

**BEFORE THE OIL CONSERVATION DIVISION
EXAMINER HEARING AUGUST 12, 2025**

CASE No. 25225

MESA VERDE EOR WC

EDDY & LEA COUNTIES, NEW MEXICO



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

**APPLICATION OF OXY USA INC. FOR
APPROVAL OF INJECTION AUTHORITY
FOR THE MESA VERDE WOLFCAMP
RESOURCE DEVELOPMENT UNIT FOR
ENHANCED OIL RECOVERY, EDDY AND
LEA COUNTY, NEW MEXICO.**

CASE NO. 25225

TABLE OF CONTENTS

- **OXY Exhibit A:** *Revised* Application of OXY USA Inc. for Enhanced Oil Recovery
- **OXY Exhibit B:** Self-Affirmed Statement of Stephen Janacek, Petroleum Engineer
 - OXY Exhibit B-1: 2-mile AOR Mineral Ownership Map
 - OXY Exhibit B-2: Gunbarrel View
 - OXY Exhibit B-3: Mesa Verde Locator Map
 - OXY Exhibit B-4: OXY Variance Requests
 - OXY Exhibit B-5: OXY SCADA Overview
- **OXY Exhibit C:** Self-Affirmed Statement of Leslie Mulin, Landman
 - OXY Exhibit C-1: Resume
 - OXY Exhibit C-2: Mineral Ownership & Discussion
 - OXY Exhibit C-3: Surface Ownership Map
 - OXY Exhibit C-4: Mineral Ownership Map
- **OXY Exhibit D:** Self-Affirmed Statement of Stephanie Noonan, Geologist
 - OXY Exhibit D-1: Geology Statement & Area Type Log
 - OXY Exhibit D-2: Cross-Section Map
 - OXY Exhibit D-3: Structure Map
 - OXY Exhibit D-4: Groundwater Map & List
 - OXY Exhibit D-5: Seismic Response Area
- **OXY Exhibit E:** Self-Affirmed Statement of Daniel Salamander, Reservoir Engineer
 - OXY Exhibit E-1: Resume
 - OXY Exhibit E-2: Line Drive v. Huff and Puff EOR Operations
 - OXY Exhibit E-3: Huff and Puff Cycle Plan
 - OXY Exhibit E-4: Huff and Puff Uplift Potential

- OXY Exhibit E-5: Surface Injection Pressure Calculations
 - OXY Exhibit E-6: OXY Permian Basin Injection Experience
 - OXY Exhibit E-7: EOR Breakthrough Mitigation Strategies
- **OXY Exhibit F:** Self-Affirmed Statement of Notice
- **OXY Exhibit G:** Affidavit of Publication

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

**APPLICATION OF OXY USA INC. FOR
APPROVAL OF INJECTION AUTHORITY
FOR THE MESA VERDE WOLFCAMP
RESOURCE DEVELOPMENT UNIT FOR
ENHANCED OIL RECOVERY, EDDY AND
LEA COUNTY, NEW MEXICO.**

CASE NO. _____

APPLICATION

OXY USA Inc. (“Oxy” or “Applicant”) (OGRID No. 16696), through its undersigned attorneys, files this application for an order authorizing the injection of produced gas and water for purposes of enhanced oil recovery (“EOR”) within the Unitized Interval of the Mesa Verde Bone Spring Resource Development Unit area. In support of this application, Oxy states:

1. The proposed Project Area is the same as the Mesa Verde Bone Spring Resource Development Unit area and consists of the following 3461.80 acres, more or less, of federal and state lands situated in Eddy and Lea County, New Mexico:

TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.

Section 13: ALL

TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.

Section 7: SE/4, E/2 of NE/4

Section 8: ALL

Section 9: W/2

Section 16: W/2

Section 17: ALL

Section 18: ALL

2. The Mesa Verde Bone Spring Unit (“Unit”) is a Resource Development Unit.
3. Oxy is the designated operator under the Resource Development Unit Agreement.

4. The Unitized Interval for the Unit includes the Wolfcamp formation as identified by the Gamma Ray log run in the Jack Tank 8 Federal 2 well (API: 30-025-32192) located in the SW/4 of NE/4 of Section 8, Township 24 South, Range 32 East, Lea County, New Mexico, with the top of the unitized interval being found at a depth of 11,882 feet below the surface and the base of the unitized interval being found at a depth of 13,400 feet below the surface.

5. The Unit has twenty-one (21) active horizontal wells completed in the Wolfcamp formation. Oxy seeks to convert eight (8) of these producing horizontal wells into injection wells to implement a “huff and puff” enhanced oil recovery project. Oxy intends to periodically inject water, produced gas and carbon dioxide into the Wolfcamp formation within the Unitized Interval through one or more of these wells followed by a period of flowback and production.

6. Submitted with this application is a complete Form C-108 for these wells, attached as **Exhibit A**.

7. Oxy request authority to inject produced gas and water within the Unitized Interval up to the following maximum surface injection pressures in the respective Wolfcamp zones of the Wolfcamp XYA (“WCXYA”) and Wolfcamp B/C (“WCB/C”):

	Maximum Surface Injection Pressure (psi)	
Zone	Hydrocarbon Gas	Water
WCXYA	5,700	2,361
WCB/C	6,190	2,570

8. Oxy seeks authority to inject at the following maximum and average rates:

Injectant	Maximum Rate	Average Rate
Hydrocarbon Gas	45 MMSCFPD	22 MMSCFPD
Water	6,500 bwpd	5,000 bwpd

9. Due to facility costs and timing associated with implementing this “huff and puff” injection project, Oxy seeks an exception from 19.15.26.12.C NMAC, which requires actual injection to occur within one (1) year of approval.

10. Pursuant to 19.15.26.8.F(5) NMAC, Oxy requests that additional injection wells in the Unit Area be approved administratively, subject to the applicable notice requirements.

11. A copy of this Application has been provided to all affected parties as required by Division Rules and notice of the hearing on this application will be provided in a newspaper of general circulation in Eddy and Lea Counties.

12. Approval of this application is in the best interests of conservation, the prevention of waste and the protection of correlative rights.

WHEREFORE, Applicant requests that this matter be set for hearing before an Examiner of the Oil Conservation Division on March 13, 2025, and that after notice and hearing this Application be approved.

Respectfully submitted,

HOLLAND & HART LLP

By: _____
Michael H. Feldewert
Adam G. Rankin
Paula M. Vance
Post Office Box 2208
Santa Fe, NM 87504
505-988-4421
mfeldewert@hollandhart.com
agrarkin@hollandhart.com
pmvance@hollandhart.com

ATTORNEYS FOR OXY USA INC.

CASE NO. ____: **Application of Oxy USA Inc. for Approval of Injection Authority for the Mesa Verde Wolfcamp Resource Development Unit for Enhanced Oil Recovery, Eddy and Lea Counties, New Mexico.** Applicant seeks an order authorizing the injection of water and produced gas for purposes of enhanced oil recovery (“EOR”) within the Unitized Interval of the Mesa Verde Wolfcamp Resource Development Unit area. The Project Area is comprised of the following federal and state lands in Eddy and Lea County, New Mexico:

TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.

Section 13: ALL

TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.

Section 7: SE/4, E/2 of NE/4

Section 8: ALL

Section 9: W/2

Section 16: W/2

Section 17: ALL

Section 18: ALL

The unitized interval consists of the Wolfcamp formation as identified by the Gamma Ray log run in the Jack Tank 8 Federal 2 well (API: 30-025-32192) located in the SW/4 of NE/4 of Section 8, Township 24 South, Range 32 East, Lea County, New Mexico, with the top of the unitized interval being found at a depth of 11,882 feet below the surface and the base of the unitized interval being found at a depth of 13,400 feet below the surface. The Unit has twenty-one (21) active horizontal wells completed in the Wolfcamp formation. Oxy seeks to convert fifteen (15) of these producing horizontal wells into injection wells to implement a “huff and puff” enhanced oil recovery project. Oxy requests authority to inject produced gas, water, and carbon dioxide within the Unitized Interval up to the following maximum surface injection pressures in the respective Wolfcamp zones of the Wolfcamp XYA (“WCXYA”) and Wolfcamp B/C (“WCB/C”):

	Maximum Surface Injection Pressure (psi)	
Zone	Hydrocarbon Gas	Water
WCXYA	5,700	2,361
WCB/C	6,190	2,570

Oxy seeks authority to inject at the following maximum and average rates:

Injectant	Maximum Rate	Average Rate
Hydrocarbon Gas	45 MMSCFPD	22 MMSCFPD
Water	6,500 bwpd	5,000 bwpd

The Mesa Verde Bone Spring Resource Development Unit is approximately 5 miles west of Jal, New Mexico.

JULY 2025

OXY REGULATORY



MESA VERDE WOLFCAMP UNIT EOR INJECTION PROJECT

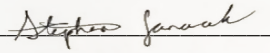
EOR PROJECT

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

**Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505**

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____X_____Secondary Recovery _____Pressure Maintenance _____Disposal _____Storage
Application qualifies for administrative approval? _____Yes _____No
- II. OPERATOR: _____OXY USA INC._____
ADDRESS: _____PO BOX 4294, HOUSTON, TX, 77210-4294_____
CONTACT PARTY: _____STEPHEN JANACEK_____PHONE: _____713-493-1986_____
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary. SEE ATTACHED
- IV. Is this an expansion of an existing project? _____Yes _____X_____No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. SEE ATTACHED.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. SEE ATTACHED.
- VII. Attach data on the proposed operation, including: SEE ATTACHED.
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed; CLOSED
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. SEE ATTACHED.
- IX. Describe the proposed stimulation program, if any. NO STIMULATION PLANNED AT TIME OF APPLICATION.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: _____STEPHEN JANACEK_____TITLE: _____REGULATORY ENGINEER_____
- SIGNATURE: __________DATE: _____1/10/2025_____
- E-MAIL ADDRESS: _____STEPHEN.JANACEK@OXY.COM_____
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:

DISTRIBUTION: File Electronically via OCD Permitting

Side 2

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include: **SEE ATTACHED.**

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated. **SEE ATTACHED.**

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

PROJECT OVERVIEW

- Description
 - The Mesa Verde Wolfcamp Unit is a Resource Development Unit with wells initially drilled in 2017.
 - Various Enhanced Oil Recovery (“EOR”) techniques, such as Huff and Puff or Line Drive Injection will be applied with produced gas and water as injectants to sweep the pore space of the depleted reservoir to recover additional hydrocarbon reserves.
- Benefits
 - No additional surface disturbances.
 - Prevents waste of resources.
- Estimated Timeline
 - 1. Install compressor and surface facilities 6 months
 - 2. Install injection equipment ½ month
 - 3. Begin injection in first phase wells

REQUESTED RELIEF

- Requested Relief:
 - Approval of an Enhanced Oil Recovery (“EOR”) Project.
 - 8 injection wells producing/injection from various zones in the Wolfcamp Pool.
 - Add additional injection wells administratively
 - Approval to use hydrocarbon gas and water as injectant.
 - Maximum Allowable Surface Pressure (“MASP”) for each zone and each injectant as seen in table below:

	Max Allowable Surface Pressure [PSI]	
Zone	Hydrocarbon Gas	Water
WCXYA	5,700	2,361
WCB/C	6,190	2,570



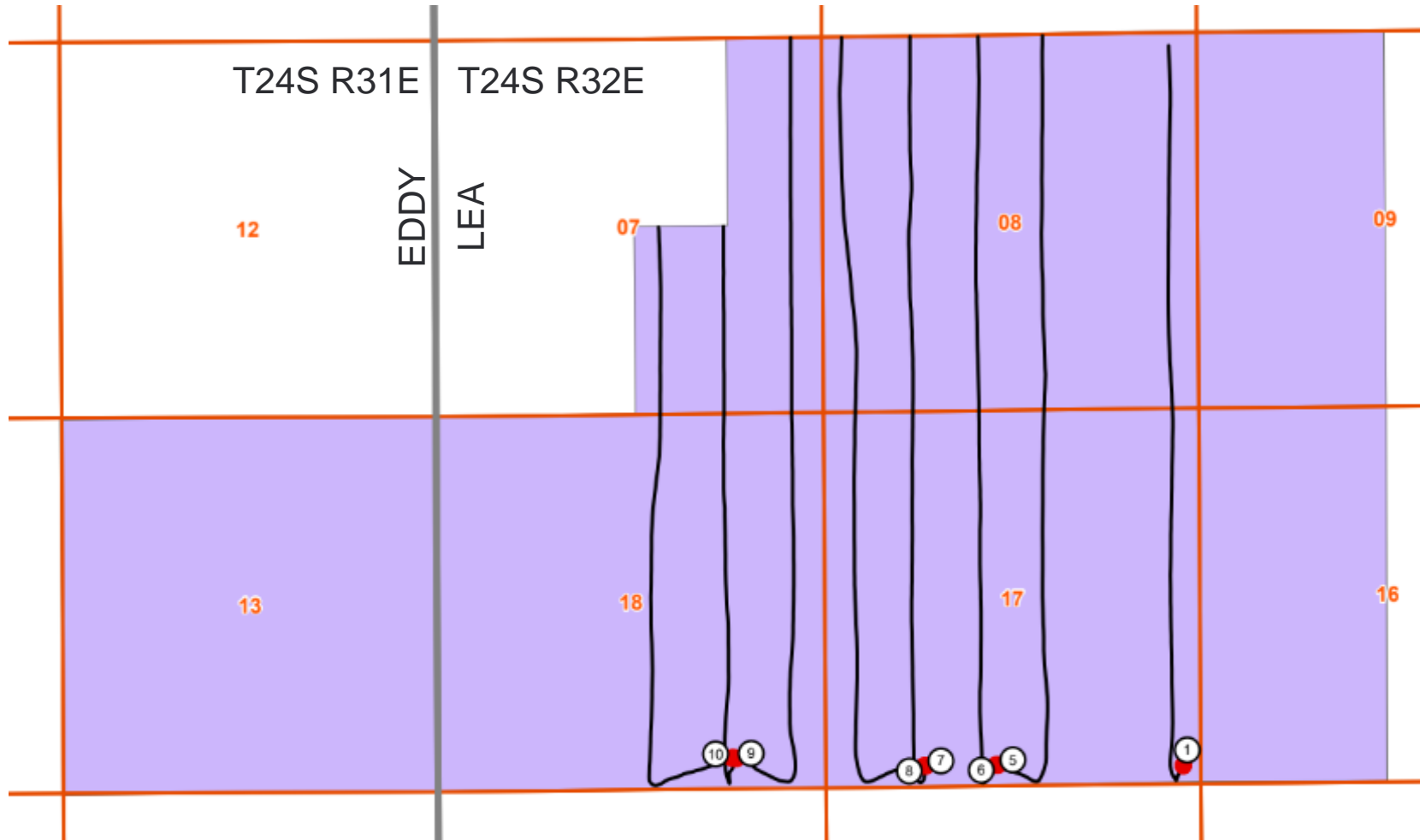
WELL LIST

AOR Well ID	API10	Well Name	Zone
1	3002544195	MESA VERDE WC UNIT 1H ST1	WCXYA
5	3002545862	MESA VERDE WC UNIT 5H	WCXYA
6	3002545863	MESA VERDE WC UNIT 6H	WCXYA
7	3002545920	MESA VERDE WC UNIT 7H	WCXYA
8	3002545921	MESA VERDE WC UNIT 8H	WCXYA
9	3002545871	MESA VERDE WC UNIT 9H	WCXYA
10	3002545872	MESA VERDE WC UNIT 10H	WCXYA
11	3002545873	MESA VERDE WC UNIT 11H	WCXYA

- Initially, not all unit wells are being permitted for injection. As of January 2025, there are 21 unit wells.
- The remaining unit wells will be added to the injection permit later.



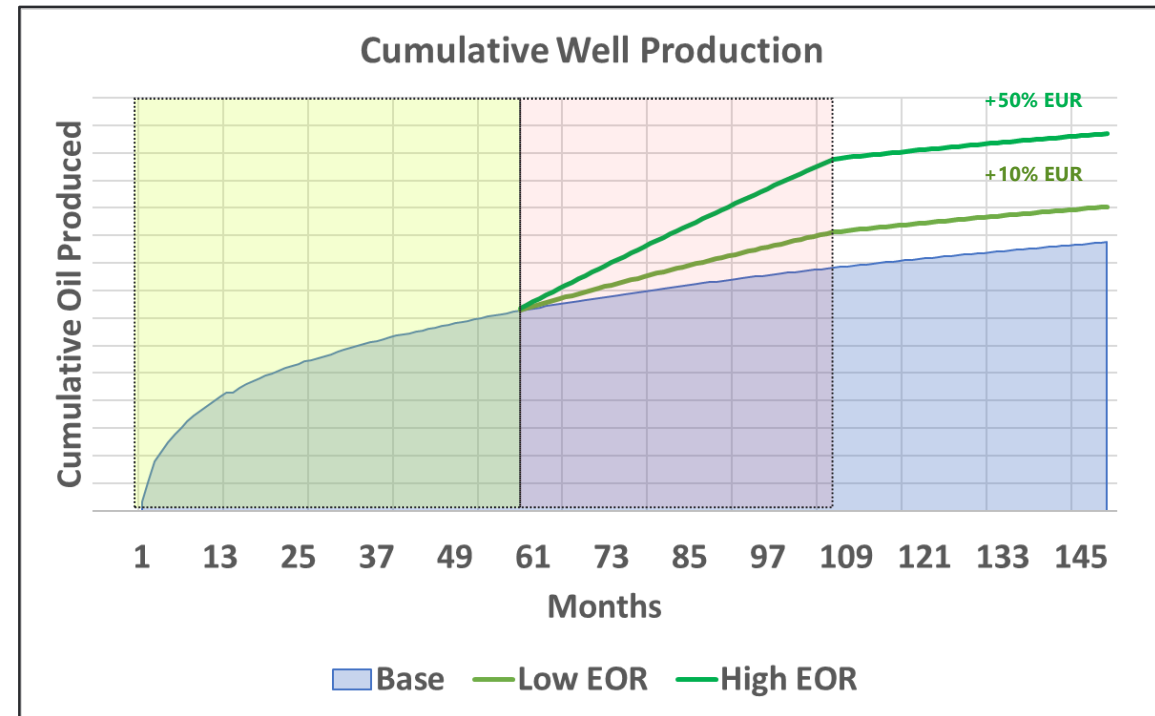
PROJECT MAP



- Key
- Mesa Verde Wolfcamp Unit
 - Surface Hole Location
 - Well Trajectory
 - AOR Well ID

EOR UPLIFT

- Primary production recovery factor is estimated to be 2-10% of OOIP(Original Oil in Place).
- Estimated Ultimate Recovery(EUR) can be improved by 10%-30+% using EOR injection.
- Miscible gas HnP has been demonstrated to increase production in unconventional wells in Midland Basin Texas
- Miscible HC Gas injection has potential in all target benches



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 **HOBBS OCD**
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

NOV 19 2018
RECEIVED

☒ AMENDED REPORT
(As-Drilled)

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-44195	Pool Code 98252	Pool Name Mesa Verde Wolfcamp
Property Code 320829	Property Name MESA VERDE WC UNIT	Well Number 1H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3559.2'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	17	24 SOUTH	32 EAST, N.M.P.M.		241'	SOUTH	245'	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	8	24 SOUTH	32 EAST, N.M.P.M.		180' 192'	NORTH	200' 434'	EAST	LEA
Dedicated Acres 320	Joint or Infill Y	Consolidation Code	Order No.	LTP - 356 FNL 446 FEL FTP - 373 FSL 426 FEL					

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

<p>BOTTOM HOLE LOCATION NEW MEXICO EAST NAD 1983 Y=451204.23 US FT X=740422.04 US FT LAT.: N 32.2387958° LONG.: W 103.6894319°</p> <p>BOTTOM PERF. NEW MEXICO EAST NAD 1983 Y=451044.23 US FT X=740423.07 US FT LAT.: N 32.2383560° LONG.: W 103.6894316°</p> <p>TOP PERF. NEW MEXICO EAST NAD 1983 Y=441160.37 US FT X=740487.06 US FT LAT.: N 32.2111869° LONG.: W 103.6894162°</p> <p>KICK OFF POINT NEW MEXICO EAST NAD 1983 Y=440970.38 US FT X=740488.29 US FT LAT.: N 32.2106646° LONG.: W 103.6894159°</p> <p>SURFACE LOCATION NEW MEXICO EAST NAD 1983 Y=441062.92 US FT X=740622.77 US FT LAT.: N 32.2109168° LONG.: W 103.6889794°</p> <p>GRID AZ = 235°27'65" 163.25'</p> <p>GRID AZ = 359°07'45" 10294.07' IN ALL</p> <p>PRODUCING AREA</p>		<p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>[Signature]</i> 8/16/18 Signature: _____ Date: _____ Jana Mendiola Printed Name: _____ janelyn-mendiola@oxy.com E-mail Address: _____</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes or actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>SEPTEMBER 26, 2016 Date of Survey: _____ Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certificate Number: 15079</p> <p>WO# 150930WL-a (Rev. C) (KA)</p>
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District I
1623 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-9720
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1000 Rio Grande Road, Artes, 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

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SEP 13 2019

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

☒ AMENDED REPORT
As-drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45862	Pool Code 98252	Pool Name MESA VERDE WOLF CAMP
Property Code 320829	Property Name MESA VERDE WC UNIT	Well Number 5H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3560.1'

Surface Location

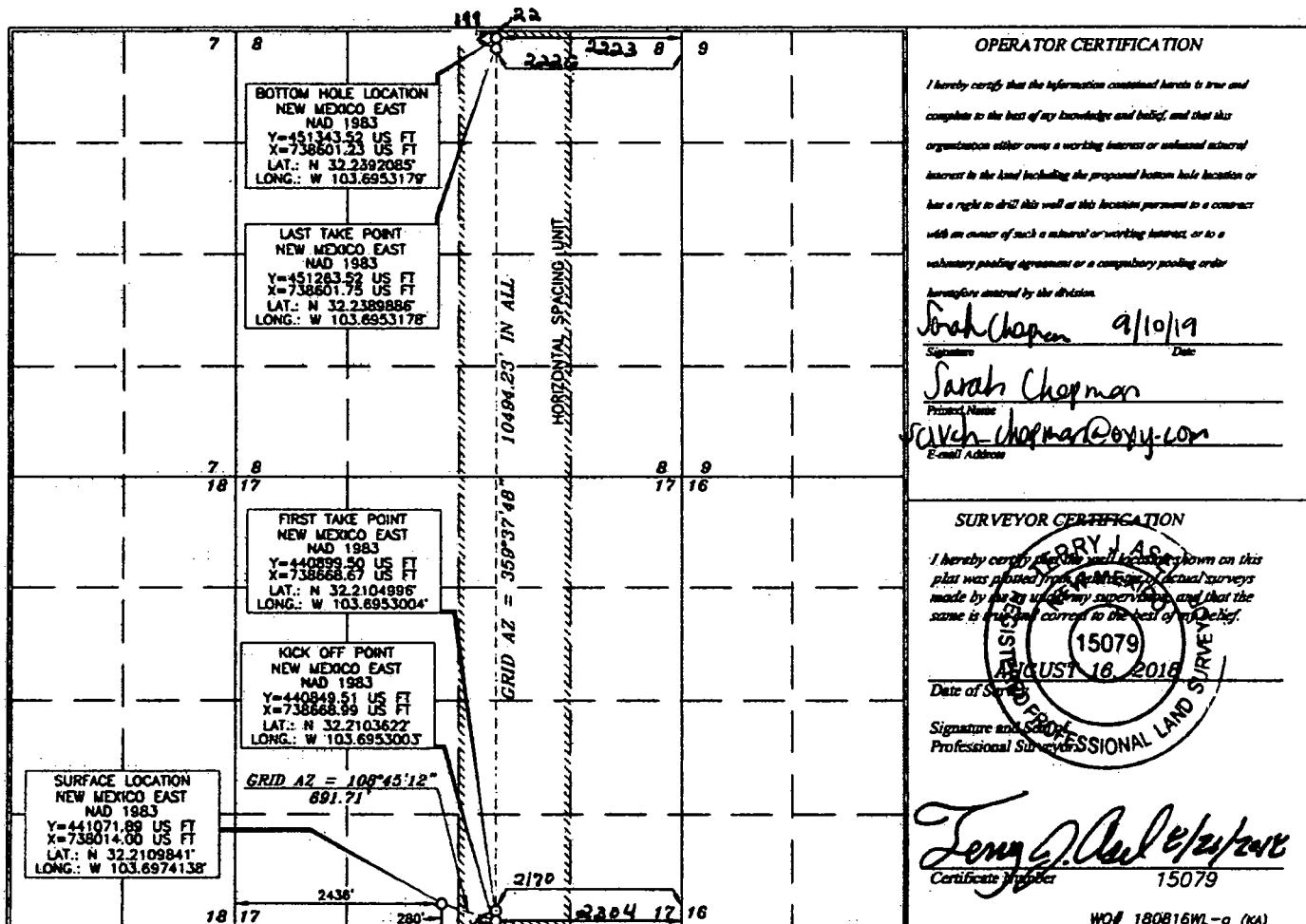
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	17	24 SOUTH	32 EAST, N.M.P.M.		280'	SOUTH	2436'	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	8	24 SOUTH	32 EAST, N.M.P.M.		22	NORTH	2223	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



OPERATOR CERTIFICATION

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

Signature: Sarah Chapman Date: 9/10/19

Printed Name: Sarah Chapman
E-mail Address: sarah.chapman@oxy.com

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from the best of my knowledge and belief, and that the same is true and correct to the best of my belief.

Date of Survey: AUGUST 16, 2018

Signature and Seal: [Signature]
Professional Surveyor: [Seal]

Long J. Paul 8/24/2018
Certificate Number: 15079

WO# 180816WL-o (KA)

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720

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811 S. First St., Artesia, NM 88210
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District III
1000 Rio Bosque Road, Artesia, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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SEP 1 2019
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Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT
AS-Unifiled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45863	Pool Code 98252	Pool Name MESA VERDE WOLF CAMP
Property Code 320829	Property Name MESA VERDE WC UNIT	Well Number 6H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3560.2'

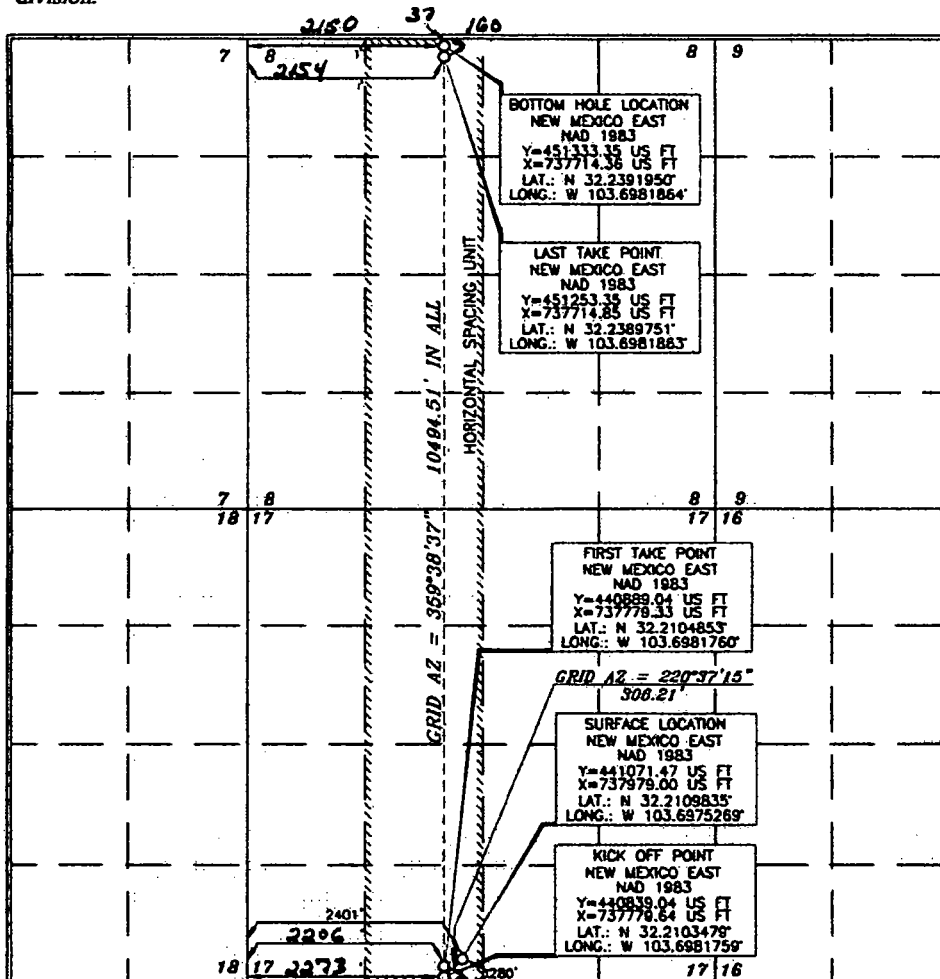
Surface Location

UL or Int no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	17	24 SOUTH	32 EAST, N.M.P.M.		280'	SOUTH	2401'	WEST	LEA

Bottom Hole Location If Different From Surface

UL or Int no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	8	24 SOUTH	32 EAST, N.M.P.M.		37	NORTH	2150	WEST	LEA
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						

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



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 undivided 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 Chapman 9/10/19
Signature Date

Sarah Chapman
Printed Name

sarah.chapman@oxy.com
E-mail Address

SURVEYOR CERTIFICATION

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

FERRY J. ASH
15079
Date of Survey

Ferry J. Ash
Signature and Seal
Professional Surveyor

Ferry J. Ash 8/21/2019
Certificate Number 15079

WOF 180816WL-b (KA)

District I
1625 N. Francis Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0700

District II
811 S. First St., Aramis, NM 88210
Phone: (505) 743-1283 Fax: (505) 748-9720

District III
1000 Rio Grande Road, Aramis, 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

HOBBS OCD
SEP 13 2019

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45920	Pool Code 90252	Pool Name Mesa Verde Wolfcamp
Property Code 320929	Property Name MESA VERDE WC UNIT	Well Number 7H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3563.0'

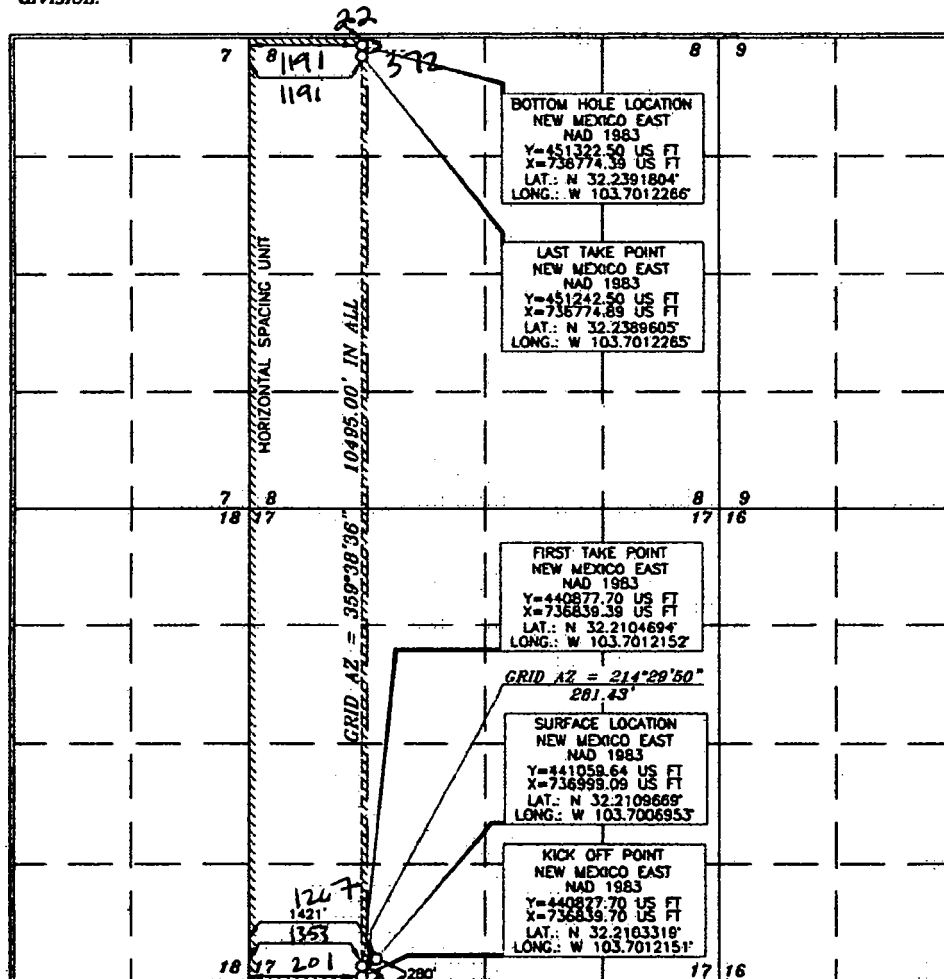
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	17	24 SOUTH	32 EAST, N.M.P.M.		280'	SOUTH	1421'	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	8	24 SOUTH	32 EAST, N.M.P.M.		22	NORTH	141	WEST	LEA
Dedicated Acres 320		Joint or Infill	Consolidation Code	Order No.					

