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, EDDY AND LEA COUNTIES, 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 1,958.92-acre, more or less, project area for this Pilot Project consisting of the following acreage identified below in Eddy and Lea Counties, New Mexico (the "Project Area"). *See* **Exhibit A** at 5.

Township 22 South, Range 31 East

Section 13: W/2 W/2
Section 12: W/2 W/2

Township 22 South, Range 32 East

Section 8: All
Section 17: All
Section 19: W/2 W/2
Section 30: W/2 W/2

2. The proposed Project Area is part of a larger area OXY refers to as the Lost Tank area.

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

4. Within the proposed Project Area, OXY seeks authority to utilize the following producing wells to occasionally inject produced gas into the Bone Spring formation:

- **Lost Tank 30-19 Federal Com 1H** (API No. 30-025-46474) with a surface location 128 feet FNL and 1235 feet FWL (Lot 1) in Section 19, Township 22 South, Range 32 East, and a bottom hole location 29 feet FSL and 971 feet FWL (Lot 4) in Section 30, Township 22 South, Range 32 East, NMPM, all in Lea County, New Mexico.
- **Top Spot 12-13 Federal Com 11H well** (API No. 30-015-48595) with a surface location 655 feet FSL and 2022 feet FWL (Unit N) in Section 13, Township 22 South, Range 31 East, and a bottom hole location 51 feet FNL and 448 feet FWL (Unit D) in Section 12, Township 22 South, Range 31 East, NMPM, all in Eddy, New Mexico.
- **Top Spot 12-13 Federal Com 1H well** (API No. 30-015-48594) with a surface location 655 feet FSL and 2087 feet FWL (Unit N) in Section 13, Township 22 South, Range 31 East, and a bottom hole location 51 feet FNL and 764 feet FWL (Unit D) in Section 12, Township 22 South, Range 31 East, NMPM, all in Eddy, New Mexico.
- **Top Spot 12-13 Federal Com 21H well** (API No. 30-015-47771) with a surface location 655 feet FSL and 2052 feet FWL (Unit N) in Section 13, Township 22 South, Range 31 East, and a bottom hole location 49 feet FNL

and 449 feet FWL (Unit D) in Section 12, Township 22 South, Range 31 East, NMPM, all in Eddy, New Mexico.

- **Dr Pi Federal Unit 17 8 DA 21H well** (API No. 30-025-48282) with a surface location 530 feet FSL and 1075 feet FWL (Unit M) in Section 17, Township 22 South, Range 32 East, and a bottom hole location 52 feet FNL and 453 feet FWL (Unit D) in Section 8, Township 22 South, Range 32 East, NMPM, all in Eddy County, New Mexico.
- **Dr Pi Federal Unit 17 8 DA 23H well** (API No. 30-025-48947) with a surface location 530 feet FSL and 1145 feet FWL (Unit M) in Section 17, Township 22 South, Range 32 East, and a bottom hole location 37 feet FNL and 2193 feet FWL (Unit D) in Section 8, Township 22 South, Range 32 East, NMPM, all in Eddy County, New Mexico.
- **Dr Pi Federal Unit 17 8 DA 25H well** (API No. 30-025-48949) with a surface location 455 feet FSL and 1565 feet FEL (Unit O) in Section 17, Township 22 South, Range 32 East, and a bottom hole location 40 feet FNL and 1282 feet FEL (Unit D) in Section 8, Township 22 South, Range 32 East, NMPM, all in Eddy County, New Mexico.
- **Dr Pi Federal Unit 17 8 DA 26H well** (API No. 30-025-48950) with a surface location 455 feet FSL and 1530 feet FEL (Unit O) in Section 17, Township 22 South, Range 32 East, and a bottom hole location 61 feet FNL and 322 feet FEL (Unit D) in Section 8, Township 22 South, Range 32 East, NMPM, all in Eddy County, New Mexico. *See* **Exhibit A** at 7-14.

5. The proposed average injection rate for each well is 3 MMSCFD with a maximum injection rate of 4 MMSCFD during injection. *See* **Exhibit A** at 31.

6. The maximum achievable surface pressure (MASP) for the wells in the Pilot Project is proposed to be 1,300 psi. *See* **Exhibit A** at 31. The current average surface pressures under normal operations for the proposed injection wells range from approximately 185 psi to 850 psi. *Id.*

7. Injection along the horizontal portion of the wellbores will be within the Bone Spring formation, Pierce Crossing; Bone Spring East Pool (Pool Code 96473), at the following approximate true vertical depths:

- **Lost Tank 30-19 Federal Com 1H** between 9,829 feet and 9,875 feet;
- **Top Spot 12-13 Federal Com 11H well** between 9,005 feet and 9,037 feet
- **Top Spot 12-13 Federal Com 1H well** between 9,853 feet and 9,822 feet
- **Top Spot 12-13 Federal Com 21H well** between 10,319 feet and 10,383 feet
- **Dr Pi Federal Unit 17 8 DA 21H well** between 10,636 feet and 10,641 feet
- **Dr Pi Federal Unit 17 8 DA 23H well** between 10,585 feet and 10,594 feet
- **Dr Pi Federal Unit 17 8 DA 25H well** between 10,699 feet and 10,637 feet
- **Dr Pi Federal Unit 17 8 DA 26H well** between 10,649 feet and 10,543 feet. *See* **Exhibit A** at 15-30.

8. Due to the location and curvature of the kickoff point in **Top Spot 12-13 Federal Com 11H well**, OXY also requests an exception for the 100-foot packer setting depth requirement applied to vertical injection wells that packers be set within one hundred feet of the uppermost perforations or casing shoe.

9. A map depicting the pipeline that ties the wells proposed for the Pilot Project into the gathering system and the affected compressor station is included in the attached **Exhibit A** at 5.

WELL DATA

10. Information on the well data, including well diagrams and well construction, casing, tubing, packers, cement, perforations, and other details for each proposed injection well are included in the attached **Exhibit A** at pages 15-30.

11. The proposed maximum achievable surface pressure will not exert pressure at the top perforation in the wellbore of any injection well with a full fluid column of reservoir brine water in excess of 90% of the burst pressure for the production casing or production liner. *See* **Exhibit A** at 31. In addition, the proposed maximum achievable surface pressure will not exert pressure at the topmost perforation in excess of 90% of the formation parting pressure. *See* **Exhibit A** at 31.

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

13. The wells proposed for injection in the Pilot Project have previously demonstrated mechanical integrity. *See* **Exhibit A** at 33. OXY will undertake new tests to demonstrate mechanical integrity for each well proposed for this Pilot Project as a condition of approval prior to commencing injection operations.

[1] Electronic versions of the cement bond logs will be submitted to the Division through each well file.

GEOLOGY AND RESERVOIR

14. 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 54-66. 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.*

15. The top of the Bone Spring formation in this area is at approximately 8,400 feet total vertical depth and extends down to the top of the Wolfcamp formation at approximately 11,900 feet total vertical depth. *See* **Exhibit A** at 56.

16. Zones that are productive of oil and gas are located above and below the targeted injection interval. *See* **Exhibit A** at 54, 56.

17. Reservoir modeling indicates anticipated horizontal movement of injected gas will be approximately 100 feet or less from each injection wellbore within the Bone Spring formation. *See* **Exhibit A** at 75.

18. OXY has prepared calculations estimating the stimulated reservoir volume based on supporting empirical data and a reservoir model to evaluate potential effects on wells adjacent to the Project Area. *See* **Exhibit A** at 69-79. OXY's analysis concludes that there will be no change in the oil recovery from each of its proposed injection wells or from any of the offsetting wells. *See id.* at 78.

19. The source of gas for injection will be from OXY's Top Spot, Lost Tank, and Dr Pi Federal Unit wells producing from the Bone Spring and Wolfcamp formations that are identified in the list of wells in **Exhibit A** at page 34. All proposed temporary injection wells and gas source wells are commingled under the approved gas surface commingling permit PLC-867A. Additional

source wells may be added over time under an approved surface commingling authorization. Each of OXY's proposed injection wells are operated by OXY.

20. OXY has prepared an analysis of the composition of the source gas for injection and a corrosion prevention plan. *See* **Exhibit A** at 37-41.

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 67. 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 79.

GAS ALLOCATION

28. OXY's proposes a method of gas allocation following a temporary injection event has been previously approved by the Division. *See* **Exhibit A** at 83-84.

AREA OF REVIEW

22. OXY has prepared maps depicting the surface hole location and trajectory of the proposed injection wells, the location of every well within a two-mile radius, leases within two miles, and the half-mile area of review. *See* **Exhibit A** at pages 47-49.

23. A tabulation of data for wells that penetrate the proposed injection interval or the confining layer within the half-mile area of review is included in **Exhibit A** at pages 49-51, along with well-bore schematics for wells that are plugged and abandoned or temporarily abandoned. *See* **Exhibit A** at 52.

OPERATIONS AND SAFETY

24. OXY plans to monitor injection and operational parameters for the Pilot Project using an automated supervisory control and data acquisition (SCADA) system with pre-set alarms

and automatic shut-in safety valves that will prevent injection pressures from exceeding the MASP. *See* **Exhibit A** at pages 44-45. OXY will also monitor and track various operational parameters at the Pilot Project's central tank battery and central gas lift compressors. *See id*.

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 list of the affected parties subject to notice is included in **Exhibit A** at 88-92, along with a map and list identifying each tract subject to notice. *See* **Exhibit A** at 81-82.

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 July 6, 2023, and that after notice and hearing this Application be approved.

Respectfully submitted,

HOLLAND & HART LLP

By: _____

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Julia Broggi
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pmvance@hollandhart.com

ATTORNEYS FOR OXY USA INC.

CASE _____: **Application of OXY USA Inc. for Closed Loop Gas Capture Injection Pilot Project, Eddy and Lea Counties, New Mexico.** Applicant in the above-styled cause seeks an order authorizing it to engage in a closed loop gas capture injection pilot project ("Pilot Project") in the Bone Spring formation within a 1,958.92-acre, more or less, project area for this Pilot Project consisting of the following acreage identified below in Eddy and Lea Counties, New Mexico (the "Project Area"):

Township 22 South, Range 31 East
Section 13: W/2 W/2
Section 12: W/2 W/2

Township 22 South, Range 32 East
Section 8: All
Section 17: All
Section 19: W/2 W/2
Section 30: W/2

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

- **Lost Tank 30-19 Federal Com 1H** (API No. 30-025-46474) with a surface location 128 feet FNL and 1235 feet FWL (Lot 1) in Section 19, Township 22 South, Range 32 East, and a bottom hole location 29 feet FSL and 971 feet FWL (Lot 4) in Section 30, Township 22 South, Range 32 East, NMPM, all in Lea County, New Mexico.
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OXY seeks authority to utilize these producing wells to occasionally inject produced gas into the Bone Spring formation at total vertical depths of between approximately 9,005 feet to 10,699 feet along the horizontal portion of each wellbore at surface injection pressures of no more than 1,300 psi. at an average injection rate of 3 MMSCF per day and a maximum injection rate of 4 MMSCF per day. The source of the produced gas will be from the Bone Spring and Wolfcamp formations. The subject acreage is located approximately 22 miles northeast of Loving, New Mexico.

EXHIBIT A

Lost Tank Closed Loop Gas Capture (CLGC) Project

General Project Description: Closed Loop Gas Capture (CLGC) Project
Oxy- 2023 Lost Tank

Summary of Requested Relief

1. Authority to operate a closed loop gas capture project ("CLGC") project consisting of eight (8) wells. The project will help to prevent waste and reduce adverse impacts from temporary interruptions of gas pipeline capacity.
2. Maximum Allowable Surface Pressure (MASP) of 1300 psi.
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.

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

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

Proposed Operations

Oxy has an extensive high-pressure gas system in the Lost 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.

Mark West is the third-party gas purchaser for the Lost 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 Stations through the flow meter, control valve, safety shutdown valve, wellhead and into the wellbore for storage. Gas will be injected down the casing/tubing annulus in these wells. Simultaneously, the proposed CLGC well will be shut in by closing the electric choke upstream of the production flowline. After the interruption has ended, the electric choke will open and the CLGC well resumes production.

Gas Surface Commingling Permit

The Lost Tank area will be commingled at a future date under the approved gas surface commingling permit PLC-867A.

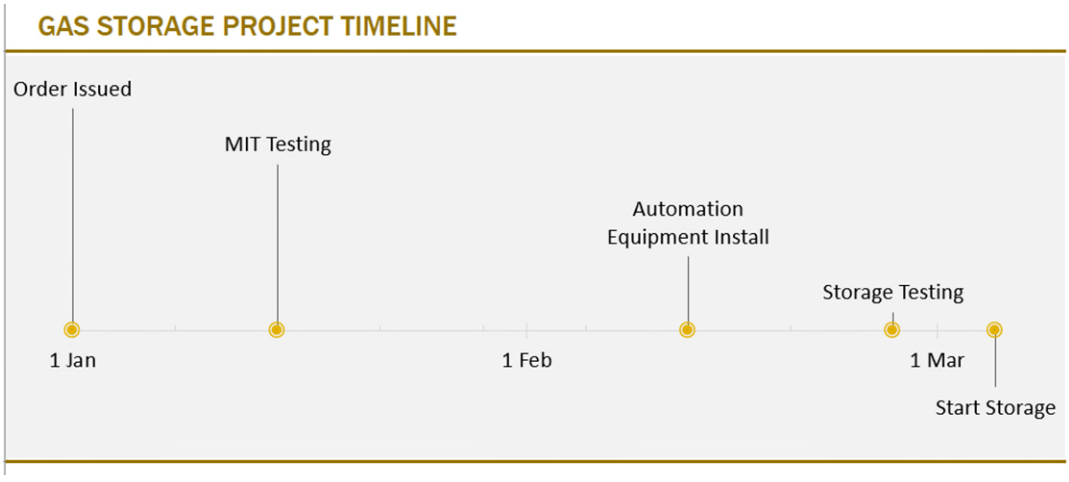
Wells

There are 8 wells proposed in this application.

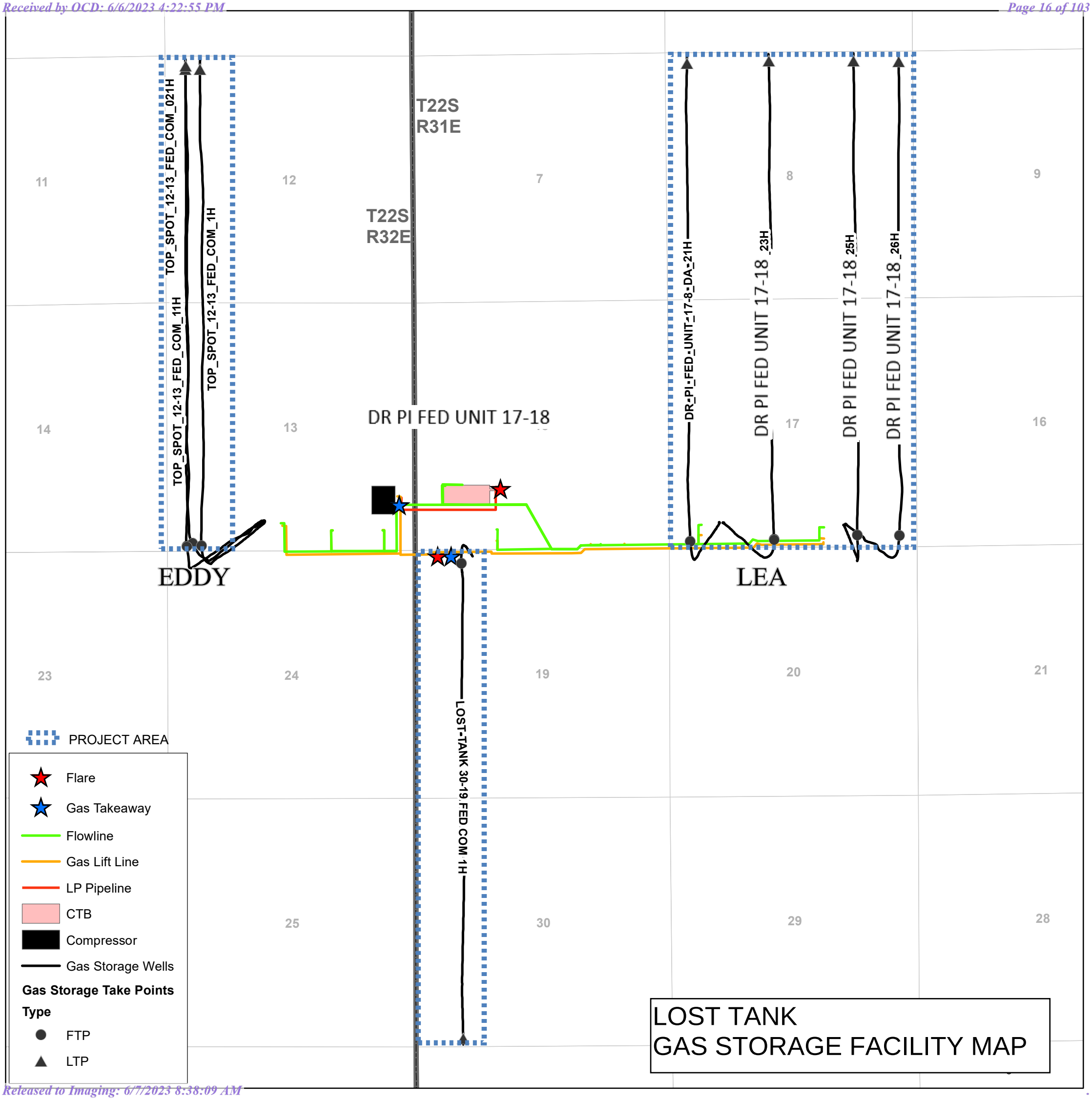
API10	Well Name
30-025-46474	LOST TANK 30-19 FEDERAL COM 1H
30-015-48595	TOP SPOT 12_13 FED COM 11H
30-015-48594	TOP SPOT 12_13 FED COM 1H
30-015-47771	TOP SPOT 12_13 FED COM 21H
30-025-48282	DR PI FEDERAL UNIT 17 8 DA 21H
30-025-48947	DR PI FEDERAL UNIT 17 8 DA 23H
30-025-48949	DR PI FEDERAL UNIT 17 8 DA 25H
30-025-48950	DR PI FEDERAL UNIT 17 8 DA 26H

Timeline

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



Facilities and Production


T22S
R31E
T22S
R32E
TOP_SPOT_12-13_FED_COM_021H
TOP_SPOT_12-13_FED_COM_11H
TOP_SPOT_12-13_FED_COM_1H
DR PI FED UNIT 17-18
DR-PI-FED-UNIT-17-8-DA-21H
DR PI FED UNIT 17-18 23H
DR PI FED UNIT 17-18 25H
DR PI FED UNIT 17-18 26H
LOST-TANK 30-19.FED COM 1H
EDDY
LEA
11
12
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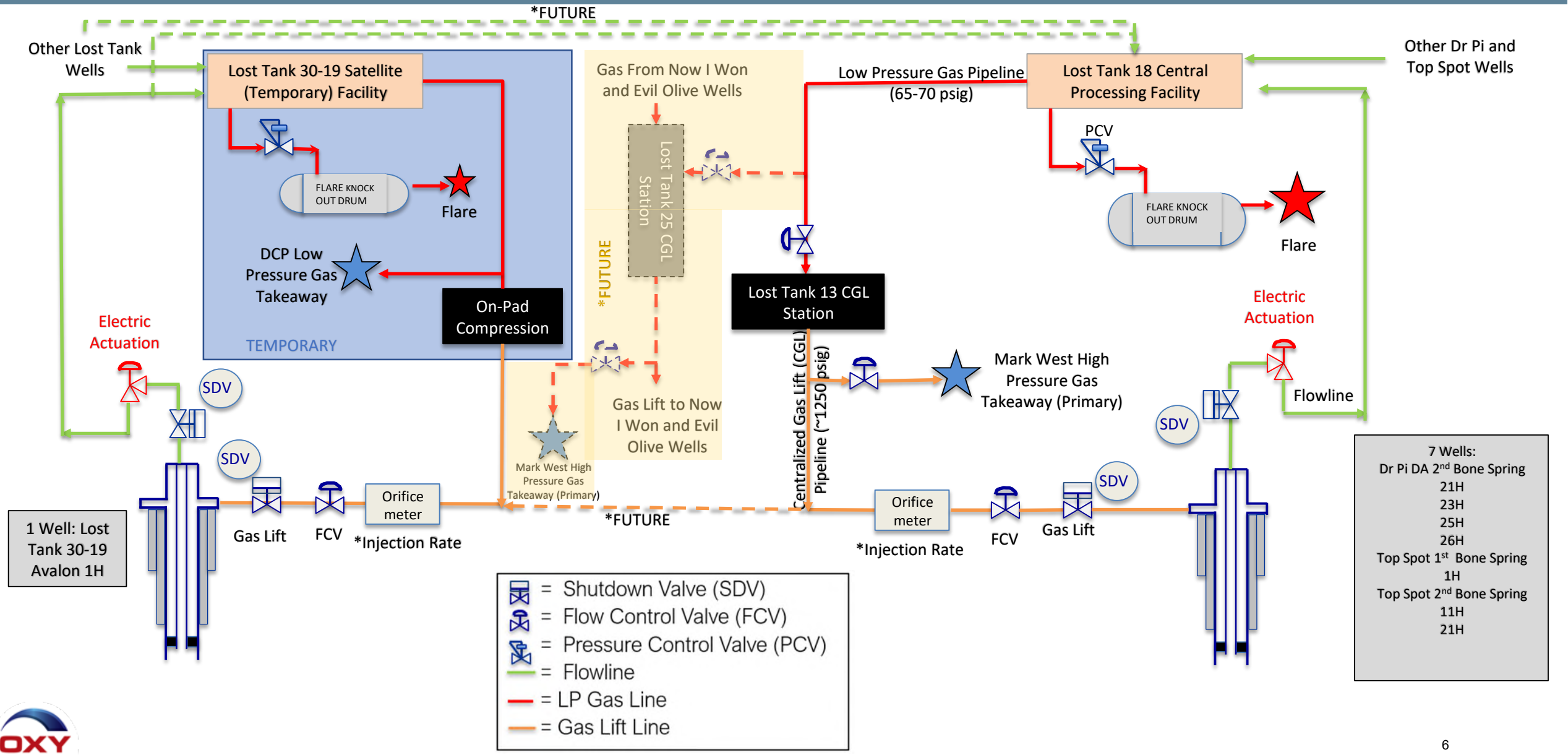
8
9
14
13
17
16
23
24
19
20
21
25
30
29
28
PROJECT AREA
Flare
Gas Takeaway
Flowline
Gas Lift Line
LP Pipeline
CTB
Compressor
Gas Storage Wells
Gas Storage Take Points
Type
FTP
LTP
LOST TANK
GAS STORAGE FACILITY MAP

Lost Tank Gas Process Flow Diagram



*Dashed lines show future gas gathering system and facilities

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr,. Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-46474	97366	Bilbrey Basin; Bone Spring, South

[4] Property Code	Property Name	[6] Well Number
322423	Lost Tank 30-19 Fed Com	1H

[7] OGRID No.	[8] Operator Name	[9] Elevation
16696	OXY USA INC	3616'

[10] Surface Location

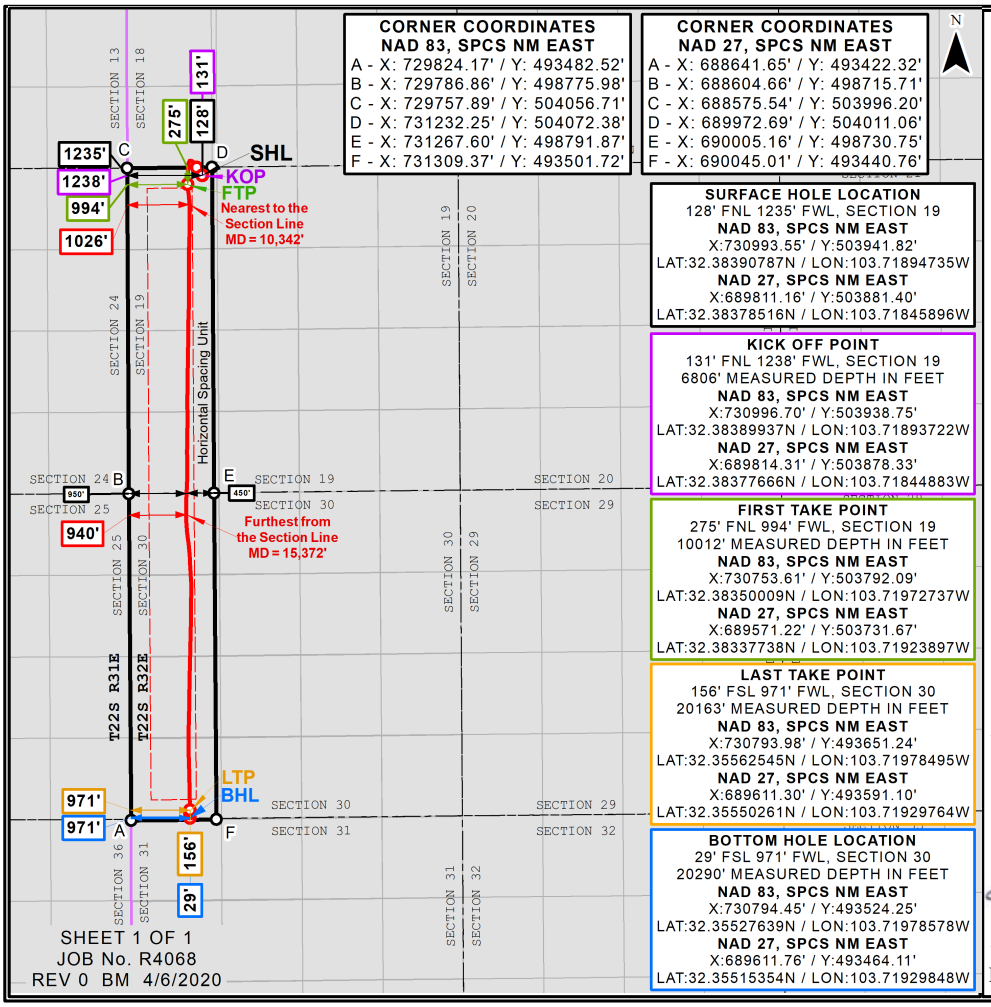
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L 1	19	22S	32E		128	NORTH	1235	WEST	LEA

[11] [11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L 4	30	22S	32E		29	SOUTH	971	WEST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
358.92			

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.



CORNER COORDINATES NAD 83, SPCS NM EAST
A - X: 729824.17' / Y: 493482.52'
B - X: 729786.86' / Y: 498775.98'
C - X: 729757.89' / Y: 504056.71'
D - X: 731232.25' / Y: 504072.38'
E - X: 731267.60' / Y: 498791.87'
F - X: 731309.37' / Y: 493501.72'

CORNER COORDINATES NAD 27, SPCS NM EAST
A - X: 688641.65' / Y: 493422.32'
B - X: 688604.66' / Y: 498715.71'
C - X: 688575.54' / Y: 503996.20'
D - X: 689972.69' / Y: 504011.06'
E - X: 690005.16' / Y: 498730.75'
F - X: 690045.01' / Y: 493440.76'

N

SURFACE HOLE LOCATION
128' FNL 1235' FWL, SECTION 19
NAD 83, SPCS NM EAST
X:730993.55' / Y:503941.82'
LAT:32.38390787N / LON:103.71894735W
NAD 27, SPCS NM EAST
X:689811.16' / Y:503881.40'
LAT:32.38378516N / LON:103.71845896W

KICK OFF POINT
131' FNL 1238' FWL, SECTION 19
6806' MEASURED DEPTH IN FEET
NAD 83, SPCS NM EAST
X:730996.70' / Y:503938.75'
LAT:32.38389937N / LON:103.71893722W
NAD 27, SPCS NM EAST
X:689814.31' / Y:503878.33'
LAT:32.38377666N / LON:103.71844883W

FIRST TAKE POINT
275' FNL 994' FWL, SECTION 19
10012' MEASURED DEPTH IN FEET
NAD 83, SPCS NM EAST
X:730753.61' / Y:503792.09'
LAT:32.38350009N / LON:103.71972737W
NAD 27, SPCS NM EAST
X:689571.22' / Y:503731.67'
LAT:32.38337738N / LON:103.71923897W

LAST TAKE POINT
156' FSL 971' FWL, SECTION 30
20163' MEASURED DEPTH IN FEET
NAD 83, SPCS NM EAST
X:730793.98' / Y:493651.24'
LAT:32.35562545N / LON:103.71978495W
NAD 27, SPCS NM EAST
X:689611.30' / Y:493591.10'
LAT:32.35550261N / LON:103.71929764W

BOTTOM HOLE LOCATION
29' FSL 971' FWL, SECTION 30
20290' MEASURED DEPTH IN FEET
NAD 83, SPCS NM EAST
X:730794.45' / Y:493524.25'
LAT:32.35527639N / LON:103.71978578W
NAD 27, SPCS NM EAST
X:689611.76' / Y:493464.11'
LAT:32.35515354N / LON:103.71929848W

[17] OPERATOR CERTIFICATION

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

April Santos — 04/29/2020
Signature — Date

April Santos
Printed Name

April_Hood@oxy.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well surface location shown on this plat was plotted from field notes of the as-staked surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Data used for underground measurements were provided by others for reference only and does not constitute field measurements performed by R-Squared Global.

