	MEWBOURNE OIL CO	32.68084	-103.93392	H	FED	0	0	[5200] BENSON, BONE SPRING; [97056] HACKBER	N/A	1.882187254
30-015-50195	SCARECROW 11 10 B3AD FED COM	Oil	New	MEWBOURNE OIL CO	32.6807	-103.93382	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A	1.883692336
30-015-54725	TIN MAN 1 6 FED COM #618H	Oil	New	MEWBOURNE OIL CO	32.68078	-103.93392	H	FED	0	0	[5200] BENSON, BONE SPRING; [97056] HACKBER	N/A	1.884770708
30-015-55209	SILVER 29 28 FED COM #121H	Oil	New	Permian Resources Operating, LLC	32.72039	-103.89025	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A	1.885062161
30-015-55306	SILVER 29 28 FED COM #112H	Oil	New	Permian Resources Operating, LLC	32.72039	-103.89015	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A	1.888385229
30-015-20329	SHUGART (APCO) A #005	Oil	PA	SOUTHLAND ROYALTY CO	32.71941	-103.88857		FED	3965	3965	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1993-06-08	1.889039719
30-015-55236	SILVER 29 28 FED COM #111H	Oil	New	Permian Resources Operating, LLC	32.72039	-103.89004	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A	1.892054249
30-015-57590	TOTO 7 10 FED COM #616H	Oil	New	MEWBOURNE OIL CO	32.67184	-103.8984	H		0	0	[5200] BENSON, BONE SPRING; [37920] LEO, BON	N/A	1.892453851