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



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 undivided 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.

Approved and signed by the division.

Sarah Chopra 9/10/19
Signature Date

Sarah Chopra
Printed Name

Sarah.Chopra@oxy.com
E-mail Address

SURVEYOR CERTIFICATION

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

15079
AUGUST 17, 2018
Date of Survey

Signature and Seal of
Professional Surveyor

Terry J. Clark 8/24/2018
Certificate Number 15079

WOP 180817WL-0 (NA)

District I
1035 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
871 S. First St., Artesia, NM 88210
Phone: (575) 748-1383 Fax: (575) 748-9720
District III
1000 Rio Bureau 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) 476-3452

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

HOBBS OCD
SEP 13 2019

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☒ AMENDED REPORT

AS-Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45921	Pool Code 90252	Pool Name Hesa Verde Wolfcamp
Property Code 320829	Property Name MESA VERDE WC UNIT	Well Number 8H
OGRID No. 14696	Operator Name OXY USA INC.	Elevation 3563.1'

Surface Location

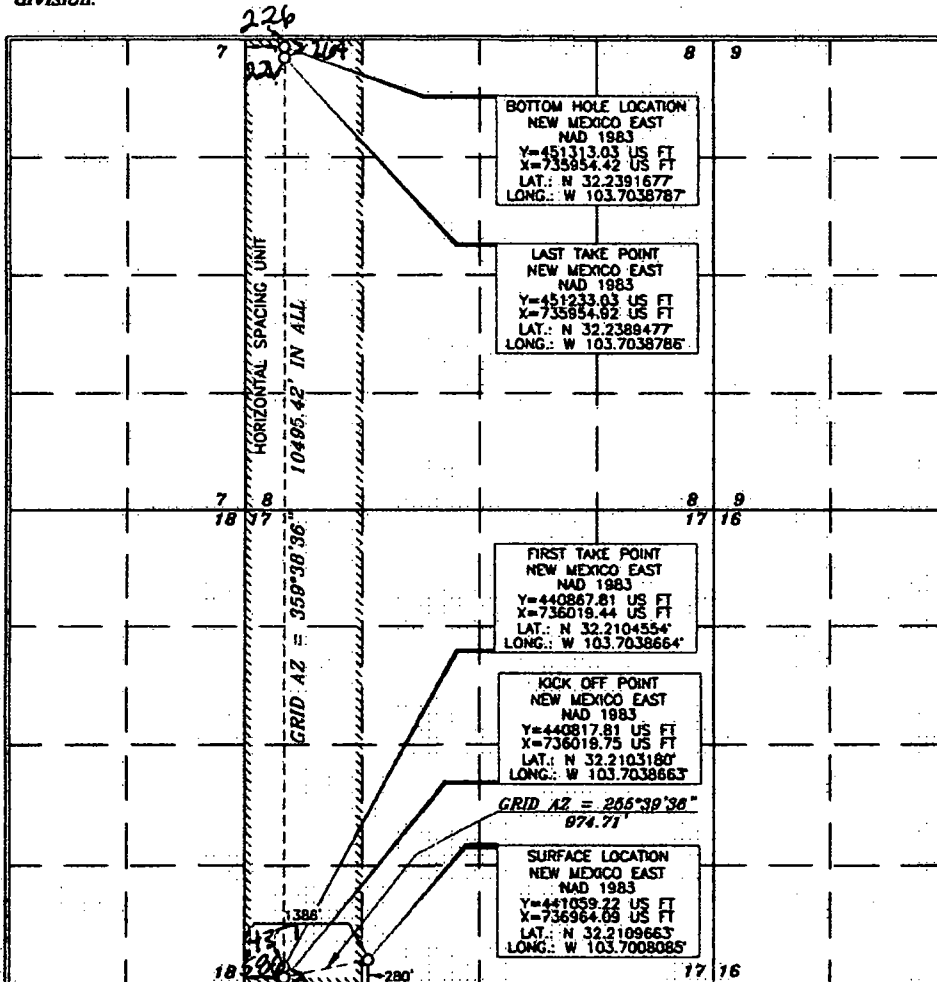
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	17	24 SOUTH	32 EAST, N.M.P.M.		280'	SOUTH	1386'	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	8	24 SOUTH	32 EAST, N.M.P.M.		35	NORTH	226	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided 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, hereafter entered by the division.

Signature: Sarah Chapin Date: 9/10/19

Printed Name: Sarah Chapin

E-mail Address: sarah-chapin@oxy.com

SURVEYOR CERTIFICATION

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

Date of Survey: AUGUST 12, 2019

Signature and Seal of Professional Surveyor: TERRY J. ASH

Signature: Terry J. Ash Certificate Number: 15079

WO# 180817WL-b (KA)

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
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☒ **AMENDED REPORT**
(AS-DRILLED)

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45871	Pool Code 98252	Pool Name Mesa Verde; Wolfcamp	KZ
Property Code 320829	Property Name MESA VERDE WC UNIT	Well Number 9H	
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3568.7'	

Surface Location

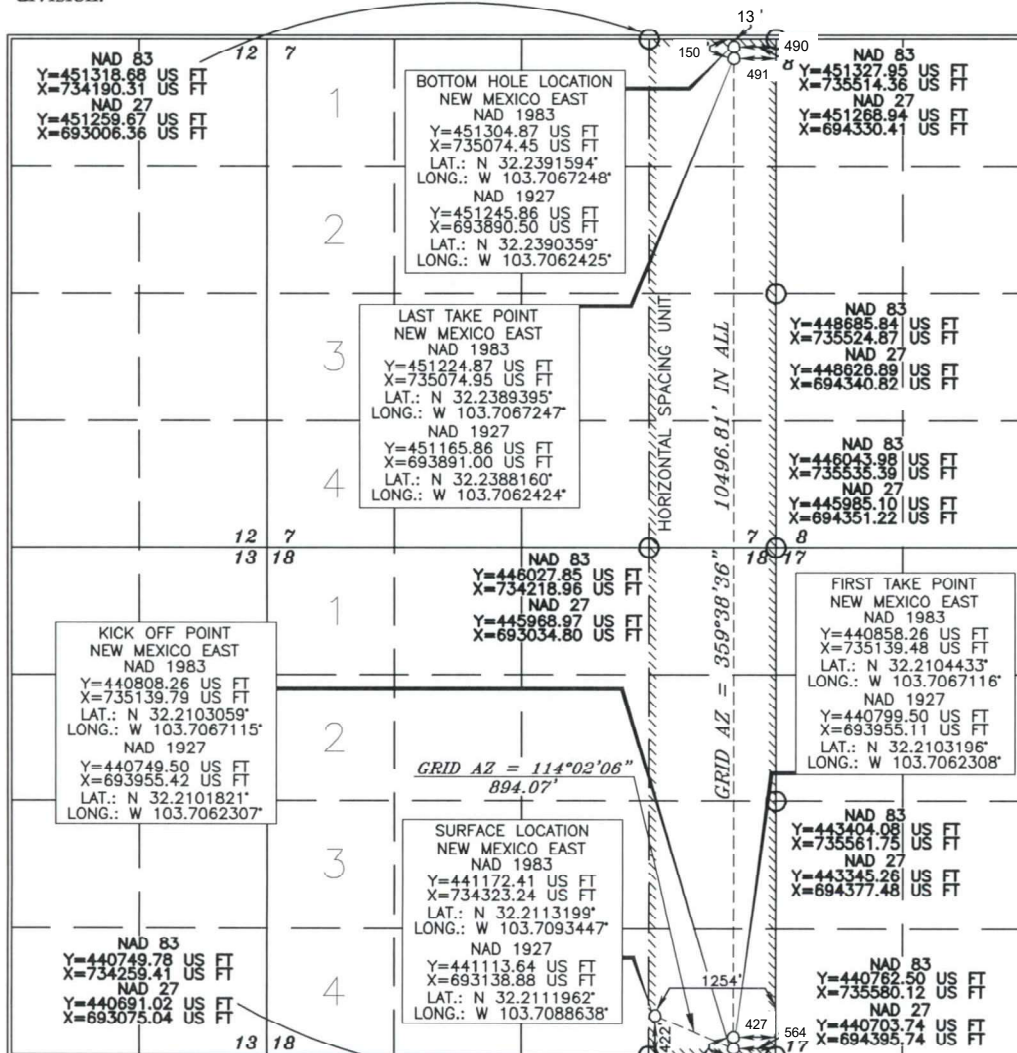
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	18	24 SOUTH	32 EAST, N.M.P.M.		422'	SOUTH	1254'	EAST	LEA

Bottom Hole Location If Different From Surface

SL

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	7	24 SOUTH	32 EAST, N.M.P.M.		13'	NORTH	490'	EAST	LEA
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.	FTP- 393' FSL 427' FEL LTP- 150' FNL 491' FEL					

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



OPERATOR CERTIFICATION

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

[Signature]
Signature

10/5/20
Date

JANA MENDIOLA

Printed Name

janalyn_mendiola@oxy.com

E-mail Address

SURVEYOR CERTIFICATION

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

DECEMBER 27, 2017
Date of Survey

[Signature]
Signature and Seal of Professional Surveyor

Certificate Number

15079

WO# 171227WL-c (Rev. A) (KA)

REC'D 10/7/2020 - NMOC

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
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☒ AMENDED REPORT
(AS-DRILLED)

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45872	Pool Code 98252	Pool Name Mesa Verde; Wolfcamp
Property Code 320829	Property Name MESA VERDE WC UNIT	Well Number 10H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3568.3'

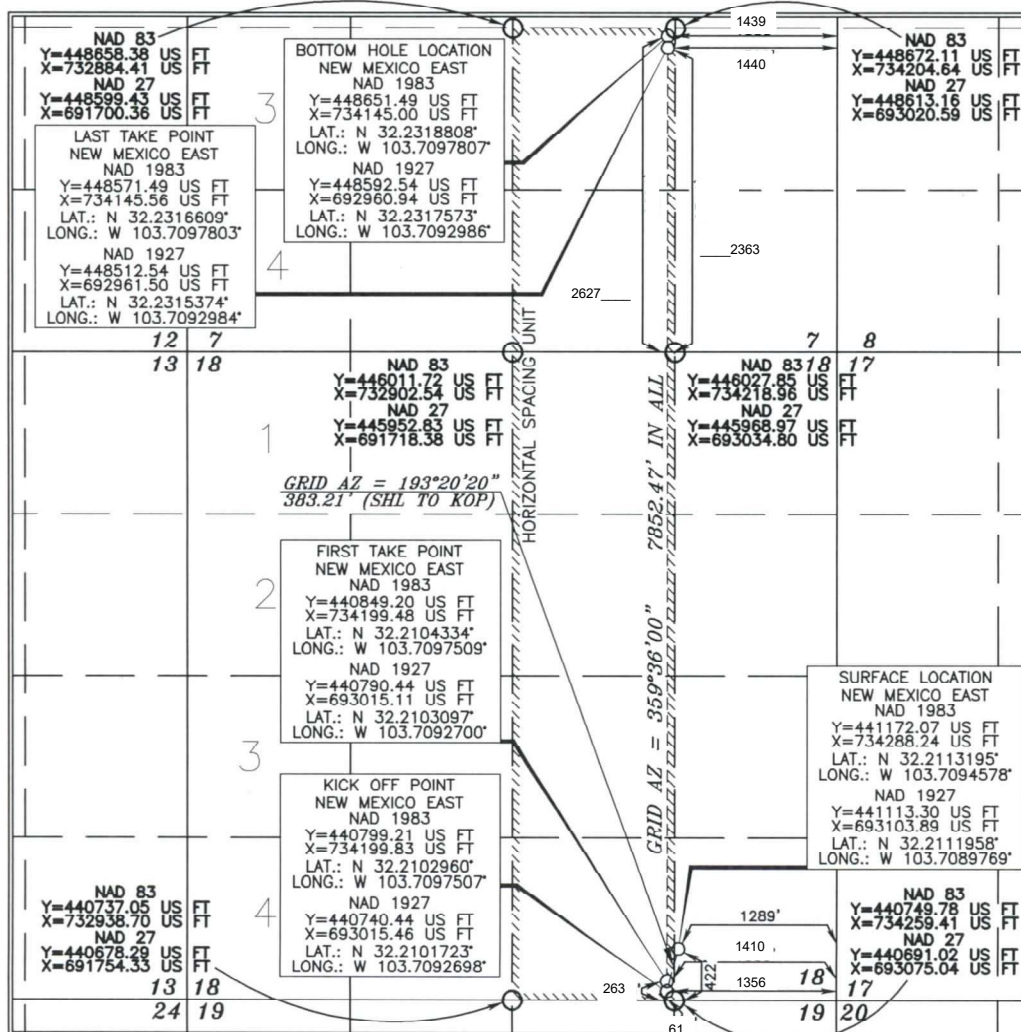
Surface Location

UT. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	18	24 SOUTH	32 EAST, N.M.P.M.		422'	SOUTH	1289'	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	7	24 SOUTH	32 EAST, N.M.P.M.		2627'	SOUTH	1439'	EAST	LEA
Dedicated Acres 240	Joint or Infill	Consolidation Code	Order No.	FTP- 263' FSL 1410' FEL LTP- 2363' FSL 1440' FEL					

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



OPERATOR CERTIFICATION

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

Signature: *[Signature]* Date: 10/7/2020
Printed Name: JANA MENDIOLA
E-mail Address: janalyn_mendiola@oxy.com

SURVEYOR CERTIFICATION

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

Date of Survey: *[Signature]*
Signature and Seal of Professional Surveyor: *[Signature]*
Certificate Number: 15079

WO# 171227WL-b (Rev. A) (AS)

REC'D 10/7/2020 - NMOC

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-6170
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

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☒ AMENDED REPORT
(AS-DRILLED)

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45873	Pool Code 98252	Pool Name Mesa Verde; Wolfcamp
Property Code 320829	Property Name MESA VERDE WC UNIT	Well Number 11H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3568.0'

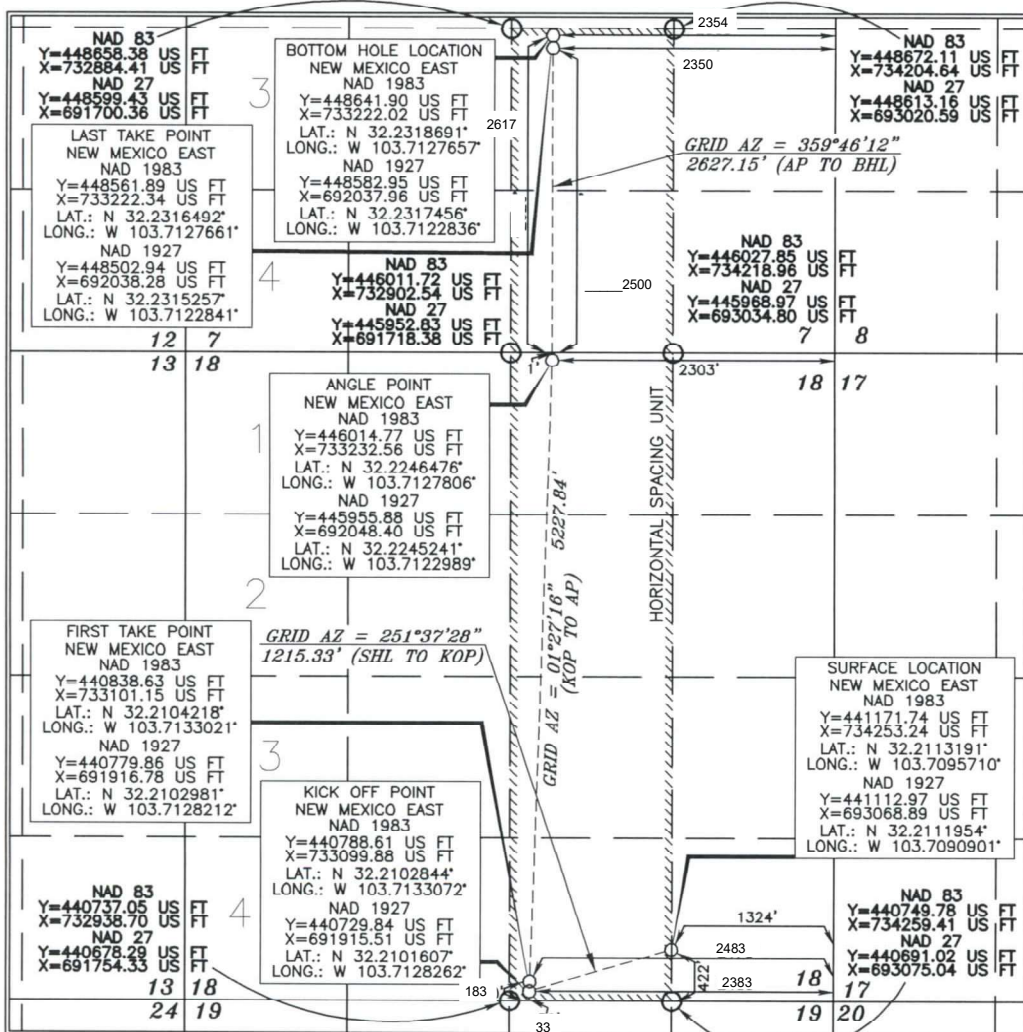
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	18	24 SOUTH	32 EAST, N.M.P.M.		422'	SOUTH	1324'	EAST	LEA

Bottom Hole Location If Different From Surface


UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	7	24 SOUTH	32 EAST, N.M.P.M.		2617	SOUTH	2354	EAST	LEA
Dedicated Acres 240	Joint or Infill	Consolidation Code	Order No.	FTP- 183' FSL 2483' FEL LTP- 2500' FSL 2350' FEL					

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




OPERATOR CERTIFICATION

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

Signature:  Date: 10/7/2020
Printed Name: JANA MENDIOLA
E-mail Address: janalyn_mendiola@oxy.com

SURVEYOR CERTIFICATION

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

Signature and Seal of Professional Surveyor: 
Date of Survey: DECEMBER 27 2017
Certificate Number: 15079

WO# 171227WL-a (Rev. B) (KA)

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

WELL NAME & NUMBER: MESA VERDE WOLFCAMP UNIT #001H API 30-025-44195

WELL LOCATION: 241 FSL / 245 FEL	P	17	24S	32E
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 17.5" Casing Size: 13.375"

Cemented with: 1190 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 12.25" Casing Size: 9.625"

Cemented with: 3620 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 8.5" Casing Size: 5.5"

Cemented with: 2193 sx. or ft³

Top of Cement: 10,764' Method Determined: Circulated

Total Depth: 22,281' Total Vertical Depth: 12,054'

Injection Interval MD/TVD

12,240' MD / 12112.2' TVD feet to 22,116' MD / 12,057.3' TVD

(Perforated or Open Hole; indicate which)

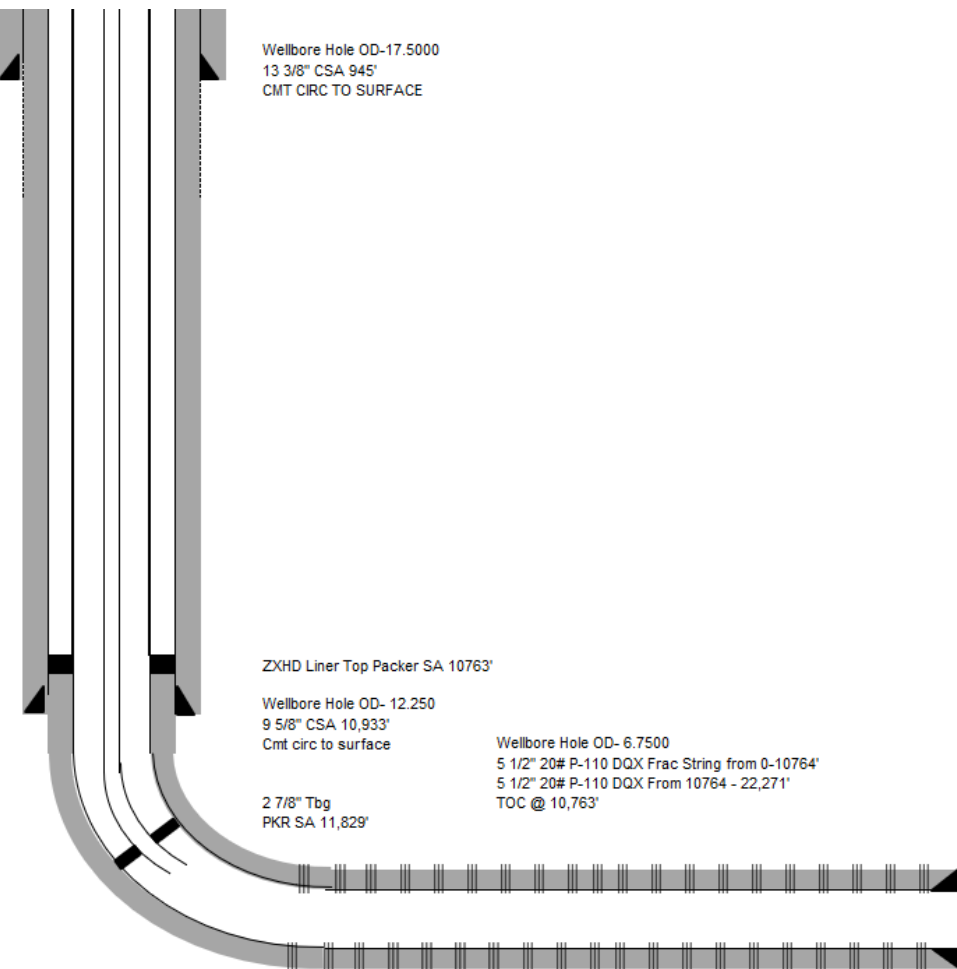
Wellbore Hole OD-17.5000
13 3/8" CSA 945'
CMT CIRC TO SURFACE

ZXHD Liner Top Packer SA 10763'

Wellbore Hole OD- 12.250
9 5/8" CSA 10,933'
Cmt circ to surface

2 7/8" Tbg
PKR SA 11,829'

Wellbore Hole OD- 6.7500
5 1/2" 20# P-110 DQX Frac String from 0-10764'
5 1/2" 20# P-110 DQX From 10764 - 22,271'
TOC @ 10,763'



Side 2

INJECTION WELL DATA SHEETTubing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)Type of Packer: 2.875" x 5.5" Nickle Coated (proposed)Packer Setting Depth: 12,000' MD / 11,957' TVD (proposed) (MD/TVD)Other Type of Tubing/Casing Seal (if applicable): NA**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 and Gas production

2. Name of the Injection Formation: WCXYA

3. Name of Field or Pool (if applicable): [98252] MESA VERDE; WOLFCAMP

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: BONE SPRING, ~8600' TVD

UNDERLYING: STRAWN, ~13874' TVD

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

WELL NAME & NUMBER: MESA VERDE WOLFCAMP UNIT #005H API 30-025-45862

WELL LOCATION: 280 FSL / 2436 FWL FOOTAGE LOCATION N UNIT LETTER 17 SECTION 24S TOWNSHIP 32E RANGE

WELLBORE SCHEMATIC

Wellbore Hole OD-14.75000
10 3/4" CSA 967'
CMT CIRC TO SURFACE

Wellbore Hole OD- 9.8750
7 5/8" CSA 11,567'
CMT CIRC TO SURFACE

Wellbore Hole OD- 6.7500
5 1/2" 20# P-110 DQX CSA 0 - 22,435'
TOC 11050', Calc

PKR SA 11,900'

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 14.75" Casing Size: 10.75"

Cemented with: 908 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 9.875" Casing Size: 7.625"

Cemented with: 3988 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 6.75" Casing Size: 5.5"

Cemented with: 840 sx. or ft³

Top of Cement: 11,050' Method Determined: Calc

Total Depth: 22,479' MD Total Vertical Depth: 12,211.03' TVD

Injection Interval MD/TVD

12,327' MD / 12,161.5' TVD feet to 22,387' MD / 12,212.5' TVD

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)Type of Packer: 2.875" x 5.5" Nickle Coated (proposed)Packer Setting Depth: 12,000' MD / 11,915' TVD (proposed) (MD/TVD)Other Type of Tubing/Casing Seal (if applicable): NA**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 and Gas production

2. Name of the Injection Formation: WCXYA

3. Name of Field or Pool (if applicable): [98252] MESA VERDE; WOLFCAMP

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: BONE SPRING, ~8600' TVD

UNDERLYING: STRAWN, ~13874' TVD

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

WELL NAME & NUMBER: MESA VERDE WOLFCAMP UNIT #006H API 30-025-45863

WELL LOCATION: 280 FSL / 2401 FWL	N	17	24S	32E
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Wellbore Hole OD-14.75000
10 3/4" CSA 945'
CMT CIRC TO SURFACE

Hole Size: 14.75" Casing Size: 10.75"

Cemented with: 908 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 9.875" Casing Size: 7.625"

Cemented with: 1655 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 6.75" Casing Size: 5.5"

Cemented with: 887 sx. or ft³

Top of Cement: 10,775' Method Determined: Calc

Total Depth: 22,314' Total Vertical Depth: 12,067'

Injection Interval MD/TVD

12,157' MD / 11,994' TVD feet to 22,218' MD / 12,069.1' TVD

(Perforated or Open Hole; indicate which)

Wellbore Hole OD- 9.8750
7 5/8" CSA 11,461'
CMT CIRC TO SURFACE

Wellbore Hole OD- 6.7500
5 1/2" 20# P-110 DQX CSA 0 - 22,394'
TOC @ 10,775'

PKR SA 11,700'

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)

Type of Packer: 2.875" x 5.5" Nickle Coated (proposed)

Packer Setting Depth: 11,800' MD / 11,746' TVD (proposed) (MD/TVD)

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

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 and Gas production

2. Name of the Injection Formation: WCXYA

3. Name of Field or Pool (if applicable): [98252] MESA VERDE; WOLFCAMP

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: BONE SPRING, ~8600' TVD UNDERLYING: STRAWN, ~13874' TVD

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

WELL NAME & NUMBER: MESA VERDE WOLFCAMP UNIT #007H

API 30-025-45920

WELL LOCATION: 280 FSL / 1421 FWL

FOOTAGE LOCATION

N

UNIT LETTER

17

SECTION

24S

TOWNSHIP

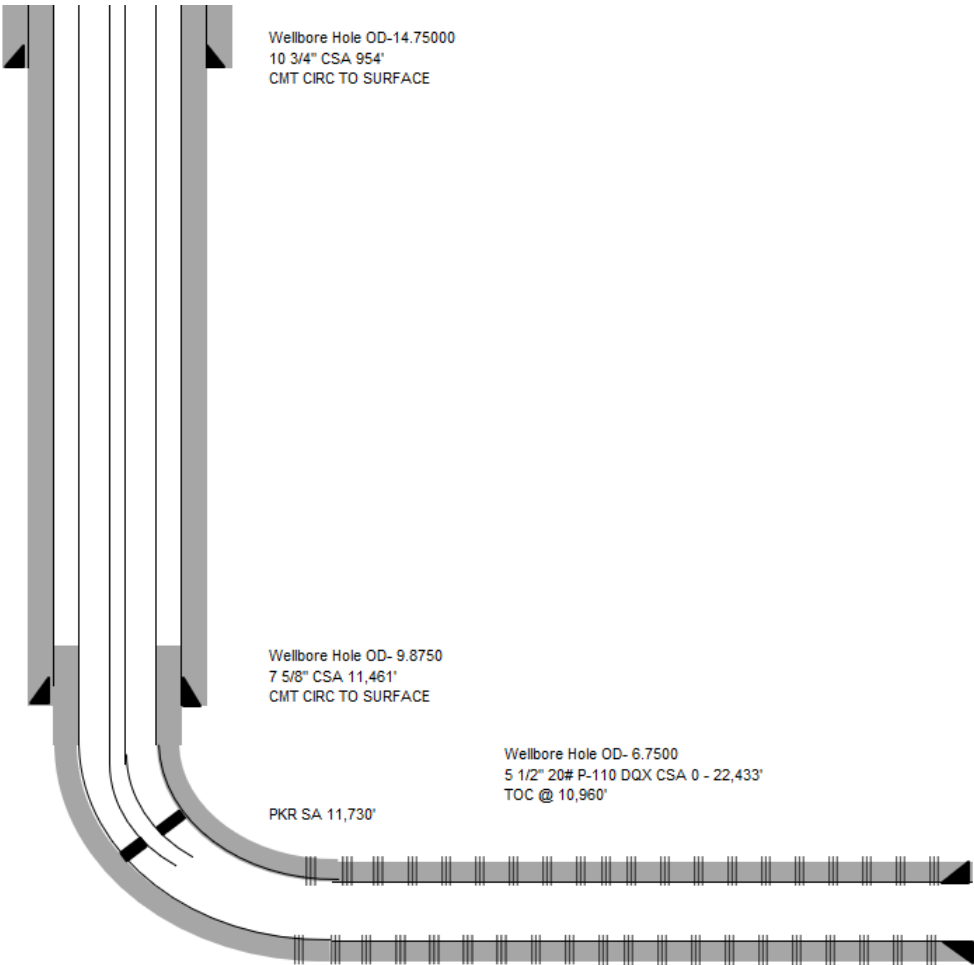
32E

RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing



Hole Size: 14.75" Casing Size: 10.75"

