

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

**APPLICATION OF OXY USA INC. FOR A
CLOSED LOOP GAS CAPTURE INJECTION
PILOT PROJECT, LEA COUNTY, NEW
MEXICO.**

CASE NO. _____

APPLICATION

OXY USA Inc. (“OXY” or “Applicant”) (OGRID No. 16696) through its undersigned attorneys, hereby files this application with the Oil Conservation Division for an order authorizing OXY to engage in a closed loop gas capture injection pilot project in the Bone Spring formation (“pilot project”). In support of this application, OXY states:

PROJECT OVERVIEW

1. OXY proposes to create a 320-acre, more or less, project area for this pilot project consisting of the W/2 W/2 of Sections 27 and 34, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico. See **Exhibit A** at 7. The proposed project area is part of a larger area referred to as the Tanks area.

2. Within the proposed project area, OXY seeks authority to utilize the following producing well to occasionally inject produced gas into the Bone Spring formation [Red Tank; Bone Spring Pool (Pool Code 51683)]:

- 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.

3. Injection along the horizontal portion of the wellbore will be at the following approximate total vertical depths:

- The **Taco Cat 27-34 Federal Com #11H well**: between 9,339 feet and 9,517 feet.

4. A map depicting the pipeline that ties the well proposed for the pilot project into the gathering system and the affected compressor station is included in the attached **Exhibit A** at pages 7-8.

WELL DATA

5. Information on the well data, including well diagrams and well construction, casing, tubing, packers, cement, perforations, and other details the proposed injection well are included in the attached **Exhibit A** at pages 33-34.

6. The top of the Bone Spring formation in this area is at approximately 8,655 feet total vertical depth and extends down to the top of the Wolfcamp formation at approximately 11,830 feet total vertical depth. See **Exhibit A** at 80.

7. The current average surface pressures under normal operations for the proposed injection well is approximately 670 psi. See **Exhibit A** at 39. The maximum achievable surface pressure (MASP) for the well in the pilot project will be 1,200 psi. *Id.*

8. OXY plans to monitor injection and operational parameters for the pilot project using an automated supervisory control and data acquisition (SCADA) system with pre-set alarms and automatic shut-in safety valves that will prevent injection pressures from exceeding the MASP. See **Exhibit A** at 49-51.

9. The proposed maximum achievable surface pressure will not exert pressure at the top perforation in the wellbore of the 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 39. 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 the injection well and will

not exert pressure at the topmost perforation in excess of 90% of the formation parting pressure. See **Exhibit A** at 39.

10. Cement bond logs¹ demonstrate the placement of cement in the well proposed for this pilot project and that there is a good and sufficient cement bond with the production casing and the tie-in of the production casing with the next prior casing in the well. See **Exhibit A** at 35-38.

11. The well proposed for injection in the pilot project has previously demonstrated mechanical integrity at a pressure of 9,800 psi for 30 minutes. See **Exhibit A** at 41. OXY will undertake new tests to demonstrate mechanical integrity for this well as a condition of approval prior to commencing injection operations.

GEOLOGY AND RESERVOIR

12. 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 80-86. 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.*

13. Zones that are productive of oil and gas are located in the overlying Avalon Sand interval of the Bone Spring formation and the Brushy Canyon formation, and in the deeper First Bone Spring Sand interval of the Bone Spring Formation. See **Exhibit A** at 80.

14. Reservoir modeling indicates anticipated horizontal movement of injected gas will be approximately 100 feet or less from the injection wellbore within the Bone Spring formation. See **Exhibit A** at 93.

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

15. The proposed average injection rate is 1.8 MMSCFD with a maximum injection rate of 2.0 MMSCFD during injection. See **Exhibit A** at 39.

16. 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 88-97. OXY's analysis concludes that there will be no change in the oil recovery from its proposed injection well or from any of the offsetting wells. See *id.* at 95.

17. Similarly, OXY has prepared an analysis of the potential effects on the reservoir caused by the proposed injection, including consideration of commingling fluids. **Exhibit A** at 42-48 and 88-98. OXY's analysis concludes that there will be no adverse effect on the reservoir as a result of the injection. *Id.* at 98.

18. OXY has also prepared an analysis evaluating the expected gas storage capacity for the proposed injection well relative to the gas injection volumes for an injection scenario lasting twenty days. See **Exhibit A** at 96. 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.

19. The source of gas for injection will be from OXY's wells producing in the Bone Spring and Wolfcamp formations within OXY's Taco Cat wells that are identified in the list of wells in **Exhibit A** at page 43. OXY's Taco Cat well is operated by OXY and OXY holds 100% of the working interest in the well.

20. OXY has prepared an analysis of the composition of the source gas for injection and a corrosion prevention plan. See **Exhibit A** at 42-48.

21. 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 86. OXY has also examined the available geologic and engineering data and determined that the total recoverable volume of hydrocarbons from the reservoir will not be adversely affected by the pilot project. *See Exhibit A* at 98.

AREA OF REVIEW

22. 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 53-54, 56.

23. 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 58-59, along with well-bore schematics for wells that are plugged and abandoned or temporarily abandoned. *See Exhibit A* at 62-65.

OPERATIONS AND SAFETY

24. OXY will monitor the injection well's instantaneous rates and daily injection volumes, along with pressure in the well tubing, casing, and bradenheads using an automated supervisory control and data acquisition (SCADA) system. *See Exhibit A* at 49-51. The injection well will also include automated safety devices, including automatic shut-in valves among other operational safety measures. *Id.* at 40. OXY will also monitor and track various operational parameters at the pilot project's central tank battery and central gas lift compressor. *See Exhibit A* at 50-51.

25. 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 in **Exhibit A** at pages 103-105, along with a map and list identifying each tract and affected persons given notice. See **Exhibit A** at 100-101.

26. Approval of this pilot project is in the best interests of conservation, the prevention of waste, and the protection of correlative rights.

WHEREFORE, OXY USA Inc. requests that this Application be set for hearing before an Examiner of the Oil Conservation Division on August 5, 2021, and that after notice and hearing this Application be approved.

Respectfully submitted,

HOLLAND & HART LLP

By:  _____
Michael H. Feldewert
Adam G. Rankin
Julia Broggi
Kaitlyn A. Luck
Post Office Box 2208
Santa Fe, NM 87504
505-998-4421
505-983-6043 Facsimile
mfeldewert@hollandhart.com
agrarkin@hollandhart.com
jbroggi@hollandhart.com
kaluck@hollandhart.com

ATTORNEYS FOR OXY USA INC.

New Mexico Closed Loop Gas Capture (CLGC) Oxy-Tanks

Exhibit A



Occidental

Overview

EXHIBIT A

General Project Description: Closed Loop Gas Capture Project Oxy- Tanks

About the Tanks Area

There are 2 gas systems in the Tanks area. One system is the Avogato 30-31 State lease and the other is the Taco Cat 27-31 Federal Com lease.

Summary of Requested Relief

1. Authority to operate a closed loop gas capture project ("CLGC") consisting of four wells to prevent waste and reduce adverse impacts from temporary interruptions of gas pipeline capacity.
2. A 5-year duration of such authority, with renewal by administrative approval conditioned upon compliance with the stipulations contained in the initial Order and a successful MIT test.
3. An exception for the 100-foot packer setting depth requirement applied to vertical injection wells.

Overview

Oxy USA Inc. (Oxy) is proposing a Closed Loop Gas Capture (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.

During the previous 12 months, Oxy has experienced 39 interruptions where the third-party gas purchaser temporarily reduced takeaway capacity from this location, resulting in the flaring of at least 25 MMSCF of gas or the immediate shut-in of at least 800 BOE. Approval of this application will significantly reduce such flaring or shut-in production in the future.

Operations During Interruption	Operations During Interruption With CLGC System	Benefits
<ul style="list-style-type: none"> • Flare gas • Shut in production 	<ul style="list-style-type: none"> • Store gas • Continue production • No additional surface disturbances 	<ul style="list-style-type: none"> • 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 Tanks 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.

DCP is the third-party gas purchaser for the Tanks 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 Station 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.

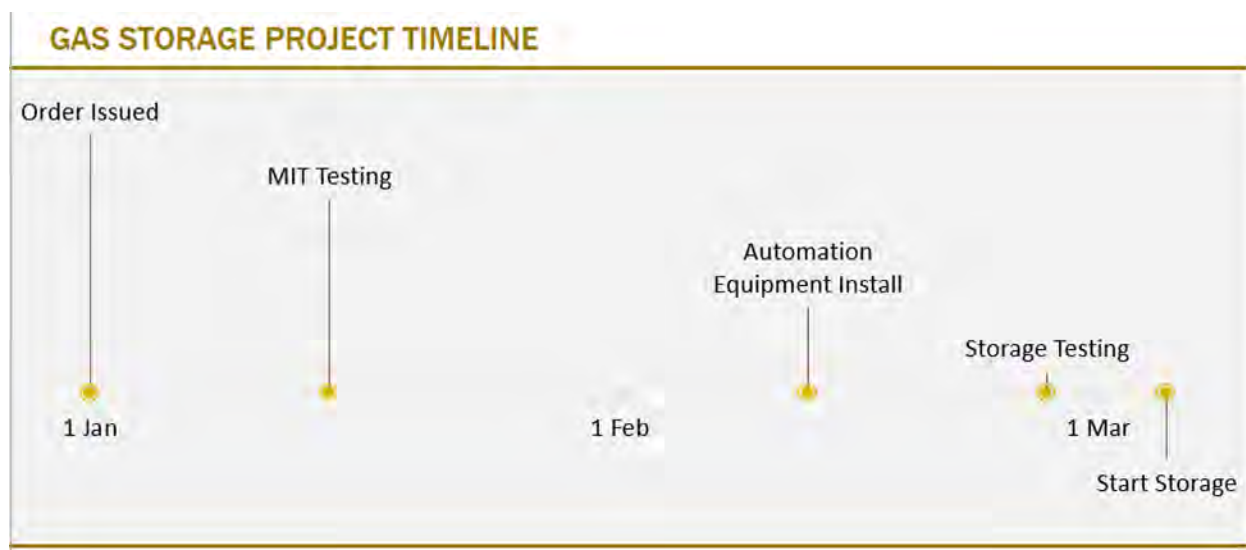
Wells

There are 4 wells proposed in this application.

#	API 14	Well Name	Injection Down the...
1	30025459560000	AVOGATO-11H	Casing
2	30025459580000	AVOGATO-13H	Casing
3	30025459590000	AVOGATO-14H	Casing
4	30025449330000	TACO2734-11H	Casing

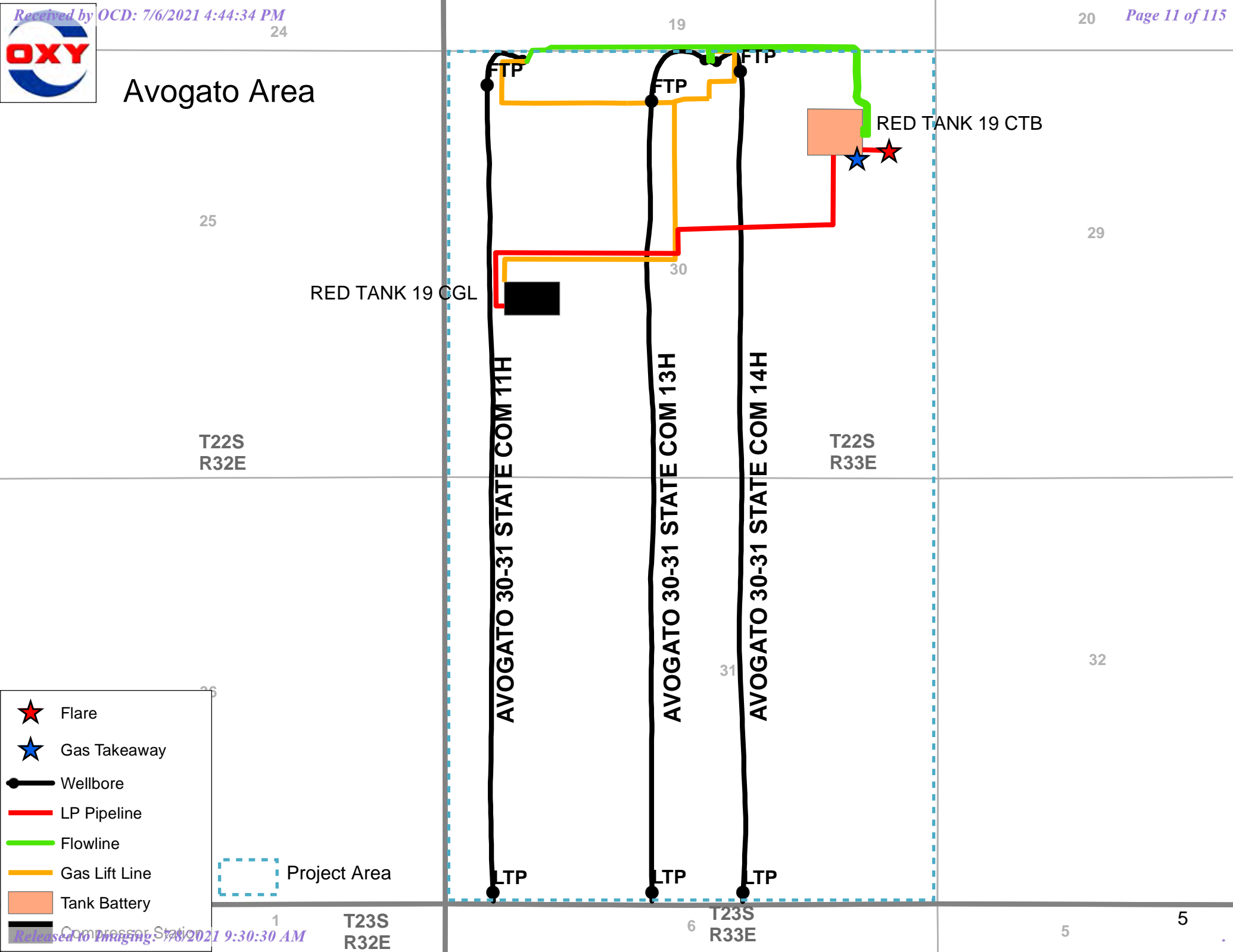
Timeline

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.

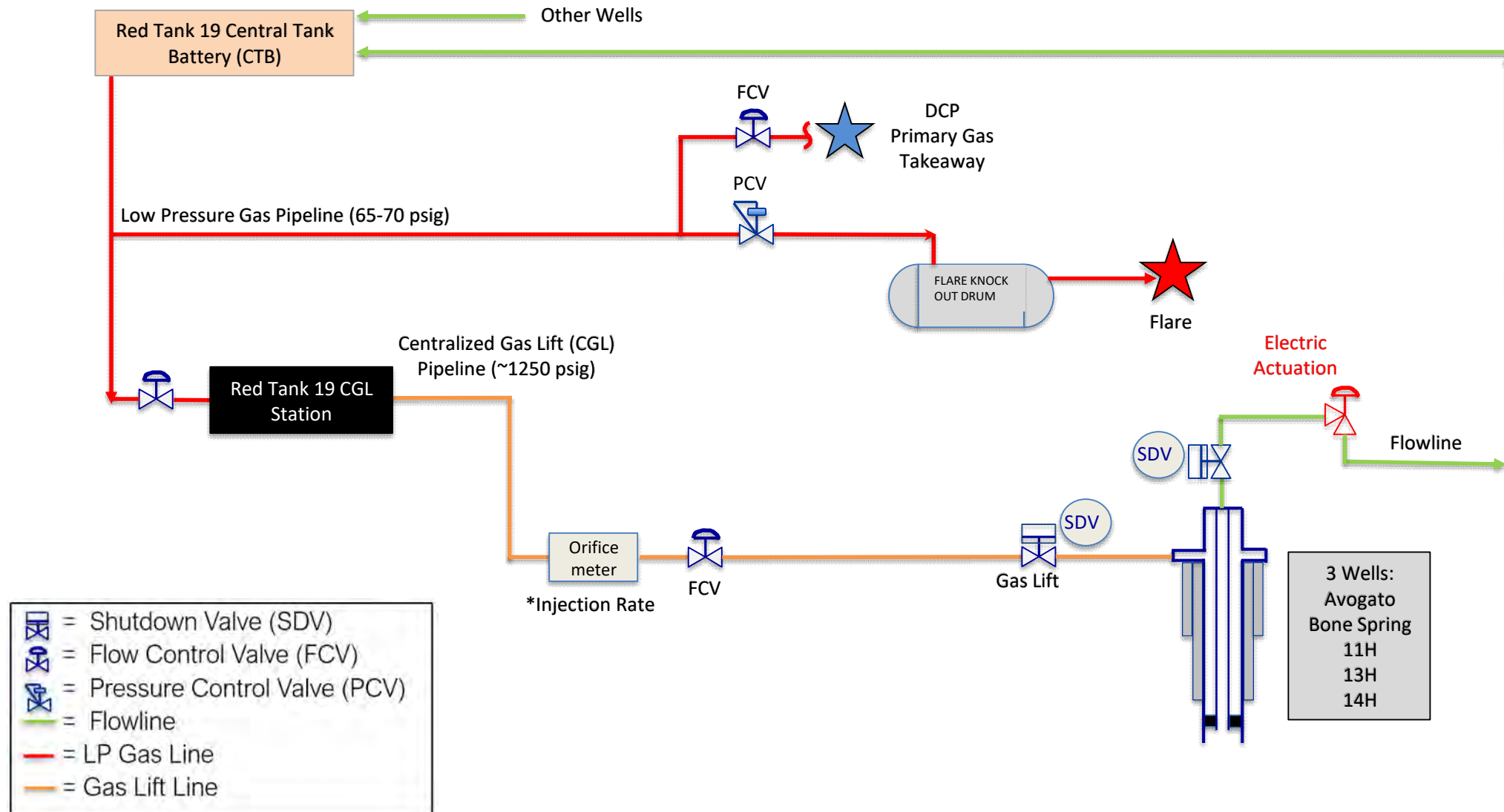




Avogato Area



Avogato Gas Process Flow Diagram



Taco Cat Area


RED TANK 27/28
CTB/CGL


T22S
R32E


TACO CAT 27-34 FED COM 11H


FTP


LTP


 Flare


 Gas Takeaway

 Wellbore

 LP Pipeline

 Gas Lift Line

 Flowline

 Tank Battery/Compressor Station

Released to Imaging: 7/8/2021 9:30:30 AM

 Project Area

22

27

34

3

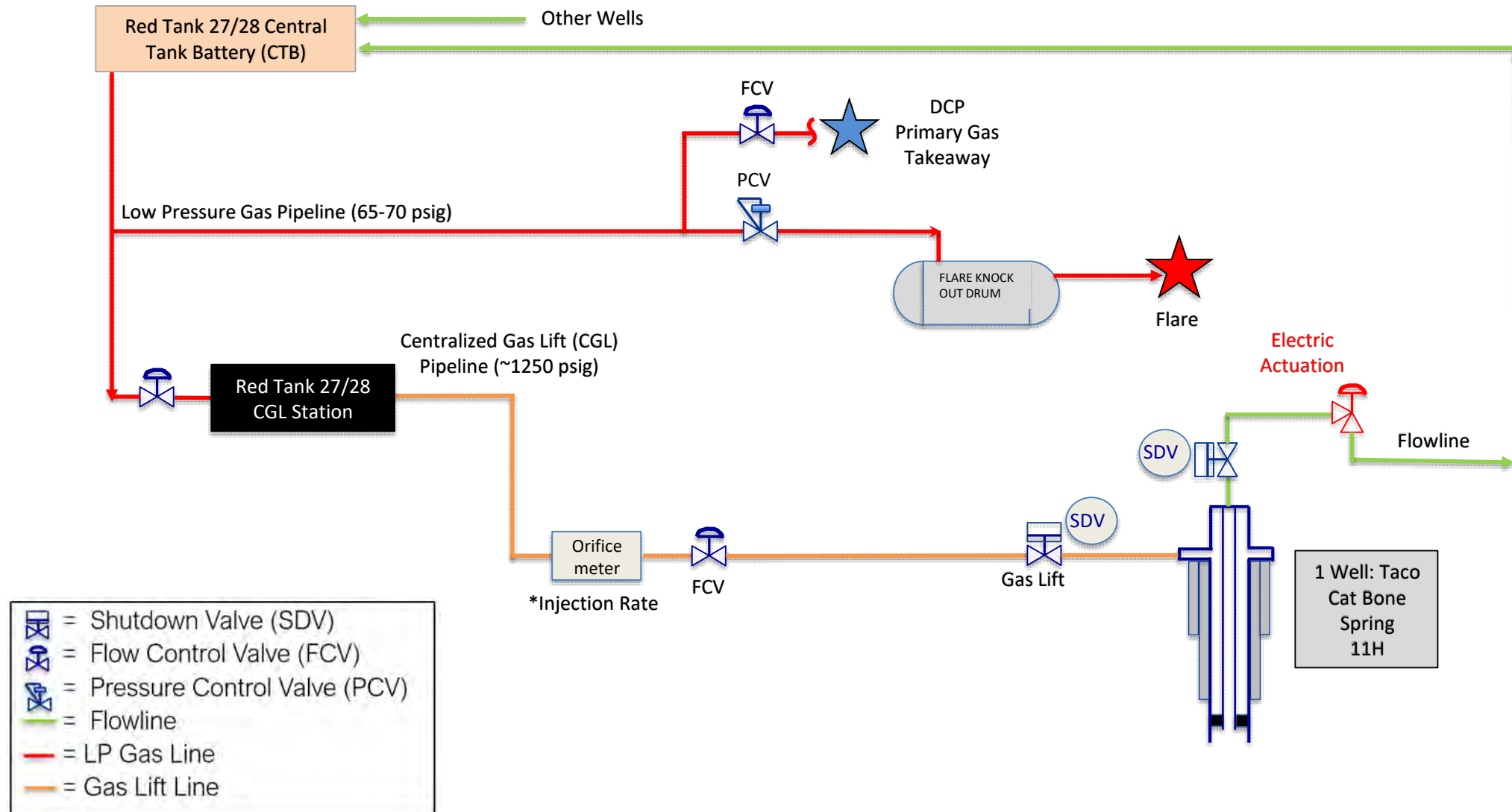
26

35

2

7

Taco Cat Gas Process Flow Diagram



Injection Wellbores

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (505) 335-6161 Fax: (505) 335-0720

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

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6176 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 478-3450 Fax: (505) 478-3452

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 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 30-025-45956	Pool Code 51687	Pool Name RED TANK; BONE SPRING; EAST
Property Code 325625	Property Name AVOGATO 30_31 STATE COM	Well Number 11H
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
1	30	22-S	33-E		160	NORTH	885	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		50	SOUTH	600	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

<p>KOP</p> <p>FTP</p> <p>LTP</p> <p>* ALL COORDINATES ARE NAD 83 VALUES</p>	<p>GRID AZ. - 285°37'56"</p> <p>HORZ. DIST. - 400.6'</p> <p>LOT 1 36.66 Ac</p> <p>LOT 2 36.67 Ac</p> <p>LOT 3 36.68 Ac</p> <p>LOT 4 36.67 Ac</p> <p>HORIZONTAL SPACING UNIT</p> <p>SECTION 30</p> <p>SECTION 31</p>	<p>SURFACE LOCATION</p> <p>Y=498951.7 N</p> <p>X=762521.6 E</p> <p>LAT.=32.369653° N</p> <p>LONG.=103.616928° W</p>	<p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>R. Mathew</i> 11/25/19 Signature Date</p> <p>RONI MATHEW Printed Name</p> <p>RONI_MATHEW@OXY.COM E-mail Address</p>																											
	<p>GRID AZ. - 179°35'18"</p> <p>HORZ. DIST. - 10489.2'</p> <p>LOT 1 36.71 Ac</p> <p>LOT 2 36.66 Ac</p> <p>LOT 3 36.63 Ac</p> <p>LOT 4 36.60 Ac</p>	<p>POINT LEGEND</p> <table border="1"> <tr><td>1</td><td>Y=499107.0 N</td></tr> <tr><td></td><td>X=781635.4 E</td></tr> <tr><td>2</td><td>Y=493628.6 N</td></tr> <tr><td></td><td>X=781673.4 E</td></tr> <tr><td>3</td><td>Y=491187.3 N</td></tr> <tr><td></td><td>X=761892.5 E</td></tr> <tr><td>4</td><td>Y=488547.8 N</td></tr> <tr><td></td><td>X=781711.3 E</td></tr> <tr><td>5</td><td>Y=488562.6 N</td></tr> <tr><td></td><td>X=784238.7 E</td></tr> <tr><td>6</td><td>Y=493844.2 N</td></tr> <tr><td></td><td>X=764203.2 E</td></tr> <tr><td>7</td><td>Y=499120.5 N</td></tr> <tr><td></td><td>X=764165.7 E</td></tr> </table> <p>BOTTOM HOLE LOCATION</p>	1	Y=499107.0 N		X=781635.4 E	2	Y=493628.6 N		X=781673.4 E	3	Y=491187.3 N		X=761892.5 E	4	Y=488547.8 N		X=781711.3 E	5	Y=488562.6 N		X=784238.7 E	6	Y=493844.2 N		X=764203.2 E	7	Y=499120.5 N		X=764165.7 E
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DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (505) 523-0181 Fax: (505) 523-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 746-1253 Fax: (505) 746-9720

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

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As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45958	Pool Code 51683 51687	Pool Name RED TANK; BONE SPRING, BAY
Property Code 325625	Property Name AVOGATO 30_31 STATE COM	Well Number 13H
OGRID No. 16696	Operator Name OXY USA, INC.	Elevation 3691.5'

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		160	NORTH	2375	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
N	31	22-S	33-E		17	SOUTH	2905	EAST	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
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<p>KOP 97' FNL & 2832' FEL LAT.:32.36983 LONG.:103.61223</p> <p>LTP 657' FNL & 2976' FEL LAT.:33.36829 LONG.:103.61270</p> <p>BOTTOM HOLE LOCATION 17' FSL & 2905' FEL LAT.:32.36112 LONG.:103.61269</p>	<p>LOT 1 36.66 Ac</p> <p>LOT 2 36.67 Ac</p> <p>LOT 3 36.68 Ac</p> <p>LOT 4 36.67 Ac</p> <p>LOT 1 36.71 Ac</p> <p>LOT 2 36.66 Ac</p> <p>LOT 3 36.63 Ac</p> <p>LOT 4 36.60 Ac</p> <p>SECTION 30 SECTION 31</p> <p>GRID AZ. - 280°01'21" HORZ. DIST. - 613.3'</p> <p>GRID AZ. - 179°35'18" HORZ. DIST. - 10488.3'</p> <p>HORIZONTAL SPACING UNIT</p> <p>17' B.H.</p> <p>2905'</p>	<p>SURFACE LOCATION Y=498961.9 N X=764429.7 E LAT.=32.369646° N LONG.=103.610748° W</p> <p>* ALL COORDINATES ARE NAD 83 VALUES</p> <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=761673.4 E</td> </tr> <tr> <td>3</td> <td>Y=491187.3 N X=761892.6 E</td> </tr> <tr> <td>4</td> <td>Y=488547.8 N X=761711.3 E</td> </tr> <tr> <td>5</td> <td>Y=488562.8 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> <p>LTP 130' FSL & 2906' FEL LAT.:32.36115 LONG.:103.61269</p>	POINT LEGEND		1	Y=499107.0 N X=761635.4 E	2	Y=493826.8 N X=761673.4 E	3	Y=491187.3 N X=761892.6 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=764185.7 E	<p>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.</p> <p>Signature: <i>Roni Mathew</i> Date: 11/11/19</p> <p>Printed Name: RONI MATHEW</p> <p>E-mail Address: RONI.MATHEW@OXY.COM</p> <p>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.</p> <p>MARCH 12, 2019 Date of Survey</p> <p>Signature & Seal of Professional Surveyor</p> <p>CHAD L. HARCROW NEW MEXICO LICENSED PROFESSIONAL SURVEYOR 17777</p> <p><i>Chad Harcrow</i> 4/5/19 Certificate No. CHAD HARCROW 17777 W.O. # 19-472 DRAWN BY: WN</p>
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Phone: (505) 593-6161 Fax: (505) 593-0720

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

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-8178 Fax: (505) 334-8170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3480 Fax: (505) 476-3482

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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		..	SOUTH	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**

<p><u>SURFACE LOCATION</u> Y=498962.1 N X=764464.7 E LAT.=32.369646° N LONG.=103.610634° W</p>		<p>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.</p> <p>Signature: <i>R. Mathew</i> Date: 11/12/19 Printed Name: RONI MATHEW. E-mail Address: RONI_MATHEW@OXY.COM</p>																																
<p>* ALL COORDINATES ARE NAD 83 VALUES</p>	<p>POINT LEGEND</p> <table border="1"> <tr><td>1</td><td>Y=499135.0 N</td></tr> <tr><td>2</td><td>X=766803.5 E</td></tr> <tr><td>3</td><td>Y=498494.8 N</td></tr> <tr><td>4</td><td>X=766823.6 E</td></tr> <tr><td>5</td><td>Y=493855.3 N</td></tr> <tr><td>6</td><td>X=766844.1 E</td></tr> <tr><td>7</td><td>Y=491215.2 N</td></tr> <tr><td>8</td><td>X=766863.8 E</td></tr> <tr><td>9</td><td>Y=488575.1 N</td></tr> <tr><td>10</td><td>X=766884.4 E</td></tr> <tr><td>11</td><td>Y=488562.8 N</td></tr> <tr><td>12</td><td>X=764238.7 E</td></tr> <tr><td>13</td><td>Y=493844.2 N</td></tr> <tr><td>14</td><td>X=764203.2 E</td></tr> <tr><td>15</td><td>Y=499120.5 N</td></tr> <tr><td>16</td><td>X=764165.7 E</td></tr> </table>	1	Y=499135.0 N	2	X=766803.5 E	3	Y=498494.8 N	4	X=766823.6 E	5	Y=493855.3 N	6	X=766844.1 E	7	Y=491215.2 N	8	X=766863.8 E	9	Y=488575.1 N	10	X=766884.4 E	11	Y=488562.8 N	12	X=764238.7 E	13	Y=493844.2 N	14	X=764203.2 E	15	Y=499120.5 N	16	X=764165.7 E	<p>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.</p> <p>MARCH 12, 2019 Date of Survey</p> <p>Signature & Seal of Professional Surveyor Certificate No. CHAD HARCROW 17777 W.O. # 19-473 DRAWN BY: WN</p>
1	Y=499135.0 N																																	
2	X=766803.5 E																																	
3	Y=498494.8 N																																	
4	X=766823.6 E																																	
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7	Y=491215.2 N																																	
8	X=766863.8 E																																	
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10	X=766884.4 E																																	
11	Y=488562.8 N																																	
12	X=764238.7 E																																	
13	Y=493844.2 N																																	
14	X=764203.2 E																																	
15	Y=499120.5 N																																	
16	X=764165.7 E																																	

District I
1625 N. Francis Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0770
District II
1117 S. First St., Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720
District III
1000 Rue Bonanza Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87503
Phone: (505) 476-3450 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

HOBBS OCD

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

RECEIVED

☒ AMENDED REPORT
AS-DRILLED

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-44933	Pool Code 51683	Pool Name Red Tank Bone Springs
Property Code 321612	Property Name TACO CAT "27-34" FEDERAL COM	Well Number 11H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3635.8'

Surface Location

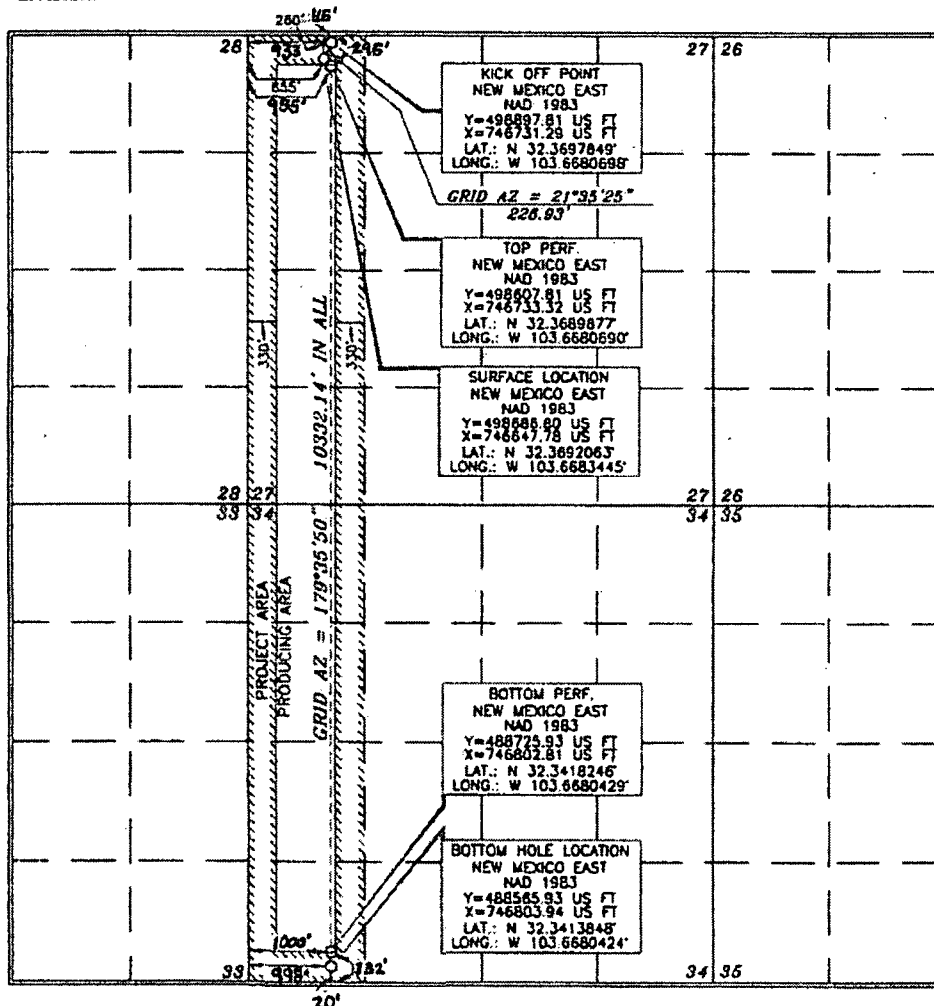
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
D	27	22 SOUTH	32 EAST, N.M.P.M.		260'	NORTH	855'	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
M	34	22 SOUTH	32 EAST, N.M.P.M.		20'	SOUTH	998'	WEST	LEA

Dedicated Acres 320	Joint or Infill Y	Consolidation Code	Order No. FTP: 295' FNL 955' FNL LTP: 132' FSL 1000' FNL
-------------------------------	-----------------------------	--------------------	--

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 selected 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.

