

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

**APPLICATION OF OXY USA INC. TO  
AMEND ORDER NO. R-22101-A TO EXPAND  
THE APPROVED CLOSED LOOP GAS  
CAPTURE INJECTION PILOT PROJECT  
AREA, ADD ADDITIONAL INJECTION  
WELLS, INCREASE THE MAXIMUM  
ALLOWABLE SURFACE INJECTION  
PRESSURE, AND DISMISS ORDER NO. R-  
22102, LEA COUNTY, NEW MEXICO.**

**CASE NO. \_\_\_\_\_**

**APPLICATION**

OXY USA Inc. (“OXY” or “Applicant”) (OGRID No. 16696) through its undersigned attorneys, hereby files this application with the Oil Conservation Division for an order amending Order No. R-22101-A to (1) expand the approved closed loop gas capture injection project area; (2) authorize two additional injection wells for intermittent, temporary produced gas injection within the Bone Spring formation within the project area; and (3) increase the authorized maximum allowable surface injection pressure from 1,200 psi to 1,300 psi for the additional wells. All other terms and provisions in Order No. R-22101-A are proposed to remain unchanged. Because the proposed expansion of the pilot project area in Order No. R-22101-A includes the project area and wells authorized for injection in Order No. R-22102, OXY seeks to dismiss Order No. R-22102. In support of this application, OXY states:

**PROJECT OVERVIEW**

1. The Division approved Order No. R-22101-A on November 1, 2024, authorizing OXY to increase the maximum allowable surface injection pressure for certain wells within an existing Closed Loop Gas Capture (“CLGC”) Pilot Project. In addition to increasing the authorized

maximum surface injection pressure for the CLGC wells under that Order, the Division extended authority for the Pilot Project to operate for two years from issuance of Order No. R-22101-A. The Pilot Project area consists of a 1,280-acre, more or less, project area (the “Avogato” project) comprised of all of Sections 30 and 31, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico.

2. OXY now proposes to further amend Order No. R-22101-A to expand the project area to include an additional 1,280 acres, add two additional CLGC wells for temporary, intermittent injection, and authorize a maximum surface injection pressure for the two additional wells of 1,300 psi, creating a 2,560-acre, more or less, amended project area for this Pilot Project consisting of the following acreage identified below in Lea County, New Mexico (the “Amended Project Area”). *See Exhibit A* at 6.

**Township 22 South, Range 32 East**

Section 27	All
Section 34	All

**Township 22 South, Range 33 East**

Section 30	All
Section 31	All

3. The proposed Amended Project Area is part of a larger area OXY refers to as the Red Tank Area.

4. OXY seeks authority for this Amended Pilot Project to avoid the temporary flaring of gas or the shut-in of producing wells during pipeline capacity constraints, mechanical difficulties, plant shutdowns, or other events impacting the ability to deliver gas into a pipeline.

5. Within the proposed Amended Project Area, OXY seeks authority to utilize the following additional producing wells to occasionally inject produced gas into the Bone Spring formation under Order No. R-22101-A:

- **Taco Cat 27-34 Federal Com #11H well** (API No. 30-025-44933), with a surface location NW/4 NW/4 (Unit D) in Section 27, and a bottom hole location SW/4 SW/4 (Unit M) in Section 34;
- **Taco Cat 27-34 Federal Com #21H well** (API No. 30-025-44934), with a surface location NW/4 NW/4 (Unit D) in Section 27, and a bottom hole location SW/4 SW/4 (Unit M) in Section 34. *See Exhibit A at 8-9.*

6. The Taco Cat Federal Com #11H well (API No. 30-025-44933) has previously been approved to inject as a CLGC well under Order No. R-22102. OXY seeks authority to continue CLGC injection in this well under an amendment to Order No. R-22101-A.

7. The proposed average injection rate for each additional well is 3 MMSCFD with a maximum injection rate of 4 MMSCFD during injection. *See Exhibit A at 14.*

8. The maximum achievable surface pressure (MASP) for the additional wells is proposed to be 1,300 psi. *See Exhibit A at 14.* The current average surface pressures under normal operations for the proposed additional injection wells ranges between approximately 670 psi and 1,087 psi. *Id.*

9. Injection along the horizontal portion of the wellbores will be within the Bone Spring formation [Red Tank; Bone Spring, East Pool (Pool Code 51687)], at the following approximate true vertical depths:

- **Taco Cat 27-34 Federal Com #11H well** between 9,339 feet and 9,517 feet.
- **Taco Cat 27-34 Federal Com #21H well** between 10,526 feet to 10,849 feet.
- *See Exhibit A at 10-13.*

10. A map and process flow diagram depicting the pipeline that ties the wells proposed for the pilot project into the gathering system and the affected compressor stations are included in the attached **Exhibit A** at pages 6-7.

## **WELL DATA**

11. Information on the well data, including well diagrams and well construction, casing, tubing, packers, cement, perforations, and other details for the additional injection wells are included in the attached **Exhibit A** at pages 10-13.

12. For the additional injection wells, the proposed maximum achievable surface pressure will not exert pressure at the top perforations in the wellbores with a full fluid column of reservoir brine water in excess of 90% of the burst pressure for the production casing or production liner. *See Exhibit A* at 14. In addition, the proposed maximum achievable surface pressure will not exert pressure at the topmost perforation in excess of 90% of the formation parting pressure. *See Exhibit A* at 14.

13. Cement bond logs<sup>1</sup> for each of the injection wells demonstrate the placement of cement in the wells proposed for this Pilot Project and that there is a good and sufficient cement bond with the production casing and the tie-in of the production casing with the next prior casing in each well.

14. The **Taco Cat 27-34 Federal Com #11H well** previously demonstrated mechanical integrity; however, OXY will undertake new tests to demonstrate mechanical integrity for both additional wells proposed for this Pilot Project as a condition of approval prior to commencing injection operations. *See Exhibit A* at 15.

## **GEOLOGY AND RESERVOIR**

15. Data and a geologic analysis confirming that the Bone Spring formation is suitable for the proposed Pilot Project is included in **Exhibit A** at pages 57-71. A general characterization

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<sup>1</sup> Electronic versions of the cement bond logs have been or will be submitted to the Division through each well file.

of the geology of the Bone Spring formation and its suitability for the proposed injection, including identification of confining layers and their ability to prevent vertical movement of the injected gas is included in the analysis. *Id.*

16. The top of the Bone Spring formation in this area is at approximately 8,596 feet measured depth and extends down to the top of the Wolfcamp formation. *See Exhibit A* at 58.

17. Zones that are productive of oil and gas are located above and below the targeted injection interval. *See Exhibit A* at 58, 67-70.

18. Reservoir modeling indicates anticipated horizontal movement of injected gas will be approximately 100 feet or less from each injection wellbore within the Bone Spring formation. *See Exhibit A* at 72-86.

19. OXY has prepared calculations estimating the stimulated reservoir volume based on supporting empirical data and a reservoir model to evaluate potential effects on wells adjacent to the Project Area. *See Exhibit A* at 72-86. OXY's analysis concludes that there will be no change in the oil recovery from each of its proposed injection wells or from any of the offsetting wells.

*See id.* at 83.

20. The source of gas for injection will be from OXY's wells producing from the Bone Spring and Wolfcamp formations that are identified in the list of wells in **Exhibit A** at page 16. All proposed temporary injection wells and gas source wells are commingled under the approved gas surface commingling permit PLC-835-A. Additional source wells may be added over time under an approved surface commingling authorization. Each of OXY's proposed injection wells are operated by OXY.

21. OXY has prepared an analysis of the composition of the source gas for injection and a corrosion prevention plan. *See Exhibit A* at 17-27.

22. OXY has examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the injection zone and any underground source of drinking water. *See Exhibit A* at 71. OXY has also examined the available geologic and engineering data and determined that the total recoverable volume of hydrocarbons from the reservoir will not be adversely affected by the Pilot Project. *See Exhibit A* at 86.

### **GAS ALLOCATION**

28. OXY's proposes a method of gas allocation following a temporary injection event has been previously approved by the Division under Order R-22101-A and previous orders. *See Exhibit A* at 87-89.

### **AREA OF REVIEW**

23. OXY has prepared maps depicting the surface hole location and trajectory of the proposed injection wells, the location of every well within a two-mile radius, leases within two miles, and the half-mile area of review. *See Exhibit A* at pages 28-30.

24. A tabulation of data for wells that penetrate the proposed injection interval or the confining layer within the half-mile area of review is included in **Exhibit A** at pages 31-34, along with well-bore schematics for wells that are plugged and abandoned or temporarily abandoned. *See Exhibit A* at 35-56.

### **OPERATIONS AND SAFETY**

25. OXY plans to monitor injection and operational parameters for the Pilot Project using an automated supervisory control and data acquisition (SCADA) system with pre-set alarms and automatic shut-in safety valves that will prevent injection pressures from exceeding the MASP. *See Exhibit A* at pages 2-3, 7. OXY will also monitor and track various operational parameters at the Pilot Project's central tank battery and central gas lift compressors. *See id.*

26. A copy of this application will be provided by certified mail to the surface owner on which each injection well identified herein is located, and to each leasehold operator and other affected persons within any tract wholly or partially contained within one-half mile of the completed interval of the wellbore for each of the proposed injection wells. A list of the affected parties subject to notice is included in **Exhibit A** at 93-95, along with a map and list identifying each tract subject to notice. *See Exhibit A* at 92.

27. Approval of this Pilot Project is in the best interests of conservation, the prevention of waste, and the protection of correlative rights.

WHEREFORE, OXY USA Inc. requests that this Application be set for hearing before an Examiner of the Oil Conservation Division on April 10, 2025, and that after notice and hearing this Application be approved.

Respectfully submitted,

HOLLAND & HART LLP

By: \_\_\_\_\_

  
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**ATTORNEYS FOR OXY USA INC.**

CASE \_\_\_\_\_:

**Application of OXY USA Inc. to Amend Order No. R-22101-A to Expand the Approved Closed Loop Gas Capture Injection Pilot Project Area, Add Additional Injection Wells, Increase the Maximum Allowable Surface Injection Pressure, and Dismiss Order No. R-22102, Lea County, New Mexico.** Applicant in the seeks an order amending Order No. R-22101-A to (1) expand the approved closed loop gas capture injection project area; (2) authorize two additional closed-loop gas capture injection wells for intermittent, temporary produced gas injection within the Bone Spring formation; and (3) approve the requested authorized maximum allowable surface injection pressure 1,300 psi for the two additional injection wells. All other terms and provisions in Order No. R-22101-A are proposed to remain unchanged. The amendment will create a 2,560-acre, more or less, project area for this Pilot Project consisting of the following acreage identified below in Lea County, New Mexico (the “Amended Project Area”):

**Township 22 South, Range 32 East**

Section 27	All
Section 34	All

**Township 22 South, Range 33 East**

Section 30	All
Section 31	All

Applicant proposes to occasionally inject produced gas from the Bone Spring and Wolfcamp formations into the following additional producing wells to avoid temporary flaring of gas or the shut-in of producing wells during pipeline capacity constraints, mechanical difficulties, plant shutdowns, or other events impacting the ability to deliver gas into a pipeline:

- **Taco Cat 27-34 Federal Com #11H well** (API No. 30-025-44933), with a surface location NW/4 NW/4 (Unit D) in Section 27, and a bottom hole location SW/4 SW/4 (Unit M) in Section 34;
- **Taco Cat 27-34 Federal Com #21H well** (API No. 30-025-44934), with a surface location NW/4 NW/4 (Unit D) in Section 27, and a bottom hole location SW/4 SW/4 (Unit M) in Section 34;

OXY seeks authority to inject produced gas into the Bone Spring formation through these additional wells at a depth of between approximately 9,339 feet to 10,849 feet along the horizontal portion of each wellbore at surface injection pressures of no more than 1,300 psi and a maximum injection rate of 4 MMSCF per day. The subject acreage is located approximately 35 miles east of Carlsbad, New Mexico.

## EXHIBIT A

# Red Tank Area CLGC Project

2025 Taco Cat  
Refiling



## General Project Description: Closed Loop Gas Capture (CLGC) Project Oxy- 2023 Red Tank Expansion

### About the Red Tank Area

The Red Tank area is composed of two combined systems: Avogato wells in Sections 30 and 31 T22S, R33E, and Taco Cat wells in Sections 27 and 34 T22S, R32E.

In 2021, Oxy USA Inc. (“Oxy”) requested authority to operate a closed loop gas capture project (“CLGC”) in Avogato wells with Case 22088 and in Taco Cat wells with Case 22089 at a hearing before the NMOCD on August 5, 2021. These projects were filed under different cases because of the separate gas gathering networks selling gas to DCP. The NMOCD issued approved orders on April 6, 2022, authorizing CLGC projects in Avogato wells with R-22101 and Taco Cat wells with R-22102.

Later in 2022, the Avogato and Taco Cat gas gathering networks were combined to improve operational efficiency. Additionally, a new third-party gas takeaway company, Mark West, was chosen to replace DCP. Along with the changes, a new gas surface commingling permit PLC-835-A was issued.

Now in 2023, Oxy is expanding the CLGC candidate list because of additional upcoming development in the area.

### Summary of Requested Relief

1. Authority to operate a CLGC project consisting of fifteen (15) wells: four (4) previously approved and eleven (11) new candidate wells. The project will help to prevent waste and reduce adverse impacts from temporary interruptions of gas pipeline capacity.
2. Increase in authorized Maximum Allowable Surface Pressure (MASP) from 1200 psi to 1300 psi.
3. A two-year pilot project extension from the date of the signed order.

### Overview

Oxy is proposing a CLGC project. On occasion, third-party gas purchasers reduce takeaway capacity and cause interruptions that result in flaring or shut in production. During these interruptions, Oxy will utilize CLGC wells to capture gas and reduce flaring.

Oxy has experienced interruptions where the third-party gas purchaser temporarily reduced takeaway capacity from this location, resulting in the flaring of gas or the immediate shut-in of production. Approval of this application will significantly reduce such flaring or shut-in production in the future.

Operations During Interruption	Operations During Interruption With CLGC System	Benefits
<ul style="list-style-type: none"> <li>Flare gas</li> <li>Shut in production</li> </ul>	<ul style="list-style-type: none"> <li>Store gas</li> <li>Continue production</li> <li>No additional surface disturbances</li> </ul>	<ul style="list-style-type: none"> <li>Reduce greenhouse gas emissions</li> <li>Improve economic recovery of mineral resources including gas that might have been flared</li> <li>Utilize existing infrastructure</li> </ul>

### Proposed Operations

Oxy has an extensive high-pressure gas system in the Red Tank area. It is used for gas lift operations, a type of artificial lift. Oxy plans to utilize the same system for gas storage operations. Very minimal equipment on surface will need to be installed prior to starting storage operations.

Mark West is the third-party gas purchaser for the Red Tank area. If an interruption occurs, Oxy will divert gas from the takeaway line back into the gas lift injection system. Gas will flow from the Central Gas Lift (CGL) Compressor Stations through the flow meter, control valve, safety shutdown valve, wellhead and into the wellbore for storage. Gas will be injected down the casing/tubing annulus in these wells. Simultaneously, the proposed CLGC well will be shut in by closing the electric choke upstream of the production flowline. After the interruption has ended, the electric choke will open and the CLGC well resumes production.

### Wells

There are 4 previously approved CLGC wells in Red Tank. 11 candidate wells are included in the expanded list.

#### **Case 22089, Injection Order R-22102 {Taco Cat}**

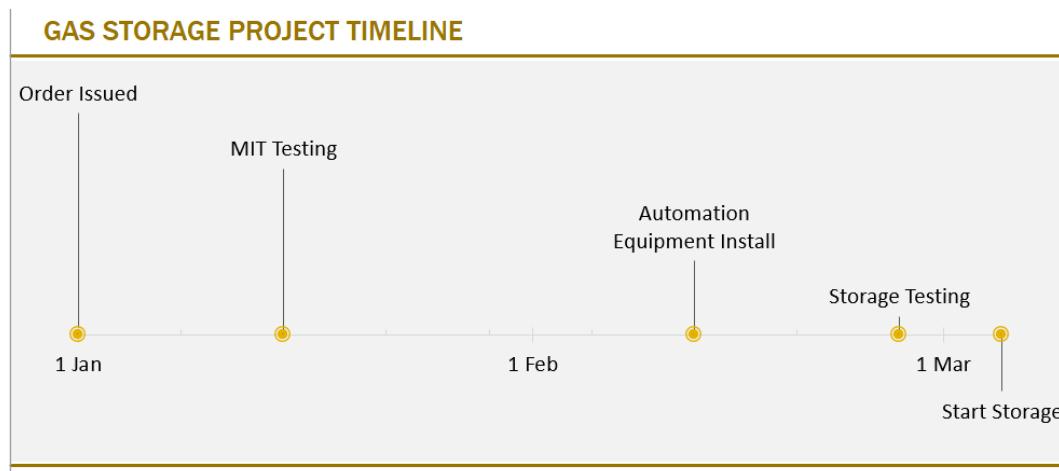
<b>API10</b>	<b>Well Name</b>	<b>Status</b>
30-025-44933	TACO CAT 27 34 FEDERAL COM #011H	Active CLGC
30-025-44934	TACO CAT 27 34 FEDERAL COM #021H	2023 Candidate

#### **Case 22088, Injection Order R-22101 {Avogato/ Red Tank}**

<b>API10</b>	<b>Well Name</b>	<b>Status</b>
30-025-45956	AVOGATO 30 31 STATE COM #011H	Active CLGC
30-025-45958	AVOGATO 30 31 STATE COM #013H	Active CLGC
30-025-45959	AVOGATO 30 31 STATE COM #014H	Active CLGC
30-025-44161	RED TANK 30 31 STATE COM #024Y	2023 Candidate
30-025-44193	RED TANK 30 31 STATE COM #014H	2023 Candidate
30-025-45923	AVOGATO 30 31 STATE COM #004H	2023 Candidate
30-025-45924	AVOGATO 30 31 STATE COM #021H	2023 Candidate
30-025-45925	AVOGATO 30 31 STATE COM #022H	2023 Candidate
30-025-45926	AVOGATO 30 31 STATE COM #023H	2023 Candidate
30-025-45957	AVOGATO 30 31 STATE COM #012H	2023 Candidate
30-025-45960	AVOGATO 30 31 STATE COM #024H	2023 Candidate
30-025-45961	AVOGATO 30 31 STATE COM #025H	2023 Candidate
30-025-45964	AVOGATO 30 31 STATE COM #074H	2023 Candidate

### Timeline

Since no new surface disturbances are required, this project can be implemented with minimal facility modifications. The timeline below assumes an order is issued on January 1 for illustration purposes.

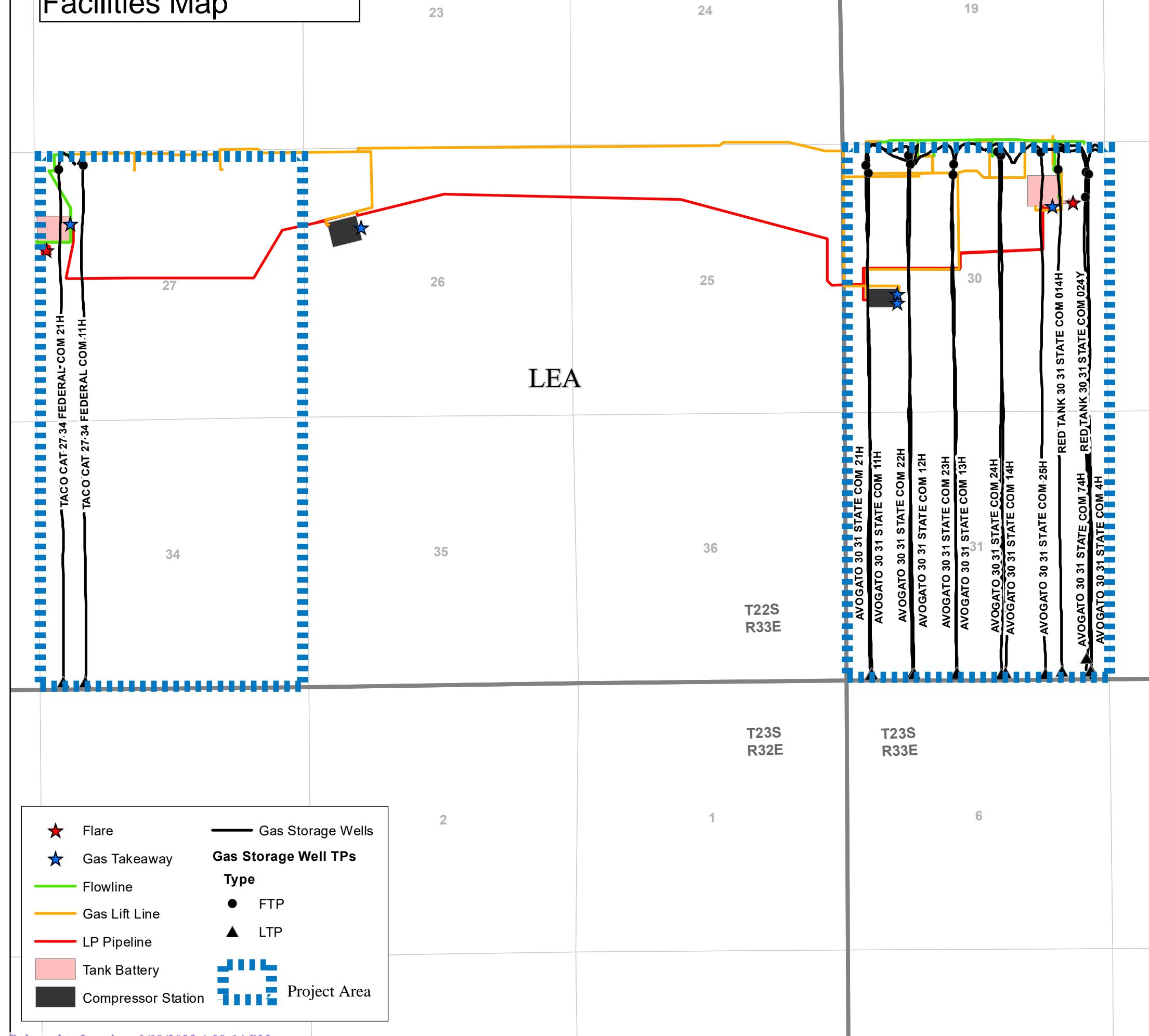


# Facilities and Production

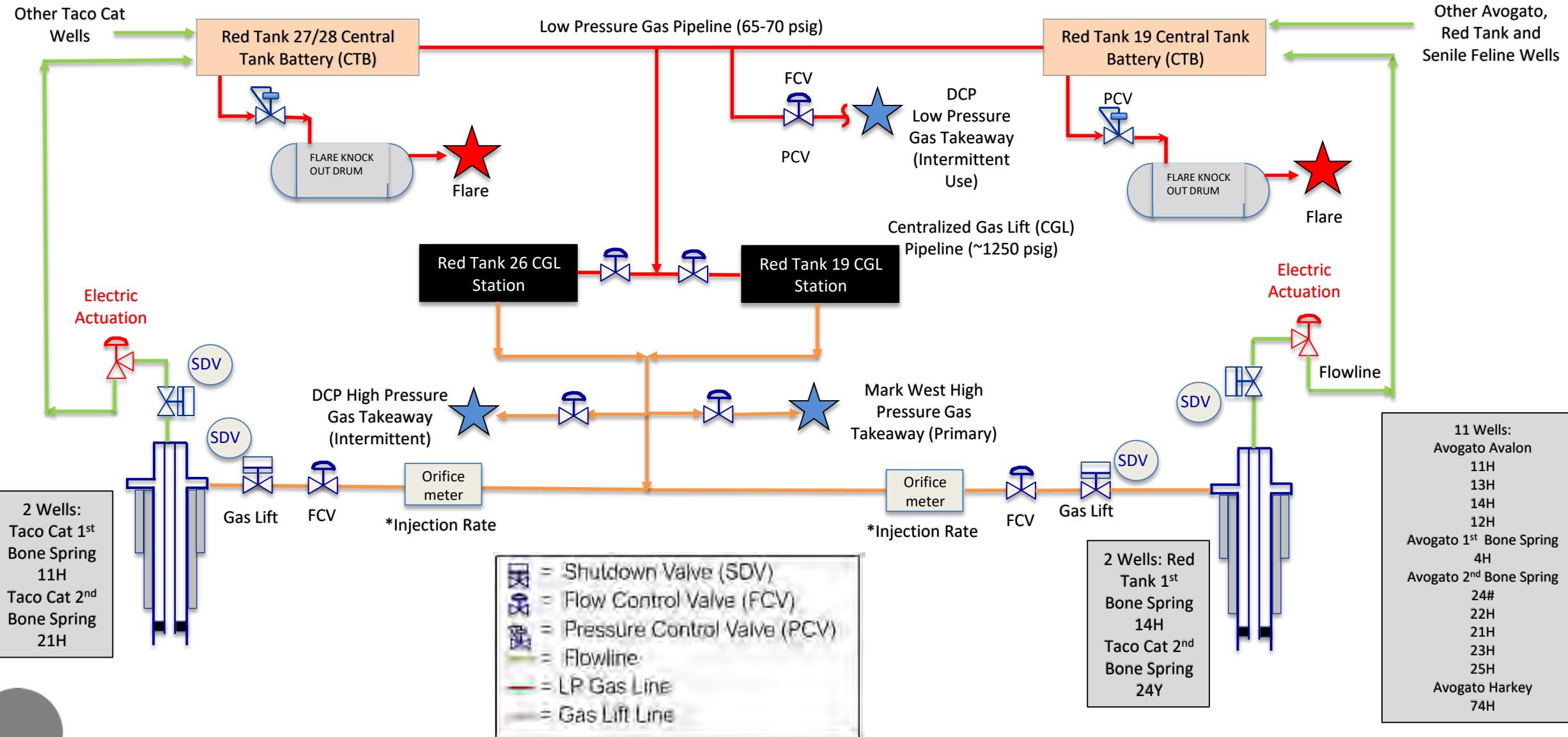


# Red Tank Area Project Area and Facilities Map

Updated  
2/12/25



# Red Tank Gas Process Flow Diagram



**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**

API Number		Pool Code	Pool Name
30-025-44933		51683	RED TANK, BONE SPRING
Property Code		Property Name	Well Number
321612		TACO CAT "27-34" FEDERAL COM	11H
OGRID No.		Operator Name	Elevation
16696		OXY USA INC.	3635.8'

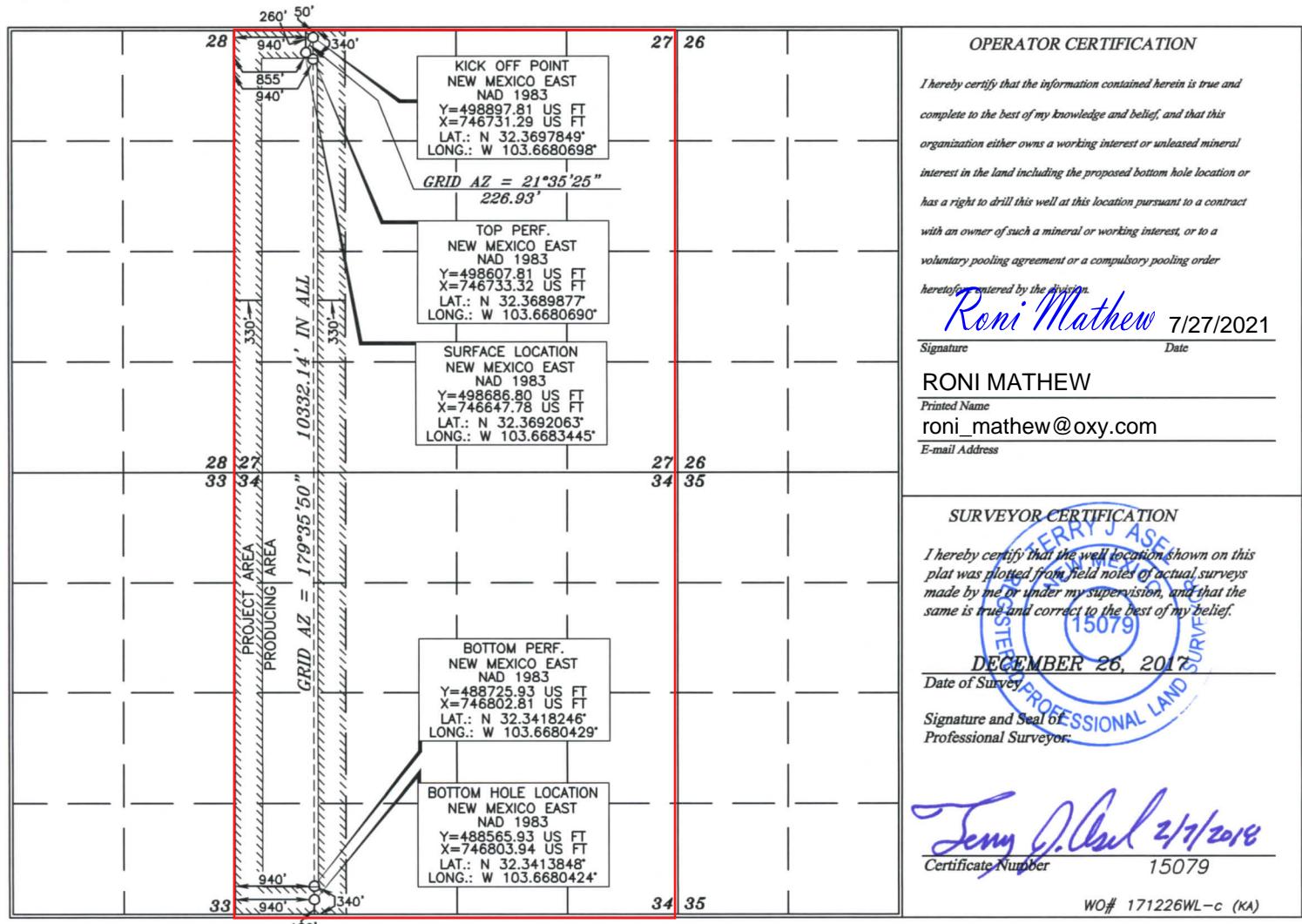
**Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	27	22 SOUTH	32 EAST, N.M.P.M.		260'	NORTH	855'	WEST	LEA

**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
M	34	22 SOUTH	32 EAST, N.M.P.M.		180'	SOUTH	940'	WEST	LEA
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.	R-21777					
1280									

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.