Cemented with: 970 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 9.875" Casing Size: 7.625"

Cemented with: 1530 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 6.75" Casing Size: 5.5"

Cemented with: 805 sx. or ft³

Top of Cement: 10,960' Method Determined: Calc

Total Depth: 22,458' Total Vertical Depth: 12,211'

Injection Interval MD/TVD

12,047' MD / 11,976.4' TVD feet to 22,108' MD / 12,208.8' TVD

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)Type of Packer: 2.875" x 5.5" Nickle Coated (proposed)Packer Setting Depth: 11,900' MD / 11,860.9' TVD (proposed) (MD/TVD)Other Type of Tubing/Casing Seal (if applicable): NA**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 and Gas production

2. Name of the Injection Formation: WCXYA

3. Name of Field or Pool (if applicable): [98252] MESA VERDE; WOLFCAMP

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: BONE SPRING, ~8600' TVD

UNDERLYING: STRAWN, ~13874' TVD

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

WELL NAME & NUMBER: MESA VERDE WOLFCAMP UNIT #008H

API 30-025-45921

WELL LOCATION: 280 FSL / 1386 FWL

FOOTAGE LOCATION

N

UNIT LETTER

17

SECTION

24S

TOWNSHIP

32E

RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Wellbore Hole OD- 14.75000
10 3/4" CSA 970'
CMT CIRC TO SURFACE

Hole Size: 14.75"

Casing Size: 10.75"

Cemented with: 970 sx.

or ft³

Top of Cement: Surface

Method Determined: Circulated

Intermediate Casing

Hole Size: 9.875"

Casing Size: 7.625"

Cemented with: 1220 sx.

or ft³

Top of Cement: Surface

Method Determined: Circulated

Production Casing

Hole Size: 6.75"

Casing Size: 5.5"

Cemented with: 780 sx.

or ft³

Top of Cement: 10940'

Method Determined: _____

Total Depth: 22,317'

Total Vertical Depth: 12,009'

Injection Interval MD/TVD

12,137' MD / 11,904' TVD

feet to 22,239' MD / 12,016' TVD

(Perforated or Open Hole; indicate which)

Wellbore Hole OD- 9.8750
7 5/8" CSA 11,445'
CMT CIRC TO SURFACE

Wellbore Hole OD- 6.7500
5 1/2" 20# P-110 DQX CSA 0 - 22,327'
TOC 10940'

PKR SA 11,700'

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)Type of Packer: 2.875" x 5.5" Nickle Coated (proposed)Packer Setting Depth: 11,800' MD / 11,671' TVD (proposed) (MD/TVD)Other Type of Tubing/Casing Seal (if applicable): NA**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 and Gas production

2. Name of the Injection Formation: WCXYA

3. Name of Field or Pool (if applicable): [98252] MESA VERDE; WOLFCAMP

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: BONE SPRING, ~8600' TVDUNDERLYING: STRAWN, ~13874' TVD

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

WELL NAME & NUMBER: MESA VERDE WOLFCAMP UNIT #009H

API 30-025-45871

WELL LOCATION: 422 FSL / 1254 FEL

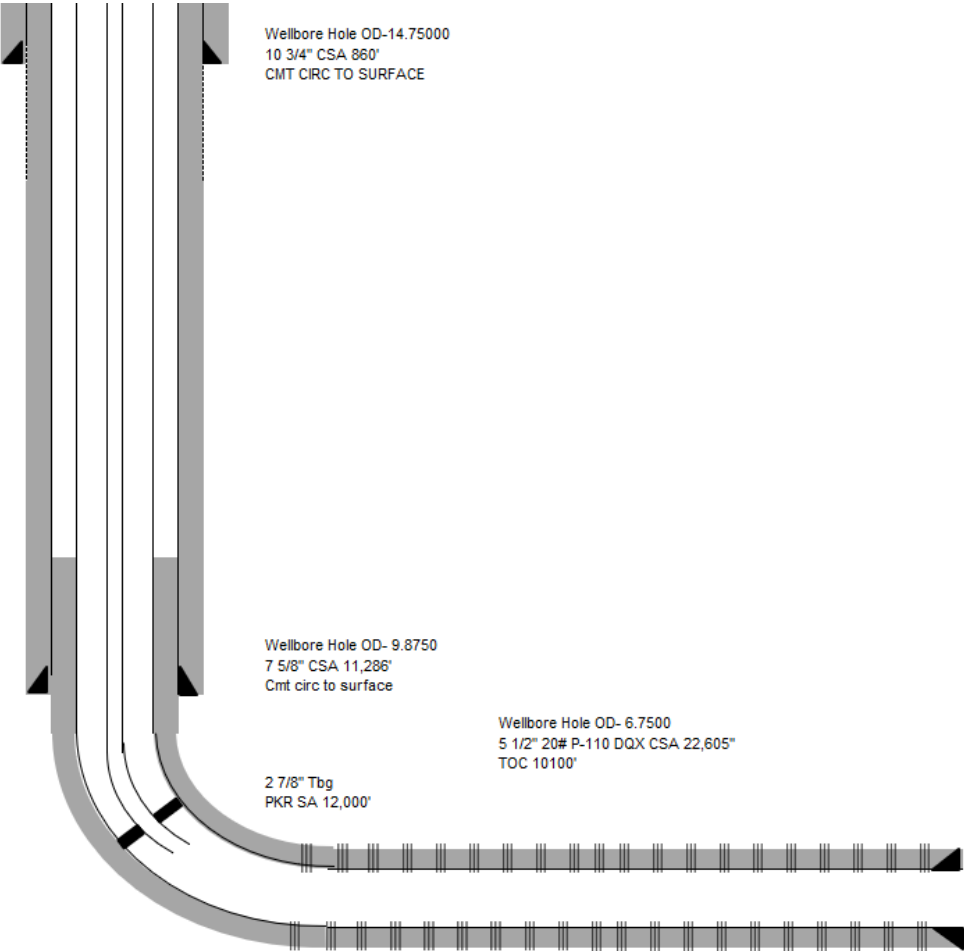
P1824S32E

FOOTAGE LOCATIONUNIT LETTERSECTIONTOWNSHIPRANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing



Hole Size: 14.75" Casing Size: 10.75"

Cemented with: 870 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 9.875" Casing Size: 7.625"

Cemented with: 2540 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 6.75" Casing Size: 5.5"

Cemented with: 905 sx. or ft³

Top of Cement: 10100' Method Determined: Calc

Total Depth: 22,488' MD Total Vertical Depth: 12,312'

Injection Interval MD/TVD

12,427' MD / 12,247.8' TVD feet to 22,488' MD / 12312' TVD

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)Type of Packer: 2.875" x 5.5" Nickle Coated (proposed)Packer Setting Depth: 12,000' MD / 11,917' TVD (proposed) (MD/TVD)Other Type of Tubing/Casing Seal (if applicable): NA**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 and Gas production

2. Name of the Injection Formation: WCXYA

3. Name of Field or Pool (if applicable): [98252] MESA VERDE; WOLFCAMP

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: BONE SPRING, ~8600' TVD

UNDERLYING: STRAWN, ~13874' TVD

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

WELL NAME & NUMBER: MESA VERDE WOLFCAMP UNIT #010H

API 30-025-45872

WELL LOCATION: 422 FSL / 1289 FEL

FOOTAGE LOCATION

P

UNIT LETTER

18

SECTION

24S

TOWNSHIP

32E

RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Wellbore Hole OD-14.7500
10 3/4" CSA 881'
CMT CIRC TO SURFACE

Hole Size: 14.75"

Casing Size: 10.75"

Cemented with: 870 sx.

or ft³

Top of Cement: Surface

Method Determined: Circulated

Intermediate Casing

Hole Size: 9.875"

Casing Size: 7.625"

Cemented with: 2975 sx.

or ft³

Top of Cement: Surface

Method Determined: Circulated

Production Casing

Hole Size: 6.75"

Casing Size: 5.5"

Cemented with: 652 sx.

or ft³

Top of Cement: 7865'

Method Determined: Calc

Total Depth: 19,702'

Total Vertical Depth: 12,064'

Injection Interval MD/TVD

12,017' MD / 11,925.6' TVD

feet

to 19,438' MD / 12,066' TVD

(Perforated or Open Hole; indicate which)

Wellbore Hole OD- 9.8750
7 5/8" CSA 11,356'
Cmt circ to surface

Wellbore Hole OD- 6.7500
5 1/2" 20# P-110 DQX CSA 19,681'
TOC 7865'

2 7/8" Tbg
PKR SA 11,800'

Side 2

INJECTION WELL DATA SHEETTubing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)Type of Packer: 2.875" x 5.5" Nickle Coated (proposed)Packer Setting Depth: 11,800' MD / 11,755' TVD (proposed) (MD/TVD)Other Type of Tubing/Casing Seal (if applicable): NA**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 and Gas production

2. Name of the Injection Formation: WCXYA

3. Name of Field or Pool (if applicable): [98252] MESA VERDE; WOLFCAMP

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: BONE SPRING, ~8600' TVDUNDERLYING: STRAWN, ~13874' TVD

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

WELL NAME & NUMBER: MESA VERDE WOLFCAMP UNIT #011H API 30-025-45873

WELL LOCATION: 422 FSL / 1324 FEL	O	18	24S	32E
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Wellbore Hole OD-14.75000
10 3/4" CSA 880'
CMT CIRC TO SURFACE

Hole Size: 14.75" Casing Size: 10.75"

Cemented with: 870 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 9.875" Casing Size: 7.625"

Cemented with: 2242 sx. or ft³

Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 6.75" Casing Size: 5.5"

Cemented with: 648 sx. or ft³

Top of Cement: 11,137' Method Determined: Calc

Total Depth: 20,035' Total Vertical Depth: 12,267.5'

Injection Interval MD/TVD

12,258' MD / 12,110.6' TVD feet to 19,918' MD / 12,268.6' TVD

(Perforated or Open Hole; indicate which)

Wellbore Hole OD- 9.8750
7 5/8" CSA 11,654'
Cmt circ to surface

Wellbore Hole OD- 6.7500
5 1/2" 20# P-110 DQX CSA 22,562'
TOC 11,137'

2 7/8" Tbg
PKR SA 12,000'

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)

Type of Packer: 2.875" x 5.5" Nickle Coated (proposed)

Packer Setting Depth: 12,000' MD / 11,800' TVD (proposed) (MD/TVD)

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

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 and Gas production

2. Name of the Injection Formation: WCXYA

3. Name of Field or Pool (if applicable): [98252] MESA VERDE; WOLFCAMP

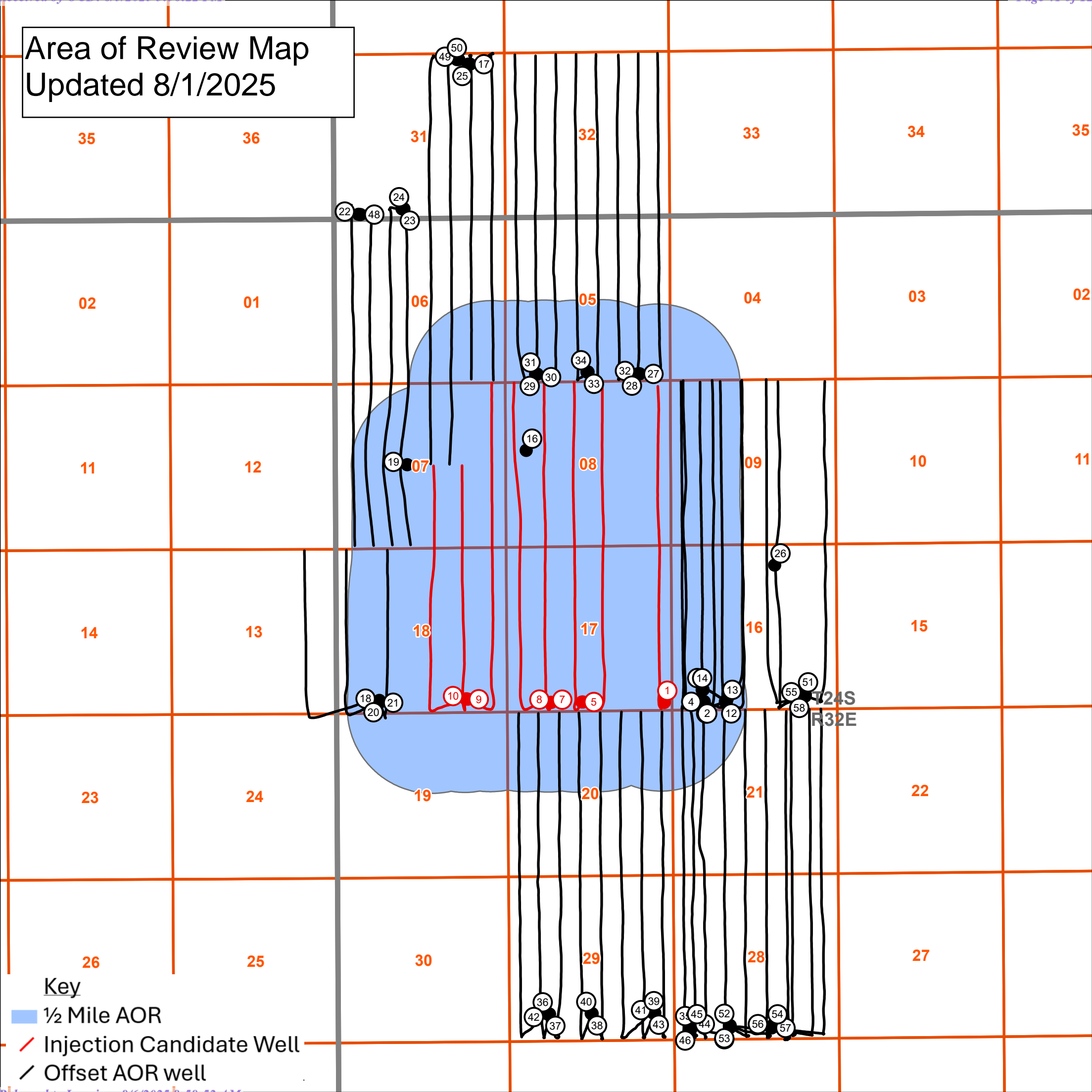
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. _____

No

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

OVERLYING: BONE SPRING, ~8600' TVDUNDERLYING: STRAWN, ~13874' TVD

Area of Review Map
Updated 8/1/2025



Wolfcamp AOR Table 2/6/2025

Red Text- Candidate EOR Injection well

AOR ID	API NUMBER	Current Operator	LEASE NAME	WELL NUMB ER	Well Type:	Status:	Footages N/S	N/S	Footag es E/W	E/W	Surface Location Unit	Surface Location Section	Surface Location TShip	Surface Location Range	Spud:	True Vertical Depth:	Current Completion	HOLE SIZE	CSG SIZE	SET AT	SX CMT	CMT TO	Top Of Cement How Measured	Comment	Pool
1	30-025-44195	OXY USA INC	MESA VERDE WOLFCAMP UNIT	001H	Oil	Active	241	S	245	E	P		17	24S	32E	12/30/2017	12054	12240-22116	17.500 12.250 8.500	13.375 9.625 5.500	922 10933 10764-22271	1190 3620 2193	Surf Circ Surf Circ 10764 Circ	8.5" Vertical pilot hole to 14150' MD. 5.5" Production Liner. 5.5" frac string from 0'-10764'	[98252] MESA VERDE; WOLFCAMP
2	30-025-46110	OXY USA INC	MESA VERDE WOLFCAMP UNIT	002H	Oil	Active	250	S	1035	W	M		16	24S	32E	11/25/2019	12280	12395-22413	14.750 9.875 6.750	10.750 7.625 5.500	959 11725 22585	975 3015 855	Surf Circ 190 Calc 5618 Calc		[98252] MESA VERDE; WOLFCAMP
3	30-025-46111	OXY USA INC	MESA VERDE WOLFCAMP UNIT	003H	Oil	Active	250	S	1000	W	M		16	24S	32E	11/29/2019	12087	12270-22288	14.750 9.875 6.750	10.750 7.625 5.500	890 11420 22351	975 2824 842	Surf Circ Surf Circ 9031 Calc		[98252] MESA VERDE; WOLFCAMP
4	30-025-46112	OXY USA INC	MESA VERDE WOLFCAMP UNIT	004H	Oil	Active	250	S	965	W	M		16	24S	32E	12/1/2019	12225	12668-22488	14.750 9.875 6.750	10.750 7.625 5.500	941 11600 22534	975 75 Calc 834	Surf Circ 75 Calc 9269 Calc		[98252] MESA VERDE; WOLFCAMP
5	30-025-45862	OXY USA INC	MESA VERDE WOLFCAMP UNIT	005H	Oil	Active	280	S	2436	W	N		17	24S	32E	5/18/2019	12211	12327-22387	14.750 9.875 6.750	10.750 7.625 5.500	942 11567 22445	908 3988 840	Surf Circ Surf Circ 11050 Calc		[98252] MESA VERDE; WOLFCAMP
6	30-025-45863	OXY USA INC	MESA VERDE WOLFCAMP UNIT	006H	Oil	Active	280	S	2401	W	N		17	24S	32E	5/16/2019	12067	12157-22218	14.750 9.875 6.750	10.750 7.625 5.500	942 11278 22279	908 1655 887	Surf Circ Surf Circ 10775 Calc		[98252] MESA VERDE; WOLFCAMP
7	30-025-45920	OXY USA INC	MESA VERDE WOLFCAMP UNIT	007H	Oil	Active	280	S	1421	W	N		17	24S	32E	5/25/2019	12211	12047-22108	14.750 9.875 6.750	10.750 7.625 5.500	934 11461 22433	970 1530 805	Surf Circ Surf Circ 10960 Calc		[98252] MESA VERDE; WOLFCAMP
8	30-025-45921	OXY USA INC	MESA VERDE WOLFCAMP UNIT	008H	Oil	Active	280	S	1386	W	N		17	24S	32E	5/26/2019	12016	12137-22108	14.750 9.875 6.750	10.750 7.625 5.500	950 11445 22327	970 1220 780	Surf Circ Surf Circ 10940 Calc		[98252] MESA VERDE; WOLFCAMP
9	30-025-45871	OXY USA INC	MESA VERDE WOLFCAMP UNIT	009H	Oil	Active	422	S	1254	E	P		18	24S	32E	1/27/2020	12316	12427-22488	14.750 9.875 6.750	10.750 7.625 5.500	860 11290 22605	870 2540 905	Surf Circ Surf Circ 10100 Calc		[98252] MESA VERDE; WOLFCAMP
10	30-025-45872	OXY USA INC	MESA VERDE WOLFCAMP UNIT	010H	Oil	Active	422	S	1289	E	P		18	24S	32E	1/28/2020	12064	12017-19438	14.750 9.875 6.750	10.750 7.625 5.500	861 11356 19681	870 2975 652	Surf Circ Surf Circ 7865 Calc		[98252] MESA VERDE; WOLFCAMP
11	30-025-45873	OXY USA INC	MESA VERDE WOLFCAMP UNIT	011H	Oil	Active	422	S	1324	E	O		18	24S	32E	1/29/2020	12267	12258-19918	14.750 9.875 6.750	10.750 7.625 5.500	860 11662 20015	870 2242 648	Surf Circ Surf Circ 11137 Calc		[98252] MESA VERDE; WOLFCAMP
12	30-025-48824	OXY USA INC	MESA VERDE WOLFCAMP UNIT	039H	Oil	New	250	S	1715	W	N		16	24S	32E	9/22/2024	12851	Not Yet Complete	14.750 9.875 6.750	10.750 7.625 5.500	1158 12696 24030	807 1851 620	Surf Planned Surf Planned 12196 Planned	Spud in late 2024. Completion report has not been filed.	[98252] MESA VERDE; WOLFCAMP
13	30-025-48825	OXY USA INC	MESA VERDE WOLFCAMP UNIT	040H	Oil	New	250	S	1750	W	N		16	24S	32E	9/23/2024	12851	Not Yet Complete	14.750 9.875 6.750	10.750 7.625 5.500	1158 12613 23957	819 1827 620	Surf Planned Surf Planned 12113 Planned	Spud in late 2024. Completion report has not been filed.	[98252] MESA VERDE; WOLFCAMP
14	30-025-48817	OXY USA INC	MESA VERDE WOLFCAMP UNIT	054H	Oil	New	635	S	865	W	M		16	24S	32E	9/25/2024	12950	Not Yet Complete	14.750 9.875 6.750	10.750 7.625 5.500	971 12560 23149	812 1831 626	Surf Planned Surf Planned 12060 Planned	Spud in late 2024. Completion report has not been filed.	[98252] MESA VERDE; WOLFCAMP
15	30-025-48863	OXY USA INC	MESA VERDE WOLFCAMP UNIT	055H	Oil	New	635	S	1004	W	M		16	24S	32E	9/27/2024	12950	Not Yet Complete	14.750 9.875 6.750	10.750 7.625 5.500	1156 12654 23242	823 1843 626	Surf Planned Surf Planned 12154 Planned	Spud in late 2024. Completion report has not been filed.	[98252] MESA VERDE; WOLFCAMP
16	30-025-32192	EOG RESOURCES INC	JACK TANK 8 FEDERAL	002	Oil	PA	2180	N	660	W	E		8	24S	32E	9/10/1993	15460	NA	26.000 17.000 12.250 9.625 9.625	20.000 13.325 9.625 7.000 4.500	598 4521 12108 11768-14950 14656-15452	932 4500 3625 750 200	Surf Circ Surf Circ 4500 TS ? ? ? ?		NA
17	30-025-48459	DEVON ENERGY PRODUCTION COMPANY, LP	RIGHT MEOW 31 6 FEDERAL COM	626H	Oil	Active	350	N	1095	E	A		31	23S	32E	4/14/2021	12091	12250-22293	17.500 9.875 7.875	13.375 8.625 5.500	1067 11357 22307	910 1292 3130	Surf Circ Surf Circ ? ?		[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
18	30-025-45874	OXY USA INC	MESA VERDE WOLFCAMP UNIT	012H	Oil	Active	365	S	1378	W	M		18	24S	32E	3/18/2021	11959	12443-16984	14.750 9.875 6.750	10.750 7.625 5.500	970 11248 17065	890 2656 500	Surf Circ Surf Circ 10748 Calc		[98252] MESA VERDE; WOLFCAMP
19	30-025-43473	NGL WATER SOLUTIONS PERMIAN, LLC	STATION SWD	001	Salt Water Disposal	Active	2625	N	2315	W	F		7	24S	32E	5/6/2018	18264	16763-18264	26.000 17.500 12.250 8.500	20.000 13.375 9.625 7.625	925 4475 11924 16763	1530 2460 1760 250	Surf Circ Surf Circ Surf Circ 11405 Calc		[97869] SWD; DEVONIAN-SILURIAN
20	30-025-45864	OXY USA INC	MESA VERDE WOLFCAMP UNIT	014H	Oil	Active	400	S	1378	W	M		18	24S	32E	3/19/2021	11929	12670-17211	14.750 9.875 6.750	10.750 7.625 5.500	957 11617 17286	890 2816 485	Surf Circ Surf Circ 10000 Calc		[98252] MESA VERDE; WOLFCAMP
21	30-025-45875	OXY USA INC	MESA VERDE WOLFCAMP UNIT	013H	Oil	Active	330	S	1378	W	M		18	24S	32E	3/16/2021	12075	12509-17050	14.750 9.875 6.125	10.750 7.625 5.500 x 4.5	960 11365 11275	890 2615 512	Surf Circ Surf Circ 10200 Calc		[98252] MESA VERDE; WOLFCAMP
22	30-025-48486	DEVON ENERGY PRODUCTION COMPANY, LP	CATTY SHACK 6 7 FEDERAL COM	711H	Oil	Active	150	S	800	W	M		31	23S	32E	5/4/2021	12131	12437-22787	17.500 9.625 7.875	13.375 8.625 5.500	999 11563 22801	630 2295 2700	Surf Circ 7000 Calc Surf Circ		[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
23	30-025-48485	DEVON ENERGY PRODUCTION COMPANY, LP	CATTY SHACK 6 7 FEDERAL COM	623H	Oil	Active	315	S	2255	W	N		31	23S	32E	4/7/2021	12007	12277-22657	17.500 9.625 7.875	13.375 8.625 5.500	978 11197 22672	850 950 Circ 2609	Surf Circ 950 Circ Surf Circ		[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
24	30-025-48487	DEVON ENERGY PRODUCTION COMPANY, LP	CATTY SHACK 6 7 FEDERAL COM	713H	Oil	Active	315	S	2195	W	N		31	23S	32E	4/8/2021	12174	12379-22759	17.500 9.625 7.875	13.375 8.625 5.500	996 11601 22773	740 1030 2860	Surf Circ 950 Circ Surf Circ		[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
25	30-025-48460	DEVON ENERGY PRODUCTION COMPANY, LP	RIGHT MEOW 31 6 FEDERAL COM	716H	Oil	Active	350	N	1155	E	A		31	23S	32E	4/13/2021	12220	12355-22373	17.500 9.625 7.875	13.375 8.625 5.500	1067 11639 22388	910 710 3130	Surf Circ Surf Circ Surf Circ		[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
26	30-025-30746	COG OPERATING LLC	DOUBLE ABJ STATE	001	Gas	PA	660	N	1980	E	B		16	24S	32E	7/31/1990	15800	NA	17.500 12.250	13.375 9.625	511 4975	525 2700	Surf Circ Surf Circ		NA
27	30-025-48434	COG OPERATING LLC	GIN AND TECTONIC FEDERAL COM	701H	Oil	New	220	S	970	E	P		5	24S	32E	9/19/2023									[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
28	30-025-48436	COG OPERATING LLC	GIN AND TECTONIC FEDERAL COM	703H	Oil	New	220	S	1030	E	P		5	24S	32E	9/22/2023									[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
29	30-025-48441	COG OPERATING LLC	GIN AND TECTONIC FEDERAL COM	708H	Oil	New	250	S	970	W	M		5	24S	32E	10/8/2023									[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
30	30-025-48439	COG OPERATING LLC	GIN AND TECTONIC FEDERAL COM	706H	Oil	New	250	S	1030	W	M		5	24S	32E	10/15/2023									[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
31	30-025-48440	COG OPERATING LLC	GIN AND TECTONIC FEDERAL COM	707H	Oil	New	250	S	1000	W	M		5	24S	32E	10/13/2023									[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
32	30-025-48435	COG OPERATING LLC	GIN AND TECTONIC FEDERAL COM	702H	Oil	New	220	S	1000	E	P		5	24S	32E	9/21/2023									[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
33	30-025-48437	COG OPERATING LLC	GIN AND TECTONIC FEDERAL COM	704H	Oil	New	300	S	2625	E	O		5	24S	32E	10/8/2023									[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
34	30-025-48438	COG OPERATING LLC	GIN AND TECTONIC FEDERAL COM	705H	Oil	New	300	S	2620	W	N		5	24S	32E	10/10/2023									[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
35	30-025-50154	XTO ENERGY, INC	OUTRIDER 28 FEDERAL	501H	Oil	New	363	S	537	W	M		28	24S	32E	6/6/2022			9.625 7.625	975 11319	535 1395	Surf Circ Surf Circ			[98248] WC-025 G-08 S243217P; UPR WOLFCAMP [98248] WC-025 G-08 S243217P; UPR WOLFCAMP
36	30-025-49197	COG PRODUCTION, LLC	AZORES FEDERAL COM	706H	Oil	New	855	S	1255	W	M		29	24S	32E	8/6/2023									[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
37	30-025-49140	COG PRODUCTION, LLC	AZORES FEDERAL COM	705H	Oil	New	855	S	1285	W	M		29	24S	32E	8/6/2023									[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
38	30-025-49139	COG PRODUCTION, LLC	AZORES FEDERAL COM	704H	Oil	New	855	S	2622	W	N		29	24S	32E										[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
39	30-025-49137	COG PRODUCTION, LLC	AZORES FEDERAL COM	702H	Oil	New	855	S	650	E	P		29	24S	32E										[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
40	30-025-49138	COG PRODUCTION, LLC	AZORES FEDERAL COM	703H	Oil	New	855	S	2630	E	O		29	24S	32E										[98248] WC-025 G-08 S243217P; UPR WOLFCAMP

1/4/2021
 Current Wellbore
Jack Tank 8 Federal #2
 30-025-32192-0000
 Lea

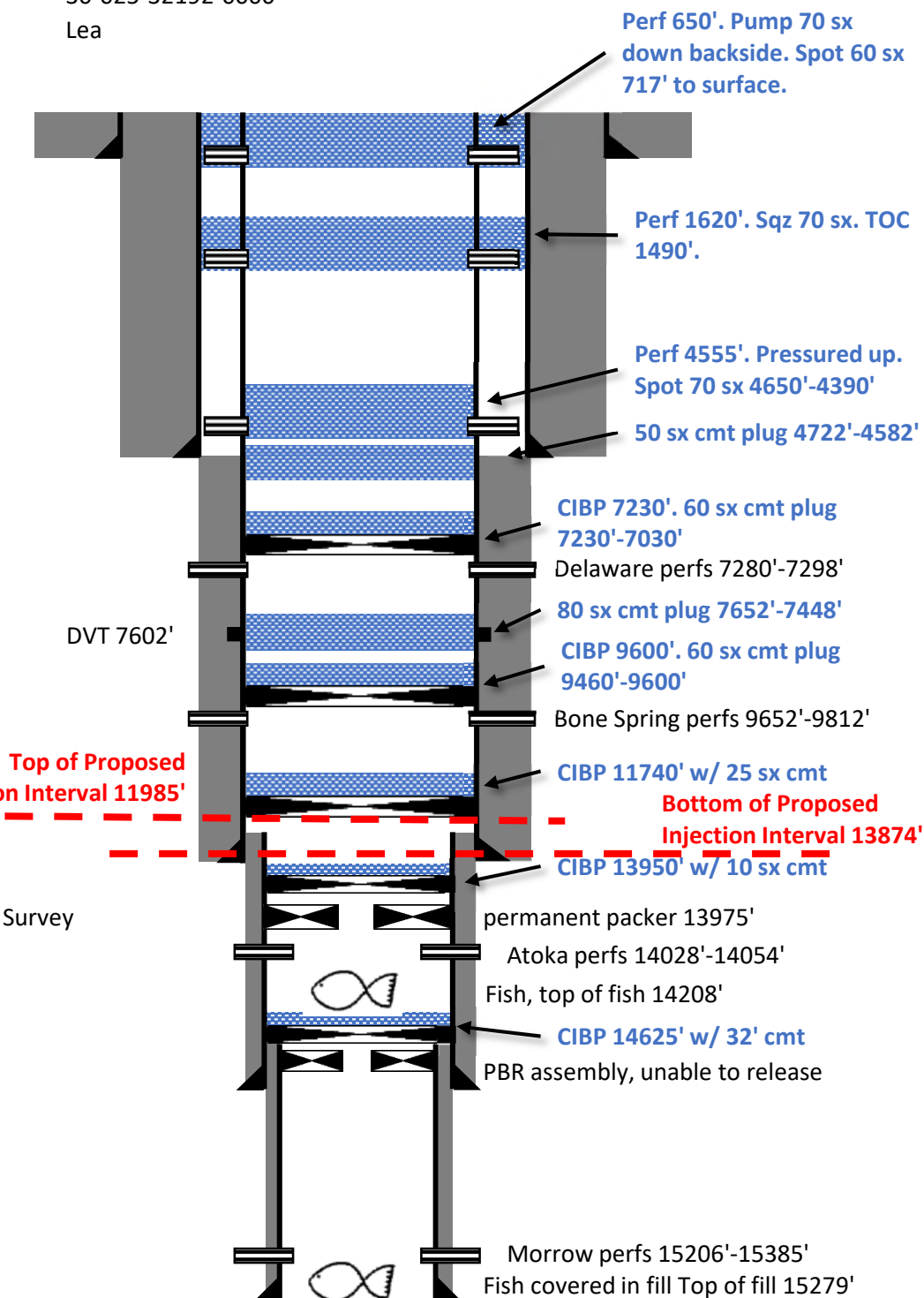
String 1
 OD 20 in
 TD 598 ft
 TOC 0 ft
 932 sx, circ