Leslie Reeves 1/28/19
Signature Date
LESLIE REEVES
Print Name
LESLIE-REEVES@OXY.COM
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was derived 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.

Terry J. As...
Signature
DECEMBER 26, 2012
Date of Survey
15079
Professional Land Surveyor

Terry J. As... 2/7/2018
Signature Date
15079
Certificate Number

WOF 171226HL-E (XA)

Side 1

OPERATOR: OXY USA INCWELL NAME & NUMBER: AVOGATO 30-31 COM 11H

WELL LOCATION:	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
160' FNL 885' FWL		D	30	22S	33E

WELLBORE SCHEMATIC

AVOGATO 30 31 STATE COM 11H

*Note- Diagram not to scale

13 3/8" CSA 1049'
CMT TO SURFACE (CIRC)9 5/8" CSA 8850'
CMT TO SURFACE (CIRC)5 1/2" CSA 19,614'
TOC 8322' (CBL)

Avalon Perfs @ 9558 - 19,537'

WELL CONSTRUCTION DATASurface CasingHole Size: 17.5" Casing Size: 13.375"Cemented with: 1340 sx. **or** ft³Top of Cement: 0' Method Determined: CIRCIntermediate CasingHole Size: 12.25" Casing Size: 9.625"Cemented with: 2149 sx. **or** ft³Top of Cement: 0' Method Determined: CIRCProduction CasingHole Size: 8.5" Casing Size: 5.5"Cemented with: 2150 sx. **or** ft³Top of Cement: 8322' Method Determined: CBLTotal Depth: MD: 19645' / TVD: 9426'Injection Interval9558' MD/9322' TVD feet to 19537' MD/ 9432' TVD

(Perforated or Open Hole; indicate which)

Side 2

Tubing Size: 2.875" 6.5# L80 Lining Material: UNLINED

Type of Packer: 5.5" AS1-X PACKER

Packer Setting Depth: 9141' MD / 9092' 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? _____

PRODUCER- OIL

2. Name of the Injection Formation: AVALON

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

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. _____

N/A

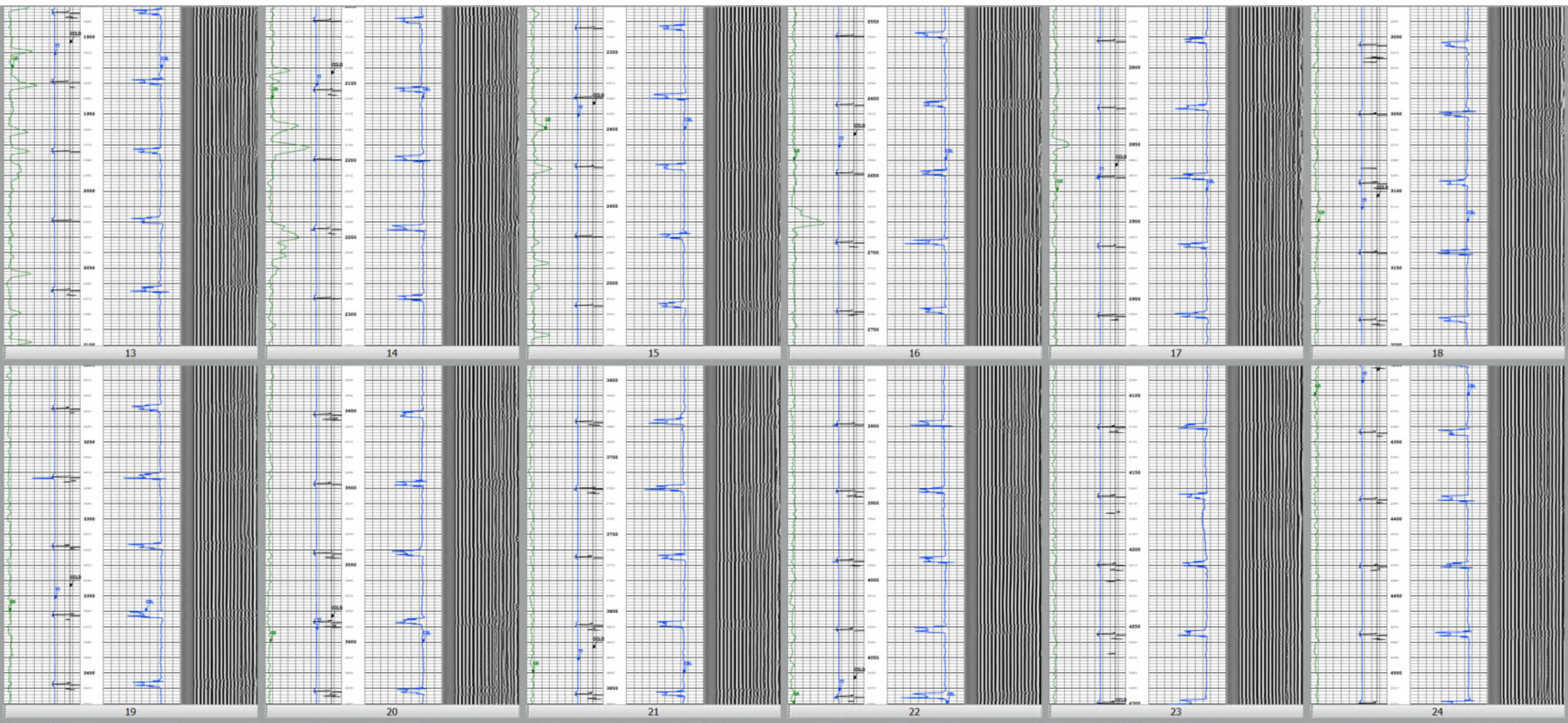
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

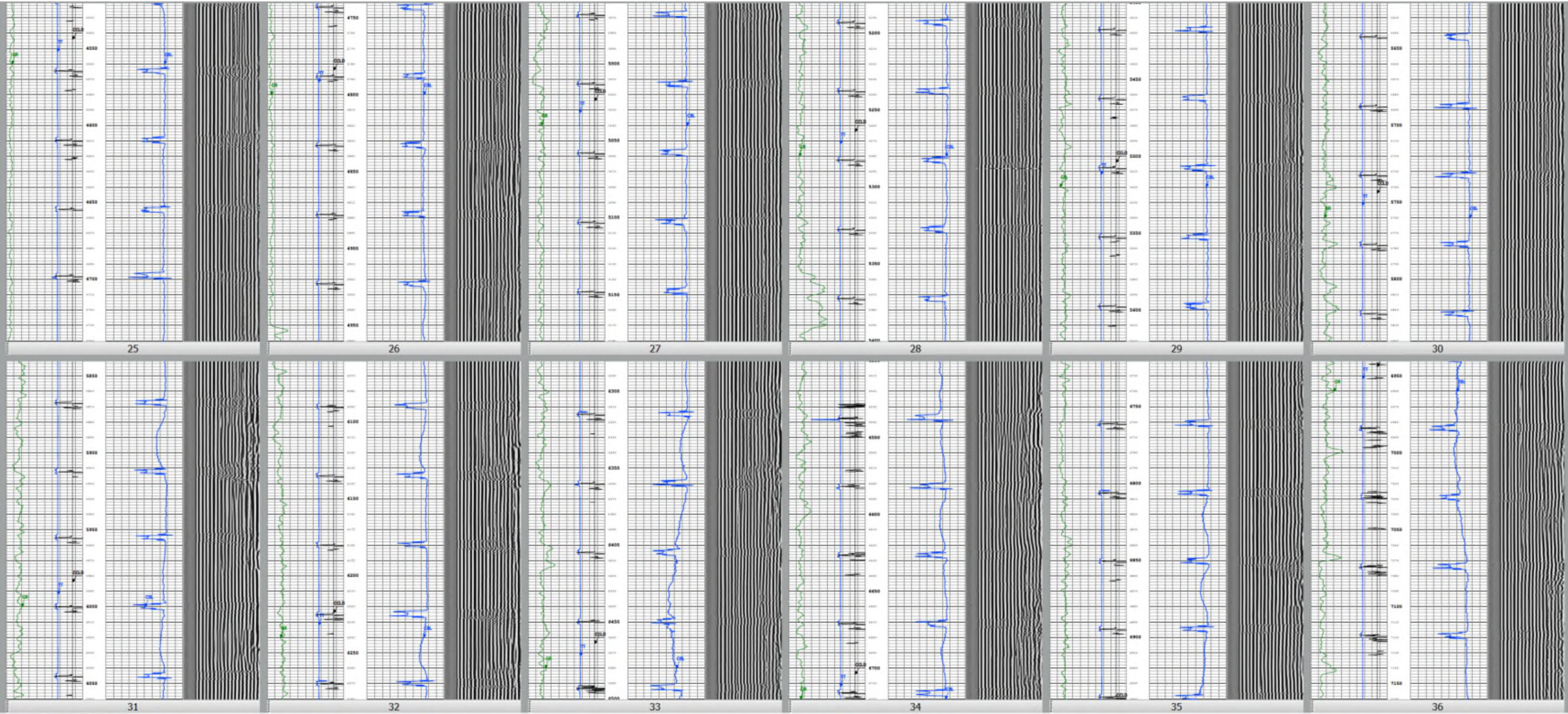
OVERLYING: BRUSHY CANYON

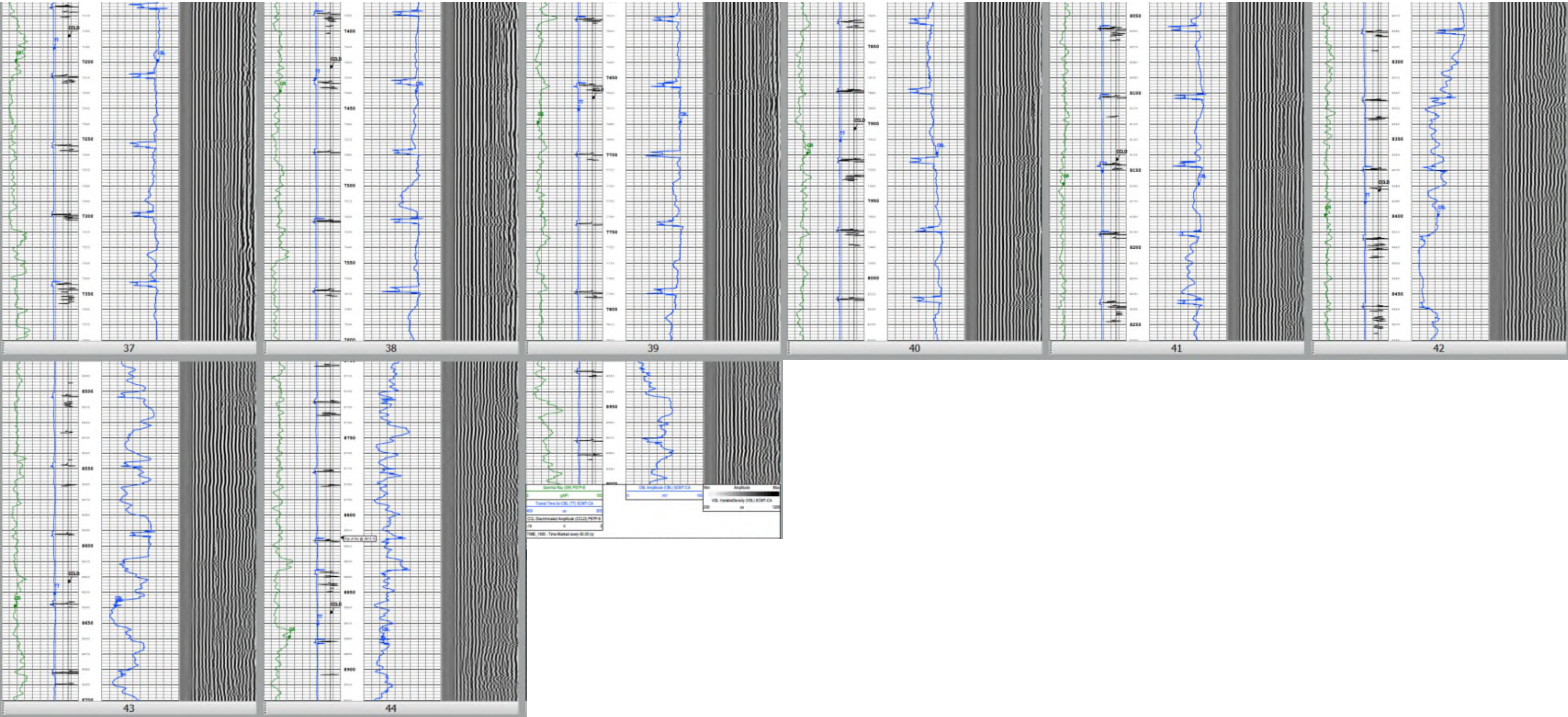
UNDERLYING: 2ND BONE SPRING

Used to Imaging: 7/8/2021 9:30:30 AM









Side 1

OPERATOR: OXY USA INCWELL NAME & NUMBER: AVOGATO 30-31 COM 13H

WELL LOCATION:	160' FNL 2375' FEL	B	30	22S	33E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

AVOGATO 30 31 STATE COM 13H

*Note- Diagram not to scale

13 3/8" CSA 1060'
CMT TO SURFACE (CIRC)9 5/8" CSA 8910'
CMT TO SURFACE (CIRC)5 1/2" CSA 19,631'
TOC 7988' (CBL)

Avalon Perfs @ 9752 - 19,532'

WELL CONSTRUCTION DATASurface CasingHole Size: 17.5" Casing Size: 13.375"Cemented with: 1340 sx. **or** ft³Top of Cement: 0' Method Determined: CIRCIntermediate CasingHole Size: 12.25" Casing Size: 9.625"Cemented with: 1600 sx. **or** ft³Top of Cement: 0' Method Determined: CIRCProduction CasingHole Size: 8.5" Casing Size: 5.5"Cemented with: 2150 sx. **or** ft³Top of Cement: 7988' Method Determined: CBLTotal Depth: MD: 19645' / TVD: 9397'Injection Interval9752' MD/ 9396' TVD feet to 19532' MD/ 9397' TVD

(Perforated or Open Hole; indicate which)

Side 2

Tubing Size: 2.875" 6.5# L80 Lining Material: UNLINED

Type of Packer: AS1-X 5.5"

Packer Setting Depth: 8970' MD / 8926' 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? _____

PRODUCER- OIL

2. Name of the Injection Formation: AVALON

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

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. _____

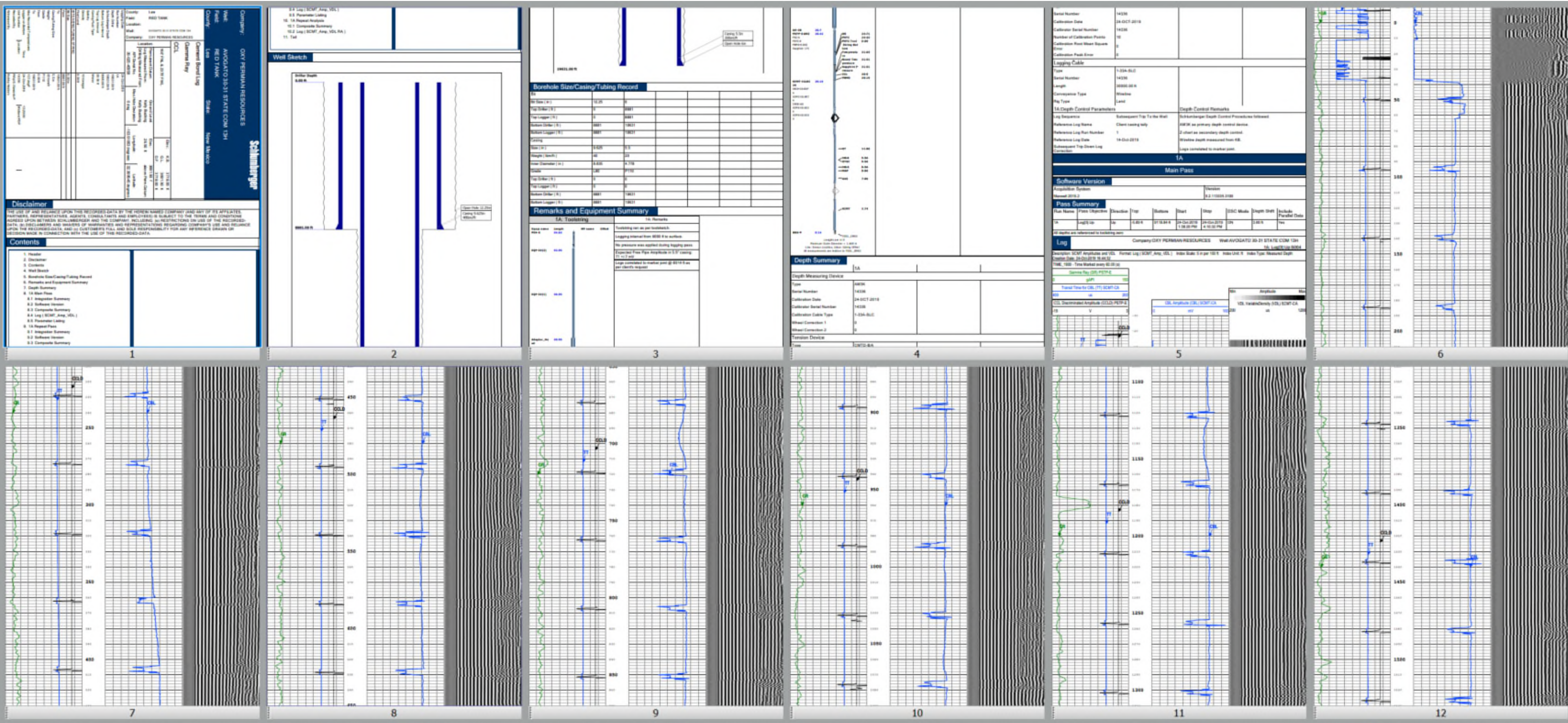
N/A

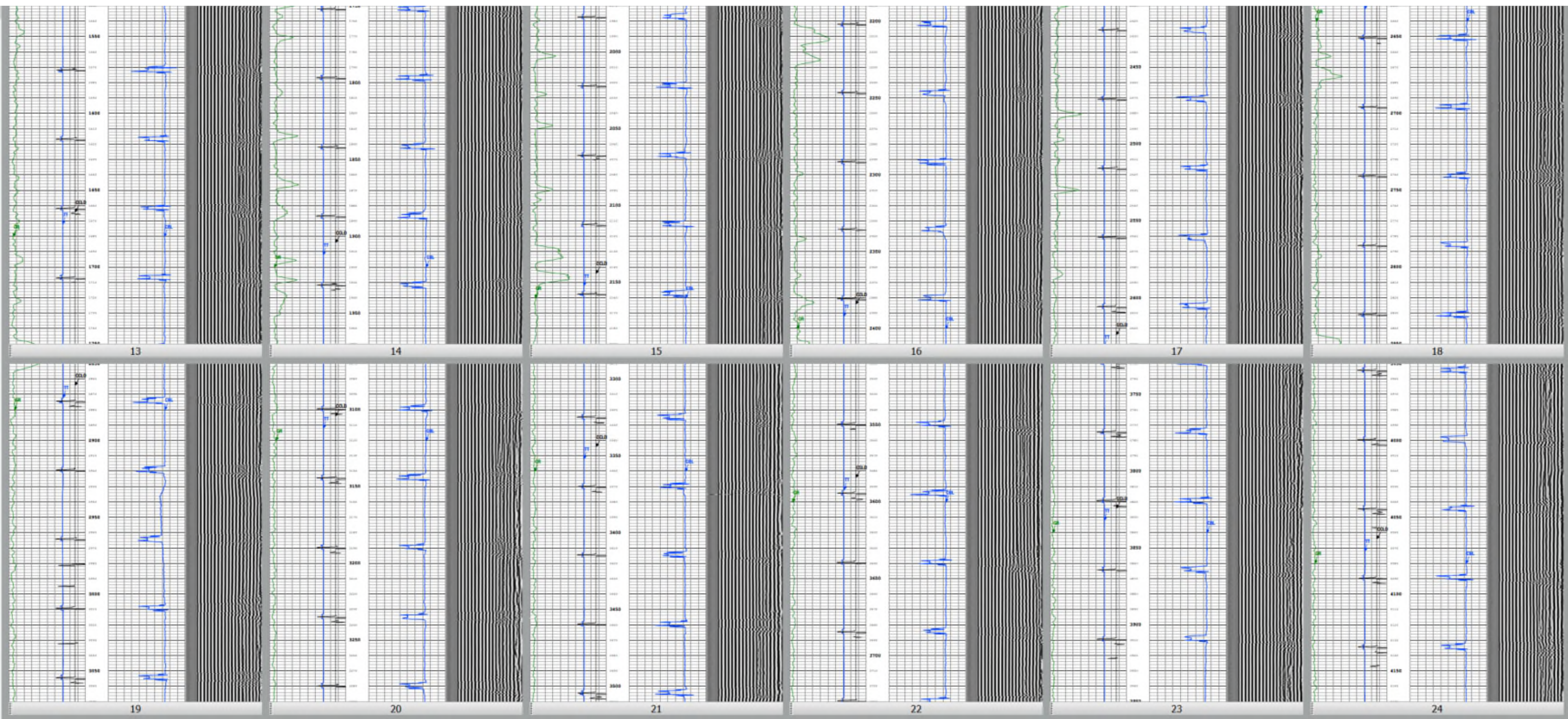
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

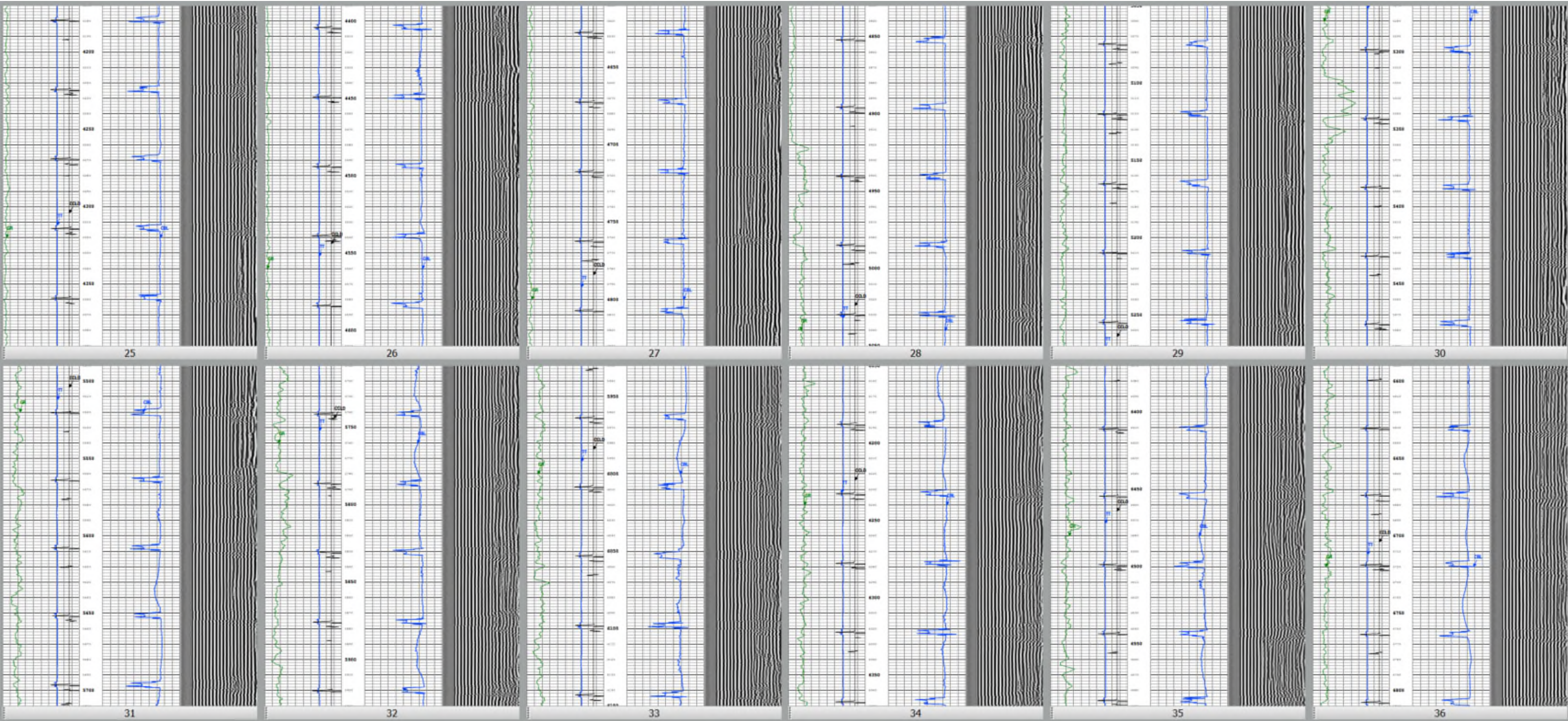
OVERLYING: BRUSHY CANYON

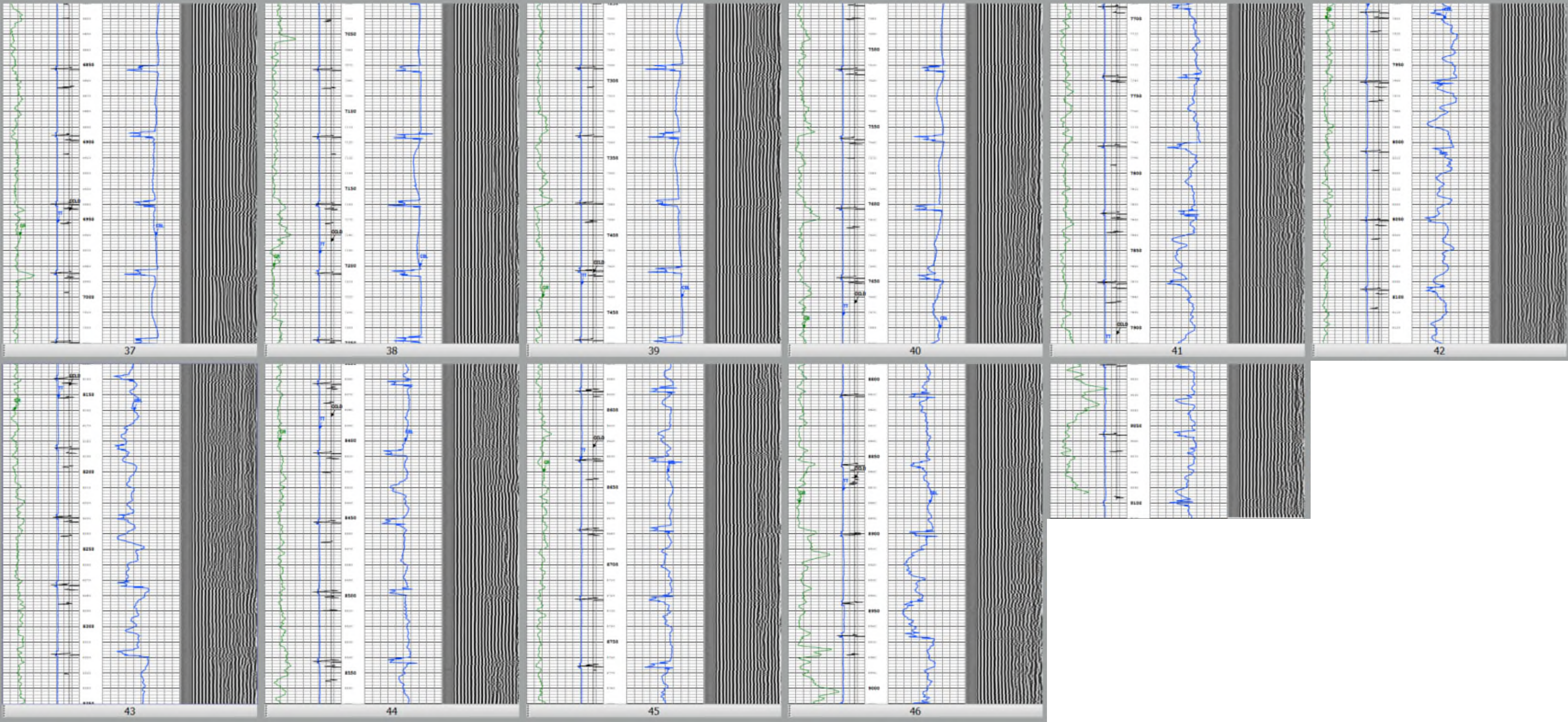
UNDERLYING: 2ND BONE SPRING

Avogato 13H CBL









Side 1

OPERATOR: OXY USA INCWELL NAME & NUMBER: AVOGATO 30-31 COM 14HWELL LOCATION: 160' FNL 2340' FEL

FOOTAGE LOCATION

B

UNIT LETTER

30

SECTION

22S

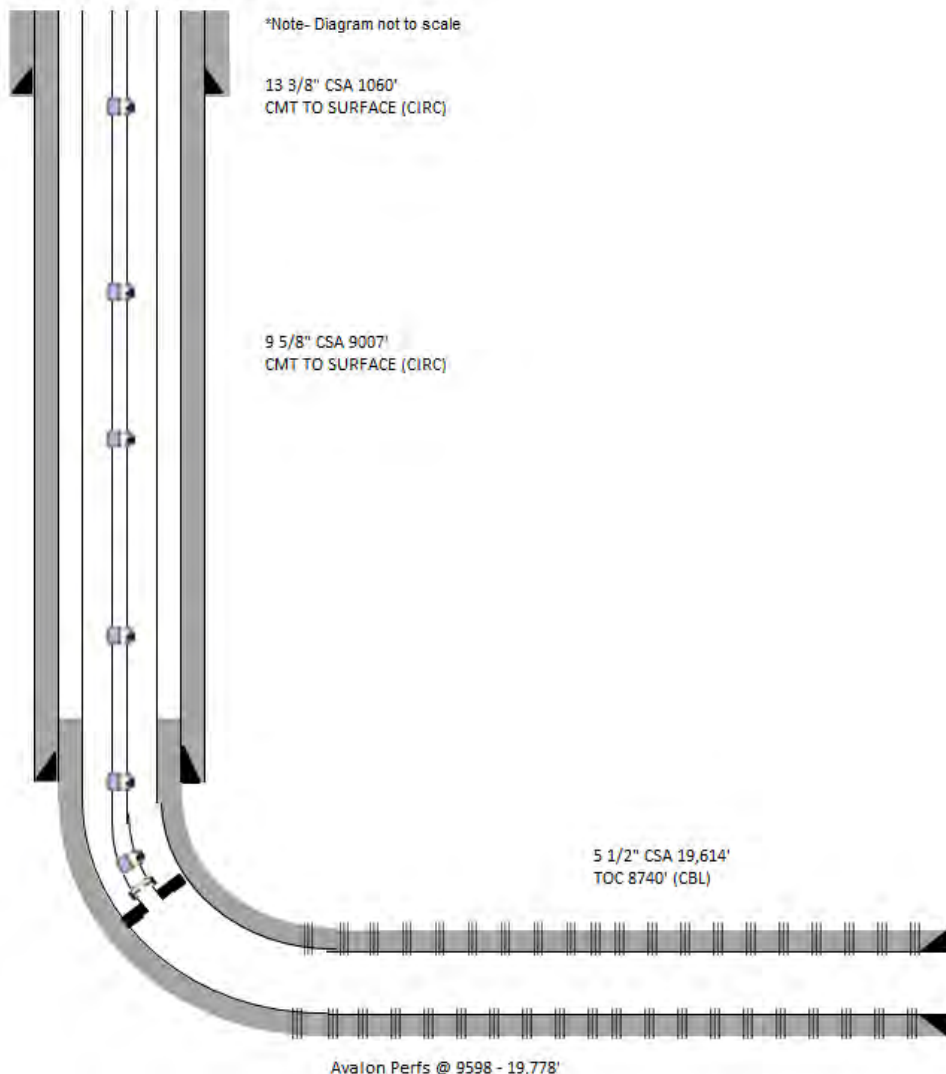
TOWNSHIP

33E

RANGE

WELLBORE SCHEMATIC

AVOGATO 30 31 STATE COM 14H

**WELL CONSTRUCTION DATA**Surface CasingHole Size: 17.5" Casing Size: 13.375"Cemented with: 1340 sx. **or** ft³Top of Cement: 0' Method Determined: CIRCIntermediate CasingHole Size: 12.25" Casing Size: 9.625"Cemented with: 2125 sx. **or** ft³Top of Cement: 0' Method Determined: CIRCProduction CasingHole Size: 8.5" Casing Size: 5.5"Cemented with: 2135 sx. **or** ft³Top of Cement: 8740' Method Determined: CBLTotal Depth: MD: 19891' / TVD: 9532'Injection Interval9598' MD/ 9488' TVD feet to 19778' MD/ 9540' TVD Perforated

