

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

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

**CASE NO. _____
ORDER NO. R-22101
ORDER NO. R-22102**

APPLICATION

OXY USA Inc. (“OXY” or “Applicant”) (OGRID No. 16696) through its undersigned attorneys, hereby files this application with the Oil Conservation Division (“Division”) for an order amending Order No. R-22101 to (1) expand the approved closed loop gas capture injection project area; (2) authorize eleven additional injection wells for intermittent, temporary produced gas injection within the Bone Spring formation; (3) increase the authorized maximum allowable surface injection pressure from 1,200 psi to 1,300 psi; and (4) extend the pilot project, and all deadlines under Order No. R-22101, for an additional two years from issuance of an order in this case. All other terms and provisions in Order No. R-22101 are proposed remain unchanged. Because the proposed expansion of the pilot project area in Order No. R-22101 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:

1. The Division approved Order No. R-22101 on April 6, 2022, authorizing OXY to engage in a closed loop gas capture injection pilot project (“pilot project”) for intermittent and temporary injection of produced natural gas into the Bone Spring formation in the Red Tank; Bone

Spring, East Pool (Pool Code 51687), within 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. Order No. R-22101 authorized OXY to occasionally inject produced natural gas at a maximum allowable surface injection pressure of 1200 psi into the Bone Spring formation [Red Tank; Bone Spring, East Pool (Pool Code 51687)] through the following wells within the project area:

- The **Avogato 30_31 State Com #11H well** (API No. 30-025-45956), with a surface location 160 feet FNL and 885 feet FWL (Lot 1) in Section 30, and a bottom hole location 50 feet FSL and 600 feet FWL (Lot 4) in Section 31.
- The **Avogato 30_31 State Com #13H well** (API No. 30-025-45958), with a surface location 160 feet FNL and 2375 feet FEL (Unit B) in Section 30, and a bottom hole location 17 feet FSL and 2905 feet FEL (Unit N) in Section 31.
- The **Avogato 30_31 State Com #14H well** (API No. 30-025-45959), with a surface location 160 feet FNL and 2340 feet FEL (Unit B) in Section 30, and a bottom hole location 160 feet FSL and 2340 feet FEL (Unit O) in Section 31.

3. Order No. R-22101 authorized OXY’s Avogato closed loop gas capture injection pilot project for a period of two years, terminating on April 6, 2024.

4. Separately, the Division approved Order No. R-22102 on April 6, 2022, authorizing OXY to engage in a closed loop gas capture injection pilot project for intermittent and temporary injection of produced natural gas into the Bone Spring formation in the Red Tank; Bone Spring, East Pool (Pool Code 51687), within a 320-acre, more or less, project area (the “Taco Cat” project) consisting of the W/2 W/2 of Sections 27 and 34, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico./

5. Order No. R-22102 authorized OXY to occasionally inject produced natural gas at a maximum allowable surface injection pressure of 1200 psi into the Bone Spring formation [Red Tank; Bone Spring, East Pool (Pool Code 51687)] through the **Taco Cat 27-34 Federal Com #11H well**

(API No. 30-025-44933), with a surface location 260 feet FNL and 855 feet FWL (Unit D) in Section 27, and a bottom hole location 20 feet FSL and 998 feet FWL (Unit M) in Section 34.

6. Order No. R-22102 authorized OXY's Taco Cat closed loop gas capture injection pilot project for a period of two years, terminating on April 6, 2024.

7. Following issuance of Order Nos. R-22101 and R-22102, OXY's Avogato and Taco Cat gas gathering networks were combined to improve operational efficiency. The Division issued a new gas surface commingling permit, PLC-835-A, authorizing surface commingling of gas within both systems. In addition, OXY is planning development of additional horizontal wells in this area.

8. An expanded project area and authorization to inject through additional closed loop gas capture injection wells will increase OXY's capacity to occasionally inject produced natural gas to help prevent waste and reduce adverse impacts from temporary interruptions of gas pipeline capacity.

9. Because OXY has combined its Avogato and Taco Cat gas gathering systems and is seeking additional closed loop gas capture injection capacity, it now seeks to amend Order No. R-22101 to address these system changes and add wells authorized for injection.

10. OXY proposes to expand the Avogato project area to include all the existing Taco Cat project area, as well as the E/2 E/2 of Sections 27 and 34, Township 22 South, Range 32 East. See Exhibit A at 6. The new expanded project area is proposed to comprise approximately 1,920 acres, more or less, consisting of the following, non-contiguous lands:

Township 22 South, Range 32 East

Section 27	W/2
Section 34	W/2

Township 22 South, Range 33 East

Section 30	All
Section 31	All

11. As part of the expansion, OXY also seeks authority to occasionally inject produced gas authorized for commingling under PLC-835-A into the Bone Spring formation [Red Tank; Bone Spring, East Pool (Pool Code 51687)] through the wells previously authorized under Order Nos. R-22101 and R-22102, as well as the following additional wells:

- **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;
- **Red Tank 30 31 State Com #24Y** (API No. 30-025-44161) with a surface location NE/4 NE/4 (Unit A) in Section 30, and a bottom hole location SE/4 SE/4 (Unit P) in Section 31;
- **Red Tank 30 31 State Com #14H** (API No. 30-025-44193) with a surface location NE/4 NE/4 (Unit A) in Section 30, and a bottom hole location SE/4 SE/4 (Unit P) in Section 31;
- **Avogato 30 31 State Com #4H well** (API No. 30-025-45923), with a surface location NE/4 NE/4 (Unit A) in Section 30, and a bottom hole location SE/4 SE/4 (Unit P) in Section 31;
- **Avogato 30 31 State Com #12H well** (API No. 30-025-45957), with a surface location NW/4 NW/4 (Lot 1) in Section 30, and a bottom hole location SE/4 SW/4 (Unit N) in Section 31;
- **Avogato 30 31 State Com #21H well** (API No. 30-025-45924), with a surface location NE/4 NW/4 (Unit C) in Section 30, and a bottom hole location SW/4 SW/4 (Lot 4) in Section 31;
- **Avogato 30 31 State Com #22H well** (API No. 30-025-45925), with a surface location NE/4 NW/4 (Unit C) in Section 30, and a bottom hole location SE/4 SW/4 (Unit N) in Section 31;
- **Avogato 30 31 State Com #23H well** (API No. 30-025-45926), with a surface location NE/4 NW/4 (Unit C) in Section 30, and a bottom hole location SE/4 SW/4 (Unit N) in Section 31;
- **Avogato 30 31 State Com #24H well** (API No. 30-025-45960), with a surface location NW/4 NE/4 (Unit B) in Section 30, and a bottom hole location SW/4 SE/4 (Unit O) in Section 31;
- **Avogato 30 31 State Com #25H well** (API No. 30-025-45961), with a surface location NW/4 NE/4 (Unit B) in Section 30, and a bottom hole location SE/4 SE/4 (Unit P) in Section 31; and

- **Avogato 30 31 State Com #74H well** (API No. 30-025-45964), with a surface location NE/4 NE/4 (Unit A) in Section 30, and a bottom hole location SE/4 SE/4 (Unit P) in Section 31.

12. Injection along the horizontal portion of the additional wellbores will be at the following approximate total vertical depths:

- **Taco Cat 27-34 Federal Com #21H well** from approximately 10,526 feet to 10,849 feet;
- **Red Tank 30 31 State Com #24Y** from approximately 10,860 feet to 10,887 feet;
- **Red Tank 30 31 State Com #14H** from approximately 9,416 feet to 19,571 9,407 feet;
- **Avogato 30 31 State Com #4H well** from approximately 10,081 feet to 20,138 10,152 feet;
- **Avogato 30 31 State Com #12H well** from approximately 9,594 feet to 9,613 feet;
- **Avogato 30 31 State Com #21H well** from approximately 10,632 feet to 10,754 feet;
- **Avogato 30 31 State Com #22H well** from approximately 10,781 feet to 10,890 feet;
- **Avogato 30 31 State Com #23H well** from approximately 10,671 feet to 10,767 feet;
- **Avogato 30 31 State Com #24H well** from approximately 10,545 feet to 10,959 feet;
- **Avogato 30 31 State Com #25H well** from approximately 10,334 feet to 10,782 feet;
- **Avogato 30 31 State Com #74H well** from approximately 10,265 feet to 11,403 feet;

13. The proposed average injection rate for each well is 3 MMSCFD with a maximum injection rate of 4 MMSCFD during injection. See **Exhibit A** at 43.

14. The source of gas for injection will be from OXY's wells producing in the Bone Spring and Wolfcamp formations that are identified in the list of wells in **Exhibit A** at page 45. Each of OXY's proposed injection wells are operated by OXY. Additional source wells may be added over time under an approved surface commingling authorization.

15. OXY has prepared an analysis of the composition of the source gas for injection and the analyses of target injection intervals. *See Exhibit A* at 46-56. OXY also has a corrosion prevention plan in place.

16. 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

17. Information on the well data, including well diagrams and well construction, casing, tubing, packers, cement, perforations, and other details for each proposed additional injection wells are included in the attached **Exhibit A** at pages 21-42.

18. The current average surface pressures under normal operations for the proposed additional injection wells range from approximately 200 psi to 1,087 psi. *See Exhibit A* at 43. The maximum achievable surface pressure (MASP) for all wells in the pilot project is proposed to be increased from 1,200 psi to 1,300 psi to provide for increased operational flexibility. *Id.*

19. The proposed maximum achievable surface pressure will not exert pressure at the top perforation in the wellbore of any injection well 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 43. In addition, the proposed maximum achievable surface pressure will not exceed 0.14 psi per foot as measured at the top of the uppermost perforation in any injection well and will not exert pressure at the topmost perforation in excess of 90% of the formation parting pressure. *See Exhibit A* at 43.

20. Cement bond logs¹ for each of the proposed additional injection wells demonstrate the placement of cement in the wells proposed for this pilot project and that there is a good and sufficient

¹ Electronic version of the cement bond logs will be submitted to the Division by email.

cement bond with the production casing and the tie-in of the production casing with the next prior casing in each well.

21. Five of the additional wells proposed for injection in the pilot project have previously demonstrated mechanical integrity. *See Exhibit A* at 44. OXY will undertake new tests to demonstrate mechanical integrity for each of the additional wells proposed for this pilot project as a condition of approval prior to commencing injection operations.

GEOLOGY AND RESERVOIR

22. 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 88-102. A general characterization 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.*

23. The top of the Bone Spring formation in this area is at approximately 8,705 feet total vertical depth and extends down to the top of the Wolfcamp formation at approximately 12,014 feet total vertical depth. *See Exhibit A* at 89.

24. Reservoir modeling indicates anticipated horizontal movement of injected gas will be approximately 100 feet or less from each additional injection wellbore within the Bone Spring formation. *See Exhibit A* at 112.

25. 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 pilot project area. *See Exhibit A* at 103-114. OXY's analysis concludes that there will be no change in the oil recovery from each of its additional proposed injection wells or from any of the offsetting wells. *See id.* at 114.

26. OXY has also prepared an analysis evaluating the expected gas storage capacity for the proposed injection well relative to the gas injection volumes. *See Exhibit A* at 116. The analysis confirms that whether the capacity is estimated based on the fracture volume gas equivalent or the total gas equivalent volumes produced from the proposed injection zone, the anticipated gas injection volumes will be well below the estimated volume capacity within the project area.

27. 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 102.

GAS ALLOCATION

28. OXY's proposed method of gas allocation remains unchanged from what was proposed and approved by the Division under Order No. R-22101. *See Exhibit A* at 119-120.

AREA OF REVIEW

29. OXY has prepared maps depicting the location of the proposed injection well, the location and lateral of every well within a two-mile radius, leases within two miles, and the half-mile area of review. *See Exhibit A* at 58-61.

30. A tabulation of data for wells that penetrate the proposed injection intervals or the confining layer within the area of review is included in **Exhibit A** at pages 62-65, along with well-bore schematics for wells that are plugged and abandoned or temporarily abandoned. *See Exhibit A* at 66-87.

31. 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 copy of the affected parties subject

to notice is included, along with a map and list identifying each tract and affected persons given notice. *See Exhibit A* at 121-128.

32. Approval of this Application 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 6, 2023, 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.

Application of OXY USA Inc. to Amend Order No. R-22101 to Expand the Approved Closed Loop Gas Capture Injection Pilot Project Area, Add Additional Injection Wells, Increase the Maximum Allowable Surface Injection Pressure, Extend the Pilot Project for Two Years, and Dismiss Order No. R-22102, Lea County, New Mexico. Applicant in the above-styled cause seeks for an order amending Order No. R-22101 to (1) expand the approved closed loop gas capture injection project area; (2) authorize eleven additional injection wells for intermittent, temporary produced gas injection within the Bone Spring formation; (3) increase the authorized maximum allowable surface injection pressure from 1,200 psi to 1,300 psi; and (4) extend the pilot project, and all deadlines under Order No. R-22101, for an additional two years from issuance of an order in this case. All other terms and provisions in Order No. R-22101 are proposed remain unchanged. Because the proposed expansion of the pilot project area in Order No. R-22101 includes the project area and wells authorized for injection in Order No. R-22102, OXY seeks to dismiss Order No. R-22102. OXY also seeks authority to occasionally inject produced gas authorized for commingling under PLC-835-A into the Bone Spring formation [Red Tank; Bone Spring, East Pool (Pool Code 51687)] through the wells previously authorized under Order Nos. R-22101 and R-22102, as well as the following additional wells:

- **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;
- **Red Tank 30 31 State Com #24Y** (API No. 30-025-44161) with a surface location NE/4 NE/4 (Unit A) in Section 30, and a bottom hole location SE/4 SE/4 (Unit P) in Section 31;
- **Red Tank 30 31 State Com #14H** (API No. 30-025-44193) with a surface location NE/4 NE/4 (Unit A) in Section 30, and a bottom hole location SE/4 SE/4 (Unit P) in Section 31;
- **Avogato 30 31 State Com #4H well** (API No. 30-025-45923), with a surface location NE/4 NE/4 (Unit A) in Section 30, and a bottom hole location SE/4 SE/4 (Unit P) in Section 31;
- **Avogato 30 31 State Com #12H well** (API No. 30-025-45957), with a surface location NW/4 NW/4 (Lot 1) in Section 30, and a bottom hole location SE/4 SW/4 (Unit N) in Section 31;
- **Avogato 30 31 State Com #21H well** (API No. 30-025-45924), with a surface location NE/4 NW/4 (Unit C) in Section 30, and a bottom hole location SW/4 SW/4 (Lot 4) in Section 31;
- **Avogato 30 31 State Com #22H well** (API No. 30-025-45925), with a surface location NE/4 NW/4 (Unit C) in Section 30, and a bottom hole location SE/4 SW/4 (Unit N) in Section 31;
- **Avogato 30 31 State Com #23H well** (API No. 30-025-45926), with a surface location NE/4 NW/4 (Unit C) in Section 30, and a bottom hole location SE/4 SW/4 (Unit N) in Section 31;
- **Avogato 30 31 State Com #24H well** (API No. 30-025-45960), with a surface location NW/4 NE/4 (Unit B) in Section 30, and a bottom hole location SW/4 SE/4 (Unit O) in Section 31;
- **Avogato 30 31 State Com #25H well** (API No. 30-025-45961), with a surface location NW/4 NE/4 (Unit B) in Section 30, and a bottom hole location SE/4 SE/4 (Unit P) in Section 31; and

- **Avogato 30 31 State Com #74H well** (API No. 30-025-45964), with a surface location NE/4 NE/4 (Unit A) in Section 30, and a bottom hole location SE/4 SE/4 (Unit P) in Section 31.

OXY seeks authority to utilize these producing wells to occasionally inject produced gas into the Bone Spring formation at total vertical depths of between approximately 9,330 feet to 10,959 feet along the horizontal portion of each wellbore at surface injection pressures of no more than 1,300 psi. The source of the produced gas will be Bone Spring and Wolfcamp formations. The subject acreage is located approximately 30 miles northwest of Jal, New Mexico.

EXHIBIT A

Red Tank Area CLGC Project 2023



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
• Flare gas • Shut in production	• Store gas • Continue production • No additional surface disturbances	• Reduce greenhouse gas emissions • Improve economic recovery of mineral resources including gas that might have been flared • Utilize existing infrastructure

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.

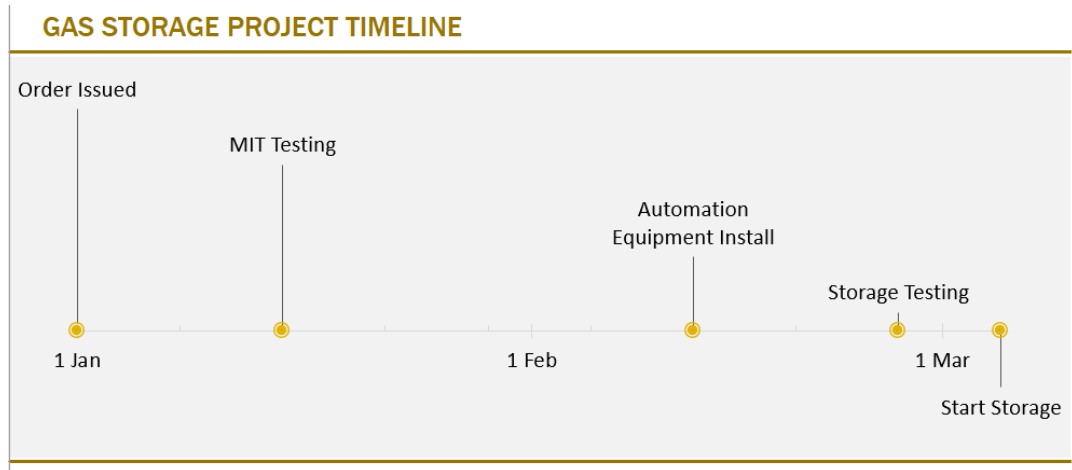
Wells

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)		
API10	Well Name	Status
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)		
API10	Well Name	Status
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

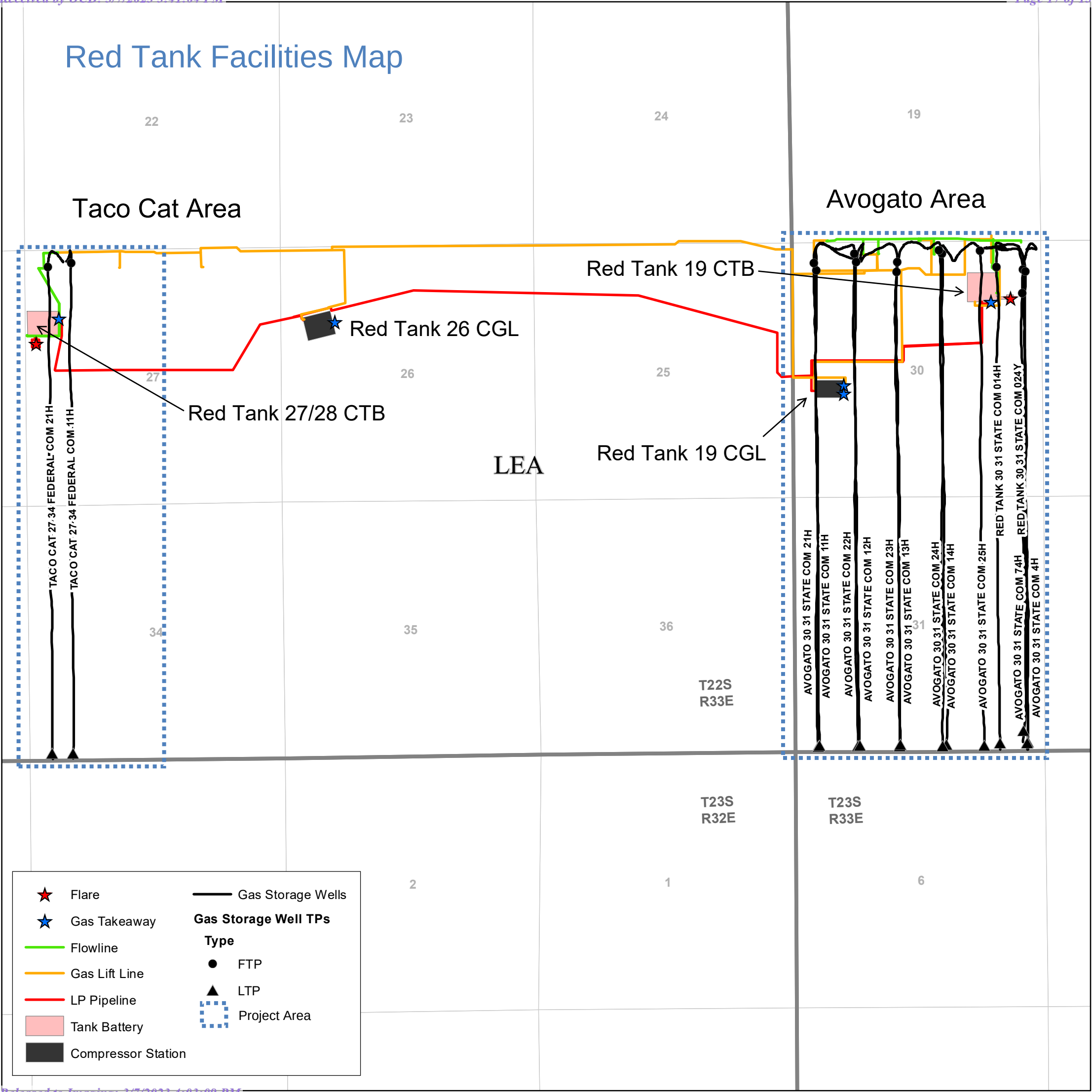
Since no new surface disturbances are required, this project can be implemented with minimal facility modifications. The timeline below assumes an order is issued on January 1 for illustration purposes.



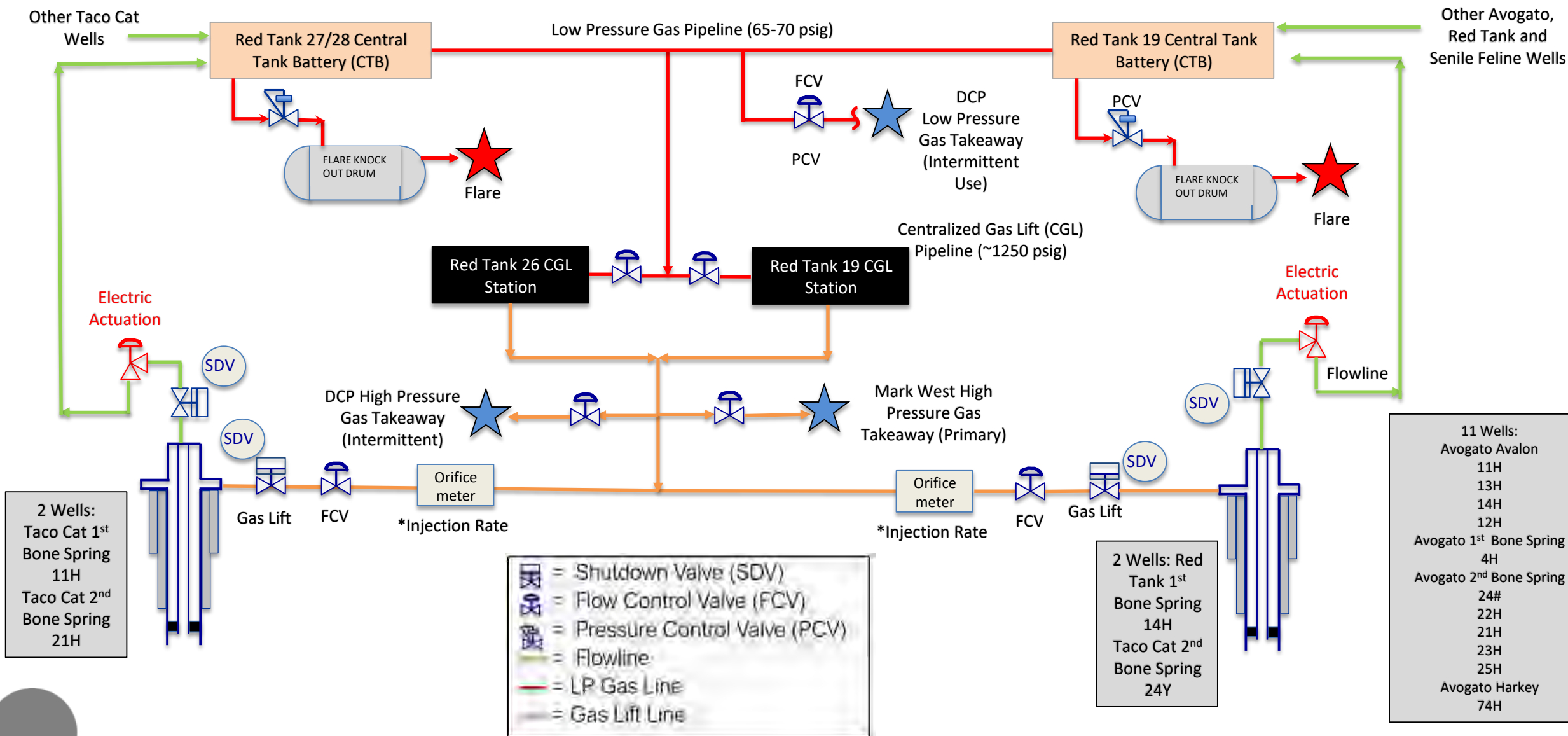
Facilities and Production



Red Tank Facilities Map



Red Tank Gas Process Flow Diagram



Division I
1625 N. French Ave., Hobbs, NM 88240
Phone: (505) 393-6181 Fax: (505) 293-0726
Division II
877 S. First St., Artesia, NM 88210
Phone: (505) 748-1203 Fax: (505) 748-9720
Division III
1000 Rio Pecos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6130
Division IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3451 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 30-025-44934	Pool Code 51683	Pool Name 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

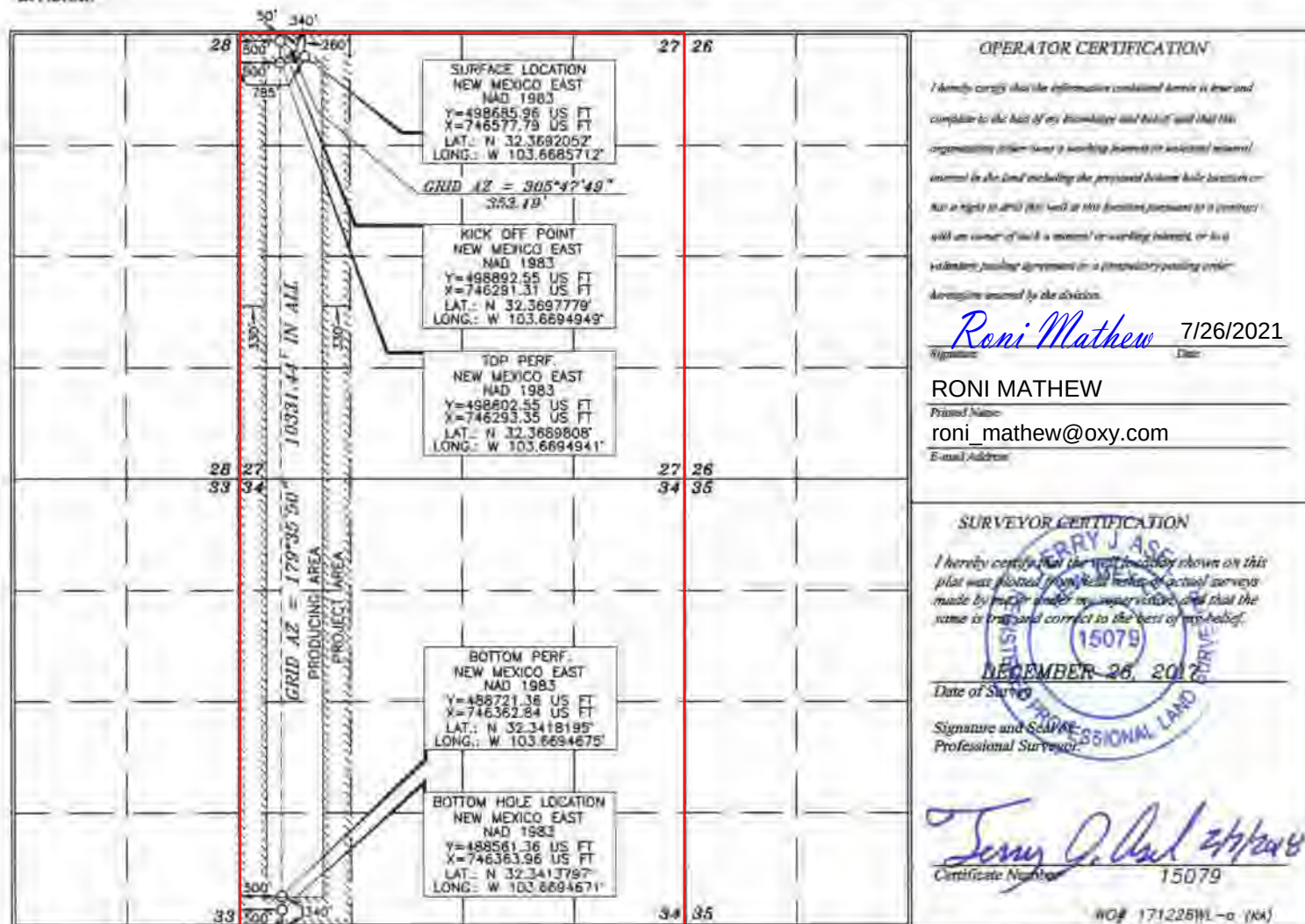
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	27	22 SOUTH	32 EAST, N.M.P.M.		260'	NORTH	785'	WEST	LEA

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
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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.