APRIL 7, 2020
Date of Survey

Signature and Seal of Professional Surveyor:

DAVID W. MYERS NEW MEXICO 11403 PROFESSIONAL SURVEYOR

Certificate Number
DAVID W. MYERS 11403

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99978625 Convergence Angle: 00°11'26.29720"

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

☐ AMENDED REPORT

WELL LOCATION AND ACERAGE DEDICATION AS-DRILLED PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015- 48595	5695	BILBREY BASIN, BONE SPRING

[4] Property Code	[5] Property Name	[6] Well Number
329719	TOP SPOT 12_13 FEDERAL COM	11H

[7] OGRID No.	[8] Operator Name	[9] Elevation
16696	OXY USA INC.	3569'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	22S	31E		655	South	2022	West	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	12	22S	31E		51	North	448	West	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320.00			

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

[16]

BHL (NAD83)
N:514552.08' / E:724863.87'
LAT:32.41316731 / LON:-103.73861220

BHL (NAD27)
N:514491.39' / E:683681.83'
LAT:32.41304485 / LON:-103.73812208

LTP (NAD83)
N:514387.11' / E:724862.55'
LAT:32.41271388 / LON:-103.73861945

LTP (NAD27)
N:514326.42' / E:683680.51'
LAT:32.41259142 / LON:-103.73812935

FTP/PPP-1 (NAD83)
N:504156.73' / E:724885.31'
LAT:32.38459347 / LON:-103.73873004

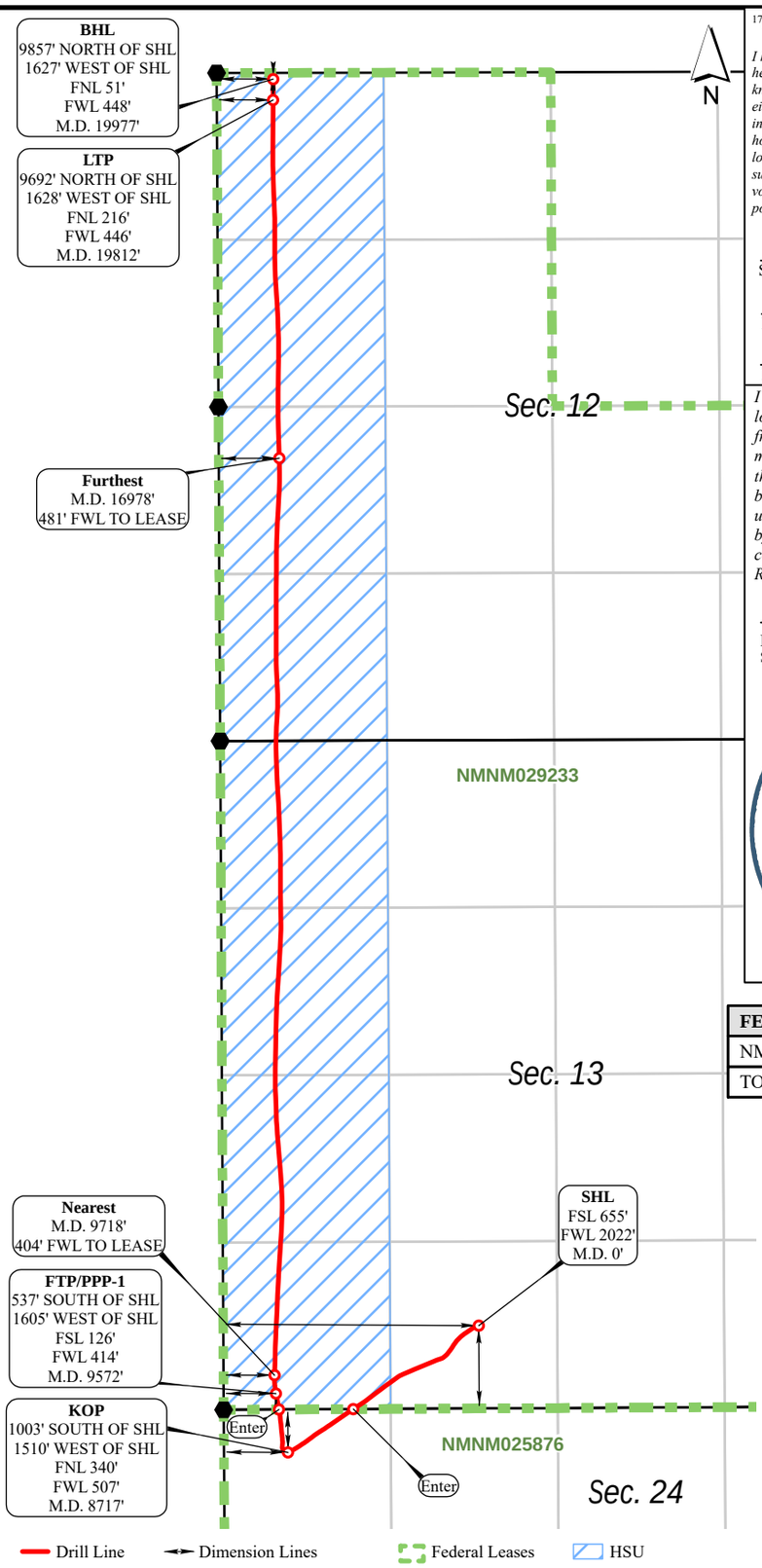
FTP/PPP-1 (NAD27)
N:504096.31' / E:683702.97'
LAT:32.38447086 / LON:-103.73824105

KOP (NAD83)
N:503691.38' / E:724980.66'
LAT:32.38331291 / LON:-103.73842955

KOP (NAD27)
N:503630.98' / E:683798.30'
LAT:32.38319029 / LON:-103.73794062

SHL (NAD83)
N:504694.20' / E:726490.60'
LAT:32.38604617 / LON:-103.73352018

SHL (NAD27)
N:504633.77' / E:685308.26'
LAT:32.38592354 / LON:-103.73303129



[17] ***OPERATOR CERTIFICATION***

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

Sarah McKinney 05/03/23
Signature Date

Sarah McKinney
Printed Name

sarah_mckinney@oxy.com
E-mail Address

I hereby certify that the well surface location shown on this plat was plotted from field notes of the as-staked surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Data used for underground measurements were provided by others for reference only and does not constitute field measurement performed by R-Squared Global.

Date of Survey MAY 1, 2023
Signature and Seal of Professional Surveyor

LLOYD P. SHORT
NEW MEXICO
21653
PROFESSIONAL SURVEYOR

FEDERAL LEASE ID	LENGTH
NMNM029233	10238.63'
TOTAL	10238.63'

Drill Line Events ⬢ Corners ▬ Drill Line ⟷ Dimension Lines Federal Leases HSU

All bearings and coordinates refer to New Mexico State Plane coordinate system, East Zone, U.S. Survey Feet.

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99994835 Convergence Angle: 0.3213°

SHEET 1 OF 1
JOB No. OXY_0026
REV 0 TCS 5/1/2023

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
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District IV
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Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACERAGE DEDICATION AS-DRILLED PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015- - 48594	5695	BILBREY BASIN, BONE SPRING

[4] Property Code	[5] Property Name	[6] Well Number
329719	TOP SPOT 12_13 FEDERAL COM	1H

[7] OGRID No.	[8] Operator Name	[9] Elevation
16696	OXY USA INC.	3568'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	22S	31E		655	South	2087	West	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	12	22S	31E		51	North	764	West	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320.00			

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

[16]

BHL (NAD83)
N:514552.73' / E:725180.14'
LAT:32.41316425 / LON:-103.73758736

BHL (NAD27)
N:514492.04' / E:683998.10'
LAT:32.41304179 / LON:-103.73709727

LTP (NAD83)
N:514334.89' / E:725176.50'
LAT:32.41256554 / LON:-103.73760309

LTP (NAD27)
N:514274.20' / E:683994.45'
LAT:32.41244307 / LON:-103.73711302

FTP/PPP-1 (NAD83)
N:504164.46' / E:725206.37'
LAT:32.38460980 / LON:-103.73768988

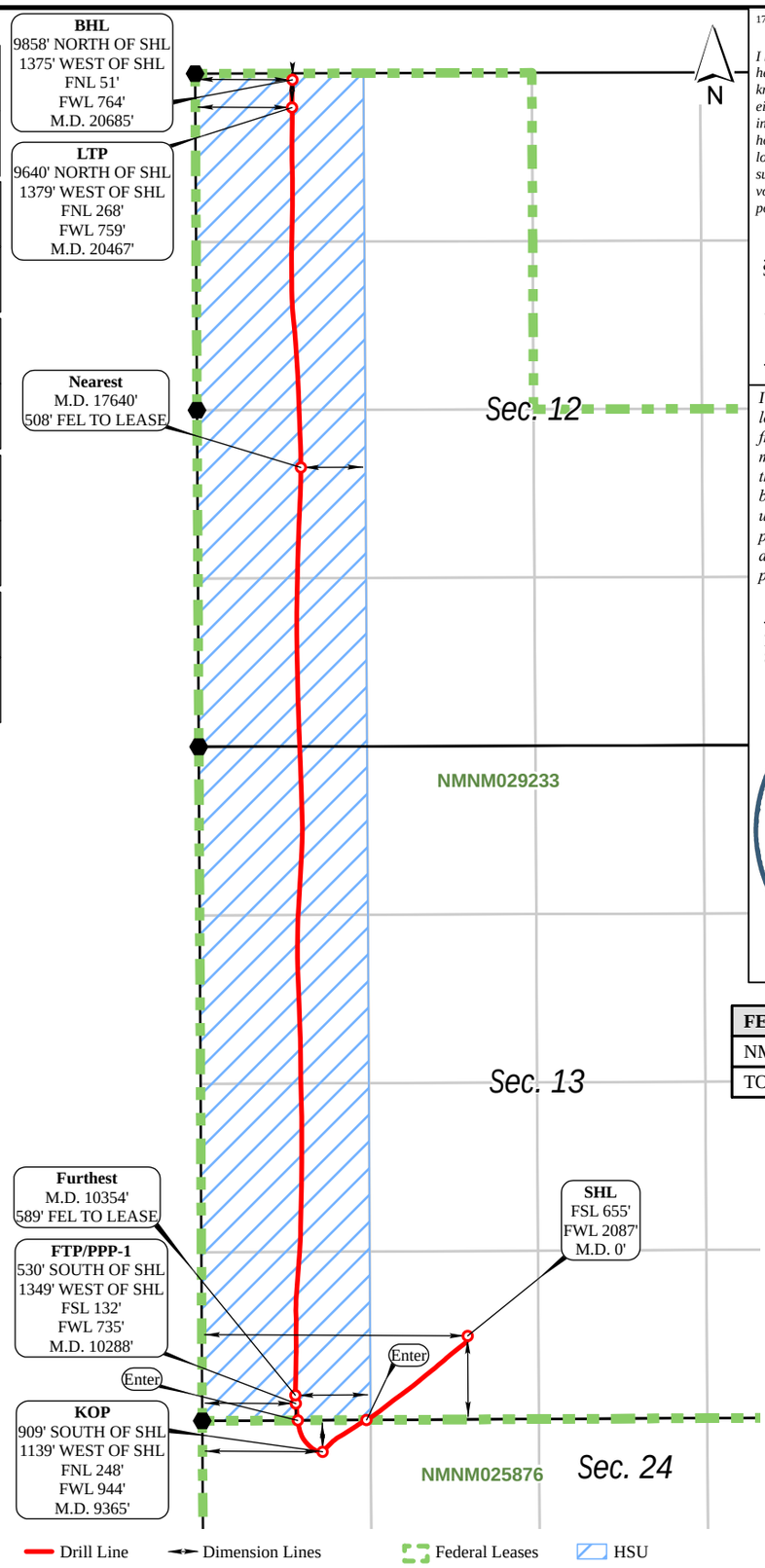
FTP/PPP-1 (NAD27)
N:504104.04' / E:684024.02'
LAT:32.38448719 / LON:-103.73720092

KOP (NAD83)
N:503785.36' / E:725416.78'
LAT:32.38356455 / LON:-103.73701513

KOP (NAD27)
N:503724.95' / E:684234.42'
LAT:32.38344193 / LON:-103.73652623

SHL (NAD83)
N:504694.60' / E:726555.60'
LAT:32.38604626 / LON:-103.73330962

SHL (NAD27)
N:504634.17' / E:685373.26'
LAT:32.38592364 / LON:-103.73282073



[17] OPERATOR CERTIFICATION

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

Sarah McKinney 05/03/2023
Signature Date

Sarah McKinney
Printed Name

sarah_mckinney@oxy.com
E-mail Address

I hereby certify that the well surface location shown on this plat was plotted from field notes of the as-staked surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Data used for underground measurements were provided by others for reference only and does not constitute field measurement performed by R-Squared Global.

Lloyd P. Short

Date of Survey MAY 1, 2023
Signature and Seal of Professional Surveyor

LLOYD P. SHORT
NEW MEXICO
21653
PROFESSIONAL SURVEYOR

FEDERAL LEASE ID	LENGTH
NMNM029233	10176.96'
TOTAL	10176.96'

Drill Line Events ⬢ Corners ▬ Drill Line ⟷ Dimension Lines Federal Leases HSU

All bearings and coordinates refer to New Mexico State Plane coordinate system, East Zone, U.S. Survey Feet.

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99994835 Convergence Angle: 0.3213°

SHEET 1 OF 3
JOB No. OXY_0026
REV 0 BM 5/1/2023

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OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACERAGE DEDICATION AS-DRILLED PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-47771	5695	BILBREY BASIN, BONE SPRING

[4] Property Code	[5] Property Name	[6] Well Number
329719	TOP SPOT 12_13 FEDERAL COM	21H

[7] OGRID No.	[8] Operator Name	[9] Elevation
16696	OXY USA INC.	3568'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	22S	31E		655	South	2052	West	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	12	22S	31E		49	North	449	West	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320.00			

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

[16]

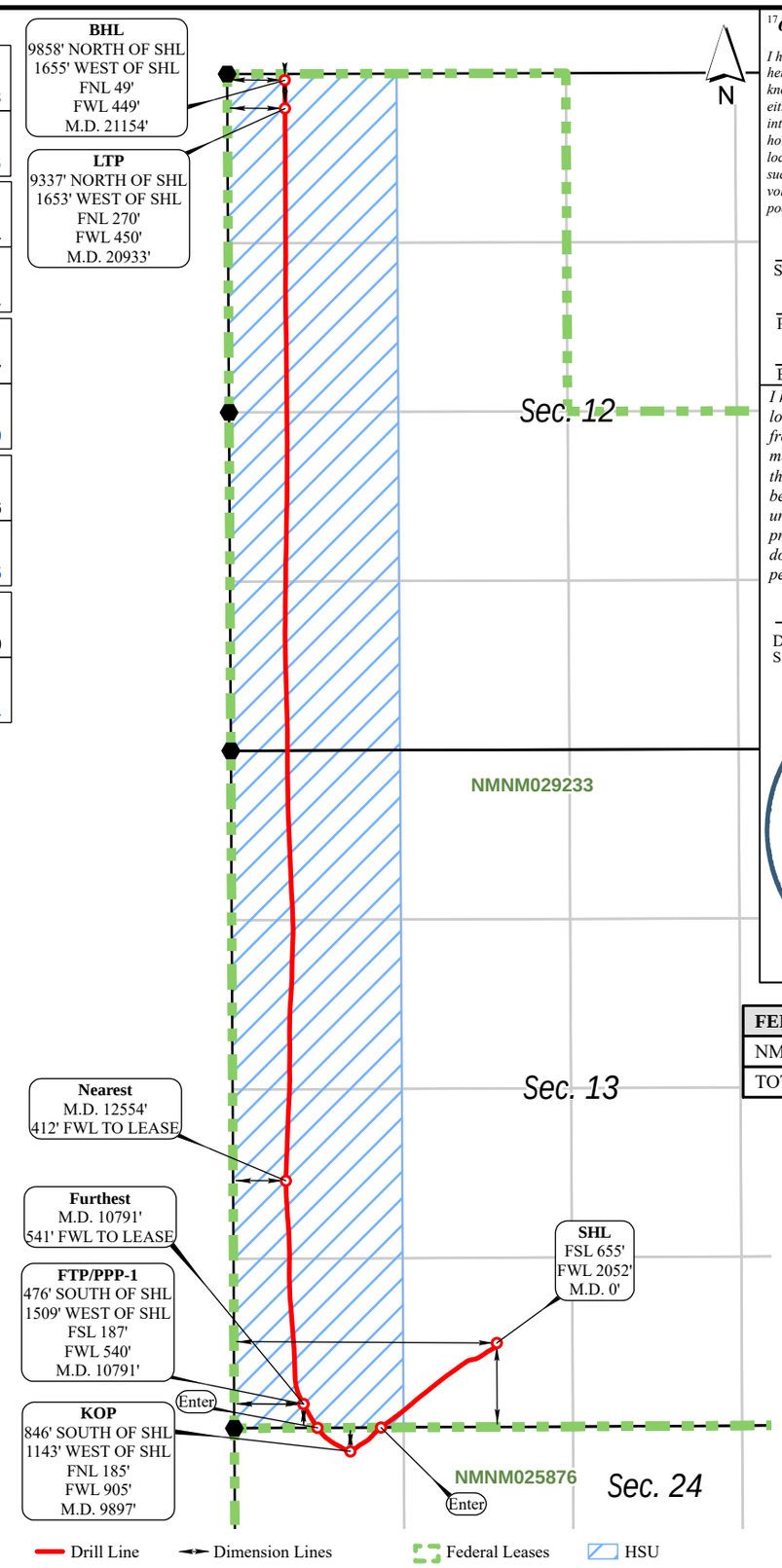
BHL (NAD83)
N:514553.16' / E:724865.26'
LAT:32.41317025 / LON:-103.73860768
BHL (NAD27)
N:514492.47' / E:683683.22'
LAT:32.41304780 / LON:-103.73811756

LTP (NAD83)
N:514332.27' / E:724867.16'
LAT:32.41256307 / LON:-103.73860551
LTP (NAD27)
N:514271.58' / E:683685.11'
LAT:32.41244061 / LON:-103.73811541

FTP/PPP-1 (NAD83)
N:504217.46' / E:725011.50'
LAT:32.38475848 / LON:-103.73832017
FTP/PPP-1 (NAD27)
N:504157.05' / E:683829.16'
LAT:32.38463587 / LON:-103.73783119

KOP (NAD83)
N:503848.01' / E:725378.02'
LAT:32.38373735 / LON:-103.73713956
KOP (NAD27)
N:503787.60' / E:684195.66'
LAT:32.38361473 / LON:-103.73665065

SHL (NAD83)
N:504694.40' / E:726520.60'
LAT:32.38604625 / LON:-103.73342300
SHL (NAD27)
N:504633.97' / E:685338.26'
LAT:32.38592363 / LON:-103.73293411



[17] *OPERATOR CERTIFICATION*

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Sarah McKinney 5/03/23
Signature Date

Sarah McKinney
Printed Name

sarah_mckinney@oxy.com
E-mail Address

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Lloyd P. Short

Date of Survey MAY 1, 2023
Signature and Seal of Professional Surveyor

LLOYD P. SHORT
NEW MEXICO
21653
PROFESSIONAL SURVEYOR

FEDERAL LEASE ID	LENGTH
NMNM029233	10132.1'
TOTAL	10132.1'

Drill Line Events ⬢ Corners ▬ Drill Line ⟷ Dimension Lines Federal Leases HSU

All bearings and coordinates refer to New Mexico State Plane coordinate system, East Zone, U.S. Survey Feet.

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99994835 Convergence Angle: 0.3213°

SHEET 1 OF 1
JOB No. OXY_0026
REV 0 TCS 5/1/2023

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Form C-102
Revised August 1, 2011
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-48282	97366	BILBREY BASIN; BONE SPRING, SOUTH

[4] Property Code	Property Name	[6] Well Number
332769	DR PI FEDERAL UNIT 17_8 DA	21H

[7] OGRID No.	[8] Operator Name	[9] Elevation
16696	OXY USA INC.	3690'

[10] Surface Location

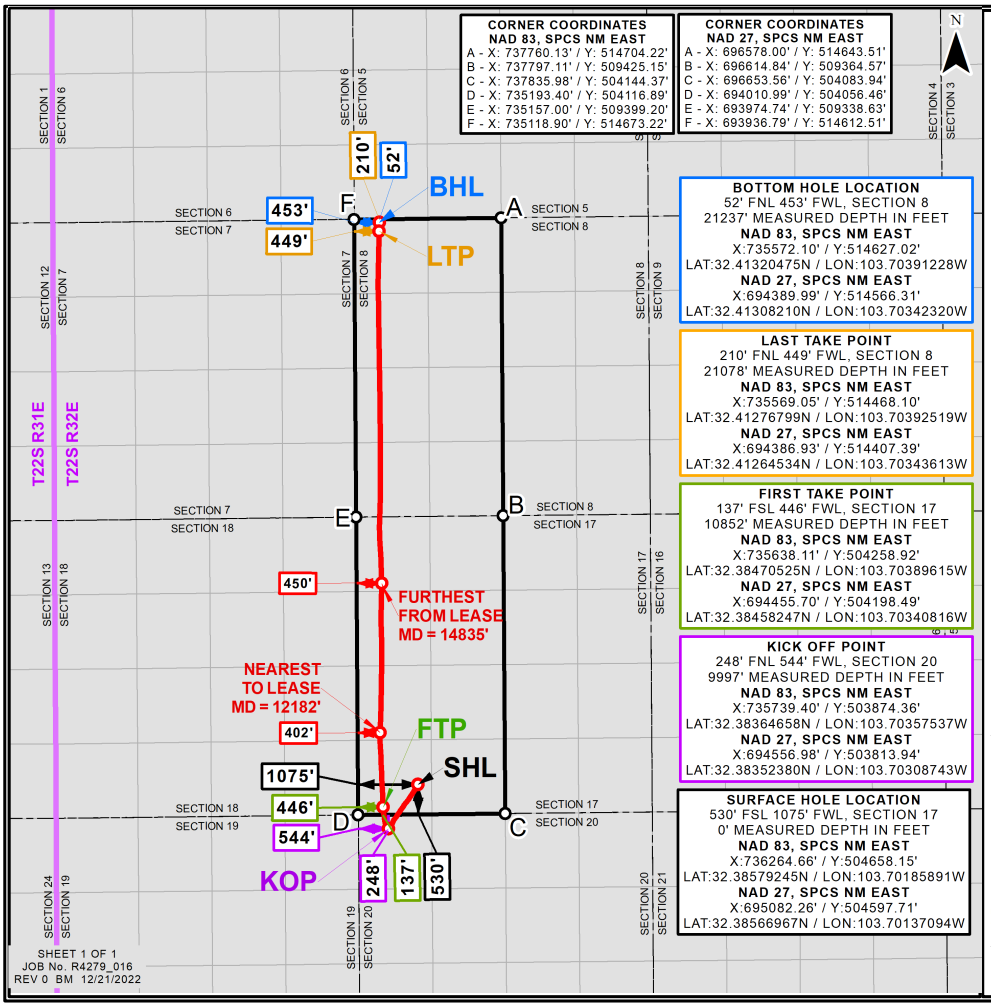
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	17	22S	32E		530	SOUTH	1075	WEST	LEA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	8	22S	32E		52	NORTH	453	WEST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640.0			

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



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Sarah Mckinney — 12/21/2022
Signature — Date

Sarah McKinney
Printed Name

sarah_mckinney@oxy.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well surface location shown on this plat was plotted from field notes of the as-staked surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Data used for underground measurements were provided by others for reference only and does not constitute field measurements performed by R-Squared Global.

DECEMBER 21, 2022
Date of Survey

Signature and Seal of Professional Surveyor:

LLOYD P. SHORT NEW MEXICO 21653 PROFESSIONAL SURVEYOR

Lloyd P. Short 21653

Certificate Number
LLOYD P. SHORT 21653

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99995379 Convergence Angle: 00°20'34.080000"

1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
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Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-48947	97366	BILBREY BASIN; BONE SPRING, SOUTH

[4] Property Code	Property Name	[6] Well Number
332769	DR PI FEDERAL UNIT 17_8 DA	23H

[7] OGRID No.	[8] Operator Name	[9] Elevation
16696	OXY USA INC.	3690'

[10] Surface Location

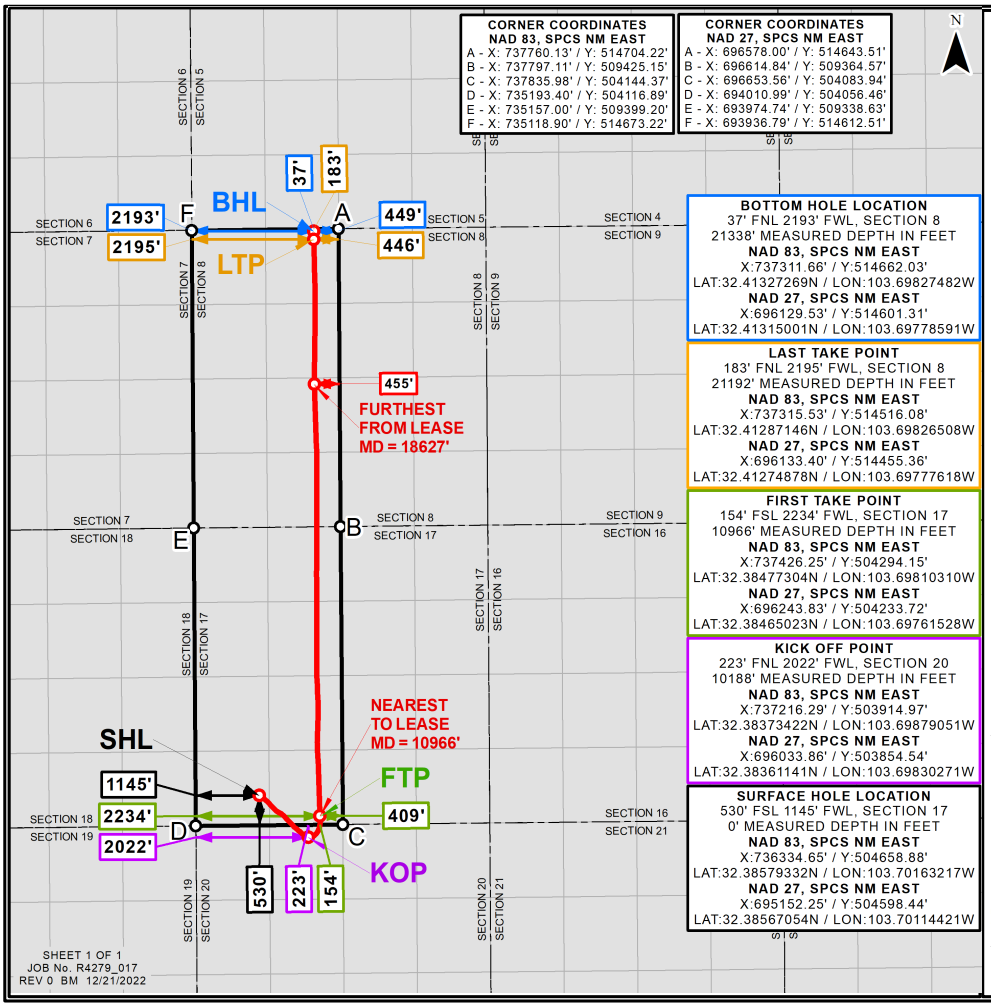
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	17	22S	32E		530	SOUTH	1145	WEST	LEA

[11] [11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	8	22S	32E		37	NORTH	2193	WEST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640.0			

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.



[17] OPERATOR CERTIFICATION

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Sarah McKinney — 12/21/22
Signature — Date

Sarah McKinney
Printed Name

sarah_mckinney@oxy.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well surface location shown on this plat was plotted from field notes of the as-staked surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Data used for underground measurements were provided by others for reference only and does not constitute field measurements performed by R-Squared Global.

DECEMBER 21, 2022
Date of Survey

Signature and Seal of Professional Surveyor:

LLOYD P. SHORT NEW MEXICO 21653 PROFESSIONAL SURVEYOR

Certificate Number LLOYD P. SHORT 21653

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99995379 Convergence Angle: 00°20'34.080000"

1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
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Form C-102
Revised August 1, 2011
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-48949	97366	BILBREY BASIN; BONE SPRING, SOUTH

[4] Property Code	Property Name	[6] Well Number
329931	DR PI FEDERAL UNIT 17_8 DA	25H

[7] OGRID No.	[8] Operator Name	[9] Elevation
16696	OXY USA INC.	3674'

[10] Surface Location

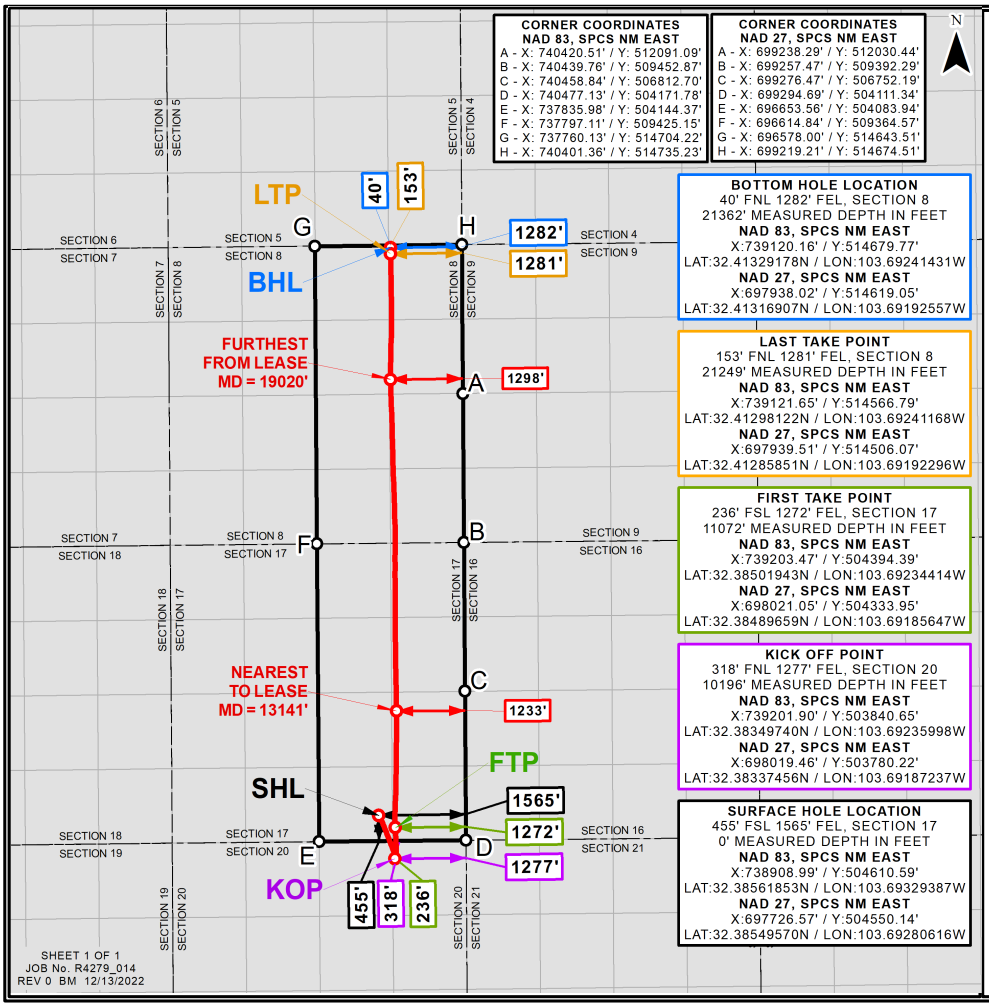
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	17	22S	32E		455	SOUTH	1565	EAST	LEA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	8	22S	32E		40	NORTH	1282	EAST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640.0			

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.



