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

APPLICATION OF TARGA MIDSTREAM SERVICES, LLC FOR AUTHORIZATION TO INJECT, LEA COUNTY, NEW MEXICO. **CASE NO. 26139**

EXHIBIT INDEX

STATE OF NEW MEXICO
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SELF-AFFIRMED STATEMENT
OF MATT EALES

1. My name is Matt Eales and I am a consultant for Targa Midstream Services, LLC ("Targa"). I am over 18 years of age, have personal knowledge of the matters addressed herein, and am competent to provide this Self-Affirmed Statement. I have previously testified before the New Mexico Oil Conservation Commission, and my credentials as an expert in environmental engineering were accepted as a matter of record.

2. In this case, Targa seeks authorization to inject treated acid gas ("TAG") from its Copperhead Gas Processing Plant ("Plant") into the proposed Copperhead AGI No. 2 well ("Well"), which will be located in Section 13, Township 24 South, Range 32 East, Lea County, New Mexico.

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

4. A copy of Targa's Application for Authorization to Inject (Form C-108) and hearing notice is attached as **Exhibit A-1**.

5. The surface location of the Well is within the Plant's boundary.

6. The Plant has been operating since 2024. Information regarding the Plant, including its location, gathering system, and treating capacity is attached as **Exhibit A-2**.

7. The addition of the Copperhead AGI #2 will expand the overall processing capacity of the Plant and provide redundancy if the Copperhead AGI #1 is unavailable for injection.

Targa Midstream Services, LLC
Case No. 26139
Exhibit A

8. The Well will provide critical infrastructure that allows Targa and its producer customers to continue to focus on developing the abundant resources in Eddy and Lea County without excluding target zones with viable sour production.

9. In my opinion, the granting of Targa's application would serve the interests of conservation, the prevention of waste, and the protection of correlative rights.

10. The attached exhibits were compiled from company business records.

11. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date next to my electronic signature below.

Matt Eales
Matt Eales

May 27, 2026
Date

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

APPLICATION OF TARGA MIDSTREAM SERVICES, LLC FOR AUTHORIZATION TO INJECT, LEA COUNTY, NEW MEXICO. **CASE NO. 26139**

TARGA MIDSTREAM SERVICES, LLC'S
APPLICATION FOR AUTHORIZATION TO INJECT

In accordance with 19.15.26 NMAC, Targa Midstream Services, LLC ("Targa") (OGRID No. 24650) seeks authorization to inject treated acid gas ("TAG") from its Copperhead Gas Processing Plant ("Plant") into the proposed Copperhead AGI No. 2 Well ("Well"), to be located in Section 13, Township 24 South, Range 32 East, Lea County, New Mexico. In support of this Application, Targa states the following.

1. The Well is an Underground Injection Control ("UIC") Class II well subject to the requirements of 19.15.26 NMAC.

2. The Well will be drilled as a vertical well with a surface location approximately 1,138 feet from the south line (FSL) and 1,842 feet from the west line (FWL) of Section 13.

3. The Well is a redundant well and will serve the Plant along with the Copperhead AGI No. 1 Well.

4. The Well will inject TAG into the Siluro-Devonian formation including the Devonian Thirtyone Formation, Upper Silurian Wristen Group and the Lower Silurian Fusselman Formation, at a depth of approximately 17,299–18,699 feet.

5. The Well's maximum daily injection rate will be 26 million standard cubic feet per day ("MMSCFD").

6. The Well's maximum surface injection pressure will not exceed 3,460 pounds per square inch gauge ("psig").

Targa Midstream Services, LLC
Case No. 26139
Exhibit A-1

7. The surface location of the Well is within the Plant's boundary.

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

9. The Well will allow Targa to serve operators in the area and avoid cessation of production.

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

WHEREFORE, Applicant requests that this application be set for hearing before an Examiner of the Oil Conservation Division on June 4, 2026, and, after notice and hearing as required by law, the Division enter an order approving Targa's C-108 application for authorization to inject.

Respectfully submitted,

HARDY MCLEAN LLC

/s/ Dana S. Hardy

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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 _____Disposal X Storage
Application qualifies for administrative approval? _____Yes _____No

II. OPERATOR- **Targa Midstream Services, LLC**

ADDRESS' **811 Louisiana Street, Houston TX 77002**

CONTACT PARTY' **Andrew Perdue, VP Operations** PHONE: **713.584.1000**

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. **See Narrative, Section V**

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. **Copperhead AGI #001 will penetrate the injection zone upon completion. The second Copperhead well is to be a redundant well as per NMOCD Order R-23867. See Section V, VI. and Attachment 3 for additional information.**

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into azone 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.). **See Narrative, Section VII**

*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. **See Narrative, Section VIII**

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

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

*XL 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. **See Narrative, Section XI**

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. **See Narrative Section XII**

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

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

NAME: Andrew Perdue _____ TITLE: _VP of Operations_____

SIGNATURE: _____ DATE: _5/1/2026_____

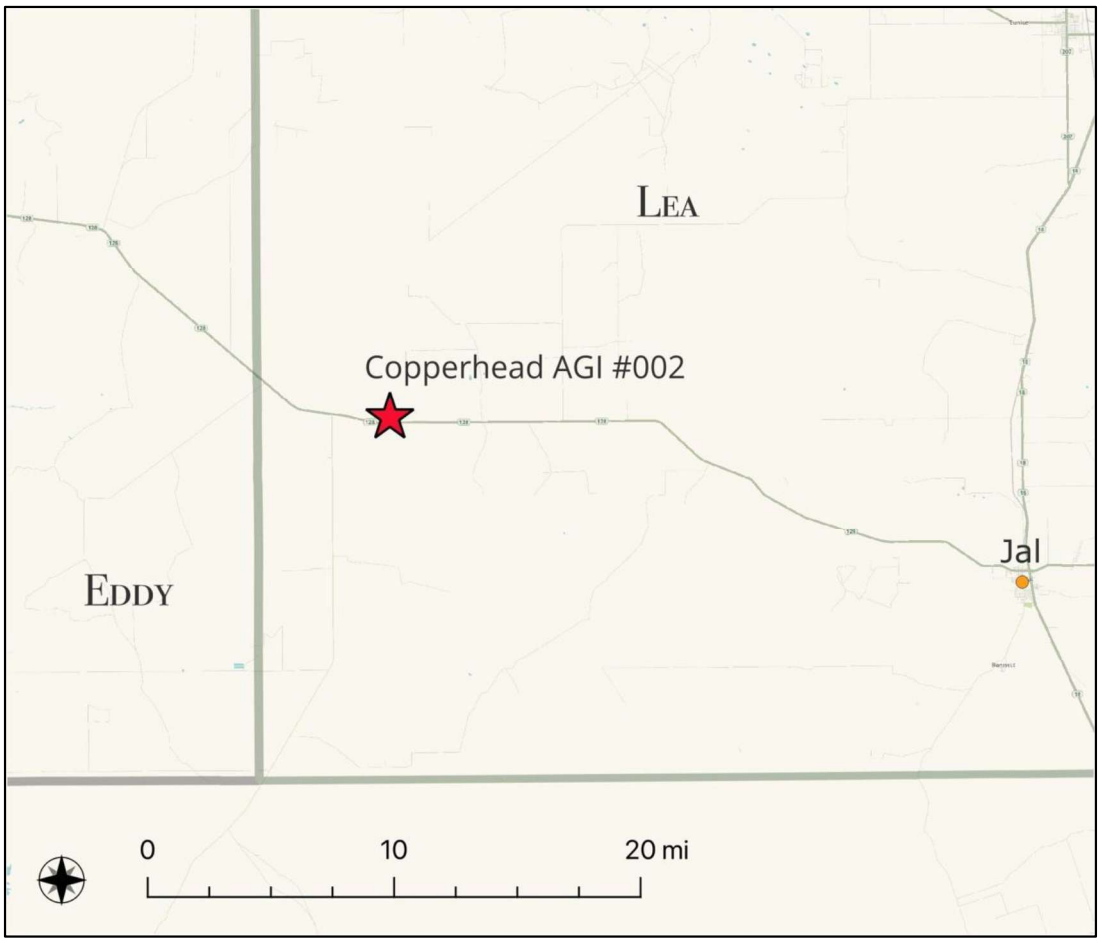
E-MAIL ADDRESS: _aperdue@targaresources.com_____

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

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

EXHIBIT A

Application for Copperhead Acid Gas Injection Well
Targa Midstream Services LLC
Copperhead AGI #002
Section 13 T24S, R32E
Lea County, New Mexico



Prepared for: Targa Midstream Services LLC, 811 Louisiana St, Houston TX 77002

Prepared by: New Mexico Tech Petroleum Recovery Research Center, 801 Leroy Place, Socorro NM

April 14, 2026

Introduction

The following document and attachments support the C-108 application for the proposed well Copperhead AGI #002. The narrative sections below align with the structure of the C-108 form.

I. Well Purpose

The well will be utilized to dispose of treated acid gas (TAG) from the adjacent Copperhead Gas Processing Plant. The Copperhead AGI #002 will be drilled at a location 1,138 ft from the south line (FSL) and 1,842 ft from the west line (FWL) of Section 13 T24S, R32E (Attachment 1). The well will be drilled vertically to an approximate depth of 18,699 ft as a Class II acid gas injection well. The well will be completed as an open hole interval and will inject into the Devonian Thirtyone Formation, Upper Silurian Wristen Group and the Lower Silurian Fusselman Formation, at a depth of approximately 17,299–18,699 ft. The well is designed to safely sequester acid gas injectate at a rate of 26.0 million standard cubic feet per day (MMSCFD) at an approximate surface pressure not to exceed 3,460 psig.

II. Operator Information

The operator of the well will be Targa Midstream Services, LLC a subsidiary of Targa Resources Corp.

III. Well Data

C-108 Section A

1. General Well Information (See Attachment 1 for C-102)

Lease name and Well Number: Copperhead AGI #002
Legal location and footage: I-13-T24S-R32E, 1,138 FSL, 1,842 FWL
Lat/Long: 32.213573°N / 103.630882°W
Geodetic Coords: X = 758585.22, Y = 442,141.76, NAD 83 New Mexico East (State Plane)
Elevation: 3598.21 ft
Proposed Injection Unit and Depth: Siluro-Devonian, approximately 17,299–18,699 ft
Operator (OGRID): Targa Midstream Services LLC (24650) - a subsidiary of Targa Resources
County: Lea County, NM

2. Casing/Cement Information (See Attachment 2 for Wellbore Diagram)

The preliminary casing design is presented in **Table 1**, and casing specifications are provided in **Table 2**. The well will contain four telescoping casing strings. All four of the casing strings will be cemented to the surface. The injection tubing will include a subsurface safety valve on the production tubing to assure that fluid cannot flow back out of the well in the event of a failure of the injection equipment. The casing setting depth shall be calculated to position the casing seat opposite a competent formation capable of containing the maximum pressure expected during normal drilling operations. The annular space between the production tubing and the well bore will be filled with corrosion-inhibited diesel as a further safety measure, consistent with injection well designs that have been previously approved by the New Mexico Oil Conservation Commission (NMOCC) for acid gas injection.

Table 1. Casing Design

Casing/ Tubing String	Casing /Tubing Depth, TVD1, ft	Borehole Diameter, in.	Casing / Tubing Outside Diameter, in	Coupling/ Connection	Casing/Tubing Material (Weight /Grade)	String Weight in Air, lb
Conductor	0–100	30	24	Welded	118 lb/ft, J-55	11,800
Surface	0–1,208	26	20	BTC	106.5 lb/ft, J-55	128,652
Intermediate #1	0–5,034	17 1/2	13 3/8	BTC	72 lb/ft, L-80	362,448
Intermediate #2	0–12,250	12 1/4	9 5/8	BTC	47 lb/ft, L-80	575,750
Long String	0–17,299	8 5/8	7	Prem FJ	32 lb/ft, Cr1 & -P110	553,568
Open hole	17,299–18,699’	5 7/8	N/A	N/A	N/A	N/A
Tubing	0–17,255’	N/A	3 1/2	VAM	9.2 lb/ft, L-80 & 300’ G3 on bottom	158,700

Table 2. Casing Specifications

Casing / Tubing String	Casing / Tubing Material (Weight / Grade / Connection)	Casing/ Tubing Diameters (OD/ID/ Drift), in.	Yield, (ksi)	Tensile(ksi)	Internal (Burst) Yield, psi	Collapse(psi)	Body Yield, (1,000 lbs)	Joint Strength, 1,000 lbs
Surface	106.5 lb/ft, J-55, BTC	20/19/ 18.812	55	75	2,410	770	1,685	1,595
Inter-mediate #1	72 lb/ft, L-80, BTC	13.375/12.347/12.191	80	95	5,380	2,670	1,661	1,650
Inter-mediate #2	47 lb/ft, L-80, BTC & Corrosion Resistant across DMG	9.625/ 8.681/ 8.525	80	95	6,870	4,760	1,086	1,122
Long String	32 lb/ft, Cr13-P110, Prem FJ	7.000/ 6.094/ 5.969	110	125	11,640	10,780	1,025	1,053
Tubing	9.2 lb/ft, VAM TOP/G3	3.500/ 2.992/ 2.867	80	95	10,160	10,540	207	168

Table 3 summarizes cement design specifications. Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a pre-flush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. The slurries listed above or equivalent slurries will be used depending on the service provider selected. Cement yields may change depending on the type of slurries selected.

Cement shall be allowed adequate curing time to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

The 9-5/8 Intermediate Casing will include Corrosion Resistant Casing across the entire DMG. Nickel Alloy casing will be the bottom 300’ of the 7” casing for corrosion resistance and will be cemented with corrosion resistant cement.

Table 3. Cement Design

Casing	Depth (ft)	Cement Volume (sacks)	Cement Type & Yield	Designed TOC	Centralizers
Conductor	100	82	Type I Neat 14.8 ppg	Surface cement circulated	None
Surface	1,208’	100% open hole excess 1680 sks lead, 200 sks tail. Volume verified with fluid caliper	Lead ExtendaCem, 13.5 ppg, 1.83 cuft/sk. Tail 690 sks Class C 14.8 ppg, 1.34 cuft/sk Circulate	Surface Cement Circulated	1 per joint on bottom 3 joints
Inter-mediate #1	5,034’	75% open hole excess Lead: 2540 sks, Tail: 370 sks	Lead: NeoCem C 12.5 ppg 1.84 cuft/sk Tail: HalCem C 13.5ppg 1.6 cuft/sk	Surface Cement Circulated	1 per joint for bottom 3 joints, 1 on every 3 joints for remaining joints
Inter-mediate #2	12,250’	75% open hole excess **STAGE 1** Lead: 790 sks Tail: 305 sks **STAGE 2** Lead:1440 sks Class C **STAGE 3** Lead: 850 sks Tail: 200 sks	**STG 1** Lead: Class C Cmt,12.5 ppg, 1.63 cuft/sk Tail:Class C Cmt 14.82 ppg, 1.32 cuft/sk **STG 2**: Class C, 13.5 ppg, 1.64 cuft/sk **STG 3**: Lead Class C, 12.5 ppg, 1.63 cuft/sk Tail: Class C, 14.8 ppg, 1.32 cuft/sk	Surface Cement Circulated	1 per joint for bottom 3 joints, 1 on every 3 joints for remaining joints
Production	17299’	75% open hole excess **STAGE 1** 600 sks Corrosion Resistant CMT**STAGE 2** Lead 263 sks Tail 200 sks	**STG 1 Class H CMT 15.6 PPG STG 2** Lead Class H cement, 12.5 ppg, 1.63 cuft/sk Tail: 200 sks cement, 15.6 ppg, 1. cuft/sk	Surface	1 every 3 joints for remaining joints

* Cement program may change based on cement engineer recommendation and caliper log result.

3. Tubing Information

The tubing is 3 ½" SS95 VA Superior 9.2 lb/ft tubing with a Premium Gas Tight Thread from the surface to 16,950 ft and then 300 ft of G3 Nickel Alloy 9.2 lb/ft tubing with Vam Top Gas Tight Threads (16,950–17,255 ft) connected to the Inconel Permanent Production Packer. G3 Nickel alloy tubing is a highly corrosion resistant material. An Inconel SubSurface Safety Valve will be installed in the tubing at 100' to 150'. Bottom hole pressure and temperature gauges will be attached to the permanent packer via fiber optic line attached to the outside of the tubing.

4. Packer Information

Halliburton 7" Nickel Alloy Permanent Packer set at 17,255 ft. The casing annulus will be filled with a corrosion resistant packer fluid consisting of diesel and corrosion inhibitors.

Drilling Fluids Design

The anticipated bottom hole pressure is ~8,800 psi. No abnormal pressure or temperatures are anticipated; however, there will be sufficient mud on location to control a blowout should one occur. Managed Pressure Drilling Systems will be installed on the rig and operated to control abnormal pressure events. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH. The mud program may be revised at the recommendation of the field engineer.

A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals, including fresh water and oil-based operations. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water. Waste will be disposed of properly at an EPA-approved hazardous waste facility. Fresh water cuttings will be disposed of by the service company.

C-108 Section III B

1. Name of injection formation: AGI Devonian
2. Injection interval: Open hole, 17,299–18,699 ft
3. Original well purpose: Drilled for Acid Gas Injection
4. Depths of any other perforated intervals: No perforated intervals
5. Depths and names of next higher and lower oil/gas zones in well area: Atoka/Morrow gas zones above (~14420–16,500 ft), no deeper producing horizons.

The proposed Copperhead AGI #002 well will be drilled for the purpose of injecting TAG into the Siluro-Devonian formations at a depth of 17,299–18,699 ft. No production or injection wells in the area penetrate these formations, nor is there production from any deeper zones. The nearest wells in the vicinity produce primarily from the Bone Spring and Wolfcamp formations. There are also three active gas wells in the Atoka (**Figure 1**). **Table 4** provides a summary of wells.

IV. Expansion of existing project

This is not an expansion of an existing project. This is a redundant well to Copperhead AGI #001, as required by NMOCD Order R-23867

V. Lease and well maps (See Attachment 3 Also)

The following maps are provided in accordance with NMOCD requirements. See **Table 3-1** in **Attachment 3** for tabular listings of wells, operators, and owners, as well as more details on land and leases.

• 2-mile, 1-mile and ½-mile radius Oil & Gas Well Map (**Figure 1, Figure 3-1**)

• 2-mile radius Mineral Ownership Map (**Figure 2, Figure 2-2**)

• 2-mile radius Surface Ownership map (**Figure 2, Figure 2-2**)

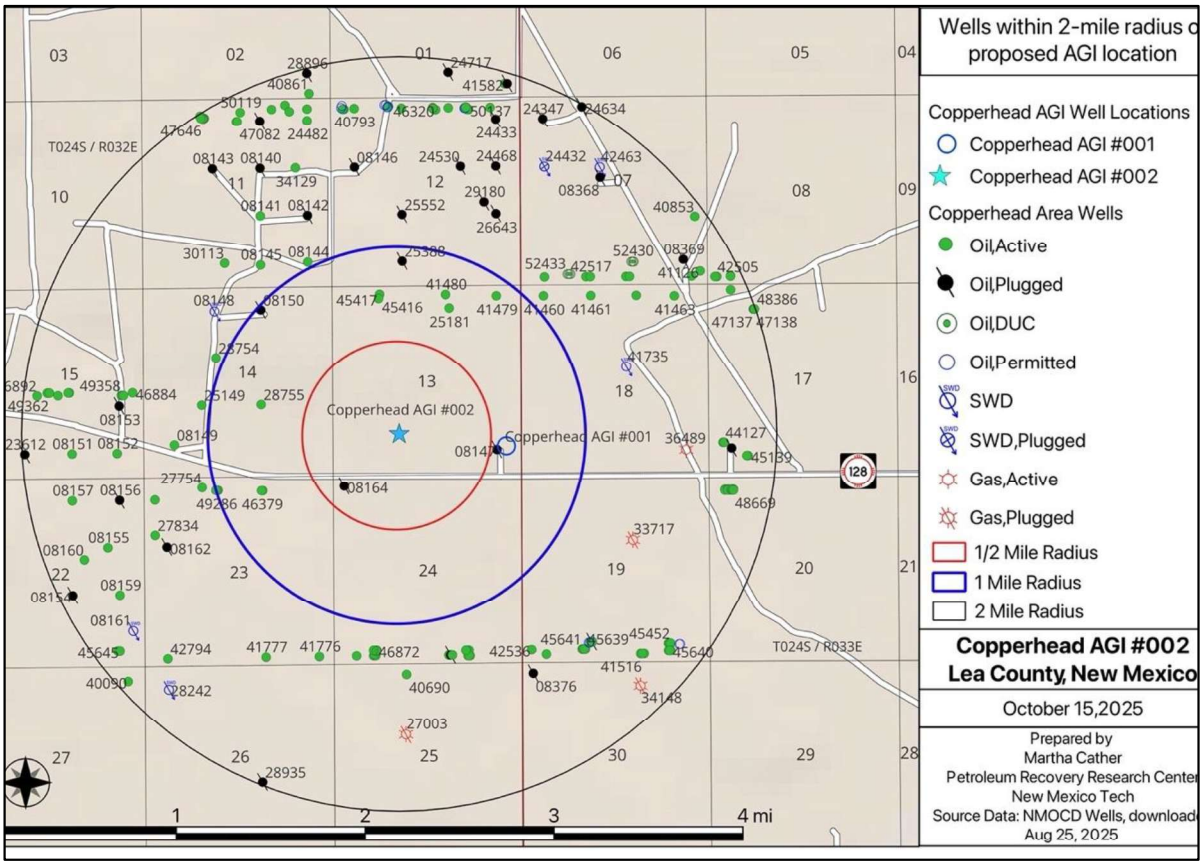


Figure 1. Wells within 1/2-, 1- and 2-mile radius of proposed Copperhead AGI #002

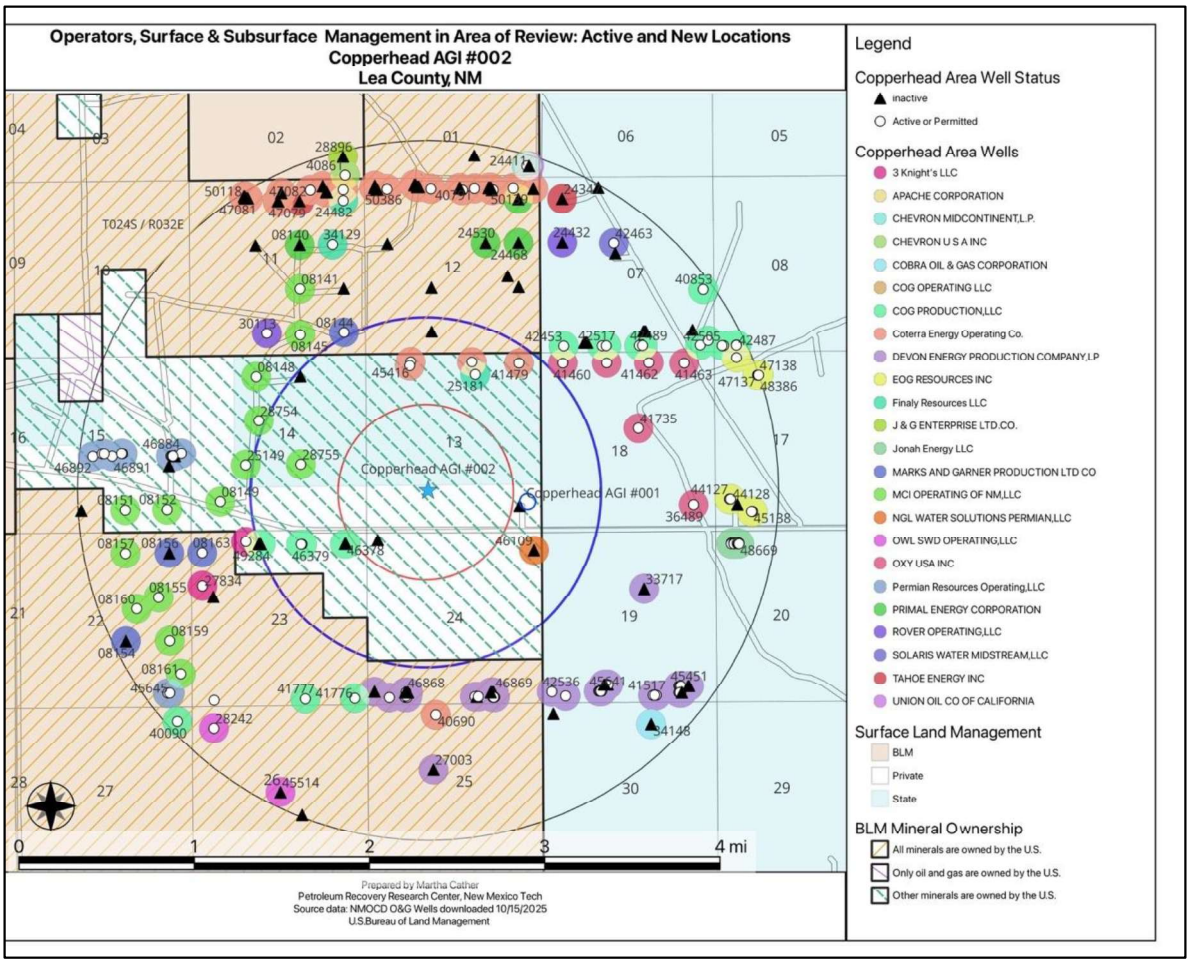


Figure 2. Operators and surface ownership for wells within 1/2-, 1- and 2-mile radius of proposed Copperhead AGI #002

VI. Tabulation of wells (See Attachment 3 for Complete Well List)

There are no wells within a 1/2-mile radius of the proposed location. There are currently no other injection or production wells penetrating the proposed injection zone within a 2-mile radius of the proposed location. However, the Copperhead AGI #002 well is planned as a redundant well to Copperhead AGI #001, API 30-025-55805 as required by NMOCD Order R-23867. Copperhead AGI #001 was spudded February 12, 2026, and will be completed in the Siluro-Devonian by late 2026. The well is approximately 0.6 mi from the proposed location of Copperhead AGI #002 well. See Attachment 3 for spud notice and well bore diagram of Copperhead AGI #001.

There are 224 well locations (active, plugged, or new) within 2 mi of the proposed well. Of these, 155 are either Bone Spring or Wolfcamp wells. The remainder are Delaware (37) or Atoka/Morrow (1). Delaware wells produce from the Double X Delaware pool located to the north and west of the proposed Copperhead AGI #002 location. Of these, 20 are still listed as active, but only 5 have reported production within the past 5 years. The Wimberly A #001, API 30-025-25181 is the nearest of these, at approximately 0.7 mi distance. No wells within the area of review have been completed within the proposed injection zone.

Tables 4 and **5** provide a general summary of wells in the area, and Attachment 3 provides a complete well listing.

Table 4. Summary of wells within 2 mi of Copperhead AGI #002

Distance from location (mi)	Active (incl New producers)	New(incl Never Drilled/recent expired/DUC)	Plugged, site released	Total
0 – 0.5 mile	0	0	1	1
0.5 – 1 mile	8	3	3	14
1 – 2 mile	147	30	32	209
Total	155	36	22	224

Table 5. Producing zones within 2 mi of Copperhead AGI #002

Unit or Pool	Approximate Depth Range (ft)
Triple X Delaware	4,900–6,800
Atoka/Morrow	15,100–15,400
Triste Draw Bone Spring	9,200–10,000
Triple X Bone Spring	9,500–11,000
Wolfcamp	12,100–12,500

VII. Data on proposed operation

(Items 1-3) A closed system will be used. Average and maximum rates and pressures are shown in **Table 6**. Equations, calculations, and modeling results are provided in **Attachment IV**.

Table 6. Average and maximum injection rates and pressures

Injection rate, MMSCFD	Average BHP, psi	Max BHP, psi	Average WHP, psi	Max WHP, psi
26	8,794	9,239	3,060	3,397

(4) Source of injection fluid is TAG from Copperhead facility with a composition of 30% H_2S, 70% CO_2

(5) **Injection formation water analysis**: The proposed well will inject TAG into the Siluro-Devonian interval. Water data was retrieved from the U.S. Geological Survey National Produced Waters Geochemical Database v2.3 (05/22/2019) to determine formation chemistry in the Siluro-Devonian injection interval for the Copperhead AGI #2 well. Water samples from the Devonian have been collected from 3 wells located within 11 mi of the proposed injection well. Those analyses show that the water contains NaCl and concentrations of total dissolved solids (TDS) range from 71,078 to 120,326 mg/L with an average of 90,530 mg/L (**Table 7, Figure 3**). High salinity indicates this interval is compatible with injection.

Table 7. Wells with water chemistry (mg/L) in the Devonian near the Copperhead AGI #2 well

API	Form	HCO_3	Ca	Mg	Na	K	Cl	SO_4	TDS
3001510859	Devonian	427	6280	586	38393	1070	73100	470	120326
3002508483	Devonian	500	2400	329	24039	610	42200	1000	71078
3002521082	Devonian	476	2820	378	27076	637	47900	900	80187

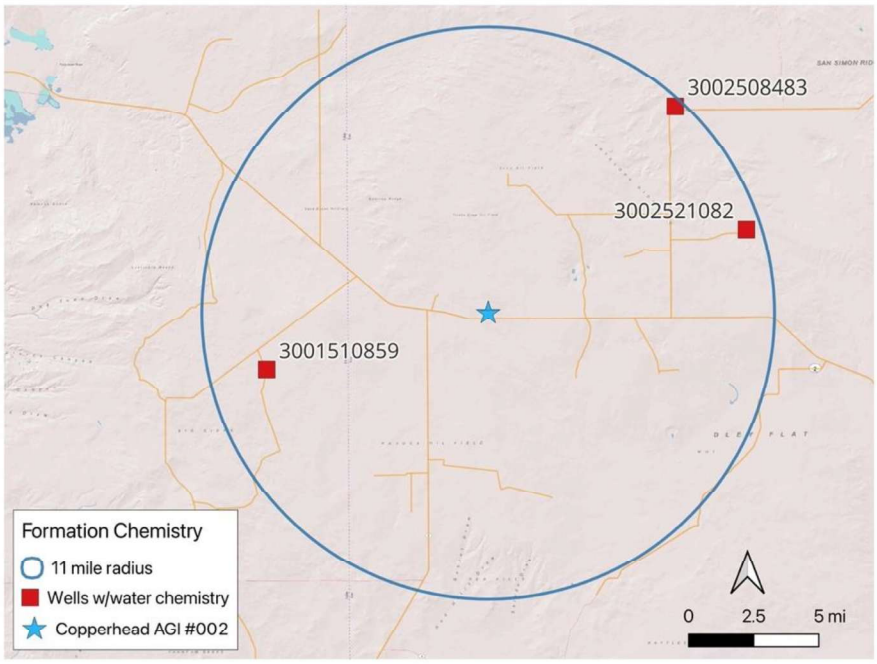


Figure 3. Wells with water chemistry (mg/L) for the Devonian within 11 mi of the Copperhead AGI #2 well from the USGS National Produced Waters Geochemical Database. Data show these formations are NaCl waters with average TDS of 90,530 mg/L.

VIII. Geologic Description and Data

Table 8 lists formations, depths and thicknesses. The subsurface geology is composed of a very thick sequence of sedimentary rocks including evaporites, carbonates, sandstones and shales representing a variety of depositional environments, underlain by Precambrian bedrock. Details of injection and confining zones are given below.

Table 8. Formation tops, depths, and thicknesses

	Measured Depth	Thickness	Porosity (%)	Permeability (md)	Behavior
Rustler	1177	346			Seal*
Salado	1523	1288			Seal*
Castile	2811	2185			Seal*

Lamar	4996	50			
Bell Canyon	5046	1028			Injection zone*
Cherry Canyon	6074	1627			Injection zone*
Brushy Canyon	7701	1265			
Bone Spring	8966	3255			
Wolfcamp	12221	1880			
Strawn	14101	340			
Atoka	14441	1365			
Morrow	15806	745			
Barnett Shale	16551	253	1.00%	0.1	Seal
Mississippian Limestone	16805	392	1.50%	0.1	Seal
Woodford Shale	17196	125	1.00%	1e-5	Seal
Thirtyone Fm	17321	120	2.20%	5.4	Injection zone
Wristen Gp	17441	770	3.50%	3.31	Injection zone
Fusselman	18211	500	4.00%	1.49	Injection
Montoya	18711	80	2.00%	1.6	Seal
Simpson Gp	18791	1615	1.00%	0.6	Seal
Ellenburger Dolomite	20406	550	1.50%	0.01	Seal
Ground elevation	3601				
*not proposed for injection at this location					

Injection zone

The injection zone encompasses the rocks of Silurian and Devonian strata including the Fusselman, Thirtyone and Wristen formations at depths of approximately 17,321–18,711 ft. The total thickness of the injection interval is estimated to be approximately 1,390 ft (**Table 8**). Minor variations in reported interval depths reflect differences between geological interpretation, simulation grid discretization, and engineering design assumptions; these differences do not affect the overall evaluation of the injection interval.

Ordovician – Silurian

Fusselman Formation – The Fusselman Formation is a shallow-water carbonate system. In the Copperhead area, it is around 500 ft thick. Although these shallow water carbonates initially had fairly high primary porosity, diagenesis usually has decreased both the porosity and permeability unless impacted by exposure and dissolution. Based on area well logs, the porosity averages around 1–2%, but some zones may have higher porosity based on regional well logs and injection well data. Reported permeability for shallower sections range from 0.001 to 10 mD (Ruppel, 2019).

Lower Devonian – Silurian

Thirtyone and Wristen Formations – The interbedded dolomites and dolomitic limestones of the Devonian Thirtyone Formation and the Silurian Wristen Group are collectively referred to as the Siluro-Devonian section (~890 ft thick). Unlike the Fusselman, Montoya and Ellenburger carbonates, these deposits represent deposition in deeper waters in the Copperhead area. Porosity and permeability in the Wristen are limited in the main body of the unit (3–5%), but exposure events and carbonate dissolution can improve the porosity (~5%). Within Thirtyone deposits, the chert-rich deposits have the best porosity

(up to 40%, up to 80 mD), while the limestones have less than 7% porosity and less than 1 mD of permeability (**Table 8**; Ruppel et al., 2020a).

Upper Confining Zone Properties: Woodford Shale/Mississippian Limestone

Mississippian – Mississippian age deposits are commonly divided (from youngest to oldest) into the Barnett Shale and the Mississippian limestone (an unnamed unit) of Lower Mississippian age. The Mississippian section is approximately 392 ft thick in the Copperhead area and is regionally extensive. Known production from this limestone consists of very small (1–2 well) plays that normally have poor porosity (4–9%) and permeability (Broadhead, 2017) in New Mexico and a few isolated fields in the shallow water, high-energy limestones in Texas. The Barnett Shale is a widespread, dark, organic shale with very low porosity and permeability and is ~250 ft thick.

Upper Devonian – Within the Permian Basin, the Upper Devonian Woodford Shale serves as a seal to hydrocarbon migration out of Devonian and older units (Wright, 1979). In combination with the Mississippian section, it makes an excellent seal for potential injection. The Woodford Shale is ~125 ft thick in the Copperhead area and is laterally continuous, organic- and shale-rich, siliceous (radiolarians) mudstone. Although porosity can be as high as 10% (Jarvie et al., 2001), it averages around 1% with very low permeabilities.

Lower Confining Zone Properties: Ordovician to Precambrian

Montoya Group – The Montoya deposits (~80 ft) are dominated by shallow-water, ramp limestones. Porosity within the Montoya Group is dependent on depositional environment and diagenesis. The higher energy environments tend to have better initial porosity than the low-energy environments. Compaction destroys the porosity, and dolomitization produces secondary porosity. Based on the well logs, the average porosity is approximately 3%, with scattered zones over 5% (**Table 8**). The average permeability is probably less than 1 mD, but fracturing may enhance it.

Simpson Group – The Simpson Group is a thick sequence of carbonates, sandstones, and shales (~1,600 ft) which has a depocenter roughly equivalent to the Delaware Basin/Tobosa Basin. There are several transgressive/regressive cycles within the section, but only the transgressive sandstone sections have significant porosity. The rest of the section typically consists of mud-rich carbonates and shales. In the Copperhead area, the Simpson is shaly, with low porosity and permeability.

While in some areas **Ellenburger Group** sediments are prospective injection zones, in this area Ellenburger rocks have low porosity and permeability (1 – 2% and <1 mD) due their original depositional environment and the depth of burial (Loucks and Kerans, 2019). This makes it a potential underlying seal, ~550 ft in thickness.

Cambrian to Precambrian – The oldest sediment in the area is Cambrian Bliss Sandstone (Broadhead, 2017) which overlies Precambrian granites. The Bliss Sandstone and crystalline Precambrian rocks are potential lower seals. Porosity and permeability data indicates that in shallower wells, the Bliss is an aquifer. Within the Copperhead area, no porosity and permeability data could be found. Considering their depth, compactional history, and potential diagenetic alteration, the Bliss sandstones and associated granitic debris (from weathering of the basement rock) are probably relatively tight.

Seismic review

A search was conducted for seismic events recorded within a 10- and 20-mile radius (300 and 1,250 mi2 respectively) surrounding the Copperhead AGI #002 well location. All seismic events of magnitude 2.0 or greater recorded by the New Mexico Tech Seismological Observatory and USGS databases from 1/12/17 to present were collected to determine if active seismicity exists near the proposed well location.

The search results from the New Mexico Tech Seismological Observatory database indicate 41 seismic

events occurred from the period of January 2017 to present (Figure 4). The closest offset seismic event occurred approximately 8.3 mi from the proposed location and was a magnitude 2 event. The largest nearby recorded seismic event was a 4.03 magnitude event in 2021, located approximately 11 mi from the Copperhead AGI #002 location. There are currently no seismic events greater than 3.0 magnitude recorded within a 10-mile radius. In addition, all seismic activity reported from the period is concentrated to the southwestern edges of the 10 and 20 mi radius buffer zone. This more active area is a locus of oil production and concomitant SWD activity in the region. There are 4 active monitoring stations located within 10 mi of the Copperhead AGI #002 well location. Among these stations, one is in direct proximity to the well (**Figure 4**). There are 10 other seismic monitoring stations within 20 mi of the well.

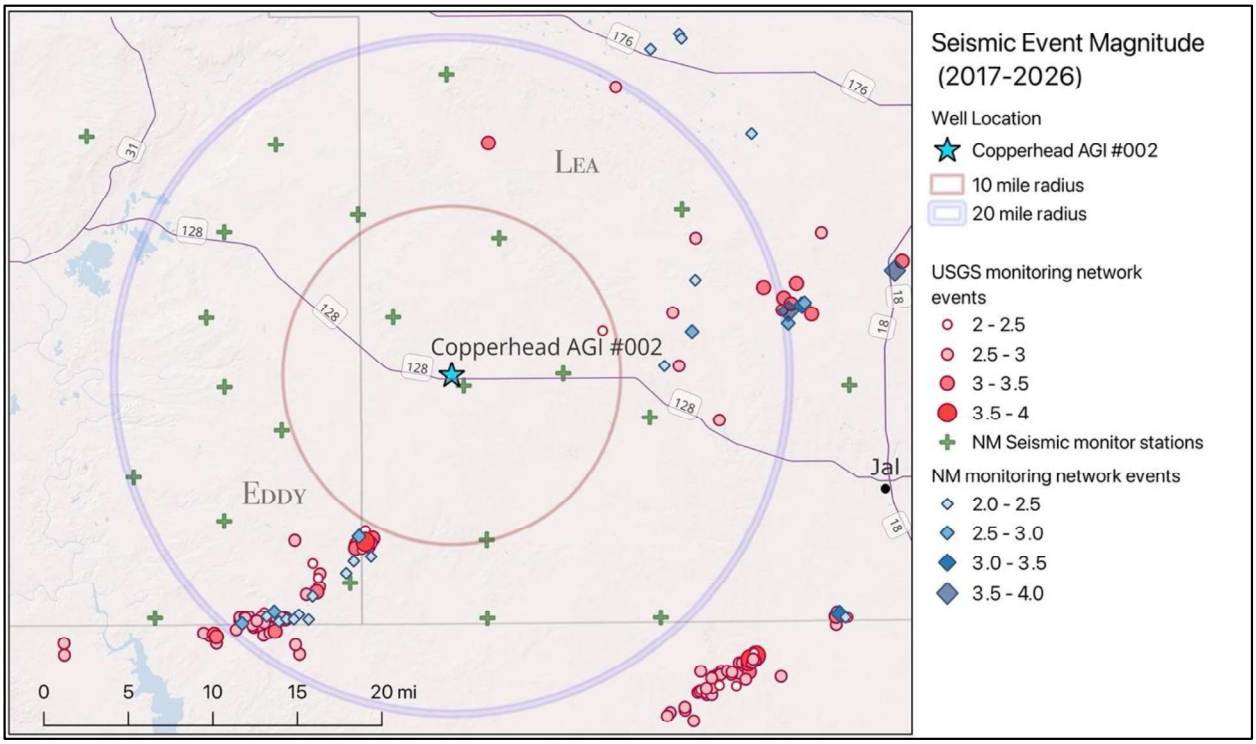


Figure 4. Existing seismic monitoring network surrounding Copperhead AGI #002 and surface projected locations of seismic events 2017–2026.

Fault Slip Potential Analysis

A fault slip potential analysis was performed for the Siluro-Devonian interval at the Copperhead injection site to evaluate the likelihood of fault reactivation under the proposed injection conditions. Analysis of faults interpreted from 3D seismic data (**Figure 5)** indicates that only two significant faults intersect the reservoir interval. The largest is located approximately 1.0–1.5 mi from the Copperhead AGI #002

injection well.

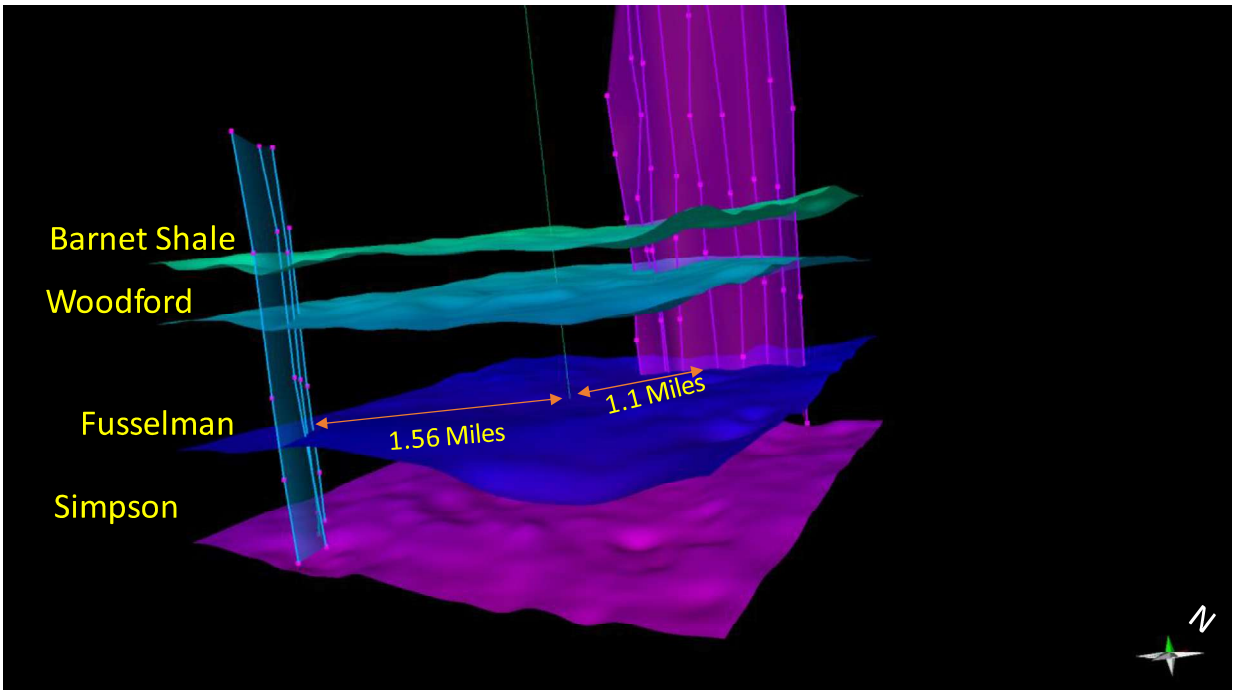


Figure 5. Structural surfaces and regional fault system interpreted from 3D seismic data.

Input Parameters

An in-house geomechanical analysis software package was developed and utilized in this study to enable flexible and transparent evaluation of fault slip potential under varying reservoir and geomechanical conditions. Unlike commercial tools (Walsh and Zoback 2016, Walsh and others, 2017), this code allows direct control and sensitivity analysis of key parameters such as Poisson's ratio. This flexibility is critical given the uncertainty ranges reported in the reservoir model (e.g., Poisson's ratio varying between 0.29–0.31) and allows rapid testing of conservative and realistic scenarios. Furthermore, the workflow integrates outputs from Petrel/CMG reservoir simulations (e.g., pressure increase grids) through shapefile coupling, enabling direct comparison between simulated pressure evolution and analytically derived fault slip thresholds. The analysis assumes a linear elastic behavior, homogeneous stress gradients, and Mohr–Coulomb failure with zero cohesion and constant friction coefficient.