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**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**

API Number	Pool Code	Pool Name
30-025-44934	51683	RED TANK, BONE SPRING
Property Code 321612	Property Name TACO CAT "27-34" FEDERAL COM	Well Number 21H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3635.3'

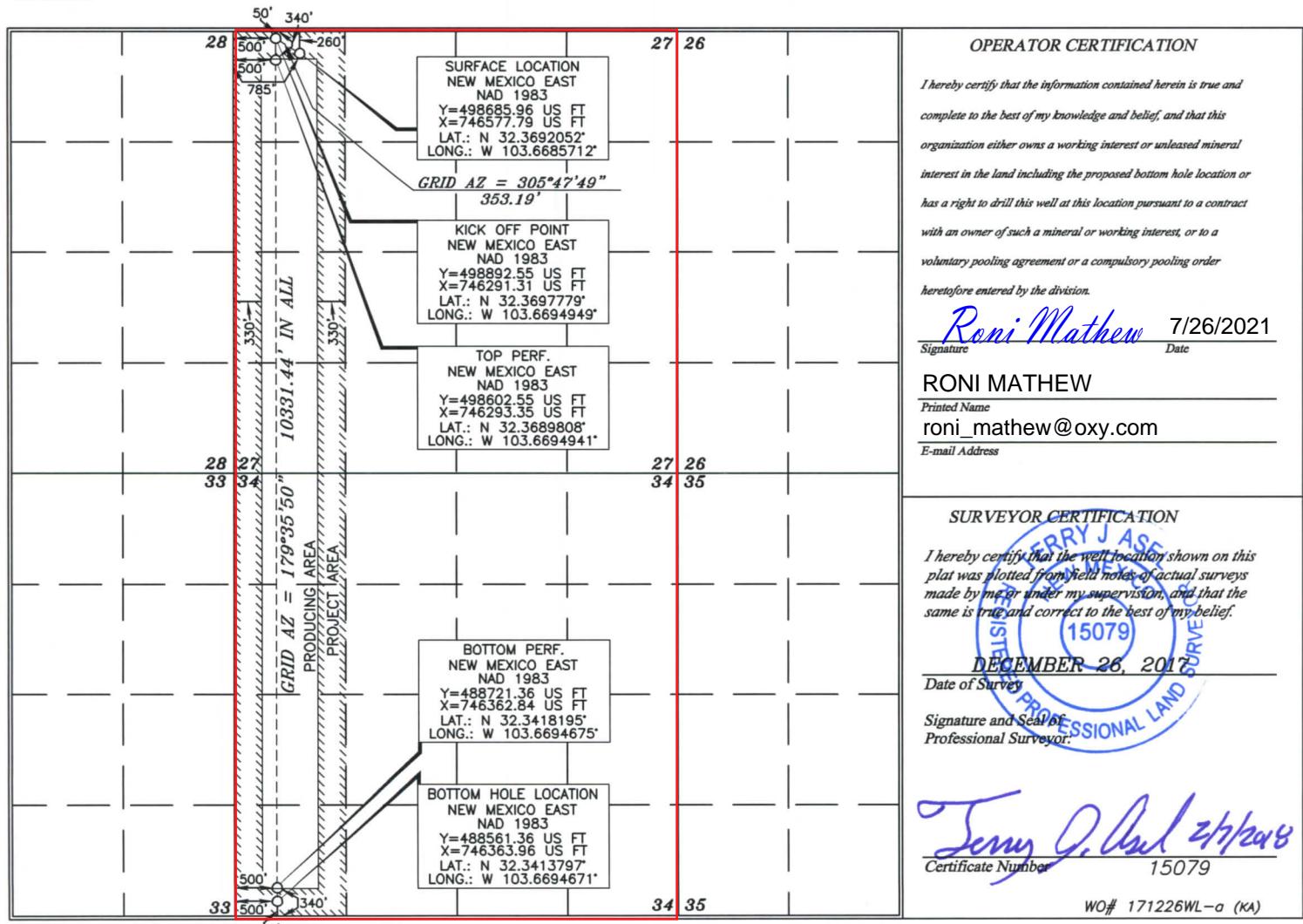
**Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	27	22 SOUTH	32 EAST, N.M.P.M.		260'	NORTH	785'	WEST	LEA

**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	
M	34	22 SOUTH	32 EAST, N.M.P.M.		180'	SOUTH	500'	WEST	LEA	
Dedicated Acres 1280	Joint or Infill	Consolidation Code	Order No.	R-21777						

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.





Side 2

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Tubing Size: 2.875" 6.5# L80 \_\_\_\_\_ Lining Material: \_\_\_\_\_

Type of Packer: 10K AS1-X Packer 5.5" \_\_\_\_\_

Packer Setting Depth: 8790' \_\_\_\_\_

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection? \_\_\_\_\_ Yes  No

If no, for what purpose was the well originally drilled? \_\_\_\_\_

**PRODUCER- OIL**

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2. Name of the Injection Formation: Avalon \_\_\_\_\_

3. Name of Field or Pool (if applicable): \_\_\_\_\_

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

**NO**

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5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

**OVERLYING: BRUSHY CANYON FORMATION 6837'**

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**UNDERLYING: 2nd Bone Spring FORMATION**

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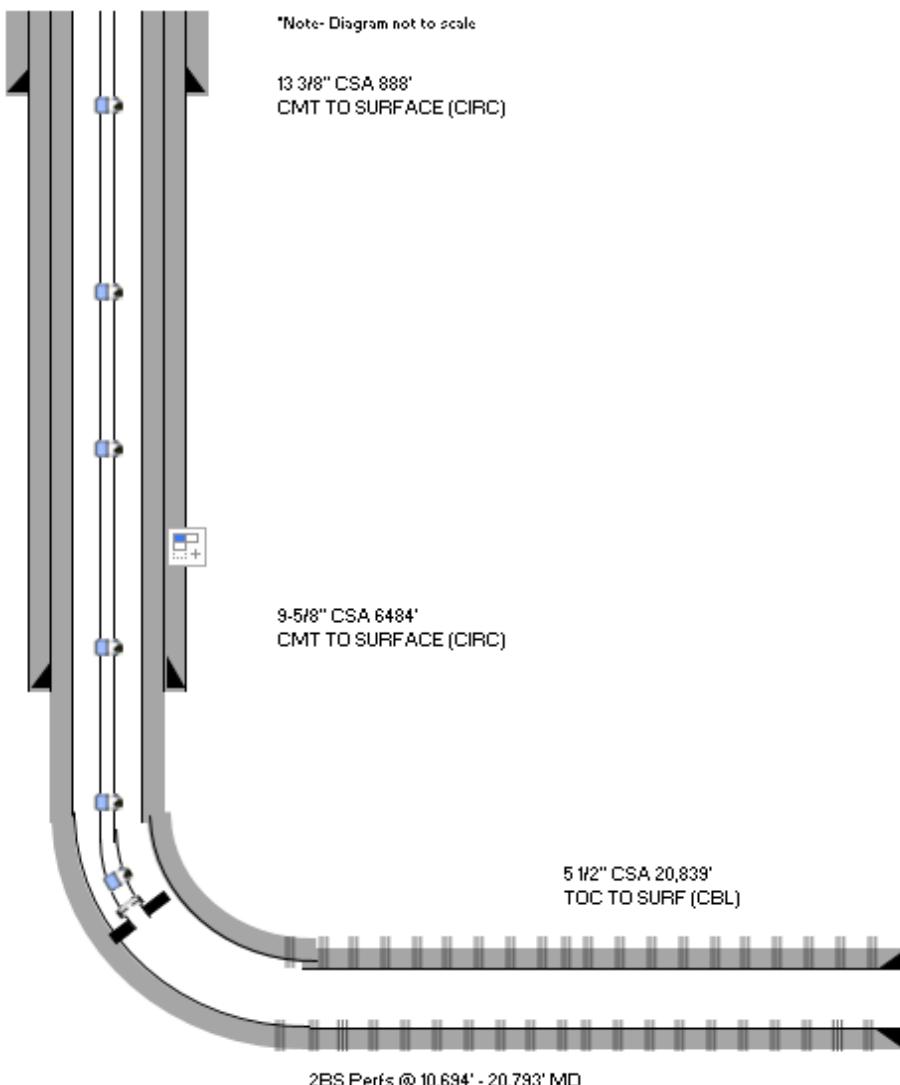
Side 1

## INJECTION WELL DATA SHEET

OPERATOR: OXY USA INC

WELL NAME &amp; NUMBER: TACO CAT 27-34 FEDERAL COM 21H

WELL LOCATION: <u>260 FNL 785 FWL</u>	<u>D</u>	<u>27</u>	<u>22S</u>	<u>32E</u>
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 17.5 Casing Size: 13.375

Cemented with: 1100 sx. or                    ft<sup>3</sup>

Top of Cement: 0 FT MD Method Determined: CBL

Intermediate Casing

Hole Size: 12.25 Casing Size: 9.625

Cemented with: 1685 sx. or                    ft<sup>3</sup>

Top of Cement: 0 FT MD Method Determined: CBL

Production Casing

Hole Size: 8.5 Casing Size: 5.5

Cemented with: 2335 sx. or                    ft<sup>3</sup>

Top of Cement: 0 FT MD Method Determined: CBL

Total Depth: 20,839' MD/ 10,848' TVDInjection Interval10,694' MD/ 10,526' TVD feet to 20,793' MD/ 10,849' TVD (PERFORATED)

(Perforated or Open Hole; indicate which)

Side 2

**INJECTION WELL DATA SHEET**Tubing Size: 2.375 Lining Material: NONEType of Packer: NONE- ANNULAR FLOW GAS LIFT

Packer Setting Depth: \_\_\_\_\_

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

**Additional Data**

1. Is this a new well drilled for injection? \_\_\_\_\_ Yes  No

If no, for what purpose was the well originally drilled? \_\_\_\_\_  
**HYDROCARBON PRODUCTION**

2. Name of the Injection Formation: 2ND BONE SPRING

3. Name of Field or Pool (if applicable): [51687] RED TANK;BONE SPRING, EAST

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_  
**NO**

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

**OVERLYING: FIRST BONE SPRING**

**UNDERLYING: HARKEY**

## Max Allowable Surface Pressure (MASP) Table

3/6/2025 Update

API10	Well Name	MASP Calculations and Results														
		Proposed Max Allowable Surface Pressure (MASP) (PSI)	Current Average Surface Pressure (PSI)	Max Achievable Surface Pressure (PSI)	Current Infrastructure (PSI)	Proposed Average Injection Rate (MMSCFPD)	Proposed Max Injection Rate (MMSCFPD)	Burst Calculation Depth (FT TVD)	Brine Pressure Gradient (PSI/FT)	Casing or Liner Burst (PSI)	MASP + Reservoir Brine Hydrostatic as a Pressure (%)	Top Perforation Depth (FT TVD)	MASP Gradient (PSI/FT)	Top Perforation Depth (FT TVD)	Gas Pressure Gradient (PSI/FT)	Formation Parting Pressure Gradient (PSI/FT)
30-025-44933	TACO CAT 27 34 FEDERAL COM #011H	1,300	670	1,300	3	4	9,339	0.468	12,640	45%	9,339	0.139	9,339	0.200	0.650	52%
30-025-44934	TACO CAT 27 34 FEDERAL COM #021H	1,300	1,087	1,300	3	4	10,586	0.468	12,640	49%	10,586	0.123	10,586	0.200	0.650	50%
Column		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Calculation										(1+6*7)/8		= 1/10				= (1+12*13) / (12/14)

## Mechanical Integrity Test (MIT) Summary Table

API10	Well Name	MIT #1	
		Date	Surface Pressure
30-025-44161	RED TANK 30 31 STATE COM #024Y	no record	
30-025-44193	RED TANK 30 31 STATE COM #014H	no record	
30-025-45923	AVOGATO 30 31 STATE COM #004H	12/5/2019	9800
30-025-45924	AVOGATO 30 31 STATE COM #021H	10/4/2019	9800
30-025-45925	AVOGATO 30 31 STATE COM #022H	10/11/2019	9800
30-025-45926	AVOGATO 30 31 STATE COM #023H	10/12/2019	9800
30-025-45957	AVOGATO 30 31 STATE COM #012H	11/4/2019	didn't record psi
30-025-45960	AVOGATO 30 31 STATE COM #024H	no record	
30-025-45961	AVOGATO 30 31 STATE COM #025H	no record	
30-025-45964	AVOGATO 30 31 STATE COM #074H	11/30/2019	9800
30-025-44934	TACO CAT 27 34 FEDERAL COM #021H	no record	

## Red Tank Gas Source Well List

Note- Any additional wells drilled, completed, and added to this gas gathering system after the application filing date will be included in the gas source well list.

API10	Well Name	CTB
3002545956	AVOGATO 30-31 STATE COM 11H	Red Tank 19 CTB
3002545957	AVOGATO 30-31 STATE COM 12H	Red Tank 19 CTB
3002545958	AVOGATO 30-31 STATE COM 13H	Red Tank 19 CTB
3002545959	AVOGATO 30-31 STATE COM 14H	Red Tank 19 CTB
3002545924	AVOGATO 30-31 STATE COM 21H	Red Tank 19 CTB
3002545925	AVOGATO 30-31 STATE COM 22H	Red Tank 19 CTB
3002545926	AVOGATO 30-31 STATE COM 23H	Red Tank 19 CTB
3002545960	AVOGATO 30-31 STATE COM 24H	Red Tank 19 CTB
3002545961	AVOGATO 30-31 STATE COM 25H	Red Tank 19 CTB
3002545929	AVOGATO 30-31 STATE COM 31H	Red Tank 19 CTB
3002545927	AVOGATO 30-31 STATE COM 32H	Red Tank 19 CTB
3002545928	AVOGATO 30-31 STATE COM 33H	Red Tank 19 CTB
3002545930	AVOGATO 30-31 STATE COM 34H	Red Tank 19 CTB
3002545931	AVOGATO 30-31 STATE COM 35H	Red Tank 19 CTB
3002545923	AVOGATO 30-31 STATE COM 4H	Red Tank 19 CTB
3002545964	AVOGATO 30-31 STATE COM 74H	Red Tank 19 CTB
3002544161	RED TANK 30 31 STATE COM 024Y	Red Tank 19 CTB
3002544063	RED TANK 30 31 STATE COM 034H	Red Tank 19 CTB
3002544193	RED TANK 30-31 STATE COM 014H	Red Tank 19 CTB
3002541885	RED TANK 31 STATE 5H	Red Tank 19 CTB
3002548756	SENILO FELINES 18 7 STATE COM 311H	Red Tank 19 CTB
3002548758	SENILO FELINES 18 7 STATE COM 312H	Red Tank 19 CTB
3002548757	SENILO FELINES 18 7 STATE COM 313H	Red Tank 19 CTB
3002548751	SENILO FELINES 18 7 STATE COM 31H	Red Tank 19 CTB
3002548754	SENILO FELINES 18 7 STATE COM 34H	Red Tank 19 CTB
3002544933	TACO CAT 27 34 FEDERAL COM 11H	Red Tank 27/28 CTB
3002544934	TACO CAT 27 34 FEDERAL COM 21H	Red Tank 27/28 CTB
3002546949	TACO CAT 27 34 FEDERAL COM 24H	Red Tank 27/28 CTB
3002546934	TACO CAT 27 34 FEDERAL COM 25H	Red Tank 27/28 CTB
3002546935	TACO CAT 27 34 FEDERAL COM 26H	Red Tank 27/28 CTB
3002544935	TACO CAT 27 34 FEDERAL COM 31H	Red Tank 27/28 CTB
3002546925	TACO CAT 27 34 FEDERAL COM 32H	Red Tank 27/28 CTB
3002546926	TACO CAT 27 34 FEDERAL COM 33H	Red Tank 27/28 CTB
3002546936	TACO CAT 27 34 FEDERAL COM 34H	Red Tank 27/28 CTB
3002546937	TACO CAT 27 34 FEDERAL COM 35H	Red Tank 27/28 CTB

## Red Tank Gas Analysis Summary 2/22/2023

- In 2022, the low-pressure and high-pressure gas systems were combined in Red Tank.
- The primary, third-party gas takeaway is Mark West.
- Central Tank Batteries (CTBs)
  - All producing wells flow to the Red Tank 19 CTB or the Red Tank 27/28 CTB.
  - See Gas Source Well List for list of wells.
  - All low-pressure gas lines are combined downstream of the CTBs.
- Centralized Gas Lift Compressors (CGLs)
  - All low-pressure gas lines connect to the Red Tank 19 CGL Station and Red Tank 26 CGL Station.
  - CGLs increase pressure from ~70 psig to ~1250 psig.
  - All high-pressure gas lines are combined downstream of the CGLs.
- Gas analysis is provided for:
  - Injection gas
  - Avalon production
  - First Bone Spring production
  - Second Bone Spring production
  - Harkey production



**Natural Gas Analysis Report**  
GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

<b>Sample Information</b>	
Sample Name	RED TANK BOO OUTLET A
WELL NAME/EU#/FMP#	RED TANK BOO OUTLET A/ 16299C
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	12-7-2022
Air temperature	61
Flow Rate (MCF/Day)	35323.47
Heat Tracing	Heated Hose & Gasifier
Type of Sample	spot-cylinder
Sampling Method	fill and empty
Operator	AKM MEASUREMENT
State	New Mexico
Region Name	Permian EOR
API#	NA
Feild	EAST
Sampling point	SAMPLE PROBE
Method Name	C9
Injection Date	2023-01-04 09:32:59
Report Date	2023-01-04 09:37:29
EZReporter Configuration File	6-17-2022 OXY GPA C9+ H2S #2.cfgx
Source Data File	deef27a1-bbbf-4190-9370-bf7235ce6ff4
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

### Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	35113.5	1.9809	0.00005642	1.9819	0.0	0.01917	0.219	
Methane	1029730.2	75.2428	0.00007307	75.2804	762.1	0.41698	12.804	
CO2	62268.9	2.9380	0.00004718	2.9395	0.0	0.04467	0.503	
Ethane	253594.1	11.5242	0.00004544	11.5300	204.5	0.11970	3.094	
H2S	0.0	0.0012	0.00000000	0.0012	0.0	0.00001	0.000	
Propane	171344.9	5.5694	0.00003250	5.5722	140.5	0.08484	1.540	
iso-butane	56016.2	0.6200	0.00001107	0.6203	20.2	0.01245	0.204	
n-Butane	131365.6	1.4400	0.00001096	1.4407	47.1	0.02891	0.456	
iso-pentane	24338.2	0.2349	0.00000965	0.2350	9.4	0.00585	0.086	
n-Pentane	24956.6	0.2343	0.00000939	0.2344	9.4	0.00584	0.085	
hexanes	12499.0	0.0933	0.00000747	0.0934	4.5	0.00278	0.039	
heptanes	9067.0	0.0544	0.00000600	0.0544	3.0	0.00188	0.025	
octanes	3214.0	0.0163	0.00000507	0.0163	1.0	0.00064	0.008	
nonanes+	60.0	0.0003	0.00000489	0.0003	0.0	0.00001	0.000	
Total:		99.9500		100.0000	1201.8	0.74374	19.063	

### Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.9500		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	109.0		
Flowing Pressure (psia)	1244.0		
Gross Heating Value (BTU / Ideal cu.ft.)	1201.8	1180.9	
Gross Heating Value (BTU / Real cu.ft.)	1206.0	1185.5	
Relative Density (G), Real	0.7460	0.7442	

Received by QCD: 3/11/2025 3:30:02 PM	Parameter	Value	Lower Limit	Upper Limit	Status		Page 27 of 103
Total un-normalized amount		99.9500	97.0000	103.0000	Pass		



**Natural Gas Analysis Report**  
GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

Sample Information	
Sample Name	RED TANK 19 CTB TEST 2 - AVOGATO 12H
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	02-01-2023
Meter Number	15602T
Air temperature	28
Flow Rate (MCF/Day)	3866
Heat Tracing	Heated Hose & Gasifier
Sample description/mtr name	RED TANK 19 CTB TEST 2 - AVOGATO 12H
Sampling Method	fill and empty
Operator	AKM MEASUREMENT
State	New Mexico
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	EAST
FLOC	OP-L2154-WELLS-WPI-0000003
Sample Sub Type	PRODUCTION
Sample Name Type	WELL
Vendor	AKM MEASUREMENT
Cylinder #	5577
Sampled by	JONATHAN ALDRICH
Sample date	2-17-2023
Analyzed date	2-20-2023
Method Name	C9
Injection Date	2023-02-20 09:05:58
Report Date	2023-02-20 09:10:21
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	08344528-2750-4699-a357-8df8fac3148e
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

### Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	48186.5	2.7157	0.00005636	2.7212	0.0	0.02632	0.300	
Methane	999802.4	73.2513	0.00007327	73.3991	743.0	0.40656	12.484	
CO2	147234.2	6.9584	0.00004726	6.9724	0.0	0.10595	1.194	
Ethane	206923.5	9.4164	0.00004551	9.4355	167.4	0.09796	2.532	
H2S	0.0	0.0020	0.00000000	0.0020	0.0	0.00002	0.000	
Propane	142823.5	4.6801	0.00003277	4.6896	118.3	0.07140	1.296	
iso-butane	49569.7	0.5509	0.00001111	0.5520	18.0	0.01108	0.181	
n-Butane	119289.9	1.3103	0.00001098	1.3130	42.9	0.02635	0.415	
iso-pentane	30197.3	0.2933	0.00000971	0.2939	11.8	0.00732	0.108	
n-Pentane	31952.1	0.3025	0.00000947	0.3032	12.2	0.00755	0.110	
hexanes	21519.0	0.1635	0.00000760	0.1638	7.8	0.00487	0.068	
heptanes	15914.0	0.0994	0.00000624	0.0996	5.5	0.00345	0.046	
octanes	7604.0	0.0424	0.00000558	0.0425	2.7	0.00168	0.022	
nonanes+	1967.0	0.0122	0.00000619	0.0122	0.9	0.00054	0.007	
Total:		99.7985		100.0000	1130.4	0.77104	18.763	

### Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.7985		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	48.0		

Result

Dry

Sat.

Gross Heating Value (BTU / Ideal cu.ft.)	1130.4	1110.7
Gross Heating Value (BTU / Real cu.ft.)	1134.4	1115.1
Relative Density (G), Real	0.7734	0.7711

## Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status
Total un-normalized amount	99.7986	97.0000	103.0000	Pass



**Natural Gas Analysis Report**  
GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

Sample Information	
Sample Name	RED TANK 19 CTB TEST 1 - AVOGATO 4H
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	02-01-2023
Meter Number	15602T
Air temperature	28
Flow Rate (MCF/Day)	3765
Heat Tracing	Heated Hose & Gasifier
Sample description/mtr name	RED TANK 19 CTB TEST 1 - AVOGATO 4H
Sampling Method	fill and empty
Operator	AKM MEASUREMENT
State	New Mexico
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	EAST
FLOC	OP-L2154-WELLS-WPI-0000001
Sample Sub Type	PRODUCTION
Sample Name Type	WELL
Vendor	AKM MEASUREMENT
Cylinder #	1951
Sampled by	JONATHAN ALDRICH
Sample date	2-17-2023
Analyzed date	2-20-2023
Method Name	C9
Injection Date	2023-02-20 08:35:10
Report Date	2023-02-20 08:39:41
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	10887b57-476b-466c-81b6-c458f1ed6b0e
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

### Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	40494.7	2.2822	0.00005636	2.2934	0.0	0.02218	0.253	
Methane	989287.8	72.4809	0.00007327	72.8353	737.3	0.40343	12.391	
CO2	110434.5	5.2192	0.00004726	5.2447	0.0	0.07969	0.898	
Ethane	229423.3	10.4403	0.00004551	10.4914	186.1	0.10892	2.816	
H2S	0.0	0.0030	0.00000000	0.0030	0.0	0.00004	0.000	
Propane	169309.3	5.5480	0.00003277	5.5751	140.6	0.08488	1.541	
iso-butane	60658.0	0.6741	0.00001111	0.6774	22.1	0.01359	0.222	
n-Butane	150224.5	1.6501	0.00001098	1.6582	54.2	0.03328	0.525	
iso-pentane	36481.2	0.3544	0.00000971	0.3561	14.3	0.00887	0.131	
n-Pentane	39885.8	0.3777	0.00000947	0.3795	15.2	0.00945	0.138	
hexanes	30703.0	0.2333	0.00000760	0.2344	11.2	0.00697	0.097	
heptanes	26031.0	0.1626	0.00000624	0.1634	9.0	0.00565	0.076	
octanes	13089.0	0.0730	0.00000558	0.0734	4.6	0.00289	0.038	
nonanes+	2359.0	0.0146	0.00000619	0.0147	1.0	0.00065	0.008	
Total:		99.5135		100.0000	1195.7	0.78052	19.134	

### Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.5135		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	68.0		

Gross Heating Value (BTU / Ideal cu.ft.)

Dry

Sat.

1195.7 1174.9

Gross Heating Value (BTU / Real cu.ft.)

1200.2 1179.8

Relative Density (G), Real

0.7831 0.7807

## Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	99.5135	97.0000	103.0000	Pass	



**Natural Gas Analysis Report**  
GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

Sample Information	
Sample Name	RED TANK 19 CTB TEST 7 - AVOGATO 24H
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	02-01-2023
Meter Number	15607T
Air temperature	28
Flow Rate (MCF/Day)	1305.4
Heat Tracing	Heated Hose & Gasifier
Sample description/mtr name	RED TANK 19 CTB TEST 7 - AVOGATO 24H
Sampling Method	fill and empty
Operator	AKM MEASUREMENT
State	New Mexico
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	EAST
FLOC	OP-L2154-WELLS-WPI-0000009
Sample Sub Type	PRODUCTION
Sample Name Type	WELL
Vendor	AKM MEASUREMENT
Cylinder #	1246
Sampled by	JONATHAN ALDRICH
Sample date	2-17-2023
Analyzed date	2-20-2023
Method Name	C9
Injection Date	2023-02-20 10:34:34
Report Date	2023-02-20 10:39:51
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	9cc93a6d-5885-419b-95bd-431d20c94d76
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

### Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	39084.4	2.2028	0.00005636	2.2084	0.0	0.02136	0.244	
Methane	999831.5	73.2534	0.00007327	73.4426	743.5	0.40680	12.495	
CO2	67106.4	3.1715	0.00004726	3.1797	0.0	0.04832	0.545	
Ethane	254356.0	11.5749	0.00004551	11.6048	205.8	0.12048	3.114	
H2S	0.0	0.0015	0.00000000	0.0015	0.0	0.00002	0.000	
Propane	182914.5	5.9938	0.00003277	6.0093	151.5	0.09149	1.661	
iso-butane	63457.3	0.7053	0.00001111	0.7071	23.0	0.01419	0.232	
n-Butane	157844.7	1.7338	0.00001098	1.7383	56.8	0.03488	0.550	
iso-pentane	37115.4	0.3605	0.00000971	0.3615	14.5	0.00901	0.133	
n-Pentane	40679.8	0.3852	0.00000947	0.3862	15.5	0.00962	0.140	
hexanes	22267.0	0.1692	0.00000760	0.1696	8.1	0.00505	0.070	
heptanes	20244.0	0.1264	0.00000624	0.1267	7.0	0.00438	0.059	
octanes	9627.0	0.0537	0.00000558	0.0538	3.4	0.00212	0.028	
nonanes+	1694.0	0.0105	0.00000619	0.0105	0.7	0.00046	0.006	
Total:		99.7425		100.0000	1230.0	0.76818	19.277	

### Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.7425		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	50.0		

	Dry	Sat.
Gross Heating Value (BTU / Ideal cu.ft.)	1230.0	1208.6
Gross Heating Value (BTU / Real cu.ft.)	1234.6	1213.6
Relative Density (G), Real	0.7708	0.7685

## Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status
Total un-normalized amount	99.7425	97.0000	103.0000	Pass



**Natural Gas Analysis Report**  
GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

Sample Information	
Sample Name	RED TANK 19 CTB TEST 2 - AVOGATO 74H
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	02-01-2023
Meter Number	15602T
Air temperature	28
Flow Rate (MCF/Day)	1994.9
Heat Tracing	Heated Hose & Gasifier
Sample description/mtr name	RED TANK 19 CTB TEST 2 - AVOGATO 74H
Sampling Method	fill and empty
Operator	AKM MEASUREMENT
State	New Mexico
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	EAST
FLOC	OP-L2154-WELLS-WPI-0000016
Sample Sub Type	PRODUCTION
Sample Name Type	WELL
Vendor	AKM MEASUREMENT
Cylinder #	2746
Sampled by	JONATHAN ALDRICH
Sample date	2-17-2023
Analyzed date	2-20-2023
Method Name	C9
Injection Date	2023-02-20 08:49:49
Report Date	2023-02-20 08:53:55
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	57710727-215f-4e57-99d7-28688ceac72c
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

### Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	36071.4	2.0329	0.00005636	2.0410	0.0	0.01974	0.225	
Methane	1002465.2	73.4464	0.00007327	73.7362	746.5	0.40842	12.545	
CO2	63558.5	3.0038	0.00004726	3.0157	0.0	0.04582	0.516	
Ethane	251773.5	11.4574	0.00004551	11.5026	204.0	0.11942	3.087	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	182746.3	5.9883	0.00003277	6.0120	151.6	0.09153	1.662	
iso-butane	66571.1	0.7399	0.00001111	0.7428	24.2	0.01491	0.244	
n-Butane	163952.6	1.8009	0.00001098	1.8080	59.1	0.03628	0.572	
iso-pentane	37039.5	0.3598	0.00000971	0.3612	14.5	0.00900	0.133	
n-Pentane	41338.7	0.3914	0.00000947	0.3930	15.8	0.00979	0.143	
hexanes	24852.0	0.1888	0.00000760	0.1896	9.0	0.00564	0.078	
heptanes	20769.0	0.1297	0.00000624	0.1302	7.2	0.00450	0.060	
octanes	9581.0	0.0534	0.00000558	0.0536	3.4	0.00211	0.028	
nonanes+	2267.0	0.0140	0.00000619	0.0141	1.0	0.00062	0.008	
Total:		99.6069		100.0000	1236.3	0.76780	19.301	

### Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.6069		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	60.0		

Gross Heating Value (BTU / Ideal cu.ft.)

Dry

Sat.

1236.3 1214.8

Gross Heating Value (BTU / Real cu.ft.)

