STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOUCES 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 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. In support of this application, Oxy states:

1. The proposed Project Area is the same as the Mesa Verde Wolfcamp 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 Wolfcamp 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 fifteen (15) 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, 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							

8. 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

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. Oxy requests authorization for injection to occur within two (2) years 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 agrankin@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, 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 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"):

1)		- (=	-):						
	Maximum Surface Injection Pressure (psi)									
Zone	Hydrocarbo	on Gas	Water		CO2					
WCXYA	5,700		2,361		3,080					
WCB/C	6,190		2,570		3,340					
Oxy seeks a	uthority to in	nject at 1	the followi	ng ma	ximum and average rates:					
Injectant		Maximum Rate			Average Rate					
Hydrocarb	on Gas	50 MN	ISCFPD		22 MMSCFPD					
Water		10,000 bwpd			5,000 bwpd					
CO2		50 MN	ISCFPD		22 MMSCFPD					
	7 1 337 10	D	D	1						

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

EXHIBIT A

February 2025

OXY REGULATORY



MESA VERDE WOLFCAMP UNIT EOR INJECTION PROJECT

EOR PROJECT

Received by OCD: 2/11/2025 12:04:22 PM STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

112.5	APPLICATION FOR AUTHORIZATION TO INJECT
I.	PURPOSE: XSecondary 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 JANACEKPHONE: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?YesNo If yes, give the Division order number authorizing the project:No
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.
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; CLOSED Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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: REGULAT	ORY ENGINEER
SIGNATURE:	Attacher Jaroah	DATE:	_1/10/2025
E-MAIL ADDRESS:STEPHEN_JAN	ACEK@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:

*

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, water, and CO2 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 ¹/₂ month
 - 3. Begin injection in first phase wells



REQUESTED RELIEF

- Requested Relief:
 - 1. Approval of an Enhanced Oil Recovery ("EOR") Project.
 - 2. 15 injection wells in various zones in the Wolfcamp Pool.
 - Add additional injection wells administratively
 - 3. Approval to use hydrocarbon gas, water, and CO2 as injectant.
 - 4. Maximum Allowable Surface Pressure ("MASP") for each zone and each injectant as seen in table below:

	Max Allo	Max Allowable Surface Pressure [PSI]									
Zono	Hydrocarbon Cas	Watar	CO2								
Zone	Hydrocarbon Gas	vvaler	CO2								
WCXYA	5,700	2,361	3,080								
WCB/C	6,190	2,570	3,340								



WELL LIST

AOR WELL ID	ΑΡΙ	WELL_NAME	ZONE
1	3002544195	MESA VERDE WC UNIT 1H ST1	WCXYA
2	3002546110	MESA VERDE WC UNIT 2H	WCXYA
3	3002546111	MESA VERDE WC UNIT 3H	WCXYA
4	3002546112	MESA VERDE WC UNIT 4H	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
† 12	3002548824	MESA VERDE WC UNIT 39H	WCB/C
† 13	3002548825	MESA VERDE WC UNIT 40H	WCB/C
★ 14	3002548817	MESA VERDE WC UNIT 54H	WCB/C
★ 15	3002548863	MESA VERDE WC UNIT 55H	WCB/C

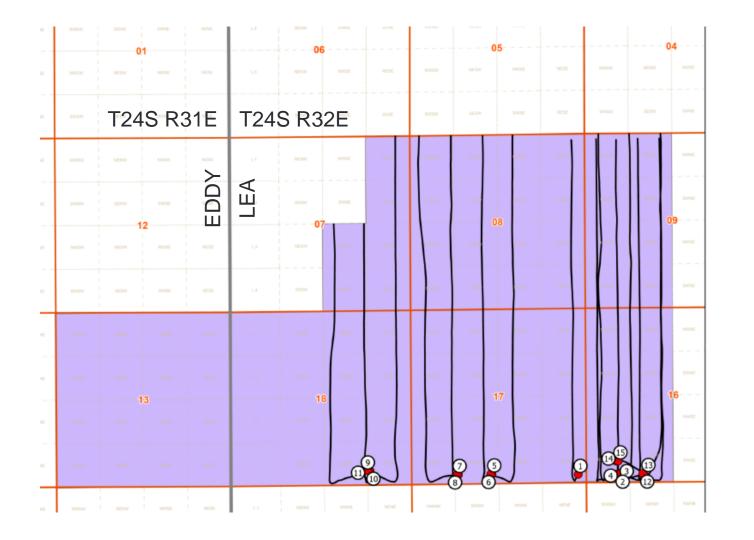
Initially, not all unit wells are being permitted for injection.
 As of January 2025, there are 21 unit wells.

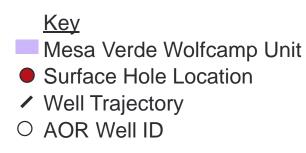
• The remaining unit wells will be added to the injection permit later.

★ Spud late 2024. Pending completion report filing.