As outlined in **Table 9**, pore pressure is assumed hydrostatic with a gradient of 0.45 psi/ft, and overburden stress is calculated using a conservative constant gradient of 1.05 psi/ft. Faults are treated as planar surfaces defined by strike and dip, and stress interactions are evaluated under quasi-static conditions. The assumptions of our analyses are consistent with published practices (Snee and Zoback, 2018) and allow a robust, physics-based assessment of fault stability while maintaining compatibility with the reservoir simulation framework.

Table 9. FSP parameters for input fault and injection model.

Fault Friction Coeff (mu)	0.58
Vertical Stress Gradient (psi/ft)	1.05
Maximum Horizontal Stress Direction (deg N CW)	75
Initial Reservoir Pressure Gradient (psi/ft)	0.47
A-Phi Parameter	0.6

Reference Friction Coefficient (mu)	0.58
Injection Years	2026 to 2056

Over a 30-year injection period, reservoir simulation results indicate that the modeled pressure increase on nearby faults remains less than 300 psi (**Figure 6**). Fault reactivation, however, depends not only on the simulated pore-pressure increase but also on whether that pressure increase is sufficient to reduce the effective normal stress and bring the fault to slip conditions. The fault slip potential analysis shows that the examined faults would require more than 2,500 psi of effective pressure increase to induce slip (**Figure 7**). The modeled pressure increase is therefore substantially lower than the threshold pressure required for fault reactivation.

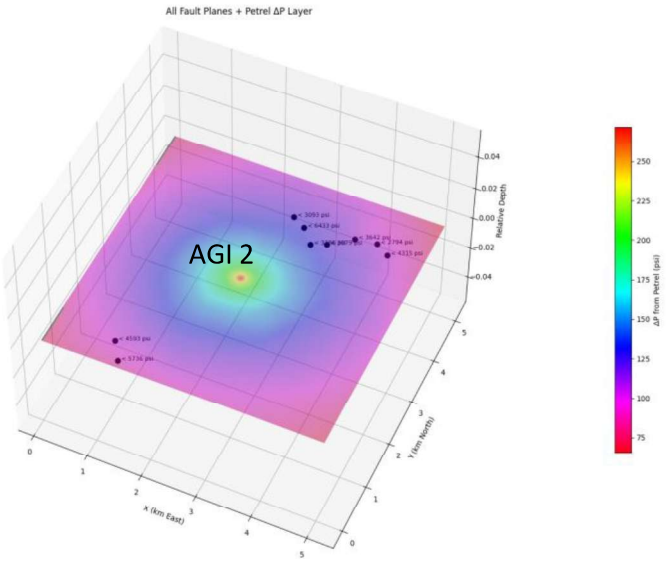


Figure 6. Visualization of pressure change after 30 years of injection and required pressure for fault slip.

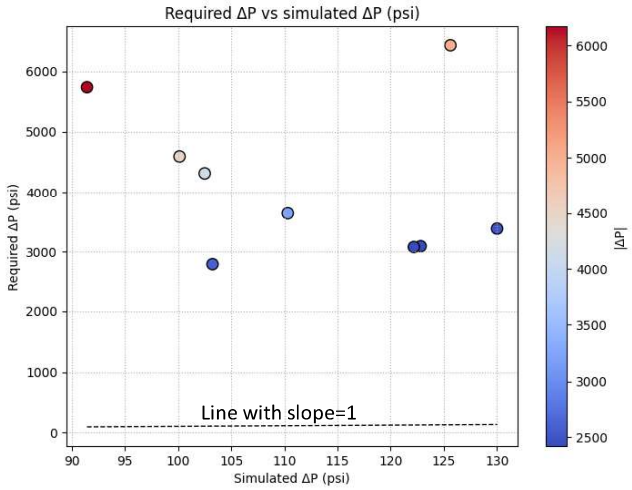


Figure 7. Visualization of pressure change required to cause fault slip and the predicted pressure after 30 years of injection.

Consistent with this result, the Mohr–Coulomb failure analysis after 30 years of injection indicates that all evaluated fault segments remain below the frictional failure envelope (**Figure 8**), demonstrating that none

of the faults satisfy the failure criterion under the modeled conditions. Overall, the predicted induced pressures on the fault planes are far below the pressure needed to trigger slip, suggesting negligible potential for reactivation of the major mapped faults in the study area. These findings support the interpretation that the fault system is mechanically stable under the proposed injection scenario. Continued monitoring and periodic reevaluation of the key geomechanical and reservoir parameters summarized in **Table 9** are nevertheless recommended to maintain confidence in the long-term integrity and safety of the storage system.

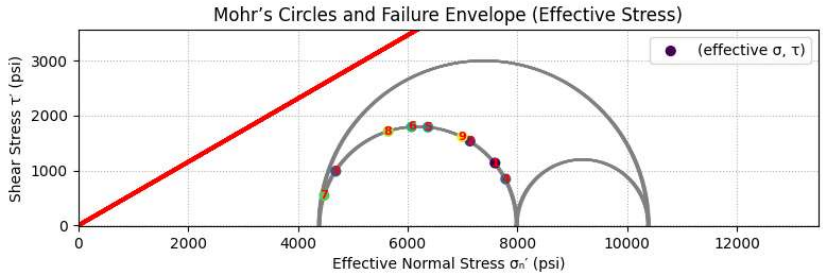


Figure 8. Mohr-Coulomb data of faults after 30 years of injection. Each point represents the Mohr-Coulomb response of an individual fault segment.

IX. Proposed stimulation program

A cleanup acid job may be used to remove mud and drill cuttings from the formation. No other formation stimulation is currently planned.

X. Logging and Test Data

Planned logging and testing is described in **Table 10**. Logs will be submitted to the Division upon completion of the well.

Table 10. Logging and testing program for Copperhead AGI #002

Well Logging	Logging Program	Depth Intervals (ft)
Surface Casing 1		1–1,208
Open Hole	None - Fluid Caliper	
Cased Hole	Cement Bond Log	
1st Intermediate Casing		1,208–5,034
Open Hole	GR/Resistivity/Sonic/Caliper	
Cased Hole	Cement Bond Log	
2nd Intermediate Casing		5,034–12,250
Open Hole	GR/Resistivity/Sonic/Caliper	
Cased Hole	Cement Bond Log	
Production Casing		12,250–17,299
Open Hole	GR/Flex (Lithoscanner), MRI, FMI, Sonic, Caliper, Sidewall Cores	
Cased Hole	Cement Bond Log	

Injection	GR/Flex (Lithoscanner), MRI, FMI, Sonic, Caliper, Sidewall Cores	17299–18699

XI. Ground Water

There are four main sources of underground drinking water in the northern Delaware Basin of New Mexico (Ritchie et al., 1985; Lowry et al., 2018; USBLM, 2020). They include: Cenozoic alluvium, lithologically complex fluvial accumulations of the Pecos River and other streams, windblown sands, playa deposits, gypsite, and others, with TDS ranging from <200 to 15,000 mg/L with an average of 2,319 mg/L; the Santa Rosa member of the Dockum Group, a reddish-brown and gray cross-stratified sandstone with TDS ranging from 205 to 2,990 mg/L which serves as the principal source of groundwater in the eastern part of Eddy County and the western third of Lea County; the Rustler Formation, a brackish to saline (~10,000 to 300,000 mg/L TDS) anhydrite or gypsum formation with two dolomite marker beds and a basal zone of sandstone to shale which is typically utilized for livestock, irrigation, and enhanced oil recovery; and the Capitan Reef, a karst limestone with TDS of <300 to 10,000 mg/L (Ritchie et al., 1985; Lowry et al., 2018; USBLM, 2020).

Based on the New Mexico Water Rights Database from the New Mexico Office of the State Engineer, there are no freshwater wells located within one mile of the Copperhead AGI #002 well. The closest groundwater wells are found at distances of approximately 1.34 mi away (C-01932) and 1.98 mi away (C-03528-POD1), completed to depths of 492 ft and 541 ft respectively and collecting water in the Triassic Dockum Group (Santa Rosa), with primary use of livestock watering (Ritchie et al., 1985; NMOSE, 2025; 9**Figure 6**). The shallow freshwater aquifer is protected by the surface and intermediate casings and cements in the Copperhead AGI #002.

Water chemistry is not available for wells C-01932 or C-03528-POD1. However, image files in the NMOSE water rights database for the expired application of pod C-01896 which is approximately 0.76 mi away include a chemical analysis of groundwater quality in the Santa Rosa of the Dockum Group (**Table 12**). Targa also implements frequent sampling in two additional shallow Triassic groundwater wells, C-03666 POD1 and C-03917 POD1 located adjacent to the Red Hills Gas Plant at distances of 5.8 and 6.2 mi away from the Copperhead AGI #002 well respectively. Samples collected on 11/21/2024 indicate the water is basic with pH of 8 and calculated TDS of 416 to 1,072 mg/L (**Attachment V**). Results of these analyses are consistent with groundwater quality in the Triassic formations throughout the region.

Table 11. Groundwater wells within 2 mi of Copperhead AGI #002

pod_file	use	status	Well depth	tws	rng	sec	county	easting_13N	northing_13N	own_name
C-01932	STK	ACT	492	24S	32E	12	ED	628633	3567188	MCCLOY
C-03528-POD1	STK	ACT	541	24S	32E	15	Lea	626040	3566130	NGL

Table 12. Geochemistry of Santa Rosa from well C-01896 application.

Ca	Mg	Na, K	HCO_3	SO_4	Cl	TDS	Spec. Cond
32	26	163	287	219	52	635	1030

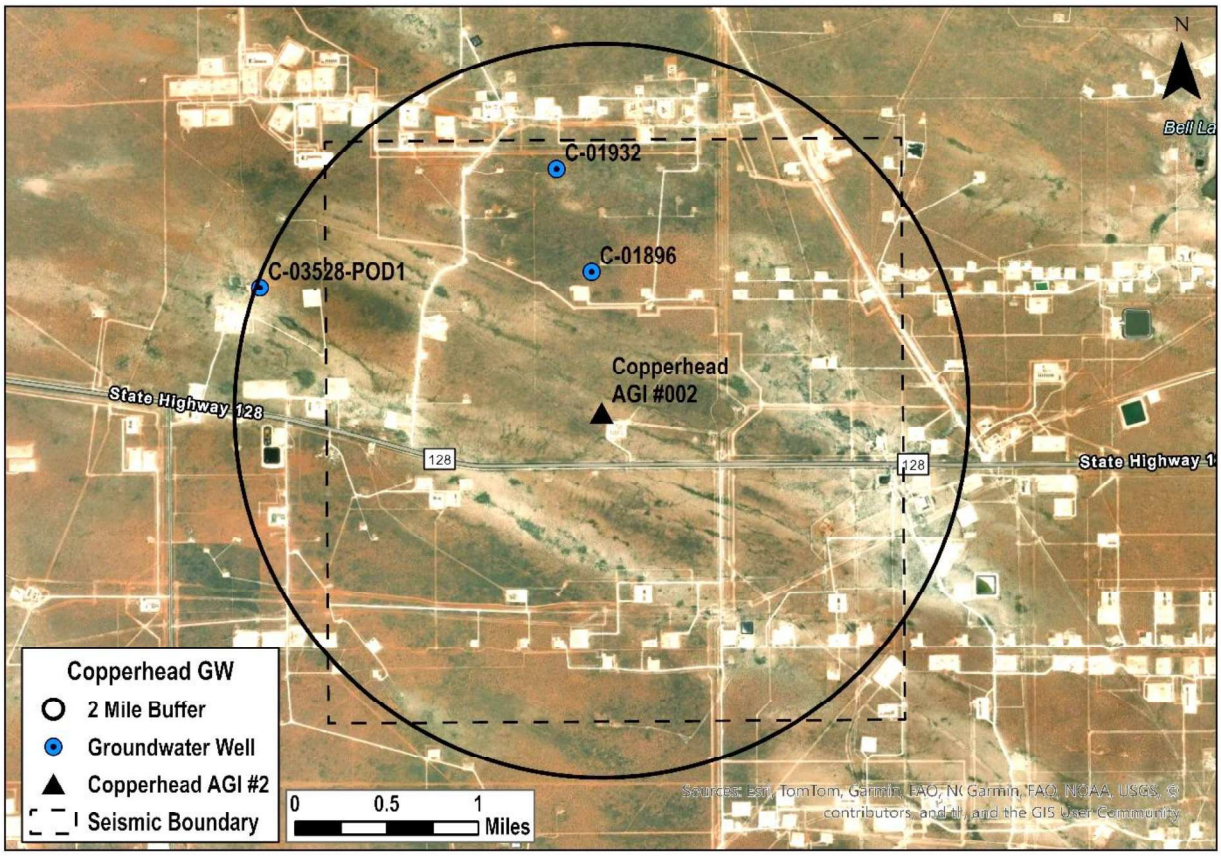


Figure 9. Groundwater wells near Copperhead AGI #002 from the NMOSE database.

References

Lowry, Thomas S., Michael D. Schuhen, Owen W. Lofton, La Tonya N. Walker, Patricia B. Johnson, Dennis W. Powers, and Dale O. Bowman. 2018. Water Resource Assessment in the New Mexico Permian Basin. Prepared by Sandia National Laboratories. SAND2018-12018. October 2018.

New Mexico Office of the State Engineer, Water Rights Division 2023. New Mexico Water Rights Reporting System, https://gis.osne.state.nm.us/gisapps/ose_pod_locations/(accessed August 2023 to November 2023)

Ritchie, S.F., Wells, J.G., and Stephens, K.T., 1985, Geohydrology of the Delaware Basin and vicinity, Texas and New Mexico: Water-Resources Investigations Report, doi:10.3133/wri844077

U.S. Department of the Interior Bureau of Land Management, 2020. BLM Water Support Document for Oil and Gas Development in New Mexico (BLM WSD 2020), 68 p.

Walsh, F. R., Zoback, M. D., Pais, D., Weingarten, M., and Tyrrell, T. (2017) FSP 1.0: A Program for Probabilistic Estimation of Fault Slip Potential Resulting From Fluid Injection, User Guide from the Stanford Center for Induced and Triggered Seismicity, available at SCITS.Stanford.edu/software

Walsh, F. R., and Zoback, M. D., (2016) Probabilistic assessment of potential fault slip related to injection induced earthquakes: Application to north central Oklahoma, USA, Geology, Data Repository item 2016334, doi:10.1130/G38275.1

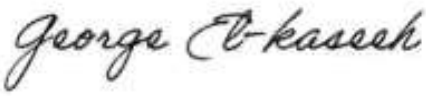
Snee, J.E.L., and Zoback, M.D., (2018), State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity. The Leading Edge.

XII. No Hydrologic Connection Statement

Based on the available geological data we find no evidence of open faults and/or other hydrologic connection between the target injection zone for the Copperhead AGI #002 and underground sources of drinking water.

George El-Kaseeh, Section Head – Industry Service Outreach

Date: March 22, 2026



XIII. Proof of Notice

Targa researched land records to obtain a listing of all operators, oil, gas and mineral lessees, and surface owners within a one-mile radius of the proposed AGI well. **Attachment III** includes the results of that search.

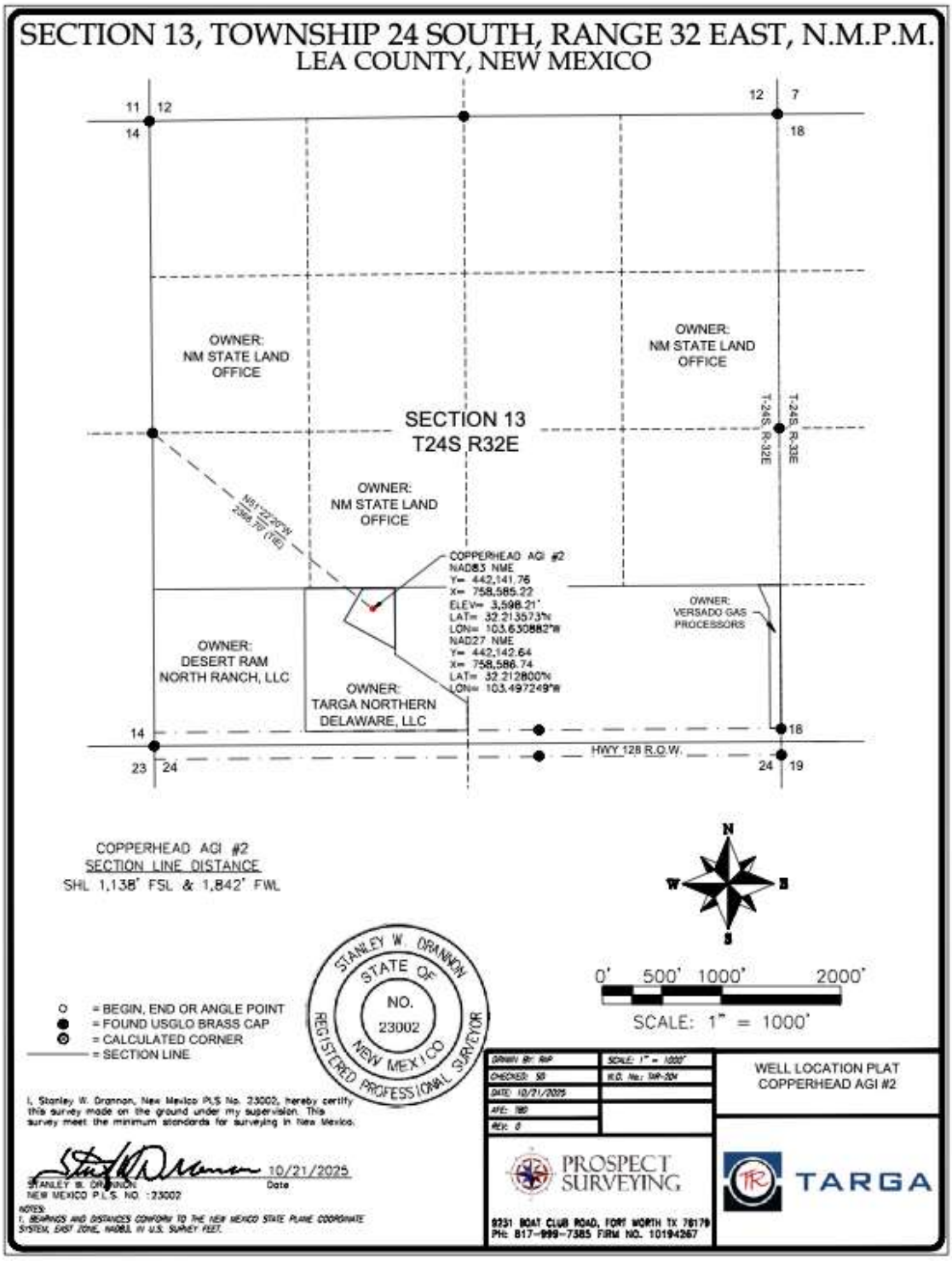
Application for Copperhead Acid Gas Injection Well
Targa Midstream Services LLC
Copperhead AGI #002
Section 13 T24S, R32E
Lea County, New Mexico

Attachments

The following attachments provide supplementary material to accompany the narrative and the C-108 application.

Attachment I contains the C-102 form for the Copperhead AGI #002 well.
Attachment II contains a wellbore diagram for the Copperhead AGI #002 well.
Attachment III contains information regarding the nearby Copperhead AGI #001 well, a listing of wells within a 2-mile radius of the proposed well location, and a listing of property owners to be notified.
Attachment IV contains a report covering reservoir modeling and simulation to support the requested injection volume.
Attachment V provides groundwater sample chemistry.
Attachment VI contains a draft notice letter which will accompany the application when the individual letters are sent. These notices will be sent out as soon as the NMOCC assigns a case number and sets a date for the hearing.

Attachment I: C-102 Well Location and Acreage Dedication Plat



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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
		ACID GAS INJECTION; DEVONIAN

4 Property Code	5 Property Name	6 Well Number
	COPPERHEAD AGI	2

7 OGRID No.	8 Operator Name	9 Elevation
	TARGA NORTHERN DELAWARE, LLC	3598.21'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	13	24 S	32 E		1,138	SOUTH	1,842	WEST	LEA

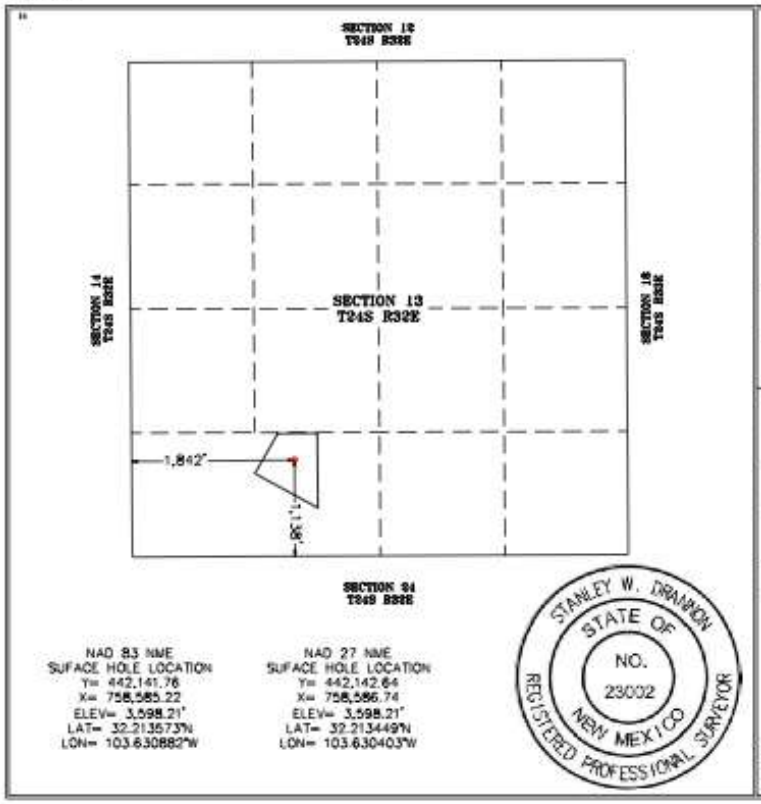
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16



NAD 83 NME
SURFACE HOLE LOCATION
Y= 442,141.76
X= 758,585.22
ELEV= 3,598.21'
LAT= 32.213573°N
LON= 103.630882°W

NAD 27 NME
SURFACE HOLE LOCATION
Y= 442,142.64
X= 758,586.74
ELEV= 3,598.21'
LAT= 32.213449°N
LON= 103.630403°W

STANLEY W. DRANNON
STATE OF NEW MEXICO
NO. 23002
REGISTERED PROFESSIONAL SURVEYOR

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Date

Printed Name

E-mail Address

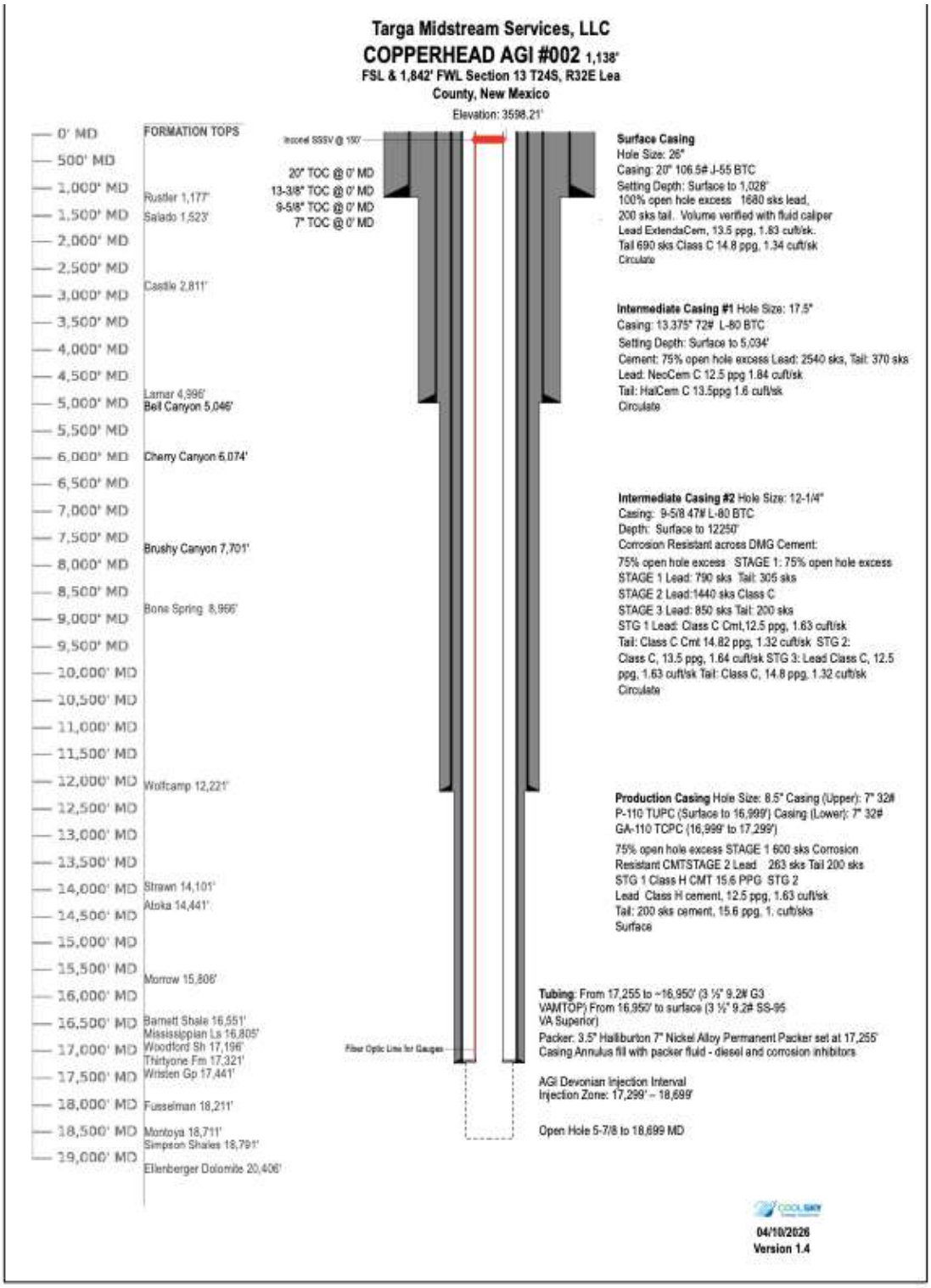
18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

10/21/2025
Date of Survey
Signature and Seal of Professional Surveyor:

STANLEY W. DRANNON 23002 10/21/2025
Certificate Number RAP TAR-204

Attachment II: Wellbore Diagram Copperhead AGI #002



Attachment III: Nearby Wells, Area of Review Well List and Lease maps

Copperhead AGI #002 well is planned as a redundant well to Copperhead AGI #001, API 30-025-55805 as required by NMOCD Order R-23867. Copperhead AGI #001 was spudded February 12, 2026 and will be completed in the Siluro-Devonian by late 2026. This attachment contains the spud notice and updated wellbore diagrams for Copperhead AGI #001 as well as a complete tabulation of wells within a 2-mile radius of the Copperhead AGI #002 location.

Santa Fe Main Office
Phone: (505) 476-3441
General Information
Phone: (505) 629-6116

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

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. 30-025-55805
5. Indicate Type of Lease STATE ☐ FEE ☒
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: Copperhead AGI
1. Type of Well: Oil Well ☐ Gas Well ☒ Other AGI
8. Well Number 1
2. Name of Operator: Targa Midstream Services, LLC
9. OGRID Number 24650
3. Address of Operator: 811 Louisiana St., Ste. 2100, Houston, TX 77002
10. Pool name or Wildcat: AGI; Devonian - Fusselman
4. Well Location
Unit Letter P : 793' feet from the South line and 429 feet from the East line
Section 13 Township 24S Range 32E NMPM County LEA
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3579' 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:			☐

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.

Copperhead AGI #1 Spud Notice: February 12, 2026 at 1:00 am MST
Spud 26" surface hole drill to 1,248'. Run 20" - 106.5#/ft J-55 BTC Casing to 1,028'
Cement 20" casing on February 16, 2026
Lead – 1680 sks of Class "C", 12.96 ppg, 1.97 cuft/sk; Tail – 200 sks Class "C" 200, 14.8 ppg, 1.34 cuft/sk
Displace with 21 bbls of water, bump plug, floats held, 257 bbls of cement returns to surface

Spud Date: February 12, 2026 @ 1:00 am MST Rig Release Date:

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

SIGNATURE Paul Ragsdale TITLE Consultant for Targa DATE Feb. 18, 2025

Type or print name Paul Ragsdale E-mail address: paul.Ragsdale@coolskyenergy.com PHONE:

For State Use Only

APPROVED BY: TITLE DATE

Conditions of Approval (if any):

Figure III-1. Spud notice for Copperhead AGI #001.

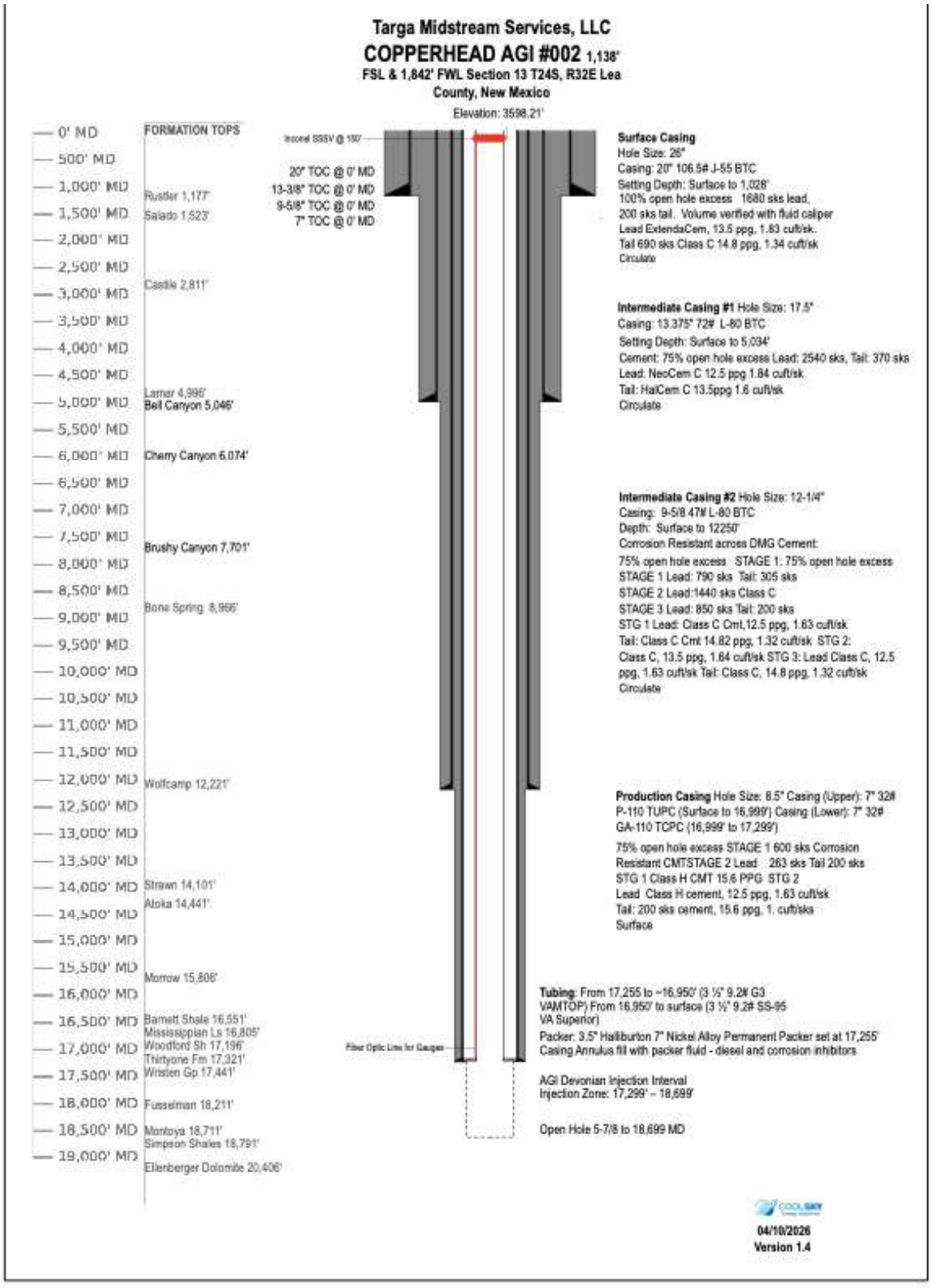


Figure III- 2. Updated wellbore diagram of Copperhead AGI #001.

Table III-1. List of all active, plugged, or new well locations in a 2-mile radius

API (30-025-)	NAME	OPERATOR	STAT	FM	TVD	DIST (MI)	SPUD YR	PLUG YR	LAT	LONG
08164	FEDERAL BONDURANT #001	PRE-ONGARD WELL OPERATOR	P	DEL	5080	0.4	1961	1961	32.209507	-103.6358109
08147	WOOLLEY #001	PRE-ONGARD WELL OPERATOR	P	DEL	5063	0.53	1900	1957	32.212265	-103.6219711
25181	WIMBERLY A #001	Finaly Resources LLC	A	DEL	5050	0.71	1975	9999	32.2231598	-103.6262131
45417	DOS EQUIS 13 FEDERAL COM #010H	Coterra Energy Operating Co.	A	BSPG	11045	0.72	2019	9999	32.22392	-103.632592
28755	JENNINGS FEDERAL #006	MCI OPERATING OF NM, LLC	A	DEL	4933	0.74	1984	9999	32.2158241	-103.6432648
45416	DOS EQUIS 13 FEDERAL COM #009H	Coterra Energy Operating Co.	A	BSPG/ WOLF	11051	0.74	2019	9999	32.22425	-103.632498
41480	DOS EQUIS 13 FEDERAL COM #002H	Coterra Energy Operating Co.	A	BSPG	10937	0.78	2014	9999	32.2242012	-103.6265335
46381	EIDER 23 FEDERAL #702H	COG PRODUCTION, LLC	A	WOLF	12390	0.78	2019	9999	32.209186	-103.643184
46379	EIDER 23 FEDERAL #602H	COG PRODUCTION, LLC	A	WOLF	12364	0.79	2019	9999	32.209185	-103.643281
41479	DOS EQUIS 13 FEDERAL COM #001H	Coterra Energy Operating Co.	A	BSPG	10988	0.89	2014	9999	32.2240753	-103.6219406
25388	WIMBERLY #007	PRE-ONGARD WELL OPERATOR	P	DEL	5100	0.91	1976	1976	32.2267799	-103.6304321
08150	JENNINGS FEDERAL#003	PRE-ONGARD WELL OPERATOR	P	DEL	5030	0.98	1962	1982	32.2231064	-103.6432495
49284	EIDER 23 FEDERAL COM #703H	COG PRODUCTION, LLC	A	WOLF	0	1	2022	9999	32.209225	-103.647209
49285	EIDER 23 FEDERAL COM #704H	COG PRODUCTION, LLC	A	WOLF	0	1.01	2022	9999	32.209224	-103.647306
49286	EIDER 23 FEDERAL COM #705H	COG PRODUCTION, LLC	A	WOLF	0	1.01	2022	9999	32.209224	-103.647403
08144	GULF HANAGAN FEDERAL #001	MARKS AND GARNER PRODUCTION LTD CO	A	DEL	5065	1.02	1962	9999	32.226757	-103.6389694
28754	JENNINGS FEDERAL #005	MCI OPERATING OF NM, LLC	A	DEL	4950	1.04	9999	9999	32.2194557	-103.6473236
25149	JENNINGS FEDERAL #004	MCI OPERATING OF NM, LLC	A	DEL	5000	1.05	9999	9999	32.2158012	-103.6486359
41460	COPPERHEAD 18 STATE #002H	OXY USA INC	A	BSPG	11060	1.06	2014	9999	32.2240486	-103.6176758
27754	EXXON 23 FEDERAL #001	3 Knight's LLC	A	DEL	4985	1.08	1982	9999	32.2094498	-103.6486511
42453	MACHO NACHO STATE COM #010H	COG PRODUCTION, LLC	A	BSPG	9480	1.13	2015	9999	32.2254962	-103.6175784
08145	GULF HANAGAN FEDERAL #002	MCI OPERATING OF NM, LLC	A	DEL	5046	1.15	1962	9999	32.2265701	-103.6432419

46865	BELL LAKE 24 FEDERAL #008H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	0	1.16	2021	9999	32.196849	-103.632957
46868	BELL LAKE 24 FEDERAL #012H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	9311	1.16	2021	9999	32.196849	-103.633151
47545	BELL LAKE 24 FEDERAL #014H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	9383	1.16	2021	9999	32.196848	-103.633248
46872	BELL LAKE 24 FEDERAL #019H	DEVON ENERGY PRODUCTION COMPANY, LP	A*	BSPG/ WOLF	0	1.16	2021	9999	32.196849	-103.633054
25552	WIMBERLY #008	PRE-ONGARD WELL OPERATOR	P	DEL	5070	1.16	1977	1979	32.2304077	-103.6304245
46870	BELL LAKE 24 FEDERAL #016H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	0	1.18	2020	9999	32.196536	-103.633152
08148	JENNINGS FEDERAL #001	MCI OPERATING OF NM, LLC	A	DEL	5019	1.18	1962	9999	32.2230835	-103.6475525
46871	BELL LAKE 24 FEDERAL #018H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	0	1.19	2020	9999	32.196436	-103.633055
46835	BELL LAKE 24 FEDERAL #015H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	0	1.19	2020	9999	32.196436	-103.633249
08149	JENNINGS FEDERAL #002	MCI OPERATING OF NM, LLC	A	DEL	5000	1.19	1962	9999	32.2127724	-103.6511307
41182	BELL LAKE 24 FEDERAL #001H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	10991	1.2	2013	9999	32.196434	-103.6347809
46869	BELL LAKE 24 FEDERAL #013H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	0	1.21	2021	9999	32.196809	-103.624617
46867	BELL LAKE 24 FEDERAL #011H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	9266	1.21	2021	9999	32.196808	-103.624714
46866	BELL LAKE 24 FEDERAL #010H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	9295	1.21	2021	9999	32.196808	-103.624811
41307	BELL LAKE 24 FEDERAL #003H	DEVON ENERGY PRODUCTION COMPANY, LP	P	BSPG	11064	1.21	2014	2015	32.1964569	-103.6262817
46873	BELL LAKE 24 FEDERAL #021H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG/ WOLF	10041	1.21	2021	9999	32.196808	-103.624908
41304	BELL LAKE 24 FEDERAL #004H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	11056	1.21	2014	9999	32.1964569	-103.6264496
41306	BELL LAKE 24 FEDERAL #002H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	11082	1.21	2014	9999	32.1964569	-103.6261215
52429	MACHO NACHO	COG	A*	BSPG	0	1.23	2024	9999	32.22577	-103.615481

	STATE COM #607H	OPERATING LLC								
52433	MACHO NACHO STATE COM #608H	COG OPERATING LLC	A*	WOLF	0	1.23	2024	9999	32.22577	-103.615578
46874	BELL LAKE 24 FEDERAL #022H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	0	1.24	2020	9999	32.196396	-103.624714
46875	BELL LAKE 24 FEDERAL #024H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	0	1.24	2020	9999	32.196396	-103.624617
46876	BELL LAKE 24 FEDERAL #025H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	0	1.24	2020	9999	32.196396	-103.62452
52428	MACHO NACHO STATE COM #605H	COG OPERATING LLC	A*	BSPG	0	1.24	2024	9999	32.22577	-103.615287
52432	MACHO NACHO STATE COM #606H	COG OPERATING LLC	A*	WOLF	0	1.24	2024	9999	32.22577	-103.615384
41735	COPPERHEAD 18 STATE SWD #001	OXY USA INC	A	DEL	6800	1.25	2014	9999	32.2186279	-103.6103592
08142	HANAGAN D #003	PRE-ONGARD WELL OPERATOR	P	DEL	4986	1.25	1962	1974	32.2303848	-103.6389694
41461	COPPERHEAD 18 STATE #003H	OXY USA INC	A	BSPG	11076	1.25	2014	9999	32.2240448	-103.6134033
41776	TREASURE ISLAND FEDERAL #001H	COG PRODUCTION, LLC	A	BSPG	10722	1.26	2014	9999	32.1963959	-103.6381454
26643	HANAGAN D FEDERAL #002	PRE-ONGARD WELL OPERATOR	P	DEL	5100	1.27	1980	1981	32.230423	-103.6219254
40690	DOUBLE X 25 FEDERAL #004	Coterra Energy Operating Co.	A	BSPG	10832	1.28	2012	9999	32.1949883	-103.6302719
30113	WIMBERLY #006	ROVER OPERATING, LLC	A	DEL	5075	1.29	9999	9999	32.2267189	-103.6464844
42518	MACHO NACHO STATE COM #009H	COG PRODUCTION, LLC	A	BSPG	9533	1.29	2015	9999	32.22549335	-103.613825
42517	MACHO NACHO STATE COM #008H	COG PRODUCTION, LLC	A	BSPG	9496	1.31	2015	9999	32.22549304	-103.613435
29180	GULF FEDERAL #001	PRE-ONGARD WELL OPERATOR	P	DEL	5020	1.31	1985	1985	32.2313309	-103.6229935
08163	ERNEST FEDERAL #001	MARKS AND GARNER PRODUCTION LTD CO	A	DEL	4992	1.34	1962	9999	32.2085228	-103.6529236
33717	STATE 19 #001	DEVON ENERGY PRODUCTION COMPANY, LP	P	AT/MOR	15966	1.35	1997	2016	32.2053223	-103.6099014
42536	BELL LAKE 19 STATE #006H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	9716	1.35	2015	9999	32.19682317	-103.6189568
08141	HANAGAN D FEDERAL #002	MCI OPERATING OF NM, LLC	A	DEL	4962	1.36	1962	9999	32.2303658	-103.6432343
08162	ERNEST FEDERAL #001	PRE-ONGARD WELL OPERATOR	P	DEL	5020	1.37	1962	1963	32.2048988	-103.6518631
41777	TREASURE ISLAND	COG PRODUCTION,	A	BSPG	10961	1.38	2014	9999	32.196373	-103.6429596

	FEDERAL #002H	LLC								
27834	EXXON 23 FEDERAL #002	3 Knight's LLC	A	DEL	5013	1.4	9999	9999	32.2058029	-103.6529236
41024	BELL LAKE 19 STATE #001H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	11054	1.41	2013	9999	32.1964722	-103.6176224
46884	GHOST RIDER 22 15 FEDERAL COM #101H	Permian Resources Operating, LLC	A	BSPG	9934	1.42	2020	9999	32.2167878	-103.6548865
08146	GULF HANAGAN FEDERAL #003	PRE-ONGARD WELL OPERATOR	P	DEL	5049	1.43	1962	1963	32.2340508	-103.6346893
24530	WIMBERLY #004	PRIMAL ENERGY CORPORATION	P	DEL	5030	1.45	1973	1997	32.234066	-103.6251144
42489	MACHO NACHO STATE COM #007H	COG PRODUCTION, LLC	A	BSPG	9477	1.46	2015	9999	32.22549031	-103.6102144
41462	COPPERHEAD 18 STATE #004H	OXY USA INC	A	BSPG	10980	1.46	2014	9999	32.224041	-103.6092911
08376	CONTINENTAL STATE #001	PRE-ONGARD WELL OPERATOR	P	DEL	5108	1.46	1961	1961	32.195015	-103.6188202
50230	GHOST RIDER 22 15 FEDERAL COM #402H	Permian Resources Operating, LLC	A	BSPG/ WOLF	12138	1.47	2022	9999	32.2165797	-103.6558078
50231	GHOST RIDER 22 15 FEDERAL COM #401H	Permian Resources Operating, LLC	A	BSPG/ WOLF	12312	1.47	2022	9999	32.2165799	-103.6557108
49358	GHOST RIDER 22 15 FEDERAL COM #001H	Permian Resources Operating, LLC	A	BSPG	9318	1.48	2022	9999	32.2165794	-103.6559047
42488	MACHO NACHO STATE COM #006H	COG PRODUCTION, LLC	A	BSPG	9527	1.48	2015	9999	32.22548999	-103.6098894
08152	HANAGAN B FEDERAL #002	MCI OPERATING OF NM, LLC	A	DEL	4990	1.49	1961	9999	32.2121391	-103.656311
08153	HANAGAN B FEDERAL #003	PRE-ONGARD WELL OPERATOR	P	DEL	4970	1.49	1961	1961	32.2157669	-103.656105
54723	BELL LAKE 19 18 STATE COM #301H	DEVON ENERGY PRODUCTION COMPANY, LP	A**	BSPG	0	1.5	9999	9999	32.197392	-103.613871
54724	BELL LAKE 19 18 STATE COM #302H	DEVON ENERGY PRODUCTION COMPANY, LP	A**	BSPG	0	1.5	9999	9999	32.197392	-103.613774
45641	BELL LAKE 19 18 STATE COM #034H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	12229	1.5	2019	9999	32.196842	-103.614389
34129	WIMBERLY #007	Finaly Resources LLC	A	DEL	5118	1.51	1997	9999	32.2340317	-103.6400299
45455	BELL LAKE 19 18 STATE COM #017H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	9350	1.51	2019	9999	32.1973915	-103.6136122
45621	BELL LAKE 19 18 STATE COM #013Y	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	9491	1.51	2019	9999	32.197392	-103.613467
45454	BELL LAKE 19 18 STATE COM #013	DEVON ENERGY PRODUCTION COMPANY, LP	P	BSPG	120	1.51	2019	2019	32.1973915	-103.6135152
24468	WIMBERLY #003	PRIMAL ENERGY	P	DEL	5070	1.51	1973	2002	32.2340698	-103.6219177