30-015-57591	TOTO 7 10 FED COM #618H	Oil	New	MEWBOURNE OIL CO	32.67178	-103.8984	H		0	0	[5200] BENSON, BONE SPRING; [37920] LEO, BON	N/A		1.896375411
30-015-20529	BENSON SHUGART WATERFLOOD	Oil	PA	CHEVRON U S A INC	32.71394	-103.93518	V	FED	3560	3560	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2023-12-20		1.898268248
30-015-56331	ZEKE 12 7 FED COM #611H	Oil	New	MEWBOURNE OIL CO	32.68015	-103.93382	H	FED	0	0	[5200] BENSON, BONE SPRING; [97056] HACKBER	N/A		1.907754645
30-015-10417	KENWOOD #4	Oil	PA	Southland Royalty Co	32.72303	-103.89491			3875	3875		2000-01-01		1.908157903
30-015-05728	WELCH A #003	Oil	PA	SWR OPERATING CO	32.69221	-103.87662	V	FED	3380	3380	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2004-07-01		1.908349546
30-015-56332	ZEKE 12 7 FED COM #613H	Oil	New	MEWBOURNE OIL CO	32.68009	-103.93382	H	FED	0	0	[5200] BENSON, BONE SPRING; [97056] HACKBER	N/A		1.910406361
30-015-36113	CREEK AL FED #018	Oil	New	EOG RESOURCES INC	32.72435	-103.91856	V	FED	0	0	[56405] SHUGART, BONE SPRING, NORTH	N/A		1.910976019
30-015-20289	CREEK AL FED #008	Oil	PA	EOG Y RESOURCES, INC.	32.72118	-103.92658	V	FED	3416	3416	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2008-02-21		1.912921709
30-015-50194	SCARECROW 11 10 B3HE FED COM	Oil	New	MEWBOURNE OIL CO	32.68015	-103.93395	H	FED	0	0	[5200] BENSON, BONE SPRING	N/A		1.913573816
30-015-05733	FEATHERSONE FED #2	Oil	PA	CHERRY BROTHERS	32.6886	-103.87768		FED	3374	3374		2000-01-01		1.916205176
30-015-24982	RITZ FED #003	Oil	Active	RAY WESTALL OPERATING, INC.	32.70486	-103.94055	V	FED	4000	4000	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A		1.917222561
30-015-05729	WELCH A #004	Oil	PA	SWR OPERATING CO	32.69493	-103.87588	V	FED	3382	3382	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2004-06-08		1.921673252
30-015-32507	OXY IVORE FED #001	Gas	Active	Permian Resources Operating, LLC	32.70824	-103.93935	V	FED	12090	12090	[96785] HACKBERRY, MORROW, NORTH (G)	N/A		1.923172489
30-015-05620	KEOHANE ETAL A FED #001	Oil	PA	CIMAREX ENERGY CO. OF COLORAI	32.71307	-103.88094	V	FED	3805	3805	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2013-05-02		1.924438547
30-015-04570	GINSBERG FED #3	Oil	PA	ERNEST A. HANSON	32.70577	-103.94055			3407	3407		2000-01-01		1.933849401
30-015-38299	BENSON DELAWARE UNIT #020	INJ	Active	CHI OPERATING INC	32.6787	-103.93301	V	FED	5250	5250	[97083] BENSON, DELAWARE(O)	N/A		1.938510882
30-015-20213	BENSON SHUGART WATERFLOOD	Oil	Active	NSP Resources, LLC	32.72391	-103.9223	V	FED	3473	3473	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A		1.959683239
30-015-38494	CRESCENT HALE 11 FED #001	Oil	Active	Coterra Energy Operating Co.	32.68119	-103.93591		FED	13018	8676	[5200] BENSON, BONE SPRING	N/A		1.959812622
30-015-20542	BENSON SHUGART WATERFLOOD	Oil	Active	NSP Resources, LLC	32.71756	-103.93303	V	FED	3530	3530	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A		1.961094205
30-015-55307	LONG JOHN 29 30 FED COM #112H	Oil	New	Permian Resources Operating, LLC	32.72264	-103.89198	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A		1.962559599
30-015-55308	LONG JOHN 29 30 FED COM #111H	Oil	New	Permian Resources Operating, LLC	32.72269	-103.89189	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A		1.968151067
30-015-55210	LONG JOHN 29 30 FED COM #122H	Oil	New	Permian Resources Operating, LLC	32.72274	-103.8918	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A		1.973746926
30-015-42566	BENSON DELAWARE UNIT #023	Oil	New	CHI OPERATING INC	32.67942	-103.93463	D	FED	5265	5265	[97083] BENSON, DELAWARE(O)	N/A		1.976229534
30-015-42567	BENSON DELAWARE UNIT #024	Oil	New	CHI OPERATING INC	32.67928	-103.93455	D	FED	0	0	[97083] BENSON, DELAWARE(O)	N/A		1.978905321
30-015-55211	LONG JOHN 29 30 FED COM #121H	Oil	New	Permian Resources Operating, LLC	32.7228	-103.89171	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A		1.979943464
30-015-10192	KENWOOD FED #001	INJ	PA	XERIC OIL & GAS CORP	32.72664	-103.90993	V	FED	3802	3802	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1995-06-14		1.981412285
30-015-55230	LONG JOHN 29 30 FED COM #132H	Oil	New	Permian Resources Operating, LLC	32.72285	-103.89162	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A		1.985547446
30-015-55231	LONG JOHN 29 30 FED COM #131H	Oil	New	Permian Resources Operating, LLC	32.7229	-103.89154	H	FED	0	0	[56400] SHUGART, BONE SPRING	N/A		1.99086236
30-015-25719	TRIGG FED #004	Oil	Active	RAY WESTALL OPERATING, INC.	32.70003	-103.94281	V	FED	3780	3780	[56439] SHUGART, YATES-7RS-QU-GRAYBURG; [9	N/A		1.993372267
30-015-34293	BENSON DELAWARE UNIT #009	Oil	Active	CHI OPERATING INC	32.67942	-103.93511	V	FED	5233	5233	[97083] BENSON, DELAWARE(O)	N/A		1.997700385
30-015-57260	JUICE BOX 24 23 FED COM #528H	Oil	New	MEWBOURNE OIL CO	32.72684	-103.91196	H		0	0	[56405] SHUGART, BONE SPRING, NORTH	N/A		2.002976514
30-015-10126	KENWOOD FED #002	Oil	PA	XERIC OIL & GAS CORP	32.72664	-103.91422	V	FED	3443	3443	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1995-06-12		2.006176727
30-015-57258	JUICE BOX 24 23 FED COM #526H	Oil	New	MEWBOURNE OIL CO	32.7269	-103.91196	H		0	0	[56405] SHUGART, BONE SPRING, NORTH	N/A		2.007091296
30-015-30780	WEST SHUGART 19 FED #002	Oil	PA	DEVON ENERGY PRODUCTION COM	32.72714	-103.90942	V	FED	8346	8346	[56405] SHUGART, BONE SPRING, NORTH	2020-05-08		2.014983055
30-015-32122	OXY T-BONE FED #001	SWD	Active	SELECT WATER SOLUTIONS, LLC	32.70945	-103.87665	V	FED	12172	12172	[96121] SWD, SAN ANDRES	N/A		2.028404646