PROJECT MAP

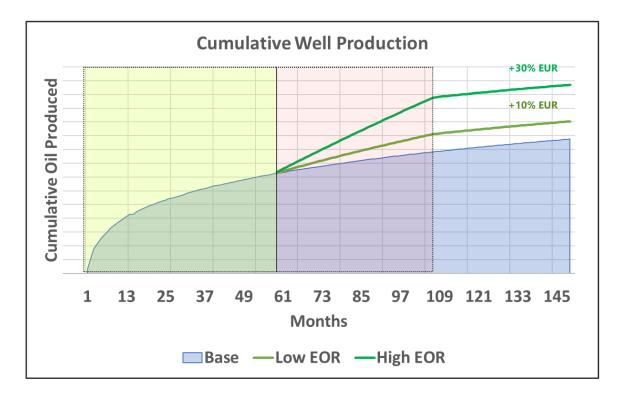






EOR UPLIFT

- 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., Phane: (573) 393-6 District IJ 811 S. First St., Art Phane: (57) 748-1 District III 1000 Rio Brazo R. District IV 1220 S. St. Francis Phane: (502) 476-3	161 Fax: (3 cesia, NM 8 283 Fax: (3 coad, Azzec, 1178 Fax: (3 Dr., Santa 1	75) 393-072 1210 75) 748-972 NM 87410 05) 334-617 74, NM 8750	10 10 15 12	U.	Santa I	th St. Fe, N	Francis 1 M 87505	Dr. REC	EIVED) Z	one copy	Form C-102 August 1, 2011 to appropriate District Office DED REPORT
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L	L			Bottom H	ole Location	n If Í	Different H	From Surfac	:	L		J
UL or lot no.	Section	То	wnship	Range				North/South line		East/We	st line	County
A	8	24	SOUTH	32 EAST, 1	N. M. P. M.		-195	NORTH	JAT	EAS	ST	LEA
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Page 15 of 78 Rec'd 8/25/2020 - NMOCD

<u>District I</u> 1623 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District II</u> 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District III</u> 1000 Rio Brazos Road, Azteo, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u> 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

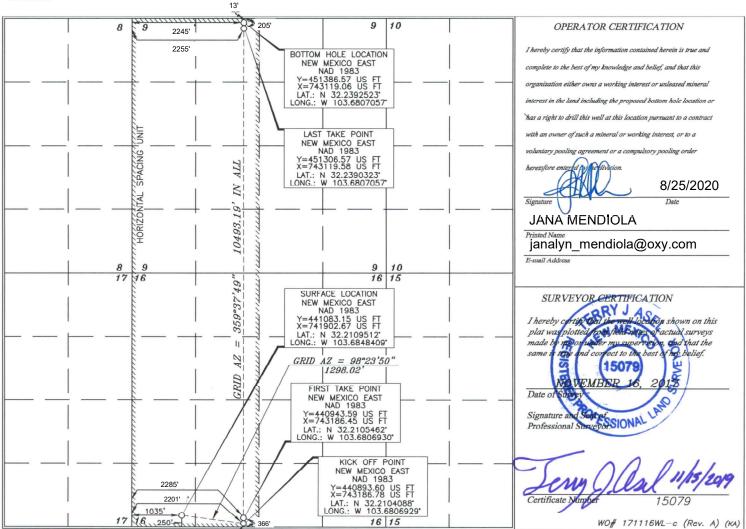
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

(As-Drilled)

API Number Pool Code 30-025-46110 98252						MESA VERDE; WOLFCAMP							
Proper 320	rty Code 829				м	ESA VE	Property Name CA VERDE WC UNIT				V	Vell Number 2H	
OGR	ID No.						Operator						Elevation
160	696					OXY	USA	A INC.				3	567.9'
Surface Location													
UL or lot no.	Section	Township		R	ange		Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
М	16	24 SOUTH	1 3	BE EAST	, <i>N</i>	М. Р. М.		250'	SOUTH	1035'	WES	T	LEA
				Bottom	Hol	le Locatio	on If I	Different H	From Surfac	e	S	SL	
UL or lot no.	Section	Township		R	ange		Lot Idn	Feet from the	North/South linc	Feet from the	East/We	st linc	County
С	9	24 SOUTH	SOUTH 32 EAST, N.M.P.M.					13'	NORTH	2245'	WES	T	LEA
Dedicated	Acres	Joint or Infill	t or Infill Consolidation Code Order No.										
640													

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



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X AMENDED REPORT

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District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District III 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztee, 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

