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

APPLICATION OF LEA MIDSTREAM, LLC
FOR AUTHORIZATION TO INJECT,
LEA COUNTY, NEW MEXICO.

CASE NO. 25413

NOTICE OF *REVISED* FORM C-108

Lea Midstream, LLC, applicant in the above-referenced case, gives notice that it is filing the attached revised Form C-108 (Exhibit A to the Application) that includes the following corrections:

Revised C-108 Title Page, Figures 1, 3, and 13 to correct typographical errors in the geographic coordinates for the proposed White Russian AGI #1 well; and

Revised Appendix B with updates to Figures B-1, B-2, and Table B-1 to correctly identify offsetting tracts, owners, leasehold interests, and affected parties requiring notice.

Respectfully submitted,

HOLLAND & HART LLP

By: _____

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ATTORNEYS FOR LEA MIDSTREAM, LLC

EXHIBIT A

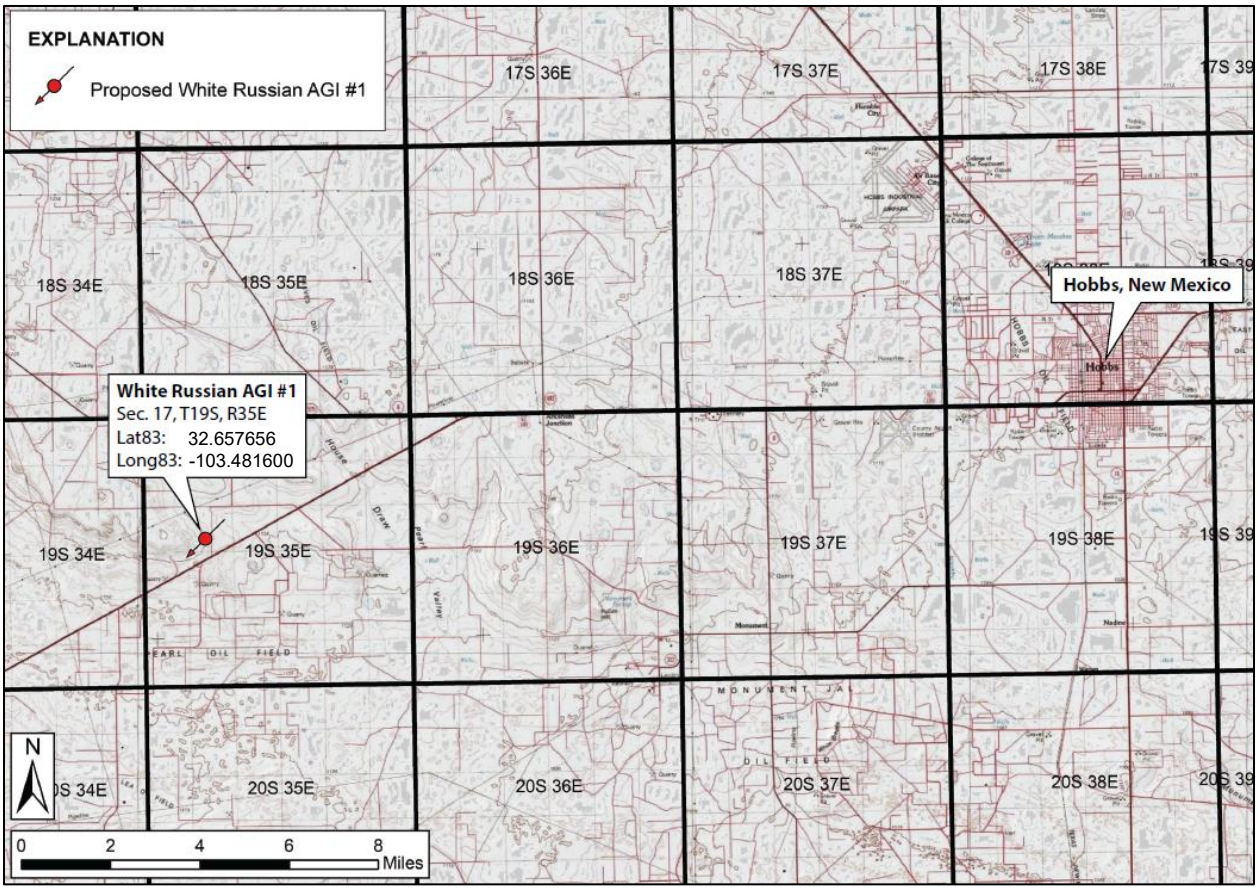
GEOLEX INCORPORATED

APPLICATION FOR UIC CLASS II AGI WELL

LEA MIDSTREAM, LLC -- (OGRID 333151)

PROPOSED WHITE RUSSIAN AGI # 1
Section 17, Township 19 South, Range 35 East

Surface Latitude (NAD83): 32.657656
Surface Longitude (NAD83): -103.481600



MARCH 2025

Prepared for:

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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: Lea Midstream, LLC [OGRID #333151]

ADDRESS: 3500 Maple Avenue, Suite 700; Dallas, Texas

CONTACT PARTY: Steven Smith, Joseph Styer PHONE: (806) 663-7735 (405) 315-1978

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; 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; Appendix A

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected; **Sections 1, 2, 3**
2. Whether the system is open or closed; **Sections 1, 2, 4**
3. Proposed average and maximum injection pressure; **Sections 1 & 3**
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, **Sections 3 & 4**
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). **Sections 3 & 4**

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
Section 4

IX. Describe the proposed stimulation program, if any.

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

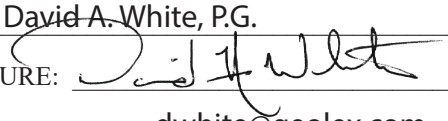
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
Section 4

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
Section 7

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

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

NAME: David A. White, P.G. TITLE: Consultant to Lea Midstream

SIGNATURE:  DATE: March 19, 2025

E-MAIL ADDRESS: dwhite@geolex.com

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

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

1.0 EXECUTIVE SUMMARY

On behalf of Lea Midstream Partners, LLC (Lea Midstream; OGRID #333151), 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 17, Township 19 South, Range 3 East, approximately 20 miles southwest of the city of Hobbs, in Lea County New Mexico (Figure 1). The proposed well, White Russian AGI #1, will provide Lea Midstream the ability to safely dispose of acid gas in a manner proven to improve operational stability and minimize the potential for exposure to facility personnel.

The proposed White Russian AGI #1 well is designed to address the anticipated sour gas disposal needs of the Lea Midstream treating facility. In submitting this application, Lea Midstream seeks approval to dispose of up to twelve (12) million standard cubic feet (MMSCFD) per day (approximately 4,962 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 White Russian AGI #1 well will permanently sequester approximately 487 tons of CO_2 and approximately 162 tons of H_2S daily.

To minimize surface and sub-surface interference and ensure access to quality reservoir, White Russian AGI #1 will be drilled as a deviated injection well. The approximate geographic coordinates for the surface location are 32.657656, -103.481600 (NAD83), within Section 17 of Township 19 South, Range 35 East, and the AGI well will be directionally drilled to a bottom-hole location at approximately 32.661345, -103.487457 (NAD83) with the same section. To ensure adequate isolation of groundwater resources, producing intervals, and potential high-pressure depth intervals, the White Russian 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.

The proposed open-hole injection zone will target geologic formations of the Siluro-Devonian, including the Devonian, Wristen, and Fusselman formations, between depths of approximately 14,615 to 16,029 feet. Analyses of these geologic units confirm that they act as excellent closed-system reservoirs that will accommodate the anticipated and future needs of Lea Midstream 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 greater than 169 feet in thickness. Additionally, more than 945 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 1,114 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 Bone Spring Formation, lies approximately 3,974 feet above the Siluro-Devonian. The vertical separation from active producing zones, as well as the significantly thick primary and secondary caprock intervals ensure overlying production activities will be isolated and unaffected by TAG injection within the Siluro-Devonian.

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

The proposed maximum allowable operating pressure (MAOP) requested for the White Russian AGI #1 is approximately 4,593 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 220°F and 7,309 psi, each MMSCF of TAG will occupy a reservoir volume of approximately 382 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 and petrophysical analysis, 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 Lea Midstream.

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 White Russian AGI #1, the resultant TAG plume is anticipated to occupy a maximum area of approximately 3.24 square miles and would extend a maximum of approximately 1.47 miles northeast from the AGI #1 bottom-hole location. Gas saturation values are anticipated to range from approximately 0 to 0.48% with diffuse concentrations (i.e., less than 10%) characterizing the plume margins. Comparison of these results to the locations of existing wells penetrating the Siluro-Devonian demonstrates that the migrating plume is not anticipated to encounter any nearby open wellbores, and thus, these wells are not anticipated to be impacted by the proposed operations of the White Russian 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 Geolex 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 White Russian AGI wells, as well as additional offset saltwater disposal (SWD) wells, demonstrates that operation of the deep AGI wells (i.e., White Russian AGI 1), as proposed, will not result in an elevated risk for injection-induced fault slip in the area.

Within the one-mile area of review (AOR) there are 28 wells, which most commonly were completed to produce Queen, Bone Spring, and Wolfcamp Formation plays, and one salt water disposal well is injecting within Siluro-Devonian reservoirs. It should be noted that for the proposed White Russian 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 28 wells, 6 are

active, 7 are permitted, and 15 are plugged. Within a two-mile radius of the modified White Russian AGI #1 AOR, there is one (1) plugged well which penetrate the proposed Siluro-Devonian injection zone. This well has been properly plugged and is not anticipated to be impacted by operation of the proposed AGI #1 well, nor will it serve as a conduit for fluids to escape the proposed injection zone. All relevant plugging reports and documents for these wells have been reviewed and are included in Appendix A.

The area surrounding the proposed injection site is arid and there are no natural bodies of water within several miles of the Lea Midstream Facility and proposed White Russian AGI #1 well. A search of the New Mexico Office of the State Engineer's files shows 58 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 0.6 miles away from the White Russian AGI #1 surface location and has been plugged. All water wells within a two-mile radius are shallow and will be protected via the proposed White Russian AGI #1 casing design, which includes installation of surface casing from the surface to an approximately depth of 1,865 feet, which will isolate and protect all shallow groundwater resources.

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

- Identification and characterization of all hydrocarbon-producing zones of wells that surround and are present on the plant's site
- The depths of perforated pay intervals in those wells relative to the depth of the target injection zone (Siluro-Devonian interval)
- The past and current uses of the proposed injection interval
- The stratigraphic and structural setting of the targeted zones relative to any nearby active or plugged wells, and other wells penetrating the interval
- The identification of and sample notification letter that will be sent to all surface owners, lessees, and operators within a one-mile radius of the proposed injection well
- Identification and characterization of all plugged and operating wells penetrating the proposed injection zone within a one- and two-mile radius of the proposed injection well
- The details of the proposed injection operation, including general well design and average maximum daily rates of injection and injection pressures
- An analysis of the potential for induced seismicity based on geologic review and mapping
- Reservoir injection simulations to evaluate the resultant effects of injection operations in the area after 30 years at the maximum daily injection rate and predict the resultant acid gas dispersion area and saturation characteristics
- Sources of injection fluid and compatibility with the formation fluid of the injection zone
- Location and identification of any freshwater-bearing zones in the area; the depth and quality of available groundwater in the vicinity of the proposed well, including a determination that there are no structures which could possibly communicate the disposal zone with any known sources of drinking water

Based upon this detailed evaluation, Lea Midstream has determined that the proposed White Russian 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 White Russian AGI #1 well (Section 3.0)
- An overview of the acid gas characteristics and modeling simulation results to predict the resultant acid gas plume and reservoir pressure effects from injection operations in the area of the proposed AGI well (Section 4.0)
- A summary of the regional and local geology, hydrogeology, and the location of drinking water wells within the area of review (Section 4.0)
- An analysis of susceptibility to formation breakdown during injection operations (Section 4.9)
- 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 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).

3.0 PROPOSED CONSTRUCTION AND OPERATION OF WHITE RUSSIAN AGI #1

White Russian AGI #1 is intended to service Lea Midstream's Treatment Facility and will be constructed on the facility property in Section 17 of Township 19 South, Range 35 East, approximately 20 miles from the city of Hobbs in Lea County, New Mexico (Figure 1). The well will be drilled as a deviated well from the approximate surface geographic coordinates of 32.657656, -103.481600 (NAD83) to a bottom-hole location approximately 2,222 feet to the northwest at 32.661345, -103.487457 (NAD83), as shown in Figure 2.

TAG to be injected via White Russian AGI #1 will be routed from the adjacent Lea Midstream Treating Facility to on-site compression facilities that will compress and dehydrate the acid gas. The compressed TAG will then be transmitted to the AGI #1 injection tree via high-pressure, 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 WHITE RUSSIAN AGI #1

The location of the proposed White Russian AGI #1 well is shown in Figure 2, and a general schematic of the injection system is shown in Figure 3. The White Russian AGI #1well will be drilled to a total depth of approximately 16,124 ft MD (measured depth) within the lower Fusselman Formation. The injection interval (approximately 14,710 to 16,124 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 Lea Midstream 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 White Russian AGI #1 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.

White Russian 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 (24-inch) will be set at approximately 1,865 feet, within the Rustler Formation to isolate shallow groundwater resources of the Dockum Group and Ogallala Aquifer. The first intermediate casing string (20-inch) will be set at approximately 3,290 feet, 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 5/8-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 6,285 ft, 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 10,712 ft. MD to aid in the isolation of the lower pressured Delaware Mountain Group and Bone Spring Formation from the underlying, higher-pressure zones of the Wolfcamp, Strawn, Atoka, and Morrow formations. The production casing will utilize 7-inch casing and will be set in a competent geologic unit within the Devonian at an approximate depth of 14,710 ft. The injection interval will be drilled as a 5 7/8-inch open hole interval to a depth of approximately 16,029 ft. in the lower Fusselman Formation.

As shown in Figures 3 and 4, the White Russian 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 White Russian 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 (Ogallala and Santa Rosa groundwater, Rustler Formation saline groundwater); (3) characterization of the zone of injection; and (4) a total depth ensuring accurate identification of the injection reservoir.

In constructing the proposed White Russian 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 below the surface casing. A schematic of the proposed well is shown in Figure 4 and the White Russian AGI #1 casing plan is summarized in Table 1.

Table 1. White Russian AGI #1 proposed casing schedule

Casing	Hole Size (in.)	Csg. Size (in.)	Pounds Per Foot	Grade	Thread	Top (ft.)	Bottom (ft.)
Proposed Casing Schedule							
Conductor	36	30	118	-	Welded	0	120’
Surface	2	24	186.4	X-65	FJ	0	1865’
1st Intermediate	22	20	169	L-80	BTC	0	3,290’
2nd Intermediate	17.5	13.625	88.2	HCL-80	Mod. BTC	0	6285’
3rd Intermediate	12.25	9.625	53.5	HCL-80	Mod. BTC	0	10,712’
Production	8.5	7	32	SS95	VA Superior	0	14,410’
Production (CRA)	8.5	7	32	G3 (CRA)	VAMTOP*	14,410’	14,710’
Proposed Injection Tubing							
Tubing	N/A	3.5	10.2	SS-95/T-95	VAMTOP*	0	14,360’
Tubing (CRA)	N/A	3.5	10.2	G3 (CRA)	VAM*	14,360’	14,660’

*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 White Russian 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 well integrity. Depth intervals which incorporate acid-resistant cement slurries will utilize cement diverter tools (DVT) and external casing packers (ECP) to ensure successful

placement and bonding of acid-resistant cement, where required. Table 2 summarizes the preliminary cementing program for all White Russian AGI #1 casing strings.

Table 2. White Russian AGI #1 proposed cementing program

Casing String	Stage #	Cement Type	No. of Sacks	Density (#/gal)	Coverage Interval
Conductor	1	Redimix	-	-	0' – 120'
Surface	1	Lead: Extend Cem C Tail: HalCem	Lead:1050 Tail: 414	Lead: 13.5 Tail: 14.8	0' – 1,865'
1st Intermediate	1	Lead: NeoCem Tail: Versa Cem	Lead: 605 Tail: 580	Lead: 11.5 Tail: 13.5	0' – 3,290'
2nd Intermediate	1	CorrosaCem	Lead: 395	13.5	0' – 6,285'
	2	Lead: NeoCem Tail: HalCem	Lead: 1410 Tail: 1200	Lead: 12.0 Tail: 13.5	
3rd Intermediate	1	Lead: NeoCem Tail: VersaCem	Lead: 1640 Tail: 245	Lead: 11.5 Tail: 13.5	0' – 10,712'
Production	1	Lead: WellLock Resin (or equivalent)	Lead: 15.0*	12.5	0' – 14,710'
	2	Lead: HalCem Tail: CorrosaCem	Lead: 175 Tail: 110	Lead: 12.5 Tail: 13.5	
	3	Lead: NeoCem Tail: VersaCem	Lead: 695 Tail: 55	Lead: 11.5 Tail: 13.5	

*Denotes amount of cement in barrels

For the purposes of monitoring down-hole injection conditions and long-term evolution of the Siluro-Devonian injection reservoir, White Russian 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 is run to a surface control panel through stainless steel line. The SSSV surface control panel will be integrated into the facility control system, such that the SSSV can be activated on-site, from the control room, or through an automated emergency shutdown (ESD) process. While additional isolation equipment will be incorporated into the White Russian 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 National Association of Corrosion Engineers (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 White Russian 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 injection fluid (without using acid gas), it will be completed with the approved injection equipment for the acid gas stream.

3.2 GEOPHYSICAL LOGGING

Prior to running the intermediate (1st, 2nd, and 3rd) and production casing strings, open-hole geophysical logging will be performed for the interval underlying the surface casing from approximately 1,865 to 16,029 feet. The proposed open-hole logging suite will consist of the following: Gamma ray, formation density, resistivity, neutron porosity, sonic porosity, and 360-degree caliper measurements with integrated borehole volume. Additionally, Fullbore Formation MicroImager (FMI) logs will be recorded along the proposed Siluro-Devonian injection interval, as well as the overlying caprock (i.e., Woodford Shale) to verify the integrity and confirm the capability of overlying strata to properly confine and permanently sequester the injected TAG. Porosity and permeability characteristics of the proposed injection zone and overlying caprock strata will be further verified through collection and analysis of sidewall cores.

3.3 RESERVOIR STIMULATION, TESTING, AND PRESSURE MONITORING

Upon the completion of 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.

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

Following the completion of reservoir testing activities (SRT and pressure fall-off monitoring), a complete acid stimulation of the open-hole interval will be completed. Approximately 40,000 gallons of 15% HCl and approximately 8,000 gallons of gelled 15% HCl acid will be injected into the reservoir to open potential reservoir-bound fractures, secondary porosity zones, and dissolve any natural carbonate cement within the pore spaces of the Siluro-Devonian injection zone. As needed, diverter materials (e.g., rock salt) will be utilized to divert acid volumes away from high-porosity intervals and ensure complete stimulation of the open-hole interval.

Upon the completion of reservoir testing and stimulation activities, the final tubing string and permanent injection packer will be run and set at an approximate depth of 14,710 feet. For long-term monitoring of down-hole conditions, White Russian AGI #1 will be equipped with bottom-hole pressure and temperature instrumentation designed to provide real-time monitoring of reservoir conditions, as it is installed immediately above the permanent injection packer. While this equipment is useful in gathering data that will ultimately be used to evaluate reservoir and well performance, it is only a portion of the overall data collection and analysis program to evaluate the reservoir over time and to compare the predicted reservoir performance (discussed in Sections 4.6 and 4.7) with actual performance in future reporting periods.

The collection and analysis of injection and annular pressure data has a two-fold purpose. First, to provide an early warning of any mechanical well integrity issues that may arise, and the second to provide data for reservoir performance evaluation. While the initial purpose of monitoring the mechanical integrity of the well only requires the surface injection pressure, temperature, rate, and annular pressure monitoring, the bottom-hole data provides the ability to analyze and evaluate the performance of the Siluro-Devonian injection reservoir.

Surface pressure/temperature/annular pressure monitoring equipment has extremely high reliability, whereas our experience with bottom-hole pressure/temperature monitoring equipment has shown that this equipment is more complex and may suffer from periodic data collection and transmission issues. As such, we 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 White Russian 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 White Russian 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 White Russian 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 (2,500 psi, 120 °F), the total depth of the well (7,309 psi, 220°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 4,593 psig, as determined by the following calculations:

MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP) DETERMINATION

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

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

AND

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

WHERE: SG_{Tag} = Average specific gravity of treated acid gas in the tubing (SG_{Tag} at top = 0.75, and SG_{Tag} at bottom = 0.81; see Table 3)

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

$$SG_{Tag} = 0.7762$$
$$D_{Top} = 14{,}615 feet$$

THEREFORE:

$$PG = 0.2 + 0.433\ (1.04 - 0.7762)$$

$$PG = 0.314$$

AND

$$IP_{Max} = 0.314 \frac{psi}{ft}\ x\ 14615\ ft$$

$$\boldsymbol{IP_{Max} = 4{,}593\ psi}$$

Based on this determination, Lea requests approval for a surface injection MAOP of 4593 psig for the proposed White Russian 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	323297	974126	1297422

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	2500	12.0	70:30	1297422	745.7	0.75	6.23	27857	4962

Conditions at Bottom of Well

TD		TAG							
Temp F	Pressure psi	$Depth_{Top}$ ft	$Depth_{Bot}$ ft	Thickness ft	Density kg/m^3	SG	Density lbs/gal	Volume ft^3	Volume bbl
220.1	7309	14615	16029	1414	806.67	0.81	6.74	25751	4586

Conditions in Reservoir at Equilibrium

Reservoir Mid		TAG					
Temp F	Pressure psi	Avg. Porosity	Density kg/m^3	SG	Density lbs/gal	Volume ft^3	Volume bbl
213.3	6989	5.0	808.66	0.81	6.75	25751	4586

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

4.1 GENERAL GEOLOGIC SETTING AND SURFICIAL GEOLOGY

The proposed White Russian AGI #1 well location (S17, T19S, R35E, as shown in Figure 1)lies on the northeastern margin of the Central Basin Platform (Figure 5). Generally, the area is covered predominantly by stable or semi-stable sand dunes overlying Quaternary alluvium and, in some areas, a hard caliche surface where the sand forms topographic highs. The surface area is highly irregular with few drainage features except at the outer boundaries of playas further to the west of the area of interest. The area to the north and northwest contains shallow depressions and small sand dune reliefs to flat, treeless plains with extensive short prairie grass coverage. The proposed well site is underlain by recent Quaternary sediments. The thick sequences of Permian rocks that underly these deposits are generally described below.

4.2 BEDROCK GEOLOGY

The Lea Midstream Treatment Facility and the proposed White Russian AGI #1 well are located along the northwestern margin of the Central Basin Platform, an uplifted sequence portion of geologic strata in the larger, encompassing Permian 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 underly the proposed wellsite. The entire Lower Paleozoic interval (Ellenburger through Devonian) was periodically subjected to subaerial exposure and prolonged periods of karsting (i.e., dissolution of existing rock), most especially in the Fusselman, Wristen, and Devonian intervals. The result of this exposure was the development of systems of karst-related secondary porosity, which included solution-enlargement of fractures and vugs, and the development of small cavities and caves. Particularly in the Fusselman, solution features from temporally distinct karst events became interconnected with each successive episode of subaerial exposure, so there is the potential for vertical continuity in parts of the Fusselman that could lead to enhanced vertical and horizontal permeability. Within the local area of the White Russian 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 Fussleman and Devonian intervals.

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

The Silurian Fusselman, Wristen, and Devonian Thirtyone formations overly the Montoya Formation and are comprised of interbedded dolomites and dolomitic limestones that are capped by the Woodford Shale.

The Woodford Shale is overlain by several hundred feet of tight Osagean limestone and 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 this entire sequence, wells have historically produced gas from the Strawn, however, gas production from Strawn in the area is limited to only one nearby producing well. Active oil and gas production within the area of review of the proposed AGI well is found predominantly in the Tansill-Yates-Seven Rivers pools and horizontal plays (active and permitted) within the Bone Spring and Wolfcamp formations. The deepest currently producing formation, the Strawn Formation, is approximately 3,300 feet above the proposed injection zone.

4.3 LITHOLOGIC AND RESERVOIR CHARACTERISTICS OF THE SILURO-DEVONIAN FORMATIONS

The proposed injection interval for the White Russian 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 White Russian AGI #1 location, Geolex determined that the Devonian and Silurian injection reservoirs exhibited sufficient porosity potential to accommodate the disposal needs of the Lea Midstream Treatment 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 14,615 feet to 16,029 feet. The proposed injection zone consists of approximately 1,414 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 180 feet thick in this area. The Woodford Shale is overlain, in turn, by approximately 780 feet of tight shales and carbonates of the Barnett and Osage formations. These units provide an excellent geologic seal 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 White Russian 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 caprock. The proposed AGI well location is on the southwestern-dipping slope and there is no indication of faulting that offsets the lateral continuity of injection reservoir confining strata. Geophysical logs from included wells indicate several intervals within the proposed injection zone exhibiting significant porosity development and the anticipated low-porosity and low-permeability caprock is shown to be laterally continuous within the greater project area.

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

Formation	Depth (MD)	Formation	Depth (MD)
Dockum Group	751	Wolfcamp	10,693
Ochoa-Dewey Lake	1,420	Strawn	12,086
Rustler	1,860	Atoka	12,433
Salado	2,148	Morrow	12,992
Tansill	3,286		
Yates	3,471	Barnett	13,747
Seven Rivers	3,986	Osage (Miss Lime)	13,875
Grayburg	5,242	Woodford	14529
San Andres	5,621	Devonian	14,700
Cherry Canyon	6,284	Wristen	14,999
Bone Spring	8,090	Fusselman	15,511

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 18.9 miles to the west of the proposed White Russian 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 4,593 PSI , pressures at bottom hole (16,029' TVD) will have an absolute maximum 0.610 psi/ft at bottom hole pressure of 9,809 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 White Russian AGI #1, a full suite of geophysical logs, including sonic dipole, will be logged allowing a more precise calculation of breakdown pressure for the local area of White Russian AGI #1. In addition, following drilling and completion of the White Russian AGI #1, 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 24 wells with analyses from drill stem test fluids collected from the Devonian-Lower Devonian interval in wells within approximately 10 miles of the proposed White Russian AGI #1 Table 5 below summarizes the measured formation fluid characteristics.