		CORPORATION								
45642	BELL LAKE 19 18 STATE COM #035H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	12325	1.51	2019	9999	32.196842	-103.614195
45638	BELL LAKE 19 18 STATE COM #030H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	12469	1.51	2019	9999	32.196842	-103.614292
08156	BRADLEY FEDERAL #003	MARKS AND GARNER PRODUCTION LTD CO	P	DEL	4980	1.52	1962	2006	32.2085114	-103.6561203
45639	BELL LAKE 19 18 STATE COM #031H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	12515	1.52	2019	9999	32.196842	-103.614098
36489	COPPERHEAD 18 STATE #001	OXY USA INC	A	WOLF	14627	1.52	2004	9999	32.2122612	-103.6050262
52427	MACHO NACHO STATE COM #603H	COG OPERATING LLC	A*	BSPG	0	1.53	2024	9999	32.226688	-103.609711
52431	MACHO NACHO STATE COM #604H	COG OPERATING LLC	A*	WOLF	0	1.53	2024	9999	32.226688	-103.609808
52426	MACHO NACHO STATE COM #601H	COG OPERATING LLC	A*	BSPG	0	1.54	2024	9999	32.226688	-103.60957
52430	MACHO NACHO STATE COM #602H	COG OPERATING LLC	A*	WOLF	0	1.54	2024	9999	32.226688	-103.609614
08140	WIMBERLY #001	PRIMAL ENERGY CORPORATION	P	DEL	5091	1.58	1962	2000	32.2340164	-103.6432343
27003	FEDERAL BM #001	DEVON ENERGY PRODUCTION COMPANY, LP	P	MORROW	15973	1.59	1980	2007	32.1904526	-103.6305313
24432	INGRAM O STATE #002	ROVER OPERATING, LLC	P	DEL	5204	1.61	1973	2021	32.2340698	-103.6176453
41463	COPPERHEAD 18 STATE #005H	OXY USA INC	A	BSPG	11109	1.63	2014	9999	32.2239838	-103.6058502
08155	BRADLEY FEDERAL #002	MCI OPERATING OF NM, LLC	A	DEL	4976	1.65	1962	9999	32.2048798	-103.657196
08159	U S SMELTING FEDERAL #003	MCI OPERATING OF NM, LLC	A	DEL	5005	1.71	1962	9999	32.2012367	-103.6561356
42794	CHARRO FEDERAL COM #001H	COG OPERATING LLC	A	BSPG	10972	1.71	2015	9999	32.196302	-103.651845
08143	HANAGAN D #004	PRE-ONGARD WELL OPERATOR	P	DEL	5107	1.71	1962	1974	32.2339935	-103.6475372
40792	DOS EQUIS 12 FEDERAL COM #003H	Coterra Energy Operating Co.	A	BSPG	11003	1.72	2013	9999	32.2385941	-103.6304169
44127	HEARTTHROB 17 STATE #701H	EOG RESOURCES INC	A	WOLF	12447	1.72	2018	9999	32.2127039	-103.6015362
08151	HANAGAN B FEDERAL #001	MCI OPERATING OF NM, LLC	A	DEL	4955	1.73	1961	9999	32.2121239	-103.6603851
24482	WIMBERLY #005	Finaly Resources LLC	A	DEL	5050	1.73	9999	9999	32.2376671	-103.6389618
46323	DOS EQUIS 12 13 FEDERAL COM #073H	Coterra Energy Operating Co.	A	WOLF	12396	1.73	2020	9999	32.238468	-103.627386

46320	DOS EQUIS 12 13 FEDERAL COM #005H	Coterra Energy Operating Co.	A	BSPG/ WOLF	12418	1.73	2020	9999	32.238468	-103.627322
44128	HEARTTHROB 17 STATE #702H	EOG RESOURCES INC	A	WOLF	12422	1.73	2018	9999	32.2127038	-103.6014294
08368	GULF 7 STATE #002	PRE-ONGARD WELL OPERATOR	P	DEL	5076	1.73	1900	1962	32.2331581	-103.6124878
50125	DOS EQUIS 12 13 FEDERAL COM #075H	Coterra Energy Operating Co.	A	BSPG	0	1.74	2024	9999	32.238633	-103.62758
46319	DOS EQUIS 12 13 FEDERAL COM #003H	Coterra Energy Operating Co.	A	BSPG/ WOLF	0	1.74	2023	9999	32.238754	-103.631578
46318	DOS EQUIS 12 13 FEDERAL COM #001H	Coterra Energy Operating Co.	A	BSPG/ WOLF	0	1.74	2023	9999	32.238545	-103.635619
46322	DOS EQUIS 12 13 FEDERAL COM #047H	Coterra Energy Operating Co.	A	WOLF	0	1.74	2023	9999	32.238754	-103.631642
46321	DOS EQUIS 12 13 FEDERAL COM #008H	Coterra Energy Operating Co.	A	WOLF	0	1.74	2023	9999	32.238543	-103.635684
50135	DOS EQUIS 12 13 FEDERAL COM #009H	Coterra Energy Operating Co.	A	WOLF	0	1.74	2023	9999	32.238545	-103.635749
50126	DOS EQUIS 12 13 FEDERAL COM #076H	Coterra Energy Operating Co.	A*	BSPG	0	1.74	2024	9999	32.238633	-103.627645
50120	DOS EQUIS 12 13 FEDERAL COM #048H	Coterra Energy Operating Co.	A**	BSPG/ WOLF	0	1.74	9999	9999	32.238754	-103.631707
40793	DOS EQUIS 12 FEDERAL COM #004H	Coterra Energy Operating Co.	A	BSPG	10933	1.74	2013	9999	32.2385864	-103.6346893
24433	WIMBERLY #002	PRIMAL ENERGY CORPORATION	P	DEL	5038	1.74	1973	1962	32.2376976	-103.6219025
41515	BELL LAKE 19 STATE #002H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	11105	1.74	2014	9999	32.1964722	-103.609108
41516	BELL LAKE 19 STATE #003H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	11114	1.74	2014	9999	32.1964722	-103.6089478
50121	DOS EQUIS 12 13 FEDERAL COM #049H	Coterra Energy Operating Co.	A**	WOLF	0	1.74	9999	9999	32.238754	-103.631772
50124	DOS EQUIS 12 13 FEDERAL COM #052H	Coterra Energy Operating Co.	A**	BSPG	0	1.75	9999	9999	32.238918	-103.632031
50122	DOS EQUIS 12 13 FEDERAL COM #050H	Coterra Energy Operating Co.	A**	BSPG/ WOLF	0	1.75	9999	9999	32.238919	-103.631901
40791	DOS EQUIS 12 FEDERAL COM #002H	Coterra Energy Operating Co.	A	BSPG	11027	1.75	2013	9999	32.2385979	-103.6261749
41517	BELL LAKE 19 STATE #004H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	11088	1.75	2014	9999	32.1964722	-103.6087875
50138	DOS EQUIS 12 13 FEDERAL COM #089H	Coterra Energy Operating Co.	A	BSPG	0	1.76	2024	9999	32.238635	-103.62467
50137	DOS EQUIS 12 13 FEDERAL COM #087H	Coterra Energy Operating Co.	A	WOLF	0	1.76	2024	9999	32.23847	-103.624476
08161	U S SMELTING	MCI	A	DEL	4995	1.76	1962	9999	32.1985168	-103.6550751

	FEDERAL SWD #005	OPERATING OF NM, LLC								
08157	U S SMELTING FEDERAL #001	MCI OPERATING OF NM, LLC	A	DEL	5014	1.76	1960	9999	32.2084961	-103.6603928
49333	GHOST RIDER 22 15 FEDERAL COM #002H	Permian Resources Operating, LLC	A	BSPG	9336	1.76	2022	9999	32.2168035	-103.6607067
50181	DOS EQUIS 11 14 FEDERAL COM #091H	Coterra Energy Operating Co.	A**	BSPG	0	1.76	9999	9999	32.238635	-103.6248
50139	DOS EQUIS 12 13 FEDERAL COM #090H	Coterra Energy Operating Co.	A**	BSPG	0	1.76	9999	9999	32.238635	-103.624735
41958	MACHO NACHO STATE COM #005H	COG PRODUCTION, LLC	A	BSPG	9512	1.76	2014	9999	32.2254944	-103.6042786
46126	HYPERION STATE #141H	Jonah Energy LLC	A	BSPG	10493	1.76	2019	9999	32.2090552	-103.6013907
49344	GHOST RIDER 22 15 FEDERAL COM #403H	Permian Resources Operating, LLC	A	BSPG/ WOLF	12299	1.76	2022	9999	32.2168038	-103.6606097
50386	DOS EQUIS 12 13 FEDERAL COM #011H	Coterra Energy Operating Co.	A**	WOLF	0	1.76	9999	9999	32.23871	-103.635943
46324	DOS EQUIS 12 13 FEDERAL COM #086H	Coterra Energy Operating Co.	A	WOLF	12419	1.76	2019	9999	32.23847	-103.624411
45842	HYPERION STATE #221H	Jonah Energy LLC	A	WOLF	12915	1.76	2019	9999	32.2089864	-103.6013906
46481	DOS EQUIS 12 13 FEDERAL COM #006H	Coterra Energy Operating Co.	A	BSPG/ WOLF	12951	1.76	2019	9999	32.23847	-103.624347
50206	DOS EQUIS 12 13 FEDERAL COM #088H	Coterra Energy Operating Co.	A	BSPG	0	1.77	2024	9999	32.238635	-103.624606
50136	DOS EQUIS 12 13 FEDERAL COM #077H	Coterra Energy Operating Co.	A	BSPG/ WOLF	0	1.77	2024	9999	32.238635	-103.624541
42463	MACHO NACHO 7 STATE SWD #001	SOLARIS WATER MIDSTREAM, LLC	A	DEL	7385	1.77	2015	9999	32.23400115	-103.6126319
46659	HYPERION STATE #131H	Jonah Energy LLC	A	WOLF	12248	1.77	2020	9999	32.2090532	-103.6011329
50385	DOS EQUIS 12 13 FEDERAL COM #010H	Coterra Energy Operating Co.	A**	WOLF	0	1.77	9999	9999	32.238871	-103.635878
46658	HYPERION STATE #201H	Jonah Energy LLC	A	WOLF	12486	1.77	2020	9999	32.2089845	-103.601133
46661	HYPERION STATE #215H	Jonah Energy LLC	A	WOLF	12572	1.77	2020	9999	32.2090535	-103.6010521
20400	LOWE STATE #001	PRE-ONGARD WELL OPERATOR	P	DEL	5230	1.77	1963	1963	32.2122574	-103.6007614
08369	STATE 7 #001	PRE-ONGARD WELL OPERATOR	P	DEL	5165	1.77	1958	1958	32.2267876	-103.6050186
46660	HYPERION STATE #205H	Jonah Energy LLC	A	WOLF	12945	1.78	2020	9999	32.2089848	-103.6010521
48662	HYPERION STATE #101H	Jonah Energy LLC	A	BSPG	0	1.79	2022	9999	32.2089847	-103.6007935
08160	U S SMELTING FEDERAL #004	MCI OPERATING OF NM, LLC	A	DEL	4985	1.79	1962	9999	32.2039642	-103.6593323
48667	HYPERION STATE #171H	Jonah Energy LLC	A	BSPG	9549	1.79	2022	9999	32.2090534	-103.6007126
41469	DOS EQUIS 11 FEDERAL COM #001H	Coterra Energy Operating Co.	A	BSPG	10925	1.79	2014	9999	32.2385712	-103.6389542

48665	HYPERION STATE #151H	Jonah Energy LLC	A	BSPG	11480	1.79	2022	9999	32.2090534	-103.6007935
47083	DOS EQUIS 11 14 FEDERAL COM #062H	Coterra Energy Operating Co.	A	WOLF	0	1.8	2023	9999	32.238377	-103.640554
48668	HYPERION STATE #172H	Jonah Energy LLC	A	BSPG	9561	1.8	2022	9999	32.2090533	-103.6006318
48669	HYPERION STATE #181H	Jonah Energy LLC	A	BSPG	9967	1.8	2022	9999	32.2089847	-103.6007127
50355	HYPERION STATE #125H	Jonah Energy LLC	A	BSPG	10872	1.8	2022	9999	32.2089846	-103.6006318
40700	DOS EQUIS 12 FEDERAL COM #001	Coterra Energy Operating Co.	A	BSPG	11085	1.8	2012	9999	32.2386055	-103.6223907
45453	BELL LAKE 19 18 STATE COM #010H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	9339	1.81	2019	9999	32.1972387	-103.6065847
46891	GHOST RIDER 22 15 FEDERAL COM #102H	Permian Resources Operating, LLC	A	BSPG	10000	1.81	2020	9999	32.2165947	-103.6616272
41126	MACHO NACHO STATE #004H	COG PRODUCTION, LLC	A	BSPG	10826	1.81	2013	9999	32.2258797	-103.6035004
25368	WIMBERLY #006	TAHOE ENERGY INC	P	DEL	5100	1.81	1976	1976	32.2376442	-103.6432266
45452	BELL LAKE 19 18 STATE COM #009H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	9336	1.82	2019	9999	32.1972389	-103.6063907
45451	BELL LAKE 19 18 STATE COM #007H	DEVON ENERGY PRODUCTION COMPANY, LP	A	BSPG	9509	1.82	2019	9999	32.1972388	-103.6064877
28242	JACKSON FEDERAL SWD #001	OWL SWD OPERATING, LLC	A	DEL	9350	1.83	1983	9999	32.1939964	-103.651886
24347	STATE O #001	TAHOE ENERGY INC	P	DEL	5204	1.83	1973	2002	32.2376976	-103.6176376
47080	DOS EQUIS 11 14 FEDERAL COM #008H	Coterra Energy Operating Co.	A	WOLF	0	1.84	2023	9999	32.23887	-103.640945
41470	DOS EQUIS 11 FEDERAL COM #002H	Coterra Energy Operating Co.	A	BSPG	10893	1.84	2014	9999	32.2385559	-103.6421585
34148	STATE 30 #001	COBRA OIL & GAS CORPORATION	P	NA	15585	1.84	1997	1999	32.1941071	-103.6093063
45643	BELL LAKE 19 18 STATE COM #036H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	12289	1.84	2019	9999	32.196689	-103.606584
45640	BELL LAKE 19 18 STATE COM #032H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	12467	1.84	2019	9999	32.196689	-103.606487
45644	BELL LAKE 19 18 STATE COM #037H	DEVON ENERGY PRODUCTION COMPANY, LP	A	WOLF	12332	1.85	2019	9999	32.196689	-103.60639
45138	HEARTTHROB 17 STATE #703H	EOG RESOURCES INC	A	WOLF	12473	1.85	2019	9999	32.2116745	-103.5993872
47082	DOS EQUIS 11 14 FEDERAL COM #049H	Coterra Energy Operating Co.	A	WOLF	0	1.86	2023	9999	32.23763	-103.645279
47079	DOS EQUIS 11 14 FEDERAL COM #007H	Coterra Energy Operating Co.	A	WOLF	0	1.86	2023	9999	32.237629	-103.645343

54725	BELL LAKE 19 18 STATE COM #303H	DEVON ENERGY PRODUCTION COMPANY, LP	A**	BSPG	0	1.86	9999	9999	32.197235	-103.605693
54726	BELL LAKE 19 18 STATE COM #304H	DEVON ENERGY PRODUCTION COMPANY, LP	A**	BSPG	0	1.86	9999	9999	32.197234	-103.605596
40861	MCCLOY RANCH 2 24 32 STATE COM #004H	CHEVRON U S A INC	A	BSPG	9573	1.86	2012	9999	32.2397575	-103.6387634
49362	GHOST RIDER 22 15 FEDERAL COM #404H	Permian Resources Operating, LLC	A	BSPG/ WOLF	12129	1.86	2022	9999	32.2167985	-103.6624006
45139	HEARTTHROB 17 STATE #704H	EOG RESOURCES INC	A	WOLF	12510	1.86	2019	9999	32.2116743	-103.5992805
49357	GHOST RIDER 22 15 FEDERAL COM #003H	Permian Resources Operating, LLC	A	BSPG	9339	1.87	2022	9999	32.2167982	-103.6624976
42505	EATA FAJITA STATE #011H	COG PRODUCTION, LLC	A	BSPG	9606	1.87	2015	9999	32.2254379	-103.6021552
45645	GHOST RIDER 22 15 FEDERAL COM #201H	Permian Resources Operating, LLC	A	BSPG	10572	1.87	2019	9999	32.1969185	-103.6561629
49361	GHOST RIDER 22 15 FEDERAL COM #405H	Permian Resources Operating, LLC	A	BSPG/ WOLF	12274	1.87	2022	9999	32.216798	-103.6625946
42506	EATA FAJITA STATE #012H	COG PRODUCTION, LLC	A	BSPG	9520	1.88	2015	9999	32.22543767	-103.6019927
45769	GHOST RIDER 22 15 FEDERAL COM #202H	Permian Resources Operating, LLC	A	BSPG	10934	1.88	2019	9999	32.196918	-103.6563568
50119	DOS EQUIS 11 14 FEDERAL COM #050H	Coterra Energy Operating Co.	A	WOLF	0	1.9	2023	9999	32.23834	-103.644997
46892	GHOST RIDER 22 15 FEDERAL COM #103H	Permian Resources Operating, LLC	A	BSPG	9935	1.92	2020	9999	32.2165891	-103.6635151
41056	HEARTTHROB BSX STATE #001H	EOG RESOURCES INC	A	BSPG	11116	1.92	2014	9999	32.2244186	-103.6007538
08154	BRADLEY FEDERAL #001	MARKS AND GARNER PRODUCTION LTD CO	P	DEL	4966	1.93	9999	2006	32.2012215	-103.6604004
24717	UNION 1 FEDERAL #001	PRE-ONGARD WELL OPERATOR	P	DEL	5117	1.93	1974	1979	32.2413216	-103.6261673
40090	DOS XX 27 FEDERAL COM #001H	COG PRODUCTION, LLC	A	BSPG	9595	1.94	2013	9999	32.1945839	-103.6554413
24411	NEWMAN FEDERAL #001	UNION OIL CO OF CALIFORNIA	P	DEL	5025	1.94	1973	1995	32.2404213	-103.6208344
41582	J KEATS 1 24 32 #040H	CHEVRON MIDCONTINENT, L.P.	A	BSPG	11035	1.94	2014	9999	32.2404213	-103.6210556
42487	EATA FAJITA STATE #013H	COG PRODUCTION, LLC	A	BSPG	9570	1.95	2015	9999	32.22545754	-103.600758
40853	MACHO NACHO STATE #003H	COG PRODUCTION, LLC	A	BSPG	10891	1.95	2013	9999	32.2301102	-103.6039505
40582	EATA FAJITA STATE #001H	COG PRODUCTION, LLC	A	BSPG	11002	1.95	2013	9999	32.2254906	-103.6007538
45414	DOS EQUIS 11 14	Coterra Energy	A	BSPG	0	1.96	2022	9999	32.237909	-103.648246

	FEDERAL COM #005H	Operating Co.								
47081	DOS EQUIS 11 14 FEDERAL COM #023H	Coterra Energy Operating Co.	A	BSPG/ WOLF	0	1.96	2022	9999	32.237909	-103.64831
50259	DOS EQUIS 11 14 FEDERAL COM #025H	Coterra Energy Operating Co.	A	BSPG	0	1.97	2022	9999	32.237909	-103.648569
47645	DOS EQUIS 11 14 FEDERAL COM #024H	Coterra Energy Operating Co.	A	BSPG/ WOLF	0	1.97	2022	9999	32.237909	-103.648375
47646	DOS EQUIS 11 14 FEDERAL COM #025Y	Coterra Energy Operating Co.	A*	BSPG/ WOLF	0	1.97	2022	9999	32.237909	-103.64844
28896	NEW MEXICO EH STATE #001	J & G ENTERPRISE LTD. CO.	P	DEL	5233	1.97	1985	1997	32.2412949	-103.6389542
50117	DOS EQUIS 11 14 FEDERAL COM #026H	Coterra Energy Operating Co.	A	WOLF	0	1.98	2023	9999	32.238073	-103.648569
50118	DOS EQUIS 11 14 FEDERAL COM #027H	Coterra Energy Operating Co.	A	WOLF	0	1.98	2023	9999	32.238073	-103.648634
23612	HICKS FEDERAL #001	PRE-ONGARD WELL OPERATOR	P	DEL	5023	1.98	1970	1971	32.2121086	-103.6646652
24634	STATE P #001	PRE-ONGARD WELL OPERATOR	P	DEL	5121	1.98	1973	1974	32.2386017	-103.6141052
47137	HEARTTHROB 17 STATE #201H	EOG RESOURCES INC	A	BSPG	9536	1.99	2021	9999	32.2229403	-103.5987142
47138	HEARTTHROB 17 STATE #202H	EOG RESOURCES INC	A	BSPG	9788	1.99	2021	9999	32.2229403	-103.5986625
28935	JACKSON FEDERAL #002	PRE-ONGARD WELL OPERATOR	P	DEL	5100	1.99	1984	1985	32.1867638	-103.6433487
48386	HEARTTHROB 17 STATE #101H	EOG RESOURCES INC	A	BSPG	9449	2	2021	9999	32.2229403	-103.5986107

A = Active

A* = Spud or Drilled, not completed

A**= Permit Active, Drill status not known

P = Plugged

Undrilled wells locations with expired or cancelled permits are not included in this listing

Data from NMOCD database and scanned well files downloaded 8/25/25/ - 9/29/25

PROPERTY REPORT

September 24, 2025

RE: Lea County, New Mexico

Copperhead – Pore Space Redlines

Per client request, the undersigned has conducted an examination of records detailing the property ownership as specified in email provided by client attorney. The scope of work includes the identification of surface owners, operators, working interest owners and mineral owners for unleased interests. The records reviewed include the online databases: CourthouseDirect.com, the online index of the County Clerk of Lea County, New Mexico, the New Mexico State Land Office, the State of New Mexico Oil Conservation Division, and the Bureau of Land Management.

This report was prepared to specifically identify and catalogue the relevant ownership within a one-mile radius of the proposed Copperhead - Pore Space Redlines for the client to notify affected parties.

The available online records do not include original Oil and Gas Leases for all properties as some recorded documents appear to be Memorandums which limits the analysis of the lands, specifically acreage and/or depths held by production or some of the original Oil and Gas Leases were not filed of record. Also, the available records of the New Mexico Oil Conservation Division do not include a graphic representation of wellbores, rather identify only the surface location. A best effort was made to include all production falling within the one-mile radius inclusive of wells with a surface location outside the radius but with a bottom hole location within the radius. Additionally, there appear to be Joint Operating Agreements detailing working interest ownership which are not filed of record. To wit, a comprehensive review of ownership specific to depth and percentage of interest is limited. This report is prepared with the objective of being inclusive of all potential interest owners within the scope of the analysis in an abundance of caution. At client's request, a more in-depth analysis could be made if required.

If additional information is needed regarding this report, please do not hesitate to contact our office at (713) 622-4823.

Surface Owners

Versado Gas Processors, L.L.C.
KE Andrews & CO
2424 Ridge Road
Rockwall, TX 75087

- Owner ID #206138
- Property Code. – 4000051757005
- 80.00 acres, being S2 S2, situated in Sec. 13, T24S, R32E

Desert Ram North Ranch, LLC (fka NGL North Ranch LLC)
6120 S Yale Avenue, Suite 805

Tulsa, OK 74136

- Owner ID #206181
- Property Code - 4980808100234
  - 65.35 acres, being S2 S2 situated in Sec. 13, T24S, R32E
  - Less 15.65 acres dedicated to NMDOT for NM State Hwy 128
- Property Code – 4000051757004
  - 258.15 acres, being W2 W2, S2 SE4 and SE4 SW4 situated in Sec. 14, T24S, R32E
  - Less 21.85 acres dedicated to NMDOT for NM State Hwy 128

- Property Code - 4000051757002
  - 155.54 acres, being NE4 NW4, N2 NE4 and SE4 NE4 situated in Sec. 23, T24S, R32E
  - Less 4.46 acres, dedicated to NMDOT for NM State Hwy 128
- Property Code - 4000051757001
  - 468.06 acres, being N2 and N2 S2 situated in Sec 24, T24S, R32E
  - Less 11.94 acres dedicated to NMDOT for NM State Hwy 128

New Mexico Department of Transportation

1120 Cerrillos Road
P.O. Box 1149
Santa Fe, NM 87504-1149
Phone (505) 795-1401

- Lands in T24S, R32E with Sec 13 - 15.65 acres; Sec 14 - 21.85 acres; Sec 23 - 4.46 acres and Sec 24 - 11.94 acres.
- Lands in T24S, R33E with Sec 18 - 5.93 acres and Sec 19 - 4.56 acres.

State of New Mexico

State Land Office
310 Old Santa Fe Trail, Santa Fe NM 87501
Mailing Address:
P.O. Box 1148, Santa Fe, NM 87504
505-827-5760
505-827-5766 (Fax)

- Lands in T24S, R32E Sections 13 and 14
- Lands in T24S, R33E, Sections 7, 18 and 19

United States Bureau of Land Management

New Mexico State Office
301 Dinosaur Trail

Santa Fe, NM 87508
United States
Phone: 505-954-2222

- Lands in T24S, R32E Sections 11 and 12

Operators

Coterra Energy Operating Company
6001 Deauville Boulevard, 300N
Midland, TX 79706
Main Phone: 432-571-7800

- Operations in Sections 11, 12, 13 and 14, T24S, R32E

Finaly Resources LLC
16585 PCH
Suite 324
Sunset Beach, CA 90742
Main Phone: 562-881-0975

- Operations in Section 13, T24S, R32E

COG Production, LLC

One Concho Center
600 W. Illinois Ave
Midland, TX 79701
Main Phone: 432-683-7443

- Operations in Section 23, T24S, 32S
- Section 7, T24S, R33E

Devon Energy Production Co, LP
333 W. Sheridan Ave
Oklahoma City, OK 73102
Phone Main: (405)235-3611
Phone: (405) 228-4800

- Operations in Section 24, T24S, R32E
- Section 19, T24S, R33E

Marks and Garner Production Ltd Company
P O Box 70
Lovington, NM 88260
Main Phone: 575-393-9358

- Operations in Section 11, T24S, R32E

Oxy USA, Inc.
Oil & Gas Royalty Interest Owners
Attn: Land Administration
P.O. Box 27570
Houston, TX 77227-7757
Phone: (713) 215-7231

- Operations in Section 18, T24S, R33E

MCI Operating of New Mexico, LLC
107 Main Street
Sealy, TX 77474
Main Phone: 979-885-0809

- Operations in Sections 11 and 14, T24S, R32E

3 Knight's LLC
4023 Harmon Lane
Carlsbad, NM 88220
Main Phone: 630-670-6280

- Operations in Section 23, T24S, R32E

3XT Holding, LLC
5326 County Road 7560
Lubbock, TX 79424

- Operations in Section 23, T24S, R32E

Working Interest Owners

Cimarex Energy Co.
6001 Deauville Blvd., Suite 300N
Midland, Texas 79706
Phone: (432) 571-7800

Magnum Hunter Production Inc.
840 Gessner Rd, Suite 1400
Houston, TX 77024

Chevron USA Inc.
6001 Bollinger Canyon Road
San Ramon, CA 94583, USA
Phone: (925) 842-1000

Chevron Midcontinent LP
6301 Deauville Blvd
Midland, Tx 79706

Phone: (432) 687-7723

Devon Energy Production Co. LP
333 W. Sheridan Ave
Oklahoma City, OK 73102
Phone Main: (405)235-3611
Phone: (405) 228-4800

Conoco Phillips Company
P.O. Box 2197
Houston, Texas 77252-2197

Conoco Phillips Company
315 S Johnstone
Bartlesville, OK 74005-7500

Canaan Resources Drilling Company, LLC
1101 N Broadway, Suite #300
Oklahoma, City 73103

Oxy USA, Inc.
Attn: Land Administration
P.O. Box 27570
Houston, TX 77227-7757
Phone: (713) 215-7231

Finaly Resources LLC
16585 PCH, Suite 324
Sunset Beach, CA 90742
Main Phone: 562-881-0975

Coterra Energy Operating Company
6001 Deauville Boulevard, 300N
Midland, TX 79706
Main Phone: 432-571-7800

Marks and Garner Production Ltd Company
P O Box 70
Lovington, NM 88260
Main Phone: 575-393-9358

XTO Holdings, LLC
22777 Springwoods Village Pkwy
Spring, Texas 77389
Phone (817) 870-2800
Fax: (817) 870-1671

3XT Holding, LLC
5326 County Road 7560
Lubbock, TX 79424

3 Knight's LLC
4023 Harmon Lane
Carlsbad, NM 88220
Main Phone: 630-670-6280

COG Production, LLC
One Concho Center

600 W. Illinois Ave
Midland, TX 79701
Main Phone: 432-683-7443
Main Fax: 432-687-8013

COG Operating LLC
600 W. Illinois Avenue
Midland, Texas 79701

Concho Oil & Gas LLC
600 W. Illinois Avenue
Midland, Texas 79701

MCI Operating of New Mexico, LLC
107 Main Street
Sealy, TX 77474
Main Phone: 979-885-0809

Mineral Interest Owner(s) for unleased tracts

Based on United States Bureau of Land Management maps, New Mexico Land Status Maps, Lea County Records, BLM Records and The State of New Mexico Land Office records, the State of New Mexico and the United States Bureau of Land Management, the following lists the mineral ownership of the subject tracts within a 1-mile radius:

All of Section 11-T24S-R32E – USA - appears HBP

All of Section 12-T24S-R32E – USA - appears HBP

All of Section 13-T24S-R32E – USA - appears HBP

All of Section 14-T24S-R32E – USA - appears HBP

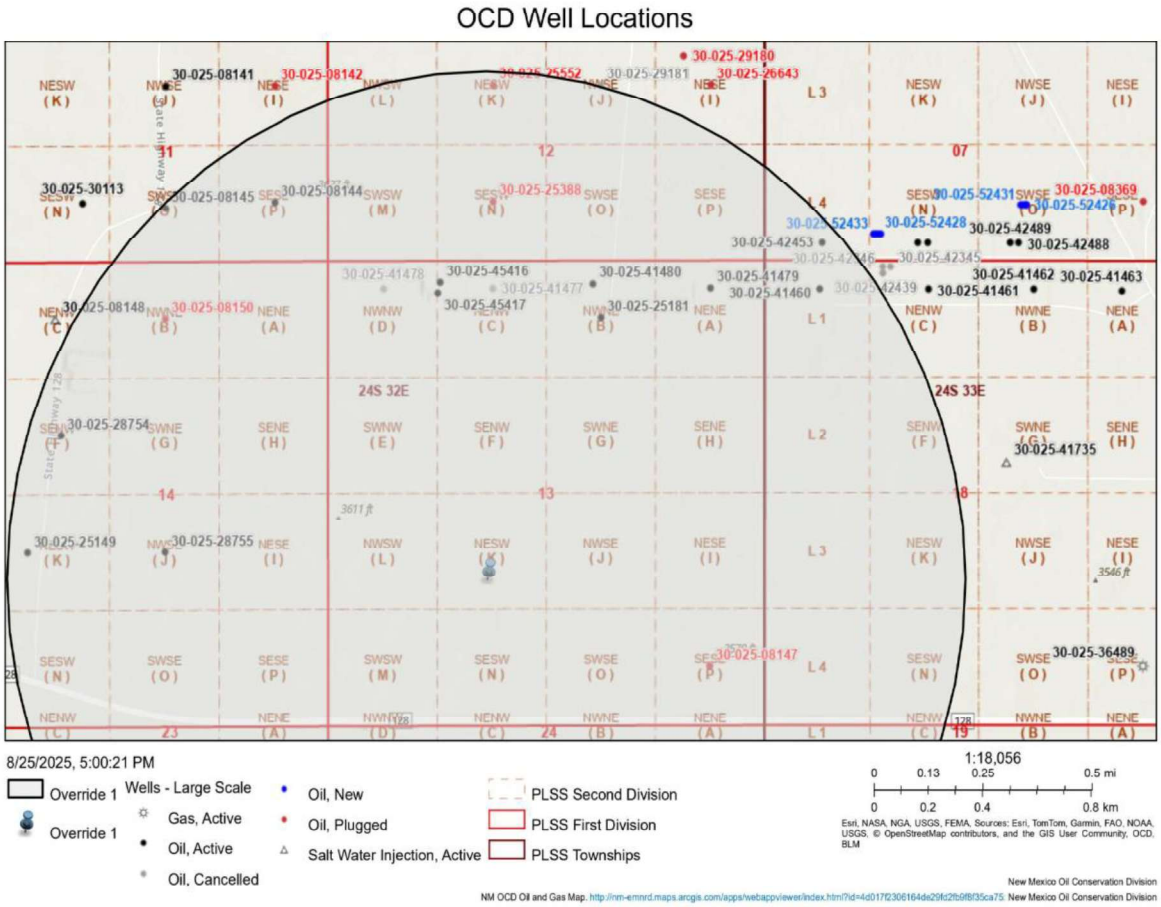
All of Section 23-T24S-R32E – USA - appears HBP

All of Section 24-T24S-R32E – USA - appears HBP

All of Section 7-T24S-R33E – State of NM - appears HBP

All of Section 18-T24S-R33E – State of NM - appears HBP

All of Section 19-T24S-R33E – State of NM - appears HBP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30-025-25388
30-025-52431
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30-025-08150
30-025-45417
30-025-25181
24S 32E
24S 33E
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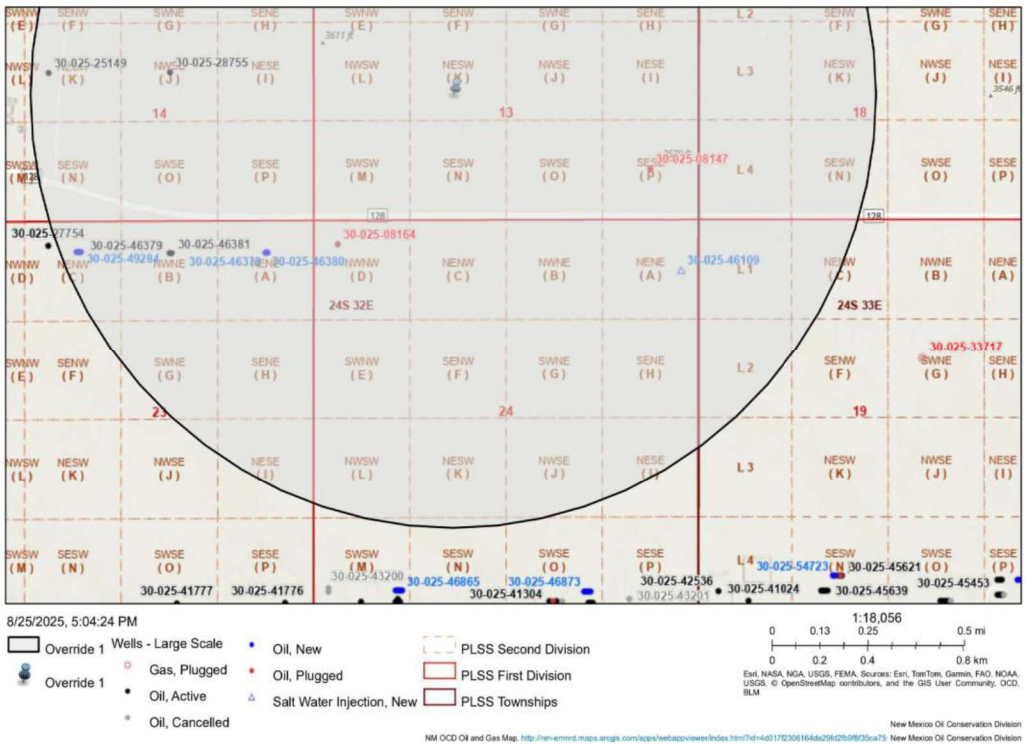
30-025-25149
30-025-28755
30-025-08147
30-025-36489
8/25/2025, 5:00:21 PM
Override 1
Override 1
Wells - Large Scale
Gas, Active
Oil, Active
Oil, Cancelled
Oil, New
Oil, Plugged
Salt Water Injection, Active
PLSS Second Division
PLSS First Division
PLSS Townships
1:18,056
0 0.13 0.25 0.5 mi
0 0.2 0.4 0.8 km
Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, OCD, BLM
New Mexico Oil Conservation Division
NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb0f8f35ca75. New Mexico Oil Conservation Division

OCD Well Locations



Attachment IV – Reservoir Modeling

Overview

Numerical simulations of dynamic reservoirs are carried out on a detailed geological model to facilitate the disposal authorization for Copperhead AGI #002. These models project the injectivity of the well, its pressure dynamics, and the movement of the AGI plume. The chosen depth for acid gas injection is approximately 17,340–18,745 ft MD. The target injection zone includes the Thirtyone, Wristen and Fusselman formations, and is approximately 1,405 feet in thickness. Depths in the reservoir simulation correspond to average grid-block elevations and may differ slightly from formation tops interpreted from well logs.

Inputs and Assumptions

In this study, we employed advanced software tools for the construction of geological and reservoir simulation models. Schlumberger's Petrel® software (Version 2024.5) was utilized for developing the geological models, while reservoir simulations were conducted using Computer Modeling Group (CMG)'s CMG-GEM® (Version 2025.40). CMG-WINPROP® (Version 2025.40) was used to perform PVT calculations using an equation-of-state (EOS) approach to model phase behavior and fluid-property interactions among the injected gas components. The resulting fluid properties were then used as input for hydrodynamic modeling in CMG-GEM. The treated acid gas (TAG) involved in the injection was modeled with the potential to exist in both dissolved and supercritical states within the aqueous and gaseous phases, respectively.

The construction of the static model was based on well logs and formation tops, aiming to accurately characterize and map the structural layers of injection and confining units. The geological model covers an area of approximately 3.2 by 3.1 mi, represented by a grid of 164 x 167 x 39 cells, totaling 1,068,132 cells. The grid size in the actively injected areas averages 100 by 100 square feet. **Figures IV-1 through IV-3** provide detailed visualizations of the model, including a map view (**Figure IV-1**), a 3D representation of the simulation model (**Figure IV-2**), and estimates of porosity and permeability based on available data from well logs (**Figure IV-3**). In the model, porosity ranges from 0.00001 to 0.0899 (fraction), corresponding to approximately 0.001% to 9%. The permeability ranges from 1e-5 to 7 mD, and the vertical permeability anisotropy is 0.1 (**Figure IV-3**). The simulation evaluates a maximum injection scenario, where both the Copperhead AGI #001 and Copperhead AGI #002 wells operate simultaneously, each injecting at a rate of 26 MMSCFD for a combined total of 52 MMSCFD. The second well is intended to be redundant; therefore this scenario provides a conservative assessment of injection impacts.

For initialization of the reservoir simulations, several parameters and assumptions were considered. The connate water saturation of the storage reservoir was conservatively set at 100%, with a residual water saturation of 55% as per established sources (Jenkins, 1961; Bennion and Bachu, 2005). The initial salinity was estimated at 84,640 ppm, an average derived from measurements in three nearby wells, and the well data are from the U.S. Geological Survey National Produced Waters Geochemical Database (ver. 3.0, December 2023) (Blondes et al., 2023). Following industry standards and data from drill stem tests in the Delaware Basin, a pore pressure gradient of 0.45 psi/ft was estimated, establishing a reservoir pressure of 7,750 psi at the initiation phase.

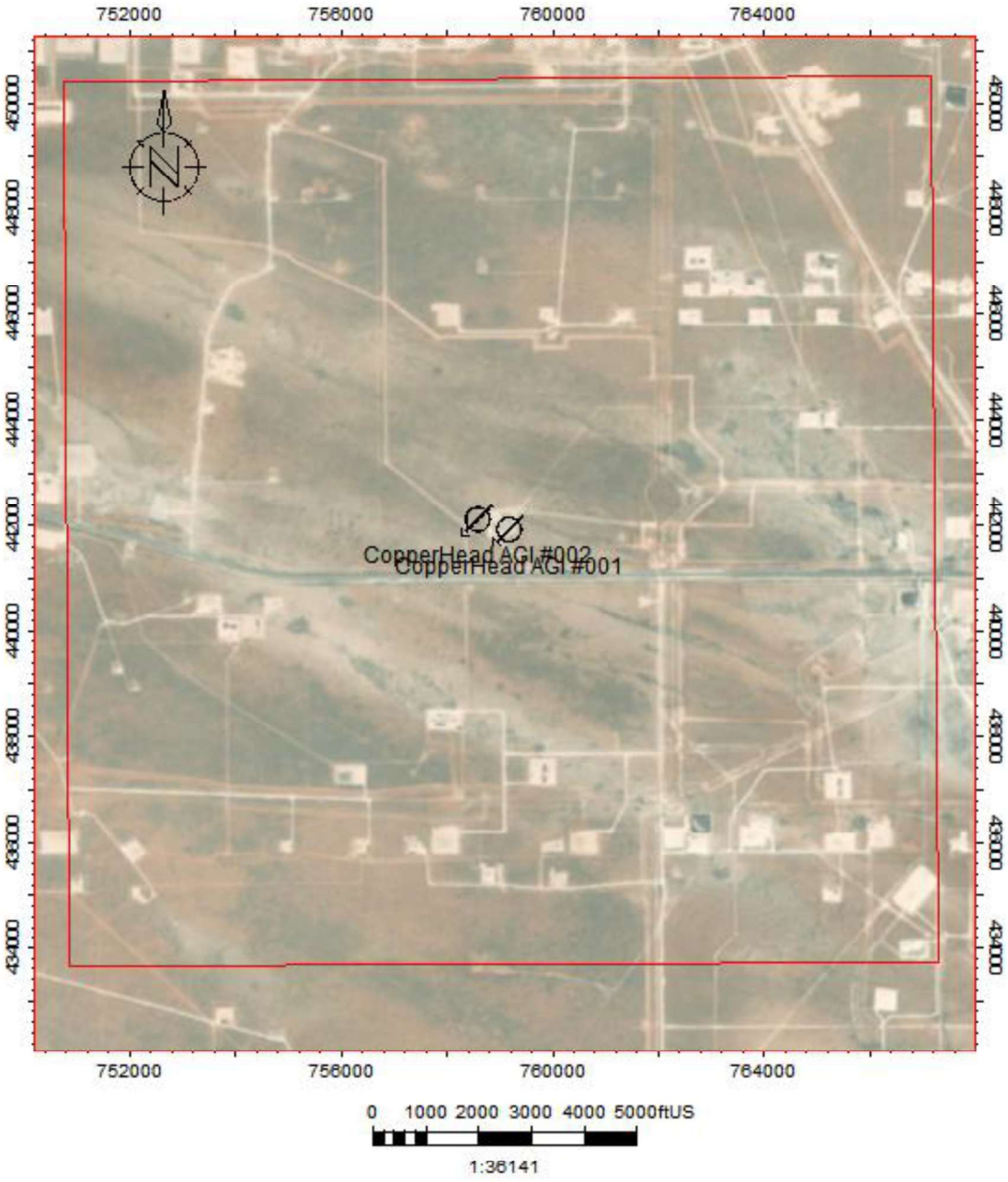


Figure IV-1. Map view showing boundaries (red box) of the simulation model of Copperhead AGI #002

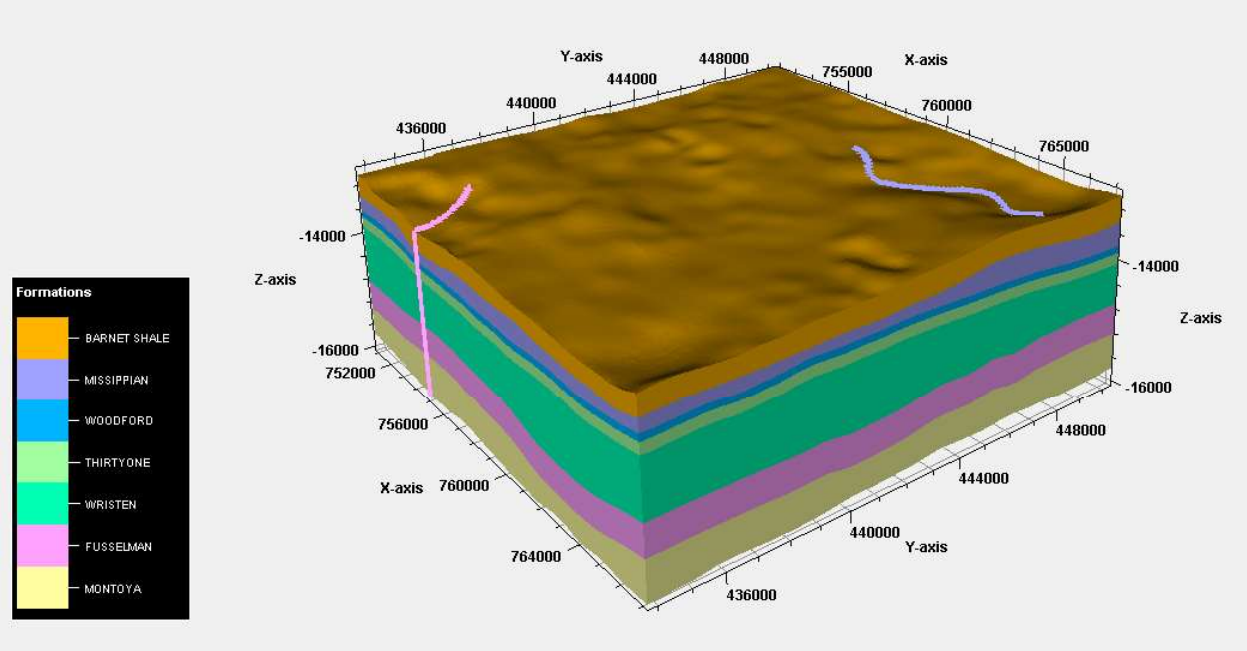


Figure IV-2. 3D view of the simulation model of the Copperhead AGI location containing Barnett Shale, Mississippian Limestone, Woodford Shale, Thirtyone, Wristen, Fusselman and Montoya formations. Color legends represent the layers. Pink and purple lines on model represent fault traces as interpreted from 3D seismic data.