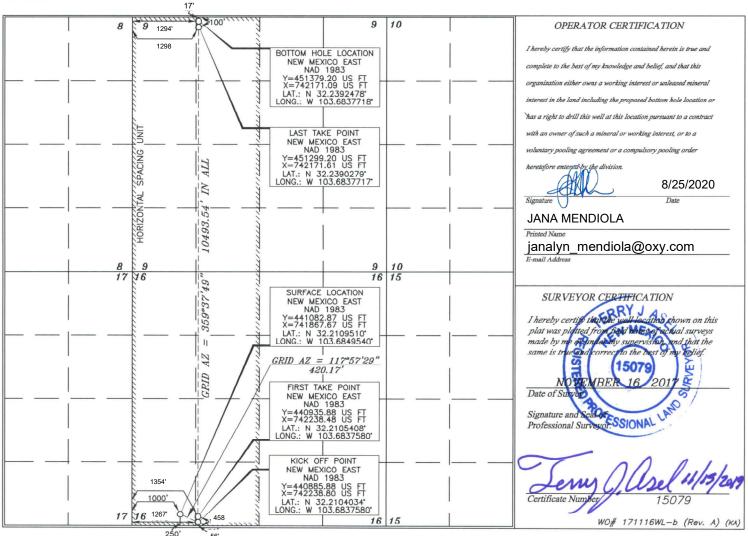
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

(As-Drilled)

API Number				ool Code				Pool Name			
30-025-46111 98252						MESA VERDE; WOLFCAMP					
Prope	rty Code				Property	Name				И	Vell Number
32	0829			MESA VE	RDE	WC UNI	TT				ЗН
OGR	ID No.				Operator	r Name					Elevation
16	696			OXY	USA	A INC.				3	569.3'
	Surface Location										
UL or lot no.	Section	Township	Rang	e	Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
М	16	24 SOUTH	32 EAST,	N. M. P. M.		250' SOUTH 1000' WE			WES	T	LEA
			Bottom H	Iole Locatio	on If I	Different H	From Surfac	e		SL	
UL or lot no.	Section	Township	Rang	e	Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
С	9	24 SOUTH	32 EAST,	N. M. P. M.		17'	NORTH	1294'	WES	T	LEA
Dedicated	Dedicated Acres Joint or Infill Consolidation Code Order No.										
640											

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



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X AMENDED REPORT

Rec'd 8/25/2020 - NMOCD

 District I

 1625 N. French Dr., Hobbs, NM 88240

 Phone: (375) 393-6161 Fax: (575) 393-0720

 District II

 811 S. First St., Artesia, NM 88210

 Phone: (375) 748-1283 Fax: (575) 748-9720

 District II

 1000 Rio Brazos Road, Aztec, NM 87410

 Phone: (505) 334-6178 Fax: (505) 334-6170

 District III

 1202 S. St. Francis Dr., Santa Fe, NM 87505

 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

	WELL LOCATION AND ACREAGE DEDICATION PLAT											
3		<i>Number</i> 5-46112			Pool Code 98252		MESA VERDE; WOLFCAMP					
	Property Code 320829 MESA						w Name WC UN	IT			Well Number 4H	
OGRID No. Operator Name Elevation									Elevation			
1	16696 OXY USA										38	569.2'
					Su	rface L	ocation					
UL or lot no.	Section	Township	,	Ran	ge	Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
М	16	24 SOU	TH	32 EAST,	N. M. P. M.		250'	SOUTH	965'	WES	T	LEA
				Bottom 1	Hole Loca	ation If	Different I	From Surfac	e	SL	-	
UL or lot no.	Section	Township	,	Ran	ge	Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
D	D 9 24 SOUTH 32 EAST, N.M.P.M.						25'	NORTH	365'	WES	T	LEA
Dedicated	Acres	Joint or Int	ill Con	solidation Cod	le Order N	lo.						
640	640											