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

API	Concentration (parts per million)						
	TDS	HCO_3	Ca	Cl	Mg	Na	SO_4
30-025-21647	25199	415	1210	14200	171	7903	1050
30-025-01661	21444	881	5090	11400	93	N/A	1537
30-025-01735	28696	808.4	1044	15135	189.07	9327	1926
30-025-20329	66549	159	13000	42600	3330	N/A	700
30-025-02424	29436	634	1550	16720	496	N/A	1142
30-025-20080	32222	855	1608	17810	244	N/A	1425
30-025-20382	31610	335	1810	17600	555	N/A	2000
30-025-20115	71593	155	15860	46430	4526	N/A	852
30-025-02431	33414	227	1775	18570	151	N/A	1961
30-025-02247	31145	183	1520	18200	292	N/A	950
30-025-03156	25800	830	1170	14100	134	8410	1120
30-025-20378	39874	545	1529	22440	258	13092	1529
30-025-20377	44825	761	2590	27970	2424	N/A	N/A
30-025-03137	28173	168	1408	15500	245	N/A	1856
30-025-03136	31047	722	1843	17610	304	N/A	1065
30-025-03130	28417	560	1306	15910	248	N/A	1244
30-025-03151	27740	247	1720	16180	442	N/A	926
30-025-03118	27719	392	1274	14870	148	N/A	1956
30-025-03114	28813	1207	1501	16520	432	N/A	362
30-025-03113	30255	562	1100	16500	73	N/A	1820
30-025-03978	20882	645	809	11190	185	N/A	1232
30-025-03977	30527	330.4	1826	18060	415.5	9234	661
30-025-04270	48300	1150	2080	26700	486	15600	2340

These analyses show Total Dissolved Solids (TDS) in the area of the proposed AGI well ranging from 20,882 to 71,593 parts per million (PPM) with an average of 34,073 PPM. The primary constituent in the sampled formation waters is the chloride ion, with an average concentration of 19,662 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 White Russian 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 five (5) water wells or points of diversion located within a one-mile radius of the Lea AOI surface location. Of these wells, the closest is located approximately 0.61 miles to the south of the White Russian AGI #1 surface-hole location (Figure 10; Table 6). All wells within the two-mile radius are relatively shallow, with depths ranging from approximately 100 feet to 1,000 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 White Russian AGI #1 well include a five-string casing design, including a surface casing interval that extends to approximately 2,120 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 White Russian AGI #1 surface- and bottom-hole locations (Retrieved from the New Mexico Office of the State Engineer's Files on February 11, 2025)

POD	USE	Owner	Well Depth (ft)	Water Depth (ft)	Latitude (NAD83)	Longitude (NAD83)
L 08234	Commercial	Snyder Ranches Inc	120	90	32.659631	-103.480596
L 08234 S	Commercial	Snyder Ranches Inc	106	60	32.661439	-103.497823
L 08234 S2	Commercial	Snyder Ranches Inc	126	80	32.656775	-103.483832
L 09569	Dol	Klein Ranch	80	30	32.655014	-103.481643
L 14208 POD 1	Exp	Snyder Ranches Inc	78	0	32.667816	-103.489066

In lieu of recent groundwater sample collection and chemical analysis, Geolex conducted a review of *Geology and Ground-Water Conditions in Southern Lea County, New Mexico* (Nicholson and Clebsch, 1961) to identify published groundwater data representative of nearby water wells in the area (within less than 10 miles) of the proposed White Russian AGI #1 well. Table 7 summarizes the four wells identified in this review and the results of those chemical analyses.

Table 7. Chemical analysis results of samples collected from water wells in the area of the proposed White Russian AGI #1 (Nicholson and Clebsch, 1961. *Geology and Ground-Water Conditions in Southern Lea County, New Mexico*)

Historical Owner	Location (T-R-S)	Depth (ft)	Ca (eq)	Na+K	HCO_3	SO_4	Cl	NO_3	Hardness	pH
Scharbauer Cattle Co.	19S-34E-9	33	430	675	189	1680	560	139	1340	7.1
Tom Green	19S-36E-35	43	-	-	-	212	31	-	-	-
S.P. Jordan	19S-36E-32	32	84	158	261	225	79	6.8	222	-
H.S. Record	20S-36E-15	50	-	-	304	1840	1080	-	-	-

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, Geolex has

completed detailed reservoir characterization, reservoir modeling, and injection simulation evaluations, which leverage all available, local Siluro-Devonian well logs, including raster logs and LAS data. 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 reservoir 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, lower Wristen, and Fusselman formations strata. Based on mapped average effective porosity and net effective reservoir, Siluro-Devonian porosity attributes were determined to range from less than 1% to approximately 15%, with an average porosity of 5.0% within two miles of the White Russian AGI 1 location. Siluro-Devonian petrophysical models for offset logs and subsequent mapping were calibrated to an internal rock database and lithologies observed in mudlogs.

Figure 11 includes a map of fault features interpreted through the analysis of Lea Midstream AGI well project area. Generally, faults within the project area trend northwest to southeast, or less frequently, approximately northeast to southwest. In total, eight (8) faults are interpreted, which have been further subdivided into 31 fault segments, for the purpose of evaluating induced seismicity risk (discussed in Section 4.9). For all interpreted faults, the magnitude of offset (or fault throw) is less than the thickness of the Woodford Shale confining strata, and thus, does not compromise the ability to contain TAG within the proposed Siluro-Devonian injection reservoir.

From our review and analysis of all available geologic data, a reservoir characterization model was developed to be utilized for injection simulation investigations that assess the feasibility of TAG injection up to 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 Lea Midstream.

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 to develop a reservoir characterization model and complete injection plume forecasts, informed by and incorporating the geologic and petrophysical analysis and resultant mapped porosity of the proposed injection reservoir. This modeling evaluation was completed utilizing Schlumberger Petrel to construct a geologic simulation grid informed by available well log data and derived petrophysical analysis, and rock data from analog wells, whereas, Schlumberger's Eclipse platform was then utilized to complete injection simulations representative of the injection scenario proposed for the White Russian AGI #1.

The reservoir characterization model is comprised of 171 simulation layers characterizing seven discrete depth intervals identified within the Siluro-Devonian reservoir. In total, the model grid is comprised of 4,099,896 cells. Based upon available and accessible data, faults are not interpreted or publicly reported within the immediate area of the White Russian AGI #1 (e.g. within the 2-mile radius of review). Within the greater project area, the reservoir characterization model includes subsurface fault features interpreted with well logs and literature, located 4.5 miles or greater from the White Russian AGI #1 (i.e., Horne et

al. 2021 *Basement-Rooted Faults of the Delaware Basin and Central Basin Platform, Permian Basin, West Texas and Southeastern New Mexico*).

As described previously in Section 4.0, utilizing this method, Siluro-Devonian reservoir porosity was determined to range from less than 1% to approximately 15%, with an average porosity of 5.0%. The distribution of porosity within the reservoir model is shown in Figure 12.

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 0.02 to 17.88 millidarcies (mD), with an average model permeability of 8.7 mD. The total model (all zones) permeability distribution is shown in Figure 12 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 - upper Devonian	230	3.7	7.7
2 - lower Devonian	96	1.5	5.8
3 - upper Wristen	200	3.0	7.1
4 - lower Wristen	187	6.7	21.9
5 - Wristen-Fusselman Seal	151	1.9	0.02
6 - upper Fusselman	319	4.2	0.59
7 - lower Fusselman	255	4.8	17.88

With the constructed geologic model, injection operations for the proposed White Russian 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 formations.

In support of this C-108 application, two dynamic model simulations are presented, which estimate the size and characteristics of the resultant TAG injection plume, following operations of the White Russian AGI #1 well at a shared 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 13 and 14, 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 3.24 square miles generally extending up to 1.4 miles from the Lea Midstream Treatment 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 no fraction of acid gas injectate will exhibit a dispersion pattern such that gas reaches local fault features to the northeast. In the unlikely event that acid gas injectate could migrate to the northeastern, prominent fault system, an existing Devonian oil field (greater than 4.4 miles from the proposed AGI well location) shows structural trapping with a three-way closure geometry. 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.

In the local area of the White Russian AGI #1 well, wells and associated drilling fluid density data are sparse within Barnett to deeper strata. With the offset Siluro-Devonian SWD well, the Wildrye #1 SWD #1, mud weights utilized range from 9.0 to 12.3 pounds per gallon (ppg) above the proposed Siluro-Devonian injection reservoir. For those wells identified that penetrate the proposed injection reservoir, available fluid records (i.e., mudlogs, well headers, and scout tickets) indicate utilization of less dense fluids (commonly at 8.3 ppg) while drilling the Siluro-Devonian section. These records support the interpretation that overlying Wolfcamp to Woodford zones in this area are generally over-pressured with respect to the normally pressured target injection reservoir.

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

4.9 INDUCED-SEISMICITY RISK ASSESSMENT

To evaluate the potential for seismic events in response to injected fluids, an induced-seismicity risk assessment was conducted in the area of the proposed White Russian AGI #1 well. This estimate (1) identifies all known Siluro-Devonian fault systems within approximately 8 miles of the White Russian AGI #1 BHL, (2) models the impact of eight injection wells over a 30-year injection period during proposed AGI operations and includes prior historical SWD injections, and (3) estimates the fault slip probability associated with the eight-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 eight (8) faults, located within approximately eight (8) miles of the White Russian AGI #1, and generally striking northwest to southeast, and northeast to southwest (Figure 11). Due to the low number of injection wells in close proximity to these features, substantial distance to known faults (greater than four

miles), and considering the relatively small injection volume proposed for the White Russian AGI #1 well (equivalent to approximately 4,962 barrels per day), operation of the White Russian AGI #1 well, 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 17 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 eight-well injection scenario. Specifically, the FSP model is only capable of considering a single set of fluid characteristics and this study aims to model a scenario that includes saltwater disposal (SWD) wells and acid gas injection wells. To ensure a conservative fault slip probability estimate, the proposed AGI well was modeled utilizing the fluid characteristics of produced water. This approach yields a more conservative model prediction as produced water displays greater density, dynamic viscosity, and is significantly less compressible than acid gas. Characteristics of acid gas at anticipated reservoir conditions, as modeled by AQUAlibrium™, are shown in Table 9.

Table 9. Input parameters and source material for FSP simulation

Modeled Parameter	**Input Value**	**Variability (+/-)**	**UOM**	**Source**
Stress				
Vertical Stress Gradient	1.05	0.105	psi ft^{-1}	Nearby well estimate
Max Horizontal Stress Direction	N70E	0	Deg.	Lund Snee & Zoback, 2018
Reference Depth	11,500	0	ft	Nearby well evaluation
Initial Res. Pressure Gradient	0.456	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	1,414	155	ft	Nearby well evaluation
Porosity Average	6.0	1	%	Nearby well evaluation
Permeability Average	0.2	0.0	mD	Petrophysical analysis of nearby well data, calibrated to analog core data
Material properties				
Density (Water)	1,050	20	kg m^{-3}	Adjusted to reported salinities
Dynamic Viscosity (Water)	0.0008	0.0001	Pa.s	Standard Value
Fluid Compressibility (water)	3.6×10^{-10}	0	Pa^{-1}	Standard Value

Rock Compressibility	1.08×10^{-9}	0	Pa^{-1}	Standard Value
Acid gas @ 213 °F, 6,986 psi				
Density	806.80	-	$kg\ m^{-3}$	AQUAlibrium™
Dynamic Viscosity	0.0000804	-	Pa.s	AQUAlibrium™

Daily maximum injection volumes utilized in the FSP model range from 916 to 25,000 bpd (Table 10). In submission of this application, Lea is requesting approval to operate the proposed White Russian AGI #1 well for a period of at least 30 years. This simulation includes a history matching period of thirty-one additional years to ensure the simulation results also consider the historical impact of injection wells that have been operating since 1994. Figure 19 shows the resultant pressure front, single well radial solutions, and the predicted pressure change at the fault segment midpoints; Figure 20 (scenario 1) shows the model-predicted fault slip potential for all wells operating at maximum capacity, including the White Russian AGI #1. Figure 21 (scenario 2) shows the model-predicted fault slip potential with historical and active SWD wells only and excludes the proposed AGI well to evaluate any additional potential risk created by the proposed White Russian AGI #1 injection operations. For both scenarios 1 and 2, the predicted pressure change along each fault segment, model-derived pressure change required to induce slip, and model-predicted actual pressure change are summarized in Table 10 below. Scenario 1 and 2 generated identical results for all results of fault slip potential, demonstrating the negligible impact operation of the proposed AGI well has on 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	White Russian AGI #1	32.033013	-103.278384	4592	2025	2055
2	30-025-51764	Wildrye Fee SWD #1	32.652154	-103.471636	25,000	2025	2055
3	30-025-42461	Wild Cobra 1 State #2	32.695237179	-103.517073	3634	2015	2055
4	30-025-03137	Reeves 26 #4	32.7157784	-103.431290	2490	2008	2023
5	30-025-03142	State Section 27 #2	32.7203751	-103.438820	9225	1994	2024
6	30-025-03150	South Vacuum Unit #351	32.7057762	-103.425850	4449	2005	2055
7	30-025-29021	Arco State SWD #2	32.7415695	-103.459976	916	1994	2024
8	30-025-37122	South Vacuum #274	32.7138824	-103.4389191	4878	2014	2055

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 #	Δ Pressure necessary to induce fault slip	Actual Δ Pressure at fault midpoint at year 2055	Fault Slip Potential at year 2055
1	2179	7	0.00
2	3465	37	0.00
3	4102	301	0.00
4	3054	1146	0.06
5	1498	1094	0.34
6	4336	1052	0.00
7	2757	568	0.00
8	3072	2	0.00
9	4454	0	0.00
10	4160	0	0.00
11	2681	0	0.00
12	2437	0	0.00
13	3535	0	0.00
14	1292	0	0.00
15	3060	0	0.00
16	4115	0	0.00
17	3980	0	0.00
18	1624	0	0.00
19	1116	0	0.00
20	1177	0	0.00
21	1117	0	0.00
22	4520	0	0.00
23	3920	0	0.00
24	3939	0	0.00
25	4514	0	0.00
26	2322	0	0.00
27	4420	0	0.00
28	1015	0	0.00
29	4490	0	0.00
30	4525	0	0.00
31	4391	0	0.00

Generally, faults considered in this assessment are predicted by the FSP model to have very low to one moderate potential probability for injection-induced slip and the proposed White Russian AGI #1 operations are not predicted to contribute significantly to the total resultant pressure front and resultant fault slip probabilities. As per a recently released report on February 11th of 2025 by New Mexico Oil Conservation Division, limited seismic activity was observed near the South Vacuum fault system approximately 5.8 to 8 miles to the northeast in respect to the proposed White Russian AGI #1 BHL. This reported seismic activity was of limited magnitude, typically less than 2.5 to a maximum of 3.3 and of a very limited, discrete time window of June 27th to June 30th of 2020. No prior or additional seismic

events for the South Vacuum fault system or within the area of the proposed AGI well have been reported by USGS or the New Mexico Seismological Network.

Within both modeled scenarios, there is minor potential for fault slip near an interpreted, mapped fault bend (i.e., fault segments 4 and 5) immediately adjacent to active SWD wells. The northeastern basement faults, including interpreted fault bends or potential fault en-echelon 'steps' (i.e., fault segments 4, 5, and 6 of the South Vacuum fault), are based upon well control only. No 2D or 3D seismic data has been made available to evaluate the precise fault geometries of the northeastern South Vacuum basement fault system, however, when comparing scenarios 1 and 2 (Figures 19 and 20), the model results clearly demonstrate that proposed volumes and duration of White Russian AGI #1 are inconsequential to any risk for slip probability through the 30-year scenario. Furthermore, radial pressure solutions calculated for each injection well illustrate that the operation of the proposed White Russian AGI #1 well will have little impact to pressure conditions near any identified or interpreted faults. Therefore, there is no foreseen risk for seismic activity both for the limited, historical activity nor any other known faults within the region of the proposed White Russian AGI #1.

5.0 OIL AND GAS WELLS IN THE WHITE RUSSIAN AGI #1 AREA OF REVIEW AND PROJECT AREA

In support of this application, Geolex conducted, on behalf of Lea Midstream, a detailed review of the area within one-mile and two-miles of the proposed White Russian 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 White Russian AGI #1 well, and along the deviated wellbore path of White Russian AGI #1.

5.1 OIL AND GAS WELLS IN THE WHITE RUSSIAN 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 White Russian 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 37 wells within a one-mile radius of the proposed White Russian 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, 13 are active and 14 have been plugged. Additionally, there are no locations permitted that have not yet been drilled or completed. Specific information relating to active and plugged wells is summarized. Active wells are primarily producing from the Tansill-Yates-Seven Rivers shallow depth intervals, as well as the Lower Bone Spring and Wolfcamp pools, all of which, overly and are isolated from the proposed injection zone.

Table 12. Wells located within one mile of proposed White Russian AGI #1

API	Well Name	Associated Pools	Well Type	Well Status	Lat (NAD83)	Long (NAD83	Depth (ft)
3002541152	Airstrip Fee Com #001H	Bone Spring	Oil	Active	32.6684	-103.4897	10586
3002551344	Beefalo 7 6 ST COM #401H	Bone Spring; Wolfcamp	Oil	New	32.6668	-103.4959	0
3002551345	Beefalo 7 6 ST COM #404H	Bone Spring	Oil	New	32.6668	-103.4957	0
3002551346	Beefalo 7 6 ST COM #408H	Bone Spring	Oil	New	32.6668	-103.4956	0
3002551347	Beefalo 7 6 ST COM #713H	Bone Spring; Wolfcamp	Oil	New	32.6668	-103.4958	0
3002551348	Beefalo 7 6 ST COM #716H	Bone Spring	Oil	New	32.6668	-103.4957	0
3002542751	Cuatro Hijos Fee #002C	Bone Spring	Oil	Cancelled	32.654	-103.4773	0
3002542276	Cuatro Hijos Fee #003H	Bone Spring	Oil	Active	32.6538	-103.4817	10797
3002541752	Cuatro Hijos Fee #004H	Bone Spring	Oil	Active	32.6539	-103.4865	10833
3002542468	Cuatro Hijos Fee #008H	Bone Spring	Oil	Active	32.6538	-103.4849	9785
3002545332	Hereford 20 29 B2AH ST COM #001H	Bone Spring	Oil	New	32.6525	-103.4756	10972
3002550170	Mariner E2w2 07 06 W1 ST COM #001H	Wolfcamp	Oil	Cancelled	32.6668	-103.4957	0
3002550171	Mariner W2e2 07 06 W1 ST COM #001H	Wolfcamp	Oil	Cancelled	32.6668	-103.4956	0
3002526735	Mescalero Ridge #001	Bone Spring	Oil	P&A	32.6587	-103.4817	13420
3002528507	Mescalero Ridge #002	Bone Spring	Misc.	P&A	32.6661	-103.483	11200
3002528526	Mescalero Ridge #008	Bone Spring	Oil	P&A	32.6551	-103.486	10267
3002529945	Amoco "E" Fee	Queen	Oil	P&A	32.6582	-103.4903	10370
3002523030	Hooper "A" #1	Bone Spring	Oil	P&A	32.6737	-103.4908	10148
3002529145	Richardson #1	Bone Spring	Oil	P&A	32.6519	-103.4812	10170
3002528945	Mescalero Ridge C #1	Bone Spring	Oil	P&A	32.6555	-103.4813	10142
3002503167	Gulf Roberts #1-J	No Data	Oil	P&A	32.6587	-103.4774	5350
3002529894	Mobile Mescalero Ridge #1	Wolfcamp	Oil	P&A	32.6621	-103.4777	11097
3002528677	Mescalero Ridge B Com #1	Bone Spring	Oil	P&A	32.6555	-103.4769	10100
3002529136	Bell State #1	Bone Spring	Oil	P&A	32.6556	-103.4728	10200
3002528561	Mescalero Ridge A Com #1	Bone Spring	Oil	P&A	32.6587	-103.4731	11191
3002528623	Mescalero Ridge Unit A #3	No Data	Oil	Cancelled	32.666	-103.4731	0
3002528676	Mescalero Ridge #4	No Data	Oil	Cancelled	32.6624	-103.4774	0
3002528640	Mescalero Ridge #9	No Data	Oil	Cancelled	32.6514	-103.4736	0
3002521149	Reddy Gulf State #001	Queen	Oil	P&A	32.6661	-103.5032	10950
3002529041	Reddy Gulf State #002	Queen	Oil	Active	32.6661	-103.4989	10270
3002529568	Reddy Gulf State #003	Queen; Grayburg	Oil	Active	32.6634	-103.5042	5950
3002551764	Wildrye Fee SWD #001	Devonian-Silurian	SWD	New	32.6522	-103.4716	0
3002525804	Scharb Com #001	Queen; Bone Spring	Oil	P&A	32.6733	-103.4946	10220
3002528616	Lea UA State #2 Unit K	No Data	Oil	Cancelled	32.6592	-103.4644	0
3002529626	Serendipity State #1-N	No Data	Oil	Cancelled	32.6697	-103.4983	0
3002535054	Toro 16 State #001	Bone Spring; San Andres	Oil	Cancelled	32.6554	-103.4683	11200

Within two miles of the White Russian AGI #1 well, there are 169 wells (Appendix A, Figure A-1, Table A-1). Of these wells, there are 26 active wells, 67 permitted locations, and 76 wells that have been plugged and abandoned. 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 and Wolfcamp formations. In addition to this, there is one active gas well, within two miles, producing from the Strawn Formation.

There are two wells within two miles of the White Russian AGI #1 that penetrate the proposed Siluro-Devonian injection interval (Table 13). These wells are located greater than one mile from the proposed White Russian AGI #1 bottom-hole location and include the Toro 21 State Com #001Y (API: 30-025-34492) and the Wildrye Fee SWD #001 (API: 30-025-51764). Although the Toro 21 State well was drilled such that it penetrated the proposed injection zone, the well was plugged back to shallower depth intervals before being plugged and abandoned. The Toro 21 State well was properly cemented through the injection zone and is not anticipated to be negatively affected by the operation of the White Russian AGI #1 well. The Wildrye Fee SWD #1 is located greater than 1.1 miles to the southeast in reference to the proposed White Russian AGI #1 bottom hole and based upon injection modeling, is not expected to inhibit or complicate White Russian AGI #1 operations. All relevant plugging reports have been included in Appendix A.