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 Grande Road, Artesia, 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
(As-Drilled)

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-44161	Pool Code 51687	Pool Name Red Tank; Bone Spring, East
Property Code 319659	Property Name RED TANK "30-31" STATE Com	Well Number 24Y
OGRID No. 116696	Operator Name OXY USA INC.	Elevation 3660.1'

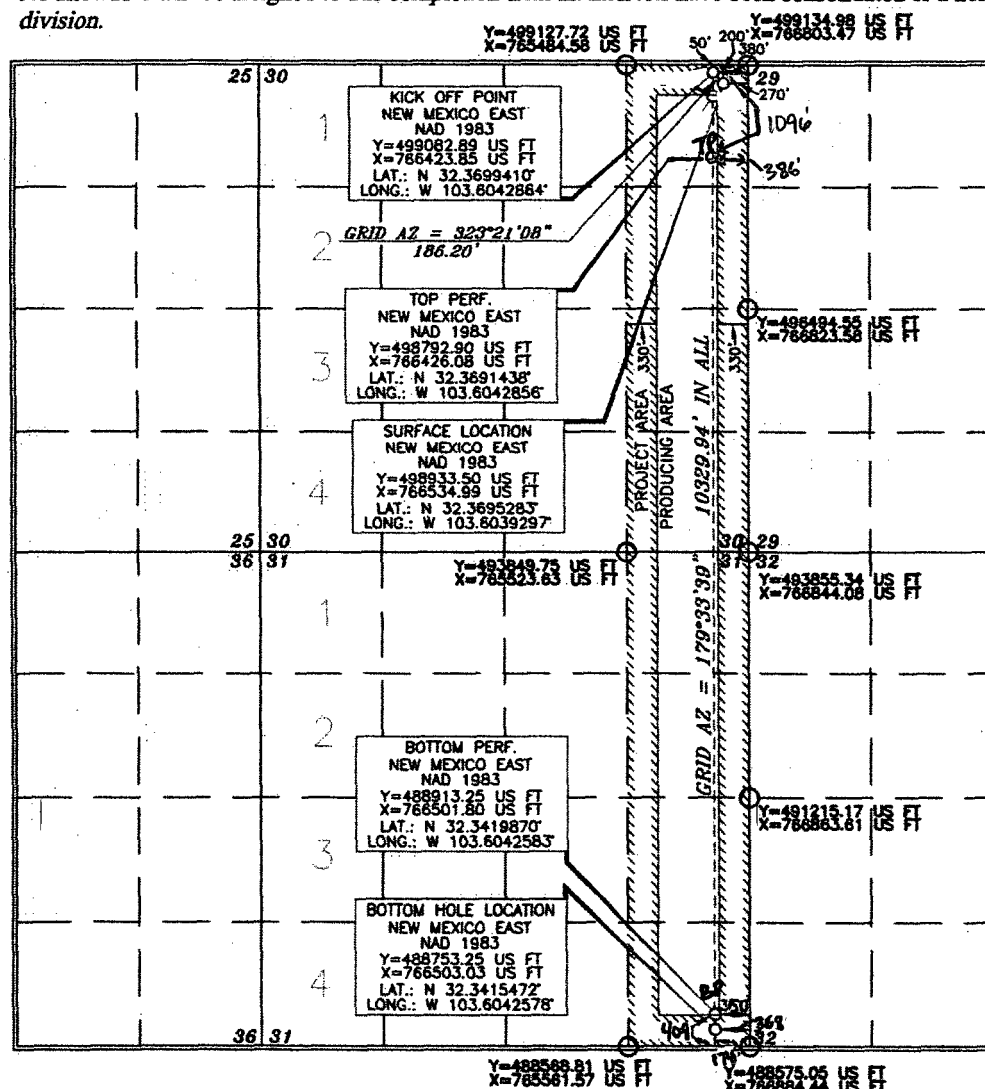
Surface Location

UL or lot no.	Section	Township	Range	Lot Id	Feet from the	North/South line	Feet from the	East/West line	County
A	30	22 SOUTH	33 EAST, N.M.P.M.		200'	NORTH	270'	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Id	Feet from the	North/South line	Feet from the	East/West line	County
P	31	22 SOUTH	33 EAST, N.M.P.M.		100' 139'	SOUTH	300' 368'	EAST	LEA
Dedicated Acres 320	Joint or Infill Y	Consolidation Code	Order No.	BP- 409 FSL 350 FEL TP- 1096 FNL 386 FEL					

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.



OPERATOR CERTIFICATION

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

[Signature] 1/16/18
Signature Date
Jana Mendiola
Printed Name
jana.mendiola@oxy.com
E-mail Address

SURVEYOR CERTIFICATION

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

[Signature]
Date of Survey
15079
Professional Land Surveyor

[Signature] 10/30/2017
Certificate Number 15079

WO# 170808WL-a-XY (Rev. A) (XA)

HOBBS OCD

JAN 07 2019

Form C-102

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

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District Office

☒ AMENDED REPORT

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 193-6161 Fax: (575) 394-0720
District II
311 S. First St., Artesia, NM 88210
Phone: (575) 748-1253 Fax: (575) 748-9720
District III
1001 Rio Grande 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) 476-3450 Fax: (505) 476-3462

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-44193	Pool Code 51687	Pool Name Red Tank Bone Springs, East
Property Code 319659	Property Name RED TANK "30-31" STATE	Well Number 14H
OGRID No 16696	Operator Name OXY USA INC.	Elevation 3662.5'

Surface Location

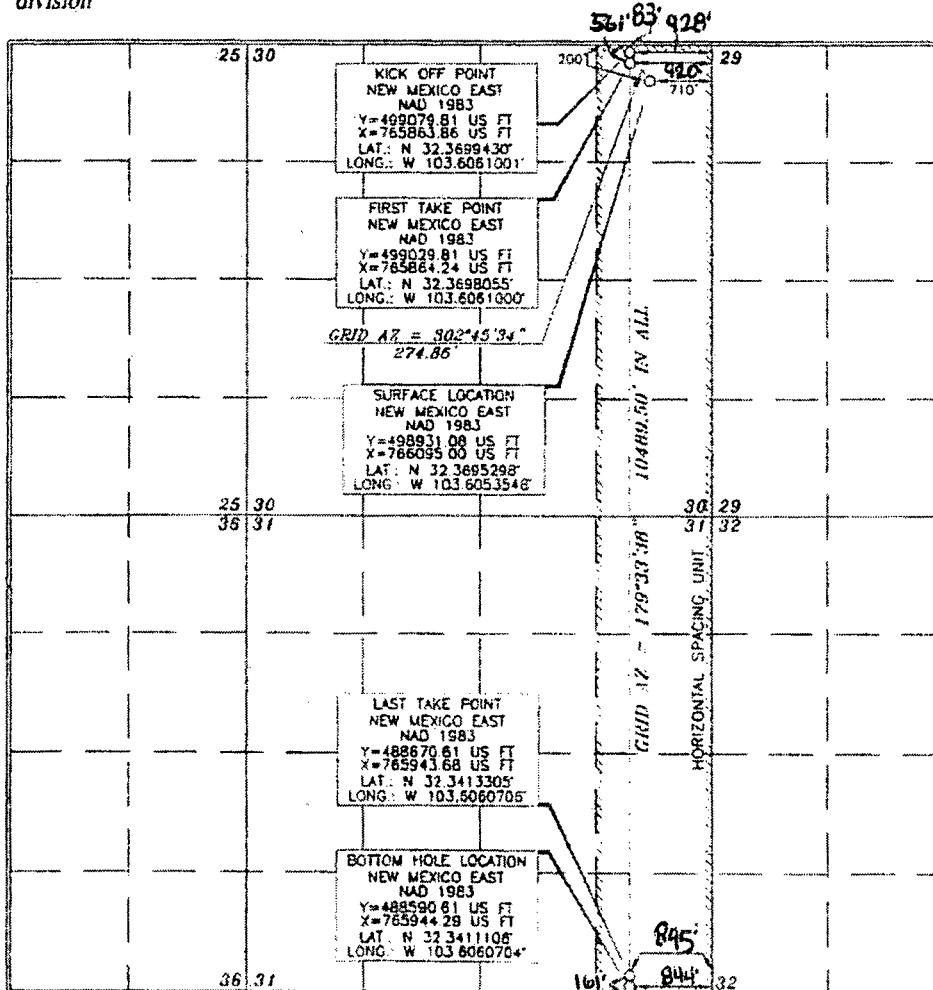
UT. or lot no	Section	Township	Range	Lot Idn	Feet from the	North South line	Feet from the	East West line	County
A	30	22 SOUTH	33 EAST, N.M.P.M.		200'	NORTH	710'	EAST	LEA

Bottom Hole Location If Different From Surface

UT. or lot no	Section	Township	Range	Lot Idn	Feet from the	North South line	Feet from the	East West line	County
P	31	22 SOUTH	33 EAST, N.M.P.M.		20'	SOUTH	844'	EAST	LEA

Dedicated Acres 320	Joint or Infill ?	Consolidation Code	Order No. FTP: 561' FNL 920' FEL LTP: 101' ESL 845' FEL
-------------------------------	-----------------------------	--------------------	---

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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization neither owns a working interest or unleased mineral interest in the land underlying the proposed bottom hole location, or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest or as a voluntary pooling agreement or a compulsory pooling order.

Authorized Signature: *Leslie Reeves*

Signature: *Leslie Reeves* Date: *1/7/19*

Printed Name: **LESUE REEVES**

E-mail Address: **LESUE-REEVES@OXY.COM**

SURVEYOR CERTIFICATION

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

Date of Survey: **SEPTEMBER 18, 2015**

Signature and Stamp: *Leslie Reeves*
Professional Surveyor

Certificate Number: *10/24/2018*
15079

WD# 17091842-a (Rev. A) (XA)

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

OCD - HOBBS
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WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45923	Pool Code 51687	Pool Name RED TANK; BONE SPRING; EAST
Property Code 325625	Property Name AVOGATO 30_31 STATE COM	Well Number 4H
OGRID No. 16696	Operator Name OXY USA INC	Elevation 3669.0'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	30	22-S	33-E		160	NORTH	1120	EAST	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
P	31	22-S	33-E		21	SOUTH	342	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

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

INC

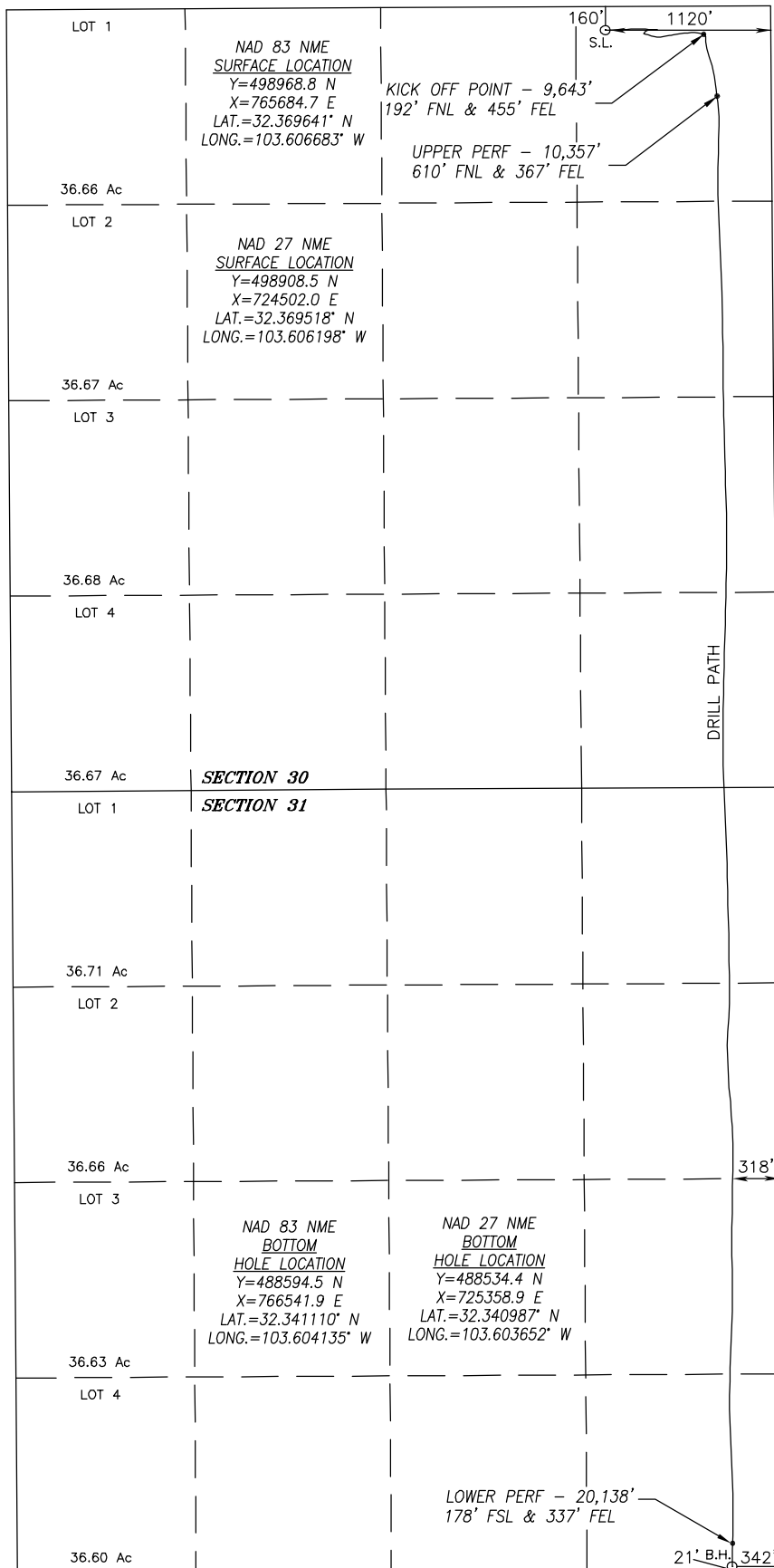
SEE PAGE 2

PAGE 1 OF 2

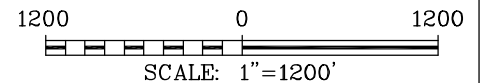
W.O. #19-2358

DRAWN BY: WN

Property Code 325625	Property Name AVOGATO 30_31 STATE COM	Well Number 4H
OGRID No. 16696	Operator Name OXY USA INC	Elevation 3669.0'



SURFACE INFO AND BOREPATH SHOWN HEREON
IS BASED ON DIRECTIONAL SURVEY REPORT
PROVIDED BY OXY USA FOR THE AVOGATO
30_31 STATE COM 4H SUPPLIED TO HARCROW
SURVEYING, LLC ON DECEMBER 20, 2019



OPERATOR CERTIFICATION

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

Roni Mathew 12/23/19

Signature Date

RONI MATHEW

Printed Name

RONI_MATHEW@OXY.COM

E-mail Address

SURVEYOR CERTIFICATION

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

MAR. 12, 2019/NOV. 25, 2019

Date of Survey/Date of Geographic Survey

Signature & Seal of Professional Surveyor



Chad Harcrow 12/20/19

Certificate No. CHAD HARCROW 17777

DISTRICT I
1825 N. FRENCH DR., HOBBS, NM 88240
Phone: (505) 333-6161 Fax: (505) 333-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
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Santa Fe, New Mexico 87505

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As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45924	Pool Code 51687	Pool Name RED TANK; BONE SPRING; EAST
Property Code 325625	Property Name AVOGATO 30_31 STATE COM	Well Number 21H
OGRID No. 16696	Operator Name OXY USA, INC.	Elevation 3707.2'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	30	22-S	33-E		420	NORTH	1350	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
4	31	22-S	33-E		17	SOUTH	563	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
613.28			

**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**

KOP 106' FNL & 542' FWL LAT.=32.36981 LONG.=103.61803 IFP 606' FNL & 532' FWL LAT.=32.58844 LONG.=103.61808 LTP 108' FSL & 560' FWL LAT.=32.34138 LONG.=103.61820 * ALL COORDINATES ARE NAD 83 VALUES GRID AZ. = 293°12'04" HORZ. DIST. = 927.7' LOT 1 36.66 Ac LOT 2 36.67 Ac LOT 3 36.68 Ac LOT 4 36.67 Ac LOT 1 36.71 Ac LOT 2 36.66 Ac LOT 3 36.63 Ac LOT 4 36.60 Ac HORIZONTAL SPACING UNIT SECTION 30 SECTION 31	SURFACE LOCATION Y=498694.2 N X=762988.4 E LAT.=32.368936° N LONG.=103.615421° W <table border="1"> <tr> <th colspan="2">POINT LEGEND</th></tr> <tr> <td>1</td> <td>Y=499107.0 N X=761835.4 E</td></tr> <tr> <td>2</td> <td>Y=493828.6 N X=761873.4 E</td></tr> <tr> <td>3</td> <td>Y=491187.3 N X=761692.5 E</td></tr> <tr> <td>4</td> <td>Y=488547.8 N X=761711.3 E</td></tr> <tr> <td>5</td> <td>Y=488562.6 N X=764238.7 E</td></tr> <tr> <td>6</td> <td>Y=493844.2 N X=764203.2 E</td></tr> <tr> <td>7</td> <td>Y=499120.5 N X=764165.7 E</td></tr> </table> BOTTOM HOLE LOCATION 17' FSL & 563' FWL LAT.=32.34113 LONG.=103.6189	POINT LEGEND		1	Y=499107.0 N X=761835.4 E	2	Y=493828.6 N X=761873.4 E	3	Y=491187.3 N X=761692.5 E	4	Y=488547.8 N X=761711.3 E	5	Y=488562.6 N X=764238.7 E	6	Y=493844.2 N X=764203.2 E	7	Y=499120.5 N X=764165.7 E	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>[Signature]</i> 11/13/19 Signature Date RONI MATHEW Printed Name RONI_MATHEW@OXY.COM E-mail Address SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MARCH 12, 2019 Date of Survey Signature & Seal of Professional Surveyor CHAD L. HARGROW NEW MEXICO 17777 LICENSED PROFESSIONAL SURVEYOR <i>[Signature]</i> 4/4/19 Certificate No. CHAD HARGROW 17777 W.O. # 19-474 DRAWN BY: AM
POINT LEGEND																		
1	Y=499107.0 N X=761835.4 E																	
2	Y=493828.6 N X=761873.4 E																	
3	Y=491187.3 N X=761692.5 E																	
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DISTRICT I
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Phone: (505) 593-6161 Fax: (505) 593-0720

DISTRICT II
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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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☒ AMENDED REPORT
As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45925	Pool Code 51687	Pool Name RED TANK; BONE SPRING; EAST
Property Code 325625	Property Name AVOGATO 30_31 STATE COM	Well Number 22H
OGRID No. 16696	Operator Name	Elevation 3706.6'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	30	22-S	33-E		420	NORTH	1385	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
N	31	22-S	33-E		..	SOUTH		WEST	LEA
Dedicated Acres 613.28	Joint or Infill	Consolidation Code	Order No.						

**NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION**

* ALL COORDINATES ARE NAD 83 VALUES	SURFACE LOCATION Y=498694.4 N X=763023.4 E LAT.=32.368936° N LONG.=103.615308° W <table border="1"> <thead> <tr> <th colspan="2">POINT LEGEND</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Y=499107.0 N X=761835.4 E</td> </tr> <tr> <td>2</td> <td>Y=493626.6 N X=761873.4 E</td> </tr> <tr> <td>3</td> <td>Y=491187.3 N X=761892.5 E</td> </tr> <tr> <td>4</td> <td>Y=488547.8 N X=761711.3 E</td> </tr> <tr> <td>5</td> <td>Y=488562.6 N X=764238.7 E</td> </tr> <tr> <td>6</td> <td>Y=493844.2 N X=764203.2 E</td> </tr> <tr> <td>7</td> <td>Y=499120.5 N X=764165.7 E</td> </tr> </tbody> </table> BOTTOM HOLE LOCATION	POINT LEGEND		1	Y=499107.0 N X=761835.4 E	2	Y=493626.6 N X=761873.4 E	3	Y=491187.3 N X=761892.5 E	4	Y=488547.8 N X=761711.3 E	5	Y=488562.6 N X=764238.7 E	6	Y=493844.2 N X=764203.2 E	7	Y=499120.5 N X=764165.7 E	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>R. Mathew</i> Date: 11/13/19 RONI MATHEW Printed Name RONI_MATHEW@OXY.COM E-mail Address SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MARCH 12, 2019 Date of Survey Signature & Seal of Professional Surveyor <i>Chad L. Harcrow</i> 4/4/19 Certificate No. CHAD HARCROW 17777 W.O. # 19-475 DRAWN BY: AM
POINT LEGEND																		
1	Y=499107.0 N X=761835.4 E																	
2	Y=493626.6 N X=761873.4 E																	
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7	Y=499120.5 N X=764165.7 E																	

HOBBS OCD

FEB 13 2020

DISTRICT I
1635 N. FRENCH DR., HOBBS, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-0720

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DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45926	Pool Code 51683	Pool Name RED TANK; BONE SPRING; EAST
Property Code 325625	Property Name AVOGATO 30_31 STATE COM	Well Number 23H
OGRID No. 16696	Operator Name OXY USA, INC.	Elevation 3706.1'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	30	22-S	33-E		420	NORTH	1420	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
N	31	22-S	33-E		26	SOUTH	2252	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
613.28			

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

SURFACE LOCATION Y=498694.6 N X=763058.4 E LAT.=32.368936° N LONG.=103.615195° W GRID AZ. = 64°00'35" HORZ. DIST. = 853.7' * ALL COORDINATES ARE NAD 83 VALUES LTP 107' FSL & 2252' FWL LAT.=32.34135 LONG.=103.61272 BOTTOM HOLE LOCATION 26' FSL & 2252' FWL LAT.=32.34112 LONG.=103.61272	KOP 127' FSL & 2142' FWL LAT.=32.36973 LONG.=103.61285 ETP 452' FSL & 220' FWL LAT.=32.3236869 LONG.=103.61266 <table border="1"> <thead> <tr> <th colspan="2">POINT LEGEND</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Y=499107.0 N X=761635.4 E</td> </tr> <tr> <td>2</td> <td>Y=493826.8 N X=761873.4 E</td> </tr> <tr> <td>3</td> <td>Y=491187.3 N X=761892.5 E</td> </tr> <tr> <td>4</td> <td>Y=488547.8 N X=761711.3 E</td> </tr> <tr> <td>5</td> <td>Y=488582.6 N X=764238.7 E</td> </tr> <tr> <td>6</td> <td>Y=493844.2 N X=764203.2 E</td> </tr> <tr> <td>7</td> <td>Y=499120.5 N X=764185.7 E</td> </tr> </tbody> </table>	POINT LEGEND		1	Y=499107.0 N X=761635.4 E	2	Y=493826.8 N X=761873.4 E	3	Y=491187.3 N X=761892.5 E	4	Y=488547.8 N X=761711.3 E	5	Y=488582.6 N X=764238.7 E	6	Y=493844.2 N X=764203.2 E	7	Y=499120.5 N X=764185.7 E	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>Roni Mathew</i> Date: 11/13/19 Printed Name: RONI MATHEW E-mail Address: RONI.MATHEW@OXY.COM SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MARCH 12, 2019 Date of Survey Signature & Seal of Professional Surveyor  Certificate No. CHAD HARCROW 17777 W.O. # 19-476 DRAWN BY: AM
POINT LEGEND																		
1	Y=499107.0 N X=761635.4 E																	
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HOBBS OCD

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

February 28 2020

ON
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District Office

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As-Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45957		Pool Code 51687	Pool Name RED TANK; BONE SPRING; EAST	K ₂
Property Code 325625	Property Name AVOGATO 30_31 STATE COM		Well Number 12H	
OGRID No. 16696	Operator Name OXY USA, INC.		Elevation 3705.6'	

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	30	22-S	33-E		160	NORTH	920	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No. N	Section 31	Township 22-S	Range 33-E	Lot Idn	Feet from the 22	North/South line SOUTH	Feet from the 1426	East/West line WEST	County LEA
Dedicated Acres 613.28		Joint or Infill	Consolidation Code		Order No.				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

GRID AZ. - 73°56'09"
HORZ. DIST. - 405.0'

SURFACE LOCATION
 Y=498951.9 N
 X=762556.6 E
 LAT.=32.369653° N
 LONG.=103.616814° W

*** ALL COORDINATES ARE NAD 83 VALUES**

BOTTOM HOLE LOCATION

LTP

POINT LEGEND

POINT	COORDINATES
1	Y=499107.0 N X=761635.4 E
2	Y=493828.8 N X=761673.4 E
3	Y=491187.3 N X=761692.5 E
4	Y=488547.8 N X=761711.3 E
5	Y=488562.8 N X=764238.7 E
6	Y=493844.2 N X=764203.2 E
7	Y=499120.5 N X=764165.7 E

SECTION 30
SECTION 31

LOT 1 36.66 Ac
LOT 2 36.67 Ac
LOT 3 36.68 Ac
LOT 4 36.67 Ac
LOT 1 36.67 Ac
LOT 2 36.71 Ac
LOT 3 36.66 Ac
LOT 4 36.63 Ac
LOT 5 36.60 Ac

HORIZONTAL SPACING UNIT

B.H.

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505
865 25 2019

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Revised August 1, 2011
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☒ AMENDED REPORT

As-Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45900 45960	Pool Code 51687	Pool Name RED TANK; BONE SPRING, EAST
Property Code 325625	Property Name AVOGATO 30_31 STATE COM	Well Number 24H
OGRID No. 16696	Operator Name OXY USA, INC.	Elevation 3686.0'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	30	22-S	33-E		420	NORTH	1820	EAST	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
O	31	22-S	33-E		17	SOUTH	2029	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

**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**

SURFACE LOCATION Y=498705.0 N X=764986.7 E LAT.=32.368929' N LONG.=103.608949' W	LOT 1 GRID AZ. 324°30'28" HORZ. DIST. - 452.7' 36.66 Ac LOT 2 36.67 Ac LOT 3 36.68 Ac LOT 4 36.67 Ac SECTION 30 LOT 1 SECTION 31 36.71 Ac LOT 2 36.66 Ac LOT 3 36.63 Ac LOT 4 36.60 Ac GRID AZ. 179°33'38" HORZ. DIST. - 10488.6' 20' B.H. 2080'	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>[Signature]</i> 10/22/19 Signature Date RONI MATHEW Printed Name RONI.MATHEW@OXY.COM E-mail Address
* ALL COORDINATES ARE NAD 83 VALUES		SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MARCH 12, 2019 Date of Survey <i>[Signature]</i> Signature & Seal of Professional Surveyor CHAD L. HARCROW NEW MEXICO LICENSED PROFESSIONAL SURVEYOR 17777 <i>[Signature]</i> 4/5/19 Certificate No. CHAD HARCROW 17777 W.O. # 19-477 DRAWN BY: WN

DISTRICT I
1625 N. FRENCH DR., HOBBES, NM 88240
Phone: (505) 333-6161 Fax: (505) 333-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 746-1253 Fax: (505) 746-0720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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As-Drilled

API Number 30-025-45960 45961		Pool Code 51687	Pool Name RED TANK; BONE SPRING, EAST
Property Code 325625	Property Name AVOGATO 30_31 STATE COM		Well Number 25H
OGRID No. 16696	Operator Name OXY USA INC		Elevation 3685.2'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	30	22-S	33-E		420	NORTH	1785	EAST	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
P	31	22-S	33-E		22	SOUTH	1163	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

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

<u>SURFACE LOCATION</u> Y=498705.2 N X=765021.7 E LAT.=32.368929° N LONG.=103.608836° W * ALL COORDINATES ARE NAD 83 VALUES <table border="1"> <tr><th colspan="2">POINT LEGEND</th></tr> <tr><td>1</td><td>Y=499135.0 N X=766809.5 E</td></tr> <tr><td>2</td><td>Y=498494.6 N X=766823.6 E</td></tr> <tr><td>3</td><td>Y=498855.3 N X=766844.1 E</td></tr> <tr><td>4</td><td>Y=491215.2 N X=766863.6 E</td></tr> <tr><td>5</td><td>Y=488575.1 N X=766884.4 E</td></tr> <tr><td>6</td><td>Y=488562.6 N X=764238.7 E</td></tr> <tr><td>7</td><td>Y=493844.2 N X=764203.2 E</td></tr> <tr><td>8</td><td>Y=499120.5 N X=764165.7 E</td></tr> </table> <u>BOTTOM HOLE LOCATION</u> Y=488589.1 N X=765624.3 E LAT.= 32.34111° N LONG.= -103.60704° W	POINT LEGEND		1	Y=499135.0 N X=766809.5 E	2	Y=498494.6 N X=766823.6 E	3	Y=498855.3 N X=766844.1 E	4	Y=491215.2 N X=766863.6 E	5	Y=488575.1 N X=766884.4 E	6	Y=488562.6 N X=764238.7 E	7	Y=493844.2 N X=764203.2 E	8	Y=499120.5 N X=764165.7 E	LOT 1 36.66 Ac LOT 2 36.67 Ac LOT 3 36.68 Ac LOT 4 36.71 Ac LOT 1 36.66 Ac LOT 3 36.63 Ac LOT 4 36.60 Ac		GRID AZ. = 54°28'11" HORZ. DIST. = 641.6' GRID AZ. = 179°33'38" HORZ. DIST. = 10489.3' HORIZONTAL SPACING UNIT 20' B.H. 1260'	KOP 124' FNL x 1300' FEL LAT.= 32.36973° N LONG.= -103.60726° W EIP 216' FNL x 1263' FEL LAT.= 32.36948° N LONG.= -103.6071° W LTP 114 FSL x 1164 FEL LAT.= 32.34137° N LONG.= -103.6070° W	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>[Signature]</i> 10/23/19 Signature Date RONI MATHEW Printed Name roni_mathew@oxy.com E-mail Address SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MARCH 12, 2019 Date of Survey Signature & Seal of Professional Surveyor <i>[Signature]</i> 4/5/19 Certificate No. CHAD HARCROW 17777 W.O. # 19-478 DRAWN BY: WN
	POINT LEGEND																						
1	Y=499135.0 N X=766809.5 E																						
2	Y=498494.6 N X=766823.6 E																						
3	Y=498855.3 N X=766844.1 E																						
4	Y=491215.2 N X=766863.6 E																						
5	Y=488575.1 N X=766884.4 E																						
6	Y=488562.6 N X=764238.7 E																						
7	Y=493844.2 N X=764203.2 E																						
8	Y=499120.5 N X=764165.7 E																						

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (505) 533-8181 Fax: (505) 533-0720

DISTRICT II
511 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 745-1253 Fax: (505) 745-9722

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505
DEC 30 2019

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WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45964	Pool Code 51687	Pool Name RED TANK; BONE SPRING; EAST
Property Code 325625	Property Name AVOGATO 30_31 STATE COM	Well Number 74H
OGRID No. 16696	Operator Name OXY USA INC	Elevation 3669.4'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	30	22-S	33-E		160	NORTH	1155	EAST	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
P	31	22-S	33-E		21	SOUTH	357	EAST	LEA

Dedicated Acres 640	Joint or Infill	Consolidation Code	Order No.
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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