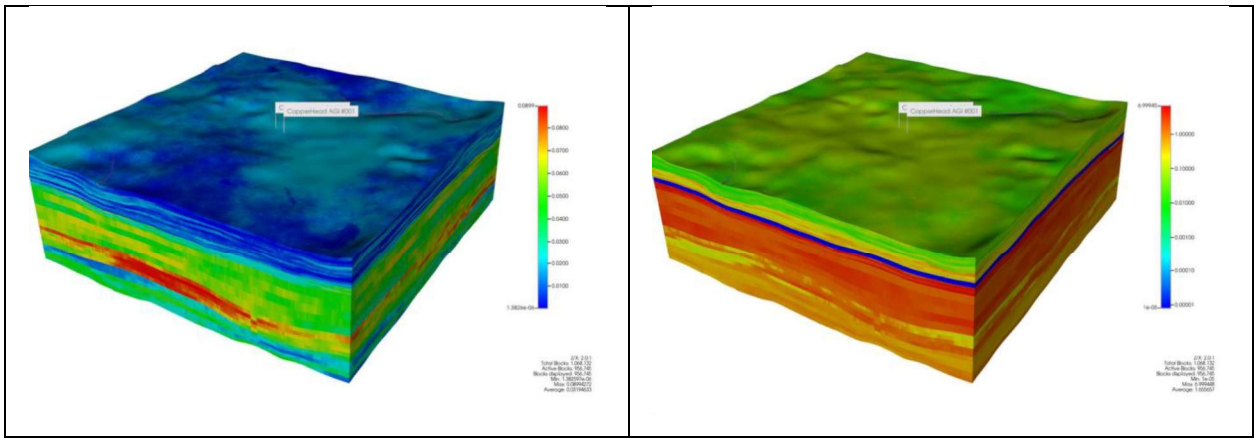


Figure IV-3. Porosity (left) and permeability (right) estimation of the simulation model.

The fracture gradient (FG) for the injection interval was calculated using Eaton's formula, which characterized the formation lithology from Poisson's ratio and stress ratio value:

$$FG=1\text{-}OBG\text{-}pp+pp$$

Where,

is the Poisson's ratio,

OBG *is the overburden gradient,*

pp *is the pore pressure gradient*

An overburden gradient of 1.05 psi/ft is typically used in calculations when no site-specific data is

available (Luo et al., 1994). Poisson's ratio was assumed to be 0.3 for the injection layer, with a variation between 0.29 and 0.31 to account for uncertainties (Smye et al., 2021; Dvory and Zoback, 2021). The fracture gradient was estimated to be 0.65 to 0.68 psi/ft (Dvory and Zoback, 2021). This led to a calculated bottom hole formation fracture pressure of 11,527 psi. Furthermore, a safety margin of 10% was applied to this fracture gradient to prevent the bottom hole injection pressure (BHP) during active injection from surpassing the fracture gradient, setting the maximum BHP at 0.59 psi/ft in simulations (10,373 psi). The geomechanical properties of the reservoir are detailed in **Table IV-1**. These parameters, derived from existing well logs and referenced literature, will be validated with actual measurements upon completion of the proposed, with subsequent updates to the modeling and simulation work as necessary.

Table IV-1. Summary of parameters for the confining zones and injection interval

Parameter	Upper Confining Zone	Injection Interval	Lower Confining Zone
Overburden Gradient (psi/ft)	1.05	1.05	1.05
Pore Pressure Gradient (psi/ft)	0.45	0.45	0.45
Poisson's Ratio	0.29	0.30	0.31
Fracture Gradient (psi/ft)	0.68	0.65	0.68
Fracture Gradient with 10% Safety Factor (psi/ft)	0.61	0.59	0.61

Although Copperhead AGI #002 is to be drilled as a redundant well for Copperhead AGI #001, both wells are included in the simulation model. Each well was set to inject at the proposed average injection rate of 26 MMSCFD. A maximum allowable surface injection pressure (MAOP) of 3,460 psi (calculated by the NMOCD approved method) and a bottom hole pressure of 10,373 psi, are set, and an injection composition of 30% H_2S and 70% CO_2 is used. The simulation begins on January 1, 2027, and concludes on January 1, 2087, encompassing a 30-year active injection phase followed by a subsequent 30-year post-injection monitoring phase to estimate the maximum impacted area.

Table IV-2. Well operations input of reservoir simulation

Well Name	Injection Start (yr)	Expected Shut-In (yr)	Injection Rate (surface condition)
Copperhead AGI #001	2027	2057	26 MMSCFD
Copperhead AGI #002	2027	2057	26 MMSCFD

Model Outputs

The injection rate profiles for Copperhead AGI #002 suggests the consistent proposed rates, as depicted in **Figure IV-4**. The consistent rate of 26 MMSCFD ensures that the target formations can safely receive the treated acid gas (TAG) from Copperhead #002 over a 30-year period while adhering to the pressure constraints and maintaining formation integrity.

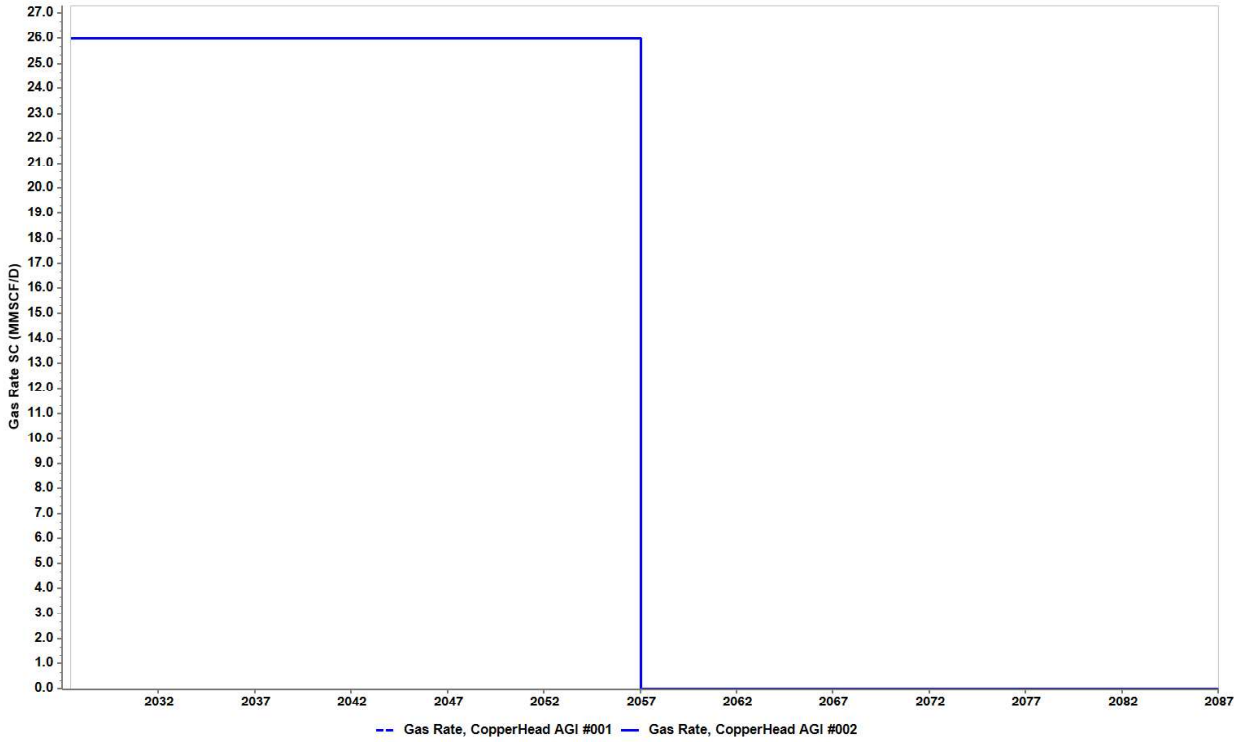


Figure IV-4. Forecast of TAG injection rate of wells Copperhead AGI #001 and AGI #002 at 26 MMSCFD.

TAG Plume

Figure IV-5 captures the evolution of the TAG plume for the simulated assumptions at various times: 5, 10, 15, 20, 25, and 30 years' post-injection commencement in 2027, with the largest part of the plume estimated to span 10,228 ft (2.384 sq miles). The dashed lines in the figure delineate the plume boundary at these specified intervals.

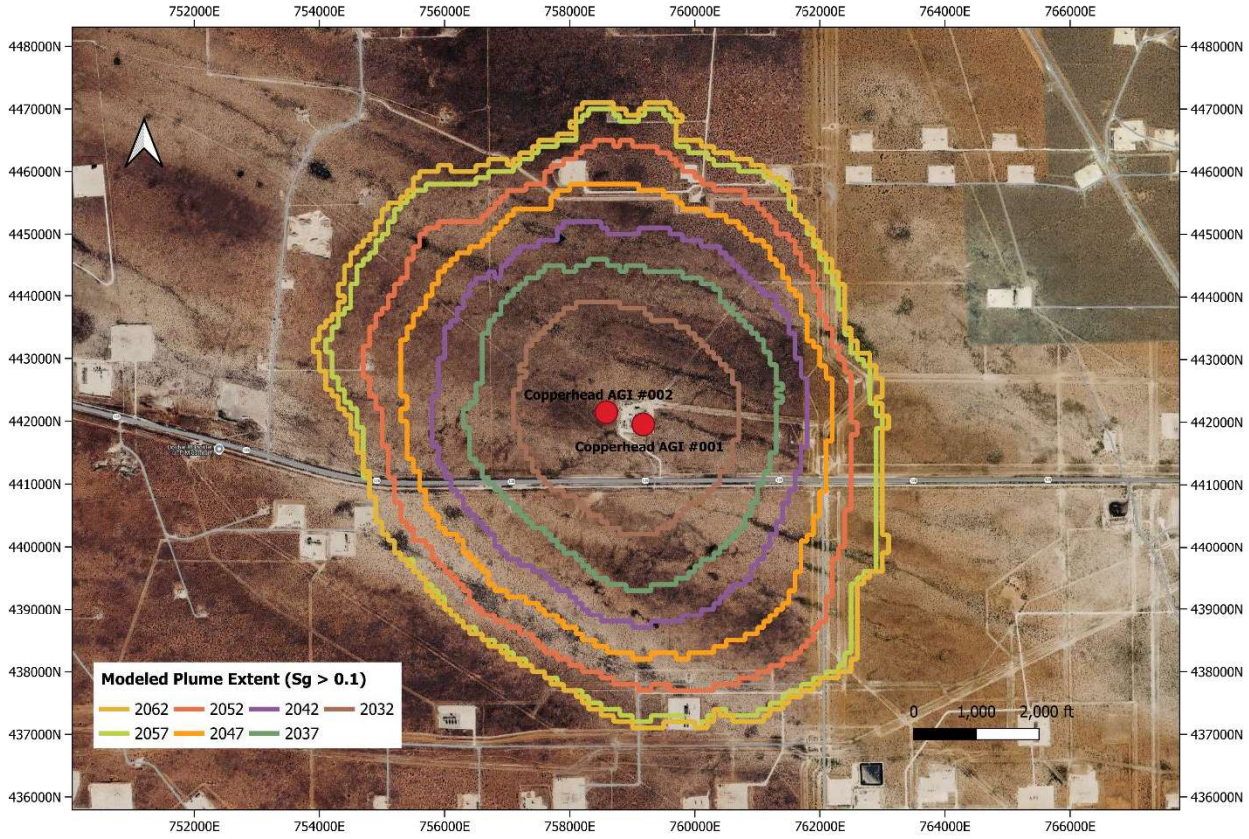


Figure IV-5. Extent of TAG plume (represented by gas saturation) at years 2032, 2037, 2042, 2047, 2052, 2057 (end of injection) and 2062 (Five years post-injection, showing plume stabilization) in map view at 26 MMSCFD. Dashed lines represent plume boundary at these time intervals.

Predicted Bottom Hole Pressures

The maximum and average wellhead pressures were determined from the simulation output by CMG-GEM (GEM). GEM uses EOS methods to compute the effects from the tubing size and calculate friction losses of the phase behavior and fluid properties of the flowing fluid. The input parameters for the wellbore model are summarized in **Table IV-3**. The prediction of the bottom hole and wellhead pressures are summarized in **Table IV-4** and displayed in **Figure IV-6.**

Table IV-3. Input parameters for Wellbore Model Pressure Calculations

Wellbore Model	Values
Length, ft	14,948
Relative Roughness	0.001
Wellhead Temperature, °F	80
Bottomhole Temperature, °F	225
Tubing Size (OD), inch	3.5

Composition of injected gas	70% CO_2/30% H_2S
Density and Viscosity of injected gas	Dynamically Calculated by EOS

Table IV-4. Summary of predicted injection pressures

Well	Injection rate, MMSCFD	Average BHP, psi	Max BHP, psi	Average WHP, psi	Max WHP, psi
Copperhead AGI #001	26	8,804	8,964	3,068	3,188
Copperhead AGI #002	26	8,831	8,999	3,088	3,215

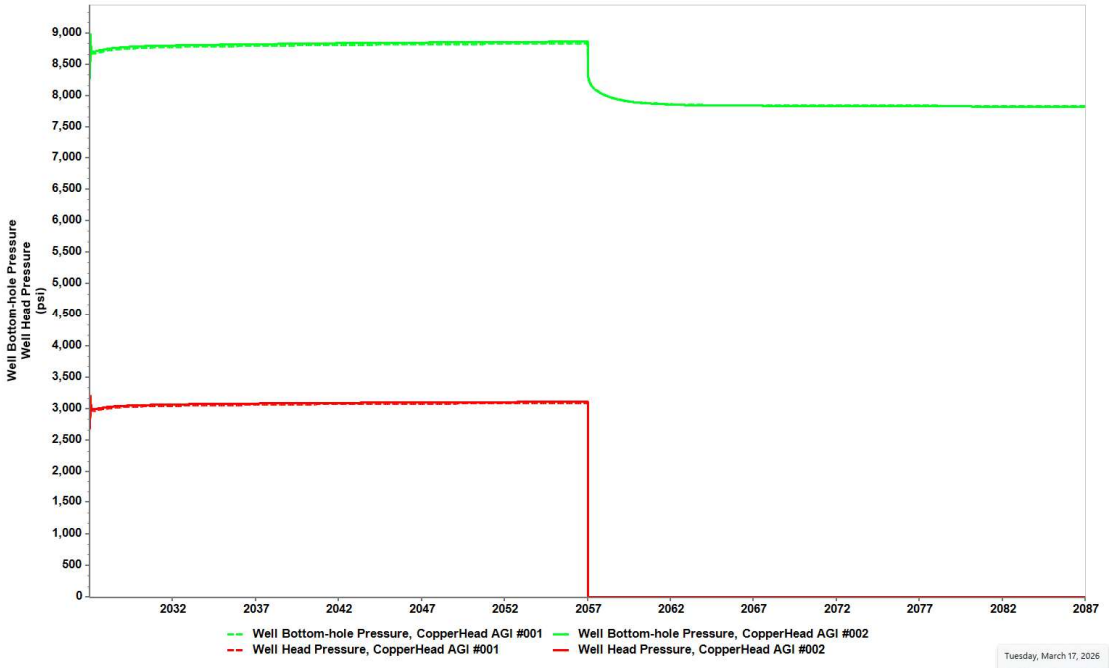


Figure IV-6 Bottom hole pressure and wellhead pressure of Copperhead AGI #001 and #002 at 26 MMSCFD critical pressure Front

The base of the deepest underground sources of drinking water (USDW) at approximately 1,500 ft below the surface at the Copperhead AGI #002 area. As given by Nicot et al. (2008) and Bandilla et al. (2012), assuming (1) hydrostatic conditions and (2) initially linearly varying densities in the borehole and constant density once the injection-zone fluid is lifted to the top of the borehole (i.e., uniform density approach), the threshold pressure increase (ΔP_c) may be calculated:

$$\Delta P_c = \frac{1}{2} \cdot g \cdot \xi \cdot (z_u - z_i)^2$$

where ξ is a linear coefficient defined by:

$$\xi = \frac{\rho_i - \rho_u}{z_u - z_i}$$

Where: ρ_u *is the fluid density of the USDW,*

ρ_i *is the injection interval fluid density,*

g *is the acceleration due to gravity,*

z_u *is the representative elevation of the USDW,*

z_i *is the representative elevation of the injection interval*

As shown in **Table IV-5**, the maximum allowable pressure elevation is 1,099.7 psi. **Figure IV-7** shows the pressure elevation at year 2055 (end of injection). The center of pressure elevation created by Copperhead AGI #001 and #002 with 26 MMSCFD injection rate is the maximum pressure gain of 815 psi. This pressure increase is less than 815 psi, much less than the maximum allowable pressure elevation of 1,099.7 psi, indicating the USDW will not be endangered even if both wells are injecting simultaneously.

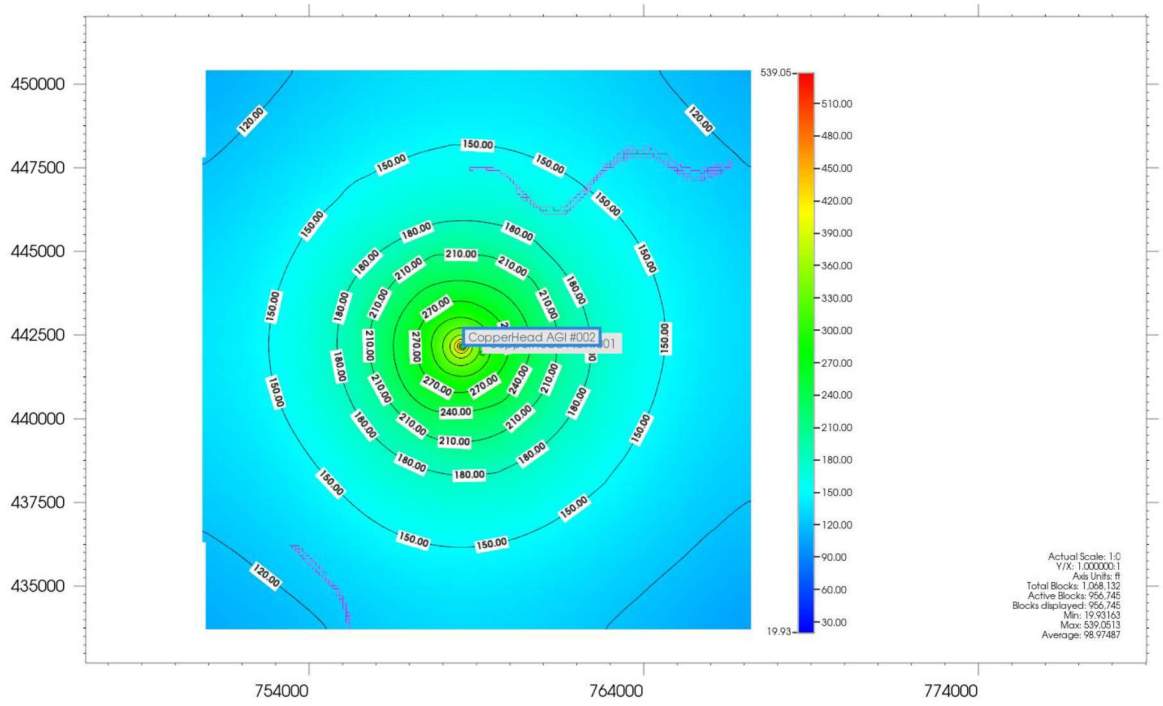


Figure IV-7 Pressure elevation in 2057 (end of injection).

Table IV-5 Summary of parameters for the USDW critical pressure calculations

USDW Base	Fresh water density	Brine Salinity	Brine Density	Top of Thirtyone	Admissible additional pressure

1,500 ft	62.4 lbm/ft3	84,640 ppm	73 lbm/ft3	17,528 ft	1,099.7 psi

In summary, the review of reservoir engineering and numerical simulations indicates that the target formation can receive the TAG at the proposed average and maximum injection rates. The models confirm that the injection pressures will remain below the formation's fracture pressure, ensuring the safe containment of the injected TAG within the designated injection and post-injection periods. The planned injection process is designed to facilitate sequestration while mitigating potential environmental impacts. This analysis relies on the best available estimates from existing legacy wells and referenced literature. After the proposed well is completed, formation properties will be assessed, and the study will be updated with site-specific data and the most recent legacy injection records before any TAG injection commences.

References

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2. Bennion, B., Bachu, S. 2005. Relative permeability Characteristics for Supercritical CO2 Displacing Water in a Variety of Potential Sequestration Zones in the Western Canada Sedimentary Basin. SPE 95547.

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5. Smye, K.M., Hennings, P.H., and Horne, E.A., 2021. Variations in vertical stress in the Permian Basin region. AAPG Bulletin, 105(10), pp. 1893-1907.

6. Nicot, J.P., Oldenburg, C.M., Bryant S.L., Hovorka, S.D. 2009. Pressure perturbations from geologic carbon sequestration: Area-of-review boundaries and borehole leakage driving forces. DOI: 10.1016/j.egypro.2009.01.009. (Note: please change this citation to Nicot et al. (2009) instead of (2008). 2008 was my typo.)

7. Bandilla, K.W., Kraemer, S.R., Birkholzer, J.T. 2021. Using semi-analytic solutions to approximate the area of potential impact for carbon dioxide injection. International Journal of Greenhouse Gas Control. https://doi.org/10.1016/j.ijggc.2012.02.009

8. Blondes, M.S., Knierim, K.J., Croke, M.R., Freeman, P.A., Doolan, C., Herzberg, A.S., and Shelton, J.L., 2023, U.S. Geological Survey National Produced Waters Geochemical Database (ver. 3.0, December 2023): U.S. Geological Survey data release, https://doi.org/10.5066/P9DSRCZJ.

Attachment V – Groundwater Analyses

There are two Targa water wells located in this region. The water samples provided were taken on July 31st, 2023, from groundwater wells C-03666 POD1 and C-03917 POD1 which are both less than 6 miles from the Copperhead AGI #002 well. The sampling and analyses provided were all done in-house at New Mexico Tech.

For these water wells, 1-L washed Nalgene bottles were triple-rinsed with well water and filled. Samples were temperature regulated prior to the general chemistry analysis. The water is basic with pH of 8 to 9 and calculated TDS of 453 to 1380 mg/L. The conductivity ranges from 757 to 2,066 us/cm.

GENERAL CHEMISTRY ANALYSES		
Customer name	Tianguang Fan	
Company	New Mexico Tech	
Address	801 Leroy Place	
City, State, Zip code	Socorro NM 87801	
Phone	(575) 835-5542	
Email	Tianguang.Fan@nmt.edu	
Date sampled	7/31/2023	
Date completed	8/30/2023	
Analyte	**C-03666**	**C-03917**
pH	8.5	8.2
Conductivity (uS/cm)	757.0	2,066.0
Alkalinity as CO_3^{-2} (mg/L)	4.0	
Alkalinity as HCO_3^- (mg/L)	287.9	97.6
Chloride (mg/L)	15.0	191.4
Fluoride (F^-) (mg/L)	ND	ND
Bromide (Br^-) (mg/L)	ND	1.5
Nitrate (NO_3^-) (mg/L)	ND	ND
Phosphate (mg/L)	ND	ND
Sulfate (SO_4^{-2}) (mg/L)	106.0	666.2
Lithium(Li) (mg/L)	0.1	0.2
Sodium (Na) (mg/L)	156.0	370.7
Potassium (K) (mg/L)	3.6	6.5
Magnesium (Mg) (mg/L)	15.0	33.9
Calcium (Ca) (mg/L)	12.9	62.7
TDS Calculation (mg/L)	452.6	1,379.6
Total cations (meq/L)	8.8	22.2
Total anions (meq/L)	-7.5	-20.9
Percent difference (%)	7.9	3.1
ORP (mV)	292.7	294.2
IC (ppm)	69.8	23.0
NPOC (ppm)	0.6	0.4
ND, non-detectable.		

Attachment VI – Sample Notice Letter

SAMPLE NOTICE LETTER

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

TO: ALL PARTIES ENTITLED TO NOTICE

Re: Case No. _____ - Application of Targa Midstream Services LLC for Authorization to Inject, Lea County, New Mexico.

To whom it may concern:

This letter is to advise you that Targa Midstream Services LLC has filed a C-108 application (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking authorization to drill, complete and operate an additional acid gas injection ("AGI") well at its Copperhead Gas Processing Plant located in Lea County, New Mexico. In accordance with New Mexico Oil Conservation Division requirements, you are being provided this notice and hearing application because you have been identified as having an interest within one mile of the proposed AGI well location. A complete copy of the C-108 is available at the following link, or you may contact my office to request a hard copy: _____.

The proposed Copperhead AGI #2 will be drilled at a location 1,138' from the south line (FSL) and 1,842' from the west line (FWL) of Section 13, Township 24 South, Range 32 East. The well will be completed as an open hole interval and will inject into the Devonian Thirtyone Formation, Upper Silurian Wristen Group and the Lower Silurian Fusselman Formation, at a depth of approximately 17,321–18,711 ft.

The hearing will be conducted on _____ beginning at 9:00 am in a hybrid fashion, both virtually and in-person at the Energy, Minerals, Natural Resources Department, Wendell Chino Building, Pecos Hall, 1220 South St. Francis Drive, 1st Floor, Santa Fe, NM 87505. The hearing may be held only virtually at the discretion of the Division. To confirm the manner in which the hearing will be held, and to participate virtually, please visit the OCD Hearings website at the following link: https://www.emnrd.nm.gov/ocd/hearing-info/. You are not required to attend this hearing, but as an owner of an interest that may be affected by the 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 matter at a later date.

Pursuant to Division Rule 19.15.4.13.B, a party who intends to present evidence at the hearing shall file a pre-hearing statement and serve copies on other parties, or the attorneys of parties who are represented by counsel, at least four business days prior to the scheduled hearing, but in no event later than 5:00 p.m. Mountain Time, on the Thursday preceding the scheduled hearing date. If you are not registered with the OCD's E-Permitting system, you must submit the statement via e-mail to ocd.hearings@emnrd.nm.gov and should include: the names of the parties; whether or not the parties are represented by counsel; a concise statement of the case; the names of witnesses anticipated to be called to testify at the hearing; the approximate amount of time needed to present the case; and an identification of any procedural matters that are to be resolved prior to the hearing.

If you have any questions about this application, please contact Matt Eales at meales@targaresources.com.

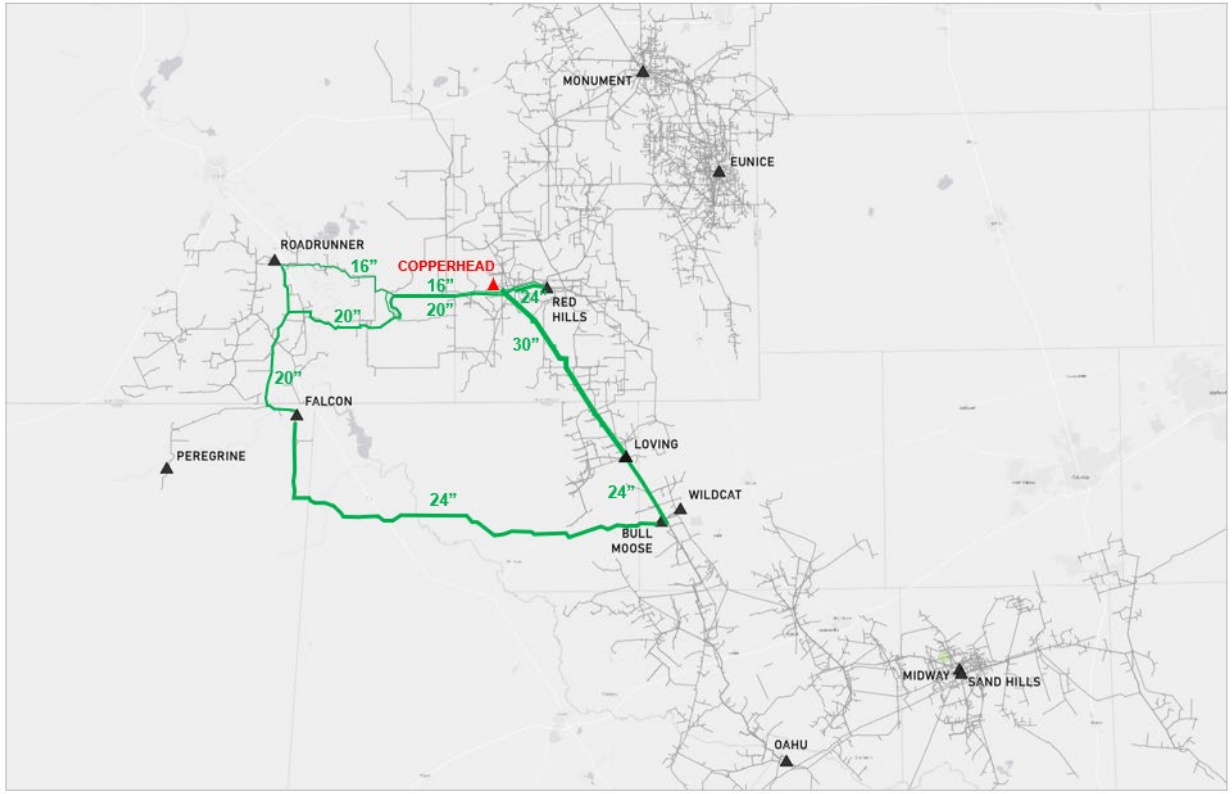
Sincerely,
/s/ Dana S. Hardy

Dana S. Hardy

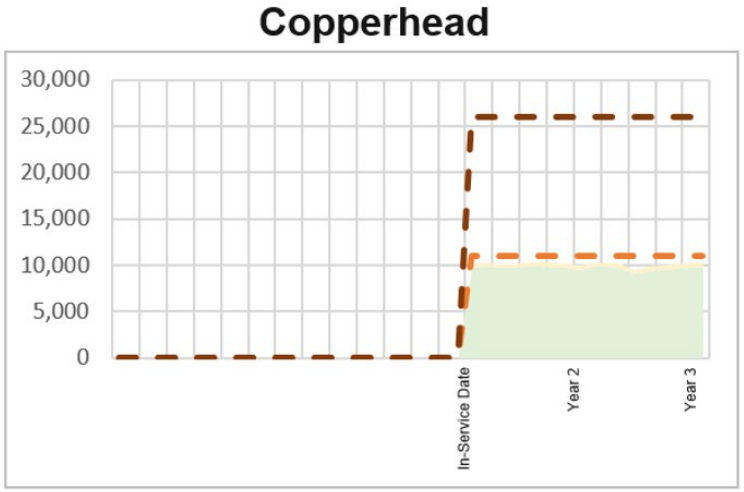
PROPOSED NOTICE

Application of Targa Midstream Services, LLC for Authorization to Inject, Lea County, New Mexico. Targa Midstream Services, LLC ("Targa") (OGRID No. 24650) seeks authorization to drill and operate a Class II acid gas injection well, the Copperhead AGI No. 2 Well ("Well"), at Targa's Copperhead Gas Processing Facility. The vertical well will be located approximately 1,138 feet from the south line (FSL) and 1,842 feet from the west line (FWL) of Section 13, Township 24 South, Range 32 East, Lea County, New Mexico. The Well will inject treated acid gas into the Siluro-Devonian formation including the Devonian Thirtyone Formation, Upper Silurian Wristen Group and the Lower Silurian Fusselman Formation, at a depth of approximately 17,299–18,699 feet. The Well's maximum daily injection rate will not exceed 26 million standard cubic feet per day, and the Well's maximum surface injection pressure will not exceed 3,460 pounds per square inch gauge. The Well is located approximately 26 miles west of Jal, New Mexico.

Copperhead Area Gathering and Processing Needs



- Copperhead is currently a compression / gathering facility and is expanding into a gas processing plant.
- This AGI well is needed for the anticipated TAG resultant from sour gas treatment.



Targa Midstream Services, LLC
Case No. 26139
Exhibit A-2

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

APPLICATION OF TARGA MIDSTREAM SERVICES, LLC FOR AUTHORIZATION TO INJECT, LEA COUNTY, NEW MEXICO. **CASE NO. 26139**

SELF-AFFIRMED STATEMENT
OF TUHIN BISWAS

1. I am a consulting geologist for Targa Midstream Services, LLC ("Targa"). I am over 18 years of age, have personal knowledge of the matters addressed herein, and am competent to provide this Self-Affirmed Statement. I have not previously testified before the New Mexico Oil Conservation Division ("Division"). I hold a Ph.D. in Geology from the Indian Institute of Technology. I am currently a Research Associate III with the Petroleum Recovery Research Center at the New Mexico Institute of Mining and Technology. A copy of my curriculum vitae is attached as **Exhibit B-1**.

2. I am familiar with the application filed by Targa in this case, and I have conducted a geologic study of the subject lands.

3. Targa proposes to inject treated acid gas ("TAG") into the Thirtyone, Wristen and the Fusselman Formations of the Siluro-Devonian Group at a depth of approximately 17,299-18,699 feet in the Copperhead AGI No. 2 well ("Well").

4. Table 8 in the C-108 identifies the formation tops, depths, and thicknesses in the area. Geologically, the project area falls within the northern Delaware Basin, west of the Central Basin Platform.

5. The geologic characterization of the proposed Well site is based on subsurface data, interpretation, and published literature. Key regional formation tops and structures were picked and correlated using well data within 10 miles of the proposed Copperhead AGI No. 2 well and

Targa Midstream Services, LLC
Case No. 26139
Exhibit B

logs that penetrated the top of the Siluro-Devonian. 36 wells were found with logs that reached sufficient depths, and formation tops were correlated across these wells. Structure mapping was quality-checked and validated by published regional structure maps in the area on the top of the Siluro-Devonian. Information regarding my geologic study is provided in **Exhibit B-2**.

6. Figure 5 of the C-108 shows the structural surfaces interpreted from 3D seismic data.

7. The proposed injection zone consists of the Devonian Thirtyone Formation, Upper Silurian Wristen Group and the Lower Silurian Fusselman Formation formations of the Siluro-Devonian Group, as depicted in Table 8 of the C-108. Section VIII of the C-108 discusses the depositional environment, rock properties, and geologic characterization of the proposed site as it relates to AGI operations.

8. Porosity data was obtained from a multiple sources that includes nearby type well, the Pilot-water solution-operated Cyclone Federal SWD#001 (API No. 30-025-46685), located approximately 4.4 miles of the proposed Well. Table 8 in the C-108 is a summary of porosity permeability dataset derived from published literature and dataset that was representative of anticipated rock fabric at the project site given the location relative to the basin and its depositional history.

9. The injection zone is comprised of approximately 1390' of Siluro-Devonian and Fusselman section with an anticipated depth interval of 17321' to 18711' true vertical depth (TVD) at the Copperhead AGI No. 2 well location. Density-porosity measurements from the nearby Cyclone Federal SWD#001 type log range from 2.20% to 10 %, with an average porosity of 3.5%, using a dolomite matrix density of 2.87g/cm3 and an estimated permeability of 6.21 millidarcies.

10. The Woodford Shale and Mississippian Limestone will serve as the upper confining zone for the proposed injection site. The Wristen Formation marks the uppermost part of the Siluro-Devonian unit and is overlain by up to 125 ft of Woodford Formation consisting of organic rich shale with interbedded chert, siltstone and carbonate. The deep-water Woodford deposits are overlain followed by the Mississippian Limestone (approximately 392'), a shallower water high-energy deposit. The Mississippian Limestone consists of carbonate sediments. The youngest Mississippian age deposit fill the basin is Barnett Shale. The Barnett Shale consists of dark, organic rich shale with very low porosity and permeability and is ~ 250ft thick. The Woodford Shale, Mississippian Limestone and Barnett Shale formations are regionally continuous across the Delaware Basin and has an average thickness of 770ft. This thickness is also supported by offset well logs in the Copperhead AGI No. 1 well area.

11. Per published literature, the organic-rich shale units have an average porosity of 1% and an average permeability of less than 0.01 nanodarcies. These averages are based on the core data presented in Table 8 in the C-108.

12. The lower confining zone is comprised of the Montoya and Simpson Groups. Additional confinement is provided by the Ellenburger group and the Cambrian Bliss Sandstone.

13. The Montoya, Simpson and Ellenburger groups are laterally continuous across Eddy and Lea Counties. In the area of the proposed well, the Montoya, Simpson and Ellenburger group is approximately 2245' thick, as observed in the 10 mile radius well search while building the geological model. The Montoya, Simpson and Ellenburger Group has an average matrix porosity of 1.5%. The Montoya, Simpson and Ellenburger groups are widely recognized as "effective seals for injected fluid."

14. Both the upper and lower confining zones are sufficient to prevent migration of injected fluids from the injection zone.

15. Based on the geologic information, I believe that this injection zone is appropriate for the proposed Well.

16. A formation-water review of the USGS National Produced Waters Geochemical Database identified 3 wells located within 11 mi of the proposed injection well. Those analyses show that the water contains NaCl and concentrations of total dissolved solids (TDS) range from 71,078 to 120,326 mg/L with an average of 90,530 mg/L (Table 7, Figure 3). High salinity indicates this interval is compatible with injection.

17. The New Mexico Water Rights Database from the New Mexico Office of the State Engineer was queried for water wells in the vicinity of the proposed Copperhead AGI No. 2 site. There are no freshwater wells located within one mile of the Copperhead AGI #2 well. The closest groundwater wells are found at distances of approximately 1.34 mi away (C-01932) and 1.98 mi away (C-03528-POD1), completed to depths of 492 ft and 541 ft respectively and collecting water in the Triassic Dockum Group (Santa Rosa), with primary use of livestock watering. The shallow freshwater aquifer is protected by the surface and intermediate casings and cements in the Copperhead AGI #2.

18. There are four main sources of underground drinking water in the northern Delaware Basin of New Mexico. They include: Cenozoic alluvium, lithologically complex fluvial accumulations of the Pecos River and other streams, windblown sands, playa deposits, gypsite, and others, with TDS ranging from 205 to 2,990 mg/L which serves as the principal source of groundwater in the eastern part of Eddy County and the western third of Lea County; the Rustler Formation, a brackish to saline (~10,000 to 300,000 mg/L TDS) anhydrite or gypsum formation

with two dolomite marker beds and a basal zone of sandstone to shale which is typically utilized for livestock, irrigation, and enhanced oil recovery; and the Capitan Reef, a karst limestone with TDS of less than 300 to 10,000 mg/L.

19. I 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.

20. It is my opinion that the TAG will be effectively and safely contained within the proposed injection interval.

21. It is my opinion that the injection of TAG into the proposed Well will not increase the risk of induced seismicity.

22. It is my opinion that Applicant's proposed method of disposing TAG will protect public health and the environment, and granting Targa's application will prevent waste and protect correlative rights.

23. The attached exhibit was prepared by me.

24. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date next to my electronic signature below.

Tuhin Biswas

Tuhin Biswas

05/27/2026

Date

Tuhin Biswas
801 Leroy Place, Socorro, NM 87801
Phone: (575)5171361
E-mail: tuhin.biswas@nmt.edu/tbtuhin24@gmail.com

EDUCATION

- 2022 PhD. Department of Earth Science: Indian Institute of Technology, Bombay, India
- 2014 M.Sc. Department of Earth Science: Indian Institute of Technology, Bombay, India
- 2012 B.Sc. Department of Geology, Presidency University, Kolkata, India

PROFESSIONAL EXPERIENCE

Research Associate III, Petroleum Recovery Research Center, NMT, Sept 2025-Present
Member of the Reservoir Evaluation and Advanced Computational Technologies (REACT) group. Research in Digital Rock Physics, Petreoleum System Modeling, Geological site characterization for geological storage.

Post-Doctoral Researcher, Petroleum Recovery Research Center, NMT, Sept 2024-Sept 2025
REACT member, involved in research and industrial projects and supervising students. Research in CO2 sequestration, geological characterization of CO2 reservoirs, basin-scale modelling, Petroleum System Modeling.

Summer Intern, PioPetro, Jun 2024- Aug 2024
Summer internship on machine learning applications in the oil and gas industries, petroleum exploration, and well-stimulation.

Senior Geologist, Oil and Natural Gas Corporation Ltd, India, Dec 2014-Apr 2024
Responsible for onsite monitoring, data management, lithological, stratigraphic, formation fluid interpretation, preparation of composite logs, core analysis, well log interpretation, wellbore-related problem solving, and technical report preparation of exploratory and development wells. Supervised the mud-logging team and worked in a team with drilling engineers, petro-physicists, and other members of the surface and subsurface teams.

Graduate Research Assistant, Indian Institute of Technology, Bombay, India, Jul 2014-May 2022
Conducted research on Lesser Himalayan brittle deformation, kinematic analyses of shear planes using geological fieldwork, microscopic studies, and paleo-stress analyses to understand the tectonic process. Worked on geometric analyses and characterization of curvi-planar deformation surfaces.

Graduate Research Assistant, Indian Institute of Technology, Bombay, India, Aug 2013-May 2014
Structural field documentation and paleo-stress analysis of brittle faults and fractures from Siwalik Himalayas.

Winter Academic Intern, Indian Institute of Technology, Bombay, India, Dec 2012-Feb 2013
Researched and reviewed the mechanism, formation, and hydrocarbon migration within Polygonal faults

PUBLICATIONS

Journals:

- Puniya, N., Mukherjee, S., Patidar, A.K., Puniya, M.K., Biswas, M., **Biswas, T.,** 2024. Morphotectonics, slope stability and paleostress studies from the Bhagirathi river section, western Himalaya (Uttarakhand, India). **Journal of Structural Geology (Elsevier),** 105288.
- **Biswas, T**., 2023. Role and Advancements in Geomechanical Challenges in Carbon Capture and Sequestration. **Petroleum & Petrochemical Engineering Journal,** 7(2), 000348.
- **Biswas, T**., Mukherjee, S. 2022. Non-uniform B-spline curve analyses of sigmoid brittle shear P-and ductile shear S-planes**. International Journal of Earth Sciences,** 111(3), 929-948.
- **Biswas, T**., Bose, N., Dutta, D., Mukherjee, S. 2022. Arc-parallel shears in collisional orogens: Global review and paleostress analyses from the NW Lesser Himalayan Sequence (Garhwal region, Uttarakhand, India). **Marine and Petroleum Geology,** 105530.
- Dutta, D., **Biswas, T.** Mukherjee, S. 2019. Arc-parallel compression in NW Himalaya: Evidence from structural and palaeostress studies of brittle deformation from the clasts of the Upper Siwalik, Uttarakhand, India. **Journal of Earth System Science**, 128. doi: 10.1007/s12040-019-1138-1.