Table 13. Wells located within two miles of the White Russian AGI #1 well that penetrate the proposed injection interval

API	Well Name	Pool	Status	Latitude (NAD 83)	Longitude (NAD 83)	Total Depth (ft)	Mi. from BHL
3002534492	Toro 21 ST COM #001Y	Wolfcamp, Devonian	Plugged	32.6469	-103.4561	13960	2.05
3002551764	Wildrye Fee SWD #001	Devonian-Silurian	Active	32.6522	-103.4716	0	1.12

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

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

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

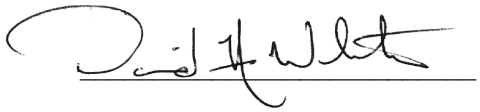
Upon issuance of an NMOCC hearing date to consider the matter of Lea Midstream's application, all interested parties identified will be provided with written notice of the associated NMOCC hearing and will be provided complete copies of the Form C-108 application. Appendix B includes an example notification letter that will be provided to interested parties, as well as an example public notice that may be utilized by 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 White Russian 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 Lea Midstream, LLC



Date: March 19, 2025

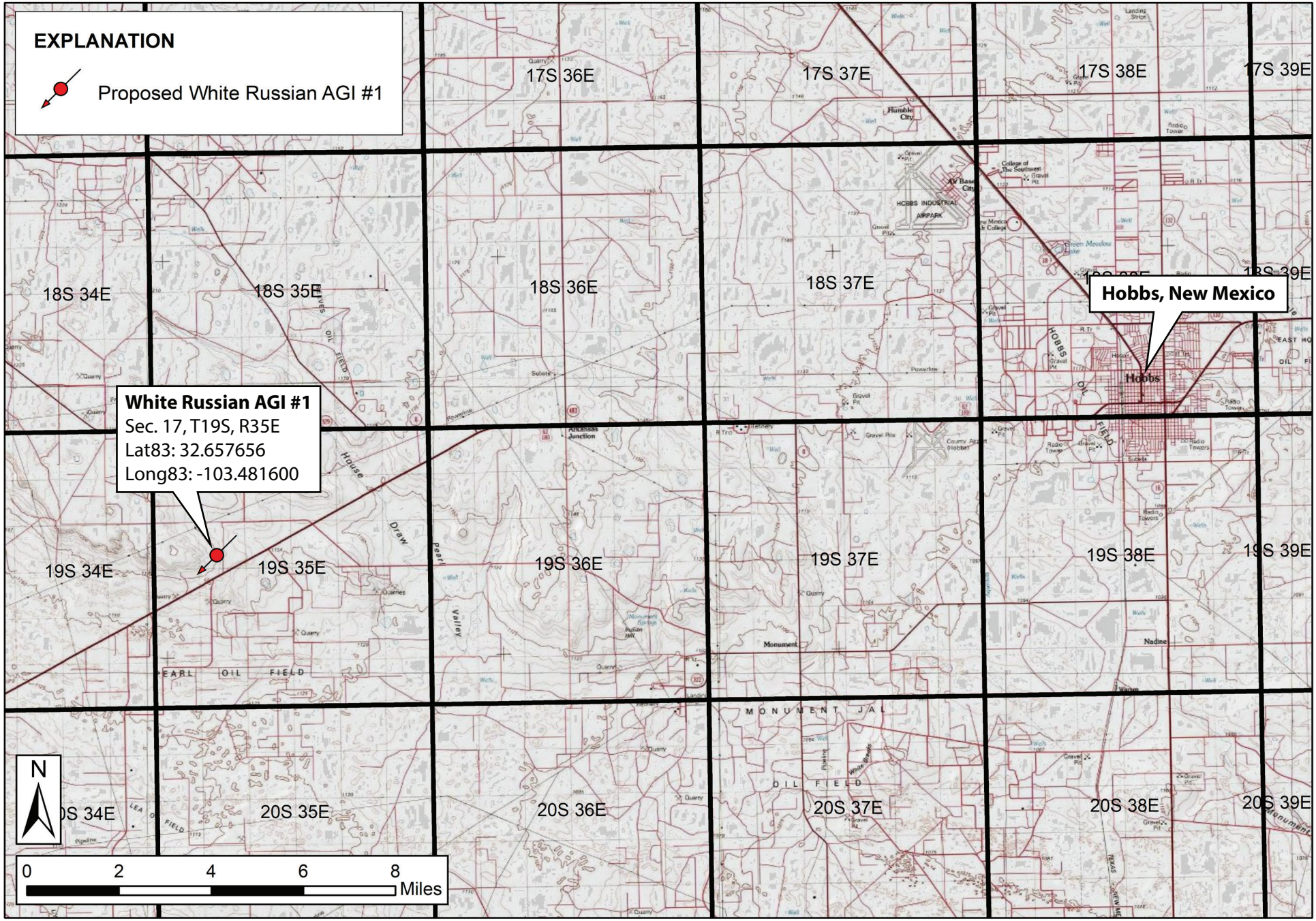


Figure 1. General location map of the proposed White Russian AGI #1 well in Section 17 (T19S, R35E), approximately 20 miles west of Hobbs, NM

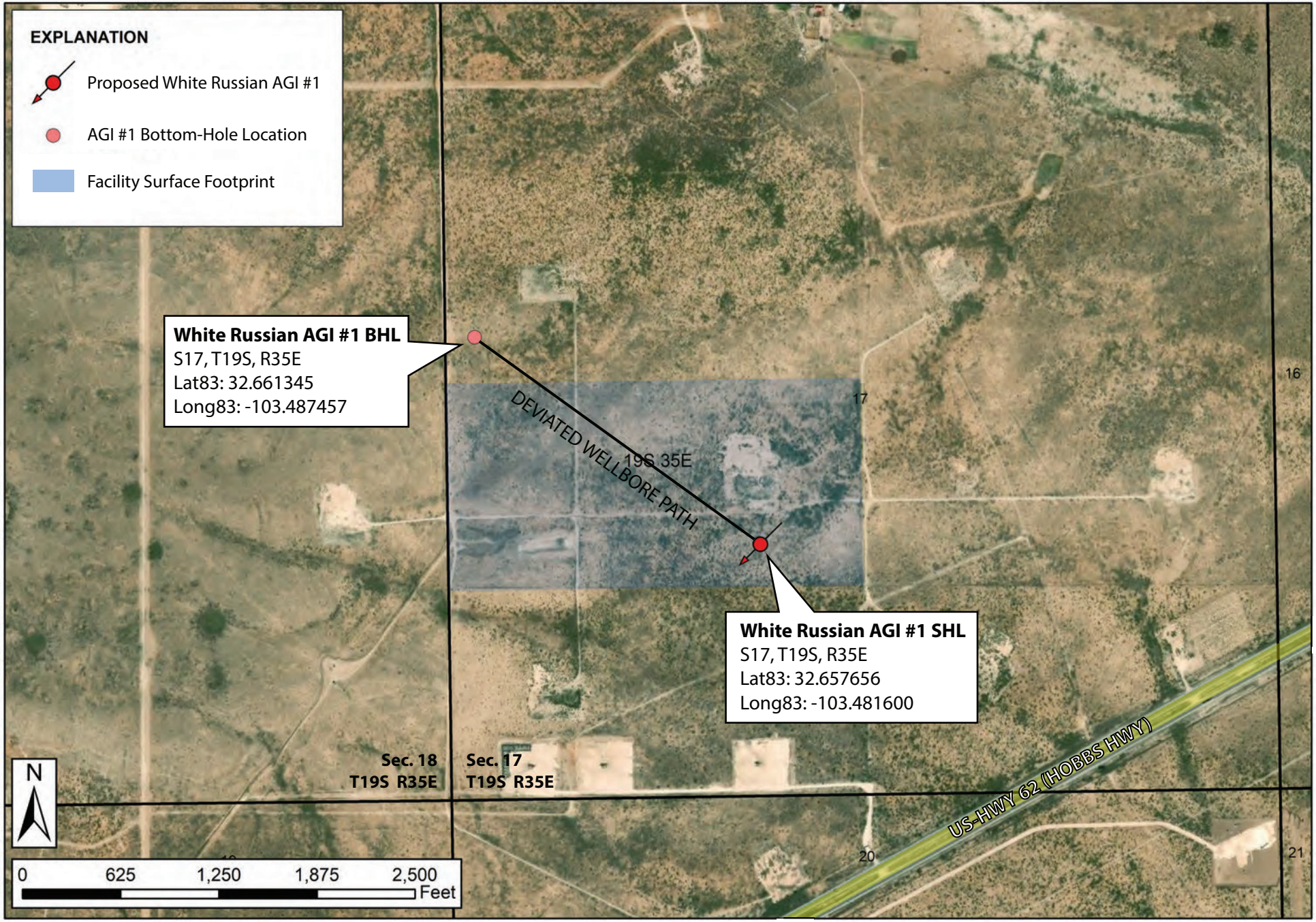


Figure 2. Detailed location map showing the proposed White Russian AGI #1 well and the surface area in which the Lea Midstream Facility is being constructed

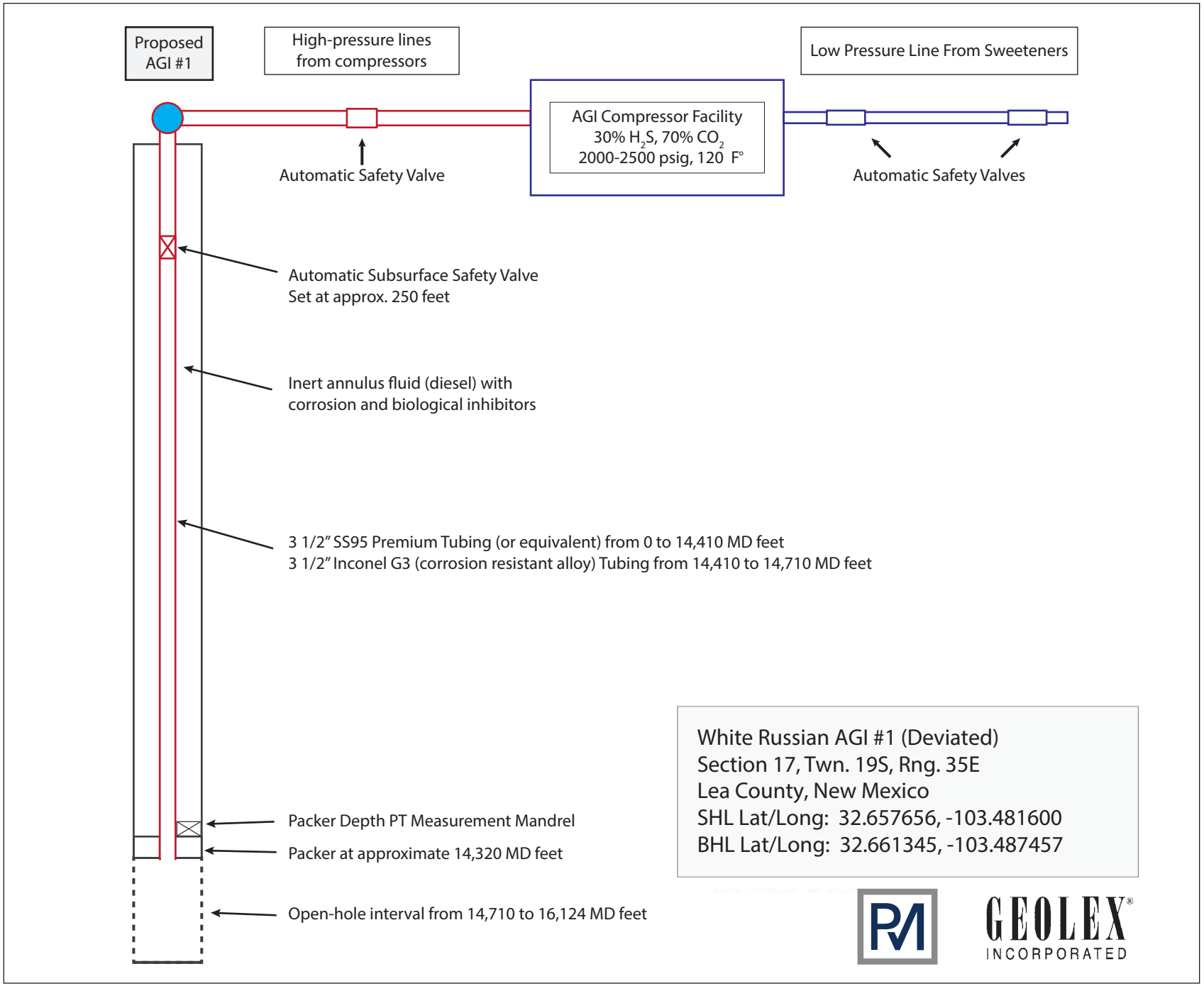
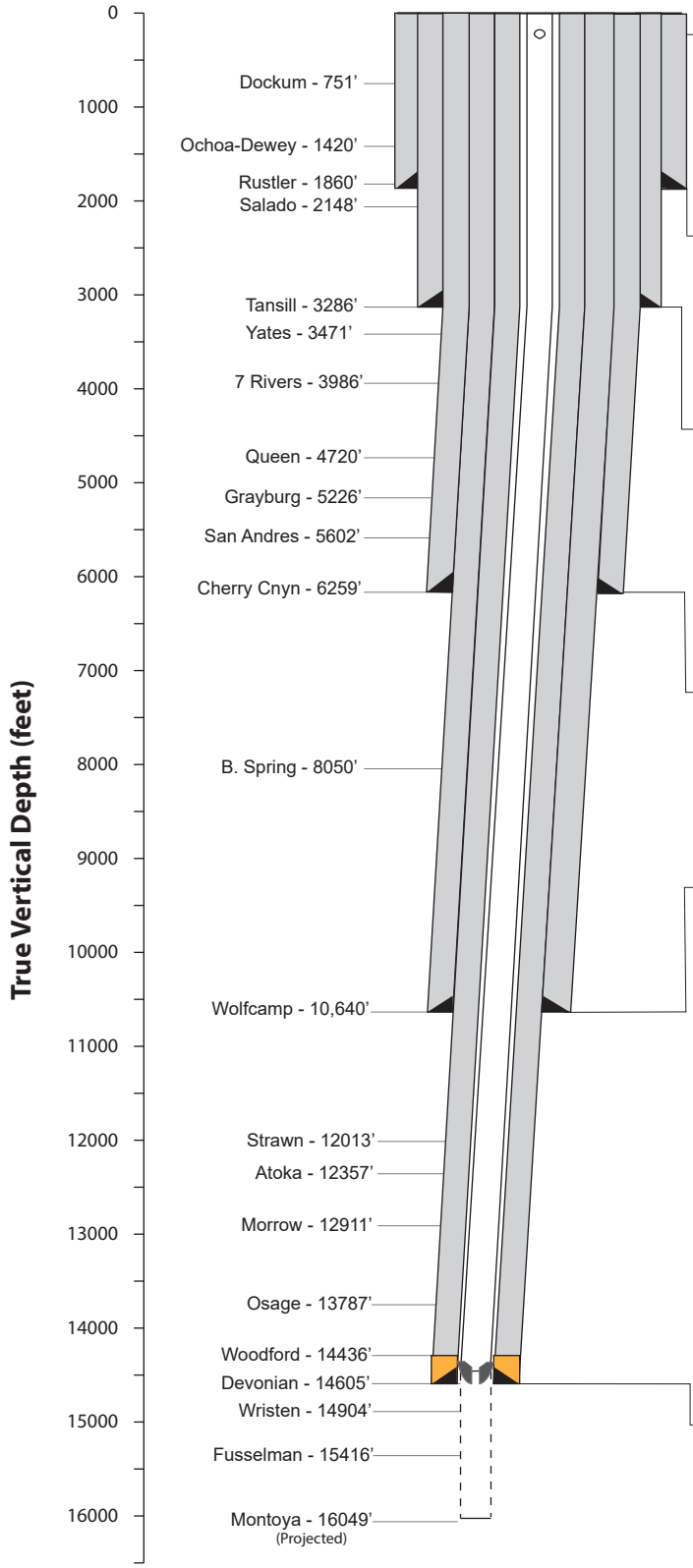


Figure 3. General schematic of surface facilities and proposed White Russian AGI #1 well. Note all geographic coordinates are reported as NAD83

White Russian AGI #1
Lea Midstream -- S17, T19S, R3E

GEOLEX INCORPORATED



36" CONDUCTOR PIPE TO APPROX. 120'

SURFACE CASING

24", 186.4 #/ft., X-65, FJ from approx. 0' to 1,865' MD
Lead: 1,050 sks Extended Cem C (13.5 ppg)
Tail: 414 sks HalCem (14.8 ppg)

Subsurface Safety Valve set @ approx. 150'
PROVIDES ISOLATION AND PROTECTION OF GROUNDWATER.

1ST INTERMEDIATE CASING

20", 169 #/ft., L-80, BTC from approx. 0' to 3,290' MD
Lead: 605 sks NeoCem (11.5 ppg)
Tail: 580 sks Versa Cem (13.5 ppg)

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

2ND INTERMEDIATE CASING

13-5/8", 88.2 #/ft., HCL-80, Mod. BTC from approx 0' to 6,285' MD
Stage 1 Lead: 395 sks CorrosaCem* (13.5 ppg)
Stage 2 Lead: 1410 sks NeoCem (12.0 ppg)
Stage 2 Tail: 1200 sks CorrosaCem (13.5 ppg)
DVT and ECP 5600'

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

9-5/8", 53.5 #/ft., HCL80, Mod. BTC from approx 0' to 10,712' MD
Lead: 1,640 sks NeoCem (11.5 ppg)
Tail: 245 sks VersaCem (14.5 ppg)

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

PRODUCTION CASING

7", 32 #/ft., SS95/T95, VA Superior (or equivalent)
BTC from approx. 0' to 14,410' MD
7", 32 #/ft., G3 (CRA), VAM from approx. 14,410' to 14,710' MD

Stage 1 Lead: 15 bbls Halliburton WellLock Resin
Stage 2 Lead: 175 sks HalCem (12.5 ppg)
Stage 2 Tail: 110 sk CorrosaCem (13.5 ppg)
Stage 3 Lead: 695 sks HalCem (12.5 ppg)
Stage 3 Tail: 55 sks 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

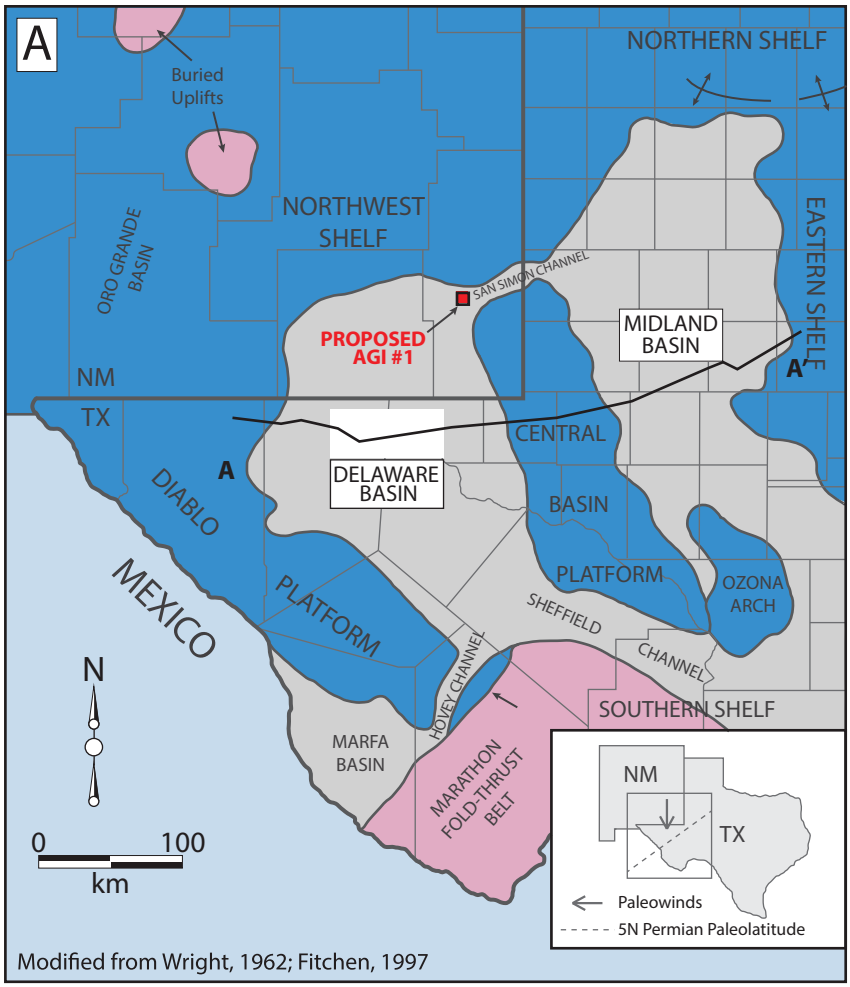
3-1/2", 10.2 #/ft., SS95/T95 (or equivalent), VA Superior from 0' to 14,360' MD
3-1/2", 10.2 #/ft., Inconel G3 (CRA), VAMTOP from 14,360' to 14,660' MD
Halliburton BWD Permanent Packer set at approx. 14,660'
Halliburton P/T sensors on mandrel above packer

TD - 16,029' TVD (16,124' MD)
5-7/8" OPEN-HOLE INTERVAL FROM 14,615' - 16,029' MD

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

Revision 02/14/2025

Figure 4 . Well Schematic for Proposed White Russian AGI #1 Deviated Well.



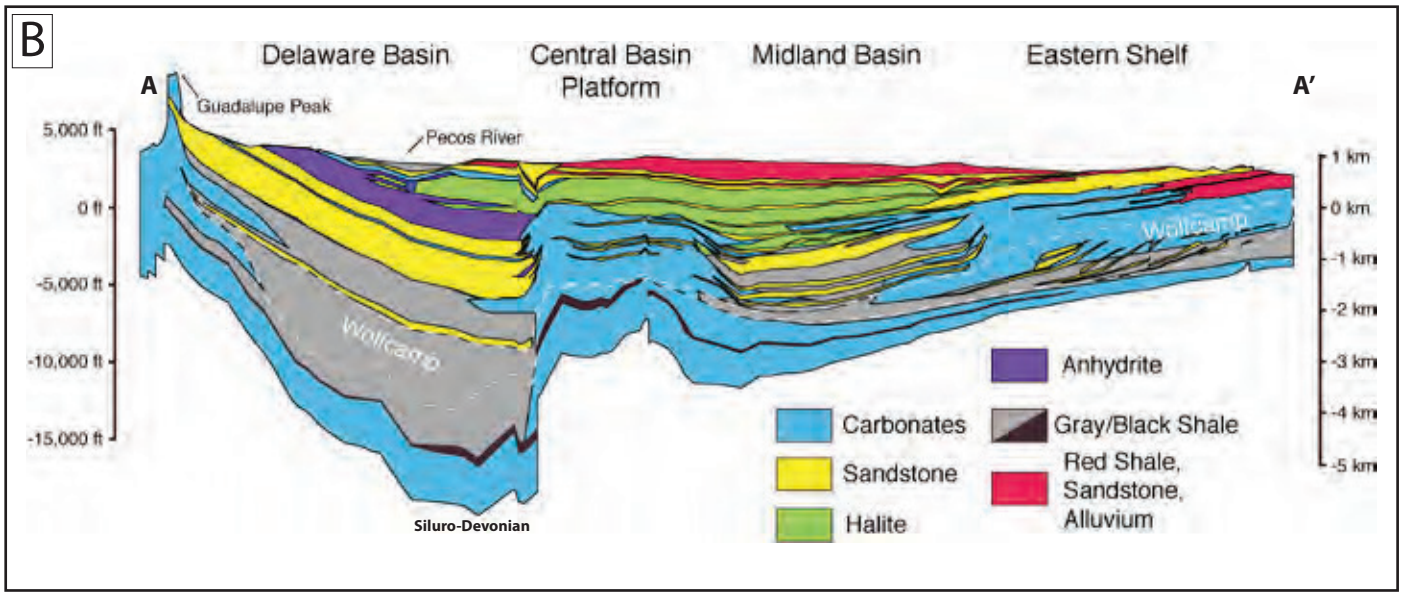


Figure 5. Structural setting (Panel A) and general lithology and schematic (Panel B) of the Perian Basin

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Generalized stratigraphic correlation chart for the Permian Basin region

SYSTEM	SERIES/ STAGE	NORTHWEST SHELF	CENTRAL BASIN PLATFORM	MIDLAND BASIN & EASTERN SHELF	DELAWARE BASIN	VAL VERDE BASIN
PERMIAN	OCHOAN	DEWEY LAKE RUSTLER SALADO	DEWEY LAKE RUSTLER SALADO	DEWEY LAKE RUSTLER SALADO	DEWEY LAKE RUSTLER SALADO CASTILE	RUSTLER SALADO
	GUADALUPIAN	TANSILL YATES SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES GLORIETA	TANSILL YATES SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES GLORIETA	TANSILL YATES SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES SAN ANGELO	DELAWARE MT. GROUP BELL CANYON CHERRY CANYON BRUSHY CANYON	TANSILL YATES SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES
	LEONARDIAN	CLEARFORK YESO WICHITA ABO	CLEARFORK WICHITA	LEONARD SPRABERRY, DEAN	★ BONE SPRING	LEONARD
	WOLFCAMPIAN	WOLFCAMP	WOLFCAMP	WOLFCAMP	★ WOLFCAMP	WOLFCAMP
PENNSYLVANIAN	VIRGILIAN	CISCO	CISCO	CISCO	CISCO	CISCO
	MISSOURIAN	CANYON	CANYON	CANYON	CANYON	CANYON
	DESMOINESIAN	STRAWN	STRAWN	STRAWN	★ STRAWN	STRAWN
	ATOKAN	ATOKA — 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 White Russian AGI #1 well (Yang and Dorobek, 1995)

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Type Log of White Russian AGI #1

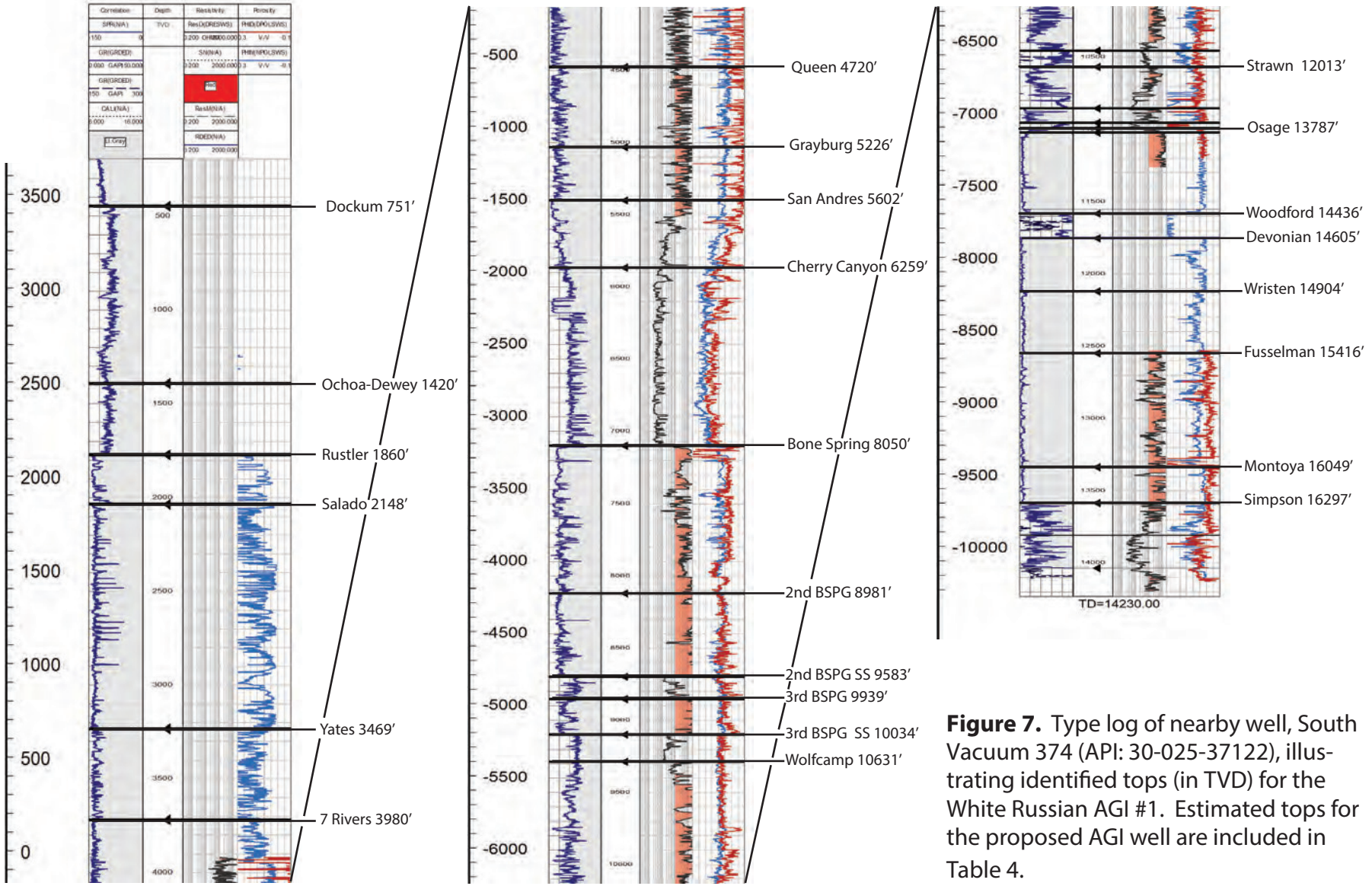


Figure 7. Type log of nearby well, South Vacuum 374 (API: 30-025-37122), illustrating identified tops (in TVD) for the White Russian AGI #1. Estimated tops for the proposed AGI well are included in Table 4.