String 2
 OD 13.375 in
 TD 4521 ft
 TOC 0 ft
 4500 sx, circ

String 3
 OD 9.625 in
 TD 12108 ft
 TOC 4500 ft
 3625 sx, Temp Survey

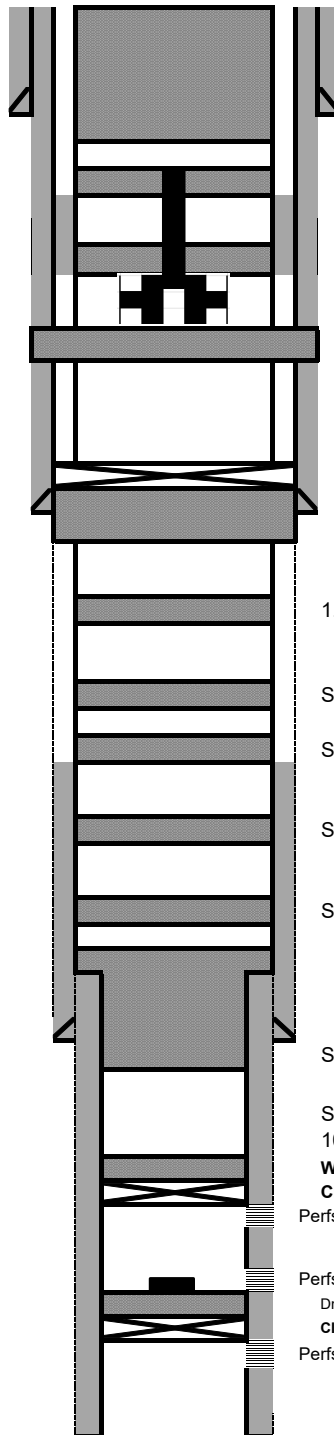
String 4, liner
 OD 7 in
 11768'-14950'
 750 sxs

String 5, liner
 OD 4.5 in
 14656'-15452'
 200 sxs



COG		Plugged	
Author:	Abby @ JMR	Well No.	#1
Well Name	Double ABJ State	API #:	30-025-30746
Field	Und. Lea Strawn Gas	Location	660 FNL & 1980 FEL
County	Lea		Sec 16, T24S, R32E
State	NM	GL	3605
Spud Date	5/1/1980		

Description	O.D.	Grade	Weight	Depth	Hole	Cmt Sx	TOC
Surface Csg	13 3/8	K55	54.5#	511	17 1/2	300	0
Inter Csg	9 5/8	K55	36 to 32#	4,975	12 1/4	875	0
Prod Csg	7	P110	26#	13,000	8 3/4	1,225	6,320
Liner	4 1/2	P110	15.1 to 13.5#	12,749-15,798'	7 7/8	350	12,749



13 3/8 csg set @ 511 with 300 cmt sx

6. Spotted 75 sx class C cmt @ 310' & circulated to surface inside the 7".

5. Spotted 50 sx class C cmt @ 590-300'. WOC & tagged @ 310'.

Cut 2 3/8" tbg @ 590'. POH w/ tbg & cut jt.

4. Perf'd @ 1590'. Sqz'd 80 sx class C cmt @ 1590-1100'. RIH w/ wireline inside tbg, tagged plug @ 910'. RIH inside 7", tagged TOC @ 590'.

3. Perf'd @ 1600'. Sqz'd 84 sx class C cmt @ 1600-1400'. Pkr & tbg stuck @ 1600'. Could not fish out of hole. RIH w/ wireline in tbg, tagged @ 1600'. RIH w/ wireline in 7" annulus, tagged @ 592'.

2. Perf'd @ 5025'. Set 7" CICR @ 4567'. Sqz'd 300 sx class C cmt from 4567-5025'.

9 5/8 csg set 4,975 with 875 cmt sx

1. Spotted 57 sx class C cmt @ 5512-5150'. WOC & tagged @ 5159'.

Drilled down to 6632'. Ran CBL. CBL does not show cmt across the 9 5/8" shoe.

Spotted 30 sx class H cmt @ 7805' & displaced to 7649'.

Spotted 30 sx class H cmt @ 8679' & displaced to 8515'.

Spotted 30 sx class H cmt @ 10,365' & displaced to 10,201'.

Spotted 30 sx class H cmt @ 12,175' & displaced to 12,011'.

7 csg set @ 13,000 with 1,225 cmt sx

Spotted 40 sx class H cmt @ 13,050-12,639'. Tagged plug @ 12,639'.

Spotted 25 sx class H cmt @ 13,986' & displaced with 4 BBLs fresh brine H2O to 13,621'. Circ'd hole w/ 55 BBLs 10# brine H2O. WOC & Tagged plug @ 13,615'.

Wireline & ran CBL from 13,975' to surface. Found TOC @ 8300'.

CIBP @ 14,000'. Dump bailed 3 sx class H cmt. WOC & Tagged TOC @ 13,986'.

Perfs @ 14,050-14,158'

Perfs @ 14,373-14,384'

Dropped TCP GUN

CIBP @ 15,260' w 30' cmt on top

Perfs @ 15,332-15,404'

4 1/2 csg set @ 12,749-15,798' with 350 cmt sx

Formation Tops	

PROPOSED OPERATIONS- PRESSURES AND RATES

- 1. Calculated Maximum Allowable Surface Pressure for water based on 0.2 psi/ft gradient.
- 2. Calculated bottom hole pressure based on 0.2 psi/ft (OCD gradient), 0.433 psi/ft (freshwater gradient), and true vertical depth of top perforation.
- 3. Calculated Maximum Allowable Surface Pressure for hydrocarbon gas based on *PROSPER* model
 - Various inputs for fluid composition, downhole equipment, bottomhole temperature, and injection rate.

	Water				Hydrocarbon Gas			
Zone	Average Daily Injection Rate [BWIPD]	Max Daily Injection Rate [BWIPD]	Average Injection Pressure [PSI]	Max Allowable Surface Pressure [PSI]	Average Daily Injection Rate [MMSCF PD]	Max Daily Injection Rate [MMSCF PD]	Average Injection Pressure [PSI]	Max Allowable Surface Pressure [PSI]
WCXYA	5000	6500	2361	2361	22	45	5700	5700
WCB/C	5000	6500	2570	2570	22	45	6190	6190



Mesa Verde Water Mixing Analysis

12/18/2024

An analysis was conducted to review scale risk due to water mixing from the Mesa Verde 18 CTB with the Avalon, 2nd Bone Spring, 3rd Bone Spring, Wolfcamp XY, and Wolfcamp A formation water from respective producing wells. To model the scale risks, ScaleSoftPitzer 2025 was used with its Mixing Two Wells function. Average water chemistry values from ChampionX were used for this analysis for all locations. The waters were mixed in the downhole conditions (temperature/pressure) for their respective formations. The Mixing Two Wells function allowed us to review the scale risk at various ratios of the two fluids being mixed.

Overall, there is little risk for scale to be formed when mixing Mesa Verde 18 CTB with formation waters downhole. The only scale that has slight risk for forming is Celestite (SrSO₄) scale that increases as the ratio between the CTB and formation water increases, i.e. more CTB water, more scale risk. Realistically, the water mixing ratio in the formation would heavily lean towards more formation water but the contact point between the two fluids would likely have more CTB water.

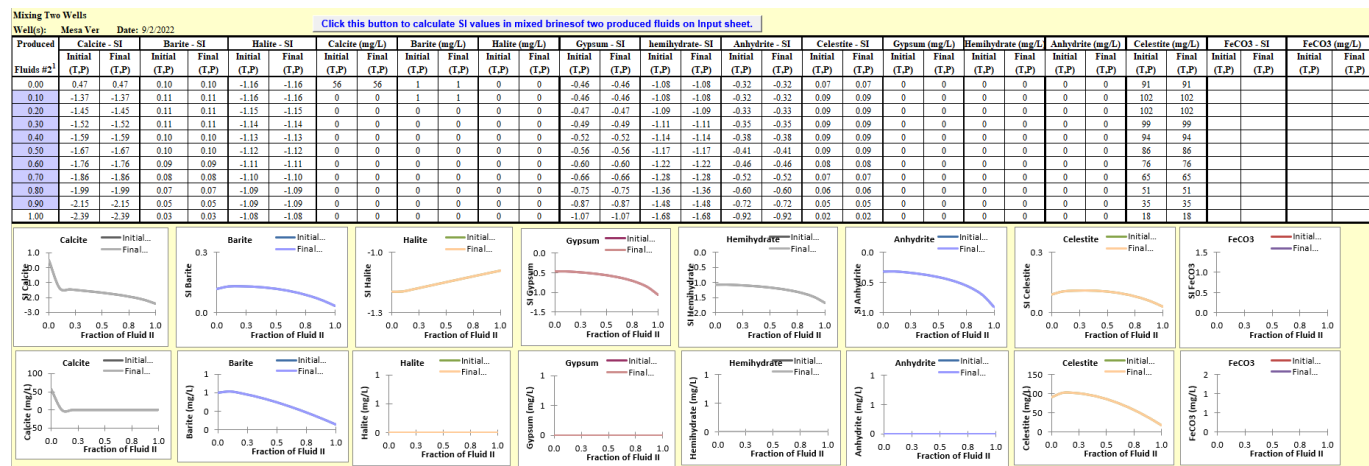
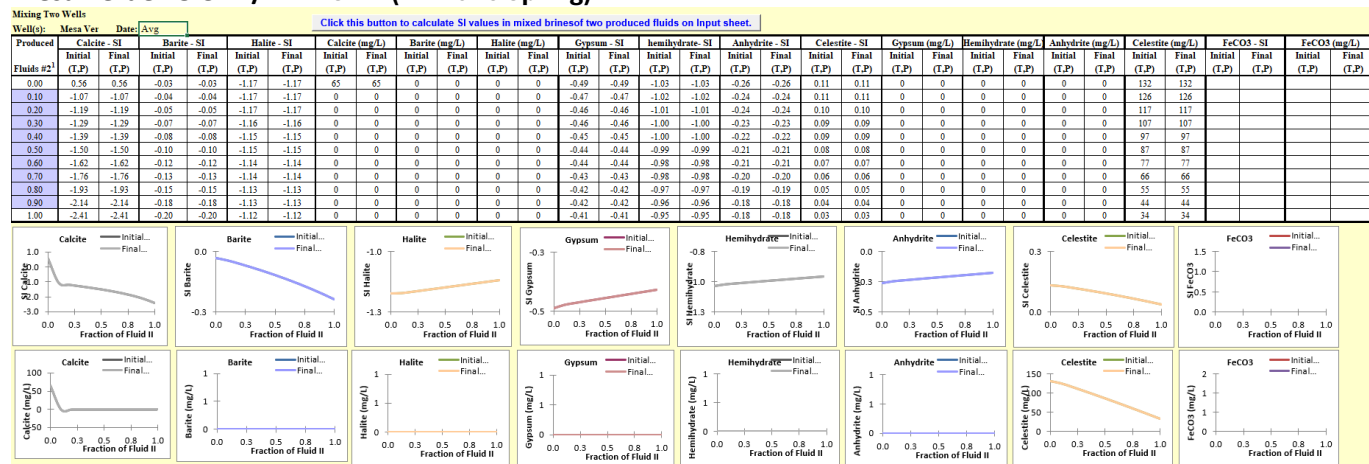
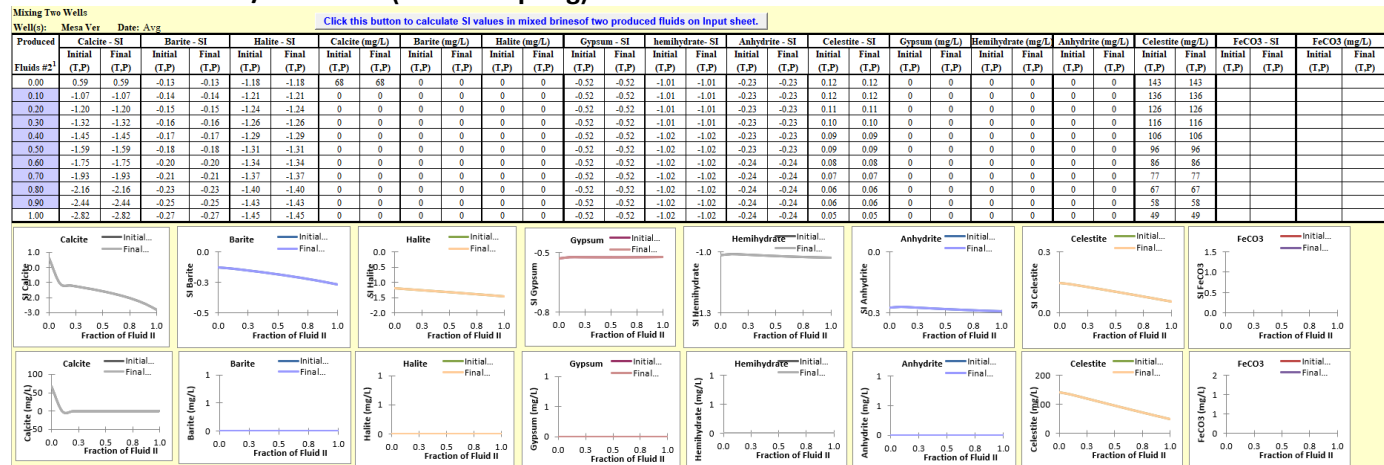
- At a 10/90 ratio of CTB/formation water, Celestite SI peaked at 0.06 SI and Celestite mg/L peaked at 60 mg/L (20 PTB). Both values are relatively low.
- At a 50/50 ratio of CTB/formation water, Celestite SI peaked at 0.10 SI and Celestite mg/L peaked at 100 mg/L (33 PTB). Both values are low.
- At a 90/10 ratio of CTB/formation water, Celestite SI peaked at 0.12 SI and Celestite mg/L peaked at 140 mg/L (47 PTB). SI values are low, but mg/L starts to hit the moderate range.

If scale risk needs to be minimized further, it is possible to inject a scale inhibitor chemistry with the CTB injection water. We would need discuss with the chemical vendor to see what chemistries they would recommend and any lab testing as needed. With scale risk being low, I do not believe a scale inhibitor would be needed for this application.

Below is supporting information and the SSP2025 results that were modeled. Additional files have the raw water chemistry information and the SSP2025 models that were ran.

Locations	Formation	Temperature (F)	Pressure (PSI)
Mesa Verde 18 CTB	CTB		
MV BS 1H-ST1	Avalon	135	5700
MV BS 4H	2nd Bone Spring	155	6400
MV BS 2H	3rd Bone Spring	170	7500
MV WC 5H	WCXY	170	7500
MV WC 7H	WCA	170	7500

Mesa Verde 18 CTB / MV BS 1H-ST1 (Avalon)

Mesa Verde 18 CTB / MV BS 4H (2nd Bone Spring)Mesa Verde 18 CTB / MV BS 2H (3rd Bone Spring)

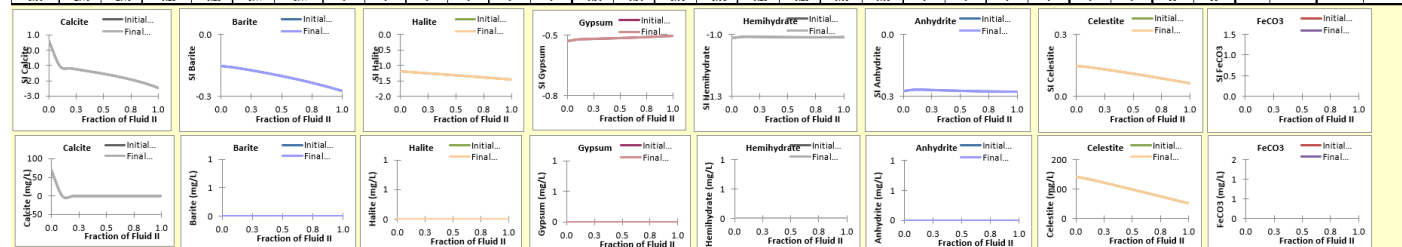
Mesa Verde 18 CTB / MV WC 5H (WCXY)

Mixing Two Wells

Well(s): Mesa Ver Date: 9/2/2022

[Click this button to calculate SI values in mixed brines of two produced fluids on input sheet.](#)

Produced Fluids #2	Calcite - SI	Barite - SI	Halite - SI	Calcite (mg/L)	Barite (mg/L)	Halite (mg/L)	Gypsum - SI	hemihydrate - SI	Anhydrite - SI	Celestite - SI	Gypsum (mg/L)	hemihydrate (mg/L)	Anhydrite (mg/L)	Celestite (mg/L)	FeCO ₃ - SI	FeCO ₃ (mg/L)
	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)
0.00	0.61	0.61	-0.13	-0.13	-1.18	-1.18	69	69	0	0	0	0	0	0	143	143
0.10	-0.94	-1.04	-0.13	-0.13	-1.21	-1.21	0	0	0	0	0	0	0	0	137	137
0.20	-1.18	-1.18	-0.14	-0.14	-1.24	-1.24	0	0	0	0	0	0	0	0	128	128
0.30	-1.29	-1.29	-0.15	-0.15	-1.27	-1.27	0	0	0	0	0	0	0	0	119	119
0.40	-1.41	-1.41	-0.16	-0.16	-1.29	-1.29	0	0	0	0	0	0	0	0	110	110
0.50	-1.53	-1.53	-0.17	-0.17	-1.32	-1.32	0	0	0	0	0	0	0	0	100	100
0.60	-1.67	-1.67	-0.18	-0.18	-1.35	-1.35	0	0	0	0	0	0	0	0	91	91
0.70	-1.82	-1.82	-0.19	-0.19	-1.38	-1.38	0	0	0	0	0	0	0	0	82	82
0.80	-2.00	-2.00	-0.20	-0.20	-1.41	-1.41	0	0	0	0	0	0	0	0	72	72
0.90	-2.20	-2.20	-0.22	-0.22	-1.44	-1.44	0	0	0	0	0	0	0	0	63	63
1.00	-2.46	-2.46	-0.23	-0.23	-1.47	-1.47	0	0	0	0	0	0	0	0	53	53



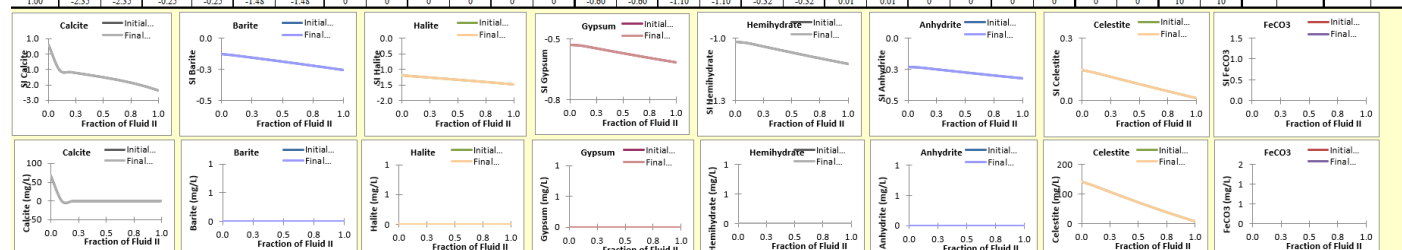
Mesa Verde 18 CTB / MV WC 7H (WCA)

Mixing Two Wells

Well(s): Mesa Ver Date: 9/2/2022

[Click this button to calculate SI values in mixed brines of two produced fluids on input sheet.](#)

Produced Fluids #2	Calcite - SI	Barite - SI	Halite - SI	Calcite (mg/L)	Barite (mg/L)	Halite (mg/L)	Gypsum - SI	hemihydrate - SI	Anhydrite - SI	Celestite - SI	Gypsum (mg/L)	hemihydrate (mg/L)	Anhydrite (mg/L)	Celestite (mg/L)	FeCO ₃ - SI	FeCO ₃ (mg/L)
	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)	Initial (T,P)
0.00	0.58	0.58	-0.13	-0.13	-1.18	-1.18	67	67	0	0	0	0	0	0	143	143
0.10	-0.94	-1.04	-0.14	-0.14	-1.21	-1.21	0	0	0	0	0	0	0	0	131	131
0.20	-1.17	-1.17	-0.15	-0.15	-1.24	-1.24	0	0	0	0	0	0	0	0	116	116
0.30	-1.27	-1.27	-0.16	-0.16	-1.27	-1.27	0	0	0	0	0	0	0	0	102	102
0.40	-1.38	-1.38	-0.17	-0.17	-1.30	-1.30	0	0	0	0	0	0	0	0	88	88
0.50	-1.50	-1.50	-0.19	-0.19	-1.33	-1.33	0	0	0	0	0	0	0	0	74	74
0.60	-1.62	-1.62	-0.20	-0.20	-1.36	-1.36	0	0	0	0	0	0	0	0	60	60
0.70	-1.77	-1.77	-0.21	-0.21	-1.39	-1.39	0	0	0	0	0	0	0	0	47	47
0.80	-1.93	-1.93	-0.22	-0.22	-1.42	-1.42	0	0	0	0	0	0	0	0	34	34
0.90	-2.12	-2.12	-0.24	-0.24	-1.45	-1.45	0	0	0	0	0	0	0	0	22	22
1.00	-2.35	-2.35	-0.25	-0.25	-1.48	-1.48	0	0	0	0	0	0	0	0	10	10





Certificate of Analysis

Number: 6030-20090036-004A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

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

Sep. 08, 2020

Field: Mesa Verde
Station Name: Mesa Verde Wolf Camp 4H
Station Number: 15511T
Sample Point: N/A
Meter Number: API 30-025-46112
County: Lea
Type of Sample: Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: Fill and Purge
Sampling Company: OXY

Sampled By: Chandler Montgomery
Sample Of: Gas Spot
Sample Date: 09/03/2020 09:45
Sample Conditions: 103 psig, @ 117.4 °F Ambient: 82 °F
Effective Date: 09/03/2020 09:45
Method: GPA-2261M
Cylinder No: 1111-002323
Instrument: 70104251 (Inficon GC-MicroFusion)
Last Inst. Cal.: 08/31/2020 0:00 AM
Analyzed: 09/08/2020 10:58:08 by PGS

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia
Nitrogen	1.004	1.01170	1.218	
Carbon Dioxide	0.108	0.10851	0.205	
Methane	72.990	73.54212	50.704	
Ethane	12.285	12.37754	15.995	3.307
Propane	6.466	6.51482	12.346	1.793
Iso-Butane	0.959	0.96585	2.413	0.316
n-Butane	2.408	2.42652	6.061	0.764
Iso-Pentane	0.613	0.61794	1.916	0.226
n-Pentane	0.741	0.74651	2.315	0.270
Hexanes	0.574	0.57834	2.142	0.238
Heptanes	0.955	0.96223	4.144	0.443
Octanes	0.109	0.11023	0.541	0.056
Nonanes Plus	0.037	0.03769	NIL	NIL
	99.249	100.00000	100.000	7.413

Calculated Physical Properties

Calculated Molecular Weight	23.27	C9+
Compressibility Factor	0.9954	NIL
Relative Density Real Gas	0.8068	NIL

GPA 2172 Calculation:

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

Real Gas Dry BTU	1380.3	NIL
Water Sat. Gas Base BTU	1356.7	NIL
Ideal, Gross HV - Dry at 14.65 psia	1374.0	NIL
Ideal, Gross HV - Wet	1349.9	NIL

Comments: H₂S Field Content 0 ppm
Mcf/day 4009

Hydrocarbon Laboratory Manager

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



Certificate of Analysis

Number: 6030-20110021-001A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

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

Nov. 05, 2020

Field: Mesa Verde
Station Name: Mesa Verde East CGL
Station Number: N/A
Sample Point: Inlet to Dehy
Meter Number:
County: Lea
Type of Sample: Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: Fill and Purge
Sampling Company: OXY

Sampled By: Scott Beasley
Sample Of: Gas Spot
Sample Date: 10/30/2020 10:00
Sample Conditions: 1290 psig, @ 60 °F Ambient: 45 °F
Effective Date: 10/30/2020 10:00
Method: GPA 2286
Cylinder No: 1111-002316
Instrument: 6030_GC2 (Agilent GC-7890B)
Last Inst. Cal.: 08/25/2020 8:12 AM
Analyzed: 11/05/2020 08:47:32 by PGS

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Nitrogen	1.206	1.189	1.495		GPM TOTAL C2+	6.645
Methane	75.248	74.177	53.401		GPM TOTAL C3+	3.314
Carbon Dioxide	1.152	1.136	2.244		GPM TOTAL iC5+	0.562
Ethane	12.654	12.474	16.832	3.331		
Propane	6.662	6.567	12.995	1.806		
Iso-butane	0.889	0.876	2.285	0.286		
n-Butane	2.126	2.096	5.467	0.660		
Iso-pentane	0.443	0.437	1.415	0.159		
n-Pentane	0.488	0.481	1.557	0.174		
Hexanes Plus	0.575	0.567	2.309	0.229		
	101.443	100.000	100.000	6.645		

Calculated Physical Properties

Relative Density Real Gas	Total	C6+
	0.7722	3.1348
Calculated Molecular Weight	22.28	90.79
Compressibility Factor	0.9960	

GPA 2172 Calculation:

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

Real Gas Dry BTU	1298	4897
Water Sat. Gas Base BTU	1275	4811
Ideal, Gross HV - Dry at 14.65 psia	1292.6	4896.9
Ideal, Gross HV - Wet	1270.0	0.000
Net BTU Dry Gas - real gas	1179	
Net BTU Wet Gas - real gas	1158	

Comments: H2S Field Content 0 ppm

Hydrocarbon Laboratory Manager

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



Certificate of Analysis

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Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

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

Nov. 05, 2020

Field: Mesa Verde
Station Name: Mesa Verde East CGL
Station Number: N/A
Sample Point: Inlet to Dehy
Meter Number:
County: Lea
Type of Sample: Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: Fill and Purge

Sampled By: Scott Beasley
Sample Of: Gas Spot
Sample Date: 10/30/2020 10:00
Sample Conditions: 1290 psig, @ 60 °F
Method: GPA 2286
Cylinder No: 1111-002316
Analyzed: 11/05/2020 14:31:50 by PGS
Sampling Company: OXY

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.65 psia		
Nitrogen	1.189	1.495		GPM TOTAL C2+	6.645
Methane	74.177	53.401		GPM TOTAL C3+	3.314
Carbon Dioxide	1.136	2.244		GPM TOTAL iC5+	0.562
Ethane	12.474	16.832	3.331		
Propane	6.567	12.995	1.806		
Iso-Butane	0.876	2.285	0.286		
n-Butane	2.096	5.467	0.660		
Iso-Pentane	0.437	1.415	0.159		
n-Pentane	0.481	1.557	0.174		
Hexanes	0.260	1.017	0.107		
Heptanes Plus	0.307	1.292	0.122		
	100.000	100.000	6.645		

Calculated Physical Properties

	Total	C7+
Relative Density Real Gas	0.7722	3.3040
Calculated Molecular Weight	22.28	95.69
Compressibility Factor	0.9960	

GPA 2172 Calculation:

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

Real Gas Dry BTU	1298	5090
Water Sat. Gas Base BTU	1275	5000
Ideal, Gross HV - Dry at 14.65 psia	1292.6	5089.5
Ideal, Gross HV - Wet	1270.0	NIL

Comments: H2S Field Content 0 ppm

Hydrocarbon Laboratory Manager

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



Certificate of Analysis

Number: 6030-20110021-001A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

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

Nov. 05, 2020

Field: Mesa Verde
Station Name: Mesa Verde East CGL
Station Number: N/A
Sample Point: Inlet to Dehy
Meter Number:
County: Lea
Type of Sample: Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: Fill and Purge

Sampled By: Scott Beasley
Sample Of: Gas Spot
Sample Date: 10/30/2020 10:00
Sample Conditions: 1290 psig, @ 60 °F
Method: GPA 2286
Cylinder No: 1111-002316
Analyzed: 11/05/2020 14:31:50 by PGS
Sampling Company: OXY

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.65 psia	
Nitrogen	1.189	1.495		GPM TOTAL C2+
Methane	74.177	53.401		6.645
Carbon Dioxide	1.136	2.244		
Ethane	12.474	16.832	3.331	
Propane	6.567	12.995	1.806	
Iso-Butane	0.876	2.285	0.286	
n-Butane	2.096	5.467	0.660	
Iso-Pentane	0.437	1.415	0.159	
n-Pentane	0.481	1.557	0.174	
i-Hexanes	0.161	0.616	0.065	
n-Hexane	0.099	0.401	0.042	
Benzene	0.019	0.064	0.005	
Cyclohexane	0.059	0.227	0.021	
i-Heptanes	0.101	0.415	0.040	
n-Heptane	0.026	0.119	0.012	
Toluene	0.001	0.002	NIL	
i-Octanes	0.077	0.352	0.034	
n-Octane	0.005	0.026	0.003	
Ethylbenzene	0.001	0.004	NIL	
Xylenes	0.005	0.020	0.002	
i-Nonanes	0.009	0.047	0.004	
n-Nonane	0.002	0.009	0.001	
i-Decanes	NIL	0.002	NIL	
n-Decane	0.001	0.002	NIL	
Undecanes	0.001	0.003	NIL	
Dodecanes	NIL	NIL	NIL	
Tridecanes	NIL	NIL	NIL	
Tetradecanes Plus	NIL	NIL	NIL	
	100.000	100.000	6.645	