[17] OPERATOR CERTIFICATION

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Sarah Mckinney — 12/15/2022
Signature — Date

Sarah McKinney
Printed Name

sarah_mckinney@oxy.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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DECEMBER 14, 2022
Date of Survey

Signature and Seal of Professional Surveyor:

LLOYD P. SHORT NEW MEXICO 21653 PROFESSIONAL SURVEYOR

Certificate Number
LLOYD P. SHORT 21653

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99995379 Convergence Angle: 00°20'34.080000"

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Phone: (575) 393-6161 Fax: (575) 393-0720
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-48950	97366	BILBREY BASIN; BONE SPRING, SOUTH

[4] Property Code	Property Name	[6] Well Number
329931	DR PI FEDERAL UNIT 17_8 DA	26H

[7] OGRID No.	[8] Operator Name	[9] Elevation
16696	OXY USA INC.	3674'

[10] Surface Location

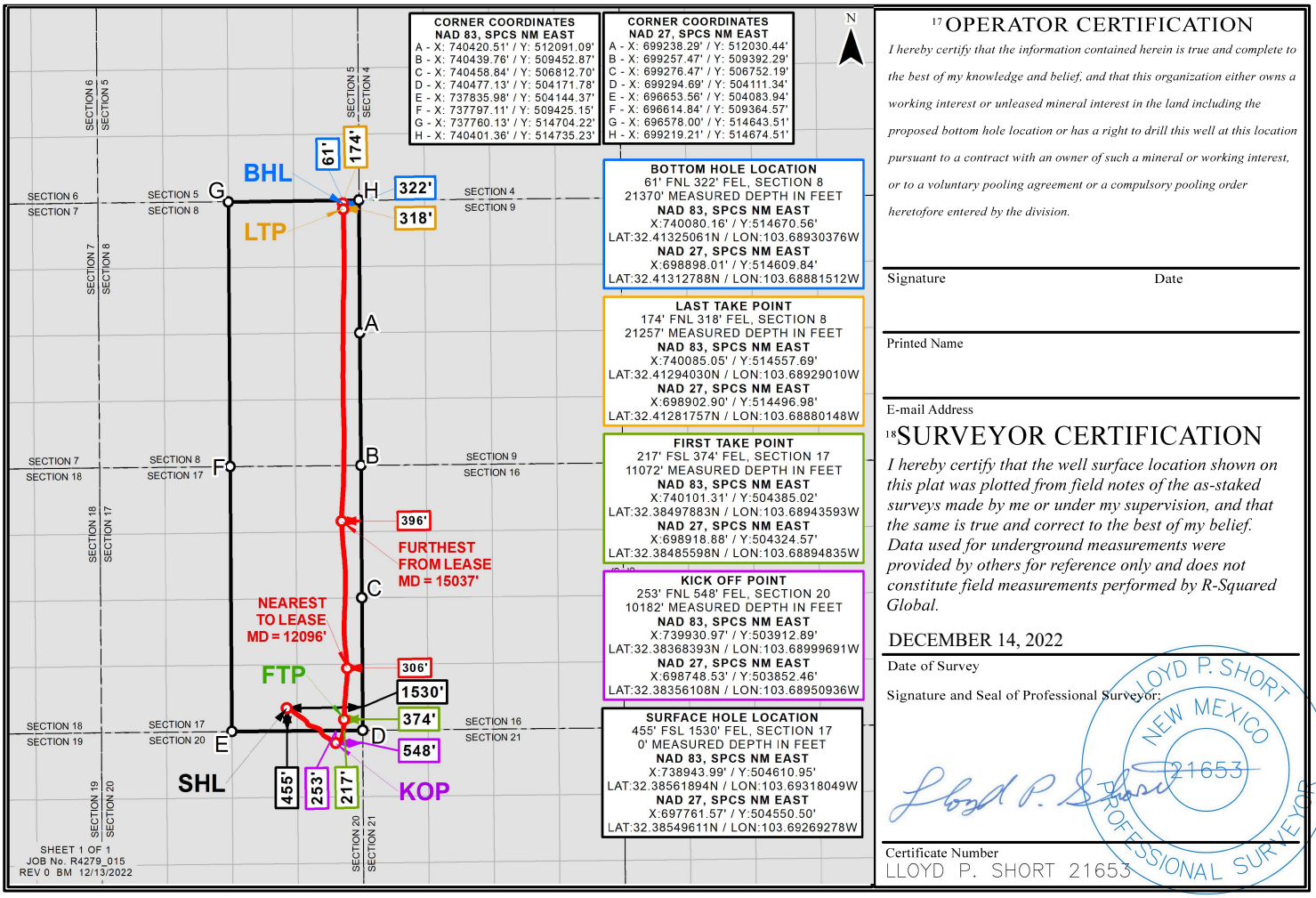
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	17	22S	32E		455	SOUTH	1530	EAST	LEA

[11] [11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	8	22S	32E		61	NORTH	322	EAST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640.0			

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.



[17] OPERATOR CERTIFICATION

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

Signature Date

Printed Name

E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well surface location shown on this plat was plotted from field notes of the as-staked surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Data used for underground measurements were provided by others for reference only and does not constitute field measurements performed by R-Squared Global.

DECEMBER 14, 2022
Date of Survey

Signature and Seal of Professional Surveyor:

LLOYD P. SHORT NEW MEXICO 21653 PROFESSIONAL SURVEYOR

Certificate Number LLOYD P. SHORT 21653

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99995379 Convergence Angle: 00°20'34.080000"

Side 1

INJECTION WELL DATA SHEET

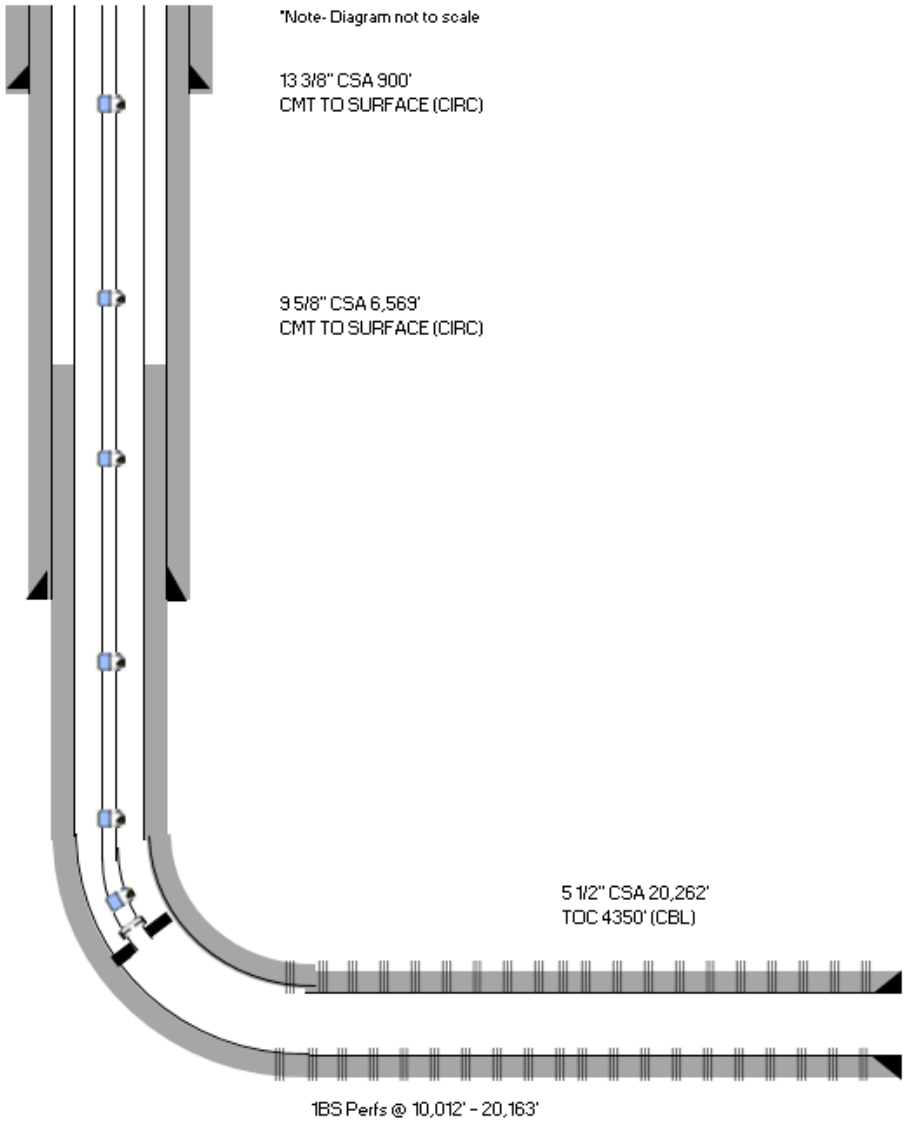
OPERATOR: OXY USA INC.

WELL NAME & NUMBER: LOST TANK 30-19 FEDERAL COM 1H

WELL LOCATION: 128' NORTH 1235' WEST | D | 19 | 22S | 32E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 1,150 sx. ***or*** 1,564 ft^3

Top of Cement: 0' Method Determined: CIRC

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 9-5/8"

Cemented with: 3,313 sx. ***or*** 3,946 ft^3

Top of Cement: 0' Method Determined: CIRC

Production Casing

Hole Size: 8-1/2" Casing Size: 5-1/2"

Cemented with: 2,749 sx. ***or*** 4,266 ft^3

Top of Cement: 4,350' Method Determined: CBL

Total Depth: 20,262' MD / 9,875' TVD

Injection Interval

10,012' MD / 9,829' TVD - perforated feet to 20,163' MD / 9,875' TVD - perforated

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" Lining Material: UNLINED

Type of Packer: AS1-X

Packer Setting Depth: 9,622' MD / 9,581' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____Yes X_____No

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

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

3. Name of Field or Pool (if applicable): BILBREY BASIN BONESPRING, SOUTH

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- AVALON

   UNDERLYING- SECOND BONE SPRING

Side 1

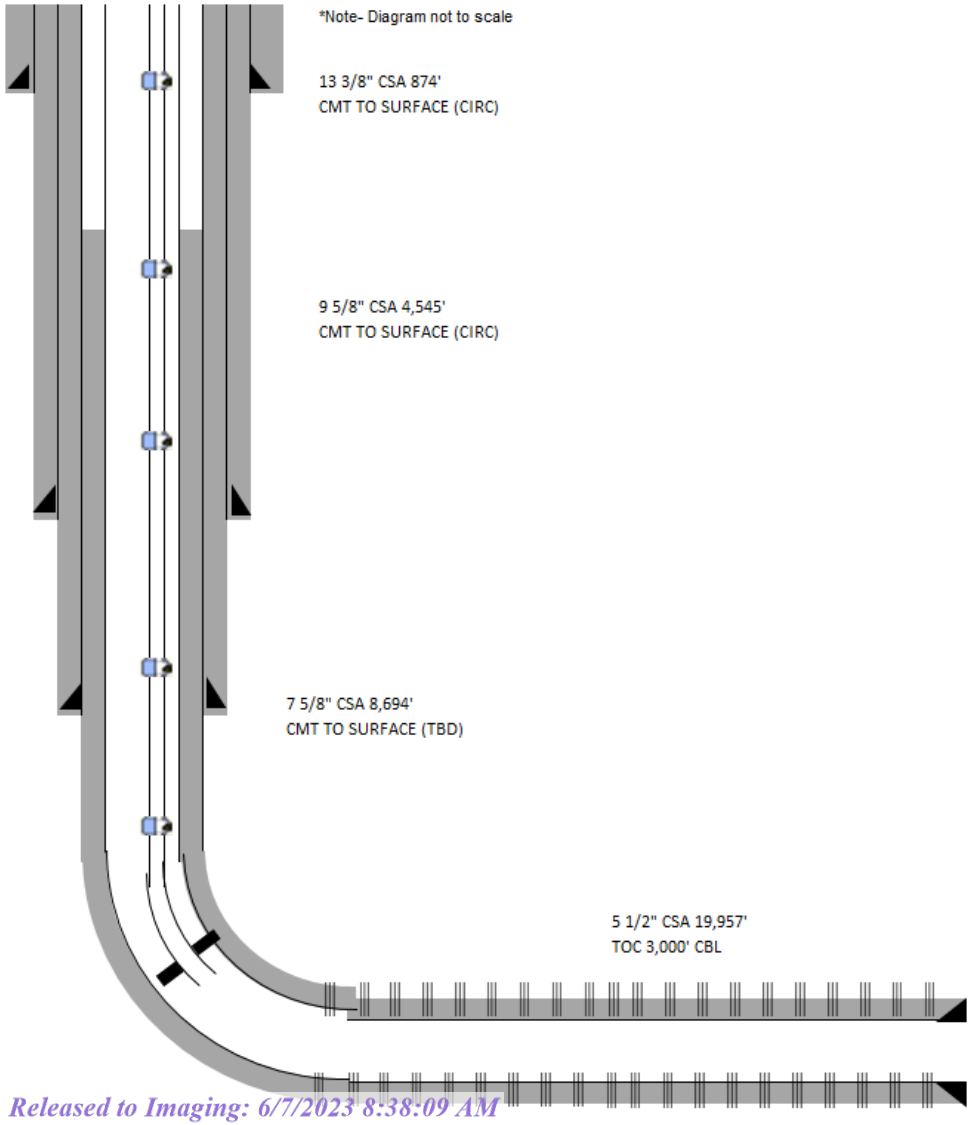
INJECTION WELL DATA SHEET

OPERATOR: OXY USA INC.

WELL NAME & NUMBER: TOP SPOT 12-13 FED COM 11H

WELL LOCATION:	653' SOUTH 2022' WEST	N	13	22S	31E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 1,090 sx. ***or*** _____ ft^3

Top of Cement: 0' Method Determined: CIRC

Intermediate Casing (STRING 1 / STRING 2)

Hole Size: 12-1/4" / 8-3/4" Casing Size: 9-5/8" / 7-5/8"

Cemented with: 1,400 / 565* sx. ***or*** _____ ft^3

Top of Cement: 0' / 0'* Method Determined: CIRC / TBD*

Production Casing

Hole Size: 6-3/4" Casing Size: 5-1/2"

Cemented with: 848 sx. ***or*** _____ ft^3

Top of Cement: 3,000' Method Determined: CBL

Total Depth: 19,957' MD / 9,035' TVD

Injection Interval

9,571' MD / 9,005' TVD - perforated feet to 19,838' MD / 9,037' TVD - perforated

(Perforated or Open Hole; indicate which)

*NOTE- Pending 2nd stage bradenhead squeeze job for 7-5/8" intermediate string 2

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" Lining Material: UNLINED

Type of Packer: AS1-X

Packer Setting Depth: 8,720' MD / 8,405' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____Yes X_____No

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

2. Name of the Injection Formation: AVALON

3. Name of Field or Pool (if applicable): BILBREY BASIN BONESPRING, SOUTH

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

   UNDERLYING: FIRST BONE SPRING

Side 1

INJECTION WELL DATA SHEET

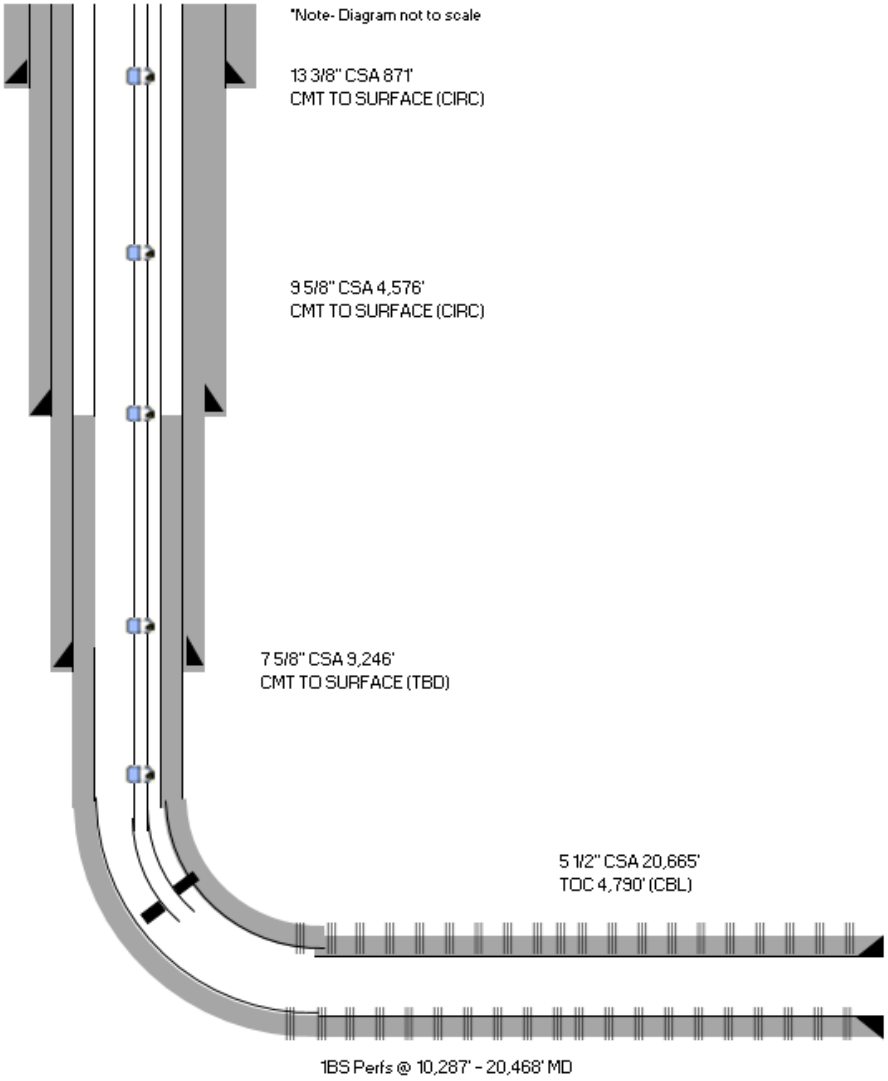
OPERATOR: OXY USA INC.

WELL NAME & NUMBER: TOP SPOT 12-13 FED COM 1H

WELL LOCATION: 653' SOUTH 2087' WEST | N | 13 | 22S | 31E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 1,090 sx. ***or*** _____ ft^3

Top of Cement: 0' Method Determined: CIRC

Intermediate Casing (STRING 1 / STRING 2)

Hole Size: 12-1/4" / 8-3/4" Casing Size: 9-5/8" / 7-5/8"

Cemented with: 1,314 / 617* sx. ***or*** _____ ft^3

Top of Cement: 0' / 0'* Method Determined: CIRC / TBD*

Production Casing

Hole Size: 6-3/4" Casing Size: 5-1/2"

Cemented with: 822 sx. ***or*** _____ ft^3

Top of Cement: 4,790' Method Determined: CBL

Total Depth: 20,665' MD / 9,817' TVD

Injection Interval

10,287' MD / 9,853' TVD - perforated feet to 20,468' MD / 9,822' TVD - perforated

(Perforated or Open Hole; indicate which)

*NOTE- Pending 2nd stage bradenhead squeeze job for 7-5/8" intermediate string 2

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" Lining Material: UNLINED

Type of Packer: AS1-X

Packer Setting Depth: 9,775' MD / 9,516' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____Yes X_____No

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

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

3. Name of Field or Pool (if applicable): BILBREY BASIN BONESPRING, SOUTH

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: AVALON

   UNDERLYING: SECOND BONE SPRING

Side 1

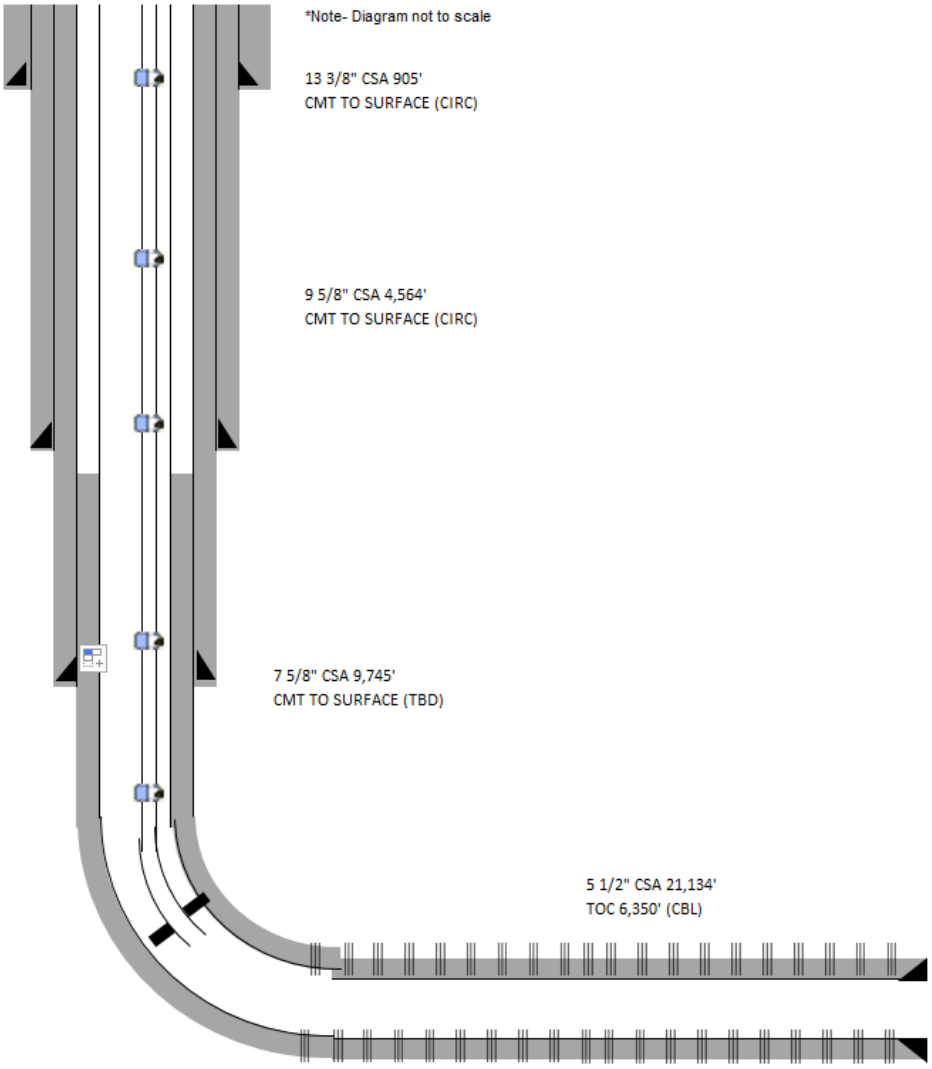
INJECTION WELL DATA SHEET

OPERATOR: OXY USA INC.

WELL NAME & NUMBER: TOP SPOT 12-13 FED COM 21H

WELL LOCATION:	653' SOUTH 2052' WEST	N	13	22S	31E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 1,090 sx. ***or*** _____ ft^3

Top of Cement: 0' Method Determined: CIRC

Intermediate Casing (STRING 1 / STRING 2)

Hole Size: 12-1/4" / 8-3/4" Casing Size: 9-5/8" / 7-5/8"

Cemented with: 1,314 / 653* sx. ***or*** _____ ft^3

Top of Cement: 0' / 0'* Method Determined: CIRC / TBD*

Production Casing

Hole Size: 6-3/4" Casing Size: 5-1/2"

Cemented with: 849 sx. ***or*** _____ ft^3

Top of Cement: 6,350' Method Determined: CBL

Total Depth: 21,134' MD / 10,387' TVD

Injection Interval

10,790' MD / 10,319' TVD - perforated feet to 20,934' MD / 10,383' TVD - perforated

(Perforated or Open Hole; indicate which)

NOTE- Pending 2nd stage bradenhead squeeze job for 7-5/8" intermediate string 2

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" Lining Material: UNLINED

Type of Packer: AS1-X

Packer Setting Depth: 10,280' MD / 10,039' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____Yes X_____No

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

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

3. Name of Field or Pool (if applicable): BILBREY BASIN BONESPRING, SOUTH

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

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

   UNDERLYING: THIRD BONE SPRING

Side 1

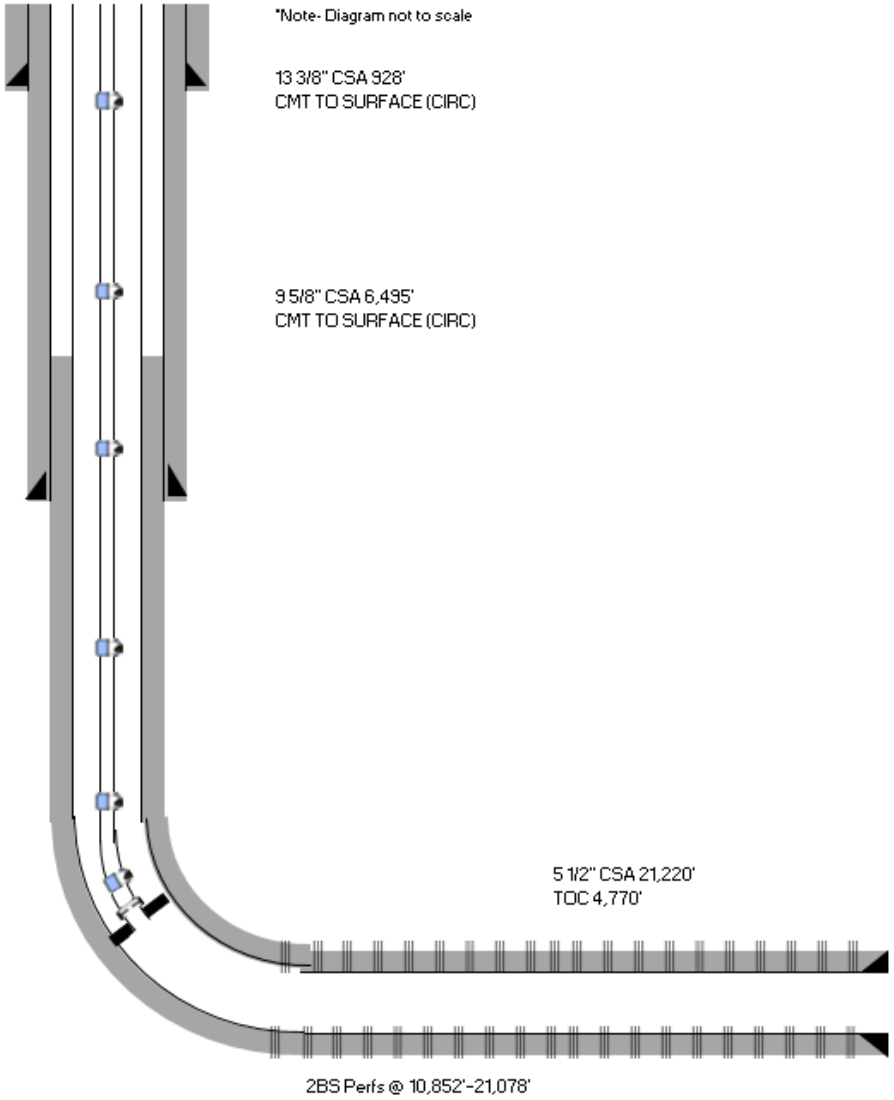
INJECTION WELL DATA SHEET

OPERATOR: OXY USA INC.

WELL NAME & NUMBER: DR PI FEDERAL UNIT 17 8 DA 21H

WELL LOCATION:	530' SOUTH 1075' WEST	M	17	22S	32E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 1,519 sx. ***or*** 1,580 ft^3

Top of Cement: 0' Method Determined: CIRC

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 9-5/8"

Cemented with: 1,403 sx. ***or*** 3,756 ft^3

Top of Cement: 0' Method Determined: CIRC

Production Casing

Hole Size: 8-3/4" Casing Size: 5-1/2"

Cemented with: 3,386 sx. ***or*** 5,172 ft^3

Top of Cement: 4,770' Method Determined: CBL

Total Depth: 21,220' MD / 10,638' TVD

Injection Interval

10,852' MD / 10,636' TVD - perforated feet to 21,078' MD / 10,641' TVD - perforated

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" Lining Material: UNLINED

Type of Packer: AS1-X

Packer Setting Depth: 10,442' MD / 10,331' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____Yes X_____No

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

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

3. Name of Field or Pool (if applicable): BILBREY BASIN BONESPRING, SOUTH

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

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

   OVERLYING- FIRST BONE SPRING

   UNDERLYING- THIRD BONE SPRING

Side 1

INJECTION WELL DATA SHEET

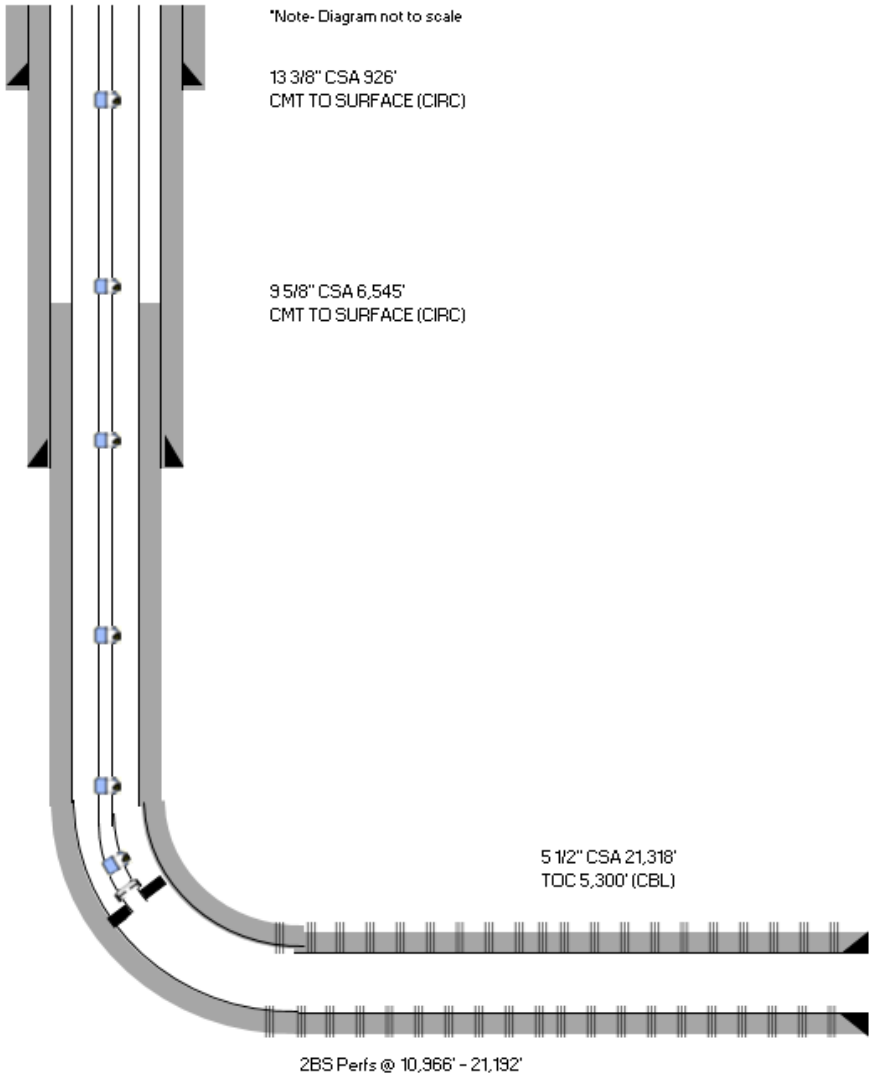
OPERATOR: OXY USA INC.