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

8 9 10 <th></th> <th></th> <th></th> <th></th> <th></th>					
BOTTON HOLE LOCATION We MEXCO DEST y = 45137147 15 US FT LAT: 13 US FT LAT: 14 32.2302352 LAT: 14 22.2302352 LONG: W 103.0867766 B 9 0 0 10 FT 16 15 FT 17 16 15 FT 16	8	365	9	10	OPERATOR CERTIFICATION
MD 1983 WAD 1983 WAD 1987 WAD 198		365			I hereby certify that the information contained herein is true and
B 9 0 10 17 6 10 10 18 100 10 19 10 10 10 10 10 11 10 10 12 10 10 13 10 10 14 10 10 15 10 10 16 15 10 17 16 15 10 10 10 10 10 10 11 10 10 12 10 10 13 10 10 14 10 10 15 10 10 16 15 10 17 16 15 18 10 10 19 10 10 10 10 10 11 10 10 11 10 10 11 10 10 11 10 10 11 10 10 11 10 10 11 10 10 11 10 10			NAD 1983		complete to the best of my knowledge and belief, and that this
Image: Second		++-+	Y=451371.97 US FT X=741241.12 US FT	<u> </u>	organization either owns a working interest or unleased mineral
Image: State of the state o			LAT.: N 32.2392434* LONG.: W 103.6867796*		interest in the land including the proposed bottom hole location or
NDD 1993.3 NDD 1993.3 Y=451291.82 US FI LONG: W 1038.8657785 NDD 1993.3 B 9 9 FIRST TAKE POINT NEW MEXICO EAST NAD 1983.3 SFI FIRST TAKE POINT NEW MEXICO EAST NAD 1983.3 SIRVEYVDE CERTIFICATION NEW MEXICO EAST NAD 1983.3 II FIRST TAKE POINT NEW MEXICO EAST NAD 1983.3 SIRVEYVDE CERTIFICATION NEW MEXICO EAST NAD 1983.3 II FIRST TAKE POINT NEW MEXICO EAST NAD 1983.3 SIRVEYVDE CERTIFICATION NEW MEXICO EAST NAD 1983.3 III FIRST TAKE POINT NEW MEXICO EAST NAD 1983.3 SIRVEYVDE CERTIFICATION NEW MEXICO EAST NAD 1983.3 III FIRST TAKE POINT NEW MEXICO EAST NAD 1983.3 SIRVEYUP CERTIFICATION NEW MEXICO EAST NAD 1983.3 VERTIFICATION NEW MEXICO EAST NAD 1983.3 SIRVEYUP CERTIFICATION NEW MEXICO EAST NAD 1983.3 SUPFACE LOCATION NEW MEXICO EAST NAD 1983.3 SIRVEYUP CERTIFICATION NAD 1983.3 SUPFACE LOCATION NEW MEXICO EAST NAD 1983.3 SIRVEYUP CENTIFICATION NAD 1983.3 SUPFACE LOCATION NAD 1983.3 SIRVEYUP CENTIFICATION NAD 1983.3			Í É		has a right to drill this well at this location pursuant to a contract
NAD 1983 #=\$71241.83.505.55 LDNE: website provide granuate a computancy pooling order website provide granuate a computancy pooling order hereigner every in provide granuate a compooling order hereigner every in provide granuate a compu					with an owner of such a mineral or working interest, or to a
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LAR: W 103.6867649 MICK OFF POINT NEW MEXICO EAST NAD 1983 Y=440878.31 US FT LAT:: N 32.2103980' GRID AZ = 248°41'49" 562.26' MICK OFF POINT NEW MEXICO EAST NOVEMBER 46, 2012 Date of Subrey Signature and Source, NONAL Professional Subrey Signature and Source, NONAL Professional Subrey SURFACE LOCATION NEW MEXICO EAST NEW MEXIC		0.32	NAD 1983		DV I A
LAR: W 103.6867649 MICK OFF POINT NEW MEXICO EAST NAD 1983 Y=440878.31 US FT LAT:: N 32.2103980' GRID AZ = 248°41'49" 562.26' MICK OFF POINT NEW MEXICO EAST NOVEMBER 46, 2012 Date of Subrey Signature and Source, NONAL Professional Subrey Signature and Source, NONAL Professional Subrey SURFACE LOCATION NEW MEXICO EAST NEW MEXIC		355	Y=440928.31 US FT X=741308.51 US FT		I hereby certify that the well location shown on this plat was plotted from perference of actual surveys
No Nick OFF POINT NAD 1983 Same & trie and correct to the best of my belief. NAD 1983 Y=44087831 US FT NAD 1983 Same & trie and correct to the best of my belief. Sume X trie and correct to the best of my belief. 15079 NAD 1983 Y=44087648' SurfAce Location NAD 1983 Y=441082.58 US FT NAD 1983			LONG.: W 103.6867649		made by me of whiter my supervision, and that the
NEW MEXICO EAST NAD 1983 NO VEMBER 16, 2012 Y=440878.31 US FT LAT:: N 32.2103980' LONG:: W 103.6867648' Jate of State of Sugnature and Sold points GRID AZ = 248°41'49" 562.26' Signature and Sold points SUBFACE NO VEMBER 16, 2012 MAD 1983 Signature and Sold points Y=441082.58 US FT X=7411832.67 US FT LAT:: N 32.2109508' Signature and Sold points Y=441082.58 US FT LAT:: N 32.2109508' Certificate Number 15079		AZ AZ			same is true and correct to the best of my belief.
LAT:: N 32.2103980' LONG:: W 103.6867648' GRID AZ = 248°41'49" 562.26' SURFACE LOCATION NEW MEXICO EAST NAD 1983 Y=441082.58 US FT X=741832.67 US FT X=741832.67 US FT LAT:: N 32.2109508' Certificate Ruthiber 15079			NEW MEXICO EAST		
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965' NEW MEXICO EAST NAD 1983 942' Y=441082.58 US FT X=741832.67 US FT LONG: N 32.2109508' 442' Certificate Symbols			562.26'		
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442 442 442 442 442 442 442 442 442 442		965'	NAD 1983		Jenny // 1/1/ 20/9
$17 \begin{bmatrix} 537\\ 537\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7$			LAT.: N 32.2109508*		
	17	537' 2250'		15	WO# 171116WL−a (Rev. A) (KA)

AMENDED REPORT (AS-DRILLED)