1241.0 1219.9

Relative Density (G), Real

0.7704 0.7682

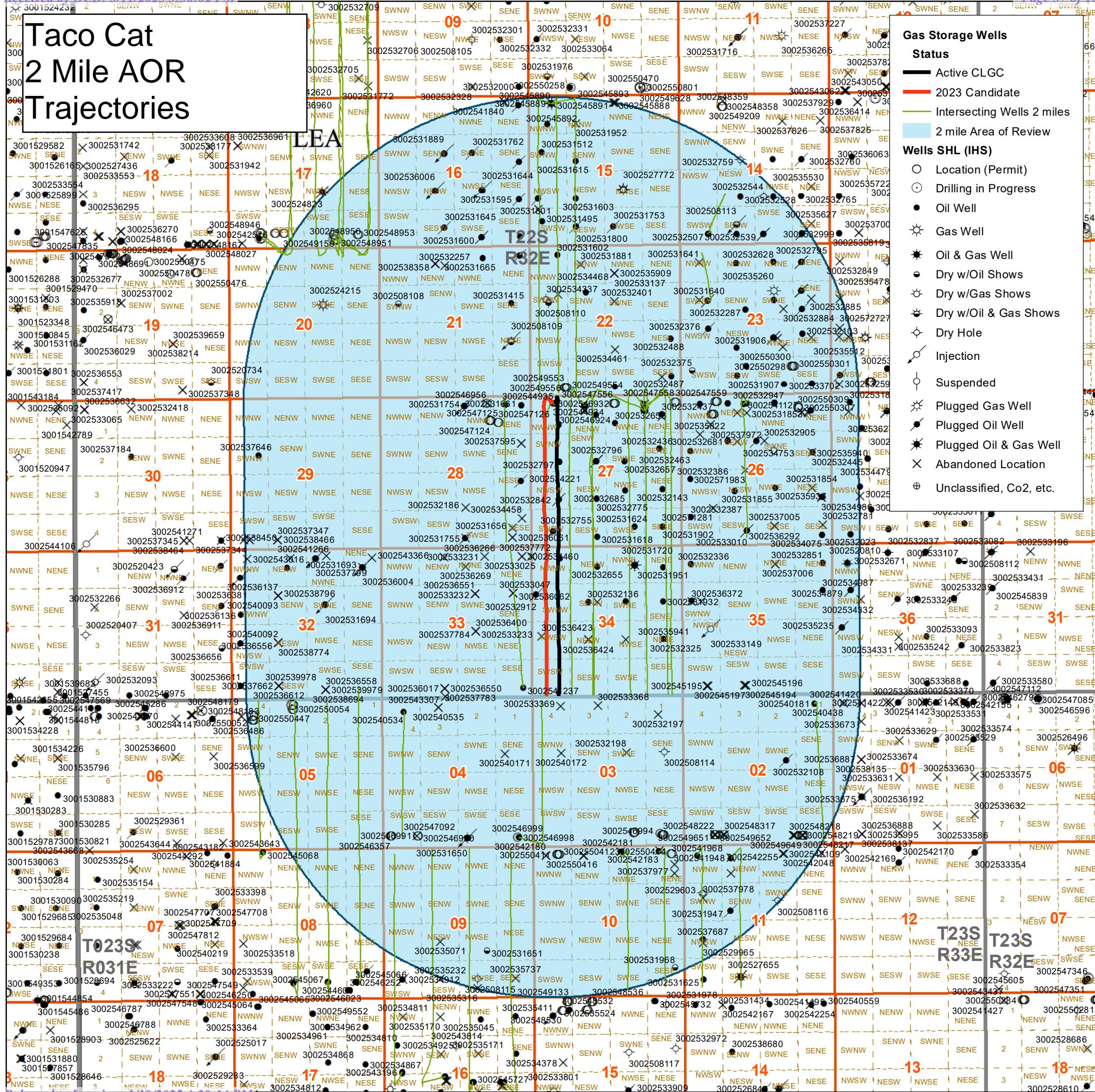
## Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	99.6069	97.0000	103.0000	Pass	

# Area of Review

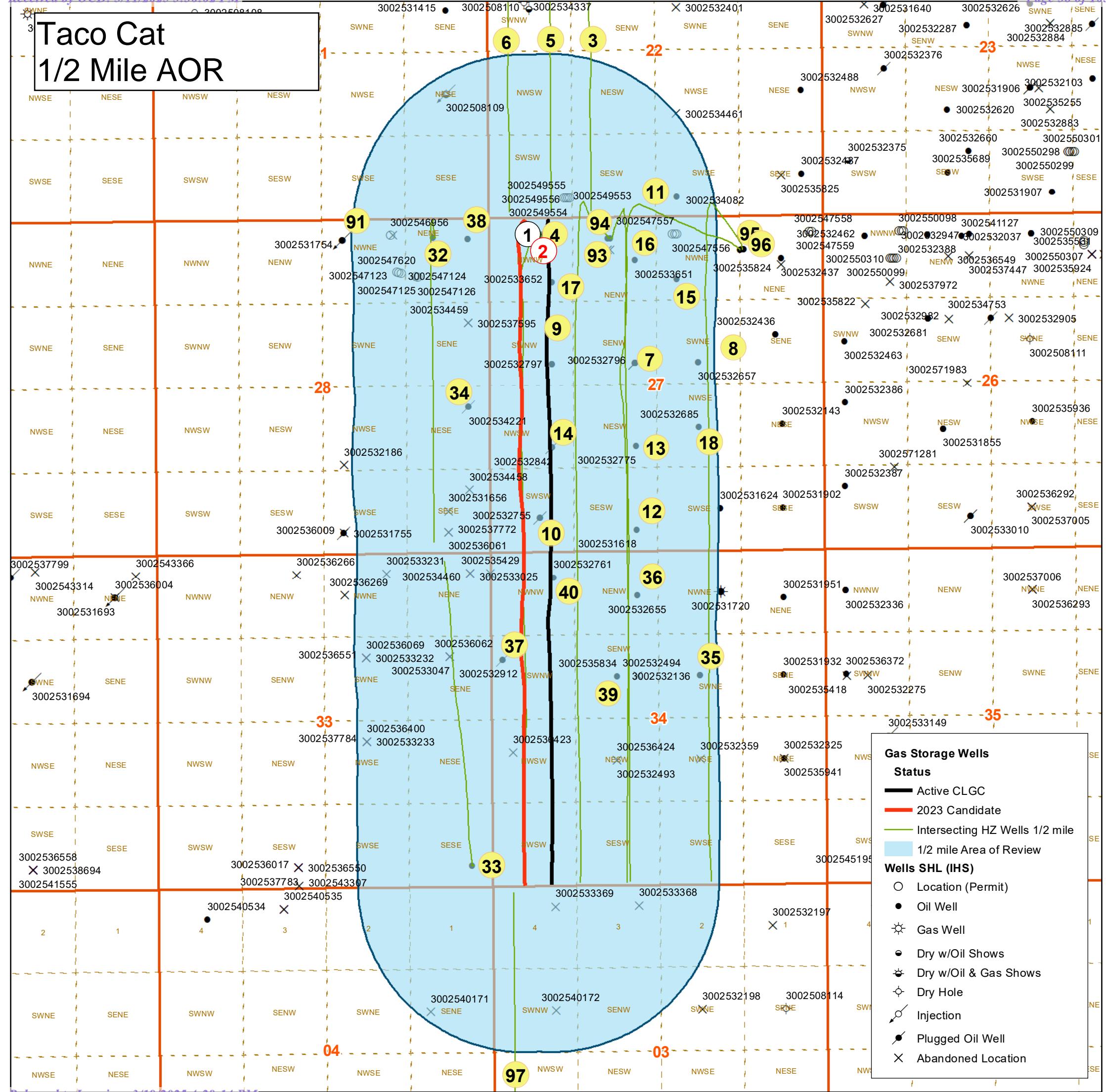


# Taco Cat 2 Mile AOR Trajectories



# Taco Cat

## 1/2 Mile AOR



## AOR Table

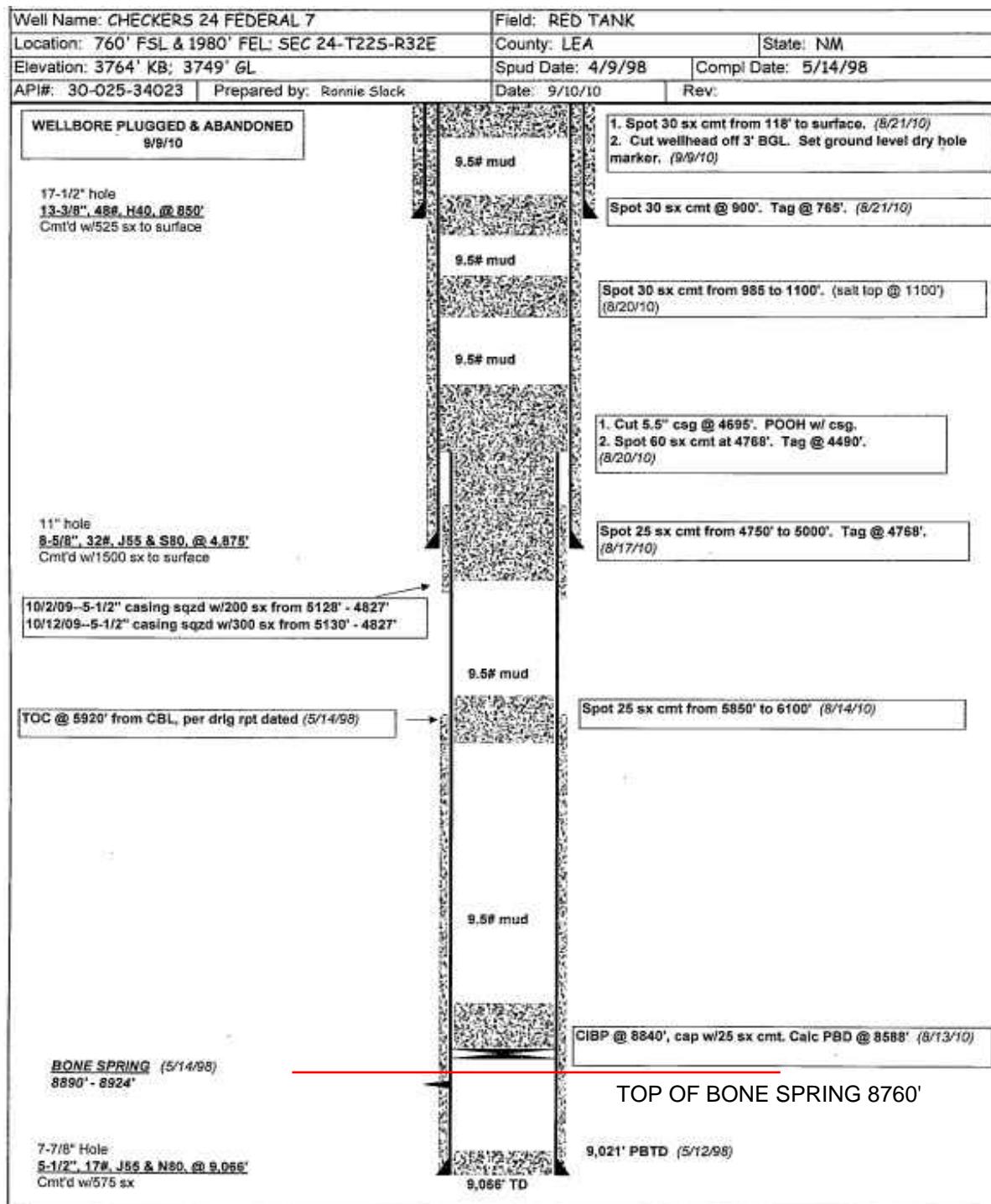
**Key:** **Bold Black** - Approved CLGC well, **Bold Red**- New Candidate well

Well ID	API NUMBER	Current Operator	LEASE NAME	WELL NUMBER	Well Type:	Status:	Footages N/S	Footages E/W	Surface Location Unit	Surface Location Section	Surface Location TShip	Surface Location Range	True Vertical Depth [ft]	Measured Depth [ft]	HOLE SIZE [in]	CSG SIZE [in]	SET AT [ft]	CMT TO WELLFILE		HOW MEASURE		Comment	Current Producing Pool
																		SX CMT [ft]	D	Current Completion [ft]			
1 30-025-44933	OXY USA INC	TACO CAT 27 34 FEDERAL COM	011H Oil	Active	260 N	855 W	D	27 22S	32E	7/29/2018	9514	19732	17.5 9.875 8.75	13.375 7.625 5.5	867 8810 19703	800 2225 705	0 Circ 204 Calc 5800 CBL	9445-19621	2021 CLGC Well, Active	[51683] RED TANK; BONE SPRING			
2 30-025-44934	OXY USA INC	TACO CAT 27 34 FEDERAL COM	021H Oil	Active	260 N	785 W	D	27 22S	32E	7/27/2018	10849	20904	17.5 12.25 8.5	13.375 9.625 5.5	858 6484 20882	1100 1685 2335	0 Circ 0 Circ 0 Circ	10699-20791	2023 CLGC Candidate	[51683] RED TANK; BONE SPRING			
3 30-025-45892	MARATHON OIL PERMIAN LLC	FRIZZLE FRY 15 WXY FEDERAL COM	007H Oil	Active	274 N	852 W	D	15 22S	32E	8/13/2019	12111	22217	17.5 12.25 8.75	13.375 9.625 5.5	1074 8906 22196	920 2050 3740	0 Circ 0 Calc 2179 Calc	12320-22126	Top of 5.5" liner 11794'	[98258] WC-025 S223203A; LWR WOLFCAMP (GAS)			
4 30-025-44935	OXY USA INC	TACO CAT 27 34 FEDERAL COM	031H Oil	Active	260 N	820 W	D	27 22S	32E	7/25/2018	12205	22168	17.5 12.25 8.5 6.75	13.375 9.625 7.625 5.5	825 8619 11075 22144	1140 2265 155 700	0 Circ 0 Circ 6800 Calc 10500 Calc	11982-22029		[98286] WC-025 G-08 S223227D; UPPER WOLFCAMP			
5 30-025-45887	MARATHON OIL PERMIAN LLC	FRIZZLE FRY 15 TB FEDERAL COM	001H Oil	Active	273 N	792 W	D	15 22S	32E	8/15/2019	11967	21990	17.5 12.25 8.75	13.375 9.625 5.5	1061 8910 21977	940 2050 890	0 Circ 2476 Calc 0 Circ	12024-21908		[51683] RED TANK; BONE SPRING			
6 30-025-45890	MARATHON OIL PERMIAN LLC	FRIZZLE FRY 15 WA FEDERAL COM	002H Oil	Active	273 N	762 W	D	15 22S	32E	8/16/2019	12115	22467	17.5 12.25 8.75 6.125	13.375 9.625 7.625 4.5	1086 8914 12527 22457	940 3240 1000 1005	0 Circ 0 Circ 0 Circ 11762 Circ	12606-22334	Top of 4.5" liner 11762'	[98166] WC-025 G-09 S233216K; UPR WOLFCAMP			
7 30-025-32796	OXY USA INC	FEDERAL 27	4 Oil	PA	2310 N	2310 W	F	27 22S	32E	8/9/1996	8730	8730	14.75 9.875 6.75	10.75 7.625 4.5	805 4464 8730	780 1230 1095	0 Circ 0 Circ 2800 Calc	N/A	N/A				
8 30-025-32657	OXY USA INC	PRIZE FEDERAL	7 Oil	Active	2310 N	1980 E	G	27 22S	32E	7/6/1996	8715	8715	14.75 9.875 6.75	10.75 7.625 4.5	830 4490 8715	780 1200 1080	0 Circ 0 Circ 3550 Calc	8364-8416		[51689] RED TANK; DELAWARE, WEST			
9 30-025-32797	OXY USA INC	FEDERAL 27	5 Oil	Active	2310 N	990 W	E	27 22S	32E	11/11/1996	8714	8714	14.75 9.875 6.75	10.75 7.625 4.5	808 4450 8714	700 1200 900	0 Circ 0 Circ 2990 Calc	7188-7204; 7299-7310; 7638-7690; 8356-8378		[51689] RED TANK; DELAWARE, WEST			
10 30-025-32755	OXY USA INC	FEDERAL 27	8 Oil	PA	580 S	790 W	M	27 22S	32E	6/9/1995	8732	8732	14.75 9.875 6.75	10.75 7.625 4.5	822 4250 8732	800 1400 875	0 Circ 0 Circ 2030 Calc	N/A	N/A				
11 30-025-34082	OXY USA INC	PRIZE FEDERAL	11 Oil	Active	330 S	2310 E	O	22 22S	32E	8/19/1997	8780	8780	14.75 9.875 6.75	10.75 7.625 4.5	802 4500 8780	800 1550 1255	0 Circ 0 Circ 2250 Calc	7000-7168; 8360-8440		[51689] RED TANK; DELAWARE, WEST			
12 30-025-31618	OXY USA INC	FEDERAL 27	1 Oil	Active	330 S	2310 W	N	27 22S	32E	6/18/1992	8850	8850	17.5 11 7.875	13.375 8.625 5.5	850 4600 8850	1060 2158 2360	0 Circ 0 Circ 2360 Calc	8330-8391		[51689] RED TANK; DELAWARE, WEST			
13 30-025-32775	OXY USA INC	FEDERAL 27	7 Oil	Active	1650 S	2310 W	K	27 22S	32E	7/8/1995	8734	8734	14.75 9.875 6.75	10.75 7.625 4.5	805 4470 8734	700 1400 980	0 Circ 0 Circ 1775 Calc	8370-8470		[51689] RED TANK; DELAWARE, WEST			
14 30-025-32842	OXY USA INC	FEDERAL 27	6 Oil	PA	1650 S	990 W	L	27 22S	32E	10/11/1995	8700	8700	14.75 9.875 6.75	10.75 7.625 4.5	825 4440 8700	600 1300 1000	0 Circ 0 Circ 2358 Calc	N/A	N/A				
15 30-025-32656	OXY USA INC	PRIZE FEDERAL	6 Oil	Active	990 N	2310 E	B	27 22S	32E	1/27/1997	8756	8756	14.75 9.875 6.75	10.75 7.625 4.5	830 4486 8756	800 1450 780	0 Circ 0 Circ 3280 Calc	8346-8360		[51689] RED TANK; DELAWARE, WEST			
16 30-025-33651	OXY USA INC	FEDERAL 27	3 Oil	Active	660 N	2310 W	C	27 22S	32E	12/27/1997	8800	8800	14.75 9.875 6.75	10.75 7.625 4.5	804 4470 8800	800 1500 1440	0 Circ 0 Circ 2594 Calc	6987-7150		[51689] RED TANK; DELAWARE, WEST			
17 30-025-33652	OXY USA INC	FEDERAL 27	2 Oil	Active	990 N	990 W	D	27 22S	32E	6/8/1998	8653	8653	14.75 9.875 6.75	10.75 7.625 4.5	804 4460 8653	750 1150 1080	0 Circ 0 Circ 2650 Calc	7184-7678		[51689] RED TANK; DELAWARE, WEST			
18 30-025-32685	OXY USA INC	PRIZE FEDERAL	8 Oil	Active	1980 S	1980 E	J	27 22S	32E	12/7/1995	8750	8750	14.75 9.875 6.75	10.75 7.625 4.5	803 4510 8750	550 1275 1050	0 Circ 0 Circ 3504 Calc	8376-8400		[51689] RED TANK; DELAWARE, WEST			
19 30-025-45956	OXY USA INC	AVOGATO 30 31 STATE COM	011H Oil	Active	160 N	885 W	D	30 22S	33E	9/8/2019	9426	19645	17.5 12.25 8.5	13.375 9.625 5.5	1049 8850 19614	1340 2149 2150	0 CIRC 0 CIRC 8322 CBL	9558'-19537"	2021 CLGC Well, Active	[51687] RED TANK; BONE SPRING, EAST			
20 30-025-45958	OXY USA INC	AVOGATO 30 31 STATE COM	013H Oil	Active	160 N	2375 E	B	30 22S	33E	8/23/2019	9397	19645	17.5 12.25 8.5	13.375 9.625 4.5	1060 8910 19631	1340 1600 2150	0 CIRC 0 CIRC 8380 CBL	9752'-19532"	2021 CLGC Well, Active	[51687] RED TANK; BONE SPRING, EAST			
21 30-025-45959	OXY USA INC	AVOGATO 30 31 STATE COM	014H Oil	Active	160 N	2340 E	B	30 22S	33E	8/26/2019	9532	19891	17.5 12.25 8.5	13.375 9.625 5.5	1060 9007 19865	1340 2125 2135	0 CIRC 0 CIRC 6435 CBL	9598'-19778"	2021 CLGC Well, Active	[51687] RED TANK; BONE SPRING, EAST			
22 30-025-44161	OXY USA INC	RED TANK 30 31 STATE COM	024Y Oil	Active	200 N	270 E	A	30 22S	33E	11/21/2017	10863	20600	17.5 12.25 8.5	13.375 9.625 5.5	1090 8687 20590	1165 2385 2260	0 CIRC 0 CIRC 1865 CALC	11300'-20364"	2023 CLGC Candidate	[51687] RED TANK; BONE SPRING, EAST			
23 30-025-44193	OXY USA INC	RED TANK 30 31 STATE COM	014H Oil	Active	200 N	710 E	A	30 22S	33E	8/1/2018	9407	19687	17.5 12.25 8.5	13.375 9.625 5.5	1072 6776 19681</								

28 30-025-45957 OXY USA INC	AVOGATO 30 31 STATE COM	012H Oil	Active	160 N	920 W	D	30 22S	33E	9/10/2019	9614	19873	17.5	13.375	1037	1340	0 CIRC	9578'-19759'	2023 CLGC Candidate	[51687] RED TANK; BONE SPRING, EAST
29 30-025-45960 OXY USA INC	AVOGATO 30 31 STATE COM	024H Oil	Active	420 N	1820 E	B	30 22S	33E	7/16/2019	10961	21078	17.5	13.375	1054	1340	0 CIRC	10610'-20985'	2023 CLGC Candidate	[51687] RED TANK; BONE SPRING, EAST
30 30-025-45961 OXY USA INC	AVOGATO 30 31 STATE COM	025H Oil	Active	420 N	1785 E	B	30 22S	33E	7/18/2019	10785	20988	17.5	13.375	1052	1340	0 CIRC	10572'-20896'	2023 CLGC Candidate	[51687] RED TANK; BONE SPRING, EAST
31 30-025-45964 OXY USA INC	AVOGATO 30 31 STATE COM	074H Oil	Active	160 N	1155 E	A	30 22S	33E	9/15/2019	11405	21667	17.5	13.375	1058	1340	0 CIRC	11772'-21527'	2023 CLGC Candidate	[51687] RED TANK; BONE SPRING, EAST
32 30-025-41189 OXY USA INC	RED TANK 28 FEDERAL	005H Oil	Active	295 N	880 E	A	28 22S	32E	9/25/2014	8418	13270	14.75	11.75	927	690	0 Circ	8602-13122		[51689] RED TANK; DELAWARE, WEST
33 30-025-41237 OXY USA INC	RED TANK 33 FEDERAL	001H Oil	Active	330 S	330 E	P	33 22S	32E	9/23/2014	8431	13014	14.75	11.75	1129	840	0 Circ	8690-12788		[51689] RED TANK; DELAWARE, WEST
34 30-025-34221 OXY USA INC	RED TANK 28 FEDERAL	6 Oil	PA	2310 S	330 E	I	28 22S	32E	8/23/1998	8700	8700	14.75	10.75	815	750	0 Circ	8300-8540		[51689] RED TANK; DELAWARE, WEST
35 30-025-32136 OXY USA INC	RED TANK 34 FEDERAL	4 Oil	Active	1980 N	1980 E	G	34 22S	32E	1/21/1994	8850	8850	17.5	13.375	764	1050	0 Circ	4800-4820; 8414-8442		[51689] RED TANK; DELAWARE, WEST
36 30-025-32655 OXY USA INC	RED TANK 34 FEDERAL	14 Oil	Active	710 N	2310 W	C	34 22S	32E	9/21/1994	8718	8718	17.5	13.375	800	950	0 Circ	8378-8412		[51689] RED TANK; DELAWARE, WEST
37 30-025-32912 OXY USA INC	RED TANK 34 FEDERAL	15 Oil	PA	1700 N	180 W	E	34 22S	32E	6/24/1995	8742	8742	14.75	10.75	818	700	0 Circ	N/A		N/A
38 30-025-31661 OXY USA INC	RED TANK 28 FEDERAL	1 Oil	Active	330 N	330 E	A	28 22S	32E	10/20/1992	8740	8740	17.5	13.375	817	850	0 Circ	7004-7218; 8373-8409		[51689] RED TANK; DELAWARE, WEST
39 30-025-35834 OXY USA INC	RED TANK 34 FEDERAL	12 Oil	Active	1980 N	1980 W	F	34 22S	32E	4/20/2002	8795	8795	14.75	10.75	1025	800	0 Circ	8420-8435		[51689] RED TANK; DELAWARE, WEST
40 30-025-32761 OXY USA INC	RED TANK 34 FEDERAL	13 Oil	Active	410 N	990 W	D	34 22S	32E	12/8/1994	8722	8722	17.5	13.375	812	950	0 Circ	8366-8392		[51689] RED TANK; DELAWARE, WEST
41 30-025-33074 OXY USA INC	COVINGTON A FEDERAL	11 Oil	Active	660 S	660 E	P	25 22S	32E	10/28/1995	9010	9010	14.75	10.75	802	600	0 CIRC	8070-8084; 8552-8570		[51689] RED TANK; DELAWARE, WEST
42 30-025-33688 OXY USA INC	MULE DEER 36 STATE	7 Oil	Active	330 S	660 E	P	36 22S	32E	12/10/1996	9100	9100	12.25	9.625	850	365	0 CIRC	8942-8989		[51683] RED TANK; BONE SPRING
43 30-025-33399 OXY USA INC	COVINGTON A FEDERAL	14 Oil	PA	1650 N	1650 E	G	25 22S	32E	4/27/1996	8966	8966	14.75	10.75	800	800	0 CIRC	N/A		N/A
44 30-025-45928 OXY USA INC	AVOGATO 30 31 STATE COM	033H Oil	Active	240 N	1420 W	C	30 22S	33E	6/24/2019	11991	22103	17.5	13.375	1050	1340	0 Circ	11819'-22000'		[51687] RED TANK; BONE SPRING, EAST
45 30-025-33224 OXY USA INC	COVINGTON A FEDERAL	16 Oil	PA	660 N	1980 E	B	25 22S	32E	7/23/1996	8980	8980	14.75	10.75	830	780	0 CIRC	N/A		N/A
46 30-025-33370 CIMAREX ENERGY CO.	THYME APY FEDERAL	1 Oil	PA	330 N	1650 E	B	1 23S	32E	4/9/1996	10250	10250	17.5	13.375	1165	750	0 CIRC	N/A		N/A
47 30-025-33107 OXY USA INC	MULE DEER 36 STATE	4 Oil	Active	660 N	860 E	A	36 22S	32E	10/10/1995	9007	9007	17.5	13.375	853	750	0 CIRC	8848'-8871'; 8466'-8539'	Well of Interest. Delaware and Avalon Sand Perfs in commingled	[51683] RED TANK; BONE SPRING; [51689] RED TANK; DELAWARE, WEST
48 30-025-43738 CIMAREX ENERGY CO.	CORIANDER AOC 1-12 STATE	003H Oil	Active	330 N	730 E	A	1 23S	32E	8/6/2018	9570	19431	17.5	13.375	1290	1525	0 CIRC	9682'-19335'	4.5" liner from 8037'-19431'	[17644] DIAMONDTAIL; BONE SPRING
49 30-025-33109 OXY USA INC	RED TANK 30 STATE	2 Oil	Active	2145 S	330 W	L	30 22S	33E	4/23/2000	9020	9020	14.75	10.75	825	775	0 CIRC	8862-8884		[51689] RED TANK; DELAWARE, WEST
50 30-025-43736 CIMAREX ENERGY CO.	CORIANDER AOC 1-12 STATE	001H Oil	Active	390 N	590 E	A	1 23S	32E	8/1/2017	9557	19004	17.5	13.375	1295	302	0 CIRC	9470'-18976'		[17644] DIAMONDTAIL; BONE SPRING
51 30-025-41501 CIMAREX ENERGY CO.	THYME APY FEDERAL	009H Oil	Active	330 N	2030 E	B	1 23S	32E	10/13/2017	9250	14027	17.5	13.375	1321	1460	0 CIRC	9450-14002		[51683] RED TANK; BONE SPRING
52 30-025-46278 MATADOR PRODUCTION COMPANY	RODNEY ROBINSON FEDERAL	101H Oil	Active	240 N	827 W	D	6 23S	33E	9/29/2019	9899	20004	17.5	13.375	1335	1140	0 CIRC	9965'-19842'		[96228] PRONGHORN; BONE SPRING
53 30-025-41885 OXY USA INC	RED TANK 31 STATE	005H Oil	Active	660 N	150 E	A	31 22S	33E	7/9/2014	10750	15423	14.75	11.75	1215	960	0 CIRC	11056'-15276'		[51687] RED TANK; BONE SPRING, EAST
54 30-025-45927 OXY USA INC	AVOGATO 30 31 STATE COM	032H Oil	Active	240 N	1385 W	C	30 22S	33E	6/30/2019	11948	22127	17.5	13.375	1052	1340	0 CIRC	11850'-22031'		[51683] RED TANK; BONE SPRING
55 30-025-45929 OXY USA INC	AVOGATO 30 31 STATE COM	031H Oil	Active	240 N	1350 W	C	30 22S	33E	7/3/2019	11948	22234	17.5	13.375	1055	1340	0 CIRC	11829'-22011'		[51687] RED TANK; BONE SPRING, EAST
56 30-025-45930 OXY USA INC	AVOGATO 30 31 STATE COM	034H Oil	Active	240 N	1820 E	B	30 22S	33E	6/20/2019	11886	22147	17.5	13.375	1050	1340	0 CIRC	11886'-22109'		[51687] RED TANK; BONE SPRING, EAST