WELL NAME & NUMBER: DR PI FEDERAL UNIT 17 8 DA 23H

WELL LOCATION: 530' SOUTH 1145' WEST | M | 17 | 22S | 32E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 1,150 sx. ***or*** 1,550 ft^3

Top of Cement: 0' Method Determined: CIRC

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 9-5/8"

Cemented with: 1,499 sx. ***or*** 3,951 ft^3

Top of Cement: 0' Method Determined: CIRC

Production Casing

Hole Size: 8-3/4" Casing Size: 5-1/2"

Cemented with: 3,381 sx. ***or*** 5,165 ft^3

Top of Cement: 5,300' Method Determined: CBL

Total Depth: 21,318' MD / 10,593' TVD

Injection Interval

10,966' MD / 10,585' TVD - perforated feet to 21,192' MD / 10,594' TVD - perforated

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" Lining Material: UNLINED

Type of Packer: AS1-X

Packer Setting Depth: 10,484' MD / 10,318' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____Yes X_____No

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

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

3. Name of Field or Pool (if applicable): BILBREY BASIN BONESPRING, SOUTH

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

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

   OVERLYING- FIRST BONE SPRING

   UNDERLYING- THIRD BONE SPRING

Side 1

INJECTION WELL DATA SHEET

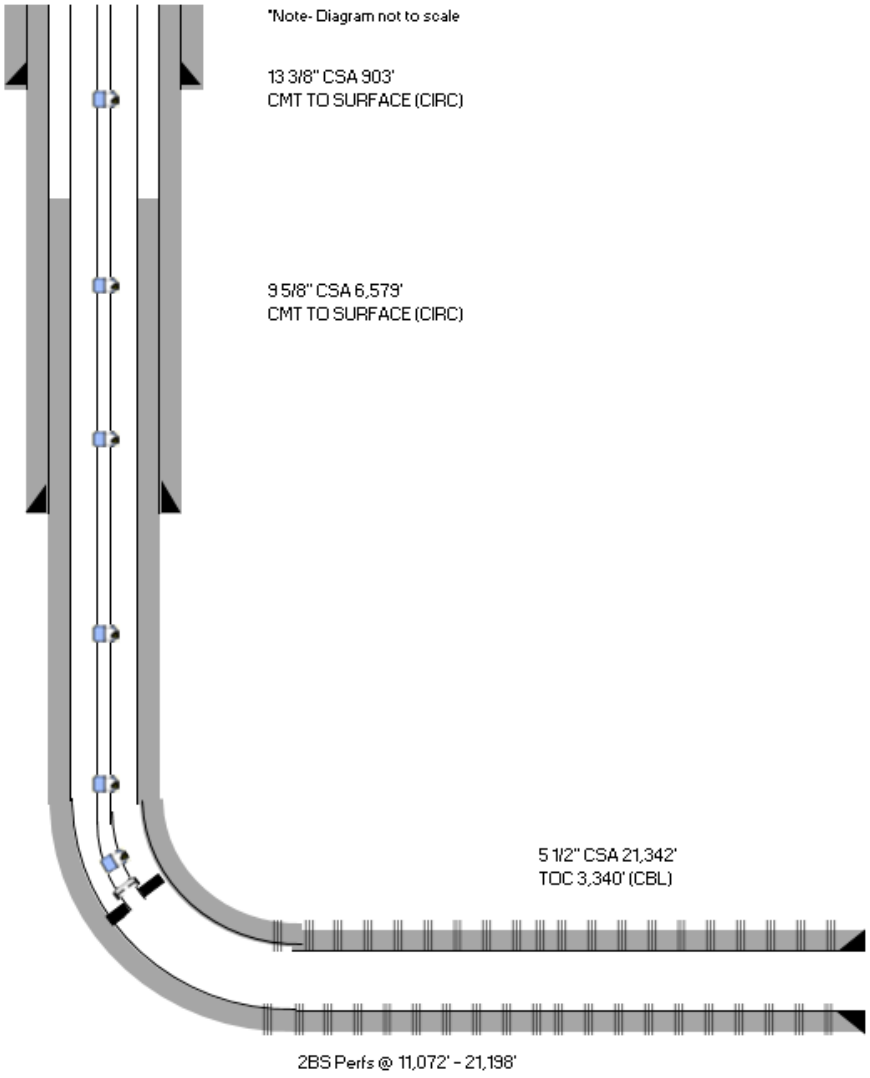
OPERATOR: OXY USA INC.

WELL NAME & NUMBER: DR PI FEDERAL UNIT 17 8 DA 25H

WELL LOCATION: 455' SOUTH 1565' EAST | O | 17 | 22S | 32E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 1,130 sx. ***or*** 1,526 ft^3

Top of Cement: 0' Method Determined: CIRC

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 9-5/8"

Cemented with: 1,761 sx. ***or*** 4,700 ft^3

Top of Cement: 0' Method Determined: CIRC

Production Casing

Hole Size: 8-3/4" Casing Size: 5-1/2"

Cemented with: 3,373 sx. ***or*** 5,165 ft^3

Top of Cement: 3,340' Method Determined: CBL

Total Depth: 21,342' MD / 10,635' TVD

Injection Interval

11,072' MD / 10,699' TVD - perforated feet to 21,198' MD / 10,637' TVD - perforated

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" Lining Material: UNLINED

Type of Packer: AS1-X

Packer Setting Depth: 10,435' MD / 10,341' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____Yes X_____No

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

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

3. Name of Field or Pool (if applicable): BILBREY BASIN BONESPRING, SOUTH

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

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

   OVERLYING- FIRST BONE SPRING

   UNDERLYING- THIRD BONE SPRING

Side 1

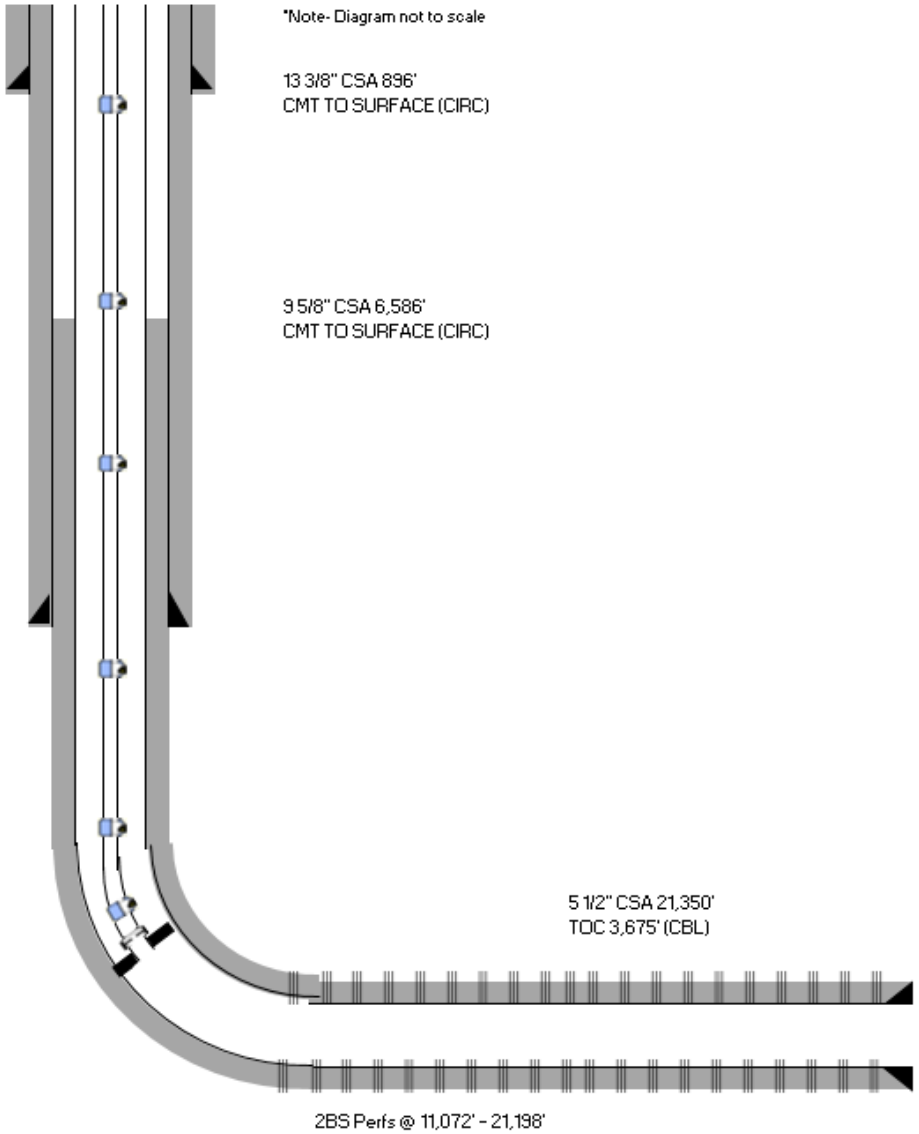
INJECTION WELL DATA SHEET

OPERATOR: OXY USA INC.

WELL NAME & NUMBER: DR PI FEDERAL UNIT 17 8 DA 26H

WELL LOCATION:	455' SOUTH 1530' EAST	O	17	22S	32E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 1,130 sx. ***or*** 1,519 ft^3

Top of Cement: 0' Method Determined: CIRC

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 9-5/8"

Cemented with: 1,383 sx. ***or*** 3,699 ft^3

Top of Cement: 0' Method Determined: CIRC

Production Casing

Hole Size: 8-3/4" Casing Size: 5-1/2"

Cemented with: 3,562 sx. ***or*** 5,465 ft^3

Top of Cement: 3,675' Method Determined: CBL

Total Depth: 21,350' MD / 10,539' TVD

Injection Interval

11,072' MD / 10,649' TVD - perforated feet to 21,198' MD / 10,543' TVD - perforated

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" Lining Material: UNLINED

Type of Packer: AS1-X

Packer Setting Depth: 10,561' MD / 10,379' TVD

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

Additional Data

1. Is this a new well drilled for injection? _____Yes X_____No

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

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

3. Name of Field or Pool (if applicable): BILBREY BASIN BONESPRING, SOUTH

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

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

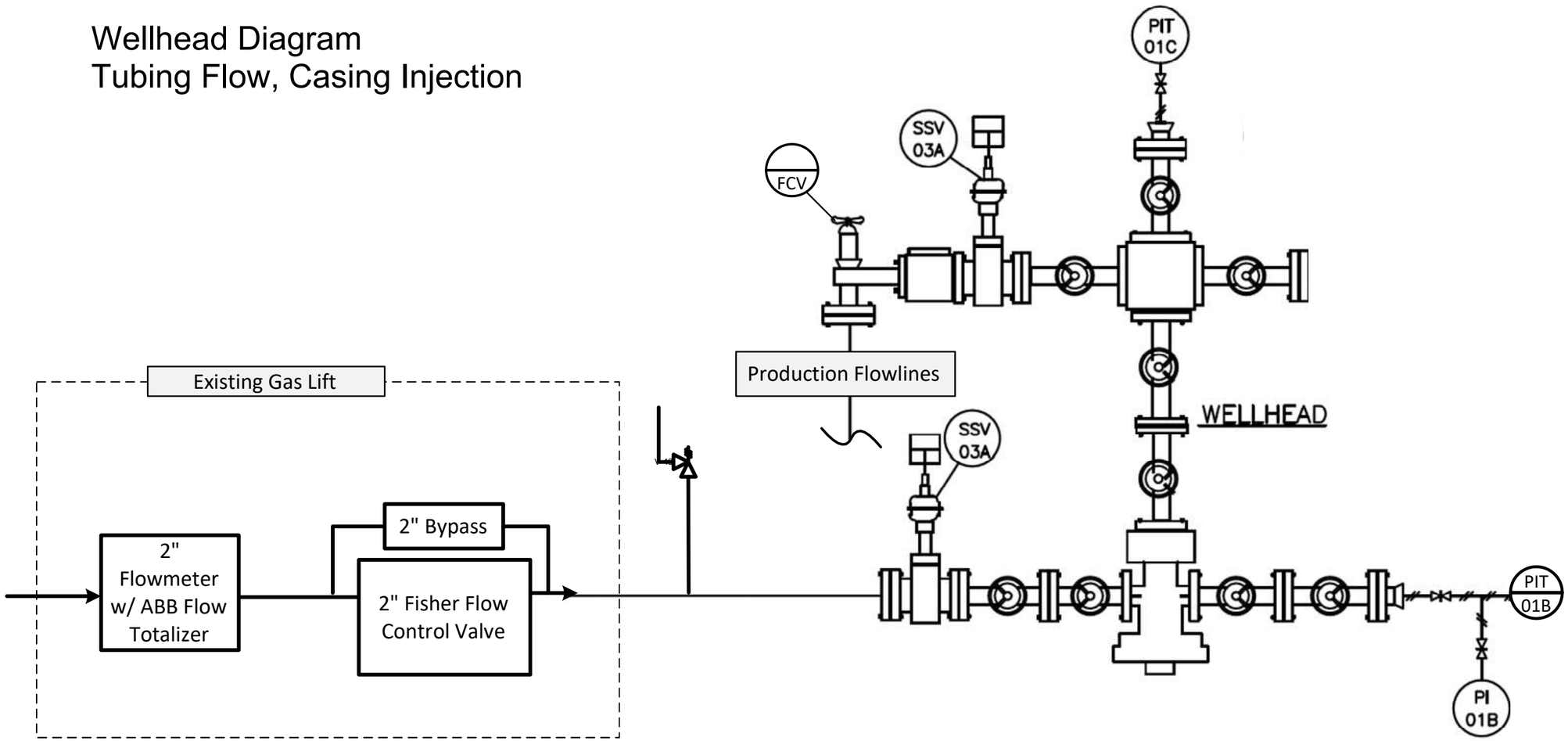
   OVERLYING- FIRST BONE SPRING

   UNDERLYING- THIRD BONE SPRING

Max Allowable Surface Pressure (MASP) Table

API10	Well Name	Proposed Max Allowable Surface Pressure (MASP) (PSI)	Current Average Surface Pressure (PSI)	Max Achievable Surface Pressure, Current Infrastructure (PSI)	Proposed Average Injection Rate (MMSCFPD)	Proposed Max Injection Rate (MMSCFPD)	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 + Gas Hydrostatic as a percentage of Formation Parting Pressure (%)
30-025-46474	LOST TANK 30-19 FEDERAL COM 1H	1,300	111	1,300	3	4	9,829	0.468	12,640	47%	9,829	0.132	9,829	0.200	0.650	51%
30-015-48595	TOP SPOT 12_13 FED COM 11H	1,300	360	1,300	3	4	9,005	0.468	12,640	44%	9,005	0.144	9,005	0.200	0.650	53%
30-015-48594	TOP SPOT 12_13 FED COM 1H	1,300	670	1,300	3	4	9,853	0.468	12,640	47%	9,853	0.132	9,853	0.200	0.650	51%
30-015-47771	TOP SPOT 12_13 FED COM 21H	1,300	850	1,300	3	4	10,319	0.468	12,640	48%	10,319	0.126	10,319	0.200	0.650	50%
30-025-48282	DR PI FEDERAL UNIT 17 8 DA 21H	1,300	179	1,300	3	4	10,600	0.468	12,640	50%	10,600	0.123	10,600	0.200	0.650	50%
30-025-48947	DR PI FEDERAL UNIT 17 8 DA 23H	1,300	308	1,300	3	4	10,584	0.468	12,640	49%	10,584	0.123	10,584	0.200	0.650	50%
30-025-48949	DR PI FEDERAL UNIT 17 8 DA 25H	1,300	190	1,300	3	4	10,698	0.468	12,640	50%	10,698	0.122	10,698	0.200	0.650	49%
30-025-48950	DR PI FEDERAL UNIT 17 8 DA 26H	1,300	185	1,300	3	4	10,645	0.468	12,640	50%	10,645	0.122	10,645	0.200	0.650	50%
	Column	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Calculation									(1+6*7)/8		= 1/10				= (1+12*13) / (12/14)

Wellhead Diagram
Tubing Flow, Casing Injection



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	
		Date	Surface Pressure [psi]
30-025-46474	LOST TANK 30-19 FEDERAL COM 1H	12/28/2019	9800
30-015-48595	TOP SPOT 12_13 FED COM 11H	4/10/2023	9800
30-015-48594	TOP SPOT 12_13 FED COM 1H	4/7/2023	9800
30-015-47771	TOP SPOT 12_13 FED COM 21H	4/9/2023	9800
30-025-48282	DR PI FEDERAL UNIT 17 8 DA 21H	12/12/2022	6000
30-025-48947	DR PI FEDERAL UNIT 17 8 DA 23H	12/12/2022	6000
30-025-48949	DR PI FEDERAL UNIT 17 8 DA 25H	11/29/2022	6000
30-025-48950	DR PI FEDERAL UNIT 17 8 DA 26H	11/30/2022	6000

Gas Source Well List

WELL	API
TOP SPOT 12_13 FED COM 1H	30-015-48594
TOP SPOT 12_13 FED COM 11H	30-015-48595
TOP SPOT 12_13 FED COM 21H	30-015-47771
TOP SPOT 12_13 FED COM 31H	30-015-48597
TOP SPOT 12_13 FED COM 32H	30-015-48596
TOP SPOT 12_13 FED COM 34H	30-015-47949
TOP SPOT 12_13 FED COM 35H	30-015-47887
TOP SPOT 12_13 FED COM 311H	30-015-47627
TOP SPOT 12_13 FED COM 312H	30-015-47626
TOP SPOT 12_13 FED COM 313H	30-015-47625
Lost Tank 30-19 FEDERAL COM #001H	30-025-46474
Lost Tank 30-19 FEDERAL COM #031H	30-025-45182
DR PI FEDERAL UNIT 17_8 021H	30-025-48282
DR PI FEDERAL UNIT 17_8 023H	30-025-48947
DR PI FEDERAL UNIT 17_8 025H	30-025-48949
DR PI FEDERAL UNIT 17_8 026H	30-025-48950
DR PI FEDERAL UNIT 17_8 031H	30-025-49147
DR PI FEDERAL UNIT 17_8 032H	30-025-49148
DR PI FEDERAL UNIT 17_8 034H	30-025-48951
DR PI FEDERAL UNIT 17_8 035H	30-025-48952
DR PI FEDERAL UNIT 17_8 311H	30-025-49152
DR PI FEDERAL UNIT 17_8 312H	30-025-48955
DR PI FEDERAL UNIT 17_8 313H	30-025-48956
DR PI FEDERAL UNIT 18-7 021H	30-025-47835
DR PI FEDERAL UNIT 18-7 023H	30-025-48158
DR PI FEDERAL UNIT 18-7 025H	30-025-48159
DR PI FEDERAL UNIT 18-7 026H	30-025-47868
DR PI FEDERAL UNIT 18-7 031H	30-025-48160
DR PI FEDERAL UNIT 18-7 032H	30-025-48024
DR PI FEDERAL UNIT 18-7 034H	30-025-48025
DR PI FEDERAL UNIT 18-7 311H	30-025-48166
DR PI FEDERAL UNIT 18-7 312H	30-025-48167
DR PI FEDERAL UNIT 18-7 313H	30-025-48168

Lost Tank Gas Analysis Summary 5/29/2023

- The future system will sell gas to only Mark West.
- Central Tank Batteries (CTBs)
  - In the future system, all wells will produce fluids to the Lost Tank 18 CTB.
  - See Gas Source Well List for list of wells.
- Centralized Gas Lift Compressors (CGLs)
  - All low-pressure gas lines connect to the Lost Tank 25 CGL Station and Lost Tank 13 CGL Station.
  - CGLs increase pressure from ~70 psig to ~1250 psig.
- Gas analysis is provided for:
  - Injection gas
  - Avalon production
  - First Bone Spring production
  - Second Bone Spring production

Placeholder page

AVL GAS SAMPLE

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

	Sample Information
Sample Name	LOST TANK 30 CTB TEST 2
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	03-09-2023
Meter Number	16102T
Air temperature	71
Flow Rate (MCF/Day)	2084.5
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	LOST TANK 30 CTB TEST 2
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	EAST
FLOC	OP-L2113-WELLS-WPI-0000002
Sample Sub Type	PRODUCTION
Sample Name Type	WELL
Vendor	AKM MEASUREMENT
Cylinder #	2565
Sampled by	JONATHAN ALDRICH
Sample date	3-9-2023
Analyzed date	3-15-2023
Method Name	C9
Injection Date	2023-03-15 10:40:12
Report Date	2023-03-15 10:44:08
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	84603ae5-1307-447f-bf55-bb249ae70b35
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	62776.9	3.5566	0.00005665	3.5612	0.0	0.03444	0.393	
Methane	979781.4	71.6914	0.00007317	71.7849	726.7	0.39762	12.214	
CO2	86902.0	4.0993	0.00004717	4.1046	0.0	0.06237	0.703	
Ethane	234907.0	10.7253	0.00004566	10.7393	190.5	0.11150	2.882	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	171723.7	5.6043	0.00003264	5.6116	141.5	0.08544	1.552	
iso-butane	65169.3	0.7266	0.00001115	0.7276	23.7	0.01460	0.239	
n-Butane	171811.5	1.8962	0.00001104	1.8987	62.1	0.03810	0.601	
iso-pentane	42512.5	0.4123	0.00000970	0.4129	16.6	0.01029	0.152	
n-Pentane	49913.5	0.4722	0.00000946	0.4728	19.0	0.01178	0.172	
hexanes	39197.0	0.2967	0.00000757	0.2971	14.2	0.00884	0.123	
heptanes	38251.0	0.2364	0.00000618	0.2367	13.1	0.00819	0.110	
octanes	22918.0	0.1245	0.00000543	0.1247	7.8	0.00492	0.064	
nonanes+	6310.0	0.0279	0.00000442	0.0279	2.0	0.00124	0.016	
Total:		99.8696		100.0000	1217.1	0.78931	19.219	

Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.8696		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	81.0		
Flowing Pressure (psig)	95.0		

Result	Dry	Sat.	
Gross Heating Value (BTU / Ideal cu.ft.)	1217.1	1195.9	
Gross Heating Value (BTU / Real cu.ft.)	1221.8	1201.0	
Relative Density (G), Real	0.7920	0.7894	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	99.8696	97.0000	103.0000	Pass	

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

	Sample Information
Sample Name	DR PI FEDERAL UNIT 17-8 DA 21H
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	03-16-2023
Meter Number	16402T
Air temperature	46
Flow Rate (MCF/Day)	1158.7
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	DR PI FEDERAL UNIT 17-8 DA 21H
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	DR PI
FLOC	OP-L2254-WELLS-WPI-0000008
Sample Sub Type	PRODUCTION
Sample Name Type	WELL
Vendor	AKM MEASUREMENT
Cylinder #	27956
Sampled by	CHANDLER MONTGOMERY
Sample date	3-15-2023
Analyzed date	3-16-2023
Method Name	C9
Injection Date	2023-03-16 09:56:29
Report Date	2023-03-16 10:00:37
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	58dc901f-69e9-46db-b05e-05b3668a0b87
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	29954.0	1.6992	0.00005673	1.6942	0.0	0.01639	0.187	
Methane	993778.5	72.8737	0.00007333	72.6584	735.5	0.40245	12.364	
CO2	9979.5	0.4591	0.00004601	0.4578	0.0	0.00696	0.078	
Ethane	314679.1	14.4287	0.00004585	14.3861	255.2	0.14936	3.862	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	215313.9	7.0179	0.00003259	6.9972	176.5	0.10653	1.935	
iso-butane	72379.5	0.8038	0.00001111	0.8014	26.1	0.01608	0.263	
n-Butane	177984.6	1.9607	0.00001102	1.9549	63.9	0.03923	0.619	
iso-pentane	34263.0	0.3331	0.00000972	0.3321	13.3	0.00827	0.122	
n-Pentane	36266.6	0.3451	0.00000952	0.3441	13.8	0.00857	0.125	
hexanes	21440.0	0.1650	0.00000770	0.1645	7.8	0.00489	0.068	
heptanes	20830.0	0.1336	0.00000641	0.1332	7.3	0.00461	0.062	
octanes	10287.0	0.0603	0.00000587	0.0602	3.8	0.00237	0.031	
nonanes+	2583.0	0.0159	0.00000617	0.0159	1.1	0.00070	0.009	
Total:		100.2962		100.0000	1304.5	0.76643	19.725	

Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	100.2962		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	65.9		
Flowing Pressure (psig)	149.7		

Result	Dry	Sat.
Gross Heating Value (BTU / Ideal cu.ft.)	1304.5	1281.7
Gross Heating Value (BTU / Real cu.ft.)	1309.7	1287.4
Relative Density (G), Real	0.7692	0.7670

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status
Total un-normalized amount	100.2962	97.0000	103.0000	Pass

 INJECTION GAS SAMPLE FROM CGL

Certificate of Analysis

Number: 6030-23030403-001A

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

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

Apr. 04, 2023

Field:	PERMIAN_RESOURCES	Sampled By:	Raul Salazar
Station Name:	Lost Tank 13 Boo Outlet B	Sample Of:	Gas Spot
Station Number:	16399C	Sample Date:	03/27/2023 08:24
Station Location:	OP-DELNE-CS002	Sample Conditions:	1230 psig, @ 104.2 °F Ambient: 42 °F
Sample Point:	Meter	Effective Date:	03/27/2023 08:24
Formation:	NEW_MEXICO	Method:	GPA-2261M
County:		Cylinder No:	1111-008083
Type of Sample: :	Spot-Cylinder	Instrument:	70104251 (Inficon GC-MicroFusion)
Heat Trace Used:	N/A	Last Inst. Cal.:	04/03/2023 0:00 AM
Sampling Method: :	Fill and Purge	Analyzed:	04/04/2023 12:27:12 by EBH
Sampling Company: :	SPL		

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Nitrogen	1.019	1.018	1.170		GPM TOTAL C2+	8.807
Methane	68.255	68.172	44.862		GPM TOTAL C3+	4.921
Carbon Dioxide	0.240	0.240	0.433		GPM TOTAL iC5+	1.057
Ethane	14.558	14.540	17.934	3.886		
Propane	8.768	8.757	15.840	2.411		
Iso-butane	1.221	1.220	2.909	0.399		
n-Butane	3.349	3.345	7.975	1.054		
Iso-pentane	0.798	0.797	2.359	0.291		
n-Pentane	0.913	0.912	2.699	0.330		
Hexanes Plus	1.000	0.999	3.819	0.436		
	100.121	100.000	100.000	8.807		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.8456	3.2176
Calculated Molecular Weight	24.38	93.19
Compressibility Factor	0.9950	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1437	5113
Water Sat. Gas Base BTU	1413	5024
Ideal, Gross HV - Dry at 14.65 psia	1430.2	5113.2
Ideal, Gross HV - Wet	1405.2	5023.7
Net BTU Dry Gas - real gas	1309	
Net BTU Wet Gas - real gas	1286	

Hydrocarbon Laboratory Manager

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

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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 ACQUISTION (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

Mineral Estate Map

Gas Storage Wells
- 2023 Candidate
- Intersecting Wells 2 mi
- 2 mile Area of Review

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

Subsurface Management
- Federal
- State

2 Mile AOR Map

Gas Storage Wells

- 2023 Candidate
- Intersecting Wells 2 mi
- 2 mile Area of Review

Wells SHL (IHS)

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

1/2 Mile AOR Map

Gas Storage Wells

- 2023 Candidate
- 1/2 mile Area of Review
- Intersecting Wells 1/2 mi

Wells SHL (IHS)

