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

APPLICATION OF DCP MIDSTREAM, LP FOR AUTHORIZATION TO INJECT ACID GAS INTO THE PROPOSED ZIA AGI #2D WELL, SECTION 19, TOWNSHIP 19 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

CASE NO. 15528

PRE-HEARING STATEMENT

This Pre-hearing Statement is submitted by Holland & Hart LLP as required by Oil Conservation Division Rule 19.15.14.1211.

APPEARANCES OF PARTIES

APPLICANT	ATTORNEY
DCP Midstream, LP 370 17th Street, Suite 2500 Denver, Colorado 80202	Adam G. Rankin Holland & Hart, LLP Post Office Box 2208 Santa Fe, New Mexico 87504 (505) 988-4421 (505) 983-6043 Facsimile agrankin@hollandhart.com

STATEMENT OF CASE

Applicant DCP Midstream, LP seeks an order from the New Mexico Oil Conservation Commission authorizing it to inject carbon dioxide (CO_2) and hydrogen sulfide (H_2S) from the Zia Gas Processing Plant (the "Plant") into its proposed Zia Acid Gas Injection ("AGI") No. 2D well. The proposed Zia AGI No. 2D well will be located 1,900 feet from the South line and 950 feet from the West line of Section 19, Township 19 South, Range 32 East, N.M.P.M., Lea County, New Mexico. The Applicant proposes to inject CO_2 and H_2S (collectively "treated acid gas" or "TAG") for disposal into the Devonian, Upper Silurian, Wristen, and Fussleman Formations, at an approximate depth interval of 13,755 feet to 14,750 feet below the surface and at a maximum allowable surface operating pressure of 5,028 psi. DCP Midstream, LP proposes authorization for a maximum injection rate of 15 million standard cubic feet per day TAG, all of which may be injected through the proposed Zia AGI No. 2D, the injection wells approved under Order R-13808, or any combination thereof. The proposed well is located approximately 35 miles west of Hobbs, New Mexico.

PROPOSED EVIDENCE

DCP Midstream, LP may present the following witnesses and evidence:

WITNESSES (Name and Expertise)	EST. TIME	EXHIBITS
Carlton D. "Tony" Canfield, Project Engineering Manager, DCP Midstream LP	**Approx. 15 minutes**	**1 Demonstrative Exhibit** consisting of a Power Point presentation summarizing testimony.

Mr. Canfield's testimony will provide an overview of acid gas injection and operations at DCP Midstream, LP's Zia Gas Processing Plant, a summary of the purpose and benefits of the proposed AGI No. 2D well, the importance of a redundant AGI capability, and why DCP requests the Oil Conservation Commission approve the C-108 as proposed.

WITNESSES (Name and Expertise)	EST. TIME	EXHIBITS
Alberto A. Gutiérrez, RG, Geolox, Inc.	**Approx. 1.5 hours**	**4 Exhibits** Exhibit 1: C-108 (filed with hearing application); Exhibit 2: Table A-1, to replace Table A-1 in the filed C-108; Exhibit 3: Power Point slides; and Exhibit 4: Notice Letter and Documentation of Notices Provided to Parties in the Area of Review.

Mr. Gutiérrez will testify on the technical aspects of the proposed Zia AGI No. 2D well necessary to receive approval from the Commission for authorization to inject. Mr. Gutiérrez will review DCP Midstream, LP's C-108 application for authorization to inject, including the basis for the proposed injection well. Mr. Gutiérrez's review of the C-108 will include a discussion, referring to corresponding exhibits, of the well data for the proposed well, wells within a one-mile radius of the proposed injection well, and a tabulation of the well data for all wells within the one-half-mile area of review that penetrate the proposed injection zone. This discussion will include testimony regarding the proposed location for the AGI No. 2D well. He will further testify regarding the geologic, stratigraphic, and hydrologic characteristics of the target injection zone, including assessment of the target formation water and injection fluid. Mr. Gutiérrez will testify regarding water wells and oil and gas wells within the vicinity of the proposed injection well and factors that mitigate against potential adverse impacts. Mr. Gutierrez will also testify to the estimated volume or the reservoir and radii of influence of the well, and the design and construction of AGI No. 2D well. Mr. Gutierrez also will testify that well operations will not result in waste and will not impair correlative rights and will be protective of freshwater sources. Finally, Mr. Gutiérrez will testify regarding land-use issues, including authorizations from the Bureau of Land Management, the Oil Conservation Division-approved Hydrogen Sulfide Contingency Plan, and notice to affected parties.

PROCEDURAL MATTERS

Included with this pre-hearing statement is a corrected Table A-1, marked as Exhibit 2, which is to be inserted into the C-108 application previously filed as a replacement for the original Table A-1.

Respectfully submitted,

Holland & Hart LLP

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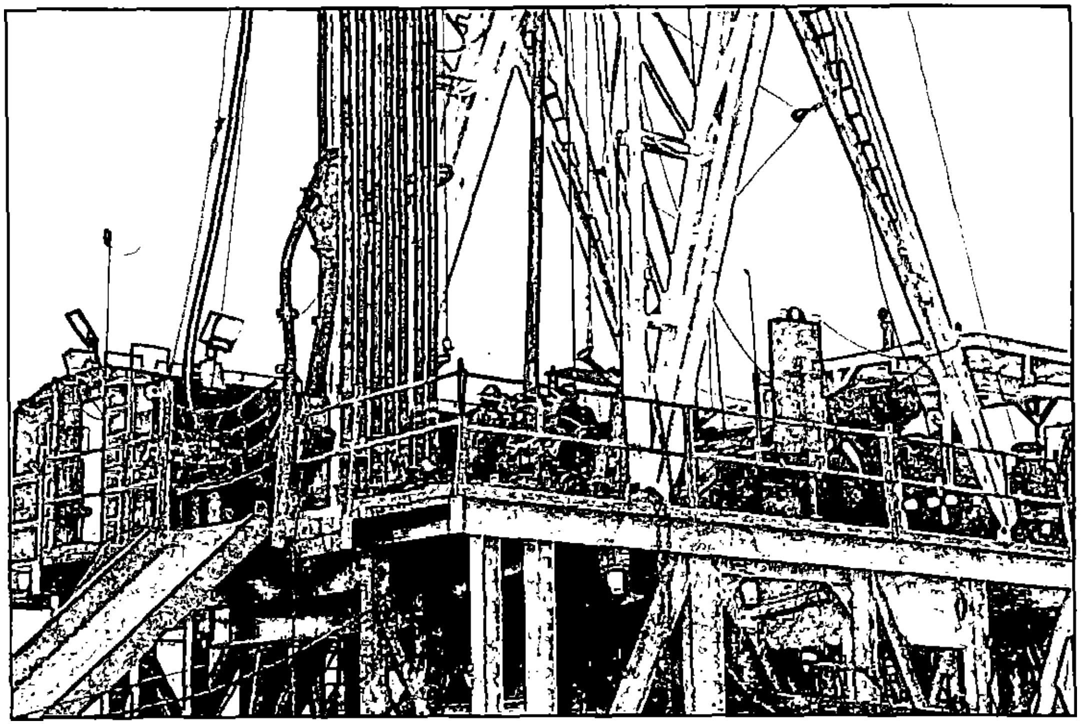
ATTORNEYS FOR DCP MIDSTREAM, LP

DCP Midstream LP

Application for Authorization to Inject
Zia Gas Processing Plant AGI System
C-108 Application for Zia AGI #2D



Presented in a Hearing Before the
New Mexico Oil Conservation Commission
Case 15528

August 25, 2016
Santa Fe, New Mexico

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BEFORE THE OIL CONSERVATION
COMMISSION
Santa Fe, New Mexico
Exhibit No. 3
Submitted by: DCP MIDSTREAM, LP
Hearing Date: August 25,2016

dcp Midstream.

DCP Midstream's Witnesses

- Mr. Tony Canfield, Petroleum Engineer, Project Manager – DCP Midstream, LP
- Alberto A. Gutierrez, RG – Geolex, Inc.

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Presentation Topics for Each Witness

- Describe overall history and benefits of DCP's Zia Gas Processing Plant and role of AGI project in gas plant operations. --- **Tony Canfield, Pet. Engr.**

- Describe relevant site geology and hydrogeology, system design, operation, analyses of anticipated effect on injection zone and all components of C-108 application. --- **Alberto A. Gutiérrez, RG**

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Zia Gas Plant and AGI System

- Plant capacity and associated infrastructure
  - 200 MMSCF/day sour gas
  - AGI system integral to plant operation
- The plant and well #2D is needed to service current and future production of sour gas in the area
  - looking for injection zone with strong performance and situated below existing production
  - sour gas production increase occurring and anticipated to continue
  - provide producers with processing capacity and minimize potential additional costs to exploit deeper resources
  - reduction in field flaring due to greater reliability

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AGI Wells are Integral to Zia Plant

- AGI system integral to the facility
  - air permit
  - in lieu of SRU / TGI
- Allowed for a net reduction in emissions from various SE NM DCP assets
- AGI system has been in operation since August 2015

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DCP's Commitment and Investment

- Zia II Plant and AGI Facility
  - Plant and associated infrastructure provide substantial incremental gas processing
  - AGI system consisting of compression facility and two wells
- Creates capacity for growth of natural gas production in region
- Plant went online in mid 2015 and has been in operation since then using approved AGI#1 in Brushy Canyon/Cherry Canyon Formations
- While deeper and more expensive, the proposed Zia AGI#2D allows DCP to primarily use a deeper injection zone that is a stronger reservoir and more agreeable to adjacent operators and the regulators (OCD and BLM).

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Benefits of Redundant AGI System

- Provides additional layer of system protection, and added reliability
  - increased reliability of plant operation and ability to process producer gas when one well is off-line
  - environmental benefits by reducing waste and flaring and geologically sequestering H_2S and CO_2 which would otherwise create a surface waste or released to atmosphere, respectively.
- Redundant AGI facility components and second well reflects prudent investment

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Requested Approval of C-108

- Zia AGI#2D is a significant improvement to the approved Zia AGI system and more agreeable to adjacent operators and regulators
  - Producers prefer not having to drill through injection zone approved for AGI#1 and AGI#2.
  - So far essentially only CO_2 has been injected into Zia AGI#1 – good time to switch to deeper zone when H_2S concentrations increase
  - Benefits to New Mexico include:
    - supporting protection of correlative rights and responsible development
    - improved safety and reliability of overall AGI system and plant
    - improved cash flow to State due to less shut-ins
    - reduced number and duration of flaring events
- Request approval of C-108 as submitted, and as presented by Geolex on behalf of DCP

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C-108 Application Executive Summary

1. **DCP is requesting authority to inject acid gas into a deep, vertical well:**
   - into the Silurian Fusselman and Wristen, and Devonian Thirtyone ("Siluro-Devonian") Formations, at depths of approximately 13,800 to 14,500 feet
   - at a maximum rate of 15.0 MMSCFD injecting at a maximum operating surface pressure of 5,028 psig.
2. **Using a safety factor of 100 % (total injection of 30 MMSCFD), the radius of influence for the AGI #2D well after injecting for 30-years will be 0.39 mile (2,083 feet).**
3. **There is no current or anticipated production in the Siluro-Devonian Formations within at least three miles of the proposed injection site**
4. **Only one well penetrates the injection zone within the one-mile radius area of review, which is a plugged Morrow (Lower Pennsylvanian) gas producer. Within one half mile of the injection points there are no wells that penetrate the injection zone.**
5. ***The single well penetrating the proposed injection zone is properly plugged and abandoned, such that the proposed injection zones are well isolated from producing and fresh water zones.***
6. ***The proposed injection zone is capable of permanently containing the injected fluid due to low porosity and permeability of cap rock above and below zone.***
7. ***Geolex analyzed seismic data loaned by Devon to DCP in order to identify promising porosity zones in the Devonian/Fusselman section***

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Key Elements of DCP's C-108

- AGI project has substantial environmental benefits of greenhouse gas reduction due to sequestration of CO_2 which otherwise would be released to atmosphere.
- AGI project reduces waste and air emissions by eliminating flaring of acid gas or operation of a sulfur recovery unit as sulfur control measures.
- Nearby oil and gas wells, nearby water wells and surface water are protected by well design and geologic factors.
- Overlying fresh water resources, the Capitan Reef, nearby SWD and producing wells will all be protected by the accurate delineation of the reservoir obtained by our seismic and geophysical log analyses and the well design.

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Key Elements of DCP's C-108 (cont.)