30-015-30149	SHUGART WEST 19 FED #001	Oil	Active	MEWBOURNE OIL CO	32.72755	-103.91049	V	FED	10275	10275	[56405] SHUGART, BONE SPRING, NORTH	N/A		2.045481786
30-015-10175	KEOHANE ET AL "D" FED #001	Oil	PA	Southland Royalty Co	32.72755	-103.90672		FED	3805	3805		2001-01-01		2.045963236
30-015-30501	SHUGART WEST 19 FED #002	SWD	PA	MARATHON OIL PERMIAN LLC	32.72755	-103.90656	V	FED	12130	12130	[85305] SHUGART, MORROW, NORTH (GAS); [961	2019-04-09		2.046505001
30-015-05630	SHUGART APCO A #003	Oil	PA	CIMAREX ENERGY CO. OF COLORAI	32.72032	-103.88557	V	FED	4150	4150	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2009-08-06		2.048923945
30-015-05670	SHUGART B #001	INJ	PA	SWR OPERATING CO	32.69766	-103.87341	V	FED	99999	99999	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2004-06-07		2.054682154
30-015-10173	SHUGART D #009	Water	PA	SOUTHLAND ROYALTY CO	32.72665	-103.89921	V	FED	3961	3961	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1985-04-07		2.056154438
30-015-10141	V.S. WELCH KENWOOD #1	Oil	PA	V.S. WELCH	32.71941	-103.88417			2740	2740		2000-01-01		2.057799769
30-015-05621	KEOHANE ETAL A FED #002	Oil	PA	CIMAREX ENERGY CO. OF COLORAI	32.7167	-103.88095		FED	3682	3682	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2012-10-22		2.070455539
30-015-30647	SHUGART WEST 19 FED #004	Oil	PA	MARATHON OIL PERMIAN LLC	32.72754	-103.91479	V	FED	8500	8500	[56405] SHUGART, BONE SPRING, NORTH	2019-11-23		2.072834518
30-015-20234	CREEK AL FED #003	Oil	Active	Oso Perdido Services LLC	32.72391	-103.92658	V	FED	3790	3790	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A		2.073142044
30-015-22151	NORTH SHUGART DEEP #1	Oil	PA	CHEVRON U S A INC	32.72394	-103.8902			12000	12000		2000-01-01		2.092223034
30-015-05727	WELCH A #002	Oil	PA	SWR OPERATING CO	32.69222	-103.87339	V	FED	3608	3608	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2004-06-23		2.092724751
30-015-05628	SHUGART APCO A #002	Oil	PA	CIMAREX ENERGY CO. OF COLORAI	32.72395	-103.88954	V	FED	3729	3729	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2014-04-01		2.112842648
30-015-05726	WELCH A #001	Oil	PA	SWR OPERATING CO	32.69494	-103.87233	V	FED	4500	4500	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2004-06-18		2.127341703
30-015-04540	CREEK AL FED #002	Oil	PA	EOG Y RESOURCES, INC.	32.72754	-103.91908	V	FED	3602	3602	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2008-01-22		2.129984247
30-015-20247	CREEK AL FED #004	Oil	PA	EOG Y RESOURCES, INC.	32.72663	-103.92338	V	FED	3485	3485	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2008-01-29		2.156564466
30-015-21695	FED 20 #1	Oil	PA	HONEYSUCKLE EXPLORATION CORF	32.72666	-103.89384		FED	4025	4025		2000-01-01		2.161801321
30-015-21752	FED 20 #001Y	Oil	Active	PRIDE ENERGY COMPANY	32.72666	-103.89368	V	FED	3950	3950	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A		2.16554467
30-015-05623	KEOHANE ET AL B FED #001	INJ	PA	XERIC OIL & GAS CORP	32.72033	-103.88095	V	FED	3650	3650	[56430] SHUGART YATES (DO NOT USE); [56439] S	1995-05-31		2.235412022
30-015-10089	KENWOOD FED #003	Oil	PA	XERIC OIL & GAS CORP	32.73027	-103.91209	V	FED	3447	3447	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1995-06-07		2.238969082
30-015-05585	GULF FED #1	Oil	PA	SHENANDOAH OIL CORPORATION	32.72667	-103.89062		FED	3741	3741		2000-01-01		2.243993974
30-015-31634	SHUGART WEST 19 FED #012	Oil	PA	KCS RESOURCES LLC	32.73028	-103.9035	V	FED	8400	8400	[56405] SHUGART, BONE SPRING, NORTH	2001-04-30		2.251165279
30-015-10464	KENWOOD FED #004	Oil	PA	Southland Royalty Co	32.73027	-103.91423		FED	3825	3825		2000-01-01		2.253439735
30-015-05629	SHUGART APCO A #001	Oil	PA	CIMAREX ENERGY CO. OF COLORAI	32.72395	-103.88525	V	FED	3576	3576	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	2014-06-17		2.254696724
30-015-26159	PHILLIPS FED #001	Oil	PA	RAY WESTALL	32.70673	-103.87128	V	FED	3930	3930	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1995-05-02		2.261954374
30-015-05622	FED KEOHANE ET AL "A" #3	Oil	PA	GULF OIL CORPORATION	32.7167	-103.87666		FED	3400	3400	Shugart, Queen	2000-01-01		2.270775396
30-015-30648	SHUGART WEST 19 FED #003	Oil	Active	MEWBOURNE OIL CO	32.73118	-103.91049	V	FED	9850	9850	[56405] SHUGART, BONE SPRING, NORTH	N/A		2.295262188
30-015-44036	GRAY SQUIRREL FED COM #001H	Oil	New	ASCENT ENERGY, LLC.	32.731	-103.89913	H	FED	0	0	[56405] SHUGART, BONE SPRING, NORTH	N/A		2.347319364
30-015-21857	FED 20 #2	Oil	PA	HONEYSUCKLE EXPLORATION CORF	32.73029	-103.89384		FED	4025	4025		2000-01-01		2.39309975
30-015-21694	GULF FED #002	Oil	RFA	LLJ VENTURES, LLC DBA MARKER O	32.72848	-103.88847	V	FED	13073	8625	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	1999-12-31		2.413396268
30-015-05619	LITTLE A #1	Oil	PA	G. B. SUPPES	32.72395	-103.88096			3603	3603	YATES-7RS-QU-GRAYBURG	2000-01-01		2.414140069
30-015-10113	TEXACO FED #2	Oil	PA	CHEMICAL EXPRESS, INC.	32.72486	-103.88203		FED	3653	3653	YATES-7RS-QU-GRAYBURG	2000-01-01		2.420671842
30-015-05625	KEOHANE B FED #003	Oil	Active	LG&S OIL COMPANY, LLC	32.72033	-103.87666	V	FED	3650	3650	[56439] SHUGART, YATES-7RS-QU-GRAYBURG	N/A		2.42212043
30-015-05589	Little B	Oil	PA	Sunset Oil Co	32.72758	-103.88525		-	-	-	-	2001-01-01		2.458409285
30-015-30363	SHUGART 28 FED #002	Gas	Active	Permian Resources Operating, LLC	32.72124	-103.87666	V	FED	12050	12050	[85300] SHUGART, MORROW (GAS)	N/A		2.462585256