Certificate of Analysis

Number: 6030-20110021-001A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

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

Nov. 05, 2020

Field: Mesa Verde
Station Name: Mesa Verde East CGL
Station Number: N/A
Sample Point: Inlet to Dehy
Meter Number:
County: Lea
Type of Sample: Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: Fill and Purge

Sampled By: Scott Beasley
Sample Of: Gas Spot
Sample Date: 10/30/2020 10:00
Sample Conditions: 1290 psig, @ 60 °F
Method: GPA 2286
Cylinder No: 1111-002316
Analyzed: 11/05/2020 14:31:50 by PGS
Sampling Company: OXY

Calculated Physical Properties	Total
Calculated Molecular Weight	22.284

GPA 2172 Calculation:**Calculated Gross BTU per ft³ @ 14.65 psia & 60°F**

Real Gas Dry BTU	1297.8
Water Sat. Gas Base BTU	1275.1
Relative Density Real Gas	0.7722
Compressibility Factor	0.9960

Comments: H2S Field Content 0 ppm

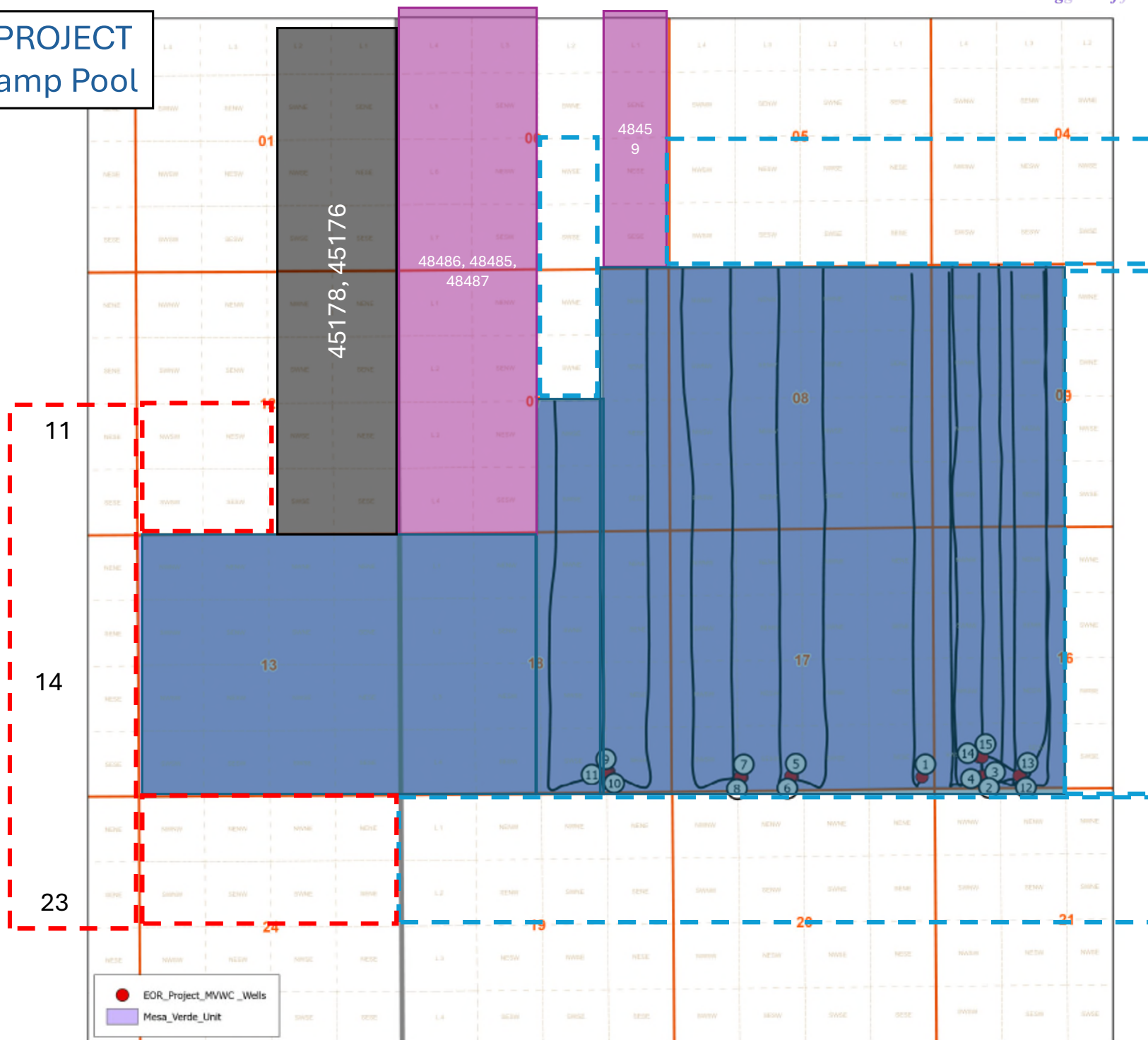
Hydrocarbon Laboratory Manager

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

MESA VERDE EOR PROJECT Notice Map- Wolfcamp Pool

- Key**
- Project Area
 - Oxy IWM HSU
 - Oxy HSU
 - Devon HSU
 - Chevron HSU
 - Determined Lessee or Unleased MIO
 - West side review

— Candidate well



Mesa Verde WC EOR Project- Notice List 2/3/2025

Party	Address
Agencies and Surface Owners	
Bureau of Land Mangment- Carlsbad Field Office	620 E. Greene Street Carlsbad, New Mexico 88220-6292
State Land Office	P.O. Box 1148 Santa Fe, NM 87504
Offset Operators	
BURLINGTON RESOURCES OIL & GAS CO	P.O. Box 51810 Midland, TX 79710
BURLINGTON RESOURCES OIL & GAS COMPANY LP	600 W. Illinois Avenue Midland, TX 79701
COG OPERATING LLC	600 W. Illinois Avenue Midland, TX 79701
COG PRODUCTION, LLC	600 W. Illinois Avenue Midland, TX 79701
DEVON ENERGY PRODUCTION COMPANY, LP	333 West Sheridan Avenue Oklahoma City, OK 73102
DEVON SFS OPERATING INC	20 N. Broadway Suite 1500 Oklahoma City, OK 73102
EOG RESOURCES INC	5509 Champions Drive Midland, TX 79706
EOG Y RESOURCES, INC.	104 S. 4th Street Artesia, NM 88210
HARVARD PETROLEUM COMPANY, LLC	P.O. Box 936 Roswell, NM 88202
NGL WATER SOLUTIONS PERMIAN, LLC	865 North Albion Street Suite 500 Denver, CO 80220
XTO ENERGY, INC	6401 Holiday Hill Road Building #5 Midland, TX 79707
Other Affected Persons and Parties	
28TwentyEight Energy LLC	5790 Saintsbury Drive The Colony, TX 75056
3 Knights Operating LLC	6404 County Road 1440 Lubbock, TX 79407
3XT Holding LLC	5325 County Road 7560 Lubbock, TX 79424

Abo Petroleum	P.O. Box 900 Artesia, NM 88211
Burlington Resources Oil & Gas Company LP	600 W. Illinois Avenue Midland, TX 79701
Burlington Resources Oil & Gas Company LP	P.O. Box 51810 Midland, TX 79710
Chevron USA Inc.	1400 Smith Street Houston, TX 77002
COG Operating LLC	600 W. Illinois Avenue Midland, TX 79701
EOG Resources	1111 Bagby Street Sky Lobby 2 Houston, TX 77002
Hilcorp Energy	1000 Louisiana #3760 Houston, TX 77002
Javelina Partners	616 Texas Street Fort Worth, TX 76102
LMS Limited Liability Company	Box 621402 Littleton, CO 80162
Mersereau Enterprises LLC	132 Castillo Avenue San Antonio, TX 78210
Oxy Y-1 Company	5 Greenway Plaza, Suite 110 Houston, TX 77046
Panada Pipe & Equipment	P.O. Box 3721 Midland, TX 79702
PXP Producing Company LLC	717 Texas Street Suite 2100 Houston, TX 77002
Sabine Oil & Gas Corporation	1415 Louisiana Street Suite 1600 Houston, TX 77002
SMC Oil & Gas Inc.	P.O. Box 50907 Midland, TX 79710
T E F Corporation	P.O. Box 3721 Midland, TX 79702
Tempo Energy Inc.	P.O. Box 1034 Midland, TX 79702
Thomas E. Jennings	P.O. Box 1797 Roswell, NM 88202
Timothy Z. Jennings	P.O. Box 1797 Roswell, NM 88202
Vladin LLC	P.O. Box 100 Artesia, NM 88211
XTO Holdings LLC	22777 Springwoods Village Parkway Spring, TX 77389

Part VIII- Geologic Information for Mesa Verde – Wolfcamp BC

The Mesa Verde “huff and puff” injection program may include injection into lateral wells drilled in the Wolfcamp B and Wolfcamp C zones of the Wolfcamp Formation in later phases of the unconventional enhanced oil recovery projects in the unit. Information on the Wolfcamp BC formations are included below to facilitate future administrative additions to the projects.

Wolfcamp B and C wells have a subsea true vertical depth (SSTVD) of approximately -9250 to -9350 ft. with lateral lengths of approximately 10,000 ft. They would be injecting into a heterolithic reservoir composed of tight siltstone with interbedded calcareous siltstones, argillaceous siltstones, and mudrocks. The reservoir rock has porosity of 2-14% with an average porosity of 7%. Rock matrix permeability measured on whole core and rotary sidewall cores with GRI tests averages 0.00805 millidarcies, ranging from 0.0000238 to 0.01478 millidarcies.

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.

The top of the Wolfcamp measures at 11,882 feet measured depth in the Heavy Metal 14 Federal 1 well (API #30-015-29603). The top of the Bone Spring Formation measures at 8,482 MD depth at the Jack Tank Federal 2 well (API #30-025-32192) in Mesa Verde with a total thickness of 4,300 ft. above the injection zone, with carbonate mudstones and shales acting as permeability baffles to upward migration of injected gas. These low-permeability barriers acted as seals above and below the reservoir to historically trap hydrocarbon 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 3,800 ft. thick. Above that is the Castile Formation consisting of very low permeability anhydrite, gypsum, and calcite that acts as another 1,400 ft. thick barrier to upward movement of fluids. The Salado overlies the Castile and forms a 2,000 ft. thick barrier of salt. The top of the Salado is at 1,285 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 930 ft. The Rustler top is a continuous anhydrite layer that acts as another permeability barrier creating a perched aquifer above it that is the lowest level where fresh water is known in the area. Water wells drilled in the area typically have not reached this depth. 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.

Locate freshwater wells within two miles:

An investigation of existing shallow water wells has found freshwater wells within a two mile radius of Mesa Verde.

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

Stephanie Noonan

Stephanie Noonan
Geologist Staff Sr.

7/21/25

Date

Part VIII- Geologic Information for Mesa Verde Wolfcamp A Lateral Wells:*Table 1. Mesa Verde Wolfcamp A Laterals (8).*

Well Name	API
MESA VERDE WC UNIT 1H ST1	3002544195
MESA VERDE WC UNIT 5H	3002545862
MESA VERDE WC UNIT 6H	3002545863
MESA VERDE WC UNIT 7H	3002545920
MESA VERDE WC UNIT 8H	3002545921
MESA VERDE WC UNIT 9H	3002545871
MESA VERDE WC UNIT 10H	3002545872
MESA VERDE WC UNIT 11H	3002545873

The Mesa Verde Wolfcamp A laterals (Table 1) will be injecting into the Wolfcamp X, Y, A1, A2 subformations, grouped as the “Wolfcamp A,” of the Wolfcamp Formation. These wells have a subsea true vertical depth (SSTVD) of approximately -8,425 to -8,775 ft. with lateral lengths ranging from 7,500 to 10,000 ft. They will be injecting into a heterolithic reservoir mainly composed of tight siltstone with interbedded calcareous siltstones, argillaceous siltstones, and mudrocks. The reservoir rock has porosity of 1-12% with an average porosity of 7%. Rock matrix permeability measured on whole core and rotary sidewall cores with GRI tests averages 0.001 millidarcies, ranging from 0.0000009 to 0.004 millidarcies. Pressure transient analysis indicates a permeability of 0.001 millidarcies.

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.

The top of the Wolfcamp measures at 11,882 feet measured depth in the Heavy Metal 14 Federal 1 well (API #30-015-29603). The top of the Bone Spring Formation measures at 8,482 MD depth at the Jack Tank Federal 2 well (API #30-025-32192) in Mesa Verde with a total thickness of 3,400 ft. above the injection zone, with carbonate mudstones and shales acting as permeability baffles to upward migration of injected gas. These low-permeability barriers acted as seals above and below the reservoir to historically trap hydrocarbon 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 3,800 ft. thick. Above that is the Castile Formation consisting of very low permeability anhydrite, gypsum, and calcite that acts as another 1,400 ft. thick barrier to upward movement of fluids. The Salado overlies the Castile and forms a 2,000 ft. thick barrier of salt. The top of the Salado is at 1,285 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 930 ft. The Rustler top is a continuous anhydrite layer that acts as another permeability barrier creating a perched aquifer above it that is the lowest level where fresh water is known in the area. Water wells drilled in the area typically have not reached this depth. 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.

Locate freshwater wells within two miles:

An investigation of existing shallow wells has found freshwater wells within a two mile radius of Mesa Verde.

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

Stephanie Noonan

Stephanie Noonan
Geologist Staff Sr.

7/21/25

Date

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

**APPLICATION OF OXY USA INC. FOR
APPROVAL OF INJECTION AUTHORITY
FOR THE MESA VERDE WOLFCAMP
RESOURCE DEVELOPMENT UNIT FOR
ENHANCED OIL RECOVERY, EDDY AND
LEA COUNTY, NEW MEXICO.**

CASE NO. 25225

SELF-AFFIRMED STATEMENT OF STEPHEN JANACEK

1. My name is Stephen Janacek, and I am employed by OXY USA Inc. ("OXY") as a petroleum engineer.
2. I have previously testified before the New Mexico Oil Conservation Division as an expert witness in petroleum engineering.
3. I am familiar with the application filed by OXY in this case, and the Division rules regarding enhanced oil recovery projects ("EOR" Project), such as this one. I also prepared or oversaw the preparation of the exhibits included in support of the filed application to OXY's application in this case (*Exhibit A* to the Application).
4. In this case, OXY seeks an order authorizing the injection of water and produced gas¹ for purposes of EOR within the Unitized Interval of the Mesa Verde Wolfcamp Resource Development Unit area. *See* Application. Along with the application filed, OXY submitted a completed Form C-108, including the required attachments. *Id.*

¹ OXY's application initially requested to include carbon dioxide but is currently only seeking to inject water and produced gas.

5. The proposed Project Area is the same as the Mesa Verde Wolfcamp Resource Development Unit area and consists of the following 3,461.80 acres, more or less, of federal and state lands situated in Eddy and Lea County, New Mexico:

TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.

Section 13: ALL

TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.

Section 7: SE/4, E/2 of NE/4

Section 8: ALL

Section 9: W/2

Section 16: W/2

Section 17: ALL

Section 18: ALL

6. The Mesa Verde Wolfcamp Unit (“Unit”) is a Resource Development Unit.

7. Oxy is the designated operator under the Resource Development Unit Agreement.

8. The Unitized Interval for the Unit includes the Wolfcamp formation as identified by the Gamma Ray log run in the Jack Tank 8 Federal 2 well (API: 30-025-32192) located in the SW/4 of NE/4 of Section 8, Township 24 South, Range 32 East, Lea County, New Mexico, with the top of the unitized interval being found at a depth of 11,882 feet below the surface and the base of the unitized interval being found at a depth of 13,400 feet below the surface.

9. A locator map identifying the general location of OXY’s proposed Mesa Verde EOR Project is included in ***Exhibit A*** to the Revised Application, page 12.

10. Due to facility costs and timing associated with implementing this “huff and puff” injection project, Oxy seeks an exception from 19.15.26.12.C NMAC, which requires actual injection to occur within one (1) year of approval. Oxy requests authorization for injection to occur within two (2) years of approval.

11. Pursuant to 19.15.26.8F(5) NMAC, OXY also requests that additional injection wells in the Unit area be approved administratively, subject to the applicable notice requirements.

12. A summary overview of the EOR project is in **Exhibit A** to the Revised Application, page 9.

13. Within the proposed project area, OXY seeks authority to inject produced gas and water for purposes of EOR into the following eight (8)² Bone Spring formation wells, as identified on the project locator map that is included in **Exhibit A** to the Revised Application, pages 11 & 12:

- The **Mesa Verde WC Unit 1H** (API No. 30-025-44195) with a surface hole location 241 feet FSL and 245 feet FEL (Unit P) in Section 17, Township 24 South, Range 32 East, and a bottom hole location 192 feet FNL and 454 feet FEL (Unit A) in Section 8, Township 24 South, Range 32 East, NMPM, Lea, New Mexico;
- The **Mesa Verde WC Unit 2H** (API No. 30-025-46110) with a surface hole location 250 feet FSL and 1,035 feet FWL (Unit M) in Section 16, Township 24 South, Range 32 East, and a bottom hole location 13 feet FNL and 2,245 feet FWL (Unit C) in Section 9, Township 24 South, Range 32 East, NMPM, Lea, New Mexico;
- The **Mesa Verde WC Unit 3H** (API No. 30-025-46111) with a surface hole location 250 feet FSL and 1,000 feet FWL (Unit M) in Section 16, Township 24 South, Range 32 East, and a bottom hole location 17 feet FNL and 1,294 feet FWL (Unit C) in Section 9, Township 24 South, Range 32 East, NMPM, Lea, New Mexico;

² OXY's application initially requested fifteen (15) wells but is currently only seeking to include eight (8) wells as part of the initial phase of the project.

- The **Mesa Verde WC Unit 4H** (API No. 30-025-46112) with a surface hole location 250 feet FSL and 965 feet FWL (Unit M) in Section 16, Township 24 South, Range 32 East, and a bottom hole location 25 feet FNL and 365 feet FWL (Unit D) in Section 9, Township 24 South, Range 32 East, NMPM, Lea, New Mexico;
- The **Mesa Verde WC Unit 5H** (API No. 30-025-45862) with a surface hole location 280 feet FSL and 2,438 feet FWL (Unit N) in Section 17, Township 24 South, Range 32 East, and a bottom hole location 22 feet FNL and 2,223 feet FEL (Unit B) in Section 8, Township 24 South, Range 32 East, NMPM, Lea, New Mexico;
- The **Mesa Verde WC Unit 6H** (API No. 30-025-45863) with a surface hole location 280 feet FSL and 2,401 feet FWL (Unit N) in Section 17, Township 24 South, Range 32 East, and a bottom hole location 37 feet FNL and 2,150 feet FWL (Unit C) in Section 8, Township 24 South, Range 32 East, NMPM, Lea, New Mexico;
- The **Mesa Verde WC Unit 7H** (API No. 30-025-45920) with a surface hole location 280 feet FSL and 1,421 feet FWL (Unit N) in Section 17, Township 24 South, Range 32 East, and a bottom hole location 22 feet FNL and 1,191 feet FWL (Unit D) in Section 8, Township 24 South, Range 32 East, NMPM, Lea, New Mexico; and
- The **Mesa Verde WC Unit 8H** (API No. 30-025-45921) with a surface hole location 280 feet FSL and 1,386 feet FWL (Unit N) in Section 17, Township 24 South, Range 32 East, and a bottom hole location 35 feet FNL and 226 feet FWL

(Unit D) in Section 8, Township 24 South, Range 32 East, NMPM, Lea, New Mexico

See also **Exhibit A** to the Revised Application, pages 14-21.

14. Injection along the horizontal portion of the wellbores will be at the following approximate true vertical depths:

- The **Mesa Verde WC Unit 1H**: between 12,112 feet and 12,057 feet;
- The **Mesa Verde WC Unit 2H**: between 12,153 feet and 12,271 feet;
- The **Mesa Verde WC Unit 3H**: between 12,068 feet and 12,090 feet;
- The **Mesa Verde WC Unit 4H**: between 12,259 feet and 12,224 feet;
- The **Mesa Verde WC Unit 5H**: between 12,161 feet and 12,212 feet;
- The **Mesa Verde WC Unit 6H**: between 11,994 feet and 12,069 feet;
- The **Mesa Verde WC Unit 7H**: between 11,976 feet and 12,208 feet; and
- The **Mesa Verde WC Unit 8H**: between 11,904 feet and 12,016 feet.

See **Exhibit A** to the Revised Application, pages 22-37.

15. Information on the as-drilled wells, including wellbore diagrams, identification and location information, casing and cementing details, tubing details, packers, perforation depths, and formation tops, are shown in tabular format (**Exhibit A** to the Revised Application, at page 39) and in diagram format (See **Exhibit A** to the Revised Application, at pages 22-37).

16. Oxy requests authority to inject water and produced gas within the Unitized Interval at up to the following maximum surface injection pressures in the respective Wolfcamp zones of the Wolfcamp XYA ("WCXYA") and Wolfcamp B/C ("WCB/C"):

	Maximum Surface Injection Pressure (psi)	
Zone	Hydrocarbon Gas	Water

WCXY A	5,700	2,361
WCB/C	6,190	2,570

17. OXY seeks authority to add EOR wells to the proposed project by administrative approval if the well is within the Area of Review (“AOR”) previously completed.

18. OXY seeks authority to inject at the following maximum and average rates:³

Injectant	Maximum Rate	Average Rate
Hydrocarbon Gas	45 MMSCFPD	22 MMSCFPD
Water	6,500 bwpd	5,000 bwpd

19. In addition to *Exhibit A* to the Application, I have also prepared the additional exhibits included with this statement.

20. **OXY Exhibit B-1** is a 2-mile AOR map for the Wolfcamp that shows that the application includes both federal and state lands.

21. A gunbarrel view of the wells in both Mesa Verde Units is included in **OXY Exhibit B-2**.

22. **OXY Exhibit B-3** is a locator map that outlines OXY’s Mesa Verde Unit and identifies the Mesa Verde Central Tank Battery (“CTB”), along with the source gas and water to be used for the EOR Project. Each of OXY’s proposed EOR Project wells are operated by OXY and are permitted for surface commingling under PLC-799. OXY prepared an analysis of the composition of the source gas for injection and a water mixing analysis. See *Exhibit A* to the

³ OXY revised the maximum injection rates for both water and produced gas from its original filing of the application and removed CO2 from the application.

Revised Application, at pages 44-51. H₂S is not found in any of the gas analyses. CO₂ is found in all the analyses at various amounts.

23. **OXY Exhibit B-4** is an overview of OXY's three (3) variance requests for its proposed EOR operations due to the nature of "huff and puff" cycling: (1) OXY requests that injection packers be set at a minimum of 100 feet below the top of the confining interval; (2) OXY proposes installing gas lift mandrels with 10,000 psi check valves in the injection assembly; and (3) OXY proposes treated, dry gas will be present in the annulus between the production casing and injection tubing during injection cycles. OXY Exhibit B-4 also includes a diagram demonstrating OXY's proposed "huff and puff" EOR operations for the project.

24. OXY plans to monitor injection and operational parameters for the EOR 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 maximum surface injection pressure and flow rates. **OXY Exhibit B-5** provides an overview of the EOR Project SCADA System and includes a wellhead diagram. The SCADA components currently in place for gas lift operations will be utilized. Additional SCADA components will be installed on the wellhead similar to OXY's Closed Loop Gas Capture ("CLGC") projects. These additional components are (1) a pressure transducer for the annular space between the surface casing and the intermediate casing, and (2) a pressure transducer for the annular space between the intermediate casing and the production casing. The exhibit also includes OXY's proposed shutdown set points and alarms for its SCADA plan. These are similar to recent CLGC orders. Additionally, OXY will monitor and track various operational parameters at the CTB and EOR compressor.

25. I also conducted an analysis of the half-mile AOR. A map depicting wells and their trajectories within the half-mile area of review are on page 38 of **Exhibit A** to the Revised Application. The map on page 38 of **Exhibit A** to the Revised Application depicts all wells identified with completed laterals all or partially within the half-mile area of review. It assigns a well identification number to each well within the area of review that may be cross referenced in the following well data tabulation chart on pages 39-40 of **Exhibit A** to the Revised Application. The well data tabulation chart provides detailed information for identification, location, drilling, casing, cement, current completion, and current producing pool of each well. Following the data tabulation chart, are wellbore schematics for wells that are plugged and abandoned or temporarily abandoned. See **Exhibit A** to the Application, at 41-42.

26. Additionally, an updated AOR map that also includes all “new” wells in the AOR is on page 38 of **Exhibit A** to the Revised Application. The operators of the new wells received notice of the application.

27. Working with OXY’s in-house land department, I also prepared a list of affected parties required to receive notice of this application. The map on page 52 of **Exhibit A** to the Revised Application depicts the notice map. Pages 53-54 of **Exhibit A** to the Revised Application identifies all leasehold operators and other affected persons within any tract wholly or partially contained within one-half mile of the completed interval of the wellbores for each of the proposed EOR wells entitled to notice in accordance with Division regulations, including the Bureau of Land Management as the surface owner where each EOR well is located.

28. It is my opinion that OXY undertook a good faith effort to locate and identify the correct parties and valid addresses required for notice within the half-mile area of review. To the

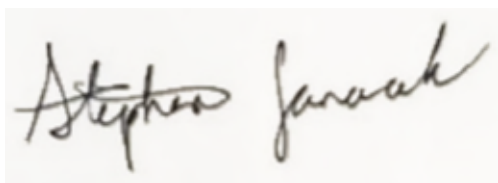
best of my knowledge the addresses used for notice purposes are valid and correct. There were no unlocatable parties for whom we were unable to locate a valid address.

29. I provided the law firm of Holland & Hart LLP a list of names and addresses of the affected parties identified on pages 53-54 of **Exhibit A** to the Revised Application for purposes of providing notice.

30. As reflected in this hearing packet, notice of this application was provided in accordance with 19.15.26.8(B)(2) NMAC. Notice was also published in the Hobbs Daily News.

31. **OXY Exhibit B-1 through B-5** was either prepared by me or compiled under my direction and supervision.

32. I affirm under penalty of perjury under the laws of the State of New Mexico that the foregoing statements are true and correct. I understand that this self-affirmed statement will be used as written testimony in this case. This statement is made on the date next to my signature below.



8/5/2025

Stephen Janacek

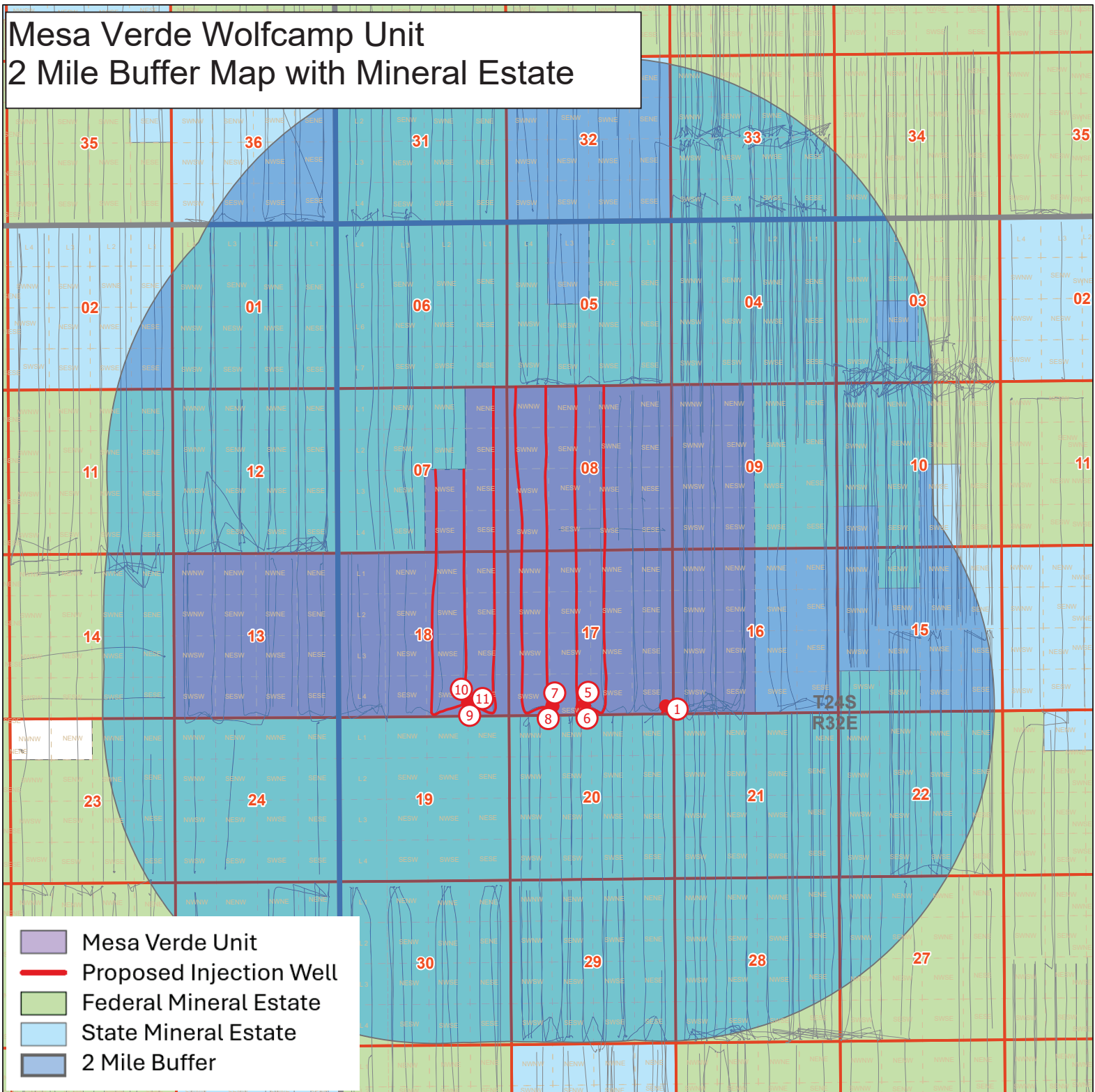
Date



MESA VERDE

REGULATORY

Mesa Verde Wolfcamp Unit 2 Mile Buffer Map with Mineral Estate



BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. B-1

Submitted by: OXY USA INC.