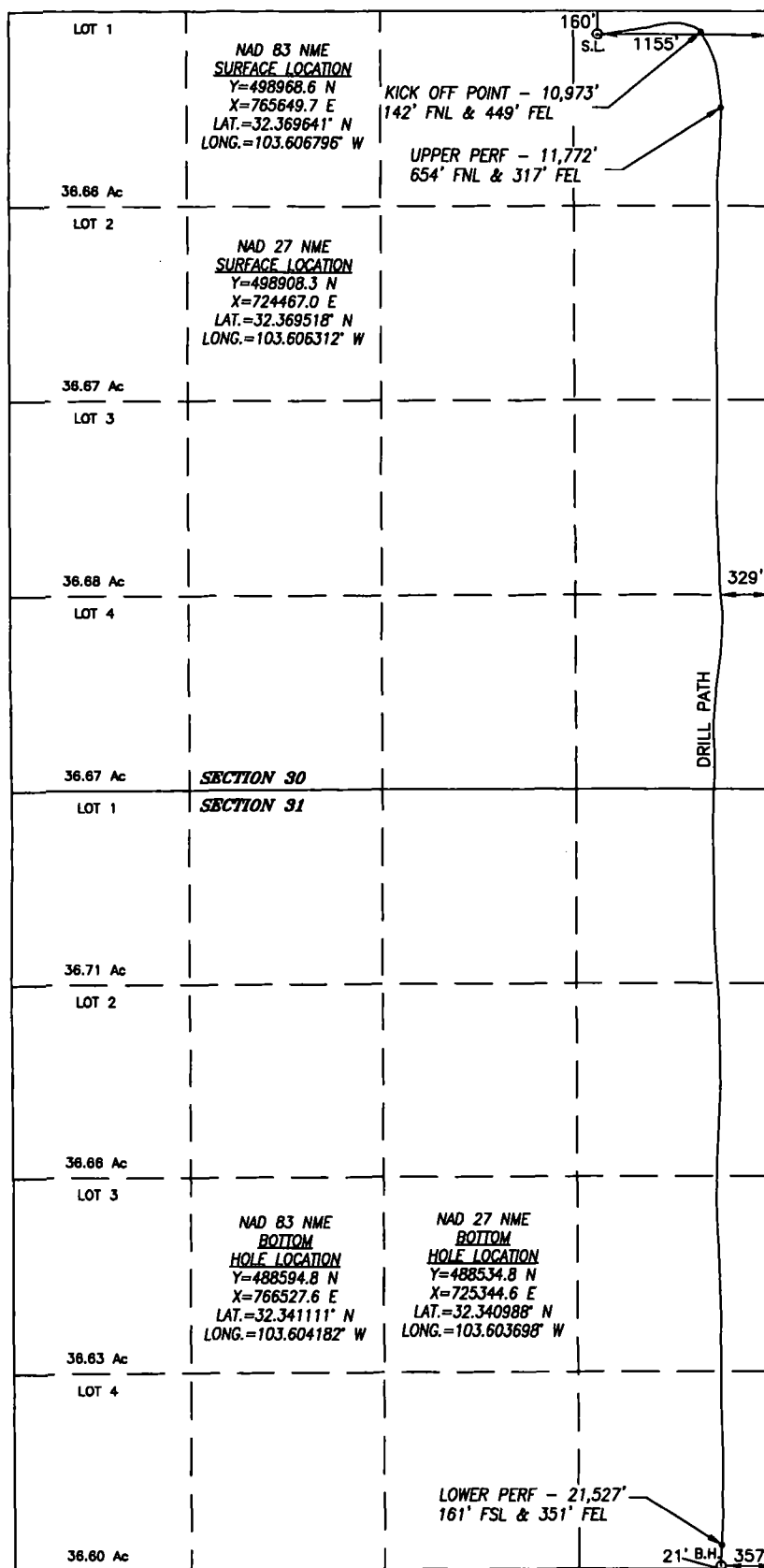
SEE PAGE 2

PAGE 1 OF 2

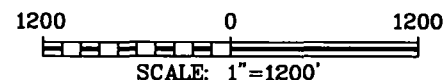
W.O. #19-2359

DRAWN BY: WN

Property Code 325625	Property Name AVOGATO 30_31 STATE COM	Well Number 74H
OGRID No. 16696	Operator Name OXY USA	Elevation 3669.4'



SURFACE INFO AND BOREPATH SHOWN HEREON
IS BASED ON DIRECTIONAL SURVEY REPORT
PROVIDED BY OXY USA FOR THE AVOGATO
30_31 STATE COM 74H SUPPLIED TO HARCROW
SURVEYING, LLC ON DECEMBER 20, 2019



OPERATOR CERTIFICATION

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

Roni Mathew 12/23/19

Signature

Date

RONI MATHEW

Printed Name

RONI_MATHEW@OXY.COM

E-mail Address

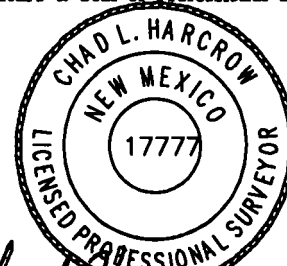
SURVEYOR CERTIFICATION

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

MAR. 12, 2019/NOV. 6, 2019

Date of Survey/Date of Geographic Survey

Signature & Seal of Professional Surveyor



Chad L. Harcrow 12/20/19

Certificate No. CHAD HARCROW 17777

PAGE 2 OF 2

W.O. #19-2359

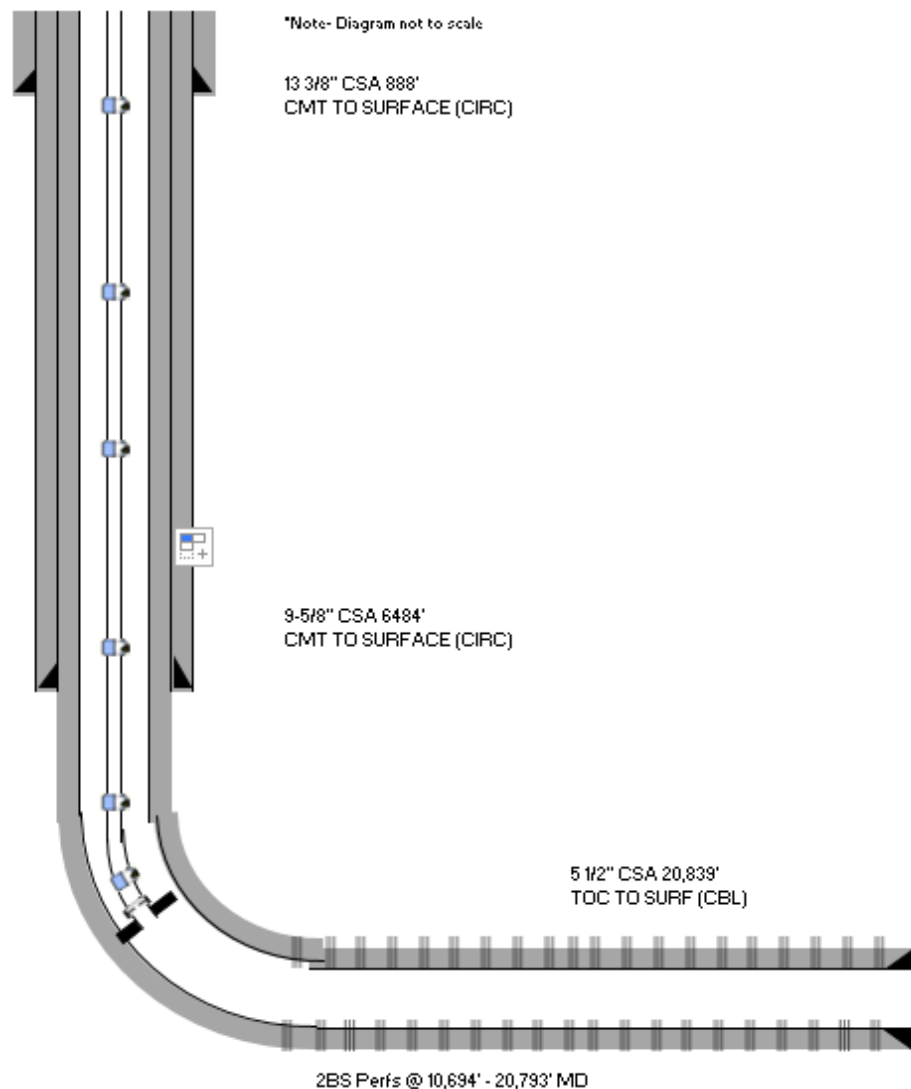
DRAWN BY: WN

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA INCWELL NAME & 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 SCHEMATIC**WELL CONSTRUCTION DATA**Surface CasingHole Size: 17.5 Casing Size: 13.375Cemented with: 1100 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLIntermediate CasingHole Size: 12.25 Casing Size: 9.625Cemented with: 1685 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLProduction CasingHole Size: 8.5 Casing Size: 5.5Cemented with: 2335 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLTotal 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 SHEETTubing 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 X _____ 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: _____

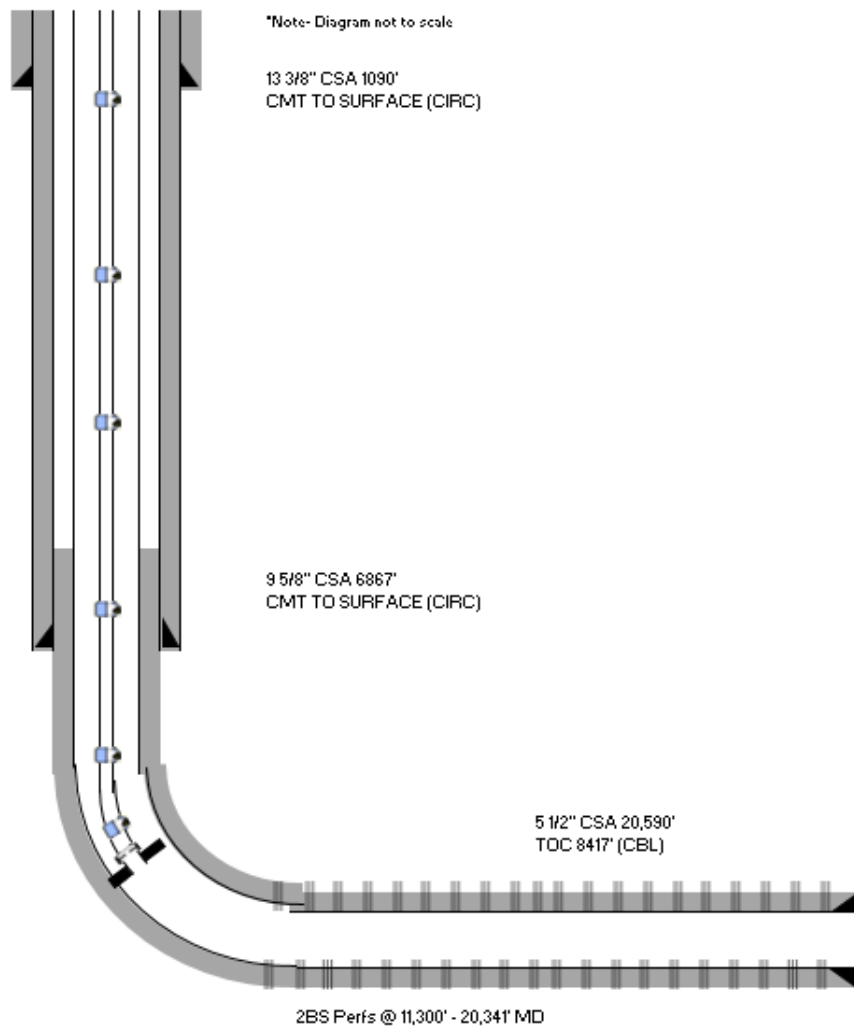
OVERLYING: FIRST BONE SPRINGUNDERLYING: HARKEY

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA INCWELL NAME & NUMBER: RED TANK 30 31 STATE COM 24Y

WELL LOCATION: <u>200 FNL 270 FEL</u>	<u>A</u>	<u>30</u>	<u>22S</u>	<u>33E</u>
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17.5 Casing Size: 13.625Cemented with: 1165 sx. **or** ft³Top of Cement: 0 Method Determined: CBLIntermediate CasingHole Size: 12.25 Casing Size: 9.625Cemented with: 2385 sx. **or** ft³Top of Cement: 0 Method Determined: CBLProduction CasingHole Size: 8.5 Casing Size: 5.5Cemented with: 2260 sx. **or** ft³Top of Cement: 8417 Method Determined: CBLTotal Depth: 20,590' MD/ 10,864' TVDInjection Interval11,300' MD/ 10,860' TVD feet to 20,341' MD/ 10,887' TVD (PERFORATED)

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: NONEType of Packer: RETRIEVABLE PACKERPacker Setting Depth: 10307' MD/ 9959' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____ Yes X _____ 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: _____

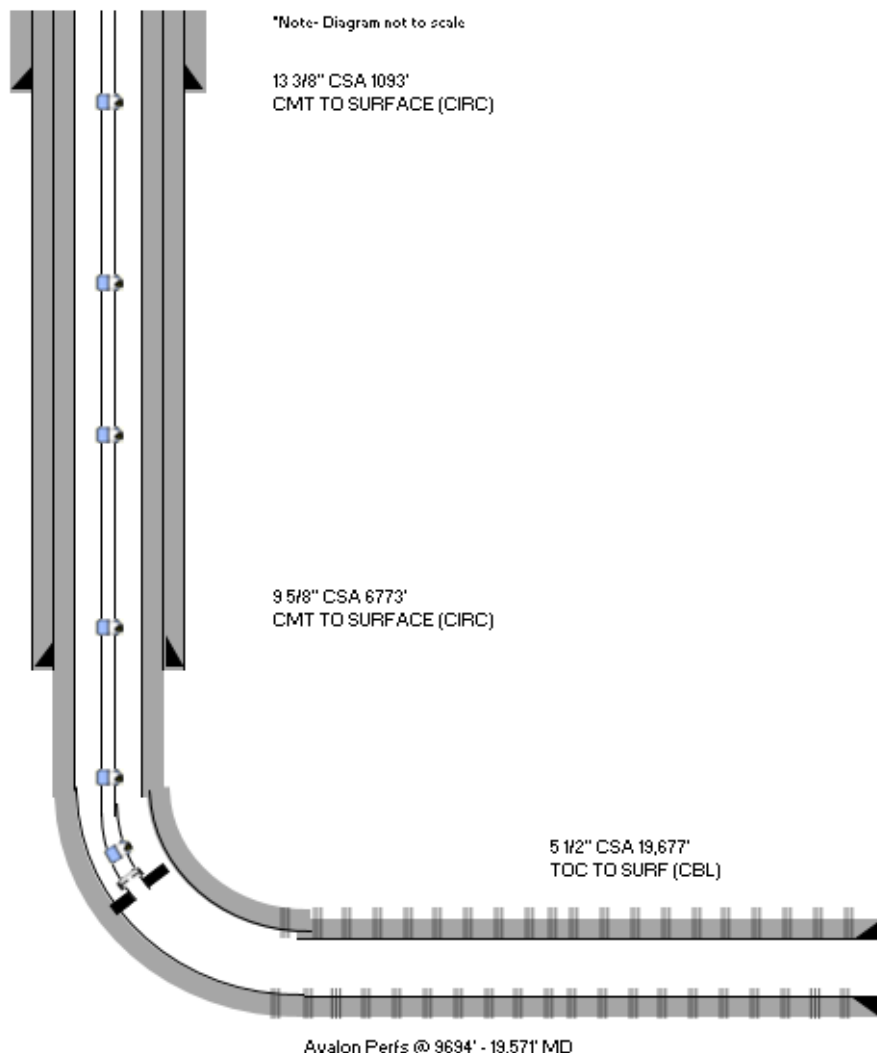
UNDERLYING: HARKEYOVERLYING: FIRST BONE SPRING

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA INCWELL NAME & NUMBER: RED TANK 30 31 STATE COM 14H

WELL LOCATION:	200 FNL 710 FEL	A	30	22S	33E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 17.5 Casing Size: 13.375

Cemented with: 1450 sx. **or** ft³

Top of Cement: 0 Method Determined: CBL

Intermediate Casing

Hole Size: 12.25 Casing Size: 9.625

Cemented with: 3125 sx. **or** ft³

Top of Cement: 0 Method Determined: CBL

Production Casing

Hole Size: 8.5 Casing Size: 5.5

Cemented with: 1805 sx. **or** ft³

Top of Cement: 8417 Method Determined: CBL

Total Depth: 19,677' MD/ 9407' TVDInjection Interval

9694' MD/ 9416' TVD feet to 19,571' MD/ 9407' TVD (PERFORATED)

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: NONEType of Packer: 7K L80Packer Setting Depth: 8995' MD/ 9003' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____ Yes X _____ No

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

HYDROCARBON PRODUCTION

2. Name of the Injection Formation: AVALON

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: _____

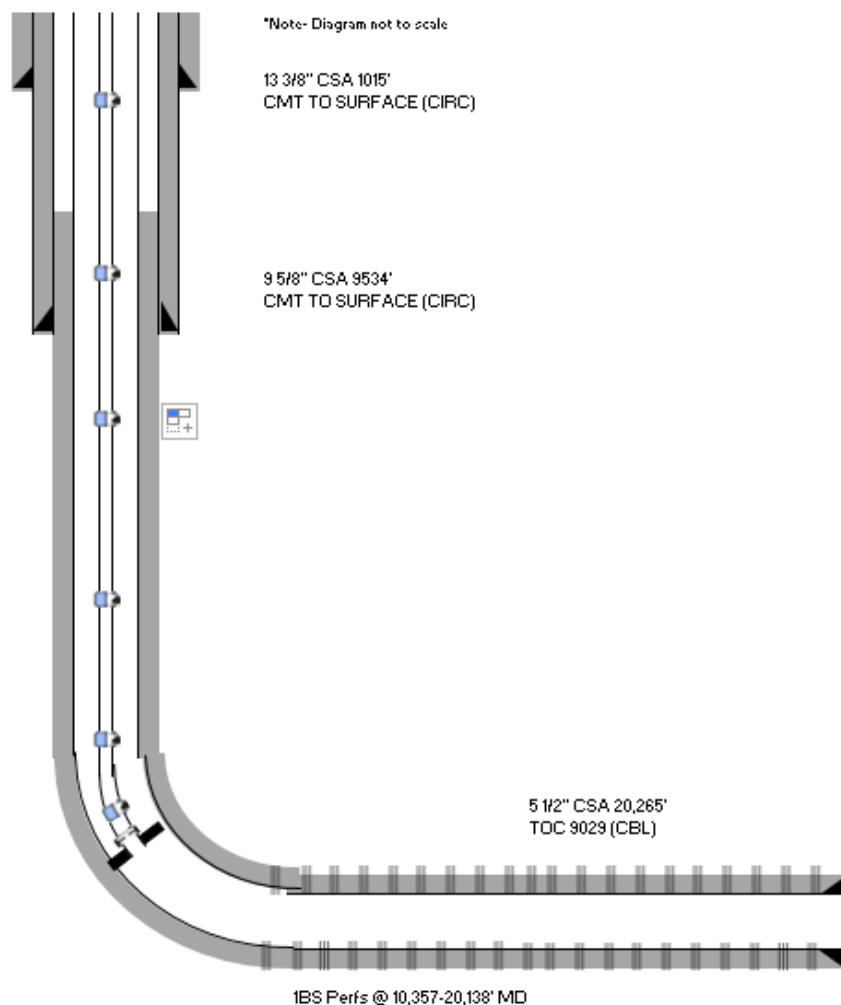
UNDERLYING: 1ST BONE SPRINGOVERLYING: BRUSHY CANYON

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA INCWELL NAME & NUMBER: AVOGATO 30 31 STATE COM 4H

WELL LOCATION:	160 FNL 1120 FWL	A	30	22S	33E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17.5 Casing Size: 13.375Cemented with: 1340 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLIntermediate CasingHole Size: 12.25 Casing Size: 9.625Cemented with: 3594 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLProduction CasingHole Size: 6.75 Casing Size: 5.5Cemented with: 815 sx. **or** ft³Top of Cement: 9029 FT MD Method Determined: CBLTotal Depth: 20265' MD/10,153' TVDInjection Interval10,357' MD/ 10,081' TVD feet to 20,138' MD/10,152' TVD (PERFORATED)

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing 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 X _____ No

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

HYDROCARBON PRODUCTION

2. Name of the Injection Formation: 1ST BONE SPRING

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

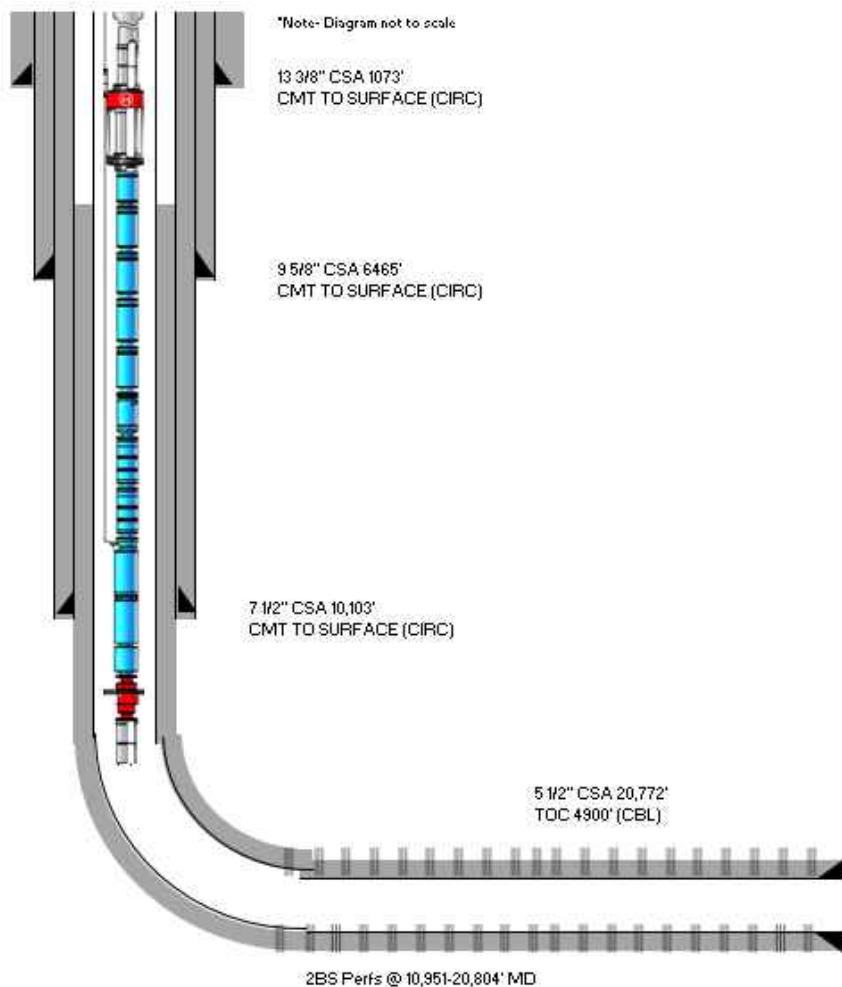
UNDERLYING: FIRST BONE SPRINGOVERLYING: BRUSHY CANYON

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA INCWELL NAME & NUMBER: AVOGATO 30 31 STATE COM 21H

WELL LOCATION: <u>420 FNL 1350 FWL</u>	<u>C</u>	<u>30</u>	<u>22S</u>	<u>33E</u>
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 17.5 Casing Size: 13.375

Cemented with: 1340 sx. **or** ft³

Top of Cement: 0 FT MD Method Determined: CBL

Intermediate Casing

Hole Size: 12.25 Casing Size: 9.625

Cemented with: 1213 sx. **or** ft³

Top of Cement: 0 FT MD Method Determined: CBL

Production Casing

Hole Size: 8.5 Casing Size: 5.5

Cemented with: 2569 sx. **or** ft³

Top of Cement: 4900 FT MD Method Determined: CBL

Total Depth: 20,772' MD/ 10,752' TVDInjection Interval

10,951' MD/ 10,632' TVD feet to 20,804' MD/ 10,754' TVD(PERFORATED)

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 3.5 Lining Material: NONEType of Packer: NONE - ELECTRIC SUBMERSIBLE PUMP

Packer Setting Depth: _____

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

Additional Data

1. Is this a new well drilled for injection? _____ Yes X _____ 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: _____

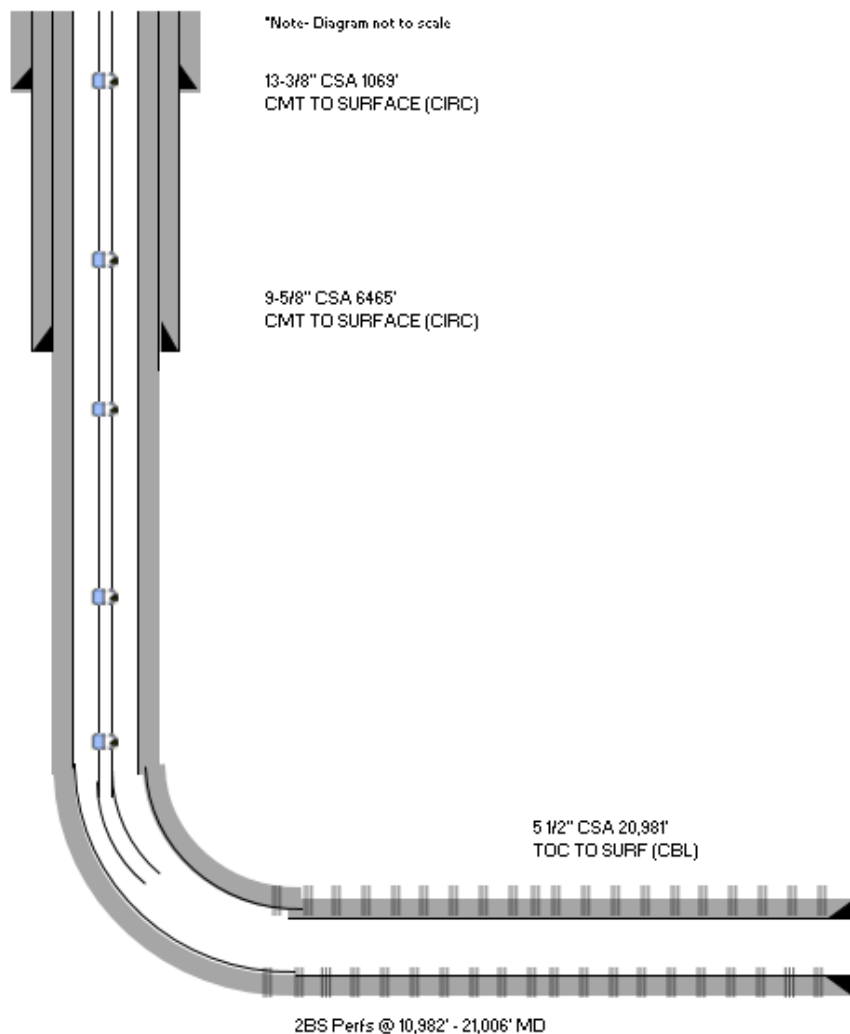
OVERLYING: FIRST BONE SPRINGUNDERLYING: HARKEY

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA INCWELL NAME & NUMBER: AVOGATO 30 31 STATE COM 22H

WELL LOCATION: <u>420 FNL 1385 FWL</u>	<u>C</u>	<u>30</u>	<u>22S</u>	<u>33E</u>
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17.5 Casing Size: 13.375Cemented with: 1340 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLIntermediate CasingHole Size: 12.25 Casing Size: 9.625Cemented with: 1207 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLProduction CasingHole Size: 8.5 Casing Size: 5.5Cemented with: 2892 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLTotal Depth: 21073' MD/ 10,890' TVDInjection Interval10,982' MD/ 10,781' TVD feet to 21,006' MD/ 10,890' TVD (PERFORATED)

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.375 Lining Material: NONEType of Packer: NO PACKER- ANNULAR 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 X _____ 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: _____

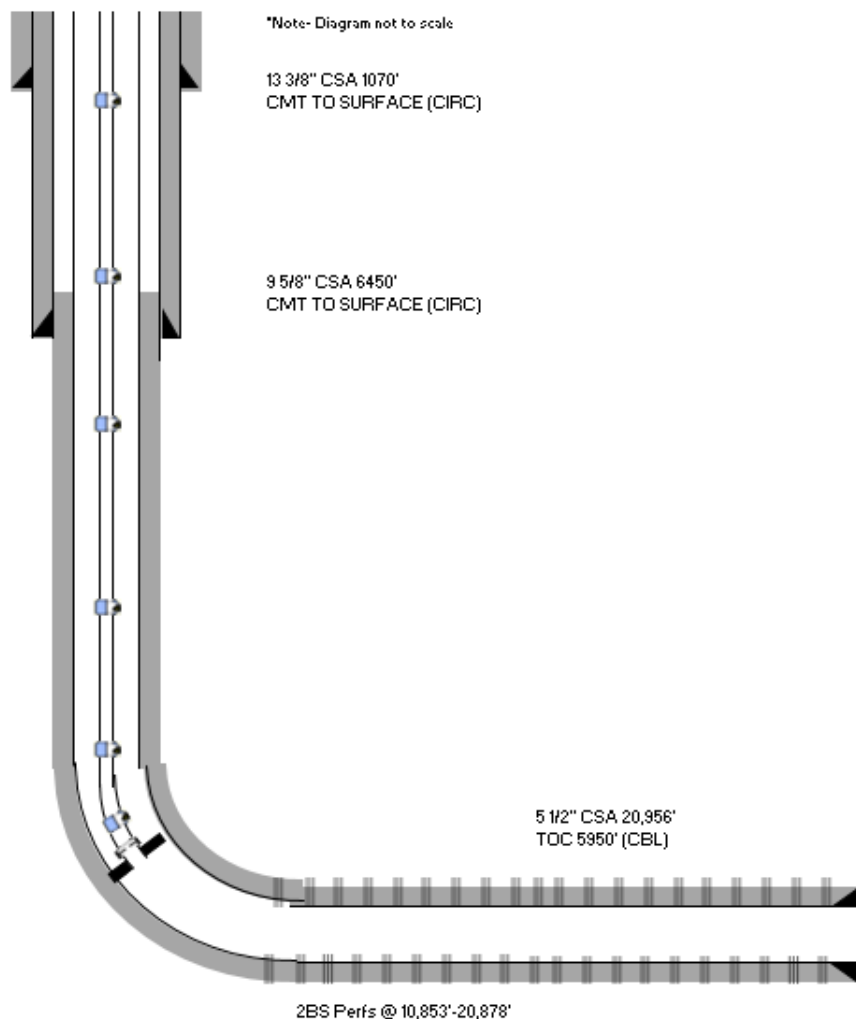
OVERLYING: FIRST BONE SPRINGUNDERLYING: HARKEY

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA INCWELL NAME & NUMBER: AVOGATO 30 31 STATE COM 23H

WELL LOCATION: <u>420 FNL 1420 FWL</u>	<u>C</u>	<u>30</u>	<u>22S</u>	<u>33E</u>
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17.5 Casing Size: 13.375Cemented with: 1340 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLIntermediate CasingHole Size: 12.25 Casing Size: 9.625Cemented with: 1210 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLProduction CasingHole Size: 8.5 Casing Size: 5.5Cemented with: 2710 FT MD sx. **or** ft³Top of Cement: 5950 FT MD Method Determined: CBLTotal Depth: 20,956' MD/ 10,769' TVDInjection Interval10,853' MD/ 10,671' TVD feet to 20,878' MD/ 10,767' TVD(PERFORATED)

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: NONEType of Packer: 2-3/8"x5.5" PackerPacker Setting Depth: 10,517' MD/ 10,416' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____ Yes X _____ 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: _____