Book:

- Mukherjee, S., Bose, N., Ghosh, R., Dutta, D., Misra, A.A., Kumar, M., Dasgupta, S., **Biswas, T.,** Joshi, A. and Limaye, M.A., 2019. Structural Geological Atlas. Springer Singapore. ISBN: 978-981-13-9825-4, 621.

Conference presentations: (**student author*)

- *Appiah, E., **Biswas, T.,** Ulmer-Scholle, D., Wu, J., Wang, S., 2024. Uncovering Hidden Worlds: Exploring the subsurface basalt formation for carbon mineralization in New Mexico. NMOGA Annual Meeting, Oct 6-8, 2024 *(poster)*.
- **Biswas, T.,** Bose, N., Mukherjee, S. 2017, December. Shear fabrics reveal orogen-parallel deformations, NW Lesser Garhwal Himalaya, Uttarakhand, India. In AGU Fall Meeting Abstracts (Vol. 2017, T43A-0662) *(abstract)*.
- **Biswas, T.,** Dutta, D. Mukherjee, S. 2014. Tectonics of Siwalik Himalaya in Dehradun-Roorkee section, India. In Session: T23. 'Exploring the Development of the Himalayan-Karakorum- Tibet Orogenic System from the Mantle to Mountain Peaks'. Geological Society of America Annual Meeting 2014 46(6), 573 *(abstract)*.

Other publication:

- **Biswas, T.,** Dutta, D. 2016. Broken pebble with small-scale brittle reverse-fault with top-to-SSE. Photograph of the month. Journal of Structural Geology 85, iii. doi: 10.1016/S0191-8141(16)00031-6.

SYNERGISTIC ACTIVITIES

- **Journal Peer Reviewer** for Marine and Petroleum Geology (4), JPCE (1), PPEJ (5), All Earth (1), Earth Sciences (1), Carbon Capture Science and Technology (2), Energies (2), Geosciences (1)
- **Scientific workshops attended:** Geothermal Development, CUSP West, CESAM
- **Mentor** graduate and undergraduate students

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Site Geology Review

Copperhead AGI #002

Targa Midstream Services, LLC
Case No. 26139
Exhibit B-2

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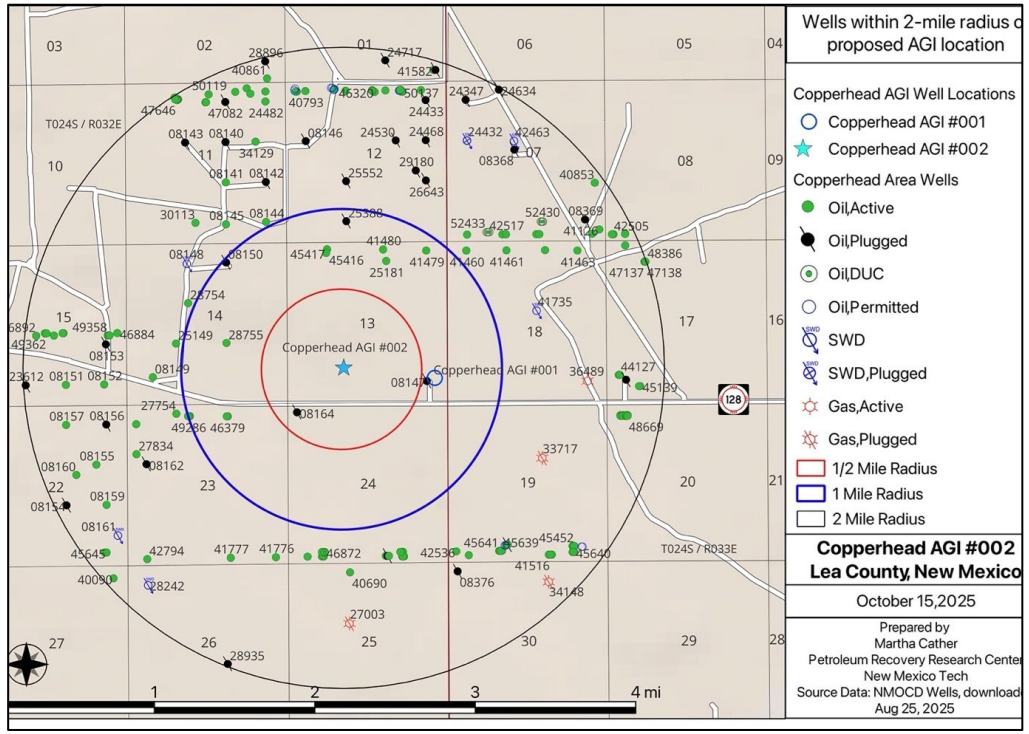
Summary of Well Activity Near Proposed Injector Location

- No production wells in injection zone within 2-mi radius (data 3/6/2024)
- Copperhead AGI #001 (API 30-025-55805) spud 2/12/2026 (~0.6 mi will inject into Devonian)
- Copperhead AGI #002 planned as a redundant well as per NMOCD Order R-23867.
- 224 well locations (active, plugged, new) within 2-mi radius
- 130 Bone Spring or Wolfcamp, remainder Delaware or Morrow
- Over 5000’ between base of Wolfcamp and top of injection zone
- Projected path of one horizontal Wolfcamp well does appear to be in close proximity to proposed location and will be considered in drilling plan



Distance from location (mi)	Active (incl New producers)	New(incl Never Drilled/recent expired/DUC)	Plugged, site released	Total
0 – 0.5 mile	0	0	1	1
0.5 – 1 mile	8	3	3	14
1 – 2 mile	147	30	32	209
Total	155	36	22	224

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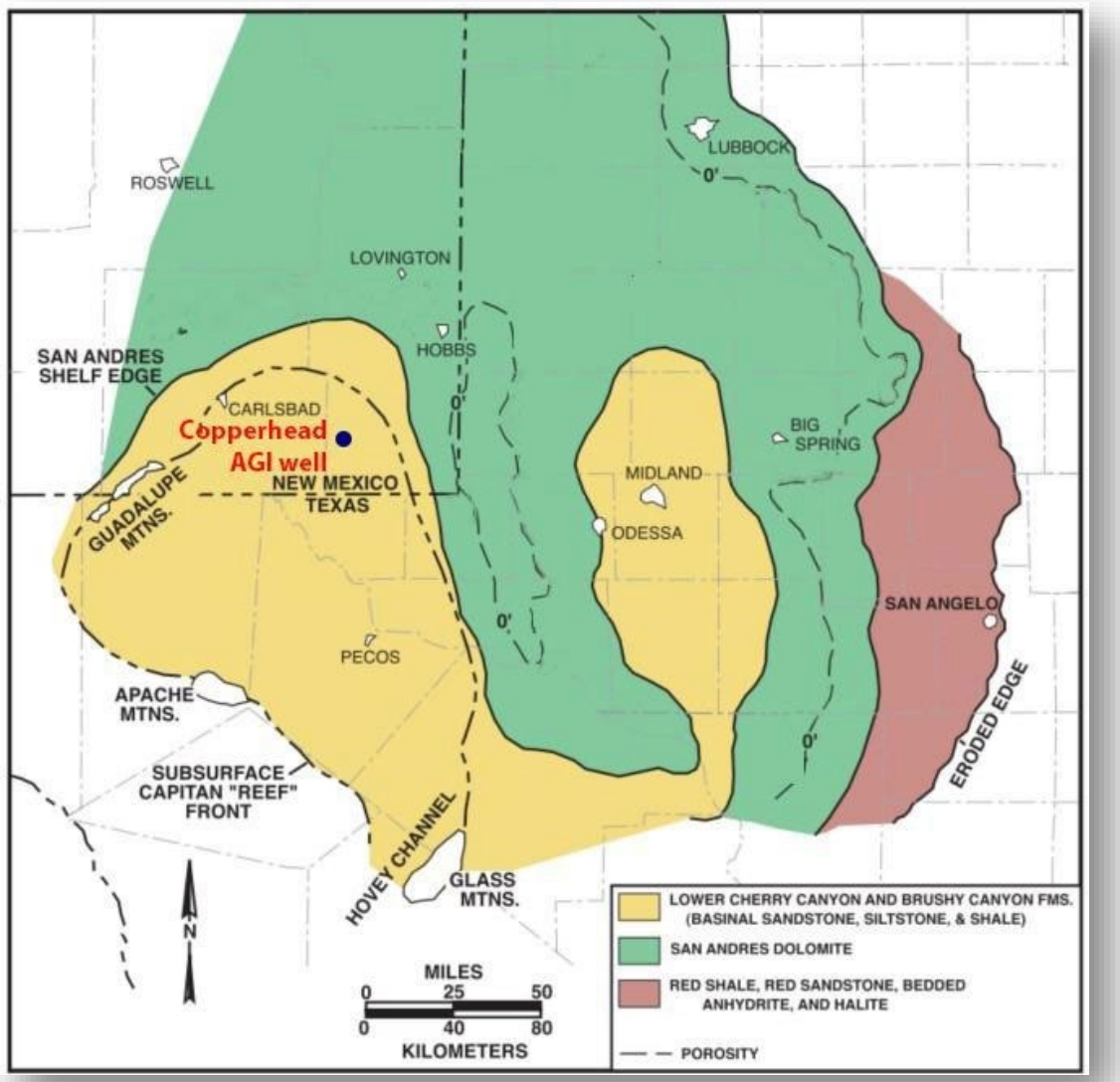
Proposed Injection Location



- The area is in the northeastern part of the present-day Delaware Basin within the greater Permian Basin area
- The units were deposited within the Tobosa Basin
- The geologic model is based on both well logs and purchased 3-D seismic for the greater Copperhead area

*Diagram is modified from Ward et al. (1986).

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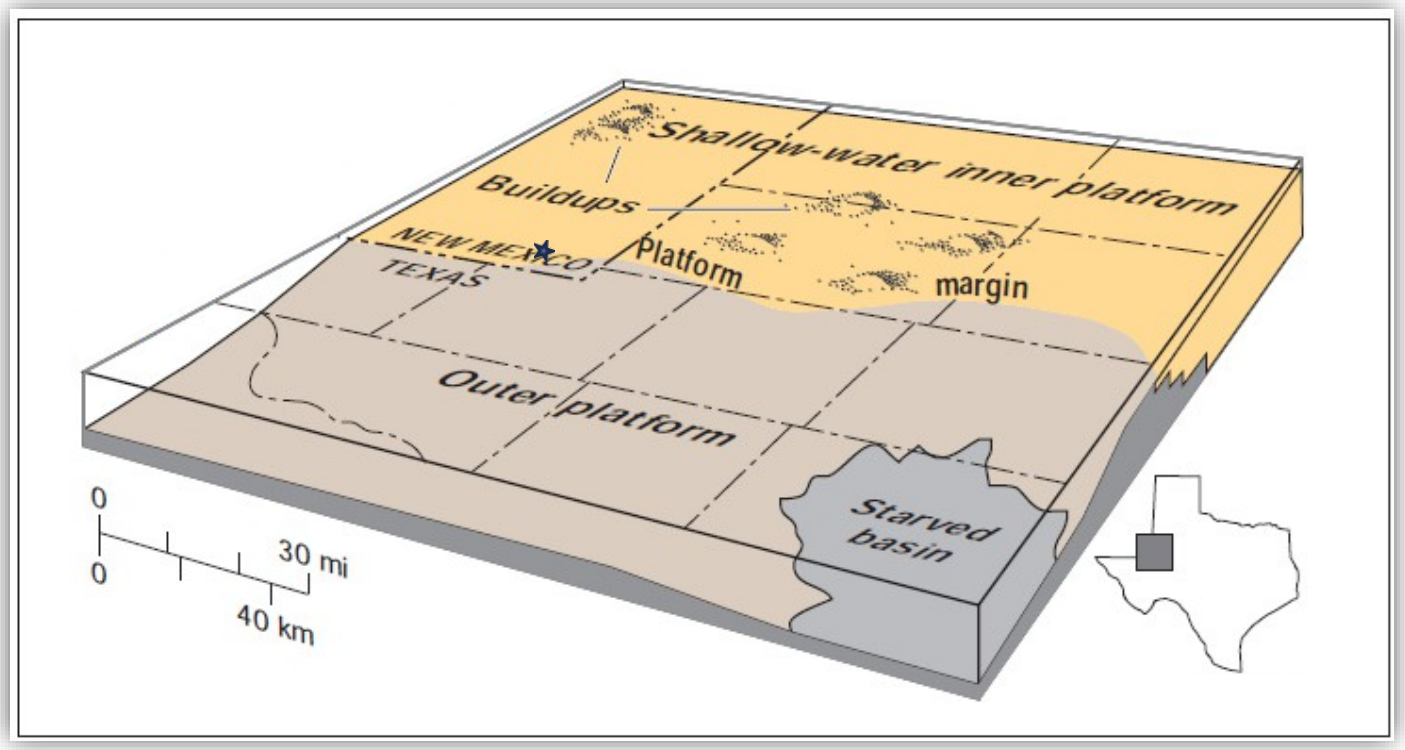
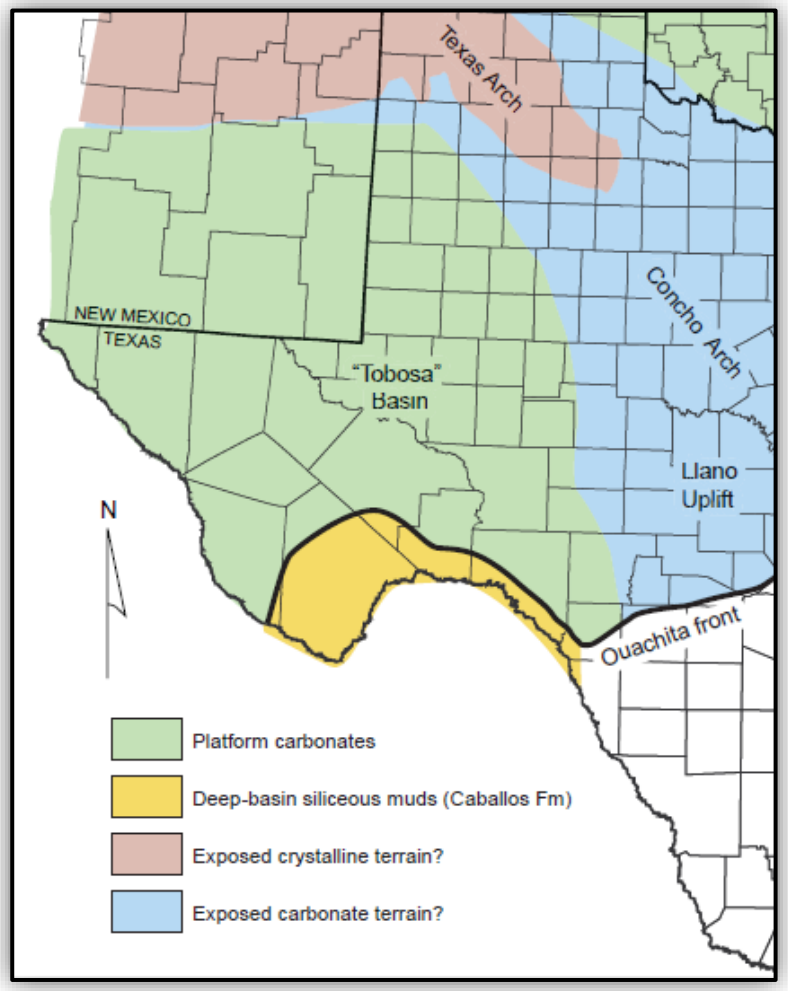
Paleogeography & Depositional Environments

- Model is for the Silurian Tobosa Basin
- Copperhead area is on a shallow-water high-energy carbonate platform





** Diagram is from Ruppel (2019)*

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Stratigraphy

The **Siluro-Devonian (Thirtyone & Wristen)** and **Fusselman** section:

- Consists of interbedded limestones and dolomites with minor sandstone and shale interbeds
- Zones with good porosity and permeability are related to primary porosity within the carbonates and secondary porosity within solution-enlarged pores and breccia
- The proposed injection zone is capped by 140- to 180-feet-thick, Devonian Woodford Shale followed by 480- to 675-feet-thick section of Mississippian limestones and shales. These units have negligible porosity and permeability
- Properties of injection and confining zones presented in next section

AGE		CENTRAL BASIN PLATFORM-NORTHWEST SHELF	DELAWARE BASIN
Pennsylvanian	Missourian	Canyon Formation	Canyon Formation
	Des Moinesian	Strawn Formation	Strawn Formation
	Atokan	Atoka Formation	Atoka Formation
	Morrowan	Morrow Formation	Morrow Formation
Mississippian	*Upper*	Barnett Shale	Barnett Shale
	Lower	"Mississippian limestone"	"Mississippian limestone"
Devonian	*Upper*	Woodford Shale	Woodford Shale
	Middle		
	Lower	Thirtyone Formation	Thirtyone Formation
Silurian	*Upper*	Wristen Group	Wristen Group
	Middle		
	Lower	Fusselman Formation	Fusselman Formation
Ordovician	*Upper*	Montoya Group	Montoya Group
	Middle	Simpson Group	Simpson Group
	Lower	Ellenburger Group	Ellenburger Group
Cambrian		Bliss Sandstone	Bliss Sandstone
Precambrian		Miscellaneous igneous, metamorphic, volcanic rocks	Miscellaneous igneous, metamorphic, volcanic rocks

Stratigraphic column for the Delaware basin, the Northwest Shelf and Central Basin Platform (modified from Broadhead, 2017).

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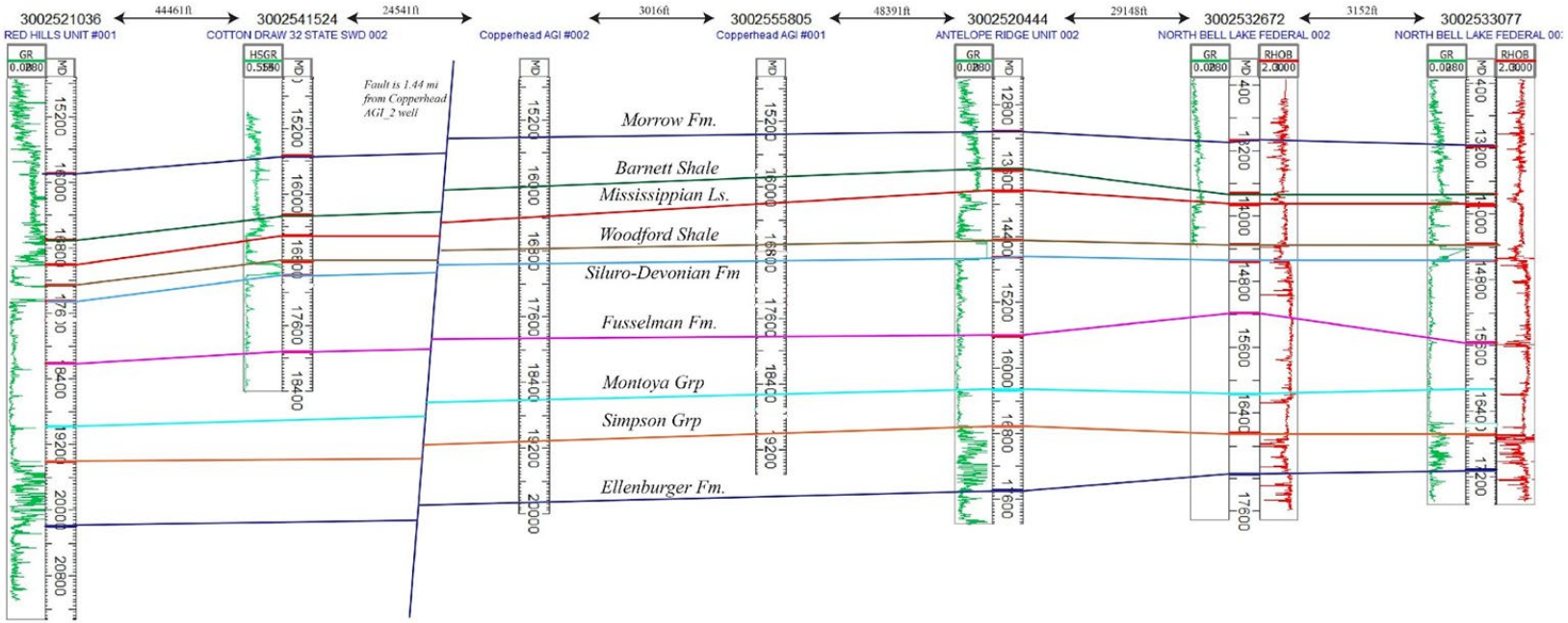
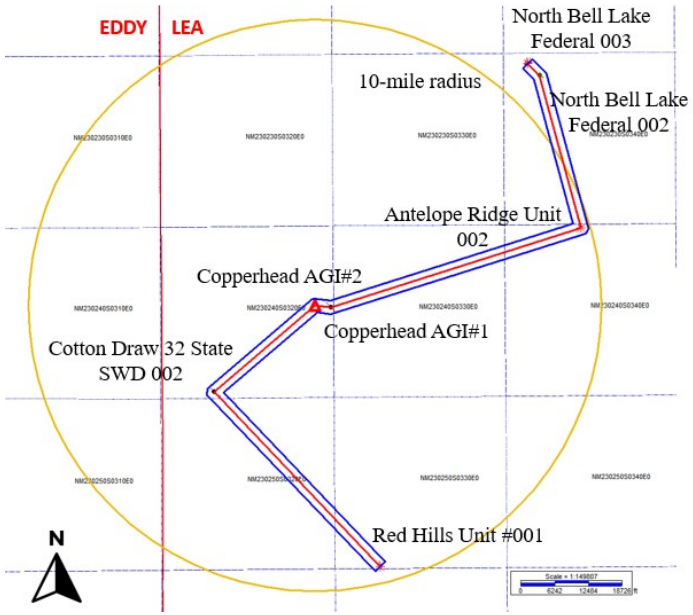
Stratigraphy

- **Siluro-Devonian strata:** ~1,380 ft of Thirtyone, Wristen and Fusselman limestones and dolomites
- **Confining Zone:** ~780 ft of Barnett Shale, Mississippian limestones, and Woodford Shale





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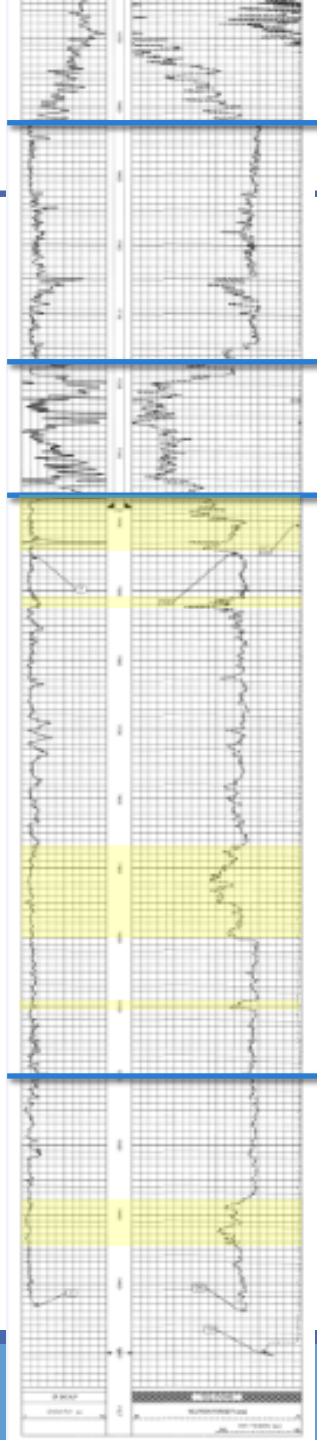
Petrophysical properties

- The closest deep well with log data (4.4 mi) to the proposed well is Cyclone Federal SWD #001
- The majority of the porosity within the section is confined to horizons (possibly karsted intervals) shown in yellow
- Maximum measured porosity of ~10% is in the both the Siluro-Devonian and Fusselman section
- Woodford, Mississippian and Barnett are the confining zones
- Copperhead AGI #001 logs not available at time of presentation preparation



Cyclone Federal SWD #001
30-025-46685

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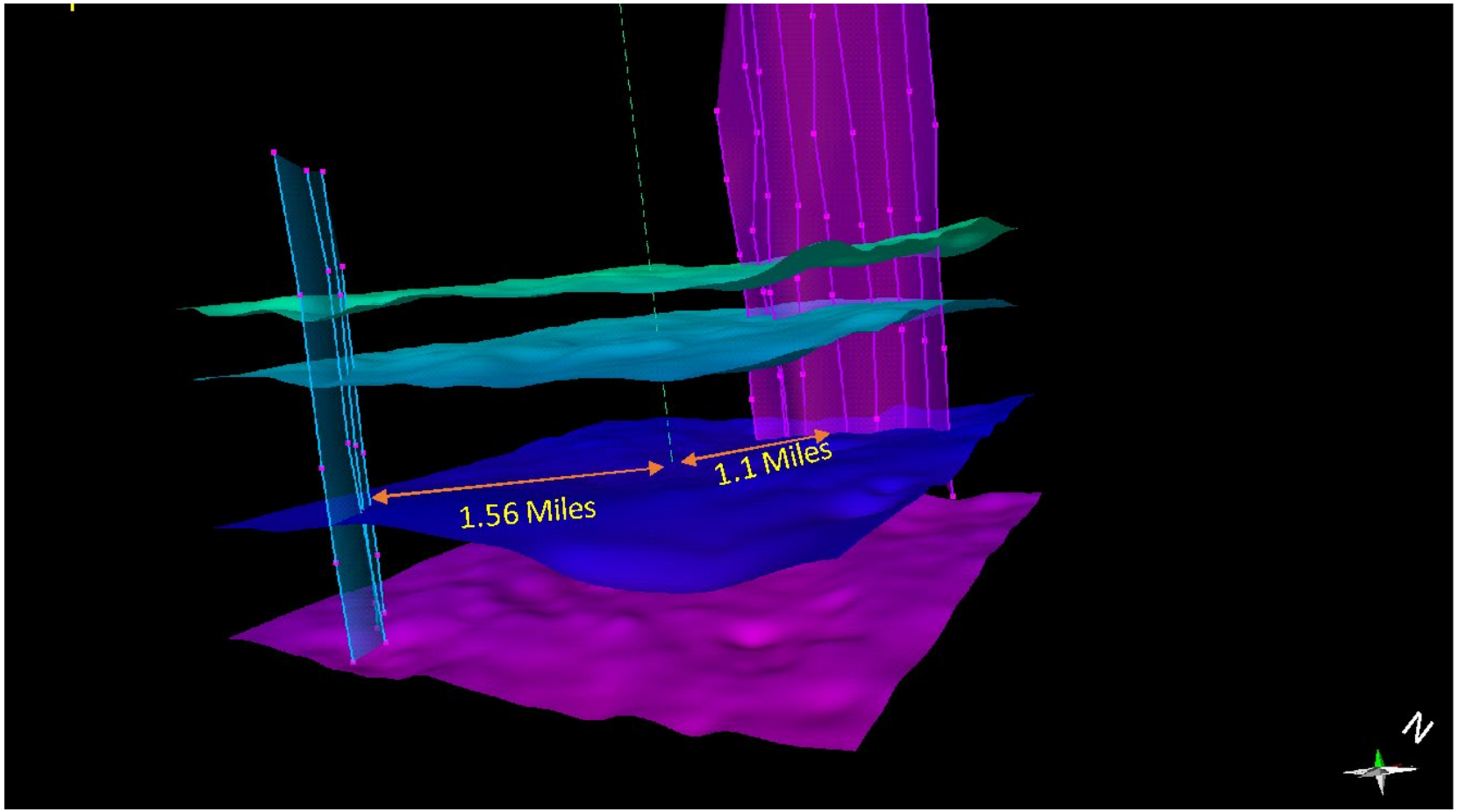
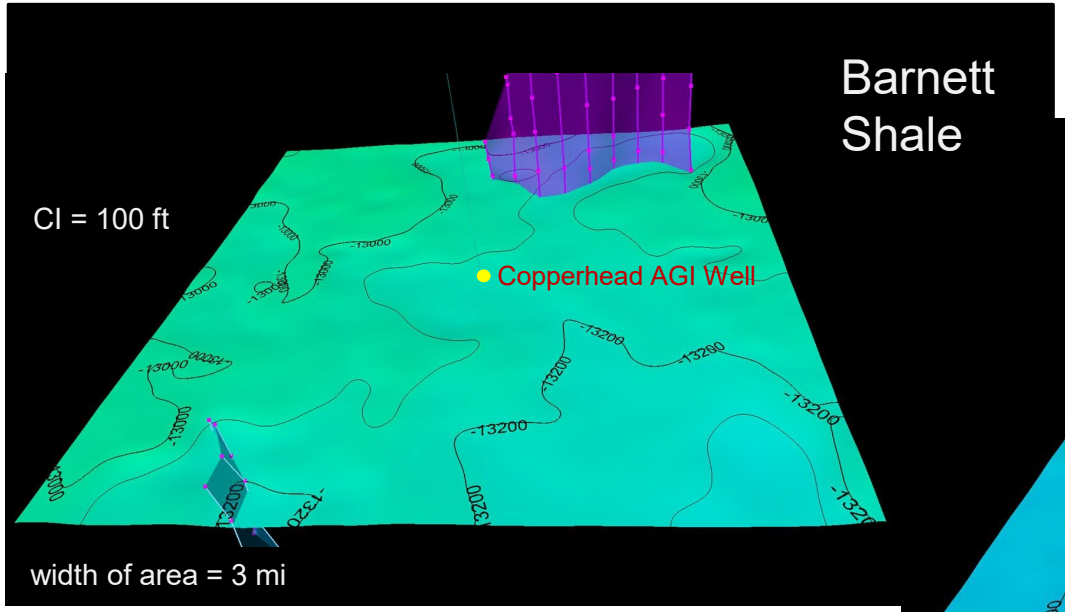
Seismic Interpretation

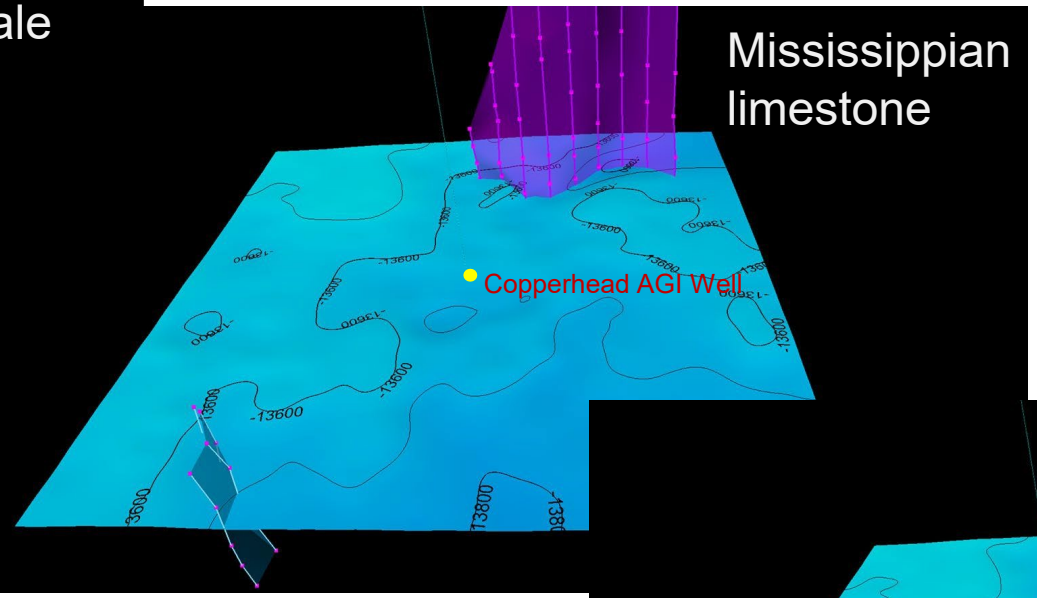
Structural surfaces and regional fault system interpreted from 3D seismic data

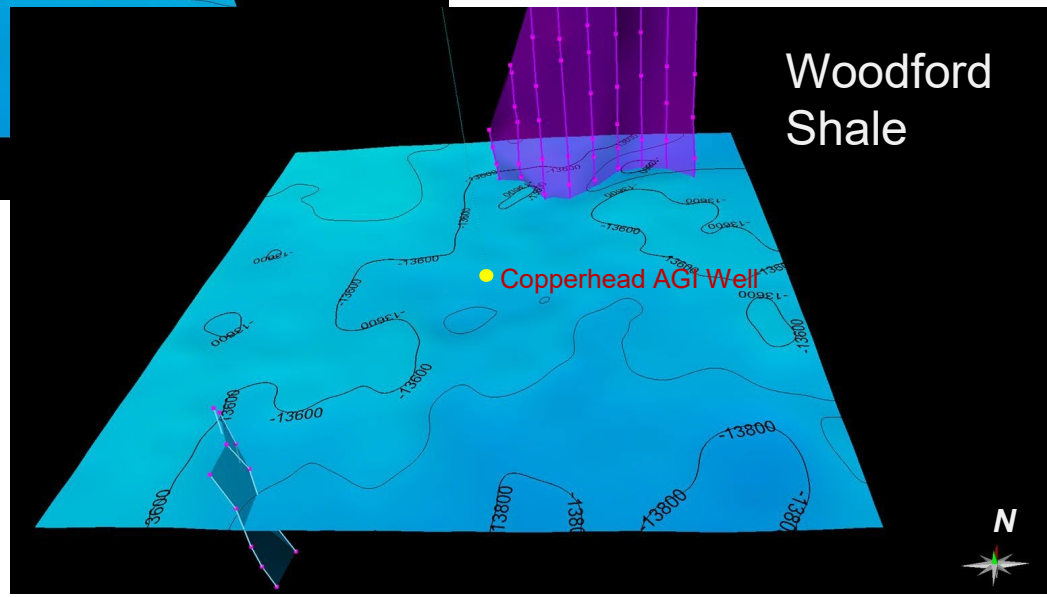


- Formation tops based on the Copperhead 3-D seismic and well logs
- The Barnett Shale is the uppermost confining zone (Woodford Shale + Mississippian limestone + Barnett Shale)
- The Siluro-Devonian (Thirtyone Fm. + Wristen Group) through the Fusselman Formation is approximately 1,400 ft thick

Subsea Structure Maps – Confining Zone (Mississippian - Woodford)



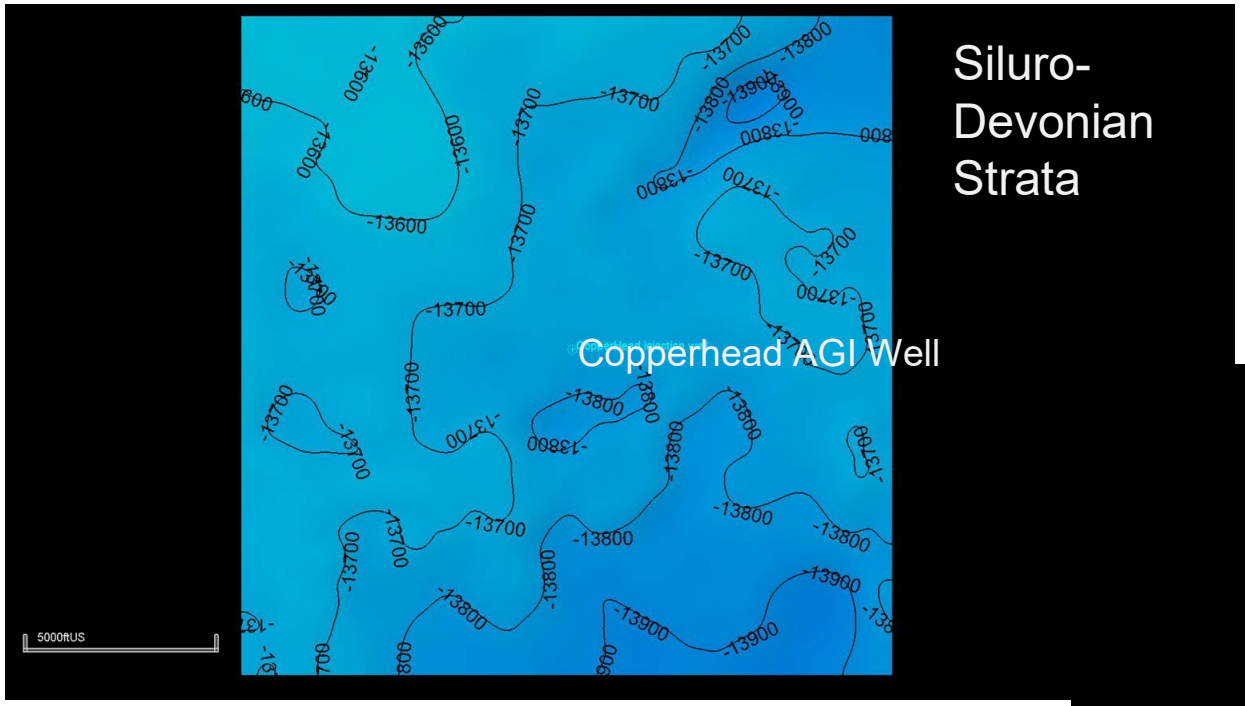


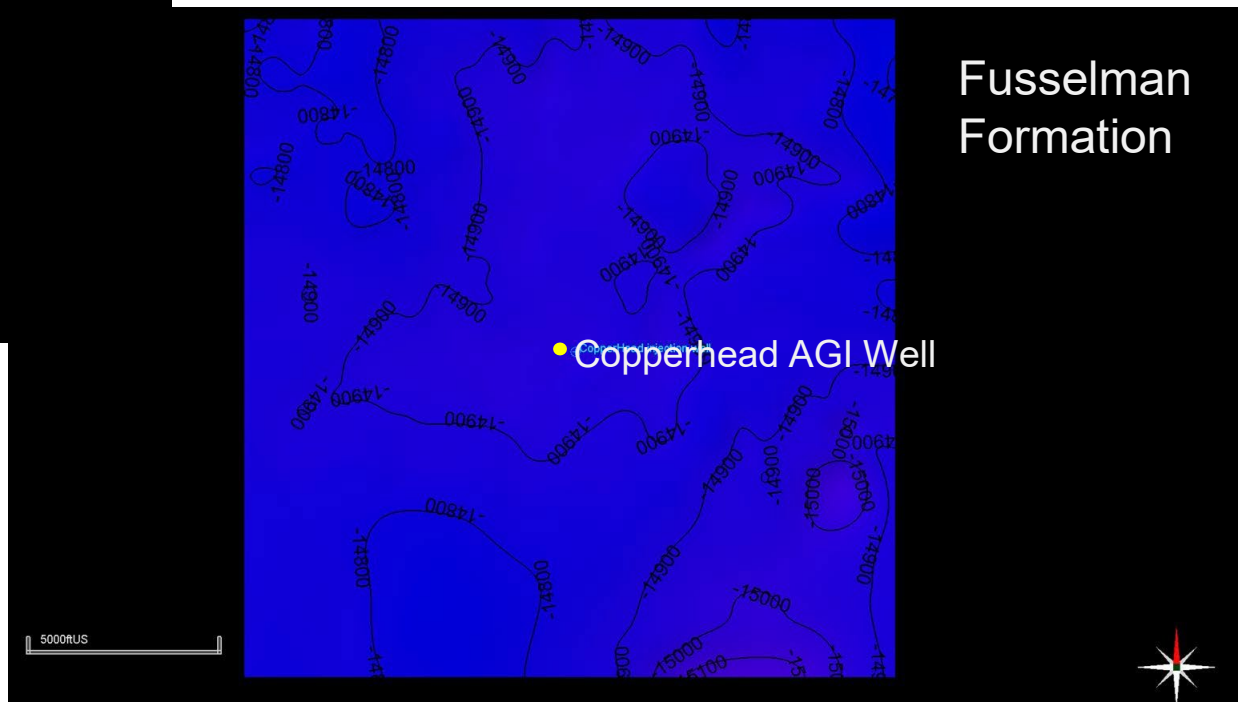


- Structure on seismically correlated horizons for the Barnett Shale (uppermost seal), the Mississippian limestone, and the Woodford Shale (lowermost seal)

- The seal starts at roughly 16,600 ft below surface
- The total seal is >750 ft thick

Subsea Structure Maps – Injection Zone (Siluro-Devonian – Fusselman)





- Structure on seismically correlated horizons for the Siluro-Devonian and Fusselman

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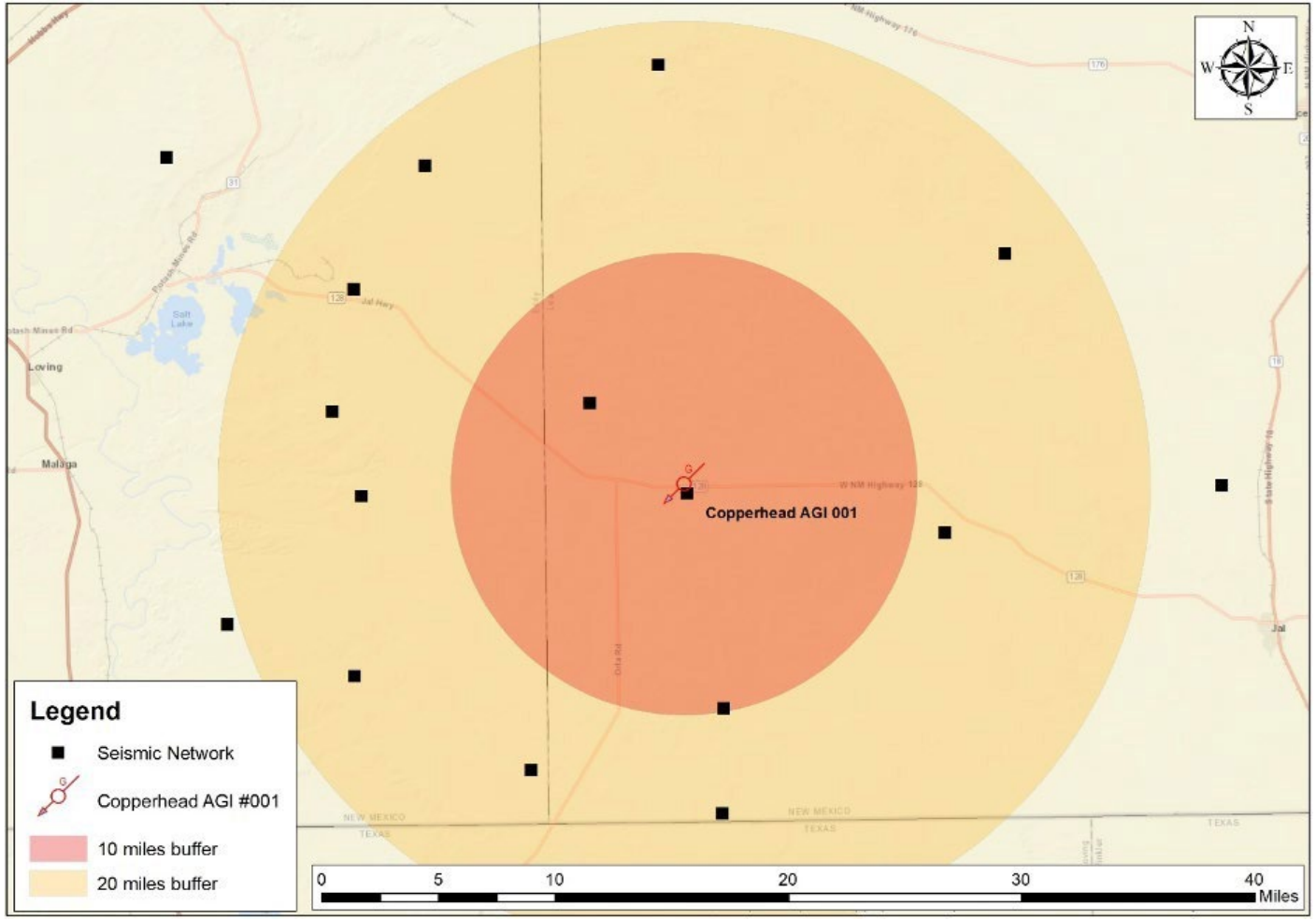
Seismic Monitoring Network Near the Copperhead Site



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Targa Midstream Services, LLC
Case No. 26139
Exhibit C-2

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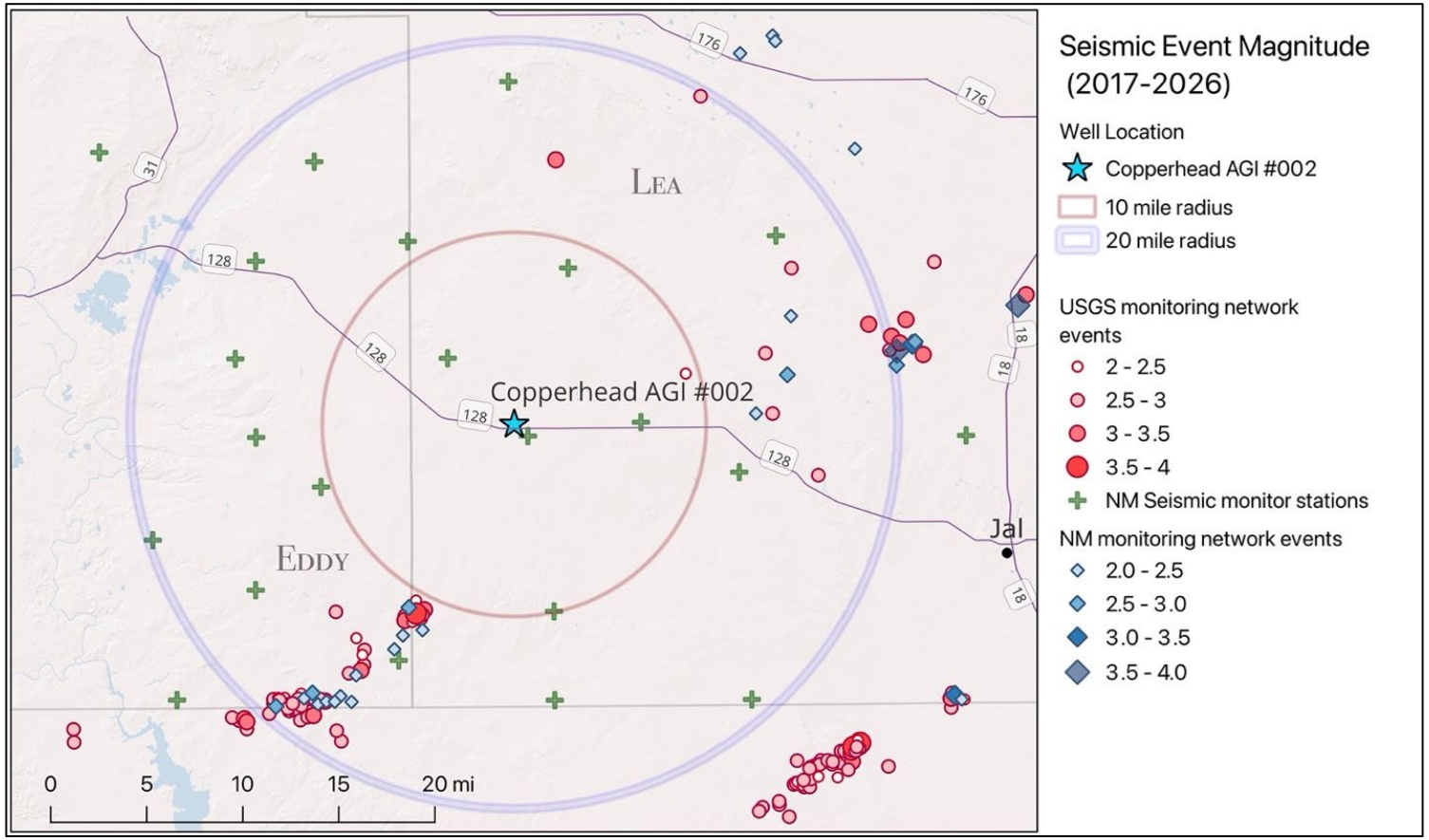
Seismic events near the Copperhead Site



Map of events >2.0 2017-2026

- Closest offset event ~8.3 mi, M 2.0
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- 4 active monitoring stations located within 10 mi, with one in very close proximity
- 10 other seismic monitoring stations within 20 mi of the well.