Hearing Date: August 12, 2025

Case No. 25225

Released to Imaging: 8/6/2025 8:58:52 AM



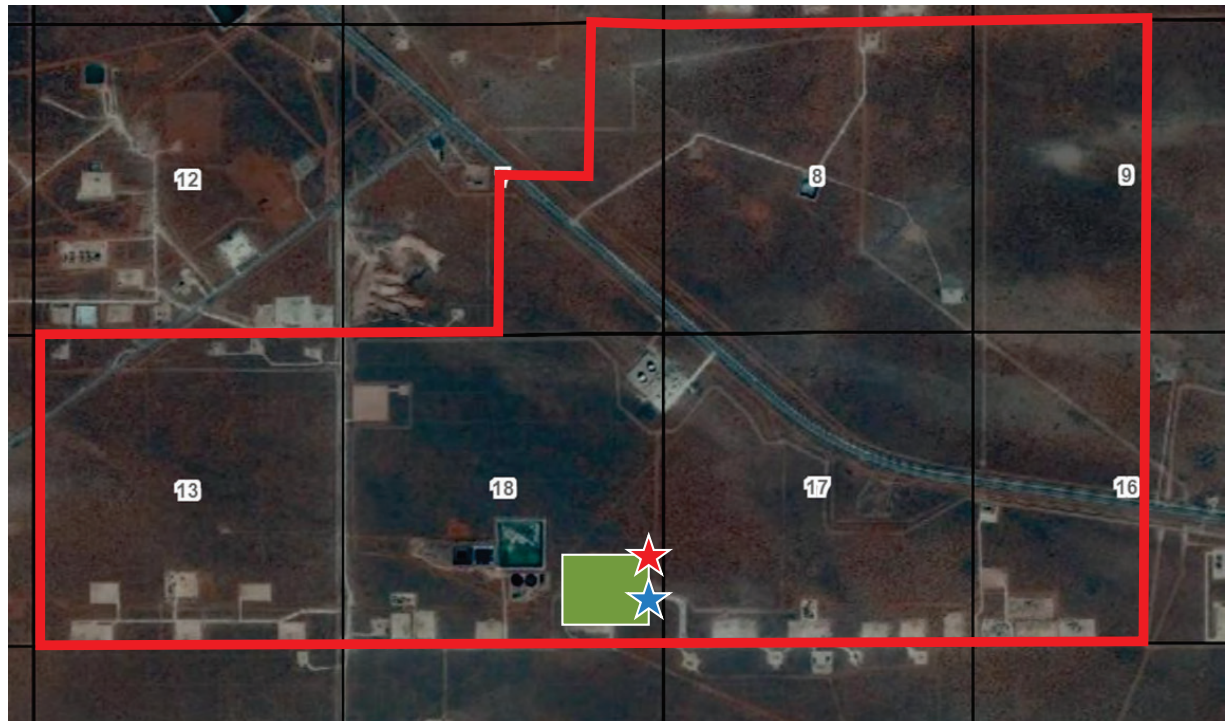
BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. B-2
Submitted by: OXY USA INC.
Hearing Date: August 12, 2025
Case No. 25225

INJECTION FLUIDS AND SOURCES

- All BS and WC Unit wells produce to the Mesa Verde CTB, PLC 799
- Dehydrated Produced Gas
 - ★ From the Mesa Verde CTB
- Treated Water
 - ★ From the Mesa Verde CTB

Key

- Unit Outline
- Mesa Verde CTB
- ★ Gas Source
- ★ Water Source



VARIANCE REQUESTS DURING OPERATIONS

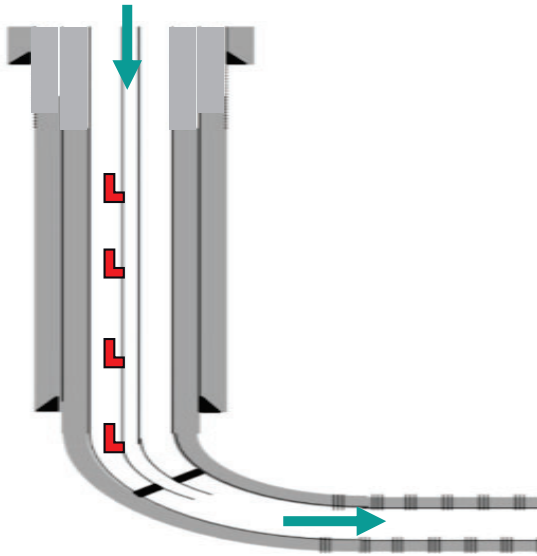
- Variance requests to standard injection requirements:
 1. Injection packers to be set at a minimum of 100 ft below the top of the confining interval.
 2. Install gas lift mandrels with 10,000 psi check valves in injection assembly.
 - If not, production equipment (gas lift valves) would need to be installed before every production cycle to help artificially lift production and reduce the downtime between cycles.
 - Establishing well control by killing the well and performing a workover before every production cycle will negatively impact the EOR recovery.
 - The project will not be economical due to additional operational costs to pull equipment with a workover rig between injection/production cycles.
 3. Packer fluid will be present in the tubing/casing annulus during the initial gas injection cycle. When gas lift operations begin, packer fluid will be displaced from the annulus with dehydrated produced gas. This gas will be present in the annulus after each injection/production cycle.
 - Produced gas has no H₂S content. See gas analysis.
 - Produced gas will be dehydrated.



VARIANCE REQUESTS DURING OPERATIONS- DIAGRAMS

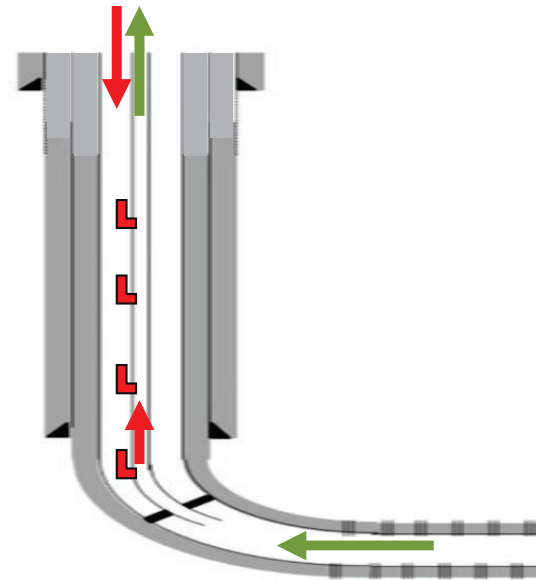
Injection Cycle

- Gas or water injected down tubing.
- Check valves isolate tubing pressure from casing pressure.







Production Cycle

- Gas lift gas injected down casing tubing annulus and through gas lift check valves.
- Producing fluids flow up tubing with gas lift gas.



Key

-  Gas Lift Check Valves
-  EOR Injection Flow
-  Production Flow
-  Gas Lift Flow



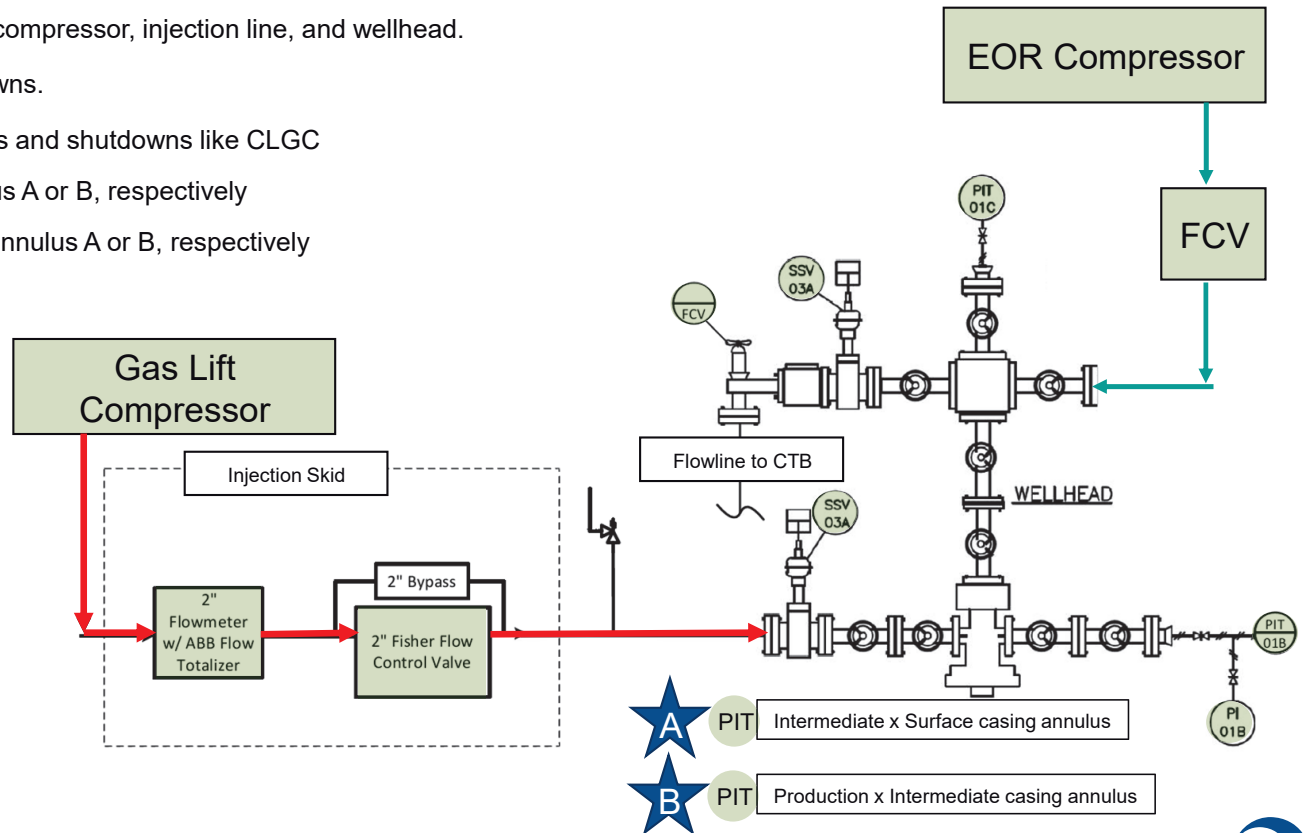
SCADA SYSTEM AND WELLHEAD DIAGRAM

- Upgrade wellheads to 10,000 psi components before injection commences.
- Various components installed at the high-pressure compressor, injection line, and wellhead.
- System will have alarms and high-pressure shutdowns.

- ★ Additional SCADA components installed with alarms and shutdowns like CLGC
 - Alarms- Greater than 50 psi or 100 psi in annulus A or B, respectively
 - Shutdowns- Greater than 200 psi or 500 psi in annulus A or B, respectively

Key

- Connected to SCADA
- ➡ EOR Injection Flow
- ➡ Gas Lift Flow
- FCV Flow Control Valve
- SSV Safety Shutdown Valve
- PIT Pressure Transducer
- PI Pressure Gauge





NM MESA VERDE SCADA PLAN

SCADA Plan

WELLSITE

Oxy USA Inc. (Oxy) will monitor the following items on wellsite via SCADA system:

- Injection flow rate and volume
 - Instantaneous Rate
 - Total Injected by Day (volume)
- Gas Lift 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 injection streams to prevent overpressure (not monitored via SCADA other than pressure trend)
 - Control of injection rate and pressures via control valve
 - 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 the CTB via SCADA system:

- Production Rates
 - Oil
 - Gas
 - Water

HIGH-PRESSOR COMPRESSOR

Oxy will monitor the following items at the High-Pressure Compressor via SCADA system:

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

SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) DETAILS

Oxy SCADA system consists of PLCs at wellsite, CTB, and High-Pressure Compressor.

- The Programmable Logic Controller (PLCs) will act 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.
 - o Additional reclamation will be coordinated to ensure proper recovery of contaminated soil and liquid.

Page 81 of 121

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

APPLICATION OF OXY USA INC. FOR
APPROVAL OF INJECTION AUTHORITY
FOR THE MESA VERDE WOLFCAMP
RESOURCE DEVELOPMENT UNIT FOR
ENHANCED OIL RECOVERY, EDDY AND
LEA COUNTY, NEW MEXICO.

CASE NO. 25225

SELF-AFFIRMED STATEMENT OF LESLIE MULLIN

1. My name is Leslie Mullin, and I am employed by OXY USA Inc. ("OXY") as a land negotiator.

2. I have not previously testified before the New Mexico Oil Conservation Division ("Division") as an expert witness in petroleum land matters. I have included a copy of my resume as **OXY Exhibit C-1** for the Division to review and respectfully request that my credentials be accepted as a matter of record, and that I be tendered as an expert in land matters.

3. I am familiar with the application filed by OXY in this case.

4. In support of preparing the application for filing, I reviewed the title for the subject lands to identify parties entitled to notice.

5. Parties entitled to notice were identified based on a determination of the title of lands and interests as recorded in the records of Eddy and Lea County, as found in the online BLM Mineral & Land Records System, or from a review of New Mexico Oil Conservation Division and Bureau of Land Management ("BLM") operator records as of the time the application was filed or from OXY's internal records (division orders). *See Exhibit A* to the Revised Application, pages 53 and 54.

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. C
Submitted by: OXY USA INC.
Hearing Date: August 12, 2025
Case No. 25225

6. **OXY Exhibit C-2** is a mineral land overview that provides a breakdown of OXY's working interest ownership and/or control in the Mesa Verde Unit ("Unit"), as well as the federal and state interest comprising the Unit. Additionally, Exhibit C-2 outlines communications between OXY and BLM and New Mexico State Land Office ("NMSLO").

7. **OXY Exhibit C-3** is a surface ownership map. The Unit surface ownership is comprised entirely of federal lands.

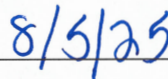
8. **OXY Exhibit C-4** is a mineral ownership map. The Unit mineral ownership is comprised of both state and federal interests.

9. **OXY Exhibit C-1 through C-4** was either prepared by me or compiled under my direction and supervision.

10. I affirm under penalty of perjury under the laws of the State of New Mexico that the foregoing statements are true and correct. I understand that this self-affirmed statement will be used as written testimony in this case. This statement is made on the date next to my signature below.



Leslie Mullin



Date



MESA VERDE

LAND

LESLIE MULLIN CV

- Work Experience
 - Advisor Land Negotiator – Occidental Petroleum – Houston, Texas 4/2024 – Present
 - Senior Landman – Apache Corporation – Houston, Texas 9/2018 – 4/2024
 - Landman II – Apache Corporation – Houston, Texas 7/2016 – 9/2018
 - Landman I – Apache Corporation – Tulsa, Oklahoma 3/2014 – 7/2016
 - Land Analyst – Apache Corporation – Tulsa, Oklahoma 4/2012 – 3/2014
- Education
 - Master of Business Administration – The University of Tulsa – Tulsa, Oklahoma 5/2008
 - Bachelor of Arts – The University of Tulsa – Tulsa, Oklahoma 12/2001
 - Major – Political Science
 - Major – Elementary Education
- Professional Certification
 - Certified Professional Landman – American Association of Professional Landmen 10/2022 – Present
 - Registered Professional Landman – American Association of Professional Landmen 1/2020 – 10/2022

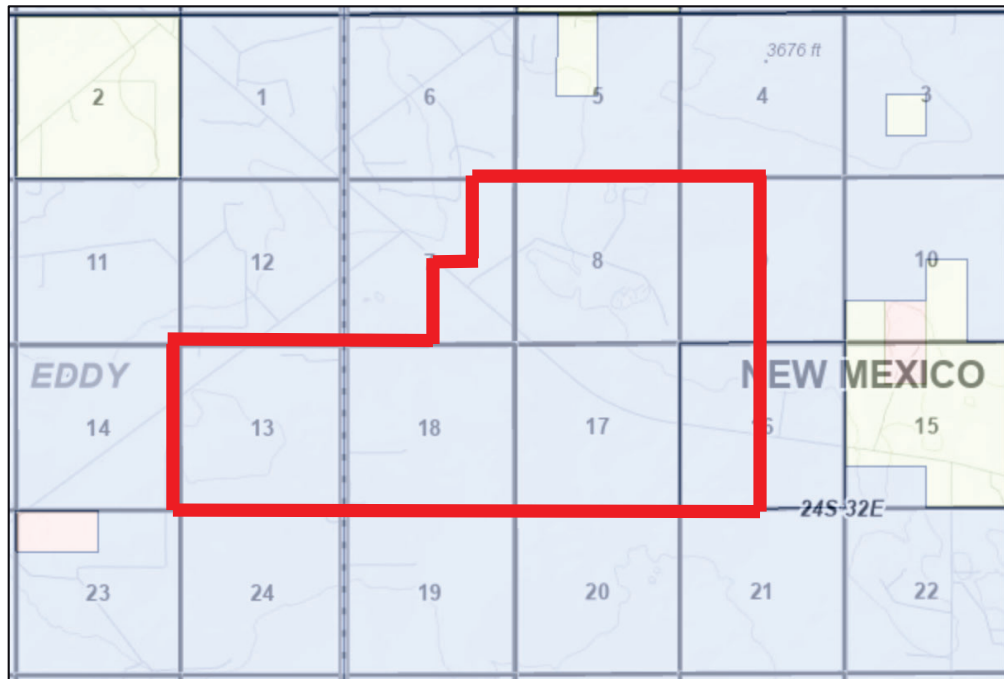


MINERAL LAND OVERVIEW

- BLM Resource Development Units (2017)
 - 1 for Bone Spring and 1 for Wolfcamp
 - Identical Working, Royalty and ORRI Interests
- 3461.8 acres
 - 3141.8 BLM acres (90.76%)
 - 320 SLO acres (9.24%)
- BLM provides approval through annual Plan of Development (POD) process required by Unit Agreements
 - Submitted with 2025 POD Supplements 3/4/2025 to both BLM and NMSLO
 - Informal meetings held with both BLM and NMSLO
- Unit Operating Agreements provide for secondary recovery and pressure maintenance
 - Oxy entities are ~90.07% Working Interest
 - All Working Interest Owners are subject to Operating Agreements



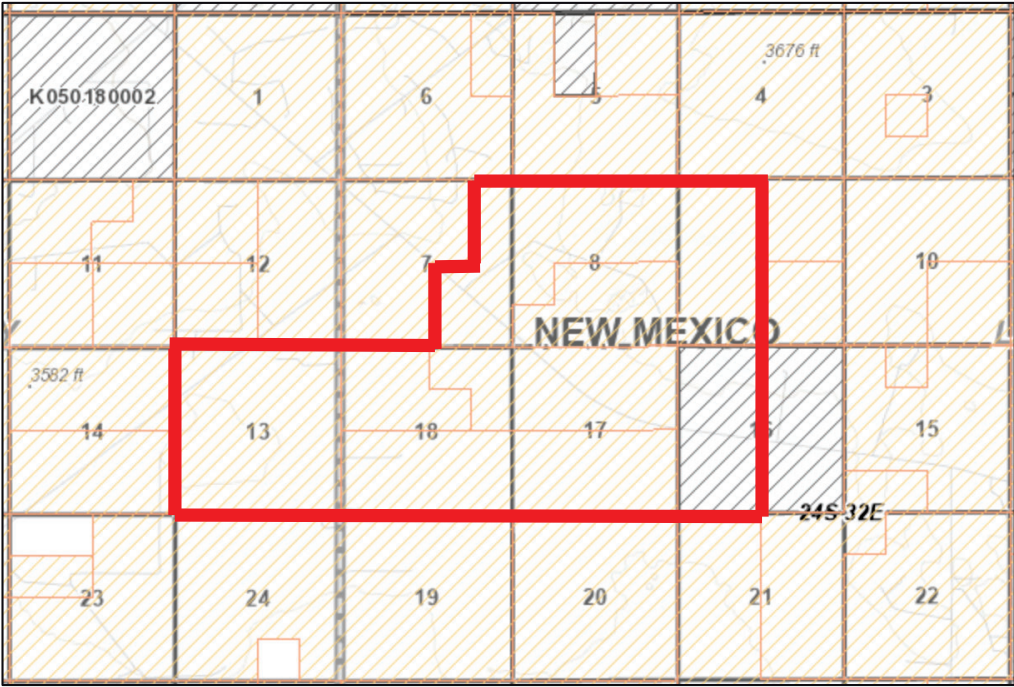
SURFACE OWNERSHIP MAP







- BLM**
- NMSLO**
- Private**
- Mesa Verde Unit Boundary**



MINERAL OWNERSHIP MAP



-  **BLM**
-  **NMSLO**
-  **Private**
-  **Mesa Verde Unit Boundary**



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

**APPLICATION OF OXY USA INC. FOR
APPROVAL OF INJECTION AUTHORITY
FOR THE MESA VERDE WOLFCAMP
RESOURCE DEVELOPMENT UNIT FOR
ENHANCED OIL RECOVERY, EDDY AND
LEA COUNTY, NEW MEXICO.**

CASE NO. 25225

SELF-AFFIRMED STATEMENT OF STEPHANIE NOONAN

1. My name is Stephanie Noonan, and I am employed by OXY USA Inc. ("OXY") as a petroleum geologist.
2. I have previously testified before the New Mexico Oil Conservation Division as an expert witness in petroleum geology.
3. I am familiar with the application filed by OXY in this case.
4. In support of preparing the application for filing, I conducted a geologic review of the subject lands and provided the geologic data on pages 55-58 of *Exhibit A* to the Revised Application.
5. **OXY Exhibit D-1** describes the different confining layers from the top of the Bone Spring formation to the lowest level fresh water source in the area. There is 11,000 feet of subsurface strata between the top of the Wolfcamp formation and the lowest level freshwater source in the area, with at least 3000 feet of impermeable rock layers between the aquifer and the Wolfcamp. The injected gas will be contained laterally by the tight low-permeability reservoir and the production from the adjacent wells. OXY Exhibit D-1 also includes an area type log, which shows the proposed injection zones and confining layers described in the narrative.

**BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. D
Submitted by: OXY USA INC.
Hearing Date: August 12, 2025
Case No. 25225**

6. On the lower left-hand side of **OXY Exhibit D-2** is a line of cross-section through the Mesa Verde Unit from B to B'. I chose the logs from these wells to create the cross-section because they penetrate the targeted injection zones, are of good quality and have been subjected to petrophysical analysis. In my opinion, these well logs are representative of the geology in the subject area. On the right-hand side is a stratigraphic cross-section that I prepared using the logs from the representative wells. Each well on the cross-section contains gamma ray, resistivity, and porosity logs. The target injection zone is indicated by the yellow arrow and the grey shading represents the confining zones.

7. **OXY Exhibit D-3** are two subsea structure maps that I prepared. The map on the left-hand side is prepared from off the top of the Wolfcamp with a contour interval of 50 feet. The map on the right-hand side is prepared from off the base of the Wolfcamp with a contour interval of 50 feet. The structure maps show that the Wolfcamp dips to the east and southeast. Additionally, the structure map on the right-hand side shows a fault that extends above the top of the Wolfcamp. The fault does not extend below the base of the Wolfcamp or above the top of the Bone Spring.

8. **OXY Exhibit D-4** shows a map of the active groundwater wells within a two-mile radius of the project area, along with a list of the wells.

9. **OXY Exhibit D-5** shows a map of the seismic response area in relation to the Mesa Verde Project area.

10. **OXY Exhibit D-1 through D-5** was either prepared by me or compiled under my direction and supervision.

11. I affirm under penalty of perjury under the laws of the State of New Mexico that the foregoing statements are true and correct. I understand that this self-affirmed statement will be

used as written testimony in this case. This statement is made on the date next to my signature below.

Stephanie Noonan

Stephanie Noonan

8/4/25

Date



MESA VERDE

GEOLOGY

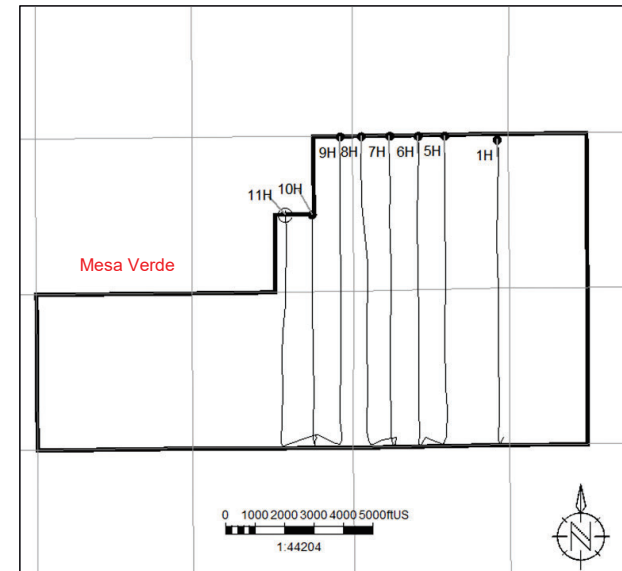
WOLFCAMP UNIT GEOLOGIC STATEMENT

- The Mesa Verde Wolfcamp lateral wells (Table 1) will be injecting into the Wolfcamp X, Wolfcamp Y, Wolfcamp A ("Wolfcamp XYA") formations in the Wolfcamp formation. The Mesa Verde "huff and puff" injection program may include injection into lateral wells drilled in the Wolfcamp B and C in later phases of the unconventional enhanced oil recovery projects.
- The top of the Wolfcamp measures at 11,882 feet (TVD). The top of the Bone Spring Formation is at 8,482 TVD with over 500 ft. of carbonate mudstones and shales above the shallowest injection zone acting as additional permeability barriers to upward migration of injected gas. Carbonates at the base of the 3rd Bone Spring Limestone also form additional permeability barriers to upward migration of gas.
- Above the Wolfcamp is the Delaware Mountain Group, which consists of connate-water bearing and hydrocarbon-bearing sands, with minor limestone and shale intervals and is over 3,800 ft. thick.
- Above that is the Castile Formation consisting of very low permeability anhydrite, gypsum, and calcite that acts as another 1,400 ft. thick barrier to upward movement of fluids.
- The Salado overlies the Castile and forms a 1,000 ft. thick barrier of salt. The top of the Salado is at 877 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 930 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.
- Laterally the injection will be primarily contained by the reservoir volume that has been previously and partially depleted by the producing well. 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.
- There are faults in the area identified in seismic data which show these faults extend to Bone Spring and Wolfcamp but do not extend above the Bone Spring, or to the confining zone at the Ochoan (Rustler, Castille, and Salado Formations), or to the Pennsylvanian or deeper

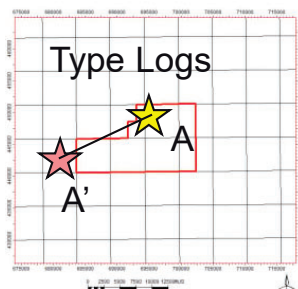
S. Noonan 2/14/25

Table 1 – Wolfcamp Lateral Wells

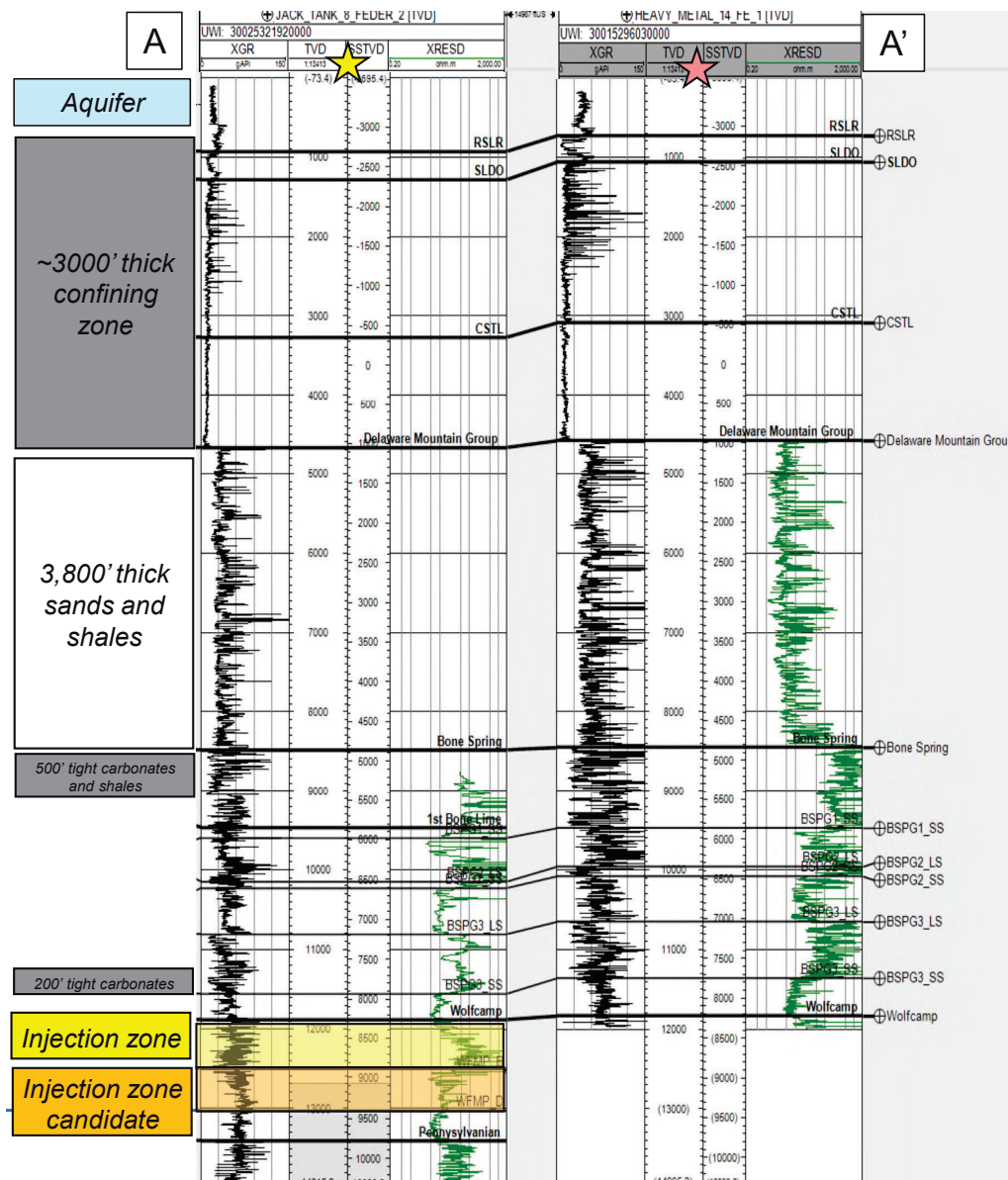
API	WELL_NAME	ZONE
3002544195	MESA VERDE WC UNIT 1H ST1	Wolfcamp XYA
3002545862	MESA VERDE WC UNIT 5H	Wolfcamp XYA
3002545863	MESA VERDE WC UNIT 6H	Wolfcamp XYA
3002545920	MESA VERDE WC UNIT 7H	Wolfcamp XYA
3002545921	MESA VERDE WC UNIT 8H	Wolfcamp XYA
3002545871	MESA VERDE WC UNIT 9H	Wolfcamp XYA
3002545872	MESA VERDE WC UNIT 10H	Wolfcamp XYA
3002545873	MESA VERDE WC UNIT 11H	Wolfcamp XYA



AREA TYPE LOGS – WOLFCAMP



- The top of the Wolfcamp measures at 11,882 feet (TVD). The top of the Bone Spring Formation is at 8,482 (TVD) with over 500 ft. of carbonate mudstones and shales above the shallowest injection zone acting as additional permeability barriers to upward migration of injected gas. Carbonates at the base of the 3rd Bone Spring Limestone also form additional permeability barriers to upward migration of 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 3,800 ft. thick.
- Above that is the Castile Formation consisting of very low permeability anhydrite, gypsum, and calcite that acts as another 1,400 ft. thick barrier to upward movement of fluids.
- The Salado overlies the Castile and forms a 1,000 ft. thick barrier of salt. The top of the Salado is at 1,285 ft. (TVD) and the deep aquifers found just above the Salado at the base of the Rustler are saline water.
- The top of Rustler Formation is at about 930 ft. (TVD) 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.