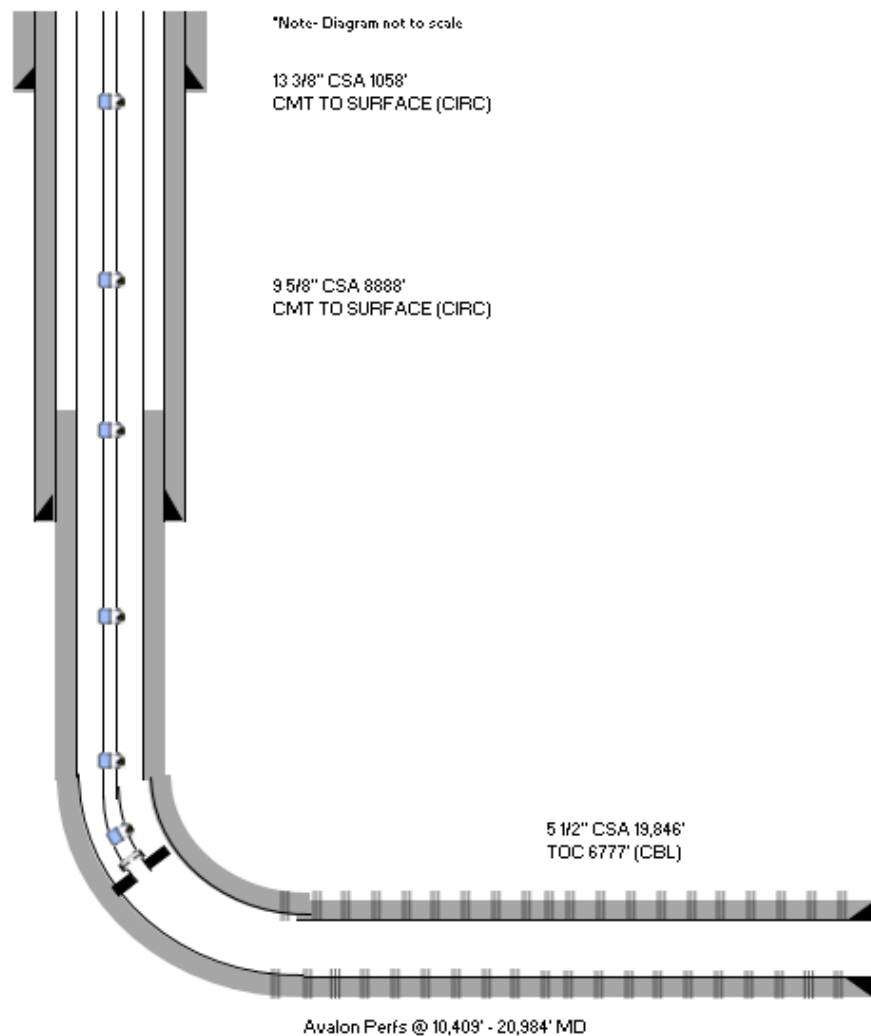
OVERLYING: FIRST BONE SPRINGUNDERLYING: HARKEY

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA INCWELL NAME & NUMBER: AVOGATO 30 31 STATE COM 12H

WELL LOCATION:	160 FNL 920 FEL	D	30	22S	33E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC**WELL CONSTRUCTION DATA**Surface Casing

Hole Size: 17.5 Casing Size: 13.375

Cemented with: 1340 sx. **or** ft³

Top of Cement: 0 FT MD Method Determined: CBL

Intermediate Casing

Hole Size: 12.25 Casing Size: 9.625

Cemented with: 1670 sx. **or** ft³

Top of Cement: 0 FT MD Method Determined: CBL

Production Casing

Hole Size: 8.5 Casing Size: 5.5

Cemented with: 2130 sx. **or** ft³

Top of Cement: 6777 FT MD Method Determined: CBL

Total Depth: 19,846' MD/ 9613' TVDInjection Interval

10,409' MD/ 9594' TVD feet to 20,984' MD/ 9613' TVD (PERFORATED)

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.375 Lining Material: NONEType of Packer: NO PACKER - 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 X _____ No

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

HYDROCARBON PRODUCTION

2. Name of the Injection Formation: AVALON

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: _____

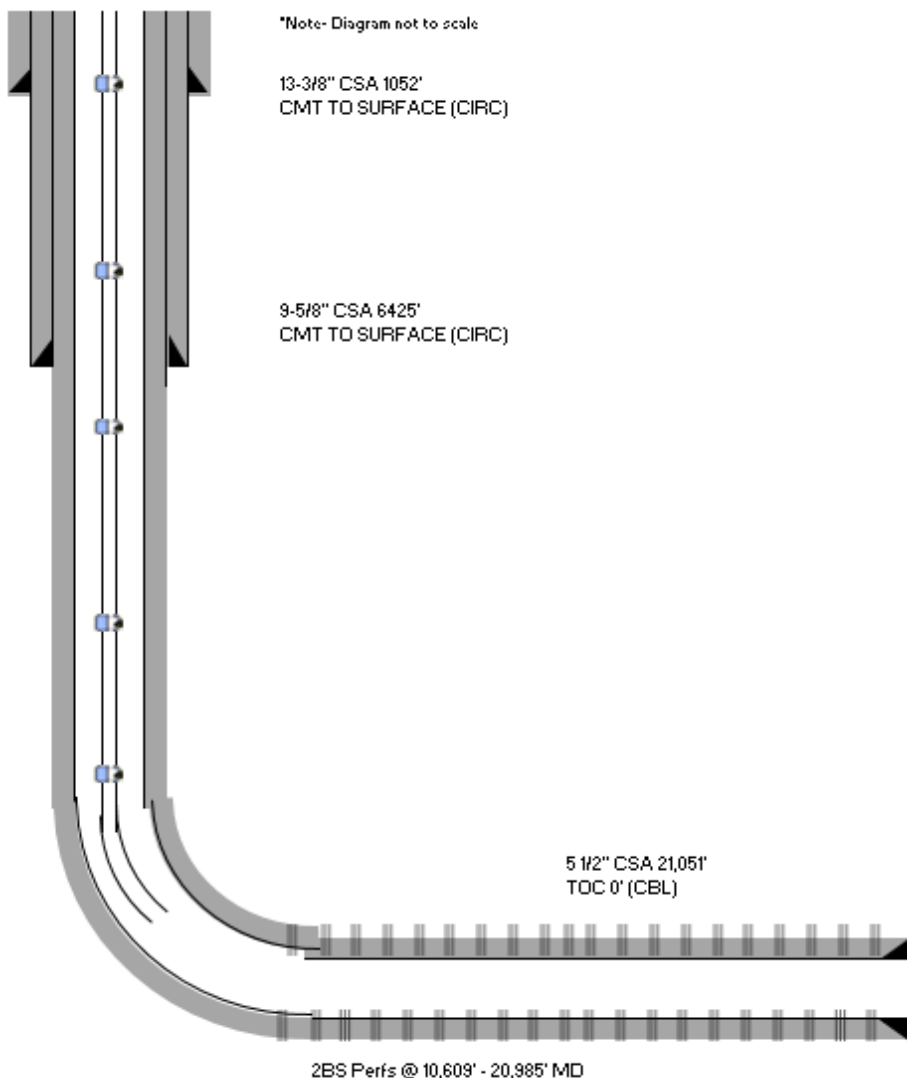
OVERLYING: BRUSHY CANYONUNDERLYING: FIRST BONE SPRING

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA INCWELL NAME & NUMBER: AVOGATO 30 31 STATE COM 24H

WELL LOCATION:	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
420 FNL 1820 FEL		B	30	22S	33E

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17.5 Casing Size: 13.375Cemented with: 1340 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLIntermediate CasingHole Size: 12.25 Casing Size: 9.625Cemented with: 1165 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLProduction CasingHole Size: 8.5 Casing Size: 5.5Cemented with: 2485 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLTotal Depth: 21,051' MD/ 10,960' TVDInjection Interval10,609' MD/ 10,545' TVD feet to 20,985' MD/ 10,959' TVD (PERFORATED)

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: NONEType of Packer: retrievable packerPacker Setting Depth: 9870' MD / 9813' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____ Yes X _____ 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: _____

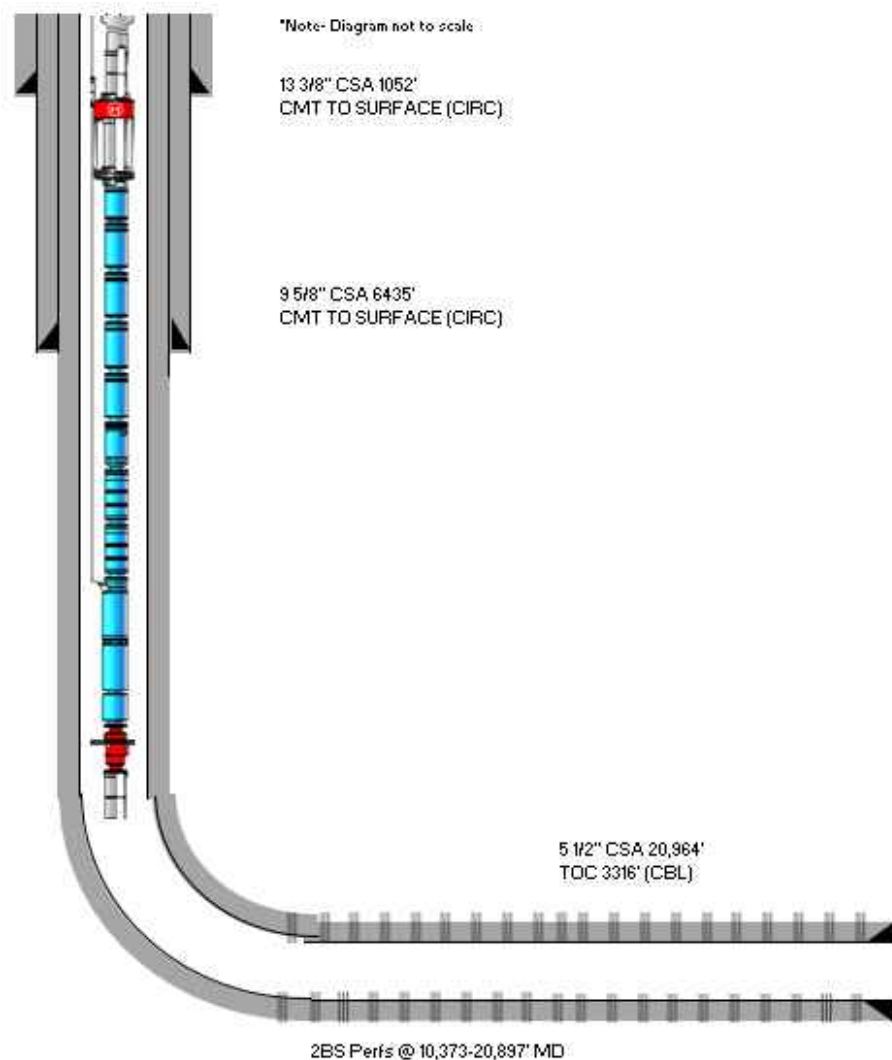
OVERLYING: FIRST BONE SPRINGUNDERLYING: HARKEY

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA INCWELL NAME & NUMBER: AVOGATO 30 31 STATE COM 25H

WELL LOCATION:	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
420 FNL 1785 FEL		B	30	22S	33E

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 17.5 Casing Size: 13.375

Cemented with: 1340 sx. **or** ft³

Top of Cement: 0 FT MD Method Determined: CBL

Intermediate Casing

Hole Size: 12.25 Casing Size: 9.625

Cemented with: 1165 sx. **or** ft³

Top of Cement: 0 FT MD Method Determined: CBL

Production Casing

Hole Size: 8.5 Casing Size: 5.5

Cemented with: 2470 sx. **or** ft³

Top of Cement: 3316 FT MD Method Determined: CBL

Total Depth: 20,964' MD/ 10,783' TVDInjection Interval

10,373' MD/ 10,334' TVD feet to 20,897' MD/ 10,782' TVD (PERFORATED)

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: NONEType of Packer: NO PACKER ELECTRIC SUBMERSIBLE PUMP

Packer Setting Depth: _____

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

Additional Data

1. Is this a new well drilled for injection? _____ Yes X _____ 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: _____

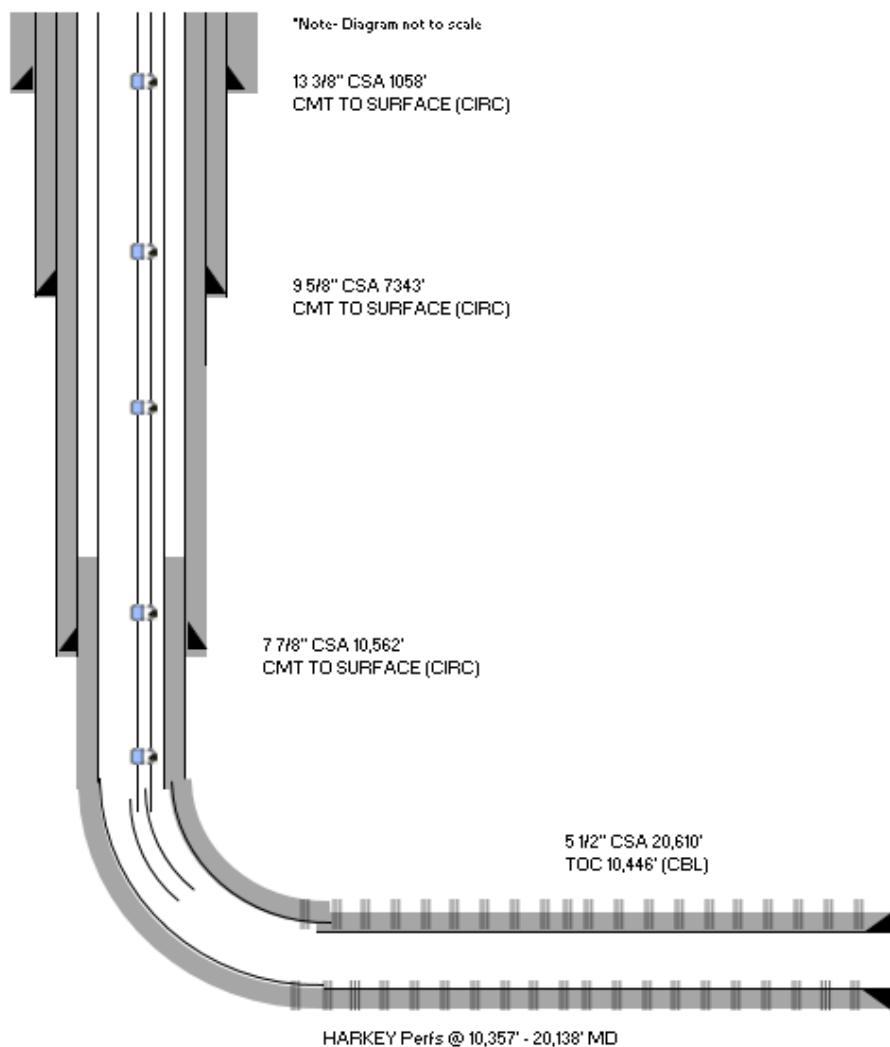
UNDERLYING: THIRD BONE SPRINGOVERLYING: FIRST BONE SPRING

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA INCWELL NAME & NUMBER: AVOGATO 30 31 STATE COM 74H

WELL LOCATION:	160 FNL 1155 FEL	A	30	22S	33E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17.5 Casing Size: 13.375Cemented with: 1340 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLIntermediate CasingHole Size: 12.25/8.5 Casing Size: 9.625/7.875Cemented with: 1447/472 sx. **or** ft³Top of Cement: 0 FT MD Method Determined: CBLProduction CasingHole Size: 6.75 Casing Size: 5.5Cemented with: 858 sx. **or** ft³Top of Cement: 10446 FT MD Method Determined: CBLTotal Depth: 20,610' MD/ 11, 405' TVDInjection Interval10,357' MD/ 10,265' TVD feet to 20,138' MD/ 11,403' TVD(PERFORATED)

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.375 Lining Material: NONEType of Packer: NO PACKER - CASING FLOW

Packer Setting Depth: _____

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

Additional Data

1. Is this a new well drilled for injection? _____ Yes X _____ No

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

HYDROCARBON PRODUCTION

2. Name of the Injection Formation: HARKEY

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: _____

UNDERLYING: THIRD BONE SPRINGOVERLYING: SECOND BONE SPRING

Max Allowable Surface Pressure (MASP) Table

	Column	1	2	3	4	5
	Calculation					
API10	Well Name	Proposed Max Allowable Surface Pressure (MASP) (PSI)	Current Average Surface Pressure (PSI)	Max Achievable Surface Pressure, Current Infrastructure (PSI)	Proposed Average Injection Rate (MMSCFPD)	Proposed Max Injection Rate (MMSCFPD)
30-025-44934	TACO CAT 27 34 FEDERAL COM #021H	1,300	1,087	1,300	3	4
30-025-44161	RED TANK 30 31 STATE COM #024Y	1,300	891	1,300	3	4
30-025-44193	RED TANK 30 31 STATE COM #014H	1,300	681	1,300	3	4
30-025-45923	AVOGATO 30 31 STATE COM #004H	1,300	1,012	1,300	3	4
30-025-45924	AVOGATO 30 31 STATE COM #021H	1,300	300	1,300	3	4
30-025-45925	AVOGATO 30 31 STATE COM #022H	1,300	1,050	1,300	3	4
30-025-45926	AVOGATO 30 31 STATE COM #023H	1,300	910	1,300	3	4
30-025-45957	AVOGATO 30 31 STATE COM #012H	1,300	921	1,300	3	4
30-025-45960	AVOGATO 30 31 STATE COM #024H	1,300	914	1,300	3	4
30-025-45961	AVOGATO 30 31 STATE COM #025H	1,300	200	1,300	3	4
30-025-45964	AVOGATO 30 31 STATE COM #074H	1,300	1,043	1,300	3	4

	Column	6	7	8	9	10	11	12	13	14	15
	Calculation				(1+6*7)/8		= 1/10				= (1+12*13) / (12/14)
					MASP + Reservoir Brine Hydrostatic as a percentage of Casing or Liner Burst Pressure (%)						
API10	Well Name	Burst Calculation Depth (FT TVD)	Brine Pressure Gradient (PSI/FT)	Casing or Liner Burst (PSI)		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)	MASP + Gas Hydrostatic as a percentage of Formation Parting Pressure (%)
30-025-44934	TACO CAT 27 34 FEDERAL COM #021H	10,586	0.468	12,640	49%	10,586	0.123	10,586	0.200	0.650	50%
30-025-44161	RED TANK 30 31 STATE COM #024Y	10,860	0.468	12,640	50%	10,860	0.120	10,860	0.200	0.650	49%
30-025-44193	RED TANK 30 31 STATE COM #014H	9,417	0.468	12,640	45%	9,417	0.138	9,417	0.200	0.650	52%
30-025-45923	AVOGATO 30 31 STATE COM #004H	10,082	0.468	12,640	48%	10,082	0.129	10,082	0.200	0.650	51%
30-025-45924	AVOGATO 30 31 STATE COM #021H	10,607	0.468	12,640	50%	10,607	0.123	10,607	0.200	0.650	50%
30-025-45925	AVOGATO 30 31 STATE COM #022H	10,781	0.468	12,640	50%	10,781	0.121	10,781	0.200	0.650	49%
30-025-45926	AVOGATO 30 31 STATE COM #023H	10,671	0.468	12,640	50%	10,671	0.122	10,671	0.200	0.650	50%
30-025-45957	AVOGATO 30 31 STATE COM #012H	10,455	0.468	12,640	49%	10,455	0.124	10,455	0.200	0.650	50%
30-025-45960	AVOGATO 30 31 STATE COM #024H	10,545	0.468	12,640	49%	10,545	0.123	10,545	0.200	0.650	50%
30-025-45961	AVOGATO 30 31 STATE COM #025H	10,334	0.468	12,640	49%	10,334	0.126	10,334	0.200	0.650	50%
30-025-45964	AVOGATO 30 31 STATE COM #074H	10,082	0.468	12,640	48%	10,082	0.129	10,082	0.200	0.650	51%

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	SENILE FELINES 18 7 STATE COM 311H	Red Tank 19 CTB
3002548758	SENILE FELINES 18 7 STATE COM 312H	Red Tank 19 CTB
3002548757	SENILE FELINES 18 7 STATE COM 313H	Red Tank 19 CTB
3002548751	SENILE FELINES 18 7 STATE COM 31H	Red Tank 19 CTB
3002548754	SENILE 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)
 - o All producing wells flow to the Red Tank 19 CTB or the Red Tank 27/28 CTB.
 - o See Gas Source Well List for list of wells.
 - o All low-pressure gas lines are combined downstream of the CTBs.
- Centralized Gas Lift Compressors (CGLs)
 - o All low-pressure gas lines connect to the Red Tank 19 CGL Station and Red Tank 26 CGL Station.
 - o CGLs increase pressure from ~70 psig to ~1250 psig.
 - o All high-pressure gas lines are combined downstream of the CGLs.
- Gas analysis is provided for:
 - o Injection gas
 - o Avalon production
 - o First Bone Spring production
 - o Second Bone Spring production
 - o Harkey production



Natural Gas Analysis Report

GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

	Sample Information
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
Field	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

Parameter	Value	Lower Limit	Upper Limit	Status	
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		
Flowing Temperature (Deg. F)	112.1		

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		
Flowing Temperature (Deg. F)	124.0		

Result	Dry	Sat.	
Gross Heating Value (BTU / Ideal cu.ft.)	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		
Flowing Temperature (Deg. F)	114.9		

Result	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		
Flowing Temperature (Deg. F)	115.7		

Result	Dry	Sat.	
Gross Heating Value (BTU / Ideal cu.ft.)	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	

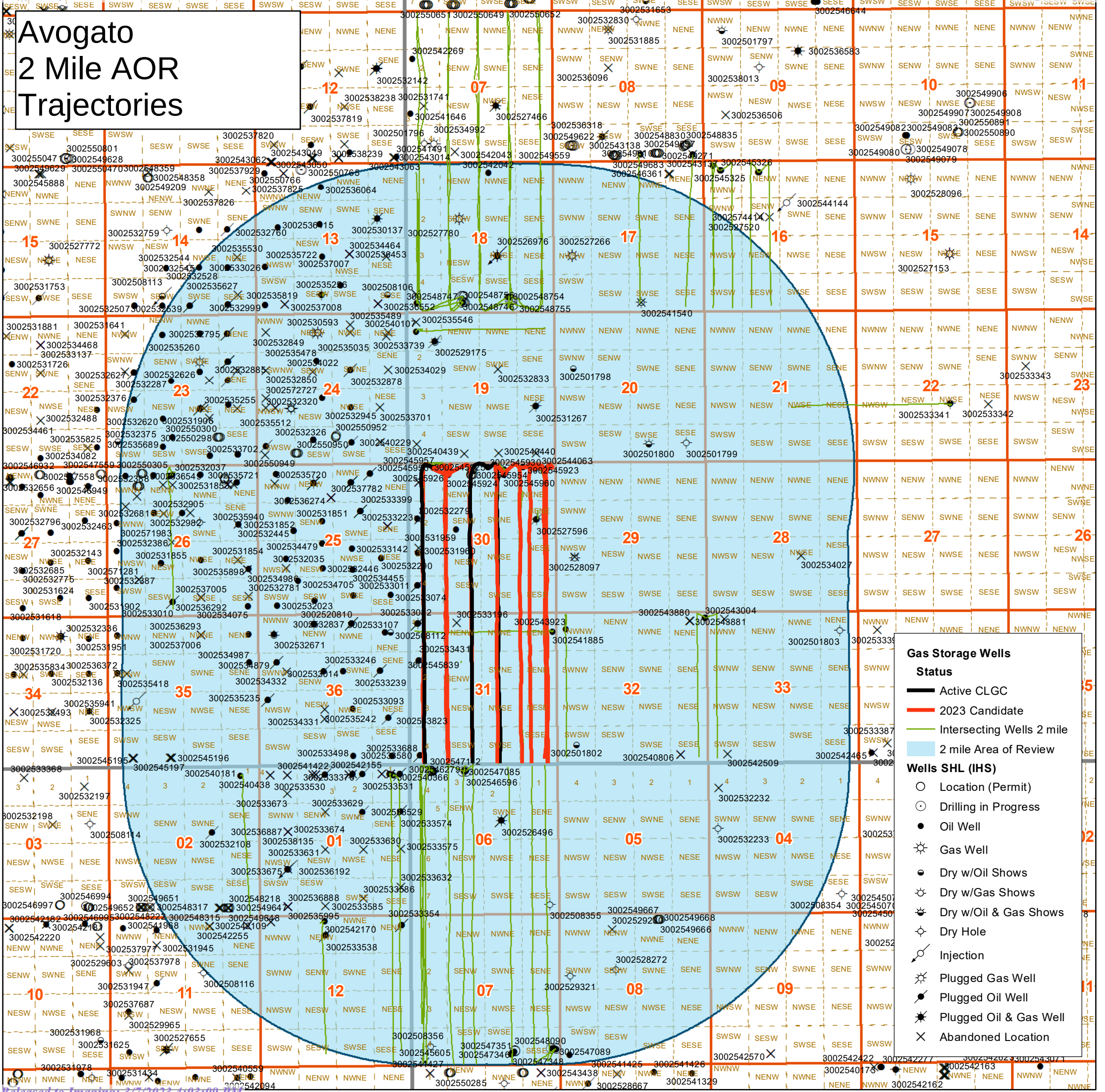
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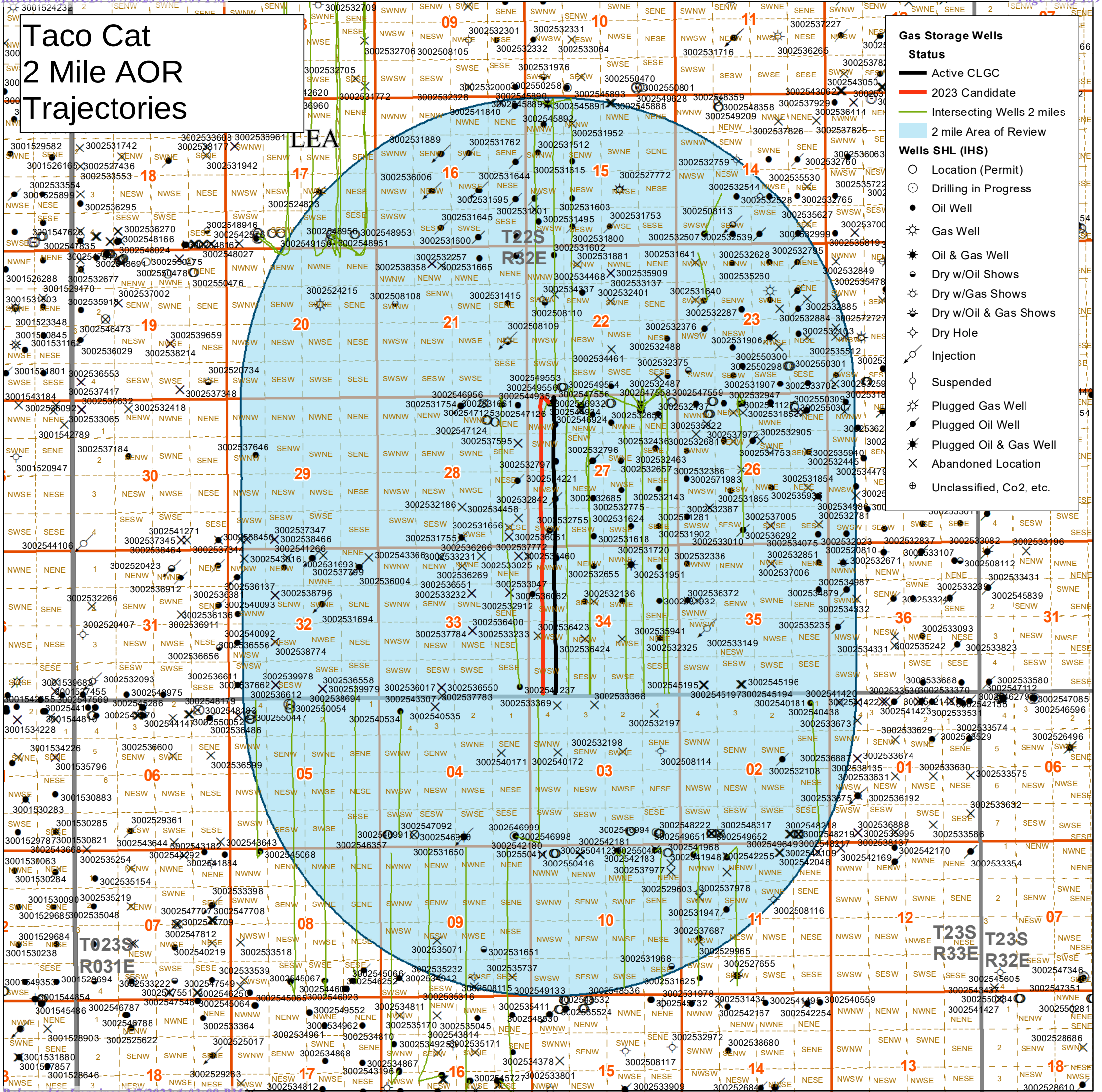
Avogato