(Perforated or Open Hole; indicate which)

Side 2

Tubing Size: 2.875" 6.5# L80 Lining Material: UNLINED

Type of Packer: 5.5" AS1

Packer Setting Depth: 9090' MD / 9045' 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? _____

PRODUCER- OIL

2. Name of the Injection Formation: AVALON

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

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. _____

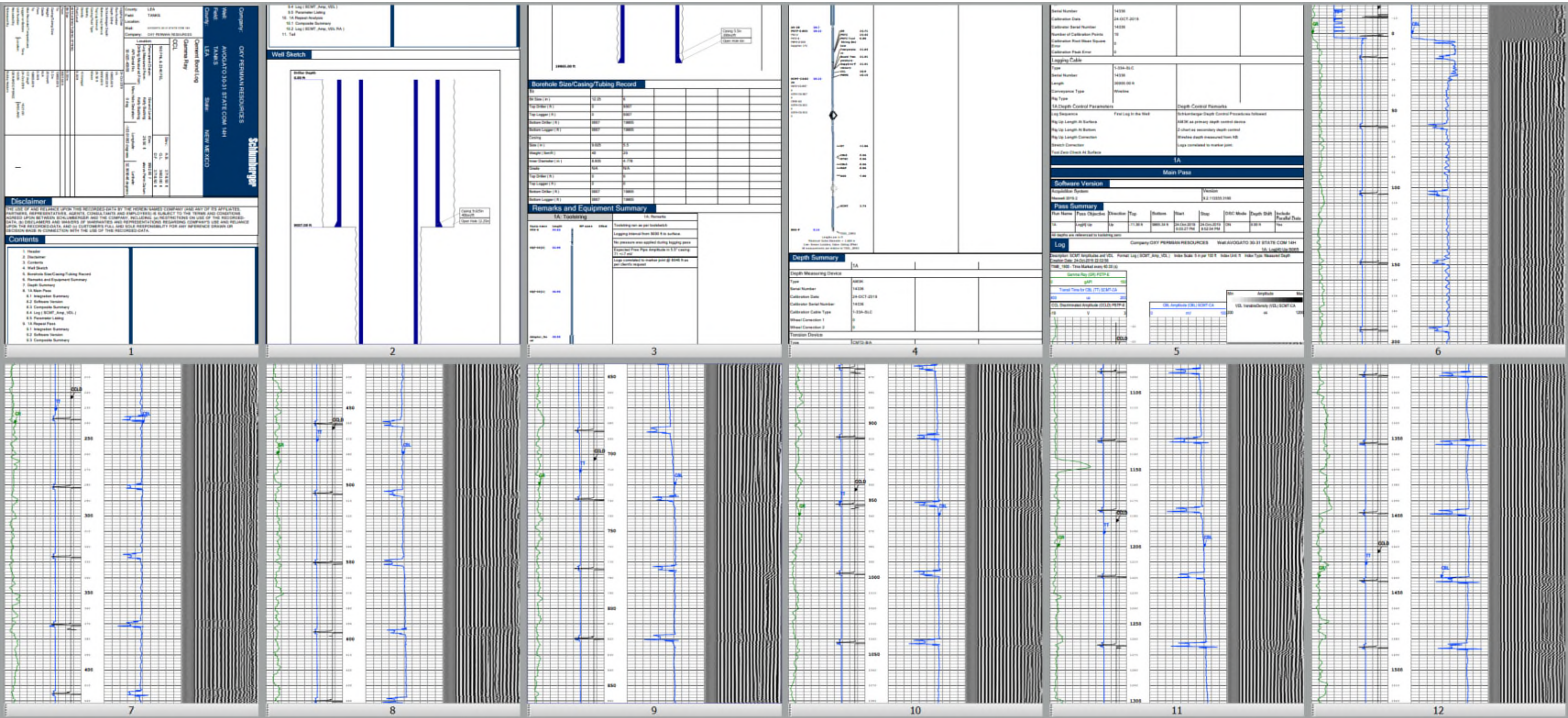
N/A

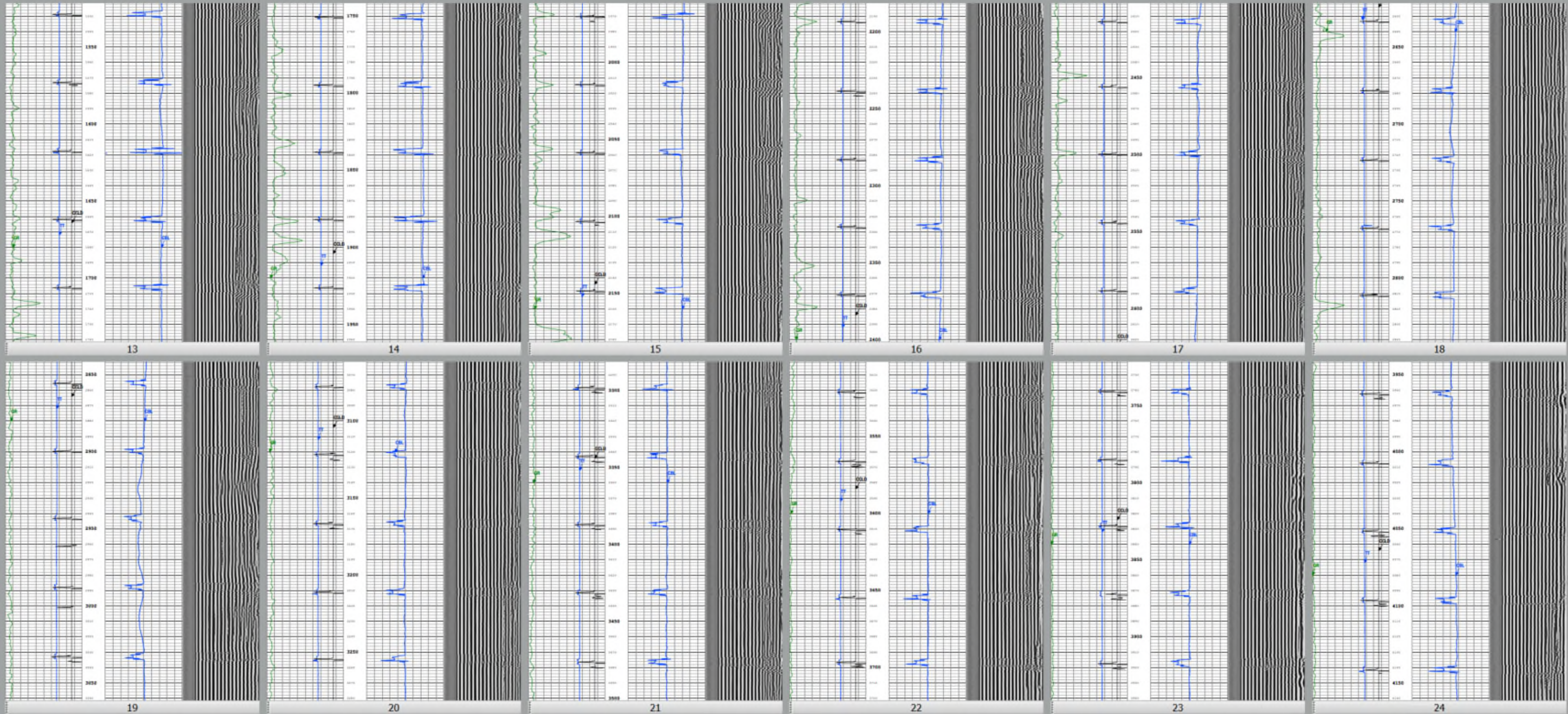
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

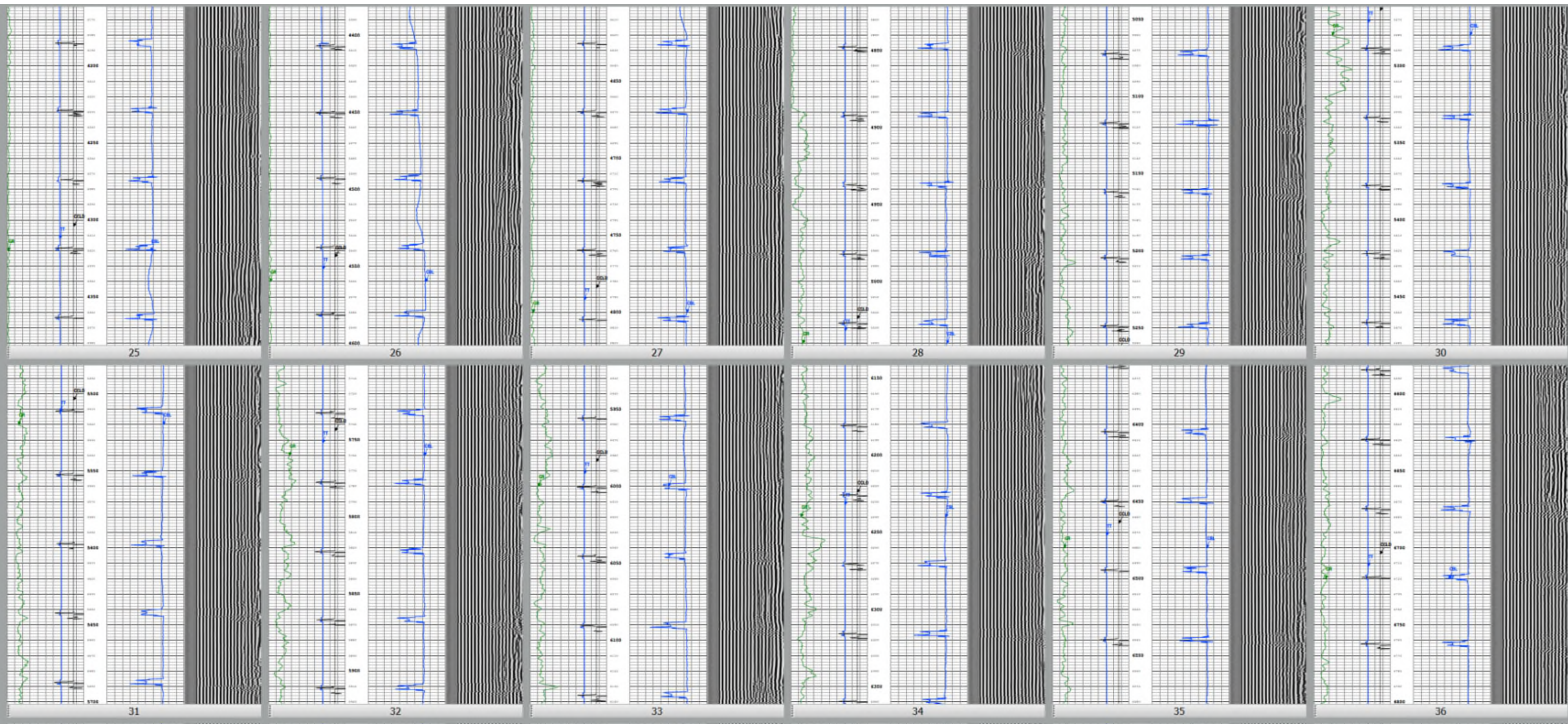
OVERLYING: BRUSHY CANYON

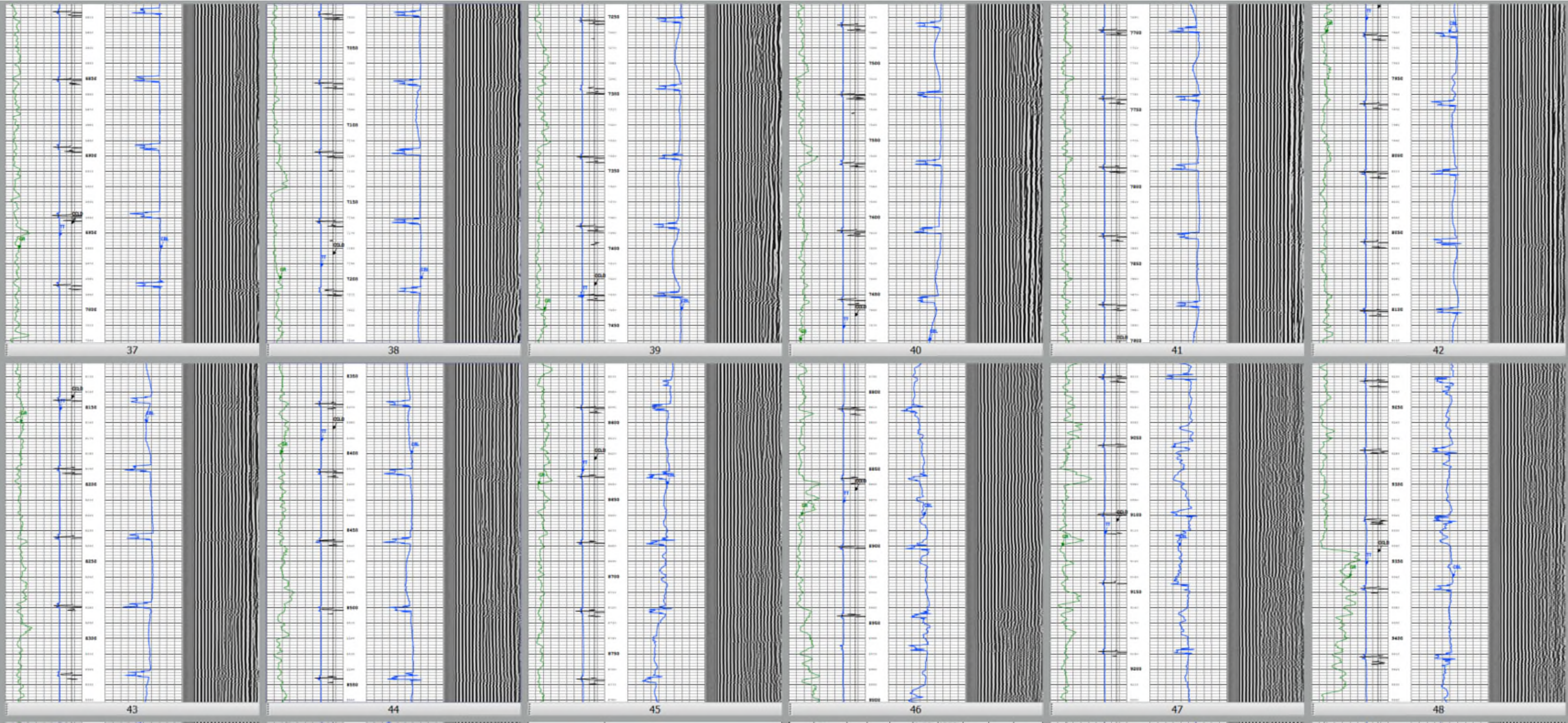
UNDERLYING: 2ND BONE SPRING

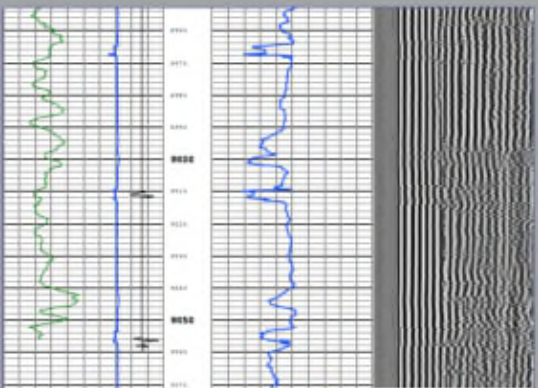
Avogato 14H CBL











Side 1

OPERATOR: OXY USA INCWELL NAME & NUMBER: TACO CAT 27-34 FEDERAL COM 11H

WELL LOCATION: <u>260' FNL 855' FWL</u>	<u>D</u>	<u>27</u>	<u>22S</u>	<u>32E</u>
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

TACO CAT 27-34 FEDERAL COMM 11H

*Note- Diagram not to scale

13 3/8" CSA 447'
CMT TO SURFACE (CIRC)9 5/8" CSA 8810'
CMT TO SURFACE (CIRC)5 1/2" CSA 19,703'
TOC 6700' (CBL)

Avalon Perfs @ 9445 - 19,621'

WELL CONSTRUCTION DATASurface CasingHole Size: 17.5" Casing Size: 13.375"Cemented with: 800 sx. **or** ft³Top of Cement: SURFACE Method Determined: CIRCIntermediate CasingHole Size: 9.875" Casing Size: 7.625"Cemented with: 2225 sx. **or** ft³Top of Cement: 204' Method Determined: CalcProduction CasingHole Size: 6.750" Casing Size: 5.5"Cemented with: 705 sx. **or** ft³Top of Cement: 6700' Method Determined: CBLTotal Depth: MD 19732' / TVD 9514'Injection Interval9445' MD/ 9339' TVD feet to 19621' MD / 9517" TVD Perforated

(Perforated or Open Hole; indicate which)

Side 2

Tubing Size: 2.875" 6.5# L80 Lining Material: UNLINEDType of Packer: 10K AS1-X Packer 5.5"Packer Setting Depth: 8790' MD / 87 66' 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? _____

PRODUCER- OIL

2. Name of the Injection Formation: Avalon

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

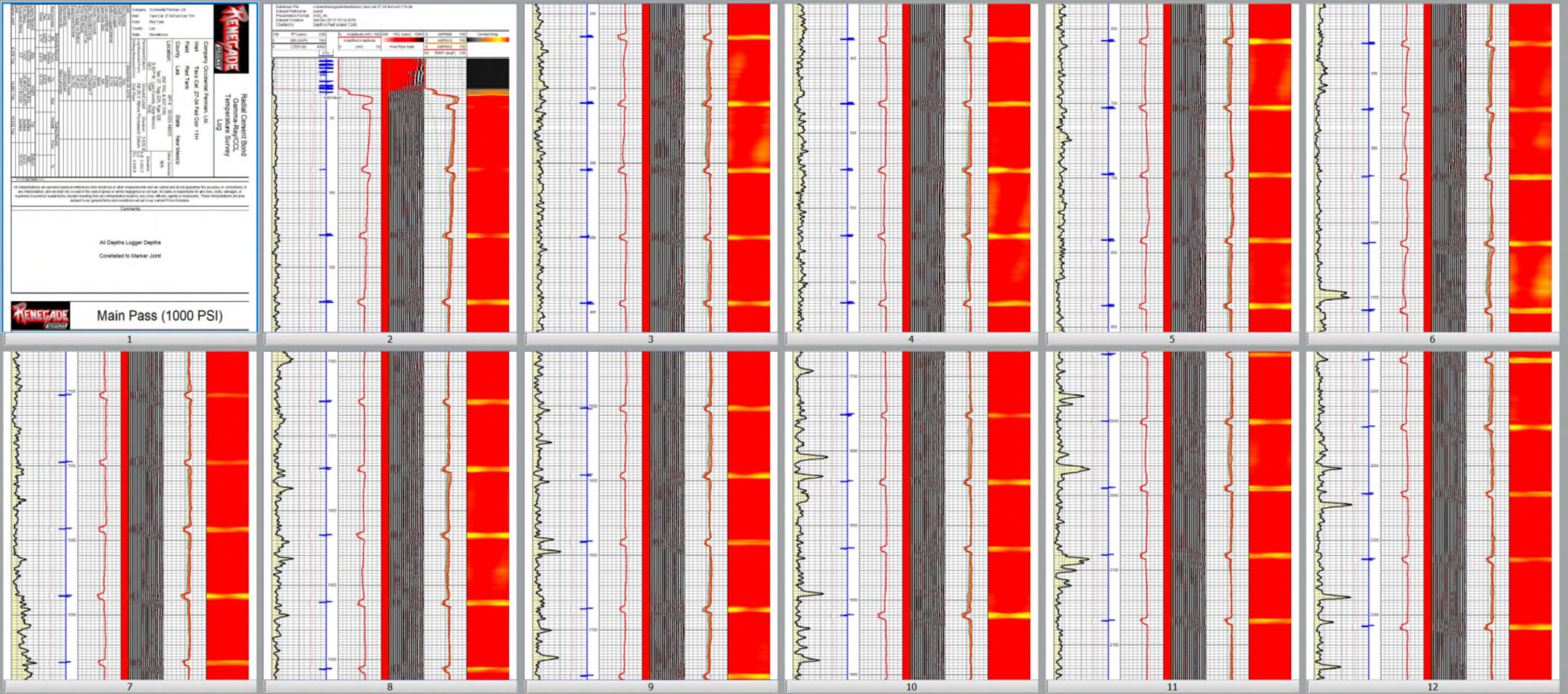
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. _____

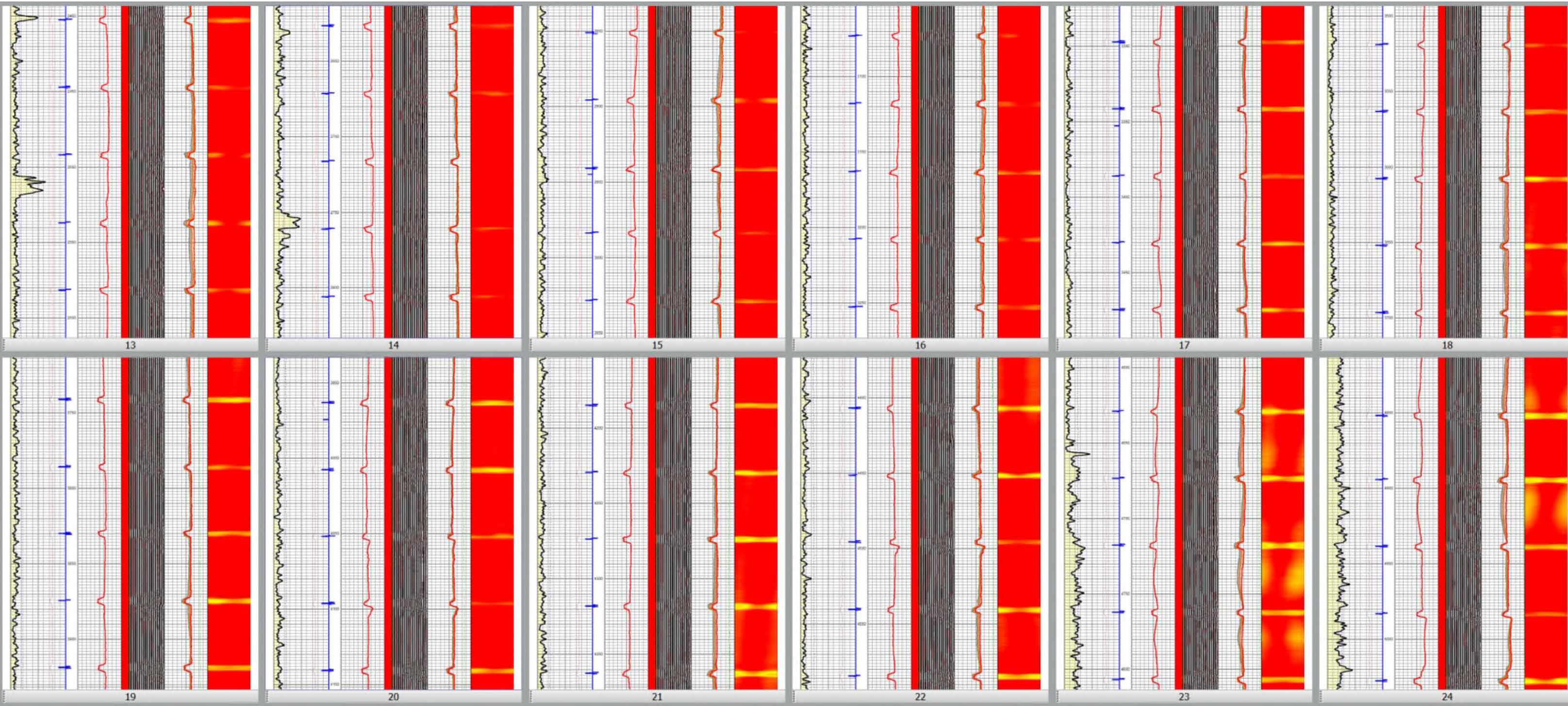
NO

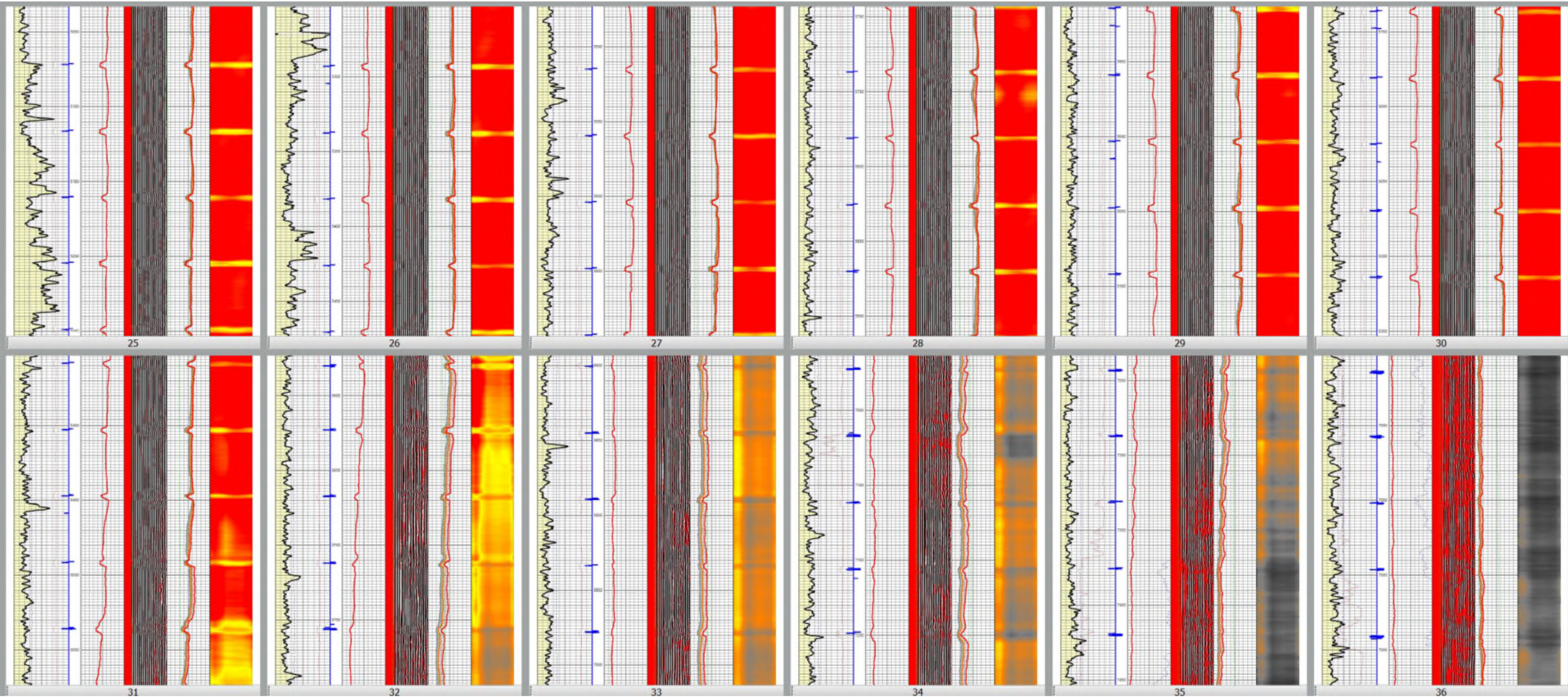
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

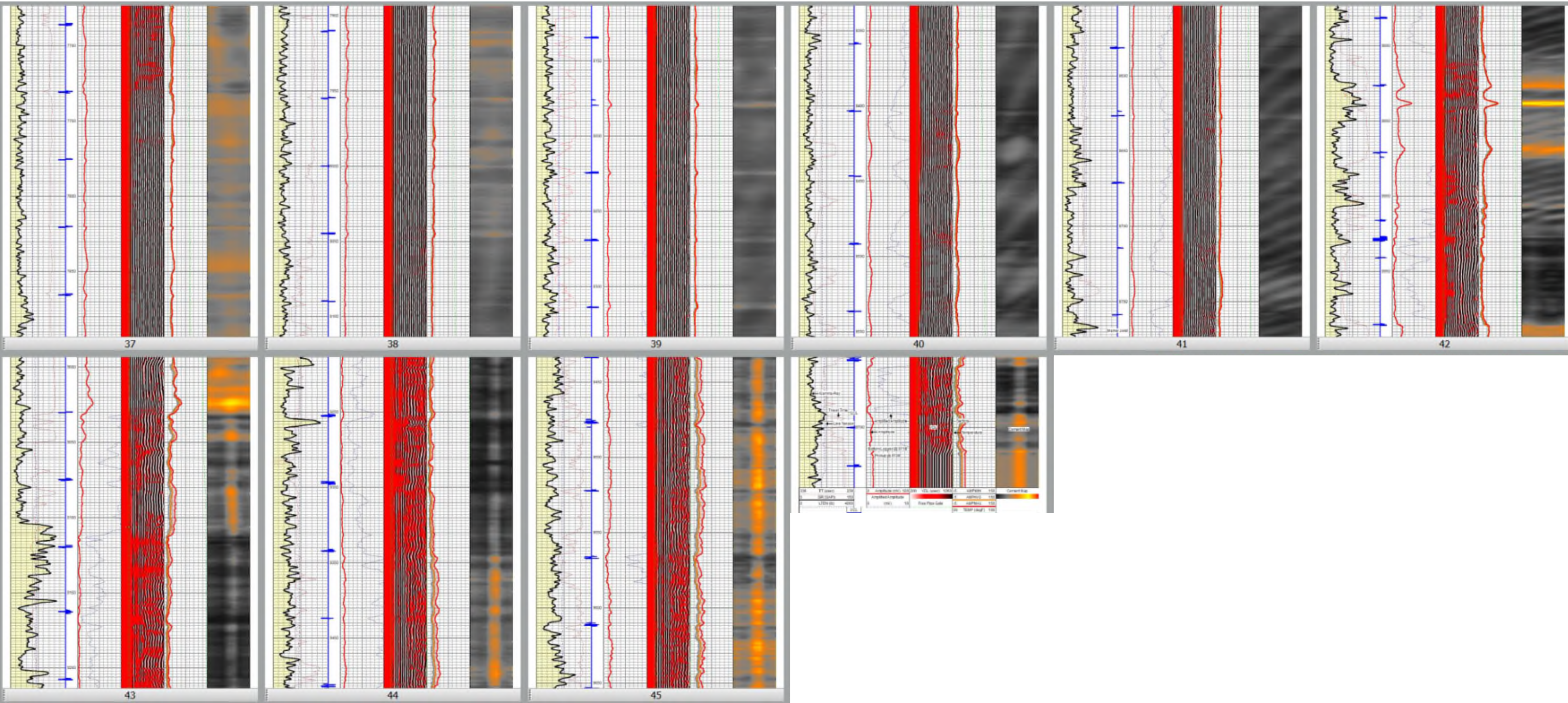
OVERLYING: BRUSHY CANYON FORMATION 6837'UNDERLYING: 2nd Bone Spring FORMATION