Ochaon

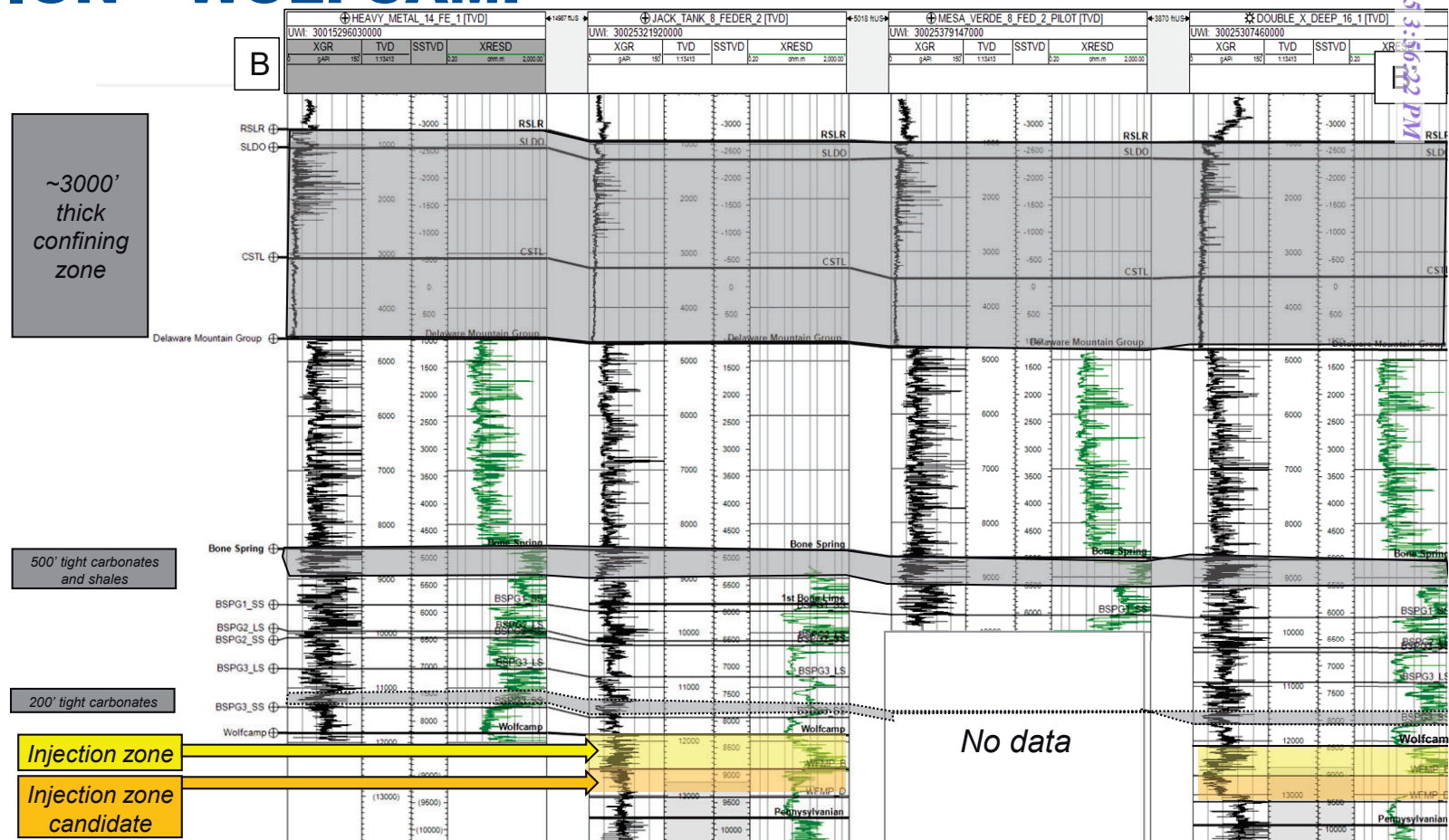
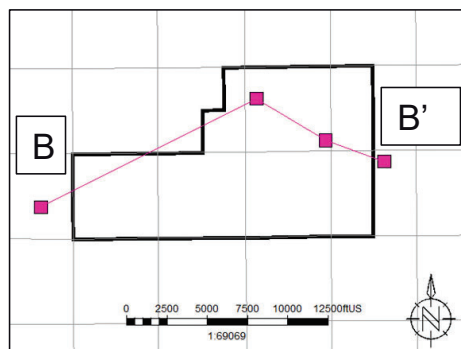
Delaware Mtn
Group

Bone Spring

Wolfcamp

CROSS SECTION – WOLFCAMP UNIT

- Continuous confining zones
- Continuous beds of carbonates and shales above injection zone



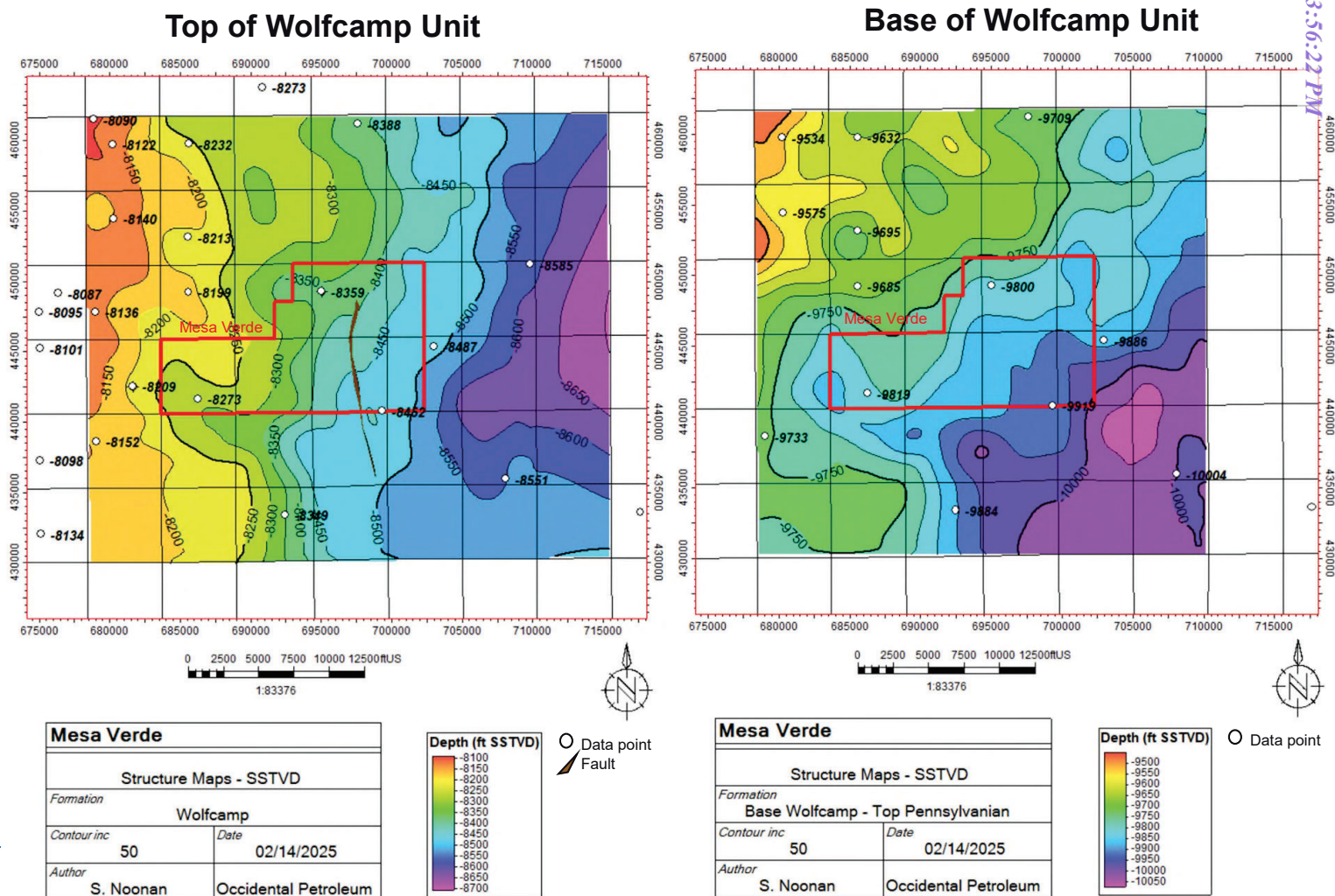
★ Type Log



BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. D-2
Submitted by: OXY USA INC.
Hearing Date: August 12, 2025
Case No. 25225

MESA VERDE WOLFCAMP UNIT STRUCTURE MAPS

- Mesa Verde structure dips to the east and southeast
- Fault identified in seismic data extends above the top of the Wolfcamp but does not extend to base of the unit at the Pennsylvanian



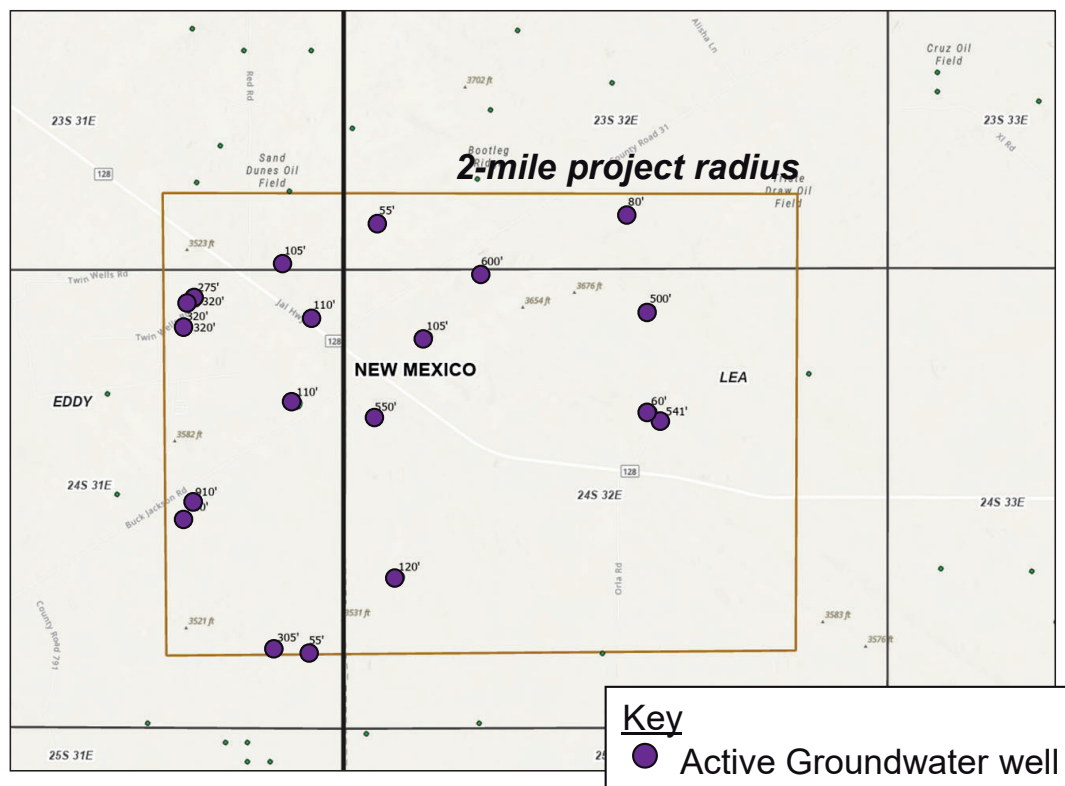
BEFORE THE OIL CONSERVATION DIVISION
 Santa Fe, New Mexico
 Exhibit No. D-3
 Submitted by: OXY USA INC.
 Hearing Date: August 12, 2025
 Case No. 25225

- Active groundwater wells are inside the project area.
- These are shown on map with TD annotated.



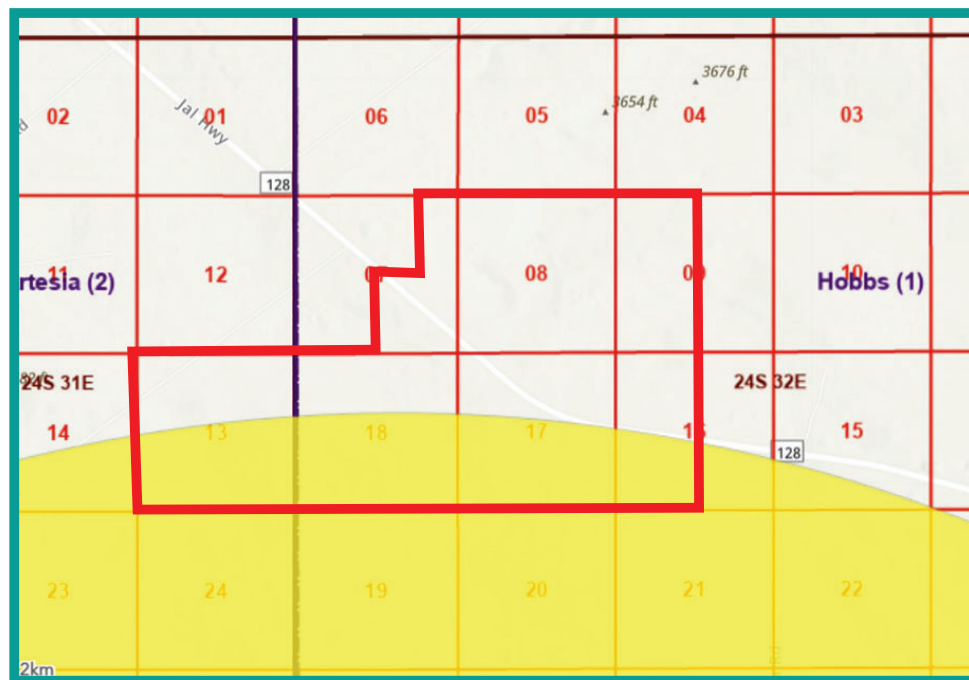
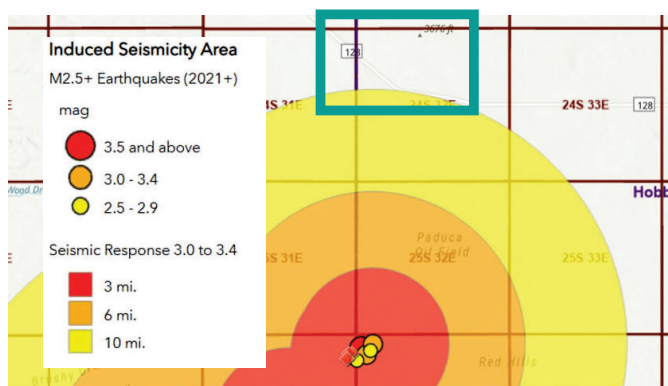
ACTIVE GROUNDWATER WELLS

OBJECTID_1	pod_file	own_lname
74278	C-02405	Texaco Exploration & Prod. Ind
94614	C-02350	Limestone Livestock Llc
180207	C-02460	Sonat Exploration
180208	C-02460-POD2	Sonat Exploration
180210	C-02464	Commissioner Of Public Lands
189629	C-03527-POD1	Mccloy
189630	C-03528-POD1	Ngl North Ranch Llc
190303	C-03530-POD1	Mccloy
195569	C-03555-POD1	Ngl North Ranch Llc
243276	C-04388-POD1	Twin Wells Ranch Llc
252009	C-04576-POD1	Twin Wells Ranch Llc
254828	C-04643-POD1	Valenzuela
255213	C-04654-POD1	Devon Energy
255763	C-04665	Cog Operating Llc
256099	C-04672-POD 1	Ensolum Llc
257098	C-04687-POD1	Oxy Usa Inc
257824	C-04712-POD1	Vertex Resources
259105	C-04746-POD1	Devon Energy Resources
260571	C-04775-POD1	Devon Energy Resources
260750	C-04780-POD1	Eog Resources



SEISMIC RESPONSE AREA

- Seismic response area and Mesa Verde Unit



 Mesa Verde Unit Outlines



BEFORE THE OIL CONSERVATION DIVISION
 Santa Fe, New Mexico
 Exhibit No. D-5
 Submitted by: OXY USA INC.
 Hearing Date: August 12, 2025
 Case No. 25225

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

APPLICATION OF OXY USA INC. FOR
APPROVAL OF INJECTION AUTHORITY
FOR THE MESA VERDE WOLFCAMP
RESOURCE DEVELOPMENT UNIT FOR
ENHANCED OIL RECOVERY, EDDY AND
LEA COUNTY, NEW MEXICO.

CASE NO. 25225

SELF-AFFIRMED STATEMENT OF DANIEL SALAMANDER

1. My name is Daniel Salamander, and I am employed by OXY USA Inc. ("OXY") as a reservoir engineer.

2. I have not previously testified before the New Mexico Oil Conservation Division ("Division") as an expert witness in reservoir engineering matters. I have included a copy of my resume as **OXY Exhibit E-1** for the Division to review and respectfully request that my credentials be accepted as a matter of record, and that I be tendered as an expert in reservoir engineering matters.

3. I am familiar with the application filed by OXY in this case.

4. In support of preparing the application for filing, I conducted an engineering study of the reservoir to evaluate the potential effects of the proposed enhanced oil recovery program ("EOR") on the reservoir and future production.

5. **OXY Exhibit E-2** is an overview of OXY's proposed plans, which also includes a comparison between conventional EOR line drive recovery and OXY's proposed unconventional EOR "huff and puff" plan. OXY Exhibit E-2 also includes a step-by-step description of how OXY plans to carry out its proposed "huff and puff" operations.

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. E
Submitted by: OXY USA INC.
Hearing Date: August 12, 2025
Case No. 25225

6. On the left-hand side of **OXY Exhibit E-3** is a chart showing the cycling plan (6-10 injection cycles) for OXY's proposed "huff and puff" process and the production responses expected during the injection and flowback periods. On the right-hand side is a narrative explaining the cycling plan.

7. **OXY Exhibit E-4** outlines the expected results of OXY's proposed EOR program, which shows that OXY anticipates that the estimated ultimate recovery ("EUR") can be improved by 10%-50% per well. This is based off of OXY's experience conducting similar operations in the Delaware and Midland Basins of Texas.

8. **OXY Exhibit E-5** shows the surface injection pressure limit calculations for both water and gas injection, consistent with the NMOCD UIC Manual Section III.A.2 pressure gradient guidance.

9. **OXY Exhibit E-6** lists OXY's previous unconventional EOR projects in the Permian Basin that are comparable to the proposed project.

10. **OXY Exhibit E-7** discusses the general concepts of gas breakthrough and impacts and also provides an overview of OXY's breakthrough mitigation strategies for the proposed project. Additionally, the exhibit includes a map, which shows the surrounding offset operators and their developments.

11. **OXY Exhibit E-1 through E-7** was either prepared by me or compiled under my direction and supervision.

12. I affirm under penalty of perjury under the laws of the State of New Mexico that the foregoing statements are true and correct. I understand that this self-affirmed statement will be used as written testimony in this case. This statement is made on the date next to my signature below.

Daniel Salamander

Daniel Salamander

8/5/2025

Date



MESA VERDE

RESERVOIR

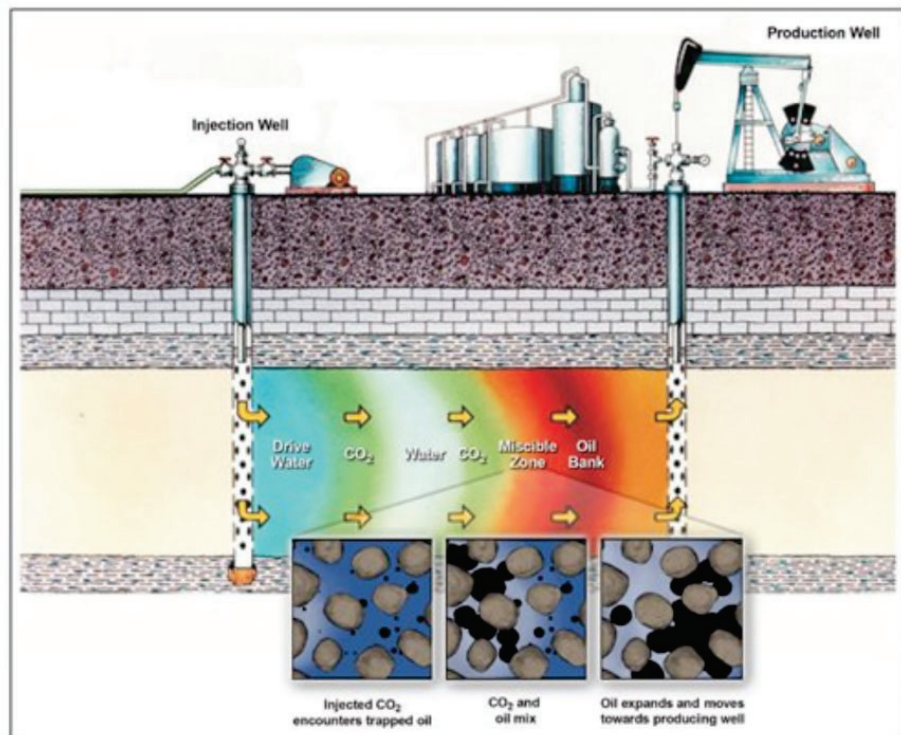
DANIEL SALAMANDER CV

- Work Experience
 - Staff Senior Reservoir Engineer – Occidental Petroleum – Houston, TX 3/2024 - Present
 - Senior Reservoir Engineer – Occidental Petroleum – Houston, TX 7/2022 – 3/2024
 - Senior Reservoir Engineer – Occidental Petroleum – Denver, CO 3/2021 – 7/2022
 - Staff Reservoir Engineer – Occidental Petroleum – Denver, CO 4/2019 – 3/2021
 - Staff Reservoir Engineer – Anadarko Petroleum – Denver, CO 9/2018 – 4/2019
 - Staff Drilling Engineer – Anadarko Petroleum – Denver, CO 4/2017 – 9/2018
 - Drilling Engineer – Anadarko Petroleum – Denver, CO 4/2015 – 4/2017
- Education
 - Bachelor of Science, Petroleum Engineering – University of Oklahoma – Norman, OK 12/2014



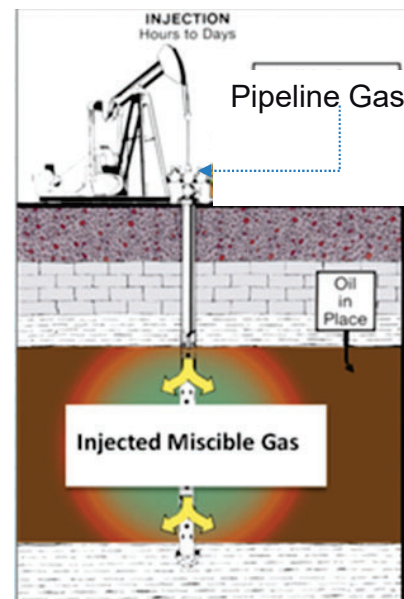
CONVENTIONAL VS. UNCONVENTIONAL EOR PROCESS

**Conventional EOR
Line Drive**

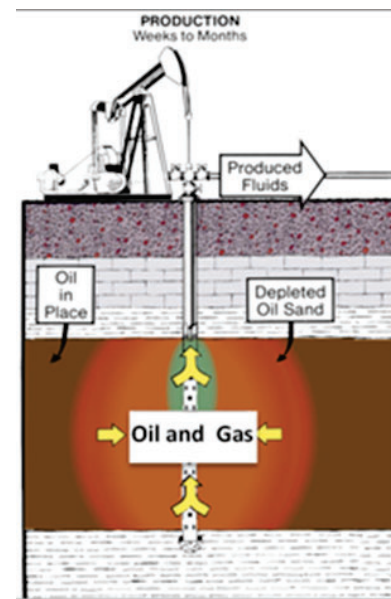


- High Permeability (milliDarcy - Darcy)
- Distinct injectors and producers in a field
- Drive miscible gas/water towards producers, some remains in reservoir
- When a field is converted to EOR, typically it remains that way until the end of well life

**Unconventional EOR
Huff-n-Puff**



**Huff Cycle
(Injection)**



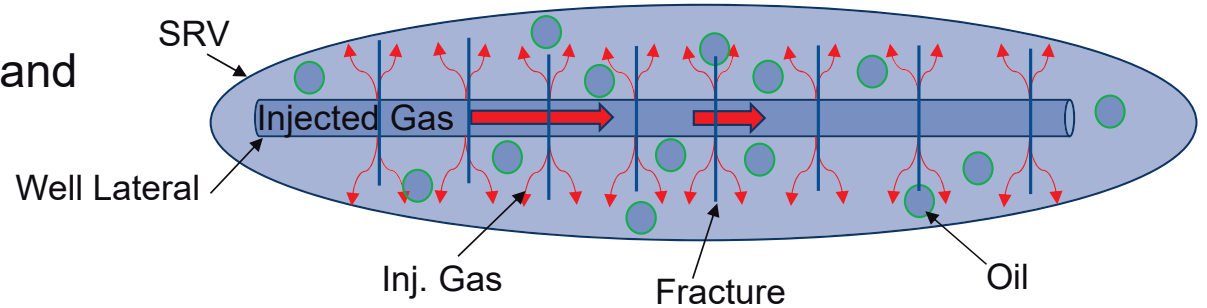
**Puff Cycle
(Flowback)**

- Low Permeability (nanoDarcy – microDarcy)
- All wells are both injectors and producers
- Goal is to keep injected gas near wellbore, injected gas comes back through injection well and offset wells
- 6-10 total injection cycles, followed by production cycles. After injection cycles, well is back on primary production.
 - Could push this to end of well life, but could be mid-life

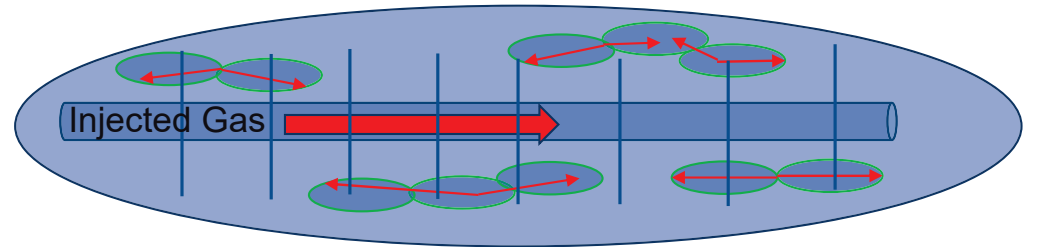


HUFF-N-PUFF MECHANISM FOR HORIZONTAL WELLS

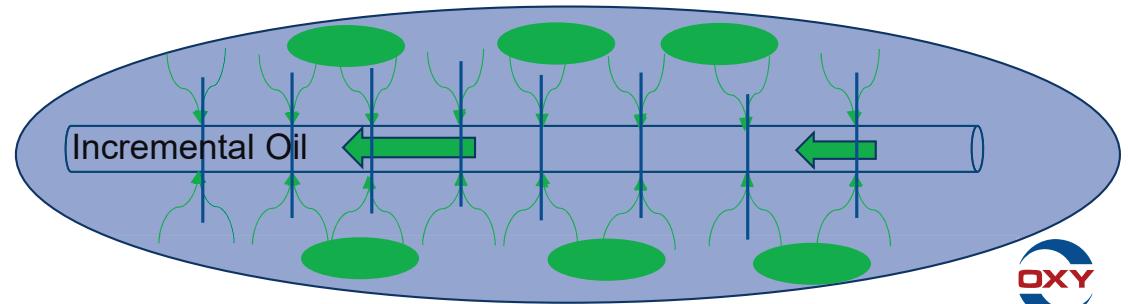
Step 1 : Injected gas enters fractures and pressurizes SRV (Stimulated Rock Volume).



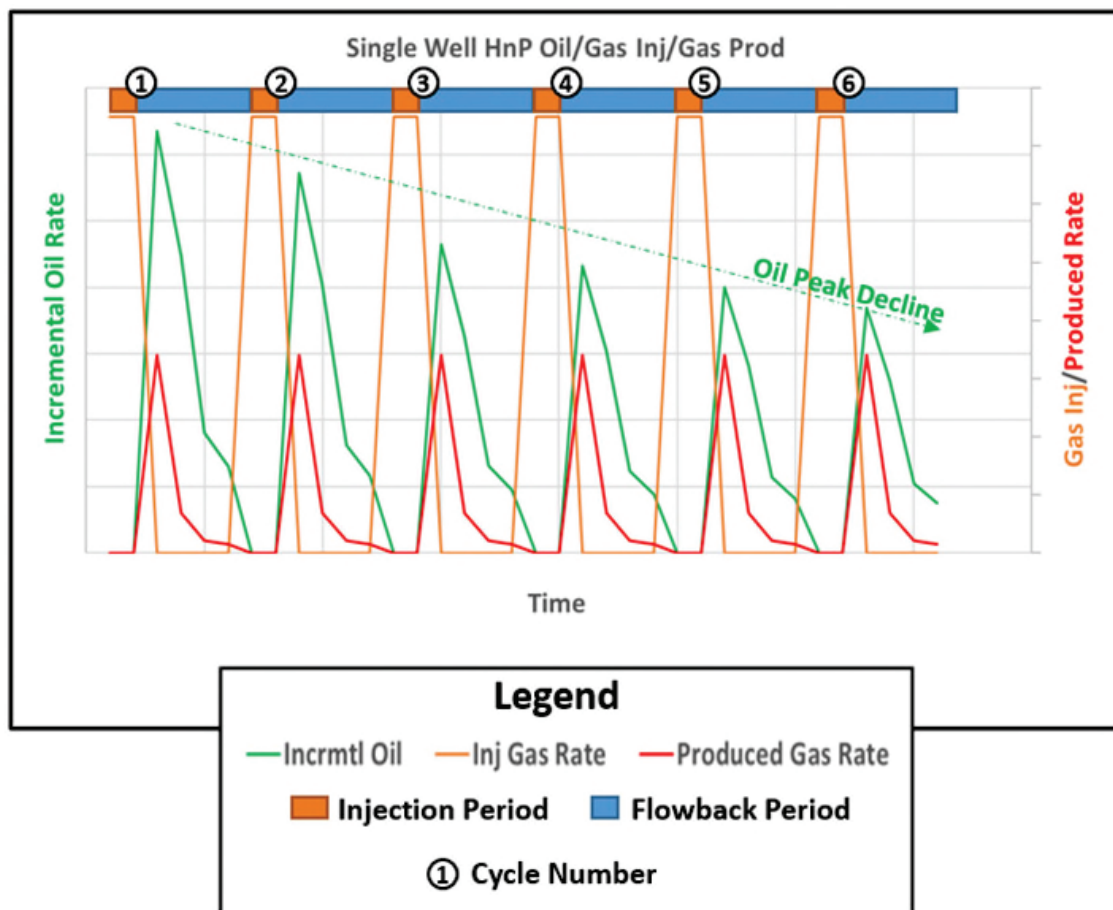
Step 2 : High Pressure creates miscibility and swells oil.