57	30-025-45931	OXY USA INC	AVOGATO 30 31 STATE COM	035H Oil	Active	240 N	1785 E	B	30 22S	33E	6/22/2019	12139	22280	17.5	13.375	1050	1340	0 CIRC	12117'-22118'
															6.75	5.5	22122	795	5900 CALC
58	30-025-46372	MATADOR PRODUCTION COMPANY	RODNEY ROBINSON FEDERAL	201H Oil	Active	240 N	797 W	D	6 23S	33E	10/1/2019	12436	22484	17.5	13.375	1335	1345	0 Circ	12324'-22368'
															12.25	9.625	5035	1650	0 CIRC
															8.75	7.625	12531	920	2700 CALC
															6.75	5.5	22484	1435	0 CIRC
59	30-025-44063	OXY USA INC	RED TANK 30 31 STATE COM	034H Oil	Active	200 N	470 E	A	30 22S	33E	11/5/2017	11996	21675	17.5	13.375	1094	1100	0 Circ	12133'-21491'
															12.25	9.625	11130	2900	249 CALC
															8.5	5.5	21665	1750	11001 CALC
60	30-025-26496	LIME ROCK RESOURCES A, L.P.	PRONGHORN AHO FEDERAL	1 Oil	PA	1980 N	1980 E	G	6 23S	33E	9/30/1979	16160	16160	17.5	13.375	736	750	0 CIRC	N/A
															12.25	10.75	5026	1400	0 CIRC
															9.5	7.625	12174	815	7091 CALC
															6.5	5	15400	540	11676 CIRC
61	30-025-27596	OXY USA INC	RED TANK 30 STATE	3 Oil	PA	1980 N	660 E	H	30 22S	33E	10/24/1981	15540	15450	17.5	13.375	711	750	0 CIRC	N/A
															12.25	10.75	4848	2050	1150 CALC
															9.5	7.625	12150	1105	4300 CALC
62	30-025-43923	EOG RESOURCES INC	FOGHORN 32 STATE COM	209H Oil	Active	590 N	330 W	D	32 22S	33E	8/28/2017	9456	14259	17.5	13.375	1066	1028	0 CIRC	9626'-14147'
															12.25	9.625	4914	1380	0 CIRC
															8.75	5.5	14247	2156	7300 CALC
63	30-025-45839	OXY USA INC	AVOGATO 31 STATE	100 Monitor	Active	1702 N	1810 W	F	31 22S	33E	6/16/2019	13900	13900	17.5	13.375	1210	1560	0 CIRC	N/A
															12.25	9.625	8825	3380	0 CIRC
															8.5	4.5	13883	1097	7160 CALC
64	30-025-31959	WAGNER OIL CO.	BIGHORN 30 STATE	2 Oil	Active	2310 N	1650 W	F	30 22S	33E	7/8/1993	10491	10491	17.5	13.375	500	600	0 CALC	8887-8906
															12.25	8.625	4800	2150	0 CALC
															7.875	5.5	10490	1050	0 CALC
65	30-025-33130	OXY USA INC	CALMON 30 STATE	1 Oil	Active	1930 N	330 W	E	30 22S	33E	11/27/1995	9000	9000	14.75	10.75	825	575	0 CIRC	8862-8898
															9.875	7.625	4700	1160	0 CIRC
															6.75	4.5	9000	920	4300 CALC
66	30-025-43737	CIMAREX ENERGY CO.	CORIANDER AOC 1-12 STATE	002H Oil	Active	330 N	710 E	A	1 23S	32E	8/26/2018	9747	19642	17.5	13.375	1295	1635	0 CIRC	9898-19590
															12.25	9.625	4970	1865	0 CIRC
															8.75	7	8100	3755	0 CIRC
															8.5	5.5	19642	3755	0 CIRC
67	30-025-33531	CIMAREX ENERGY CO.	CORIANDER AOC STATE	1 Oil	PA	330 N	330 E	A	1 23S	32E	8/25/1996	9121	9121	14.75	11.75	1150	700	0 CIRC	N/A
															11	8.625	4797	1150	0 CIRC
															7.875	5.5	9121	925	2692 CALC
68	30-025-33574	EOG Y RESOURCES, INC.	CORIANDER AOC STATE	2 Oil	PA	1650 N	330 E	H	1 23S	32E	9/30/1996	9170	9170	14.75	11.75	1153	700	0 CIRC	N/A
															11	8.625	4790	1250	0 CIRC
															7.875	5.5	9170	1000	0 CALC
69	30-025-32581	OXY USA INC	COVINGTON A FEDERAL	10 Oil	Active	660 S	1980 E	O	25 22S	32E	5/19/1995	8990	8990	17.5	13.375	811	900	0 CIRC	8526-8548; 8343-8374; 8058-8083; 7935-7942; 6998-7030; 5018-5028
															11	8.625	4720	1800	0 CIRC
															7.875	5.5	8990	1650	1500 CALC
70	30-025-33142	OXY USA INC	COVINGTON A FEDERAL	13 Oil	Active	2310 S	1980 E	J	25 22S	32E	12/27/1995	9000	9000	14.75	10.75	804	600	0 CIRC	8536-8556; 8366-8386; 7930-7942; 7000-7018
															9.625	7.625	4695	1300	0 CIRC
															6.75	4.5	9000	915	2760 CALC
71	30-025-34455	OXY USA INC	COVINGTON A FEDERAL	37 Oil	Active	1575 S	1950 E	J	25 22S	32E	9/16/1999	8960	8960	14.75	10.75	855	800	0 CIRC	8608-8628; 8104-8124; 7822-7936;
															9.875	7.625	4710	1880	0 CIRC
															6.75	4.5	8960	1105	3600 CALC
72	30-025-32290	OXY USA INC	COVINGTON A FEDERAL	4 Oil	Active	1980 S	990 E	I	25 22S	32E	1/12/1996	9010	9010	14.75	10.75	790	600	0 CIRC	8536-8556; 8048-8067;
															9.875	7.625	4700	1500	510 CALC
															6.75	4.5	9010	615	2990 CALC
73	30-025-33319	OXY USA INC	COVINGTON A FEDERAL	15 Oil	PA	330 N	1300 E	A	25 22S	32E	7/31/1997	9010	9010	14.75	10.75	831	800	0 CIRC	N/A
															9.625	7.625	4705	1600	0 CIRC
															6.75	4.5	9010	1325	1800 CALC
74	30-025-33093	OXY USA INC	MULE DEER 36 STATE	3 Oil	Active	1980 S	1980 E	J	36 22S	32E	9/								

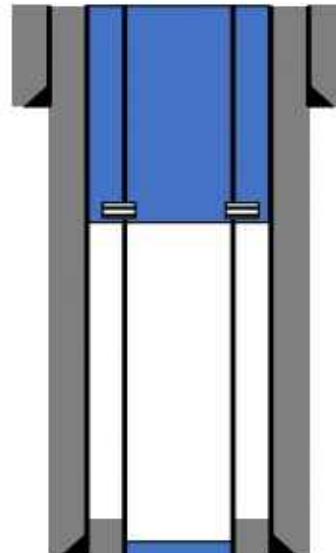
83 30-025-46335	MATADOR PRODUCTION	RODNEY ROBINSON FEDERAL COMPANY	122H Oil	Active	240 N	1927 W	C	6 23S	33E	9/4/2019	11189	21224	17.5	13.375	1339	1520	0 CIRC	10963-21051	[96228] PRONGHORN; BONE SPRING
													12.25	9.625	5059	1369	0 CIRC		
													8.75	5.5	21200	4224	28 CALC		
84 30-025-46371	MATADOR PRODUCTION	RODNEY ROBINSON FEDERAL COMPANY	121H Oil	Active	270 N	827 W	D	6 23S	33E	9/27/2019	11164	21253	17.5	13.375	1339	1140	0 CIRC	11135-21109	[96228] PRONGHORN; BONE SPRING
													12.25	9.625	5063	1555	0 CIRC		
													8.75	5.5	21289	3838	2900 CALC		
85 30-025-46279	MATADOR PRODUCTION	RODNEY ROBINSON FEDERAL COMPANY	102H Oil	Active	270 N	1927 W	C	6 23S	33E	9/2/2019	9550	19750	17.5	13.375	1337	1515	0 CIRC	9591-19593	[96228] PRONGHORN; BONE SPRING
													12.25	9.625	5060	1369	0 CIRC		
													8.75	5.5	19740	3615	0 CIRC		
86 30-025-47350	MATADOR PRODUCTION	RODNEY ROBINSON FEDERAL COM COMPANY	133H Oil	Active	367 S	1730 E	O	7 23S	33E	9/25/2020	12009	22435	17.5	13.375	1394	1190	0 CIRC	12386-22283	[96228] PRONGHORN; BONE SPRING
													9.875	7.625	11441	2610	0 CIRC		
													6.75	5.5	22420	1090	0 CIRC		
87 30-025-47351	MATADOR PRODUCTION	RODNEY ROBINSON FEDERAL COM COMPANY	203H Oil	Active	385 S	1706 E	O	7 23S	33E	9/23/2020	12213	22462	17.5	13.375	1389	1190	0 CIRC	12685-22188	[98177] WC-025 G-09 S223332A; UPR WOLFCAMP
													9.875	7.625	11505	2455	0 CIRC		
													6.75	5.5	22447	1299	1250 CALC		
88 30-025-47352	MATADOR PRODUCTION	RODNEY ROBINSON FEDERAL COM COMPANY	204H Oil	Active	546 S	155 E	P	7 23S	33E	11/5/2020	12220	22640	17.5	13.375	1385	1210	0 CIRC	12526-22488	[98177] WC-025 G-09 S223332A; UPR WOLFCAMP
													9.875	7.625	11759	2650	1320 CALC		
													6.75	5.5	22640	1170	0 CIRC		
89 30-025-47489	MATADOR PRODUCTION	RODNEY ROBINSON FEDERAL COM COMPANY	134H Oil	Active	546 S	185 E	P	7 23S	33E	11/9/2020	12000	22415	17.5	13.375	1385	1210	0 CIRC	12538-22256	[96228] PRONGHORN; BONE SPRING
													9.875	7.625	11759	2650	1320 CALC		
90 30-025-31267	C W TRAINER	WHITE LIGHTNIN	1 Oil	PA	1980 S	660 E	I	19 22S	33E	6/29/1991	15384	15384	17.5	13.375	804	860	0 CALC	N/A	N/A
													12.25	9.625	4870	2250	0 CALC		
													8.75	7	12166	1400	2332 CALC		
91 30-025-31754	OXY USA INC	RED TANK 28 FEDERAL	3 SWD	Active	330 N	2310 E	B	28 22S	32E	3/14/1993	10153	10107	13.375	820	820	1275	0 CIRC	4674-4698;5434-5748	[96100] SWD; DELAWARE
													8.625	4435	4435	2035	0 CIRC		
													5.5	10153	10153	1675	2580 CBL		
92 30-025-34023	DEVON ENERGY PRODUCTION COMPANY, LP	CHECKERS 24 FEDERAL	7 Oil	PA	760 S	1980 E	O	24 22S	32E	4/9/1998	9066	9066	17.5	13.375	850	525	0 CIRC	N/A	N/A
													11	8.625	4875	1500	0 CIRC		
													7.875	5.5	9066	575	5920 CBL		
93 30-025-46925	OXY USA INC	TACO CAT 27 34 FEDERAL COM	032H Oil	Active	340 N	1880 W	C	27 22S	32E	9/6/2021	11993	22379	17.5	13.375	976	1165	0 Circ	11968-22296	[98286] WC-025 G-08 S223227D; UPPER WOLFCAMP
													9.875	7.625	11147	1550	0 Circ		
													6.75	5.5	22359	930	8700 CBL		
94 30-025-46926	OXY USA INC	TACO CAT 27 34 FEDERAL COM	033H Oil	Active	340 N	1915 W	C	27 22S	32E	9/8/2021	12140	22380	17.5	13.375	975	1140	0 Circ	11968-22298	[98286] WC-025 G-08 S223227D; UPPER WOLFCAMP
													9.875	7.625	11264	2130	0 Circ		
													6.75	5.5	22362	926	10653 CALC		
95 30-025-46949	OXY USA INC	TACO CAT 27 34 FEDERAL COM	024H Oil	Active	535 N	1315 E	A	27 22S	32E	8/28/2021	10718	21199	17.5	13.375	963	1160	0 Circ	10788-21089	[51683] RED TANK;BONE SPRING;
													12.25	9.625	6433	1714	0 Circ		
													8.75	5.5	21179	2848	2918 Est.		
96 30-025-46934	OXY USA INC	TACO CAT 27 34 FEDERAL COM	025H Oil	Active	535 N	1285 E	A	27 22S	32E	8/29/2021	10821	21246	17.5	13.375	970	1165	0 Circ	10835-21136	[51683] RED TANK;BONE SPRING;
													12.25	9.625	6346	1714	0 Circ		
													8.75	5.5	21226	2724	3798 Est		
97 30-025-46998	OXY USA INC	RED TANK 3 FEDERAL	014H Oil	Active	330 S	508 E	P	4 23S	32E	1/6/2021	12010	16829	17.5	13.375	1006	997	0 Circ	12023-16795	[17644] DIAMONDTAIL; BONE SPRING
													12.25	9.625	4721	1923	0 Circ		
													8.75	7	12233	1184	10672 Calc		
													6	4.5	16829	349	3950 CBL		



Stephen Janacek  
10/5/2021

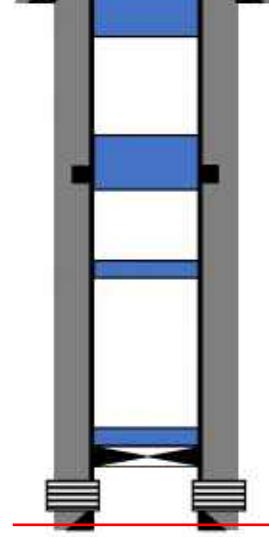
Final Wellbore  
**RED TANK 28 FEDERAL #006**  
30-025-34221-0000  
Lea

**String 1**  
OD 10.75 in  
TD 815 ft  
TOC 0 ft , Circ



PERF @ 1300'. EST CIRC. CIRC 240 SX  
CL C CMT TO SURFACE. VERIFIED CMT  
@ SURFACE.

**String 2**  
OD 7.625 in  
TD 4435 ft  
TOC 0 ft , Circ



SPOT 45 SX CL C CMT 4719'. TAG AT  
4130'.

SPOT 50 SX CL C CMT 6048' TAG  
AT 5290'.

SPOT 25 SX CL C CMT 6849'. CTOC  
6562'.

SET CIBP @ 8250'. CAP CIBP WITH  
25 SX CL H CMT. TAG AT 8006'.  
Perfs 8300'-8540' (Brushy Canyon)

TOP OF BONE SPRING 8590'

**String 3**  
OD 4.5 in  
TD 8700 ft  
TOC 4150 ft , CBL  
PBTD 8700 ft

OXY USA Inc. - Plugged  
Red Tank 31 State #004  
API No. 30-025-33580

Perf'd @ 890' Sqzd 200sx CI C Cmt to surface. Verified.

EOT @ 1900'. Pumped 25sx CI C Cmt.

EOT @ 5050'. Pumped 40sx CI C Cmt. Tagged TOC @ 4461'.

EOT @ 6338'. Pumped 50sx CI C Cmt. Tagged TOC @ 5663'.

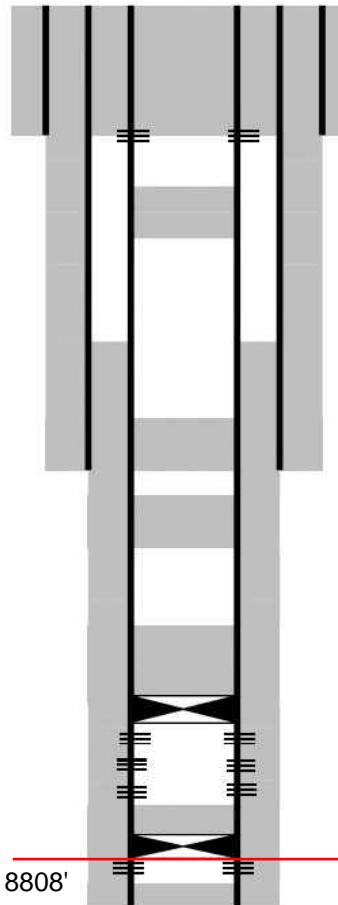
Set CIBP @ 7770'. Pumped 25sx CI H. Tagged TOC @ 7712'.  
Added 25sx CI C. Tagged TOC @ 7397'.

Pumped 25sx CI C on existing CIBP. Tagged TOC @ 8507'.

PBTD - 9052'

TOP OF BONE SPRING 8808'

TD - 9100' TVD



Spud 09/30/1996

14-3/8" hole @ 820'  
10-3/4" @ 820'  
w/ 780 sx-TOC-Surf-Circ.

9-7/8" hole @ 4770'  
7-5-8" csg @ 4770'  
w/ 1150 sx-TOC-Surf-Circ.

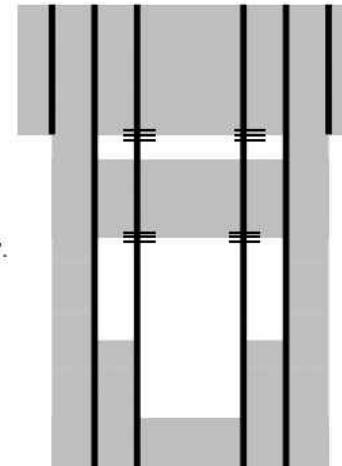
6-3/4" hole @ 9100'  
4-1/2" csg @ 9100'  
w/ 775sx - TOC @ ~3500'  
DV Tool @ 6288'

Perfs 7820' - 7850'  
Perfs 8343'-8566'

CIBP @ 8900'  
Perfs 8942' - 8988'

OXY USA Inc. - Plugged  
Red Tank 31 State #002  
API No. 30-025-33431

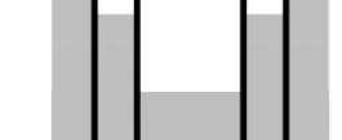
Perf'd @ 872'. Squeezed 230sx CI C Cmt. Verified Cmt to Surf.



Spud 04/06/2000

14-3/8" hole @ 822'  
10-3/4" @ 822'  
w/ 770 sx-TOC-Surf-Circ.

Perf'd @ 1500'. Squeezed 50sx CI C Cmt. Tagged TOC @ 1052'.



9-7/8" hole @ 4730'  
7-5-8" csg @ 4730'  
w/ 1750 sx-TOC-Surf-Circ.

EOT @ 5003'. Pumped 35sx CI C Cmt. Tagged TOC @ 4414'.



6-3/4" hole @ 9050'  
4-1/2" csg @ 9050'  
w/ 1050sx - TOC @ ~3181'  
DV Tool @ 6032'

EOT @ 6082'. Pumped 25sx CI C Cmt. Tagged TOC @ 5772'.



Tagged Existing CIBP @ 8732'. Pumped 35sx CI C cmt.  
WOC Tagged TOC @ 8210'.

TOP OF BONE SPRING 8751'

PBTD - 9003'



Perfs 8550'-8702'

CIBP @ 8870'  
Perfs 8914' - 8932'

TD - 9050' TVD

Shaunik Bhatte  
5/5/2021

Current Wellbore  
**Red Tank 30 State 1**  
30-025-33011-0000  
Sec 30 T22S R33E 990 FSL 330 FWL  
Lea County, NM

String 1

Hole 17-1/2 @ 807'  
OD 13-3/8 csg @ 807'  
TOC SURF CIRC w/ 900 sx

Perf & Squeeze- 857' w/ 267 sx cmt  
CIRC TO SURF

String 2

Hole 11 @ 4710'  
OD 8-5/8 csg @ 4710'  
TOC SURF CIRC w/ 1600 sx

Perf & Squeeze- 2780' w/ 50 sx cmt  
Top of Plug - 2586'

Cement plug - 4481-4760' w/ 35 sx

String 3

7-7/8" hole @ 9020'  
OD 5-1/2 in csg @ 9020'  
TOC 3580 ft CBL - 1030 sx

Cement plug - 5870-6226' w/ 35 sx cmt (CALC)

CIBP - 6226'

Prod Zone

6276-6284'  
6775-6785'  
7036-7052'  
8073-8087'  
8537-8567'  
8850-8892'

CIBP - 8825'

Proposed Injection Zone Top - 8745'

PBD - 8976'

TD - 9020'

Shaunik Bhatte  
5/5/2021

Current Wellbore  
**Red Tank 31 State 1**  
30-025-33082-0000  
Sec 31 T22S R33E 330 FNL 330 FWL  
Lea County, NM

String 1  
Hole 14-3/4 @ 816'  
OD 10-3/4 csg @ 816'  
TOC SURF CIRC w/ 700 sx

Perf & Squeeze- 250' w/ 60 sx cmt  
CIRC TO SURF  
Perf & Squeeze- 866' w/ 30 sx cmt  
Top of Plug - 730'

String 2  
Hole 9-7/8 @ 4740'  
OD 7-5/8 csg @ 4740'  
TOC SURF CIRC w/ 970 sx

Perf & Squeeze- 2785' w/ 30 sx cmt  
Top of Plug - 2668'

Cement plug - 4410-4804' w/ 25 sx (CALC)

CIBP - 5360'  
Cement plug - 4982-5360' w/ 25 sx (CALC)

CIBP - 5610' w/ 10' cmt to 5600'  
Cement plug - 6080-6738' w/ 45 sx cmt  
Casing squeezed @ 6294'-6326' w/ 100 sx

String 3  
6-3/4" hole @ 9010'  
OD 4.5 in csg @ 9010'  
TOC 3590 ft CBL - 780 sx

CIBP - 6738'      Prod Zone  
5410-5460'  
6788-6796'  
7046-**7056'**  
8081-8095'  
8614-8634'  
8870-8914'

PBTD - 8972'  
TD - 9010'

CIBP - 8000'

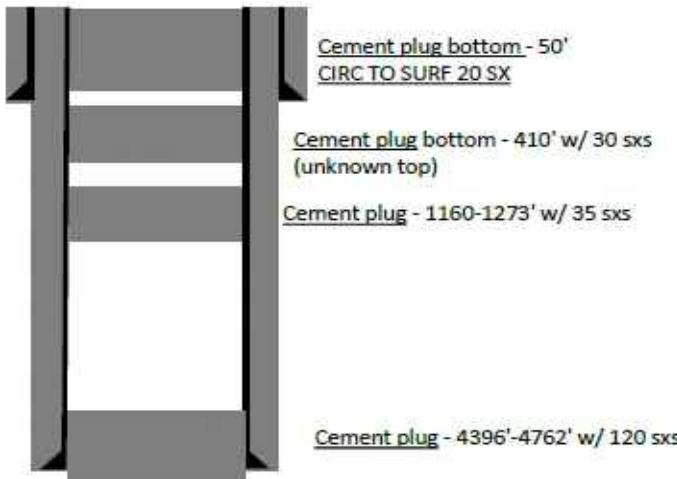
CIBP - 8830'

Proposed Injection Zone Top - 8752'

Shaunik Bhatte  
5/5/2021

Current Wellbore  
**Mule Deer 36 State 8**  
30-025-33823-0000  
Sec 36 T22S R32E 1650 FSL 770 FEL  
Lea County, NM

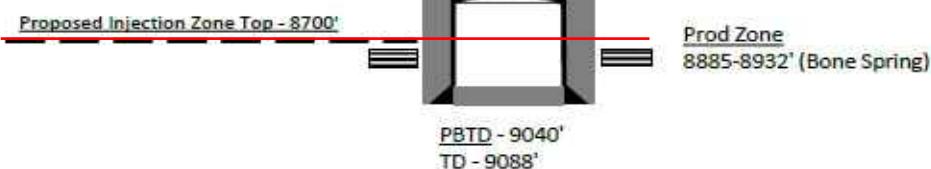
String 1  
Hole 12-1/4 @ 1223'  
OD 9-5/8 csg @ 1223'  
TOC SURF CIRC w/ 500 sx



String 2  
Hole 8-3/4 @ 4704'  
OD 7 csg @ 4704'  
TOC @ 35' w/ 1175 sx

Casing cut and pulled @ 5700'  
Cement plug- 5621'-6249' w/ 60 sxs

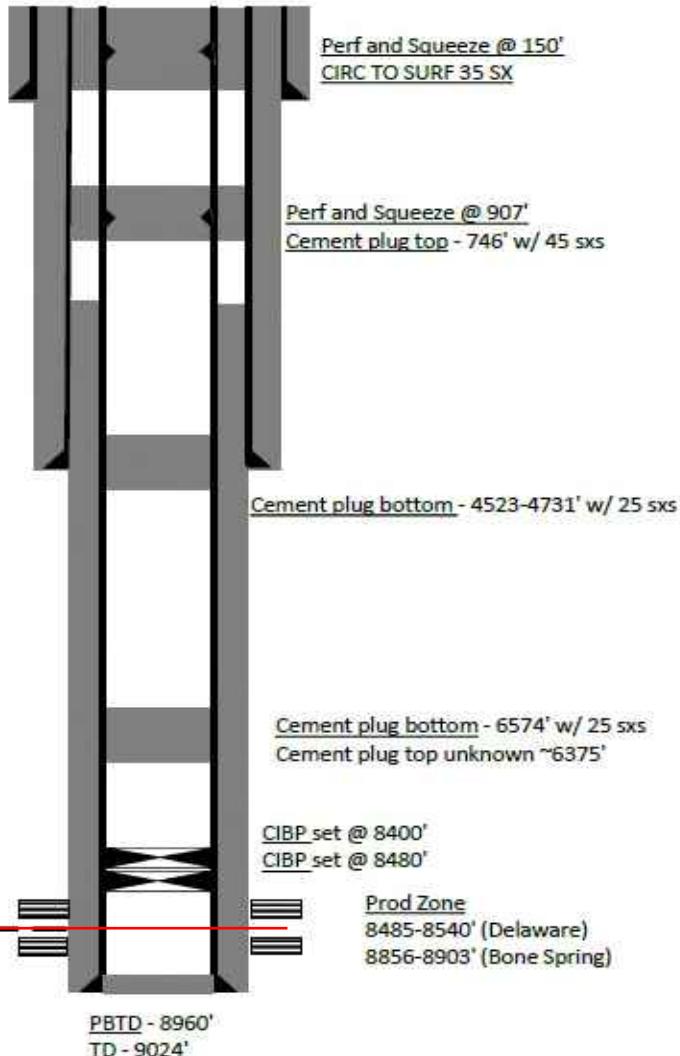
String 3  
6-1/8" hole @ 9088'  
OD 4-1/2 in csg @ 9088'  
TOC 6795 ft CBL - 310 sx



Shaunik Bhatte  
5/5/2021

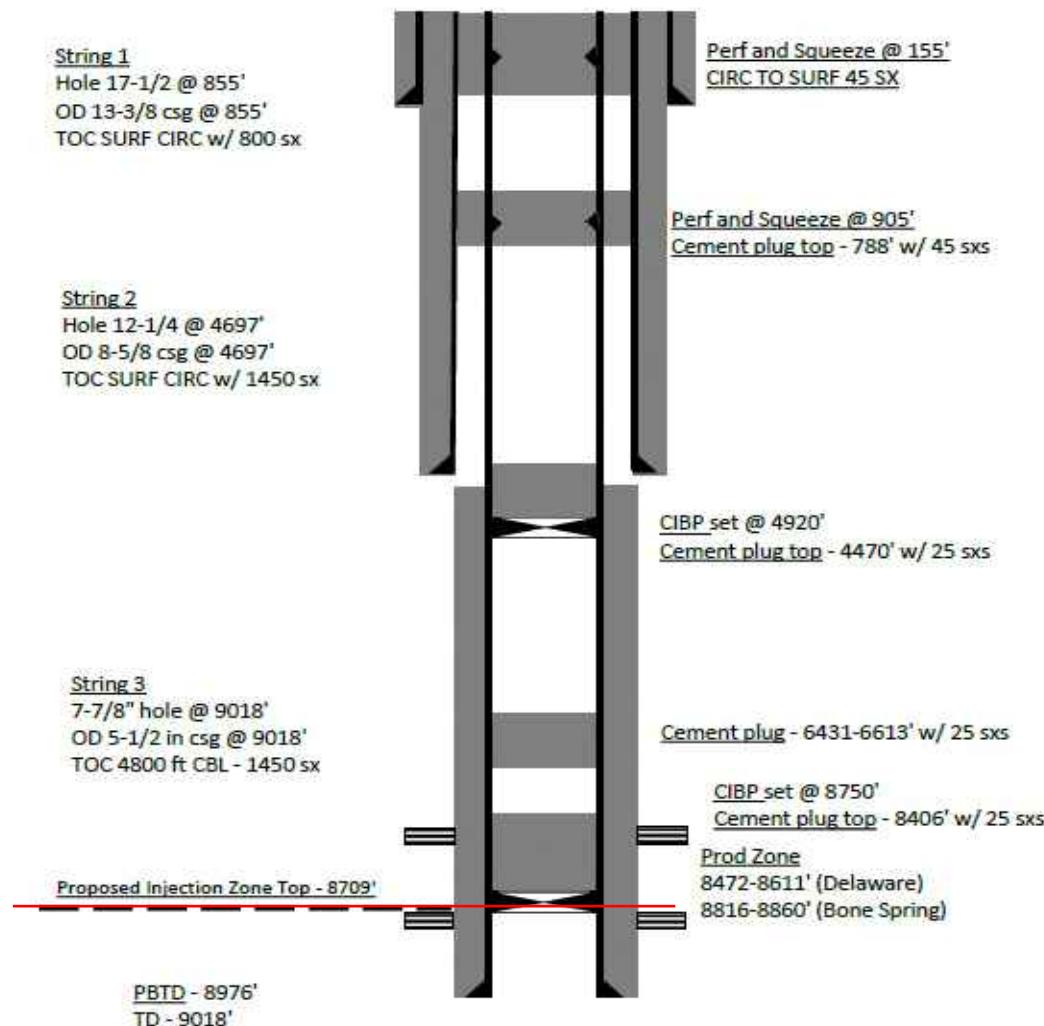
Current Wellbore  
**Mule Deer 36 State 5**  
30-025-33239-0000  
Sec 36 T22S R32E 1980 FNL 990 FEL  
Lea County, NM

String 1  
Hole 17-1/2 @ 857'  
OD 13-3/8 csg @ 857'  
TOC SURF CIRC w/ 750 sx



Shaunik Bhatte  
5/5/2021

Current Wellbore  
**Mule Deer 36 State 1**  
30-025-32837-0000  
Sec 36 T22S R32E 330 FNL 1980 FEL  
Lea County, NM



Shaunik Bhatte  
5/5/2021

Current Wellbore  
**Covington A Federal 15**  
30-025-33319-0000  
Sec 25 T22S R32E 330 FNL 1300 FEL  
Lea County, NM

String 1  
Hole 14-3/4 @ 831'  
OD 10-3/4 csg @ 831'  
TOC SURF CIRC w/ 800 sx

Perf & Squeeze- 1250' w/ 230 sx cmt  
CIRC TO SURF

String 2  
Hole 9-5/8 @ 4705'  
OD 7-5/8 csg @ 4705'  
TOC SURF CIRC w/ 1600 sx

Cement Plug - 2646'-3024' w/ 25 sx cmt (CALC)

Cement plug - 4488'-5002' w/ 35 sx cmt

Casing Damage Squeezed- 6309'-6282'  
Cement plug top - depth unknown

String 3  
6-3/4" hole @ 9010'  
OD 4-1/2 in csg @ 9010'  
TOC 1800 ft CBL - 1325 sx