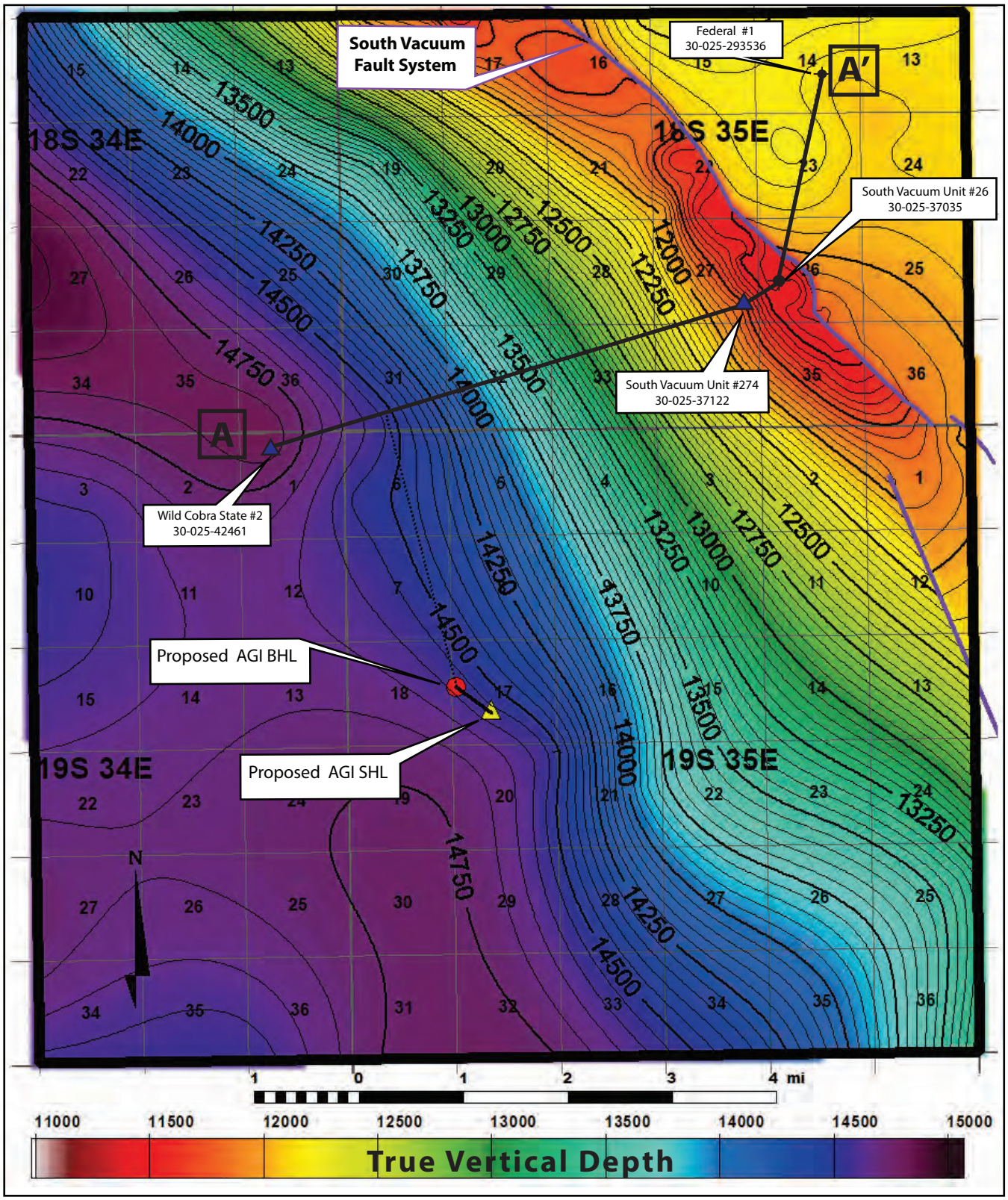


Figure 8. Local Devonian structure contour map (TVD) of the White Russian AGI #1 showing the top of the Siluro-Devonian target injection reservoir. Cross section A-A' is shown in Figure 9. Note contour intervals (CI) are equal to 50 ft.

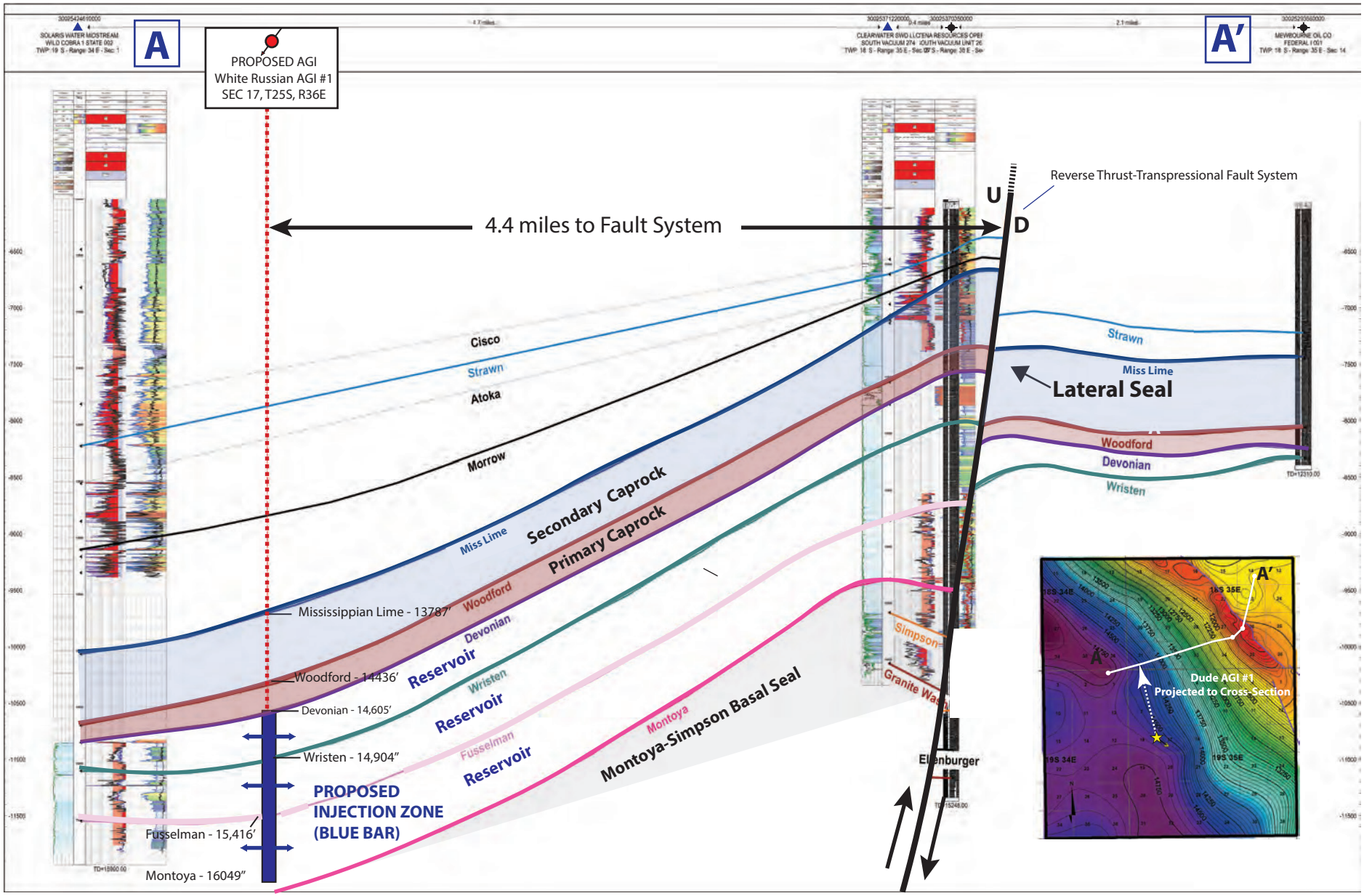


Figure 9. Structural Cross Section - Demonstration of TAG Injection Geologic System. A - A' showing regional structural profile and distance to well control and northeastern reverse thrust fault system (approximately 4.4 miles updip to northeast). White Russian AGI #1 is projected into cross-section as shown in inset map (B).

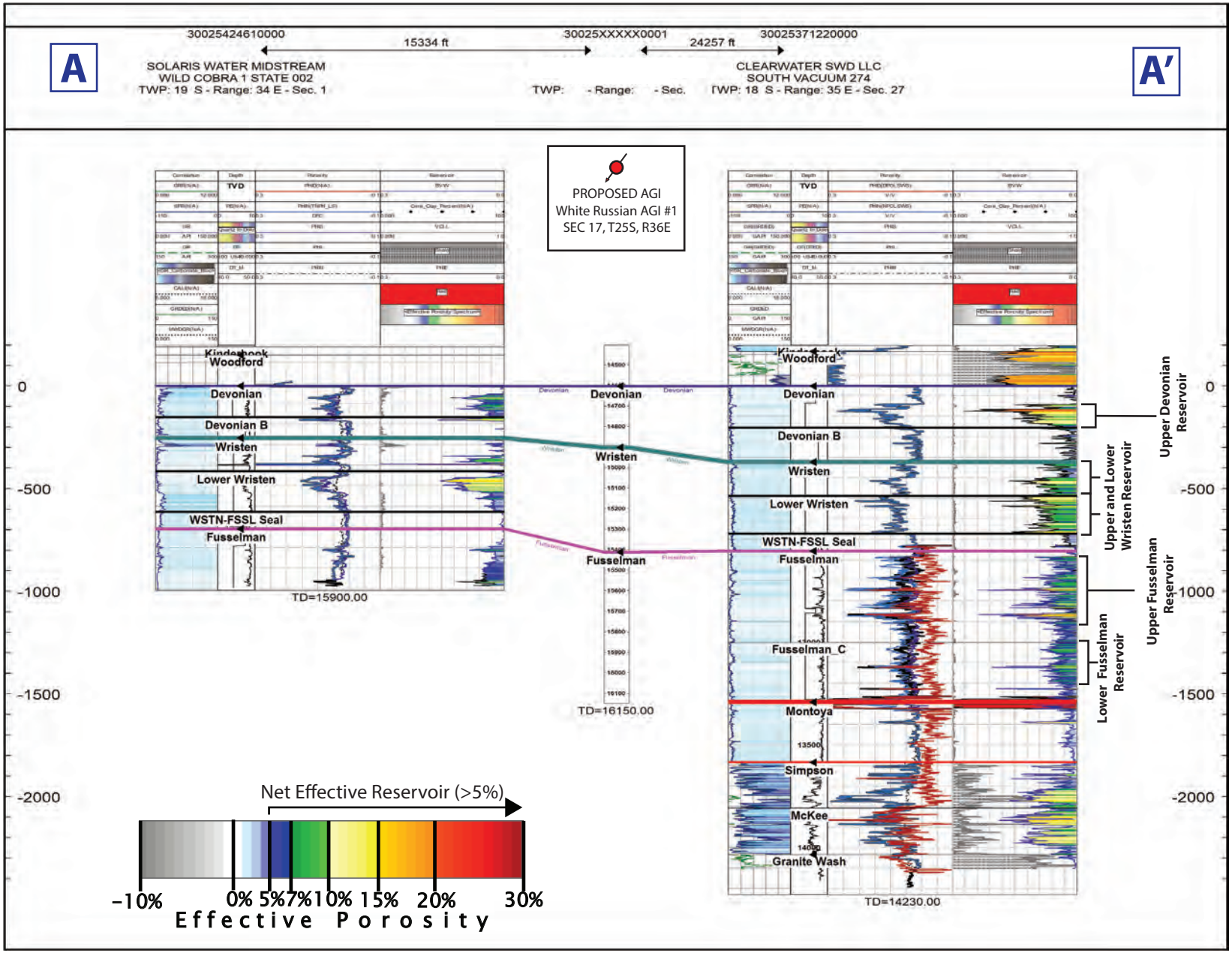


Figure 10. Stratigraphic Correlation Section - Siluro-Devonian Target Injection Reservoirs. Effective reservoirs are notated. Siluro-Devonian petrophysical model for effective porosity are shown on logs, and effective reservoir is observed within upper Devonian, lower and upper Wristen, and lower and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

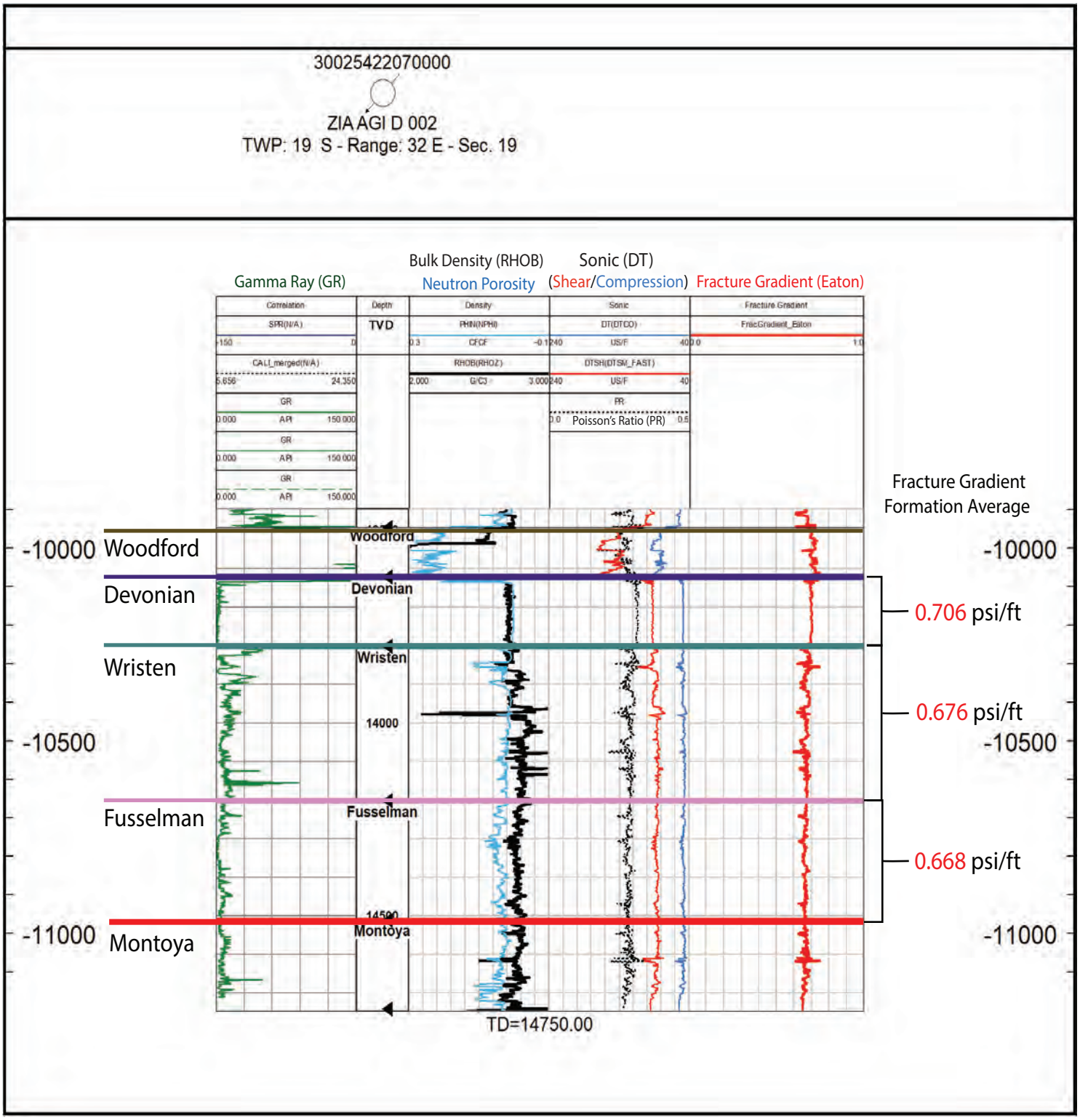


Figure 11. Fracture pressure gradient calculated from the Zia AGI D #2 (red trace). Average fracture gradient estimates range from 0.676 to 0.706 psi/ft. for Devonian through Montoya geologic strata.

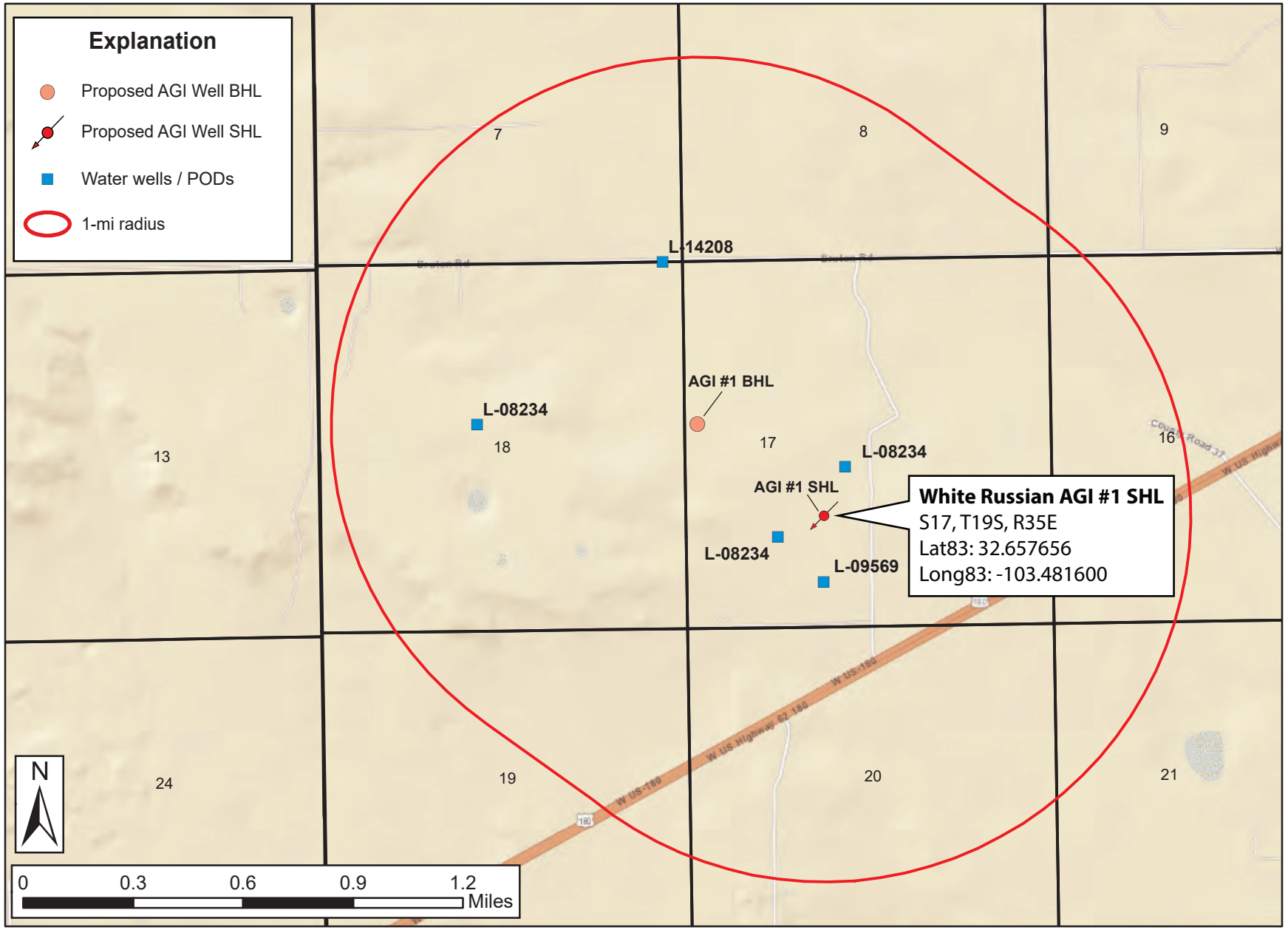


Figure 12. Water wells and points of diversion within one-mile of the proposed White Russian AGI #1 well. Note that the AGI one-mile area of review has been modified to reflect a combined one-mile buffer zone around the AGI surface and bottom-hole locations, and the anticipated deviation path of the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

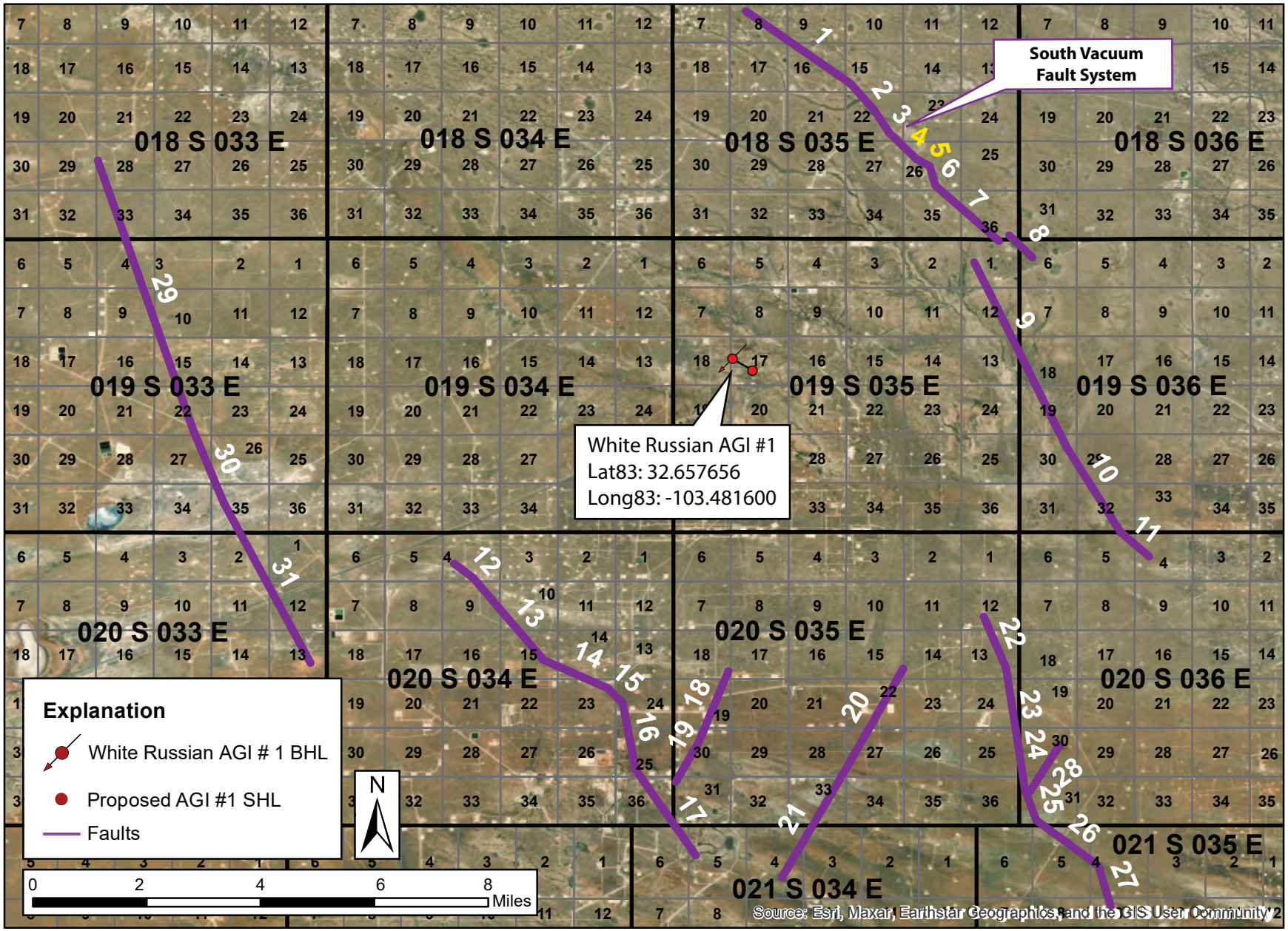
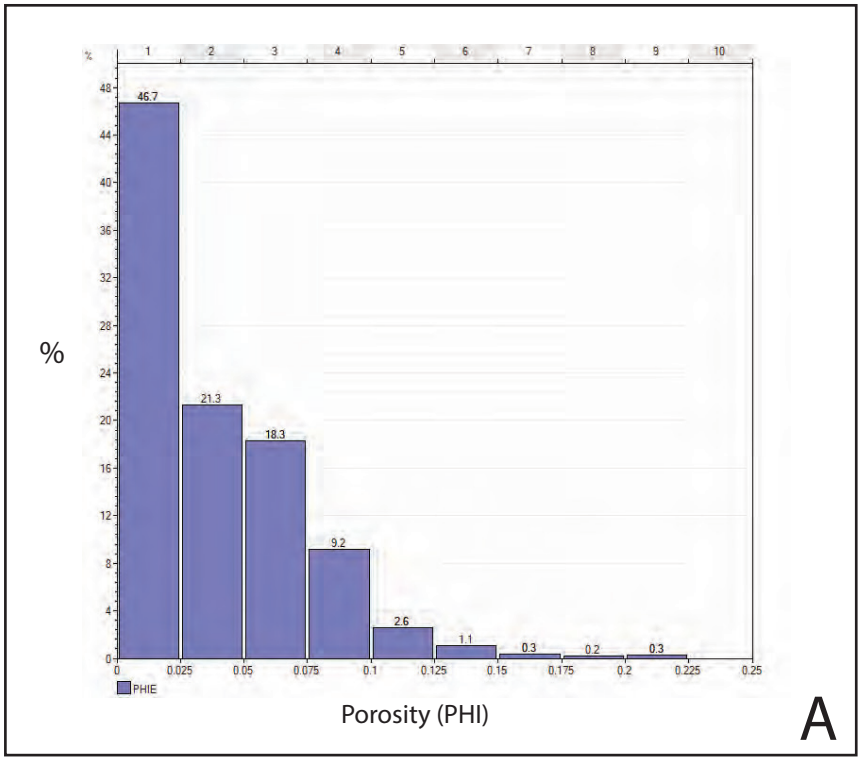


Figure 13. Subsurface fault features interpreted from well control and published literature in the vicinity of the proposed White Russian AGI #1. Fault segments are annotated for reference in FSP simulation results regarding induced seismicity risk. Fault segments anticipated to have risk for slip are annotated in yellow.