Step 3 : Mobilized Oil is produced in production cycle.



HUFF-N-PUFF CYCLING PLAN



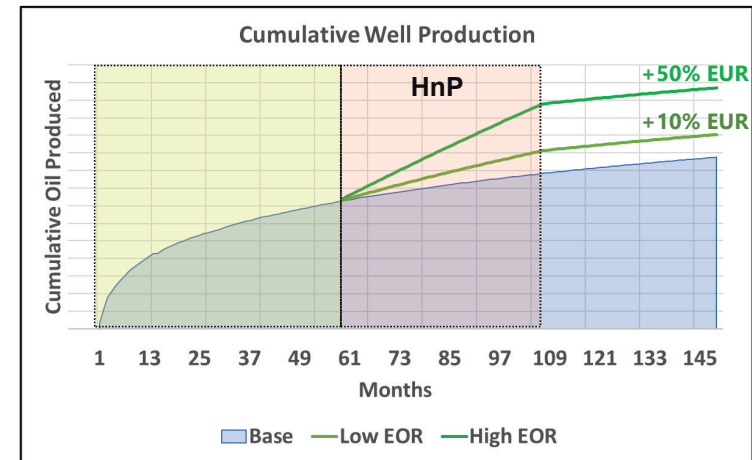
Preliminary Plan:

- Inject Gas into well for injection period (~few weeks to multiple months).
- Short to no soak period (injection period is the soak period)
- Flowback well for period of time (~few weeks to multiple months).
- Targeting 6-10 cycles/well, but can adjust the strategy based on results.
- Simultaneous well injection
- Including water injection as an option for conformance



HUFF-N-PUFF UPLIFT POTENTIAL

- Primary production recovery factor is estimated to be 2-10% of OOIP(Original Oil in Place)
- Estimated Ultimate Recovery(EUR) can be improved by 10%-50+% using miscible hydrocarbon(HC) gas
- Miscible gas HnP has been demonstrated to increase production in unconventional wells in the Delaware and Midland Basins in Texas
- Miscible HC Gas injection has potential in all target benches



- Gas HnP is estimated to last 3 – 6 years of well's life
- Post-HnP well will continue to produce
- HnP not expected to impact well's remaining producing life



CALCULATION FOR SURFACE INJECTION PRESSURE LIMIT WOLFCAMP XYA EXAMPLE

For Water Injection: **2,361 psi**

The calculation for surface pressure limit: $0.2 \text{ (psi/ft)} * 11,806 \text{ (ft TVD to top perforation)} = 2,361 \text{ psi}$

Based on "The permitted injection pressure is limited to 0.2 psi/ft. to the uppermost perforation" (NMOCD UIC Manual Section III.A.2)

For Produced Gas Injection: **5,700 psi**

The calculation procedure is shown below:

1. Based on the surface pressure limit for water and assuming fresh water gradient (0.433 psi/ft). The Bottom Hole Pressure Limit is $2,361 + 0.433 * 11,806 = 7,473 \text{ psi}$ (or 0.633 psi/ft)

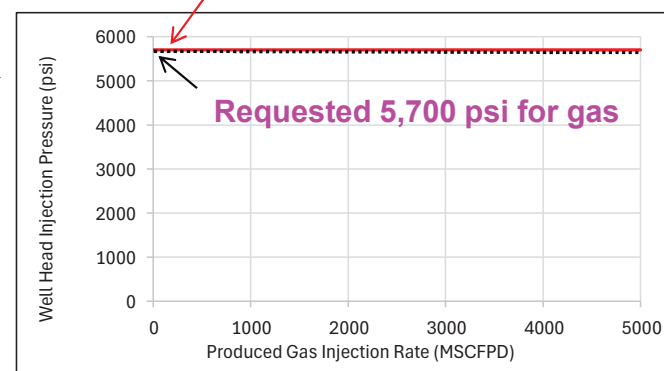
2. The composition of the proposed injection gas is shown in the following table.

Component	Mol (%)
C1	76.1
C2	10.9
C3	5.08
IC4	0.74
NC4	1.7
IC5	0.39
NC5	0.43
C6+	0.44
CO2	2.51
N2	1.71

3. A Petroleum Expert Prosper® Model was used to calculate the surface pressure with 2.875" tubing (2.441" ID), reservoir depth, injection gas composition and the BHP limit calculated in the step 1.

* Prosper Model is industrial standard nodal analysis software for pressure calculation includes phase behavior change, friction loss.

Model Output: Surface Pressure of Gas Injection using 7,473 psi BHP



OXY, PERMIAN BASIN: PAST UNCONVENTIONAL INJECTION PROJECTS

- Previous Projects
 1. Delaware Basin, New Mexico, HC gas
 2. Delaware Basin, Texas, HC gas
 3. Midland Basin, Texas, CO2
- All project incremental oil uplift forecasts are consistent with a range of 10-50%



BREAKTHROUGH MITIGATION STRATEGIES

- Offset Operator Breakthrough is defined by a notable rise in gas or water rates with a drop in oil rate.
- Observed gas communication effects include added gas and sometimes oil and less gas lift needed for liquids lifting
- No reduction in oil rate has been observed
- Management strategies involve maintaining buffer wells, adjusting gas injection, switching injectors, temporary water injection, monitoring surrounding drilling and completion operations, and reviewing gas processing agreements.



**STATE OF NEW MEXICO
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RESOURCE DEVELOPMENT UNIT FOR
ENHANCED OIL RECOVERY, EDDY AND
LEA COUNTY, NEW MEXICO.**

CASE NO. 25225

**SELF-AFFIRMED STATEMENT OF
PAULA M. VANCE**

1. I am attorney in fact and authorized representative of OXY USA Inc. ("Oxy"), the Applicant herein. I have personal knowledge of the matter addressed herein and am competent to provide this self-affirmed statement.

2. The above-referenced application and notice of the hearing on this application was sent by certified mail to the locatable affected parties on the date set forth in the letter attached hereto.

3. The spreadsheet attached hereto contains the names of the parties to whom notice was provided.

4. The spreadsheet attached hereto contains the information provided by the United States Postal Service on the status of the delivery of this notice as of August 5, 2025.

5. I caused a notice to be published to all parties subject to these proceedings. An affidavit of publication from the publication's legal clerk with a copy of the notice of publication is attached herein.

6. I affirm under penalty of perjury under the laws of the State of New Mexico that the foregoing statements are true and correct. I understand that this self-affirmed statement will be used as written testimony in this case. This statement is made on the date next to my signature below.

**BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. F
Submitted by: OXY USA INC.
Hearing Date: August 12, 2025
Case No. 25225**



Paula M. Vance

08/05/2025

Date



Adam G. Rankin
Phone (505) 988-4421
Email agrankin@hollandhart.com

February 21, 2025

VIA CERTIFIED MAIL
CERTIFIED RECEIPT REQUESTED

TO: ALL AFFECTED PARTIES

Re: Application of Oxy USA Inc. for Approval of Injection Authority for the Mesa Verde Wolfcamp Resource Development Unit for Enhanced Oil Recovery, Eddy and Lea Counties, New Mexico.

Ladies & Gentlemen:

This letter is to advise you that OXY USA Inc. has filed the enclosed application with the New Mexico Oil Conservation Division. A hearing has been requested before a Division Examiner on March 13, 2025, and the status of the hearing can be monitored through the Division's website at <https://www.emnrd.nm.gov/ocd/>.

It is anticipated that hearings will be held in a hybrid format with both in-person and virtual participation options. The meeting will be held in the Pecos Hall Hearing Room at the Wendall Chino Building, 1st Floor, 1220 South St. Francis Dr., Santa Fe, New Mexico. To participate virtually in the hearing, see the instructions posted on the OCD Hearings website: <https://www.emnrd.nm.gov/ocd/hearing-info/>.

You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date. Parties appearing in cases are required to file a Pre-hearing Statement four business days in advance of a scheduled hearing that complies with the provisions of NMAC 19.15.4.13.B.

If you have any questions about this matter, please contact Leslie Mullin at (713) 627-6880, or Leslie_Mullin@oxy.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "A. Rankin", with a stylized flourish at the end.

Adam G. Rankin
ATTORNEY FOR OXY USA INC.

T 505.988.4421 F 505.983.6043
110 North Guadalupe, Suite 1, Santa Fe, NM 87501-1849
Mail to: P.O. Box 2208, Santa Fe, NM 87504-2208
www.hollandhart.com

Alaska
Colorado
Idaho

Montana
Nevada
New Mexico

Utah
Washington, D.C.
Wyoming

OXY - Mesa Verde EOR BS and WC Wells - Case nos. 25222 and 25225
Postal Delivery Report

9402811898765456363937	28TwentyEight Energy LLC	5790 Saintsbury Dr	The Colony	TX	75056-5397	Your package will arrive later than expected, but is still on its way. It is currently in transit to the next facility.
9402811898765456363975	3 Knights Operating LLC	6404 County Road 1440	Lubbock	TX	79407-1106	Your item was returned to the sender on February 27, 2025 at 11:28 am in SANTA FE, NM 87501 because it could not be delivered as addressed.
9402811898765456363616	3XT Holding LLC	5325 County Road 7560	Lubbock	TX	79424-6575	Your item has been delivered to the original sender at 12:21 pm on March 19, 2025 in SANTA FE, NM 87504.
9402811898765456363654	Abo Petroleum	PO Box 900	Artesia	NM	88211-0900	Your item has been delivered and is available at a PO Box at 7:57 am on February 26, 2025 in ARTESIA, NM 88210.
9402811898765456363623	Bettis Brothers Inc.	500 W Texas Ave Ste 830	Midland	TX	79701-4276	Your item was delivered to an individual at the address at 2:39 pm on February 25, 2025 in MIDLAND, TX 79701.
9402811898765456363692	Bulington Resources Oil & Gas Company LP	600 W Illinois Ave	Midland	TX	79701-4882	Your item was picked up at a postal facility at 7:53 am on February 26, 2025 in MIDLAND, TX 79701.
9402811898765456363630	Bureau of Land Mangment- Carlsbad Field Office	620 E Greene St	Carlsbad	NM	88220-6292	Your item was delivered to the front desk, reception area, or mail room at 11:21 am on February 26, 2025 in CARLSBAD, NM 88220.
9402811898765456363111	Burlington Resources Oil & Gas CO	PO Box 51810	Midland	TX	79710-1810	This is a reminder to pick up your item before March 11, 2025 or your item will be returned on March 12, 2025. Please pick up the item at the MIDLAND, TX 79710 Post Office.
9402811898765456363128	Burlington Resources Oil & Gas Company LP	600 W Illinois Ave	Midland	TX	79701-4882	Your item was picked up at a postal facility at 7:53 am on February 26, 2025 in MIDLAND, TX 79701.

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9402811898765456363142	Burlington Resources Oil & Gas Company LP	PO Box 51810	Midland	TX	79710-1810	This is a reminder to pick up your item before March 11, 2025 or your item will be returned on March 12, 2025. Please pick up the item at the MIDLAND, TX 79710 Post Office.
9402811898765456363173	Chevron U S A Inc.	6301 Deauville Attn Land Dept	Midland	TX	79706-2964	Your item was delivered to an individual at the address at 12:12 pm on February 25, 2025 in MIDLAND, TX 79706.
9402811898765456363357	Chevron USA Inc.	1400 Smith St	Houston	TX	77002-7311	Your item has been delivered to an agent. The item was picked up at USPS at 1:51 pm on February 24, 2025 in HOUSTON, TX 77002.
9402811898765456363302	COG Operating LLC	600 W Illinois Ave	Midland	TX	79701-4882	Your item was picked up at a postal facility at 7:54 am on February 26, 2025 in MIDLAND, TX 79701.
9402811898765456363340	COG Production, LLC	600 W Illinois Ave	Midland	TX	79701-4882	Your item was picked up at a postal facility at 7:53 am on February 26, 2025 in MIDLAND, TX 79701.
9402811898765456363371	Devon Energy Production Company, LP	333 W Sheridan Ave	Oklahoma City	OK	73102-5010	Your item was picked up at a postal facility at 7:21 am on February 24, 2025 in OKLAHOMA CITY, OK 73102.
9402811898765456363029	Devon SFS Operating Inc	20 N Broadway Ste 1500	Oklahoma City	OK	73102-9213	Your item has been delivered to the original sender at 11:39 am on March 4, 2025 in SANTA FE, NM 87501.
9402811898765456363098	EOG Resources	1111 Bagby St Lbby 2	Houston	TX	77002-2589	Your item has been delivered to an agent. The item was picked up at USPS at 1:54 pm on February 24, 2025 in HOUSTON, TX 77002.
9402811898765456363081	EOG Resources Inc.	5509 Champions Dr	Midland	TX	79706-2843	Your item has been delivered to an agent. The item was picked up at USPS at 8:23 am on February 26, 2025 in MIDLAND, TX 79706.
9402811898765456363074	EOG Y Resources Inc.	104 S 4th St	Artesia	NM	88210-2123	Your item has been delivered to the original sender at 2:21 pm on March 27, 2025 in SANTA FE, NM 87501.

OXY - Mesa Verde EOR BS and WC Wells - Case nos. 25222 and 25225
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9402811898765456363456	EP Energy E&P Company LP	6333 N State Highway 161 Ste 500	Irving	TX	75038-2282	Your item was delivered to the front desk, reception area, or mail room at 10:15 am on February 24, 2025 in IRVING, TX 75038.
9402811898765456363463	Harvard Petroleum Company, LLC	PO Box 936	Roswell	NM	88202-0936	Your item was picked up at the post office at 10:36 am on February 26, 2025 in ROSWELL, NM 88201.
9402811898765456363449	Hilcorp Energy	1000 Louisiana St Ste 3760	Houston	TX	77002-5008	Your item is being processed at our USPS facility in HOUSTON, TX 77002 on March 5, 2025 at 9:26 am.
9402811898765456363432	Javelina Partners	616 Texas St	Fort Worth	TX	76102-4612	Your item was delivered to the front desk, reception area, or mail room at 1:28 pm on February 25, 2025 in FORT WORTH, TX 76102.
9402811898765456363555	LMS Limited Liability Company	PO Box 621402	Littleton	CO	80162-1402	We were unable to deliver your package at 9:58 am on February 24, 2025 in SANTA FE, NM 87501 because the business was closed. We will redeliver on the next business day. No action needed.
9402811898765456363524	McLeod Holdings LLLP	600 N Grant St Ste 850	Denver	CO	80203-3527	Your item was delivered to an individual at the address at 9:37 am on February 22, 2025 in DENVER, CO 80203.
9402811898765456363593	Merit Energy Partners	13727 Noel Rd Ste 500	Dallas	TX	75240-7312	Your item was delivered to an individual at the address at 10:57 am on February 25, 2025 in DALLAS, TX 75240.
9402811898765456363586	Merit Energy Partners II, LP	13727 Noel Rd Ste 500	Dallas	TX	75240-7312	Your item was delivered to the front desk, reception area, or mail room at 10:27 am on February 25, 2025 in DALLAS, TX 75254.
9402811898765456363579	Merit Energy Partners III, LP	13727 Noel Rd Ste 500	Dallas	TX	75240-7312	Your item was delivered to an individual at the address at 10:57 am on February 25, 2025 in DALLAS, TX 75240.
9402811898765456364255	Merit Energy Partners IV, LP	13727 Noel Rd Ste 500	Dallas	TX	75240-7312	Your item was delivered to an individual at the address at 10:57 am on February 25, 2025 in DALLAS, TX 75240.

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9402811898765456364224	Mersereau Enterprises LLC	132 Castillo Ave	San Antonio	TX	78210-2810	Your item is being processed at our USPS facility in SANTA FE, NM 87501 on March 8, 2025 at 5:00 am.
9402811898765456364293	Mesquite SWD, Inc	PO Box 1479	Carlsbad	NM	88221-1479	Your item was picked up at the post office at 1:20 pm on February 27, 2025 in CARLSBAD, NM 88220.
9402811898765456364286	NGL Water Solutions Permian, LLC	865 Albion St Ste 500	Denver	CO	80220-4809	This is a reminder to arrange for redelivery of your item or your item will be returned to sender.
9402811898765456364859	Oxy Y-1 Company	5 Greenway Plz Ste 110	Houston	TX	77046-0521	Your item has been delivered to an agent at the front desk, reception, or mail room at 12:07 pm on February 24, 2025 in HOUSTON, TX 77046.
9402811898765456364828	Panada Pipe & Equipment	PO Box 3721	Midland	TX	79702-3721	Your item was picked up at the post office at 1:33 pm on March 7, 2025 in MIDLAND, TX 79701.
9402811898765456364897	PXP Producing Company LLC	717 Texas St Ste 2100	Houston	TX	77002-2753	Your item was picked up at a postal facility at 10:02 pm on March 10, 2025 in SANTA FE, NM 87501.
9402811898765456364835	Sabine Oil & Gas Corporation	1415 Louisiana St Ste 1600	Houston	TX	77002-7490	Your item was delivered to an individual at the address at 2:35 pm on February 24, 2025 in HOUSTON, TX 77002.
9402811898765456364712	SMC Oil & Gas Inc.	PO Box 50907	Midland	TX	79710-0907	Your item has been delivered and is available at a PO Box at 6:57 am on February 25, 2025 in MIDLAND, TX 79705.
9402811898765456364767	New Mexico State Land Office	PO Box 1148	Santa Fe	NM	87504-1148	Your item was picked up at a postal facility at 7:44 am on February 25, 2025 in SANTA FE, NM 87501.
9402811898765456364705	T E F Corporation	PO Box 3721	Midland	TX	79702-3721	Your item was picked up at the post office at 1:33 pm on March 7, 2025 in MIDLAND, TX 79701.
9402811898765456364743	Tap Rock Operating, LLC	523 Park Point Dr Ste 200	Golden	CO	80401-9387	Your item was delivered to an individual at the address at 11:03 am on February 24, 2025 in GOLDEN, CO 80401.

OXY - Mesa Verde EOR BS and WC Wells - Case nos. 25222 and 25225
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9402811898765456364736	Tempo Energy Inc.	PO Box 1034	Midland	TX	79702-1034	This is a reminder to pick up your item before March 20, 2025 or your item will be returned on March 21, 2025. Please pick up the item at the MIDLAND, TX 79702 Post Office.
9402811898765456364910	Thomas E. Jennings	PO Box 1797	Roswell	NM	88202-1797	Your item was picked up at the post office at 10:30 am on February 26, 2025 in ROSWELL, NM 88201.
9402811898765456364965	Timothy Z. Jennings	PO Box 1797	Roswell	NM	88202-1797	Your item was picked up at the post office at 10:30 am on February 26, 2025 in ROSWELL, NM 88201.
9402811898765456364903	Vladin LLC	PO Box 100	Artesia	NM	88211-0100	Your item has been delivered and is available at a PO Box at 7:57 am on February 26, 2025 in ARTESIA, NM 88210.
9402811898765456364941	XTO Energy, Inc.	6401 Holiday Hill Rd Bldg 5	Midland	TX	79707-2157	Your item was delivered to the front desk, reception area, or mail room at 10:20 am on February 25, 2025 in MIDLAND, TX 79707.
9402811898765456364613	XTO Holdings LLC	22777 Springwoods Village Pkwy	Spring	TX	77389-1425	Your item was delivered to an individual at the address at 11:26 am on February 24, 2025 in SPRING, TX 77389.

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

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

Beginning with the issue dated
February 26, 2025
and ending with the issue dated
February 26, 2025.



Publisher

Sworn and subscribed to before me this
26th day of February 2025.



Business Manager

My commission expires

January 29, 2027
STATE OF NEW MEXICO
(Seal) NOTARY PUBLIC
GUSSIE RUTH BLACK
COMMISSION # 1087526
COMMISSION EXPIRES 01/29/2027

LEGAL

LEGAL

LEGAL

LEGAL

LEGAL NOTICE
February 26, 2025

Case No. 25225: Application of Oxy USA Inc. for Approval of Injection Authority for the Mesa Verde Wolfcamp Resource Development Unit for Enhanced Oil Recovery, Eddy and Lea Counties, New Mexico. Notice to all affected interest owners, including all heirs, devisees and successors of: 28TwentyEight Energy LLC; 3 Knights Operating LLC; 3XT Holding LLC; Abo Petroleum; Bettis Brothers Inc.; Burlington Resources Oil & Gas Company LP; Bureau of Land Management - Carlsbad Field Office; Burlington Resources Oil & Gas CO; Burlington Resources Oil & Gas Company LP; Burlington Resources Oil & Gas Company LP; Chevron USA Inc.; COG Operating LLC; COG Production, LLC; Devon Energy Production Company, LP; Devon SFS Operating Inc.; EOG Resources; EOG Resources Inc.; EOG Y Resources Inc.; EP Energy E&P Company LP; Harvard Petroleum Company, LLC; Hilcorp Energy; Javelina Partners; LMS Limited Liability Company; McLeod Holdings LLLP; Merit Energy Partners; Merit Energy Partners II, LP; Merit Energy Partners III, LP; Merit Energy Partners IV, LP; Mersereau Enterprises LLC; Mesquite SWD, Inc.; NGL Water Solutions Permian, LLC; Oxy Y-1 Company; Panada Pipe & Equipment; PXP Producing Company LLC; Sabine Oil & Gas Corporation; SMC Oil & Gas Inc.; New Mexico State Land Office; T E F Corporation; Tap Rock Operating, LLC; Tempo Energy Inc.; Thomas E. Jennings; Timothy Z. Jennings; Vladin LLC; XTO Energy, Inc.; XTO Holdings LLC. The State of New Mexico, Energy Minerals and Natural Resources Department, Oil Conservation Division ("Division") hereby gives notice that the Division will hold public hearing 8:30 a.m. on March 13, 2025, to consider this application. The hearing will be conducted in a hybrid fashion, both in-person at the Energy, Minerals, Natural Resources Department, Wendell Chino Building, Pecos Hall, 1220 South St. Francis Drive, 1st Floor, Santa Fe, NM 87505 and via the WebEx virtual meeting platform. To participate in the hearings electronically, see the instructions posted on the docket for the hearing date: <https://www.emnrd.nm.gov/ocd/hearing-info/> or contact Freya Tschantz, at Freya.Tschantz@emnrd.nm.gov. Applicant seeks an order authorizing the injection of water, produced gas and carbon dioxide for purposes of enhanced oil recovery ("EOR") within the Unitized Interval of the Mesa Verde Wolfcamp Resource Development Unit area. The Project Area is comprised of the following federal and state lands in Eddy and Lea County, New Mexico:

TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.

Section 13: ALL

TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.

Section 7: SE/4, E/2 of NE/4

Section 8: ALL

Section 9: W/2

Section 16: W/2

Section 17: ALL

Section 18: ALL

The unitized interval consists of the Wolfcamp formation as identified by the Gamma Ray log run in the Jack Tank-8 Federal 2 well (API: 30-025-32192) located in the SW/4 of NE/4 of Section 8, Township 24 South, Range 32 East, Lea County, New Mexico, with the top of the unitized interval being found at a depth of 11,882 feet below the surface and the base of the unitized interval being found at a depth of 13,400 feet below the surface. The Unit has twenty-one (21) active horizontal wells completed in the Wolfcamp formation. Oxy seeks to convert fifteen (15) of these producing horizontal wells into injection wells to implement a "huff and puff" enhanced oil recovery project. Oxy requests authorization for injection to occur within two (2) years of approval. Oxy requests authority to inject produced gas, water, and carbon dioxide within the Unitized Interval up to the following maximum surface injection pressures in the respective Wolfcamp zones of the Wolfcamp XYA ("WCXYA") and Wolfcamp B/C ("WCB/C"):

Zone	Maximum Surface Injection Pressure (psi)		
	Hydrocarbon Gas	Water	CO2
WCXYA	5,700	2,361	3,080
WCB/C	6,190	2,570	3,340

Oxy seeks authority to inject at the following maximum and average rates:

Injectant	Maximum Rate	Average Rate
Hydrocarbon Gas	50 MMSCFPD	22 MMSCFPD
Water	10,000 bwpd	5,000 bwpd
CO2	50 MMSCFPD	22 MMSCFPD

The Mesa Verde Wolfcamp Resource Development Unit is approximately 5 miles west of Jal, New Mexico.
#00298572

67100754

00298572

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

HOLLAND & HART LLC
110 N GUADALUPE ST., STE. 1
SANTA FE, NM 87501

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. G

Submitted by: OXY USA INC.

Hearing Date: August 12, 2025

Case No. 25225

AFFIDAVIT OF PUBLICATION

CARLSBAD CURRENT-ARGUS
PO BOX 507
HUTCHINSON, KS 67504-0507

STATE OF NEW MEXICO } SS
COUNTY OF EDDY }

Account Number: 1232
Ad Number: 36350
Description: Mesa Verde EOR BS 25222
Ad Cost: \$251.31

Sherry Groves, being first duly sworn, says:

That she is the Agent of the the Carlsbad Current-Argus, a Weekly newspaper of general circulation, printed and published in Carlsbad, Eddy County, New Mexico; that the publication, a copy of which is attached hereto, was published in said newspaper on the following dates:

February 27, 2025

That said newspaper was regularly issued and circulated on those dates.

SIGNED:

Sherry Groves

Agent

Subscribed to and sworn to me this 27th day of February 2025.

Leanne Kaufenberg

Leanne Kaufenberg, Notary Public, Redwood County
Minnesota

KARI REESE
HOLLAND & HART LLP
420 L STREET, SUITE 550
ANCHORAGE, AK 99501
klreese@hollandhart.com



PUBLIC NOTICE

Case No. 25225: Application of Oxy USA Inc. for Approval of Injection Authority for the Mesa Verde Wolfcamp Resource Development Unit for Enhanced Oil Recovery, Eddy and Lea Counties, New Mexico. Notice to all affected interest owners, including all heirs, devisees and successors of: 28TwentyEight Energy LLC; 3 Knights Operating LLC; 3XT Holding LLC; Abo Petroleum; Bettis Brothers Inc.; Burlington Resources Oil & Gas Company LP; Bureau of Land Management - Carlsbad Field Office; Burlington Resources Oil & Gas CO; Burlington Resources Oil & Gas Company LP; Burlington Resources Oil & Gas Company LP; Chevron USA Inc.; COG Operating LLC; COG Production, LLC; Devon Energy Production Company, LP; Devon SFS Operating Inc.; EOG Resources; EOG Resources Inc.; EOG Y Resources Inc.; EP Energy E&P Company LP; Harvard Petroleum Company, LLC; Hilcorp Energy; Javelina Partners; LMS Limited Liability Company; McLeod Holdings LLLP; Merit Energy Partners; Merit Energy Partners II, LP; Merit Energy Partners III, LP; Merit Energy Partners IV, LP; Mersereau Enterprises LLC; Mesquite SWD, Inc.; NGL Water Solutions Permian, LLC; Oxy Y-1 Company; Panada Pipe & Equipment; PXP Producing Company LLC; Sabine Oil & Gas Corporation; SMC Oil & Gas Inc.; New Mexico State Land Office; T E F Corporation; Tap Rock Operating, LLC; Tempo Energy Inc.; Thomas E. Jennings; Timothy Z. Jennings; Vladin LLC; XTO Energy, Inc.; XTO Holdings LLC. The State of New Mexico, Energy Minerals and Natural Resources Department, Oil Conservation Division ("Division") hereby gives notice that the Division will hold public hearing 8:30 a.m. on March 13, 2025, to consider this application. The hearing will be conducted in a hybrid fashion, both in-person at the Energy, Minerals, Natural Resources Department, Wendell Chino Building, Pecos Hall, 1220 South St. Francis Drive, 1st Floor, Santa Fe, NM 87505 and via the WebEx virtual meeting platform. To participate in the hearings electronically, see the instructions posted on the docket for the hearing date: <https://www.emnrd.nm.gov/ocd/hearing-info/> or contact Freya Tschantz, at Freya.Tschantz@emnrd.nm.gov. Applicant seeks an order authorizing the injection of water, produced gas and carbon dioxide for purposes of enhanced oil recovery ("EOR") within the Unitized Interval of the Mesa Verde Wolfcamp Resource Development Unit area. The Project Area is comprised of the following federal and state lands in Eddy and Lea County, New Mexico:

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Section 13: ALL

TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.

Section 7: SE/4, E/2 of NE/4

Section 8: ALL

Section 9: W/2

Section 16: W/2

Section 17: ALL

Section 18: ALL

The unitized interval consists of the Wolfcamp formation as identified by the Gamma Ray log run in the Jack Tank 8 Federal 2 well (API: 30-025-32192) located in the SW/4 of NE/4 of Section 8, Township 24 South, Range 32 East, Lea County, New Mexico, with the top of the unitized interval being found at a depth of 11,882 feet below the surface and the base of the unitized interval being found at a depth of 13,400 feet below the surface. The Unit has twenty-one (21) active horizontal wells completed in the Wolfcamp formation. Oxy seeks to convert fifteen (15) of these producing horizontal wells into injection wells to implement a "huff and puff" enhanced oil recovery project. Oxy requests authorization for injection to occur within two (2) years of approval. Oxy requests authority to inject produced gas, water, and carbon dioxide within the Unitized Interval up to the following maximum surface injection pressures in the respective Wolfcamp zones of the Wolfcamp XYA ("WCXYA") and Wolfcamp B/C ("WCB/C"):

Maximum Surface Injection Pressure (psi)

Zone	Hydrocarbon Gas	Water	CO2
WCXYA	5,700	2,361	3,080
WCB/C	6,190	2,570	3,340

Oxy seeks authority to inject at the following maximum and average rates:

Injectant	Maximum Rate	Average Rate
Hydrocarbon Gas	50 MMSCFPD	22 MMSCFPD
Water	10,000 bwpd	5,000 bwpd
CO2	50 MMSCFPD	22 MMSCFPD

The Mesa Verde Wolfcamp Resource Development Unit is approximately 5 miles west of Jal, New Mexico.

Published in the Carlsbad Current-Argus February 27, 2025.
#36330