Taco Cat 11H CBL









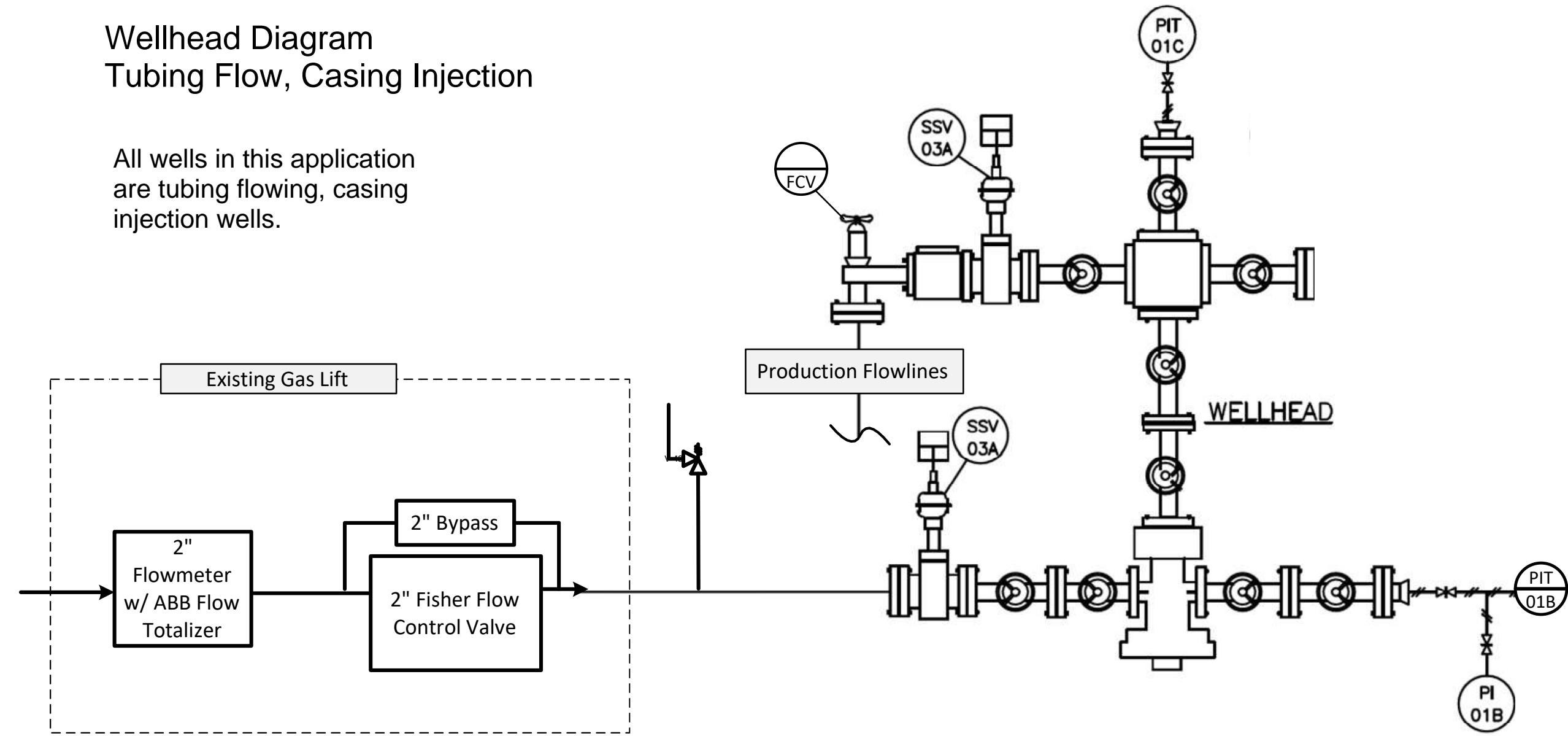
Max Allowable Surface Pressure (MASP) Table

	Column	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	Calculation									(1+6*7)/8						(1+12*13)/(12*14)	
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 (MMSCFD)	Proposed Max Injection Rate (MMSCFD)	Burst Calculation Depth (FT TVD)	Brine Pressure Gradient (PSI/FT)	Casing or Liner Burst (PSI)	MASP + Reservoir Brine Hydrostatic as a percentage of Casing or Liner Burst Pressure (%)	Top Perforation Depth (FT TVD)	MASP Gradient (PSI/FT)	Top Perforation Depth (FT TVD)	Gas Pressure Gradient (PSI/FT)	Formation Parting Pressure Gradient (PSI/FT)	MASP + Reservoir Gas Hydrostatic as a percentage of Formation Parting Pressure (%)	
	3002545956	Avogato 11H	1200	780	1200	1.8	2	9322	0.468	12640	44%	9322	0.129	9322	0.200	0.65	51%
	3002545958	Avogato 13H	1200	540	1200	1.8	2	9396	0.468	12640	44%	9396	0.128	9396	0.200	0.65	50%
	3002545959	Avogato 14H	1200	680	1200	1.8	2	9488	0.468	12640	45%	9488	0.126	9488	0.200	0.65	50%
	3002544933	Taco Cat 11H	1200	670	1200	1.8	2	9339	0.468	12640	44%	9339	0.128	9339	0.200	0.65	51%

Wellhead Diagram

Tubing Flow, Casing Injection

All wells in this application are tubing flowing, casing injection wells.



KEY
SSV – Safety Shutdown Valve
PI – Pressure Indicator
PIT – Pressure Indicating Transmitter
FCV- Flow Control Valve

Mechanical Integrity Test (MIT) Summary Table

API10	Well Name	MIT #1				MIT #2		
		Date	Surface Pressure	Time	Notes	Date	Surface Pressure	Time
3002545956	Avogato 30 31 State Com #011H	11/3/2019	9800	30 min		12/5/2019	500	10 min
3002545958	Avogato 30 31 State Com #013H	10/24/2019	3000	15 min		12/2/2019	1000	15 min
3002545959	Avogato 30 31 State Com #014H	10/6/2019	1000	10 min	Only tested from surface to 2998' on the prod casing	11/20/2019	1000	unknown
3002544933	Taco Cat 27 34 Federal Com #011H	12/29/2018	1000	CBL		12/30/2018	9800	30 min

Gas Analysis and Operations

Avogato Gas Source Well

API10	Well Name
30-025-45928	AVOGATO 30 31 STATE COM 33H
30-025-45924	AVOGATO 30 31 STATE COM 21H
30-025-45925	AVOGATO 30 31 STATE COM 22H
30-025-45926	AVOGATO 30 31 STATE COM 23H
30-025-45927	AVOGATO 30 31 STATE COM 32H
30-025-45929	AVOGATO 30 31 STATE COM 31H
30-025-45930	AVOGATO 30 31 STATE COM 34H
30-025-45931	AVOGATO 30 31 STATE COM 35H
30-025-45956	AVOGATO 30 31 STATE COM 11H
30-025-45957	AVOGATO 30 31 STATE COM 12H
30-025-45958	AVOGATO 30 31 STATE COM 13H
30-025-45959	AVOGATO 30 31 STATE COM 14H
30-025-45960	AVOGATO 30 31 STATE COM 24H
30-025-45961	AVOGATO 30 31 STATE COM 25H
30-025-45923	AVOGATO 30 31 STATE COM 4H
30-025-45964	AVOGATO 30 31 STATE COM 74H

Taco Cat Gas Source Well

API10	Well Name
30-025-44933	TACO CAT 27 34 FEDERAL COM 11H
30-025-44934	TACO CAT 27 34 FEDERAL COM 21H
30-025-44935	TACO CAT 27 34 FEDERAL COM 31H

Tanks Gas Analysis Summary

- 2 separate gas systems in Tanks that sell gas to DCP.
 - Avogato
 - Taco Cat
- Avogato System
 - All producing wells flow to the Red Tank 19 Central Tank Battery (CTB).
 - Gas flows into the low-pressure gas pipeline to the Red Tank 19 Compressor Gas Lift Station (CGL).
- Taco Cat System
 - All producing wells flow to the Red Tank 27/28 Central Tank Battery (CTB).
 - Gas flows into the low-pressure gas pipeline to the Red Tank 27/28 Compressor Gas Lift Station (CGL).
- Gas analysis is provided for:
 - Red Tank 19 CGL
 - Gas Lift meter downstream of Red Tank 27/28 CGL
 - Avalon production



Certificate of Analysis

Number: 6030-21030247-006A

Artesia Laboratory
200 E Main St.
Artesia, NM 88210
Phone 575-746-3481

Chandler Montgomery
Occidental Petroleum
1502 W Commerce Dr.
Carlsbad, NM 88220

Mar. 22, 2021

Field:	Red Tank	Sampled By:	Javier Lazo
Station Name:	Red Tank 19 CGL Check A	Sample Of:	Gas Spot
Station Number:	15697C	Sample Date:	03/19/2021 08:30
Station Location:	OXY	Sample Conditions:	667 psia, @ 102 °F Ambient: 39 °F
Sample Point:	Meter Run	Effective Date:	03/19/2021 08:30
Formation:	Monthly	Method:	GPA-2261M
County:	Eddy	Cylinder No:	1111-002595
Type of Sample:	Spot-Cylinder	Instrument:	70104124 (Inficon GC-MicroFusion)
Heat Trace Used:	N/A	Last Inst. Cal.:	03/22/2021 0:00 AM
Sampling Method:	Fill and Purge	Analyzed:	03/22/2021 13:58:20 by EJL
Sampling Company:	SPL		

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Hydrogen Sulfide	0.000	0.000	0.000		GPM TOTAL C2+	5.934
Nitrogen	2.130	2.124	2.604		GPM TOTAL C3+	3.095
Methane	72.845	72.626	50.986		GPM TOTAL iC5+	0.631
Carbon Dioxide	4.485	4.472	8.613			
Ethane	10.666	10.634	13.993	2.839		
Propane	5.909	5.891	11.368	1.620		
Iso-butane	0.756	0.754	1.918	0.246		
n-Butane	1.905	1.899	4.830	0.598		
Iso-pentane	0.445	0.444	1.402	0.162		
n-Pentane	0.466	0.465	1.468	0.168		
Hexanes Plus	0.693	0.691	2.818	0.301		
	100.300	100.000	100.000	5.934		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7918	3.2176
Calculated Molecular Weight	22.85	93.19
Compressibility Factor	0.9961	

GPA 2172 Calculation:

Calculated Gross BTU per ft³ @ 14.65 psia & 60°F

Real Gas Dry BTU	1229	5113
Water Sat. Gas Base BTU	1208	5024
Ideal, Gross HV - Dry at 14.65 psia	1224.4	5113.2
Ideal, Gross HV - Wet	1203.0	5023.7
Net BTU Dry Gas - real gas	1116	
Net BTU Wet Gas - real gas	1097	

Comments: H2S Field Content 2.5 ppm
Mcf/day 7126

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

Gas Lift Meter Downstream of Red Tank 27/28 CGL



Volumetrics US Inc.

3001 N Cameron St, Victoria, TX-77901

Phone: 361-827-4024

Company: OXY USA INC
Field/Location : NMSW
Station Name : TACO CCT 27-34FC 11GL
Station Number : 16231I
Sample Date: 3/12/21 2:37 PM
Analysis Date: 3/15/21 7:10:09 AM
Instrument: VARIAN CP 490 GC
Calibration/Verification Date: 3/15/2021
Heat Trace used: YES

Work Order 4000248705
Sampled by: VOLUMETRICS/JA
Sample Type : SPOT-CYLINDER
Sample Temperature (F): 84
Sample Pressure (PSIG): 1243
Flow rate (MCF/Day): 499.5
Ambient Temperature (F): 79
Sampling method: FILL & EMPTY
Cylinder Number: 1137

NATURAL GAS ANALYSIS: GPA 2261

Components	Un-Normalized Mol%	Normalized Mol%	GPM 14.650	GPM 14.730	GPM 15.025
Hydrogen Sulfide	0.0000	0.0000			
Nitrogen	2.1539	2.2001			
Methane	71.2480	72.7773			
Carbon Dioxide	1.4295	1.4602			
Ethane	12.5308	12.7998	3.417	3.436	3.505
Propane	6.4693	6.6082	1.817	1.827	1.864
Isobutane	0.8184	0.8360	0.273	0.275	0.280
N-butane	1.9947	2.0375	0.641	0.645	0.658
Isopentane	0.3908	0.3992	0.146	0.147	0.149
N-Pentane	0.4155	0.4244	0.154	0.154	0.157
Hexanes Plus	0.4477	0.4573	0.199	0.200	0.204
Total	97.8986	100.0000			

Hexanes plus split (60%-30%-10%)

Physical Properties (Calculated)	14.650 psia	14.730 psia	15.025 psia
Total GPM Ethane+	6.647	6.684	6.817
Total GPM Iso-Pentane+	0.499	0.501	0.511
Compressibility (Z)	0.9961	0.9961	0.9960
Specific Gravity (Air=1) @ 60 °F	0.7757	0.7757	0.7758
Molecular Weight	22.387	22.387	22.387
Gross Heating Value	14.650 psia	14.730 psia	15.025 psia
Dry, Real (BTU/Ft ³)	1279.0	1286.0	1311.8
Wet, Real (BTU/Ft ³)	1256.7	1263.6	1289.0
Dry, Ideal (BTU/Ft ³)	1273.9	1280.9	1306.5
Wet, Ideal (BTU/Ft ³)	1251.8	1258.6	1283.8

Temperature base 60 °F

Comment:

Verified by

Mostaq Ahammad
Petroleum Chemist

Approved by

Deann Friend
Laboratory Manager



Certificate of Analysis

Number: 6030-20100053-001A

Artesia Laboratory

200 E Main St.
Artesia, NM 88210
Phone 575-746-3481Chandler Montgomery
Occidental Petroleum
1502 W Commerce Dr.
Carlsbad, NM 88220

Oct. 09, 2020

Field: Red Tank
Station Name: Avogato 30-31 State Com 11H
Station Number: 15601T
Sample Point: N/A
Meter Number: 30-025-45956
County: Lea
Type of Sample: Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: Fill and Purge
Sampling Company: OXYSampled By: Chandler Montgomery
Sample Of: Gas Spot
Sample Date: 10/08/2020 11:50
Sample Conditions: 95.7 psig, @ 85.4 °F Ambient: 81 °F
Effective Date: 10/08/2020 11:50
Method: GPA-2261M
Cylinder No: 1111-002274
Instrument: 70104251 (Inficon GC-MicroFusion)
Last Inst. Cal.: 10/05/2020 0:00 AM
Analyzed: 10/09/2020 10:24:10 by KNF

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Hydrogen Sulfide	0.000	0.001	0.001		GPM TOTAL C2+	4.668
Nitrogen	4.524	4.542	5.489		GPM TOTAL C3+	2.378
Methane	70.019	70.304	48.658		GPM TOTAL iC5+	0.515
Carbon Dioxide	8.747	8.782	16.674			
Ethane	8.548	8.583	11.134	2.290		
Propane	4.557	4.575	8.703	1.258		
Iso-butane	0.554	0.556	1.394	0.182		
n-Butane	1.339	1.344	3.370	0.423		
Iso-pentane	0.383	0.385	1.198	0.140		
n-Pentane	0.386	0.388	1.208	0.140		
Hexanes Plus	0.538	0.540	2.171	0.235		
	99.595	100.000	100.000	4.668		

Calculated Physical Properties

Relative Density Real Gas	Total	C6+
	0.8029	3.2176
Calculated Molecular Weight	23.18	93.19
Compressibility Factor	0.9965	

GPA 2172 Calculation:

Calculated Gross BTU per ft³ @ 14.65 psia & 60°F

Real Gas Dry BTU	1098	5113
Water Sat. Gas Base BTU	1079	5024
Ideal, Gross HV - Dry at 14.65 psia	1094.2	5113.2
Ideal, Gross HV - Wet	1075.1	5023.7
Net BTU Dry Gas - real gas	996	
Net BTU Wet Gas - real gas	979	

Comments: H2S Field Content 9 ppm
Mcf/day 3614

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

Corrosion Prevention Plan

Existing Corrosion Prevention Plan

- Produced gas is processed through a gas dehydration unit to remove water.
- Corrosion inhibitor is added to the system downstream of the gas dehydration unit.
- Fluid samples are taken regularly and checked for Fe, Mn, and residual corrosion inhibitor in produced fluids.
- Continuously monitor and adjust the chemical treatment over the life of the well.

Oxy will continue the existing corrosion prevention plan in place for the gas lift system due to the similar nature of gas storage operations.

- Fluid samples will be taken prior to injection to establish a baseline for analysis.
- After a storage event, fluid samples will be taken to check for Fe, Mn, and residual corrosion inhibitor in the produced fluids.
- Continuously monitor and adjust the chemical treatment over the life of the project.





NM GAS STORAGE OPERATIONAL PLAN

Operational Plan

WELLSITE CLGC

Oxy USA Inc. (Oxy) will monitor the following items on each Closed Loop Gas Capture (CLGC) well via SCADA system:

- Injection flow rate and volume
 - Instantaneous Rate
 - Total Injected by Day (volume)
- Tubing Pressure
- Casing Pressure
- Bradenhead Pressures
- Safety devices
 - Pressure kills have an automated kill sequence that is initiated by SCADA system readings.
 - Injection pressure kills on production stream for injection
 - Relief Valves for both production and gas storage/injection streams to prevent overpressure (not monitored via SCADA other than pressure trend)
 - Control of injection rate and pressures via control valve at each well injection stream
 - Control of production stream via automated choke valves to ensure controlled production and prevent over pressurization of flowline

CENTRAL TANK BATTERY (CTB)

Oxy will monitor the following items at each CTB via SCADA system:

- Production Rates
 - Oil
 - Gas
 - Water
- Safety devices
 - Flares at CTBs
 - Injection pressure kills on production/gas storage stream for injection
 - Emergency Shutdown (ESD) of wells that are local and remote for automatic shut downs to safe the system
 - Control of injection rate and pressures via control valve at each well injection stream

CENTRAL GAS LIFT (CGL) COMPRESSOR(S)

Oxy will monitor the following items on each Central Gas Lift (CGL) Compressor Station via SCADA system:

- Safety devices
 - Discharge/injection pressure kills of each compressor and for the station
 - Relief Valves on 3rd stage of compressors, to prevent over pressurization (not monitored via SCADA other than pressure trend)
 - Station recycle valves (that recycle discharge pressure back to suction) if the pressure is getting too high for the compressor or station. (not all control valves are capable of

remote monitoring of valve position; but still monitored in some sense of the pressure trend for the station)

SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA)

Oxy SCADA system consists of PLCs at each CTB, Wellsite, and Central Gas Lift compressor or station.

- The Programmable Logic Controller (PLCs) will take action immediately (within seconds or minutes) as programmed to automatically safe the system as required; for the system and certain device shut down(s).
- The High Alarms and High-High Alarms will be logged and registered in the SCADA system. Also the call center will take the High Alarm and make the physical phone call notification to the production techs to acknowledge the alarm & take action.

ENVIRONMENTAL/SPILL RESPONSE

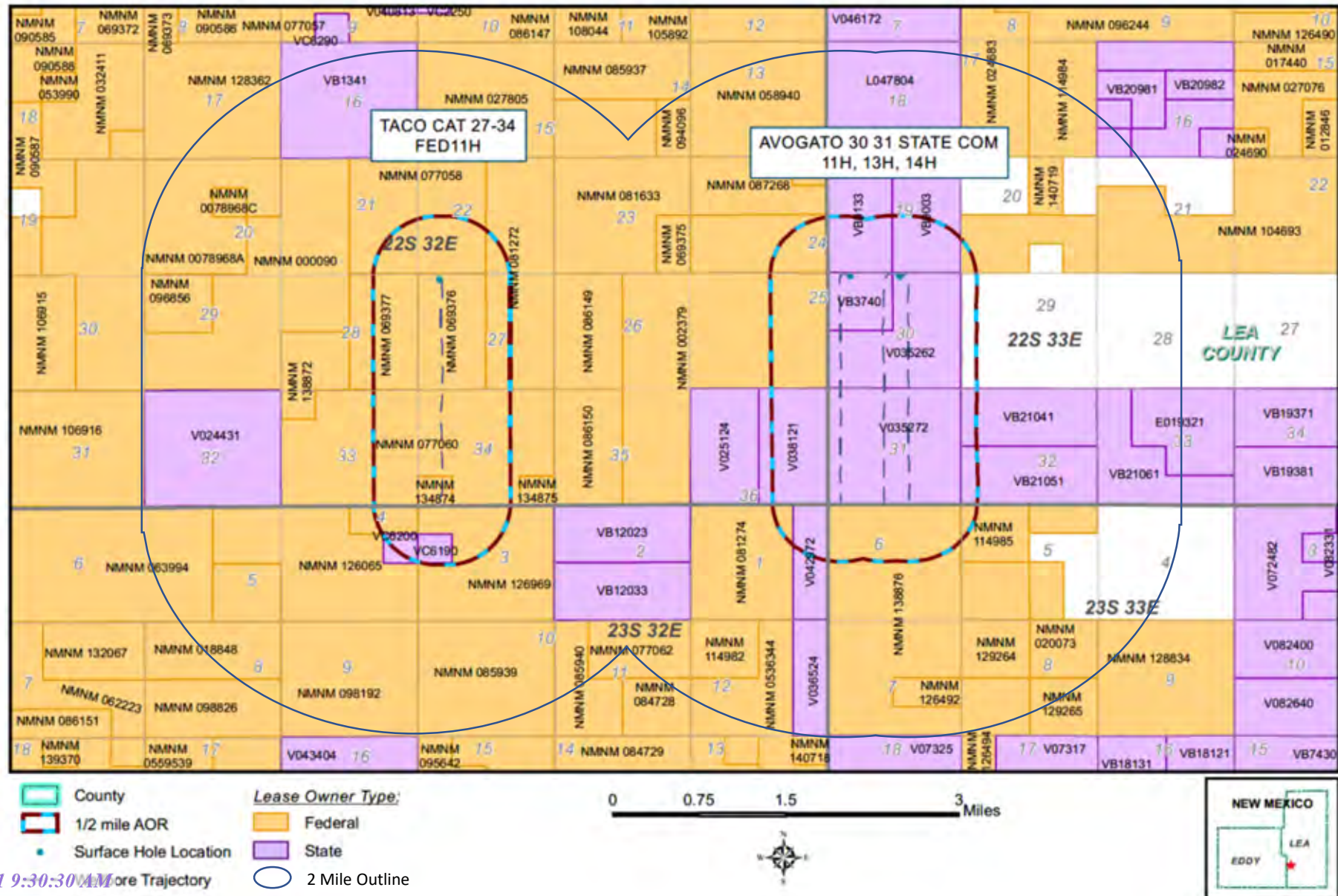
Oxy will report and track any spill recordable or non-recordable via our CDR system

- Any spill or gas release will be reported by operations calling in to our Call Center to make the report of spill/release. The fluid type and release amount will be disclosed along with location details; and if it's a recordable or non-recordable spill.
- Liquids will be contained and isolated and vacuum trucks will be called in to recover the liquid and will also report the amount of liquid recovered on the same CDR spill form.
 - Additional reclamation will be coordinated to ensure proper recovery of contaminated soil and liquid.