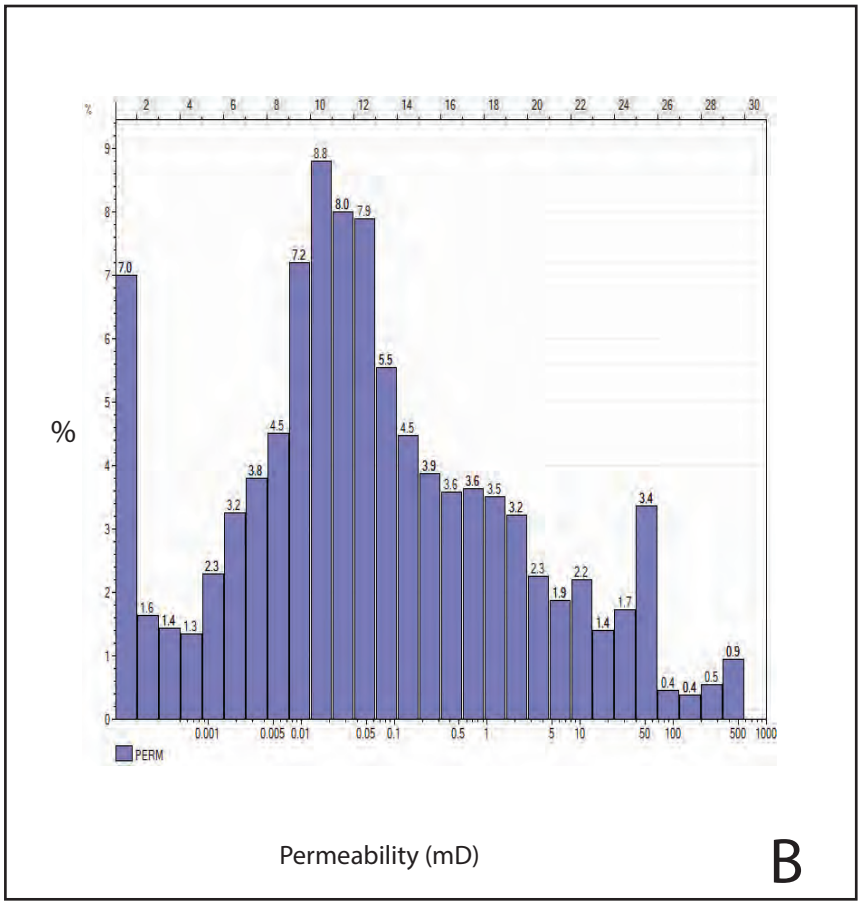


Figure 14. Distribution of porosity (panel A) and permeability (panel B) for all geo-model layers.

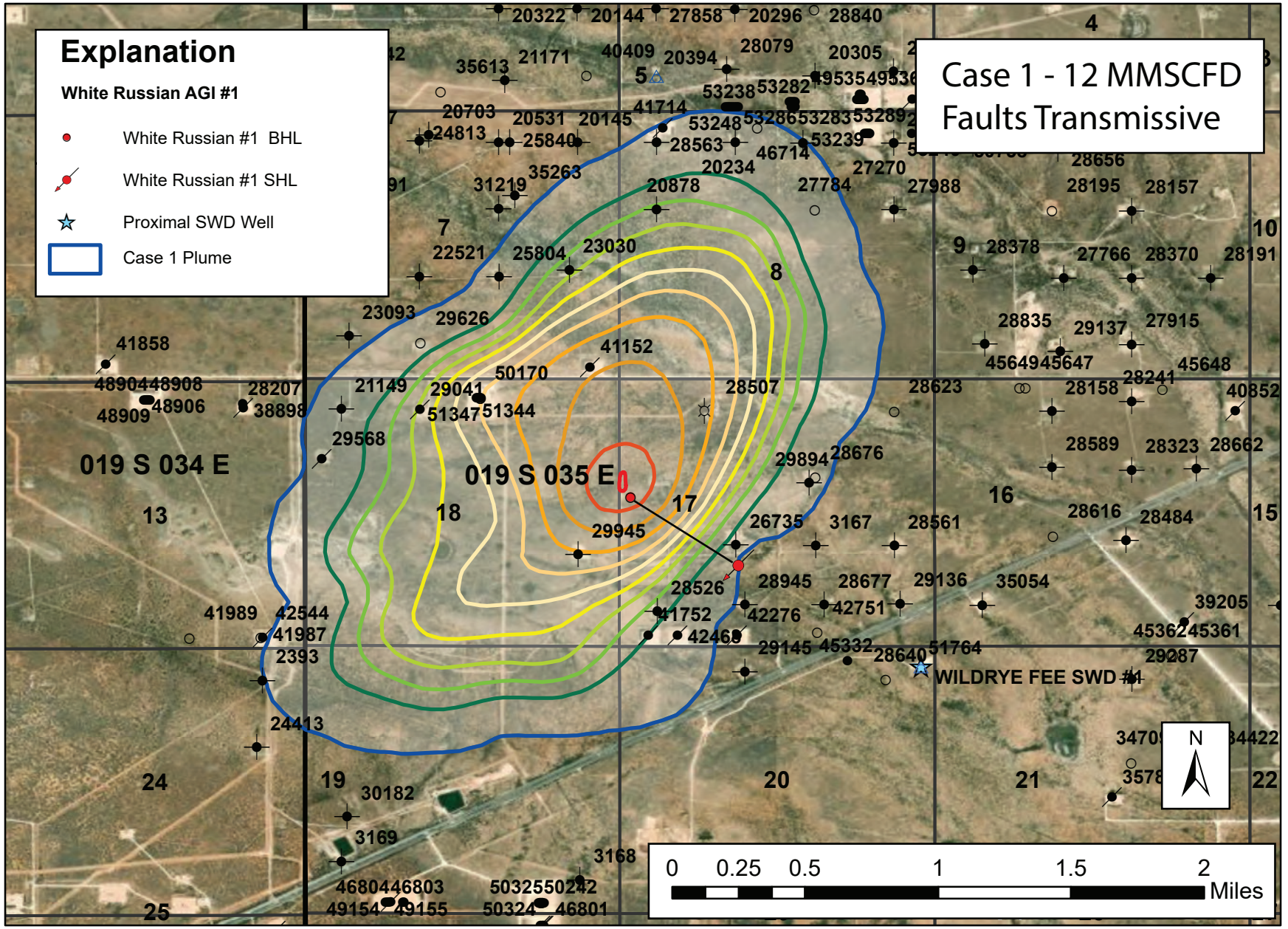


Figure 15. Summary of Eclipse simulation results for Case 1. This map displays the simulated plume of 30 years of injection. Contours of gas saturation are depicted ranging from 0 to 48% gas saturation. Offset wells are identified by API (Last 5 digits).

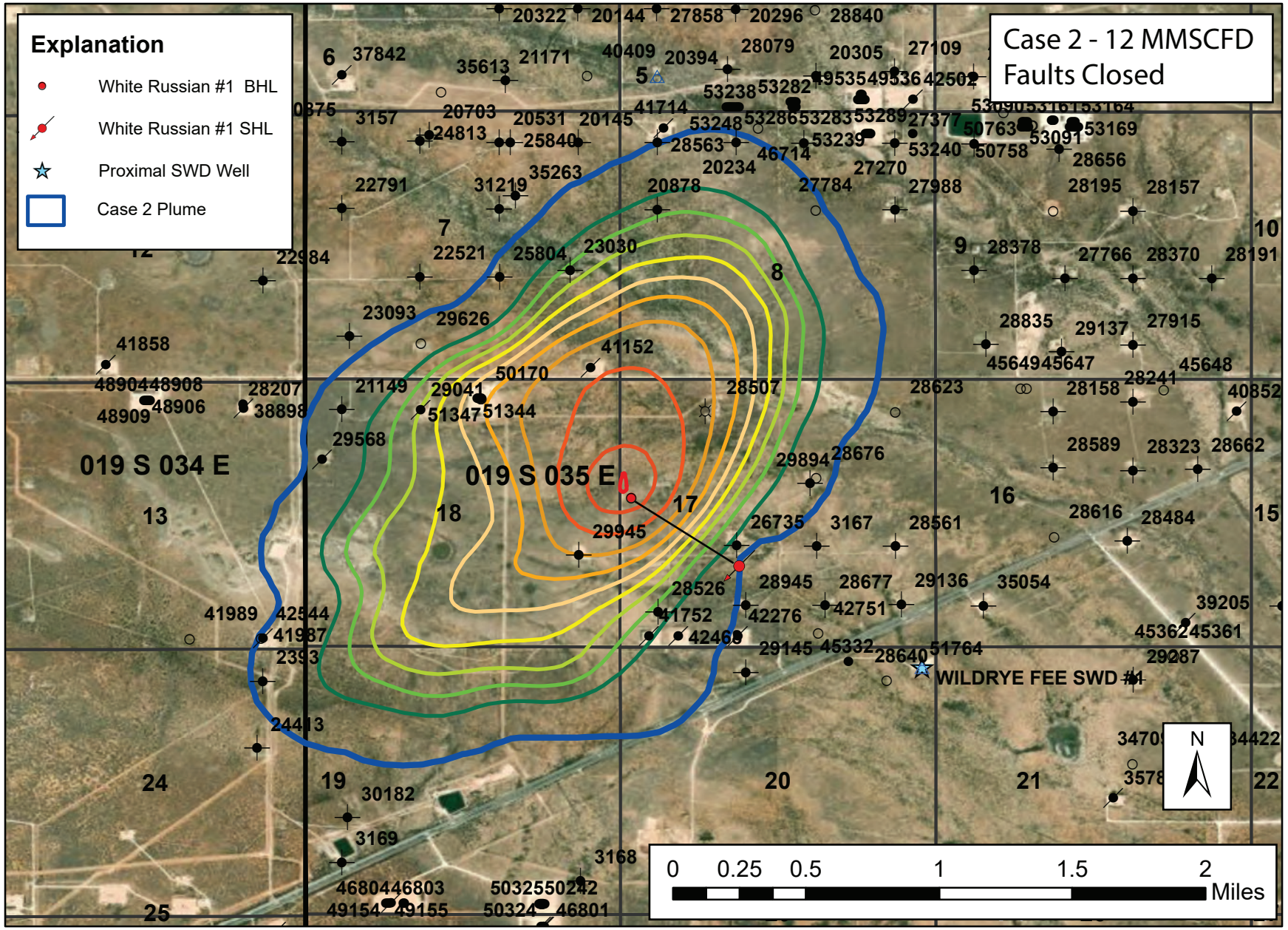
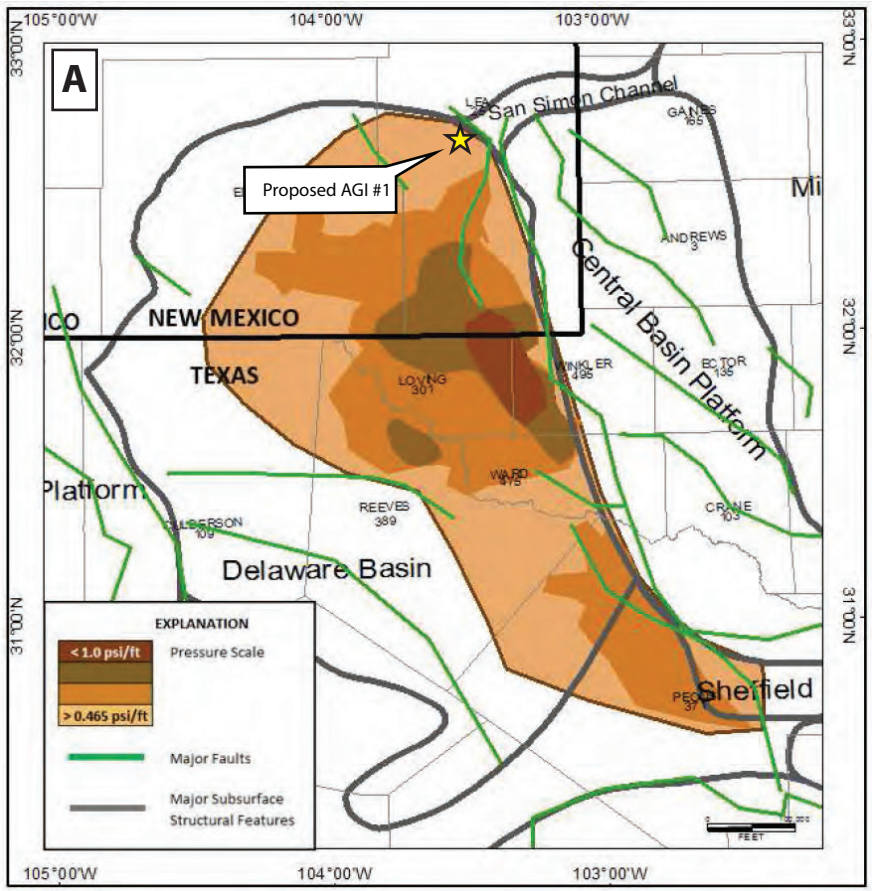


Figure 16. Summary of Eclipse simulation results for Case 2. This map displays the simulated acid gas plume following 30 years of injection at the maximum proposed rate. Contours of gas saturation are depicted ranging from 0 to 48%. Offset wells are identified by last five digits of their respective API numbers.



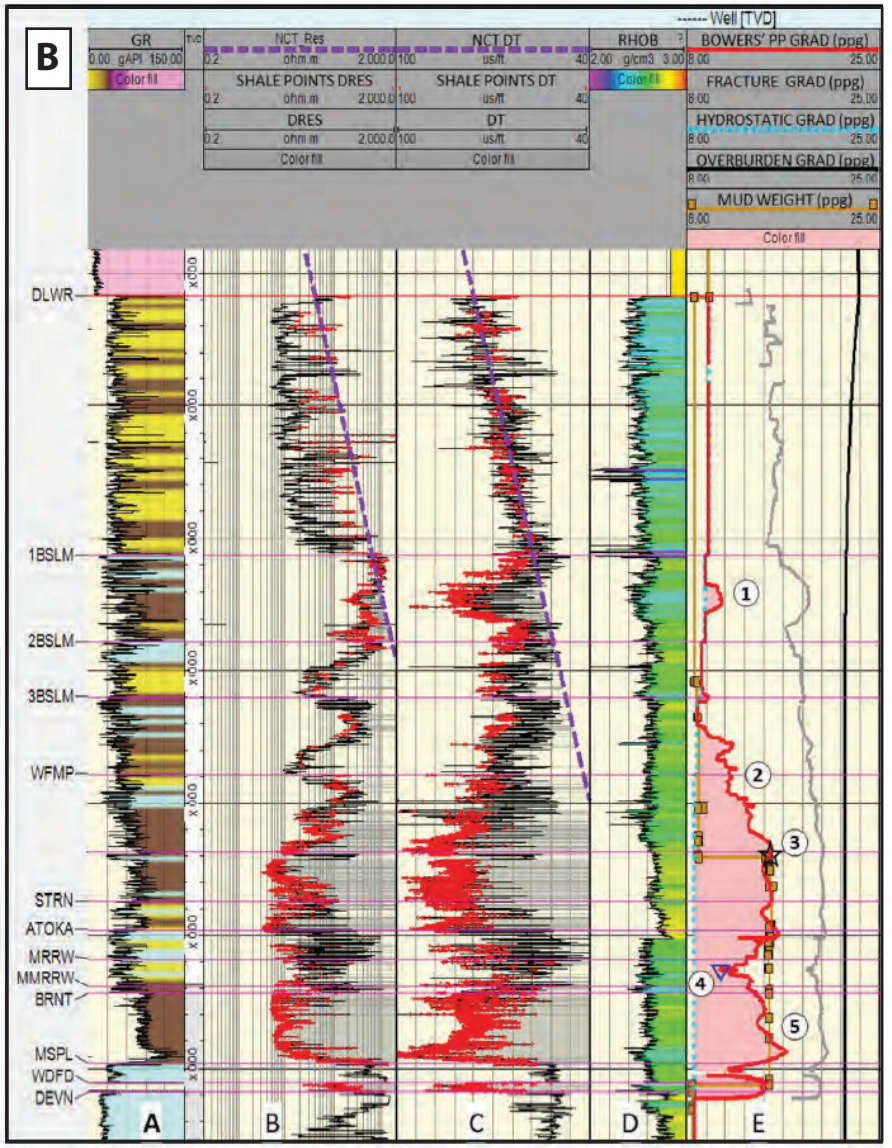


Figure 17. Mapped extent of present day overpressure in the Delaware Basin (Panel A) and example log response (Panel B) illustrating stratigraphic onset of over-pressured intervals and associated drilling fluid densities (modified from Rittenhouse et al., 2016)

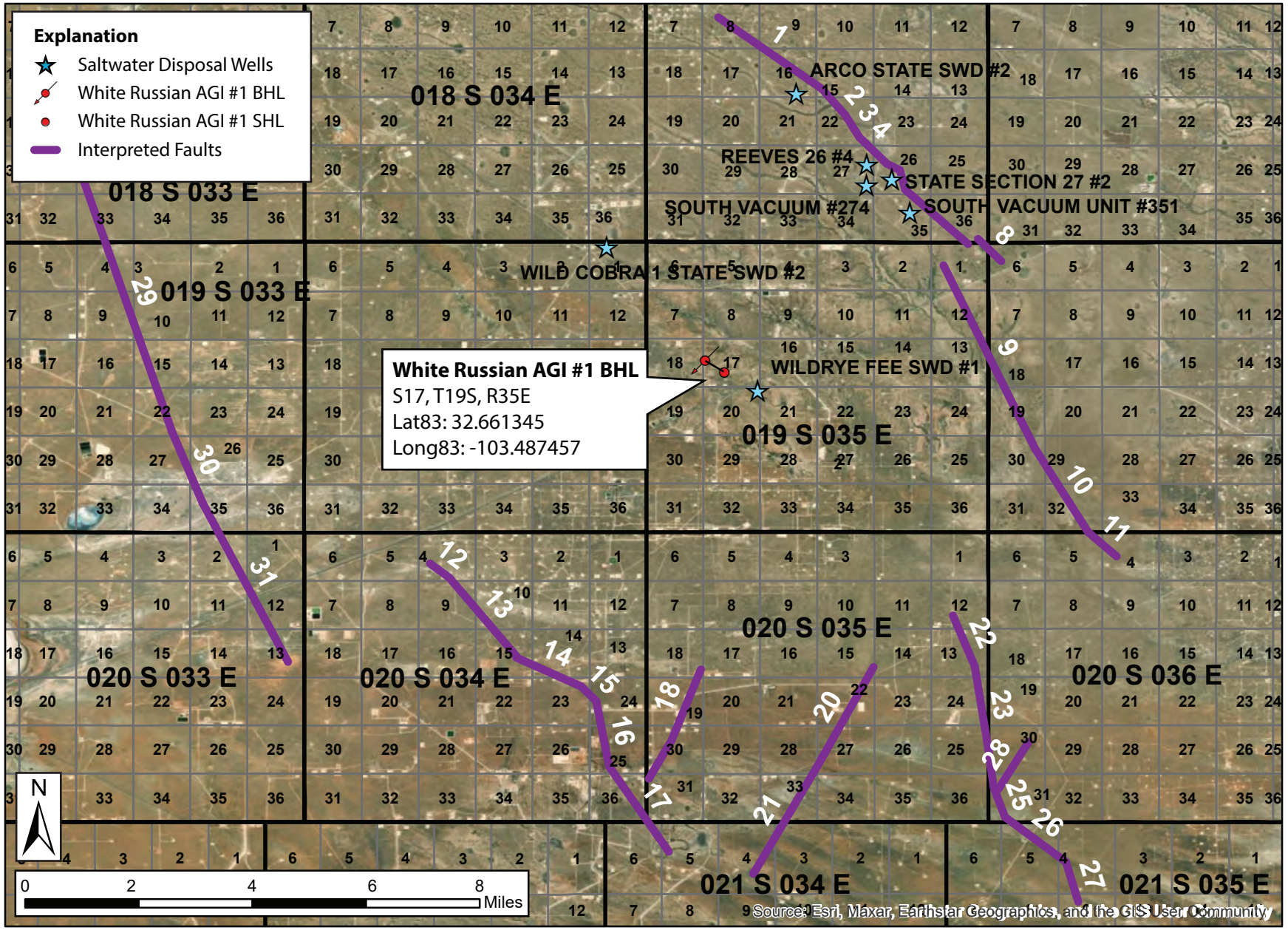
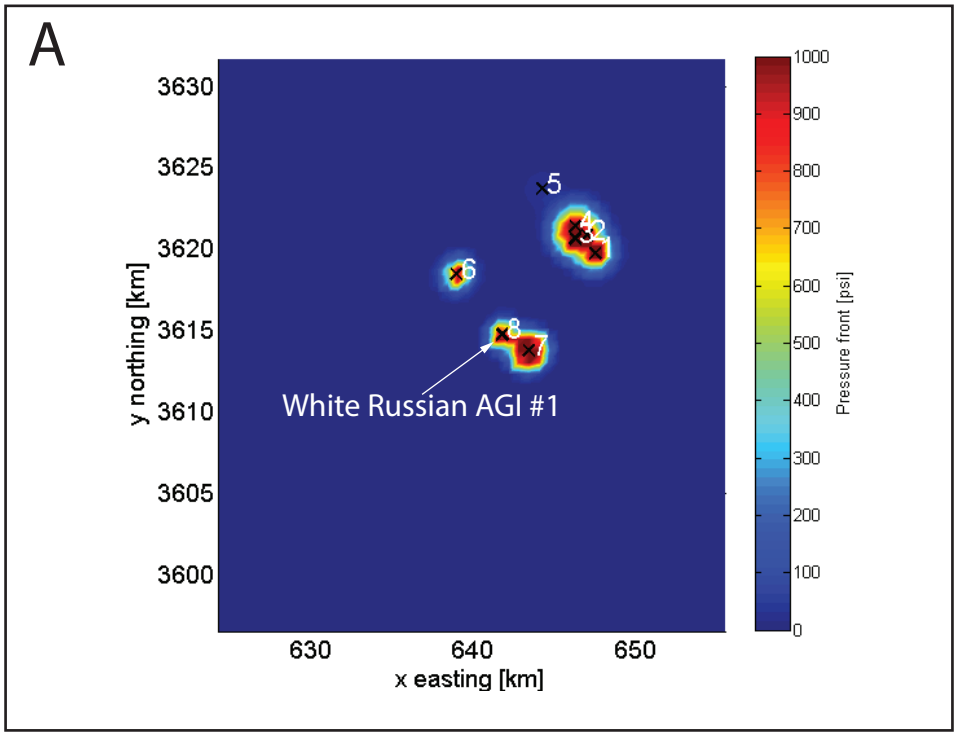
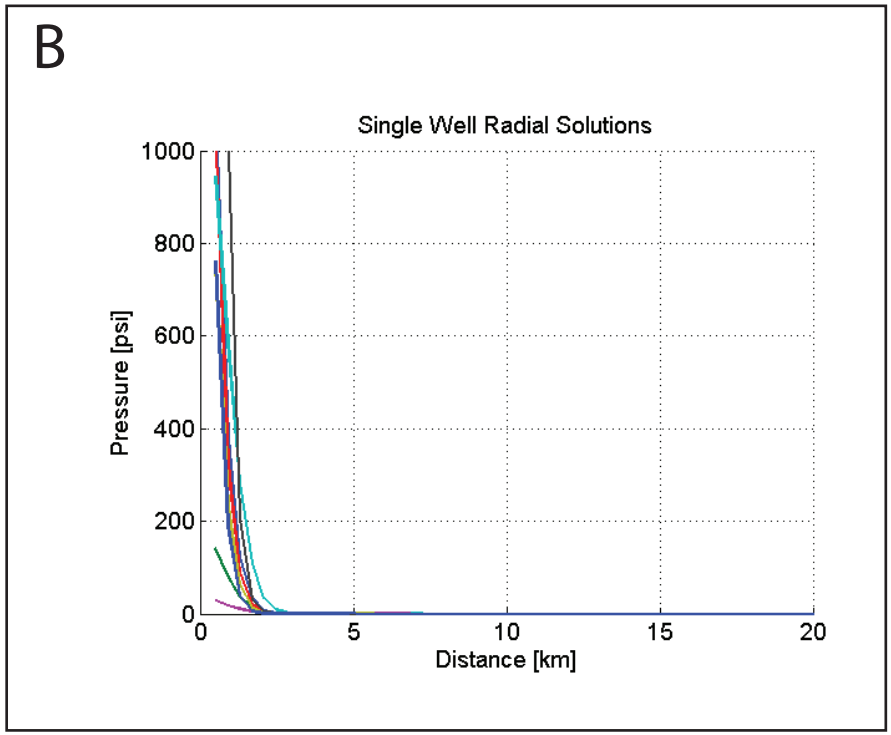


Figure 18. Injection wells and subsurface features in the vicinity of the proposed White Russian AGI #1 well