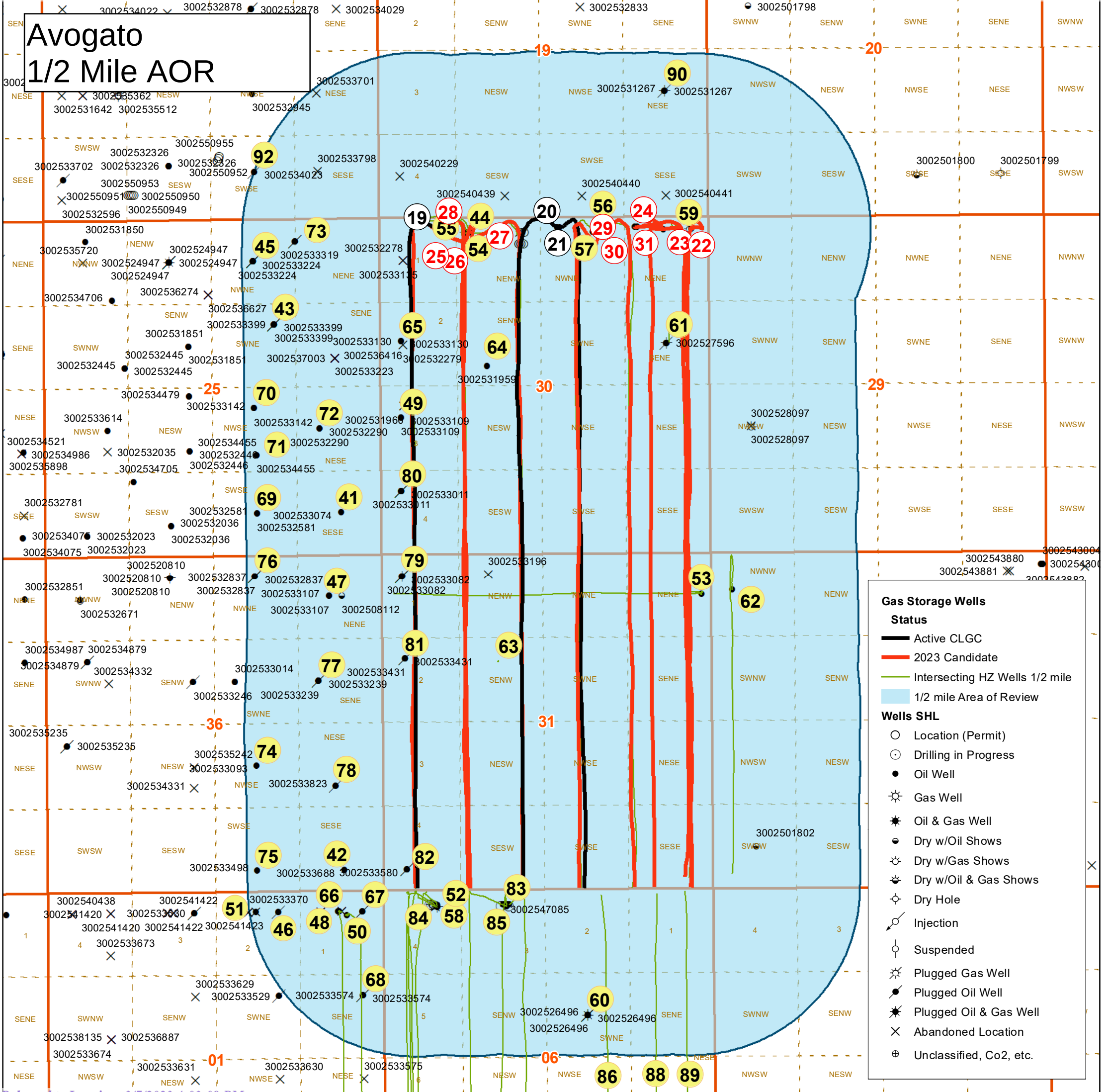
2 Mile AOR

Trajectories



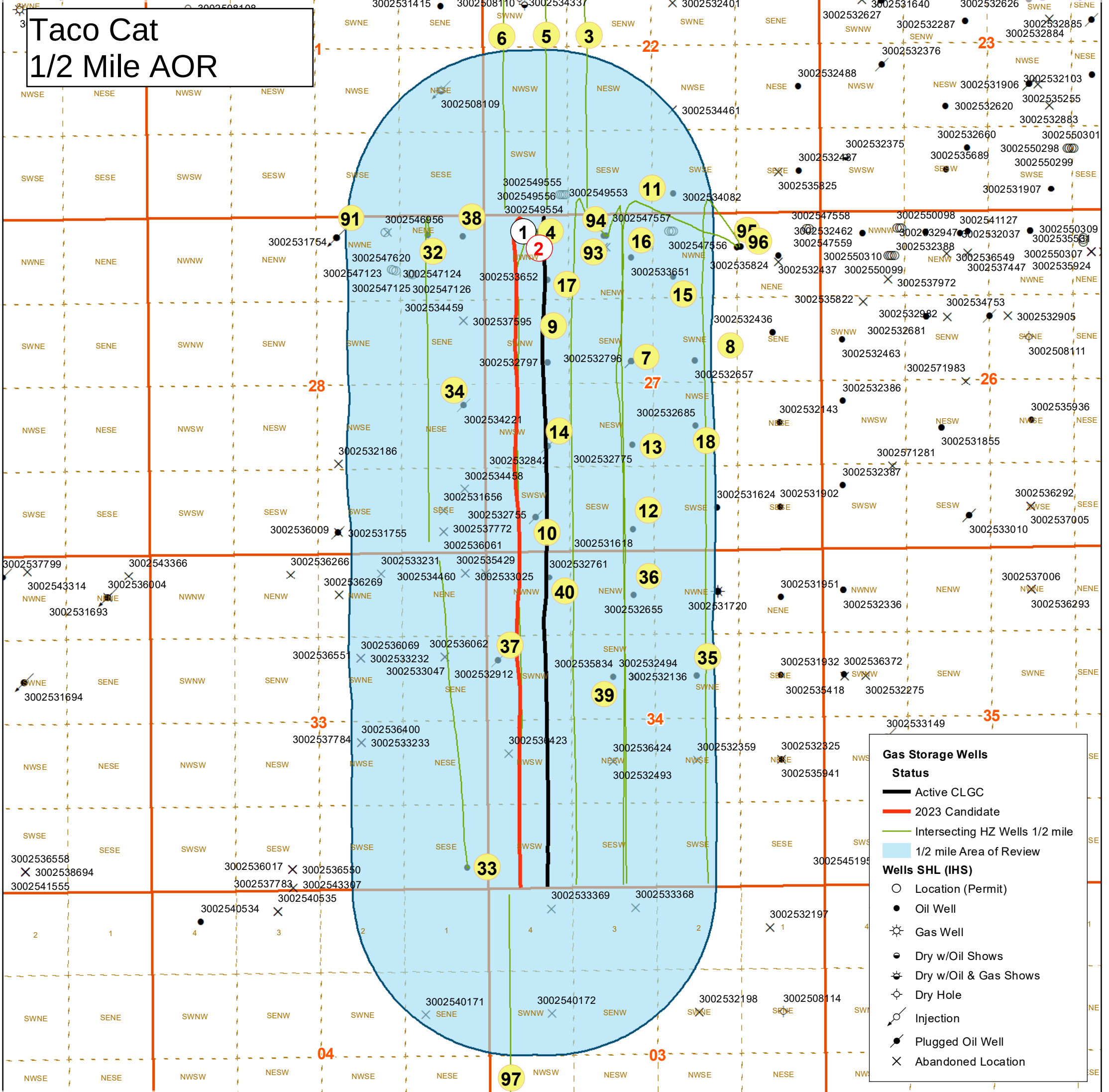
Taco Cat 2 Mile AOR Trajectories





Taco Cat

1/2 Mile AOR



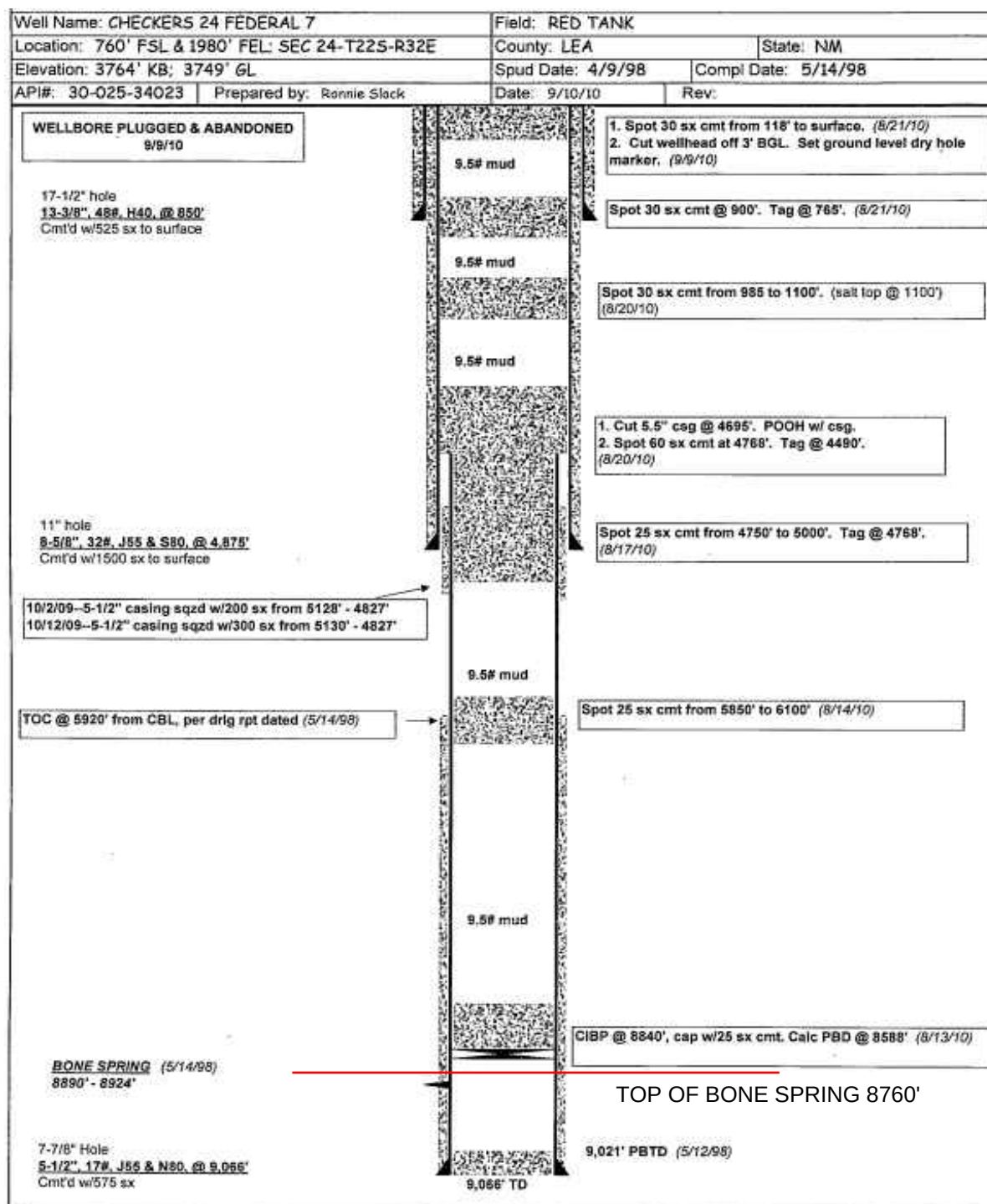
Key: **Bold Black** - Approved CLGC well, **Bold Red**- New Candidate well

Released to Imaging: 3/7/2023 4:03:09 PM

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 12.25 8.5	13.375 9.625 5.5	1037 8890 19846	1340 1670 2130	0 CIRC 0 CIRC 6777 CBL	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 12.25 8.5	13.375 9.625 5.5	1054 6425 21051	1340 1165 2485	0 CIRC 0 CIRC 3170 CALC	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 12.25 8.5	13.375 9.625 5.5	1052 6435 20988	1340 1165 2470	0 CIRC 0 CIRC 3316 CALC	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 12.25 8.5 6.75	13.375 9.625 7.625 5.5	1058 7343 10562 21610	1340 1447 472 858	0 CIRC 0 CIRC 6834 CALC 10446 CALC	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 10.625 7.875	11.75 8.625 5.5	927 4650 13270	690 1120 1590	0 Circ 0 Circ 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 10.625 7.875	11.75 8.625 5.5	1129 4655 13004	840 1110 1640	0 Circ 0 Circ 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 9.875 6.75	10.75 7.625 4.5	815 4435 8700	750 1050 995	0 Circ 0 Circ 4150 Calc	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 11 7.875	13.375 8.625 5.5	764 4750 8850	1050 1750 1240	0 Circ 0 Circ 2660 Calc	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 11 7.875	13.375 8.625 5.5	800 4511 8718	950 1800 1420	0 Circ 0 Circ 2550 Calc	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 9.875 6.75	10.75 7.625 4.5	818 4520 8742	700 1400 900	0 Circ 0 Circ 3674 Calc	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 11 7.875	13.375 8.625 5.5	817 4500 8740	850 1800 1125	0 Circ 0 Circ 2900 Calc	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 9.875 6.75	10.75 7.625 4.5	1025 4570 8795	800 1404 985	0 Circ 0 Circ 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 11 7.875	13.375 8.625 5.5	812 4475 8722	950 1800 1210	0 Circ 0 Circ 3096 Calc	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 9.625 6.75	10.75 7.625 4.5	802 4720 9010	600 1000 900	0 CIRC 0 CIRC 3110 CBL	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 8.75 6.125	9.625 7 4.5	850 4600 9100	365 965 1050	0 CIRC 0 CIRC 5865 CBL	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 9.875 6.75	10.75 7.625 4.5	800 4670 8966	800 1150 1100	0 CIRC 0 CIRC 3202 CBL	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 12.25; 9.87 6.75	13.375 7.625 5.5	1050 11336 22103	1340 4119 831	0 Circ 0 Circ 11457 Calc	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 9.625 6.75	10.75 7.625 4.5	830 4695 8980	780 1125 490	0 CIRC 0 CIRC 5828 CALC	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 12.25 7.875	13.375 8.625 5.5	1165 4790 10250	750 1175 1075	0 CIRC 0 CIRC 3000 CBL	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 12.25 7.875	13.375 8.625 5.5	853 4665 9001	750 1600 1150	0 CIRC 0 CIRC 4850 CALC	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 12.25 8.75 6	13.375 9.625 7 4.5	1290 4975 12408 19431	1525 1860 1325 715	0 CIRC 0 CIRC 1110 CALC 1110 CALC	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 9.875 6.75	10.75 7.625 4.5	825 4720 9020	775 1210 1050	0 CIRC 0 CIRC 3588 CALC	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 12.25 8.75	13.375 9.625 5.5	1295 4982 19004	302 1773 3859	0 CIRC 0 CIRC 2000 Calc	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 12.25 8.75	13.375 9.625 5.5	1321 4975 14030	1460 1745 2570	0 CIRC 0 CIRC 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 12.25 8.75	13.375 9.625 5.5	1335 8855 19989	1140 1574 3021	0 CIRC 5010 CALC 4056 CALC	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 10.625 7.875	11.75 8.625 5.5	1215 4930 15423	960 1160 1690	0 CIRC 0 CIRC 3920 CALC	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 9.875 6.75	13.375 7.625 5.5	1052 11162 22105	1340 4050 874	0 CIRC 0 CIRC 8243 CALC	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 12.25 8.5 6.75	13.375 9.625 7.625 5.5	1055 6435 11332 22206	1340 1207 627 826	0 CIRC 0 CIRC 6241 CALC 25 CALC	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 12.25	13.375 9.625	1050 6422	1340 1620	0 CIRC 0 CIRC	11886'-22109'		[51687] RED TANK; BONE SPRING, EAST

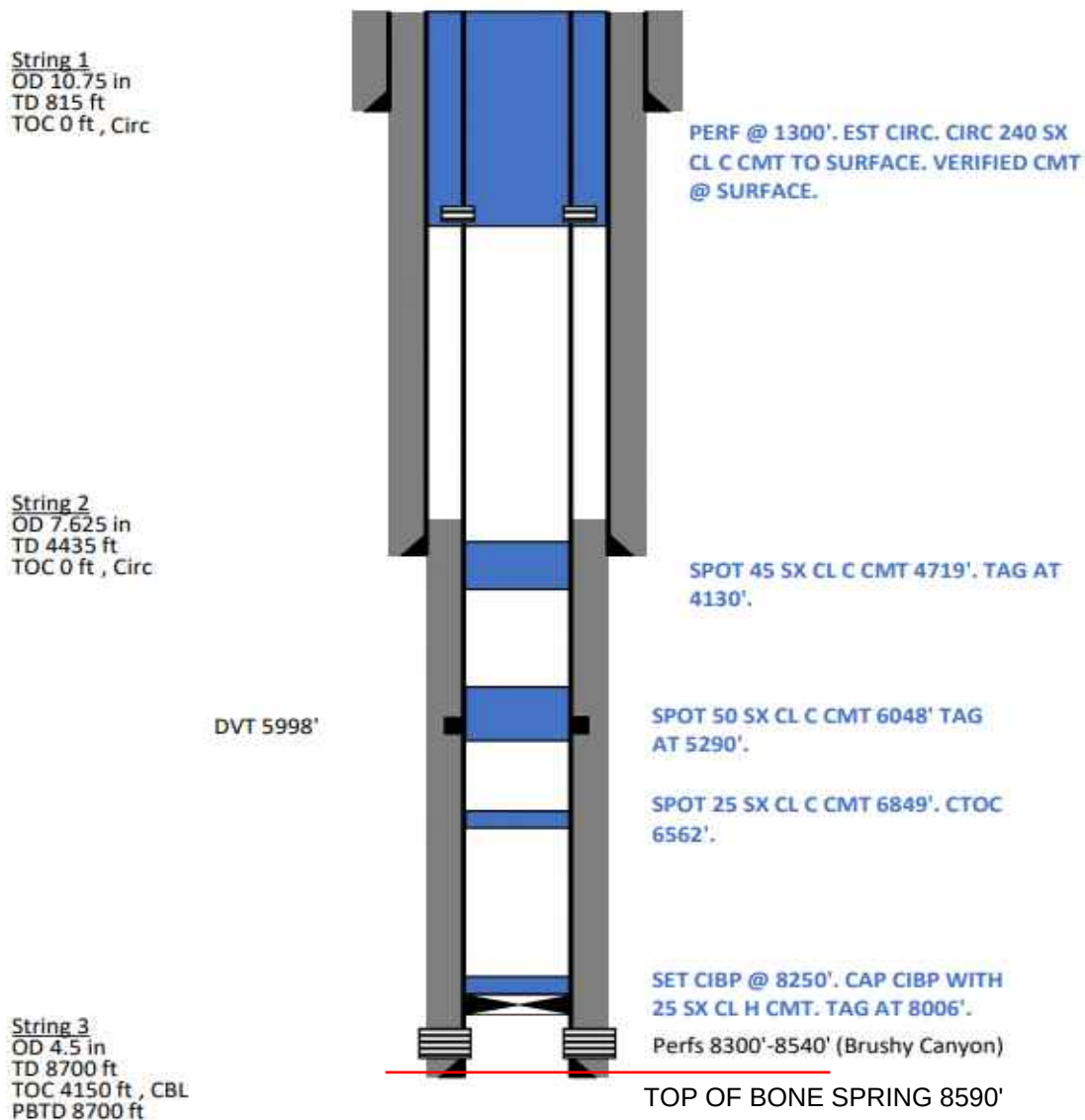
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83	30-025-46335	MATADOR PRODUCTION COMPANY	RODNEY ROBINSON FEDERAL	122H Oil	Active	240 N	1927 W	C	6 23S	33E	9/4/2019	11189	21224	17.5 12.25 8.75	13.375 9.625 5.5	1339 5059 21200	1520 1369 4224	0 CIRC 0 CIRC 28 CALC	10963-21051	[96228] PRONGHORN; BONE SPRING
84	30-025-46371	MATADOR PRODUCTION COMPANY	RODNEY ROBINSON FEDERAL	121H Oil	Active	270 N	827 W	D	6 23S	33E	9/27/2019	11164	21253	17.5 12.25 8.75	13.375 9.625 5.5	1339 5063 21289	1140 1555 3838	0 CIRC 0 CIRC 2900 CALC	11135-21109	[96228] PRONGHORN; BONE SPRING
85	30-025-46279	MATADOR PRODUCTION COMPANY	RODNEY ROBINSON FEDERAL	102H Oil	Active	270 N	1927 W	C	6 23S	33E	9/2/2019	9550	19750	17.5 12.25 8.75	13.375 9.625 5.5	1337 5060 19740	1515 1369 3615	0 CIRC 0 CIRC 0 CIRC	9591-19593	[96228] PRONGHORN; BONE SPRING
86	30-025-47350	MATADOR PRODUCTION COMPANY	RODNEY ROBINSON FEDERAL COM	133H Oil	Active	367 S	1730 E	O	7 23S	33E	9/25/2020	12009	22435	17.5 9.875 6.75	13.375 7.625 5.5	1394 11441 22420	1190 2610 1090	0 CIRC 0 CIRC 0 CIRC	12386-22283	[96228] PRONGHORN; BONE SPRING
87	30-025-47351	MATADOR PRODUCTION COMPANY	RODNEY ROBINSON FEDERAL COM	203H Oil	Active	385 S	1706 E	O	7 23S	33E	9/23/2020	12213	22462	17.5 9.875 6.75	13.375 7.625 5.5	1389 11505 22447	1190 2455 1299	0 CIRC 0 CIRC 1250 CALC	12685-22188	[98177] WC-025 G-09 S223332A; UPR WOLFCAMP
88	30-025-47352	MATADOR PRODUCTION COMPANY	RODNEY ROBINSON FEDERAL COM	204H Oil	Active	546 S	155 E	P	7 23S	33E	11/5/2020	12220	22640	17.5 9.875 6.75	13.375 7.625 5.5	1385 11759 22640	1210 2650 1170	0 CIRC 1320 CALC 0 CIRC	12526-22488	[98177] WC-025 G-09 S223332A; UPR WOLFCAMP
89	30-025-47489	MATADOR PRODUCTION COMPANY	RODNEY ROBINSON FEDERAL COM	134H Oil	Active	546 S	185 E	P	7 23S	33E	11/9/2020	12000	22415	17.5 9.875 6.75	13.375 7.625 5.5	1385 11759 22640	1210 2650 1170	0 CIRC 1320 CALC 0 CIRC	12538-22256	[96228] PRONGHORN; BONE SPRING
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 12.25 8.75	13.375 9.625 7	804 4870 12166	860 2250 1400	0 CALC 0 CALC 2332 CALC	N/A	N/A
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 8.625 5.5	820 4435 10153	820 4435 10153	1275 2035 1675	0 CIRC 0 CIRC 2580 CBL	4674-4698;5434-5748	[96100] SWD; DELAWARE
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 11 7.875	13.375 8.625 5.5	850 4875 9066	525 1500 575	0 CIRC 0 CIRC 5920 CBL	N/A	N/A
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 9.875 6.75	13.375 7.625 5.5	976 11147 22359	1165 1550 930	0 Circ 0 Circ 8700 CBL	11968-22296	[98286] WC-025 G-08 S223227D; UPPER WOLFCAMP
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 9.875 6.75	13.375 7.625 5.5	975 11264 22362	1140 2130 926	0 Circ 0 Circ 10653 CALC	11968-22298	[98286] WC-025 G-08 S223227D; UPPER WOLFCAMP
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 12.25 8.75	13.375 9.625 5.5	963 6433 21179	1160 1714 2848	0 Circ 0 Circ 2918 Est.	10788-21089	[51683] RED TANK;BONE SPRING;
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 12.25 8.75x	13.375 9.625 8.5	970 6346 21226	1165 1714 2724	0 Circ 0 Circ 3798 Est	10835-21136	[51683] RED TANK;BONE SPRING;
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 12.25 8.75 6	13.375 9.625 7 4.5	1006 4721 12233 16829	997 1923 1184 349	0 Circ 0 Circ 10672 Calc 3950 CBL	12023-16795	[17644] DIAMONDTAIL; BONE SPRING



Stephen Janacek
10/5/2021

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



**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'.

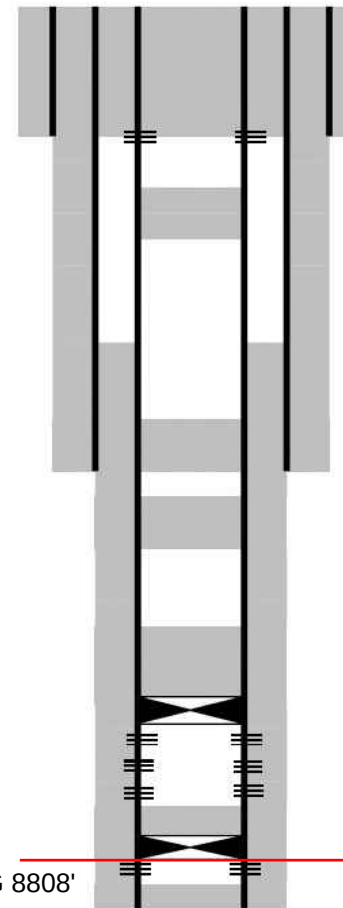
EOT @ 6338'. Pumped 50sx CI C Cmt. Tagged TOC @ 5663'.

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'



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'

TD - 9100' TVD

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.

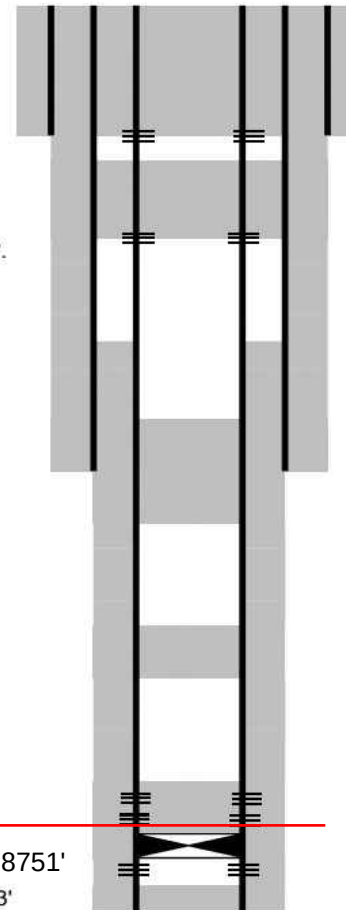
Perf'd @ 1500'. Squeezed 50sx CI C Cmt. Tagged TOC @ 1052'.

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

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'



Spud 04/06/2000

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

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

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

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'

Proposed Injection Zone Top - 8745'

CIBP - 8825'

PBTD - 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'

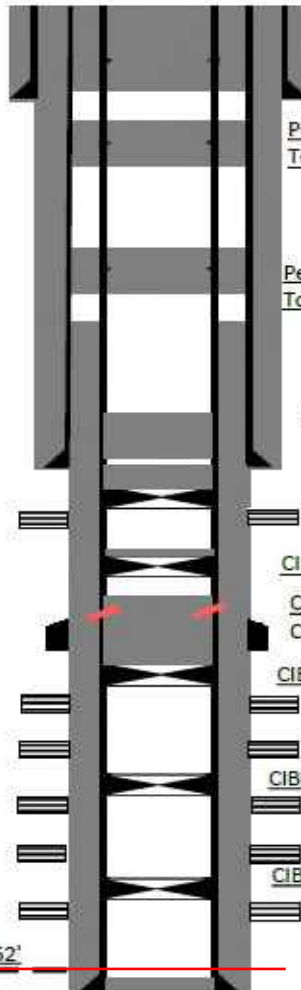
CIBP - 8000'

CIBP - 8830'

PBTD - 8972'

TD - 9010'

Proposed Injection Zone Top - 8752'



Shaunik Bhatte
5/5/2021

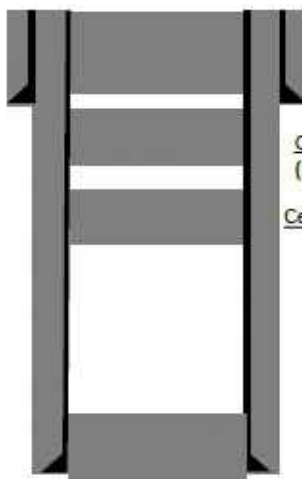
Current Wellbore
Mule Deer 36 State 8
30-025-33823-0000
Sec 36 T22S R32E 1650 FSL 770 FEL
Lea County, NM

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

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

Proposed Injection Zone Top - 8700'

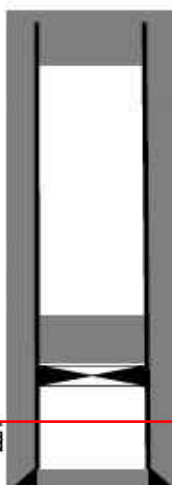


Cement plug bottom - 50'
CIRC TO SURF 20 SX

Cement plug bottom - 410' w/ 30 sxs
(unknown top)

Cement plug - 1160-1273' w/ 35 sxs

Cement plug - 4396'-4762' w/ 120 sxs



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

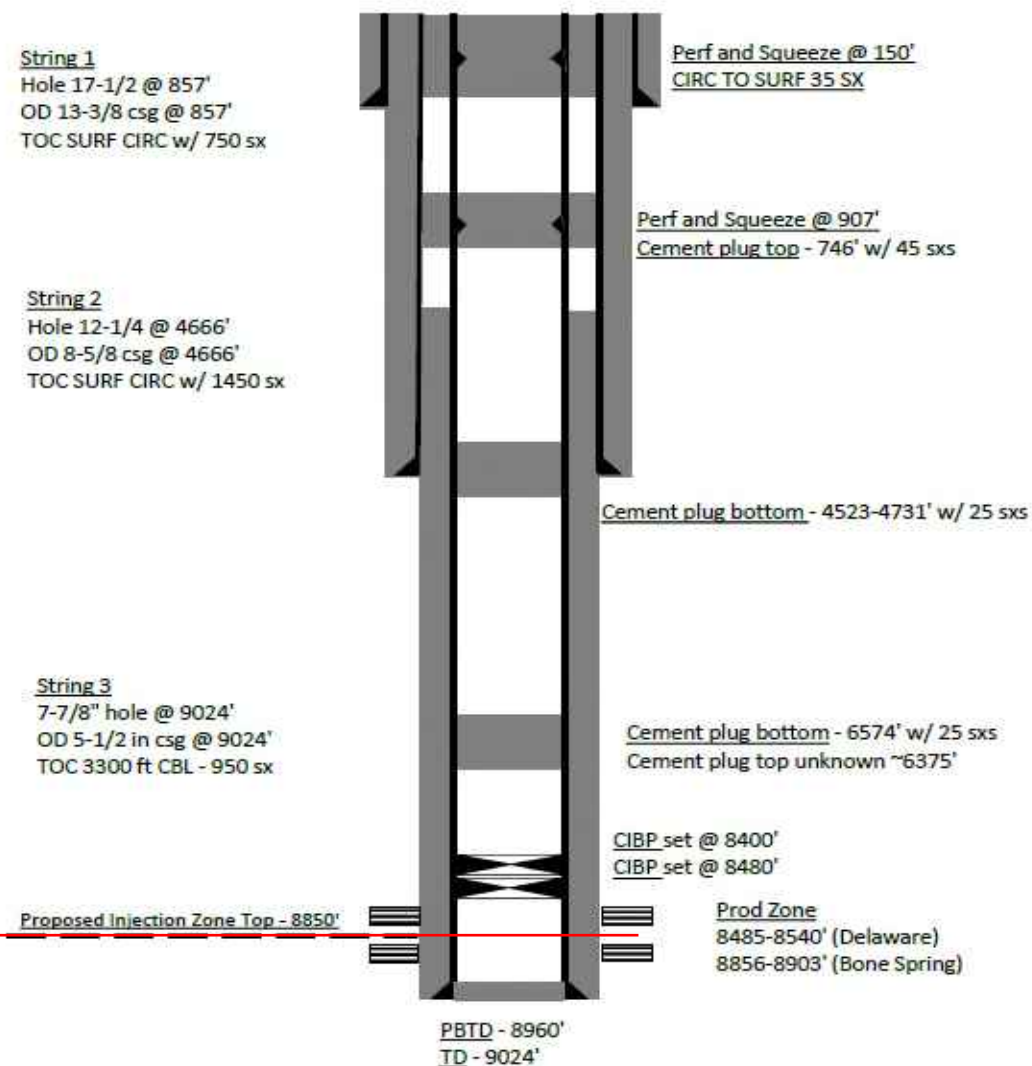
Plug Top @ 8606' (CALC)
CIBP set @ 8835'