- DCP's C-108 application details the full information needed to approve the installation of AGI well.
- Revised H_2S Contingency Plan for the Zia plant including the proposed AGI#2D well was prepared, submitted and approved by OCD in July 2016.
- Adjacent operators, NMOCD and the BLM strongly support the project over use of the previously-approved Delaware reservoir.
- Operators and surface owners have received proper notice and there are no objections to the AGI project.

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Location and Background

- The proposed AGI well is designed to support the operations of DCP's Zia Gas Plant.
- The plant is located in Section 19, Township 19 South, Range 32 East in Lea County, New Mexico (see location map on next slide).
- When fully operational, the plant will process approximately 200 million cubic feet of natural gas per day.
- The production will provide additional new revenue to State of NM.

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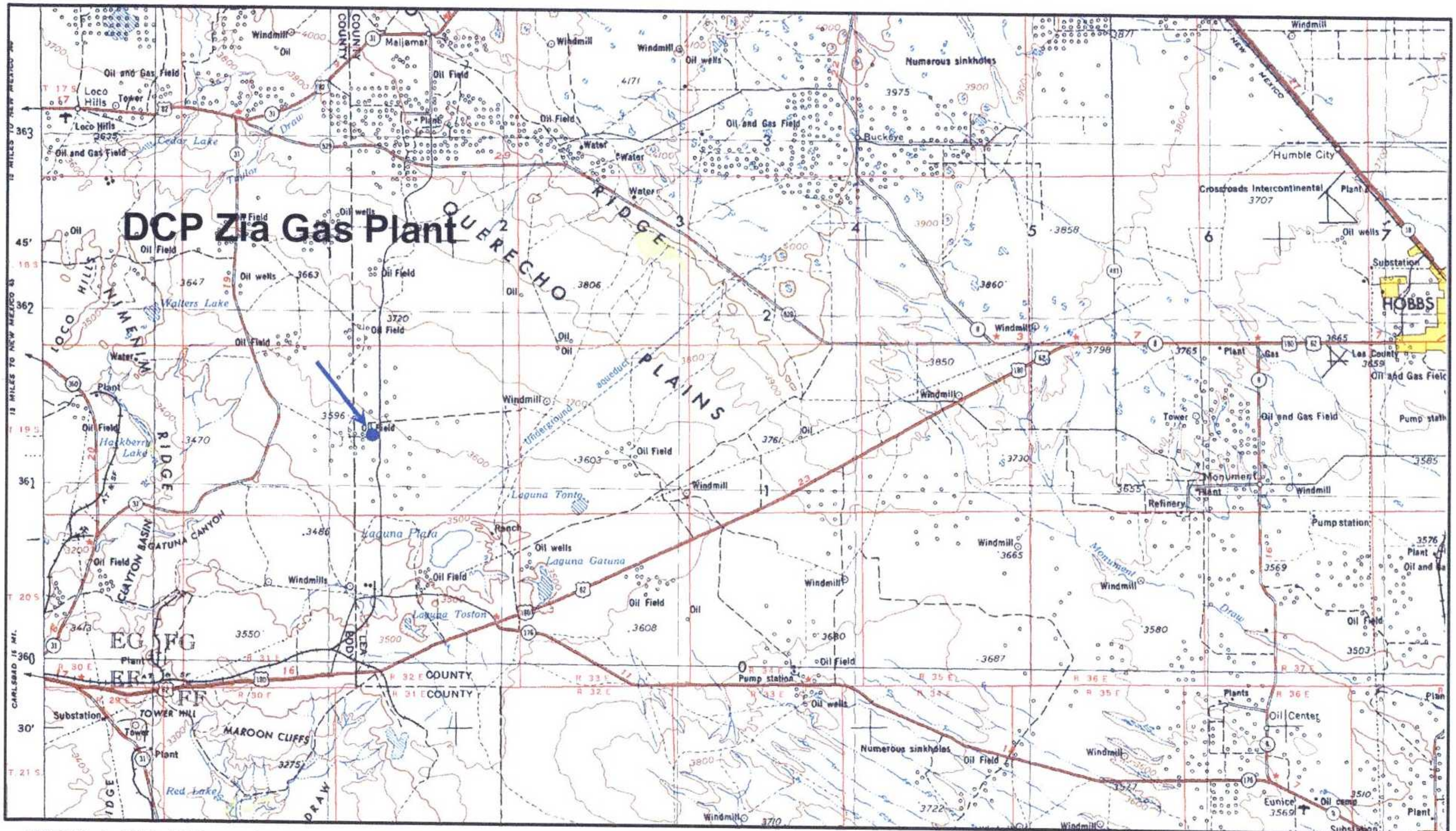
Location of the DCP Zia Gas Plant and AGI Facility



USGS 1:250,000 scale base map

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Plant Site Details

- The overall site encompasses approximately 180 acres, and the plant operations area occupy approximately 50 acres.
- All lands are owned by the United States Government, and are leased from the BLM.
- Field gas will be "sweetened" by two amine units, and the TAG will then be compressed and piped to the AGI wells.
- The proposed well and all surface equipment will be contained within the plant area.

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Legal Descriptions of Proposed Well

- The Zia AGI #2D well will be drilled at 1900' from the south line (FSL) and 950' from the west line (FWL) of Section 19.
- This is same surface location as approved for Zia AGI#2 in the Brushy Canyon/Cherry Canyon.
- The Zia AGI #2D well will be drilled as a vertical well from this surface location, and completed in the Siluro-Devonian formations.

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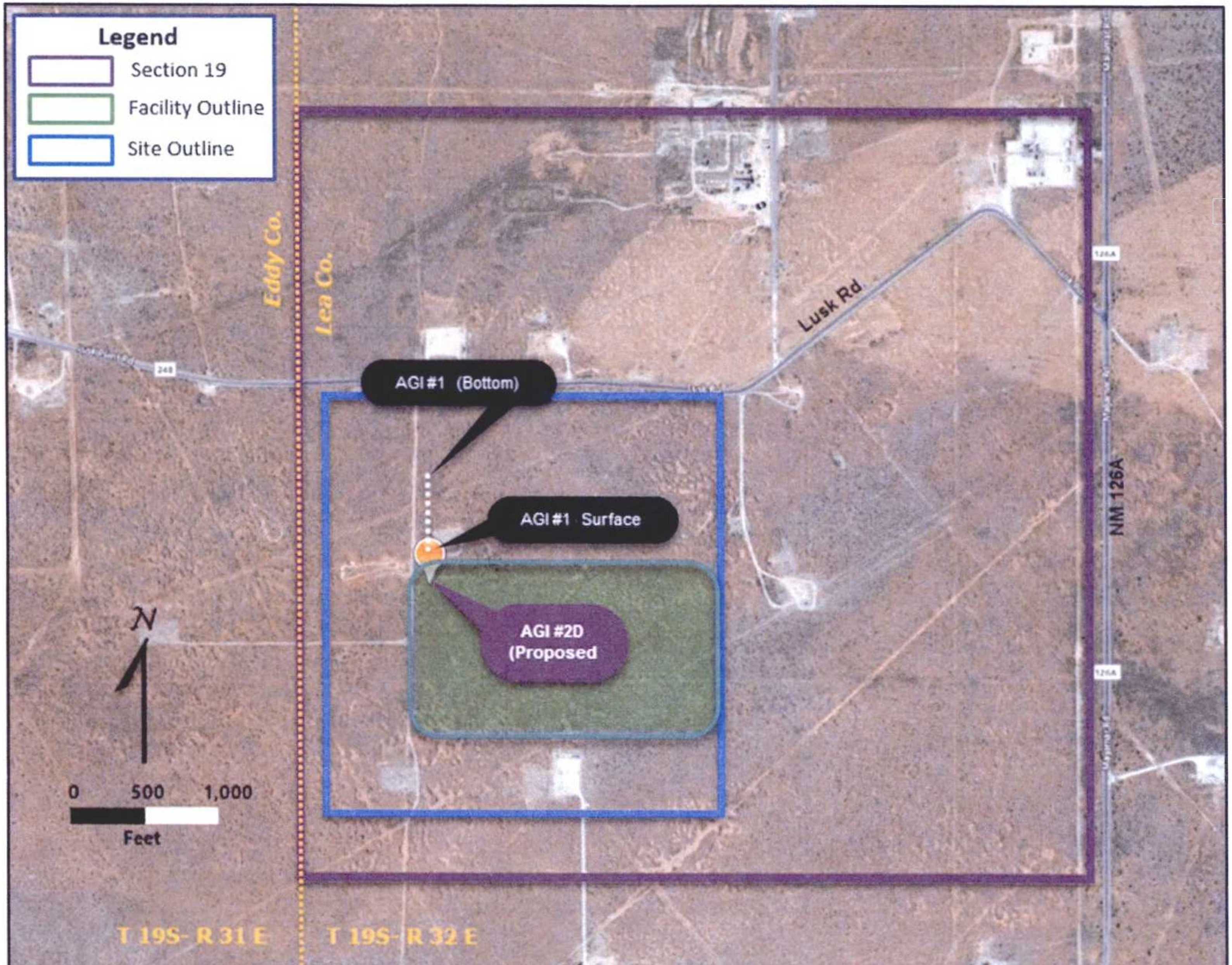
Detail Map, Zia Plant and Existing and Proposed AGI Wells



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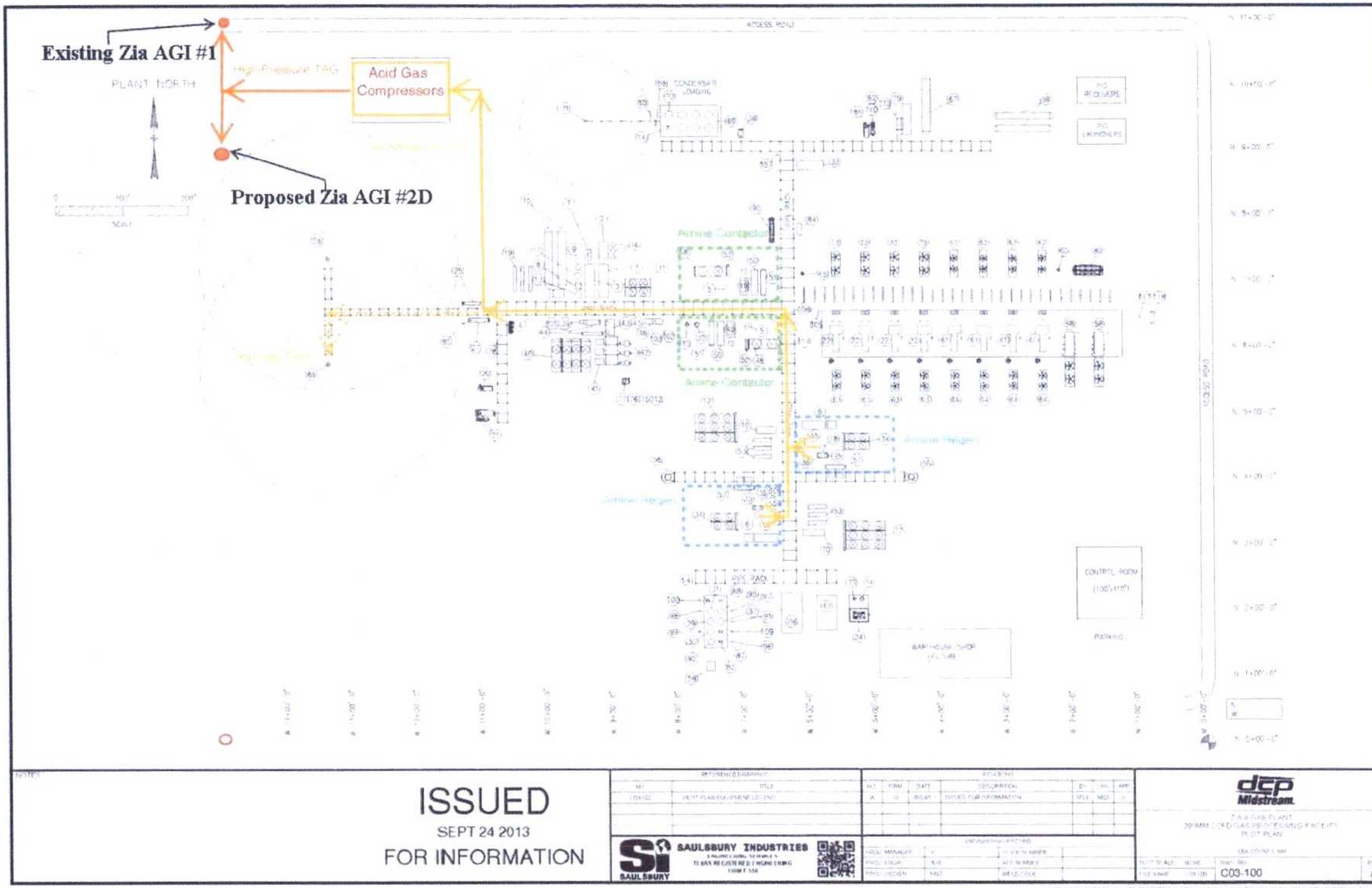
Schematic of Injection Well and Surface Equipment System



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Injection Fluid Volume, Composition and Pressure Calculations for AGI #2D

- Maximum combined injection rate for system is approximately 15 MMSCFD.
- Injected fluid composition is 11% H_2S, 89% CO_2, and traces of light hydrocarbons (C1 – C8).
- Injected fluid compatibility is determined through nearby injection experience and formation fluid analysis.
- The Maximum Allowable Operating Pressure (MAOP) requested was calculated per NMOCD guidelines to be 5,028 psig at the surface.