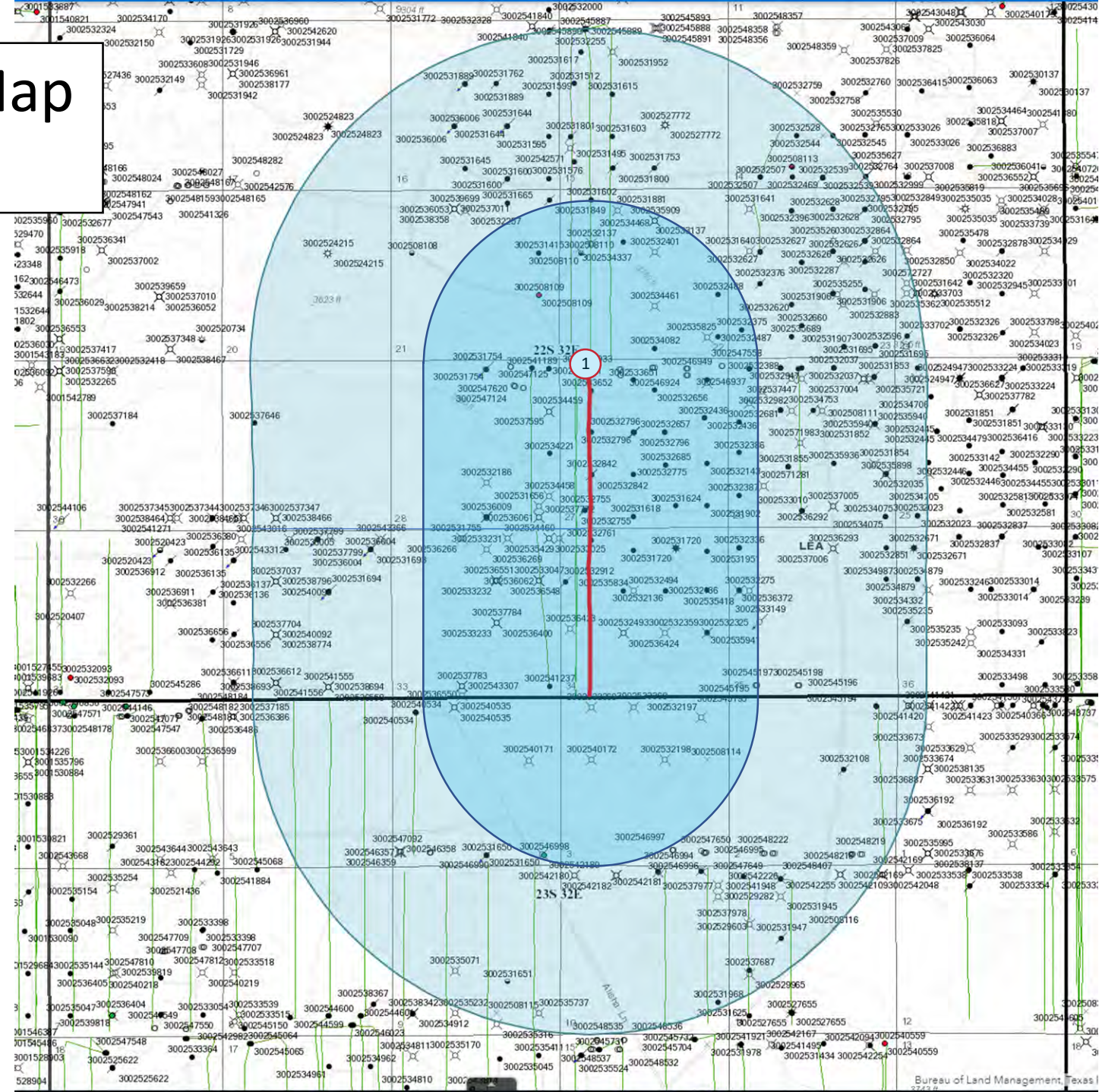
Area of Review



NENM GAS LIFT NETWORK LEA COUNTY, NEW MEXICO



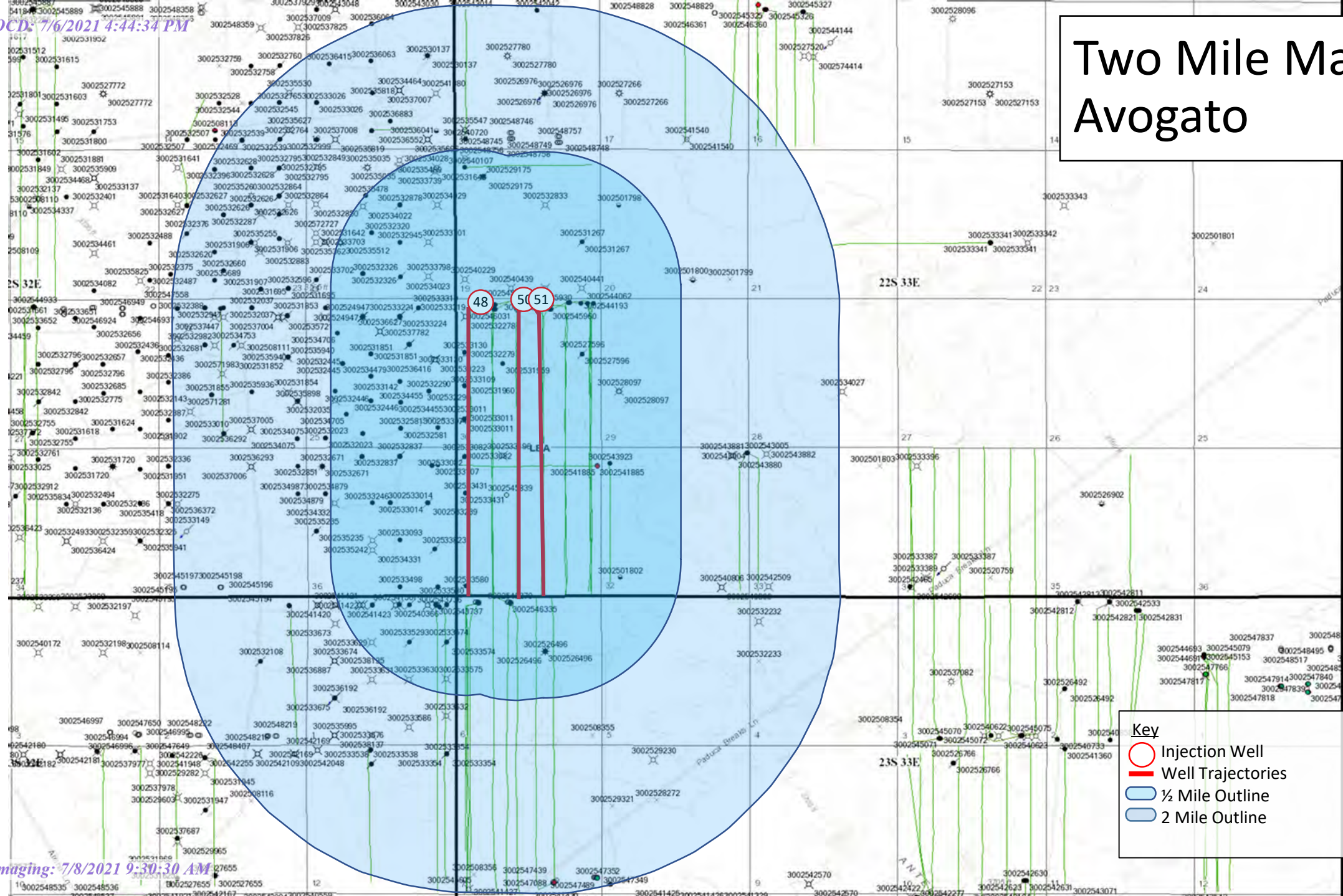
Two Mile Map Taco Cat

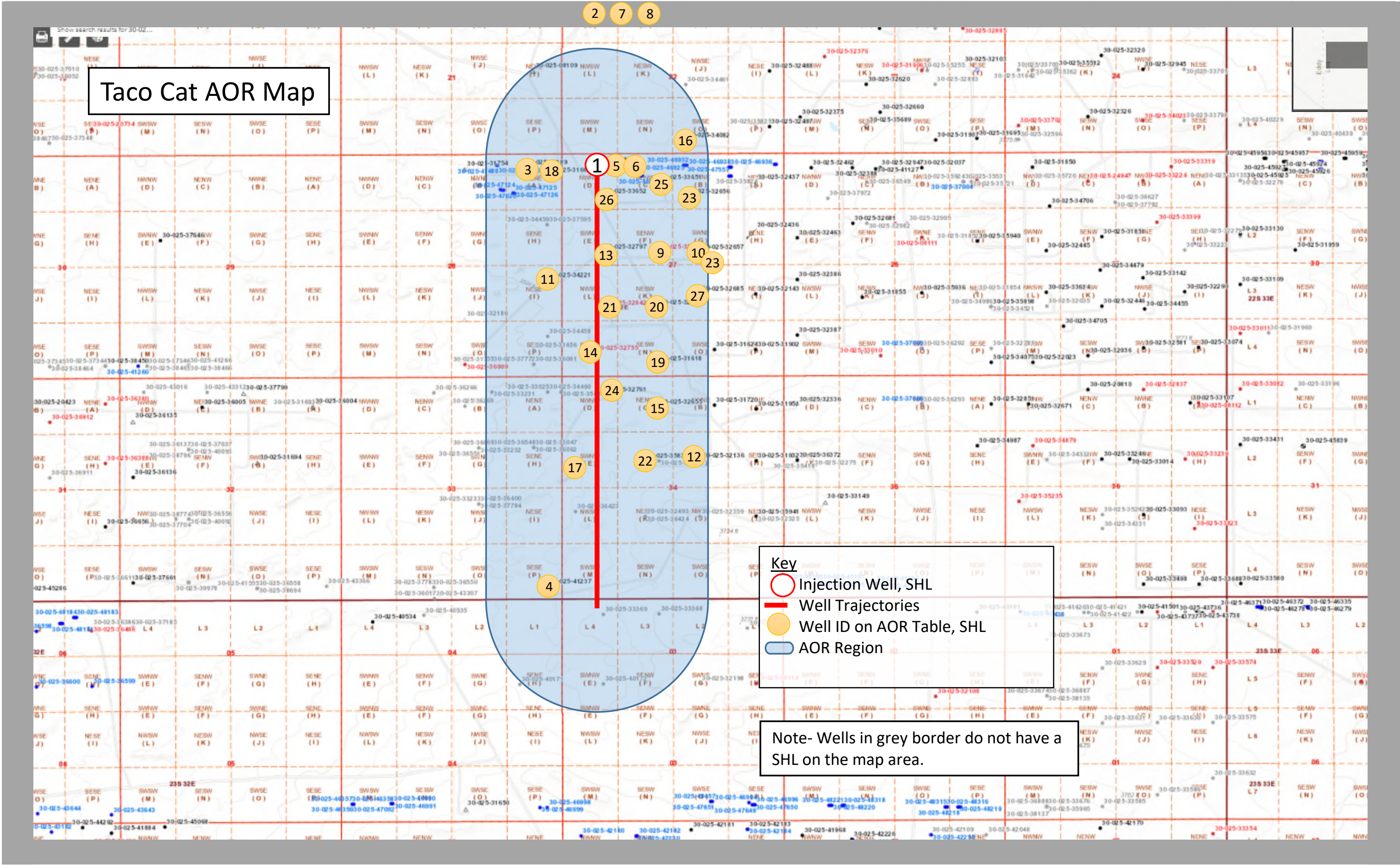


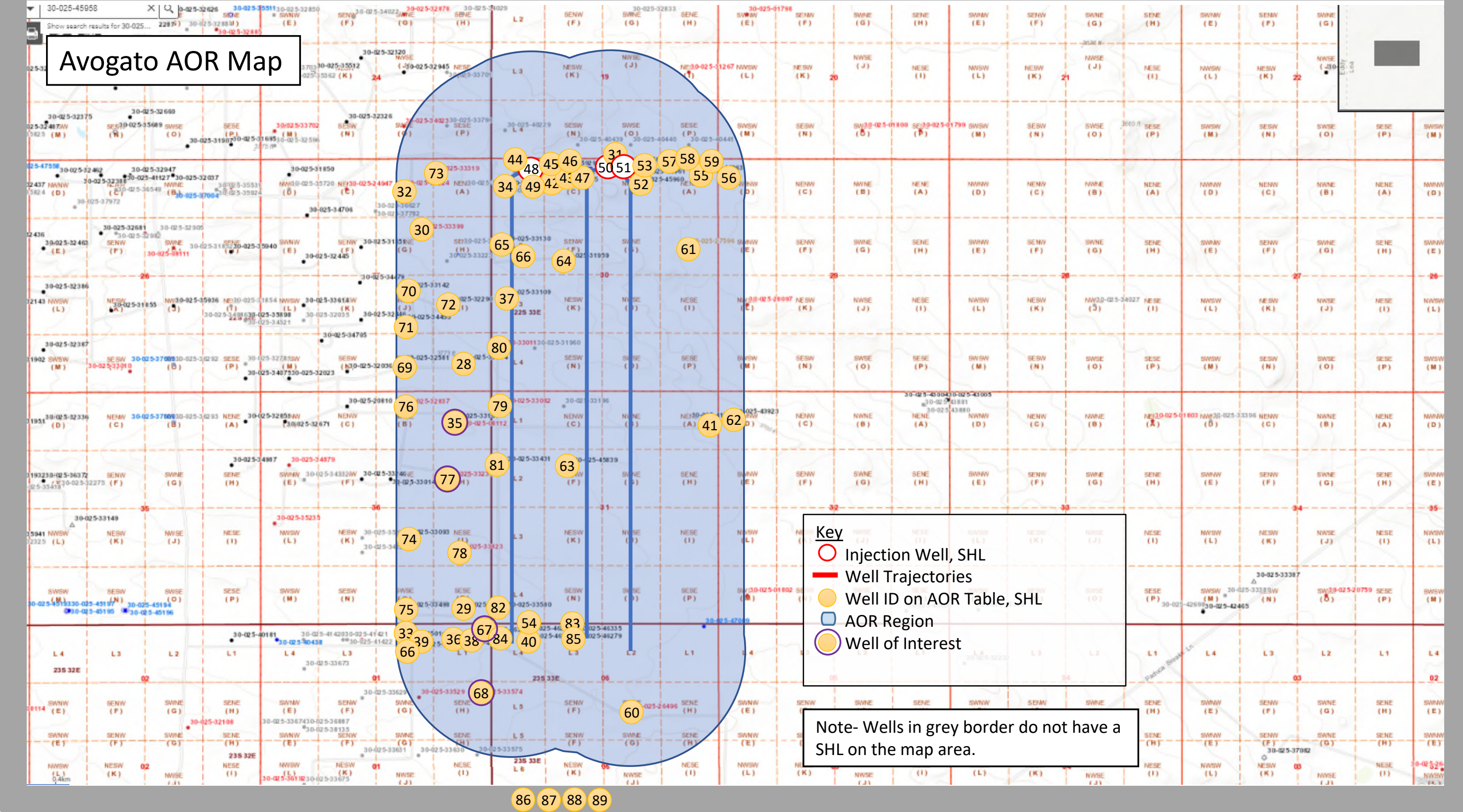
- Key**
- Injection Well
 - Well Trajectories
 - 1/2 mile Outline
 - 2 Mile Outline

Key

- Injection Well
- Well Trajectories
- ½ Mile Outline
- 2 Mile Outline







Well ID	API NUMBER	Current Operator	LEASE NAME	WELL NUMBER	Well Type:	Status:	Footages		Footages		E/W	Surface Location	Surface Location	Surface Location	Surface Location	Spud:	True Vertical Depth [ft]	Measured Depth [ft]	HOLE SIZE [in]	CSG SIZE [in]	SET AT [ft]	SX CMT	CMT TO WELLFILE [ft]	HOW MEASUR ED	Current Completion [ft]	Comment	Current Producing Pool
1	30-025-44933	OXY USA INC	TACO CAT 27 34 FEDERAL COM	011H	Oil	Active	260	N		855	W	D		27	22S	32E	7/29/2018	9514	19732	17.5 9.875 8.75	13.375 7.625 5.5	867 8810 19703	800 2225 705	0 Circ 204 Calc 5800 CBL	9445-19621		[51683] RED TANK; BONE SPRING
2	30-025-45892	MARATHON OIL PERMIAN LLC	FRIZZLE FRY 15 WXY FEDERAL COM	007H	Oil	Active	274	N		852	W	D		15	22S	32E	8/13/2019	12111	22217	17.5 12.25 8.75 8.75	13.375 9.625 7 5.5	1074 8906 11794 22196	920 2050 890 3740	0 Circ 0 Calc 0 Circ 2179 Calc	12320-22126	Top of 5.5" liner 11794'	[98258] WC-025 S223203A; LWR WOLFCAMP (GAS)
3	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	1.75 8.625 5.5	927 4650 13270	690 1120 1590	0 Circ 0 Circ 0 Circ	8602-13122		[51689] RED TANK; DELAWARE, WEST
4	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
5	30-025-44934	OXY USA INC	TACO CAT 27 34 FEDERAL COM	021H	Oil	Active	260	N		785	W	D		27	22S	32E	7/27/2018	10849	20904	17.5 12.25 8.5	13.375 9.625 5.5	858 6484 20882	1100 1685 2335	0 Circ 0 Circ 0 Circ	10699-20791		[51683] RED TANK; BONE SPRING
6	30-025-44935	OXY USA INC	TACO CAT 27 34 FEDERAL COM	031H	Oil	Active	260	N		820	W	D		27	22S	32E	7/25/2018	12205	22168	17.5 12.25 8.5 6.75	13.375 9.625 7.625 5.5	825 8619 11075 22144	1140 2265 155 700	0 Circ 0 Circ 6800 Calc 10500 Calc	11982-22029		[98286] WC-025 G-08 S223227D; UPPER WOLFCAM
7	30-025-45887	MARATHON OIL PERMIAN LLC	FRIZZLE FRY 15 TB FEDERAL COM	001H	Oil	Active	273	N		792	W	D		15	22S	32E	8/15/2019	11967	21990	17.5 12.25 8.75	13.375 9.625 5.5	1061 8910 21977	940 2050 890	0 Circ 2476 Calc 0 Circ	12024-21908		[51683] RED TANK; BONE SPRING
8	30-025-45890	MARATHON OIL PERMIAN LLC	FRIZZLE FRY 15 WA FEDERAL COM	002H	Oil	Active	273	N		762	W	D		15	22S	32E	8/16/2019	12115	22467	17.5 12.25 8.75 6.125	13.375 9.625 7 4.5	1086 8914 12527 22457	940 3240 1000 1005	0 Circ 0 Circ 0 Circ 11762 Circ	12606-22334	Top of 4.5" liner 11762'	[98166] WC-025 G-09 S233216K; UPR WOLFCAMP
9	30-025-32796	OXY USA INC	FEDERAL 27	004	Oil	PA	2310	N		2310	W	F		27	22S	32E	8/9/1996	8730	8730	14.75 9.875 6.75	10.75 7.625 4.5	805 4464 8730	780 1230 1095	0 Circ 0 Circ 2800 Calc	N/A		N/A
10	30-025-32657	OXY USA INC	PRIZE FEDERAL	007	Oil	Active	2310	N		1980	E	G		27	22S	32E	7/6/1996	8715	8715	14.75 9.875 6.75	10.75 7.625 4.5	830 4490 8715	780 1200 1080	0 Circ 0 Circ 3550 Calc	8364-8416		[51689] RED TANK; DELAWARE, WEST
11	30-025-34221	OXY USA INC	RED TANK 28 FEDERAL	006	Oil	Active	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
12	30-025-32136	OXY USA INC	RED TANK 34 FEDERAL	004	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
13	30-025-32797	OXY USA INC	FEDERAL 27	005	Oil	Active	2310	N		990	W	E		27	22S	32E	11/11/1996	8714	8714	14.75 9.875 6.75	10.75 7.625 4.5	808 4450 8714	700 1200 900	0 Circ 0 Circ 2990 Calc	7188-7204; 7299-7310; 7638-7690; 8356-8378		[51689] RED TANK; DELAWARE, WEST
14	30-025-32755	OXY USA INC	FEDERAL 27	008	Oil	PA	580	S		790	W	M		27	22S	32E	6/9/1995	8732	8732	14.75 9.875 6.75	10.75 7.625 4.5	822 4250 8732	800 1400 875	0 Circ 0 Circ 2030 Calc	N/A		N/A
15	30-025-32655	OXY USA INC	RED TANK 34 FEDERAL	014	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
16	30-025-34082	OXY USA INC	PRIZE FEDERAL	011	Oil	Active	330	S		2310	E	O		22	22S	32E	8/19/1997	8780	8780	14.75 9.875 6.75	10.75 7.625 4.5	802 4500 8780	800 1550 1255	0 Circ 0 Circ 2250 Calc	7000-7168; 8360-8440		[51689] RED TANK; DELAWARE, WEST
17	30-025-32912	OXY USA INC	RED TANK 34 FEDERAL	015	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
18	30-025-31661	OXY USA INC	RED TANK 28 FEDERAL	001	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
19	30-025-31618	OXY USA INC	FEDERAL 27	001	Oil	Active	330	S		2310	W	N		27	22S	32E	6/18/1992	8850	8850	17.5 11 7.875	13.375 8.625 5.5	850 4600 8850	1060 2158 2360	0 Circ 0 Circ 2360 Calc	8330-8391		[51689] RED TANK; DELAWARE, WEST
20	30-025-32775	OXY USA INC	FEDERAL 27	007	Oil	Active	1650	S		2310	W	K		27	22S	32E	7/8/1995	8734	8734	14.75 9.875 6.75	10.75 7.625 4.5	805 4470 8734	700 1400 980	0 Circ 0 Circ 1775 Calc	8370-8470		[51689] RED TANK; DELAWARE, WEST
21	30-025-32842	OXY USA INC	FEDERAL 27	006	Oil	PA	1650	S		990	W	L		27	22S	32E	10/11/1995	8700	8700	14.75 9.875 6.75	10.75 7.625 4.5	825 4440 8700	600 1300 1000	0 Circ 0 Circ 2358 Calc	N/A		N/A
22	30-025-35834	OXY USA INC	RED TANK 34 FEDERAL	012	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
23	30-025-32656	OXY USA INC	PRIZE FEDERAL	006	Oil	Active	990	N		2310	E	B		27	22S	32E	1/27/1997	8756	8756	14.75 9.875 6.75	10.75 7.625 4.5	830 4486 8756	800 1450 780	0 Circ 0 Circ 3280 Calc	8346-8360		[51689] RED TANK; DELAWARE, WEST
24	30-025-32761	OXY USA INC	RED TANK 34 FEDERAL	013	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
25	30-025-33651	OXY USA INC	FEDERAL 27	003	Oil	Active	660	N		2310	W	C		27	22S	32E	12/27/1997	8800	8800	14.75 9.875 6.75	10.75 7.625 4.5	804 4470 8800	800 1500 1440	0 Circ 0 Circ 2594 Calc	6987-7150		[51689] RED TANK; DELAWARE, WEST

26	30-025-33652	OXY USA INC	FEDERAL 27	002	Oil	Active	990 N	990 W	D	27 22S	32E	6/8/1998	8653	8653	14.75 9.875 6.75	10.75 7.625 4.5	804 4460 8653	750 1150 1080	0 Circ 0 Circ 2650 Calc	7184-7678	[51689] RED TANK; DELAWARE, WEST	
27	30-025-32685	OXY USA INC	PRIZE FEDERAL	008	Oil	Active	1980 S	1980 E	J	27 22S	32E	12/7/1995	8750	8750	14.75 9.875 6.75	10.75 7.625 4.5	803 4510 8750	550 1275 1050	0 Circ 0 Circ 3504 Calc	8376-8400	[51689] RED TANK; DELAWARE, WEST	
28	30-025-33074	OXY USA INC	COVINGTON A FEDERAL	011	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	
29	30-025-33688	EOG RESOURCES INC	MULE DEER 36 STATE	007	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	
30	30-025-33399	OXY USA INC	COVINGTON A FEDERAL	014	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	
31	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; 9.8: 6.75	13.375 7.625 5.5	1050 11336 22103	1340 4119 831 11457'	0 Circ 0 Circ Calc	11819'-22000'	[51687] RED TANK; BONE SPRING, EAST	
32	30-025-33224	OXY USA INC	COVINGTON A FEDERAL	016	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	
33	30-025-33370	CIMAREX ENERGY CO.	THYME APY FEDERAL	001	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 CALC	N/A	N/A	
34	30-025-45924	OXY USA INC	AVOGATO 30 31 STATE COM	021H	Oil	Active	420 N	1350 W	C	30 22S	33E	7/13/2019	10755	20863	17.5 12.25 8.5 8.5	13.375 9.625 7 5.5	1052 6425 10106 20875	1340 1213 2569 2569	0 Circ 0 Circ 4900 Calc 4900 Calc	10951'-20804'	5.5" Liner from 10106'-20875'	[51687] RED TANK; BONE SPRING, EAST
35	30-025-33107	EOG RESOURCES INC	MULE DEER 36 STATE	004	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
36	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
37	30-025-33109	OXY USA INC	RED TANK 30 STATE	002	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	
38	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	
39	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	
40	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	
41	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	
42	30-025-45925	OXY USA INC	AVOGATO 30 31 STATE COM	022H	Oil	Active	420 N	1385 W	C	30 22S	33E	7/10/2019	10891	21097	17.5 12.25 8.5	13.375 9.625 5.5	1050 6465 21073	1340 1207 2892	0 CIRC 0 CIRC 5900 CALC	10982'-21006'	[51687] RED TANK; BONE SPRING, EAST	
43	30-025-45926	OXY USA INC	AVOGATO 30 31 STATE COM	023H	Oil	Active	420 N	1420 W	C	30 22S	33E	7/8/2019	10769	20969	17.5 12.25 8.5	13.375 9.625 5.5	1050 6450 20956	1340 1210 2710	0 CIRC 0 CIRC 5950 CALC	10853'-20877'	[51687] RED TANK; BONE SPRING, EAST	
44	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	
45	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	
46	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 8.5 6.75	13.375 9.625 7.625 5.5	1050 6422 11265 22122	1340 1620 255 795	0 CIRC 0 CIRC 5900 CALC 5900 CALC	11886'-22109'	[51687] RED TANK; BONE SPRING, EAST	
47	30-025-45931	OXY USA INC	AVOGATO 30 31 STATE COM	035H	Oil	Active	240 N	1785 E	B	30 22S	33E	6/22/2019	12139	22280	17.5 12.25 6.75	13.375 7.625 5.5	1050 11544 22265	1340 2819 790	0 CIRC 673 CALC 9185 CALC	12117'-22118'	[98177] WC-025 G-09 S223332A; UPR WOLFCAMP	
48	30-025-45956	OXY USA INC	AVOGATO 30 31 STATE COM	011H	Oil	Active	160 N	885 W	D	30 22S	33E	9/8/2019	9426	19645	17.5 12.25 8.5	13.375 9.625 5.5	1049 8850 19614	1340 2149 2150	0 CIRC 0 CIRC 8322 CBL	9558'-19537'	[51687] RED TANK; BONE SPRING, EAST	
49	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'	[51687] RED TANK; BONE SPRING, EAST	
50	30-025-45958	OXY USA INC	AVOGATO 30 31 STATE COM	013H	Oil	Active	160 N	2375 E	B	30 22S	33E	8/23/2019	9397	19645	17.5 12.25 8.5	13.375 9.625 5.5	1060 8910 19631	1340 1600 2150	0 CIRC 0 CIRC 8380 CBL	9752'-19532'	[51687] RED TANK; BONE SPRING, EAST	
51	30-025-45959	OXY USA INC	AVOGATO 30 31 STATE COM	014H	Oil	Active	160 N	2340 E	B	30 22S	33E	8/26/2019	9532	19891	17.5 12.25	13.375 9.625	1060 9007	1340 2125	0 CIRC 0 CIRC	9598'-19778'	[51687] RED TANK; BONE SPRING, EAST	

52	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	8.5	5.5	19865	2135	6435 CBL		[51687] RED TANK; BONE SPRING, EAST	
															17.5	13.375	1054	1340	0 CIRC			
															12.25	9.625	6425	1165	0 CIRC			
															8.5	5.5	21051	2485	3170 CALC			
53	30-025-45961	OXY USA INC	AVOGATO 30 31 STATE COM	025H	Oil	Active	420 N	1785 E	B	30 22S	33E	7/18/2019	10785	20988	17.5	13.375	1052	1340	0 CIRC		[51687] RED TANK; BONE SPRING, EAST	
															12.25	9.625	6435	1165	0 CIRC			
															8.5	5.5	20988	2470	3316 CALC			
54	30-025-46372	MATADOR PRODUCTION COMPANY	RODNEY ROBINSON FEDERAL	201H	Oil	Active	240 N	797 W	D	6 23S	33E	10/1/2019	12436	22484	17.5	13.375	1335	1345	0 Circ	12324'-22368'	[98177] WC-025 G-09 S223332A; UPR WOLFCAMP	
															12.25	9.625	5035	1650	0 CIRC			
															8.75	7.625	12531	920	2700 CALC			
															6.75	5.5	22484	1435	0 CIRC			
55	30-025-44161	OXY USA INC	RED TANK 30 31 STATE COM	024Y	Oil	Active	200 N	270 E	A	30 22S	33E	11/21/2017	10863	20600	17.5	13.375	1090	1165	0 CIRC	11300'-20364'	[51687] RED TANK; BONE SPRING, EAST	
															12.25	9.625	6867	2385	0 CIRC			
															8.5	5.5	20590	2260	1865 CALC			
56	30-025-44193	OXY USA INC	RED TANK 30 31 STATE COM	014H	Oil	Active	200 N	710 E	A	30 22S	33E	8/1/2018	9407	19687	17.5	13.375	1072	1450	0 CIRC	9694'-19546'	[51687] RED TANK; BONE SPRING, EAST	
															12.25	9.625	6776	3125	0 CIRC			
															8.5	5.5	19681	2012	0 CIRC			
57	30-025-45923	OXY USA INC	AVOGATO 30 31 STATE COM	004H	Oil	Active	160 N	1120 E	A	30 22S	33E	9/14/2019	10154	20295	17.5	13.375	1037	1340	0 CIRC	10357'-20138'	[51687] RED TANK; BONE SPRING, EAST	
															12.25	7.625	9534	3594	0 CIRC			
															6.75	5.5	20625	922	9029 CALC			
58	30-025-45964	OXY USA INC	AVOGATO 30 31 STATE COM	074H	Oil	Active	160 N	1155 E	A	30 22S	33E	9/15/2019	11405	21667	17.5	13.375	1058	1340	0 CIRC	11772'-21527'	[51687] RED TANK; BONE SPRING, EAST	
															12.25	9.625	7343	1447	0 CIRC			
															8.5	7.625	10562	472	6834 CALC			
															6.75	5.5	21610	858	10446 CALC			
59	30-025-44063	OXY USA INC	RED TANK 30 31 STATE COM	034H	Oil	Active	200 N	470 E	A	30 22S	33E	11/5/2017	11996	21675	17.5	13.375	1094	1100	0 Circ	12133'-21491'	5.5" Casing tie-back @ 0-11001'	[51687] RED TANK; BONE SPRING, EAST
															12.25	9.625	11130	2900	249 CALC			
															8.5	5.5	21665	1750	11001 CALC			
60	30-025-26496	LIME ROCK RESOURCES A, L.P.	PRONGHORN AHO FEDERAL	001	Oil	PA	1980 N	1980 E	G	6 23S	33E	9/30/1979	16160	16160	17.5	13.375	736	750	0 CIRC	N/A	N/A	
															12.25	10.75	5026	1400	0 CIRC			
															9.5	7.625	12174	815	7091 CALC			
															6.5	5	15400	540	11676 CIRC			
61	30-025-27596	OXY USA INC	RED TANK 30 STATE	003	Oil	TA	1980 N	660 E	H	30 22S	33E	10/24/1981	15540	15450	17.5	13.375	711	750	0 CIRC	N/A	N/A	
															12.25	10.75	4848	2050	1150 CALC			
															9.5	7.625	12150	1105	4300 CALC			
62	30-025-43923	EOG RESOURCES INC	FOGHORN 32 STATE COM	209H	Oil	Active	590 N	330 W	D	32 22S	33E	8/28/2017	9456	14259	17.5	13.375	1066	1028	0 CIRC	9626'-14147'	[51687] RED TANK; BONE SPRING, EAST	
															12.25	9.625	4914	1380	0 CIRC			
															8.75	5.5	14247	2156 7300	CALC			
63	30-025-45839	OXY USA INC	AVOGATO 31 STATE	100	Monitor	Active	1702 N	1810 W	F	31 22S	33E	6/16/2019	13900	13900	17.5	13.375	1210	1560	0 CIRC	N/A	Monitor Well; No Perfs	N/A
															12.25	9.625	8825	3380	0 CIRC			
															8.5	4.5	13883	1097	7160 CALC			
64	30-025-31959	WAGNER OIL CO.	BIGHORN 30 STATE	002	Oil	Active	2310 N	1650 W	F	30 22S	33E	7/8/1993	10491	10491	17.5	13.375	500	600	0 CALC	8887-8906	[51687] RED TANK; BONE SPRING, EAST	
															12.25	8.625	4800	2150	0 CALC			
															7.875	5.5	10490	1050	0 CALC			
65	30-025-33130	OXY USA INC	CALMON 30 STATE	001	Oil	Active	1930 N	330 W	E	30 22S	33E	11/27/1995	9000	9000	14.75	10.75	825	575	0 CIRC	8862-8898	[51689] RED TANK; DELAWARE, WEST	
															9.875	7.625	4700	1160	0 CIRC			
															6.75	4.5	9000	920	4300 CALC			
66	30-025-43737	CIMAREX ENERGY CO.	CORIANDER AOC 1-12 STATE	002H	Oil	Active	330 N	710 E	A	1 23S	32E	8/26/2018	9747	19642	17.5	13.375	1295	1635	0 CIRC	9898-19590	[17644] DIAMONDTAIL; BONE SPRING	
															12.25	9.625	4970	1865	0 CIRC			
															8.75	7	8100	3755	0 CIRC			
															8.5	5.5	19642	3755	0 CIRC			
67	30-025-33531	CIMAREX ENERGY CO.	CORIANDER AOC STATE	001	Oil	PA	330 N	330 E	A	1 23S	32E	35302	9121	9121	14.75	11.75	1150	700	0 CIRC	N/A	Well of interest. Delaware and Avalon Sand Perfs in communication	N/A
															11	8.625	4797	1150	0 CIRC			
															7.875	5.5	9121	925	2692 CALC			
68	30-025-33574	EOG Y RESOURCES, INC.	CORIANDER AOC STATE	002	Oil	PA	1650 N	330 E	H	1 23S	32E	35338	9170	9170	14.75	11.75	1153	700	0 CIRC	N/A	Well of interest. Delaware and Avalon Sand Perfs in communication	N/A
															11	8.625	4790	1250	0 CIRC			
															7.875	5.5	9170	1000	0 CALC			
69	30-025-32581	OXY USA INC	COVINGTON A FEDERAL	010	Oil	Active	660 S	1980 E	O	25 22S	32E	5/19/1995	8990	8990	17.5	13.375	811	900	0 CIRC	8526-8548; 8343-8374; 8058-8083; 7935-7942; 6998-7030; 5018-5028	[51689] RED TANK; DELAWARE, WEST	
															11	8.625	4720	1800	0 CIRC			
															7.875	5.5	8990	1650	1500 CALC			
70	30-025-33142	OXY USA INC	COVINGTON A FEDERAL	013	Oil	Active	2310 S	1980 E	J	25 22S	32E	12/27/1995	9000	9000	14.75	10.75	804	600	0 CIRC	8536-8556; 8366-8386; 7930-7942; 7000-7018	[51689] RED TANK; DELAWARE, WEST	
															9.625	7.625	4695	1300	0 CIRC			
															6.75	4.5	9000	915	2760 CALC			
71	30-025-34455	OXY USA INC	COVINGTON A FEDERAL	037	Oil	Active	1575 S	1950 E	J	25 22S	32E	9/16/1999	8960	8960	14.75	10.75	855	800	0 CIRC	8608-8628; 8104-8124; 7822-7936;	[51689] RED TANK; DELAWARE, WEST	
															9.875	7.625	4710	1880	0 CIRC			
															6.75	4.5	8960	1105	3600 CALC			
72	30-025-32290	OXY USA INC	COVINGTON A FEDERAL	004	Oil	Active	1980 S	990 E	I	25 22S	32E	1/12/1996	9010	9010	14.75	10.75	790	600	0 CIRC	8536-8556; 8048-8067;	[51689] RED TANK; DELAWARE, WEST	
															9.875	7.625	4700	1500	510 CALC			
															6.75	4.5	9010	615	2990 CALC			
73	30-025-33319	OXY USA INC	COVINGTON A FEDERAL	015	Oil	PA	330 N	1300 E	A	25 22S	32E	7/31/1997	9010	9010	14.75	10.75	831	800	0 CIRC	N/A	N/A	
															9.625	7.625	4705	1600	0 CIRC			
															6.75	4.5	9010	1325	1800 CALC			
74	30-025-33093	EOG RESOURCES INC	MULE DEER 36 STATE	003	Oil	Active	1980 S	1980 E	J	36 22S	32E	9/22/1995	9000	9000	17.5	13.375	854	750	0 CALC	8889-8901	[51683] RED TANK; BONE SPRING	
															12.25	8.625	4684	1600	0 CALC			
															7.875	5.5	9000	1390	0 CALC			

75	30-025-33498	EOG RESOURCES INC	MULE DEER 36 STATE	006	Oil	Active	330 S	1980 E	O	36 22S	32E	8/1/1996	9080	9080	17.5 12.25 7.875	13.375 8.625 5.5	867 4702 9080	750 1400 1020	0 CIRC 0 CIRC 3821 CALC	8922-8957	[51683] RED TANK; BONE SPRING
76	30-025-32837	EOG RESOURCES INC	MULE DEER 36 STATE	001	Oil	PA	330 N	1980 E	B	36 22S	32E	4/7/1995	9018	9018	17.5 12.25 7.875	13.375 8.625 5.5	855 4697 9018	800 1450 1450	0 CIRC 0 CIRC 4800 CALC	N/A	N/A
77	30-025-33239	EOG RESOURCES INC	MULE DEER 36 STATE	005	Oil	PA	1980 N	990 E	H	36 22S	32E	1/14/1996	9024	9024	17.5 12.25 7.875	13.375 8.625 5.5	857 4666 9024	750 1450 950	0 CIRC 0 CIRC 3300 CALC	N/A	Well of Interest. Delaware and Avalon Sand Perfs in communication N/A
78	30-025-33823	EOG RESOURCES INC	MULE DEER 36 STATE	008	Oil	PA	1650 S	770 E	I	36 22S	32E	3/15/1997	9088	9088	12.25 8.75 6.125	9.625 7 4.5	1223 4704 9088	500 1175 310	0 CIRC 35 CALC 6795 CALC	N/A	N/A
79	30-025-33082	OXY USA INC	RED TANK 31 STATE	001	Oil	PA	330 N	330 W	D	31 22S	33E	9/23/1995	9010	9010	14.75 9.875 6.75	10.75 7.625 4.5	816 4740 9010	700 970 780	0 CIRC 0 CIRC 3590 CALC	N/A	N/A
80	30-025-33011	OXY USA INC	RED TANK 30 STATE	001	Oil	PA	990 S	330 W	M	30 22S	33E	7/19/1995	9020	9020	17.5 11 7.875	13.375 8.625 5.5	807 4710 9020	900 1600 1030	0 CIRC 0 CIRC 3580 CALC	N/A	N/A
81	30-025-34331	OXY USA INC	RED TANK 31 STATE	002	Oil	Active	1650 N	330 W	E	31 22S	33E	4/6/2000	9050	9050	14.75 9.875 6.75	10.75 7.625 4.5	822 4730 9050	770 1750 1050	0 CIRC 0 CIRC 3181 CALC		
82	30-025-33580	OXY USA INC	RED TANK 31 STATE	004	Oil	Active	330 S	330 W	M	31 22S	33E	9/30/1996	9100	9100	14.75 9.875 6.75	10.75 7.625 4.5	820 4770 9100	780 1150 775	0 CIRC 0 CIRC 3500 CALC	8550-8566	[51689] RED TANK; DELAWARE, WEST
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	CALC CALC CALC	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	13.375	1385	1210	0 CIRC	12538-22256	[96228] PRONGHORN; BONE SPRING