APPENDIX B

IDENTIFICATION OF OPERATORS, LESSEES, SURFACE OWNERS, AND OTHER INTERESTED PARTIES WITHIN ONE (1) MILE, SAMPLE NOTICE LETTER TO INTERESTED PARTIES, AND SAMPLE PUBLIC NOTICE OF HEARING

Figure B1:	Map of surface ownership within one mile of Hatch AGI #1
Figure B2:	Map of lessees and active operators within one mile of Hatch AGI #1
Table B1:	Summary list of all persons and interested parties to be notified of the C-108 Application
Attachment 1:	Sample notice letter to be delivered to interested parties
Attachment 2:	Sample public notification of hearing

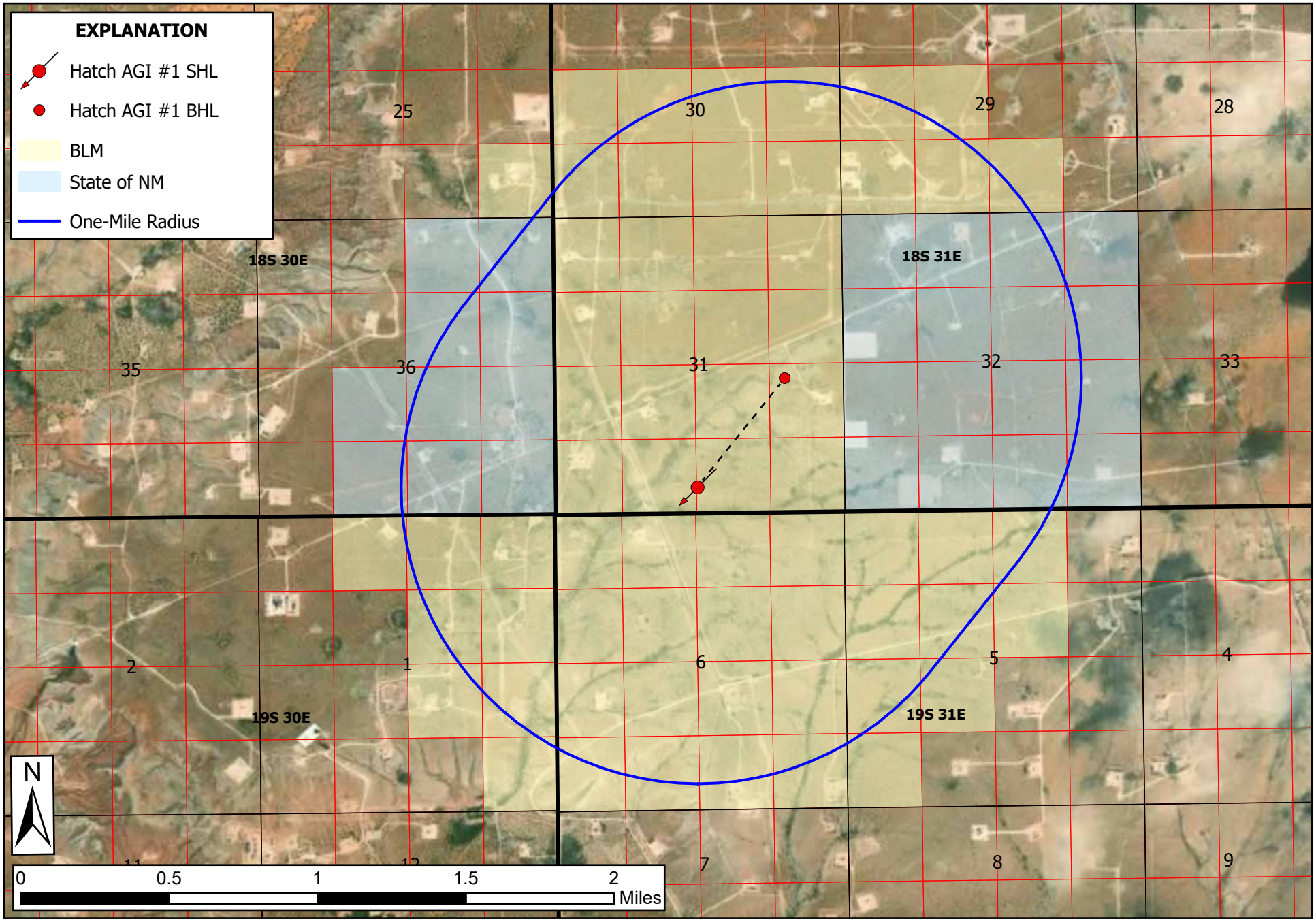


Figure B-1. Surface ownership within one-mile of the proposed Hatch AGI #1 surface- and bottom-hole locations. All off-setting surface land are federal- or state owned parcels. Throughout project development and prior to submittal of this C-108 application, Trace has been coordinating with BLM personnel regarding the proposed Heritage Facility and Hatch AGI #1 well.