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Reservoir Volume and Area Calculations

- At the anticipated reservoir conditions of 185° F and 6,000 psig, each MMSCF of TAG will occupy a volume of 2,259 cubic feet (402 barrels). At the anticipated maximum operational capacity of 15 MMSCFD, the compressed TAG will occupy 6,036 barrels per day.
- After 30 years of operation, the TAG will occupy an area of approximately 156 acres, or a radius of 1,473' (0.28 miles) from the Zia AGI #2D well.
- See Map on next slide

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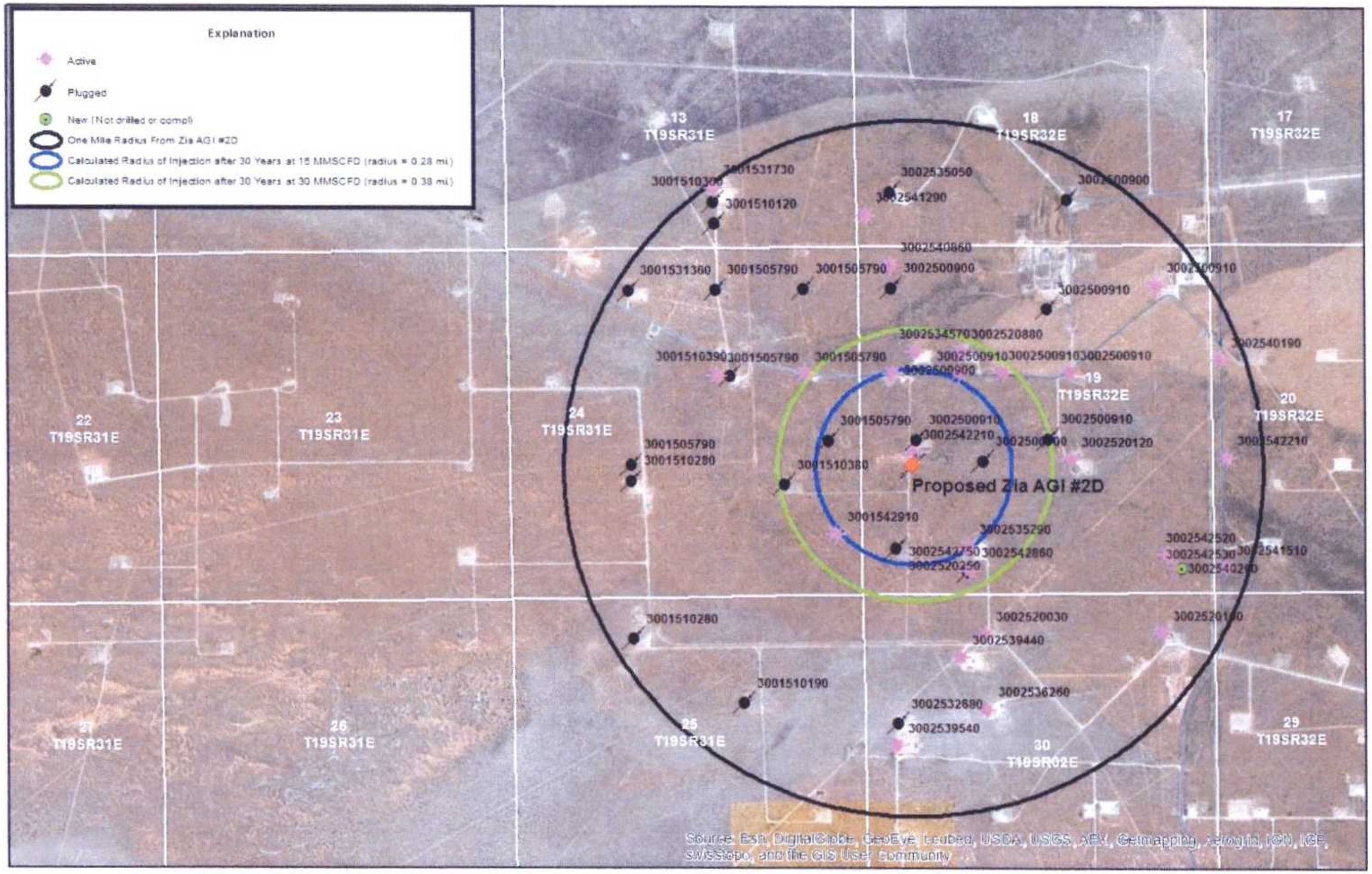
Calculated Maximum Radial Extent of TAG Plume from AGI#2D after 30 years

- 30 years at 15MMSCFD results in an affected radius of 0.28 mile (shown in blue).
- Using a 100% safety margin and injecting 30 MMSCFD for 30 years results in an affected radius of 0.39 mile (shown in green).
- The one mile circle from the proposed AGI#2D is shown in black.
- Note that only one properly plugged well penetrates the injection zone within the 1 mile circle at 0.88mile to the northeast.



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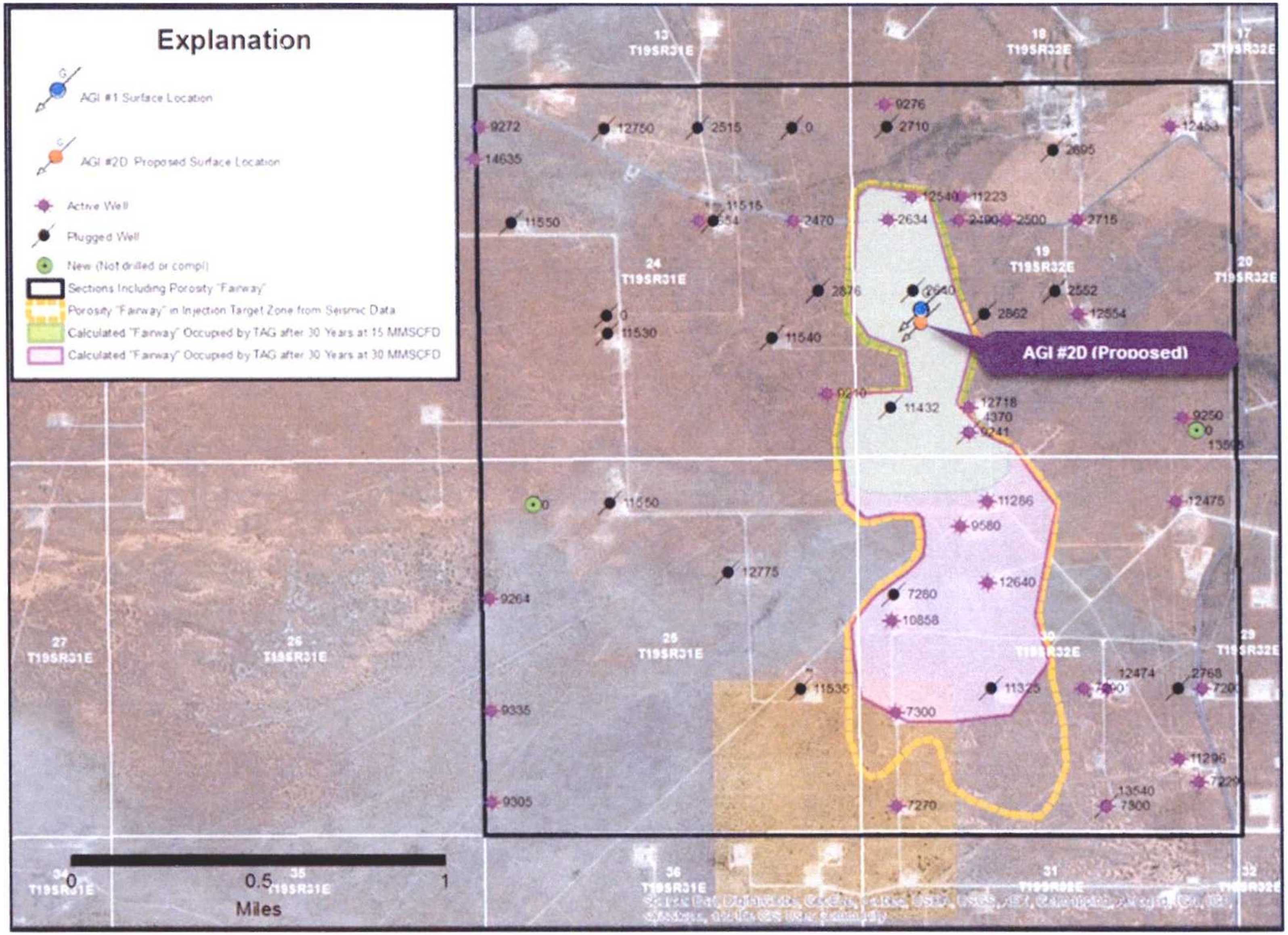
Calculated 30-Year Plu[illegible]e Expansion into Porosi[illegible] Fairway from DCP Zia AGI Well #2D



Adjacent Operators and Surface Owner Notification and Notices

- DCP's complete C-108 application was sent to adjacent operators and surface owners within the one mile radius of the proposed wells via Certified Mail, Return Receipt Requested.
- Notice of the application and the Commission hearing were published in the local paper by NMOCC.
- No objections to DCP's application have been submitted.
- Adjacent operators and the BLM support the AGI project which will:
  - allow increased throughput and production capacity
  - increase royalties paid to State of New Mexico
  - protect fresh water resources and correlative rights
  - reduce operator concerns about drilling through existing approved Delaware injection zone

What Are We Looking For in a Reservoir For CO_2 and Acid Gas Sequestration?

- Geologic seal to permanently contain injected fluid
- Isolated from any fresh groundwater
- No effect on existing or potential production
- Laterally extensive, permeable, good porosity
- Excess capacity for anticipated injection volumes
- Compatible fluid chemistry

✓ **DCP's Proposed Zia AGI #2D Meets all of These Criteria**

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Identification & Characterization of Wells, Stratigraphy & Geologic Structure in the Project Area

- Fifty five wells were identified in the one-mile radius of the proposed AGI location, of which only a single, properly-plugged well penetrates the injection zone. There are no completions or current production in the proposed injection zone in this area.

- Within one half mile of the proposed location, there are no wells penetrating the injection zone.

- Analysis of existing seismic data from Devon indicates adequate porosity in Devonian section of sufficient extent to accommodate proposed injection,

- A review of the plugging and completion reports indicates that the injection zone is properly isolated by all of the plugged wells within calculated radius of injection of the proposed AGI well, including a 100% volume safety factor (0.28 miles from the injection point of the proposed well).