Prod Zone
8885-8932' (Bone Spring)

PBTD - 9040'
TD - 9088'

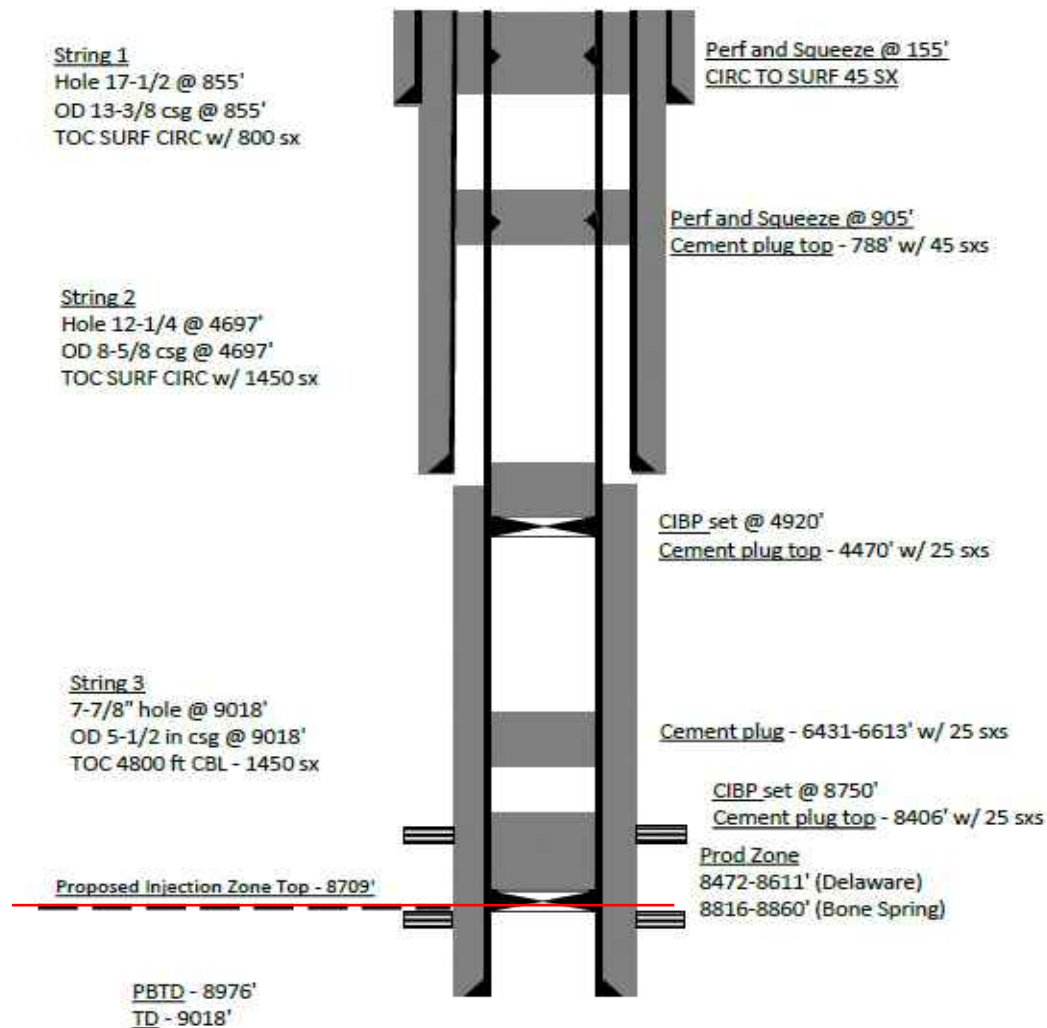
Shaunik Bhatte
5/5/2021

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



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'

Proposed Injection Zone - 8758'

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

PBTD - 8977'
TD - 9010'

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

String 1
Hole 14-3/4" @ 1150'
OD 11-3/4" csg @ 1150'
TOC SURF CIRC w/ 700 sx

Cement plug- 150' w/ 40 sx cmt
CIRC TO SURF

Cement plug - 1045-1330' w/ 90 sx cmt

String 2
Hole 11" @ 4797'
OD 8-5/8" csg @ 4797'
TOC SURF CIRC w/ 1150 sx

Cut and pull 5.5" Casing @ 2500
Cement plug top - 2379-2560' w/ 45 sx cmt

Cement plug - 4610'-5004' w/ 60 sx cmt

String 3
7-7/8" hole @ 9121'
OD 5.5 in csg @ 9121'
TOC 2692 ft CBL - 925 sx

Cement plug top - 8320' w/ 25 sx
CIBP - 8500'

Proposed Injection Zone Top - 8821'

Prod Zone
8534'-8590' Delaware Perfs
8968-9010' Bone Spring Perfs

PBTD - 9044'
ID - 9121'

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'

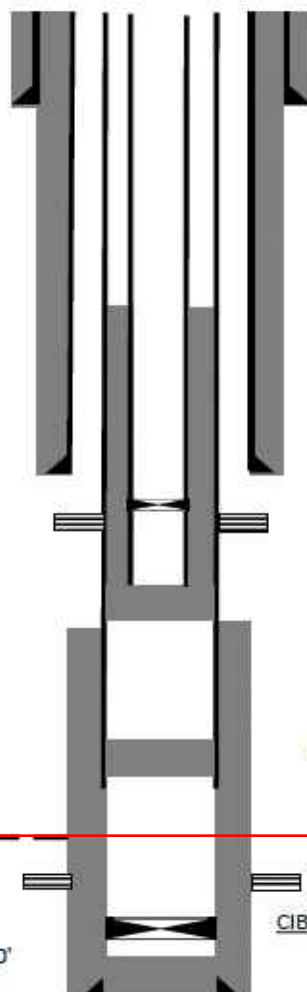
OD 5-1/2 in csg @ 5290'

TOC 3900' (CALC) w/ 575 sx

Proposed Injection Zone Top - 8746'

PBD - 12050'

TD - 15,450'

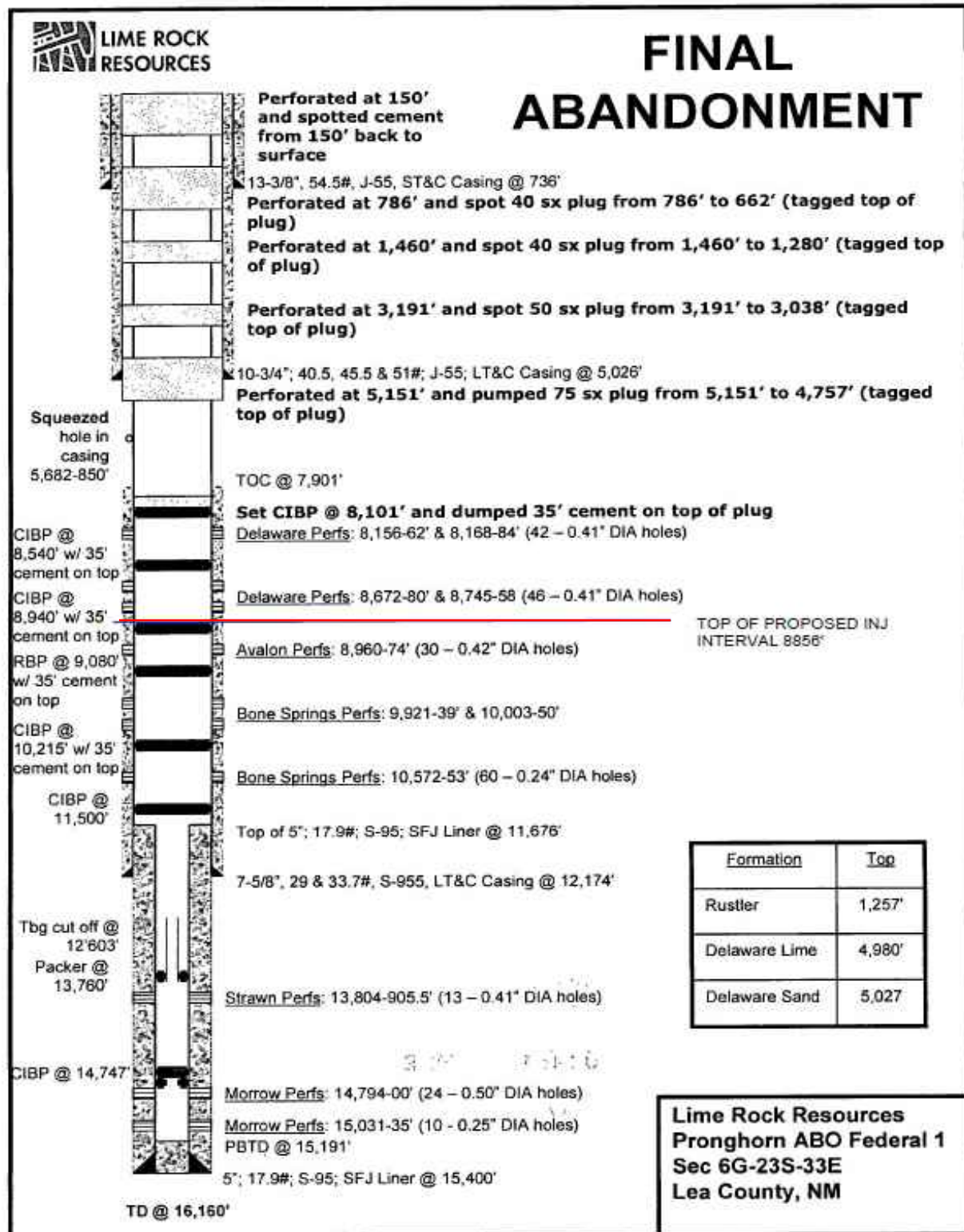
CIBP - 4900'Prod Zone

4946'-4963'

Cement plug top - 5212' w/ 125 sx
cmt, Bottom calc - 5823'Cement plug - 7588-7768' w/ 100 sx cmtProd Zone

10563'-10620'

CIBP - 10500'



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

Cement plug top - Surf
to circ w/ 25 sx cmt

String 2

Hole 11" @ 4790'
OD 8-5/8" csg @ 4790'
TOC SURF CIRC w/ 1175 sx

Cement plug top - 1052-1345' w/ 90 sx cmt

Cement plug top - 2572-2760' w/ 45 sx cmt

Cut and Pull 5.5" Casing - 2700'

String 3

7-7/8" hole @ 10250'
OD 5-1/2" in csg @ 10250'
TOC 3000 ft CBL - 1075 sx

Cement plug top - 4624-5020' w/ 60 sx cmt

Proposed Injection Zone Top - 8825'

Cement plug on top w/ 25 sx cmt

Prod Zone

8966-9008' - Bone Spring perms
10029-10071' - Bone Spring perms

CIBP - 8900'

Cement plug top - 9915'

CIBP - 9950'

PBTD - 10162'
TD - 10250'

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'

Cement plug - 5490' - 5670'
Holes - 5574-5602'

Prod Zone

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

Calculated cement plug top - 5875' w/ 25 sx cmt
CIBP - 6254'

Cement plug - 6387'-6766' w/ 25 sx cmt

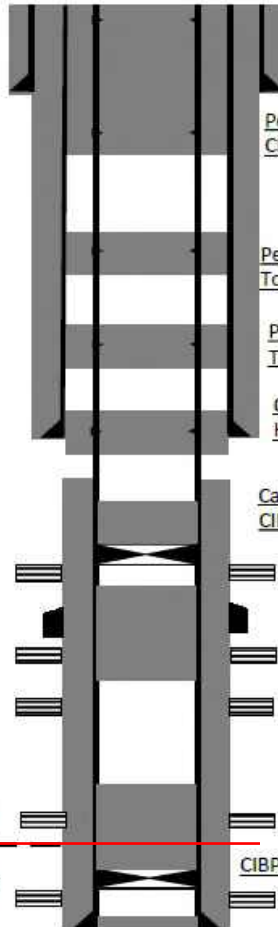
String 3

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

Proposed Injection Zone Top - 8746'

Cement plug top - 8285' w/ 25 sx
cmt (tagged high CTOC= 8448')
CIBP - 8829'

PBTD - 8980'
ID - 8980'



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

String 1

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

Perf & Squeeze- 850' w/ 180 sx cmt
CIRC TO SURF

String 2

Hole 9-7/8 @ 4670'
OD 7-5/8 csg @ 4670'
TOC SURF CIRC w/ 1150 sx

Perf & Squeeze- 2760' w/ 40 sx cmt
Top of Plug - 2555'

Prod Zone

4950-5020'
6228-6366'
8046-8066'
8528-8548'
8836-8855'

Cement plug top - 4380' w/ 35 sx cmt

CIBP - 4900'

Cement plug - 5295-6380' w/ 35 sx cmt
(tagged high CTOC= 5851')

String 3

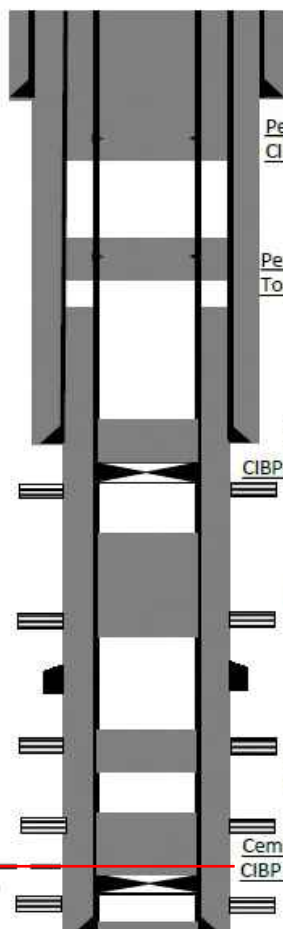
6-3/4" hole @ 8966'
OD 4.5 in csg @ 8966'
TOC 3202 ft CBL - 1100 sx

Cement plug top - 7911' w/ 25 sx cmt
Unknown bottom, tagged lower than expected

Proposed Injection Zone - 8700'

Cement plug top - 8496' w/ 25 sx cmt
CIBP - 8800'

PBTD - 8919'
TD - 8966'



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

String 1

Hole 14-3/4 @ 825'
OD 10-3/4 csg @ 825'
TOC SURF CIRC w/ 600 sx

Perf & Squeeze- 1300' w/ 306 sx cmt
CIRC TO SURF

String 2

Hole 9-7/8 @ 4440'
OD 7-5/8 csg @ 4440'
TOC SURF CIRC w/ 1300 sx

Cement plug top - 2551-2910' 35 w/ sx cmt

Cement plug top - 4103-4600' w/ 40 sx cmt

Cement plug top - 6053' w/ 70 sx cmt

CIBP - 7010'
CIBP - 7060'

String 3

6-3/4" hole @ 8700'
OD 4.5 in csg @ 8700'
TOC 2358 ft CBL - 1000 sx

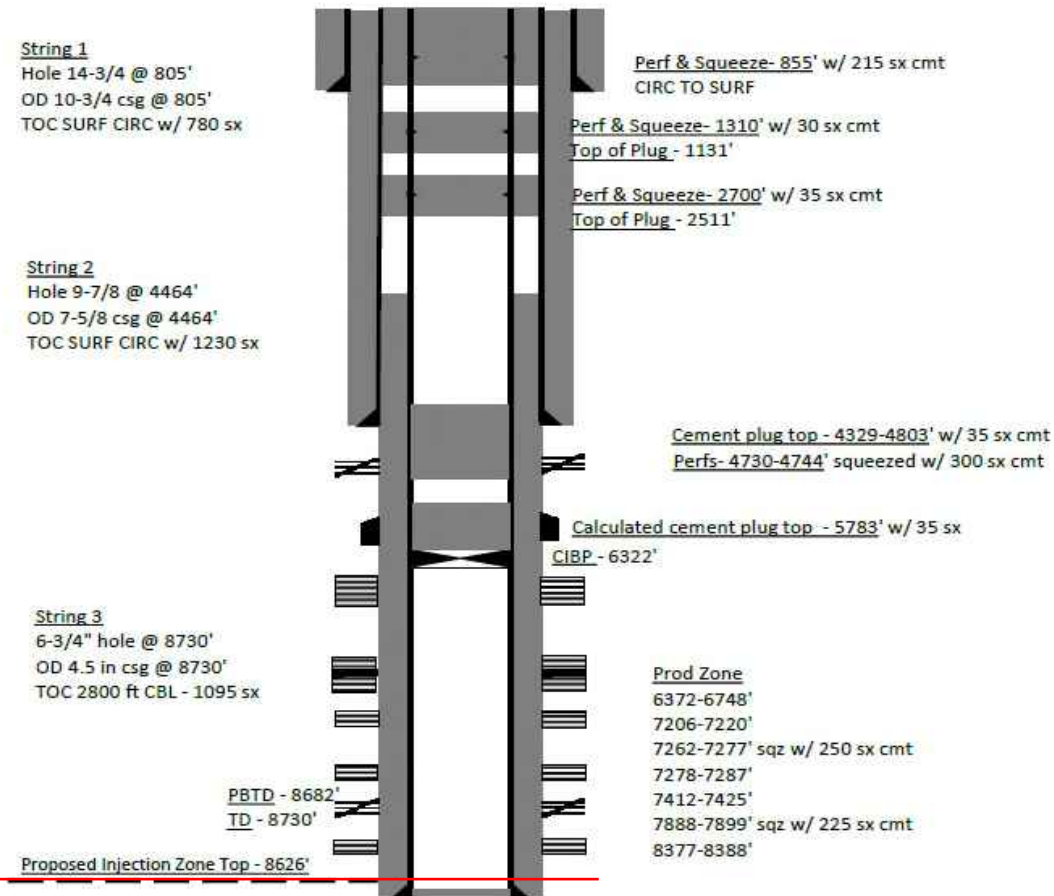
Prod Zone
7110-7150' sqz w/ 425 sx cmt
7412-7420'
7712-7732'
8298-8360'
8510-8530'

Proposed Injection Zone Top - 8600'

PBTD - 8652'
TD - 8700'

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

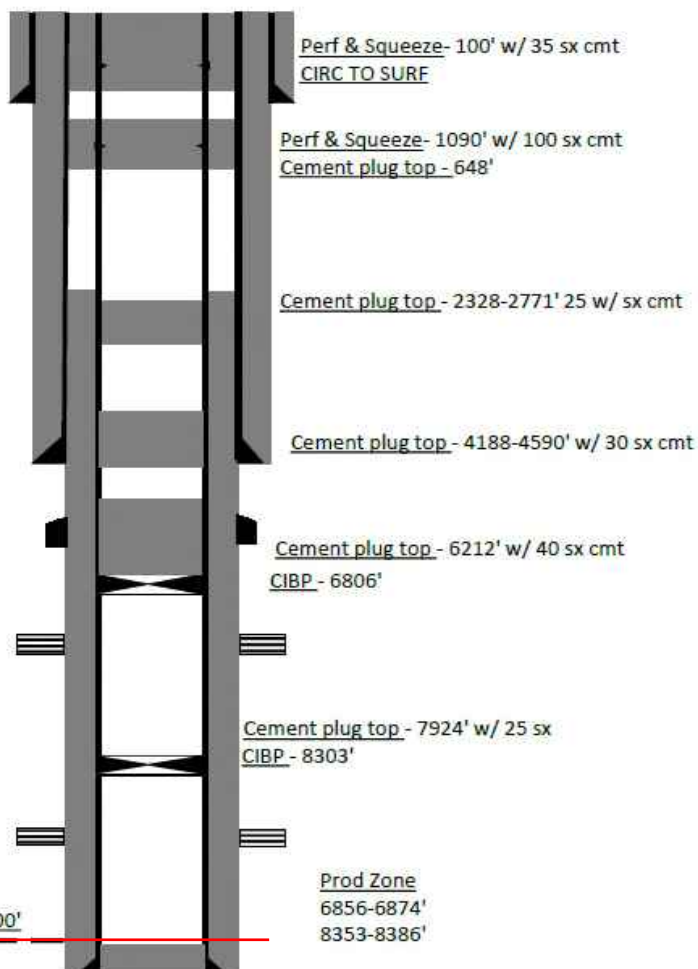
String 1
Hole 14-3/4 @ 822'
OD 10-3/4 csg @ 822'
TOC SURF CIRC w/ 800 sx

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 @ 8732'
OD 4.5 in csg @ 8732'
TOC 2030 ft CBL - 875 sx

PBTD - 8685'
TD - 8732'

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

Perf & Squeeze- 60' w/ 50 sx cmt
CIRC TO SURFPerf & Squeeze- 1090' w/ 140 sx cmt
Top of Plug - 190'Perf & Squeeze- 2135' w/ 60 sx cmt
Top of Plug - 1963'Perf & Squeeze- 3425' w/ 60 sx cmt
Top of Plug - 3273'String 2

Hole 9-7/8 @ 4520'

OD 7-5/8 csg @ 4520'

TOC SURF CIRC w/ 1400 sx

Cement plug top - 4249-4740'
w/ 30 sx cmtCement plug top - 6013-6495' w/ 25 sx cmtString 3

6-3/4" hole @ 8742'

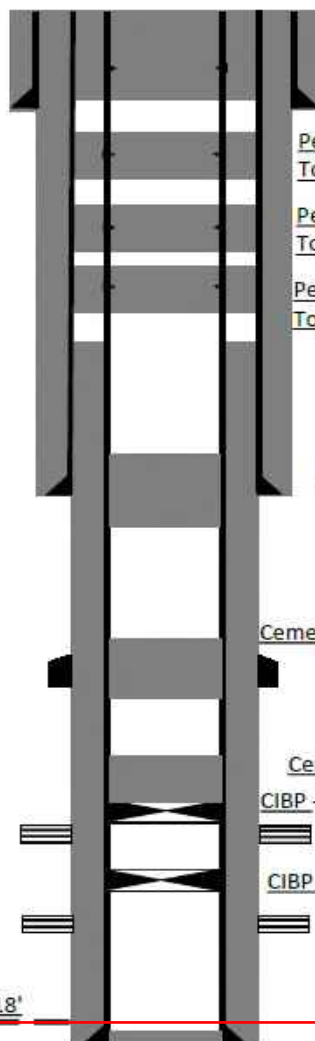
OD 4.5 in csg @ 8742'

TOC 3674 ft CBL - 900 sx

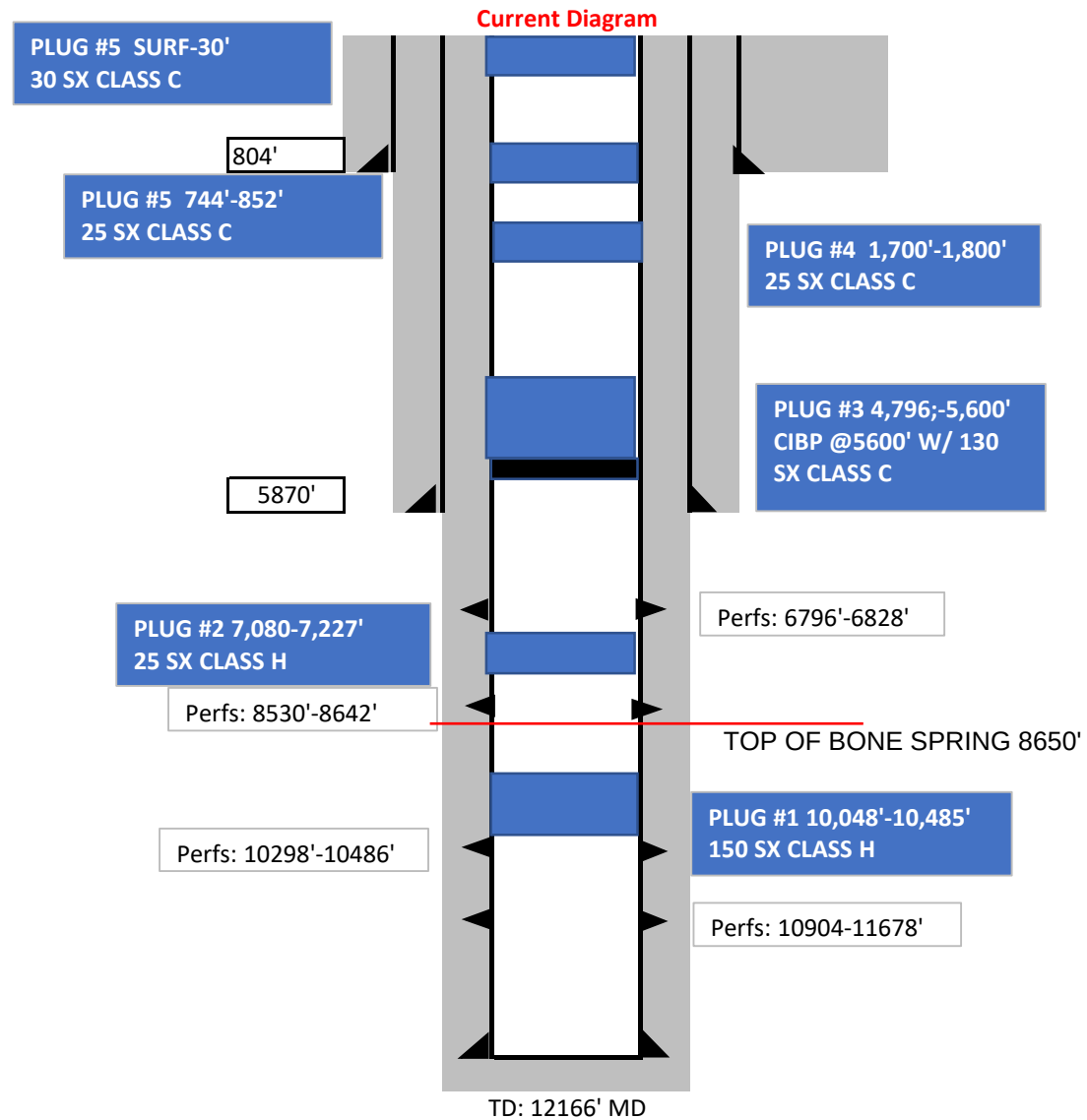
Cement plug top - 6778' w/ 25 sx cmtCIBP - 7150'Prod Zone

7197-7210'

8376-8410'

CIBP - 8244'PBTD - 8695'ID - 8742'Proposed Injection Zone Top - 8618'