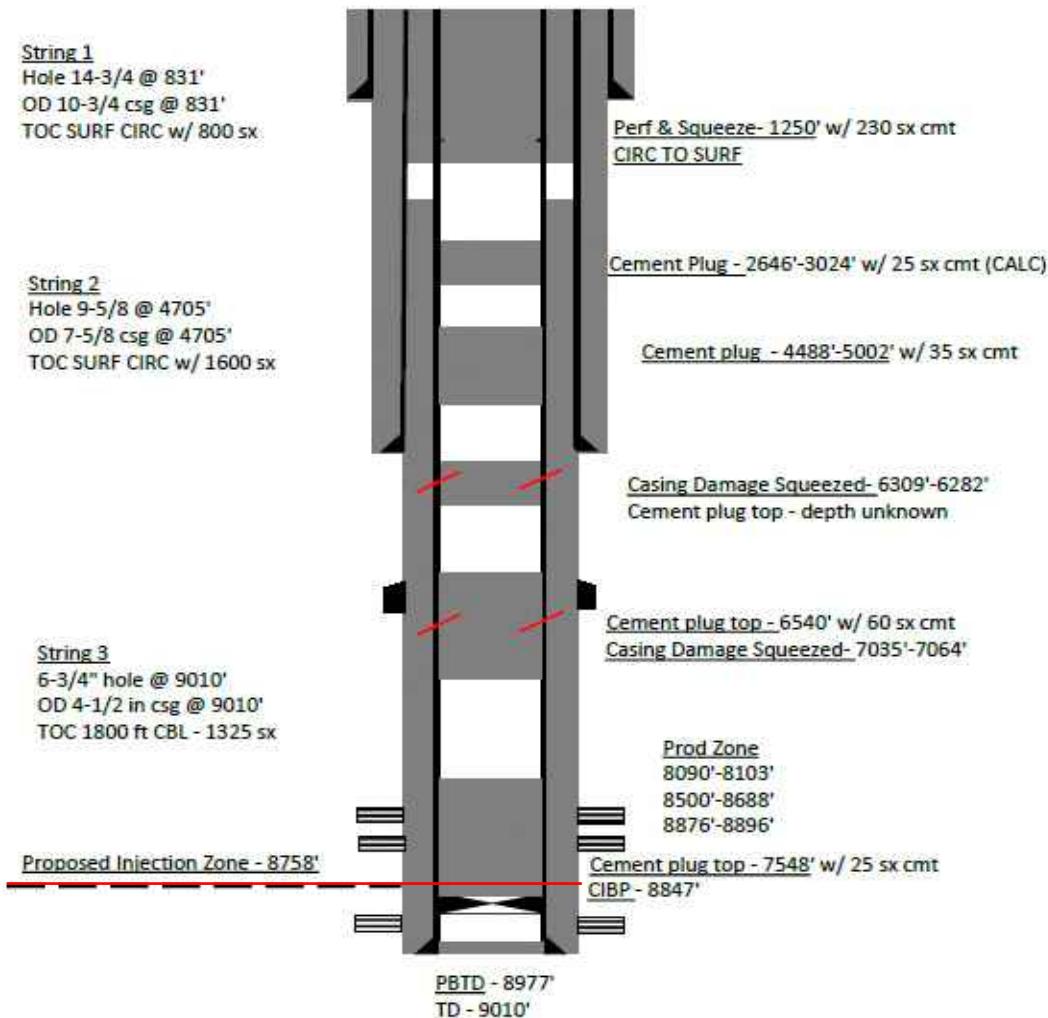
Cement plug top - 6540' w/ 60 sx cmt  
Casing Damage Squeezed- 7035'-7064'

Prod Zone  
8090'-8103'  
8500'-8688'  
8876'-8896'

Cement plug top - 7548' w/ 25 sx cmt  
CIBP - 8847'

PBT - 8977'  
TD - 9010'

Proposed Injection Zone - 8758'



Shaunik Bhatte  
5/4/2021

Current Wellbore  
**Coriander AOC State 002**  
30-025-33574-0000  
Sec 01 T23S R32E 1650 FNL 330 FEL  
Lea County, NM

String 1  
Hole 14-3/4" @ 1153'  
OD 11-3/4" csg @ 1153'  
TOC SURF CIRC w/ 700 sx

Cement plug top-Surf w/ 120 sx cmt  
CIRC TO SURF  
Perf casing @ 400'

Cement plug top- 1074 w/ 120 sx cmt  
Perf casing @ 1285'

String 2  
Hole 11" @ 4790'  
OD 8-5/8" csg @ 4790'  
TOC SURF CIRC w/ 1250 sx

Cement plug- 2403-2650' w/ 25 sx cmt

Cement plug - 4677'-4840' w/ 50 sx cmt

String 3  
7-7/8" hole @ 9170'  
OD 5.5 in csg @ 9170'  
TOC 3075 ft CALC - 1000 sx

Cement plug top - 6928' w/ 10 sx (CALC)  
CIBP - 7000'

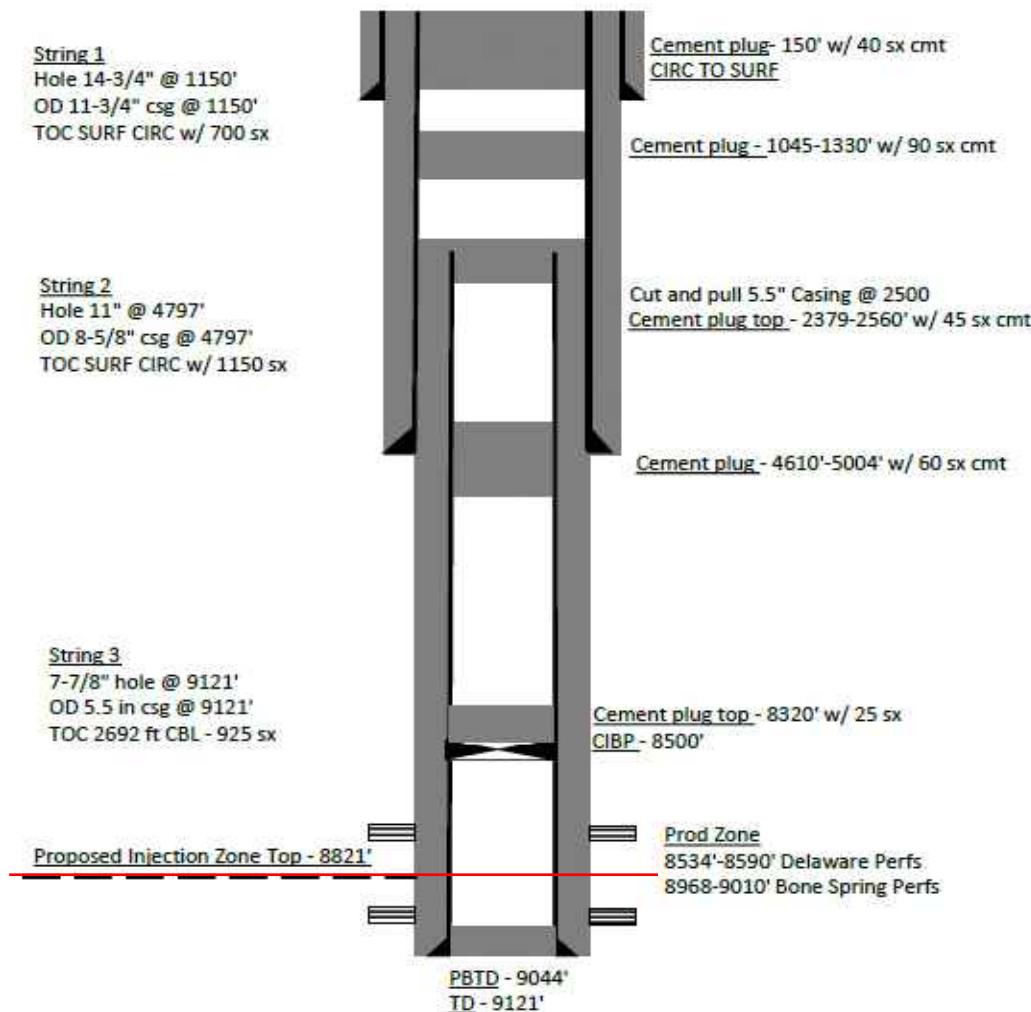
Proposed Injection Zone Top - 8856'

Prod Zone  
7086'-7656' Delaware Perfs  
9007'-9045' Bone Spring Perfs

PBTD - 9118'  
TD - 9170'

Shaunik Bhatte  
5/4/2021

Current Wellbore  
**Coriander AOC State 001**  
30-025-33531-0000  
Sec 01 T23S R32E 330 FNL 330 FEL  
Lea County, NM



Shaunik Bhatte  
3/24/2021

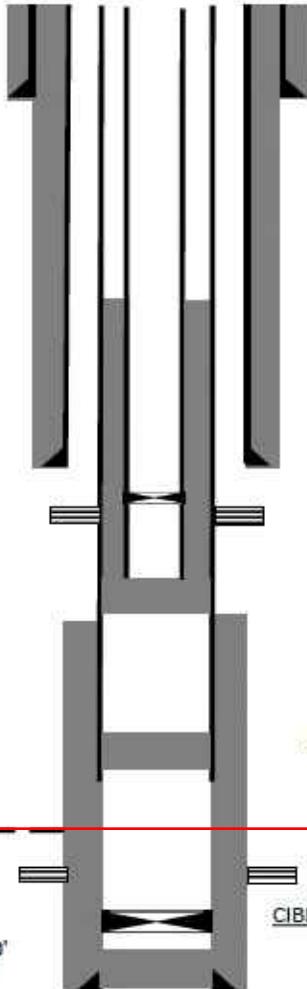
Current Wellbore  
**Red Tank 30 State 3**  
30-025-27596-0000  
Sec 30 T22S R33E 19800 FNL 660 FEL  
Lea County, NM

String 1  
Hole 17-1/2 @ 711'  
OD 13-3/8 csg @ 711'  
TOC SURF CIRC w/ 750 sx

String 2  
Hole 12-1/4 @ 4848'  
OD 10-3/4 csg @ 4848'  
TOC 1150' w/ 2050 sx

String 3  
9-1/2" hole @ 12,150'  
OD 7-3/8 in csg @ 12,150'  
Casing cut and pulled  
Casing stub at 7693'  
TOC 5840' (CALC) w/ 1105 sx

String 4  
9-1/2 hole @ 5290'  
OD 5-1/2 in csg @ 5290'  
TOC 3900' (CALC) w/ 575 sx



CIBP - 4900'

Prod Zone  
4946'-4963'

Cement plug top- 5212' w/ 125 sx  
cmt, Bottom calc - 5823'

Cement plug - 7588-7768' w/ 100 sx cmt

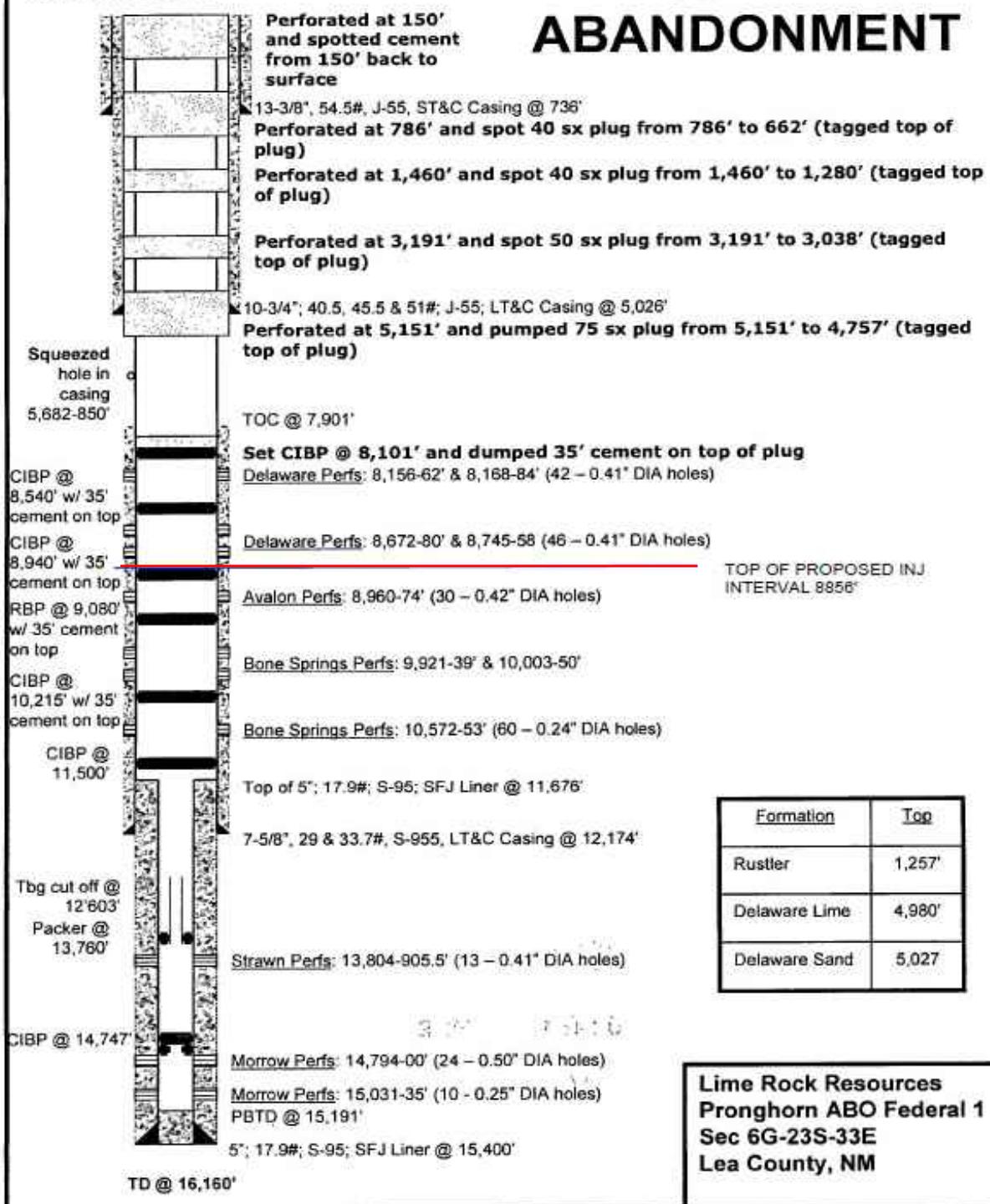
Prod Zone  
10563'-10620'

CIBP - 10500'

PBD - 12050'  
TD - 15,450'



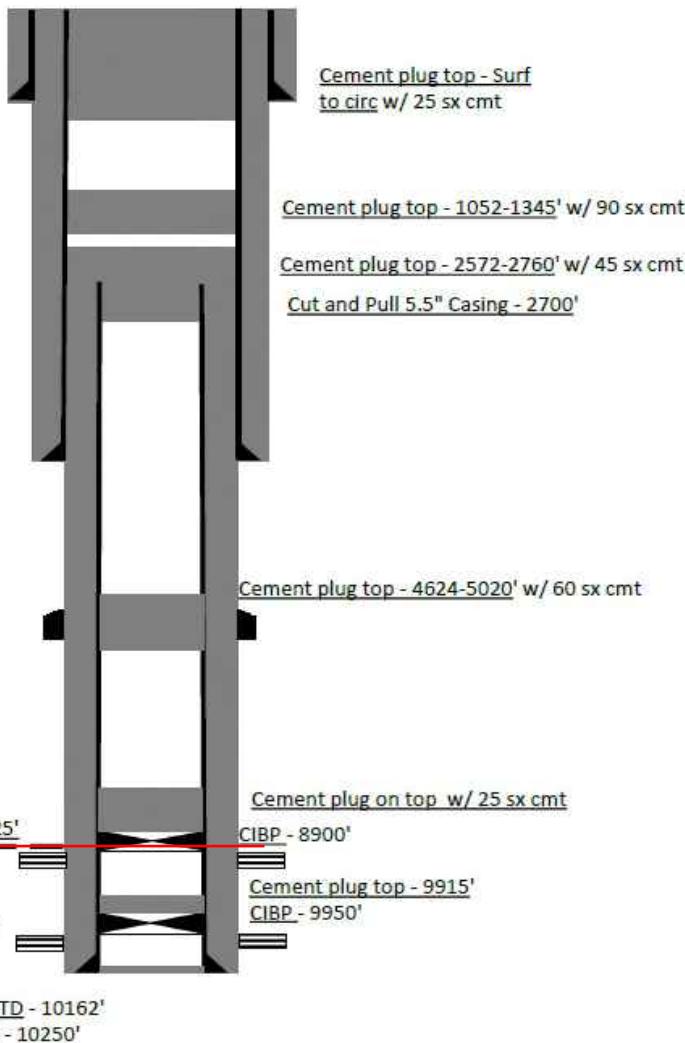
# FINAL ABANDONMENT



Shaunik Bhatte  
3/24/2021

Current Wellbore  
**Thyme APY Federal 1**  
30-025-33370-0000  
Sec 1 T23S R32E NWNE 330' FNL 1650' FEL  
Lea County, NM

String 1  
Hole 14-3/4 @ 1165'  
OD 11-3/4 csg @ 1165'  
TOC SURF CIRC w/ 750 sx



Shaunik Bhatte  
3/24/2021

Current Wellbore  
**Covington A Federal 16**  
30-025-33224-0000  
Sec 25 T22S R32E SWNE 1650 FNL 1650 FEL  
Lea County, NM

String 1  
Hole 14-3/4 @ 830'  
OD 10-3/4 csg @ 830'  
TOC SURF CIRC w/ 780 sx

Perf & Squeeze- 60' & 880' w/ 190 sx cmt  
CIRC TO SURF

String 2  
Hole 9-7/8 @ 4695'  
OD 7-5/8 csg @ 4695'  
TOC SURF CIRC w/ 1125 sx

Perf & Squeeze- 2780' w/ 50 sx cmt  
Top of Plug - 2590'  
Perf & Squeeze- 5055' w/ 100 sx cmt  
Top of Plug - 4603'

Prod Zone  
6304-6322'  
6990-7014'  
7338-7348'  
7944-8086'  
8647-8674'  
8864-8888'

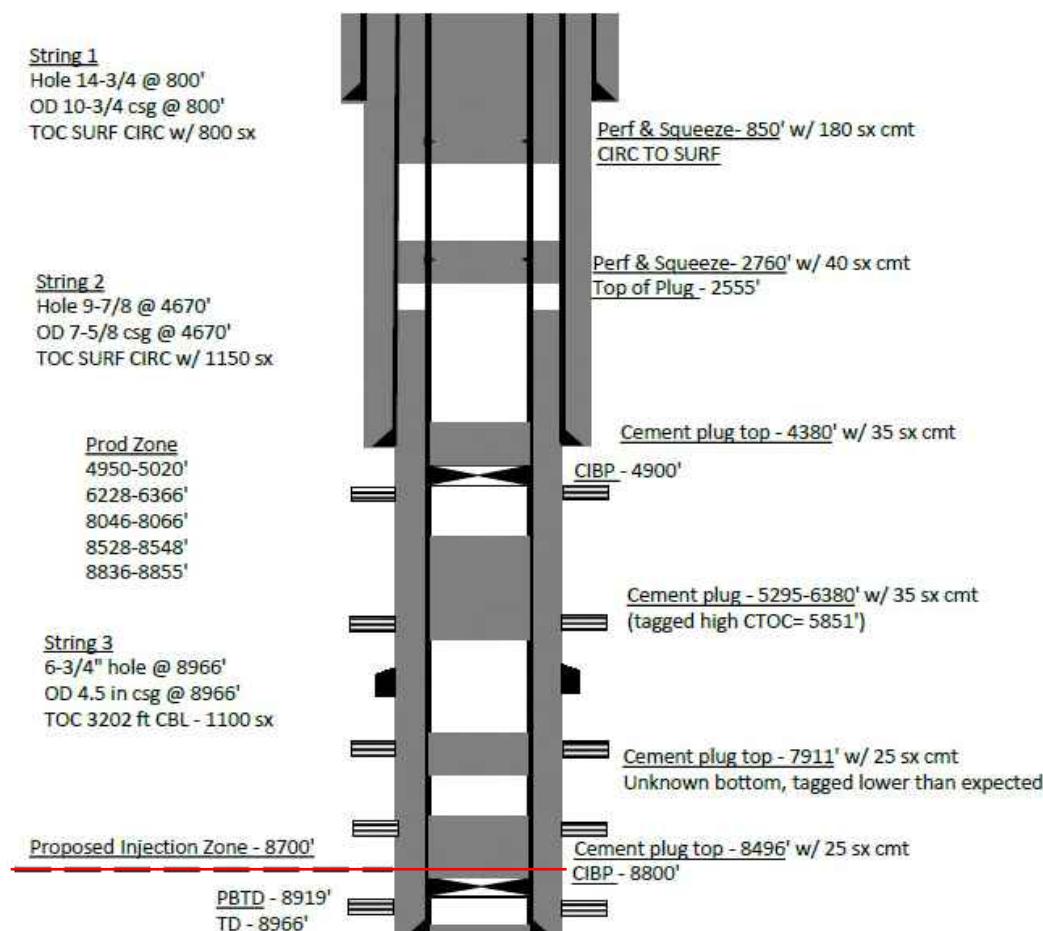
Cement plug - 5490' - 5670'  
Holes - 5574-5602'  
Calculated cement plug top - 5875' w/ 25 sx cmt  
CIBP - 6254'

String 3  
6-3/4" hole @ 8980'  
OD 4.5 in csg @ 8980'  
TOC 5828 ft CBL - 490 sx

Cement plug - 6387'-6766' w/ 25 sx cmt  
Proposed Injection Zone Top - 8746'  
PBTD - 8980'  
ID - 8980'  
Cement plug top - 8285' w/ 25 sx cmt (tagged high CTOC= 8448')  
CIBP - 8829'

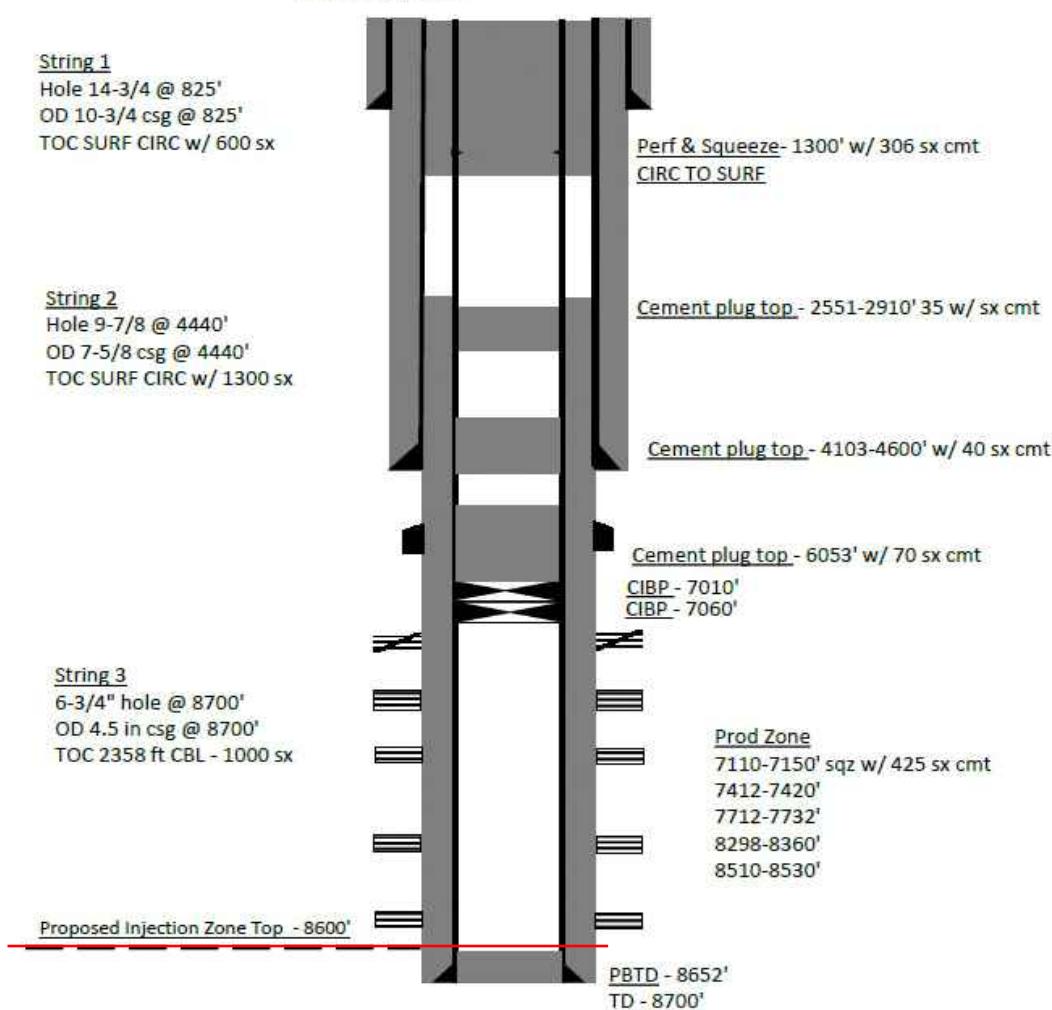
Shaunik Bhatte  
3/24/2021

Current Wellbore  
**Covington A Federal 14**  
30-025-33399-0000  
Sec 25 T22S R32E SWNE 1650 FNL 1650 FEL  
Lea County, NM



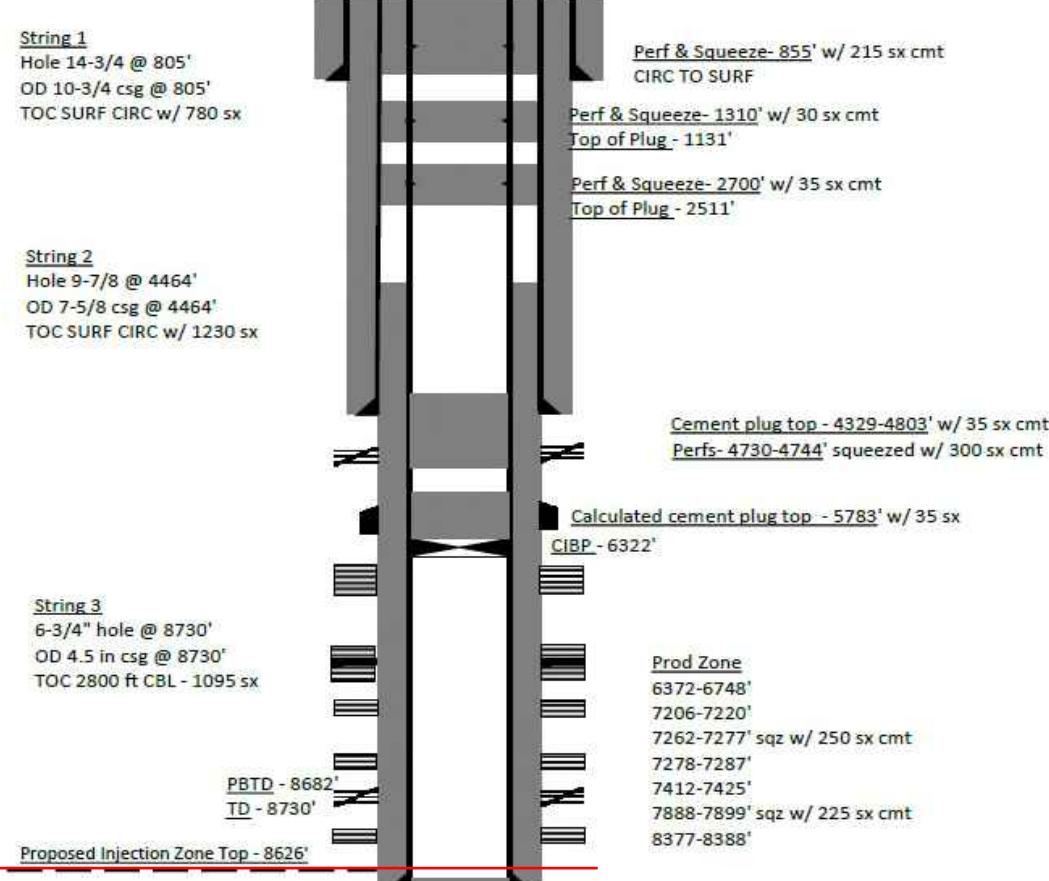
Shaunik Bhatte  
3/23/2021

Current Wellbore  
**Federal 27 006**  
30-025-32842-0000  
Sec 27 T22S R32E NWSW 1650 FSL 990 FWL  
Lea County, NM



Shaunik Bhatte  
3/18/2021

Current Wellbore  
**Federal 27 004**  
30-025-32796-0000  
Sec 27 T22S R32E SENW 2310 FNL 2310 FWL  
Lea County, NM



Shaunik Bhatte  
3/23/2021

Current Wellbore  
**Federal 27 008**  
30-025-32755-0000  
Sec 27 T22S R32E SWSW 580 FSL 790 FWL  
Lea County, NM

String 1  
Hole 14-3/4 @ 822'  
OD 10-3/4 csg @ 822'  
TOC SURF CIRC w/ 800 sx

Perf & Squeeze- 100' w/ 35 sx cmt  
CIRC TO SURF

String 2  
Hole 9-7/8 @ 4520'  
OD 7-5/8 csg @ 4520'  
TOC SURF CIRC w/ 1400 sx

Perf & Squeeze- 1090' w/ 100 sx cmt  
Cement plug top - 648'

Cement plug top - 2328-2771' 25 w/ sx cmt

Cement plug top - 4188-4590' w/ 30 sx cmt  
Cement plug top - 6212' w/ 40 sx cmt  
CIBP - 6806'

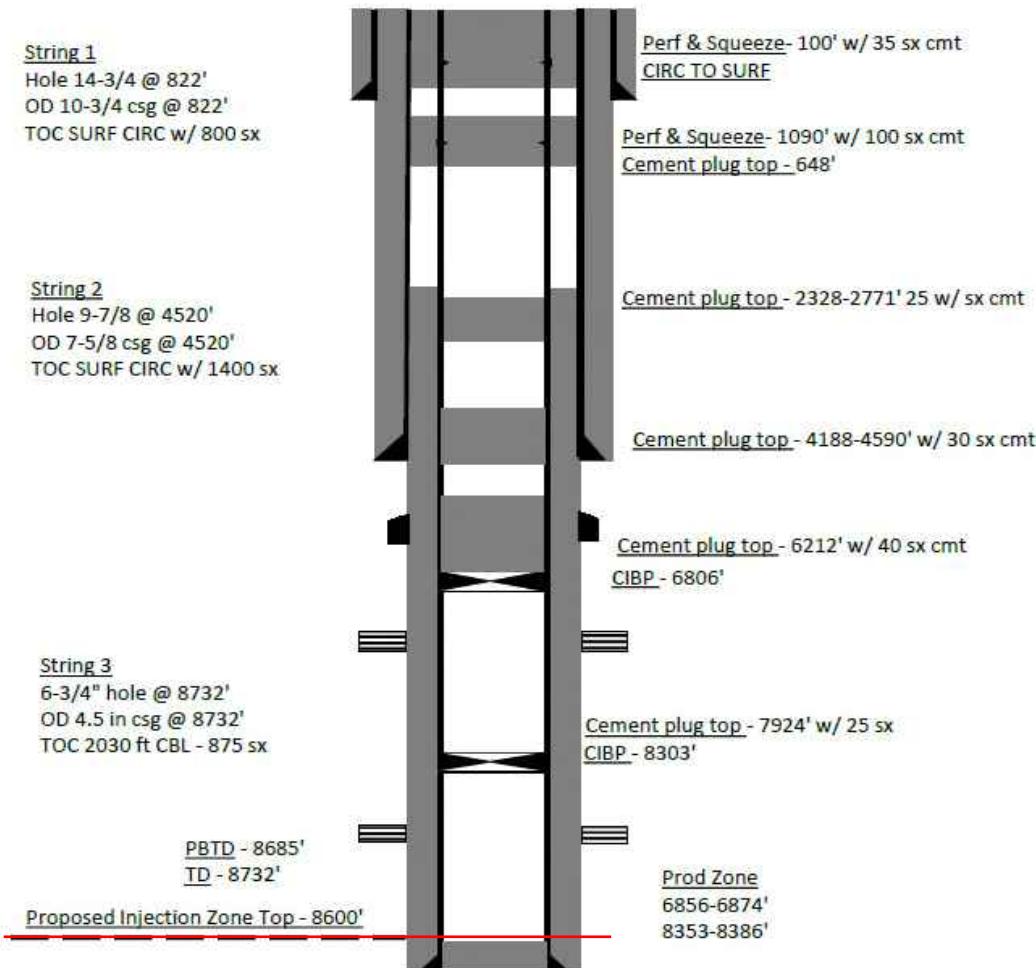
String 3  
6-3/4" hole @ 8732'  
OD 4.5 in csg @ 8732'  
TOC 2030 ft CBL - 875 sx