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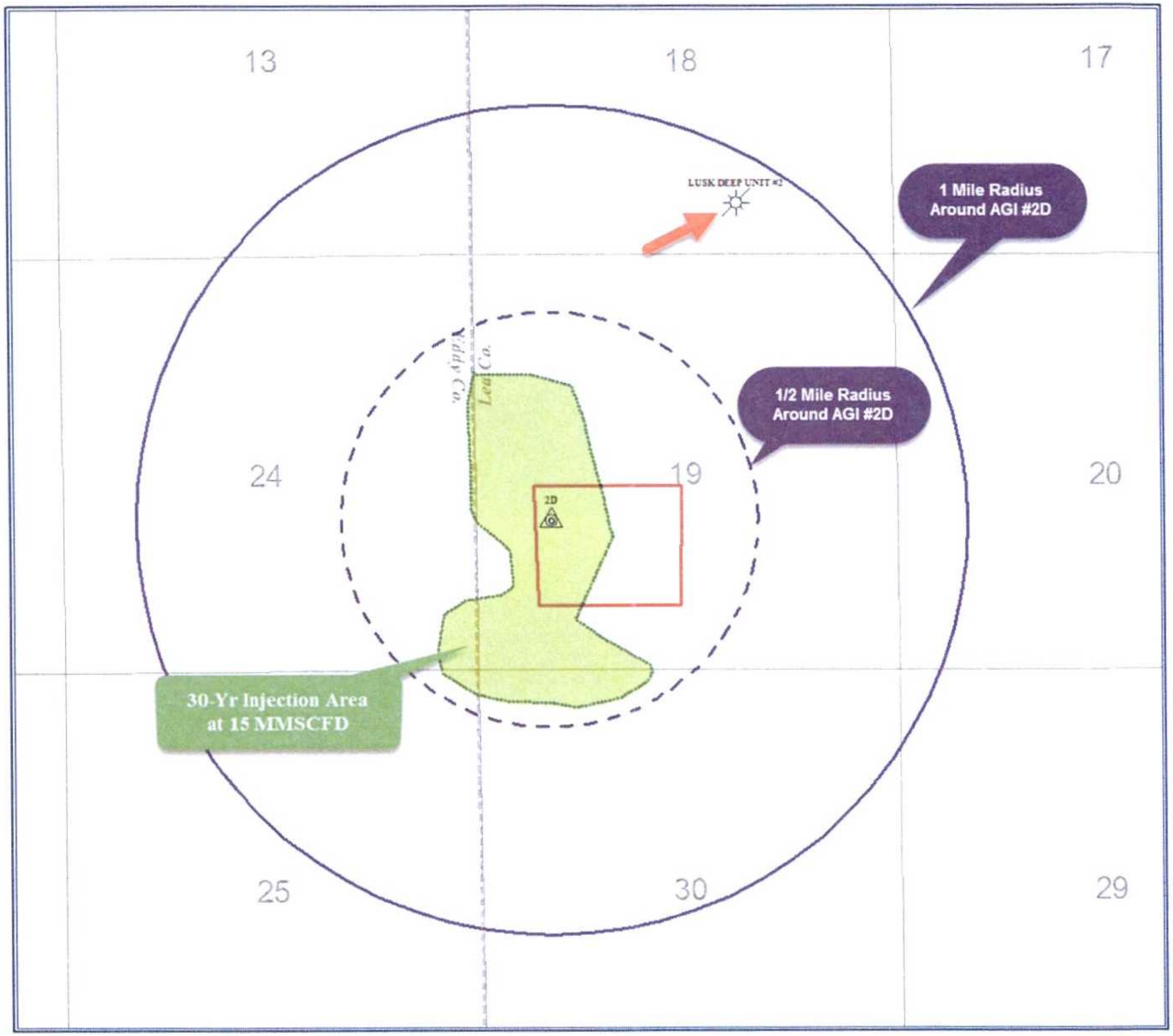
Well Penetrating Inje on Zone Within One Mile of Proposed Well Zia AGI #2D (Red Arrow)



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Stratigraphy of Proposed Injection Area

- The proposed wells will be located on the southern slope of the Northwest Shelf of the Permian Basin.
- The Siluro-Devonian Formations are carbonate units that are variously dolomitized (and sporadically porous), and are contained above and below by low-permeability limestones and shales.
- The well will penetrate the Capitan Aquifer (usable, not potable water) and BLM protection rules require that the intermediate casing extend beneath this zone. Well uses four string design for extra safety in this area of the Capitan.

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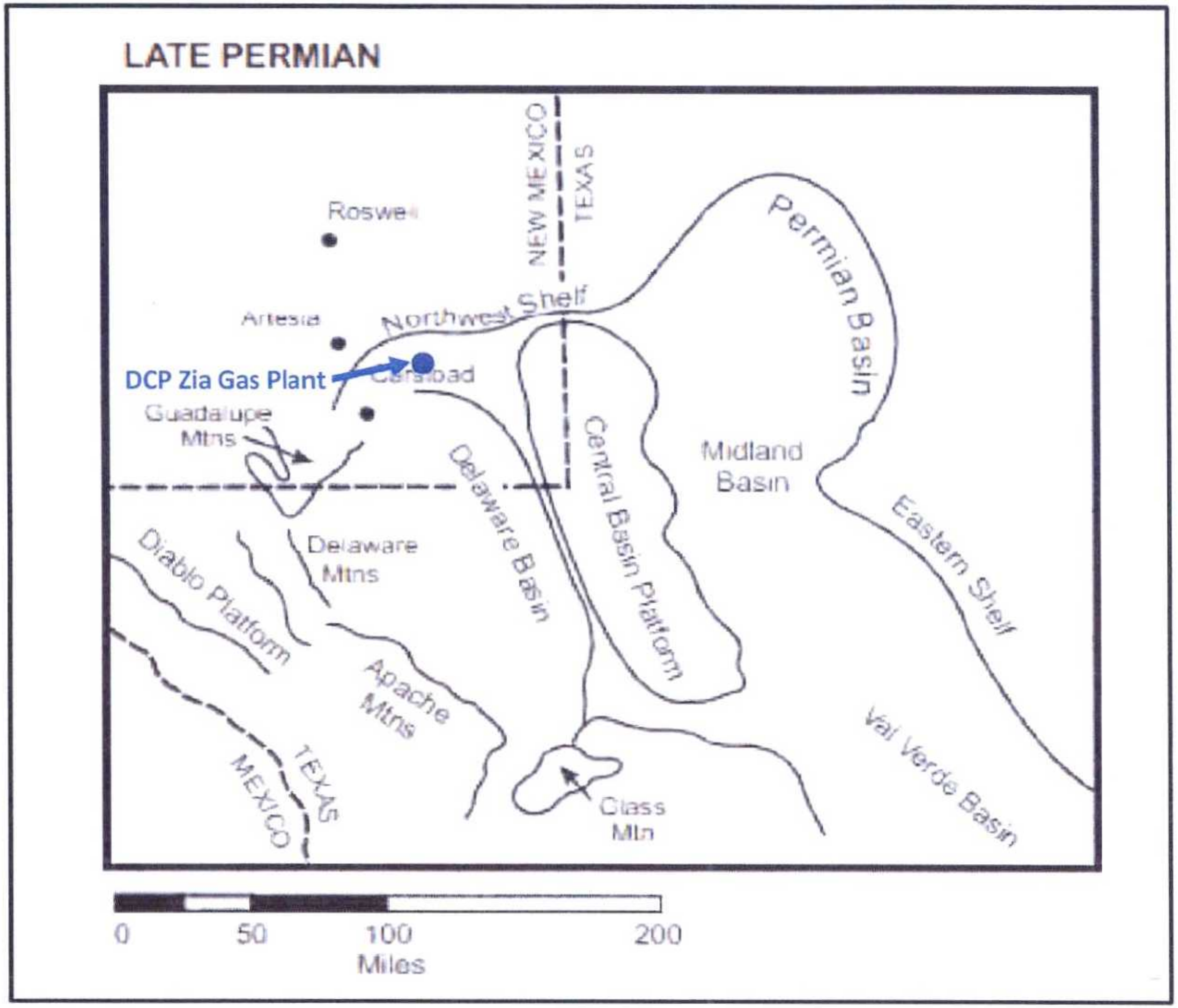
Structural Features of the Permian Basin During the Late Permian (Modified from Ward, et al (1968)).



Approximate Location of the DCP Zia Gas Plant is Shown by the Blue Arrow.

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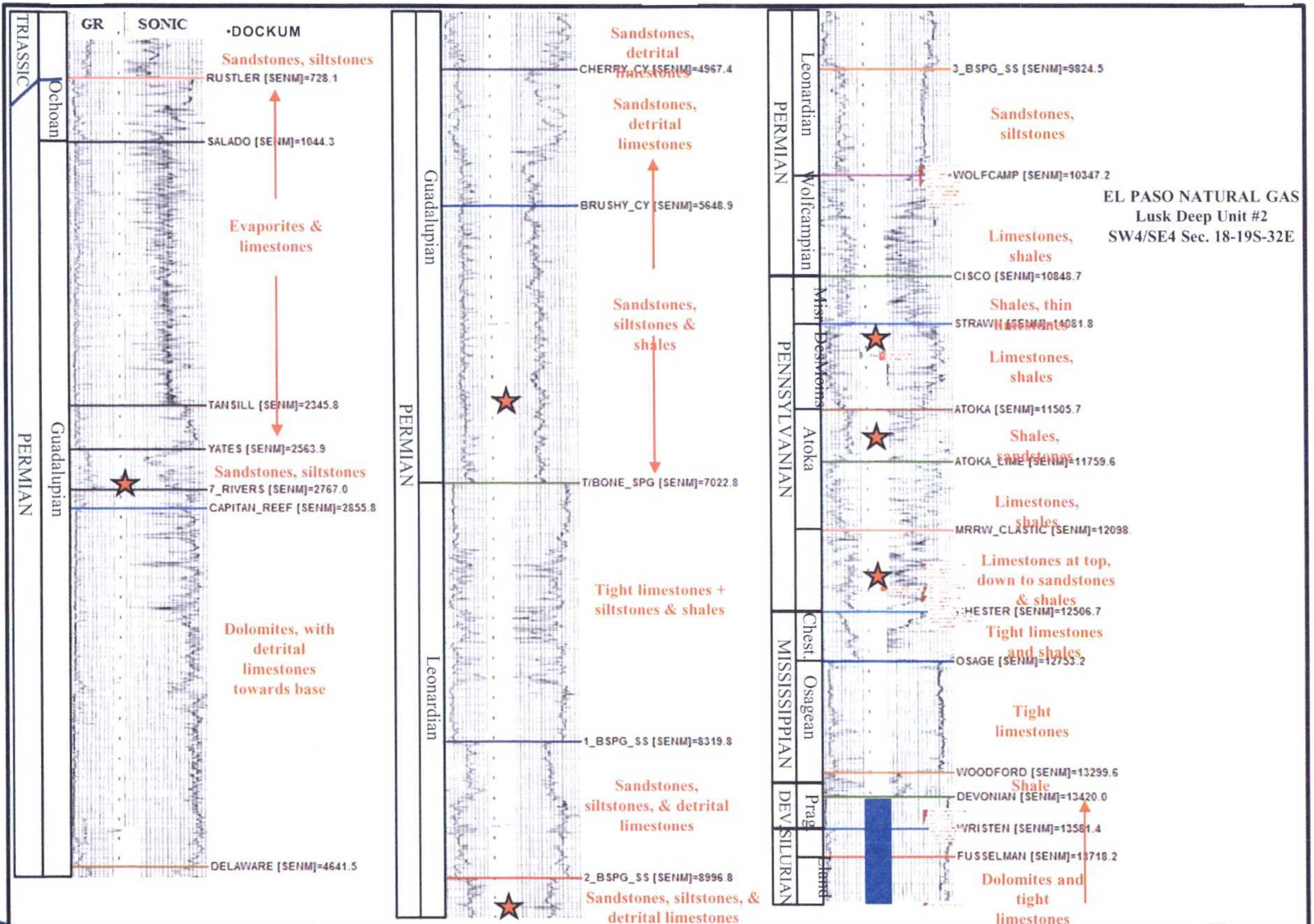
Section Showing General Strati phy Around Proposed Zia Gas Pl t



The proposed AGI zone is approximated by the blue bar.