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

T021S R031E

T021S R032E

T022S R031E

T22S R32E

T023S R031E

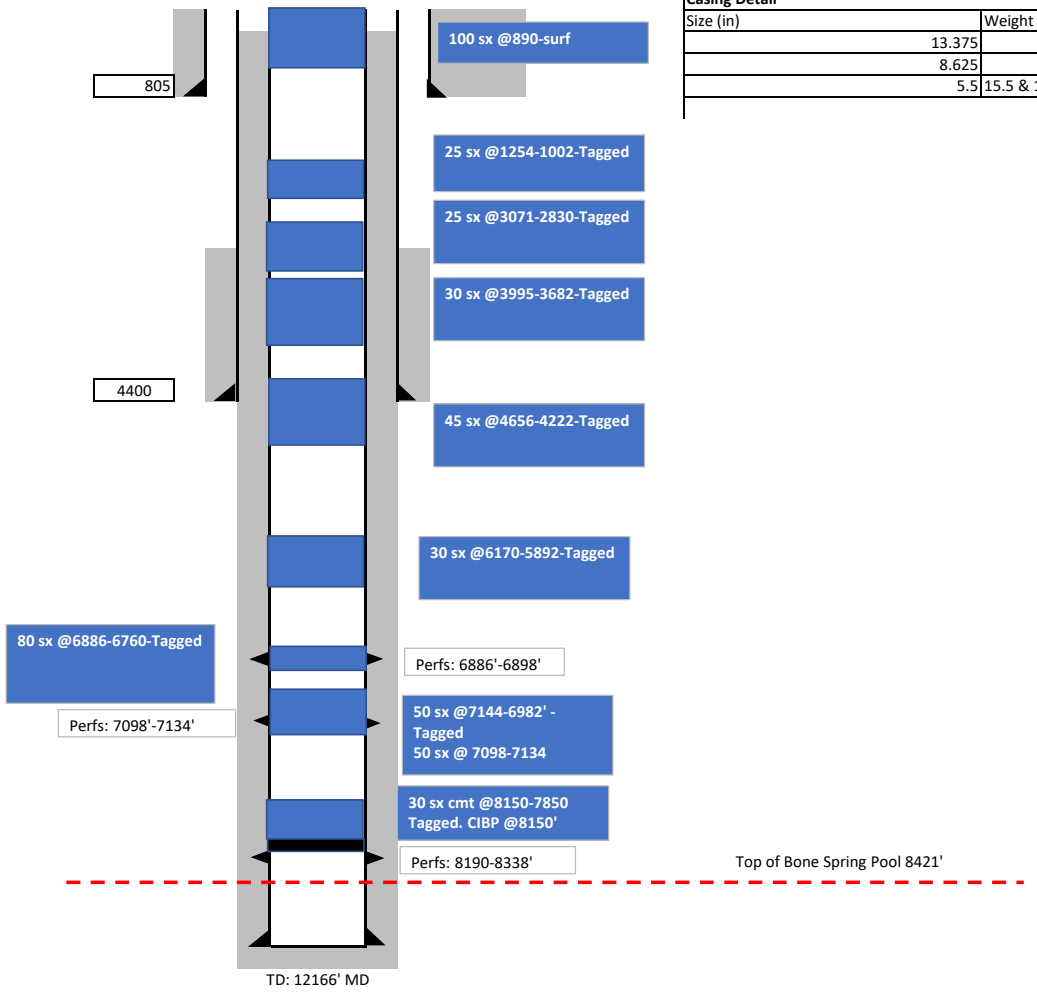
T23S R32E

1/2 Mile AOR Table

Well ID	API NUMBER	Current Operator	LEASE NAME	WELL NUMBER	Well Type:	Status:	Footages N/S	N/S	Footages E/W	E/W	Surface Location Unit	Surface Location Section	Surface Location TShip	Surface Location Range	Spud:	True Vertical Depth:	Measured Depth [ft]	HOLE SIZE	CSG SIZE	SET AT	SX CMT	CMT TO	TOC How Measured	Current Completion [ft]	Comment	Current Producing Pool
1	30-025-46474	OXY USA INC	LOST TANK 30 19 FEDERAL COM	001H	Oil	New Drill	128	N	1235	W	D	19	22S	32E	11/23/2019	9874	20290	17.5	13.375	900	1150	Surf	Circ	10012-20163		[97366] BILBREY BASIN; BONE SPRING, SOUTH
																		12.25	9.625	6569	3313	Surf	Circ			
																		8.5	5.5	20262	2749	4350	CBL			
2	30-015-48595	OXY USA INC	TOP SPOT 12_13 FED COM	11H	Oil	New Drill	653	S	2022	W	N	13	22S	32E	11/1/2022	9035	19957	17.5	13.375	874	1090	Surf	Circ	9571-19938		[97366] BILBREY BASIN; BONE SPRING, SOUTH
																		12.25	9.625	4545	1400	Surf	Circ			
																		8.75	7.625	8694	*565	TBD	TBD			
																		6.75	5.5	19957	848	3000	CBL			
3	30-015-48594	OXY USA INC	TOP SPOT 12_13 FED COM	1H	Oil	New Drill	653	S	2087	W	N	13	22S	32E	10/30/2022	9817	20665	17.5	13.375	871	1090	Surf	Circ	10287-20468		[97366] BILBREY BASIN; BONE SPRING, SOUTH
																		12.25	9.625	4576	1314	Surf	Circ			
																		8.75	7.625	9246	*617	TBD	TBD			
																		6.75	5.5	20665	822	4790	CBL			
4	30-015-47771	OXY USA INC	TOP SPOT 12_13 FED COM	21H	Oil	New Drill	653	S	2052	W	N	13	22S	32E	11/1/2022	10387	21134	17.5	13.375	905	1090	Surf	Circ	10790-20934		[97366] BILBREY BASIN; BONE SPRING, SOUTH
																		12.25	9.625	4564	1314	Surf	Circ			
																		8.75	7.625	9745	*653	TBD	TBD			
																		6.75	5.5	21134	849	6350	CBL			
5	30-025-48282	OXY USA INC	DR PI FEDERAL UNIT 17 8 DA	21H	Oil	New Drill	530	S	1075	W	M	17	22S	32E	10/8/2022	10638	21220	17.5	13.375	928	1519	Surf	Circ	10852-21078		[97366] BILBREY BASIN; BONE SPRING, SOUTH
																		12.25	9.625	6495	1403	Surf	Circ			
																		8.75	5.5	21220	3386	4770	CBL			
6	30-025-48947	OXY USA INC	DR PI FEDERAL UNIT 17 8 DA	023H	Oil	Active	530	S	1145	W	M	17	22S	32E	10/10/2022	10594	21338	17.5	13.375	926	1150	Surf	Circ	10966-21192		[97366] BILBREY BASIN; BONE SPRING, SOUTH
																		12.25	9.625	6545	1499	Surf	Circ			
																		8.75	5.5	21318	3381	5300	CBL			
7	30-025-48949	OXY USA INC	DR PI FEDERAL UNIT 17 8 DA	025H	Oil	New Drill	455	S	1565	E	O	17	22S	32E	9/25/2022	10635	21342	13.375	903	903	1130	Surf	Circ	11072-21198		[97366] BILBREY BASIN; BONE SPRING, SOUTH
																		12.25	9.625	6579	1761	Surf	Circ			
																		8.75	5.500	21342	3373	3340	CBL			
8	30-025-48950	OXY USA INC	DR PI FEDERAL UNIT 17 8 DA	026H	Oil	Active	455	S	1530	E	O	17	22S	32E	9/26/2022	10538	21370	17.5	13.375	896	1130	Surf	Circ	11072-21198		[97366] BILBREY BASIN; BONE SPRING, SOUTH
																		12.25	9.625	6586	1383	Surf	Circ			
																		8.75	5.500	21350	3562	3675	CBL			
9	30-015-37334	OXY USA INC	FEDERAL 23	009	Oil	Active	2261	N	656	E	H	23	22S	31E	1/10/2010	8363	8629	14.750	11.750	846	330	Surf	Circ	8267-8518		[39360] LIVINGSTON RIDGE; DELAWARE
																		10.625	8.625	4238	1150	Surf	Circ			
																		7.875	5.500	8632	1590	Surf	Circ			
10	30-015-37341	OXY USA INC	FEDERAL 23	016	Oil	Active	612	N	509	E	A	23	22S	31E	1/21/2010	8376	8690	14.750	11.750	857	600	Surf	Circ	8306-8380		[39360] LIVINGSTON RIDGE; DELAWARE
																		10.625	8.625	4266	1150	Surf	Circ			
																		7.875	5.500	8690	1528	Surf	Circ			
11	30-015-37509	EOG RESOURCES INC	MARTHA AIK FEDERAL	010H	Oil	Active	1780	S	178	E	I	11	22S	31E	9/21/2012	7984	12526	26.000	20.000	40	135	Surf	Circ	8410-12440		[39360] LIVINGSTON RIDGE; DELAWARE
																		17.500	13.375	859	760	Surf	Circ			
																		12.250	9.625	4562	1370	Surf	Circ			
																		8.750	7.000	7420	825	Surf	Circ			
																		6.125	4.500	12520	400	6922	CBL			
12	30-015-37510	EOG RESOURCES INC	MARTHA AIK FEDERAL	011H	Oil	Active	1780	S	200	E	I	11	22S	31E	9/21/2012	7045	11498	26.000	20.000	40	5 yds redi-mix	Surf	Circ	7353-11405		[39360] LIVINGSTON RIDGE; DELAWARE
																		17.500	13.375	835	680	Surf	Circ			
																		12.250	9.625	4366	1260	Surf	Circ			
																		8.500	5.500	11498	2230	Surf	CBL			
13	30-015-37511	EOG RESOURCES INC	MARTHA AIK FEDERAL	013H	Oil	Active	1650	N	330	E	H	11	22S	31E	8/15/2010	12600	12600	17.500	13.375	835	750	Surf	Circ	8828-12515		[39360] LIVINGSTON RIDGE; DELAWARE
																		12.240	9.625	4325	1360	Surf	Circ			
																		8.750	5.500	12600	2650	540	Temp			
14	30-015-37512	EOG RESOURCES INC	MARTHA AIK FEDERAL	009	Oil	Active	430	S	200	E	P	11	22S	31E	11/7/2012	9	11456	17.500	13.375	802	760	Surf	Circ	8606-11397		[39360] LIVINGSTON RIDGE; DELAWARE
																		12.250	9.625	4545	1140	Surf	Circ			
																		8.750	7.000	7450	1410	Surf	Circ			
																		6.125	4.500	11456	330	7755	Calc			
15	30-015-37556	EOG RESOURCES INC	MARTHA AIK FEDERAL	014H	Oil	Active	430	S	178	E	P	11	22S	31E	11/7/2012	7019	10330	17.500	13.375	862	760	Surf	Circ	7456-10281		[39360] LIVINGSTON RIDGE; DELAWARE
																		12.250	9.625	4499	1170	Surf	Circ			
																		8.750	7.000	7439	785	Surf	Circ			
																		6.125	4.500	10330	259	5204	CBL			
16	30-015-39733	EOG RESOURCES INC	MARTHA AIK FEDERAL	008H	Oil	Active	430	N	200	E	A	11	22S	31E	10/1/2013	8827	11475	17.500	13.375	714	630	Surf	Circ	8543-11420		[39360] LIVINGSTON RIDGE; DELAWARE
																		12.250	9.625	4449	1030	Surf	Circ			
																		8.750	7.000	7700	950	Surf	Circ			
																			4.500	11470	290	7756	CBL			
17	30-015-40051	EOG RESOURCES INC	MARTHA AIK FEDERAL	007H	Oil	Active	1750	N	200	E	H	11	22S	31E	10/29/2013	7966	12560	26.000	20.000	40	5.8 yds redi-mix	Surf	Circ	8378-12508		[39360] LIVINGSTON RIDGE; DELAWARE
																		17.500	13.375	729	650	Surf	Circ			
																		12.250	9.625	4406	1440	Surf	Circ			
																		8.750	7.000	7431	965	Surf	Circ			
																		6.125	4.500	12560	390	6034	CBL			
18	30-015-40821	OXY USA INC	FEDERAL 12	014H	Oil	Active	330	S	405	E	P	12	22S	31E	1/3/2013	10414	14704	14.75	11.75	892	620	Surf	Circ	10870-14530		[96403] WILDCAT; BONE SPRING
																		10.625	8.625	4500	1260	Surf	Circ			
																		7.875	5.500	14694	1880	Surf	Circ	DVT @6430		
19	30-015-41038	COG OPERATING LLC	BULTACO STATE	001H	Oil	Active	190	S	330	E	P	36	22S	31E	8/23/2014	10270	14764	17.500	13.375	749	590	Surf	Circ	10498-14575		[39350] LIVINGSTON RIDGE; BONE SPRING
																		12.250	9.625	4535	1340	Surf	Circ			
																		8.750	5.500	14725	2780	Surf	Circ			
20	30-015-41459	OXY USA INC	NEFF 25 FEDERAL	009H	Oil	Active	2160	N	150	W	E	25	22S	31E	8/31/2013	10214	14635	14.750	11.750	828	600	Surf	Circ	10440-14480		[39350] LIVINGSTON RIDGE; BONE SPRING
																		10.625	8.625	4455	1280	Surf	Circ			
																		7.875	5.5	14632	1630	Surf	Circ			
21	30-015-43670	COG OPERATING LLC	BULTACO STATE	003H	Oil	Active	5	S	1090	E	P	36	22S	31E	10/12/2016	10440	15447	17.500	13.375	775	675	Surf	Circ	10641-15112		[39350] LIVINGSTON RIDGE; BONE SPRING
																		12.250	9.625	4580	1300	Surf	Circ			
																		8.750	5.500	15408	2450	Surf	Circ			
22	30-025-36029	OXY USA INC	LIVINGSTON RIDGE 19 FEDERAL	003	Oil	PA	2150	S	330	W	L	19	22S	32E	6/14/2003	8580	8580	17.500	13.375	805	940	Surf	CIRC	NA		NA
																		11.000	8.625	4400	2035	1400	TS			
																		7.875	5.500	8580	2105	160	CBL			
23	30-025-36295	OXY USA INC	LIVINGSTON RIDGE 18 FEDERAL	006	Oil	Active	1650	S	330	W	L	18	22S	32E	7/4/2003	8590	8590	17.500	13.375	842	940	Surf	Circ	7058-8264		[39366] LIVINGSTON RIDGE; DELAWARE, EAST
																		11.000	8.625	4418	1500	Surf	Circ			
																		7.875	5.500	8590	2160	Surf	Circ	DV Tool at 5800' and 3700		
24	30-025-40987	Permian Resources Operating, LLC	BILBREY BASIN 5 STATE COM	001H	Oil	Active	790	S	1520	W	N	5	22S	32E	6/26/2013	10560	16227	17.500	13.375	805	790	Surf	Circ	10700-16048		[5695] BILBREY BASIN; BONE SPRING
																		12.250	9.625	4575	1379	Surf	Circ			
																		8.750	5.500	16227	2680	2620	Calc	Set DV tool @6537		
25	30-025-41926	MATADOR PRODUCTION COMPANY	E LIVINGSTON 31 FEDERAL	006H	Oil	Active	190	S	330	W	M	31	22S	32E	11/29/2014	10227	14802	17.500	13.375	840	650	Surf	Circ	11010-14640		[53800] SAND DUNES; BONE SPRING
																		12.250	9.625	5085	1350	Surf	Circ			
																		7.875	5.500	14788	2400	160	Calc			
26	30-025-42975	MATADOR PRODUCTION COMPANY	E LIVINGSTON 31 FEDERAL	007H	Oil	Active	190	S	1862	W	N	31	22S	32E	1/5/2016	10292	14918	17.500	13.375	880	409	Surf	Circ	10842-14770		[53800] SAND DUNES; BONE SPRING
																		12.250	9.625	4561	1075	Surf	Circ			
																		7.875	5.500	14918	1685	Surf	Circ	DV Tool at 6493		
27	30-025-44106	NGL WATER SOLUTIONS PERMIAN, LLC	DEEP PURPLE SWD	001	Salt Water	Active	270	S	380	W	M	30	22S	32E	10/26/2017	17673	17673	26	20	851	1480	Surf	Circ	16975-18135		[97869] SWD; DEVONIAN-SILURIAN
																		17.5	13.375	4528	2580	Surf	Circ			
																		12.25	9.625	11807	2180	Surf	Circ			
																		9.625	8.5	11807	2180	Surf	Calc			
																		8.5	7.625	16313	390	11524	Calc	TOL at 11524		
28	30-025-44692	Permian Resources Operating, LLC	CHEDDAR 3BS FEDERAL COM	001H	Oil	Active	244	S	370	W	M	5	22S	32E	5/19/2018	11672	21669	17.500	13.375	728	655	Surf	Circ	11945-21595		[5695] BILBREY BASIN; BONE SPRING

															12.250	9.625	4501	1555	Surf	Circ			
															8.500	5.500	21661	3170	7048	Calc			
29	30-025-45182	OXY USA INC	LOST TANK 30 19 FEDERAL COM	031H	Oil	Active	240 N	880 W	D	19	22S	32E	9/13/2018	11965	22338	17.5	13.375	875	1150	Surf	Circ	12094-22048	[98296] WC-025 G-09 S223219D; WOLFCAMP
															12.250	9.875	6493	1495	Surf	Circ			
															8.500	7.625	11319	210	4000	Calc			
															6.750	5.500	22323	715	27	Calc			
30	30-025-45286	MATADOR PRODUCTION COMPANY	E LIVINGSTON 31 FEDERAL	008H	Oil	Active	190 S	2310 E	O	31	22S	32E	1/19/2019	10274	15011	17.500	13.375	873	810	Surf	Circ	10500-14855	[53800] SAND DUNES; BONE SPRING
															12.250	9.625	4532	1510	Surf	Circ			
															8.750	5.500	15011	2585	4204	Calc	DV Tool @6524		
31	30-025-46742	Permian Resources Operating, LLC	MOZZARELLA FEDERAL COM	602H	Oil	Active	954 N	2159 W	C	8	22S	32E	4/20/2021	11687	22487	17.5	13.375	753	665	Surf	Circ	12191-22373	[5695] BILBREY BASIN; BONE SPRING
															12.25	9.625	5323	980	Surf	Circ			
															8.75	5.500	22415	2640	Surf	Circ			
32	30-025-46757	Permian Resources Operating, LLC	MOZZARELLA FEDERAL COM	603H	Oil	Active	954 N	2219 W	C	8	22S	32E	4/20/2021	11716	22480	17.5	13.375	753	665	Surf	Circ	12149-22428	[5695] BILBREY BASIN; BONE SPRING
															12.25	9.625	5333	940	Surf	Circ			
															8.5	5.500	22472	2640	Surf	Circ			
33	30-025-48024	OXY USA INC	DR PI FEDERAL UNIT 18 7 IPP	032H	Oil	Active	310 S	1690 W	N	18	22S	32E	2/6/2022	11999	22600	17.5	13.375	943	1140	Surf	Circ	12238-22464	[98296] WC-025 G-09 S223219D; WOLFCAMP
															9.875	7.625	11270	3286	Surf	Calc			
															6.75	5.500	22578	876	11502	Calc			
34	30-025-48025	OXY USA INC	DR PI FEDERAL UNIT 18 7 IPP	034H	Oil	Active	170 S	1430 E	O	18	22S	32E	2/2/2022	12034	22647	17.5	13.375	948	1140	Surf	Circ	12253-22439	[98296] WC-025 G-09 S223219D; WOLFCAMP
															9.875	7.625	10770	2050	Surf	Circ			
															6.75	5.500	22570	904	8458	Calc			
35	30-025-48160	OXY USA INC	DR PI FEDERAL UNIT 18 7 IPP	031H	Oil	Active	310 S	1625 W	N	18	22S	32E	2/10/2022	11960	22516	17.500	13.375	954	1140	Surf	Circ	12129-22355	[98296] WC-025 G-09 S223219D; WOLFCAMP
															9.875	7.625	11328	3225	Surf	Calc			
															6.75	5.500	22471	888	10670	Calc			
36	30-025-48166	OXY USA INC	DR PI FEDERAL UNIT 18 7 IPP	311H	Oil	Active	310 S	1655 W	N	18	22S	32E	2/8/2022	11653	22220	17.5	13.375	940	1140	Surf	Circ	11858-22084	[5695] BILBREY BASIN; BONE SPRING
															9.875	7.625	10983	2887	Surf	Calc			
															6.75	5.500	22200	876	9880	Calc			
37	30-025-48167	OXY USA INC	DR PI FEDERAL UNIT 18 7 IPP	312H	Oil	Active	170 S	1460 E	O	18	22S	32E	1/31/2022	11758	22185	17.5	13.375	938	1140	Surf	Circ	11846-21783	[5695] BILBREY BASIN; BONE SPRING
															9.875	7.625	11043	2923	Surf	Calc			
															6.75	5.500	22165	835	8701	Calc			
38	30-025-48168	OXY USA INC	DR PI FEDERAL UNIT 18 7 IPP	313H	Oil	Active	170 S	1395 E	O	18	22S	32E	2/4/2022	11726	22298	17.5	13.375	935	1140	Surf	Circ	11959-22145	[5695] BILBREY BASIN; BONE SPRING
															9.875	7.625	11104	1732	Surf	Calc			
															6.75	5.500	22278	869	10199	Calc			
39	30-025-48951	OXY USA INC	DR PI FEDERAL UNIT 17 8 DA	034H	Oil	Active	275 S	1570 E	O	17	22S	32E	1/22/2022	12609	22608	17.5	13.375	942	1140	Surf	Circ	12246-22472	[98166] WC-025 G-09 S233216K; UPR WOLFCAMP
															9.875	7.625	11288	3011	Surf	Circ			
															6.75	5.500	22588	877	10788	Calc			
40	30-025-48952	OXY USA INC	DR PI FEDERAL UNIT 17 8 DA	035H	Oil	Active	275 S	1500 E	O	17	22S	32E	1/18/2022	11765	22507	17.5	13.375	944	1140	Surf	Circ	12234-22370	[97366] BILBREY BASIN; BONE SPRING, SOUTH
															9.875	7.625	11189	1364	Surf	Circ			
															6.75	5.500	22487	863	10689	Calc			
41	30-025-48955	OXY USA INC	DR PI FEDERAL UNIT 17 8 DA	312H	Oil	Active	275 S	1600 E	O	17	22S	32E	1/23/2022	11747	22328	17.5	13.375	942	1140	Surf	Circ	11923-22199	[97366] BILBREY BASIN; BONE SPRING, SOUTH
															9.875	7.625	10970	2518	Surf	Circ			
															6.75	5.500	22308	912	10470	Calc			
42	30-025-49147	OXY USA INC	DR PI FEDERAL UNIT 17 8 DA	031H	Oil	Active	350 S	1075 W	M	17	22S	32E	1/26/2022	12050	22313	17.5	13.375	952	1140	Surf	Circ	11947-22173	[98166] WC-025 G-09 S233216K; UPR WOLFCAMP
															9.875	7.625	11405	2048	Surf	Circ			
															6.75	5.500	22293	877	11600	Calc			
43	30-025-49148	OXY USA INC	DR PI FEDERAL UNIT 17 8 DA	032H	Oil	Active	350 S	1140 W	M	17	22S	32E	1/29/2022	12089	22617	17.5	13.375	945	1140	Surf	Circ	12216-22483	[98166] WC-025 G-09 S233216K; UPR WOLFCAMP
															9.875	7.625	11370	3107	Surf	Circ			
															6.75	5.500	22597	877	10870	Calc			
44	30-025-49152	OXY USA INC	DR PI FEDERAL UNIT 17 8 DA	311H	Oil	Active	350 S	1105 W	M	17	22S	32E	1/27/2022	11741	22309	17.5	13.375	940	1140	Surf	Circ	12155-22177	[97366] BILBREY BASIN; BONE SPRING, SOUTH
															9.875	7.625	11006	2048	Surf	Circ			
															6.75	5.500	22287	866	10506	Calc			

LIVINGSTON RIDGE 19 FED #003
30-025-36029
FINAL PA DIAGRAM



Casing Detail

Size (in)	Weight (lb/ft)	Grade	Depth (ft)	CMT (sx)	TOC (ft)	Comment
13.375	48	H 40	805	940	Surf	Circ
8.625	32	J 55	4400	2035	1400	Temp
5.5	15.5 & 17	J 55	8580	2105	160	CBL

Geology

Lost Tank 2nd Bone Spring storage zone and permeability barriers

Proposed Storage Zone

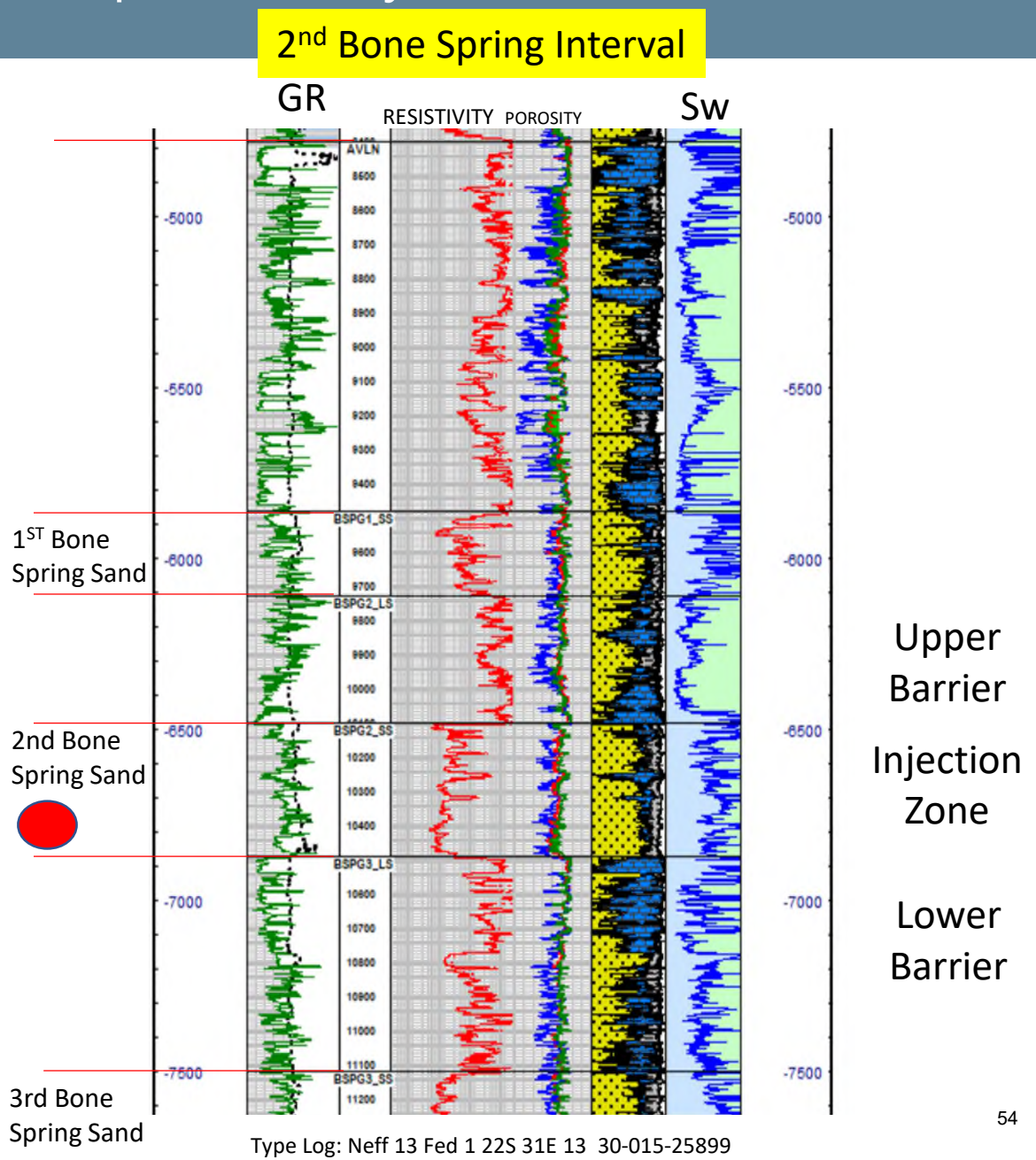
- 2nd Bone Spring Sand
  - > Reservoir composed of tight siltstone. Core data indicates that the grain sizes range from coarse siltstone to very-fine-grained subarkose (Folk, 1980) sandstone. Samples show evidence of moderate compaction. Minor amounts of illite and smectite clays are found throughout the samples ranging from 5% to 15%. Cements are Fe-calcite, Fe-dolomite, pore-bridging illite and some quartz overgrowths. Minor amounts of pyrite (<1%) are present. The resulting reservoir rock has porosity of 8-18% with an average porosity of 9.7%. Permeability measured by injection fall-off tests conducted within the reservoir ranges from 10 millidarcies to 0.003 millidarcies. Siliceous mudstone with natural permeability in the nano-darcy range

Adjacent Oil & Gas Production Zones

- Delaware Mountain Group Brushy Canyon
  - > Very fine-grained sandstone with permeability in the 100-10 millidarcy range
- 1st Bone Spring Sand
  - > Reservoir composed of tight siltstone. Core data indicates that the grain sizes range from coarse siltstone to very-fine-grained subarkose (Folk, 1980) sandstone. Samples show evidence of moderate compaction. Minor amounts of illite and smectite clays are found throughout the samples ranging from 5% to 15%. Cements are Fe-calcite, Fe-dolomite, with some quartz overgrowths. Minor amounts of pyrite (<1%) are present. The resulting reservoir rock has porosity of 8-18% with an average porosity of 11.7%. Permeability measured by injection fall-off tests conducted within the reservoir ranges from 0.02 millidarcies to 0.001 millidarcies.
- 3rd Bone Spring Sand
  - > Reservoir composed of tight siltstone. Core data indicates that the grain sizes range from coarse siltstone to very-fine-grained subarkose (Folk, 1980) sandstone. Samples show evidence of moderate compaction. Minor amounts of illite and smectite clays are found throughout the samples ranging from 5% to 15%. Cements are Fe-calcite, Fe-dolomite, with some quartz overgrowths. Minor amounts of pyrite (<1%) are present. The resulting reservoir rock has porosity of 8-18% with an average porosity of 11.7%. Permeability measured by injection fall-off tests conducted within the reservoir ranges from 0.02 millidarcies to 0.001 millidarcies.

Confining Layers

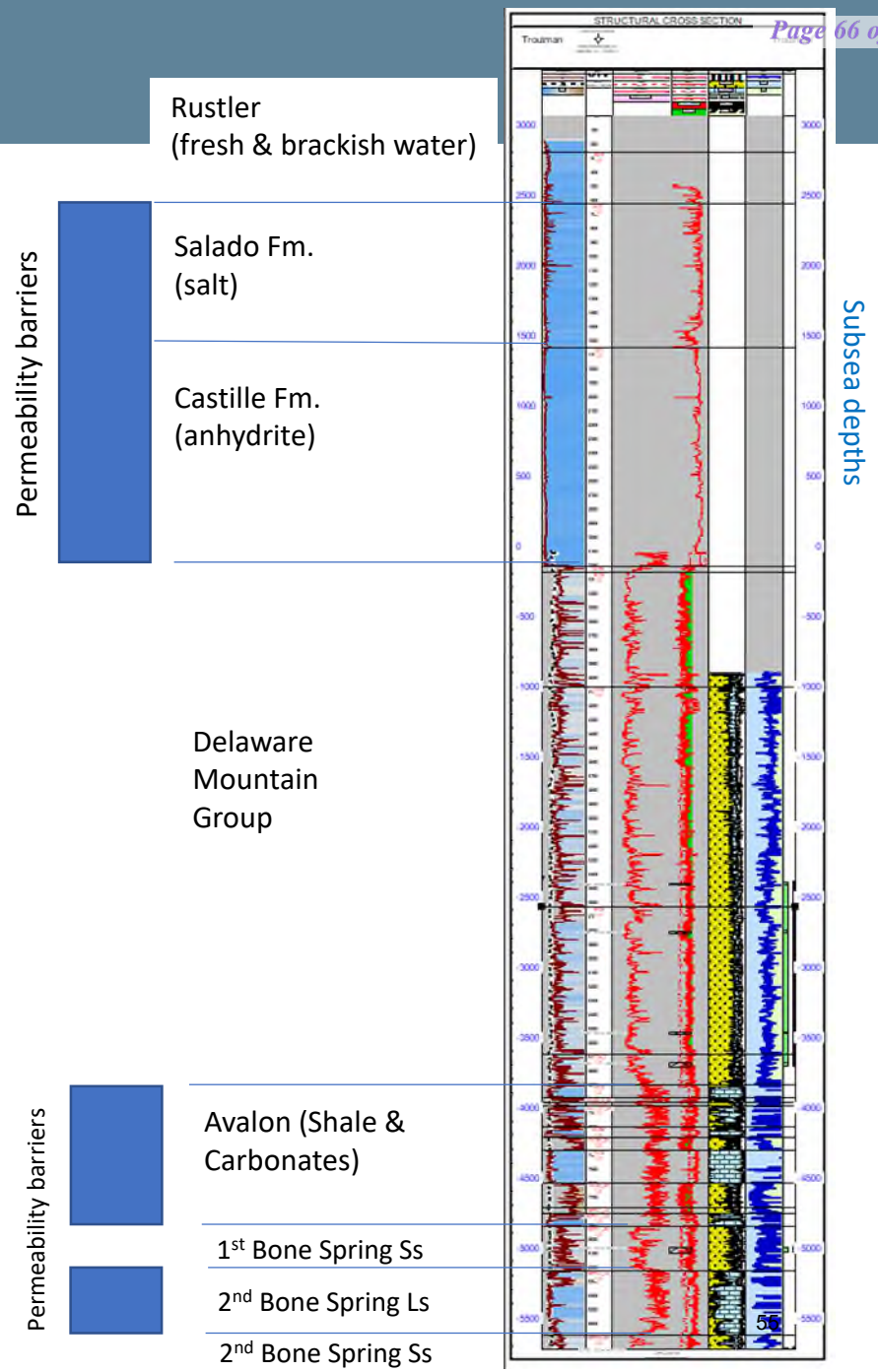
- Low-permeability barriers act as seals above and below the reservoir. These barriers consist of carbonate mudstone, dolomudstone, and shales that are ~1040 ft. thick above and ~630 ft. thick below. Laterally the injection will be primarily contained by the reservoir volume that has been previously 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.
- 2nd Bone Spring Limestone (~370 ft.) is upper permeability barrier between 2nd BS Sand and 1st BS Sand. Tight dolomudstones and shale.
- 3rd Bone Spring Limestone lower permeability barrier (~630 ft.) between 2nd BS Sand and 3rd BS Sand. Tight dolomudstones and shale.
- Upper and Lower Avalon upper permeability barrier between 1st BS Sand and Delaware Mountain Group Brushy Canyon



Type Log: Neff 13 Fed 1 22S 31E 13 30-015-25899

Lost Tank freshwater aquifers

- The top of the Bone Spring Formation is at ~8,400 ft. (log depth) with over 1,400 ft. of carbonate mudstones and shales acting as additional permeability barriers to upward migration of injected gas.
- Above that the Delaware Mountain Group consists of connate-water bearing and hydrocarbon-bearing sands, with minor limestone and shale intervals and is over 4,000 ft. thick.
- Above that is the Castile Formation consisting of very low permeability anhydrite, gypsum, and calcite that acts as another 1,100 ft. thick barrier to upward movement of fluids.
- The Salado overlies the Castile and forms a 1,400 ft. thick barrier of salt. The top of the Salado is at 850 ft. 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 about 850 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. Because of the thickness of multiple impermeable rock layers above the injection reservoir there is no possible path for migration upward into freshwater aquifers where they exist.