Cement plug top - 7924' w/ 25 sx  
CIBP - 8303'

PBTD - 8685'  
TD - 8732'

Prod Zone  
6856-6874'  
8353-8386'

Proposed Injection Zone Top - 8600'



Shaunik Bhatte

3/24/2021

Current Wellbore

**Red Tank 34 Federal 15**

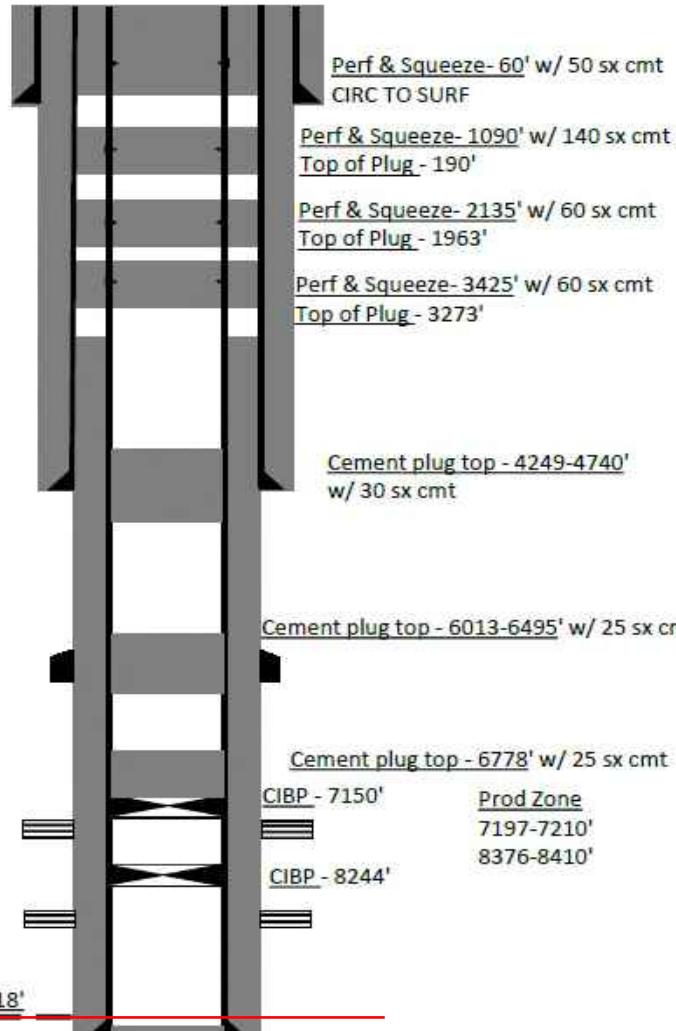
30-025-32912-0000

Sec 34 T22S R32E SWNW 1700 FNL 180 FWL

Lea County, NM

String 1

Hole 14-3/4 @ 818'  
 OD 10-3/4 csg @ 818'  
 TOC SURF CIRC w/ 700 sx

String 2

Hole 9-7/8 @ 4520'  
 OD 7-5/8 csg @ 4520'  
 TOC SURF CIRC w/ 1400 sx

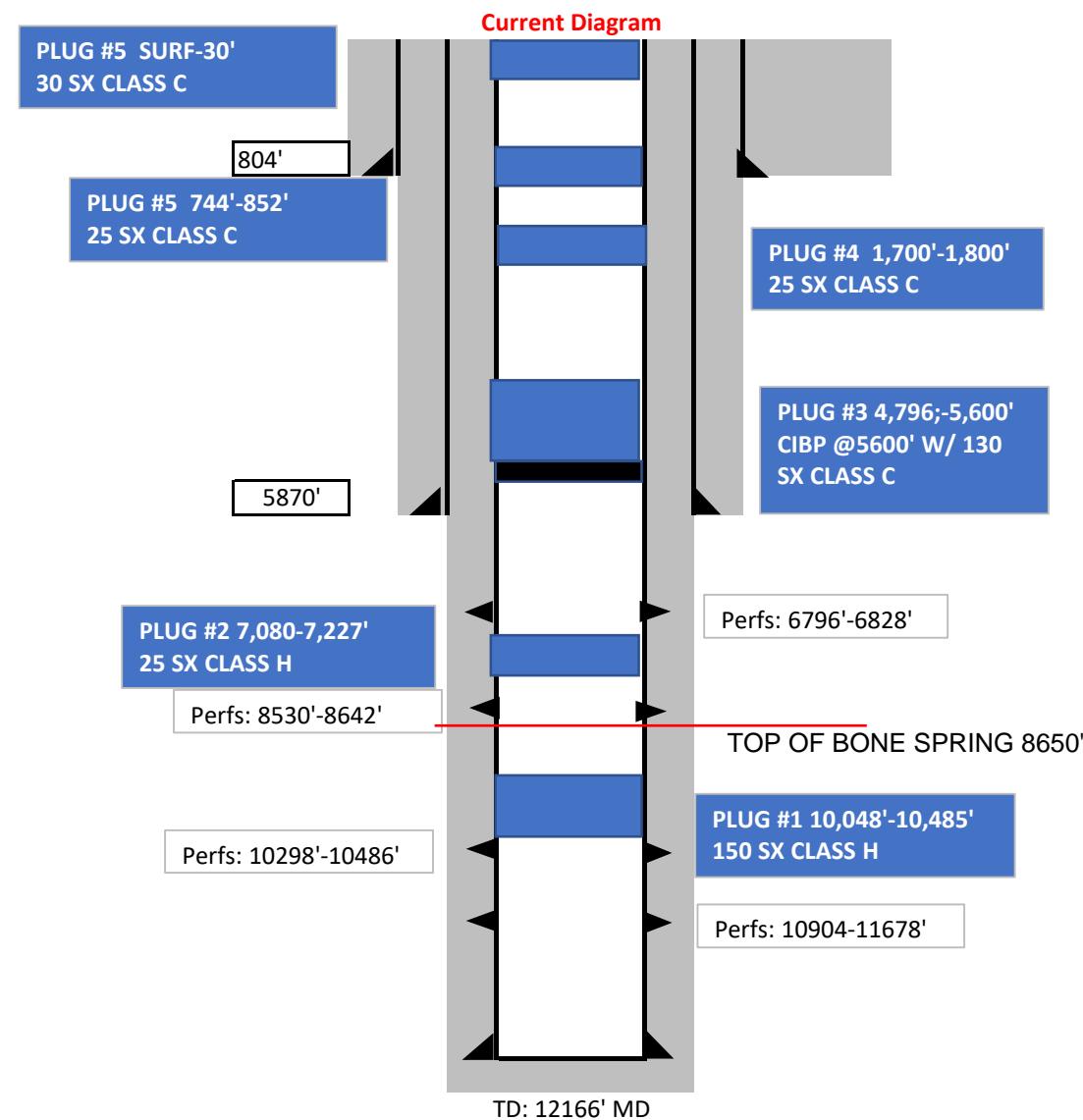
String 3

6-3/4" hole @ 8742'  
 OD 4.5 in csg @ 8742'  
 TOC 3674 ft CBL - 900 sx

PBTD - 8695'  
TD - 8742'

Proposed Injection Zone Top - 8618'

White Lightnin #001  
30-025-31267  
C W Trainer



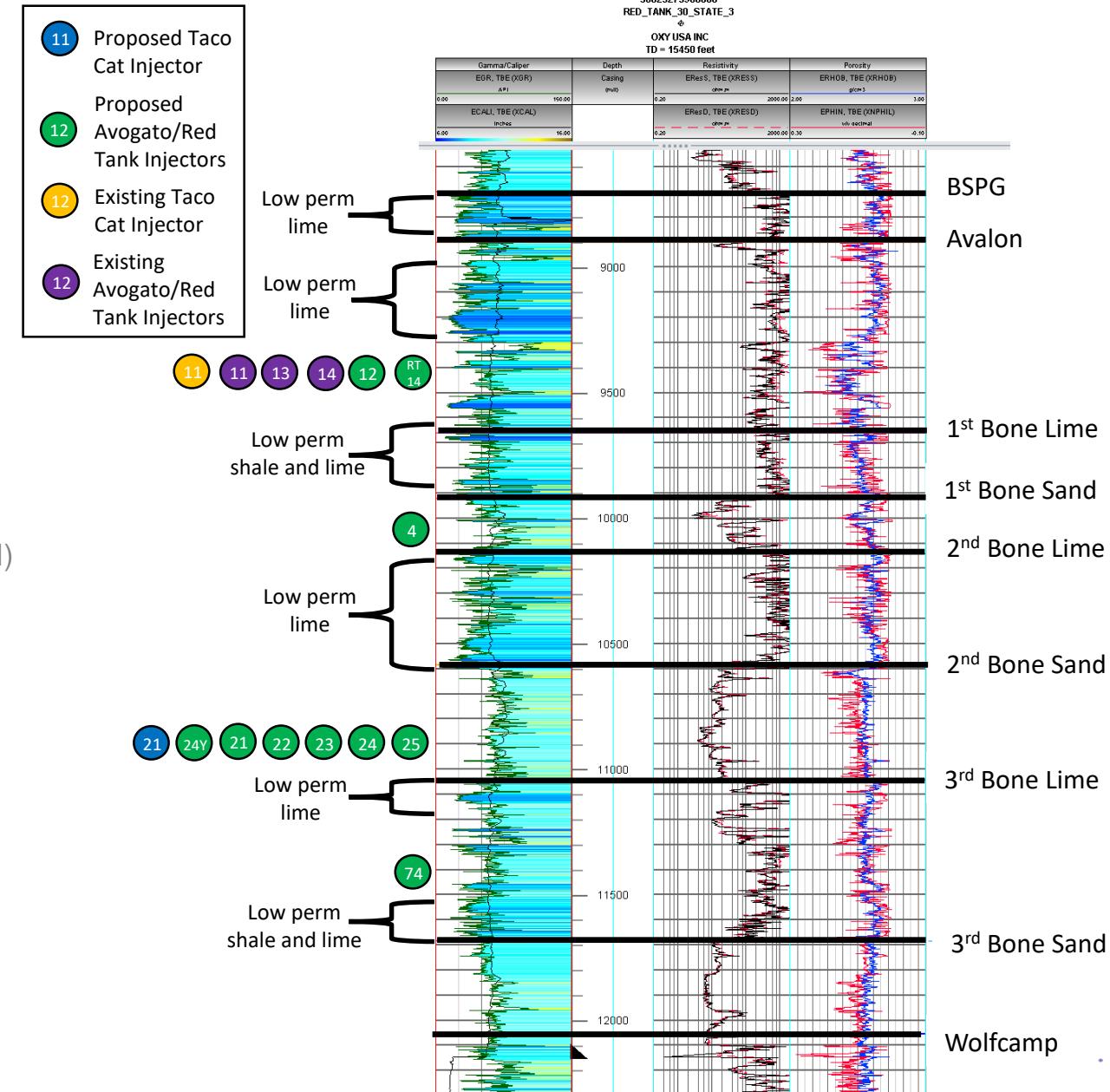
# Geology



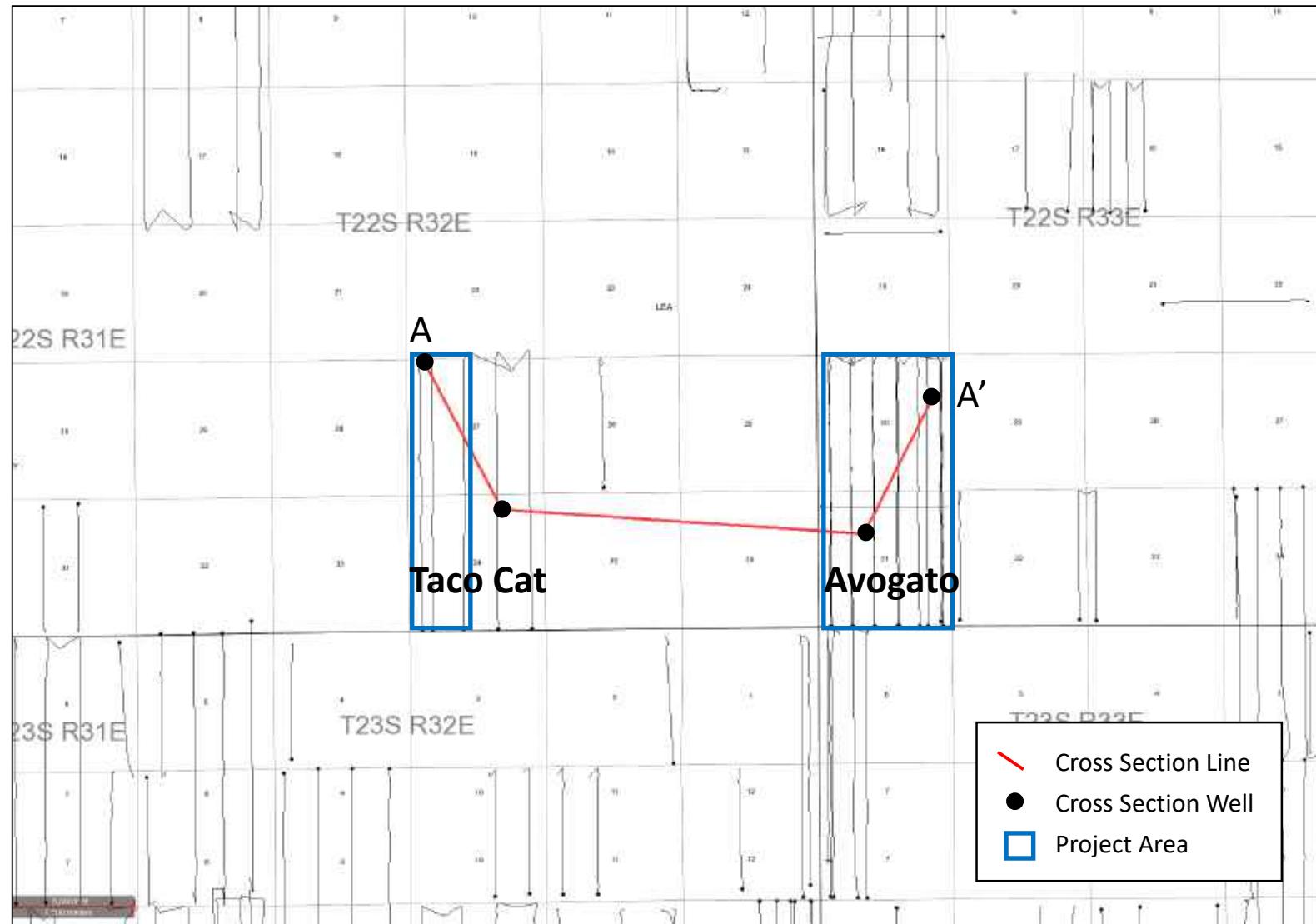
# Type Log

## Proposed Storage Zones

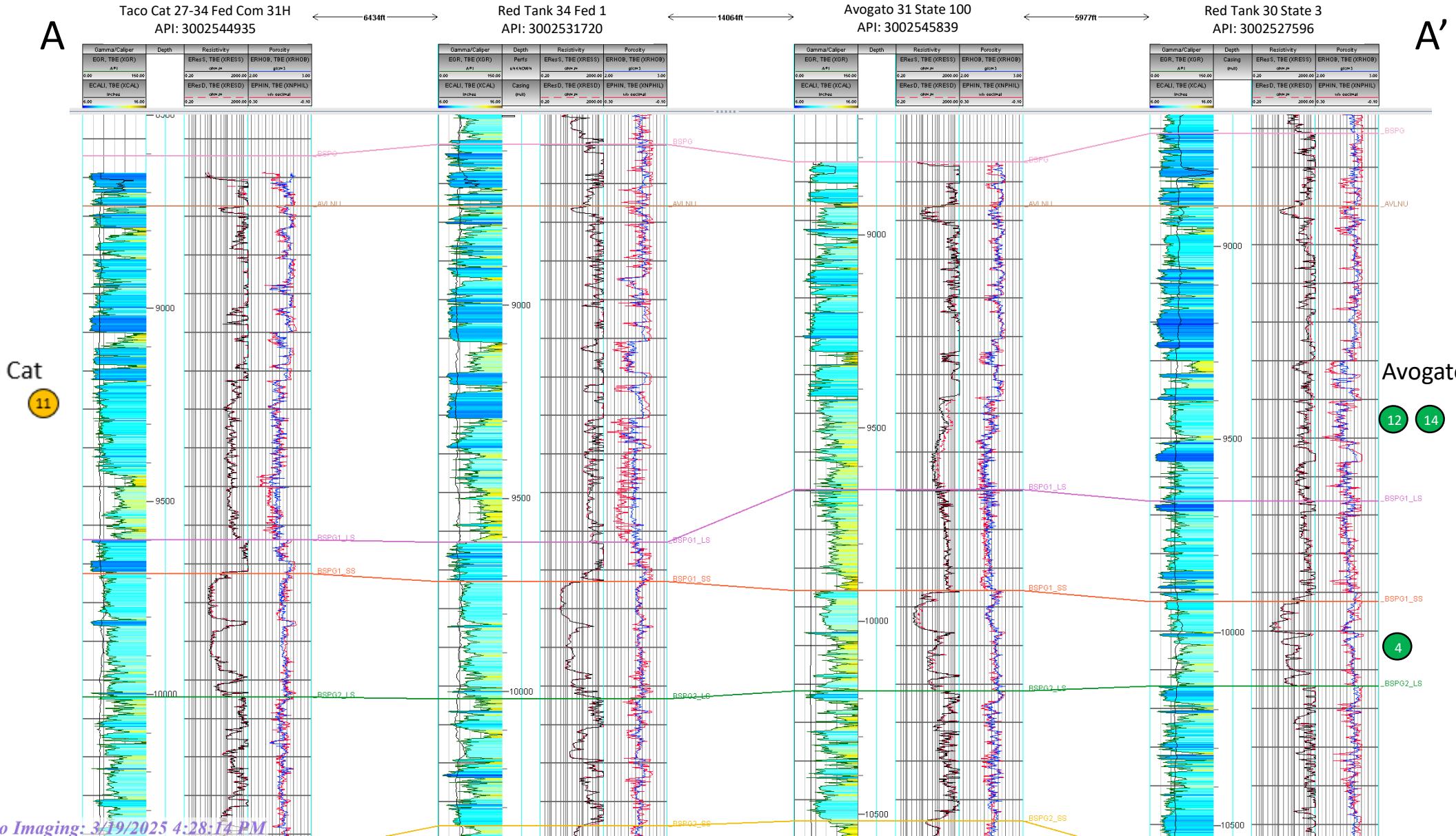
- Avalon Shale (Avogato 12H, Red Tank 14H)
  - Reservoir comprised of siliceous mudstone reservoir with natural permeability in the nano-darcy range
  - Confining layer: overlain by ~300' of low porosity and permeability limestone and underlain by ~250' of interbedded low porosity and permeability limestone and shale
- 1st Bone Spring (Avogato 4H)
  - Reservoir comprised of low porosity and permeability sands and shales
  - Confining layer: overlain by ~250' of interbedded low permeability limestone and shale and underlain by ~450' of low porosity and permeability limestone
- 2<sup>nd</sup> Bone Spring (Avogato 21H, 22H, 23H, 24H, 25H, 24Y, Taco Cat 21H)
  - Reservoir comprised of low porosity siltstone and sandstone
  - Confining layer: overlain by ~450' of low permeability limestone and underlain by 150' low permeability limestone
- 3<sup>rd</sup> Bone Lime (Avogato 74H)
  - Reservoir comprised of interbedded low porosity and permeability silts, shales, and limestones
  - Confining layer: overlain by ~150' of low permeability limestone and underlain by ~200' of low porosity and permeability shales and limestones