Digerics 1 1623 N. Franch Dr., 1 Phone: (575) 350-61 Diarties II. 811 S. Fart St., Arth Phone: (575) 745-13 Diatries III. 1000 Rio Brusso Ran Phone: (505) 374-61 Phone: (505) 476-54	6) Pase (S atia, Nod 83 183 Pase (S ati, Astare, 1 178 Pase (Si Dr., Santa P	29) 393-0720 2110 75) 748-9720 NM 87410 25) 334-6170 % NM 87505		0.	Ainerals & J IL CONSE 1220 So Santa	Natur RVA uth Si Fe, N	TION DIV L Francis I VM 87505	HOB TSION TRECEL EDICATIO	³ 2019 VED	ългания Ф	one copy	Form C-102 August 1, 2011 to appropriate District Office DED REPORT
ſ	API	Number	WLL		ool Code	T		LDICATIO	Pool Name			
30-02	5-	45802		9829	52		Mesa	VERDE W	ISIAND			Re
Property 3208	ty Code			.		Property RDE					a	Vell Number 5H
	ID No.			·		Operato	r Name		· · · · · · · · · · · · · · · · · · ·			Elevation
1600	9.10				OXY	KY USA INC.						560.1'
·					Surfa	ace L	ocation					
UL or lot no.	Section	Township		Rang	¢	Lot Ida	Feet from the	North/South Line	Feet from the	East/W	est line	County
N	17	24 SOUI	H .	32 EAST,	N. M. P. M.		280'	SOUTH	2436'	WES	ST	LEA
L				Bottom H	Iole Locatio	on If I	Different I	From Surfac	e1			
UL or lot no. Section Township Range								North/South Line	Feet from the	East/W	est line	County
B 8 24 SOUTH 32 EAST, N.M.P.M.					ŀ	22	NORTH	2223	EAS	ST	LEA	
Dedicated Acres Joint or Infill Consolidation Code Order No. 320					e 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.

	<u>معر</u>	
78	9 8 8 9	OPERATOR CERTIFICATION
BOTTOM HOLE LOCATION NEW MEDICO EAST		I knowly control that the information contained hards is inter and constained hards to inter and
	└ \$ <u>-</u>	organization utility owny a working interest or uninated advertal
LAT.: N 32.2392085 LONG.: W 103.6953179		inservent in the land including the proposal bottom hale incention or
		has a right to drift this well at this boosties persons to a construct
		while an owner of such a minural armonting interact, or to a
Y=151283-52 US FT		valunary peaking agreement or a compulsory peoking order
X=/38501./5 US F1 LAT: N 32.2389886 LONG: W 103.6953178	N ALL	Soch (happing 9/10/19
		Sector Det
	10	Jarah Cherman
	10494	Win- chop mar Dory - Lon
7 8	8 9	E-mill Addrew J
FIRST TAKE POINT	90	
NEW MEXICO EAST	359-37 48	SURVEYOR CERTIFICATION
X=#1988888.29 VS FT	38	I hereby cerefy the the sell in the power wown on this plan was placed from performing of a court surveys made by the in gradient surveys apervation and that the
LAT.: N 32.2104996 LONG.: W 103.6953004		made by the of a fattering supervision and that the same is tracking correct to the best of the birt.
KICK OFF POINT	24	ซี (15079) โ ย
NEW MEDICO EAST NAD 1983	<u>Ğ</u> ŘÍD	Date of Series
X=7388688.83 US FI		
LAT.: N 32.2103622 LONG.: W 103.6953003		Signature and Stope Professional Silvertors SIONAL
SURFACE LOCATION GRID AZ = 108°45'12"		
NEW MEXICO EAST 691.71	<u>⊹_</u> → → → → → →	or and
Y=441071.80 US FT x=738014.00 US FT LAT: M 32,2109841		Jenn May E/21/2012
LONG: W 103.6974138	2170	Conificent Inglier 15079
18 17 280-	B 3204 17 16	WO# 180816WL-0 (KA)
383	44	

<u>Dianis I</u> 1625 N. French Dr., Hobbe, NM 82340 **Phone:** (S75) 393-6161 Par: (575) 393-0720

00 Rio Brazes Road, Antas, N24 87410 Ione: (305) 334-6178 Faz: (305) 334-6170 Disector IV 1220 S. St. Francis Dr., Santo Fe, NM 87505 Phone: (505) 476-3460 Fex: (505) 476-3462

Panie: (373) 393-6761 Faz: (373) 2 <u>District II</u> 811 S. First St., Artunia, NM 88210 Phone: (375) 748-1283 Faz: (375) 7

Destrict III 1000 July Ba

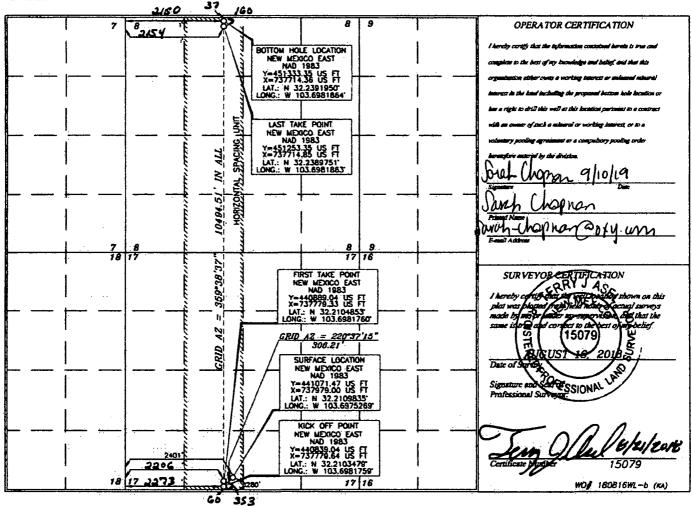
HOBBS OCD State of New Mexico SEP Energy, Minerals & Natural Resources Departments State ... Minerals & Natural Resources Log OIL CONSERVATION DIVISION 1990 South St. Francis Dr.