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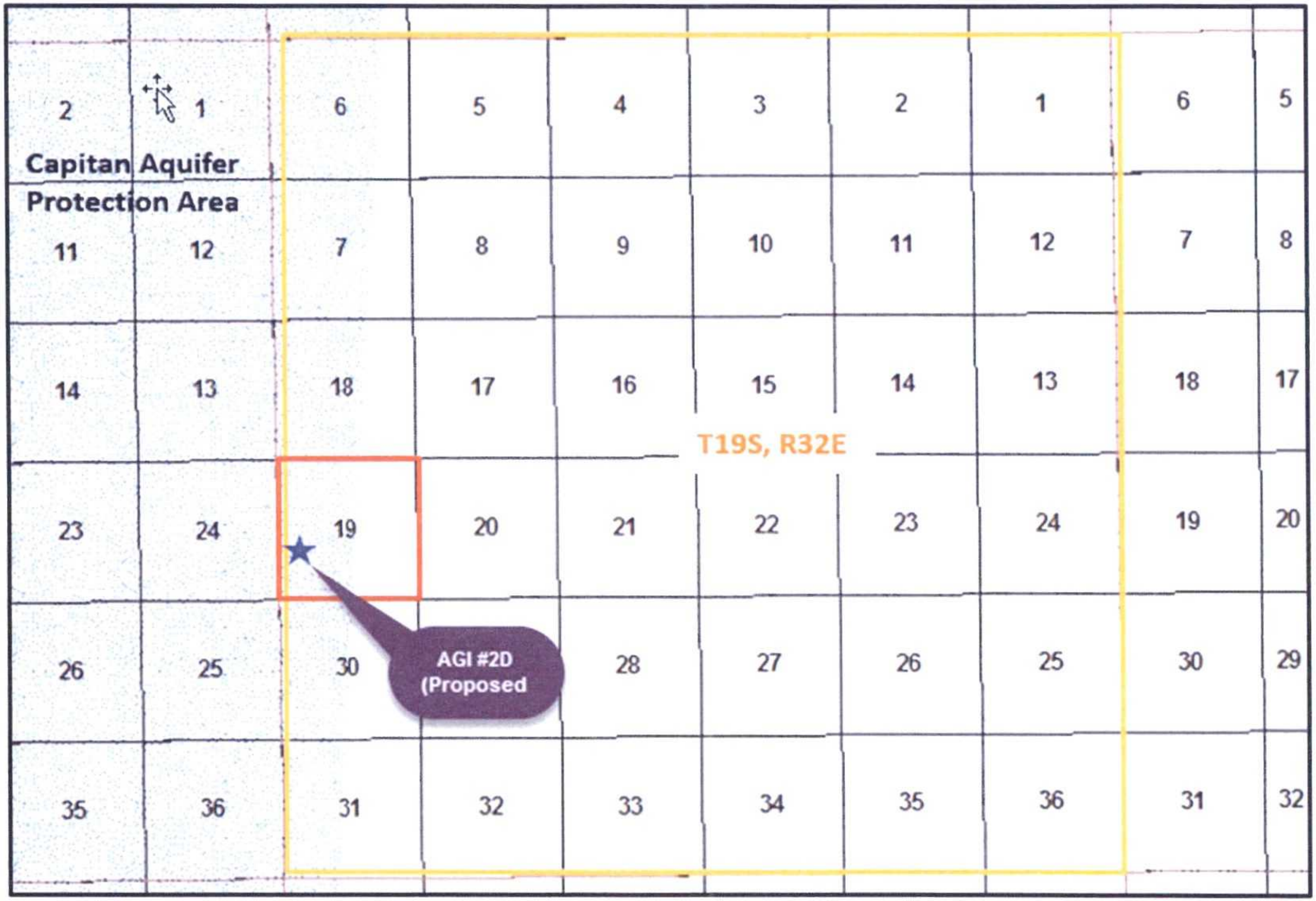
BLM-Designated Capit: Aquifer Protection Are



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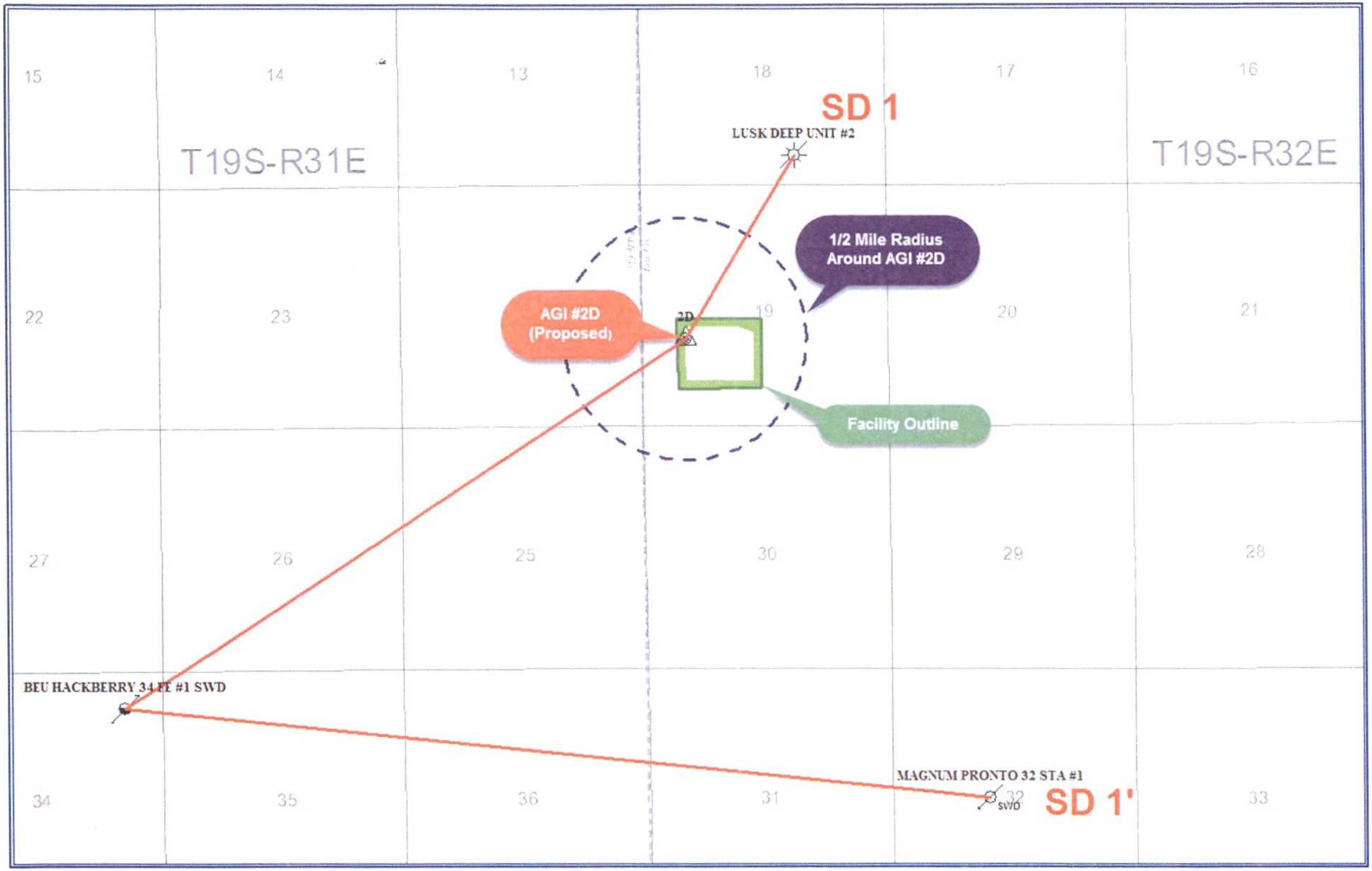
Location of Cross Section SD 1- SD 1'



Only wells penetrating the injection interval are shown

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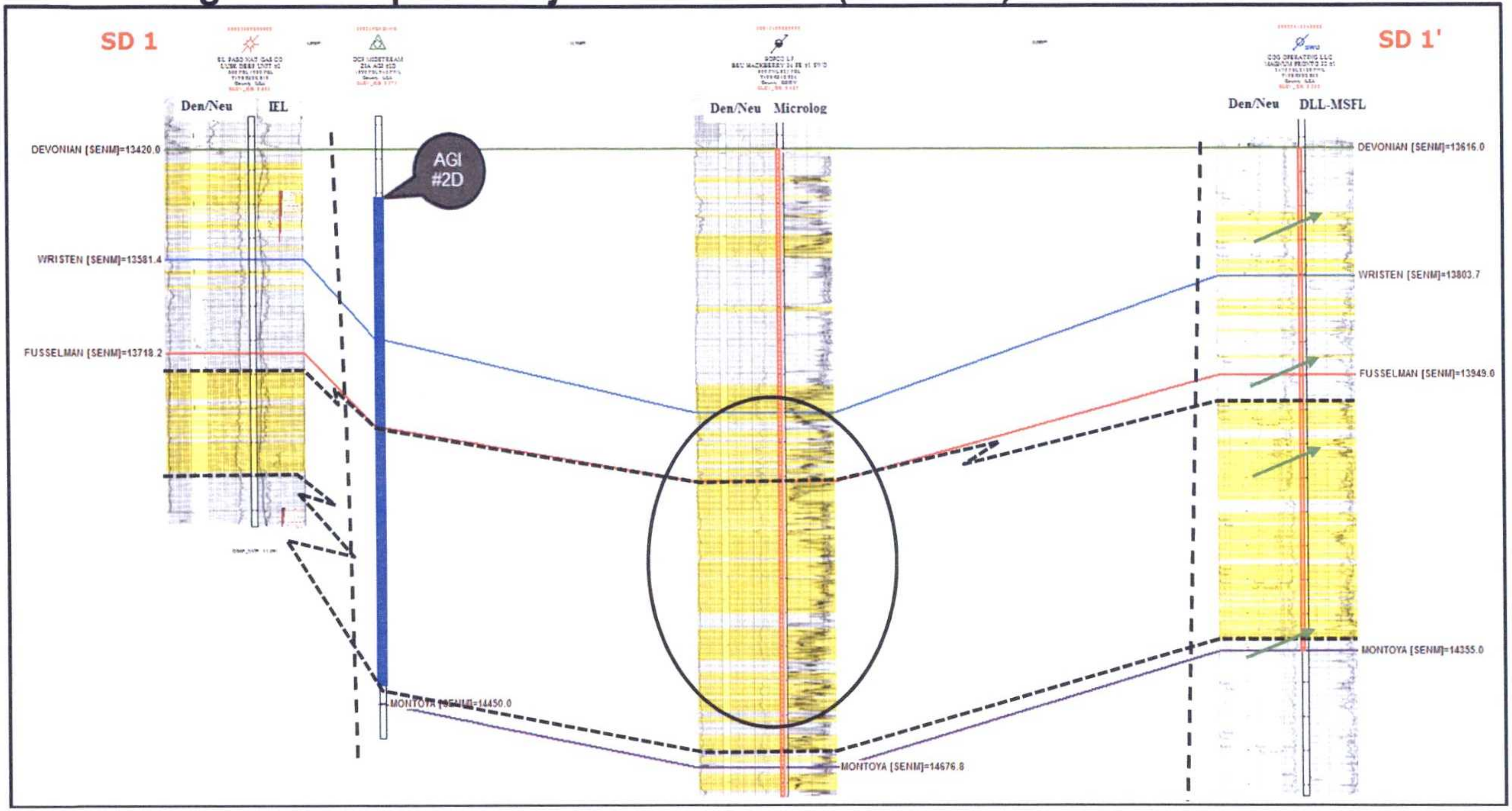
Stratigraphic Section, Hung at the Top of the Devonian, Showing Detail Through the Proposed Injection Interval (blue bar) in the Zia AGI #2D



Yellow shading shows porosity of 3% or greater through the proposed injection interval. The primary injection zone is expected to be the Fusselman (dashed outline), but additional injection capacity could come from other porosity development in the Devonian and Wristen. The proposed AGI #2D will be on the downthrown side of the seismically-defined fault (dashed gray traces), where both the Devonian and Fusselman may be more porous that in the Lusk Deep Unit #2 (far left). The Magnum Pronto 32 #1 (far right) appears to be on the upthrown side of the same fault that trends towards that well. Both water disposal wells shown on this section were completed open-hole across the entire Siluro-Devonian interval, and both are injecting at volumes and pressures that suggest high permeability across the interval.