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Fault Slip Potential Inputs

- An in-house geomechanical analysis software package was used. This tool:
- Allows flexible and transparent evaluation of fault slip potential under varying reservoir and geomechanical conditions, desirable given the uncertainty ranges reported in the reservoir model
- Allows direct control and sensitivity analysis of key parameters such as Poisson's ratio (e.g., varying Poisson's between 0.29–0.31)
- Tool allows rapid testing of conservative and realistic scenarios.
- Integrates outputs from Petrel/CMG reservoir, enabling direct comparison between simulated pressure evolution and analytically derived fault slip thresholds.

Fault Friction Coeff (mu)	0.58
Vertical Stress Gradient (psi/ft)	1.05
Maximum Horizontal Stress Direction (deg N CW)	75
Initial Reservoir Pressure Gradient (psi/ft)	0.47
A-Phi Parameter	0.6
Reference Friction Coefficient (mu)	0.58
Injection Years	2026 to 2056

The analysis assumes a linear elastic behavior, homogeneous stress gradients, and Mohr–Coulomb failure with zero cohesion and constant friction coefficient.

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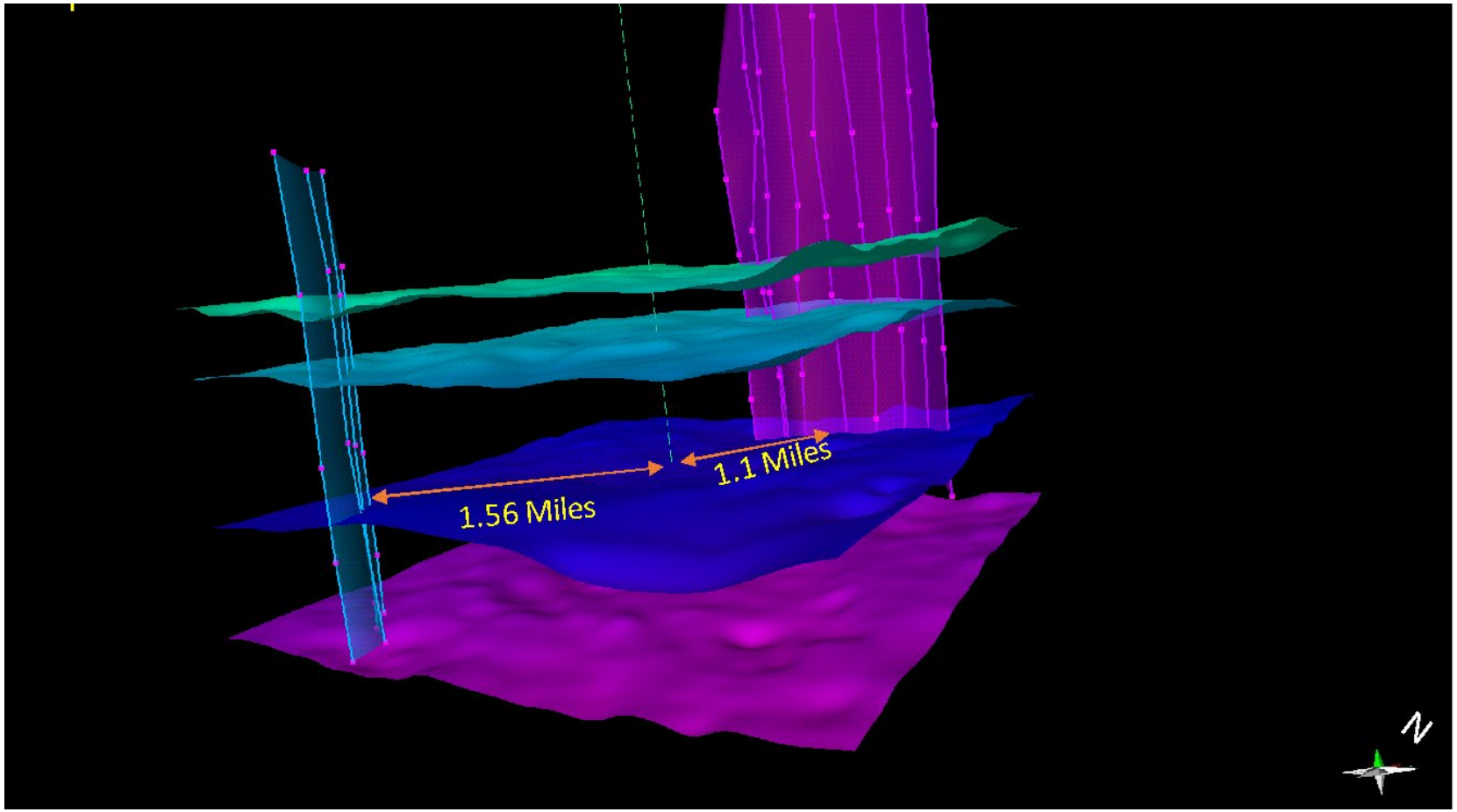
Fault Slip Potential Analysis

Two faults interpreted from 3D seismic data were analyzed for fault slip potential



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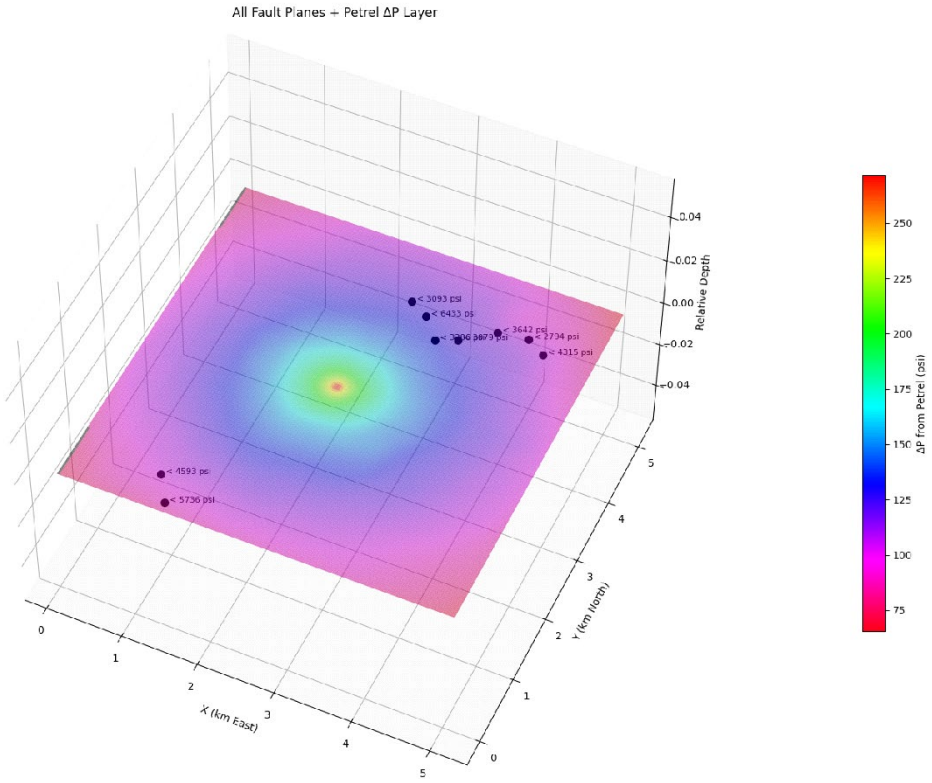
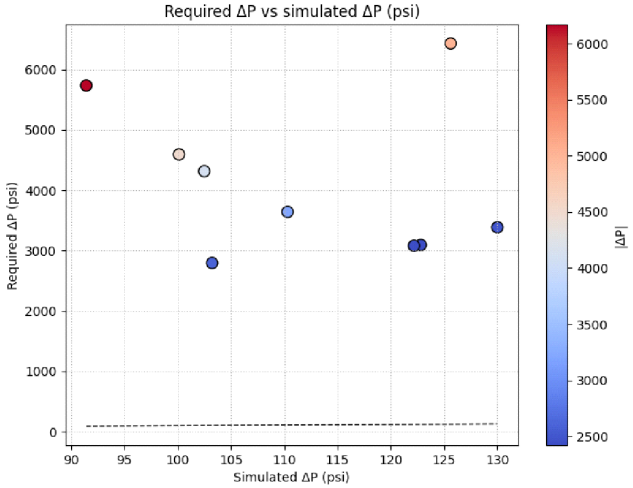
Fault Slip Potential Analysis Results



Calculated pressure increase. Dots are intersection of Petrel grid with interpreted fault planes, values are estimated increase at these locations.



Pressure change required to cause fault slip and the predicted pressure after 30 years of injection.

- Modeled pressure increase on nearby faults remains less than 300 psi
- FSP analysis shows that the examined faults would require more than 2,500 psi of effective pressure increase to induce slip
- Modeled pressure increase is much lower the threshold pressure required for fault reactivation

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

APPLICATION OF TARGA MIDSTREAM SERVICES, LLC FOR AUTHORIZATION TO INJECT, LEA COUNTY, NEW MEXICO. **CASE NO. 26139**

SELF-AFFIRMED STATEMENT
OF HASSAN KHANIANI

1. I am a consulting geologist for Targa Midstream Services, LLC ("Targa"). I am over 18 years of age, have personal knowledge of the matters addressed herein, and am competent to provide this Self-Affirmed Statement. I have not previously testified before the New Mexico Oil Conservation Division ("Division"). I hold B.Sc. and M.Sc. in Petroleum Exploration Engineering, and a Ph.D. in Exploration Geophysics. I am currently an Assistant Professor with the Petroleum Recovery Research Center and Department of Mineral Engineering at the New Mexico Institute of Mining and Technology. A copy of my curriculum vitae is attached as **Exhibit C-1**.

2. I am familiar with the application filed by Targa in this case, and I conducted a fault slip potential analysis for the Well, which is provided in Section VIII of the C-108 and **Exhibit C-2**.

3. Analysis of faults interpreted from 3D seismic data indicates that only two significant faults intersect the reservoir interval. The largest is located approximately 1.0–1.5 mi from the Well.

4. Seismic events of 2.0 or greater magnitude, recorded by the New Mexico Tech Seismological Observatory and USGS databases, within 10-and 20-mile radius of the AGI site—from January 12, 2017 to present—were collected to determine if active seismicity exists near the proposed Well site. The separate database queries, shown in Figures 4 and 5 in the C-108, demonstrate that the closest offset seismic event occurred approximately 8.3 miles from the

Targa Midstream Services, LLC
Case No. 26139
Exhibit C

proposed location and was a 2.0 magnitude event. No other seismic events of greater than 3.0 magnitude have been recorded within a 10 miles radius.

5. In my opinion, the faults and seismic history in the area are not a concern for injection into the proposed Well.

6. It is my opinion that the TAG will be effectively and safely contained within the proposed injection interval.

7. It is my opinion that the injection of TAG into the proposed Well will not increase the risk of induced seismicity.

8. It is my opinion that Applicant's proposed method of disposing TAG will protect public health and the environment, and granting Targa's application will prevent waste and protect correlative rights.

9. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date next to my electronic signature below.

05/27/2026

Hassan Khaniani Date

Hassan Khaniani

Petroleum Recovery Research Center (PRRC)
Department of Mineral Engineering
New Mexico Institute of Mining and Technology
801 Leroy Place, Socorro NM, 87801, NM, USA
Hassan.khaniani@nmt.edu

A. Profile summary

I earned my B.Sc. (2003) and M.Sc. (2006) in Petroleum Exploration Engineering, and a Ph.D. (2015) in Exploration Geophysics from the University of Calgary, Canada. My postdoctoral and industrial experience focused on High-Performance Computing (HPC) applications in seismic imaging and inversion. I joined the New Mexico Institute of Mining and Technology (NMT) in 2020 as a Research Scientist and currently serve as an Assistant Professor with a joint appointment between the Petroleum Recovery Research Center (PRRC) and the Department of Mineral Engineering. My research at PRRC focuses on subsurface modeling, seismic imaging, and reservoir characterization, while my work in the Department of Mineral Engineering addresses mine safety, evacuation planning, and environmental monitoring in underground mines under hazardous conditions such as fire, smoke, and gas propagation. I lead the software development team for an underground mine rescue project funded by the National Institute for Occupational Safety and Health (NIOSH–CDC). In addition to research, I teach several graduate and undergraduate courses at NMT, including Machine Learning with Applications in Geoscience and Engineering, Geostatistics, Surface Mining, Mine Ventilation, Software Programming, and Occupational Health and Safety.

Institution and location	Degree	Date	Field of study
University of Calgary-Canada	Ph.D.	2009/09-2015/02	Geophysics-Exploration seismology
University of Calgary-Canada	M.Eng.	2004/05-2006/05	Petroleum Engineering (major in Exploration)
Petroleum University of Technology- Iran	B.Sc.	1999/09-2003/09	Petroleum Engineering (major in Exploration)

Employment positions

Position	Location	Dates
Assistant Professor	**New Mexico Institute of Mining and Technology (NMT)** *Joint Appointment: Petroleum Recovery Research Center (PRRC) and Department of Mineral Engineering.*	2025/05-Current
Research Scientist	New Mexico Institute of Mining and Technology (NMT) *Department of Petroleum Recovery Research Center (PRRC)*	2020/08-2025/05
Researcher	Ashaw Energy - Calgary, Canada.	2020/02-2020/08
Postdoctoral fellow	University of Calgary and Absolute Imaging Inc- Canada	2020/02-2020/08
R&D geophysicist	Absolute Imaging Inc- Calgary, Canada	2019/02-2020/02
Postdoctoral fellow	University of Calgary, CREWES consortium- Calgary, Alberta	2017/02-2018/01
Research consultant	Suncor Energy, Unconventional resources, Calgary, Alberta	2014/03-2015/03
Research intern geophysicist	Nexen Energy, Calgary, Alberta	2012/05-2014/03

Graduate Student Assistant	Consortium for Research in Elastic Wave Exploration Seismology (CREWES), University of Calgary	2009/09-2015/02

SELECTED PUBLICATIONS

Google scholar: **https://scholar.google.com/citations?user=QgSdVkgAAAAJ&hl=en&authuser=1**

Personal academic website: Automation Lab

1. Androulakis V., Kingman S., **Khaniani H.**, Hassanalian M., Shao S., Roghanchi P., 2025, *Intelligent Self-Evacuation Path Planning for Fire Emergencies in Underground Coal Mines*, **Tunnelling and Underground Space Technology**, Vol. 162, Article 106623, Elsevier. https://doi.org/10.1016/j.tust.2025.106623
2. Owusu-Ansah R., **Khaniani H.**, Androulakis V., Hassanalian M., Roghanchi P., 2025, *Optimizing Fire Emergency Evacuation Routes in Underground Coal Mines: An Application to Simulation Rig Data*, in **Tunnelling into a Sustainable Future – Methods and Technologies**, pp. 687–694, CRC Press.
3. Lotero S., Androulakis V., **Khaniani H.**, Hassanalian M., Shao S., Roghanchi P., 2024, *Optimizing Fire Emergency Evacuation Routes in Underground Coal Mines: A Lightweight Network Flow Approach*, **Tunnelling and Underground Space Technology**, Vol. 146, Article 105637, Pergamon. https://doi.org/10.1016/j.tust.2024.105637
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5. Dinelli C., Racette J., Escarcega M., Lotero S., Gordon J., Montoya J., Dunaway C., Androulakis V., **Khaniani H.**, Shao S., Roghanchi P., Hassanalian M., 2023, *Configurations and Applications of Multi-Agent Hybrid Drone/Unmanned Ground Vehicle for Underground Environments: A Review*, **Drones**, Vol. 7, Issue 2, Article 136, MDPI. https://doi.org/10.3390/drones7020136
6. McMillan M., Ampomah W., Will R., **Khaniani H.**, 2021, *Development of Time Lapse VSP Integration Workflow: A Case Study at Farnsworth CO_2-EOR Project*, **SPE Europec featured at 82nd EAGE Conference and Exhibition**, SPE. https://doi.org/10.2118/205142-ms
7. Nazari S., **Khaniani H.**, 2021, *Intelligent Trading and Risk Management Framework*, **U.S. Patent 2021065296**, issued March 4, 2021.
8. Fernández-Muñiz Z., **Khaniani H.**, Fernández-Martínez J. L., 2019, *Data Kit Inversion and Uncertainty Analysis*, **Journal of Applied Geophysics**, Vol. 161, pp. 228–238, Elsevier. https://doi.org/10.1016/j.jappgeo.2018.12.022
9. **Khaniani H.**, Bancroft J. C., von Lunen E., 2016, *Iterative Multiparameter Waveform Inversion of Precritical Reflection Data Using Prestack Time Kirchhoff Approximation*, **Geophysics**, Vol. 81, No. 1, pp. R15–R27, SEG. https://doi.org/10.1190/geo2014-0560.1
10. Acheampong S. A., Ampomah W., **Khaniani H.**, Will R., Sarkodie-Kyeremeh J., 2022, *Quantitative Interpretation of Time-Lapse Seismic Data at Farnsworth Field Unit: Rock Physics Modeling and Calibration of Simulated Time-Lapse Velocity Responses*, **Greenhouse Gases: Science and Technology**, Vol. 12, No. 6, pp. 671–697, Wiley. https://doi.org/10.1002/ghg.2184
11. Duane P., Christie A., Shao S., Androulakis V., **Khaniani H.**, Hassanalian M., Roghanchi P., 2026, *Optimal Sequential Node Deployment in Underground Mines with Partial Map Discovery*, **Tunnelling and Underground Space Technology**.
12. Bakzadeh R., Joao K. M., Androulakis V., **Khaniani H.**, Shao S., Hassanalian M., Roghanchi P., 2025, *Enhancing Emergency Response: The Critical Role of Interface Design in Mining Emergency Robots*, **Robotics**, Vol. 14, Issue 11, p. 148, MDPI. https://doi.org/10.3390/robotics14110148

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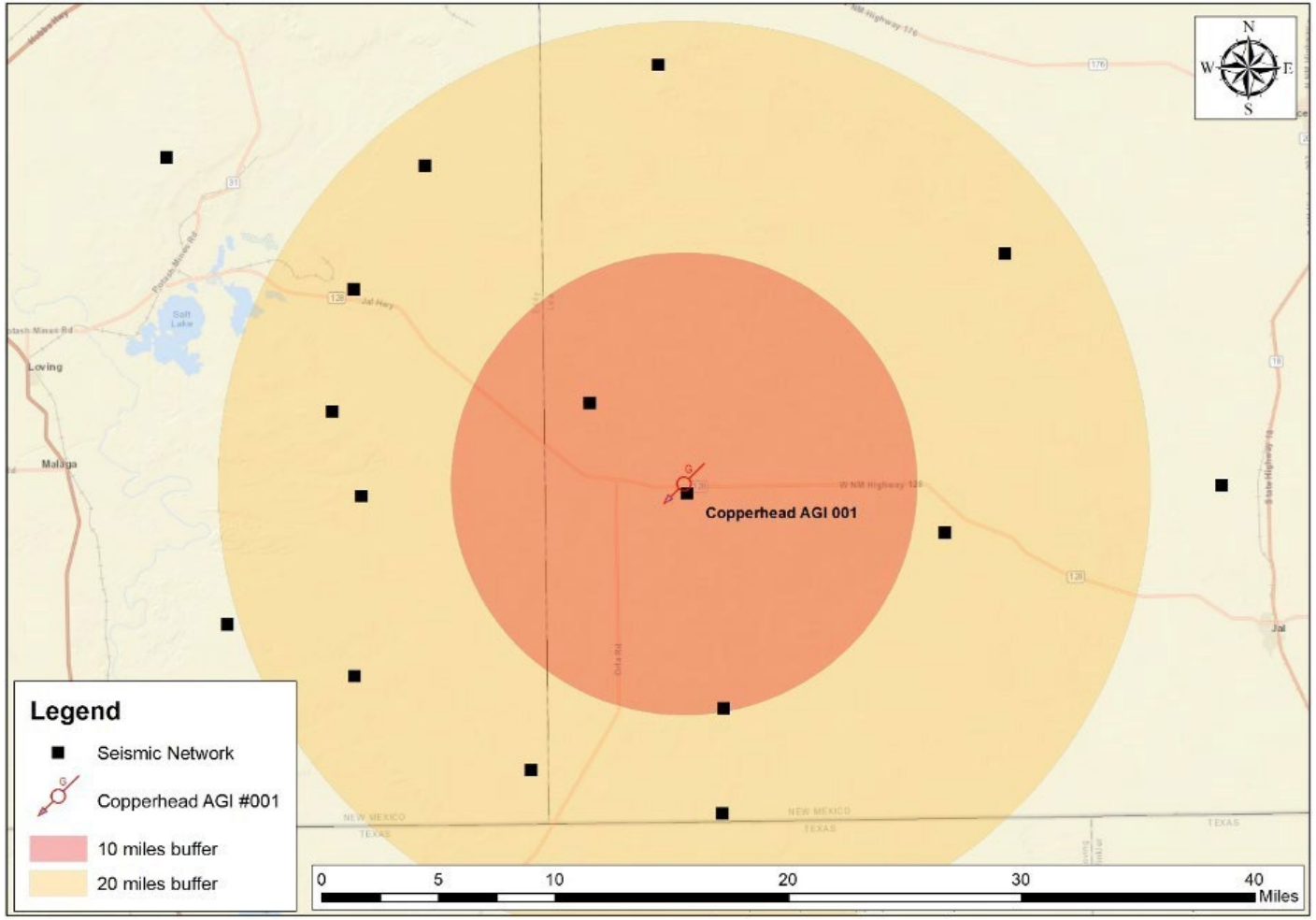
Seismic Monitoring Network Near the Copperhead Site



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Targa Midstream Services, LLC
Case No. 26139
Exhibit C-2

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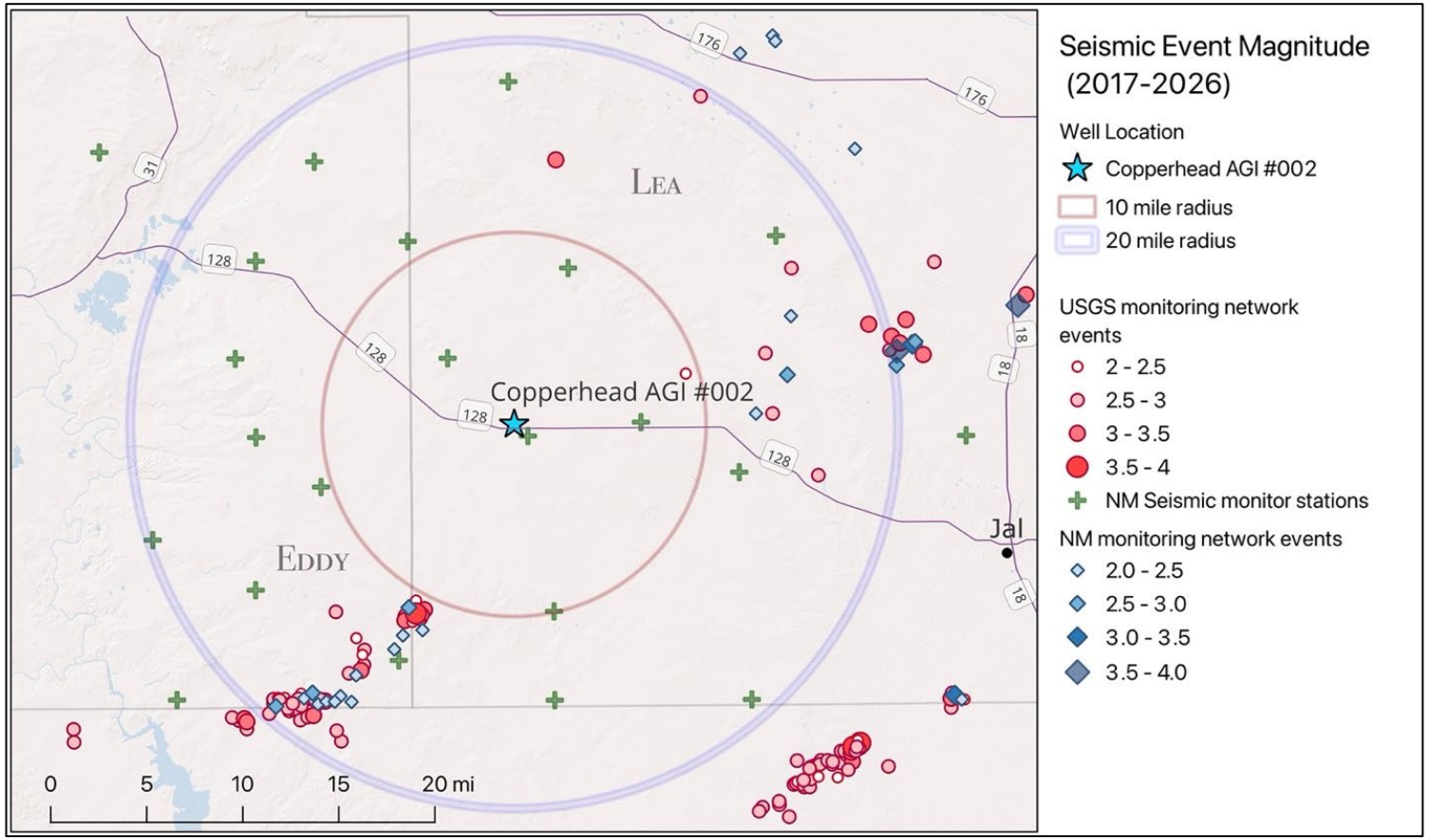

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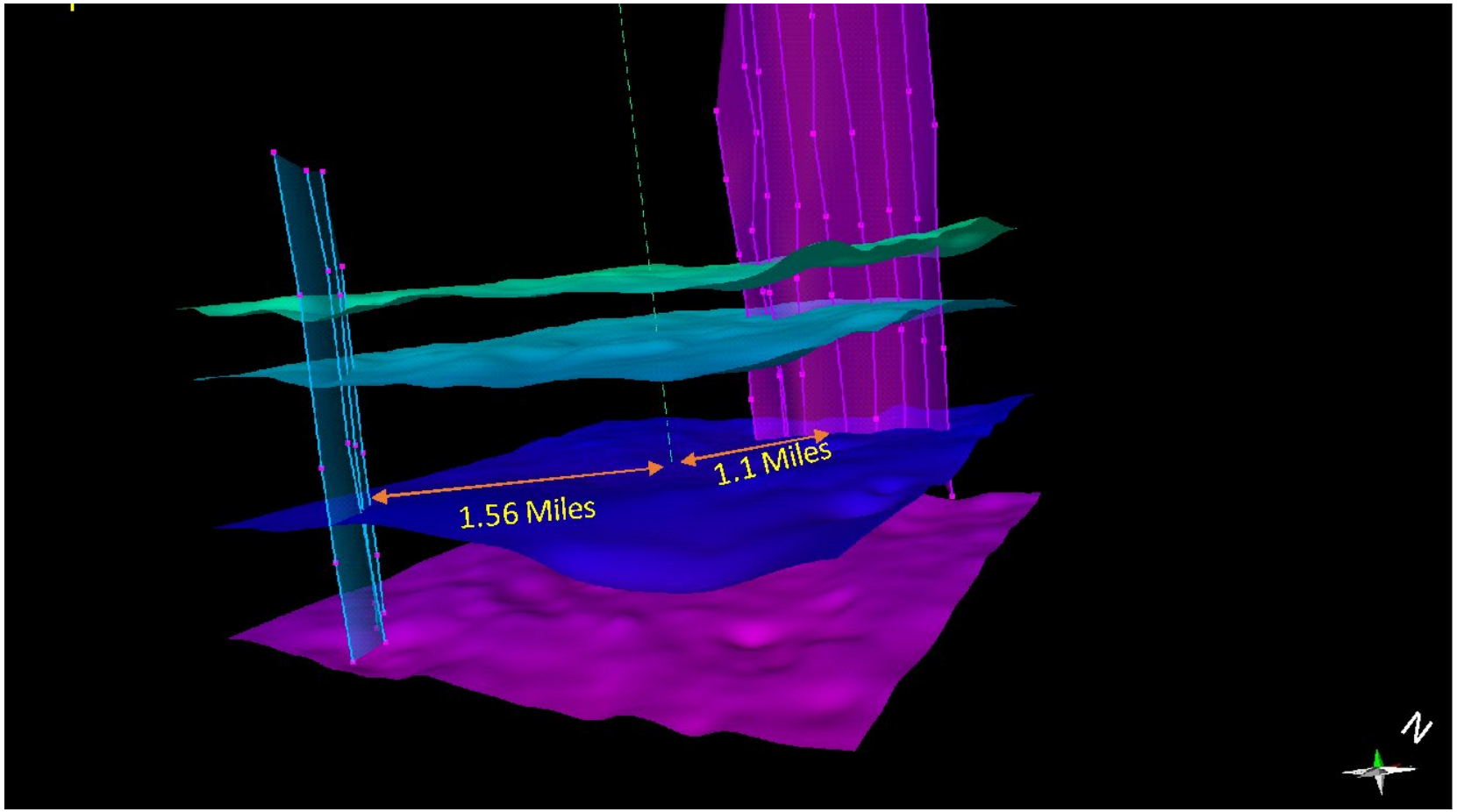

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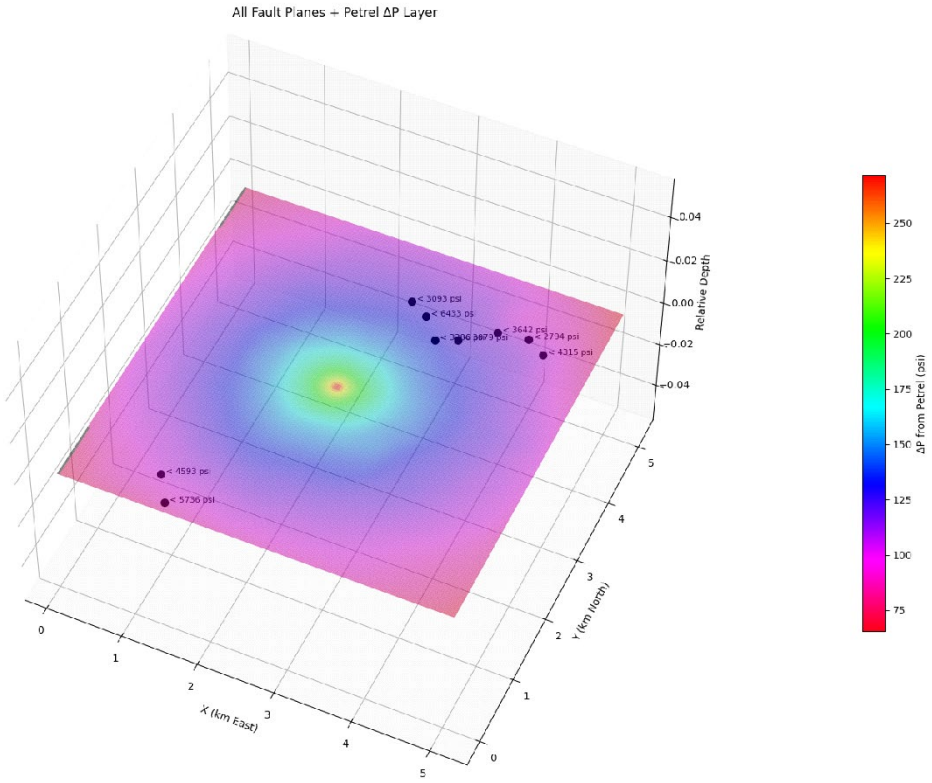
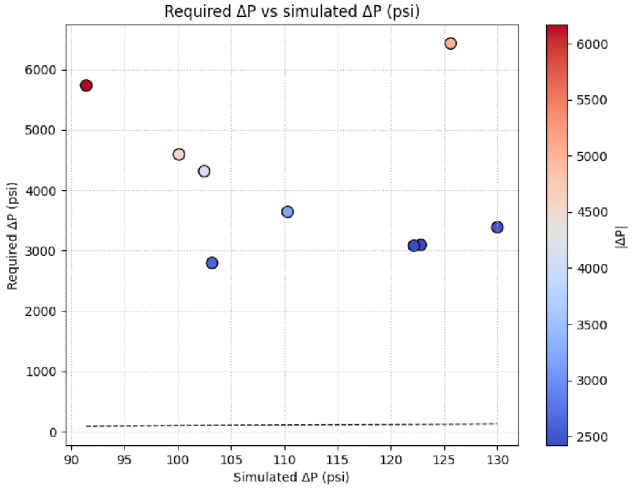
Fault Slip Potential Analysis Results



Calculated pressure increase. Dots are intersection of Petrel grid with interpreted fault planes, values are estimated increase at these locations.



Pressure change required to cause fault slip and the predicted pressure after 30 years of injection.

- Modeled pressure increase on nearby faults remains less than 300 psi
- FSP analysis shows that the examined faults would require more than 2,500 psi of effective pressure increase to induce slip
- Modeled pressure increase is much lower the threshold pressure required for fault reactivation

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

APPLICATION OF TARGA MIDSTREAM SERVICES, LLC FOR AUTHORIZATION TO INJECT, LEA COUNTY, NEW MEXICO. **CASE NO. 26139**

SELF-AFFIRMED STATEMENT
OF JIYUE (JESSIE) WU

1. I am a consulting reservoir engineer for Targa Midstream Services, LLC ("Targa" or "Applicant"). I have not previously testified before the New Mexico Oil Conservation Division ("Division"). I have a Ph.D. degree in Petroleum Engineering from the University of Southern California. Since January 2024, I have been a Postdoctoral Researcher at the Petroleum Recovery Research Center at the New Mexico Institute of Mining and Technology. A copy of my curriculum vitae is attached as **Exhibit D-1**.

2. I am familiar with the Application in this case and with the reservoir engineering matters pertaining to this Application.

3. In this matter, Targa seeks authorization to inject treated acid gas ("TAG") from Targa's Copperhead Gas Processing Plant ("Plant") into the proposed Copperhead AGI No. 2 well ("Well"), which will be located in Section 13, Township 24 South, Range 32 East, Lea County, New Mexico.

4. The legal location and injection interval of the Well are as follows:

   Location: 1,138' FSL & 1,842' FWL (Unit I), Section 13, Township 24 South, Range 32 East
   Injection Interval: 17,299' to 18,699'

5. The Well will inject treated TAG into the Devonian Thirtyone Formation, Upper Silurian Wristen Group and the Lower Silurian Fusselman Formation, at depths of approximately

Targa Midstream Services, LLC
Case No. 26139
Exhibit D

17,299' to 18,699'. The Well will include an open hole completion across the proposed injection interval.

6. The Well is designed to inject up to 26 million cubic feet per day (MMcf/D) of TAG.

7. The Well's maximum surface injection pressure will not exceed 3,460 pounds per square inch gauge (psig), as determined using the Division-approved methodology.

8. As discussed in Attachment IV to the C-108, plume behavior was modeled to determine whether the Thirtyone, Wristen, and Fusselman formations can receive TAG under a maximum injection scenario, where both the Copperhead AGI #1 and Copperhead AGI #2 wells operate simultaneously, each injecting at a rate of 26 MMSCFD for a combined total of 52 MMSCFD. The Copperhead AGI #2 is intended to be redundant; therefore this scenario provides a conservative assessment of injection impacts.

9. Information regarding the reservoir dynamic simulation is attached to my testimony as **Exhibit D-2**.

10. A compositional model of the injection formation was created using Computer Modeling Group (CMG)'s software to predict the behavior of the TAG at various pressures and temperatures. A wellbore model was implemented to assess the wellhead pressure by calculating TAG density, viscosity, and pressure changes as it flows through the tubing.

11. The geological model covers an area of approximately 3.2 by 3.1 mi, represented by a grid of 164 x 167 x 39 cells, totaling 1,068,132 cells. Thickness, porosity, and permeability were held constant throughout each of the 39 layers.

12. Geologic data, including fault interpretation, formation thickness, average porosity (%), and average permeability (%), was imported into the tNavigator software. The model's other

key inputs were TAG composition (70% CO_2 and 30% H_2S), temperature gradient (1.2 °F/100ft), pore pressure gradient (0.45 psi/ft), salinity (90,530 ppm), residual gas saturation (17 %), rock compressibility (3×10^{-6} 1/psi), and fractural pressure gradient (0.65 psi/ft). The input values and rock properties by layer are provided in Table IV-2 in the C-108.

13. Table IV-3 in the C-108 provides temperature, pressure, and gas density at wellhead, bottomhole (inside tubing), and reservoir conditions.

14. A well review was also conducted within a 2-mile radius of the Copperhead AGI No. 2 well to identify any offset SWDs or other injectors. The review identified no nearby wells—including permitted wells—as injecting into the Thirtyone, Wristen, and Fusselman formations in the project vicinity.

15. The model also imposed three constraints on the well operations. First, the well could only inject at a maximum rate of 26 MMcf/D. A BHP constraint of 10,373 psi and an MAOP of 3,460 psi were imposed. The BHP constraint is equivalent to the fracture pressure with a 10% safety factor applied. These constraints were made to ensure that the model operation would not fracture the rock.

16. The results indicate that the acid gas will not reach any potential vertical pathways (i.e., offset wellbores). The resulting plume had a radius of roughly 10,224 ft (1.94 miles).

17. The reservoir engineering and numerical simulations show that the target formation can receive TAG at the proposed average and maximum injection rates. The models confirm that the injection pressures will remain below the formation's fracture pressure, ensuring the safe containment of the injected TAG within the designated injection and post-injection periods. The planned injection process is designed to facilitate sequestration while mitigating potential environmental impacts.

18. In my opinion, the granting of Targa's application would serve the interests of conservation, the prevention of waste, and the protection of correlative rights.

19. The exhibit referenced above was prepared by me.

20. I understand that this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date next to my signature below.

_____ ____05/25/2026_____

Jiyue (Jessie) Wu Date

JIYUE (Jessie) WU

Tel: (323)-449-9395 | **Email: jiyue.wu@nmt.edu**

WORK EXPERIENCE

Jan. 2024 – Present
Postdoctoral Researcher

Petroleum Recovery Research Center (PRRC)
New Mexico Institute of Mining and Technology, Socorro, New Mexico

- Conducting research in subsurface formation development, focusing on flow in porous media, reservoir characterization, uncertainty quantification and optimization, oil and gas production, numerical simulation modeling, unconventional resources, enhanced oil recovery, CO2 sequestration and utilization, and hydrogen storage.
- Led and contributed to multiple CCUS projects funded by the industry and the U.S. Department of Energy (DOE).
- Prepared and filed UIC Class VI CO2 sequestration well permits and Monitoring, Reporting, and Verification (MRV) plans for clients with the EPA.
- Mentored graduate students in the Department of Petroleum and Natural Gas Engineering.

Aug. 2018 – Jan. 2024
Research Assistant

University of Southern California, Los Angeles, California

- Proposed and implemented a new approach to study adsorption on shale via the thermogravimetric analysis (TGA) technique.
- Conducted TGA experiments to study the sorption phenomena in synthetic (synthetic silica, MCM-41, etc.) porous media and predict the isotherms using molecular simulation and Grand Canonical Monte Carlo (GCMC) models.
- Investigated the phase transition (capillary condensation/evaporation) of hydrocarbons within pore confinements via experiments and identify the vapor-liquid phase transition line by the Gauge Cell Gibbs ensemble Monte Carlo (Gauge-GEMC) techniques, focusing on the shift of the critical properties in the pore caused by the temperature and pore size changes.
- Conducted experiments to quantify the CO_2 capillary condensation phenomenon within various sandstones, leading to an improved understanding of carbon sequestration.
- Proficiently operated Magnetic suspension balance (MSB), Volumetric adsorption setup, Gas pycnometer, etc.
- Working at the Center for Mechanistic Control of Unconventional Formations (CMC-UF). https://efrc-shale.stanford.edu/

Aug. 2022 – May. 2023
Teaching Assistant

University of Southern California, Los Angeles, California

- Delivered engaging and informative lectures on chemical engineering laboratory sections during the Fall 2022 and Spring 2023 semesters.

- Proficiently operated liquid-liquid extraction, gas chromatography measurements (GC), ion exchange chromatography (IC), plasma mass spectrometry (ICP-MS), etc.

EDUCATION

May. 2019 – Jan. 2024
Ph. D.
Petroleum Engineering

University of Southern California, Los Angeles, California

Research Topic: Adsorption and phase transitions in natural and synthetic porous materials.