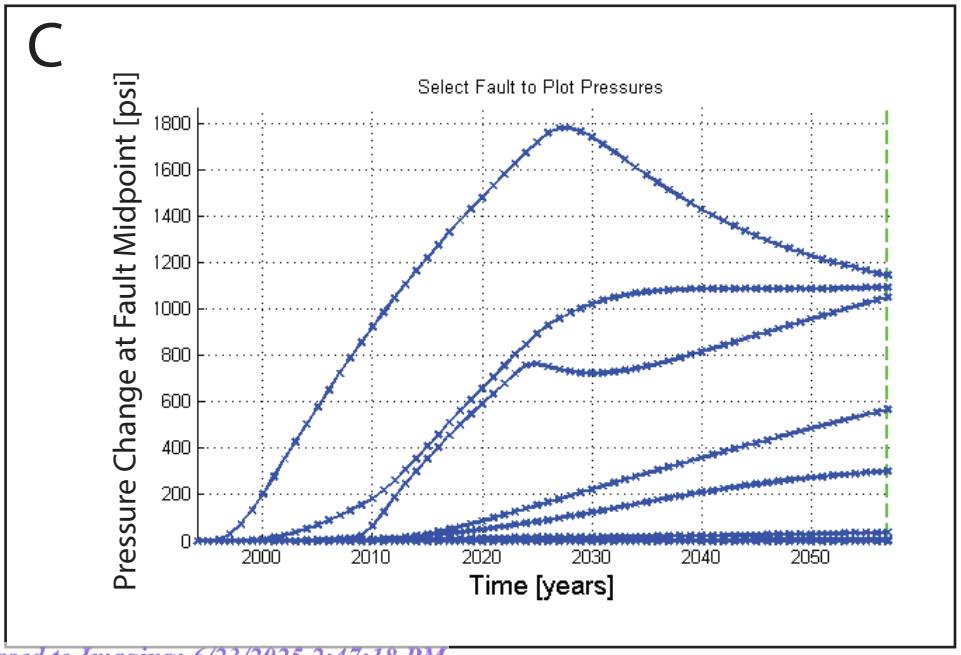
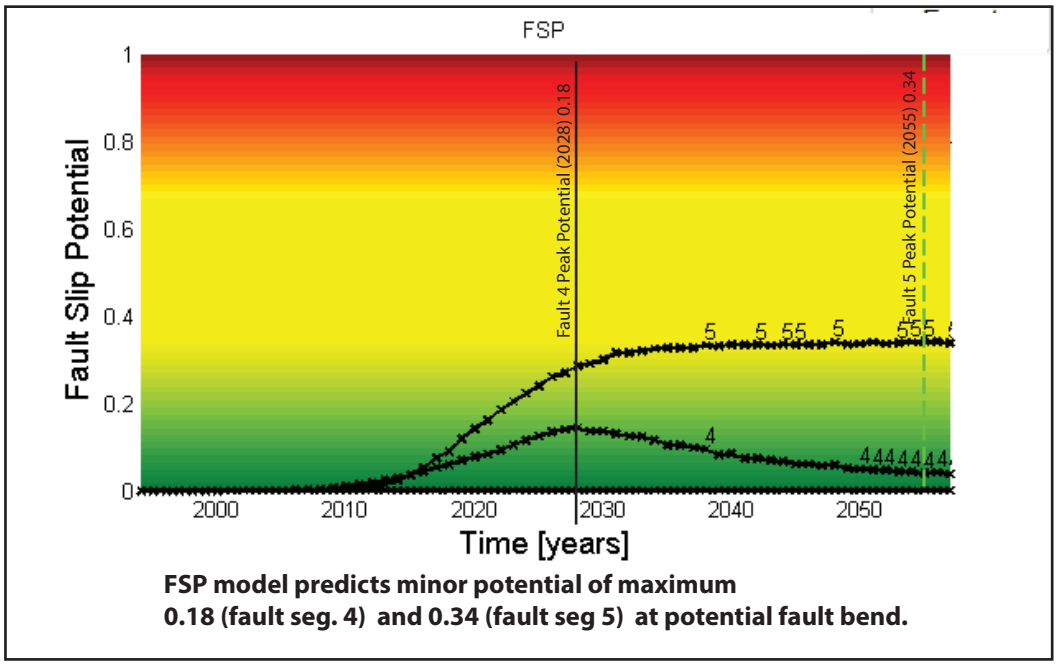


Figure 19. Summary of FSP model-predicted pressure front effects in the year 2055, resulting from injection activities of nearby wells that are actively injecting within the Siluro-Devonian formations.



FSP model predicts minor potential of maximum 0.18 (fault seg. 4) and 0.34 (fault seg 5) at potential fault bend.

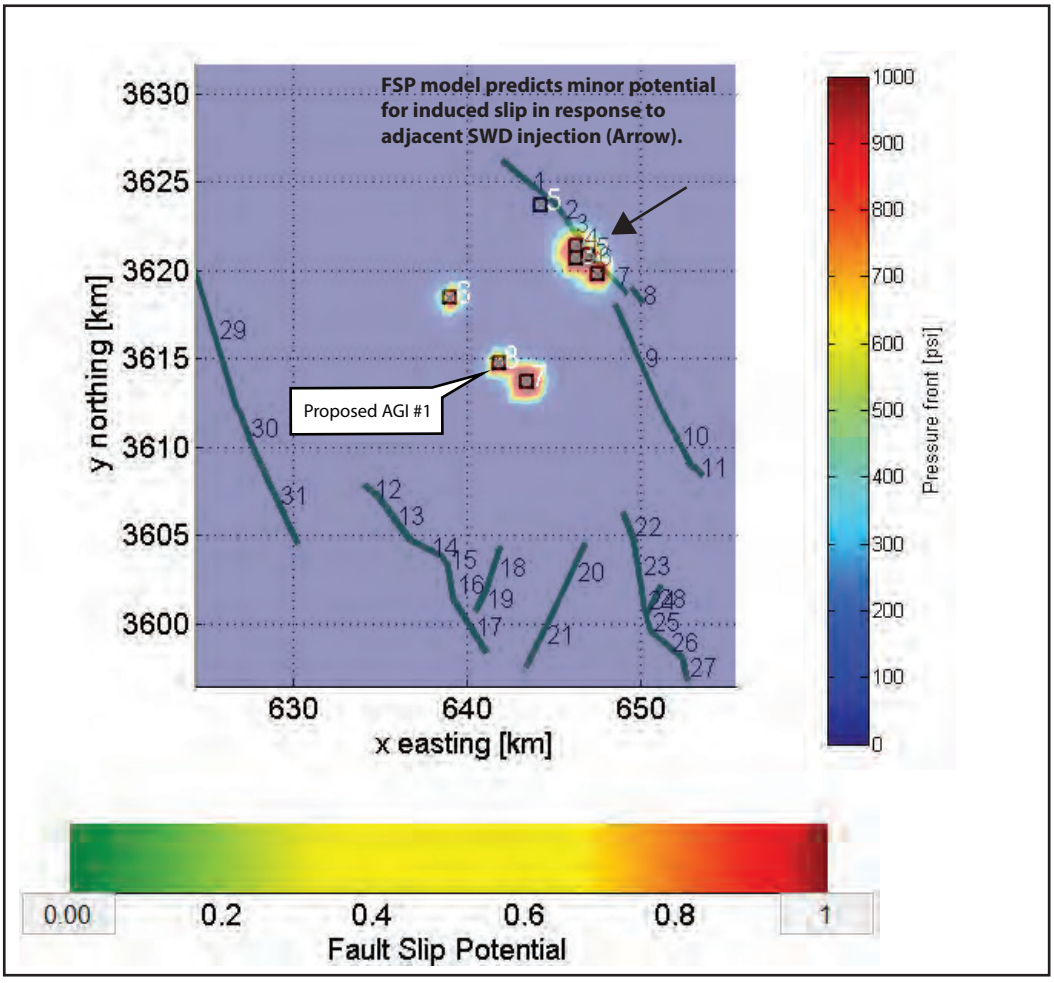
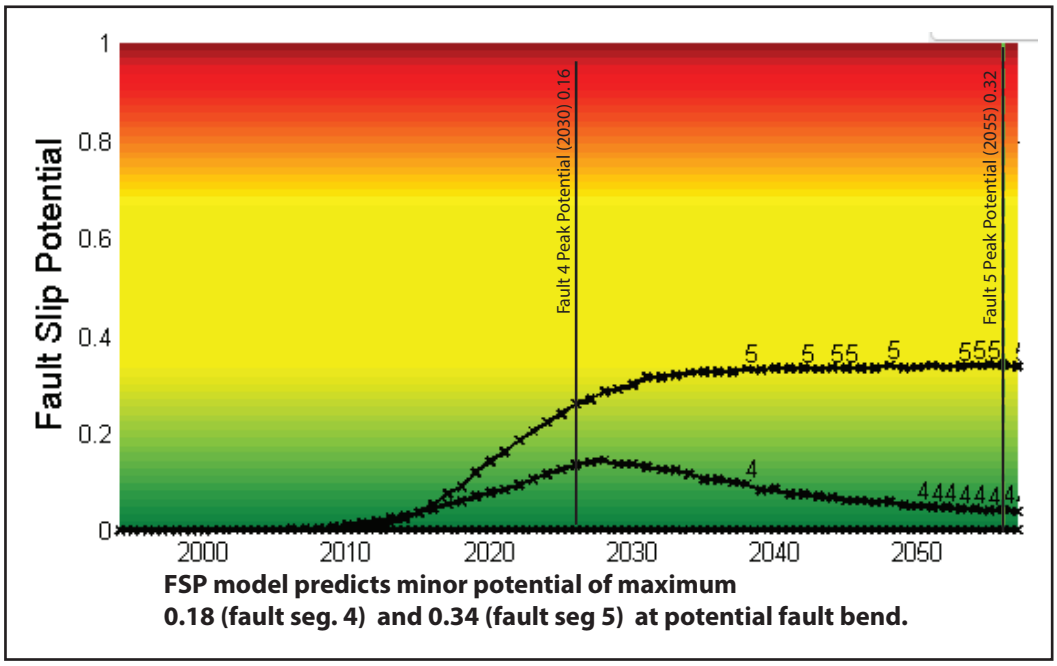


Figure 20. Scenario 1: Model-predicted fault slip potential after 30 years (Panel A) of maximum injection by proposed AGI and offset SWD activities. Minor fault slip potential is observed at interpreted fault segments 4 and 5, due to the proximity to Siluro-Devonian SWD wells.



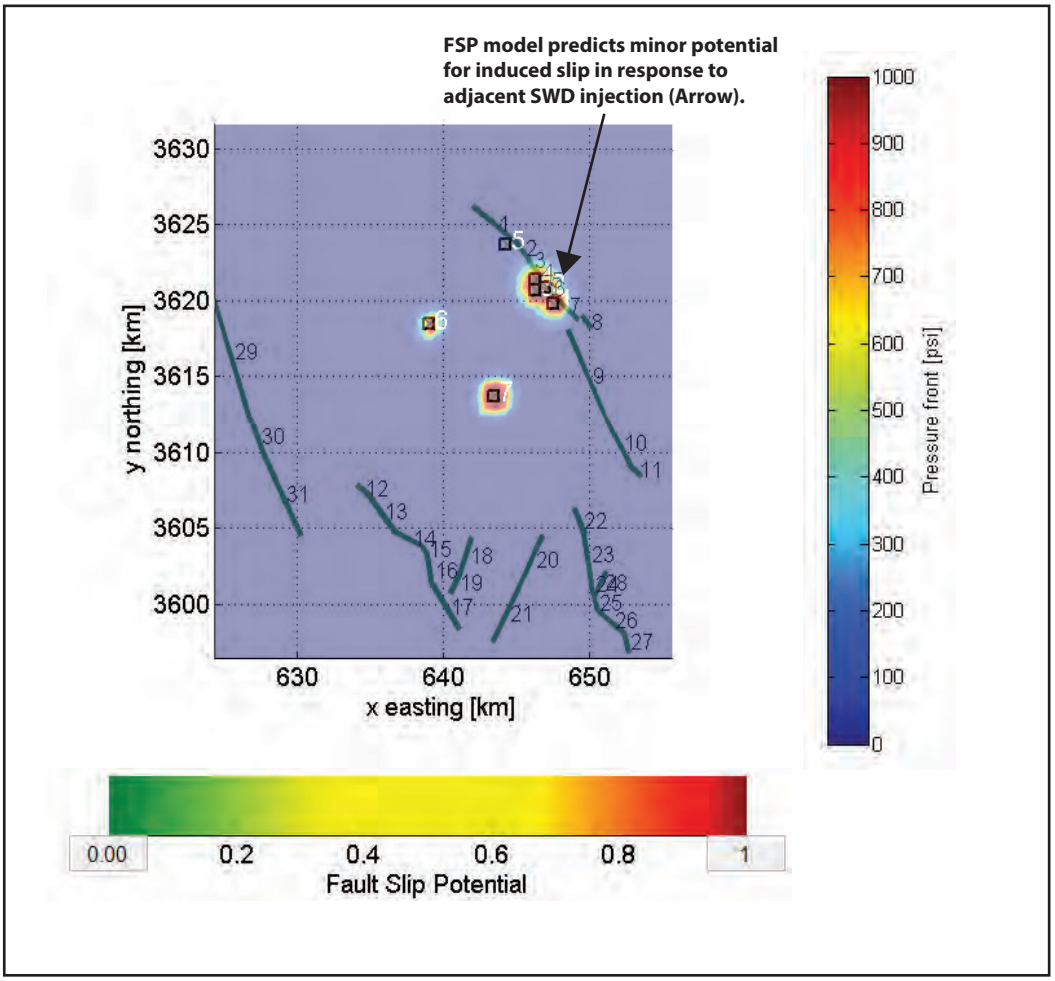


Figure 21. Scenario 2: Model-predicted fault-slip potential after 30 years (Panel A) for injection operations only reflective of nearby SWD wells. This scenario exludes the proposed White Russian AGI #1 well and demonstrates that the proposed activities for the AGI #1 well are inconsequential with respect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

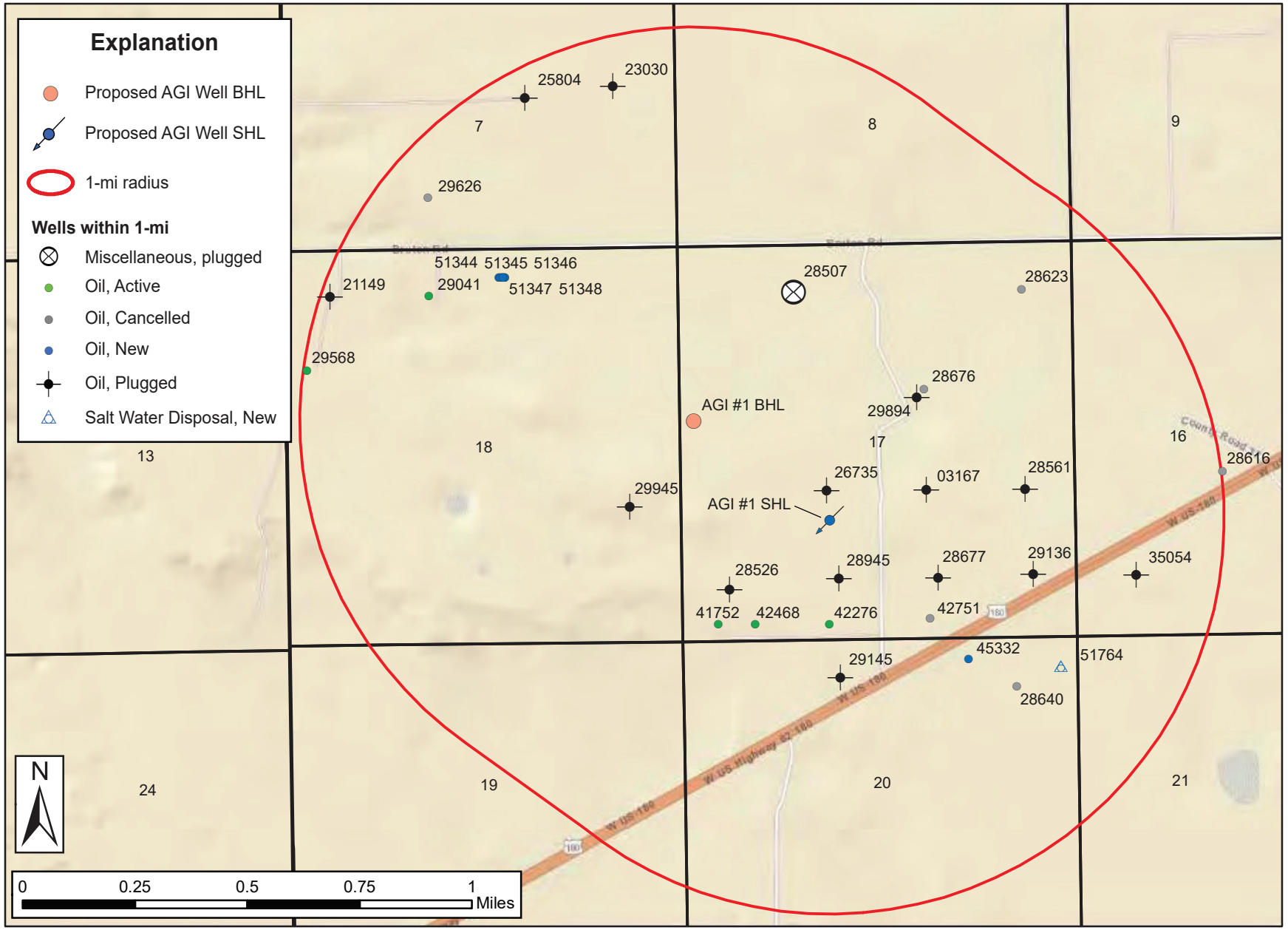


Figure 22. All wells of record within one-mile of the proposed White Russian AGI #1 well. Note that the one-mile radius area of review has been modified to include a buffer zone around the AGI #1 surface-hole and bottom-hole locations, and along the anticipated well deviation path.

APPENDIX A

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

Figure A-1:	All wells located within two miles of the proposed AGI #1
Table A-1:	Tabulated summary of all wells within two miles of the proposed White Russian AGI #1 well
Attachment A:	Plugging Documents from NMOCD online database for wells within two miles that penetrate the injection zone

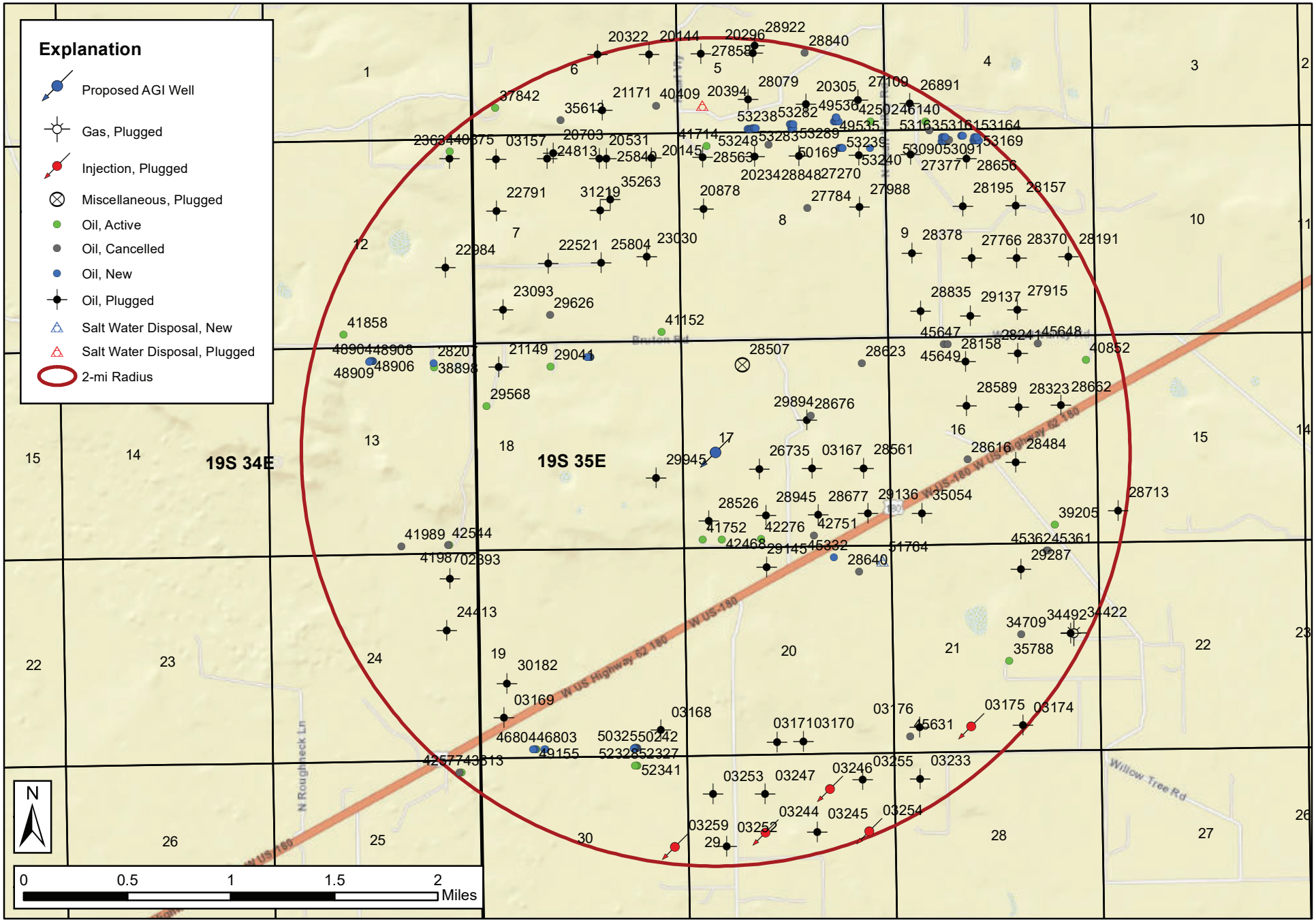


Figure A-1. All wells within two miles of the proposed AGI well, labeled according to the last five digits of their API number (30-025-XXXXX).

Table A1 -- All wells within two-miles of the proposed White Russian AGI #1 well. Area of review includes the AGI surface and bottom-hole location and anticipated deviated well path

API	Well Name	Well Type	Well Status	Operator Name	Latitude (NAD83)	Longitude (NAD83)	Associated Pools	Measured Depth (ft)	Vertical Depth (ft)	Plug Date	SPUD Date
30-025-26735	MESCALERO RIDGE #001	Oil	Plugged (site released)	SOUTHWEST ROYALTIES INC	32.65875	-103.48172	[55610] SCHARB, BONE SPRING	13,420	13,420	4/11/2002	-
30-025-29945	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.65824	-103.4903	[50450] QUAIL, QUEEN	0	10,370		
30-025-28526	MESCALERO RIDGE #008	Oil	Plugged (site released)	FOREST OIL CORPORATION	32.65514	-103.486	[55610] SCHARB, BONE SPRING	10,267	10,267	11/21/2005	
30-025-28945	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.6555	-103.48125	[55610] SCHARB, BONE SPRING	0	10,142		
30-025-42468	CUATRO HIJOS FEE #008H	Oil	Active	MATADOR PRODUCTION COMPANY	32.65384	-103.48491	[55610] SCHARB, BONE SPRING	13,667	9,785	-	4/2/2015
30-025-41752	CUATRO HIJOS FEE #004H	Oil	Active	MATADOR PRODUCTION COMPANY	32.65385	-103.48652	[55610] SCHARB, BONE SPRING	15,268	10,833	-	6/21/2014
30-025-28507	MESCALERO RIDGE #002	Miscellaneous	Plugged (site released)	FOREST OIL CORPORATION	32.66606	-103.48303	[55610] SCHARB, BONE SPRING	11,200	11,200	12/5/2005	
30-025-29894	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.66213	-103.47774		0	11,097		
30-025-03167	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.65872	-103.47738		0	5,353		
30-025-42276	CUATRO HIJOS FEE #003H	Oil	Active	MATADOR PRODUCTION COMPANY	32.65382	-103.48168	[55610] SCHARB, BONE SPRING	15,390	10,797	-	1/10/2015
30-025-28676	PRE-ONGARD WELL #004	Oil	Cancelled	PRE-ONGARD WELL OPERATOR	32.66242	-103.47742		0	0	-	-
30-025-28677	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.65548	-103.47691	[55610] SCHARB, BONE SPRING	0	10,100		
30-025-29145	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.65187	-103.48124	[55610] SCHARB, BONE SPRING	0	10,170		
30-025-41152	AIRSTRIP FEE COM #001H	Oil	Active	MATADOR PRODUCTION COMPANY	32.66841	-103.48967	[55610] SCHARB, BONE SPRING	17,759	10,586	-	6/14/2014
30-025-42751	CUATRO HIJOS FEE #002C	Oil	Cancelled	COG OPERATING LLC	32.654	-103.4773	[55610] SCHARB, BONE	0	0	-	-
30-025-28561	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.6587	-103.47309	[55610] SCHARB, BONE SPRING	0	11,191		
30-025-51346	BEEFALO 7 6 STATE COM #408H	Oil	New	MEWBOURNE OIL CO	32.66675	-103.4956	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-50171	MARINER W2E2 07 06 W1 STATE COM #001H	Oil	Cancelled	Franklin Mountain Energy 3, LLC	32.66675	-103.49561	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-51348	BEEFALO 7 6 STATE COM #716H	Oil	New	MEWBOURNE OIL CO	32.66675	-103.49566	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-50170	MARINER E2W2 07 06 W1 STATE COM #001H	Oil	Cancelled	Franklin Mountain Energy 3, LLC	32.66675	-103.49567	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-51345	BEEFALO 7 6 STATE COM #404H	Oil	New	MEWBOURNE OIL CO	32.66675	-103.49572	[55610] SCHARB, BONE SPRING	0	0	-	7/9/2023
30-025-51347	BEEFALO 7 6 STATE COM #713H	Oil	New	MEWBOURNE OIL CO	32.66675	-103.49579	SPRING; [55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-51344	BEEFALO 7 6 STATE COM #401H	Oil	New	MEWBOURNE OIL CO	32.66675	-103.49585	SPRING; [55640] SCHARB, WOLFCAMP	0	0	-	6/14/2023
30-025-45332	HEREFORD 20 29 B2AH STATE COM #001H	Oil	New	MEWBOURNE OIL CO	32.65246	-103.47565	[55610] SCHARB, BONE SPRING	21,385	10,972	-	2/16/2019
30-025-29136	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.65555	-103.47279	[55610] SCHARB, BONE SPRING	0	10,200		
30-025-28623	PRE-ONGARD WELL #003	Oil	Cancelled	PRE-ONGARD WELL OPERATOR	32.66604	-103.47312		0	0	-	-