WELL ID #9

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

String 1

Hole 14-3/4 @ 805'

OD 10-3/4 csg @ 805'

TOC SURF CIRC w/ 780 sx

Perf & Squeeze- 855' w/ 215 sx cmt
CIRC TO SURFPerf & Squeeze- 1310' w/ 30 sx cmt
Top of Plug - 1131'Perf & Squeeze- 2700' w/ 35 sx cmt
Top of Plug - 2511'String 2

Hole 9-7/8 @ 4464'

OD 7-5/8 csg @ 4464'

TOC SURF CIRC w/ 1230 sx

Cement plug top - 4329-4803' w/ 35 sx cmt
Perfs- 4730-4744' squeezed w/ 300 sx cmtCalculated cement plug top - 5783' w/ 35 sx
CIBP - 6322'String 3

6-3/4" hole @ 8730'

OD 4.5 in csg @ 8730'

TOC 2800 ft CBL - 1095 sx

Prod Zone

6372-6748'

7206-7220'

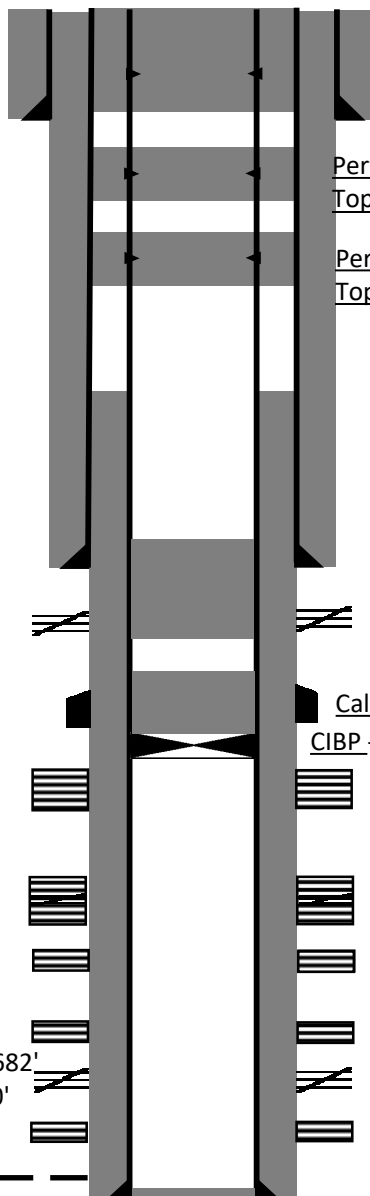
7262-7277' sqz w/ 250 sx cmt

7278-7287'

7412-7425'

7888-7899' sqz w/ 225 sx cmt

8377-8388'

PBTD - 8682'TD - 8730'Proposed Injection Zone Top - 8626'

WELL ID #14

Shaunik Bhatte

3/23/2021

Current Wellbore

Federal 27 008

30-025-32755-0000

Sec 27 T22S R32E SWSW 580 FSL 790 FWL

Lea County, NM

String 1

Hole 14-3/4 @ 822'

OD 10-3/4 csg @ 822'

TOC SURF CIRC w/ 800 sx

Perf & Squeeze- 100' w/ 35 sx cmt
CIRC TO SURFPerf & Squeeze- 1090' w/ 100 sx cmt
Cement plug top - 648'String 2

Hole 9-7/8 @ 4520'

OD 7-5/8 csg @ 4520'

TOC SURF CIRC w/ 1400 sx

Cement plug top - 2328-2771' 25 w/ sx cmtCement plug top - 4188-4590' w/ 30 sx cmtCement plug top - 6212' w/ 40 sx cmt
CIBP - 6806'String 3

6-3/4" hole @ 8732'

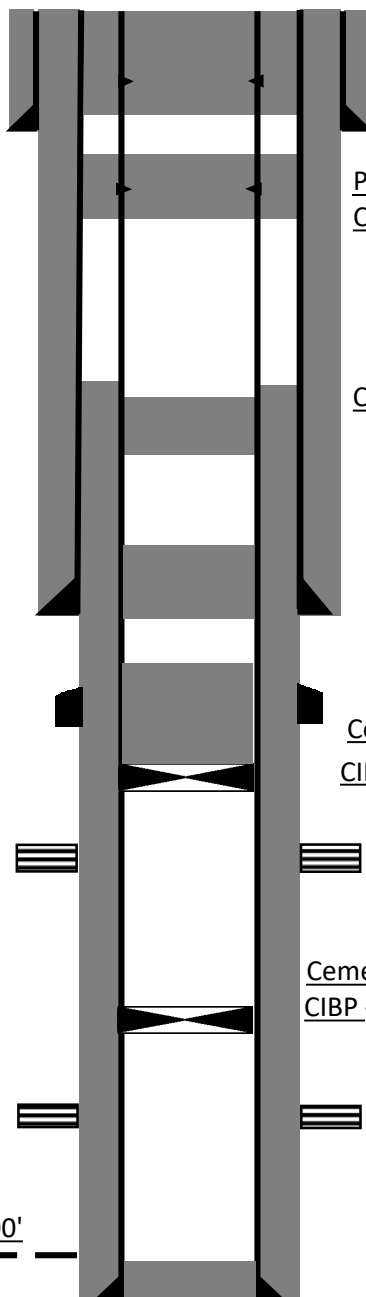
OD 4.5 in csg @ 8732'

TOC 2030 ft CBL - 875 sx

Cement plug top - 7924' w/ 25 sx
CIBP - 8303'PBTD - 8685'TD - 8732'Proposed Injection Zone Top - 8600'Prod Zone

6856-6874'

8353-8386'



WELL ID #17

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 cmt

Cement plug top - 6013-6495' w/ 25 sx cmt

String 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 cmt

CIBP - 7150'

Prod Zone

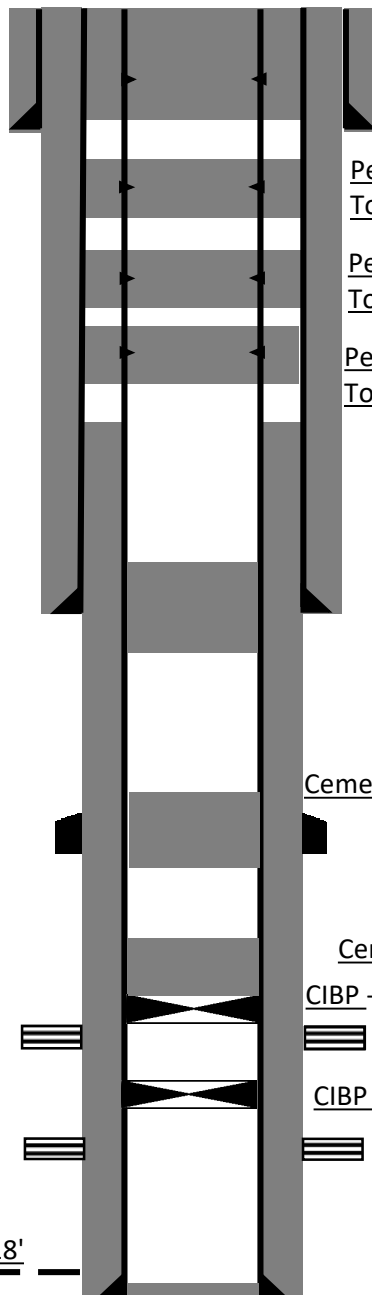
7197-7210'

8376-8410'

CIBP - 8244'

PBTD - 8695'

TD - 8742'

Proposed Injection Zone Top - 8618'

WELL ID #21

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'

WELL ID #30

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 SURFString 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'

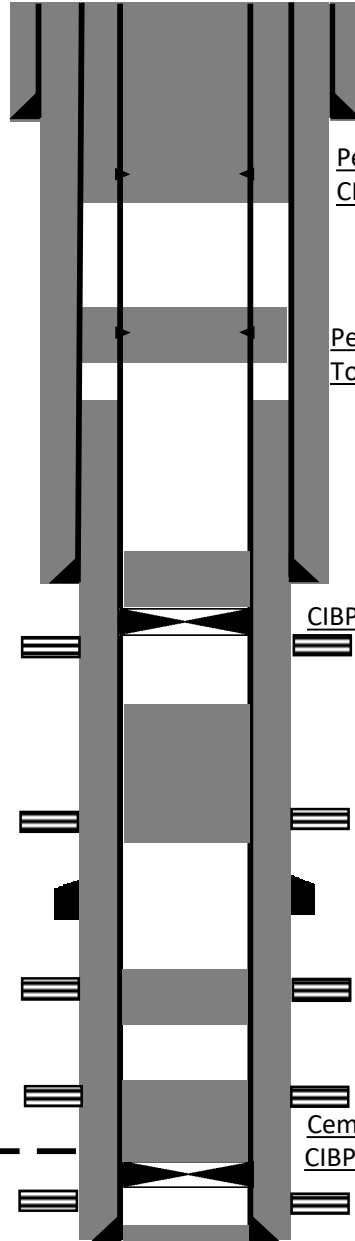
8836-8855'

Cement plug top - 4380' w/ 35 sx cmtCIBP - 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 expectedProposed Injection Zone - 8700'Cement plug top - 8496' w/ 25 sx cmt
CIBP - 8800'PBTD - 8919'TD - 8966'

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 cmtCIRC TO SURFString 2

Hole 9-7/8 @ 4695'

OD 7-5/8 csg @ 4695'

TOC SURF CIRC w/ 1125 sx

Perf & Squeeze- 2780' w/ 50 sx cmtTop of Plug - 2590'Perf & Squeeze- 5055' w/ 100 sx cmtTop of Plug - 4603'Cement plug - 5490' - 5670'Holes - 5574-5602'Prod Zone

6304-6322'

6990-7014'

7338-7348'

7944-8086'

8647-8674'

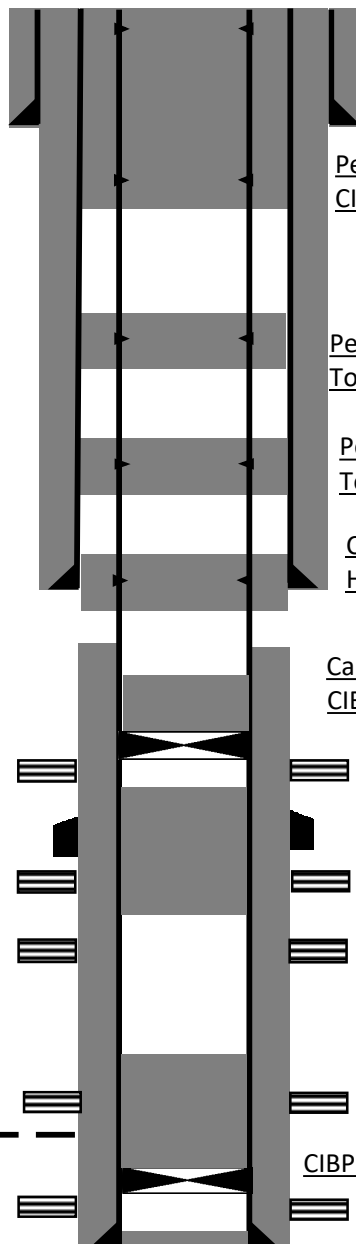
8864-8888'

Calculated cement plug top - 5875' w/ 25 sx cmtCIBP - 6254'Cement plug - 6387'-6766' w/ 25 sx cmtString 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'TD - 8980'

Well ID #39

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 cmtString 2

Hole 11" @ 4790'

OD 8-5/8 csg @ 4790'

TOC SURF CIRC w/ 1175 sx

Cement plug top - 1052-1345' w/ 90 sx cmtCement plug top - 2572-2760' w/ 45 sx cmtCut and Pull 5.5" Casing - 2700'Cement plug top - 4624-5020' w/ 60 sx cmtString 3

7-7/8" hole @ 10250'

OD 5-1/2 in csg @ 10250'

TOC 3000 ft CBL - 1075 sx

Cement plug on top w/ 25 sx cmtProposed Injection Zone Top - 8825'CIBP - 8900'Prod Zone

8966-9008' - Bone Spring perfs

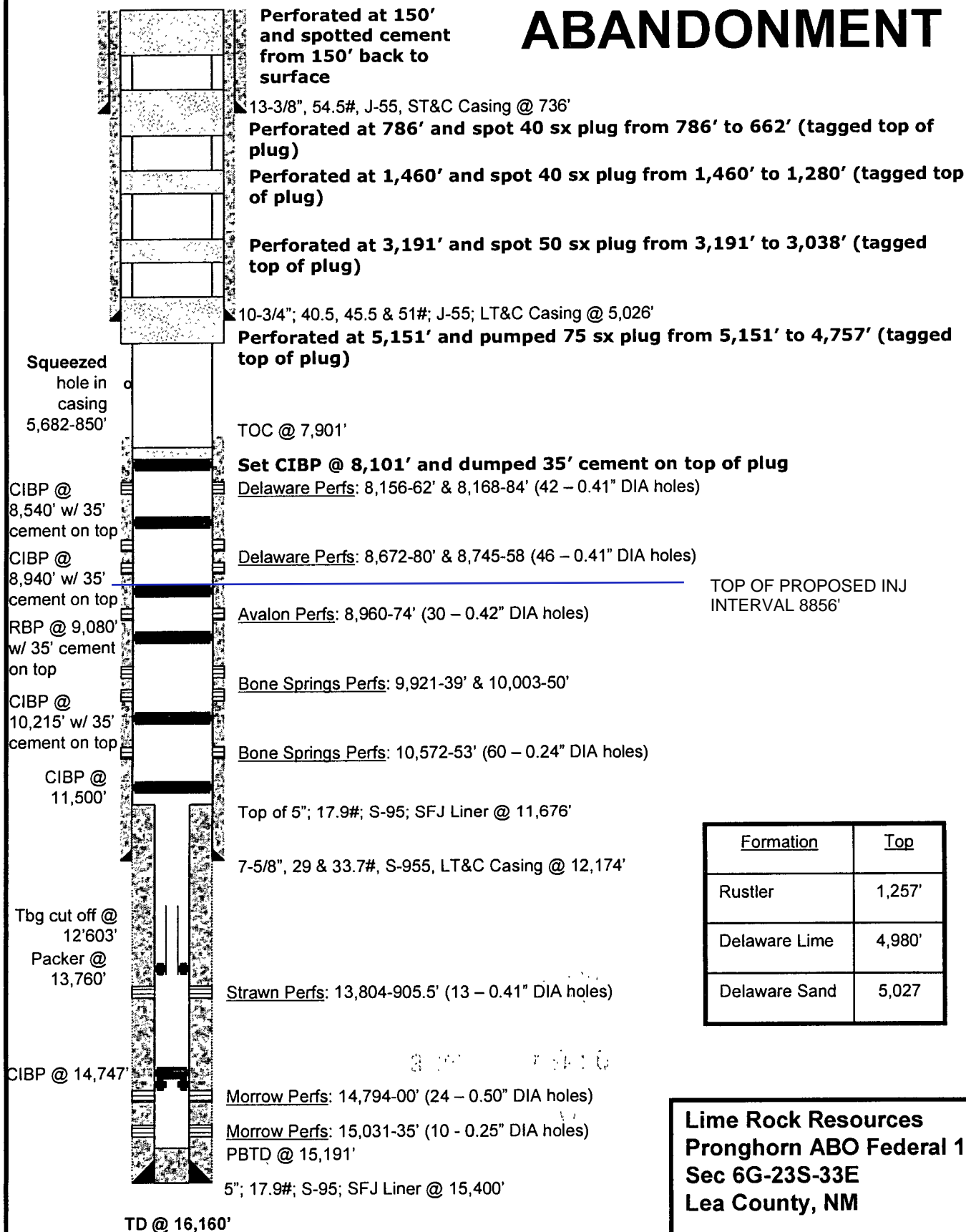
10029-10071' - Bone Spring perfs

Cement plug top - 9915'CIBP - 9950'PBTD - 10162'TD - 10250'

WELL ID #60



FINAL ABANDONMENT



**Lime Rock Resources
Pronghorn ABO Federal 1
Sec 6G-23S-33E
Lea County, NM**

WELL ID #61

Shaunik Bhatte

3/24/2021

Current Wellbore

Red Tank 30 State 3

30-025-27596-0000

Sec 30 T22S R33E 19800 FNL 660 FEL

Lea County, NM

String 1

Hole 17-1/2 @ 711'

OD 13-3/8 csg @ 711'

TOC SURF CIRC w/ 750 sx

String 2

Hole 12-1/4 @ 4848'

OD 10-3/4 csg @ 4848'

TOC 1150' w/ 2050 sx

String 3

9-1/2" hole @ 12,150'

OD 7-3/8 in csg @ 12,150'

Casing cut and pulled

Casing stub at 7693'

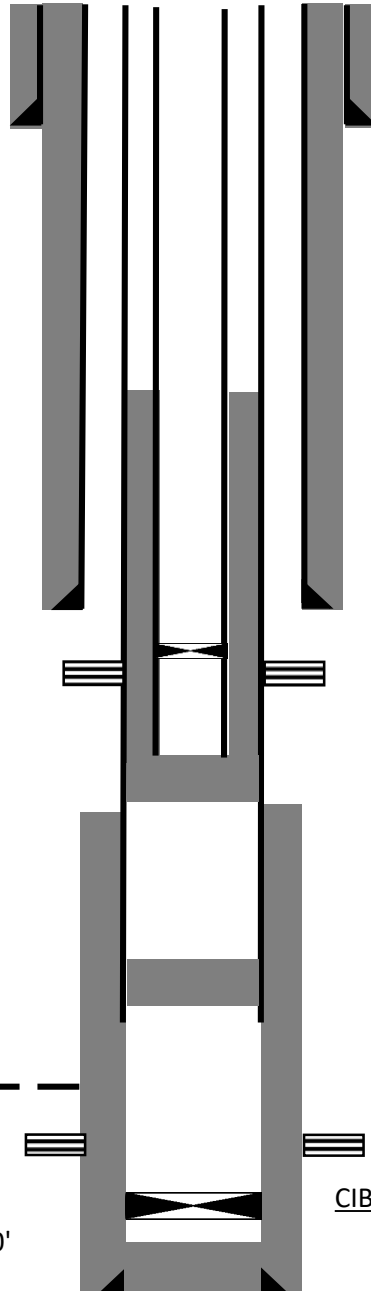
TOC 5840' (CALC) w/ 1105 sx

String 4

9-1/2 hole @ 5290'

OD 5-1/2 in csg @ 5290'

TOC 3900' (CALC) w/ 575 sx

CIBP - 4900'Prod Zone

4946'-4963'

Cement plug top- 5212' w/ 125 sx
cmt, Bottom calc - 5823'Cement plug - 7588-7768' w/ 100 sx cmtProposed Injection Zone Top - 8746'Prod Zone

10563'-10620'

CIBP - 10500'PBTD - 12050'TD - 15,450'

WELL ID #67

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 cmtCIRC TO SURFCement plug - 1045-1330' w/ 90 sx cmtString 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 cmtCement plug - 4610'-5004' w/ 60 sx cmtString 3

7-7/8" hole @ 9121'

OD 5.5 in csg @ 9121'

TOC 2692 ft CBL - 925 sx

Cement plug top - 8320' w/ 25 sxCIBP - 8500'Proposed Injection Zone Top - 8821'Prod Zone

8534'-8590' Delaware Perfs

8968-9010' Bone Spring Perfs

PBTD - 9044'TD - 9121'

WELL ID #68

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 cmtCIRC TO SURFPerf casing @ 400'Cement plug top- 1074 w/ 120 sx cmtPerf 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 cmtCement plug - 4677'-4840' w/ 50 sx cmtString 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'

WELL ID #73

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 cmtCIRC TO SURFString 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 cmtCasing 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 cmtCasing Damage Squeezed- 7035'-7064'Prod Zone

8090'-8103'

8500'-8688'

8876'-8896'

Proposed Injection Zone - 8758'Cement plug top - 7548' w/ 25 sx cmtCIBP - 8847'PBTD - 8977'TD - 9010'

WELL ID #76

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

String 1

Hole 17-1/2 @ 855'

OD 13-3/8 csg @ 855'

TOC SURF CIRC w/ 800 sx

Perf and Squeeze @ 155'CIRC TO SURF 45 SXString 2

Hole 12-1/4 @ 4697'

OD 8-5/8 csg @ 4697'

TOC SURF CIRC w/ 1450 sx

Perf and Squeeze @ 905'Cement plug top - 788' w/ 45 sxsCIBP set @ 4920'Cement plug top - 4470' w/ 25 sxsString 3

7-7/8" hole @ 9018'

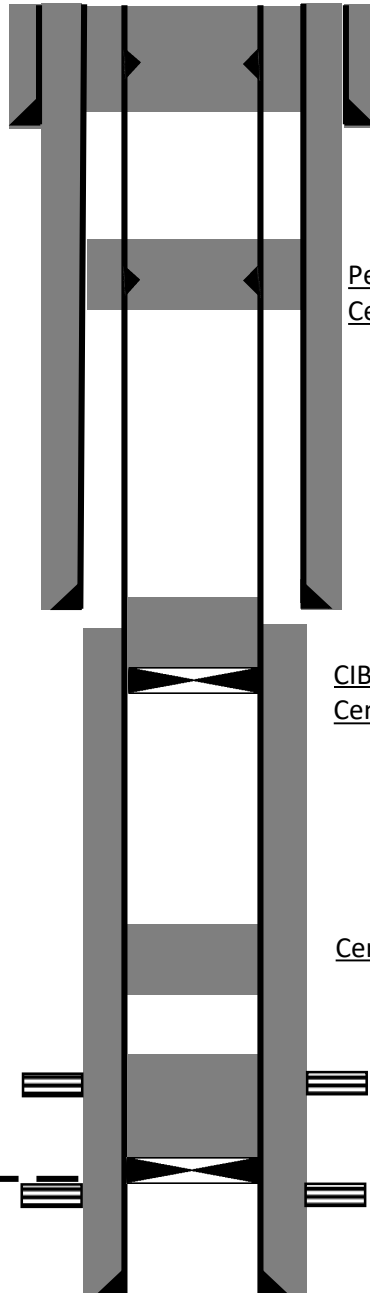
OD 5-1/2 in csg @ 9018'

TOC 4800 ft CBL - 1450 sx

Cement plug - 6431-6613' w/ 25 sxsCIBP set @ 8750'Cement plug top - 8406' w/ 25 sxsProd Zone

8472-8611' (Delaware)

8816-8860' (Bone Spring)

Proposed Injection Zone Top - 8709'PBTD - 8976'TD - 9018'

WELL ID #77

Shaunik Bhatte

5/5/2021

Current Wellbore

Mule Deer 36 State 5

30-025-33239-0000

Sec 36 T22S R32E 1980 FNL 990 FEL

Lea County, NM

String 1

Hole 17-1/2 @ 857'

OD 13-3/8 csg @ 857'

TOC SURF CIRC w/ 750 sx

Perf and Squeeze @ 150'CIRC TO SURF 35 SXString 2

Hole 12-1/4 @ 4666'

OD 8-5/8 csg @ 4666'

TOC SURF CIRC w/ 1450 sx

Perf and Squeeze @ 907'Cement plug top - 746' w/ 45 sxsCement plug bottom - 4523-4731' w/ 25 sxsString 3

7-7/8" hole @ 9024'

OD 5-1/2 in csg @ 9024'

TOC 3300 ft CBL - 950 sx

Cement plug bottom - 6574' w/ 25 sxsCement plug top unknown ~6375'CIBP set @ 8400'CIBP set @ 8480'Proposed Injection Zone Top - 8850'Prod Zone

8485-8540' (Delaware)

8856-8903' (Bone Spring)

PBTD - 8960'TD - 9024'

Well ID #78

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

Cement plug bottom - 50'CIRC TO SURF 20 SXCement plug bottom - 410' w/ 30 sxs
(unknown top)Cement plug - 1160-1273' w/ 35 sxsString 2

Hole 8-3/4 @ 4704'

OD 7 csg @ 4704'

TOC @ 35' w/ 1175 sx

Cement plug - 4396'-4762' w/ 120 sxsString 3

6-1/8" hole @ 9088'

OD 4-1/2 in csg @ 9088'

TOC 6795 ft CBL - 310 sx

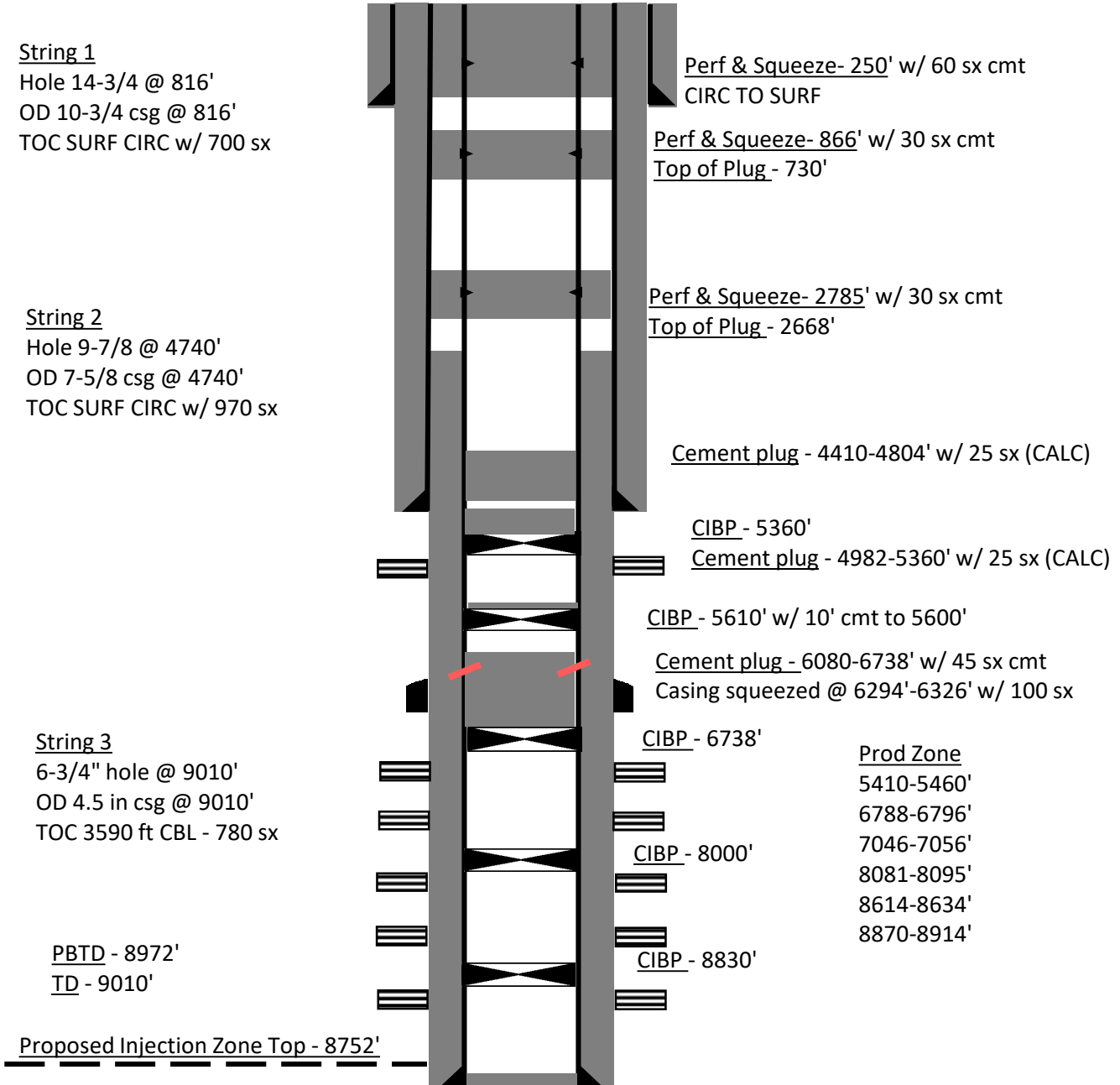
Casing cut and pulled @ 5700'Cement plug- 5621'-6249' w/ 60 sxsPlug Top @ 8606' (CALC)CIBP set @ 8835'Proposed Injection Zone Top - 8700'Prod Zone

8885-8932' (Bone Spring)

PBTD - 9040'TD - 9088'

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



WELL ID #80

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 SURFString 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 sxCement plug - 5870-6226' w/ 35 sx cmt (CALC)CIBP - 6226'String 3

7-7/8" hole @ 9020'

OD 5-1/2 in csg @ 9020'

TOC 3580 ft CBL - 1030 sx

Prod Zone

6276-6284'

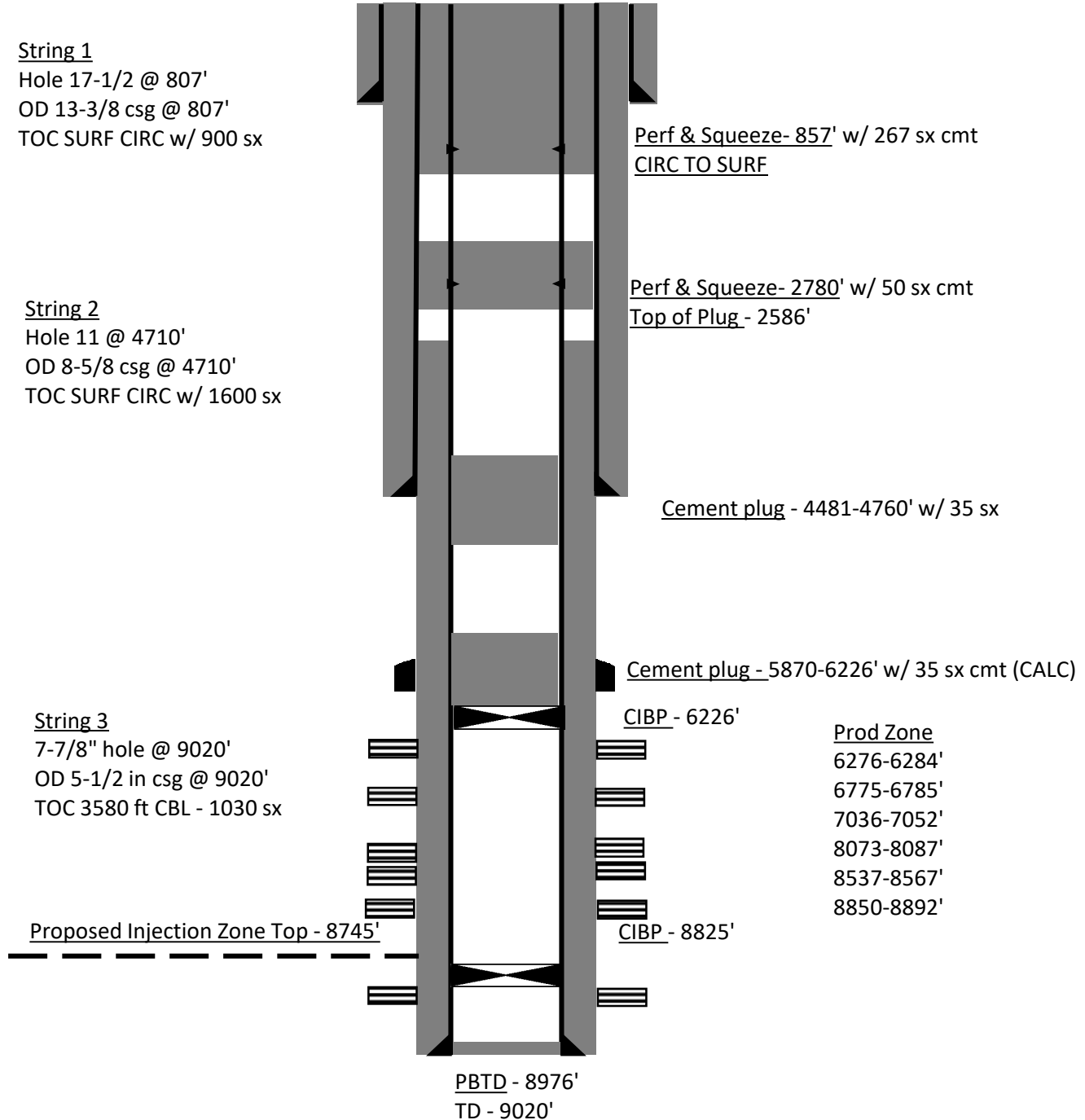
6775-6785'