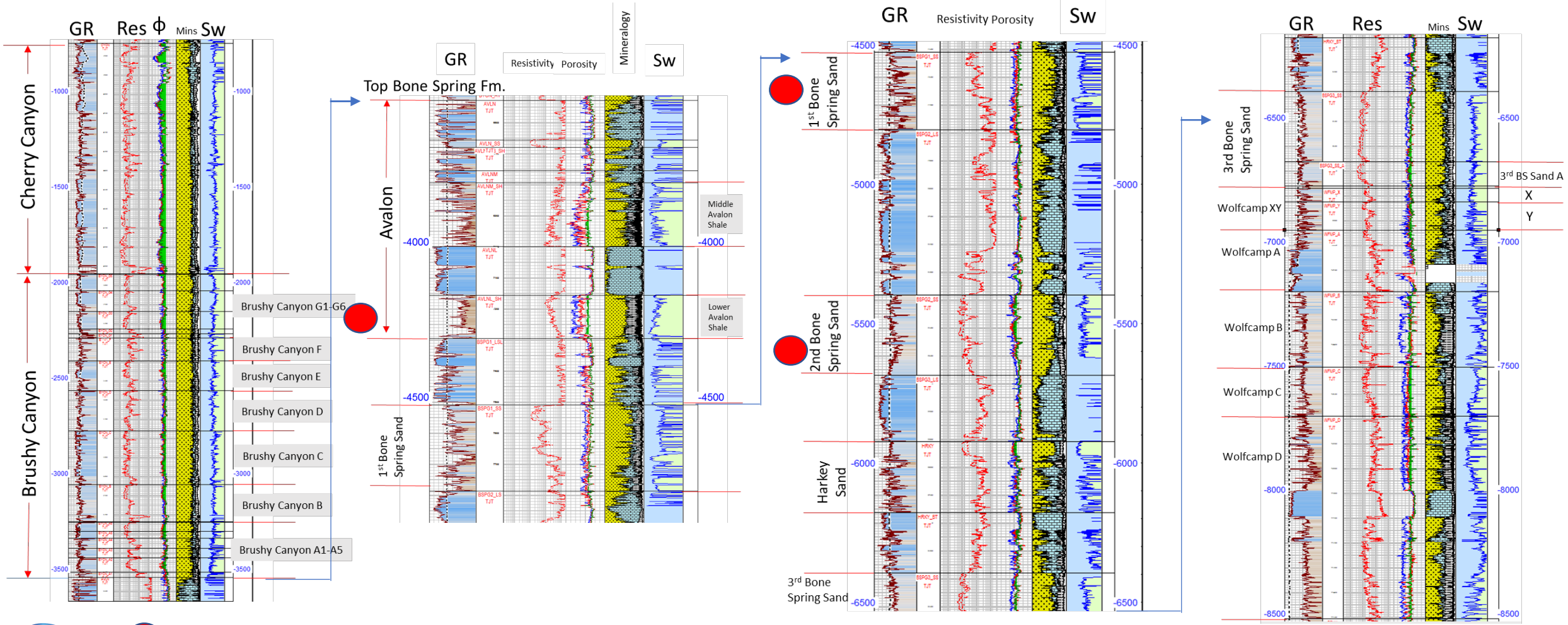
Lost Tank full type log:

Delaware Group Interval

Avalon/BSPG1_SS Interval

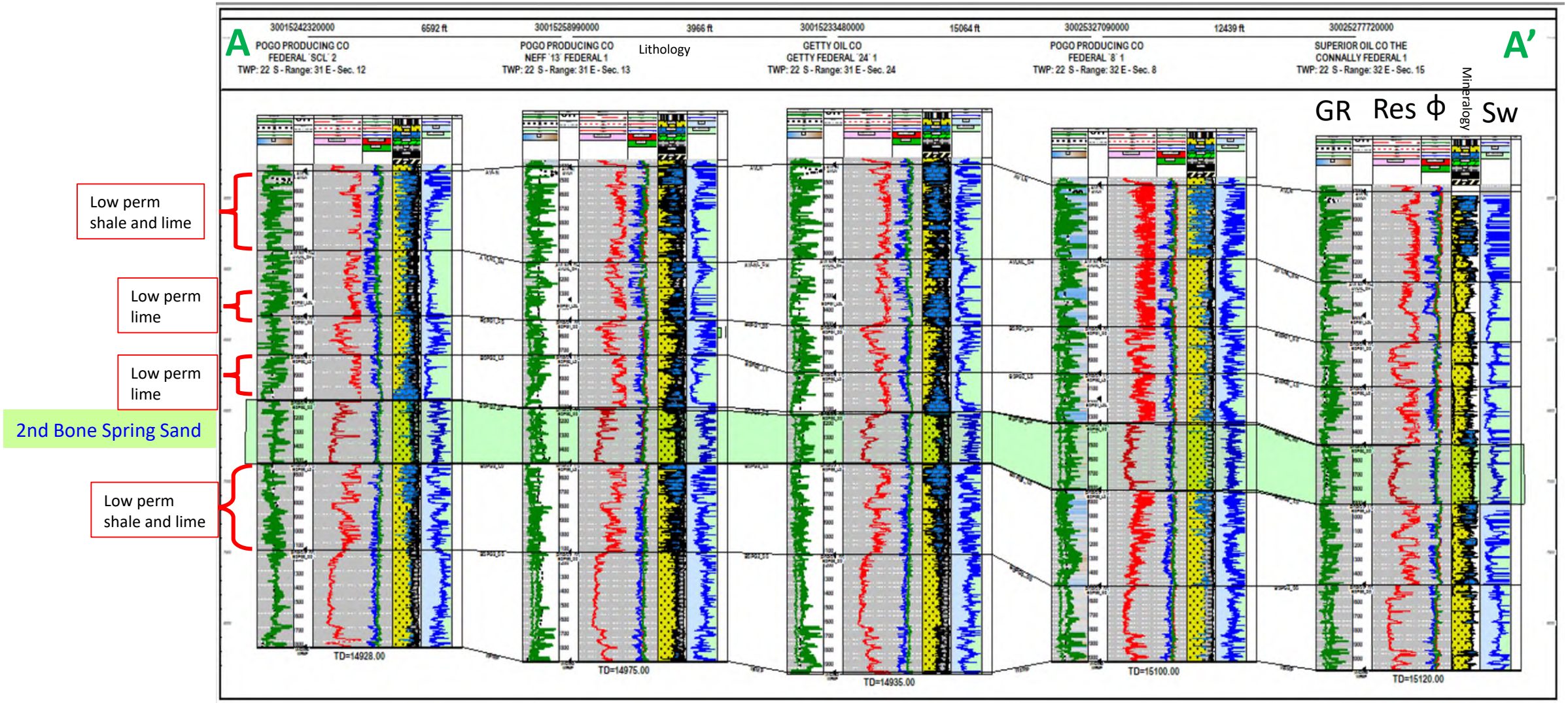
BSPG2_SS Interval

BSPG3_SS/WCMP_XY Interval



Proposed storage zones: 2nd Bone Spring Sand, 1st Bone Spring Sand, Lower Avalon

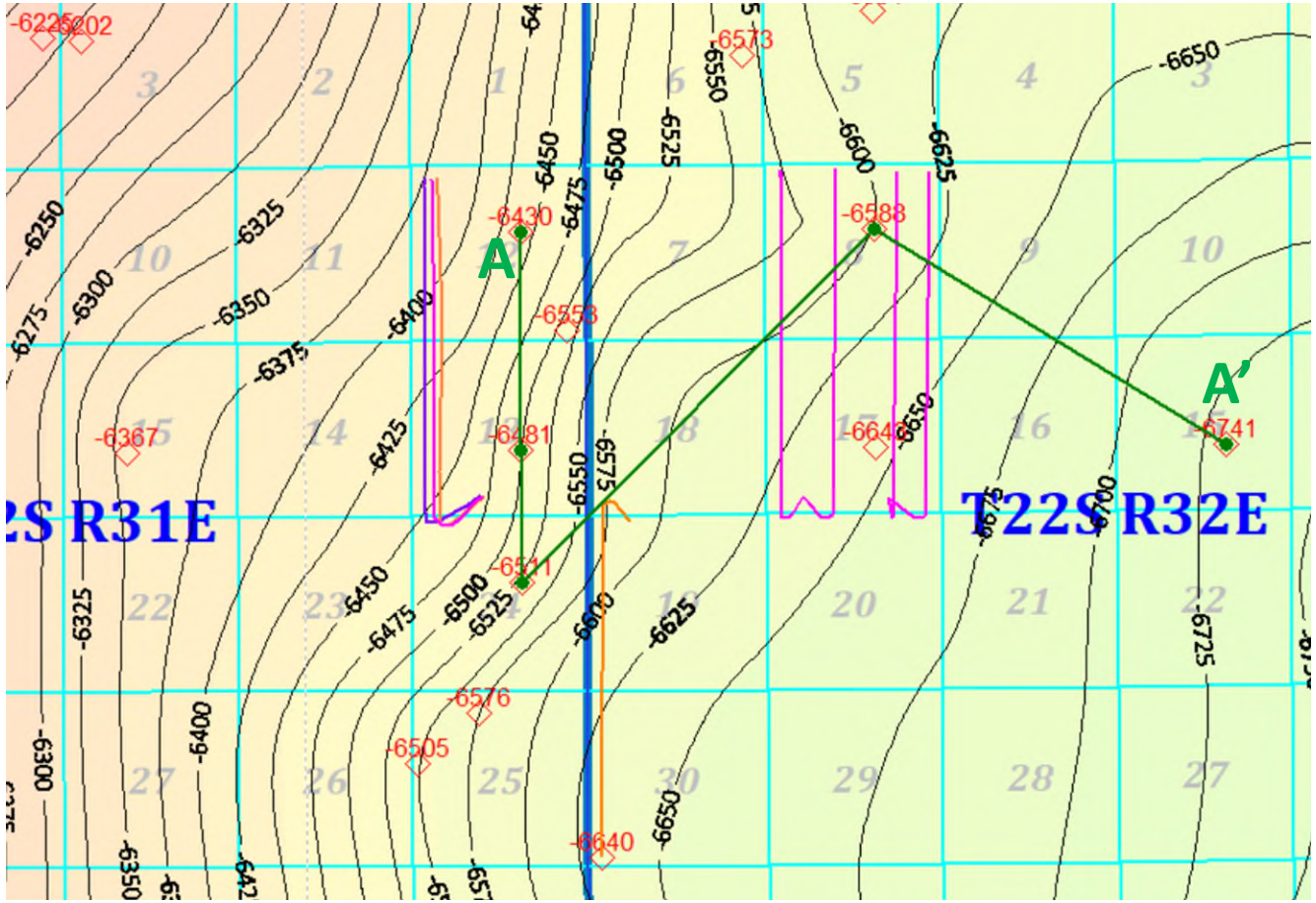
Lost Tank Second Bone Spring Sand Cross-section



Lost Tank 2nd Bone Spring Sand Top Structure

Cross-section A-A' location

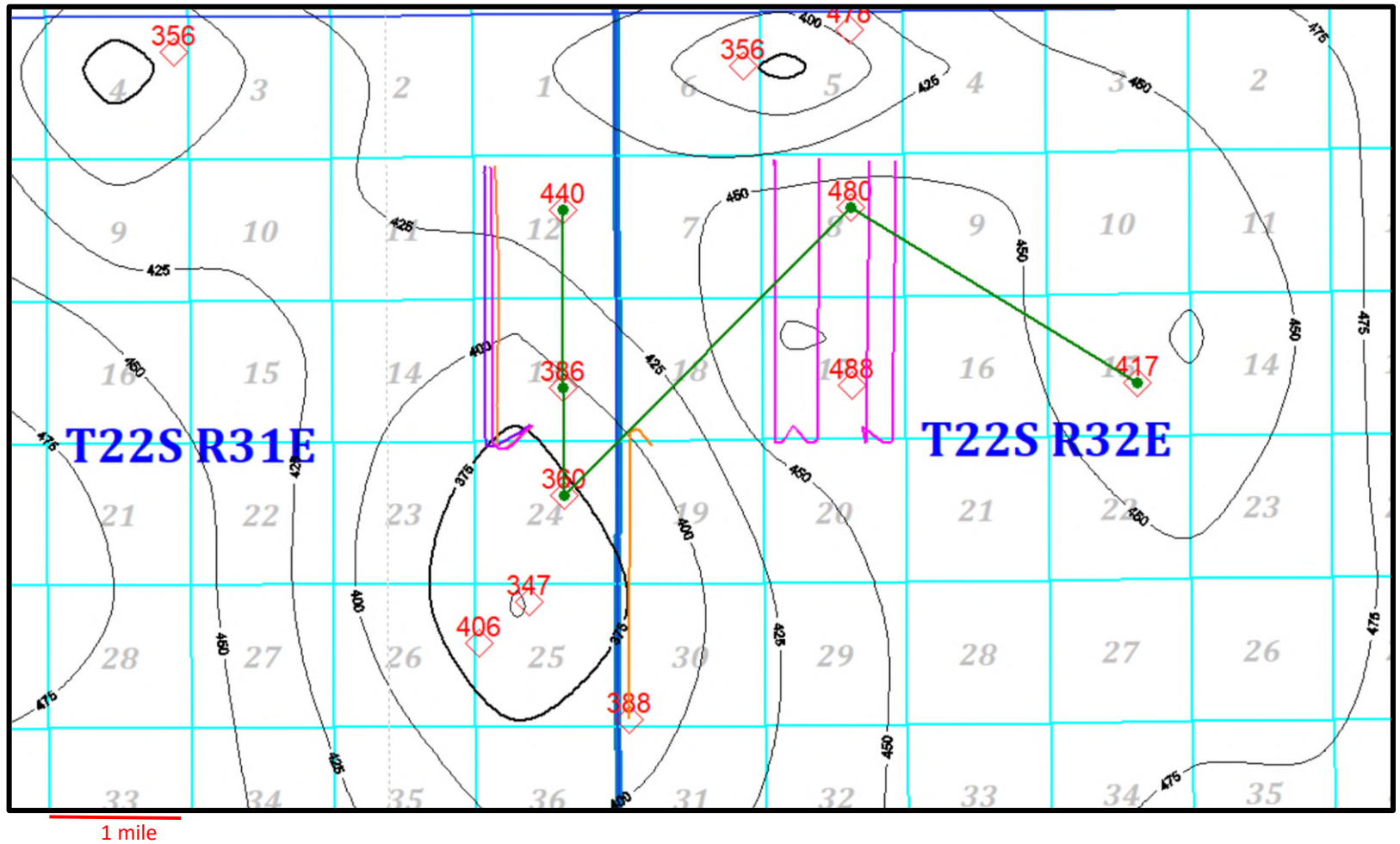
- Posted depths show well control
- Depths are TVD subsea
- Contour interval 25 ft
- 2nd Bone Spring wells marked by pink wellbores
- 1st BS wells in orange
- Avalon well in purple



2nd Bone Spring Sand

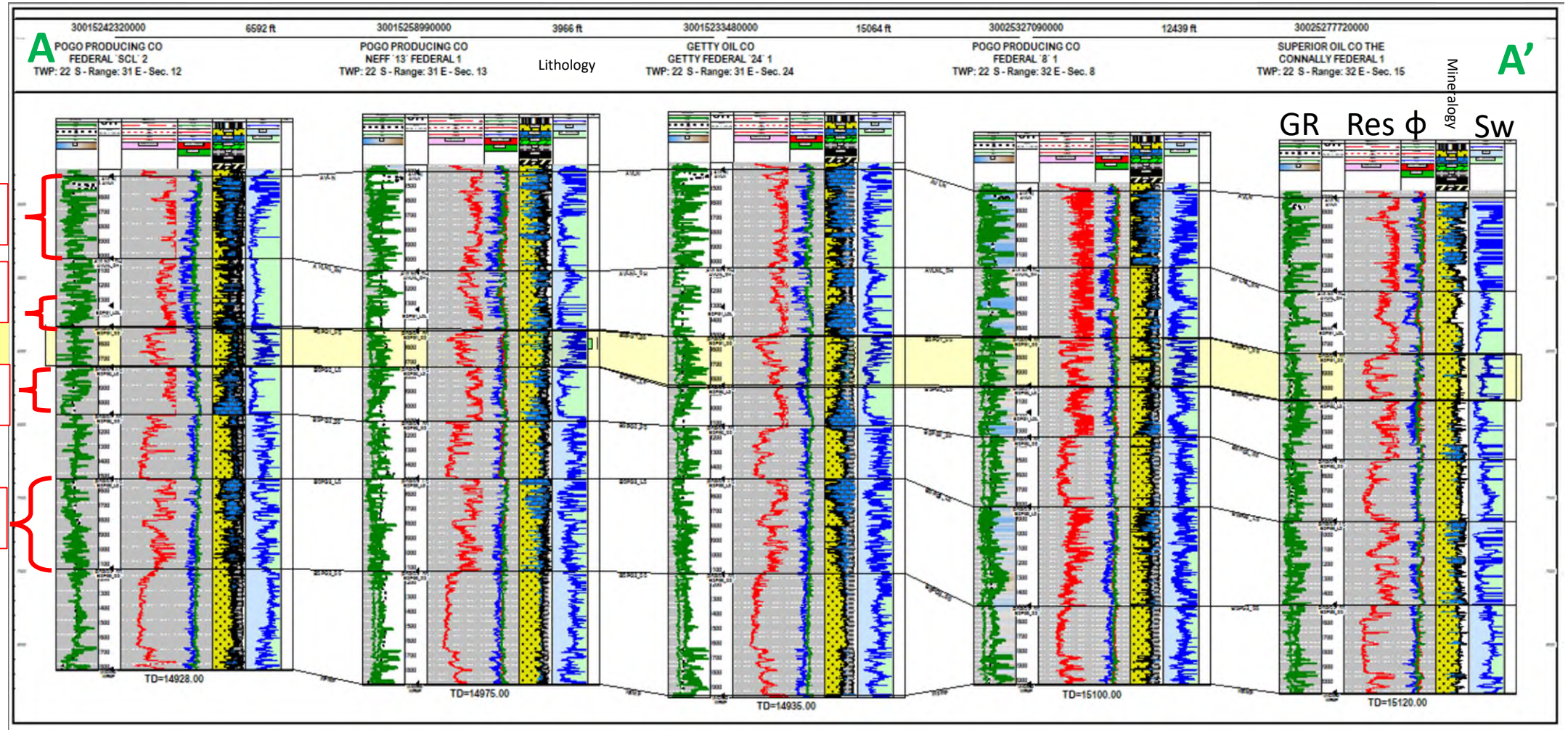
Second Bone Spring Sand Isochore Map

- Posted depths show well control
- Depths are TVD subsea
- Contour interval 25 ft
- 2nd Bone Spring wells marked by pink wellbores
- 1st BS wells in orange
- Avalon well in purple



2nd Bone Spring Sand Thickness

Lost Tank First Bone Spring Sand Cross-section



Low perm shale and lime

Low perm lime

1st Bone Spring Sand

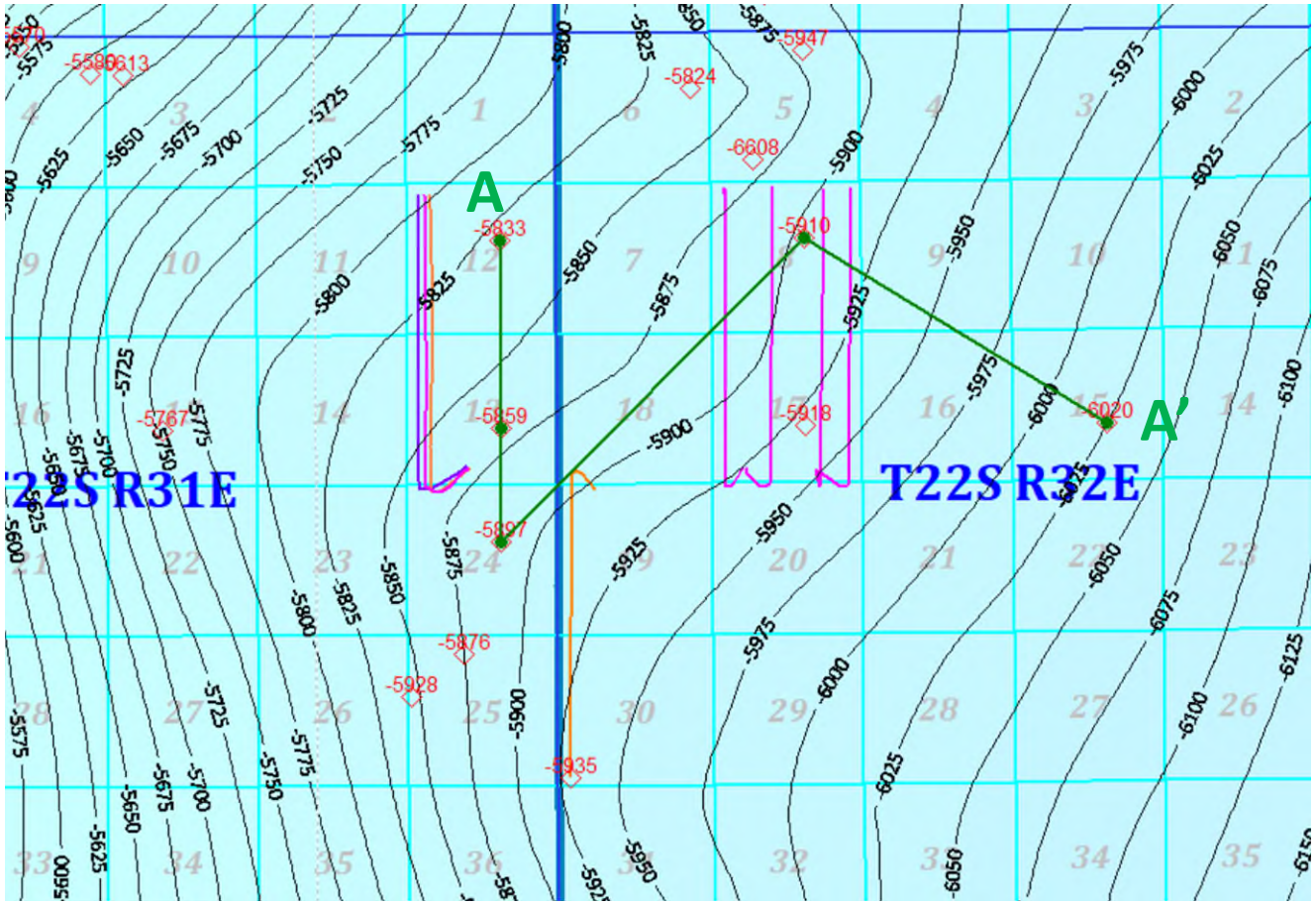
Low perm lime

Low perm shale and lime

Lost Tank 1st Bone Spring Sand Top Structure

Cross-section A-A' location

- Posted depths show well control
- Depths are TVD subsea
- Contour interval 25 ft
- 2nd Bone Spring wells marked by pink wellbores
- 1st BS wells in orange
- Avalon well in purple

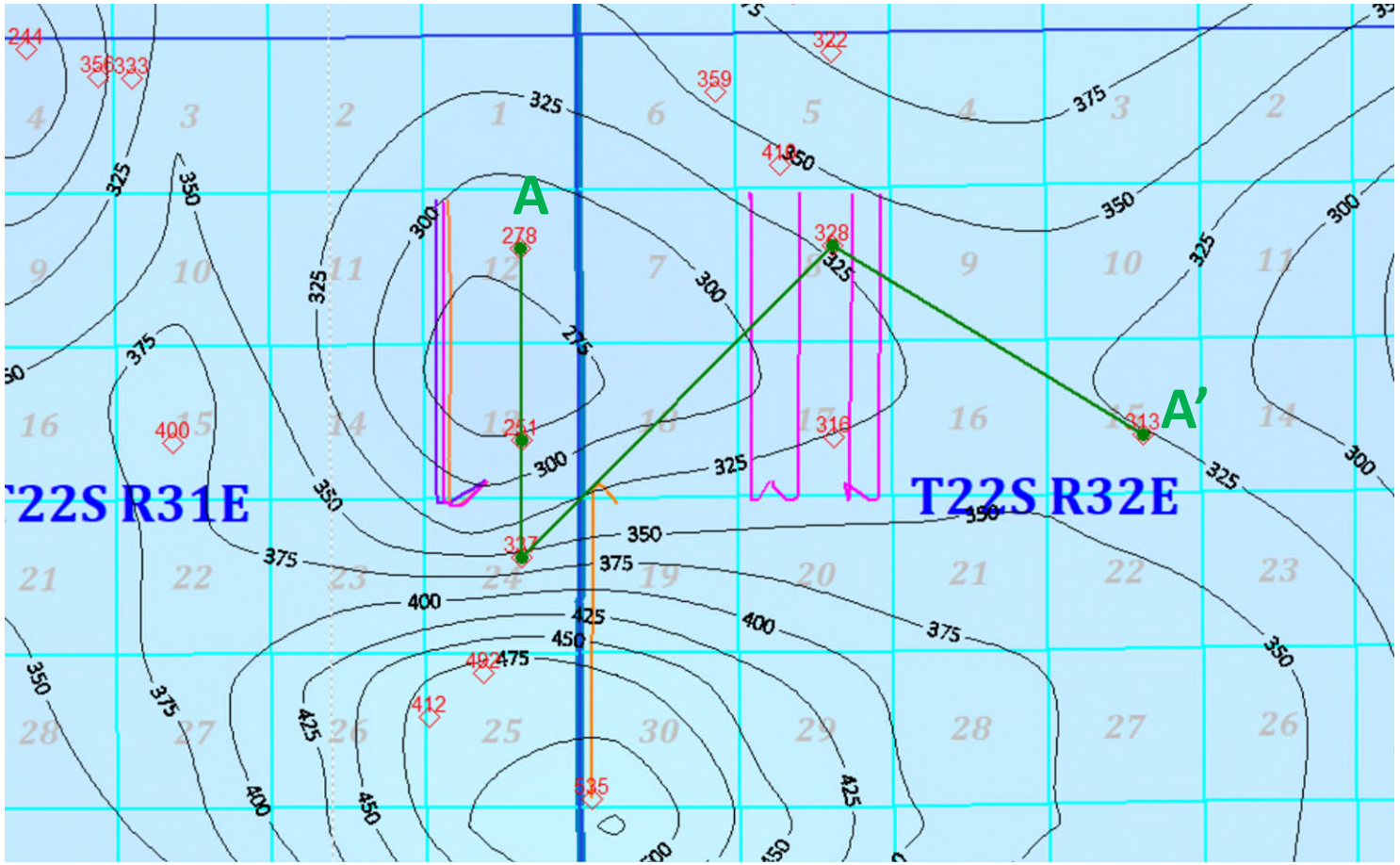


North

1st Bone Spring Sand Structure

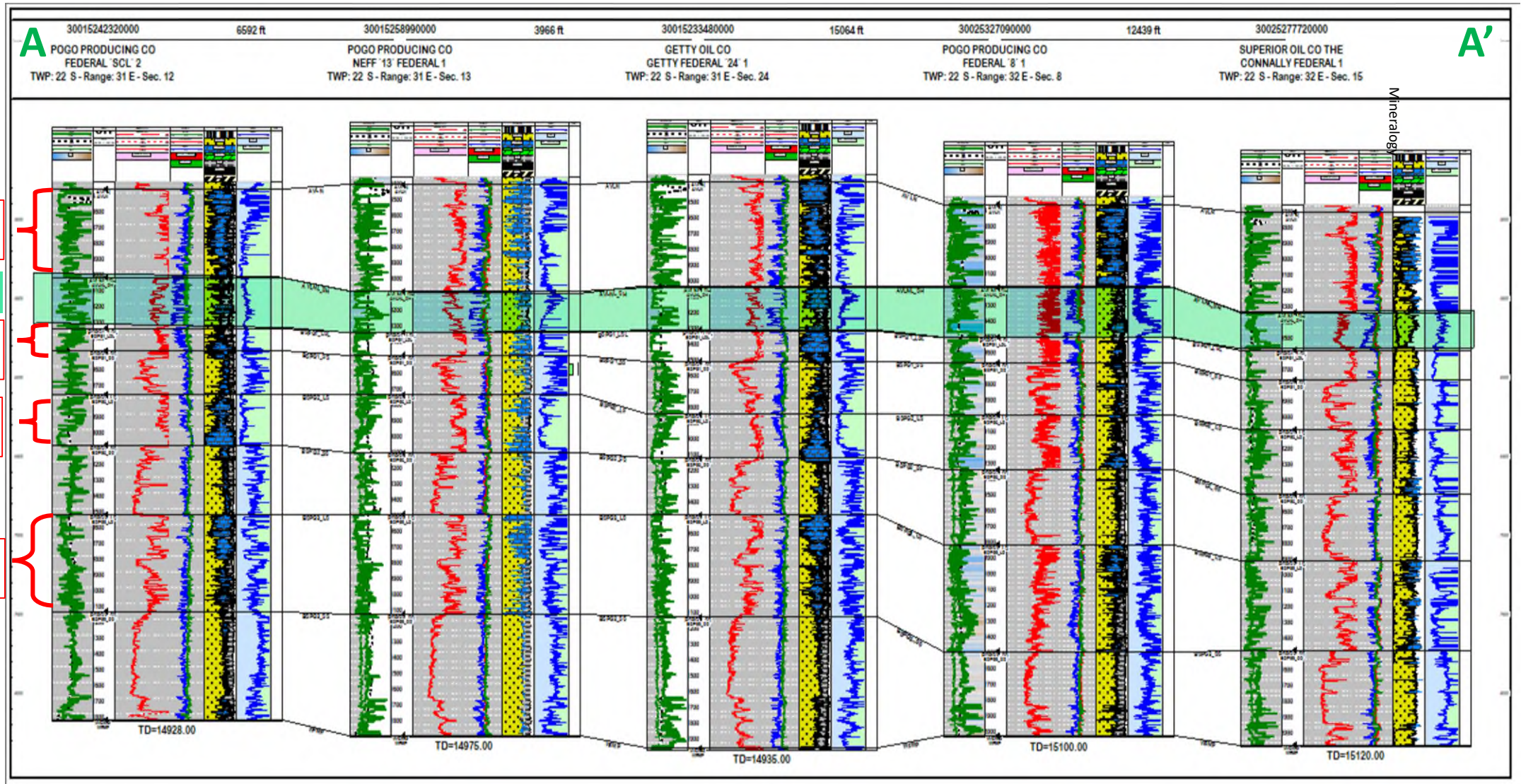
First Bone Spring Sand Isochore Map

- Posted depths show well control
- Depths are TVD subsea
- Contour interval 25 ft
- 2nd Bone Spring wells marked by pink wellbores
- 1st BS wells in orange
- Avalon well in purple