30-025-29041	REDDY GULF STATE #002	Oil	Active	YATES ENERGY CORP	32.66611	-103.49892	[37585] LEA, SAN ANDRES; [50450] QUAIL, QUEEN	10,270	10,270	-	11/30/1984
30-025-28640	PRE-ONGARD WELL #009	Oil	Cancelled	PRE-ONGARD WELL OPERATOR	32.65144	-103.47358		0	0	-	-
30-025-51764	WILDRYE FEE SWD #001	Salt Water Disposal	New	Permian Oilfield Partners, LLC	32.65215	-103.47164	[97869] SWD, DEVONIAN-SILURIAN	0	0	-	9/4/2024
30-025-23030	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.67373	-103.49078	[55610] SCHARB, BONE SPRING	0	10,148		
30-025-29626	PRE-ONGARD WELL #001	Oil	Cancelled	PRE-ONGARD WELL OPERATOR	32.66974	-103.49889		0	0	-	-
30-025-35054	TORO 16 STATE #001	Oil	Plugged (site released)	MARSHALL & WINSTON INC	32.65547	-103.46831	[55610] SCHARB, BONE SPRING; [96666] PEARL, SAN ANDRES, NORTH	11,200	11,200	5/26/2017	6/27/2000
30-025-25804	SCHARB COM #001	Oil	Plugged (site released)	READ & STEVENS INC	32.67335	-103.49461	[55610] SCHARB, BONE SPRING	10,220	10,220	1/31/2022	1/20/1978
30-025-21149	REDDY GULF STATE #001	Oil	Plugged (site released)	YATES ENERGY CORP	32.66613	-103.5032	[50450] QUAIL, QUEEN	10,950	10,950	2/10/2004	-
30-025-29568	REDDY GULF STATE #003	Oil	Active	YATES ENERGY CORP	32.66341	-103.50427	[50445] QUAIL, GRAYBURG; [50450] QUAIL, QUEEN	5,950	5,950	-	-
30-025-20878	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.67701	-103.48604	[55610] SCHARB, BONE SPRING	0	10,310		
30-025-28835	SCHARB 9 #005	Oil	Plugged (site released)	DALLAS PRODUCTION	32.66967	-103.46818	[55610] SCHARB, BONE SPRING	9,900	9,900	7/26/1996	9/7/1984
30-025-22521	GUY HOOPER COM #001	Oil	Plugged (site released)	READ & STEVENS INC	32.67337	-103.49895	[55610] SCHARB, BONE SPRING	0	10,223	2/8/2022	4/12/1968
30-025-28616	PRE-ONGARD WELL #002	Oil	Cancelled	PRE-ONGARD WELL OPERATOR	32.65924	-103.46448		0	0	-	-
30-025-45649	BELCHER 19 35 9 STATE #001C	Oil	Cancelled	Catena Resources Operating, LLC	32.66731	-103.4663	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-23093	HOOPER B #001	Oil	Plugged (site released)	READ & STEVENS INC	32.67014	-103.50278	[50450] QUAIL, QUEEN	99,999	10,235	8/19/1992	-
30-025-28589	PRE-ONGARD WELL #004	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.66296	-103.46452	[55610] SCHARB, BONE SPRING	0	10,940		
30-025-45647	CABLE 19 35 16 STATE #001C	Oil	Cancelled	Catena Resources Operating, LLC	32.66731	-103.46598	[55650] SCHARB, WOLFCAMP, SOUTHEAST	0	0	-	-
30-025-27784	PRE-ONGARD WELL #001	Oil	Cancelled	PRE-ONGARD WELL OPERATOR	32.67698	-103.47744		0	0	-	-
30-025-28158	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.66603	-103.46453	[55610] SCHARB, BONE SPRING	0	9,900		
30-025-31219	JFG 7 FEE #001	Oil	Plugged (site released)	HARVEY E YATES CO	32.67704	-103.49462	[55610] SCHARB, BONE SPRING	99,999	10,209	2/21/1992	5/29/1991
30-025-35263	CHARLES S ALVES #005	Oil	Plugged (site released)	MACK ENERGY CORP	32.67775	-103.49377	[55610] SCHARB, BONE SPRING	10,305	10,305	3/26/2002	12/19/2000
30-025-28378	SCHARB 9 #003	Oil	Plugged (site released)	DALLAS PRODUCTION	32.67371	-103.46883	[55610] SCHARB, BONE SPRING	9,920	9,920	7/22/1996	10/3/1983
30-025-41987	SUPER COBRA STATE COM #001H	Oil	Active	MATADOR PRODUCTION COMPANY	32.65371	-103.50748	[55610] SCHARB, BONE SPRING	15,298	10,738	-	11/4/2014
30-025-42544	SUPER COBRA STATE COM #002C	Oil	Cancelled	COG OPERATING LLC	32.65372	-103.50759	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-27988	SNYDER RANCHES #001	Oil	Plugged (site released)	ELK OIL CO	32.67698	-103.47312	[55640] SCHARB, WOLFCAMP	10,750	10,750	4/23/2003	-
30-025-03168	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.64054	-103.49021		0	5,185		
30-025-29137	ELKAN #004	Oil	Plugged (site released)	ELK OIL CO	32.66928	-103.46407	[55610] SCHARB, BONE SPRING	0	10,000		

30-025-38898	GO STATE #002	Oil	Active	PRIDE ENERGY COMPANY	32.66621	-103.50855	[50445] QUAIL, GRAYBURG	5,800	5,800	-	11/9/2008
30-025-02393	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.65138	-103.50748		0	6,200		
30-025-28563	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.68064	-103.48605		0	11,015		
30-025-28207	GO STATE #001	Oil	New	PRIDE ENERGY COMPANY	32.66644	-103.50857	[50450] QUAIL, QUEEN	5,800	5,800	-	5/6/1983
30-025-20234	ORA JACKSON A #002	Oil	Plugged (site released)	BIG 6 DRILLING CO	32.68063	-103.48176	[55610] SCHARB, BONE SPRING	0	10,255		
30-025-03171	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.63961	-103.48056		0	5,100		
30-025-20145	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.68065	-103.49033	[55610] SCHARB, BONE SPRING	0	10,225		
30-025-28484	LEA UA STATE #001	Oil	Plugged (site released)	MARKS AND GARNER PRODUCTION LTD CO	32.65898	-103.46048	[55650] SCHARB, WOLFCAMP, SOUTHEAST	10,864	10,864	7/1/2009	11/17/1983
30-025-03170	WEST PEARL QUEEN UNIT #101	Oil	Plugged (site released)	XERIC OIL & GAS CORP	32.6396	-103.47842	[49780] PEARL, QUEEN	5,051	5,051	9/8/2003	-
30-025-41714	TOMCAT FEE #001H	Oil	Active	MATADOR PRODUCTION COMPANY	32.68143	-103.48572	[55610] SCHARB, BONE SPRING	15,160	10,794	-	7/30/2014
30-025-28848	SCHARB 8 #002	Oil	Plugged (site released)	DALLAS PRODUCTION	32.68062	-103.47807	[55610] SCHARB, BONE SPRING	10,200	10,200	8/1/1996	9/18/1984
30-025-28323	PRE-ONGARD WELL #003	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.66282	-103.46018	[55610] SCHARB, BONE SPRING	0	9,800		
30-025-50241	SANTA VACA 19 18 B2PA FEE #001H	Oil	New	MEWBOURNE OIL CO	32.6393	-103.49217	[55610] SCHARB, BONE SPRING	0	0	-	7/3/2022
30-025-50326	SANTA VACA 19 18 B3PA FEE #001H	Oil	New	MEWBOURNE OIL CO	32.6393	-103.49226	[49553] PALMILLO, BONE SPRING, EAST	0	0	-	8/5/2022
30-025-46802	HOLSTEIN 19 18 B3PA FEE #001C	Oil	Cancelled	MEWBOURNE OIL CO	32.6393	-103.49226	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-50324	SANTA VACA 19 18 B1OB FEE #001H	Oil	New	MEWBOURNE OIL CO	32.6393	-103.49233	[49553] PALMILLO, BONE SPRING, EAST	0	0	-	8/25/2022
30-025-46801	HOLSTEIN 19 18 B3OB FEE #001C	Oil	Never Drilled	MEWBOURNE OIL CO	32.6393	-103.49236	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-50325	SANTA VACA 19 18 B2OB FEE #001H	Oil	New	MEWBOURNE OIL CO	32.6393	-103.49239	[55610] SCHARB, BONE SPRING	0	0	-	9/19/2022
30-025-50242	SANTA VACA 19 18 B3OB FEE #001H	Oil	New	MEWBOURNE OIL CO	32.6393	-103.49246	[55610] SCHARB, BONE SPRING	0	0	-	10/21/2022
30-025-46714	FOXTAIL 193505 STATE COM #001C	Oil	Cancelled	Catena Resources Operating, LLC	32.68145	-103.48058	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-30182	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.64397	-103.50288		0	60		
30-025-25840	CHARLES S ALVES #004	Oil	Plugged (site released)	MACK ENERGY CORP	32.68067	-103.49404	[55610] SCHARB, BONE SPRING	10,230	10,230	3/29/2002	3/3/1978
30-025-20531	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.68067	-103.49463	[55610] SCHARB, BONE SPRING	0	10,206		
30-025-28241	PRE-ONGARD WELL #002	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.66658	-103.46018	[55610] SCHARB, BONE SPRING	0	9,795		
30-025-27766	ELKAN #001	Oil	Plugged (site released)	ELK OIL CO	32.67329	-103.46389	[55610] SCHARB, BONE SPRING	10,421	10,421	6/26/1996	3/27/1982
30-025-24413	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.64775	-103.5078		0	10,350		

30-025-53241	FOXTAIL STATE COM #501H	Oil	New	Franklin Mountain Energy 3, LLC	32.68258	-103.48229	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-53242	FOXTAIL STATE COM #502H	Oil	New	Franklin Mountain Energy 3, LLC	32.68258	-103.4822	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-53237	FOXTAIL STATE COM #301H	Oil	New	Franklin Mountain Energy 3, LLC	32.68258	-103.4821	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-53245	FOXTAIL STATE COM #601H	Oil	New	Franklin Mountain Energy 3, LLC	32.68258	-103.482	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-52341	HEFEWEIZEN STATE COM #302H	Oil	Active	MARATHON OIL PERMIAN LLC	32.63806	-103.49218	[37570] LEA, BONE SPRING	20,603	9,714	-	1/3/2024
30-025-22791	MARATHON STATE COM #001	Oil	Plugged (site released)	READ & STEVENS INC	32.67708	-103.5032	[55610] SCHARB, BONE SPRING	10,200	10,200	6/7/1993	-
30-025-53249	FOXTAIL STATE COM #801H	Oil	New	Franklin Mountain Energy 3, LLC	32.68258	-103.4819	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-52328	HEFEWEIZEN STATE COM #301H	Oil	Active	MARATHON OIL PERMIAN LLC	32.63806	-103.49227	[97983] WC-025 G-08 S203506D, BONE SPRING	20,779	9,770	-	1/1/2024
30-025-53247	FOXTAIL STATE COM #701H	Oil	New	Franklin Mountain Energy 3, LLC	32.68258	-103.48181	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-53248	FOXTAIL STATE COM #702H	Oil	New	Franklin Mountain Energy 3, LLC	32.68258	-103.48171	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-52327	GONG WORTHY STATE COM #601H	Oil	Active	MARATHON OIL PERMIAN LLC	32.63806	-103.49237	[55650] SCHARB, WOLFCAMP, SOUTHEAST	22,501	10,900	-	12/31/2023
30-025-53238	FOXTAIL STATE COM #302H	Oil	New	Franklin Mountain Energy 3, LLC	32.68258	-103.48161	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-22984	BUSH STATE #001	Oil	Plugged (site released)	MANZANO OIL CORP	32.67315	-103.50749	[55610] SCHARB, BONE SPRING	10,290	10,290	8/10/1995	2/1/1969
30-025-53250	FOXTAIL STATE COM #803H	Oil	New	Franklin Mountain Energy 3, LLC	32.68113	-103.47473	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-41989	SUPER COBRA STATE COM #002C	Oil	Cancelled	COG OPERATING LLC	32.6537	-103.51147	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-53251	FOXTAIL STATE COM #804H	Oil	New	Franklin Mountain Energy 3, LLC	32.68113	-103.47463	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-50168	FOXTAIL E2 05 32 W1 STATE COM #001H	Oil	New	Franklin Mountain Energy 3, LLC	32.68113	-103.47457	[55640] SCHARB, WOLFCAMP	0	0	-	7/25/2022
30-025-53244	FOXTAIL STATE COM #504H	Oil	New	Franklin Mountain Energy 3, LLC	32.68113	-103.47454	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-29287	MCINTOSH #001	Oil	Plugged (site released)	DOMINION OKLAHOMA TEXAS EXPL. & PROD INC	32.65145	-103.46019	[55650] SCHARB, WOLFCAMP, SOUTHEAST	11,500	11,500	10/23/2002	6/15/1985
30-025-50169	FOXTAIL E2 05 32 W1 STATE COM #002H	Oil	New	Franklin Mountain Energy 3, LLC	32.68113	-103.4745	[55640] SCHARB, WOLFCAMP	0	0	-	7/23/2022
30-025-53239	FOXTAIL STATE COM #303H	Oil	New	Franklin Mountain Energy 3, LLC	32.68113	-103.47444	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-27270	SCHARB 8 #001	Oil	Plugged (site released)	DALLAS PRODUCTION	32.68061	-103.47313	[55610] SCHARB, BONE SPRING	10,800	10,800	7/9/1996	3/7/1981
30-025-53246	FOXTAIL STATE COM #602H	Oil	New	Franklin Mountain Energy 3, LLC	32.68259	-103.47871	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-53410	FOXTAIL STATE COM #802H	Oil	New	Franklin Mountain Energy 3, LLC	32.68259	-103.47861	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-53243	FOXTAIL STATE COM #503H	Oil	New	Franklin Mountain Energy 3, LLC	32.68259	-103.47852	[55610] SCHARB, BONE SPRING	0	0	-	-

30-025-27915	ELKAN #002	Oil	Plugged (site released)	ELK OIL CO	32.66966	-103.46018	[55610] SCHARB, BONE SPRING	0	10,900		
30-025-53281	RAMBO FEE COM #302H	Oil	New	Franklin Mountain Energy 3, LLC	32.68286	-103.47881	[55610] SCHARB, BONE	0	0	-	-
30-025-53286	RAMBO STATE COM #503H	Oil	New	Franklin Mountain Energy 3, LLC	32.68286	-103.47871	[55610] SCHARB, BONE	0	0	-	-
30-025-53283	RAMBO FEE COM #802H	Oil	New	Franklin Mountain Energy 3, LLC	32.68286	-103.47861	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-53282	RAMBO FEE COM #602H	Oil	New	Franklin Mountain Energy 3, LLC	32.68286	-103.47852	[55610] SCHARB, BONE	0	0	-	-
30-025-24813	CHARLES S ALVES #003	Oil	Plugged (site released)	MACK ENERGY CORP	32.68073	-103.49895	[55610] SCHARB, BONE SPRING	10,195	10,195	4/30/2002	8/8/1974
30-025-20703	PRE-ONGARD WELL #002	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.68107	-103.49844	[55610] SCHARB, BONE SPRING	0	10,205		
30-025-03169	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.64154	-103.50318		0	10,367		
30-025-45648	CABLE 19 35 16 STATE #002C	Oil	Cancelled	Catena Resources Operating, LLC	32.66724	-103.4585	SPRING; [55610] SCHARB, BONE SPRING	0	0	-	-
30-025-53240	FOXTAIL STATE COM #304H	Oil	New	Franklin Mountain Energy 3, LLC	32.68113	-103.47217	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-50487	SANTA VACA 19 18 B1NC STATE COM #001H	Oil	New	MEWBOURNE OIL CO	32.63931	-103.4998	[55610] SCHARB, BONE SPRING	0	0	-	10/29/2022
30-025-03253	WEST PEARL QUEEN UNIT #102	Oil	Plugged (site released)	GULF OIL CORP	32.63599	-103.48593	[49820] PEARL, SAN ANDRES, WEST	0	5,128		
30-025-50368	SANTA VACA 19 18 B1MD STATE COM #001H	Oil	New	MEWBOURNE OIL CO	32.63931	-103.49986	[55610] SCHARB, BONE SPRING	0	0	-	9/29/2022
30-025-03176	WEST PEARL QUEEN UNIT #100	Oil	Plugged (site released)	GULF OIL CORP	32.6405	-103.46877	[49780] PEARL, QUEEN	0	4,990		
30-025-20394	ORA JACKSON A #001	Salt Water Disposal	Plugged (site released)	BIG 6 DRILLING CO	32.68427	-103.48605	[96095] SWD, BONE SPRING	10,166	10,166	8/1/1989	10/4/1963
30-025-45631	ANCHOR 193528 STATE COM #001C	Oil	Cancelled	Catena Resources Operating, LLC	32.63983	-103.46955	[96989] KLEIN RANCH, WOLFCAMP	0	0	-	-
30-025-45362	CHAROLAIS 28 21 B2OB STATE COM #001C	Oil	Cancelled	MEWBOURNE OIL CO	32.65274	-103.45804	[49680] PEARL, BONE SPRING	0	0	-	-
30-025-03247	WEST PEARL QUEEN UNIT #103	Oil	Plugged (site released)	XERIC OIL & GAS CORP	32.63598	-103.48164	[49780] PEARL, QUEEN	5,039	5,039	3/13/2013	-
30-025-45361	CHAROLAIS 28 21 B2PA STATE COM #001C	Oil	Cancelled	MEWBOURNE OIL CO	32.65274	-103.45794	[49680] PEARL, BONE SPRING	0	0	-	-
30-025-49154	SANTA VACA 19 18 B2NC STATE COM #001H	Oil	Active	MEWBOURNE OIL CO	32.63931	-103.50051	[55610] SCHARB, BONE SPRING	20,836	10,206	-	10/22/2021
30-025-39205	KLEIN 16 STATE #001	Oil	Active	Franklin Mountain Energy 3, LLC	32.65455	-103.45733	[55650] SCHARB, WOLFCAMP, SOUTHEAST	11,019	11,019	-	7/28/2009
30-025-49155	SANTA VACA 19 18 B3NC STATE COM #001H	Oil	New	MEWBOURNE OIL CO	32.63931	-103.50061	[55610] SCHARB, BONE SPRING	0	0	-	10/7/2021
30-025-28195	SCHARB 9 #002	Oil	Plugged (not released)	BXP Operating, LLC	32.67695	-103.46454	[55610] SCHARB, BONE SPRING	9,850	9,850	2/7/2023	4/28/1983
30-025-46804	SANTA VACA 19 18 B2MD STATE COM #001H	Oil	New	MEWBOURNE OIL CO	32.63931	-103.50071	[55610] SCHARB, BONE SPRING	0	0	-	9/22/2021
30-025-28662	PRE-ONGARD WELL #005	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.66292	-103.45667	[55650] SCHARB, WOLFCAMP, SOUTHEAST	0	10,920		
30-025-46803	SANTA VACA 19 18 B3MD STATE COM #001H	Oil	New	MEWBOURNE OIL CO	32.63931	-103.5008	[55610] SCHARB, BONE SPRING	0	0	-	8/23/2021
30-025-40409	AIRSTRIP 6 STATE COM #003C	Oil	Cancelled	COG OPERATING LLC	32.68428	-103.48985	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-53284	RAMBO STATE COM #303H	Oil	New	Franklin Mountain Energy 3, LLC	32.683	-103.47515	[55610] SCHARB, BONE	0	0	-	-

30-025-53285	RAMBO STATE COM #304H	Oil	New	Franklin Mountain Energy 3, LLC	32.683	-103.47505	[55610] SCHARB, BONE	0	0	-	-
30-025-53287	RAMBO STATE COM #504H	Oil	New	Franklin Mountain Energy 3, LLC	32.683	-103.47495	[55610] SCHARB, BONE	0	0	-	-
30-025-53288	RAMBO STATE COM #803H	Oil	New	Franklin Mountain Energy 3, LLC	32.683	-103.47486	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-53289	RAMBO STATE COM #804H	Oil	New	Franklin Mountain Energy 3, LLC	32.683	-103.47476	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-28079	ORA JACKSON #002	Oil	Plugged (site released)	O'NEIL PROPERTIES LTD	32.68464	-103.48222	[55610] SCHARB, BONE SPRING	10,171	10,171	3/13/1992	12/17/1982
30-025-48907	GO STATE COM #204H	Oil	New	PRIDE ENERGY COMPANY	32.66666	-103.5136	[55610] SCHARB, BONE	0	0	-	6/15/2021
30-025-48905	GO STATE COM #102H	Oil	New	PRIDE ENERGY COMPANY	32.66666	-103.51367	[55610] SCHARB, BONE	0	0	-	6/18/2021
30-025-49535	RAMBO E2 08 17 STATE COM #001H	Oil	New	Franklin Mountain Energy 3, LLC	32.68327	-103.47498	[55640] SCHARB, WOLFCAMP	0	0	-	11/17/2021
30-025-48909	GO STATE COM #306H	Oil	New	PRIDE ENERGY COMPANY	32.66666	-103.51373	[55610] SCHARB, BONE	0	0	-	6/21/2021
30-025-49536	RAMBO E2 08 17 STATE COM #002H	Oil	New	Franklin Mountain Energy 3, LLC	32.68327	-103.47492	[55640] SCHARB, WOLFCAMP	0	0	-	11/15/2021
30-025-27377	SCHARB 9 #001	Oil	Plugged (site released)	DALLAS PRODUCTION	32.68059	-103.46883	[55610] SCHARB, BONE SPRING	10,841	10,841	8/9/1996	7/20/1981
30-025-48906	GO STATE COM #203H	Oil	New	PRIDE ENERGY COMPANY	32.66666	-103.5138	[55610] SCHARB, BONE	0	0	-	6/24/2021
30-025-48904	GO STATE COM #101H	Oil	New	PRIDE ENERGY COMPANY	32.66666	-103.51386	[55610] SCHARB, BONE	0	0	-	6/27/2021
30-025-48908	GO STATE COM #305H	Oil	New	PRIDE ENERGY COMPANY	32.66665	-103.51393	[55610] SCHARB, BONE	0	0	-	6/30/2021
30-025-03246	WEST PEARL QUEEN UNIT #104	Injection	Plugged (site released)	XERIC OIL & GAS CORP	32.63625	-103.47628	[49780] PEARL, QUEEN	99,999	99,999	7/27/2000	-
30-025-34709	TORO 21 #002	Oil	Cancelled	DOMINION OKLAHOMA TEXAS EXPL. & PROD INC	32.64691	-103.46022		0	0	-	-
30-025-28370	ELKAN #003	Oil	Plugged (site released)	ELK OIL CO	32.67329	-103.46019	[55610] SCHARB, BONE SPRING	11,000	11,000	6/28/1996	9/15/1983
30-025-20305	SMITH 5 #002	Oil	Plugged (site released)	SOUTHLAND ROYALTY CO	32.68425	-103.47742	[55610] SCHARB, BONE SPRING	10,179	10,179	11/18/1993	4/1/1984
30-025-21171	MAGNUM STATE #001	Oil	Plugged (site released)	PRIMERO OPERATING INC	32.68402	-103.49431		10,207	10,207	11/7/1995	3/7/1964
30-025-03255	WEST PEARL QUEEN UNIT #105	Oil	Plugged (site released)	GULF OIL CORP	32.63687	-103.47355	[49780] PEARL, QUEEN	0	5,117		
30-025-35788	TORO 21 #002	Oil	Active	North Fork Operating, LP	32.64504	-103.46126	[49680] PEARL, BONE SPRING; [55650] SCHARB, WOLFCAMP, SOUTHEAST	11,200	11,200	-	12/26/2001
30-025-42502	HIBISCUS 08 19 35 RN STATE COM #124H	Oil	Active	MATADOR PRODUCTION COMPANY	32.68296	-103.47213	[55610] SCHARB, BONE SPRING	15,187	10,185	-	10/7/2015
30-025-03157	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.68071	-103.50319		0	6,510		
30-025-35613	WINDMILL STATE #001	Oil	Cancelled	MACK ENERGY CORP	32.6834	-103.49779		0	0	-	-
30-025-03175	EAST PEARL QUEEN UNIT #011	Injection	Plugged (not released)	XERIC OIL & GAS CORP	32.6405	-103.46449	[49780] PEARL, QUEEN	4,960	4,960	10/8/2013	3/22/1958
30-025-27109	SMITH 5 #001	Oil	Plugged (site released)	DALLAS PRODUCTION	32.68451	-103.47314	[55610] SCHARB, BONE SPRING	10,806	10,806	6/25/1996	1/9/1981
30-025-40852	KLEIN 16 STATE #002H	Oil	Active	Franklin Mountain Energy 3, LLC	32.66603	-103.45456	[55610] SCHARB, BONE	13,940	9,517	-	12/4/2012
30-025-53165	ALPHA STATE COM #501H	Oil	New	Franklin Mountain Energy 3, LLC	32.68152	-103.46625	[55610] SCHARB, BONE	0	0	-	-
30-025-53167	ALPHA STATE COM #701H	Oil	New	Franklin Mountain Energy 3, LLC	32.68152	-103.46615	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-03244	WEST PEARL QUEEN UNIT #112	Injection	Plugged (site released)	XERIC OIL & GAS CORP	32.63326	-103.48166	[49780] PEARL, QUEEN	5,030	5,030	4/17/2014	-
30-025-46139	CABLE 19 35 9 STATE COM #002C	Oil	Cancelled	Catena Resources Operating, LLC	32.68229	-103.46723	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-28656	SCHARB 9 #004	Oil	Plugged (site released)	DALLAS PRODUCTION	32.68029	-103.4642	[55610] SCHARB, BONE SPRING	9,900	9,900	7/16/1996	4/6/1984