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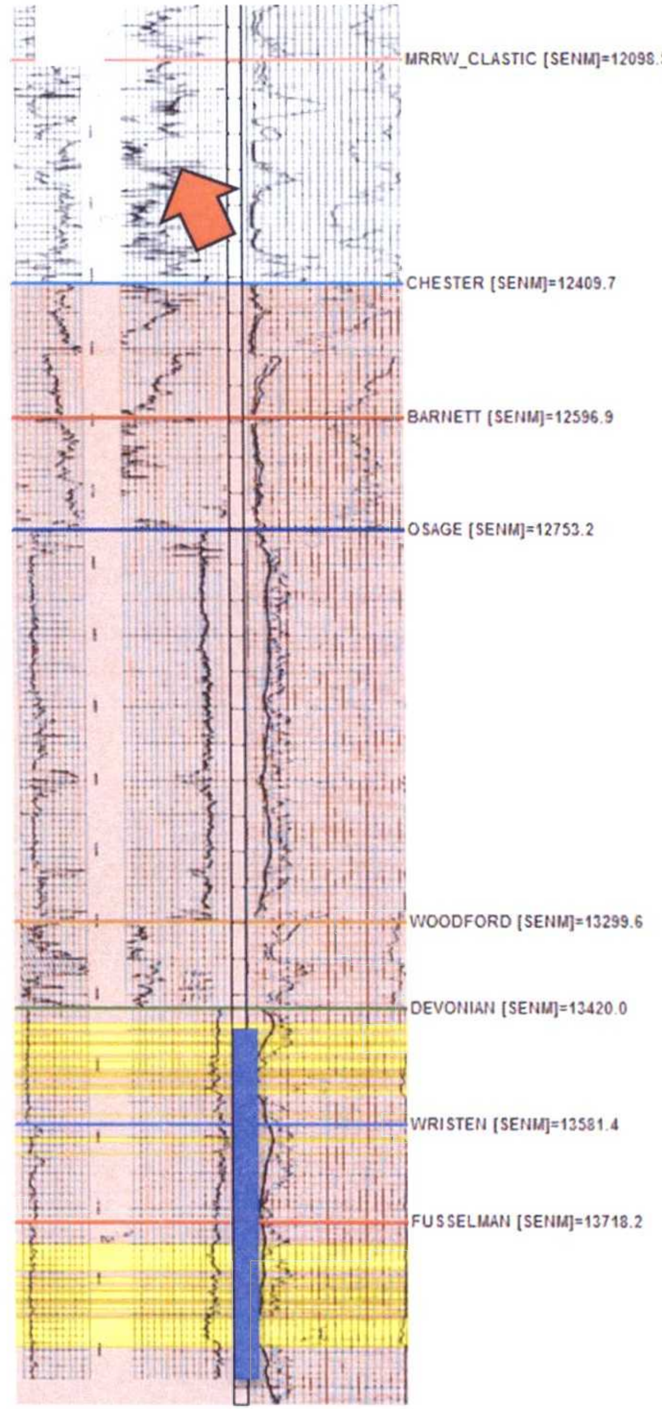
Composite Log Showing Proposed Injection Zone (Blue Bar)

The well log composite up through the closest known pay zone (Morrow sands, red arrow) in the area. Yellow shading shows porous dolomites in the Siluro-Devonian with porosity of 3% or greater. The brown shading highlights tight, impermeable rock. The Morrow pay sands are approximately 1,200 feet above the top of the proposed injection zone, and are separated from the injection zone by tight shales of the Woodford and Chester-Barnett Formations, and tight limestone of the Osage Formation. The injection zone itself contains intercalated tight dolomitic limestones and limestones. There are no pay zones in the area that are below the proposed injection interval.



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Structure in Injection Area

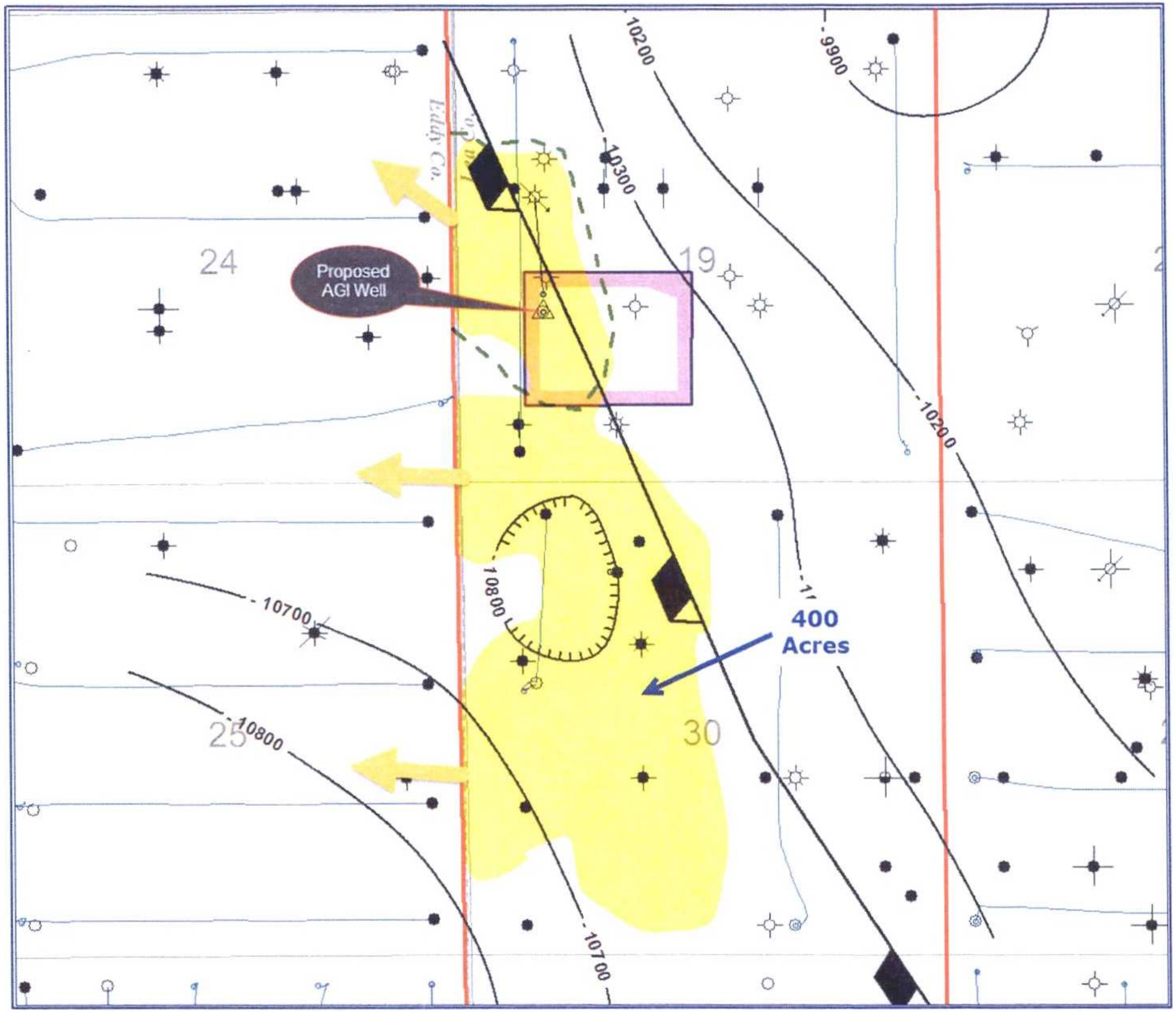
- Figure on next slide shows the structure of the top of the Siluro-Devonian.
- The formation dips west across a down-to-west fault that intersects the injection section to the east of the proposed AGI #2D well.
- This fault terminates in the Woodford shale caprock and doesn't compromise the integrity of the injection zone while adding secondary (fracture) porosity in the Devonian/Fusselman zone in the vicinity of the fault.

Fuss man/Devonian Porosity Fairway L its Based on 3D Seismic Amplitu Attrik e Analysis

Based on amplitude character analysis of a partial Devon Energy 3D seismic data set, which included generation of amplitude slice maps across several flattened volumes just below the tops of the Fusselman and Devonian, Geolex identified a possible porosity anomaly in the upper Fusselman (yellow shading) that encompasses at least 400 acres.

We were not able to map the western extent of this anomaly (arrows) because of viewing restrictions on the data, but it extends to at least another 125-150 acres to the west. The thickness of the upper Fusselman amplitude anomaly, calculated using standard interval velocities for the Fusselman, is in the range of 80-120 feet, representing only the thickest porosity unit that can be mapped by amplitude attributes, and does not include more moderately-bedded and fractured porosity below.

In addition, a smaller area of porosity development in the overlying lower Devonian, up to 40 feet thick, is indicated in the area circled in dashed green, and could likewise extend further to the west.



Contours are Approximate Subseas of the Base of Woodford Shale (Top of Devonian)
Contour Interval = 100 Feet

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Calculations of Reservoir Area Affected after 30 Years of Injection

- The calculations are based on surface injection pressures of 1,200 psig, and a temperature of 100° F.
- A calculated bottom-hole pressure of 6,000 psig and temperature of 185° Fahrenheit is based on field data from nearby wells.

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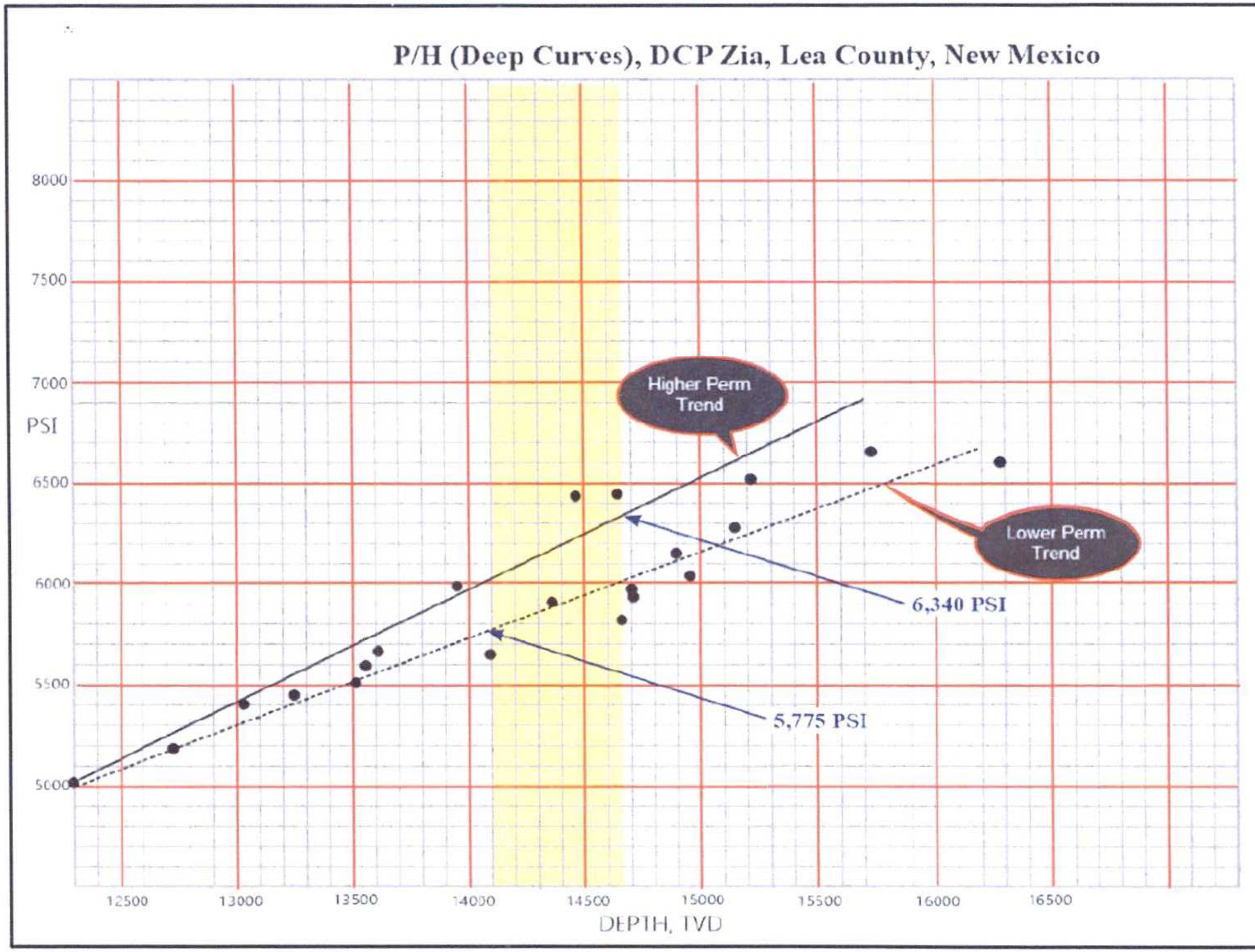
Bottom Hole Pressu Trends of Wells in A a



The majority of bottom hole (shut-in) pressure points were acquired from DSTs in wells within a 5-mile radius of the plant site. The scatter in the data points is due to differences in permeability in the different test intervals. The yellow shading brackets the depth range of the expected injection interval in AGI #2D, and shows bottom hole pressures averaging between 5,775 and 6,340 psi. For the purposes of reservoir volume calculations, an average bottom hole pressure of 6,000 psi for the Siluro-Devonian interval was assumed.