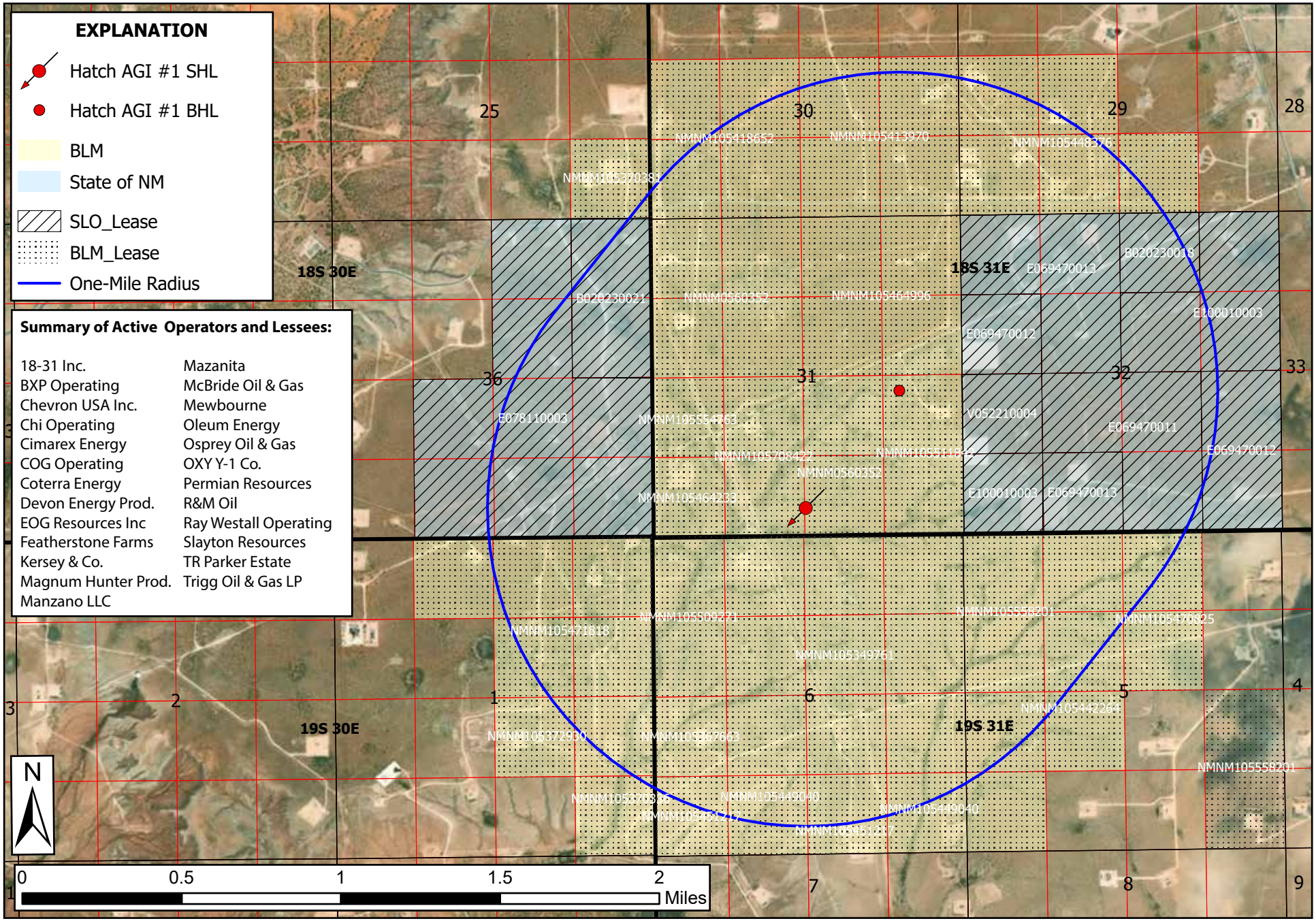


Figure B-2. Lessees, active operators, and mineral ownership within one-mile of the proposed Hatch AGI #1 surface- and bottom-hole locations.

TABLE B-1: INTERESTED PARTIES TO BE NOTIFIED OF C-108 APPLICATION HEARING

SURFACE OWNERS:

Bureau of Land Management 301 Dinosaur Trail Santa Fe, NM 57508 505-954-2000	New Mexico State Land Office c/o Allison Marks 310 Old Santa Fe Trail Santa Fe, NM 87504

ACTIVE OPERATORS, LESSEES, AND MINERAL RIGHTS OWNERS

18-31 Inc. PO Box 1120 Roswell, NM 88202	BXP Operating Inc. 11757 Katy Freeway, Suite 475 Houston, TX 77079
Bureau of Land Management SAME AS ABOVE	Chevron USA Inc. 6301 Deauville Midland, TX 79706-2964
Chi Operating PO Box 1799 Midland, TX 79705	Cimarex Energy Co. of Colorado 6001 Deauville Blvd., Suite 300N Midland, TX 79706
COG Operating Inc 600 W Illinois Avenue Midland, TX 79701 432-683-7443	Coterra Energy 6001 Deauville Road 300N Midland, TX 79706 432-571-7800
Devon Energy Prod. Company 333 W Sheridan Avenue Oklahoma City, OK 73102	EOG Resources, Inc. 1111 Bagby Street, Sky Lobby 2 Houston, TX 77002
Featherstone Farms PO Box 429 Roswell, NM 88202	Kersey & Company PO Box 1240 Ellijay, GA 30540
Magnum Hunter Prod. Co. 840 Gessner Road, Suite 1400 Houston, TX 77024	Manzano, LLC 121 W 3rd Street Roswell, NM 88201-4707
Manzanita Operating, LLLC PO Box 3489 Midland, TX 79705	McBride Oil & Gas Corp. PO Box 1515 Roswell, NM 88202-1515
Mewbourne Oil Co. PO Box 5270 Hobbs, NM 88240 575-393-5905	Oleum Energy LLC 2955 Dawn Drive, Suite 104 Georgetown, TX 78628 505-688-7609
Osprey Oil and Gas 3323 N. Midland Drive, Suite 113-130 Midland, TX 79707	OXY Y-1 Co. 5 Greenway Plaza, Suite 110 Houston, TX 77046-0521
Permian Resources Operating 300 N. Marienfeld Street, Suite 1000 Midland, TX 79701	R&M Oil LLC 132317 Lovington Hwy/PO Box 11 Loco Hills, NM 88255-0011
Ray Westall Operating PO Box 4 Loco Hills, NM 88255	Slayton Resources PO Box 2035 Roswell, NM 88202
New Mexico State Land Office SAME AS ABOVE	TR Parker Estate PO Box 1165 Grants Pass, OR 97526
Trigg Oil & Gas LP 18291 N. Pima Road, Suite 110 Box 410 Scottsdale, AZ 85255	

ATTACHMENT 1 – SAMPLE NOTICE LETTER

March XX, 2026

NAME
ADDRESS
CITY STATE ZIP

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RE: TRACE DELAWARE TREATING SERVICES, LLC PROPOSED HATCH AGI #1 (NMOCD CASE NO. XXXXX)

This letter is to advise you that Trace Delaware Treating Services, LLC (Trace) filed the enclosed C-108 application (Application for Authorization to Inject) on XX/XX/XXXX with the New Mexico Oil Conservation Division (NMOCD) seeking authorization to drill and operate an acid gas injection (AGI) well, the Hatch AGI #1 well, at their gas treatment facility in Eddy County, New Mexico. The proposed Hatch AGI #1 is intended to be the primary method for disposing of sour gases associated with oil and gas treatment activities at the Trace facility.