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

> AMENDED REPORT AS-Ovilled

		N	VELL LOCATIO	N AND	ACK	EAGE D.	EDICA TIO	N PLAT				
_		Number	Poal Co		Pool Name							
30-02	5.1	15863	98252			HESA VEDOE WOUFCAMP K.						
-	rty Code				ropeny			Well Number				
	320829 MES.					VERDE WC UNIT						
	ID No.			0	Эрспин	Name			T	,	Elevation	
66	96			ΟΧΥ	USA	A INC.				35	560.2'	
				Surfa	ce La	ocation						
UL or Int no.	Section	Township	Range	1	Lot Ida	Feet from the	North/South line	Feet from the	East/Wes	t line	County	
N	17	24 SOUTH	32 EAST, N.M.	Р.М.		280'	SOUTH	2401'	WES	r	LEA	
	l		Bottom Hole	Locatio	n If I	Different H	From Surfac	e	· · · · · · · · · · · · · · · · · · ·			
UL or lot no.	Section	Township	Range	1	Lot Ida	Feet from the	North/South line	Feet from the	East/Wes	st line	County	
С	8	24 SOUTH	32 EAST, N.M.	Р. М.		37	NORTH	2150	WES	r	LEA	
Dedicated	Acres	Joint or Infill	Consolidation Code (Order No.				A				
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.



District I 1425 N. Francis Dr., Hobba, NM 18240 Prose: (77) 391-6(6) Fax: (77) 391-6(10 Desirict II 111 S. Fran St., Armein, NM 18210 Martin (77) 748-1223 Fax: (575) 748-9720 S. F. F.	5 OCD State of Equate Minerals & Na OIL CONSER CENED 1220 South Santa F	New Mexico	Denartm	ent	Revised	Form C-102 August 1, 2011
Destrict II Elli S. Fren St. Armin, Nul \$2210	OIL CONSER	VATION DI	/ISION	5111	Submit one cop	y to appropriate
Phone: (373) 742-1223 Fiz: (373) 740-9720 <u>Diminist III</u> 1000 Run Brance Rand, Aster, NM 87410	NED1220 South	h St. Francis	Dr.		·	District Office
Planar (505) 134-61 71 Fax: (505) 334-61 70 Distain IV 1220 S. St. Francis Dr., Sanor Fa, XM 87505	CE Santa F	e, NM 87505			AMEN	DED REPORT
					「	
API Number	LL LOCATION AND A Pool Code	ACREAGE D	EDICATIO.	N PLAT Pool Name		
30-025-45920	98252	Mej	g Verde	Wo Ifca	ND	KB
Property Code 320929		operty Name DE WC UN			, i c	Vell Numb er 7H
OGRID No.	Ор	erator Name				Elevation
16696		USA INC.			3	563.0'
UL or lot no. Section Township		e Location	North/South line	Feet from the	Eest/West line	County
N 17 24 SOUTH	32 EAST, N.M.P.M.	280'	SOUTH	1421'	WEST	LEA
L	Bottom Hole Location	If Different 1	From Surfac	e	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
UL or lot no. Soction Township D 8 24 SOUTH	Range Lo 32 EAST. N.M.P.M.	ot Ida Feet from the	North/South line NORTH	Feet from the	East/West line WEST	County LEA
	nsolidation Code Order No.	22	NORTH	IP	ر د <u>م</u> ۲۳	
320			•			
No allowable will be assigned to this	s completion until all interest	ts have been con	solidated or a r	on-standard	unit has been app	roved by the
division.	x				· · · ·	
7 8 191	3.92	8 9	1	0	PERATOR CERTIFIC	ATION
1191	BOTTON HOLE L			l hereby cer	nj) that the information contains	ul hereix is true and
	NEW MERICO NAD 1982 	3 []	! 		the best of my knowledge and be wither owns a working interest	
	X=736774.39 LAT.: N 32.239 LONG.: W 103.70	012266"		1 -	in land pechating the proposed b	
			1		to dri2 this well at this location p	1
	LAST TAKE P	EAST H	!		er q'acà e mineret er verking soling egreennest er e compuber	
SPACING ALL	Y=451242.50 X=736774.89 LAT.: N 32.238	39605"		استجسيهم	narrad by she division.	
	LONG.: W 103.7(012265	1	Jarah	Ugran "	1/10/19
HORIZONTAL		- + -		Tard	Choppon	
H0412				Printed Nam	1 marcala	
7 8		8 9		- Carlos	Trad rot (NO)	y was
18 77 98.	FIRST TAKE P	17 16	1		VEYOR CERTIFICA	
	NEW MEXICO NAD 1983	EAST				1
	ITI LAT.: N 32.210)4694"		plat was	carfor and be well that factor from the first sector factor whether my ages to more for correge to the be	and that the
24	$\frac{\text{LONG.: W 103.7C}}{\text{GRID } AZ = 214}$		ł	same is		
	201.43				9 (15079) BUGUST 17, 2	
	NAD 198		 I	Date of		5
	Y=311058.64 X=736999.09 LAT: N 32:210 LONG: W 103.7	ŪŠ FT 09669 006953		Professio	and Andrewson All	ダ
	KICK OFF P	OINT				
	NEW MEDICO	EAST -	1	07	an Olla	Petro lene
24 1 421' 153	X=732833.78 LONG: W 32.31	ŬŠ Ħ 33319 012151	1	Certifica	the Name	15079
18 17 201	280'	17 16	<u>l</u>		WOJ 12	80817WL-0 (KA)
41	•••					