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



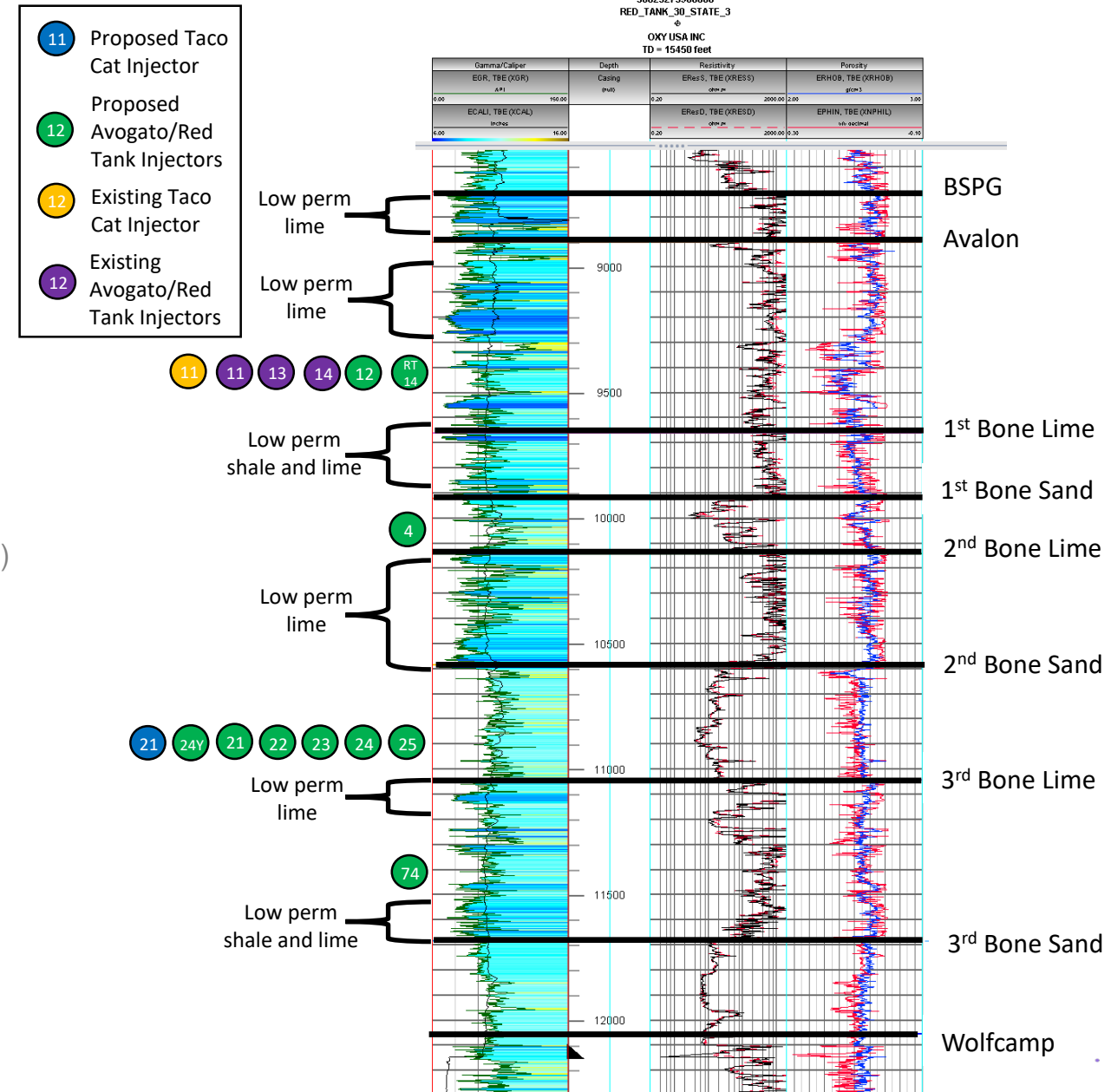
Geology



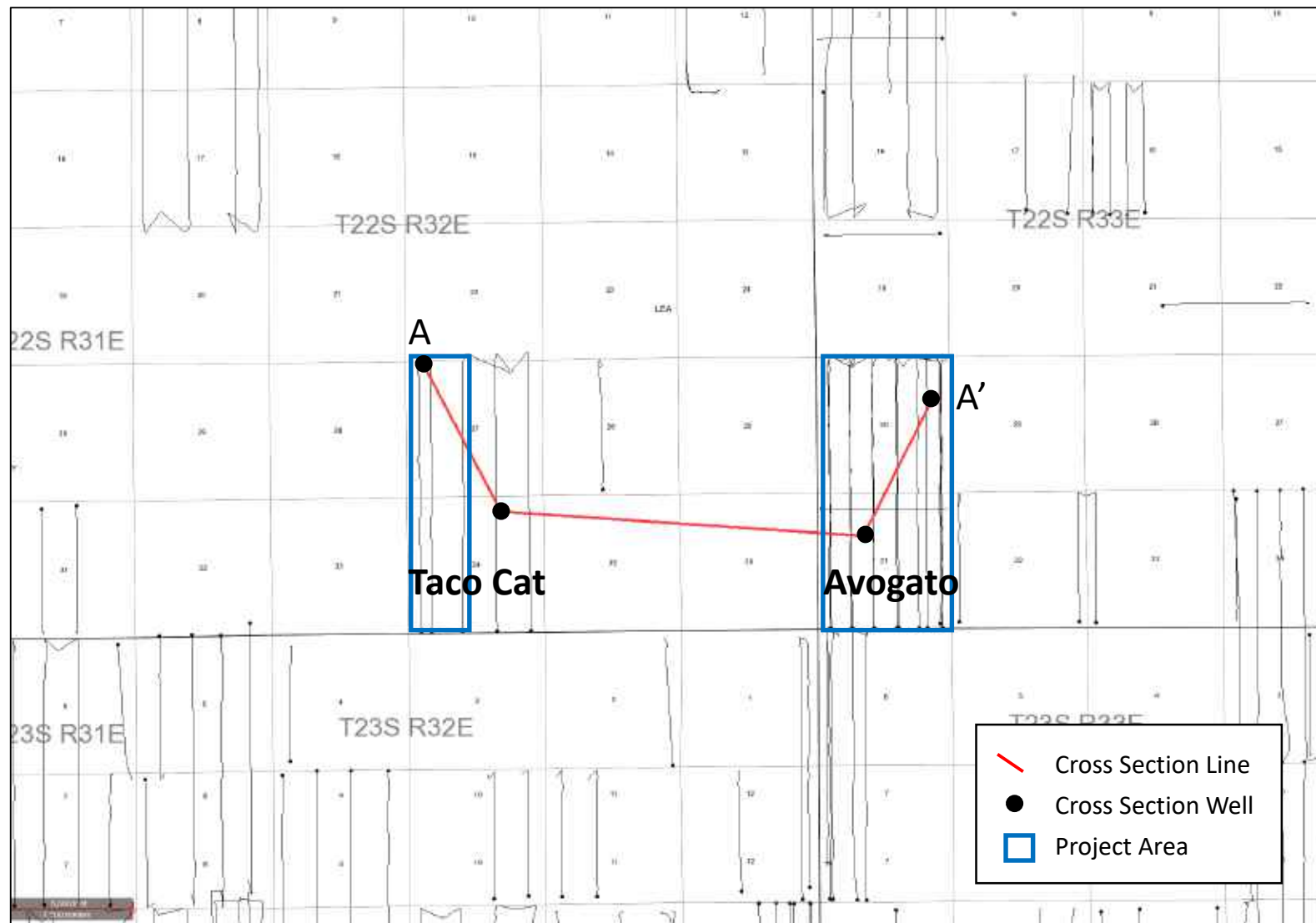
Type Log

Proposed Storage Zones

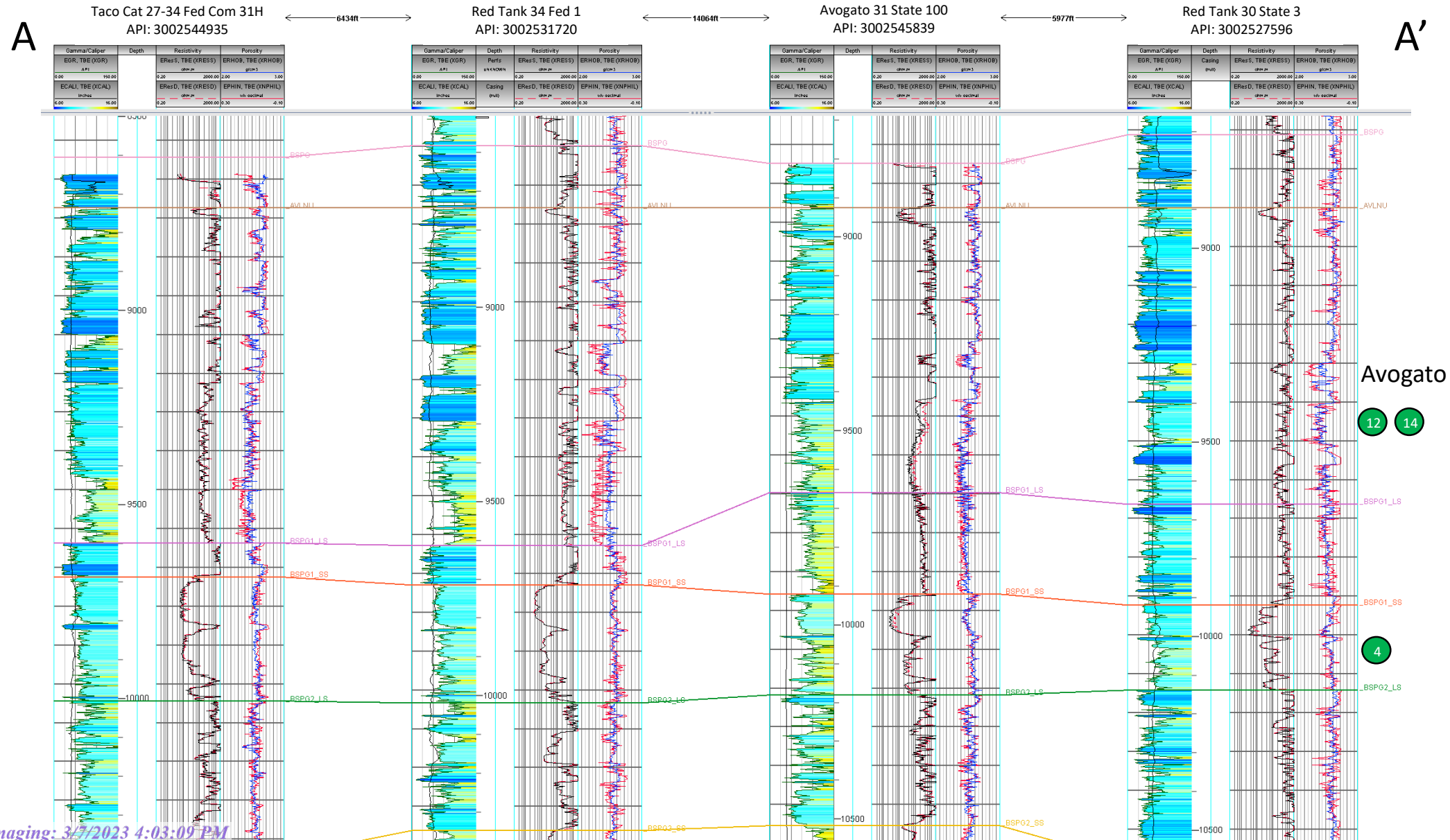
- Avalon Shale (Avogato 12H, Red Tank 14H)
 - Reservoir comprised of siliceous mudstone reservoir with natural permeability in the nano-darcy range
 - Confining layer: overlain by ~300' of low porosity and permeability limestone and underlain by ~250' of interbedded low porosity and permeability limestone 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
- 2nd 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
- 3rd 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



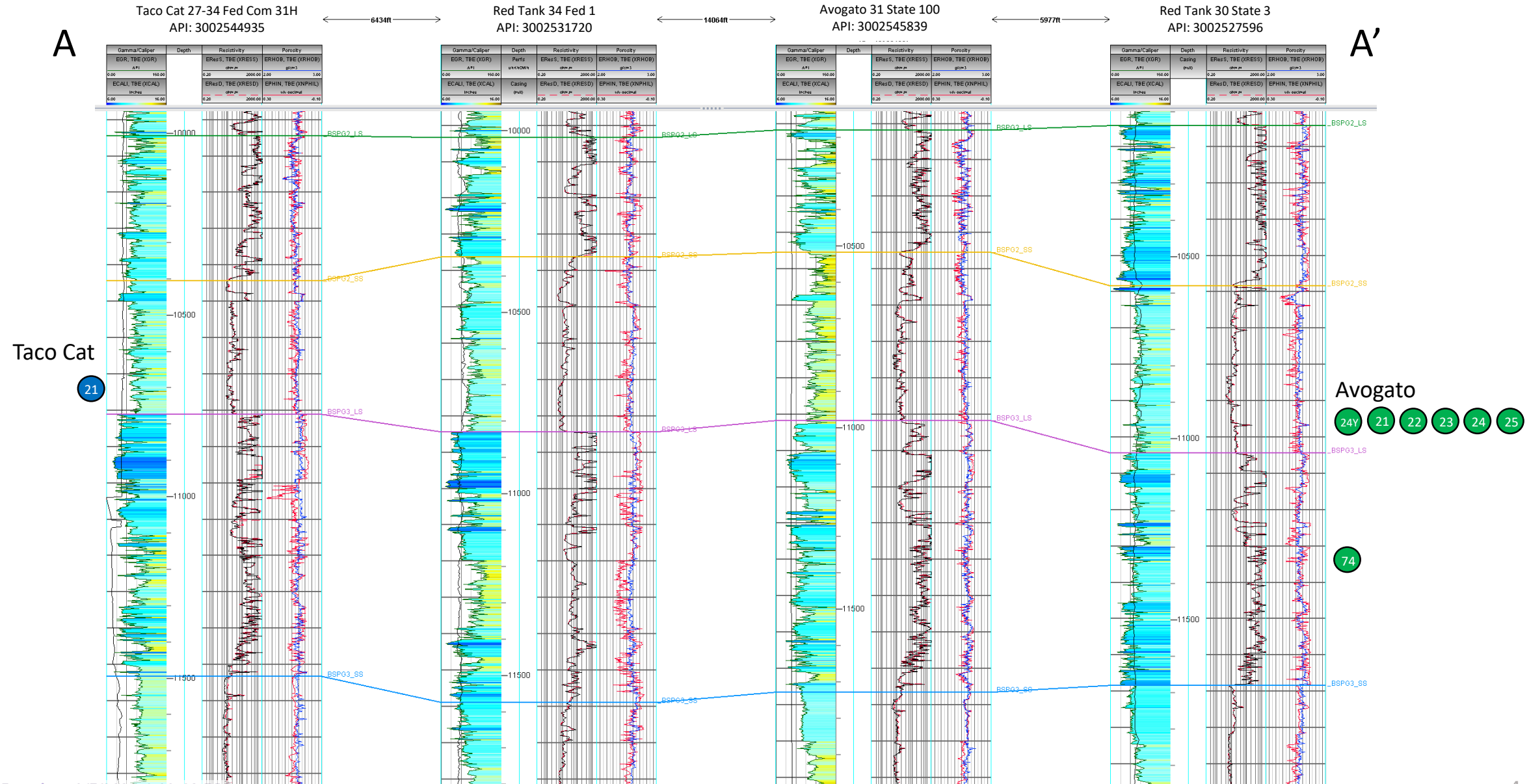
Cross Section Location Map



Avalon and First Bone Spring Cross Section

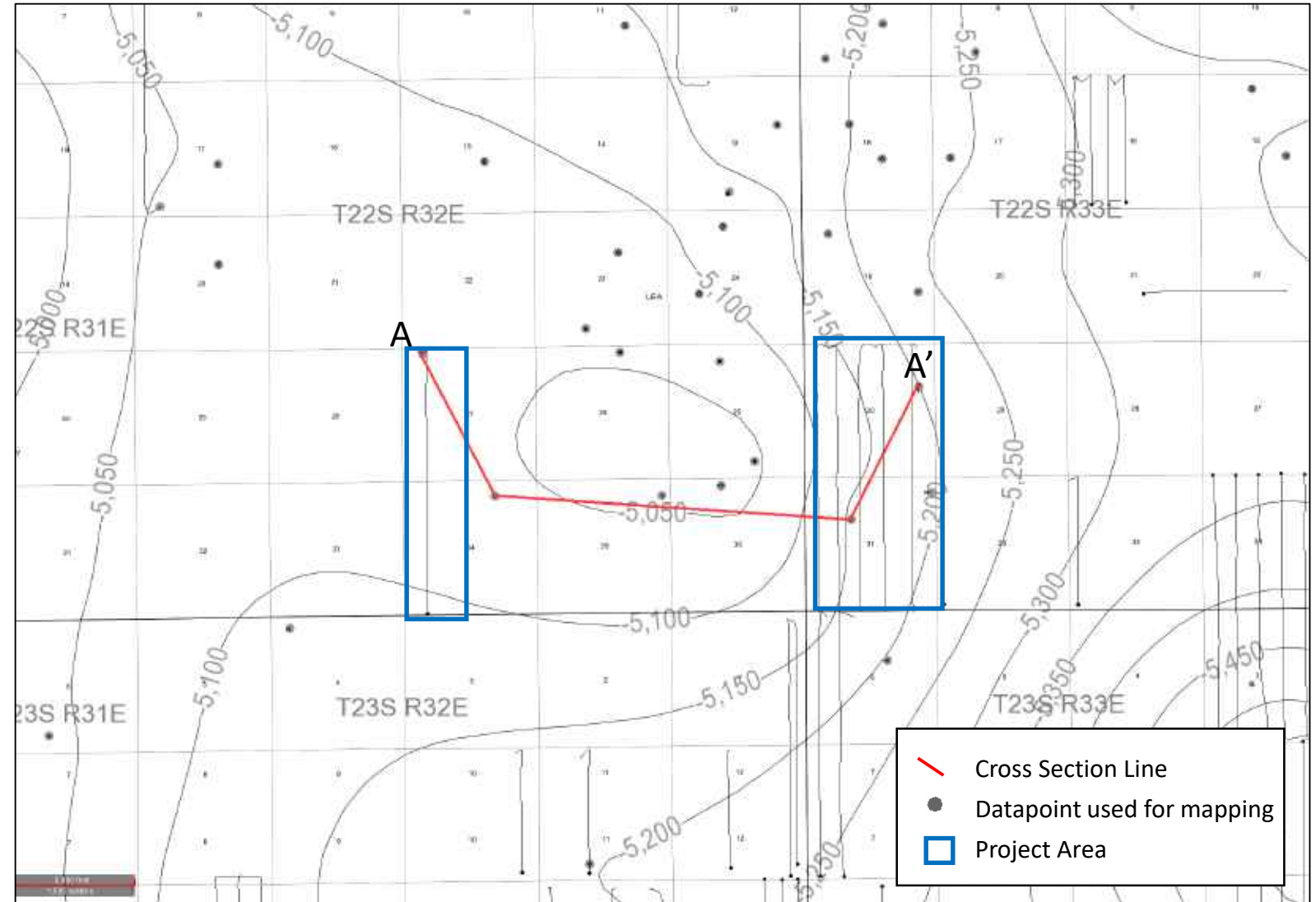


Second Bone Spring and Third Bone Spring Lime Cross Section



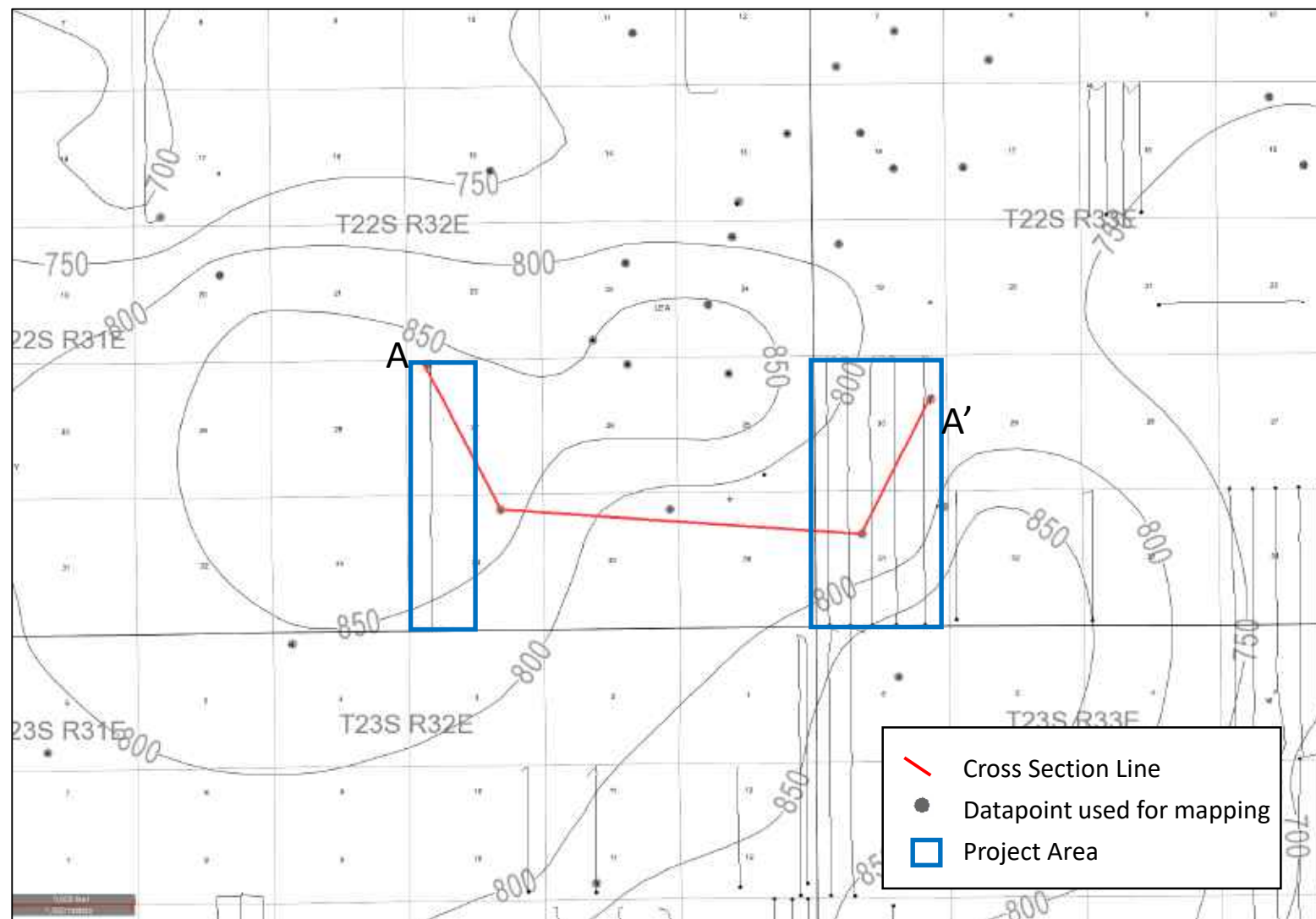
Avalon Structure Map (SSTVD)

Horizontal wells shown are
Avalon Producers



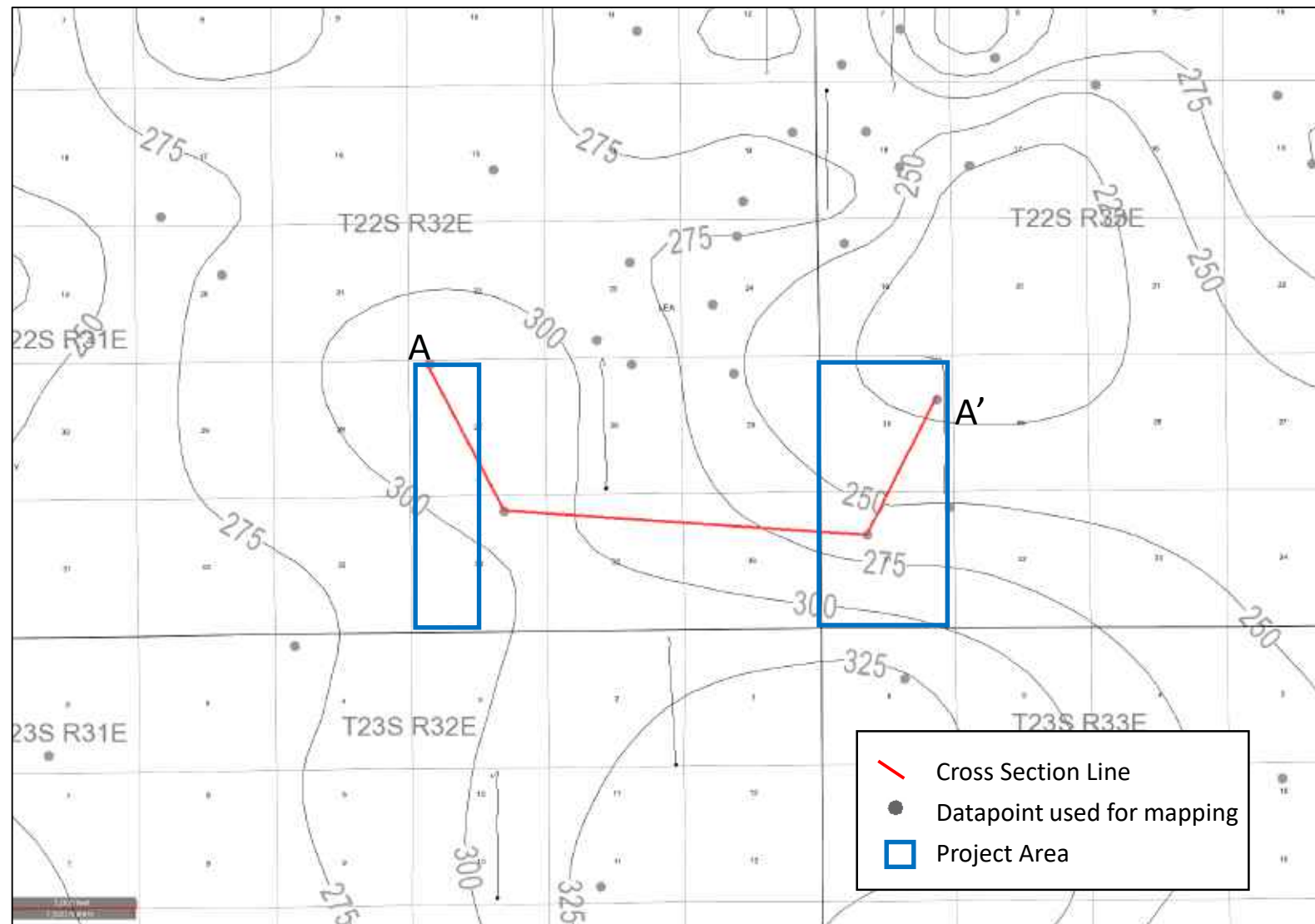
Avalon Isopach

Horizontal wells shown are
Avalon Producers



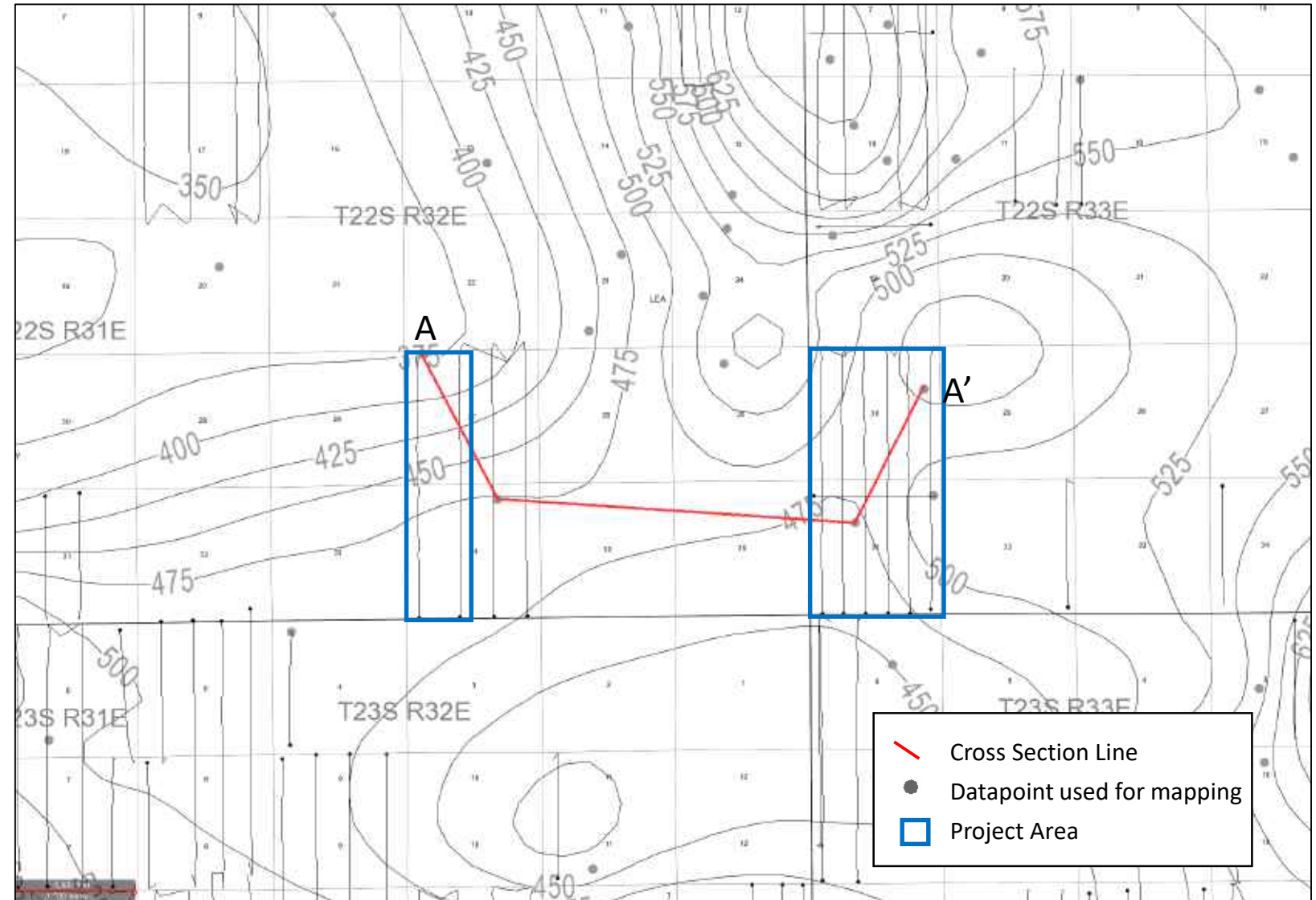
First Bone Spring Isopach

Horizontal wells shown are First Bone Spring Producers



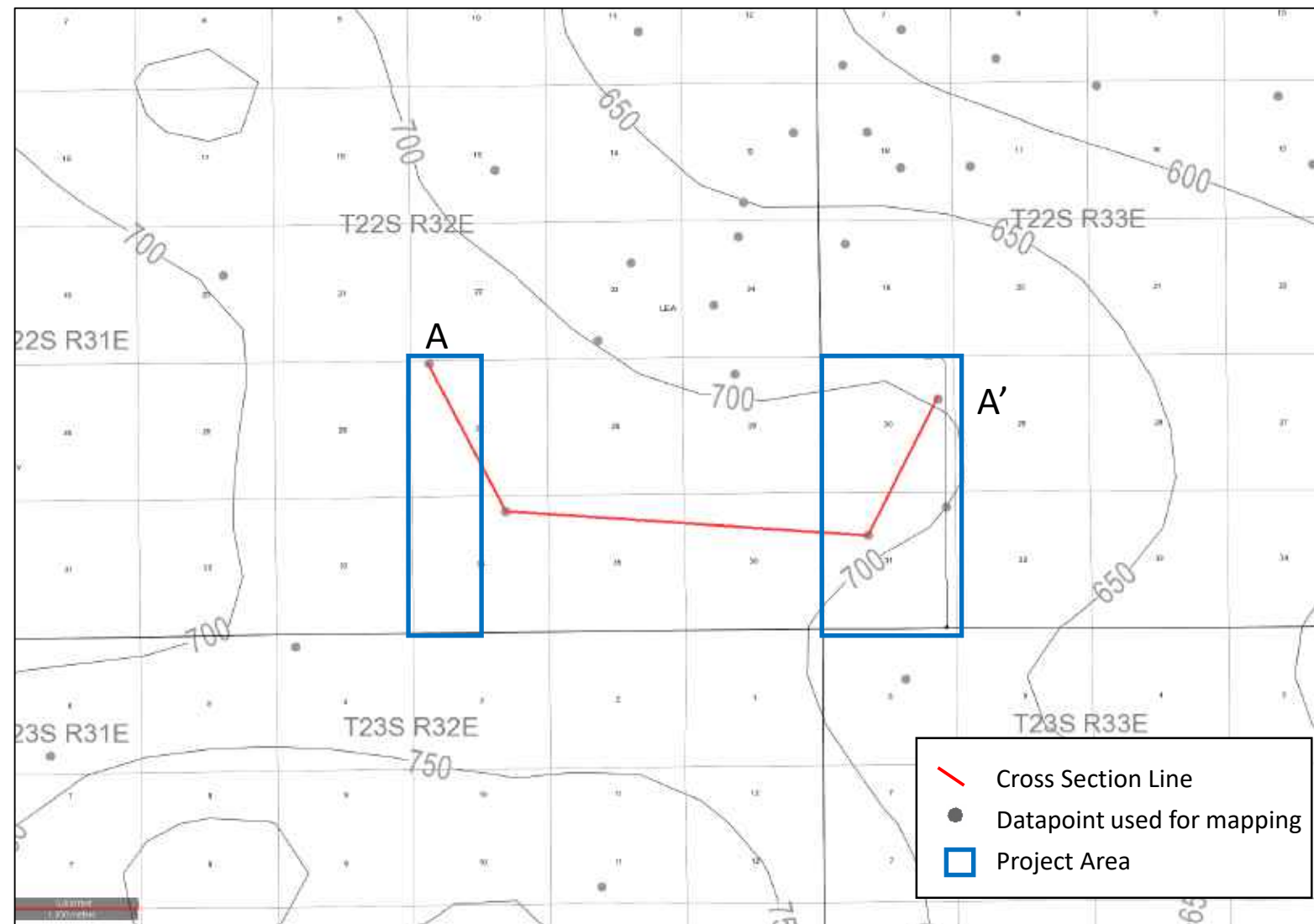
Second Bone Spring Isopach

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 1st 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 2nd 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.