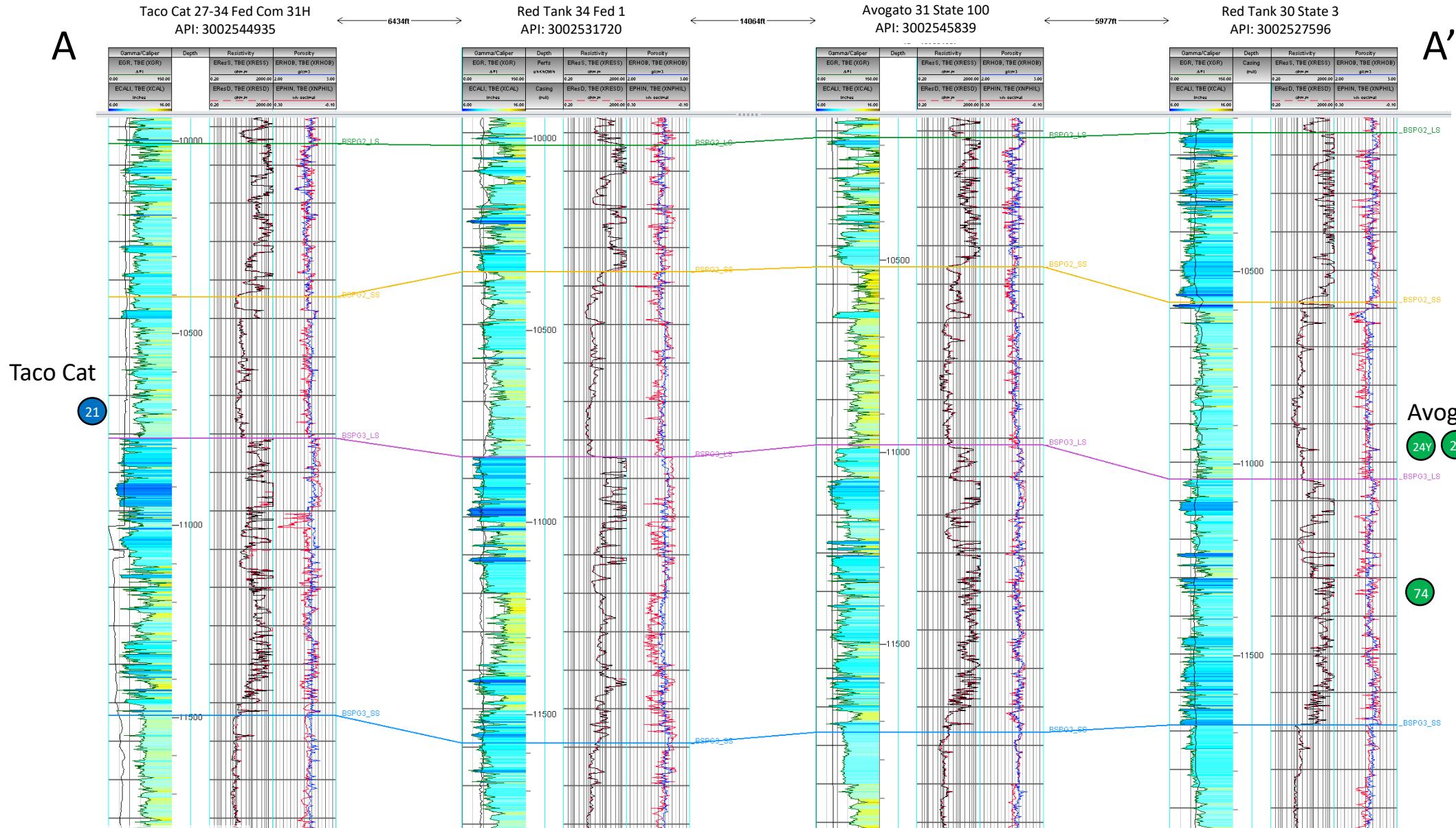
# Cross Section Location Map



# Avalon and First Bone Spring Cross Section

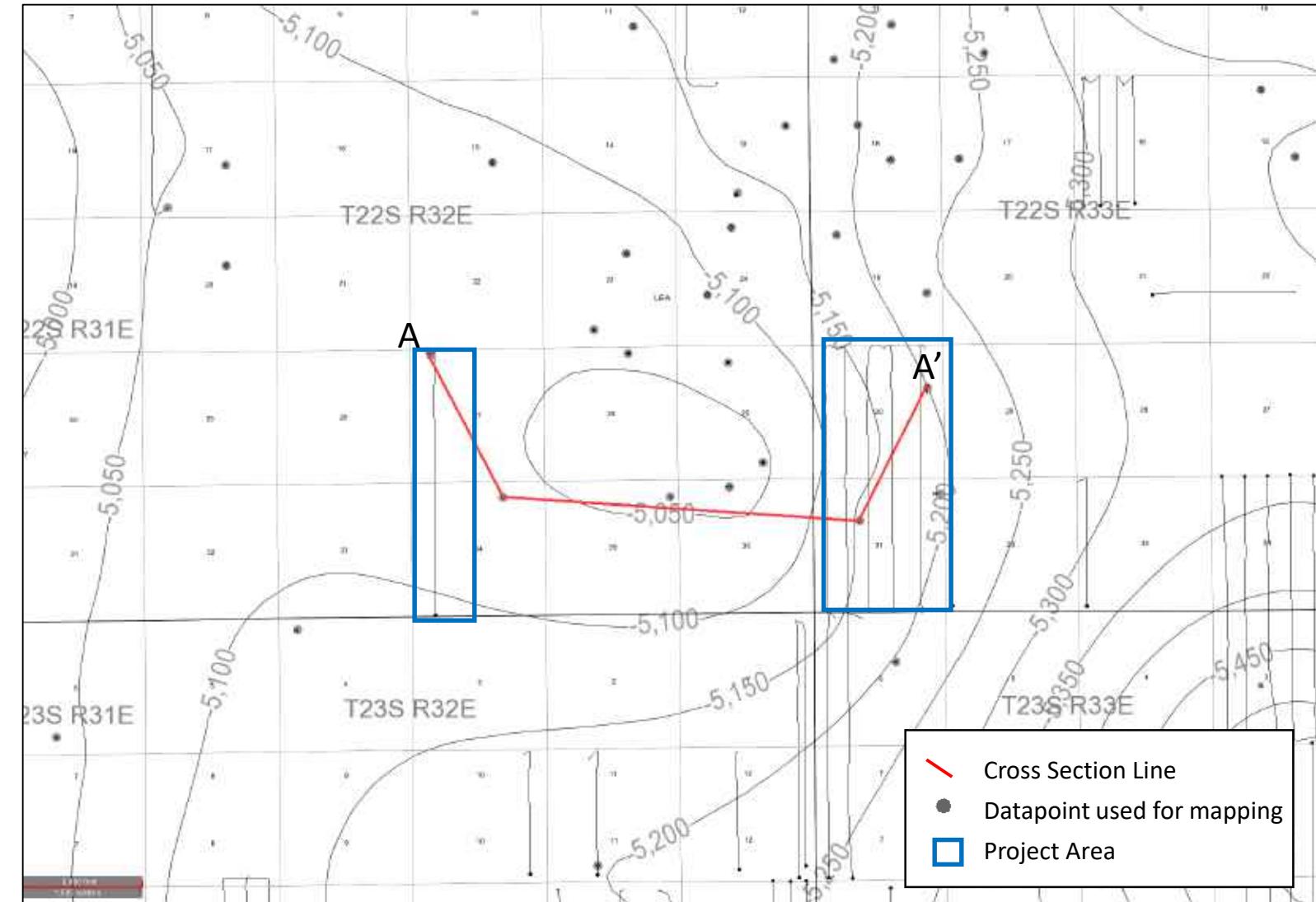


# Second Bone Spring and Third Bone Spring Lime Cross Section



# Avalon Structure Map (SSTVD)

Horizontal wells shown are  
Avalon Producers



- Cross Section Line
- Datapoint used for mapping
- Project Area

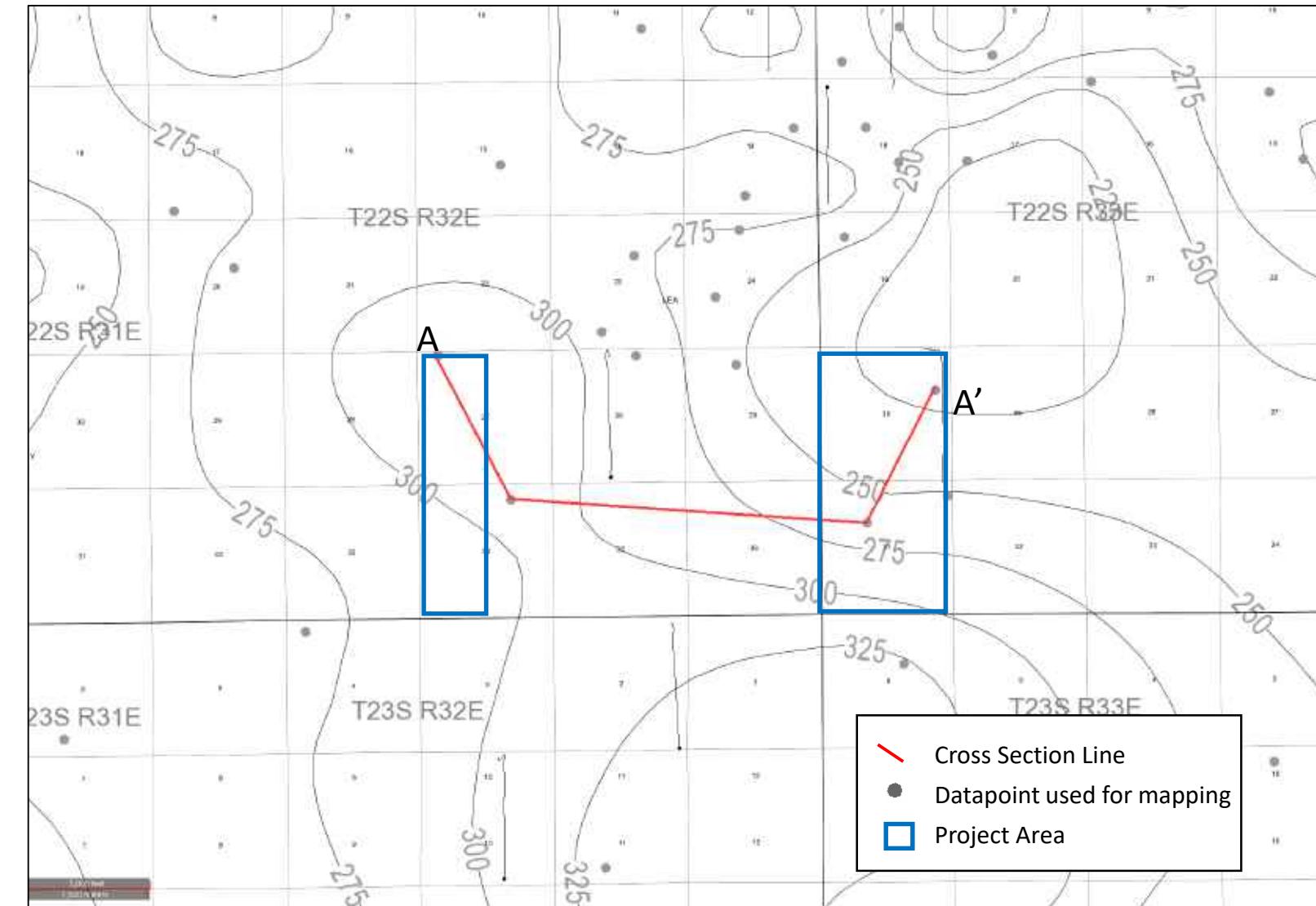
# Avalon Isopach

Horizontal wells shown are  
Avalon Producers



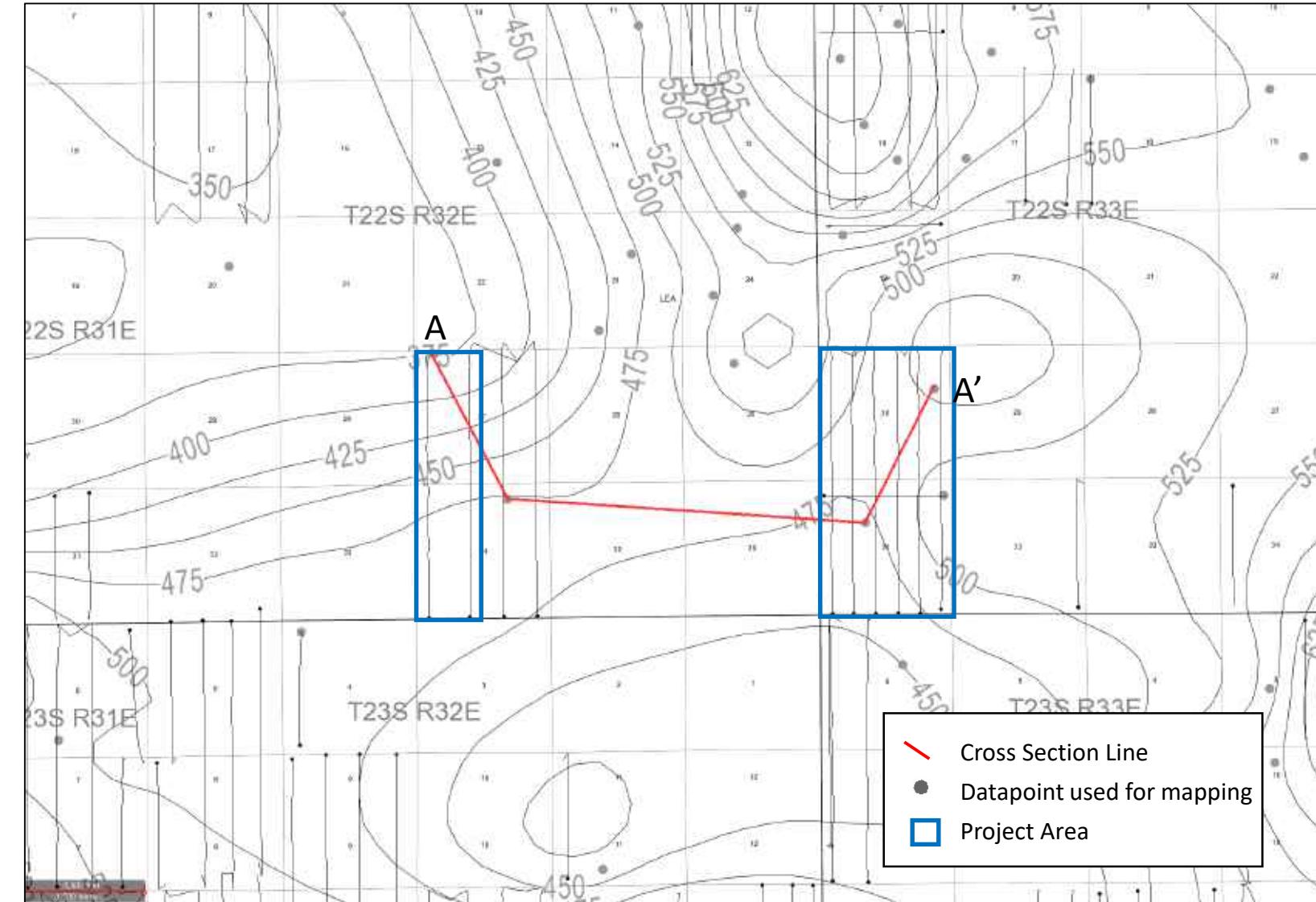
# First Bone Spring Isopach

Horizontal wells shown are First Bone Spring Producers



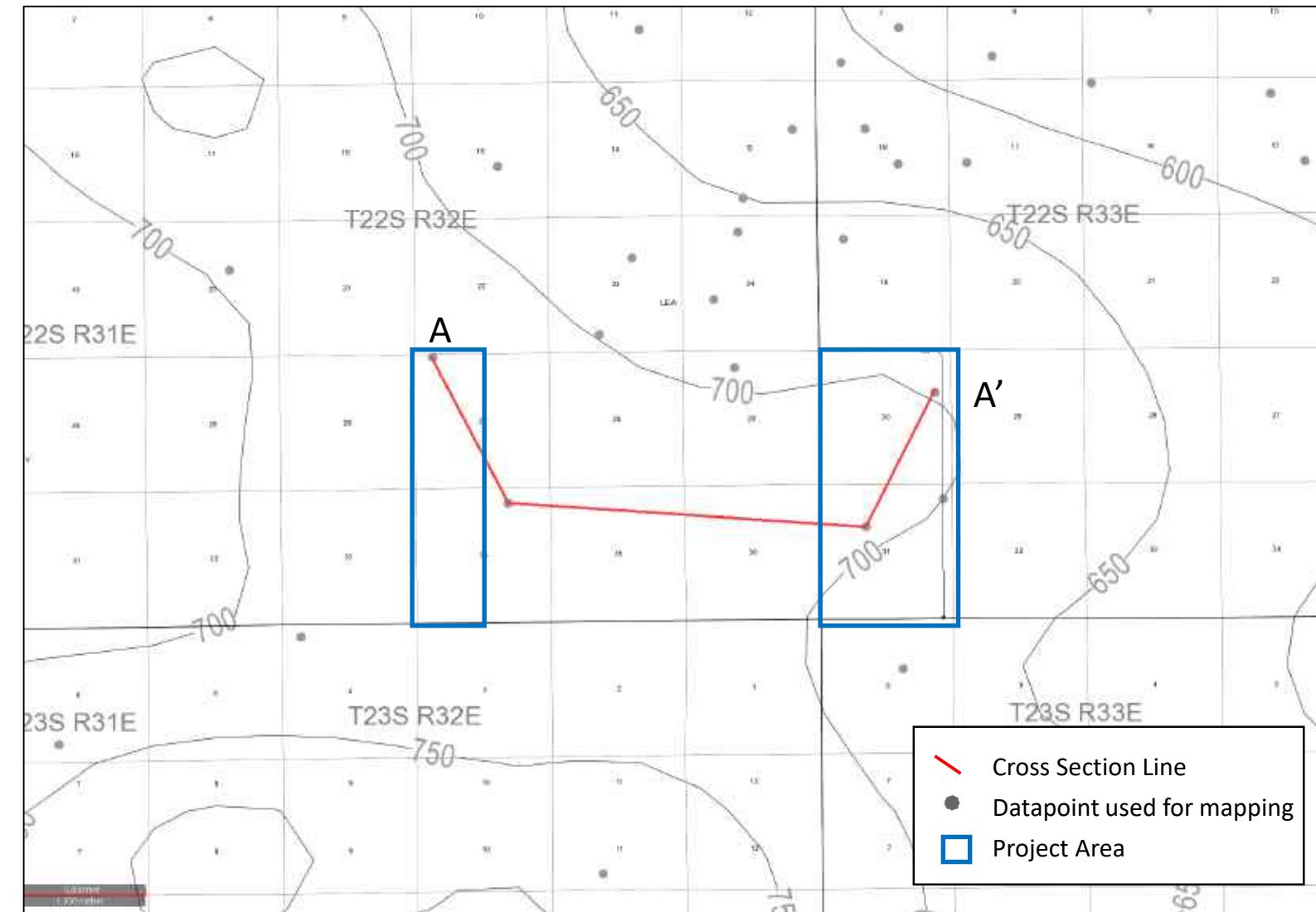
# Second Bone Spring Isopach

Horizontal wells shown are  
Second Bone Spring Producers



# Third Bone Spring Lime Isopach

Horizontal wells shown are Third Bone Spring Lime Producers



**Geologic Information for Wells injecting into the Avalon member of the Bone Spring Formation**

Two wells will be injecting into the Avalon member of the Bone Spring Formation. The wells have an average TVD of approximately 9,475' (Avogato 30-31 State Com 12H and Red Tank 30-31 State com 14H). The wells have lateral lengths of approximately 10,000'. The Avalon Shale is a very fine-grained quartz-rich and brittle siltstone with alternating cycles of carbonate rich mudstones deposited by gravity flows. Well log analysis indicates the Avalon has an average porosity of 6% with nanodarcy permeabilities.

Low-permeability barriers to fluid flow exist within the Bone Spring Formation above and below the Avalon Shale. Above the Avalon Shale, the Bone Spring Formation consists of approximately 300' of fine-grained siltstones and limestones that have very low permeabilities. Below the Avalon Shale is approximately 250' of low permeability interbedded limestones and siltstones.

Overlying the Bone Spring is the 3,700' thick Delaware Mountain Group, which consists of water and hydrocarbon-bearing low porosity and permeability sands with minor amounts of interbedded limestone and shale. Above the Delaware Mountain Group is the Castile Formation consisting of very low permeability anhydrite, gypsum, and calcite that acts as another ~1,500' thick barrier to upward movement of fluids. The Salado Formation overlies the Castile and consists of ~1,000' of impermeable salt. The top of the Salado is at 1,500' TVD and the deep aquifers found just above the Salado at the base of the Rustler are saline water. The top of Rustler Formation is at approximately 1000'. The Rustler is a continuous anhydrite layer that acts as another low permeability confining layer creating a perched aquifer above it that is the lowest known fresh water in the area. Due to the thickness of multiple impermeable rock layers between the injection interval and the shallow aquifers there is very little possibility of migration of injected fluids into freshwater aquifers.

**Locate freshwater wells within two miles:**

An investigation of existing shallow water wells has not identified any active freshwater wells within a two-mile radius of the proposed injectors.

**Well List:**

**Avogato 30 31 State Com #012H**

**Red Tank 30 31 State Com #014H**

### **Geologic Information for Wells injecting into the First Bone Spring Formation**

The Avogato 30-31 State Com 4H will be injecting into the First Bone Spring Formation. The well has an average TVD of approximately 10,150' TVD and a lateral length of approximately 10,000'. The 1<sup>st</sup> Bone Spring is a fine-grained siltstone with interbedded carbonates and mudstones deposited by gravity flows. Well log analysis indicates the First Bone Spring has an average porosity of 6% with nanodarcy permeability.

Low-permeability barriers to fluid flow exist within the Bone Spring Formation above and below the First Bone Spring. Above the First Bone Spring injector, the Bone Spring Formation consists of approximately 250' of fine-grained siltstones and limestones that have very low permeabilities. Below the First Bone Spring is approximately 300' of low permeability interbedded limestones and siltstones.

Overlying the Bone Spring is the 3,700' thick Delaware Mountain Group, which consists of water and hydrocarbon-bearing low porosity and permeability sands with minor amounts of interbedded limestone and shale. Above the Delaware Mountain Group is the Castile Formation consisting of very low permeability anhydrite, gypsum, and calcite that acts as another ~1,500' thick barrier to upward movement of fluids. The Salado Formation overlies the Castile and consists of ~1,000' of impermeable salt. The top of the Salado is at 1,500' TVD and the deep aquifers found just above the Salado at the base of the Rustler are saline water. The top of Rustler Formation is at approximately 1000'. The Rustler is a continuous anhydrite layer that acts as another low permeability confining layer creating a perched aquifer above it that is the lowest known fresh water in the area. Due to the thickness of multiple impermeable rock layers between the injection interval and the shallow aquifers there is very little possibility of migration of injected fluids into freshwater aquifers.

#### **Locate freshwater wells within two miles:**

An investigation of existing shallow water wells has not identified any active freshwater wells within a two mile radius of the proposed injectors.

#### **Well List:**

**Avogato 30 31 State Com #004H**

### **Geologic Information for Wells injecting into the Second Bone Spring Formation**

Seven wells will be injecting into the Second Bone Spring Formation. The Red Tank 30-31 State Com 24Y and Avogato 30-31 State Com 21H, 22H, 23H, 24H, and 25H have an average depth of approximately 10,800' TVD and the Taco Cat 27-34 Fed Com 21H has an average depth of approximately 10,700' TVD. The 2<sup>nd</sup> Bone Spring is a fine-grained siltstone with interbedded carbonates and mudstones deposited by gravity flows. Well logs indicate the Second Bone Spring has an average porosity of 7% with nanodarcy permeabilities.

Low-permeability barriers to fluid flow exist within the Bone Spring Formation above and below the Second Bone Spring. Above the Second Bone Spring injectors, the Bone Spring Formation consists of approximately 300' of fine-grained siltstones and limestones that have very low permeabilities. Below the Second Bone Spring is approximately 200' of low permeability interbedded limestones and siltstones.

Overlying the Bone Spring is the 3,700' thick Delaware Mountain Group, which consists of water and hydrocarbon-bearing low porosity and permeability sands with minor amounts of interbedded limestone and shale. Above the Delaware Mountain Group is the Castile Formation consisting of very low permeability anhydrite, gypsum, and calcite that acts as another ~1,500' thick barrier to upward movement of fluids. The Salado Formation overlies the Castile and consists of ~1,000' of impermeable salt. The top of the Salado is at 1,500' TVD and the deep aquifers found just above the Salado at the base of the Rustler are saline water. The top of Rustler Formation is at approximately 1000'. The Rustler is a continuous anhydrite layer that acts as another low permeability confining layer creating a perched aquifer above it that is the lowest known fresh water in the area. Due to the thickness of multiple impermeable rock layers between the injection interval and the shallow aquifers there is very little possibility of migration of injected fluids into freshwater aquifers.

#### **Locate freshwater wells within two miles:**

An investigation of existing shallow water wells has not identified any active freshwater wells within a two mile radius of the proposed injectors.

#### **Well List:**

**Avogato 30 31 State Com #021H**  
**Avogato 30 31 State Com #022H**  
**Avogato 30 31 State Com #023H**  
**Avogato 30 31 State Com #024H**  
**Avogato 30 31 State Com #025H**  
**Red Tank 30 31 State Com #024Y**  
**Taco Cat 27 34 Fed Com #021H**

### **Geologic Information for Wells injecting into the Third Bone Spring Lime Formation**

The Avogato 30-31 State Com 74H will be injecting into the Third Bone Spring Lime Formation. The well has an average TVD of approximately 11,400' TVD and a lateral length of approximately 10,000'. The Third Bone Spring Lime is a very fine-grained brittle siltstone with alternating cycles of carbonates, sands, and mudstones deposited by gravity flows. Well log analysis indicates the Third Bone Lime has an average porosity of 5% with nanodarcy permeability.

Low-permeability barriers to fluid flow exist within the Bone Spring Formation above and below the Third Bone Spring Lime. Above the Third Bone Spring Lime injectors, the Bone Spring Formation consists of approximately 300' of fine-grained siltstones and limestones that have very low permeabilities. Below the Third Bone Spring Lime is approximately 250' of low permeability interbedded limestones and siltstones.

Overlying the Bone Spring is the 3,700' thick Delaware Mountain Group, which consists of water and hydrocarbon-bearing low porosity and permeability sands with minor amounts of interbedded limestone and shale. Above the Delaware Mountain Group is the Castile Formation consisting of very low permeability anhydrite, gypsum, and calcite that acts as another ~1,500' thick barrier to upward movement of fluids. The Salado Formation overlies the Castile and consists of ~1,000' of impermeable salt. The top of the Salado is at 1,500' TVD and the deep aquifers found just above the Salado at the base of the Rustler are saline water. The top of Rustler Formation is at approximately 1000'. The Rustler is a continuous anhydrite layer that acts as another low permeability confining layer creating a perched aquifer above it that is the lowest known fresh water in the area. Due to the thickness of multiple impermeable rock layers between the injection interval and the shallow aquifers there is very little possibility of migration of injected fluids into freshwater aquifers.

#### **Locate freshwater wells within two miles:**

An investigation of existing shallow water wells has not identified any active freshwater wells within a two mile radius of the proposed injectors.

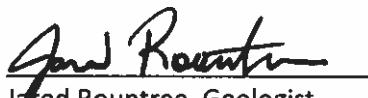
#### **Well List:**

**Avogato 30 31 State Com #074H**

Closed Loop Gas Capture (CLGC) Project

Affirmative Statement 1

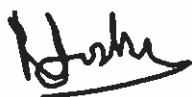
The operator examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the disposal zone and any underground source of drinking water.



Jared Rountree, Geologist

3/1/2023

Date



Rahul Joshi, Reservoir Engineer

02/17/2023

Date

# Reservoir Analysis



# 2021 Reservoir Analysis Recap

- Reservoir Simulation Model was built and history-matched with 2017 high pressure (4200 psi) gas EOR pilot project in Cedar Canyon 16-7H.
- For this project, multiple low-pressure (1200-1300 psi) gas storage scenarios were simulated.
- Results
  - Minor increase in gas saturation and reservoir pressure within the fracture network. Gas storage impacts the fracture network no more than 100 ft from the wellbore.
  - Forecast initial injection rate of 3000 MSCFPD for a 10,000 ft lateral at 1200 psi surface injection pressure.
  - Anticipate no impact on oil or gas production of gas storage well. This is due to small volumes and low pressure of gas storage events.
  - Anticipate no impact on oil or gas production of offset wells.

# 2023 Reservoir Analysis Updates

- Previous model results are still applicable due to similar project scope.
  - Theoretical vs. actual gas storage injection rates confirmed accuracy of model.
  - Increase in the MASP from 1200 psi to 1300 psi results in increased injection rate but does not impact the reservoir model results on reservoir gas saturation or reservoir pressure profile.
- Oil production rates before and after a gas storage event are similar.
- Gas storage capacity and SRV values are included for new candidate wells.
- Actual injection volumes are a lot less than the gas storage capacity of the fracture network.
- For the longest storage event of 5 days, storage gas from each well was recovered after 1-3 months.

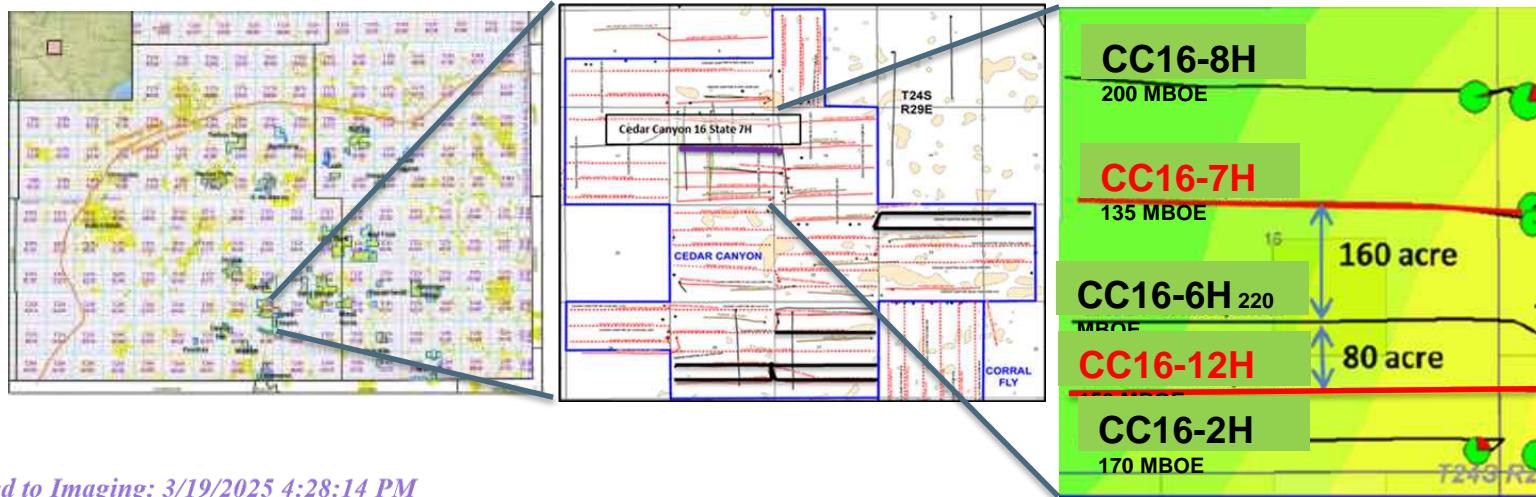


# Project Overview – Avogato, Taco Cat & Red Tank

- Closed loop gas capture project (CLGC) IN Oxy's NM assets
- Produced gas injection into productive formation in NM (Avalon, 1BS, 2BS, Harkey)
- Gas injection into horizontal wells of 10,000 ft lateral length
- Purpose of Modeling
  - >Review potential effects on wells adjacent to the CLGC area
  - >Quantify movement of the injected gas
  - >Utilize data from Cedar Canyon Huff and Puff Projects

## Model Set-up

- Uses Cedar Canyon Sec 16 2<sup>nd</sup> BSS (as shown in layout below)
- Gas Injection pilot (EOR) was implemented in CC16-7H well in 2017
- Reservoir model is history matched for primary production and gas injection pilot
- Model is also tuned to capture injection gas breakthrough in offset wells that was observed during pilot period
- Gas injection pilot wells are 4 wells per section; model is adjusted to simulate the effect of closer wells (6 wps)



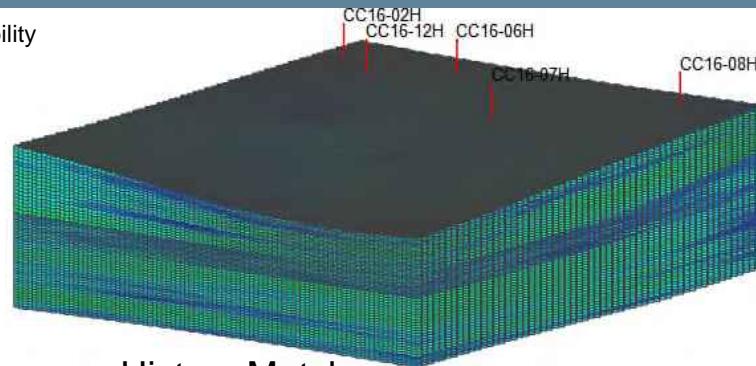
# Cedar Canyon Section-16 Reservoir Model

Location:	Lea County, NM
Model Acreage:	640
Pay Horizon:	2 <sup>nd</sup> Bone Springs Sand
Lithology:	Sandstone interbedded with Limestone
Trap Type:	Stratigraphic
Nominal Depth:	8400 ft
Gas Cap (at discovery):	No
Primary Drive Mechanism:	Solution Gas Drive

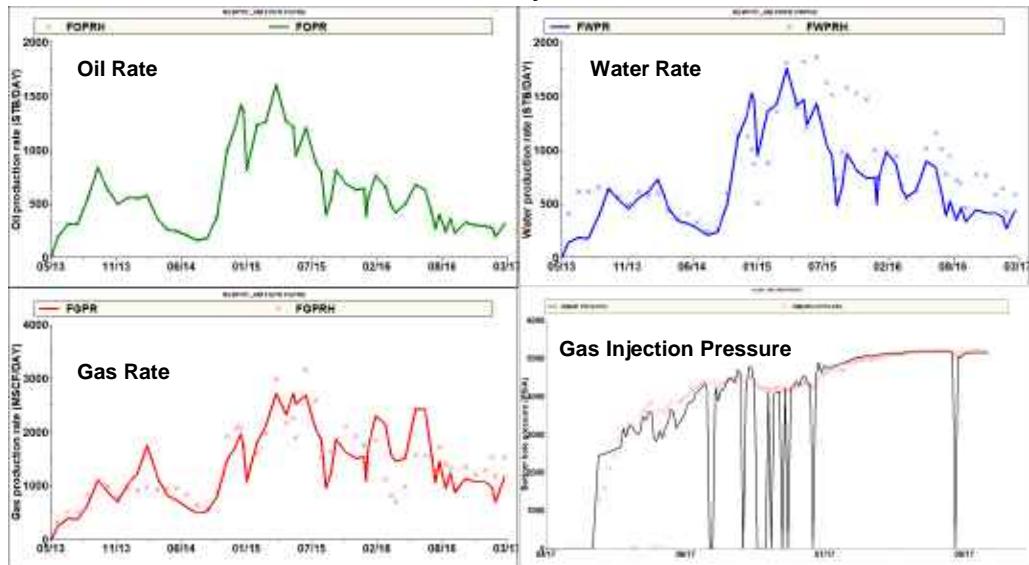
Gross Pay:	320 ft
Net Pay:	320 ft
Avg Porosity:	6.8%
Initial Sw:	50%
Permeability:	0.0003md (matrix)
Initial Reservoir Pressure:	4500 psi
Reservoir Temperature:	150 F
Oil Gravity:	42 API
Boi:	1.63 RB/STB
Rsi:	1480 SCF/STB
Original Oil in Place:	28 MMSTB
Released to Imaging:	3/19/2025 4:28:14 PM

## Model Inputs

Structure & Permeability  
1,177,400 Grids  
56 Layers



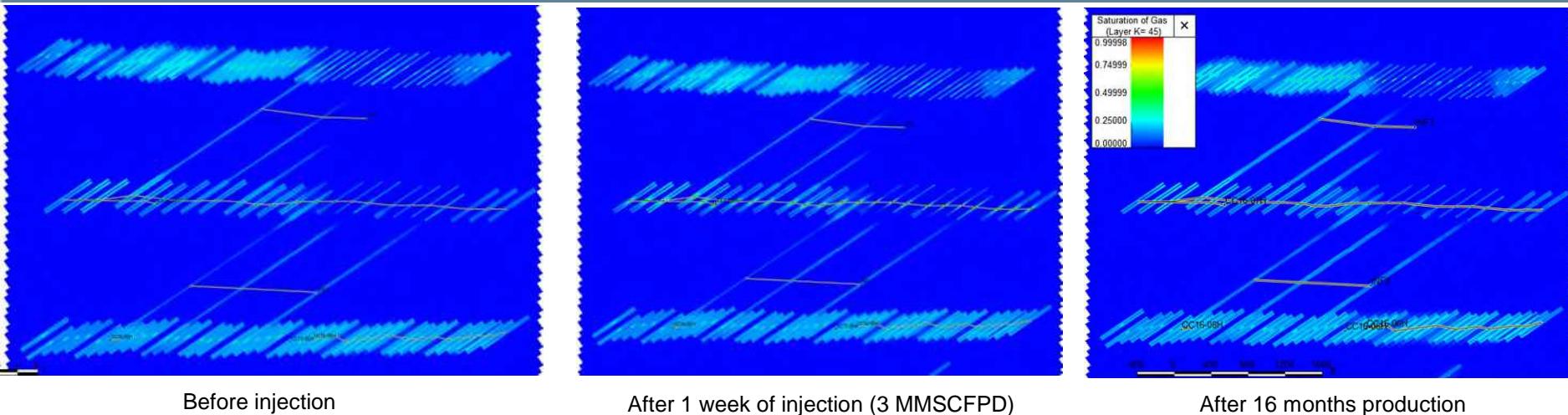
History Match



# Gas Storage Simulation Process

- Run primary production for all wells for additional period (post history match) – Base Case
- Inject gas in injection well at 2MMSCFPD for 7 days
- Produce the injection well post injection – Injection Case
- Observe the effect on oil, gas rate/recovery in injection well and offset wells by comparing Base and Injection cases

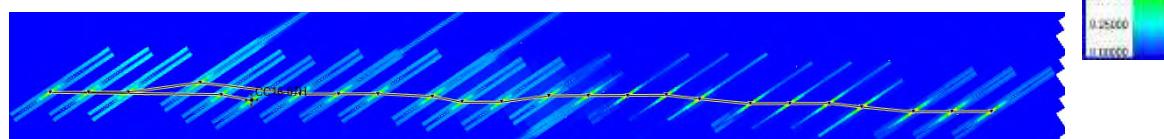
# Gas injection Profile (1 week Injection)