District I 1625 N. Presch Da Phone: (372) 393- District B 2015 Fore Sci, AJ Phone: (372) 393- Phone: (372) 393- Phone: (372) 334- District IV 1220 S. S. Francis Phone: (322) 374-	6161 Fasi: (S tesin, ND4 82 2205 Fasi: (S and, Astire, J 6178 Fasi: (S Dr., Santo F	759 393-07 1210 75) 748-97 NM 87410 15) 334-61 16) 334-61	20 70 72 52	Energy, Min OIL	Santa	Fe, N	IM 87505	Dr. RE(CEIVE		Form C-102 vised August 1, 2011 e copy to appropriate District Office MENDED REPORT AS - Dri Hede
[API	Numbe		VELL LOCATI	ON ANL	ACK	<u>REAGE D</u>	EDICATIO	N PLAT Pool Name		
Ŧ	025-	450	21	9925	2		Heil	n Verde	Wolfco	inp	- FR
	nty Code VIII				IESA VE	Property CRDE		IT	•	:	Well Number 8H
	RD Ma.	 <u></u> 				Openita		· · · · · · · · · · · · · · · · · · ·	. i		Elevation
146	9b			; ,, =, ·	OXY	US	INC.				3563 <u>1</u> '
				· · · · · · · · · · · · · · · · · · ·	Surf		ocation				· · · · · · · · · · · · · · · · · · ·
UL àr lat bà. N	Section 17		wnship SOUTH	Range 32 EAST. N.	ИРИ	Lot Idn	Feet from the 280	North/South Line SOUTH	Feet from the 1386'	East/West l	ine County LEA
L									<u></u>		
UL or lot po.	Section	To	wnship	Bottom Ho	le Locan	Lot Ida		North/South line	e Feet from the	East/West	line County
D	8	24	SOUTH	32 EAST, N.	<u>M.P.M</u>		35	NORTH	226	WEST	LEA
Dedicated 32.0 No allows division.	2		ssigned to	Cansalidation Code	Order No.	ests ha	ve been con	solidated or a i	non-standard	unit has bee	a approved by the
		7 _7 _7 _7 _7 _7 _7 _7 _7 _7 	AZ = 359'38'36" - 10485,42' IN ALL		BOTTOM HOLI NEW MEXI NAD 1 Y=4513134 X=735934 LAT: N 32 LONG: W 10 UAST TAKI NEW MEXI NAD 1 Y=451233. X=735954. LAT: N 32 LONG: W 10 FIRST TAKI NEW MEXI NAD 1 Y=440867.6 X=736019.4 LAT: N 32 LONG: W 10	CO EAST 983 13 US FI 2391677 2391677 3.703878 983 5.00 EAST 983 3.00 EAST 983 3.05 F7 2389477 2389477 3.703878 5.7038778 5.7038778 5.703978775 5.70377777777777777777777777777777777777	8 9 17 16		I hereby and Survey and And a right to And a right to SUR I hereby plan was SUR I hereby made to Survey of to And a right to And a	te bar (av barden atter ome a worke in decharge de p atter bereden atter ome a worke atter of acch a march a atter of acch a march a atter of acch a march a atter of acch a atter of acch a atter of a atter of acch a atter of acch a atter of a atter of a atter of a atter of a atter of	in constituted border is over and the simil body into the same and the simil body into the state interest or understat interest, interest or understat interest, interest or understat is a constant interesting interest or to a computery pooling order <u>9</u> 10199 <u>0055</u> <u>00555</u> <u>005555</u> <u>0055555</u> <u>0055555555555555555555555555555555555</u>

17 16

 LONG.: W 103.7038664'

 NEW MEXICO EAST NEW MEXICO EAST Y=440817.83 US FT X=736016.75 US FT LAT.: N 32.2103180' UNG:: W 103.7038663'