30-025-53166	ALPHA STATE COM #601H	Oil	New	Franklin Mountain Energy 3, LLC	32.68152	-103.46596	[55610] SCHARB, BONE	0	0	-	-
30-025-53168	ALPHA STATE COM #801H	Oil	New	Franklin Mountain Energy 3, LLC	32.68152	-103.46586	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-03233	WEST PEARL QUEEN UNIT #106	Oil	Plugged (site released)	GULF OIL CORP	32.63687	-103.46877	[49780] PEARL, QUEEN	0	5,000		
30-025-53162	CABLE STATE COM #501H	Oil	New	Franklin Mountain Energy 3, LLC	32.68179	-103.4662	[55610] SCHARB, BONE	0	0	-	-
30-025-53163	CABLE STATE COM #502H	Oil	New	Franklin Mountain Energy 3, LLC	32.68179	-103.46611	[55610] SCHARB, BONE	0	0	-	-
30-025-28157	GOVERNMENT 9 #001	Oil	Plugged (site released)	LYNX PETROLEUM CONSULTANTS INC	32.67694	-103.46019	[55610] SCHARB, BONE SPRING	10,000	10,000	8/23/1996	2/21/1983
30-025-53089	CABLE STATE COM #301H	Oil	New	Franklin Mountain Energy 3, LLC	32.68179	-103.46601	[55610] SCHARB, BONE	0	0	-	-
30-025-50763	ALPHA W2W2 04 33 W1 STATE COM #001H	Oil	Cancelled	Franklin Mountain Energy 3, LLC	32.68159	-103.46569	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-41858	TEAL 12 STATE COM #002H	Oil	Active	CIMAREX ENERGY CO.	32.66858	-103.51603	[55610] SCHARB, BONE	15,292	10,750	-	8/7/2014
30-025-50758	ALPHA E2W2 04 33 W1 STATE COM #001H	Oil	Cancelled	Franklin Mountain Energy 3, LLC	32.68159	-103.46563	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-53090	CABLE STATE COM #801H	Oil	New	Franklin Mountain Energy 3, LLC	32.68179	-103.46591	WOLFCAMP; [55650] SCHARB, WOLFCAMP, SOUTHEAST	0	0	-	-
30-025-46140	CABLE 19 35 9 STATE COM #001H	Oil	Active	Franklin Mountain Energy 3, LLC	32.68294	-103.46756	[55640] SCHARB, WOLFCAMP	21,383	11,072	-	7/16/2019
30-025-03245	WEST PEARL QUEEN UNIT #111	Oil	Plugged (site released)	XERIC OIL & GAS CORP	32.63325	-103.47736	[49780] PEARL, QUEEN	5,028	5,028	9/8/2003	-
30-025-23634	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.6808	-103.50703		0	10,257		
30-025-03252	WEST PEARL QUEEN UNIT #113	Oil	Plugged (site released)	GULF OIL CORP	32.63236	-103.48488	[49780] PEARL, QUEEN	0	5,126		
30-025-27858	ORA JACKSON #001	Oil	Plugged (site released)	O'NEIL PROPERTIES LTD	32.6879	-103.48607	[55610] SCHARB, BONE SPRING	10,902	10,902	1/19/1996	7/4/1982
30-025-03259	WEST PEARL QUEEN UNIT #114	Injection	Plugged (site released)	PYRAMID ENERGY INC	32.63237	-103.48917	[49780] PEARL, QUEEN	4,805	4,805	7/28/1994	-
30-025-26891	SCHARB 4 #001	Oil	Plugged (site released)	LINN OPERATING, LLC.	32.68422	-103.46884	[55610] SCHARB, BONE SPRING	10,706	10,706	10/17/2012	7/18/1980
30-025-20296	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.68789	-103.48177	[55610] SCHARB, BONE SPRING	0	10,200		
30-025-34492	TORO 21 STATE COM #001Y	Oil	Plugged (not released)	WPX Energy Permian, LLC	32.64692	-103.45615	WOLFCAMP, SOUTHEAST; [96874] WC G-10 S193521H, DEVONIAN	13,960	13,960	8/31/2020	8/27/1998
30-025-52724	MEAT PIE 9 STATE COM #501H	Oil	New	MARSHALL & WINSTON INC	32.68187	-103.46461	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-40875	AIRCOBRA 12 STATE #001H	Oil	Active	MATADOR PRODUCTION COMPANY	32.68132	-103.507	[55610] SCHARB, BONE SPRING	15,130	10,755	-	4/28/2013
30-025-52723	MEAT PIE 9 STATE COM #301H	Oil	New	MARSHALL & WINSTON INC	32.68187	-103.46455	[55610] SCHARB, BONE SPRING	0	0	-	-
30-025-52897	MEAT PIE 9 STATE COM #701H	Oil	New	MARSHALL & WINSTON INC	32.68187	-103.46448	WOLFCAMP; [55650] SCHARB, WOLFCAMP, SOUTHEAST	0	0	-	-
30-025-20144	GENE DALMONT #001	Oil	Plugged (site released)	LYNX PETROLEUM CONSULTANTS INC	32.68791	-103.49036	[55610] SCHARB, BONE SPRING	10,050	10,050	8/3/1994	8/6/1963
30-025-34422	TORO 21 STATE COM #001	Gas	Plugged (site released)	DOMINION OKLAHOMA TEXAS EXPL. & PROD INC	32.64692	-103.4559	[96838] DRY AND ABANDONED	4,276	4,276	8/21/1998	8/3/1998
30-025-28191	GOVERNMENT 9 #002	Oil	Plugged (site released)	LYNX PETROLEUM CONSULTANTS INC	32.67329	-103.45589	[55610] SCHARB, BONE SPRING	9,860	9,860	6/9/1992	-

30-025-53086	ALPHA STATE COM #301H	Oil	New	Franklin Mountain Energy 3, LLC	32.68151	-103.46362	[55610] SCHARB, BONE	0	0	-	-
30-025-53087	ALPHA STATE COM #302H	Oil	New	Franklin Mountain Energy 3, LLC	32.68151	-103.46352	[55610] SCHARB, BONE	0	0	-	-
30-025-53088	ALPHA STATE COM #702H	Oil	New	Franklin Mountain Energy 3, LLC	32.68151	-103.46342	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-53210	ALPHA STATE COM #502H	Oil	New	Franklin Mountain Energy 3, LLC	32.68151	-103.46333	[55610] SCHARB, BONE	0	0	-	-
30-025-53211	ALPHA STATE COM #602H	Oil	New	Franklin Mountain Energy 3, LLC	32.68151	-103.46323	[55610] SCHARB, BONE	0	0	-	-
30-025-28922	ORA JACKSON #003	Oil	Plugged (site released)	O'NEIL PROPERTIES LTD	32.68842	-103.48161	[55610] SCHARB, BONE SPRING	10,183	10,183	4/3/1991	-
30-025-53091	CABLE STATE COM #802H	Oil	New	Franklin Mountain Energy 3, LLC	32.68179	-103.46352	WOLFCAMP; [55650] SCHARB, WOLFCAMP, SOUTHEAST	0	0	-	-
30-025-53169	ALPHA STATE COM #802H	Oil	New	Franklin Mountain Energy 3, LLC	32.68151	-103.46313	[55640] SCHARB, WOLFCAMP	0	0	-	-
30-025-37842	AIRSTRIP 6 STATE COM #001	Oil	Active	MATADOR PRODUCTION COMPANY	32.68433	-103.50318	[55610] SCHARB, BONE SPRING	11,450	11,450	-	5/25/2006
30-025-28713	MCINTOSH #001	Oil	Plugged (site released)	MANZANO OIL CORP	32.65547	-103.45206	[49780] PEARL, QUEEN	10,950	10,950	3/8/1995	4/30/1984
30-025-53161	CABLE STATE COM #302H	Oil	New	Franklin Mountain Energy 3, LLC	32.68179	-103.46342	[55610] SCHARB, BONE	0	0	-	-
30-025-28840	PRE-ONGARD WELL #005	Oil	Cancelled	PRE-ONGARD WELL OPERATOR	32.68787	-103.47747		0	0	-	-
30-025-53164	CABLE STATE COM #602H	Oil	New	Franklin Mountain Energy 3, LLC	32.68179	-103.46333	[55610] SCHARB, BONE	0	0	-	-
30-025-42577	PERLA NEGRA FEDERAL COM #004H	Oil	Active	XTO ENERGY, INC	32.63778	-103.50676	[37570] LEA, BONE SPRING	16,064	10,814	-	7/12/2015
30-025-43813	PERLA NEGRA FEDERAL COM #008H	Oil	Cancelled	XTO ENERGY, INC	32.63779	-103.50693	[37570] LEA, BONE SPRING	0	0	-	-
30-025-03254	WEST PEARL QUEEN UNIT #110	Injection	Plugged (site released)	XERIC OIL & GAS CORP	32.63324	-103.47307	[49780] PEARL, QUEEN	4,920	4,920	5/13/2014	-
30-025-03174	EAST PEARL QUEEN UNIT #012	Oil	Plugged (not released)	XERIC OIL & GAS CORP	32.64051	-103.46019	[49780] PEARL, QUEEN	4,950	4,950	10/3/2013	10/2/1959
30-025-20322	PRE-ONGARD WELL #001	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	32.68793	-103.49464	[55610] SCHARB, BONE SPRING	0	10,214		

Attachment A

All relevant plugging documents for wells that penetrate the Siluro-Devonian interval within two miles of the proposed White Russian AGI #1 well

Toro 21 State Com #001 (30-025-34492)

Submit One Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-025-34492

5. Indicate Type of Lease STATE ■ FEE ☐

6. State Oil & Gas Lease No. 303293

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: TORO 21 STATE COM

1. Type of Well: Oil Well ■ Gas Well ☐ Other

8. Well Number 001Y

2. Name of Operator: WPX Energy Permian, LLC

9. OGRID Number 246289

3. Address of Operator: 3500 ONE WILLIAMS CENTER MD 35 TULSA, OK 74172

10. Pool name or Wildcat: SCHARB; WOLFCAMP, SOUTHEAST

4. Well Location
Unit Letter H : 2310 feet from the NORTH line and 735 feet from the EAST line
Section 21 Township 19S Range 35E NMPM LEA County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
3,752' GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	■
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER:	☐		

PNR

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

08/24/20 MIRU plugging equipment. Pressure tested tbg. To 1500 psi. Bled off pressure. POH with rods, rods parted.
08/25/20 Stripped rods and tbg out of hole.
08/26/20 RIH w/ 7" CIBP and set @ 10560'. Circulate 400 bbls MLF. Pressured up on csg to 600 psi. Bled of pressure off. Spotted 25 sx C;ass H @ 10560-10437. Spotted 35 sx class H xz@ 7790-7575. POH to 5100'.
08/27/20 Perf'd @ 5050'.Pressured up to 700 psi. Bled pressure off. Spotte 45 sx class C cement @ 5100-4823. POH to 3100. WOC. Tagged plug @ 4845'. Perf'd & Sqz'd 65 sx class C @ 3250-3050. WOC.
08/28/20 Tagged plug @ 3000'. Perf'd & Sqz'd 65 sx @ 720-520. WOC. Tagged plug @ 495'. Perf'd & Sqz'd 50 sx @ 150 to surface. RDMO.
08/31/20 Moved in backhoe and welder. Dug out cellar, Cut off wellhead. Welded on "Below Ground Dry Hole Marker". Removed anchors. Cleaned location and moved off.

Spud Date: 08/27/1998 Rig Release Date: 02/28/1999

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Caitlin O'Hair TITLE Regulatory Specialist DATE 09/02/2020

Type or print name Caitlin O'Hair E-mail address: caitlin.ohair@wpxenergy.com PHONE: 539-573-3527

For State Use Only

APPROVED BY: Kerry Fortner TITLE Compliance Officer A DATE 1/21/21
Conditions of Approval (if any):

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 13511

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
WPX ENERGY PERMIAN, LLC	3500 One Williams Center	Tulsa, OK74172	246289	13511	C-103P

OCD Reviewer	Condition
plmartinez	None

Submit 3 Copies to Appropriate District Office

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-103
Revised 1-1-89

WELL API NO. 30-025-34492

5. Indicate Type of Lease STATE ☐ FEE X

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: Toro 21 State Com.

1. Type of Well: OIL WELL ☐ GAS WELL X OTHER

8. Well No. 1Y

2. Name of Operator: LOUIS DREYFUS NATURAL GAS CORP.

9. Pool name or Wildcat: Wildcat Morrow

3. Address of Operator: 14000 Quail Springs Parkway, #600, Oklahoma City, OK 73134

4. Well Location
Unit Letter H : 2310 Feet From The North Line and ~~715~~ 735 Feet From The East Line

Section 21 Township 19S Range 35E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3752'GR

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT
PULL OR ALTER CASING ☐		CASING TEST AND CEMENT JOB ☐	
OTHER: ☐		OTHER: Plug-Back	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Work commenced 1/19/99. Set CIBP @ 13,750'. Tested csg. & CIBP to 3000 psi. Dump baled 40' of cement on plug, new PBTD 13,710'. Perf Lower Morrow f/12,638'-12,648 w/61 shots. Swabbed well. Perf Upper Morrow f/12,606'-12,598' and 12,542'-12,538' w/4 spf. Set 7" CIBP @ 12,628' over Lower Morrow perfs. Dump baled 5' of cement on CIBP. Swabbed well. Acidized Upper Morrow perfs w/3000 gal 10% acetic acid (25% methanol used to dilute), foamed w/7T CO2 & 75 ball sealers. Well shut in for evaluation on 2/4/99.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Terrye D Bryant TITLE Regulatory Technician DATE 2/23/99

TYPE OR PRINT NAME Terrye D. Bryant TELEPHONE NO. (405) 749-5287

(This space for State Use)

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

2A Wildcat Devonian CT 9/20/99

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 B-1:	Map of surface ownership within one mile of AGI #1
Figure B-2:	Map of lessees and active operators within one mile of AGI #1
Table B-1:	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

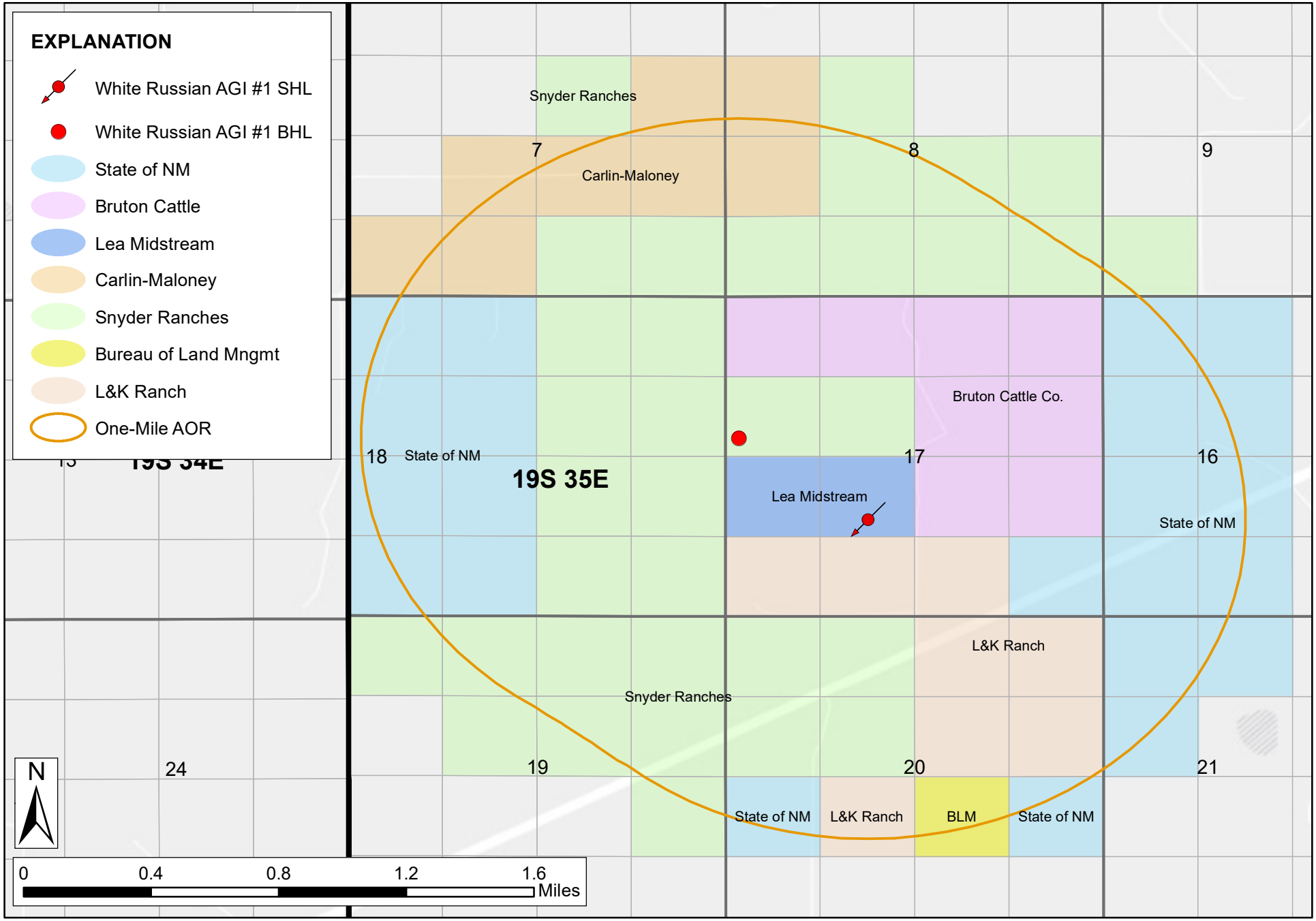


Figure B-1. Surface ownership within one mile of the proposed White Russian AGI #1 well.

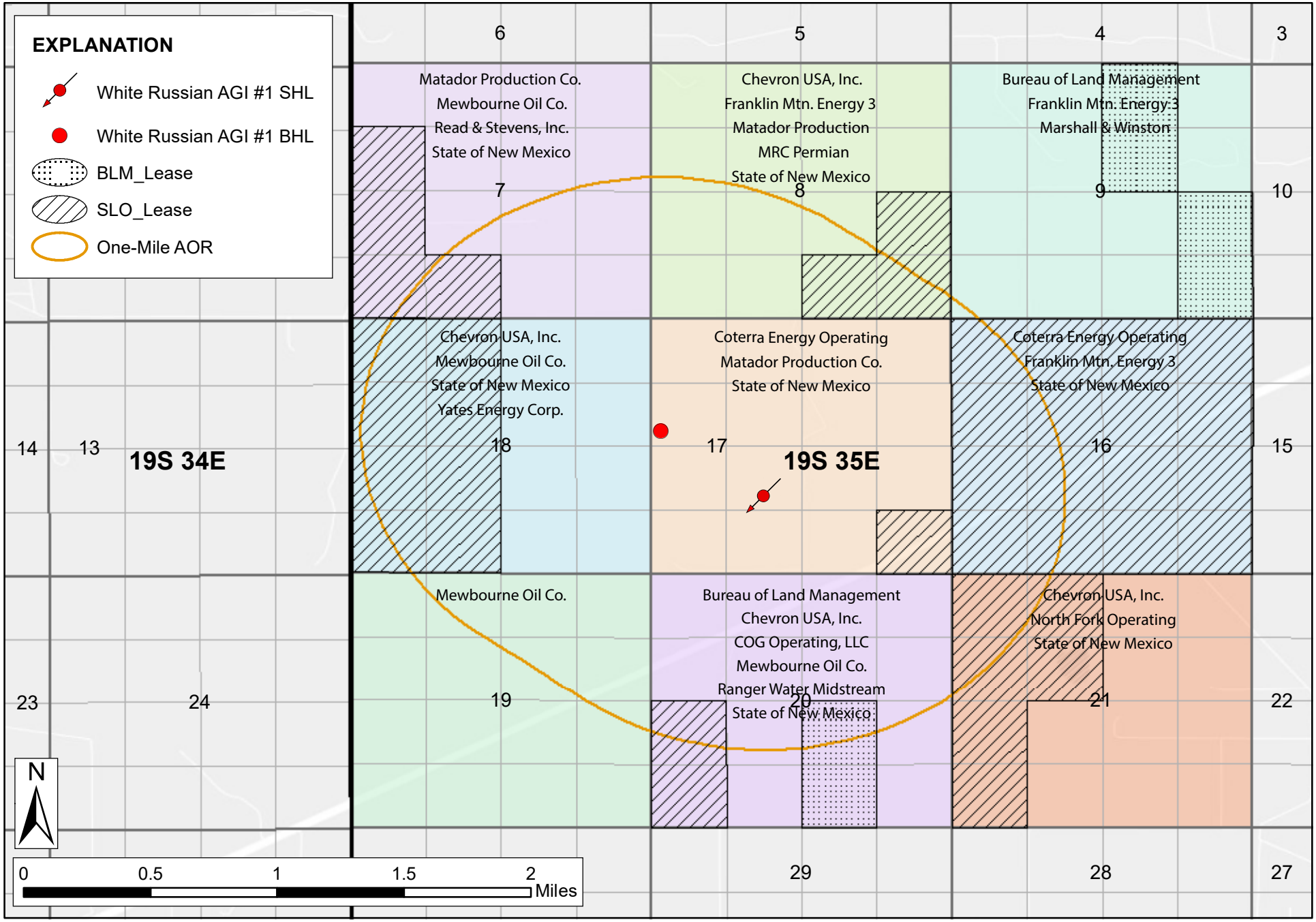


Figure B-2. Lessees, active operators, and mineral ownership within one mile of the proposed White Russian AGI #1 well

TABLE B-1: INTERESTED PARTIES IN THE AREA OF THE PROPOSED AGI WELL

Surface Owners:

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

Snyder Ranches LTD
PO Box 2158
Hobbs, NM 88241

Bureau of Land Management
301 Dinosaur Trail
Santa Fe, NM 87508

Active Operators, Lessees, and Mineral Owners

Bureau of Land Management 301
Dinosaur Trail
Santa Fe, NM 87508

COG Operating, LLC
One Concho Center
600 W Illinois Avenue
Midland, TX 79701

Franklin Mountain Energy 3, LLC
6001 Deuville Blvd., Suite 300N
Midland, TX 79706

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

MRC Permian Company
5400 LBJ Freeway, Suite 1500
Dallas, TX 75240

Ranger Water Midstream, LLC
1008 Southview Circle Center, TX
75935

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

Chevron USA, Inc.
1400 Smith Street
Houston, TX 77002
832-854-1000

Coterra Energy Operating Co.
6001 Deauville Blvd, Suite 300N
Midland, TX 79706

Marshall & Winston
PO Box 50880
Midland, TX 79710

Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241

North Fork Operating
1000 W. Wilshire Boulevard, Suite 311
Nichols Hills, OK 73116

Read & Stevens, Inc.
300 N. Marienfeld St., Suite 1000
Midland, TX 79701

Yates Energy Corporation
PO Box 2323
Roswell, NM 88202

ATTACHMENT 1 – SAMPLE NOTICE LETTER

March XX, 2025

Example Notice Letter
Party to be notified
Address

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RE: LEA MIDSTREAM, LLC PROPOSED WHITE RUSSIAN AGI #1 (CASE NO. XXXXX)

This letter is to advise you that Lea Midstream, LLC (Lea Midstream) 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 White Russian AGI #1, at their gas treatment facility in Lea County, New Mexico. The proposed AGI #1 is intended to be the primary method for disposing of sour gases associated with oil and gas treatment activities at the facility.

The proposed well will be drilled from a surface location of approximately XXX feet from the north line (FSL) and XXX feet from the west line (FWL), with a deviated wellbore and bottom-hole location approximately XXX feet northwest of the surface location in Section 17, Township 19 South, Range 35 East, in Lea County, New Mexico. As proposed, the White Russian AGI #1 well will inject waste carbon dioxide and hydrogen sulfide into the Devonian through Fusselman geologic formations from approximately XXX to XXX feet. The maximum allowable surface pressure will not exceed XXX psig with a maximum daily injection volume of 12.0 million standard cubic feet (MMSCF)

This application (Case Number XXXXX) has been set for hearing before the New Mexico Oil Conservation Commission 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 Lea Midstream'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 Lea Midstream

Enclosure: C-108 Application for Authority to Inject

APPENDIX C

REQUEST TO SAMPLE AND ANALYZE GROUNDWATER FROM EXITING WATER WELL

GEOLEX®
INCORPORATED

David A. White, P.G.

March 19, 2025

Klein Ranch
Attn: Faye Klein
PO Box 1503
Hobbs, NM 88240

VIA CERTIFIED MAIL

RE: WATER WELL (L-09569) STATUS INQUIRY AND REQUEST FOR GROUNDWATER SAMPLE

To Whom it May Concern:

On behalf of Lea Midstream, LLC (Lea Midstream), we (Geolex, Inc.®) are contacting you in the hopes 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 L-09569 and the well has a recorded location within the SE/4 of the SW/4 of Section 17, Township 19 South, Range 35 East. The approximate geographic coordinates are 32.655, -103.4817 (NAD83).

Lea Midstream 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 Class II injection well, the White Russian AGI #1. The proposed well is to be located in the NE/4 of the SW/4 in Section 17 of Township 19 South, Range 35 East.

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 Lea Midstream

P:\24-022 Producers Midstream\C-108 Application\Appendices\Appendix C\GW_Sample_Request.docx

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Sent To: Klein Ranch

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City, State, ZIP+4®: Hobbs, NM 88240

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