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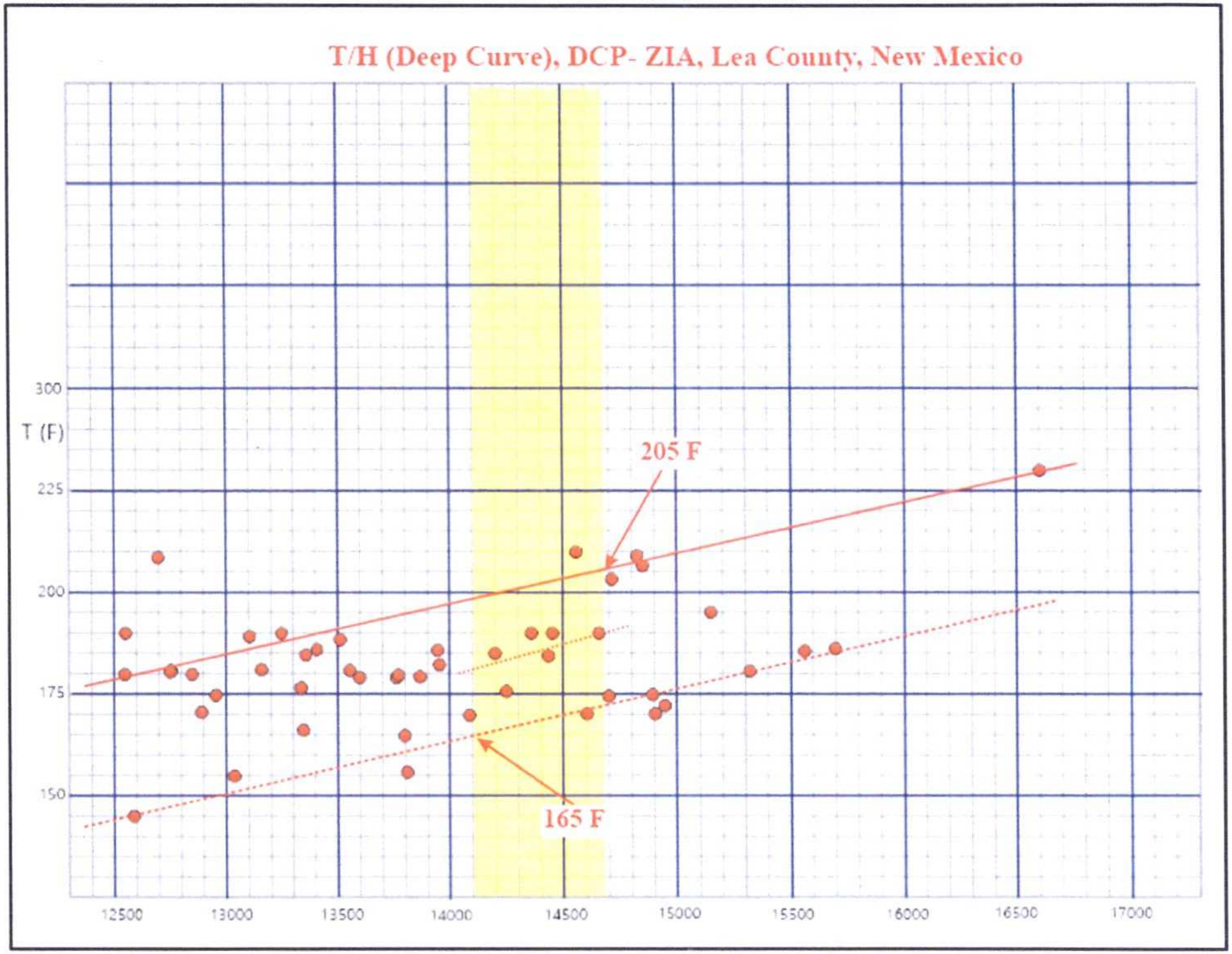
Bottom Hole Temperatures from Nearby Wells



Based On Measured Bottom Hole Temperatures On Well Log Headers From Nearby Wells

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Calculated Reservoir Volumes and Areas

- Based on a TAG mixture of 89% CO2 and 11% H2S, the FlowPhase AQUAlibrium 3.1 software was used to calculate the density and volume of the TAG at surface and reservoir conditions.
- As shown on the next figure, a daily injection rate of 15.0 MMSCFD would occupy a radius of 0.28 miles in the reservoir after 30 years.
- Based on the seismic analysis and the known behavior of nearby SWDs, we anticipate the TAG plume to extend more along the porosity fairway than in a strictly radial manner.

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Volumes, Pressures an 30 Year Injection Area

PROPOSED INJECTION STREAM CHARACTERISTICS

TAG	H_2S	CO_2	H_2S	CO_2	TAG
Gas vol MMSCFD	conc mol %	conc mol %	inject rate lb/day	inject rate lb/day	inject rate lb/day
15	10	90	142384	1654780	1797164

CONDITIONS AT WELL HEAD

Well Head Conditions		TAG							
Temp F	Pressure psi	Gas vol MMSCFD	Comp CO_2:H_2S	Inject Rate lb/day	Density[1] kg/m^3	SG[2]	density lb/gal	volume ft^3	volume bbl
100	1200	15	90:10	1797164	472.00	0.472	3.94	60962	10858

CONDITIONS AT BOTTOM OF WELL

Injection Zone Conditions					TAG				
Temp F	Pressure[3] psi	$Depth_{top}$ ft	$Depth_{bottom}$ ft	Thickness[4] ft	Density[1] kg/m^3	SG[2]	density lb/gal	volume ft^3	volume bbl
185	6000	13800	14400	600	849.00	0.849	7.09	33892	6036

CONDITIONS IN RESERVOIR AT EQUILIBRIUM

Injection Reservoir Conditions					TAG				
Temp[5] F	Pressure[3] psi	Ave. Porosity[6] %	Swr	Porosity ft	Density[1] kg/m^3	SG[2]	density lb/gal	volume ft^3	volume bbl
185	6000	11.5	0.21	54.51	849.00	0.849	7.09	33892	6036

CONSTANTS

	SCF/mol	
Molar volume at STD	0.7915	
	g/mol	lb/mol
Molar weight of H_2S	34.0809	0.0751
Molar weight of CO_2	44.0096	0.0970
Molar weight of H_2O	18.015	0.0397

[1] Density calculated using AQUAlibrium software

[2] Specific gravity calculated assuming a constant density for water

[3] PP is extrapolated using successful Drill Stem Tests at nearby wells

[4] Thickness is the average total thickness of coarse sand units in the reservoir zone

[5] Reservoir temp. is extrapolated from bottomhole temp. measured at nearby wells

[6] Porosity is estimated using geophysical logs from nearby wells

CALCULATION OF MAXIMUM INJECTION PRESSURE LIMITATION

SG_{TAG}	0.6605
$PG = 0.2 + 0.433(1.04-SG_{TAG})$	0.364 psi/ft
$IP_{max} = PG * Depth$	5028 psi

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

CALCULATION OF 30 YEAR AREA OF INJECTION

Cubic Feet/day (5.6146 ft^3/bbl)	33892 ft^3/day	
Cubic Feet/30 years	371,367,202 ft^3/30 years	12378906.75
Area = V/Net Porosity (ft)	6812827 ft^2/30 years	
Area = V/Net Porosity (ft) (43560 ft^2/acre	156.4 acres/30 years	
Radius =	1473 ft	
Radius =	0.28 miles	

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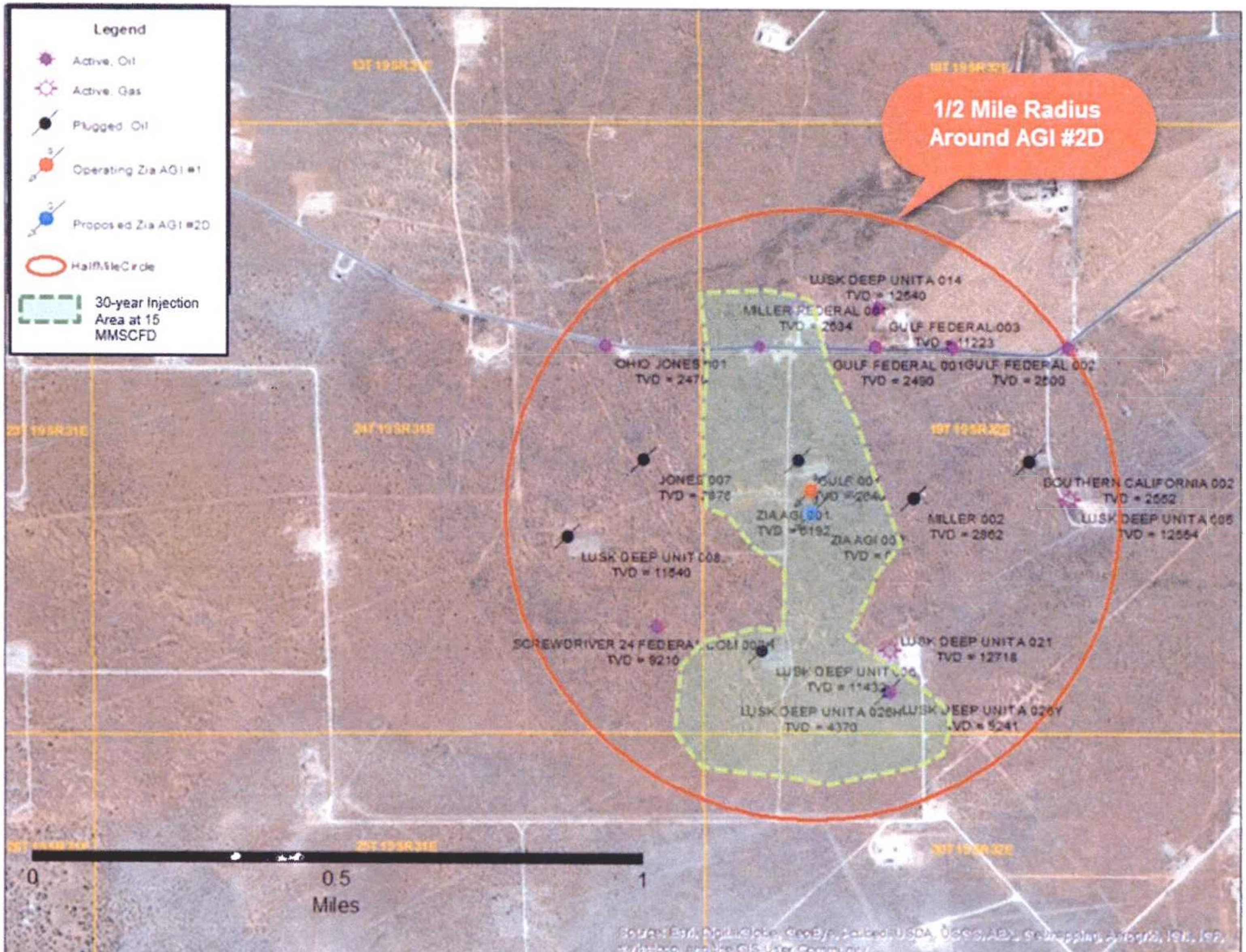
Calc..lated 30-Year Radii of Inj...tion from DCP Zia AGI W...l #2D



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General Design of AGI System

- A schematic of the Zia Plant AGI system is shown on next slide and the well details for the proposed Zia AGI#2D are shown in the following slide.
- The surface compressors and lines will be protected with automatic safety valves to prevent overpressure, and to isolate the TAG lines in the event of leaks.
- The well will include an automatic subsurface safety valve (SSSV).
- Fresh water will be protected by the surface casing, extending to 800'.
- The Capitan Aquifer (usable, not potable water) will be completely isolated by the intermediate casing, set at approximately 4,500 feet.
- Approximately 300 feet of corrosion-resistant production casing will be installed immediately above the open-hole injection zone to protect the packer and packer seat.
- The tubing is a combination of corrosion resistant HL80 and a 300' CRA section immediately above the packer
- The annulus between the production casing and tubing will be filled with corrosion-inhibited diesel fuel.
- Annular and injection tubing pressures and temperatures will be continuously monitored and recorded.
- Downhole pressure and temperature monitoring will be set up on the well.