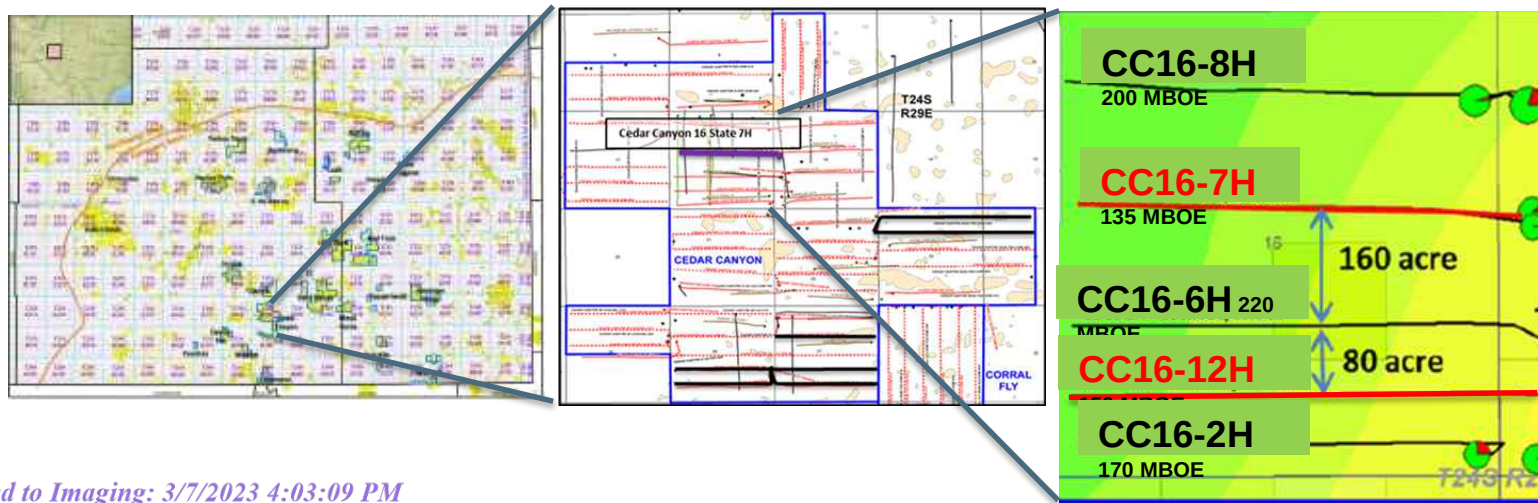
Project Overview – Avogato, Taco Cat & Red Tank

- 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

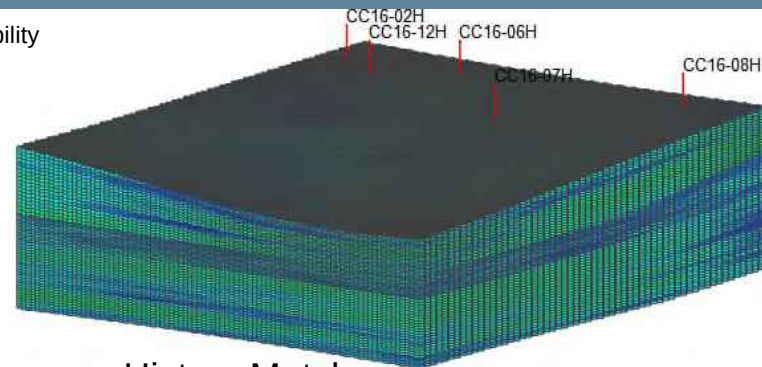
- Uses Cedar Canyon Sec 16 2nd BSS (as shown in layout below)
- Gas Injection pilot (EOR) was implemented in CC16-7H well in 2017
- Reservoir model is history matched for primary production and gas injection pilot
- Model is also tuned to capture injection gas breakthrough in offset wells that was observed 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: 2nd 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

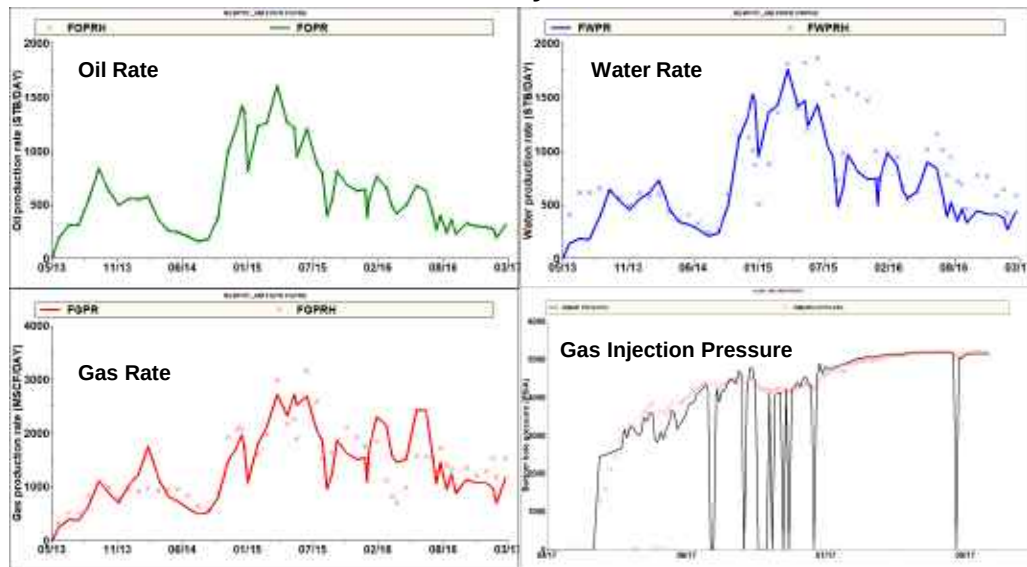
Structure & Permeability
 1,177,400 Grids
 56 Layers



History Match

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

Model Inputs

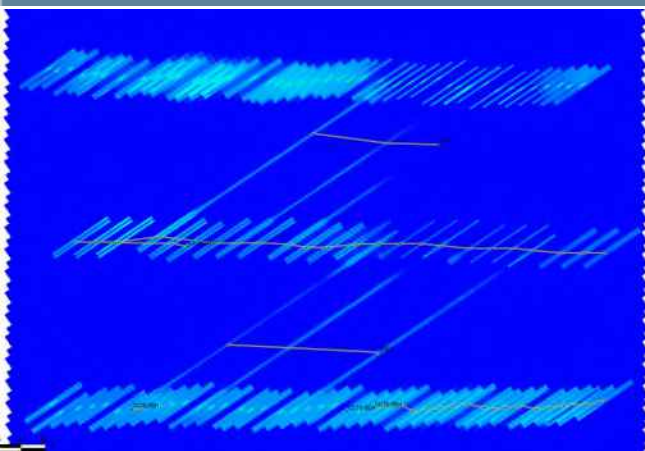


Gas Storage Simulation Process

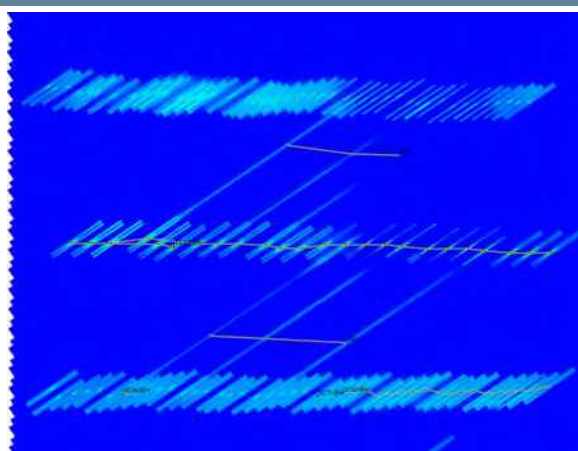
- Run primary production for all wells for additional period (post history match) – Base Case
- Inject gas in injection well at 2MMSCFPD for 7 days
- Produce the injection well post injection – Injection Case
- Observe the effect on oil, gas rate/recovery in injection well and offset wells by comparing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



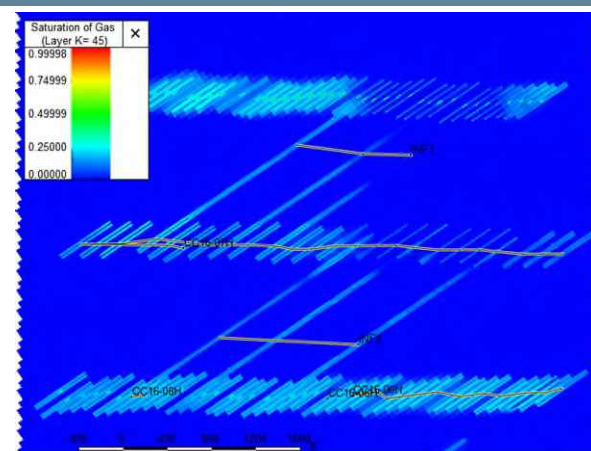
Gas Injection Profile (1 week Injection)



Before injection

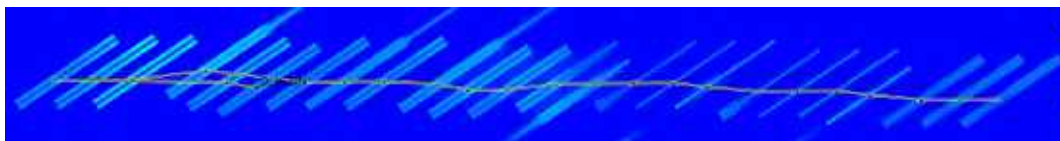


After 1 week of injection (3 MMSCFPD)

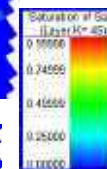
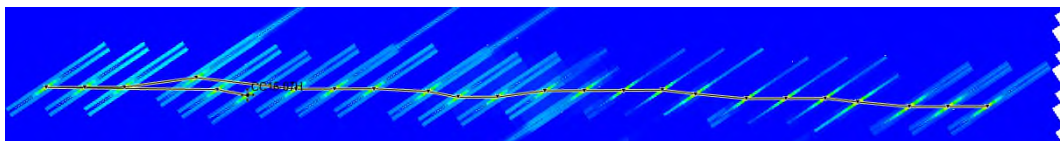


After 16 months production

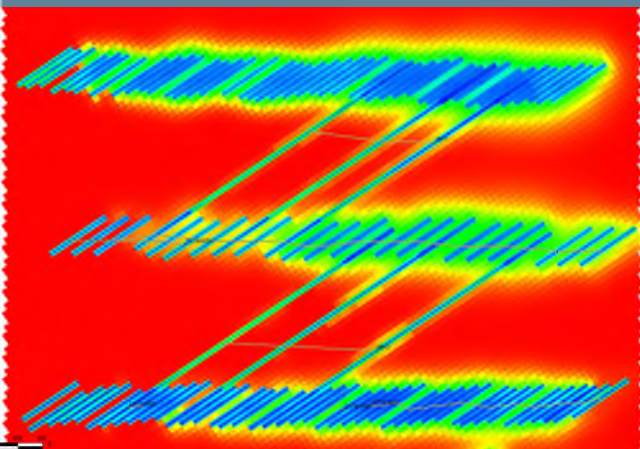
Before Injection CC16-7H
Blow-up



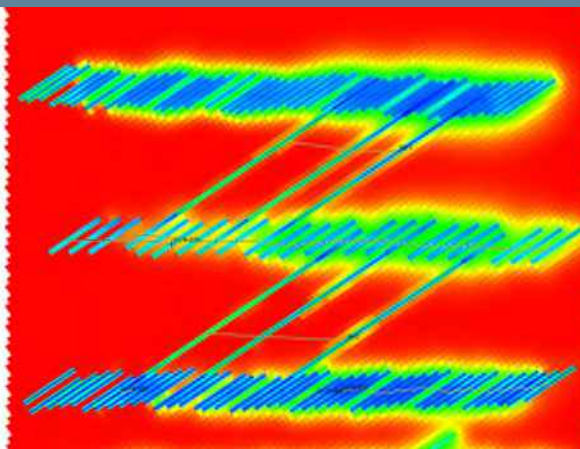
After Injection CC16-7H
Blow-up



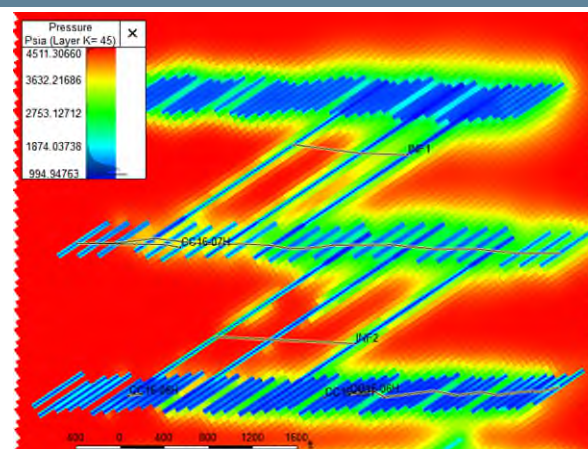
Pressure Profile (1 week injection)



Before injection

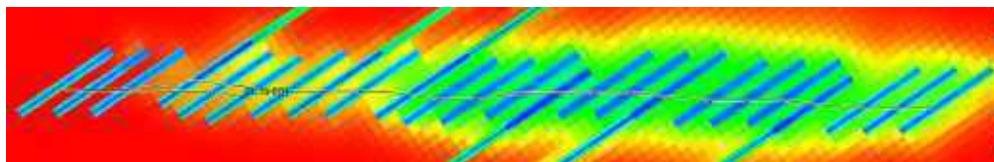


After 1 week of injection (3 MMSCFPD)

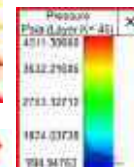
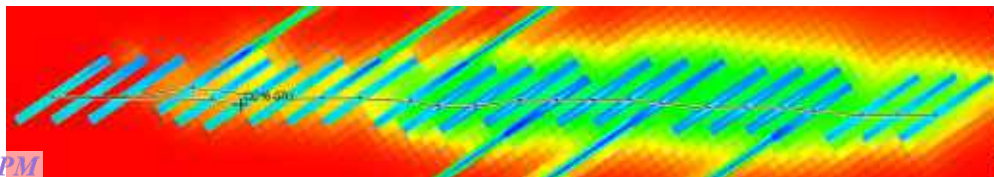


After 16 months production

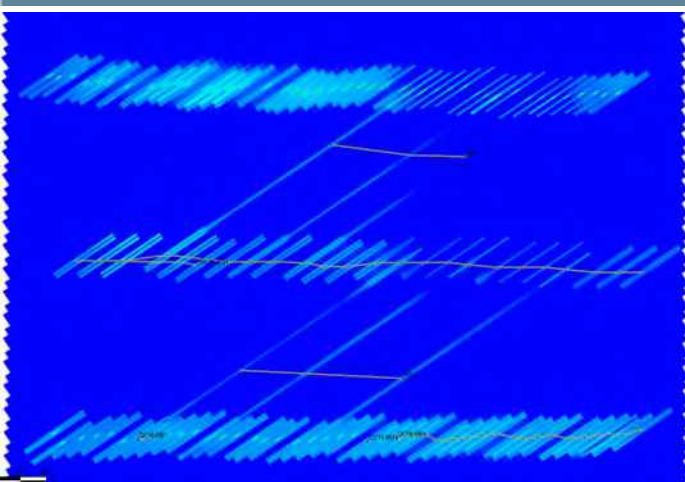
Before Injection CC16-7H
Blow-up



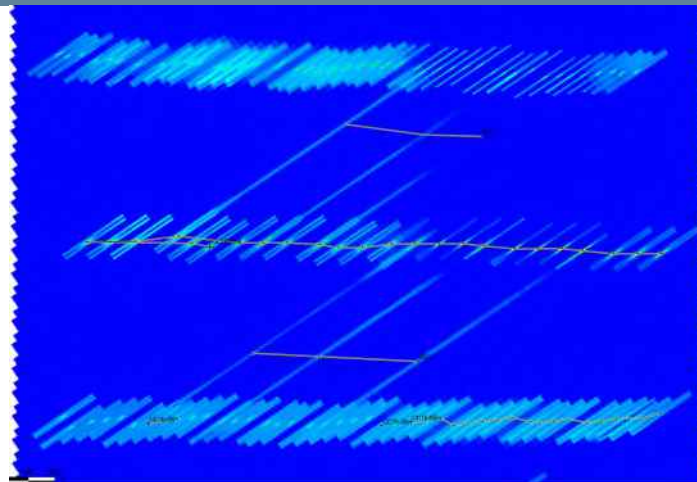
After Injection CC16-7H
Blow-up



Gas Injection Profile (3 weeks Injection)

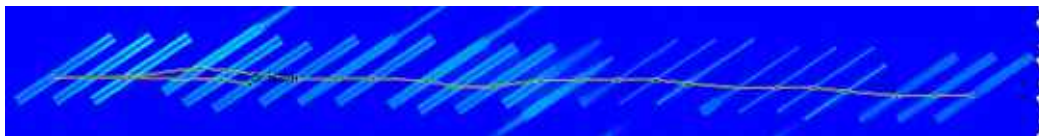


Before injection

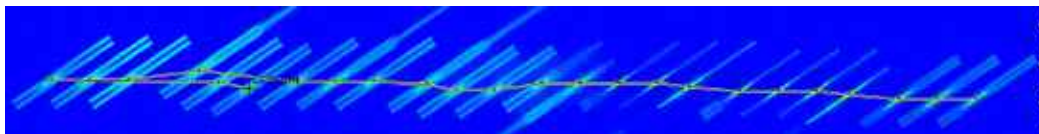


After 3 weeks of injection (@1200 psi THP)

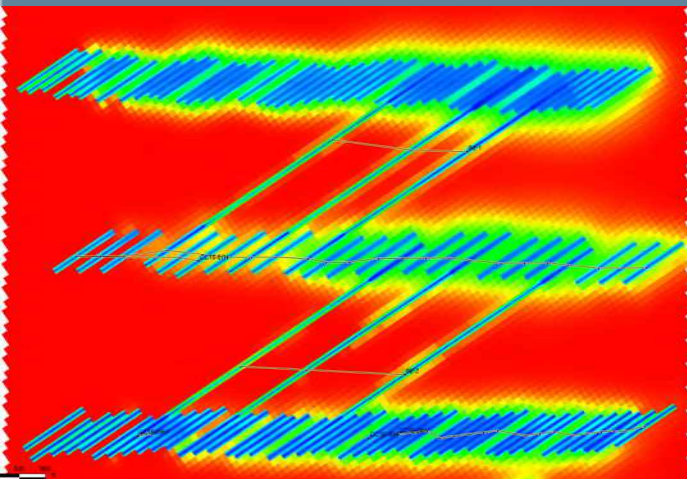
Before Injection CC16-7H
Blow-up



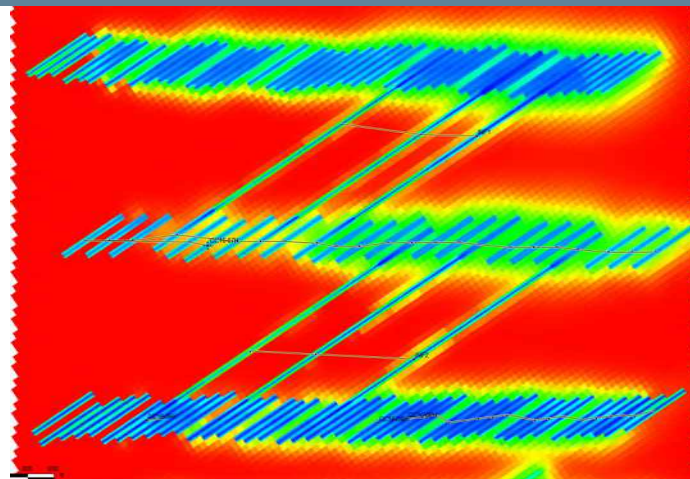
After Injection CC16-7H
Blow-up



Pressure Profile (3 weeks Injection)

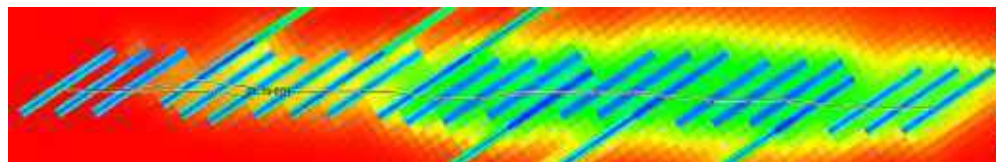


Before injection

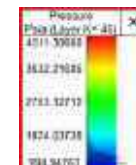
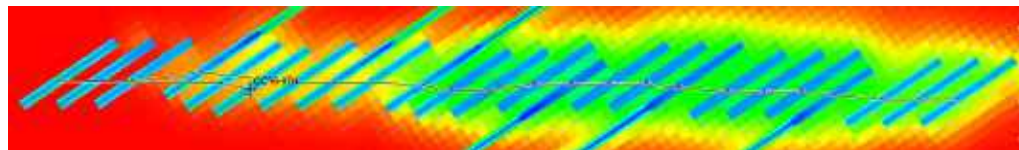


After 3 weeks of injection (@1200 psi THP)

Before Injection CC16-7H
Blow-up



After 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
3002545923	AVOGATO 30 31 STATE COM #004H	400	400	10000	3,200,000,000
3002545957	AVOGATO 30 31 STATE COM #012H	350	423	10000	2,961,000,000
3002545924	AVOGATO 30 31 STATE COM #021H	400	451	10000	3,608,000,000
3002545925	AVOGATO 30 31 STATE COM #022H	375	377	10000	2,827,500,000
3002545926	AVOGATO 30 31 STATE COM #023H	400	451	10000	3,608,000,000
3002545960	AVOGATO 30 31 STATE COM #024H	375	377	10000	2,827,500,000
3002545961	AVOGATO 30 31 STATE COM #025H	400	451	10000	3,608,000,000
3002545964	AVOGATO 30 31 STATE COM #074H	588	304	10000	3,575,040,000
3002544193	RED TANK 30 31 STATE COM #014H	350	423	10000	2,961,000,000
3002544161	RED TANK 30 31 STATE COM #024Y	375	377	10000	2,827,500,000
3002544934	TACO CAT 27 34 FEDERAL COM #021H	375	377	10000	2,827,500,000

Gas storage capacity is high for each well

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

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

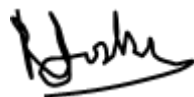
API	Well	Fracture volume gas equivalent, mmscf	Actual gas injected, mmscf
3002545956	AVOGATO 30-31 STATE COM 11H	326	13
3002545958	AVOGATO 30-31 STATE COM 13H	312	10
3002545959	AVOGATO 30-31 STATE COM 14H	325	13
3002544933	TACO CAT 27 34 FEDERAL COM 11H	339	13



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

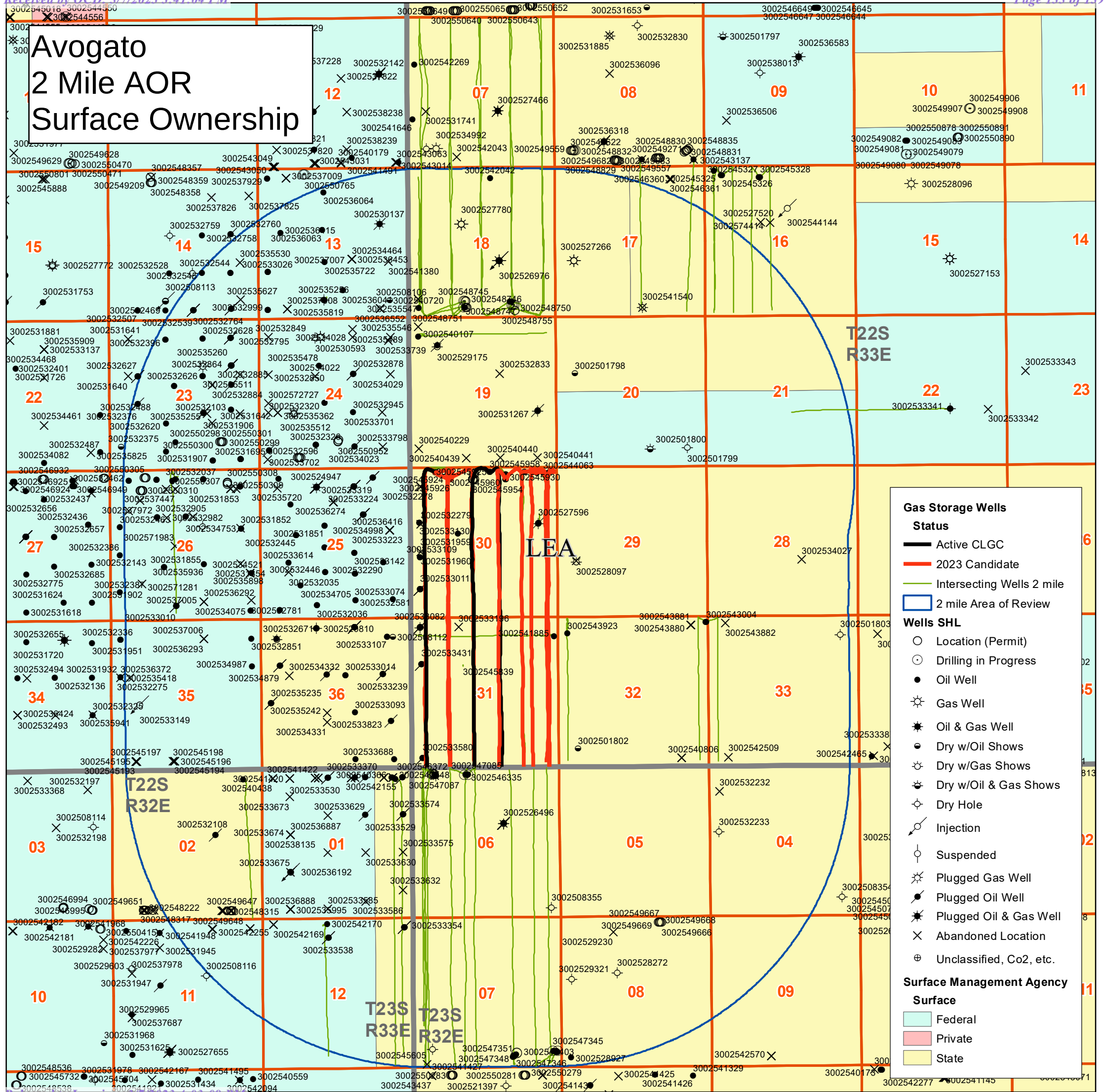
Storage Gas Injection Inventory, mscf	Storage Gas Injection Inventory, cumulative amount of storage gas injection minus storage gas production, calculated
Storage Gas Production, mscfd	Storage Gas Production, difference between Reservoir Gas and Calculated Native Gas Production, calculated

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 Injection 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



Avogato
2 Mile AOR
Surface Ownership



Taco Cat
2 Mile AOR
Surface Ownership

Gas Storage Wells

Status

- Active CLGC
- 2023 Candidate
- Intersecting Wells 2 miles
- 2 mile Area of Review

Wells SHL (IHS)

- Location (Permit)
- Drilling in Progress
- Oil Well
- Gas Well
- Oil & Gas Well
- Dry w/Oil Shows
- Dry w/Gas Shows
- Dry w/Oil & Gas Shows
- Dry Hole
- Injection
- Suspended
- Plugged Gas Well
- Plugged Oil Well
- Plugged Oil & Gas Well
- Abandoned Location
- Unclassified, Co2, etc.

Surface Management Agency

Surface

- Federal
- Private
- State

Map showing well locations, status, and surface ownership. Includes a legend for well status and surface management agency. The map is overlaid with a grid of 2-mile areas of review.

Avogato Area

Bone Spring HSU Map
2/13/23

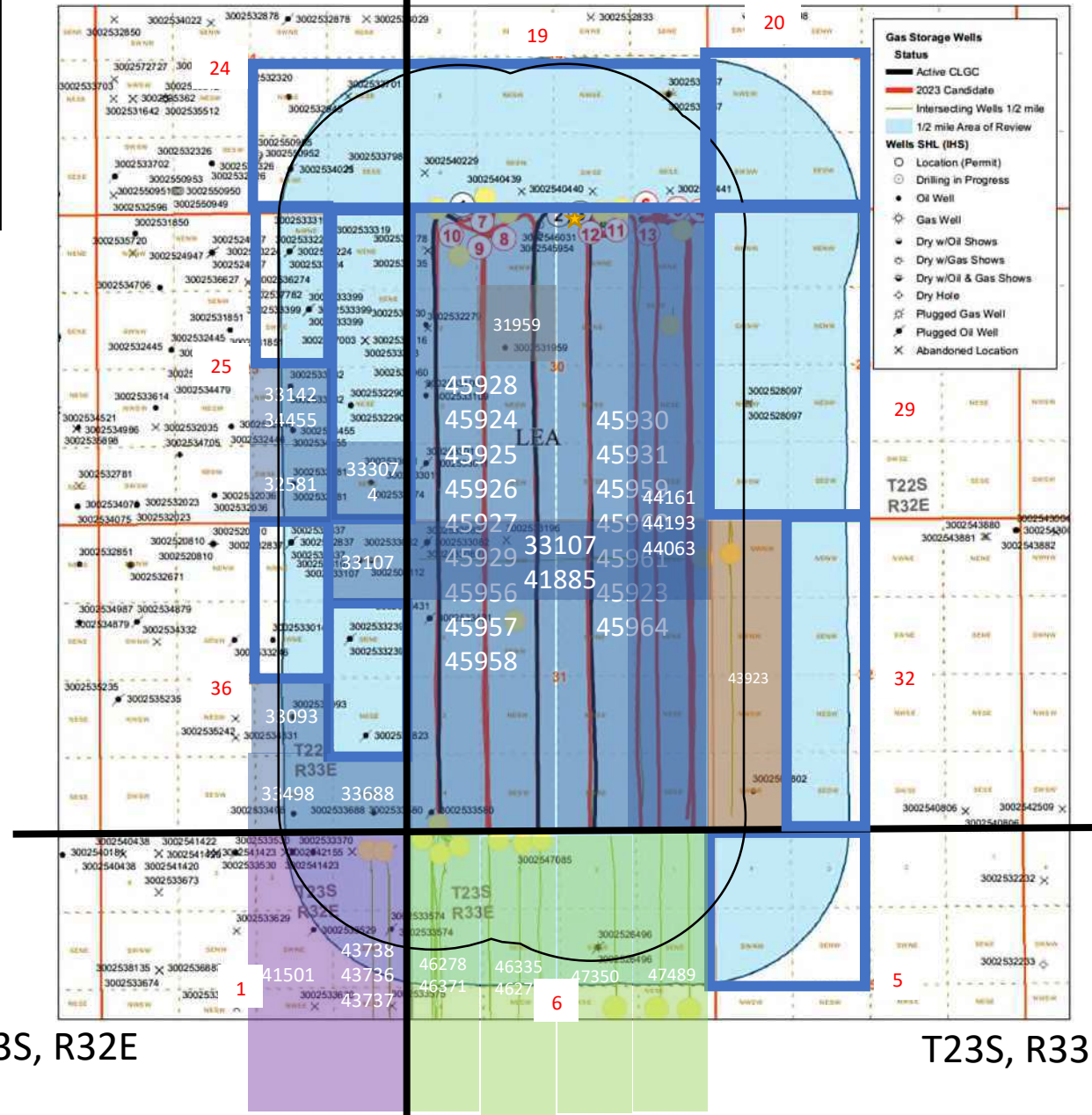
- AOR is expanded to the east by ¼ mile.

T22S, R32E

T22S, R33E

T23S, R32E

T23S, R33E



Red Tank Notice List 2023

Party	Address
Agencies and Surface Owners	
Bureau of Land Mangment	301 Dinosaur Trail Santa Fe, NM 87508
State Land Office	P.O. Box 1148 Santa Fe, NM 87504
Offset Operators	
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
Other Affected Persons and Parties	
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