The proposed well will be drilled from a surface location of approximately 458 feet from the south line (FSL) and 2,527 feet from the west line (FWL), with a deviated wellbore and bottom-hole location approximately 2,484 feet northeast of the surface location in Section 31, Township 18 South, Range 31 East, in Eddy County, New Mexico. As proposed, the Hatch AGI #1 well will inject waste carbon dioxide and hydrogen sulfide into the Devonian through Fusselman geologic formations, from approximately 13,341 to 14,226 feet. The maximum allowable surface pressure will not exceed 4,445 psig with a maximum daily injection volume of 12 million standard cubic feet (MMSCF) per day.

This application (Case Number XXXXX) has been set for hearing before the New Mexico Oil Conservation Division at 9:00 a.m. on XX/XX/XXXX, in the Wendell Chino Building at the NMOCD Santa Fe office located at 1220 South St. Francis Drive; Santa Fe, NM 87505. You are not required to attend this hearing, but as an interested party that may be affected by Trace's application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the application at a later date.

A party appearing at the hearing is required by Division Rule 19.15.4.13 NMAC to file a Pre-Hearing Statement at least four (4) days in advance of the scheduled hearing, but in no event later than 5:00 p.m. Mountain Time on Thursday preceding the scheduled hearing date. This statement must be filed at the Division's Santa Fe office at the above-specified address and should include the names of the parties and their attorneys; a concise statement of the case; the names of all witnesses the party will call to testify at the hearing; the approximate time the party will need to present its case; and an identification of any procedural matters that need to be resolved prior to the hearing.

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

Sincerely,
Geolex, Inc.

David A. White, P.G.
Vice President
Consultant to Trace Delaware Treating Services, LLC

Enclosure: C-108 Application for Authority to Inject (Trace)

ATTACHMENT 2 – SAMPLE PUBLIC NOTICE OF HEARING

Trace Delaware Treating Services, LLC; 840 Gessner Road, Suite 530; Houston, Texas 77024, filed Form C-108 (Application for Authorization to Inject) on XX/XX/XXXX, with the New Mexico Oil Conservation Division seeking authorization to drill, complete, and operate its proposed acid gas injection (AGI) well, the Hatch AGI #1, which is intended to be the primary method for disposing of sour gases associated with oil and gas treatment activities at their gas-treatment facility. Hatch AGI #1 will be drilled as a deviated well from a surface hole located at approximately 458 feet FSL and 2,527 feet FWL to a bottom-hole location approximately 2,484 feet northeast in Section 31, Township 18 South, Range 31 East, in Eddy County, New Mexico. The proposed location is approximately 26 miles northeast of Carlsbad, New Mexico. Trace seeks authorization to inject up to 12 million standard cubic feet (MMSCF) per day of treated acid gas at a maximum pressure of 4,445 psig into the Devonian to Fusselman formations through an open hole completion between approximately 13,341 feet and a total depth of approximately 14,226 feet.

This application (Case Number XXXXX) has been set for hearing before the New Mexico Oil Conservation Division at 9:00 a.m. on XX/XX/XXXX, in the Wendell Chino Building at the New Mexico Oil Conservation Division's Santa Fe office, located at 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. Interested parties that may be affected by Trace's application may appear and present testimony by filing a Pre-Hearing Statement with the Division's Santa Fe office at the above-specified address at least four days in advance of the scheduled hearing date. Additional information can be obtained from the applicant's agent, Geolex, Inc.; 500 Marquette Avenue NW, Suite 1350; Albuquerque, New Mexico 87102; (505) 842-8000.

APPENDIX C

REQUEST TO SAMPLE AND ANALYZE GROUNDWATER FROM EXISTING WATER WELL

GEOLEX®
INCORPORATED

David A. White, P.G.

March 24, 2026

Devon Energy Production Co.
Attn: Jim Raley
333 W. Sheridan Avenue
Oklahoma City, OK 73102

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RE: WATER WELL (CP 02054 POD1) STATUS INQUIRY AND REQUEST FOR GROUNDWATER SAMPLE

To Whom it May Concern:

On behalf of Trace Delaware Treating Services, LLC (Trace), we are contacting you in the hope that you may provide us with information regarding the current operational status of a water well in which you are 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 this well.

As recorded in the files of the New Mexico Office of the State Engineer, the well file number is CP 02054 POD1 and the well has a recorded location within the SW/4 of the NE/4 of Section 20, Township 18 South, Range 31 East. The approximate geographic coordinates are 32.735603, -103.888809 (NAD83).

Trace is requesting permission to sample and analyze groundwater from this well in order to provide the New Mexico Oil Conservation Division with required groundwater data in the area of their proposed UIC Class II injection well, the Hatch AGI #1. The proposed well is to be located in the SW/4 of the SE/4 in Section 31 of Township 18 South, Range 31 East, in Eddy County, New Mexico.

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

Sincerely,
Geolex, Inc.