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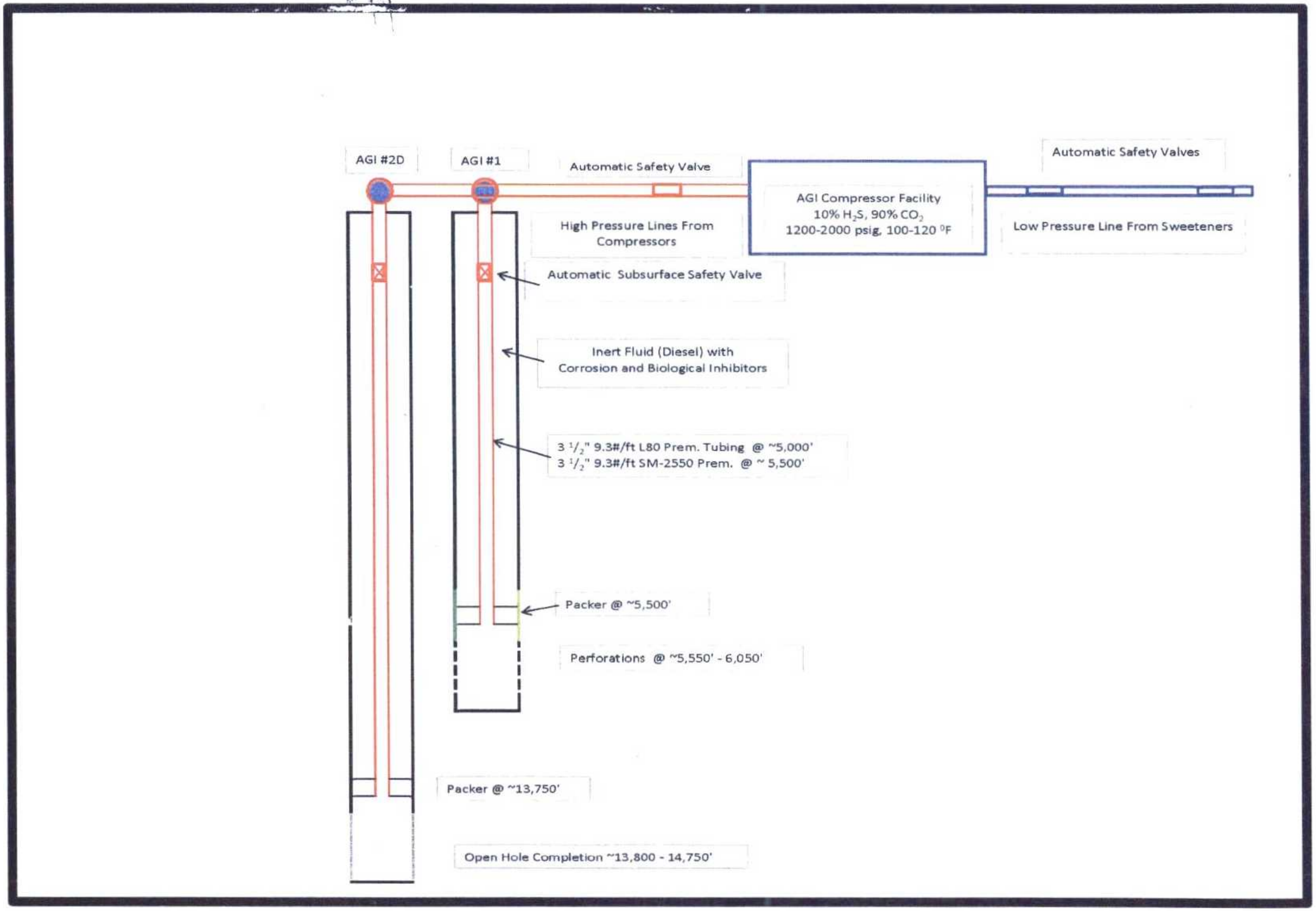
General Schematic of Zia AGI System



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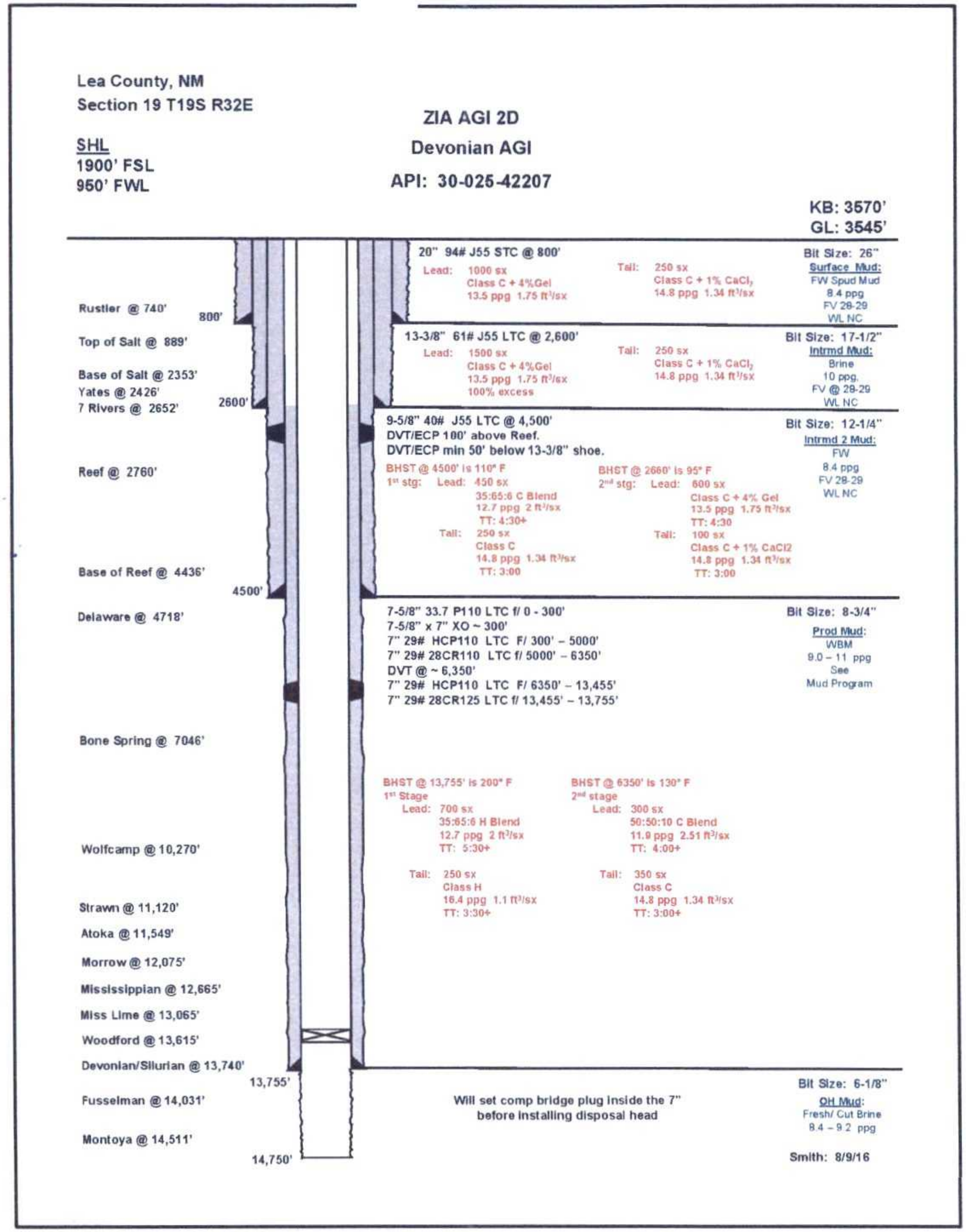
Well Design, Zia AGI #2D



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Casing and Cement Details

- All casing strings will be cemented to the surface, pressure tested, and verified using 360-degree cement bond logs.
- The production string will be cemented in the in approved AGI#1 injection zone and the critical AGI#2D cap-rock area with acid-resistant cement (CORROSACEM™ or equivalent).
- This casing and cement program is consistent with BLM guidelines applicable to wells on BLM lands in this area.

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Groundwater Conditions in the Area of Review

- Based on the New Mexico Water Rights Database from the New Mexico Office of the State Engineer, there are four freshwater wells located within a one mile radius of the proposed DCP Zia AGI well (see next slide)
- All wells within the one mile radius are shallow, collecting water from about 250' to 350' depth, in the Triassic redbeds.
- These wells were drilled for exploratory purposes by Phillips Petroleum in 1982, and do not produce any water for consumption.

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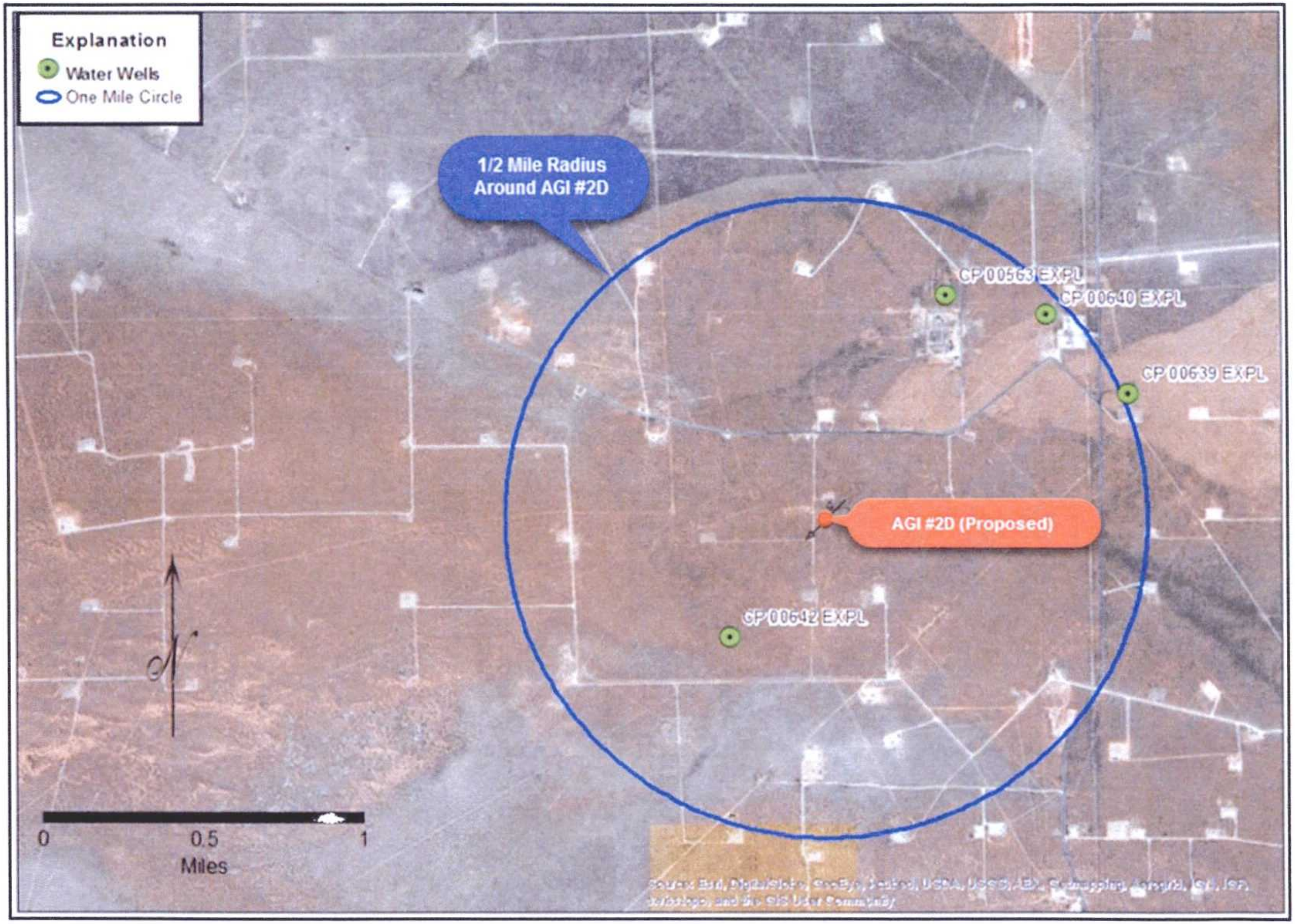
Water Wells Identified by the New Mexico State Engineer's Files within One Mile of the Proposed Zia AGI Well



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Summary of Geologic Factors Assuring Integrity and Safety of Proposed AGI Wells

- Wells penetrating injection zone within area of review are well isolated in that zone.
- Caprock is low porosity, impermeable rock which is effective barrier above injection zone.
- Injection zone is vertically isolated from adjacent production zones.
- All fresh water zones isolated by conductor and surface casing.
- Proposed injection pressure is well below fracture pressure of reservoir and caprock.
- Log and seismic analyses demonstrate closed system.

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DCP's Request for NMOCC Order

- Drill, test and complete AGI well as specified in DCP's C-108 application at the location identified in Section 19 T19S R32E at the Zia Gas Plant. (Same as surface location for approved Zia AGI#2

- DCP requests permission to inject acid gas at maximum rate of 15 MMSCFD and maximum operating pressure of 5,028 psig for at least 30 years.

- DCP will begin drilling as soon as all NMOCC and BLM permits are in place—anticipate Mid September – Early October 2016 spud date.

- As proposed, this well will enhance the reliability of the plant and the AGI system and the project is supported by the BLM and adjacent producers.

- This proposed well will dispose of acid gas safely and effectively and assures protection of surface and groundwater resources and correlative rights.

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