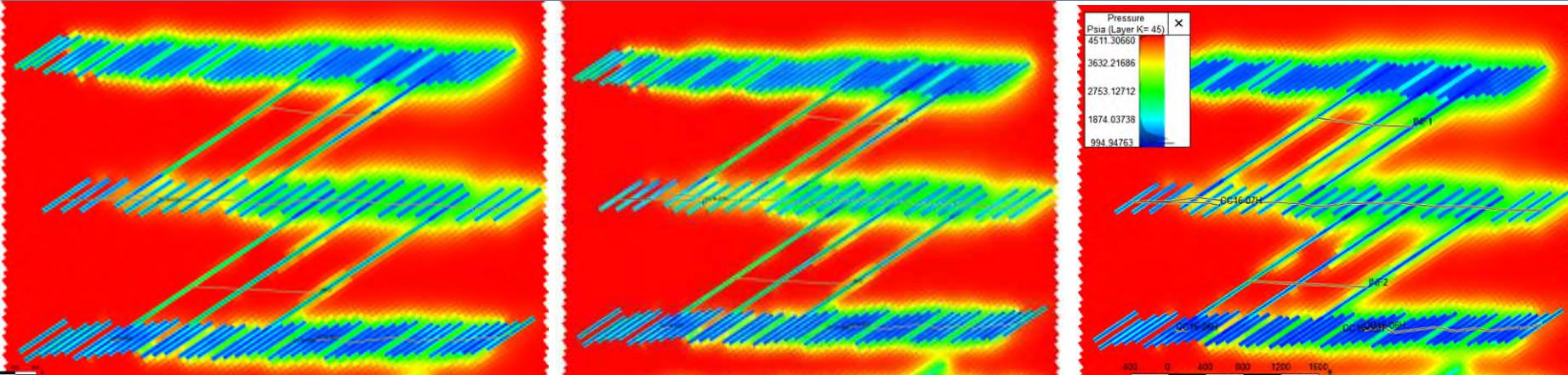
Before Injection CC16-7H  
Blow-up



After Injection CC16-7H  
Blow-up



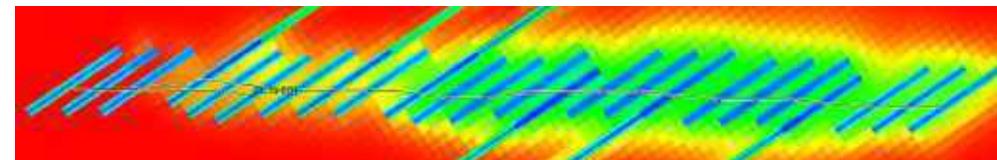
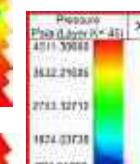
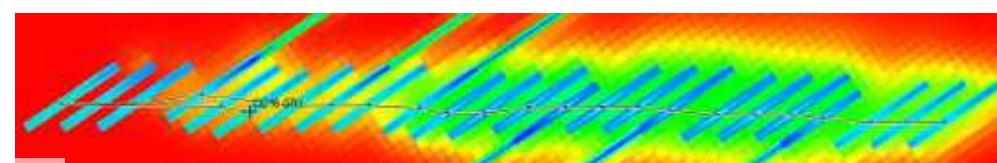
# Pressure Profile (1 week injection)



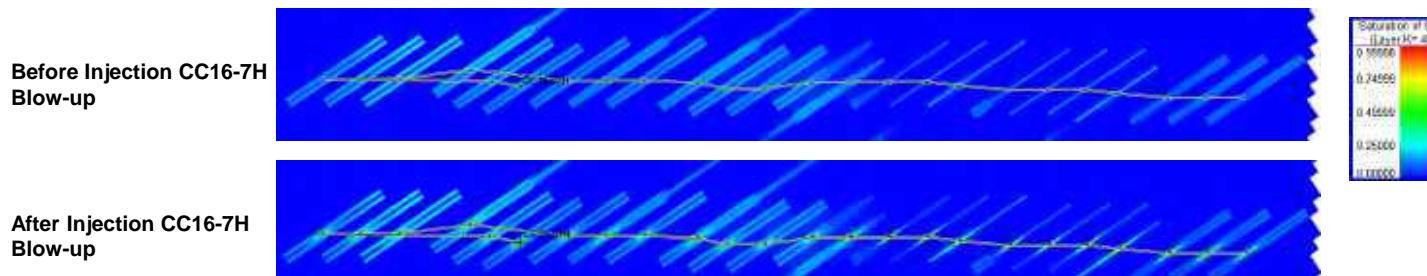
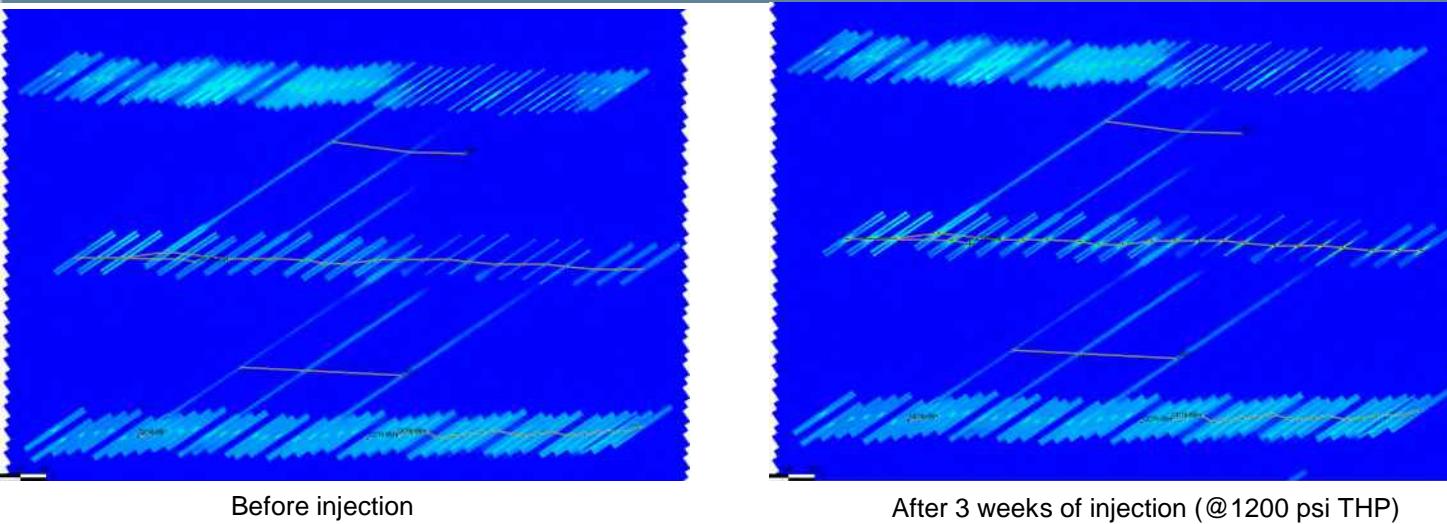
Before injection

After 1 week of injection (3 MMSCFPD)

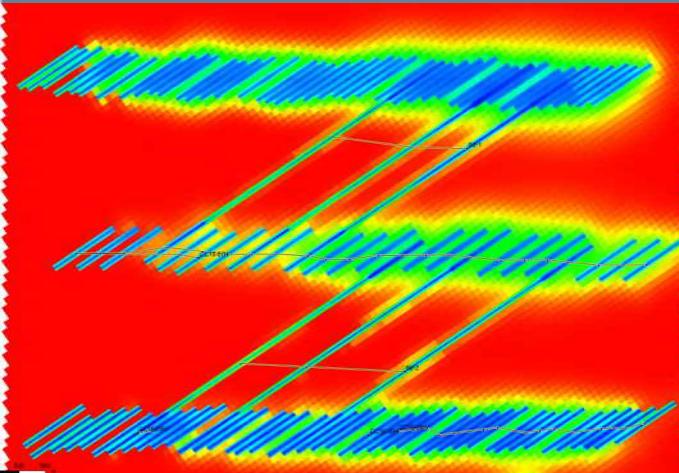
After 16 months production

Before Injection CC16-7H  
Blow-upAfter Injection CC16-7H  
Blow-up

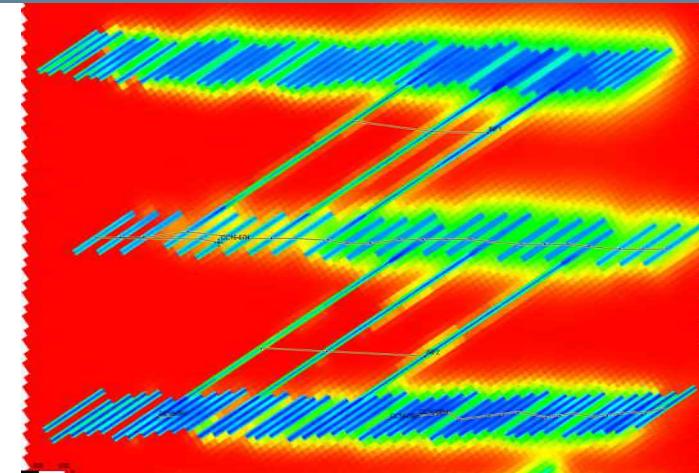
# Gas injection Profile (3 weeks Injection)



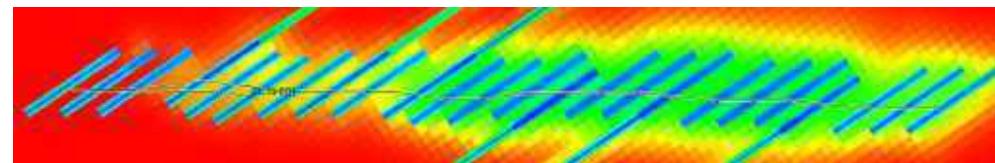
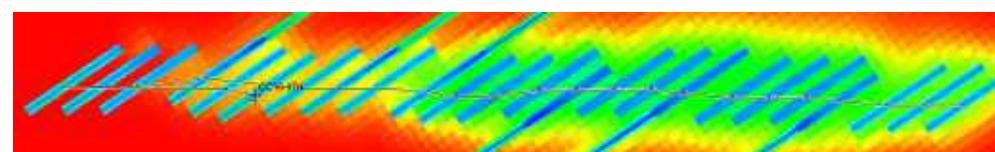
# Pressure Profile ( 3 weeks Injection)



Before injection



After 3 weeks of injection (@1200 psi THP)

Before Injection CC16-7H  
Blow-upAfter Injection CC16-7H  
Blow-up

# Summary of Cases

Case	Injection Description*	WPS	Oil recovery effect in injected well (MBO)	Oil recovery effect in offset wells (MBO)	Gas breakthrough in Offset well
1	Single Well	4	No change	No change	No
2	Single Well**	6	No change	No change	No
3	Single Well	8	No change	No change	No
4	Single Well (Multiple injection and production cycles)	6	No change	No change	No
5	Single well***	6	No change	No change	No
6	Multiple Adjacent Wells	4	No change	No change	No
7	Multiple Adjacent Wells	6	No change	No change	No
8	Multiple Adjacent Wells	8	No change	No change	No

\*All injection at 2MMSCF/DAY for 7 days except cases 2 and 5

\*\*Injection at 3MMSCF/DAY for 7 days

\*\*\*Injection at constant surface pressure of 1200 psi for 21 days

# Stimulated Rock Volume (SRV)

API	Well Name	Avg Xf (ft)	Avg H (ft)	Well Length (ft)	SRV, ft3
3002544933	TACO CAT 27 34 FEDERAL COM #011H	400	400	10000	3,200,000,000
3002544934	TACO CAT 27 34 FEDERAL COM #021H	375	377	10000	2,827,500,000

Gas storage capacity is high for each well

- SRV :  $2 \times X_f \times X_h \times \text{WellLength}$

# Gas Storage Capacity

API	Well Name	Fracture volume gas equivalent, mmscf	Total prod gas equivalent, mmscf
3002545923	AVOGATO 30 31 STATE COM #004H	293	1943
3002545957	AVOGATO 30 31 STATE COM #012H	333	2727
3002545924	AVOGATO 30 31 STATE COM #021H	235	1138
3002545925	AVOGATO 30 31 STATE COM #022H	232	1182
3002545926	AVOGATO 30 31 STATE COM #023H	232	1254
3002545960	AVOGATO 30 31 STATE COM #024H	237	1042
3002545961	AVOGATO 30 31 STATE COM #025H	226	1311
3002545964	AVOGATO 30 31 STATE COM #074H	252	770
3002544193	RED TANK 30 31 STATE COM #014H	310	2062
3002544161	RED TANK 30 31 STATE COM #024Y	237	1597
3002544934	TACO CAT 27 34 FEDERAL COM #021H	254	1392

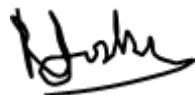
- Table below shows gas injected for May 23 storage event in permitted wells
- Actual injected volume is significantly less than maximum fracture storage capacity

API	Well	Fracture volume gas equivalent, mmscf	Actual gas injected, mmscf
3002545956	AVOGATO 30-31 STATE COM 11H	326	13
3002545958	AVOGATO 30-31 STATE COM 13H	312	10
3002545959	AVOGATO 30-31 STATE COM 14H	325	13
3002544933	TACO CAT 27 34 FEDERAL COM 11H	339	13

Closed Loop Gas Capture (CLGC) Project

Affirmative Statement 2

The operator examined the available geologic and engineering data and determined 1) the total recoverable volume of hydrocarbons from the reservoir will not be adversely affected by the project and 2) the gas composition will not damage the reservoir.



---

Rahul Joshi, Reservoir Engineer

02/17/2023 \_\_\_\_\_  
Date

# GOR Gas Allocation



# GOR Gas Allocation Plan for CLGC Wells

## Application

The following methodology will apply to CLGC wells on a well by well basis. The application will start after a CLGC storage event and will end after 100% of the Storage Gas Injection Inventory is recovered. Afterwards, Gas Allocation will revert to previous accounting procedures.

## Overview

During a CLGC storage event, a portion of the combined gas streams from source wells will be stored in a CLGC well. After a storage event, the wellhead gas produced from a CLGC well will consist of three components: Gas Lift Gas, Native Gas, and Storage Gas Production. Both Native Gas and Storage Gas Production are produced from the reservoir, and the combined production is Reservoir Gas.

$$\text{Wellhead Gas Produced} = \text{Gas Lift Gas} + \text{Native Gas} + \text{Storage Gas Production}$$

Gas Lift Gas is measured continuously for each well. This methodology applies a Gas-Oil-Ratio (GOR) Calculation to determine the Native Gas (owned by the owners of the CLGC well) and Storage Gas Production (owned by the owners of the source wells).

A Well Test Allocation Method will be utilized after a storage event. In the example below, the well tests values are highlighted. The values between are interpolated.

## Example

The following data is a simulated, 1-Day storage event.

- 2000 mscf is injected over 24 consecutive hours.
- The well is produced back immediately following a storage event.
- The data has been truncated at 24 days because it is included for illustration purposes.

The input and calculated values for an example well are listed below:

Values	Description
Wellhead Gas Produced, mscf/d	Wellhead gas, measured with well test
Gas Lift Gas, mscf/d	Gas Lift Gas injection, measured with flow meter
Reservoir Gas, mscf/d	Reservoir Gas, the difference between Wellhead Gas and Gas Lift Gas, calculated
Oil, bbl/d	Oil production, measured with well test
Water, bbl/d	Water production, measured with well test
GOR, scf/bbl	Gas Oil Ratio (GOR), engineer calculation based on previous oil and gas well tests before a storage event
Native Gas- GOR Calc, mscf/d	Minimum of Reservoir Gas or Native Gas Production using GOR, calculated
Storage Gas Injection, mscf/d	Storage Gas Injection, measured with flow meter

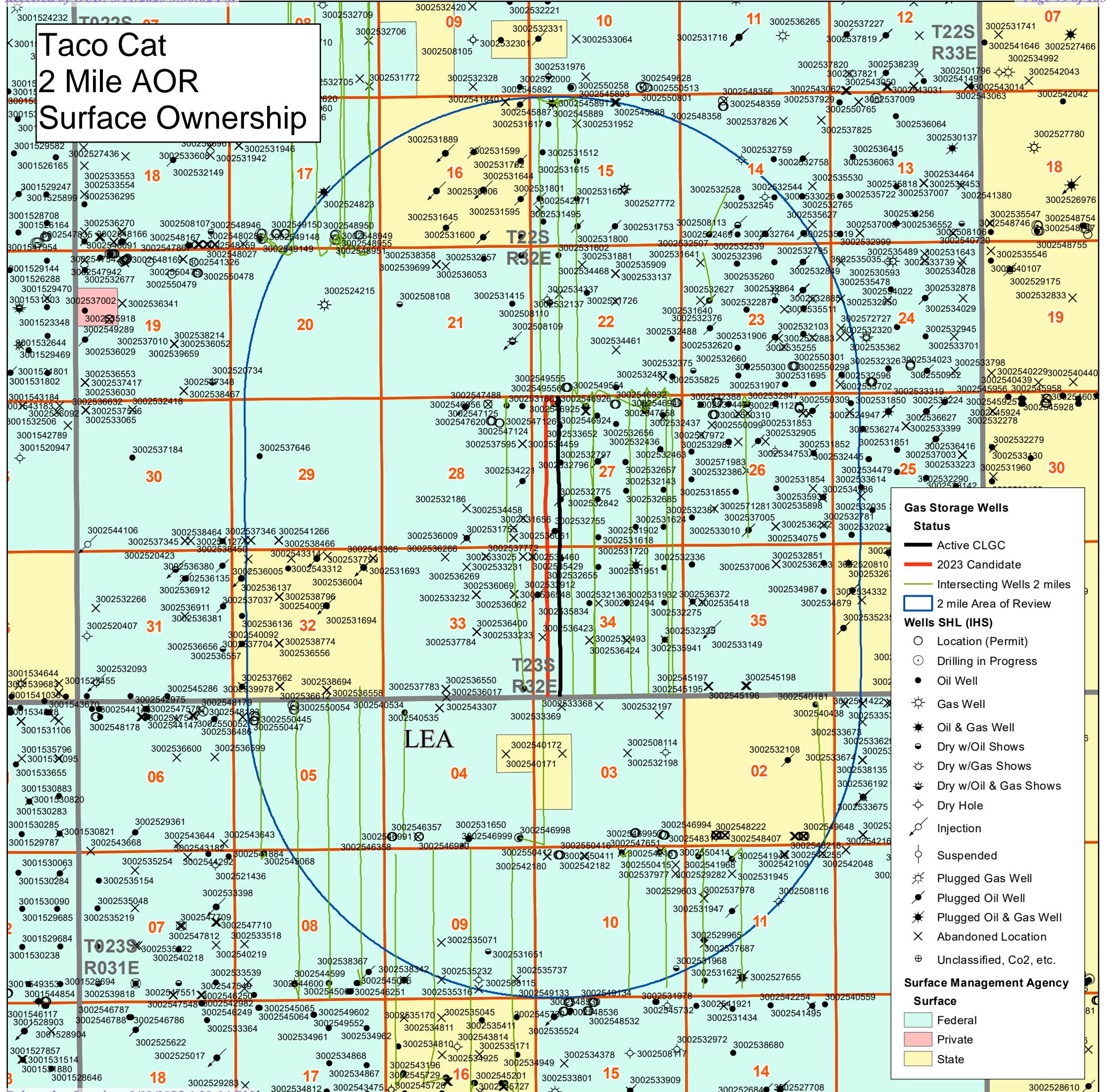
Storage Gas Injection Inventory, mscf						Storage Gas Injection Inventory, cumulative amount of storage gas injection minus storage gas production, calculated				
Storage Gas Production, mscfd						Storage Gas Production, difference between Reservoir Gas and Calculated Native Gas Production, calculated				

Column	1	2	3	4	5	6	7	8	9	10
Calculation or measurement	Well Test	Flow Meter	1-2	Well Test	Well Test	Engineer Analysis	MIN (3,4*6/1000)	Flow Meter	8-10 + 9_PreviousRow	IF(9>0, 3-7,0)
Day	Wellhead Gas Produced, mscf/d	Gas Lift Gas, mscf/d	Reservoir Gas, mscf/d	Oil, bbl/d	Water, bbl/d	GOR, scf/bbl	Native Gas-GOR Calc, mscf/d	Storage Gas Injection, mscf/d	Storage Gas Inventory, mscf	Storage Gas Production, mscfd
-90	626	500	126	63	103	2,005	126	0	0	0
-60	625	500	125	62	101	2,032	125	0	0	0
-30	624	500	124	60	99	2,053	124	0	0	0
1	623	500	123	59	96	2,081	123	0	0	0
2	0	0	0	0	0	2,050	0	2000	2000	0
3	850	500	350	45	80	2,050	92	0	1743	257
4	741	500	241	50	86	2,050	102	0	1604	139
5	713	500	213	52	88	2,050	107	0	1498	106
6	685	500	185	54	91	2,050	111	0	1424	73
7	675	500	175	55	92	2,050	113	0	1362	62
8	665	500	165	56	93	2,050	115	0	1313	50
9	661	500	161	57	93	2,050	116	0	1267	45
10	657	500	157	57	94	2,050	117	0	1227	40
11	653	500	153	57	94	2,050	117	0	1192	35
12	649	500	149	58	95	2,050	118	0	1161	31
13	647	500	147	58	95	2,050	118	0	1133	28
14	645	500	145	58	95	2,050	119	0	1106	26
15	643	500	143	58	95	2,050	119	0	1082	24
16	641	500	141	58	95	2,050	119	0	1060	22
17	640	500	140	58	95	2,050	119	0	1038	21
18	639	500	139	58	94	2,050	119	0	1018	20
19	639	500	139	58	94	2,050	119	0	998	20
20	638	500	138	58	94	2,050	119	0	980	19
21	637	500	137	58	93	2,050	119	0	962	18
22	636	500	136	58	93	2,050	119	0	945	17
23	635	500	135	58	93	2,050	119	0	930	16
24	634	500	134	58	92	2,050	119	0	915	15

# Notice



# Taco Cat 2 Mile AOR Surface Ownership

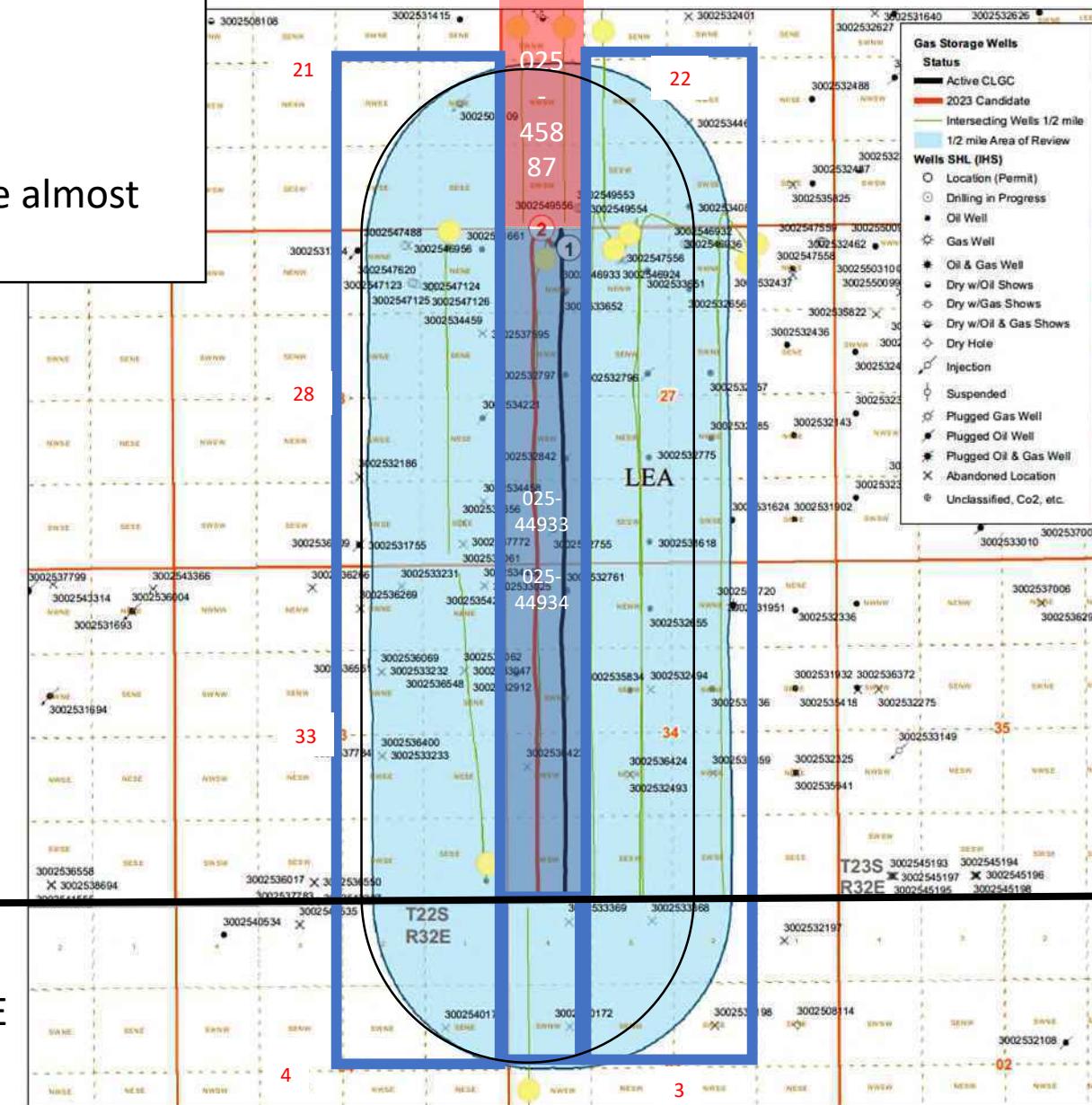


# Taco Cat Area

# Bone Spring HSU Map

## 2/13/23

- Old and New AOR are almost identical.



T22S, R32E

T23S, R32E

- Key**
- Marathon
- Oxy
- Determined Lessee or Unleased MIO
- SHL
- Well Trajectory
- $\frac{1}{2}$  mile AOR outline, 2021
- $\frac{1}{2}$  mile AOR outline, 2023

## Red Tank Notice List 2023

<b>Party</b>	<b>Address</b>
<b>Agencies and Surface Owners</b>	
Bureau of Land Mangement	301 Dinosaur Trail Santa Fe, NM 87508
State Land Office	P.O. Box 1148 Santa Fe, NM 87504
<b>Offset Operators</b>	
Marathon Oil Permian LLC	5555 San Felipe St. Houston ,TX 77056
Cimarex Energy Company of Colorado	600 N. Marienfield St., Suite 600 Midland, TX 79701-4405
MATADOR PRODUCTION COMPANY	One Lincoln Centre 5400 LBJ Freeway, Ste 1500 Dallas, TX 75240
EOG Resources Inc.	P.O. Box 840321 Dallas, TX 75284
WAGNER OIL CO.	500 Commerce St, Ste 600 Forth Worth, TX 76102
<b>Other Affected Persons and Parties</b>	
2019 PERMIAN BASIN JV	P O BOX 10 FOLSOM, LA 70437
A.J. Losee	Box 1720 Artesia, NM 88211
ACCELERATE RESOURCES OPERATING LLC	7950 LEGACY DRIVE SUITE 500 PLANO, TX 75024
Advance Energy Partners Hat Mesa LLC	11490 Westheimer Rd, Ste 950 Houston, TX 77077-6841
Anne Ransome-Losee	3505 Calle Cuervo #218 Albuquerque, NM 87048
Arthur Dow	324 Yucca Dr. NW Albuquerque, NM 87105
Black Mountain Operating LLC	500 Main St, Ste 1200 Fort Worth, TX 76102-3926
Bradley S. Bates	2400 N. Pecos St. Midland, TX 79705
Buckeye Energy Inc.	P.O. Box 3788 Midland, TX 79702-3788
Bullhead Energy LLC	P.O. BOX 3445 Midland, TX 79702-3445
Burlington Resources Oil & Gas Co LP	P.O. Box 51810 Midland, TX 79710-1810
C. W. Trainer	P.O. Box 3788 Midland, TX 79702-3788

CAL MON OIL COMPANY	200 N LORAIN ST STE 1404 MIDLAND, TX 79701
CAMPECHE PETRO LP	500 COMMERCE ST STE 600 FORT WORTH, TX 76102
CARDINAL PLASTICS INC	PO BOX 935 ODESSA, TX 79760-0935
Carmine Scarcelli	2111 Wellington Ct. Midland, TX 79705
Carrie A. Haydel	149 14th St. New Orleans, LA 70124
Chevron USA Inc.	1400 Smith St. Houston, TX 77002
CONRAD E COFFIELD	500 RODEO ROAD #202 SANTA FE, NM 87505
Devon Energy Production Company LP	333 W. Sheridan Ave Oklahoma City, OK 73102-5010
Diance C. Prince	816 Connectcut Ave NW Washington, DC 20006
Elizabeth Losee	328 Sierra Pl. Albuquerque, NM 87108
Frederick Prince IV	816 Connectcut Ave NW Washington, DC 20006
Highpoint Operating Corp.	216 16th St., Ste 1100 Denver, CO 80202-5115
Jesus Salazar Family LP	2400 Rose NW Albuquerque, NM 87104
John Blackburn	P.O. Box 340535 Austin, TX 78734
JUDITH K MARTIN	#25 LAKES DRIVE MIDLAND, TX 79705
KASTMAN OIL COMPANY	P O BOX 5930 LUBBOCK, TX 79408-5930
Kent H. Berger	203 W. Wall St. #612 Midland, TX 79701
Lewis O. Campell	8111 Lamp Post Cir SE Albuquerque, NM 87123
Losee Investments	P.O. Box 1720 Artesia, NM 88211
Lynn S. Charulk	2401 Stutz Pl. Midland, TX 79705
Mackenroth Interests LLC	3601 N. I-40 Service Rd. West Martairie, LA 70002
MCM Permian LLC	P.O. Box 1540 Midland, TX 79702-1540
Mcnic O&G Properties	1360 Post Oak Blvd Houston, TX 77056

MRC Permian Co.	5400 LBJ Fwy, Ste 1500 Dallas, TX 75240-1017
PBEX Resources	223 W. Wall St., Ste 900 Midland, TX 79701-4567
Penwell Energy Inc.	600 N. Marienfield St., Suite 1100 Midland, TX 79701
Pioneer Exploration Ltd.	15603 Kuyhendahal #219 Houston, TX 77090-3655
PXP Producing LLC	717 Texas St, Ste #2100 Houston, TX 77002-2753
Robert M. Dow Revocable Trust	5136 Lomas De Artisto Rd NW Albuquerque, NM 87105
SDS PROPERTIES INC	P O BOX 246 ROSWELL, NM 88202-0010
Sealy Hutchings Cavin Inc.	504 N Wyoming Ave Roswell, NM 88201-2169
SILVERSTONE RESOURCES INC	106 ROW THREE LAFAYETTE, LA 70508
South Highway 14 Bus Co	324 Yucca Dr. NW Albuquerque, NM 87105
Southwest Royalties Inc	6 Desta Dr., Ste 3700 Midland, TX 79705-5516
Strata Production Co	P.O Box 1030 Roswell, NM 88292-1030
The Gray Exploration Co	3601 N. I-40 Service Rd. West Martairie, LA 70002
The Ninety-Six Corp	550 W. Texas #1225 Midland, TX 79701
TOCOR INVESTMENTS INC	P O BOX 293 MIDLAND, TX 79702
Trainer Partners LTD	P.O. Box 3788 Midland, TX 79702-3788
Warwick-Artemis LLC	6608 N. Western Ave Oklahoma City, OK 73116-7326
XTO Energy Inc.	22777 Springwoods Village Pkwy Spring, TX 77389-1425
XTO HOLDINGS LLC	PO BOX 840780 DALLAS, TX 75284-0780