David A. White, P.G.
Vice President – Consultant to Trace Delaware Treating Services, LLC

\\10.0.0.2\Projects\25-043 Trace AGI Permitting NM\C-108\Appendices\Sample_Request.docx

phone: 505-842-8000 • 500 Marquette Avenue NW, Suite 1350 • email: dwhite@geolex.com
Albuquerque, New Mexico 87102
web: www.geolex.com

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Oklahoma City OK 73102

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- ☐ Return Receipt (hardcopy) $0.00
- ☐ Return Receipt (electronic) $0.00
- ☐ Certified Mail Restricted Delivery $0.00
- ☐ Adult Signature Required $0.00
- ☐ Adult Signature Restricted Delivery $

Postage $0.78

Total Postage and Fees $10.48

Sent To
Devon Energy Production Co.
Attn: Jim Raley
333 W. Sheridan Avenue
Oklahoma City, OK 73102

Street
City,

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7020 3160 0000 3391 8254

ALBUQUERQUE, NM 87101

Postmark Here

MAR 25 2026

03/25/2026

25-043

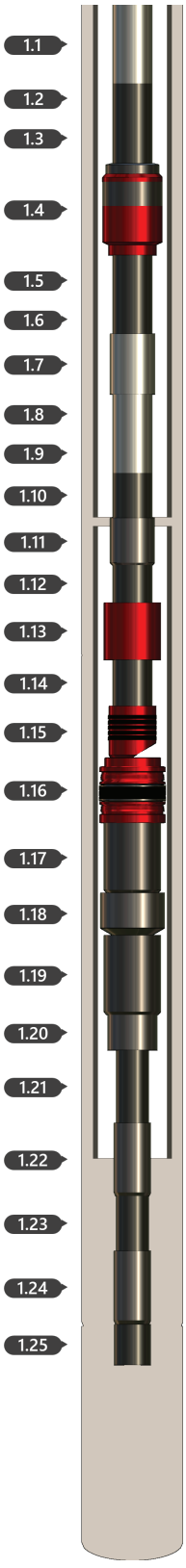
MAIN OFFICE USPS

APPENDIX D

EXAMPLE SCHEMATICS FOR DRY ACID GAS INJECTION
TREE AND DOWN-HOLE COMPLETION EQUIPMENT

ALL RELEVANT COMPONENTS INCORPORATE APPROPRIATE
CORROSION RESISTANT ALLOY MATERIALS AND
ASSOCIATED MATERIAL GRADES

HALLIBURTON
Completion Tools



TUBULAR INFORMATION

Description	OD (in)	Weight (lb/ft)	ID (in)	Grade/ Yield	Drift (in)	Length (ft)	Top Depth (ft)	Bottom Depth (ft)	Thread
Casings and Liners									
7", 32 #/ft., SS95, VA Superior	7.000	32.000	6.094	H2S95	5.969	16,341.00	1.00	16,342.00	VA Superior
7", 32 #/ft., G3 (CRA), VAM	7.000	32.000	6.094	P110	5.969	300.00	16,342.00	16,642.00	VAMTOP