1st Bone Spring Sand Thickness

Lost Tank Lower Avalon Cross-section



Low perm shale and lime

Lower Avalon

Low perm lime

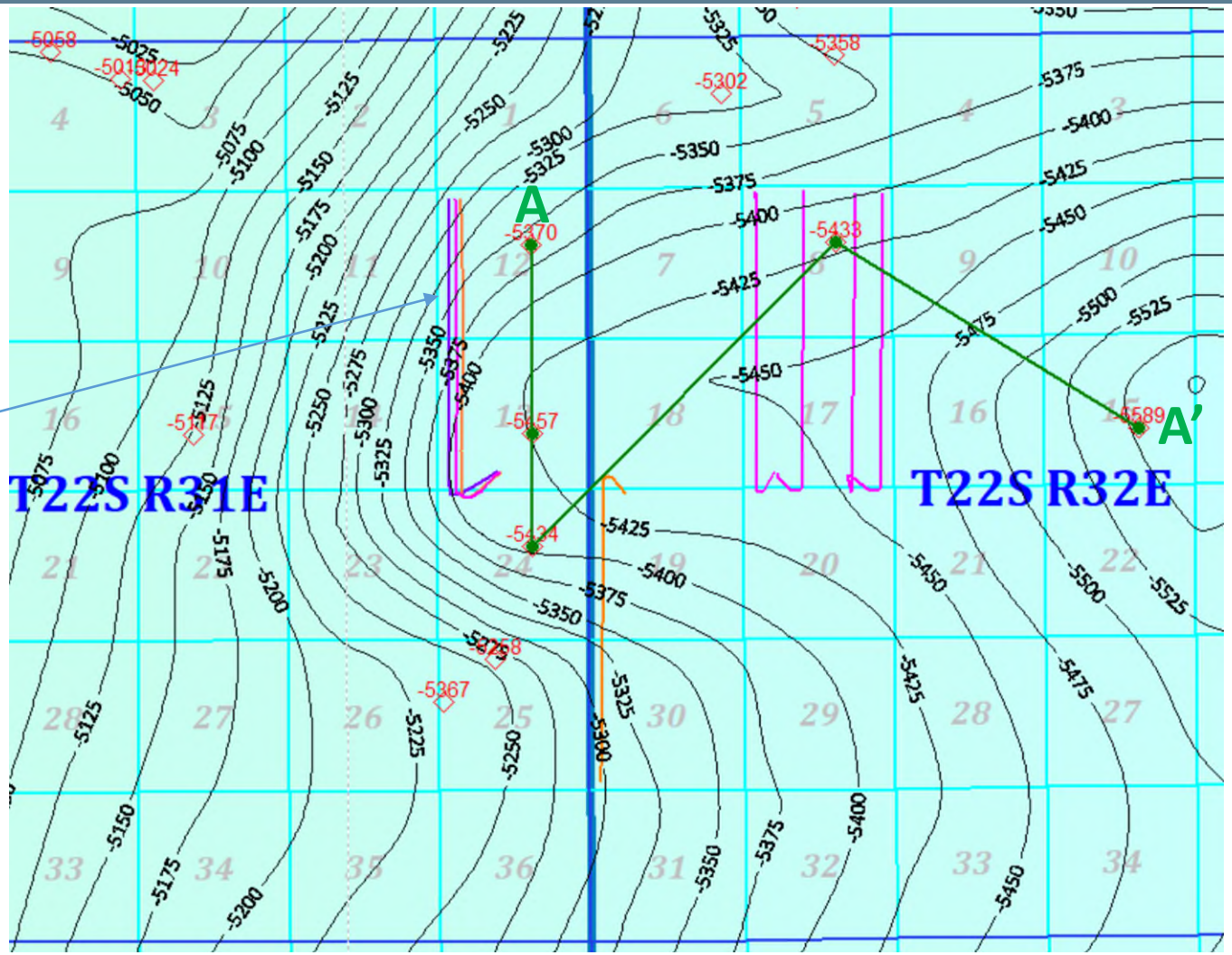
Low perm lime

Low perm shale and lime

Lost Tank Lower Avalon Top Structure

Cross-section A-A' location

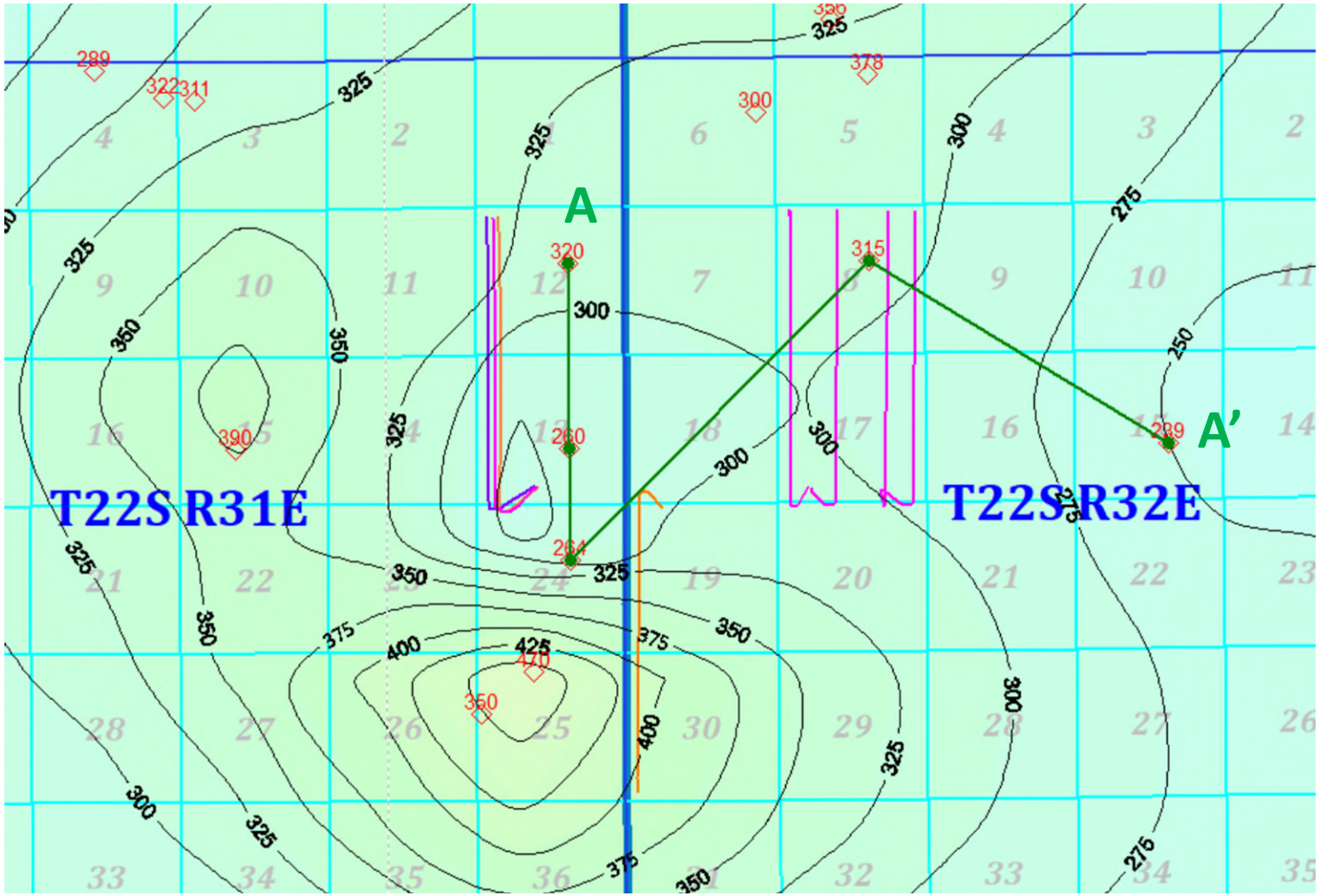
- Posted depths show well control
- Depths are TVD subsea
- Contour interval 25 ft
- 2nd Bone Spring wells marked by pink wellbores
- 1st BS wells in orange
- Avalon well in purple



Lower Avalon Structure

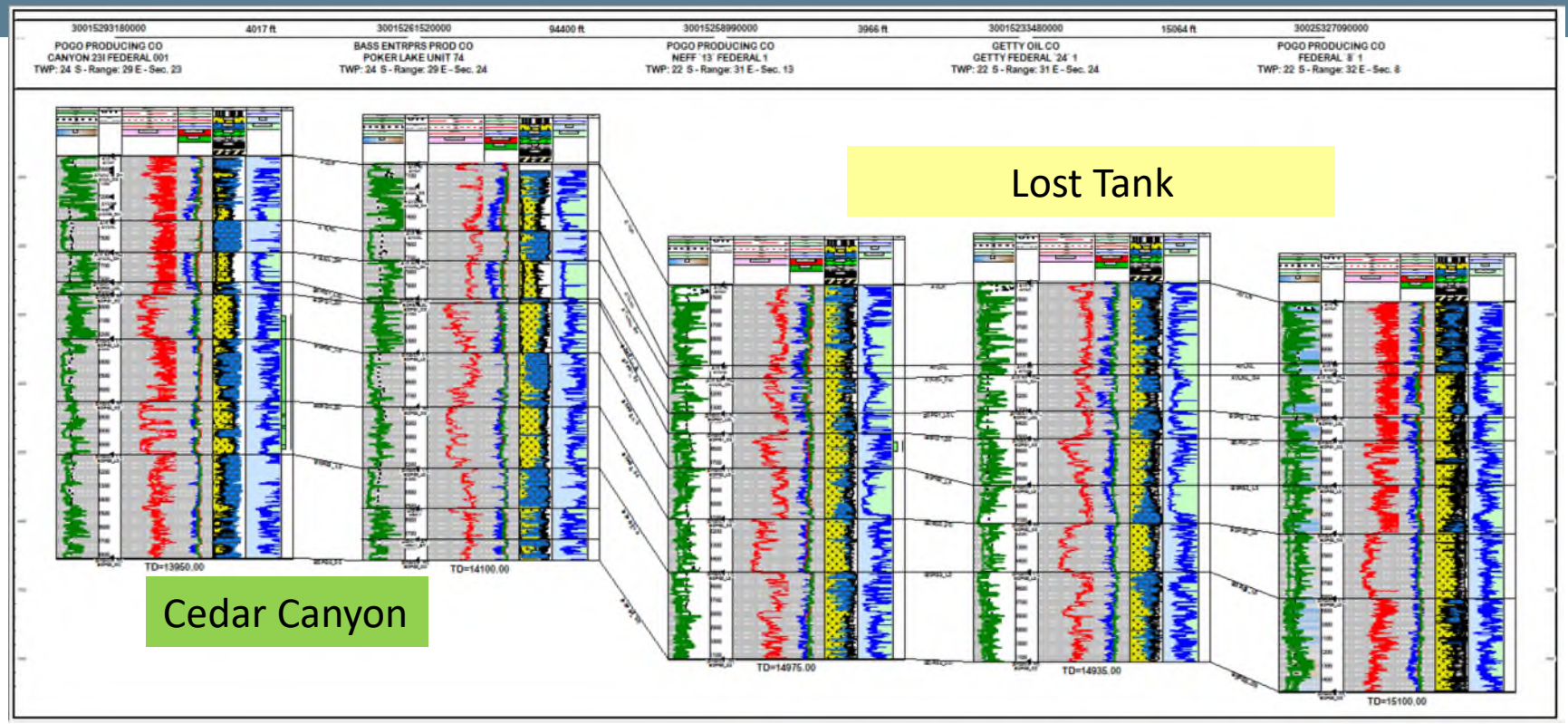
Lost Tank Lower Avalon Isochore Map

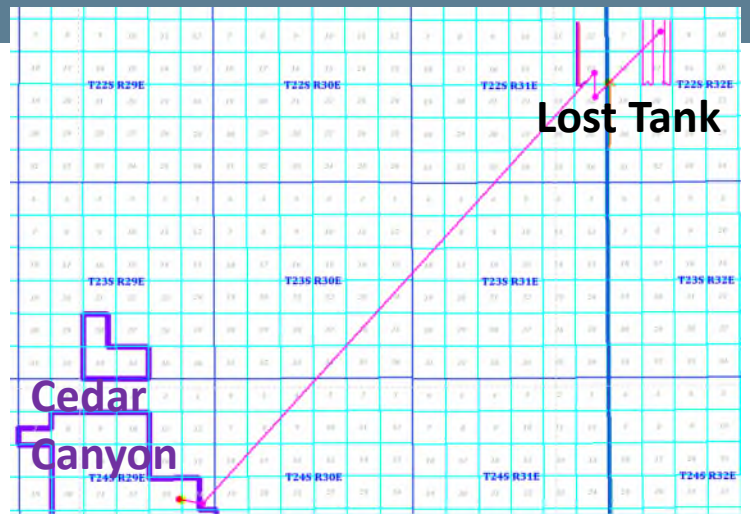
- Posted depths show well control
- Depths are TVD subsea
- Contour interval 25 ft
- 2nd Bone Spring wells marked by pink wellbores
- 1st BS wells in orange
- Avalon well in purple



Lower Avalon Thickness

Comparison of Cedar Canyon to Lost Tank





Cross section location

Depth (and reservoir pressure) are the primary differences between these two areas for these benches.
Reservoir height, porosity, permeability, and composition are similar between the two areas.

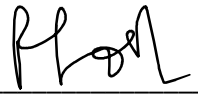
Closed Loop Gas Capture (CLGC) Project

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.

_____ ____5/09/2023_____

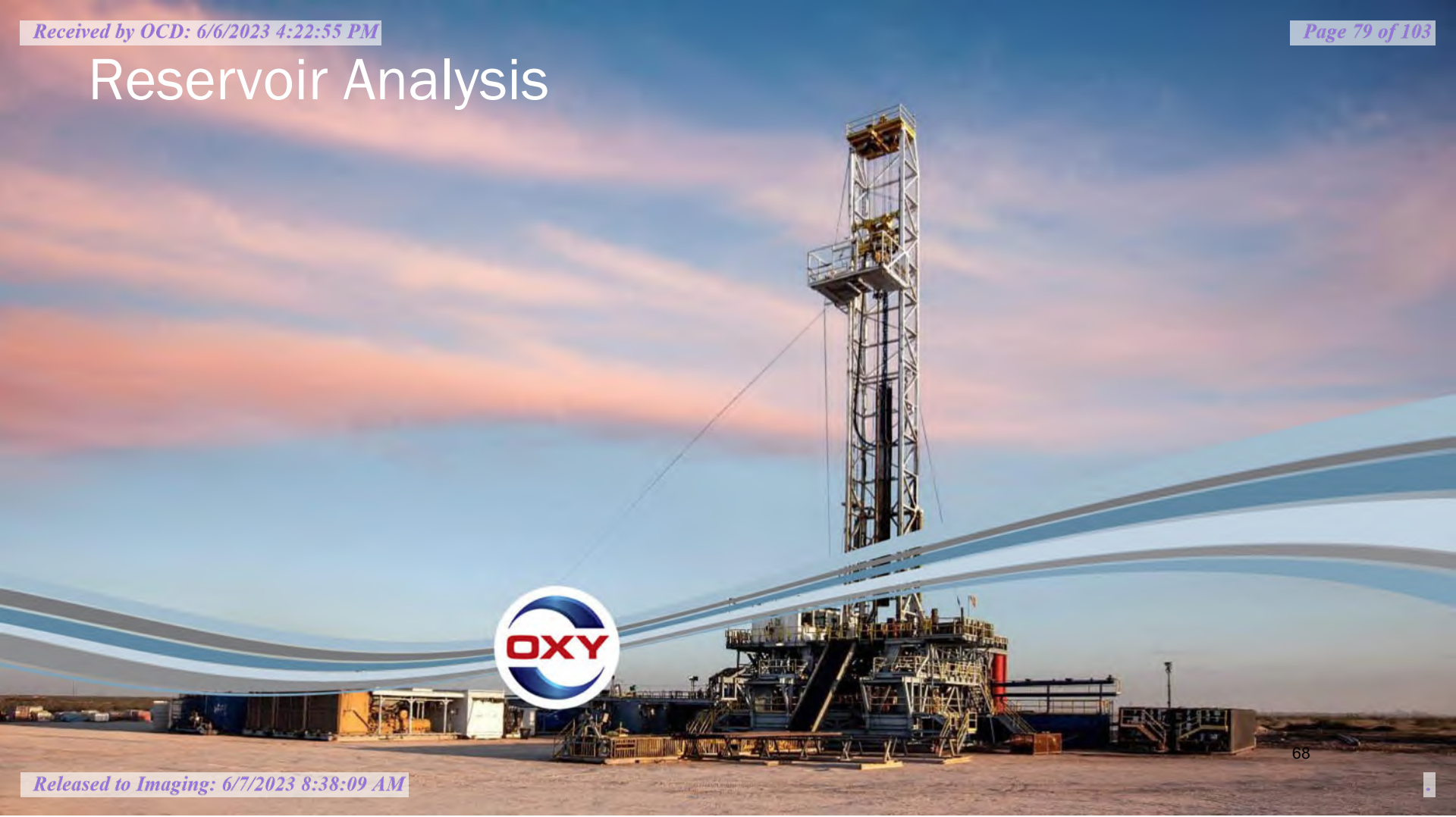
Tony Troutman, Geologist Date



_____ __05/09/2023_____

Rahul Joshi, Reservoir Engineer Date

Reservoir Analysis



CONTENTS

Previous Project- Cedar Canyon Enhance Oil Recovery (EOR) Injection Model, 2017 Pilot Project

Project and Model Comparison- EOR Injection vs. Gas Storage 2023 Gas Storage

Updated Cedar Canyon Gas Storage Model, 2023 Conclusions

Gas Storage 2023 Model Results

CEDAR CANYON EOR INJECTION MODEL, 2017

Purpose of Model

- Built model to history match EOR line drive gas injection in horizontal wells in unconventional reservoirs for project feasibility.

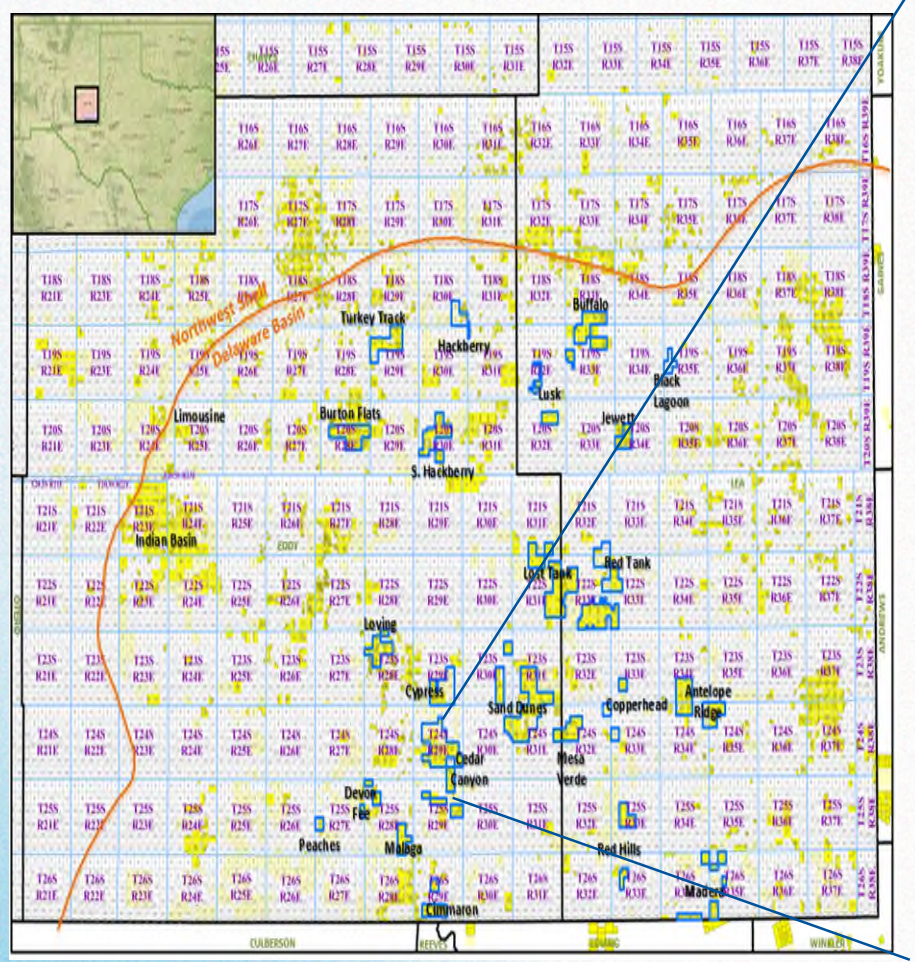
Model Inputs

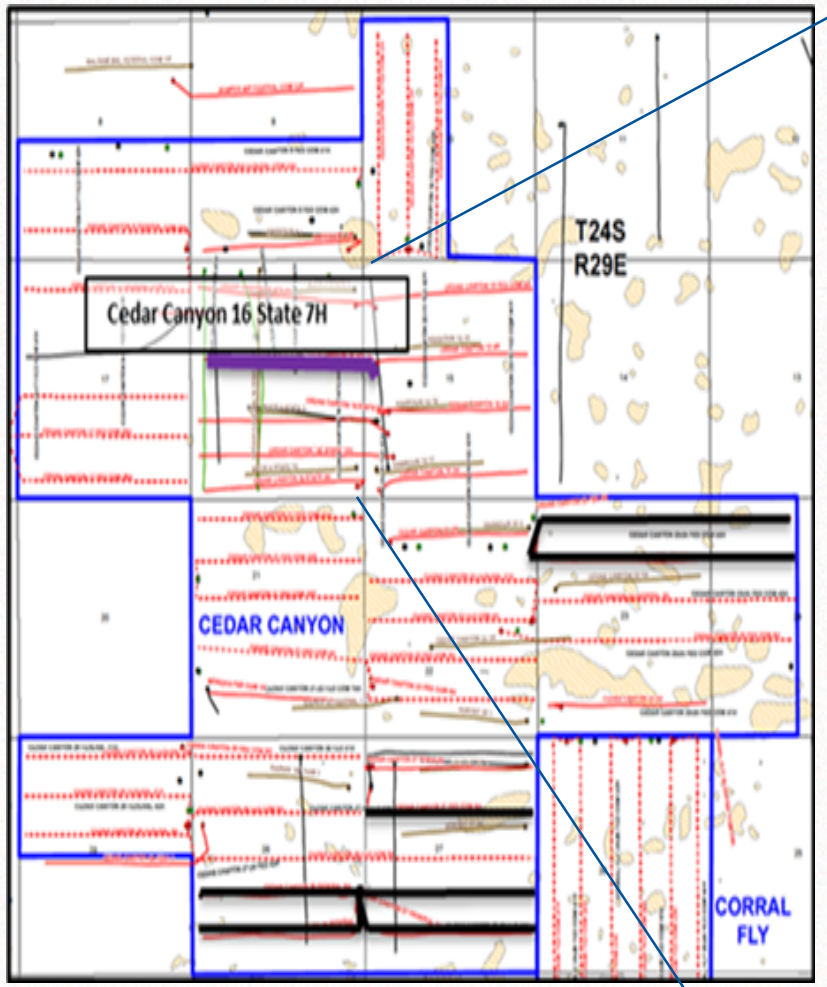
- Horizontal wells with 5,000 ft laterals
- Geologic and Reservoir properties of the Second Bone Spring Sandstone Formation
- 4 Horizontal Wells per section

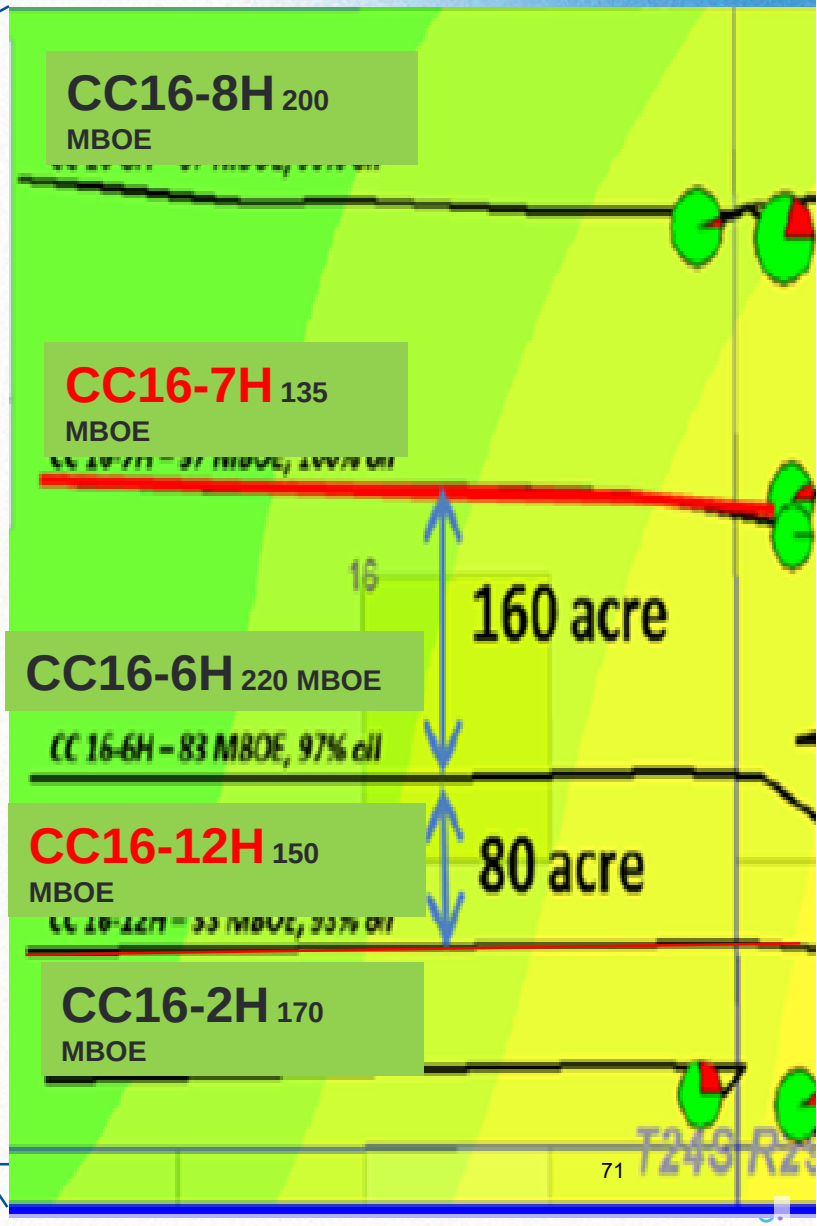
History Match

- Primary production (oil rate, water rate and gas rate) prior to 2017
- EOR injection (gas rate, gas injection pressure) during 2017: High-pressure (4250 psi MASP), high-rate gas injection (7 MMSCFPD, sustained)
- Model incorporates injection gas breakthrough observed in offset wells after 3 months of EOR injection.