7036-7052'

8073-8087'

8537-8567'

8850-8892'

Proposed Injection Zone Top - 8745'CIBP - 8825'PBTD - 8976'TD - 9020'

Geology

Tanks Type Log

Proposed Storage Zone

★ Avalon Shale

- > Unconventional siliceous mudstone reservoir with natural permeability in the nano-darcy range

Adjacent Oil & Gas Zones

● Brushy Canyon

- > Conventional very fine-grained sandstone with permeability in the millidarcy range

● Avalon Sand

- > Conventional very fine-grained sandstone with permeability in the millidarcy range

● 1st Bone Spring Sand

- > Conventional very fine-grained sandstone with permeability in the millidarcy range

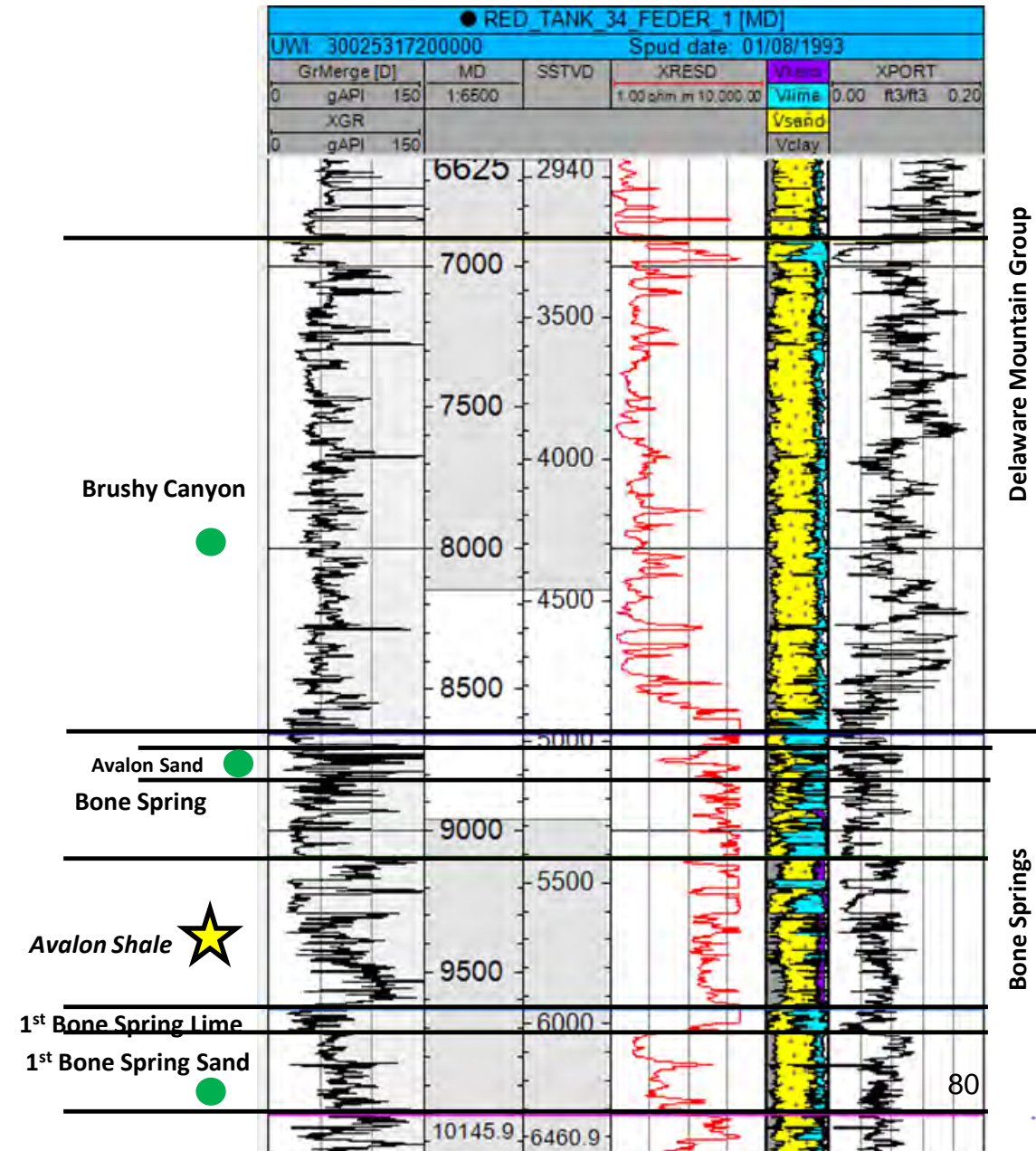
Confining Layers

• Bone Spring

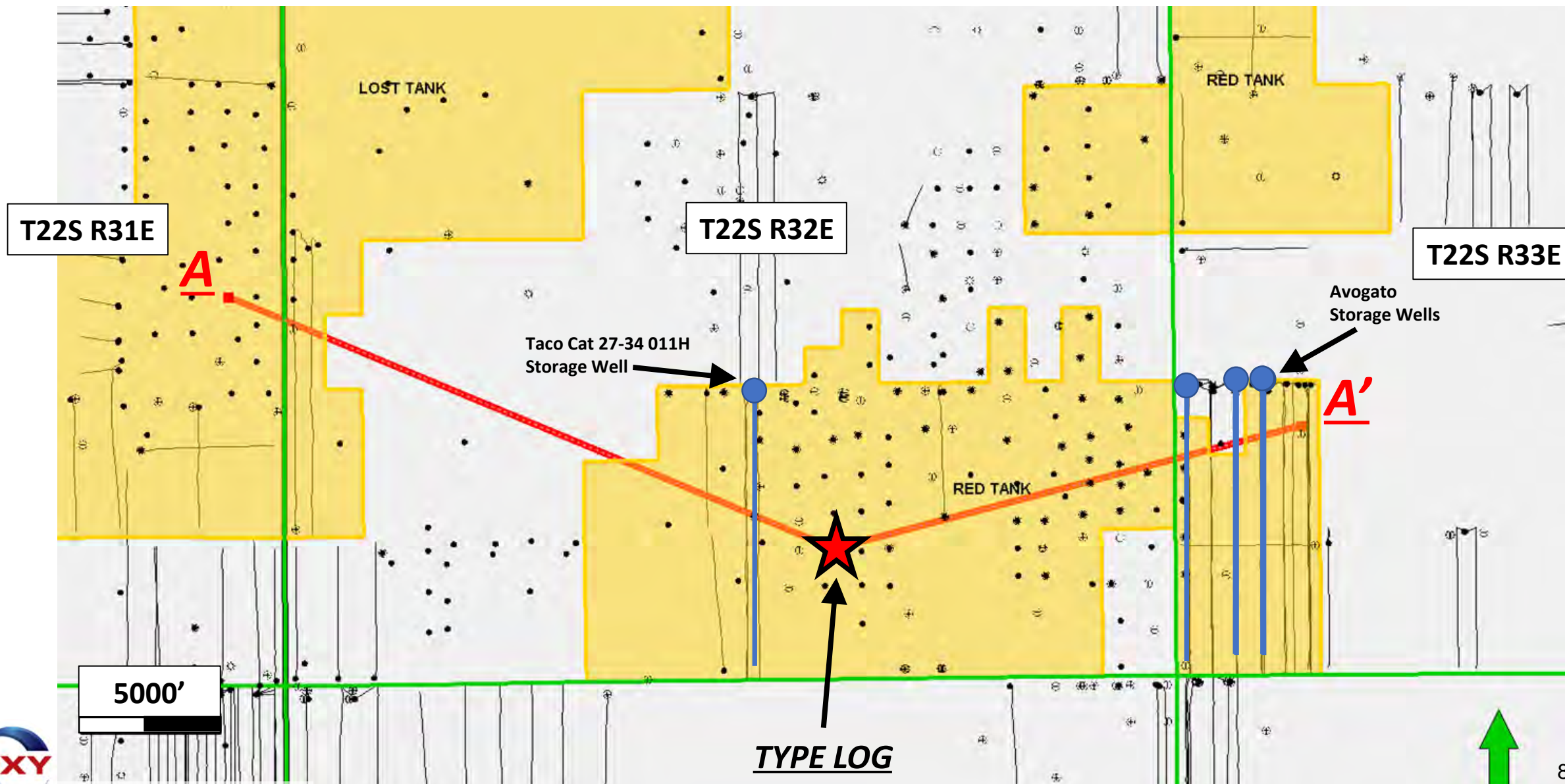
- > Approximately 250' of impermeable limestone between Avalon Sand & Brushy Canyon and Avalon Shale

• 1st Bone Spring Lime

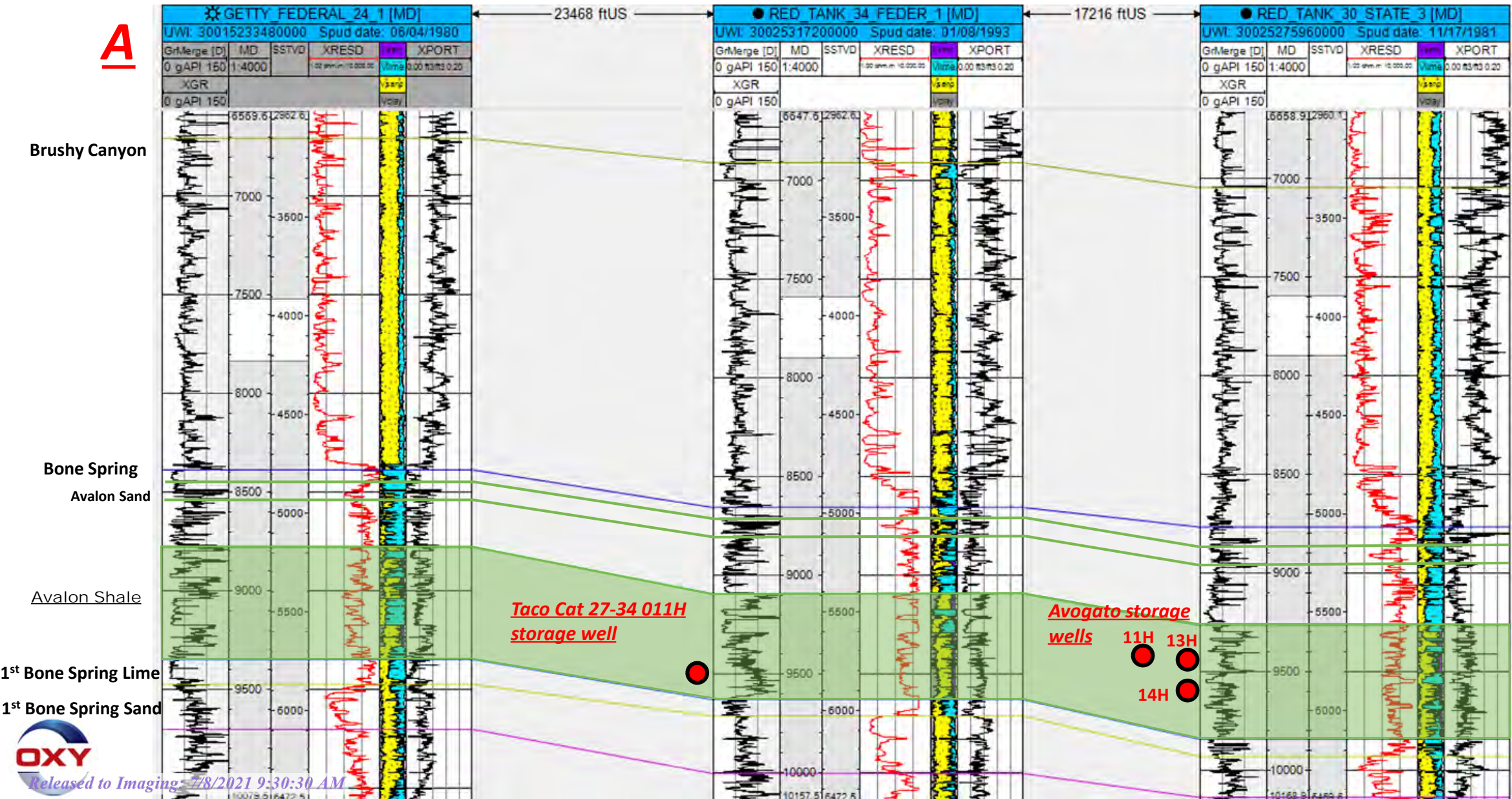
- > Approximately 100' of impermeable limestone between Avalon Shale and 1st Bone Spring Sand



Tanks Cross-section Index Map

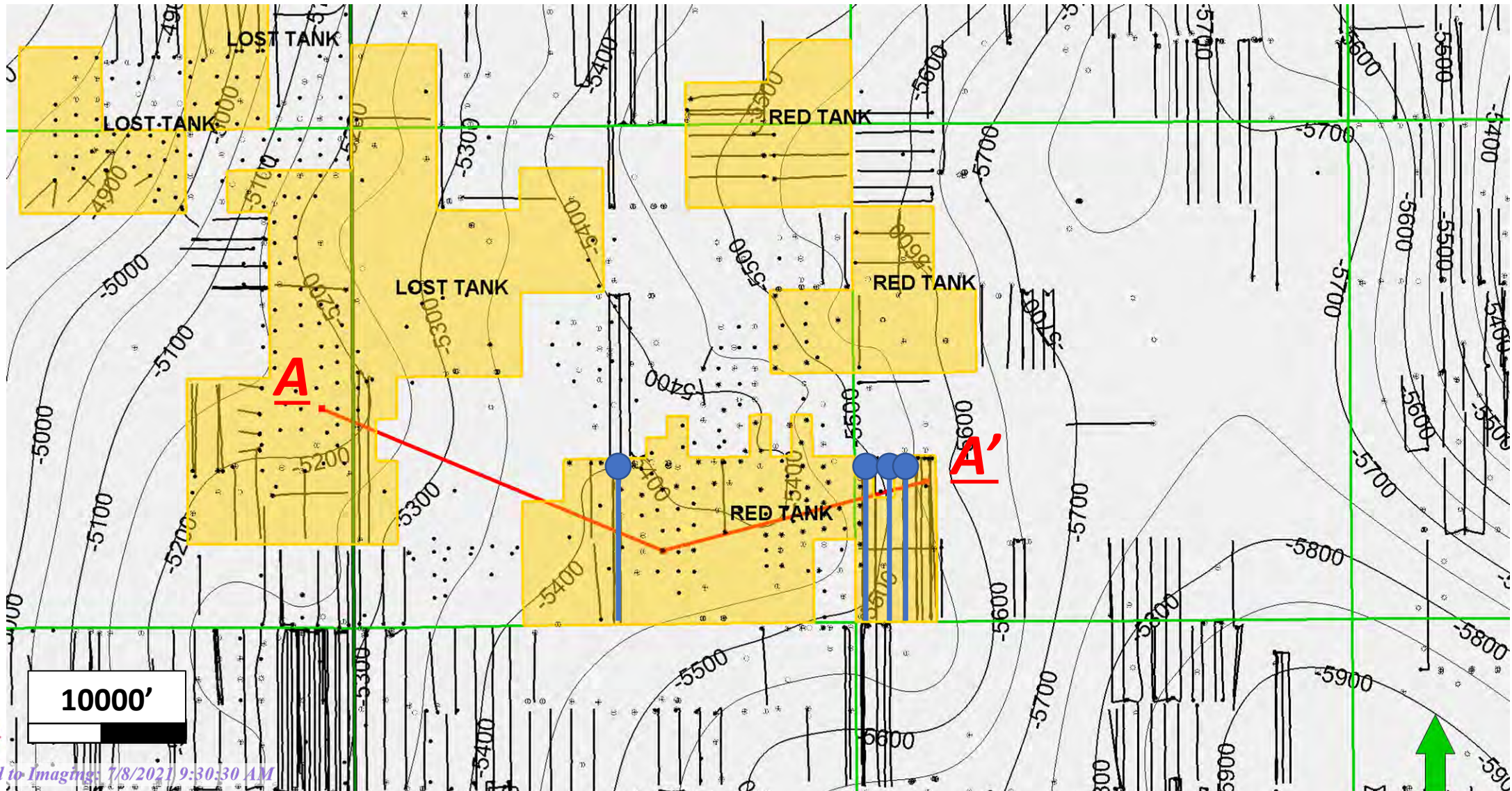


Tanks Cross-section

A**A'**

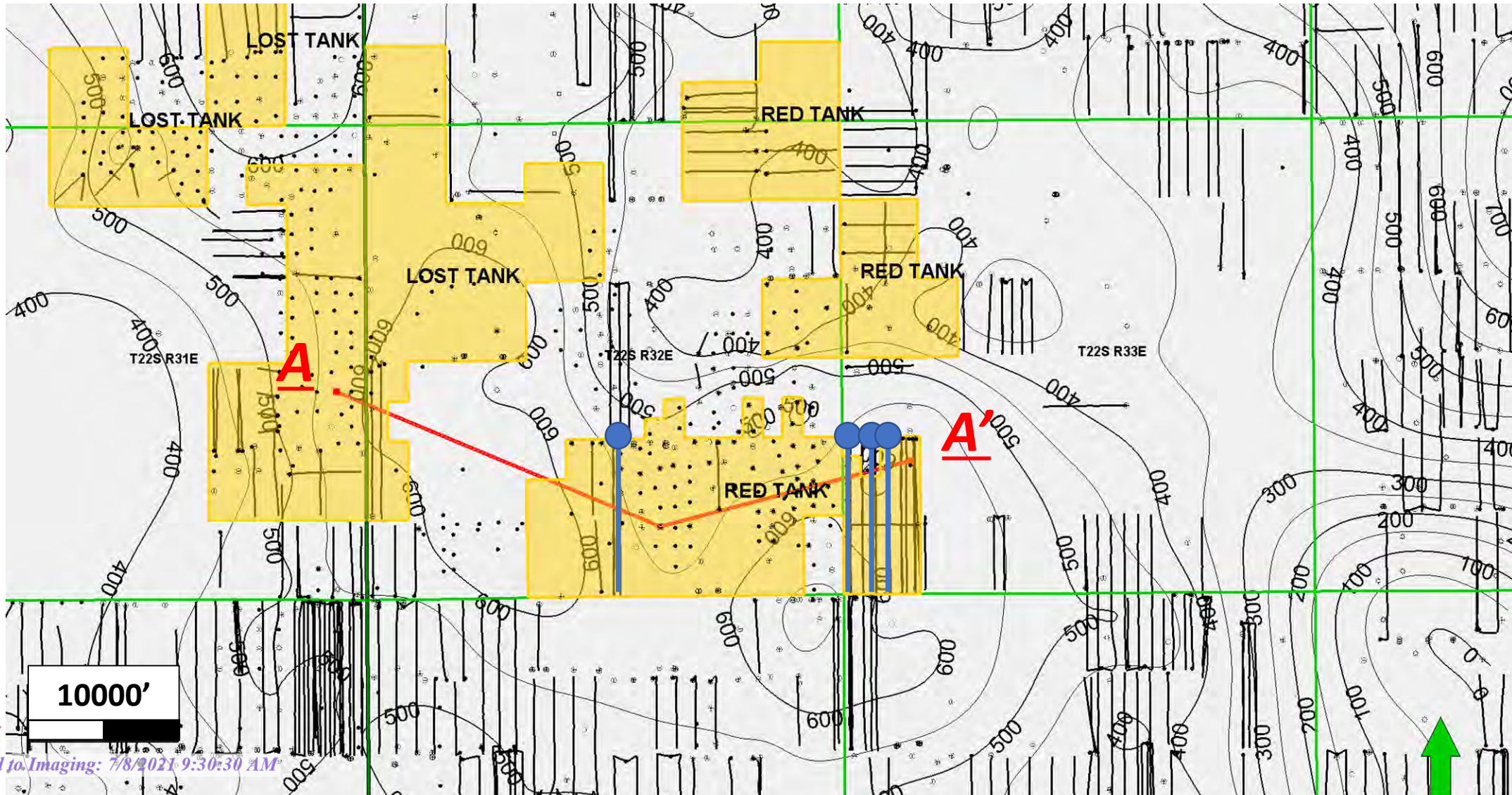
Tanks Structure Map: Top of Avalon

Consistent structural dip to east



Tanks Thickness Map

Northwest-southeast trending layer of Avalon 500-600' in thickness



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

Four wells will be injecting into the Avalon member of the Bone Spring Formation. Two wells have an average TVD of approximately 9,400 ft. (Avogato 30-31 State Com 11H & 13H), one well has an average TVD of approximately 9,500 ft. (Taco Cat 27-34 Fed Com 11H), and one well has an average TVD of approximately 9,600 ft. (Avogato 30-31 State Com 14H). The four wells have lateral lengths of approximately 10,000ft. The Avalon Shale is a very fine-grained quartz-rich and brittle siltstone with alternating cycles of carbonate rich mudstones deposited by gravity flows. Core data and petrophysical analysis indicates a tight reservoir with an average porosity less than 10% and an average permeability in the nano-darcy range. The reservoir has a clay content of 18% on average including illite and smectite. Cements include Fe-calcite, Fe-dolomite, with some quartz overgrowths. Minor amounts of pyrite (<1%) are present.

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 fine-grained siltstones, carbonate mudstone and dolomudstone that have very low permeabilities and an average thickness of 250 ft. Below the Avalon Shale is the 1st Bone Spring Lime, a low permeability ~ 100ft thick carbonate rich interval. Laterally the injection will be primarily contained by the reservoir volume that has been previously and partially depleted by the adjacent producing wells. The tight low-permeability reservoir and the production from the adjacent wells will be the primary constraints on the conformance of the injection to the project area and are expected to contain the injected gas.

Overlying the Bone Springs is the Delaware Mountain Group, which consists of connate-water bearing and hydrocarbon-bearing low permeability and porosity sands, with minor limestone and shale intervals and is approximately 3,900 ft. thick. Above that is the Castile Formation consisting of very low permeability anhydrite, gypsum, and calcite that acts as another 1,500 ft. thick barrier to upward movement of fluids. The Salado Formation overlies the Castile and consists of 1,000 ft. of impermeable salt. The top of the Salado is at 1,500 ft. TVD (depending on location within the field) 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 ft. The Rustler top is a continuous anhydrite layer that acts as another permeability barrier creating a perched aquifer above it that is the lowest level where fresh water is known in the area, water wells drilled in the area typically have not reached this depth. Due to the thickness of multiple impermeable rock layers above the injection reservoir there is little possibility for migration upward into freshwater aquifers where they exist.

Locate freshwater wells within two miles:

An investigation of existing shallow water wells has not found any active freshwater wells within a two mile radius of these injectors.

Well List:

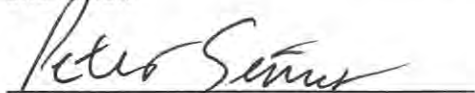
Avogato 30-31 State Com 11H (30025459560000)

Avogato 30-31 State Com 13H (30025459580000)

Avogato 30-31 State Com 14H (30025459590000)

Taco Cat 27-34 Fed Com 11H (30025449330000)

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



Peter Senior, Geologist


6-30-2021

Date

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.


Peter Senior, Geologist

June 9, 2021
Date


Xueying Xie, Reservoir Engineer

6/9/2021
Date

Reservoir Engineering

Project Overview – Avogato & Taco Cat

- Closed loop gas capture project (CLGC) IN Oxy's NM assets
- Produced gas injection into productive formation in NM (Avalon)
- 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

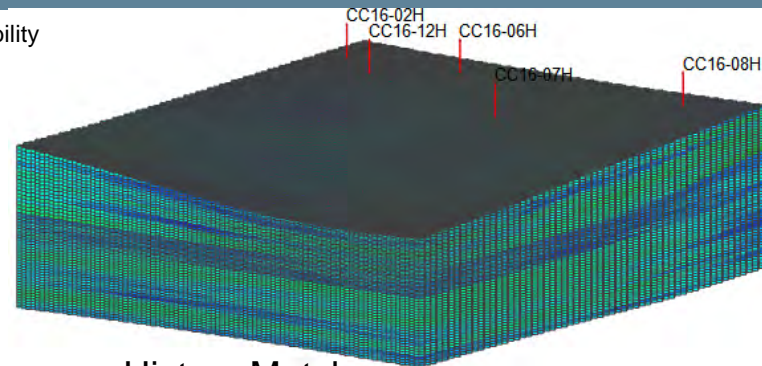
- Uses Cedar Canyon Sec 16 2nd BSS (as shown in layout below)
- Gas Injection pilot (EOR) was implemented in CC16-7H well in 2017
- Reservoir model is history matched for primary production and gas injection pilot
- Model is also tuned to capture injection gas breakthrough in offset wells that was observed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

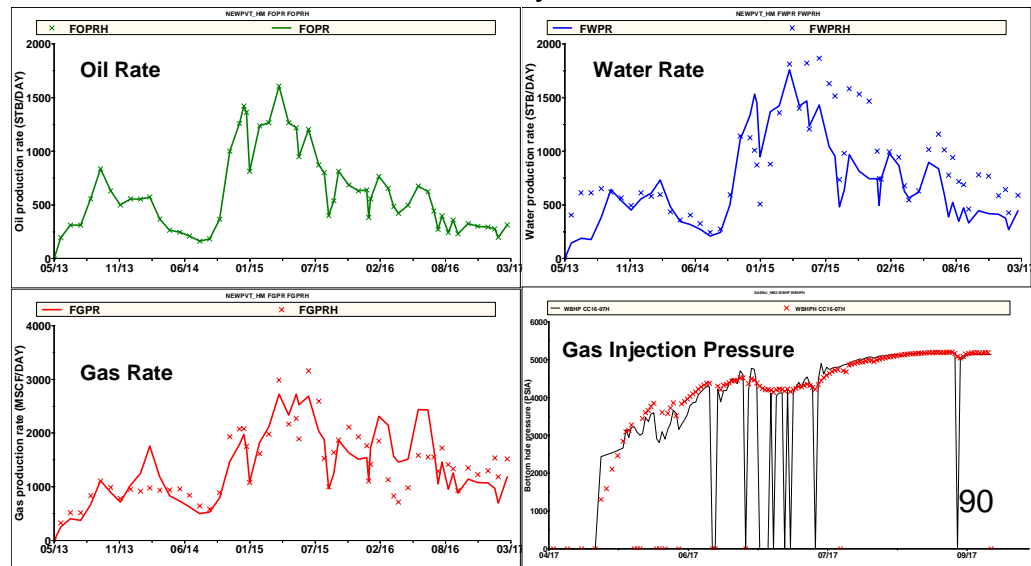
Structure & Permeability
 1,177,400 Grids
 56 Layers



History Match

Gross Pay:	320 ft
Net Pay:	320 ft
Avg Porosity:	6.8%
Initial Sw:	50%
Permeability:	0.001md (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

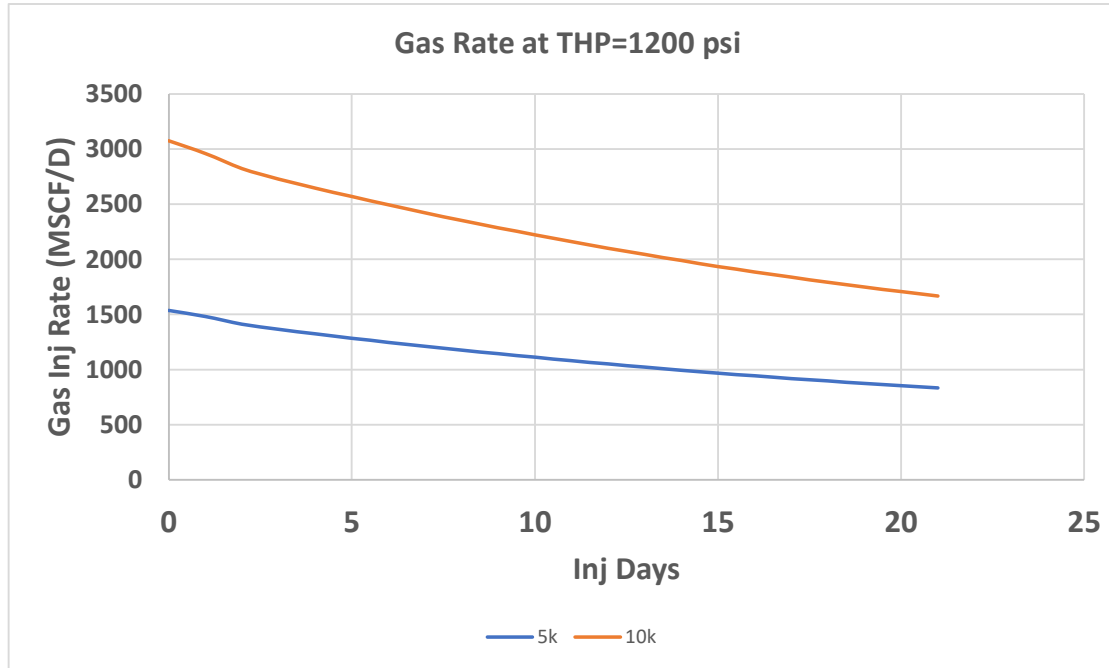
Model Inputs



Gas Storage Simulation Process

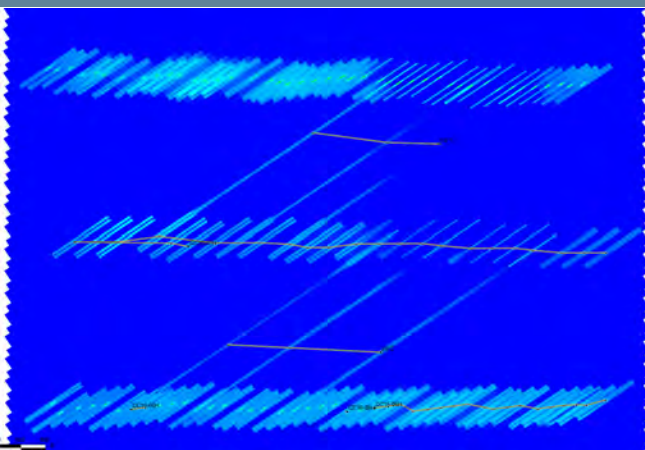
- Run primary production for all wells for additional period (post history match) – Base Case
- Inject gas in injection well at 2MMSCFPD for 7 days
- Produce the injection well post injection – Injection Case
- Observe the effect on oil, gas rate/recovery in injection well and offset wells by comparing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

Gas injection rates

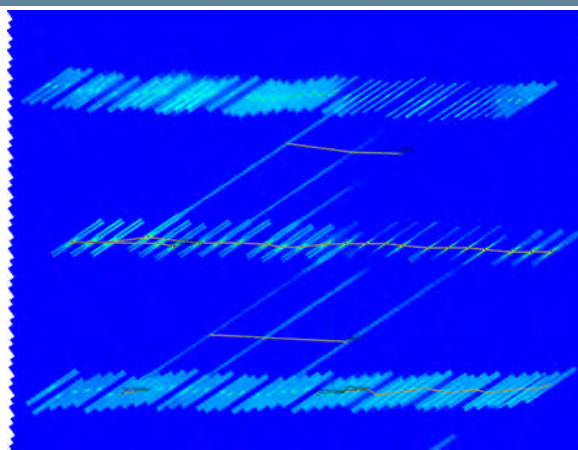


For a 10k well, 3 MMSCFPD is the max injection rate at THP of 1200 psi. Injection rate declines to about 50% of its initial value in 3 weeks. For long injection case a flat injection rate of 3MMSCFPD for 3 weeks is used as worst-case scenario.