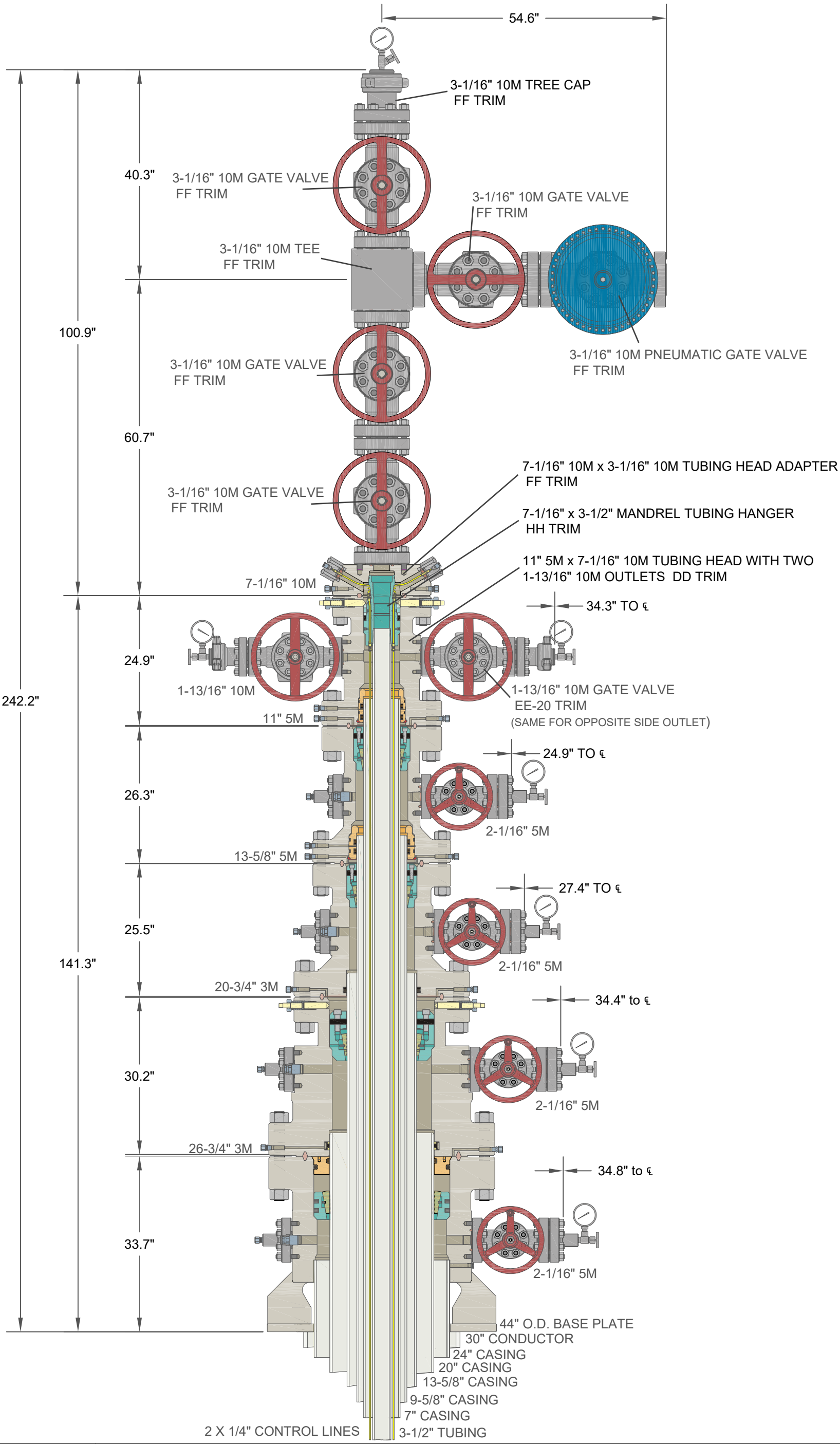
TOOL INFORMATION

Index	Description	ID (in)	OD (in)	Length (ft)	Top Depth (ft)	Bottom Depth (ft)
PRODUCTION STRING 1						
1.1	3 1/2" 10.2# TBA SS95 Joints as needed	2.922	3.500	150.00	TBD	TBD
1.2	3 1/2" 10.2# TBA Box x 3 1/2" 10.2# VAMTOP Pin Crossover SS95	2.922	3.500	6.00	TBD	TBD
1.3	6' x 3 1/2" 10.2# VAMTOP BxP SS95 Tubing Sub	2.922	3.500	6.00	TBD	TBD
1.4	TRSV,NE,5.30 2.750,H2S/CO2,10K	2.750	5.300	4.98	TBD	TBD
1.5	6' x 3 1/2" 10.2# VAMTOP BxP SS95 Tubing Sub	2.922	3.500	6.00	TBD	TBD
1.6	3 1/2" 10.2# VAMTOP Box x 3 1/2" TBA Pin Crossover SS95	2.922	3.500	6.00	TBD	TBD
1.7	3 1/2" 10.2# TBA Tubing SS95	2.922	3.962	14,500.00	TBD	TBD
1.8	3 1/2" 10.2# TBA Tubing x 3 1/2" 9.2# VAMTOP Crossover SS95 Grade	2.922	3.500	1.50	TBD	TBD
1.9	3 1/2" 9.2# VAMTOP G3 or Equivilant Tubing (~300')	2.922	3.500	1.50	TBD	TBD
1.10	8' x 3 1/2" 9.2# VAMTOP BxP G3 Or Equivalent	2.922	3.500	8.00	TBD	TBD
1.11	LN,2.562,R,NI ALY 925,3 1/2-9.20 VAMTOP	2.562	3.937	1.59	16,353.11	16,354.70
1.12	6' x 3 1/2" 9.2# VAMTOP BxP G3 Or Equivalent	2.922	3.500	8.00	16,354.70	16,362.70
1.13	MDRL ASSY,3 1/2-9.20 VAMTOP B-B	2.949	5.032	5.00	16,362.70	16,367.70
1.14	6' x 3 1/2" 9.2# VAMTOP PxP G3 Or Equivalent	2.992	3.500	6.00	16,367.70	16,373.70
1.15	LOCTR SEAL ASSY,NO-GO TY,4.000,3 1/2-9.2	2.900	4.273	23.30	16,373.70	16,397.00
1.16	PKR,TWA,7,23.00-32.00,4.000	4.000	5.875	4.02	16,397.00	16,401.02
1.17	SEALBORE EXT,4.000 X 121.10,4 3/4-8	4.000	5.032	10.09	16,401.02	16,411.11
1.18	CPLG,SEALBORE EXT,4 3/4-8 UN-2B,NI ALY 9	4.060	5.700	0.63	16,411.11	16,411.74
1.19	SEALBORE EXT,4.000 X 121.10,4 3/4-8	4.000	5.032	10.09	16,411.74	16,421.83
1.20	REDC CPLG,4 3/4-8 UN-2B X 2 7/8-6.40	2.399	5.700	1.13	16,421.83	16,422.96
1.21	8' x 2 7/8" 6.4# VAMTOP PxP Tubing Sub G3 Or Equivalent	2.441	2.875	8.00	16,422.96	16,430.96
1.22	LN,2.313,R,NI ALY 925,2 7/8-6.40 VAMTOP	2.313	3.252	1.40	16,430.96	16,432.36
1.23	8' x 2 7/8" 6.4# VAMTOP BxP Sub G3 Or Equivalent	2.441	2.875	8.00	16,432.36	16,440.36
1.24	LN,2.313,XN,NI ALY 925,2 7/8-6.40 VAMTOP	2.205	3.252	1.71	16,440.36	16,442.07
1.25	2 7/8" 6.4# VAM TOP Super 13 Chrome Pump Out Plug With Std. Insert	2.441	3.223	1.00	16,442.07	16,443.07

NOTE: Design considerations for the injection string includes multiple profile nipples for well isolation and testing purposes. Components incorporating profile nipples are highlighted above and summarized to right.

Index #	Type/Diameter
1.4	2.813"
1.11	R-nipple (2.562")
1.22	R-nipple (2.313")
1.24	XN-nipple

Completion Schematic
Revision Number: N/A



VAULT PRESSURE CONTROL

Pressure Control

30" X 24" X 20" X 13-5/8" X 9-5/8" X 7" X 3-1/2" 10M CONVENTIONAL WELLHEAD ASSEMBLY, WITH T-EBS-F TUBING HEAD, T-M40-CCL TUBING HANGER AND ADAPTER FLANGE, AND 3-1/16" 10M DRY ACID GAS INJECTION TREE

ALL DIMENSIONS ARE APPROXIMATE, NOT FOR MANUFACTURING USE.

DRAWN BY:	DRAWING NO.:	
REVIEWED BY:	Rev. B	Sht. 1 of 1
APPROVED BY:	DATE:	

GEOLEX, INC