MODEL SET-UP







CEDAR CANYON SECTION-16 RESERVOIR MODEL

Location: Lea County,NM

Model Acreage: 640

Pay Horizon: 2nd Bone Springs Sand

Lithology: Sandstone interbedded with Limestone

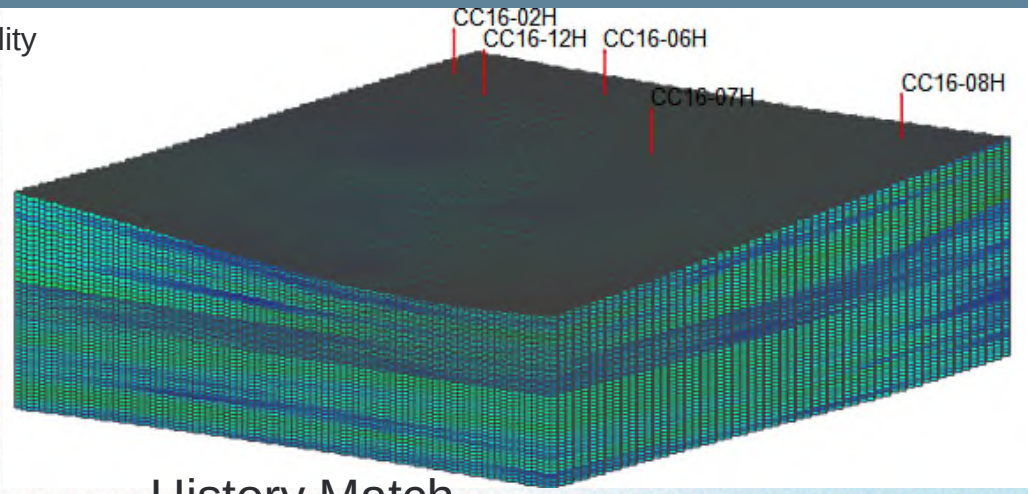
Trap Type: Stratigraphic

Nominal Depth: 8400 ft

Gas Cap (at discovery): No

Primary Drive Mechanism: Solution Gas Drive

Structure & Permeability
1,177,400 Grids
56 Layers



Gross Pay: 320 ft

Net Pay: 320 ft

Avg Porosity: 6.8%

Initial Sw: 50%

Permeability: 0.0003md (matrix)

Initial Reservoir Pressure: 4500 psi

Reservoir Temperature: 150 F

Oil Gravity: 42 API

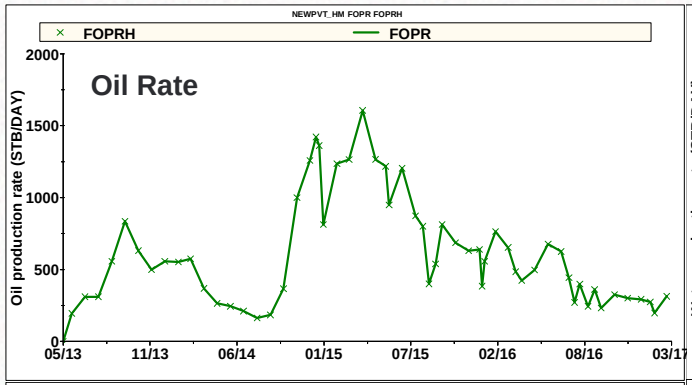
Boi: 1.63 RB/STB

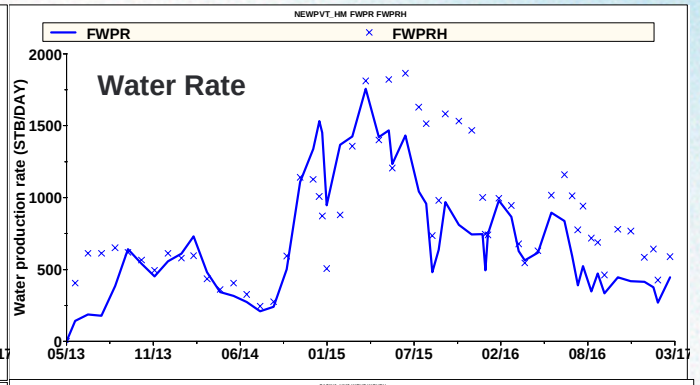
Rsi: 1480 SCF/STB

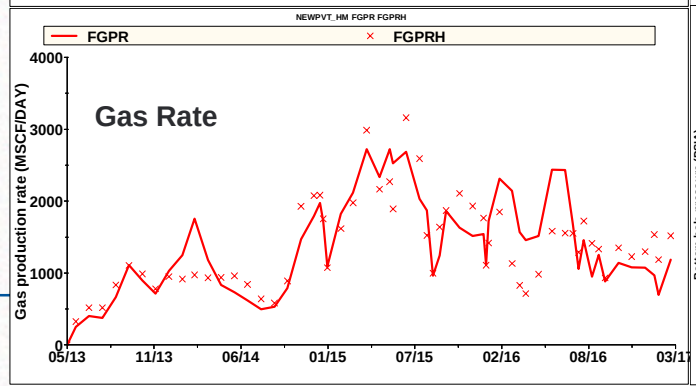
Original Oil in Place: 28 MMSTB

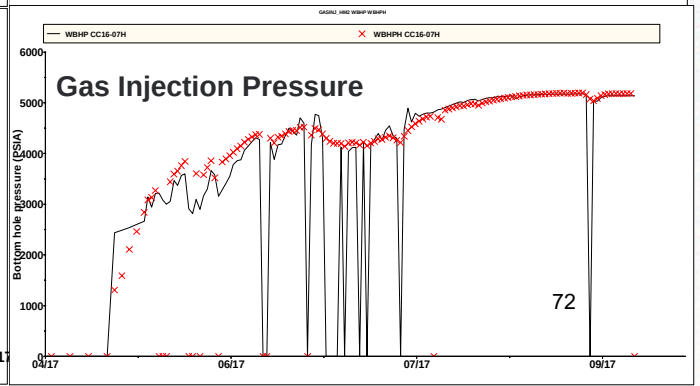
Model Inputs

History Match









PROJECT AND MODEL COMPARISON- EOR INJECTION VS. GAS STORAGE

EOR Injection, 2017

- Higher, Sustained Injection Rate (7MM SCFPD)
- Higher Injection Pressure (4250 psi MASP)
- Longer injection duration (3 months or greater)
- 5,000 ft Laterals

Gas Storage, 2023

- Lower Injection Rate (Initially 3MM SCFPD)
- Lower Injection Pressure (1300 psi MASP)
- Shorter injection duration (a couple weeks or less)
- 10,000 ft Laterals

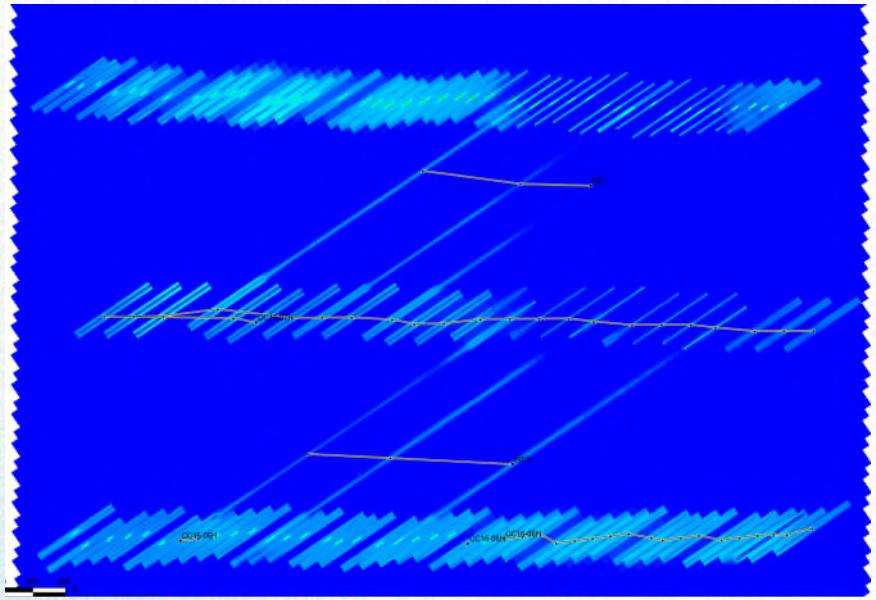
Same geographic area

- Injection of Treated, Produced Gas
- Hydraulically fractured Horizontal wells
- Bone Springs Reservoir
- 4 WPS

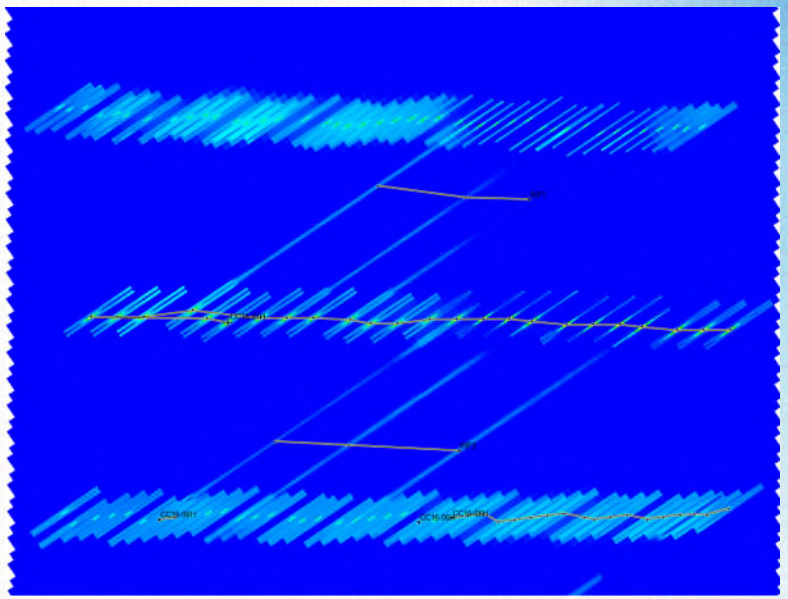
GAS STORAGE SIMULATION PROCESS

- Run primary production for all wells for additional period (post history match)
- Inject gas in injection well at 3MMSCFPD for 7 days
- Produce the injection well post injection
- No positive or negative effect seen on oil recovery of storage wells and offset wells

GAS INJECTION PROFILE (1 WEEK INJECTION)



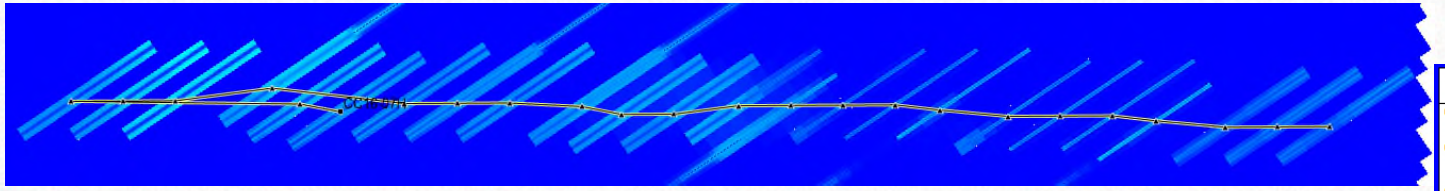
Before injection



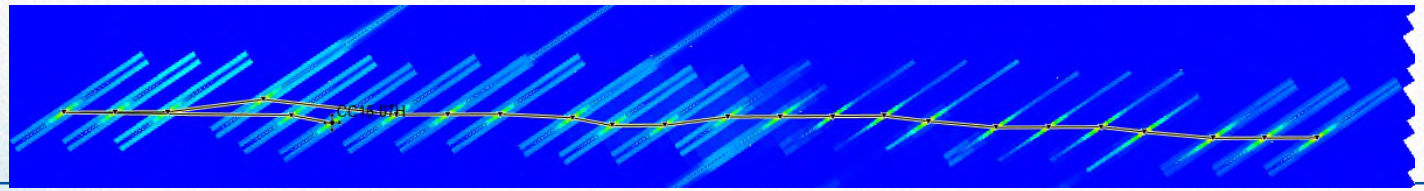
After 1 week of injection (3 MMSCFPD)

21 MMSCF Cum Gas

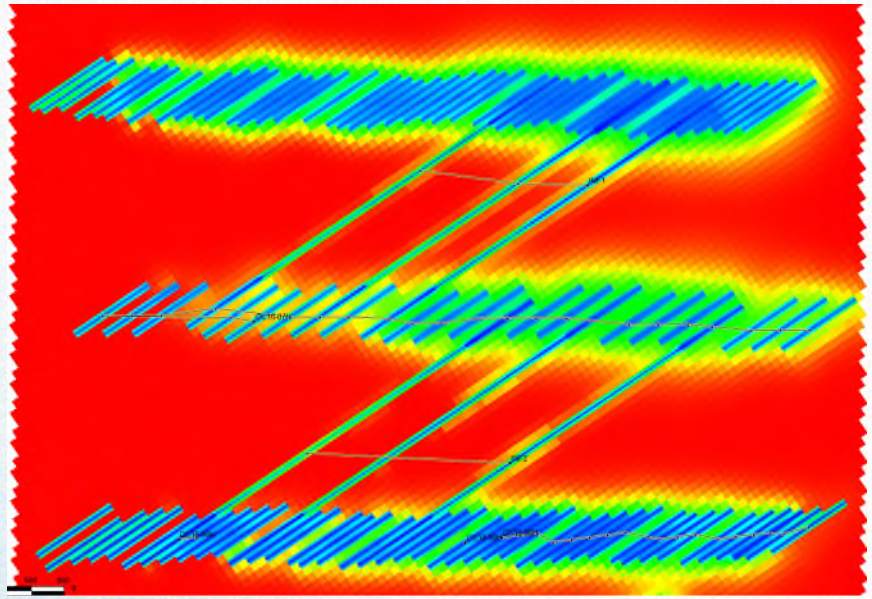
Before Injection CC16-7H Blow-up



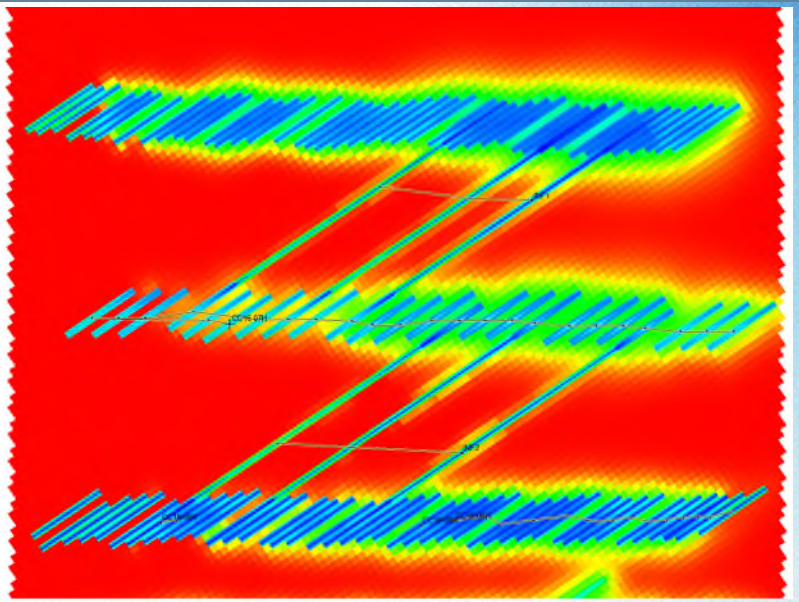
After Injection CC16-7H Blow-up



PRESSURE PROFILE (1 WEEK INJECTION)

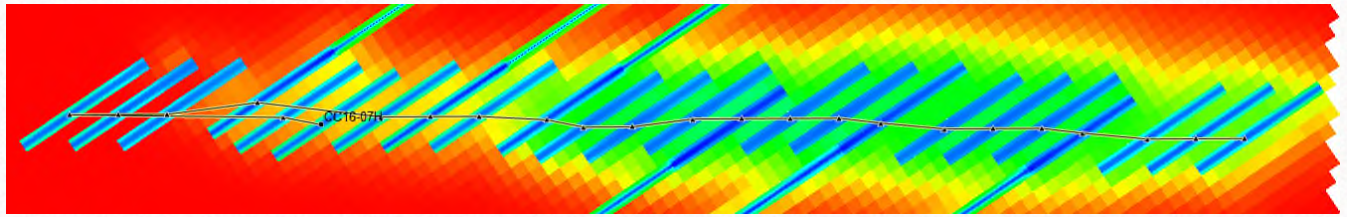


Before injection

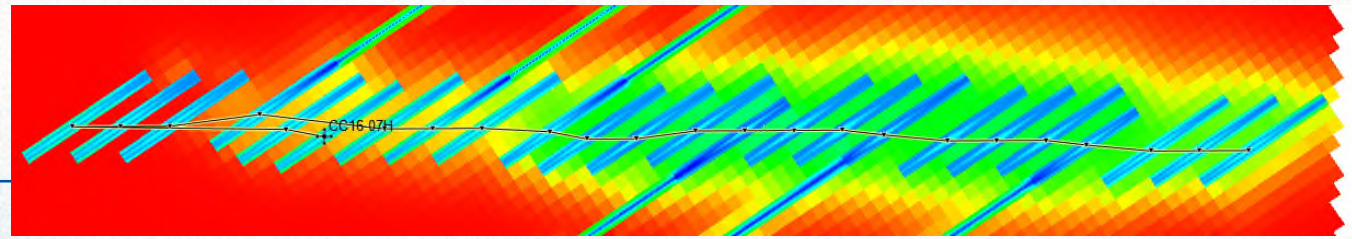


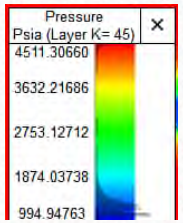
After 1 week of injection (3 MMSCFPD)

Before Injection CC16-7H Blow-up



After Injection CC16-7H Blow-up





GAS STORAGE CAPACITY

API	Well Name	Fracture Gas Volume (MMSCF)
3001548595	TOP SPOT 12_13 FEDERAL COM 11H	274
3001548594	TOP SPOT 12_13 FEDERAL COM 1H	258
3001547771	TOP SPOT 12_13 FEDERAL COM 21H	238
3002548282	DR PI FED UNIT 17_8 DA 21H	230
3002548947	DR PI FED UNIT 17_8 DA 23H	226
3002548949	DR PI FED UNIT 17_8 DA 25H	249
3002548950	DR PI FED UNIT 17_8 DA 26H	239
3002546474	LOST TANK 30-19 FED COM 1H	301

GAS STORAGE 2023 MODEL RESULTS

Conclusions

- The longest Oxy gas storage event was 13.5 MMSCF gas injection for 4 days, which is about 6% of the capacity of the hydraulically-created fractures

- On average, gas storage will not extend more than 100 ft into the hydraulic fracture network

- Oxy does not anticipate a positive or negative impact on storage or offset wells

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..

_____ 05/09/2023_____

Rahul Joshi, Reservoir Engineer Date

Other

Surface Ownership Map

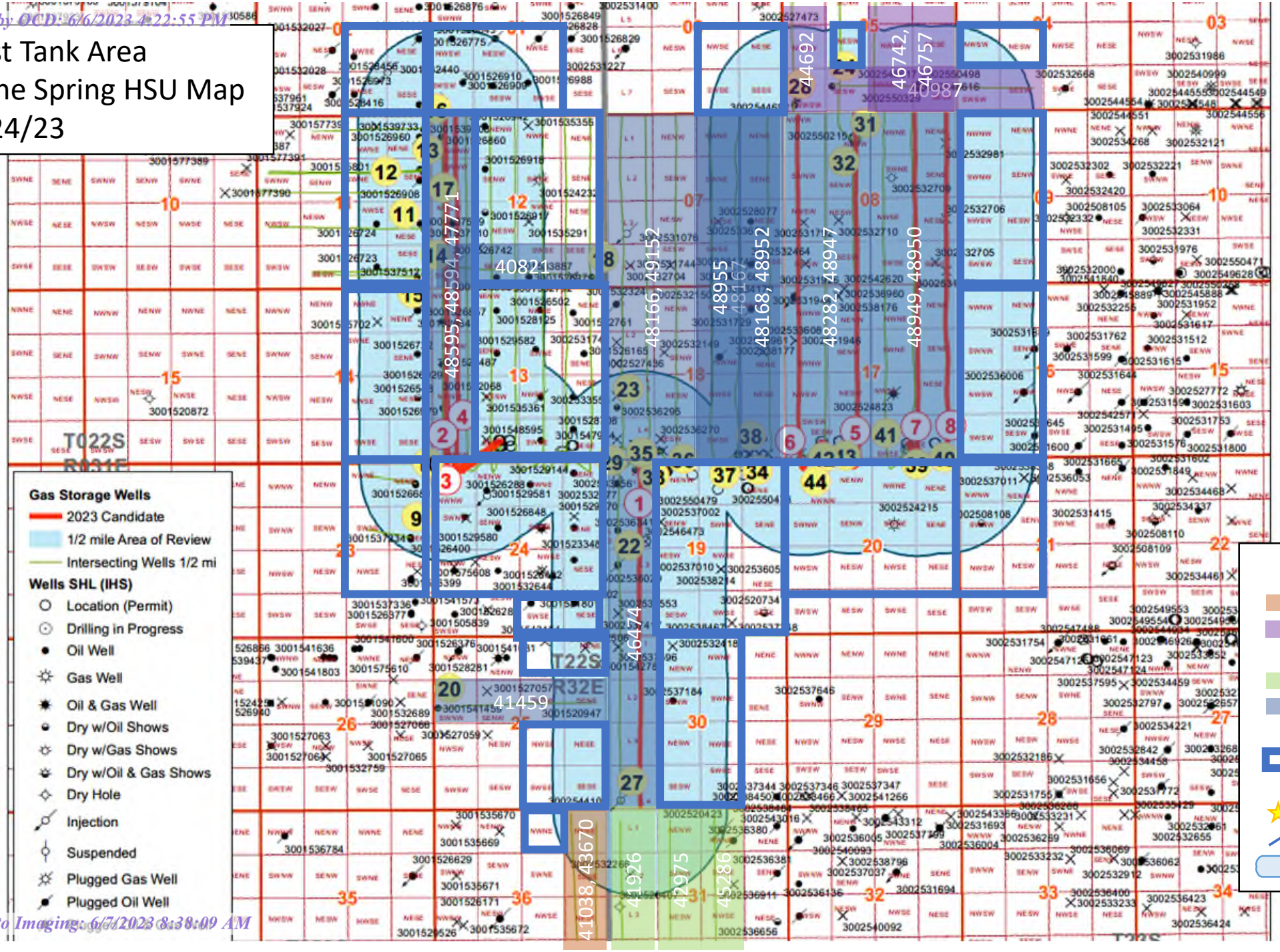
Gas Storage Wells
- 2023 Candidate
- Intersecting Wells 2 mi
- 2 mile Area of Review

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

NM Surface Ownership

Type
- Private
- State
- Federal

Lost Tank Area
Bone Spring HSU Map
5/24/23



GOR Gas Allocation Plan for CLGC Wells

Application

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

Overview

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

Wellhead Gas Produced = Gas Lift Gas + Native Gas + Storage Gas Production

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

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

Example

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

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

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

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

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

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

Well Test Allocation Method

Following an injection period, the allocation of oil and gas production shall be based on the production life of each CLGC well as measured for three periods: (a) the initial production period shall be measured from the end of the injection period until the peak gas production rate is reached; (b) the plateau period shall be measured from the end of the initial production period to the peak decline rate; and (c) the decline period shall be measured from the end of the plateau period until the well has recovered the previously-injected volume.

During the initial production period, the oil and gas production for each CLGC well shall be allocated using daily well tests or separated and metered individually prior to commingling.

During the plateau period, the oil and gas production for each CLGC well shall be allocated using a production curve calculated from a minimum of three (3) well tests per month. The production curve shall be calculated by interpolating daily production for each day using the known daily production obtained by well tests and shall use a method of interpolation that is at minimum as accurate as maintaining a constant rate of change for each day's production between the known daily production values.

During the decline period, the oil and gas production for each CLGC well shall be allocated using a production curve calculated from a minimum well testing frequency as follows: (a) a minimum of three (3) well tests per month when the decline rate is greater than 22% per month; (b) a minimum of two (2) well tests per month when the decline rate is between 22% and 10% per month; and (c) a minimum of one (1) well test per month when the decline rate is less than 10% per month. The production curve shall be calculated by interpolating daily production for each day using the known daily production obtained by well tests and shall use a method of interpolation that is at minimum as accurate as maintaining a constant rate of change for each day's production between the known daily production values.

Applicant shall conduct a well test by separating and metering the oil and gas production from each well for either (a) a minimum of twenty-four (24) consecutive hours; or (b) a combination of nonconsecutive periods that meet the following conditions: (i) each period shall be a minimum of six (6) hours; and (ii) the total duration of the nonconsecutive periods shall be a minimum of eighteen (18) hours.

CLGC Candidate Selection

In selecting candidates for CLGC injectors, all wells tied into the gas sales system were evaluated based on their native gas production, oil production, and flowing bottom hole pressure (FBHP). To minimize impact to oil production, wells were evaluated based on the Gas Reduced to Oil Ratio (GROR) calculation. This metric is the sum of native gas production and the maximum proposed injection gas (storage volume) divided by the oil production. FBHP was subsequently used to target more depleted wells.

$$GROR = \frac{Native\ gas\ rate\ (mscfd) + Storage\ gas\ rate\ (mscfd)}{Oil\ rate\ (bbl/d)}$$

CLGC Candidate Sequencing

Storage well sequencing will be handled similarly to the candidate selection process. Wells will be prioritized based on GROR (defined above) until the total gas removed from the system is greater than the temporary reduction in takeaway capacity.

Notice

Lost Tank Notice List 2023

Party	Address
Agencies and Surface Owners	
Bureau of Land Mangment	301 Dinosaur Trail Santa Fe, NM 87508
State Land Office	P.O. Box 1148 Santa Fe, NM 87504
Offset Operators	
EOG Resources Inc.	P.O. Box 840321 Dallas, TX 75284
MATADOR PRODUCTION COMPANY	One Lincoln Centre 5400 LBJ Freeway, Ste 1500 Dallas, TX 75240
COG OPERATING LLC	COG OPERATING LLC 600 W. Illinois Avenue, Midland, Texas 79701
Permian Resources Operating, LLC	Permian Resources Operating, LLC 1001 17th Street, Suite 1800 Denver, CO 80202
NGL WATER SOLUTIONS PERMIAN, LLC	NGL WATER SOLUTIONS PERMIAN, LLC 865 North Albion Street, Suite 400 Denver, CO 80220
Other Affected Persons and Parties	
ADEX RESOURCES CORP	ADEX RESOURCES CORP PO BOX 109 ARGILLITE KY 41121
Ben J. Fortson, Jr., Trustee	Ben J. Fortson, Jr., Trustee 301 Commerce St., Suite 2900 Fort Worth, TX 76102
Bill Burton	Bill Burton 301 Commerce St., Suite 2900 Fort Worth, TX 76102
BPX OPERATING CO	BPX OPERATING CO 501 WESTLAKE PARK BLVD HOUSTON TX 77079-2604
BURLINGTON RESOURCES OIL & GAS CO	BURLINGTON RESOURCES OIL & GAS CO LP PO BOX 51810 MIDLAND TX 79710-1810
CENTENNIAL RESOURCES PRODUCTION LLC	CENTENNIAL RESOURCES PRODUCTION LLC 1001 17TH ST STE 1800 DENVER CO 80202-2058

Charles Andrew Spradlin	Charles Andrew Spradlin 2451 Walker St. Grand Prairie, TX 75052
CHEVRON USA INC	CHEVRON USA INC 6301 DEAUVILLE MIDLAND TX 79706-2964
Chisos, Ltd	Chisos, Ltd. 1331 Lamar St. Suite 1077 Houston, TX 77010
CNX GAS CO LLC	CNX GAS CO LLC PO BOX 1248 JANE LEW WV 26378-1248
COG OPERATING LLC	COG OPERATING LLC 600 W. Illinois Avenue, Midland, Texas 79701
Crownrock Minerals, LP	Crownrock Minerals, LP P.O. Box 51933 Midland, TX 79710
Curtis A. Anderson, Trustee	Curtis A. Anderson, Trustee 9314 Cherry Brook Lane Frisco, TX 75033
DEVON ENERGY CO LP	DEVON ENERGY CO LP 333 W SHERIDAN AVE OKLAHOMA CITY OK 73102-5010
DEVON ENERGY PRODUCTION CO. LP	DEVON ENERGY PRODUCTION CO. LP 333 W. Sheridan Ave. Oklahoma City, OK 73102
Devon Energy Production Company, L.P.	Devon Energy Production Company, L.P. 333 W. Sheridan Ave. Oklahoma City, OK 73102
EOG RESOURCES INC	EOG RESOURCES INC 1111 BAGBY ST LBBY 2 HOUSTON TX 77002-2589
EOG RESOURCES INC	EOG RESOURCES INC 5509 CHAMPIONS DR MIDLAND TX 79706-2843
EXCALIBUR ENERGY CO	EXCALIBUR ENERGY CO PO BOX 25045 ALBUQUERQUE NM 87125-0045
George Vaught, Jr.	George Vaught, Jr. P.O. Box 13557 Denver, CO 80201

HANAGAN PETROLEUM CORP	HANAGAN PETROLEUM CORP PO BOX 1737 ROSWELL NM 88202-1737
HARRINGTON TRUST	HARRINGTON TRUST PO BOX 216 ROSWELL NM 88202-0216
J S ABERCROMBIE MINS	J S ABERCROMBIE MINS 2001 GULF BLDG HOUSTON TX 77002
Jastrow Family Oil & Gas, LLC	Jastrow Family Oil & Gas, LLC 6300 Bee Cave Rd., Bldg 1, 6th Floor Austin, TX 78746
John Kyle Thoma, Trustee	John Kyle Thoma, Trustee P.O. Box 558 Peyton, CO 80831
Kimbell Art Foundation	Kimbell Art Foundation 301 Commerce St., Suite 2900 Fort Worth, TX 76102
Kingdom Investments, Limited	Kingdom Investments, Limited 1601 Elm St., Suite 3400 Dallas, TX 75201
KRP Legacy Isles, LLC	KRP Legacy Isles, LLC P.O. Box 59000 Lafayette, LA 70505
Legacy Reserves Operating LP	Legacy Reserves Operating LP 15 Smith Rd., Suite 3000 Midland, TX 79705
Legacy Reserves Operating, LP	Legacy Reserves Operating, LP 15 Smith Rd., Suite 3000 Midland, TX 79705
LONG TRUSTS	LONG TRUSTS PO BOX 1336 KILGORE TX 75662
LRF Jr. LLC	LRF Jr. LLC P.O. Box 11327 Midland, TX 79702
MAP00-NET	MAP00-NET 101 N. Robinson Ave., Suite 1000 Oklahoma City, OK 73102
MARATHON OIL PERMIAN LLC	MARATHON OIL PERMIAN LLC 990 TOWN AND COUNTRY BLVD HOUSTON TX 77024

MARBOB ENERGY CORP	MARBOB ENERGY CORP 808 W MAIN ST ARTESIA NM 88210-1963
Mc Vay Drilling Company	Mc Vay Drilling Company P.O. Box 2450 Hobbs, NM 88240
MID-CON GAS SERVICES CORP	MID-CON GAS SERVICES CORP 701 E 22ND ST LOMBARD IL 60148
NIELSON & ASSOC INC	NIELSON & ASSOC INC PO BOX 2850 CODY WY 82414
NORTON LLC	NORTON LLC 60 BEACH AVE SOUTH DARTMOUTH MA 02748-1543
Permian Resources Operating, LLC	Permian Resources Operating, LLC 1001 17th Street, Suite 1800 Denver, CO 80202
PXP PRODUCING CO LLC	PXP PRODUCING CO LLC 717 TEXAS ST STE 2100 HOUSTON TX 77002-2753
Rave Energy, Inc.	Rave Energy, Inc. P.O. Box 3087 Houston, TX 77253
Robert C. Grable	Robert C. Grable 201 Main St., Suite 2500 Fort Worth, TX 76102
Rockport Oil and Gas, LLC	Rockport Oil and Gas, LLC PO Box 19567 Houston, TX 77224-9567
Rusk Capital Management, LLC	Rusk Capital Management, LLC 7600 W. Tidwell Rd., Suite 800 Houston, TX 77040
STRATA PRODUCTION CO	STRATA PRODUCTION CO 1301 N SYCAMORE AVE ROSWELL NM 88201
Sundance Minerals I	Sundance Minerals I P.O. Box 17744 Fort Worth, TX 76102
Texas Independent Exploration Limited	Texas Independent Exploration Limited 6760 Portwest Drive Houston, Texas 77024

The Long Trust P.O. Box 3096 Kilgore, TX 75663	The Long Trust P.O. Box 3096 Kilgore, TX 75663
The Roach Foundation	The Roach Foundation 777 Taylor St., Suite PII-J Fort Worth, TX 76102
The Taurus Royalty,LLC	The Taurus Royalty,LLC P.O. Box 1477 Little Elm, TX 75068
TORCH OIL & GAS CO	TORCH OIL & GAS CO 1221 LAMAR #1600 HOUSTON TX 77010-3039
TX INDEPENDENT EXPLORATION INC	TX INDEPENDENT EXPLORATION INC 1600 SMITH ST STE 3800 HOUSTON TX 77002-7345
US BORAX & CHEM CORP	US BORAX & CHEM CORP 3075 WILSHIRE BLVD LOS ANGELES CA 90010
Vision Energy, Inc.	Vision Energy, Inc. P.O. Box 2459 Carlsbad, NM 88221
WHITING 1988 PROD	WHITING 1988 PROD 1700 BROADWAY STE 2300 DENVER CO 80290-1703
WPX ENERGY PERMIAN LLC	WPX ENERGY PERMIAN LLC 333 W SHERIDAN AVENUE OKLAHOMA CITY OK 73102
XTO HOLDINGS LLC	XTO HOLDINGS LLC 22777 SPRINGWOODS VILLAGE PKWY SPRING TX 77389-1425
YATES INDUSTRIES LLC	YATES INDUSTRIES LLC 105 S 4TH ST ARTESIA NM 88210-2177
ZPZ DELAWARE I LLC	ZPZ DELAWARE I LLC 2000 POST OAK BLVD STE 100 HOUSTON TX 77056-4497