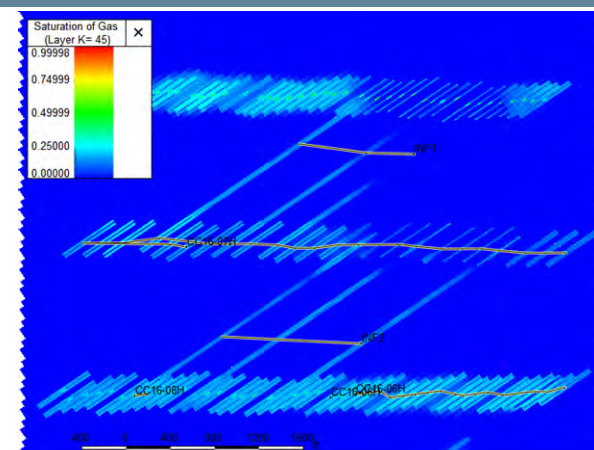
Gas Injection Profile



Before injection

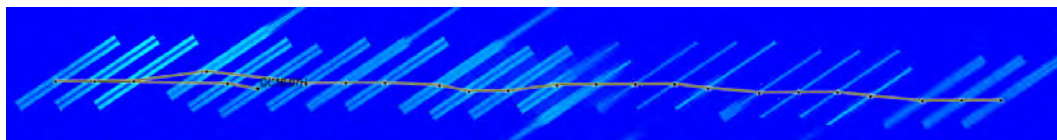


After 1 week of injection (3 MMSCFPD)

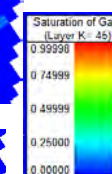
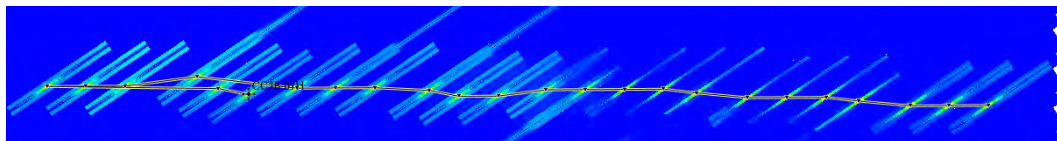


After 16 months production

Before Injection CC16-7H
Blow-up

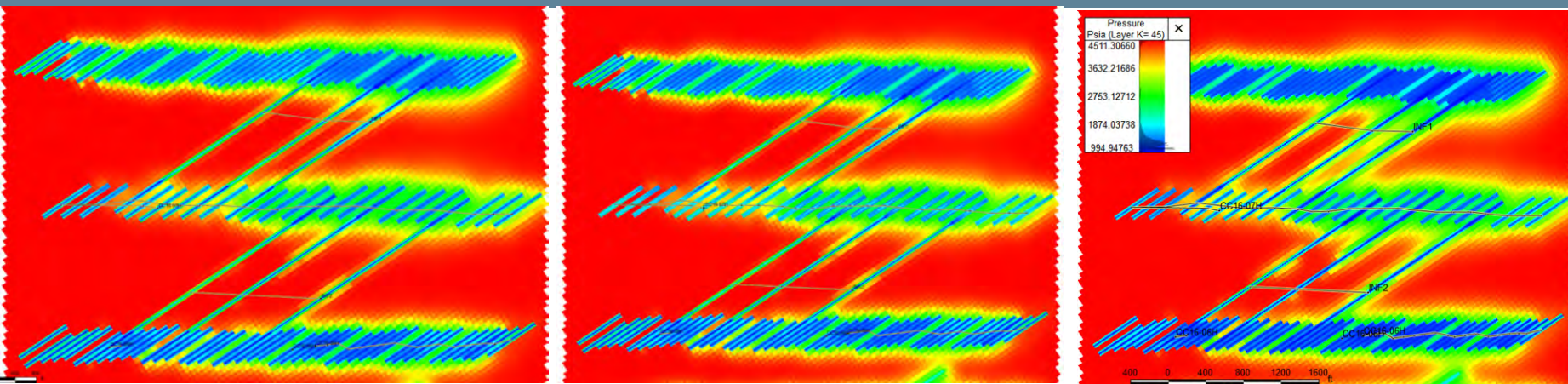


After Injection CC16-7H
Blow-up



- Gas is stored within fractures.
- All injection cases indicate horizontal gas movement of 100 ft or less into the fractures.

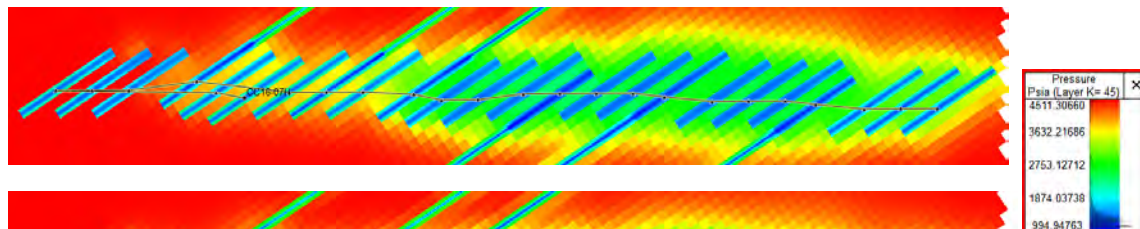
Pressure Profile



Before injection

After 1 week of injection (3 MMSCFPD)

After 16 months production

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

Summary of Cases

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

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

**Injection at 3MMSCF/DAY for 7 days

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

Gas Storage Capacities - Tanks

API	Well Name	Gas Storage Capacity with 1200 psi WHP Injection	
		Fracture volume gas equivalent, mmscf	Total prod gas equivalent, mmscf
30025459560000	AVOGATO 30-31 STATE COM 11H	326	1292
30025459580000	AVOGATO 30-31 STATE COM 13H	312	574
30025459590000	AVOGATO 30-31 STATE COM 14H	325	1265
30025449330000	TACO CAT 27 34 FEDERAL COM 11H	339	1377

- Gas storage capacity is high for each well
 - Even just stored gas in fractures, the capacity is over 200 mmscf
- The expected gas injection volume for each well during each event could be up to 60 mmscf, this is way below the storage capacity

Frac Height and SRV – Avogato & Taco Cat

- **Frac height:**
 - **Avalon: Based on Tanks Avogato**
 - **XH= 340'**
 - **Xf = 350'**
- **SRV**
 - **SRV= $2 * X_f * X_h * \text{Well length}$**

API 14	Well Name	SRV, ft^3
30025459560000	AVOGATO-11H	2,375,002,000
30025459580000	AVOGATO-13H	2,327,878,000
30025459590000	AVOGATO-14H	2,423,078,000
30025449330000	TACO2734-11H	2,421,888,000

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.

Xueying Xie

6/9/2021

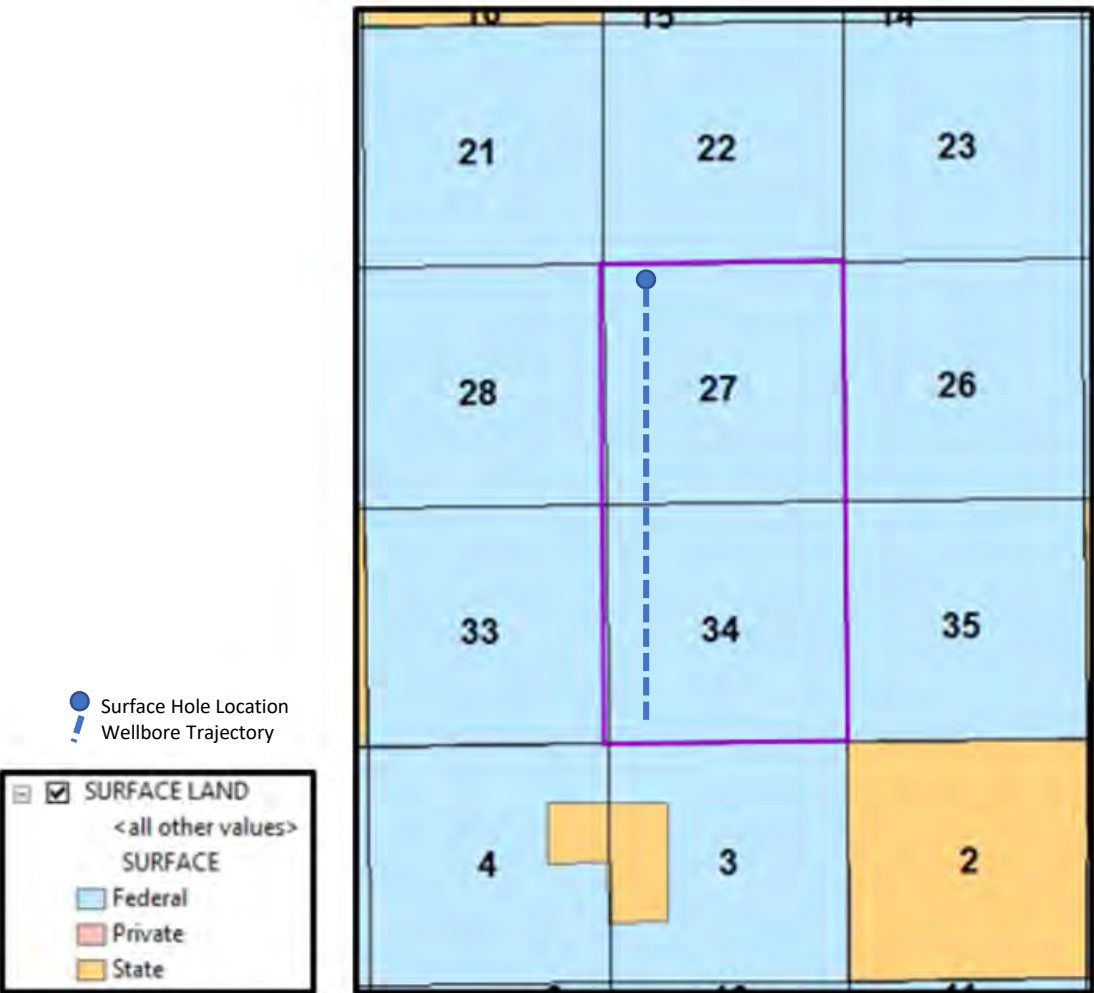
Xueying Xie, Reservoir Engineer

Date

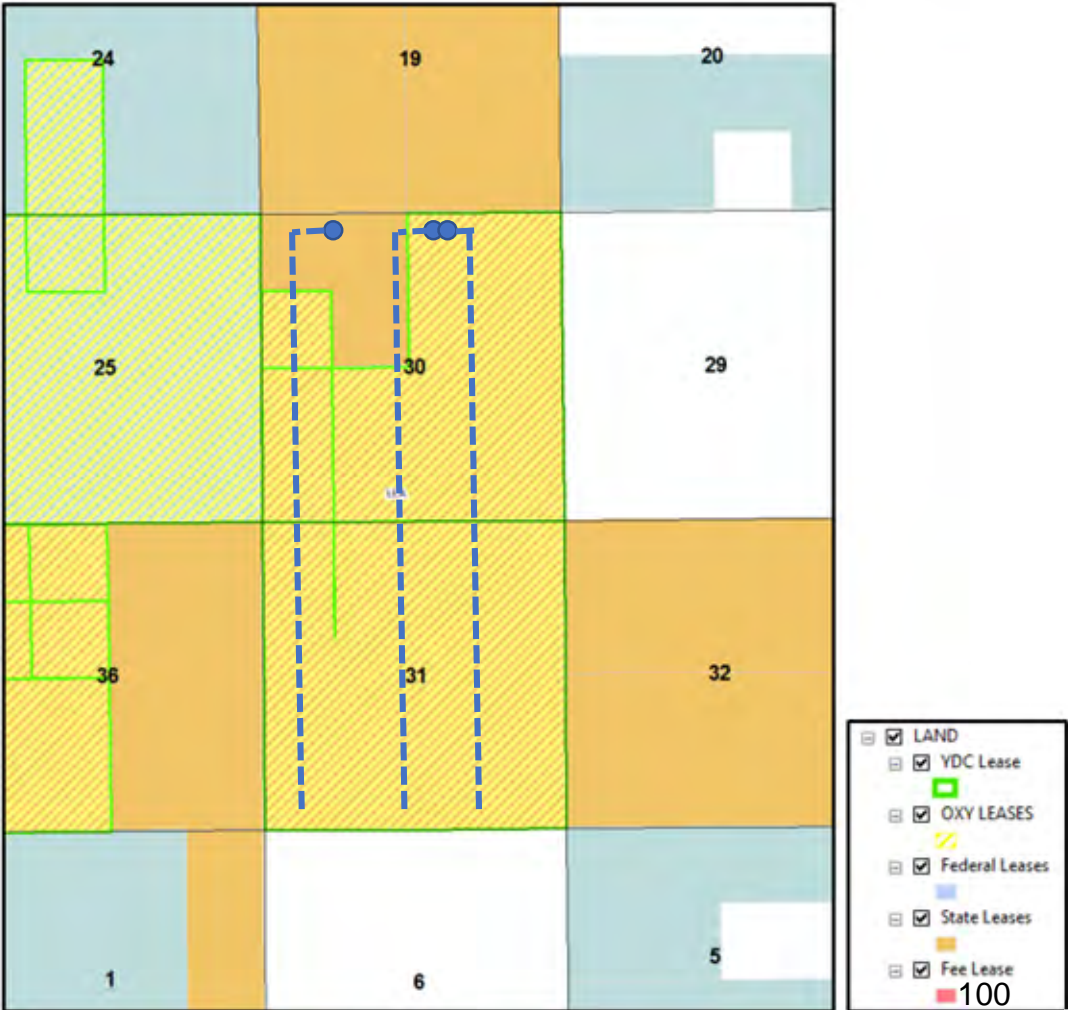
Notice

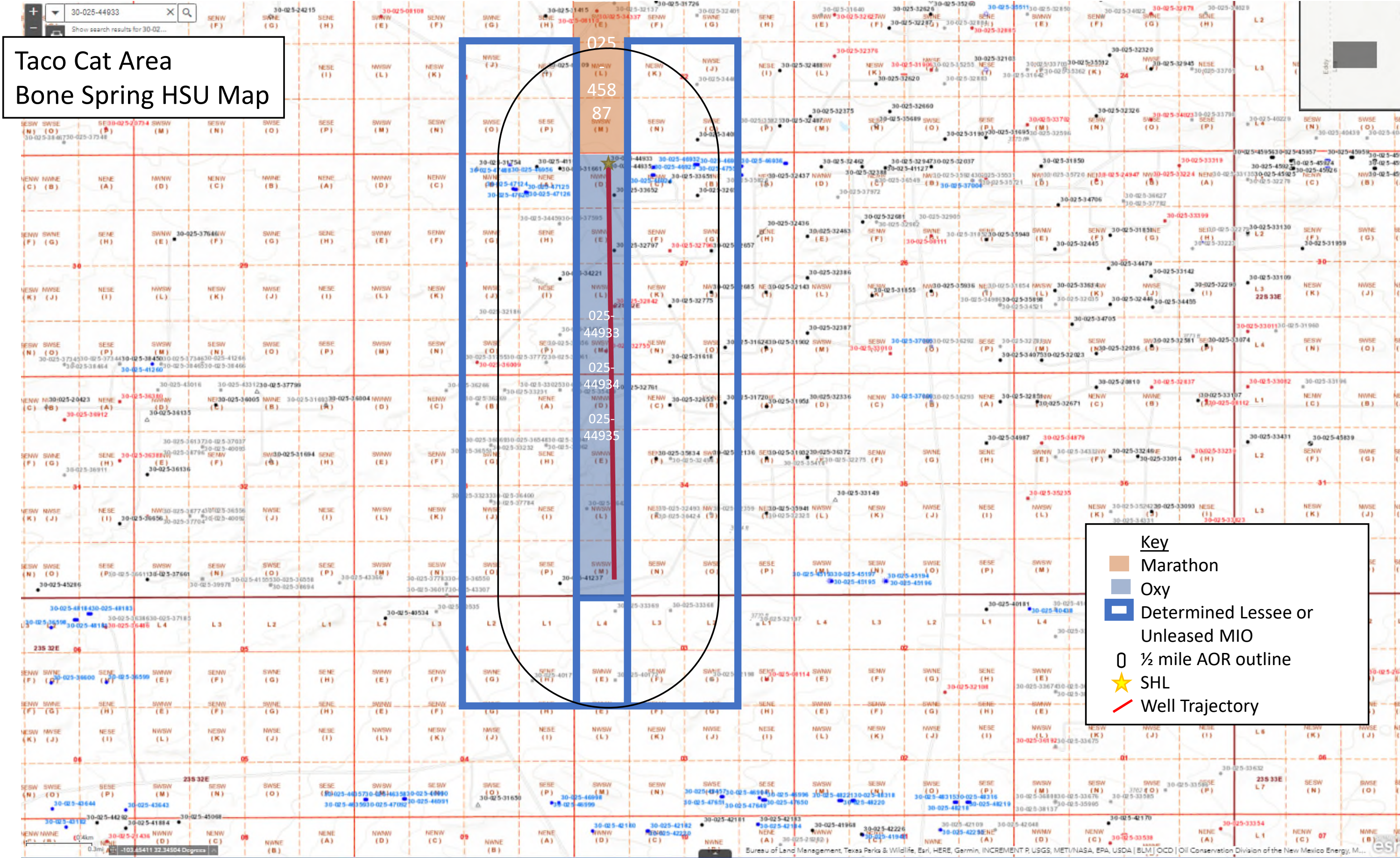
Surface Land Ownership

Taco Cat Area

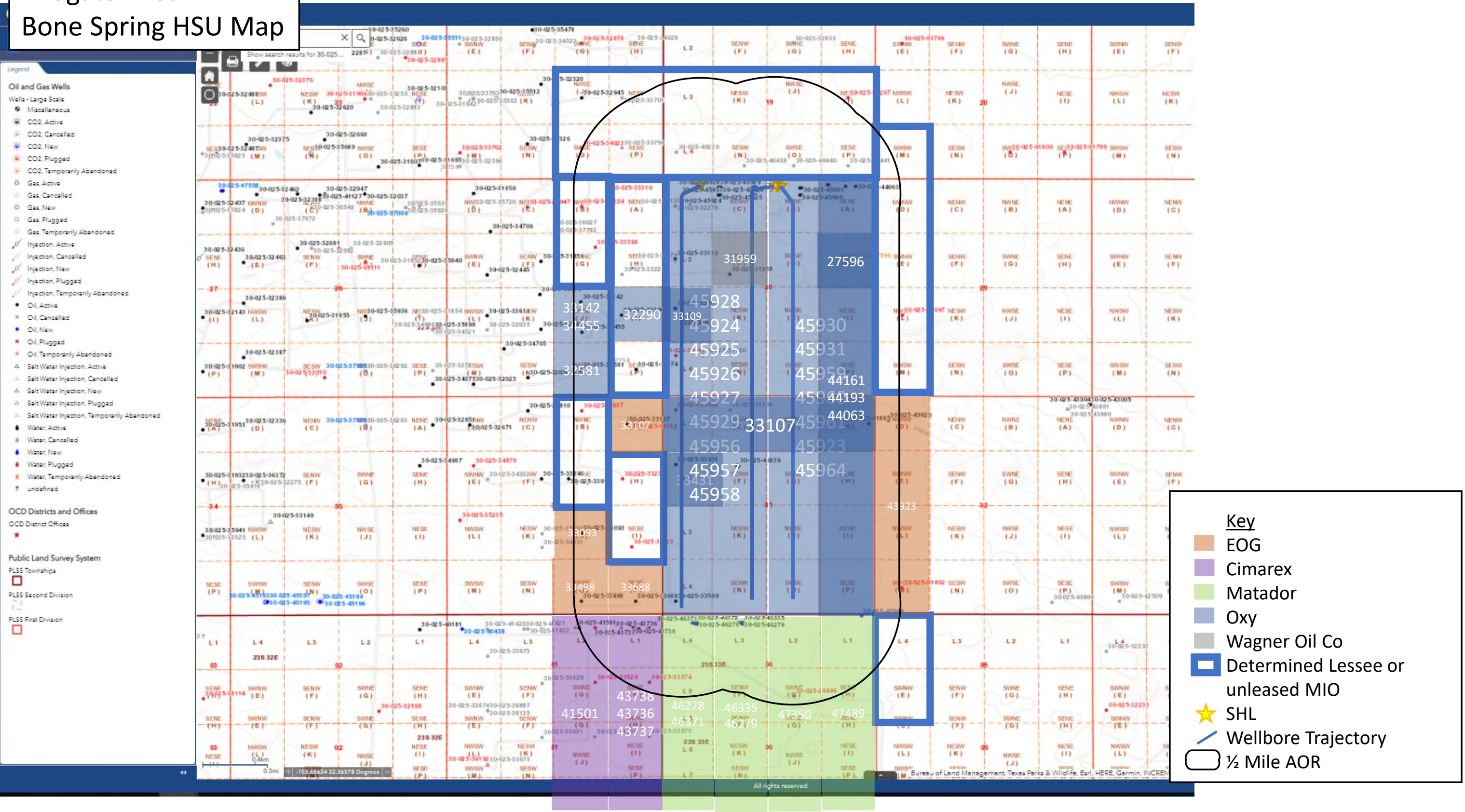


Avogato Area





Avogato Area
Bone Spring HSU Map



Taco Cat Area Notice List

Name	Street	City	State	Zip Code	Merged
Surface Owners					
BLM	620 E. Greene St.	Carlsbad	NM	88220	BLM 620 E. Greene St. Carlsbad, NM 88220
Leasehold Operators					
CIMAREX ENERGY CO.	600 N. Marienfield St. Suite 600	Midland	TX	79701	CIMAREX ENERGY CO. 600 N. Marienfield St. Suite 600 Midland, TX 79701
Marathon Oil Permian LLC	5555 San Felipe St.	Houston	TX	77056	Marathon Oil Permian LLC 5555 San Felipe St. Houston, TX 77056
Affected Persons					
XTO Holdings LLC	P.O. Box 840780	Dallas	TX	75284	XTO Holdings LLC P.O. Box 840780 Dallas, TX 75284
Marathon Oil Permian LLC	5555 San Felipe St.	Houston	TX	77056	Marathon Oil Permian LLC 5555 San Felipe St. Houston, TX 77056
A.J. Losee	Box 1720	Artesia	NM	88211	A.J. Losee Box 1720 Artesia, NM 88211
Anne Ransome-Losee	3505 Calle Cuervo #218	Albuquerque	NM	87048	Anne Ransome-Losee 3505 Calle Cuervo #218 Albuquerque, NM 87048
Arthur Dow	324 Yucca Dr. NW	Albuquerque	NM	87105	Arthur Dow 324 Yucca Dr. NW Albuquerque, NM 87105
Black Mountain Operating LLC	500 Main St Ste 1200	Fort Worth	TX	76102	Black Mountain Operating LLC 500 Main St Ste 1200 Fort Worth, TX 76102
Bradley S. Bates	2400 N. Pecos St.	Midland	TX	79705	Bradley S. Bates 2400 N. Pecos St. Midland, TX 79705
Buckeye Energy Inc.	P.O. Box 3788	Midland	TX	79702	Buckeye Energy Inc. P.O. Box 3788 Midland, TX 79702
Burlington Resources Oil & Gas Co LP	P.O. Box 51810	Midland	TX	79710	Burlington Resources Oil & Gas Co LP P.O. Box 51810 Midland, TX 79710
C. W. Trainer	P.O. Box 3788	Midland	TX	79702	C. W. Trainer P.O. Box 3788 Midland, TX 79702
Carmine Scarcelli	2111 Wellington Ct.	Midland	TX	79705	Carmine Scarcelli 2111 Wellington Ct. Midland, TX 79705

Carrie A. Haydel	149 14th St.	New Orleans	LA	70124	Carrie A. Haydel 149 14th St. New Orleans, LA 70124
Chevron USA Inc.	1400 Smith St.	Houston	TX	77002	Chevron USA Inc. 1400 Smith St. Houston, TX 77002
Cimarex Energy Company of Colorado	600 N. Marienfield St. Suite 600	Midland	TX	79701	Cimarex Energy Company of Colorado 600 N. Marienfield St. Suite 600 Midland, TX 79701
Devon Energy Production Company LP	333 W. Sheridan Ave	Oklahoma City	OK	73102	Devon Energy Production Company LP 333 W. Sheridan Ave Oklahoma City, OK 73102
Diance C. Prince	816 Connecticut Ave NW	Washington	DC	20006	Diance C. Prince 816 Connecticut Ave NW Washington, DC 20006
Elizabeth Losee	328 Sierra Pl.	Albuquerque	NM	87108	Elizabeth Losee 328 Sierra Pl. Albuquerque, NM 87108
EOG Resources Inc.	P.O. Box 840321	Dallas	TX	75284	EOG Resources Inc. P.O. Box 840321 Dallas, TX 75284
Frederick Prince IV	816 Connecticut Ave NW	Washington	DC	20006	Frederick Prince IV 816 Connecticut Ave NW Washington, DC 20006
Highpoint Operating Corp.	216 16th St. Ste 1100	Denver	CO	80202	Highpoint Operating Corp. 216 16th St. Ste 1100 Denver, CO 80202
Jesus Salazar Family LP	2400 Rose NW	Albuquerque	NM	87104	Jesus Salazar Family LP 2400 Rose NW Albuquerque, NM 87104
John Blackburn	P.O. Box 340535	Austin	TX	78734	John Blackburn P.O. Box 340535 Austin, TX 78734
Kent H. Berger	203 W. Wall St. #612	Midland	TX	79701	Kent H. Berger 203 W. Wall St. #612 Midland, TX 79701
Lewis O. Campell	8111 Lamp Post Cir SE	Albuquerque	NM	87123	Lewis O. Campell 8111 Lamp Post Cir SE Albuquerque, NM 87123
Losee Investments	P.O. Box 1720	Artesia	NM	88211	Losee Investments P.O. Box 1720 Artesia, NM 88211
Lynn S. Charulk	2401 Stutz Pl.	Midland	TX	79705	Lynn S. Charulk 2401 Stutz Pl. Midland, TX 79705
Mackenroth Interests LLC	3601 N. I-40 Service Rd.	West Martairie	LA	70002	Mackenroth Interests LLC 3601 N. I-40 Service Rd. West Martairie, LA 70002

Mcnic O&G Properties	1360 Post Oak Blvd	Houston	TX	77056	Mcnic O&G Properties 1360 Post Oak Blvd Houston, TX 77056
PBEX Resources	223 W. Wall St. Ste 900	Midland	TX	79701	PBEX Resources 223 W. Wall St. Ste 900 Midland, TX 79701
Penwell Energy Inc.	600 N. Marienfield St. Suite 1100	Midland	TX	79701	Penwell Energy Inc. 600 N. Marienfield St. Suite 1100 Midland, TX 79701
PXP Producing LLC	717 Texas St Ste #2100	Houston	TX	77002	PXP Producing LLC 717 Texas St Ste #2100 Houston, TX 77002
Robert M. Dow Revocable Trust	5136 Lomas De Artisto Rd NW	Albuquerque	NM	87105	Robert M. Dow Revocable Trust 5136 Lomas De Artisto Rd NW Albuquerque, NM 87105
Sealy Hutchings Cavin Inc.	504 N Wyoming Ave	Roswell	NM	88201	Sealy Hutchings Cavin Inc. 504 N Wyoming Ave Roswell, NM 88201
South Highway 14 Bus Co	324 Yucca Dr. NW	Albuquerque	NM	87105	South Highway 14 Bus Co 324 Yucca Dr. NW Albuquerque, NM 87105
Southwest Royalties Inc	6 Desta Dr. Ste 3700	Midland	TX	79705	Southwest Royalties Inc 6 Desta Dr. Ste 3700 Midland, TX 79705
Strata Production Co	P.O Box 1030	Roswell	NM	88292	Strata Production Co P.O Box 1030 Roswell, NM 88292
The Gray Exploration Co	3601 N. I-40 Service Rd.	West Martairie	LA	70002	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	The Ninety-Six Corp 550 W. Texas #1225 Midland, TX 79701
Trainer Partners LTD	P.O. Box 3788	Midland	TX	79702	Trainer Partners LTD P.O. Box 3788 Midland, TX 79702
XTO Energy Inc.	22777 Springwoods Village Pkwy	Spring	TX	77389	XTO Energy Inc. 22777 Springwoods Village Pkwy Spring, TX 77389
XTO Holdings LLC	22777 Springwoods Village Pkwy	Spring	TX	77389	XTO Holdings LLC 22777 Springwoods Village Pkwy Spring, TX 77389
XTO Holdings LLC	P.O. Box 840780	Dallas	TX	75284	XTO Holdings LLC P.O. Box 840780 Dallas, TX 75284
POGO PRODUCING CO.	P.O. Box 10340	Midland	TX	79702	POGO PRODUCING CO. P.O. Box 10340 Midland, TX 79702

Avogato Area Notice List

Name	Street	City	State	Zip Code	Merged
Surface Owners					
State Land Office	308 Old Santa Fe Trail	Santa Fe	NM	87501	State Land Office 308 Old Santa Fe Trail Santa Fe, NM 87501
Leasehold Operators					
CIMAREX ENERGY CO.	600 N. Marienfield St. Suite 600	Midland	TX	79701	CIMAREX ENERGY CO. 600 N. Marienfield St. Suite 600 Midland, TX 79701
EOG Resources Inc.	P.O. Box 2267	Midland	TX	79702	EOG Resources Inc. P.O. Box 2267 Midland, TX 79702
Matador Production Company	5400 LBJ Freeway Ste 1500	Dallas	TX	75240	Matador Production Company 5400 LBJ Freeway Ste 1500 Dallas, TX 75240
Wagner Oil Co	500 Commerce Suite 500	Fort Worth	TX	76102	Wagner Oil Co 500 Commerce Suite 500 Fort Worth, TX 76102
Affected Persons					
1 Timothy 6 LLC	P.O. Box 30598	Edmond	OK	73003	1 Timothy 6 LLC P.O. Box 30598 Edmond, OK 73003
2019 Permian Basin JV	P.O. Box 10	Folosom	LA	70437	2019 Permian Basin JV P.O. Box 10 Folosom, LA 70437
Accelerate Resources Operating LLC	5949 Sherry Ln.	Dallas	TX	75225	Accelerate Resources Operating LLC 5949 Sherry Ln. Dallas, TX 75225
C.D. Martin	P.O. Box 12	Midland	TX	79702	C.D. Martin P.O. Box 12 Midland, TX 79702
Cal-Mon Oil Company	200 N. Loraine St. Ste 1404	Midland	TX	79701	Cal-Mon Oil Company 200 N. Loraine St. Ste 1404 Midland, TX 79701
Campeche Petro LP	500 Commerce St. Ste 600	Fort Worth	TX	76102	Campeche Petro LP 500 Commerce St. Ste 600 Fort Worth, TX 76102
Cardinal Plastics	P.O. Box 935	Odessa	TX	79760	Cardinal Plastics P.O. Box 935 Odessa, TX 79760

Conrad E. Coffield	P.O. Box 8028	Santa Fe	NM	87504	Conrad E. Coffield P.O. Box 8028 Santa Fe, NM 87504
EOG Resources Inc.	P.O. Box 840321	Dallas	TX	75284	EOG Resources Inc. P.O. Box 840321 Dallas, TX 75284
Kastman Oil Company	P.O. Box 5930	Lubbock	TX	79408	Kastman Oil Company P.O. Box 5930 Lubbock, TX 79408
Lonsdale Resources LLC	2626 Cole Ave Ste 300	Dallas	TX	75204	Lonsdale Resources LLC 2626 Cole Ave Ste 300 Dallas, TX 75204
Maduro Oil & Gas LLC	3102 Maple Avenue Suite 400	Dallas	TX	75201	Maduro Oil & Gas LLC 3102 Maple Avenue Suite 400 Dallas, TX 75201
SDS Properties Inc.	P.O. Box 246	Roswell	NM	88202	SDS Properties Inc. P.O. Box 246 Roswell, NM 88202
Silverstone Resources Inc.	P.O. Box 41270	Reno	NV	89504	Silverstone Resources Inc. P.O. Box 41270 Reno, NV 89504
Tocor Investments Inc.	P.O. Box 293	Midland	TX	79702	Tocor Investments Inc. P.O. Box 293 Midland, TX 79702
A.J. Losee	Box 1720	Artesia	NM	88211	A.J. Losee Box 1720 Artesia, NM 88211
Anne Ransome-Losee	3505 Calle Cuervo #218	Albuquerque	NM	87048	Anne Ransome-Losee 3505 Calle Cuervo #218 Albuquerque, NM 87048
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Trainer Partners LTD	P.O. Box 3788	Midland	TX	79702	Trainer Partners LTD P.O. Box 3788 Midland, TX 79702
LIME ROCK RESOURCES A, L.P.	1111 Bagby Street Suite 4600	Houston	TX	77002	LIME ROCK RESOURCES A, L.P. 1111 Bagby Street Suite 4600 Houston, TX 77002
POGO PRODUCING CO.	P.O. Box 10340	Midland	TX	79702	POGO PRODUCING CO. P.O. Box 10340 Midland, TX 79702
POGO PRODUCING COMPANY LLC	700 Milliam Suite 1300	Houston	TX	77002	POGO PRODUCING COMPANY LLC 700 Milliam Suite 1300 Houston, TX 77002