Supervisors: Dr. Kristian Jessen and Dr. Theo Tsotsis

Aug. 2017 – May. 2019
M. Sc.
Petroleum Engineering
And Smart oil field

University of Southern California, Los Angeles, California

Major Courses: Computational Reservoir Modeling, Engineering and Economic Evaluation of Subsurface Reservoirs, Testing of Wells and Aquifer, Natural Gas Engineering, Fluid Flow and Transport Processes in Porous Media, Numerical Simulation of Subsurface Flow and Transport Processes, Enhanced Oil Recovery, Applied Geostatistical Modeling for Subsurface Characterization, Basics of Atomistic Simulation of Materials

Smart Oilfield: Smart Oilfield Data Mining, Advanced Oilfield Operations with Remote Immersive Visualization and Control, Intelligent and Collaborative Oilfield Systems Characterization and Management, Integrated Physical and Cyber Security for Oil and Gas Operations

Sept. 2012 – May. 2016
B. Sc.
Petroleum Engineering

Xi'an Petroleum (Shiyou) University, China

- 2016, Graduated with Honor
- 2014-2015, Excellent Student Award
- 2014-2015, Merit-based Fellowship Award
- 2012-2013, Merit-based Fellowship Award
- 2012-2013, Excellent Student Leader

MAJOR PROJECTS

May. 2019 – Present

Center for Mechanistic Control of Unconventional Formations (CMC-UF)

https://efrc-shale.stanford.edu/

- The project is funded by the U.S. Department of Energy Office of Science.
- The mission of this project is to provide the fundamental knowledge needed to achieve mechanistic control over the various nonequilibrium physical and geochemical processes that occur in tight rocks with nanoscale pores, such as shale and mudstones. This involves research into their unique physical and geochemical properties, particularly in relation to their nano-pore formation. Our vision is to enable science-based management of the US shale resource to provide a foundational understanding for building subsurface hydrogen and carbon dioxide storage infrastructure and reducing natural gas production's environmental impacts in the short term.

PRESENTATIONS

- Poster in AGU Fall Meeting in 2020
  Filip Simeski, Narendra Singh, Jiyue Wu, Theodore T Tsotsis, Kristian Jessen, Matthias Ihme, Storage Capacity, Sorption and Mass Transfer in Shale
- Oral presentation at AIChE Annual Meeting in 2021
  Jiyue Wu, Sheng Hu, Kristian Jessen, Theodore Tsotsis, A Study of Condensation Phenomena in Shales and in Synthetic Model Materials
- Oral presentation at AIChE Annual Meeting in 2022
  Jiyue Wu, Sheng Hu, Kristian Jessen, Theodore Tsotsis, A Study of Capillary Condensation Phenomena in Mesoporous Materials
- Oral presentation at AIChE Annual Meeting in 2024
  Jiyue Wu, Sai Wang, Regional Resource Assessment for CO2 Storage Via Mineralization Process in New Mexico and Surrounding Areas

SKILL SETS

- Molecular simulation-related software: LAMMPS, MCCCS Towhee, Ovito, Material studio
- Reservoir modeling and simulation: CMG, Petrel
- Other software: MATLAB, Python
- Soft skills: Petrophysical and geochemical lab experiments, technical proposals, reports and publications writing and editing and presenting, student advisory and supervision.

PUBLICATIONS

Google Scholar profile:

https://scholar.google.com/citations?user=3mKbQYsAAAAJ&hl=en

- Jiyue Wu, Lin Sun, Kristian Jessen, Theodore Tsotsis, A new approach to study adsorption on shales and other microporous solids via the thermogravimetric analysis (TGA) technique, Chemical Engineering Science, Volume 247, 2022, 117068, ISSN 0009-2509.
- Simeski, Filip; Wu, Jiyue; Hu, Sheng; Tsotsis, Theodore; Jessen, Kristian; Ihme, Matthias, Local Rearrangement in Adsorption Layers of Nanoconfined Ethane, The Journal of Physical Chemistry C 2023 127 (34), 17290-17297, DOI: 10.1021/acs.jpcc.3c04869
- Owusu, Ernest Ansah, Jiyue Wu, Elizabeth Akonobea Appiah, William Apau Marfo, Na Yuan, Xiaojing Ge, Kegang Ling, and Sai Wang. 2025. "Carbon Mineralization in Basaltic Rocks: Mechanisms, Applications, and Prospects for Permanent CO2 Sequestration" Energies 18, no. 13: 3489. https://doi.org/10.3390/en18133489

New Mexico Tech
Petroleum Recovery Research Center

Reservoir Dynamic Simulation

Targa Midstream Services, LLC
Case No. 26139
Exhibit D-2

New Mexico Tech
Petroleum Recovery Research Center

Model Description

Objective:

- Model plume behavior of injected treated acid gas (TAG) at Copperhead AGI #001 and #002 for 60 years (2027-2087), including 30 years injection and 30 years post-injection
- Include both Copperhead AGI #001 and #002, although unlikely both would inject simultaneously
- TAG composition is 30% H_2S and 70% CO_2
- Perform analysis at the proposed maximum injection rate (26 MMSCFD)
- Injection zone ~ 1,390 ft thickness
- Overlying confining zones (Woodford – Barnett) ~ 775 ft thickness

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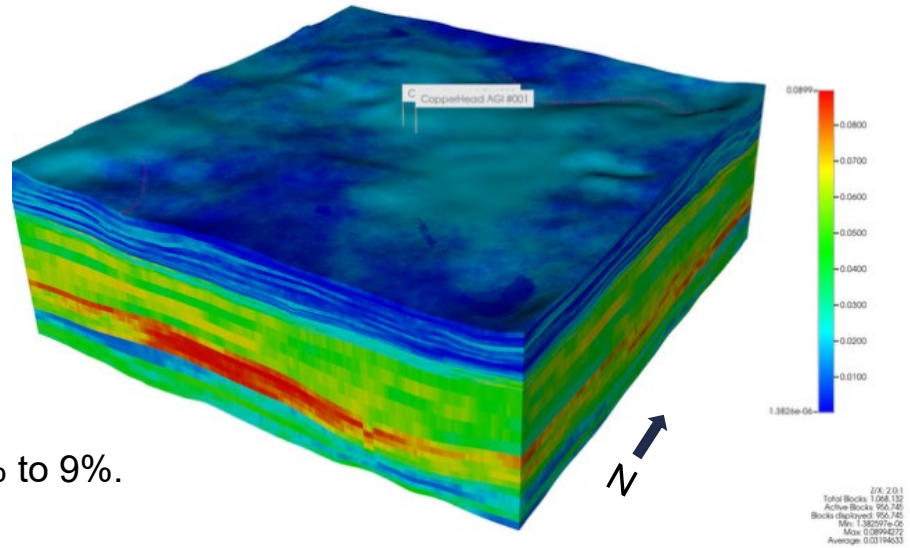
Petroleum Recovery Research Center

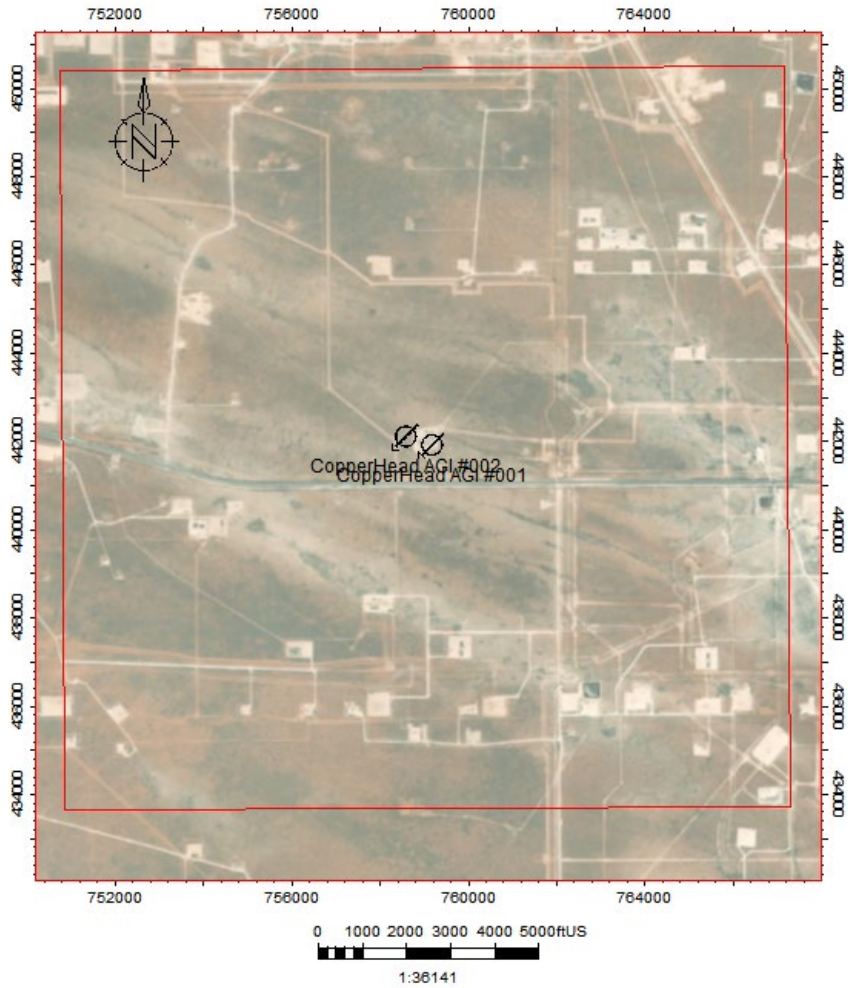
Model Description

Dimension:

- 3.2 by 3.1 mi^2
- Grid size: 164 x 167 x 39
- 1,068,132 total cells
- The average cell size is 100 x 100 ft^2



Porosity range: 0.001% to 9%.



Map view.
The red square outlines the model boundary.

Model Description – Petrophysical Parameters

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Petroleum Recovery Research Center

	Measured Depth	Thickness	Porosity (%)	Permeability (md)	Behavior
Rustler	1177	346			Seal*
Salado	1523	1288			Seal*
Castile	2811	2185			Seal*
Lamar	4996	50			
Bell Canyon	5046	1028			Injection zone*
Cherry Canyon	6074	1627			Injection zone*
Brushy Canyon	7701	1265			
Bone Spring	8966	3255			
Wolfcamp	12221	1880			
Strawn	14101	340			
Atoka	14441	1365			
Morrow	15806	745			
Barnett Shale	16551	253	1.00%	0.1	Seal
Mississippian Limestone	16805	392	1.50%	0.1	Seal
Woodford Shale	17196	125	1.00%	1e-5	Seal
Thirtyone Fm	17321	120	2.20%	5.4	Injection zone
Wristen Gp	17441	770	3.50%	3.31	Injection zone
Fusselman	18211	500	4.00%	1.49	Injection
Montoya	18711	80	2.00%	1.6	Seal
Simpson Gp	18791	1615	1.00%	0.6	Seal
Ellenburger Dolomite	20406	550	1.50%	0.01	Seal
Ground elevation	3601				

*not proposed for injection at this location

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Petroleum Recovery Research Center

Model Initialization

Formation Pressure:

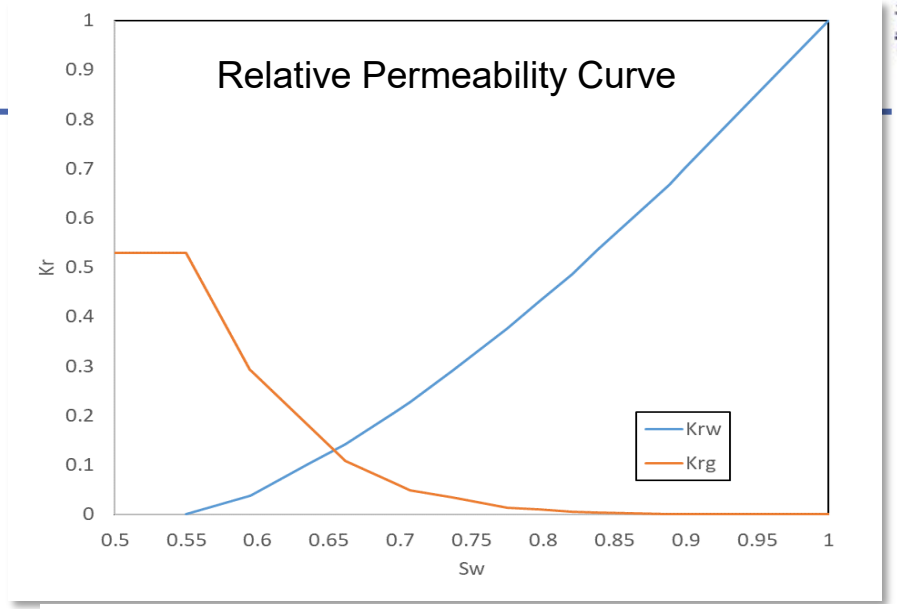
- ~ 7,750 psi (pore pressure gradient: 0.45 psi/ft)

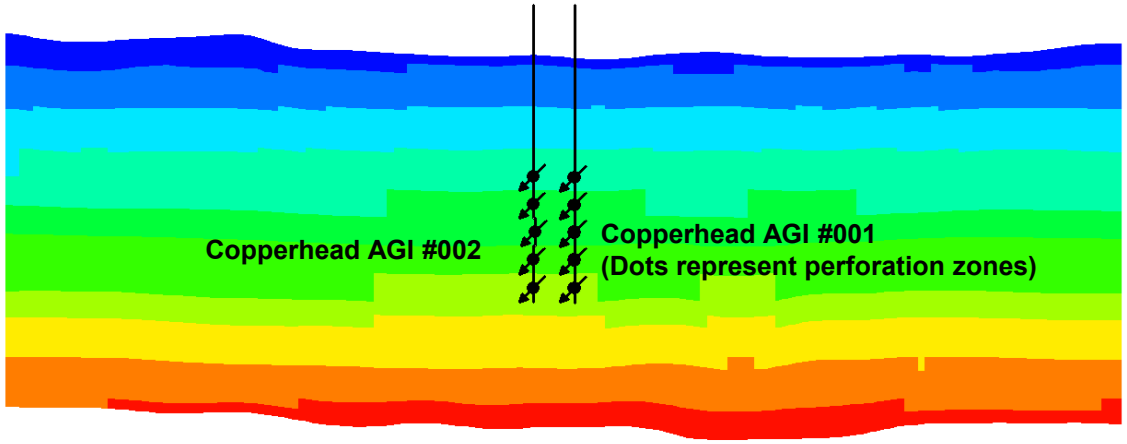
Formation Temperature:

- ~225 °F (Luo, 1994)

Fluid Saturation:

- Initial Sw = 1.0, Swi = 0.55 (Jenkins, 1961; Bennion and Bachu, 2005)



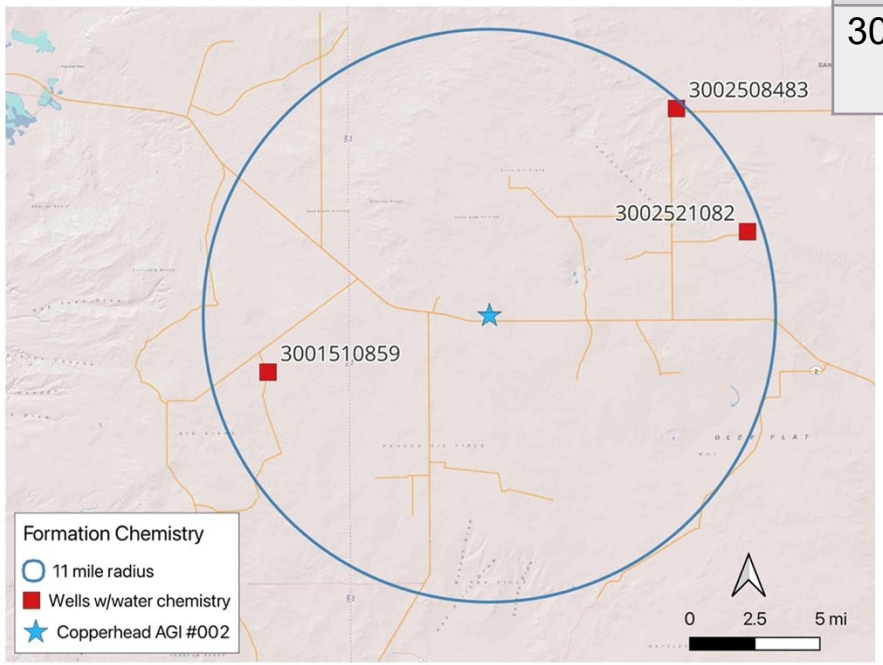


Copperhead AGI #002
Dots represent perforation zones

New Mexico Tech
Petroleum Recovery Research Center

Model Initialization

API	Form	HCO_3	Ca	Mg	Na	K	Cl	SO_4	TDS
3001510859	Dev	427	6280	586	38,393	1070	73,100	470	120,326
3002508483	Dev	500	2,400	329	24,039	610	42,200	1,000	71,078
3002521082	Dev	476	2,820	378	27,076	637	47,900	900	80,187



Total Dissolved Solids:

90,530 ppm (averaged based on 3 wells within 11 miles, data from the corresponding C-108s)

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Simulated Injection Parameters

Well control calculation, Copperhead AGI #002

	Top Thirtyone, TVD, ft	Ground Elevation, ft	Formation fracture pressure, psi*	90% Formation fracture pressure, psi	MASIP, psi
Copperhead AGI #002	17,347	3,601	11,244	10,120	3,460
Copperhead AGI #001	17,299	3,579	11,244	10,120	3,460
*Formation fracture gradient of 0.65 psi/ft					

- The wellhead pressure limit is set to the maximum allowable surface injection pressure (MASIP).
- The bottom-hole pressure limit is set to 90% of the formation fracture pressure.

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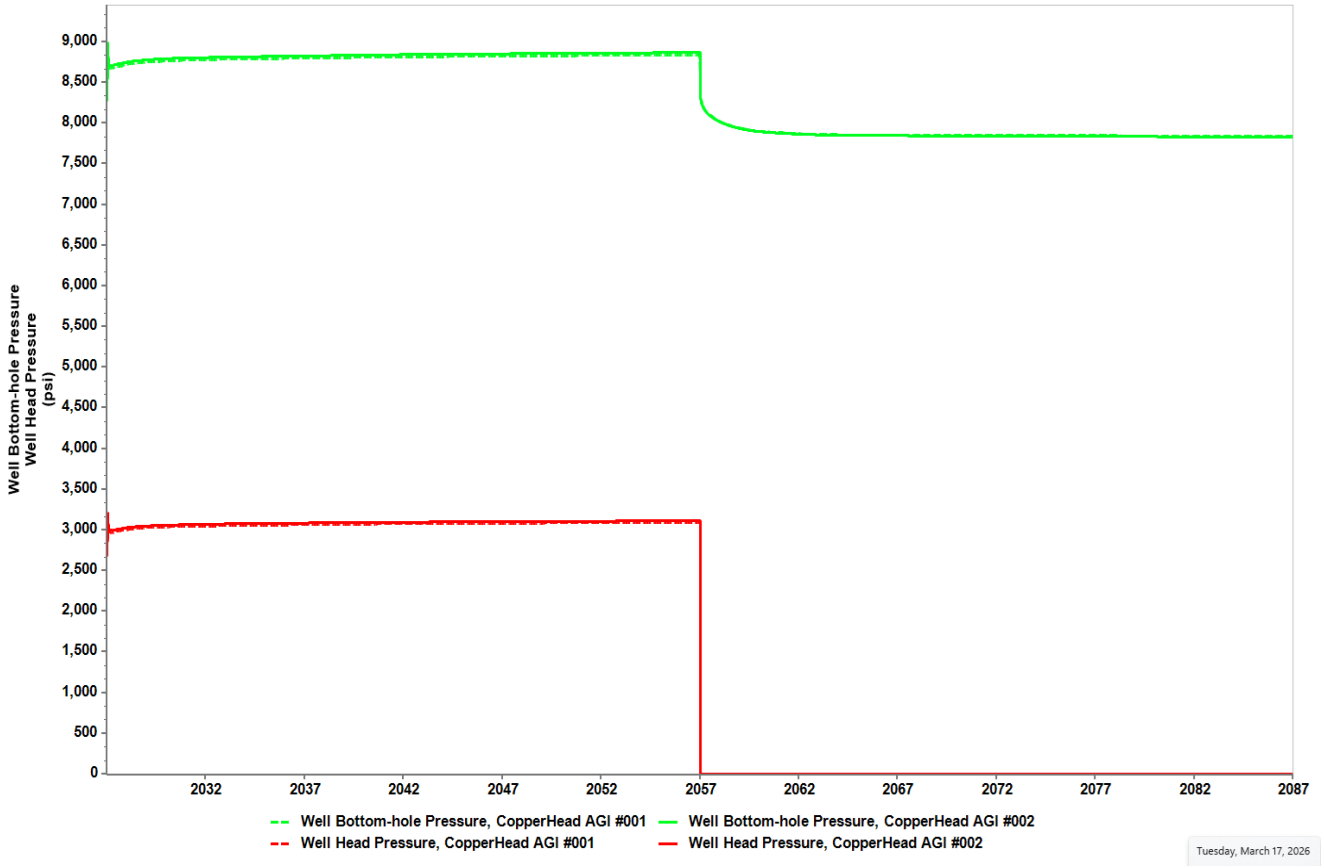
TAG Injection Profile of Copperhead AGI #002

Daily injection rate for: Proposed average injection rate (26 MMSCFD)



Simulation results indicate that:

- The Copperhead AGI #002 can operate successfully with a consistent TAG injection rate of 26 MMSCFD.
- Both wellhead pressure and bottom-hole pressure remain within allowable limits during the injection period.

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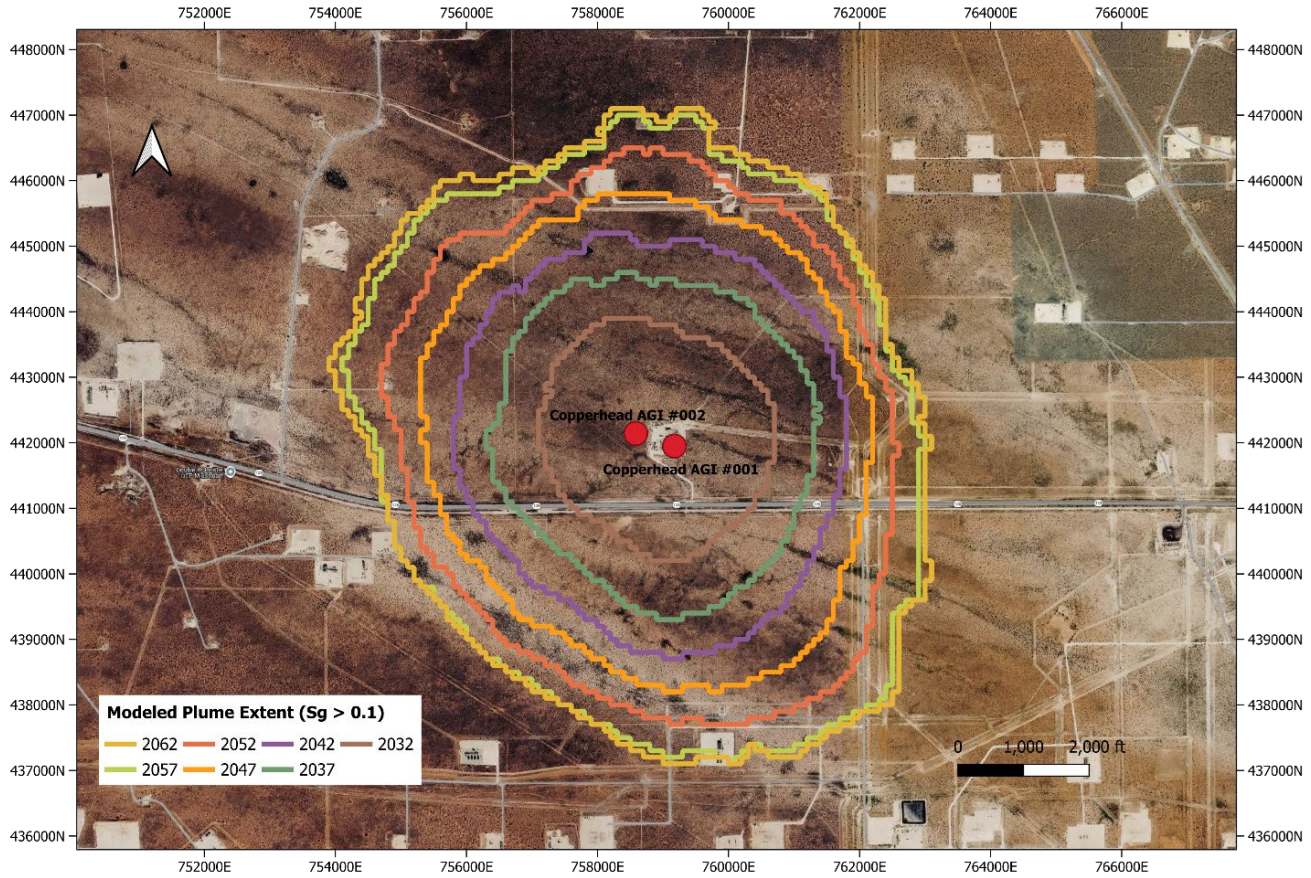
Petroleum Recovery Research Center

TAG Plume Review

- Expansion of TAG plume(s) every 5 years from 2032 to 2062
- TAG plume stabilization projected in 2062
- Largest extent of the TAG plume estimated at 10,224 ft (~1.94 miles) with an injection rate of 26 MMSCFD



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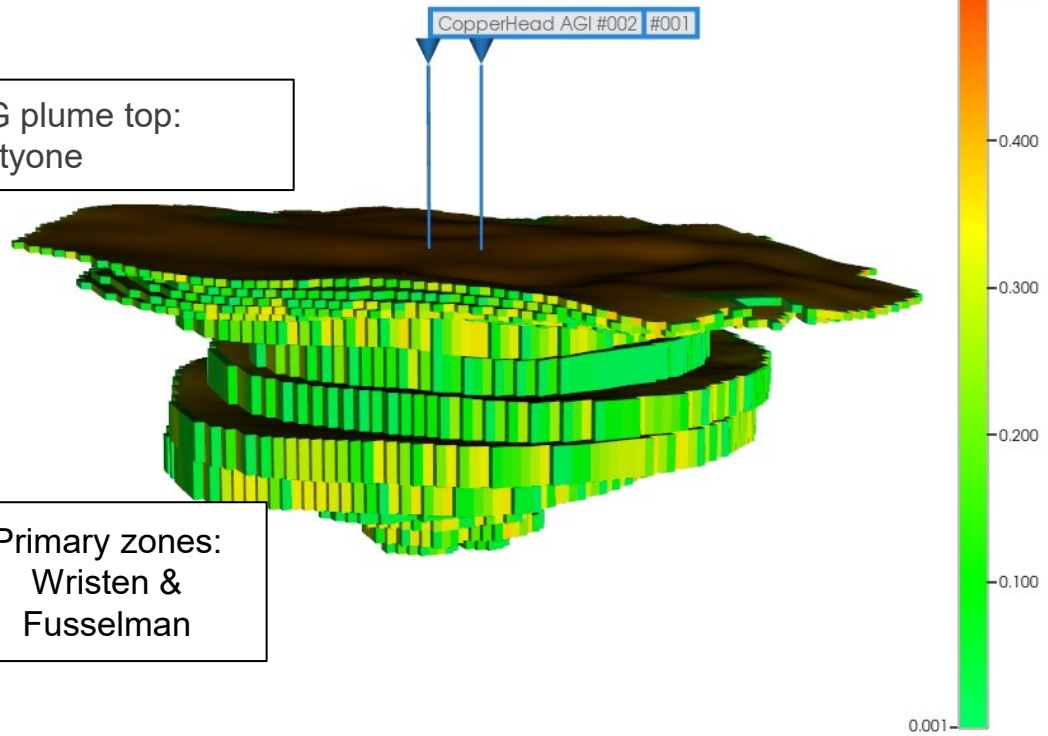
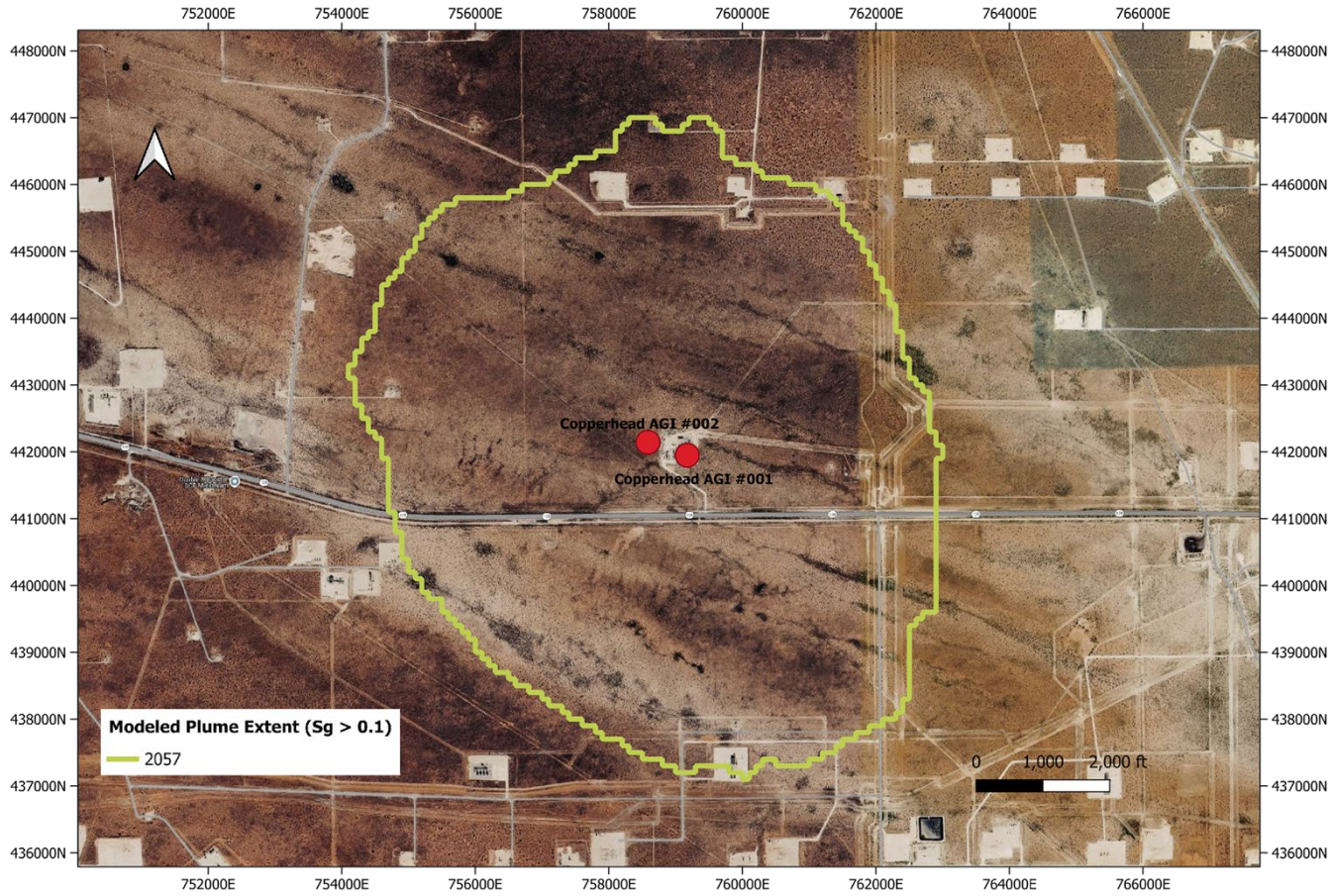
TAG Plume Review

TAG plume top:
Thirtyone

Primary zones:
Wristen &
Fusselman



The end of injection (2057)



The end of injection (2057)

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

APPLICATION OF TARGA MIDSTREAM SERVICES, LLC FOR AUTHORIZATION TO INJECT, LEA COUNTY, NEW MEXICO. **CASE NO. 26139**

SELF-AFFIRMED STATEMENT
OF PAUL RAGSDALE

1. My name is Paul Ragsdale, and I am a consulting drilling engineer for Targa Midstream Services, LLC ("Targa"). I am over 18 years of age, have personal knowledge of the matters addressed herein, and am competent to provide this Self-Affirmed Statement. I have previously testified before the New Mexico Oil Conservation Commission, and my credentials as a drilling engineer were accepted as a matter of record.

2. In this case, Targa seeks authorization to inject treated acid gas ("TAG") from its Copperhead Gas Processing Plant ("Plant") into the proposed Copperhead AGI No. 2 well ("Well"), which will be located in Section 13, Township 24 South, Range 32 East, Lea County, New Mexico.

3. Design considerations for the proposed Well are in accordance with dry acid gas injection well best practices, which include the incorporation of corrosion resistant alloy ("CRA") materials in key well components and along critical depth intervals, utilization of acid-resistant cement slurries, continuous surface and down-hole monitoring of well operating conditions, and the incorporation of subsurface safety valve equipment to provide the ability to isolate the well in the shallow subsurface. Information regarding the well design is provided in **Exhibit E-1**.

4. To ensure successful isolation of groundwater resources, producing intervals, and potential high-pressure depth intervals, the Well will be constructed utilizing a four-string casing design and all casing strings will be cemented to the surface. The integrity of cementing operations

Targa Midstream Services, LLC
Case No. 26139
Exhibit E

will be verified via visual inspection and the collection of radial cement bond logs for all casing strings underlying the surface casing.

5. The preliminary casing design is presented in Table 1 of the C-108, and casing specifications are provided in Table 2 of the C-108.

6. The injection tubing will include a subsurface safety valve on the production tubing to assure that fluid cannot flow back out of the well in the event of a failure of the injection equipment.

7. Nickel Alloy casing will be the bottom 300' of the 7" casing for corrosion resistance and will be cemented with corrosion resistant cement.

8. The tubing is 3 ½" G3 Nickel Alloy 9.2 lb/ft tubing with Vam Top Gas Tight Threads from the surface to 16,950' and then 300 ft of G3 Nickel Alloy 9.2 lb/ft tubing with Vam Top Gas Tight Threads (16,950 17,255 ft) connected to the Inconel Permanent Production Packer. An Inconel SubSurface Safety Valve will be installed in the tubing at 100' to 150'.

9. Halliburton 7" Nickel Alloy Permanent Packer will be set at 17,255'. The casing annulus will be filled with a corrosion resistant packer fluid consisting of diesel and corrosion inhibitors.

10. Managed Pressure Drilling Systems will be installed on the rig and operated to control abnormal pressure events. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

11. A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals, including fresh water and oil-based operations.

12. Upon completion of drilling, casing, cementing, and geophysical logging activities, spot-acid treatment to clean out the wellbore prior to reservoir testing, step-rate injection testing (SRT), and acid stimulation will be conducted. Approximately 3,000 gallons of 15% hydrochloric acid (HCl) will be displaced along the open-hole injection interval for about 24 hours to remove residual drilling fluids from porous zones. Upon completion of the SRT and fall-off monitoring, a full acid stimulation of the open-hole interval will be carried out, during which approximately 40,000 gallons of 15% HCl will be injected to open existing fractures, enhance secondary porosity, and dissolve natural carbonate cement within the Siluro-Devonian injection zone.

13. In my opinion, the granting of Targa's application would serve the interests of conservation, the prevention of waste, and the protection of correlative rights.

14. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date next to my electronic signature below.

Paul Ragsdale

Paul Ragsdale

05/27/2026

Date

New Mexico Tech
Petroleum Recovery Research Center

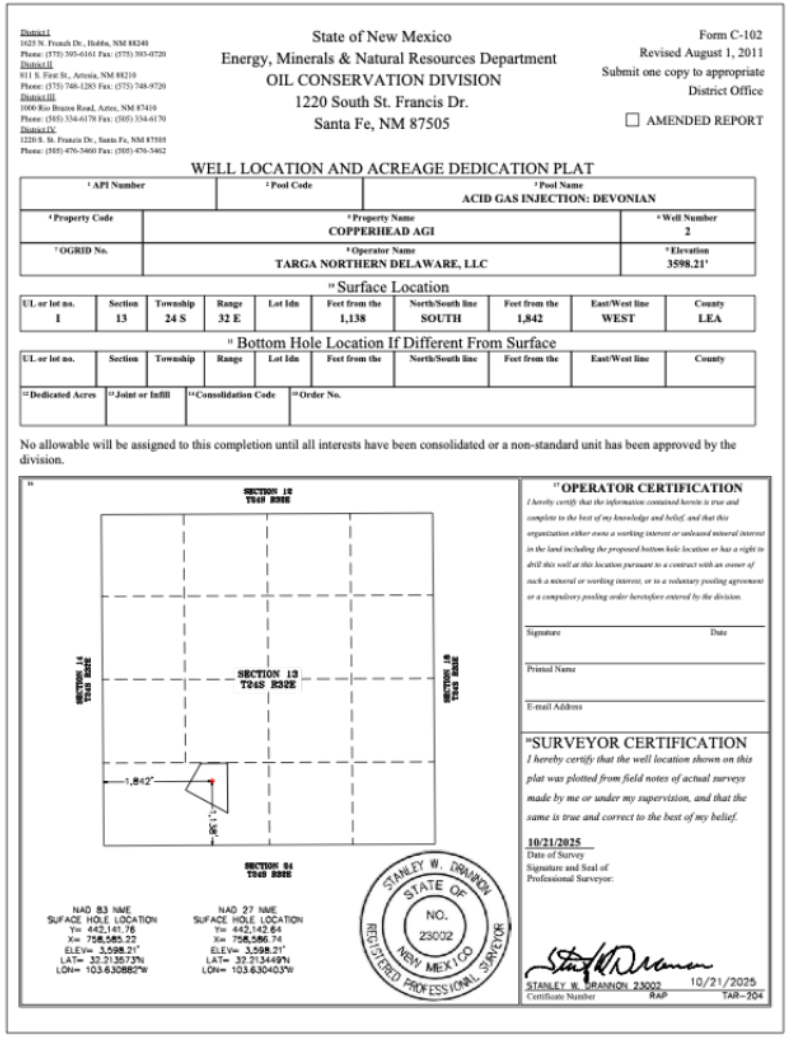
Section IV
Wellbore Design and Operational Programs

PAUL RAGSDALE

- *ENGINEERING CONSULTANT | OPERATIONS ENGINEERING & OIL AND GAS CONSULTING*

Targa Midstream Services, LLC
Case No. 26139
Exhibit E-1

Well Location and Acreage Dedication



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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
		ACID GAS INJECTION; DEVONIAN

4 Property Code	5 Property Name	6 Well Number
	COPPERHEAD AGI	2

7 OGRID No.	8 Operator Name	9 Elevation
	TARGA NORTHERN DELAWARE, LLC	3598.21'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	13	24 S	32 E		1,138	SOUTH	1,842	WEST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

NAD 83 NME
SURFACE HOLE LOCATION
Y= 442,141.76
X= 758,585.22
ELEV= 3,598.21'
LAT= 32.213537°N
LON= 103.630882°W

NAD 27 NME
SURFACE HOLE LOCATION
Y= 442,142.64
X= 758,586.74
ELEV= 3,598.21'
LAT= 32.213449°N
LON= 103.630403°W

STANLEY W. DRANNON
STATE OF
NO. 23002
NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR

16 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Date

Printed Name

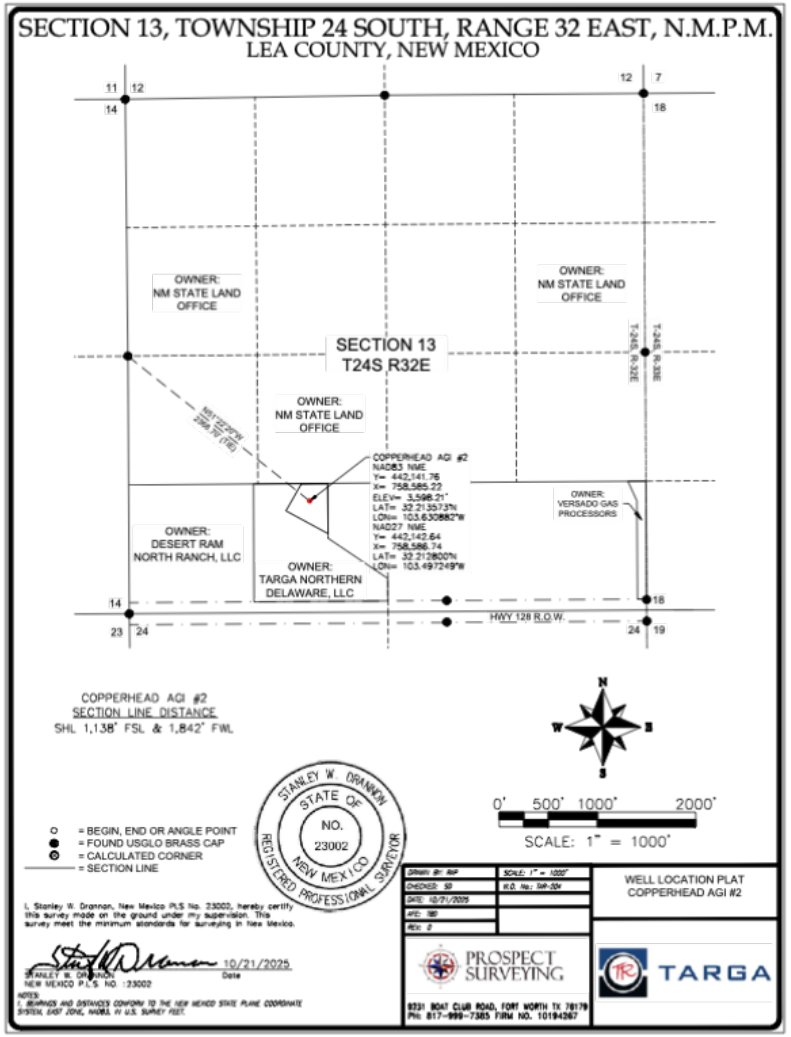
E-mail Address

17 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

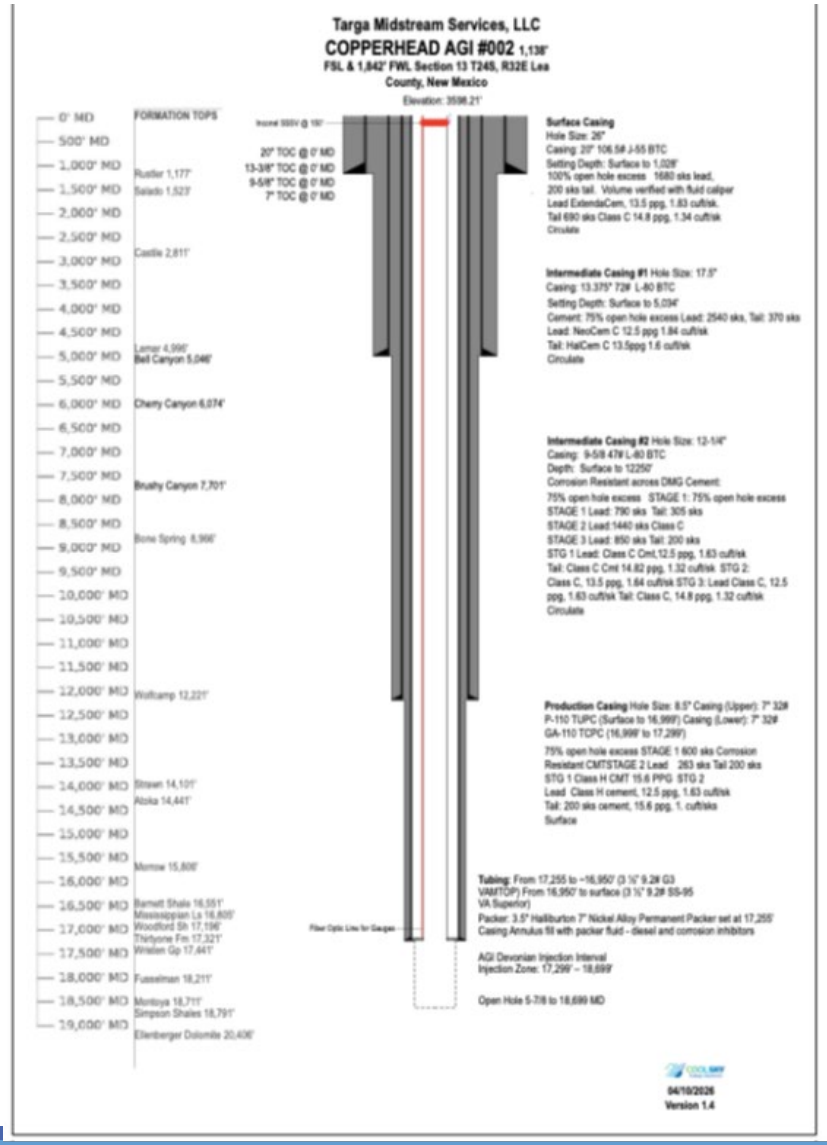
10/21/2025
Date of Survey
Signature and Seal of Professional Surveyor:

STANLEY W. DRANNON 23002 10/21/2025
Certificate Number RAP TAR-304



New Mexico Tech
Petroleum Recovery Research Center

Copperhead AGI #002 Wellbore Schematic



New Mexico Tech
Petroleum Recovery Research Center

Copperhead AGI #002 Casing Design

Casing/ Tubing String	Casing /Tubing Depth, TVD1, ft	Borehole Diameter, in.	Casing / Tubing Outside Diameter , in	Coupling/ Connection	Casing/Tubing Material (Weight /Grade)	String Weight in Air, lb
Conductor	0-100	30	28	Welded	118 lb/ft, J-55	11,800
Surface	0-1,208	26	20	BTC	106.5 lb/ft, J-55	128,652
Intermediate #1	0-5,034	17 1/2	13 3/8	BTC	72 lb/ft, L-80	362,448
Intermediate #2	0-12,250	12 1/4	9 5/8	BTC Bond coat 5084'-7100'	47 lb/ft, L-80	575,750
Long String	0-17,299	8 5/8	7	Prem FJ	32 lb/ft, Cr1 & -P110	553,568
Open hole	17,299-18,700'	5 7/8	N/A	N/A	N/A	N/A
Tubing	0-17,250'	N/A	3 1/2	VAM	9.2 lb/ft, L-80 & 300' G3 on bottom	158,700

New Mexico Tech
Petroleum Recovery Research Center

Copperhead AGI #002 Casing Specifications

Casing / Tubing String	Casing / Tubing Material (Weight / Grade / Connection)	Casing/ Tubing Diameters (OD/ID/ Drift), in.	Yield, (ksi)	Tensile(ksi)	Internal (Burst) Yield, psi	Collapse (psi)	Body Yield, (1,000 lbs)	Joint Strength, 1,000 lbs
Surface	106.5 lb/ft, J-55, BTC	20/19/ 18.812	55	75	2,410	770	1,685	1,595
Inter-mediate #1	72 lb/ft, L-80, BTC	13.375/12.3 47/12.191	80	95	5,380	2,670	1,661	1,650
Inter-mediate #2	47 lb/ft, L-80, BTC & Corrosion Resistant across DMG	9.625/ 8.681/ 8.525	80	95	6,870	4,760	1,086	1,122
Long String	32 lb/ft, Cr13-P110, Prem FJ	7.000/ 6.094/ 5.969	110	125	11,640	10,780	1,025	1,053
Tubing	9.2 lb/ft, VAM TOP/G3	3.500/ 2.992/ 2.867	80	95	10,160	10,540	207	168

New Mexico Tech
Petroleum Recovery Research Center

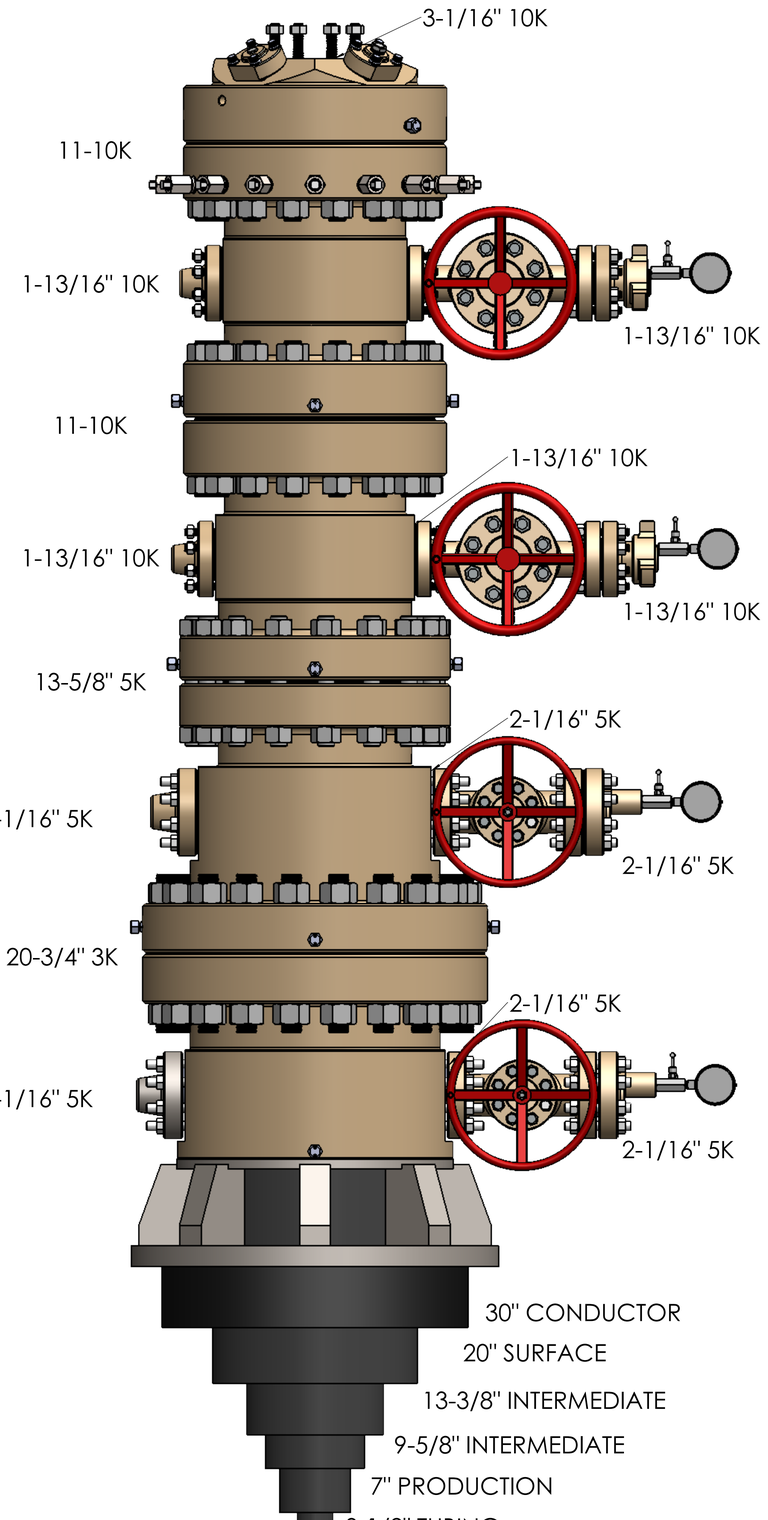
Copperhead AGI #002 Cement Design

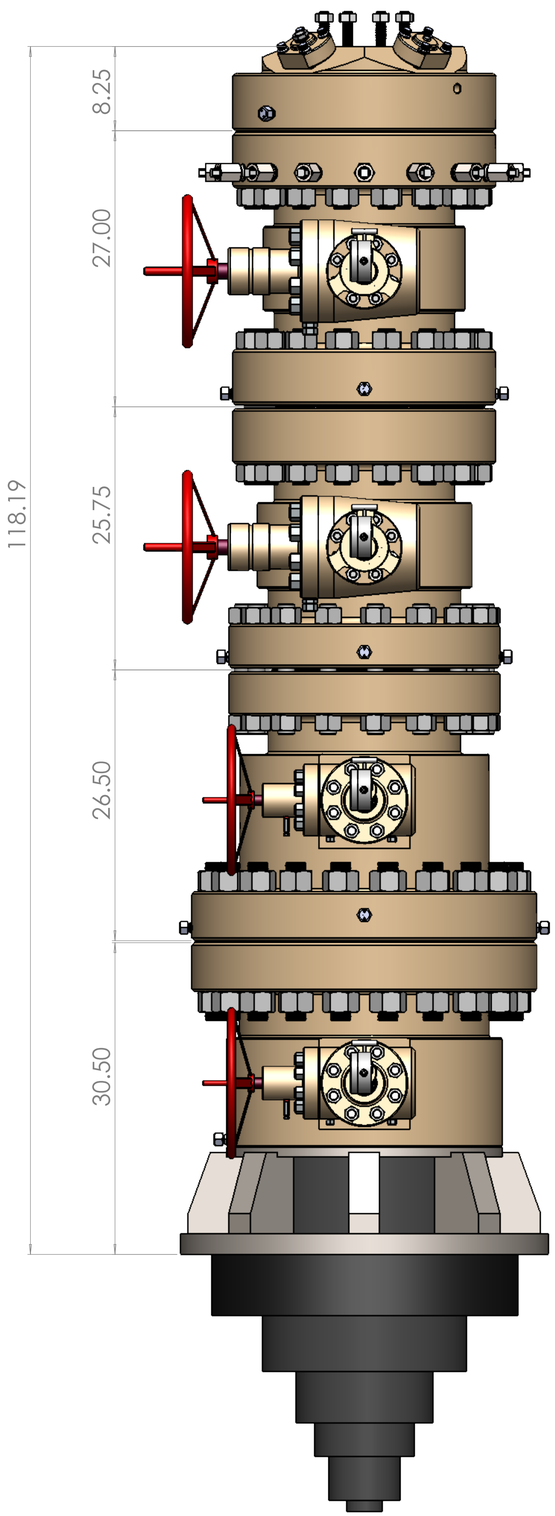
Casing	Depth (ft)	Cement Volume (sacks)	Cement Type & Yield	Designed TOC	Centralizers
Conductor	100	82	Type I Neat 14.8 ppg	Surface cement circulated	None
Surface	1,208’	100% open hole excess 1680 sks lead, 200 sks tail. Volume verified with fluid caliper	Lead ExtendaCem, 13.5 ppg, 1.83 cuft/sk. Tail 690 sks Class C 14.8 ppg, 1.34 cuft/sk Circulate	Surface Cement Circulated	1 per joint on bottom 3 joints
Inter-mediate #1	5,034’	75% open hole excess Lead: 2540 sks, Tail: 370 sks	Lead: NeoCem C 12.5 ppg 1.84 cuft/sk Tail: HalCem C 13.5ppg 1.6 cuft/sk	Surface Cement Circulated	1 per joint for bottom 3 joints, 1 on every 3 joints for remaining joints
Inter-mediate #2	12,250’	75% open hole excess STAGE 1 Lead: 790 sks Tail: 305 sks STAGE 2 Lead:1440 sks Class C STAGE 3 Lead: 850 sks Tail: 200 sks	STG 1 Lead: Class C Cmt,12.5 ppg, 1.63 cuft/sk Tail:Class C Cmt 14.82 ppg, 1.32 cuft/sk STG 2: Class C, 13.5 ppg, 1.64 cuft/sk STG 3: Lead Class C, 12.5 ppg, 1.63 cuft/sk Tail: Class C, 14.8 ppg, 1.32 cuft/sk	Surface Cement Circulated	1 per joint for bottom 3 joints, 1 on every 3 joints for remaining joints
Production	17299’	75% open hole excess STAGE 1 600 sks Corrosion Resistant CMTSTAGE 2 Lead 263 sks Tail 200 sks	STG 1 Class H CMT 15.6 PPG STG 2 Lead Class H cement, 12.5 ppg, 1.63 cuft/sk Tail: 200 sks cement, 15.6 ppg, 1. cuft/sk	Surface	1 every 3 joints for remaining joints
* Cement program may change based on cement engineer recommendation and caliper log result.					

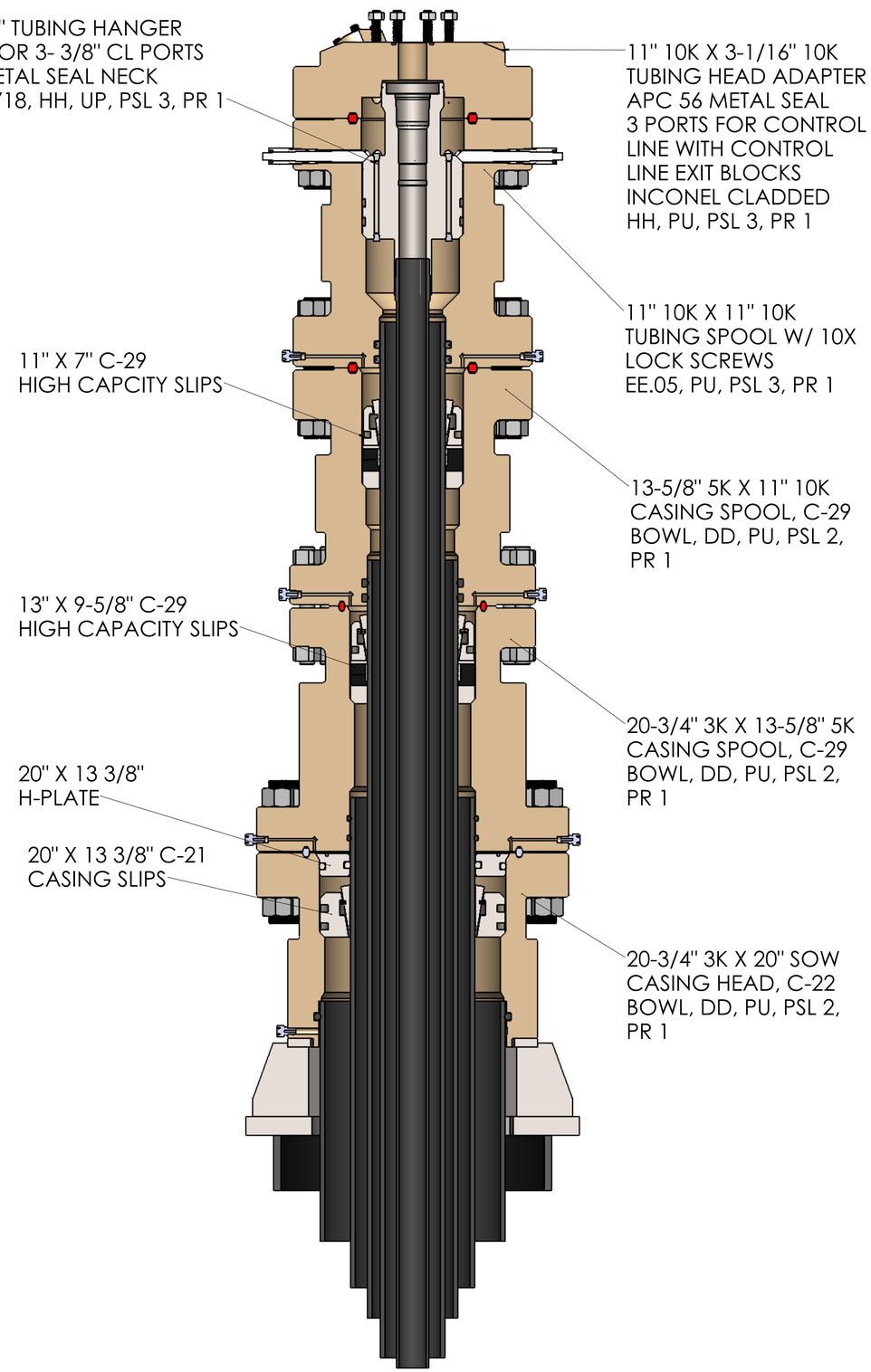
ATLAS PRESSURE CONTROL

AGI WELLHEAD SYSTEM
COPPER HEAD # 2

TARGA



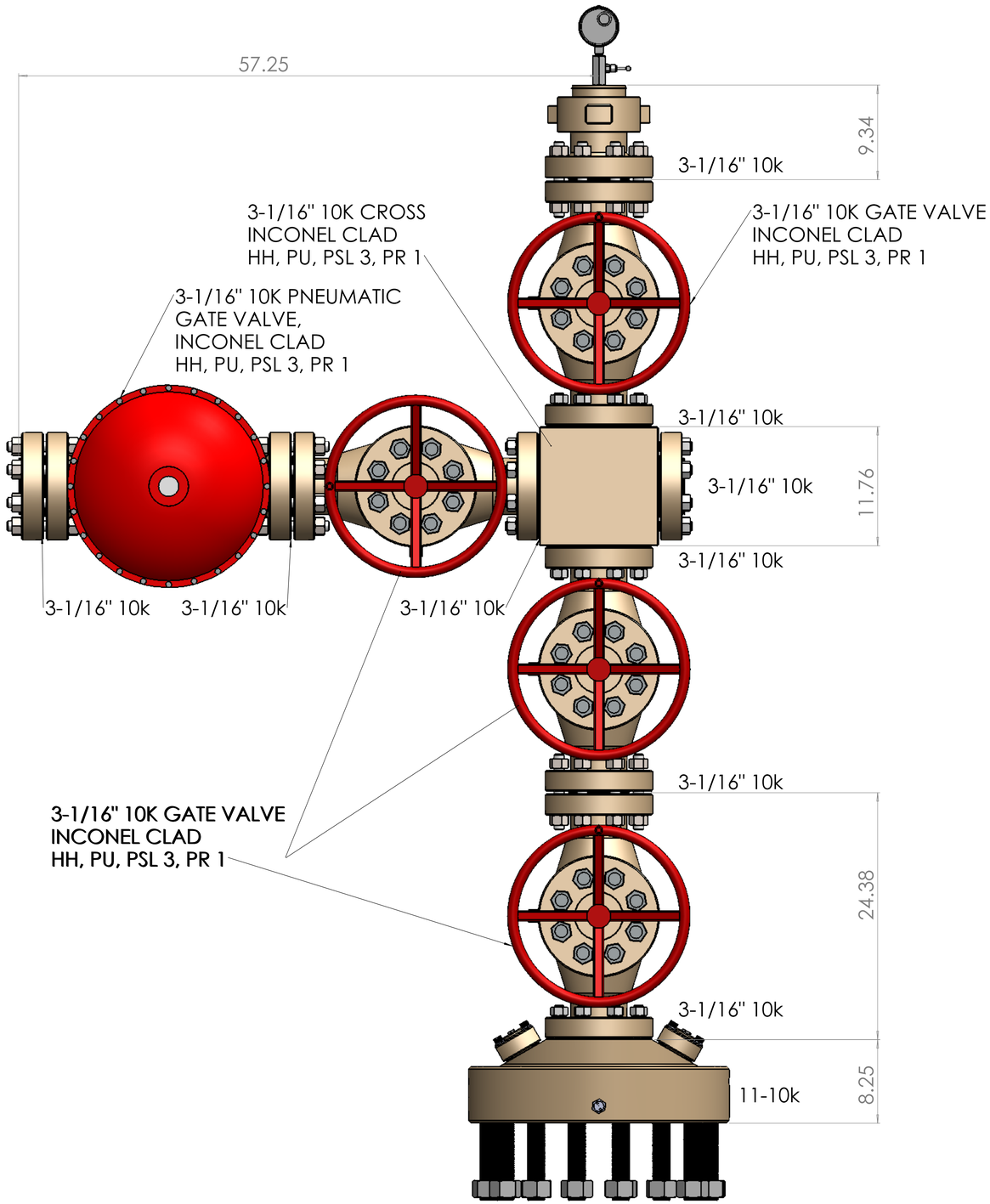


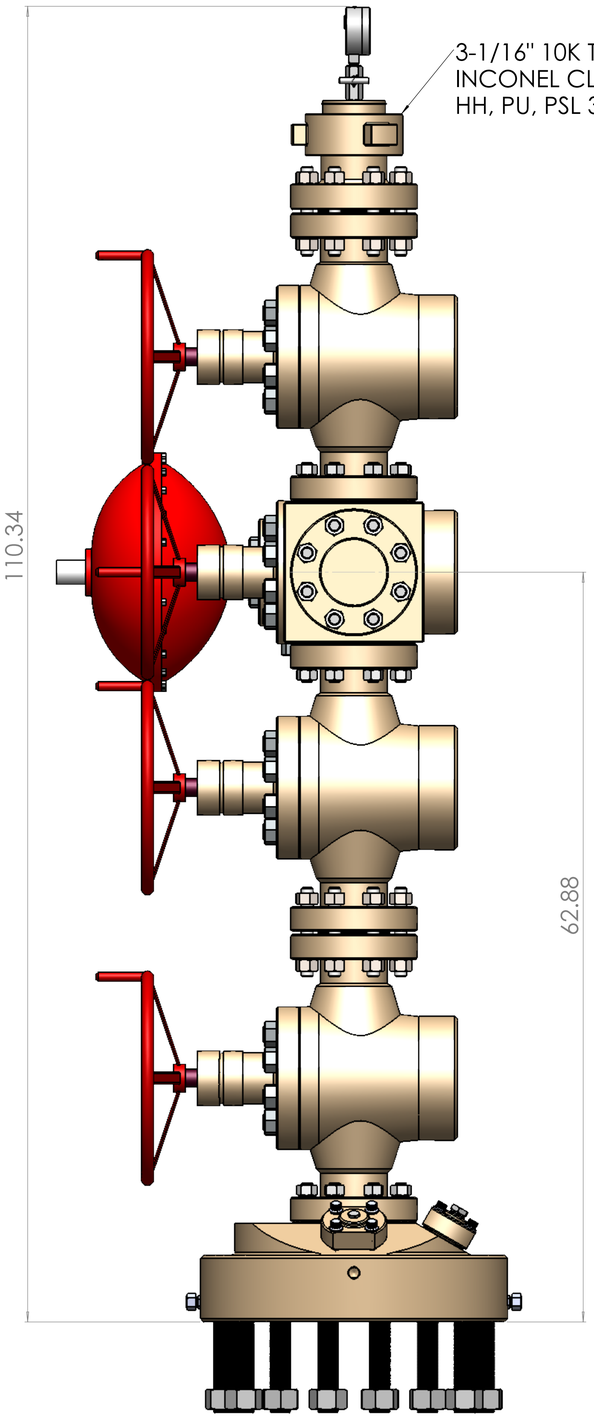


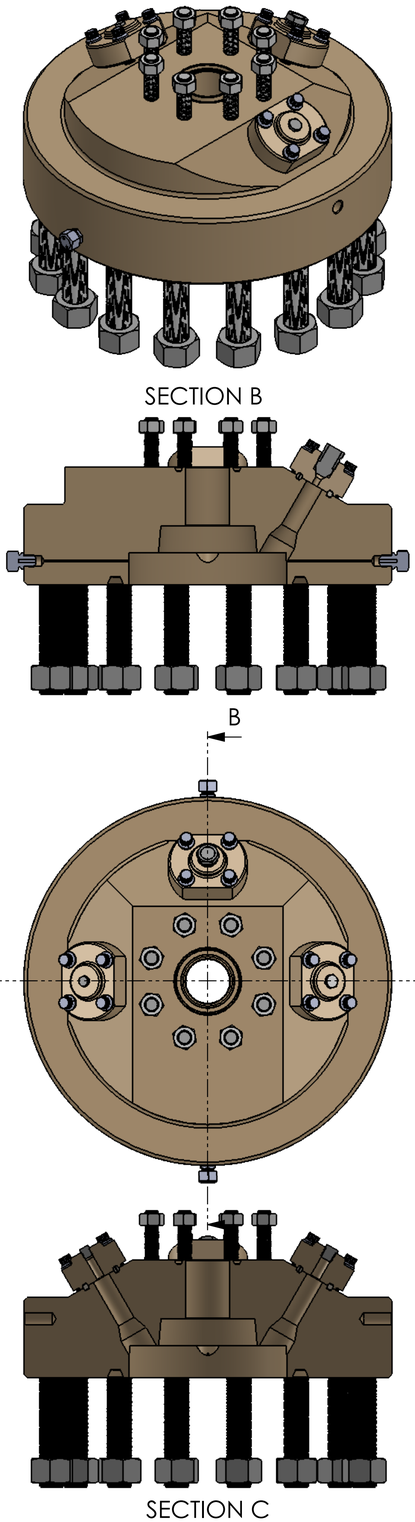
ATLAS PRESSURE CONTROL

TARGA

AGI WELLHEAD SYSTEM
XMAS TREE
COPPER HEAD # 2







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

APPLICATION OF TARGA MIDSTREAM SERVICES, LLC FOR AUTHORIZATION TO INJECT, LEA COUNTY, NEW MEXICO. **CASE NO. 26139**

SELF-AFFIRMED STATEMENT
OF DANA S. HARDY

1. I am attorney in fact and authorized representative of Targa Midstream Services, LLC, the Applicant herein.

2. I am familiar with the Notice Letter attached as **Exhibit F-1,** and caused the Notice Letter, along with the Application in this case, to be sent to the parties listed in the Postal Delivery Report attached as **Exhibit F-2**.

3. Exhibit F-2 also provides the date the Notice Letter was sent, along with the delivery status of each.

4. Electronic return receipts are attached as **Exhibit F-3** as supporting documentation for proof of mailing and the information provided on Exhibit F-2.

5. On May 10, 2026, I caused a notice to be published in the Hobbs News-Sun. An Affidavit of Publication from the legal clerk of the Hobbs News-Sun along with a copy of the Notice Publication, is attached as **Exhibit F-4.**

6. I understand this Self-Affirmed Statement will be used as written testimony in the subject case. I affirm that my testimony above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.

/s/ Dana S. Hardy May 28, 2026
Dana S. Hardy Date

Targa Midstream Services, LLC
Case No. 26139
Exhibit F

Hardy | McLean LLC
ENERGY AND NATURAL RESOURCES ATTORNEYS

May 5, 2026

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

TO: ALL PARTIES ENTITLED TO NOTICE

Re: Case No. 26139 - Application of Targa Midstream Services, LLC for Authorization to Inject, Lea County, New Mexico.

To whom it may concern:

This letter is to advise you that the enclosed application was filed with the New Mexico Oil Conservation Division and is set for hearing on **June 4, 2026**, beginning at 9:00 a.m. A complete copy of the Application for Authorization to Inject (Form C-108) is available at the following website link:

https://ocdimage.emnrd.nm.gov/Imaging/FileStore/santafe/cf/20260504/26139_05_04_2026_10_22_29.pdf

If you would prefer a hard copy, please contact my office and one will be provided.

Hearings are currently conducted in a hybrid fashion, both virtually and in-person at the Energy, Minerals, Natural Resources Department, Wendell Chino Building, Pecos Hall, 1220 South St. Francis Drive, 1st Floor, Santa Fe, NM 87505. The hearing may be held only virtually at the discretion of the Division. To confirm the manner in which the hearing will be held, and to participate virtually, please visit the OCD Hearings website at the following link: https://www.emnrd.nm.gov/ocd/hearing-info/. You are not required to attend this hearing, but as an owner of an interest that may be affected by this 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 matter at a later date.

Pursuant to Division Rule 19.15.4.13.B, a party who intends to present evidence at the hearing shall file a pre-hearing statement and serve copies on other parties, or the attorneys of parties who are represented by counsel, at least four business days prior to the scheduled hearing, but in no event later than 5:00 p.m. Mountain Time, on the Thursday preceding the scheduled hearing date. If you are not registered with the OCD's E-Permitting system, you must submit the statement via e-mail to ocd.hearings@emnrd.nm.gov and should include: the names of the parties; whether or not the parties are represented by counsel; a concise statement of the case; the names of witnesses

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

HardyMclean.com

Writer:
Dana S. Hardy
Senior Managing Partner
dhardy@hardymclean.com

Targa Midstream Services, LLC
Case No. 26139
Exhibit F-1

anticipated to be called to testify at the hearing; the approximate amount of time needed to present the case; and an identification of any procedural matters that are to be resolved prior to the hearing.

If you have any questions about this application, please contact Angelica Hernandez with Targa Midstream Services, LLC ahernandez@targaresources.com or 832-518-0880.

Sincerely,
/s/ Dana S. Hardy
Dana S. Hardy

Postal Delivery Report

Targa Copperhead AGI #2 - Case No. 26139

Recipient	Date Mailed	USPS Tracking Number	Date Received	Status
Desert Ram North Ranch, LLC	5/5/2026	9414836208551300094338	N/A	PROCESSED THROUGH USPS FACILITY
Versado Gas Processors, LLC	5/5/2026	9414836208551300094345	N/A	PROCESSED THROUGH USPS FACILITY
New Mexico Department of Transportation	5/5/2026	9414836208551300094352	5/14/2026	DELIVERED LEFT WITH INDIVIDUAL SANTA FE, NM 87501
New Mexico State Land Office	5/5/2026	9414836208551300094369	5/11/2026	DELIVERED INDIVIDUAL PICKED UP AT PO
United States Bureau of Land Management	5/5/2026	9414836208551300094376	5/7/2026	DELIVERED FRONT DESK/RECEPTION/MAIL ROOM
Coterra Energy Operating Co	5/5/2026	9414836208551300094383	5/8/2026	DELIVERED TO AGENT PICKED UP AT USPS
Devon Energy Production Co LP	5/5/2026	9414836208551300094406	5/12/2026	DELIVERED INDIVIDUAL PICKED UP AT PO OKLAHOMA CITY, OK 73102
Finaly Resources, LLC	5/5/2026	9414836208551300094390	5/11/2026	DELIVERED INDIVIDUAL PICKED UP AT USPS
Marks and Garner Production Ltd Co	5/5/2026	9414836208551300094413	N/A	DEPARTED USPS REGIONAL FACILITY
COG Production, LLC	5/5/2026	9414836208551300094420	5/11/2026	DELIVERED INDIVIDUAL PICKED UP AT PO
MCI Operating of New Mexico, LLC	5/5/2026	9414836208551300094437	5/20/2026	DELIVERED LEFT WITH INDIVIDUAL SANTA FE, NM 87501

Targa Midstream Services, LLC
Case No. 26139
Exhibit F-2

3XT Holding, LLC	5/5/2026	9414836208551300094444	5/19/2026	DELIVERED LEFT WITH INDIVIDUAL SANTA FE, NM 87501
3 Knight's, LLC	5/5/2026	9414836208551300094451	N/A	REMINDER TO SCHEDULE REDELIVERY
Cimarex Energy Co	5/5/2026	9414836208551300094468	5/8/2026	DELIVERED TO AGENT PICKED UP AT USPS
Magnum Hunter Production INC	5/5/2026	9414836208551300094475	5/11/2026	DELIVERED FRONT DESK/RECEPTION/MAIL ROOM
Chevron Midcontinent LP	5/5/2026	9414836208551300094482	5/8/2026	DELIVERED TO AGENT PICKED UP AT USPS
Chevron USA Inc	5/5/2026	9414836208551300094499	5/8/2026	DELIVERED INDIVIDUAL PICKED UP AT PO
Conoco Phillips Company	5/5/2026	9414836208551300094505	5/11/2026	DELIVERED PO BOX HOUSTON, TX 77002
Conoco Phillips Company	5/5/2026	9414836208551300094512	5/8/2026	DELIVERED INDIVIDUAL PICKED UP AT PO BARTLESVILLE, OK 74003
Oxy USA Inc.	5/5/2026	9414836208551300094529	5/8/2026	DELIVERED PO BOX HOUSTON, TX 77027
XTO Holdings, LLC	5/5/2026	9414836208551300094536	5/18/2026	DELIVERED LEFT WITH INDIVIDUAL
Concho Oil & Gas, LLC	5/5/2026	9414836208551300094543	5/11/2026	DELIVERED INDIVIDUAL PICKED UP AT PO
Canaan Resources Drilling Co, LLC	5/5/2026	9414836208551300095106	N/A	FORWARD EXPIRED

UNITED STATES POSTAL SERVICE

May 15, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0943 52**.

Item Details

Status:	Delivered, Left with Individual
Status Date / Time:	May 14, 2026, 9:59 am
Location:	SANTA FE, NM 87501
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	New Mexico Department of Transportation

Shipment Details

Weight:	2.0oz

Recipient Signature

Signature of Recipient:

Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

New Mexico Department of Transportation
1120 Cerrillos Rd
Santa Fe, NM 87504
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

Targa Midstream Services, LLC
Case No. 26139
Exhibit F-3

UNITED STATES POSTAL SERVICE

May 15, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0943 69**.

Item Details

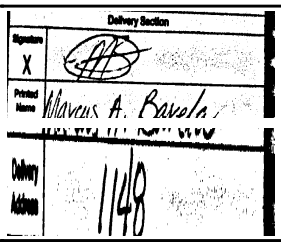
Status:	Delivered, Individual Picked Up at Post Office
Status Date / Time:	May 11, 2026, 12:16 pm
Location:	SANTA FE, NM 87501
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	New Mexico State Land Office

Shipment Details

Weight:	2.0oz

Recipient Signature

Signature of Recipient:



Address of Recipient:

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Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 11, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0943 76**.

Item Details

Status:	Delivered, Front Desk/Reception/Mail Room
Status Date / Time:	May 7, 2026, 10:43 am
Location:	SANTA FE, NM 87508
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	United States Bureau of Land Management

Shipment Details

Weight:	2.0oz

Recipient Signature

Signature of Recipient: [redacted]

Address of Recipient: 301 DINOSAUR TRL, SANTA FE, NM 87508

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Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

United States Bureau of Land Management
NM State Office
301 Dinosaur Trail
Santa Fe, NM 87508
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 11, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0943 83**.

Item Details

Status:	Delivered, Individual Picked Up at Post Office
Status Date / Time:	May 11, 2026, 8:41 am
Location:	MIDLAND, TX 79701
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Coterra Energy Operating Co

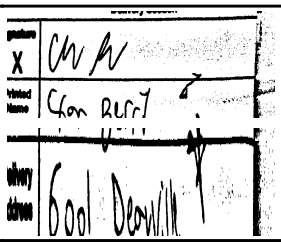
Shipment Details

Weight:	2.0oz

Recipient Signature

Signature of Recipient:

Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

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Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Coterra Energy Operating Co
6001 Deauville BLVD
300N
Midland, TX 79706
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 15, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0944 06**.

Item Details

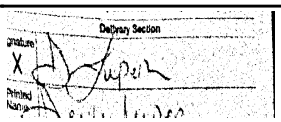
Status:	Delivered, Individual Picked Up at Post Office
Status Date / Time:	May 12, 2026, 7:22 am
Location:	OKLAHOMA CITY, OK 73102
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Devon Energy Production Co LP

Shipment Details

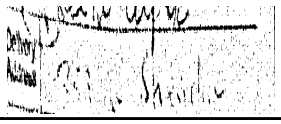
Weight:	2.0oz

Recipient Signature

Signature of Recipient:



Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

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Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Devon Energy Production Co LP
333 W. Sheridan Ave
Oklahoma City, OK 73102
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 15, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0943 90**.

Item Details

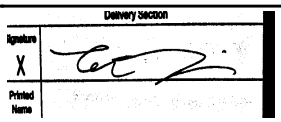
Status:	Delivered, Individual Picked Up at Postal Facility
Status Date / Time:	May 11, 2026, 1:15 pm
Location:	SUNSET BEACH, CA 90742
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Finaly Resources LLC

Shipment Details

Weight:	2.0oz

Recipient Signature

Signature of Recipient:



Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Finaly Resources, LLC
16585 Pacific Coast Highway
Suite 324
Sunset Beach, CA 90742
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 15, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0944 20**.

Item Details

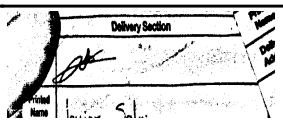
Status:	Delivered, Individual Picked Up at Post Office
Status Date / Time:	May 11, 2026, 7:59 am
Location:	MIDLAND, TX 79701
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	COG Production LLC

Shipment Details

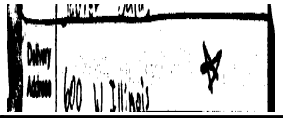
Weight:	2.0oz

Recipient Signature

Signature of Recipient:



Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

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Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

COG Production, LLC
One Concho Center
600 W Illinois Ave
Midland, TX 79701
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 11, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0944 68**.

Item Details

Status:	Delivered, Individual Picked Up at Post Office
Status Date / Time:	May 11, 2026, 8:41 am
Location:	MIDLAND, TX 79701
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Cimarex Energy Co

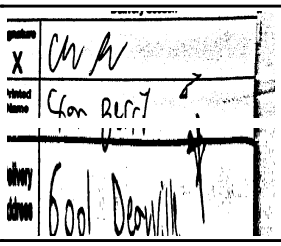
Shipment Details

Weight:	2.0oz

Recipient Signature

Signature of Recipient:

Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

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Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Cimarex Energy Co
6001 Deauville BLVD
300N
Midland, TX 79706
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 15, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0944 75**.

Item Details

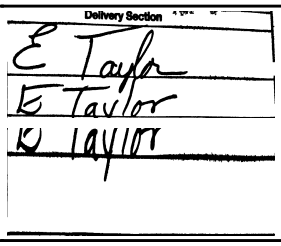
Status:	Delivered, Front Desk/Reception/Mail Room
Status Date / Time:	May 11, 2026, 3:53 pm
Location:	HOUSTON, TX 77024
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Magnum Hunter Production INC

Shipment Details

Weight:	2.0oz

Recipient Signature

Signature of Recipient:



Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Magnum Hunter Production INC
840 Gessner Rd
Suite 1400
Houston, TX 77024
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 11, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0944 82**.

Item Details

Status:	Delivered to Agent, Picked up at USPS
Status Date / Time:	May 8, 2026, 8:16 am
Location:	MIDLAND, TX 79706
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Chevron Midcontinent LP

Shipment Details

Weight:	2.0oz

Recipient Signature

Signature of Recipient: (Authorized Agent)

Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Chevron Midcontinent LP
6301 Deauville BLVD
Midland, TX 79706
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 11, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0944 99**.

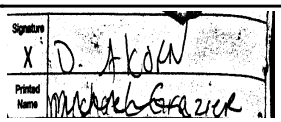
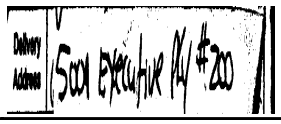
Item Details

Status:	Delivered, Individual Picked Up at Post Office
Status Date / Time:	May 8, 2026, 7:36 am
Location:	SAN RAMON, CA 94583
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Chevron USA Inc

Shipment Details

Weight:	2.0oz

Recipient Signature

Signature of Recipient:	
Address of Recipient:	

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

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Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Chevron USA Inc
6001 Bollinger Canyon Rd
San Ramon, CA 94583
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 15, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0945 05**.

Item Details

Status:	Delivered, PO Box
Status Date / Time:	May 11, 2026, 3:57 pm
Location:	HOUSTON, TX 77002
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Conoco Phillips Company

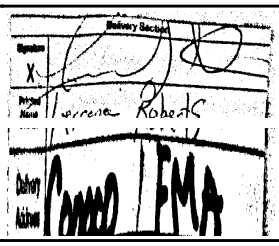
Shipment Details

Weight:	2.0oz

Recipient Signature

Signature of Recipient:

Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Conoco Phillips Company
PO Box 2197
Houston, TX 77252
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 11, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0945 12**.

Item Details

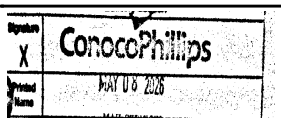
Status:	Delivered, Individual Picked Up at Post Office
Status Date / Time:	May 8, 2026, 8:08 am
Location:	BARTLESVILLE, OK 74003
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Conoco Phillips Company

Shipment Details

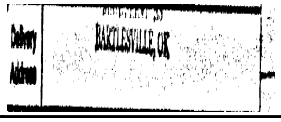
Weight:	2.0oz

Recipient Signature

Signature of Recipient:



Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Conoco Phillips Company
315 S. Johnstone
Bartlesville, OK 74005
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 11, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0945 29**.

Item Details

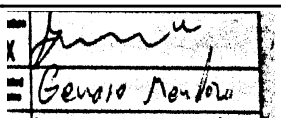
Status:	Delivered, PO Box
Status Date / Time:	May 8, 2026, 8:37 am
Location:	HOUSTON, TX 77027
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Oxy USA Inc

Shipment Details

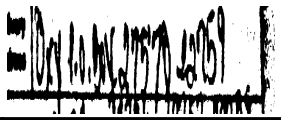
Weight:	2.0oz

Recipient Signature

Signature of Recipient:



Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

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Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Oxy USA Inc.
Attn: Land Administrator
PO Box 27570
Houston, TX 77227
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

May 15, 2026

Dear Simple Certified:

The following is in response to your request for proof of delivery on your item with the tracking number: **9414 8362 0855 1300 0945 43**.

Item Details

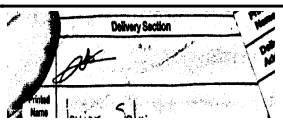
Status:	Delivered, Individual Picked Up at Post Office
Status Date / Time:	May 11, 2026, 7:59 am
Location:	MIDLAND, TX 79701
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Concho Oil Gas LLC

Shipment Details

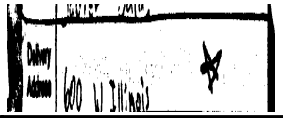
Weight:	2.0oz

Recipient Signature

Signature of Recipient:



Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

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Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Concho Oil & Gas, LLC
600 W Illinois Ave
Midland, TX 79701
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

UNITED STATES POSTAL SERVICE

Proof of Delivery (Electronic)

Date: 5/22/2026

Client Name:

Certified with RR(E) item number 9414836208551300094444, addressed to 3XT Holding, LLC was designated DELIVERED LEFT WITH INDIVIDUAL at 10:11 AM on May 19, 2026.

The item number, time, date, city, state, and zip code is a true extract of information provided by the United States Postal Service to SimpleCertifiedMail.com.

3XT Holding, LLC
5326 County Rd 7560
Lubbock, TX 79424
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

The above information is for the sole use of SimpleCertifiedMail.com clients and represents information provided by the United States Postal Service.

UNITED STATES POSTAL SERVICE

Proof of Delivery (Electronic)

Date: 5/22/2026

Client Name:

Certified with RR(E) item number 9414836208551300094437, addressed to MCI Operating of New Mexico, LLC was designated DELIVERED LEFT WITH INDIVIDUAL at 9:28 AM on May 20, 2026.

The item number, time, date, city, state, and zip code is a true extract of information provided by the United States Postal Service to SimpleCertifiedMail.com.

MCI Operating of New Mexico, LLC
107 Main St
Sealy, TX 77474
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

The above information is for the sole use of SimpleCertifiedMail.com clients and represents information provided by the United States Postal Service.

UNITED STATES POSTAL SERVICE

Proof of Delivery (Electronic)

Date: 5/22/2026

Client Name:

Certified with RR(E) item number 9414836208551300094536, addressed to XTO Holdings, LLC was designated DELIVERED LEFT WITH INDIVIDUAL at 9:34 AM on May 18, 2026.

The item number, time, date, city, state, and zip code is a true extract of information provided by the United States Postal Service to SimpleCertifiedMail.com.

XTO Holdings, LLC
22777 Springwoods Village Parkway
Spring, TX 77389
Reference #: Targa Copperhead 26139
Item ID: Targa Copperhead 26139

The above information is for the sole use of SimpleCertifiedMail.com clients and represents information provided by the United States Postal Service.

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
May 10, 2026
and ending with the issue dated
May 10, 2026.

Publisher

Sworn and subscribed to before me this 10th day of May 2026.

Business Manager

My commission expires
January 29, 2027
(Seal)

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

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said publication has been made.

LEGAL LEGAL LEGAL

LEGAL NOTICE
May 10, 2026

This is to notify all interested parties, including; United Stated Bureau of Land Management; New Mexico State Land Office; Versado Gas Processors LLC; Concho Oil and Gas LLC; Desert Ram North Ranch LLC; New Mexico Department of Transportation; Coterra Energy Operating Company; Finlay Resources LLC; COG Production, LLC; Devon Energy Production Co, LP;Marks and Garner Production Ltd Company; Oxy USA, Inc.; MCI Operating of New Mexico,LLC; 3 Knight's LLC; 3XT Holding, LLC; Cimarex Energy Co.; Magnum Hunter Production Inc.;Chevron USA Inc.; Chevron Midcontinent LP; Devon Energy Production Co. LP; Conoco Phillips Company; Canaan Resources Drilling Company, LLC; XTO Holdings, LLC; COG Operating LLC; and their successors and assigns; that the New Mexico Oil Conservation Division will conduct a hearing on the application submitted by Targa Midstream Services, LLC ("Targa" or"Applicant") (Case No. 26139). The hearing will be conducted on June 4, 2026, in a hybrid fashion, both virtually and in person at the Energy, Minerals, and Natural Resources Department,1st Floor, Santa Fe, NM 87505. To participate virtually, see the instructions posted on the OCD website: https://www.emnrd.nm.gov/ocd/hearing-info/. In Case No. 26139, Targa Midstream Services, LLC ("Targa") (OGRID No. 24650) seeks authorization to drill and operate a Class II acidgas injection well, the Copperhead AGI No. 2 Well ("Well"), at Targa's Copperhead Gas Processing Facility. The vertical well will be located approximately 1,138 feet from the south line (FSL) and1,842 feet from the west line (FWL) of Section 13, Township 24 South, Range 32 East, Lea County,New Mexico. The Well will inject treated acid gas into the Siluro-Devonian formation including the Devonian Thirty one Formation, Upper Silurian Wristen Group and the Lower Silurian Fusselman Formation, at a depth of approximately 17,299–18,699 feet. The Well's maximum daily injection rate will not exceed 26 million standard cubic feet per day, and the Well's maximum surface injection pressure will not exceed 3,460 pounds per square inch gauge. The Well is located approximately 26 miles west of Jal, New Mexico.
#00311004

67118479 00311004

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

Targa Midstream Services, LLC
Case No. 26139
Exhibit F-4

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

General Information
Phone: (505) 629-6116

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

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

COMMENTS

Operator: TARGA MIDSTREAM SERVICES LLC 811 Louisiana Street Houston, TX 77002	OGRID: 24650
	Action Number: 607936
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

COMMENTS

Created By	Comment	Comment Date
anthony.harris	Case 26139. R-24503	7/24/2026

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Operator: TARGA MIDSTREAM SERVICES LLC 811 Louisiana Street Houston, TX 77002	OGRID: 24650
	Action Number: 607936
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
anthony.harris	None	7/24/2026