 GRID A2 = 285*39'38'' 8744.71'

 SURFACE LOCATION NEW MEXICO EAST MAD 1983 Y=45064.66 US FT LAT.: N 32.2103180'' 0744.71'

WO# 180817WL-b (KA)

54 307

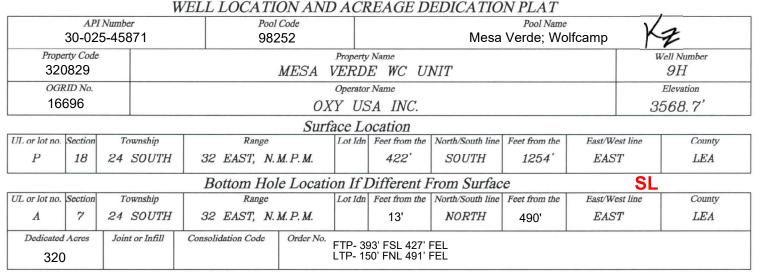
REC'D 10/6/2020 - NMOCD

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

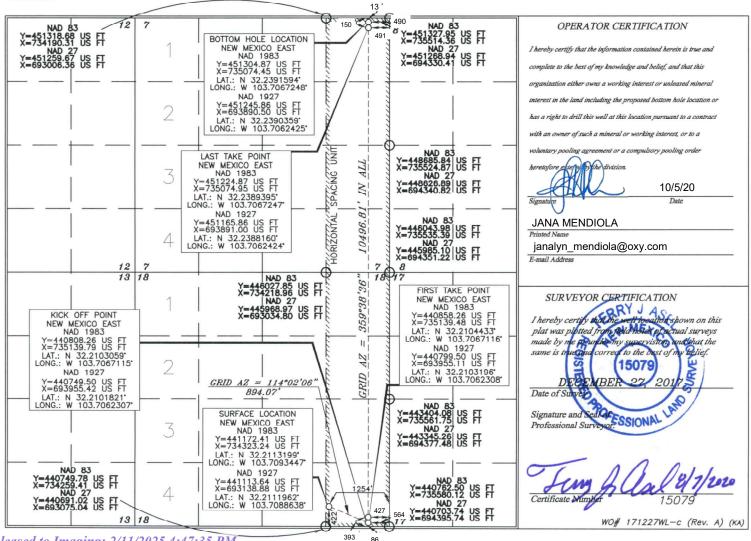
State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

(AS-DRILLED)



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.



X AMENDED REPORT

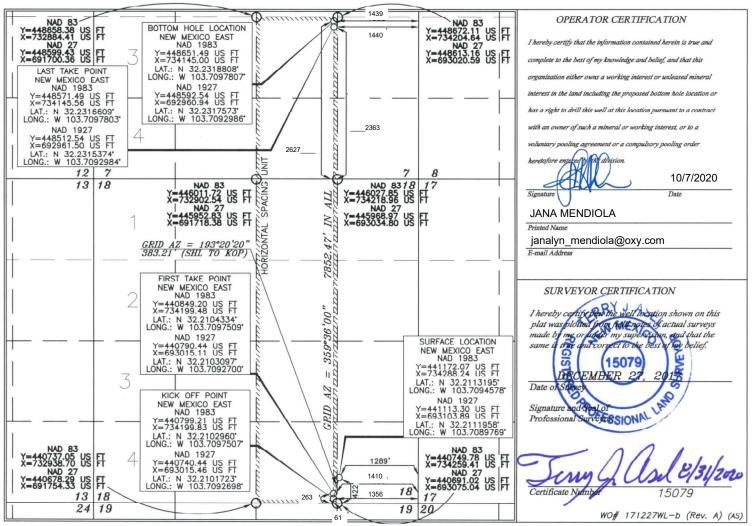
<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District II</u> 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District III</u> 1000 Rio Brazos Road, Aztee, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

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(AS-DRILLED)

	WELL LOCATION AND ACREAGE DEDICATION PLAT										
		Number 25-45872		1 Code 252		Pool Name Mesa Verde; Wolfcamp					
	rty Code)829				Property Name ESA VERDE WC UNIT						Vell Number 10H
	11D No. 696				Operator Name OXY USA INC. 3						Elevation 568.3'
	Surface Location										
UL or lot no.	Section	Township	Range		Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
P	18	24 SOUTH	32 EAST, N	М. Р. М.		422'	SOUTH	1289'	EAS	Т	LEA
			Bottom Ho	le Locatio	on If l	Different H	From Surfac	e	SL		1
UL or lot no.	Section	Township	Range		Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
J	J 7 24 SOUTH 32 EAST, N.M.P.M.					2627'	SOUTH	1439'	EAS	Т	LEA
Dedicated Acres Joint or Infill Consolidation Code Order No. FTP- 263' FSL 1410' FEL 240 LTP- 2363' FSL 1440' 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.



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X AMENDED REPORT

Phone: (575) 393-6161 Fax: (575) 393-0720 District II Bill 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

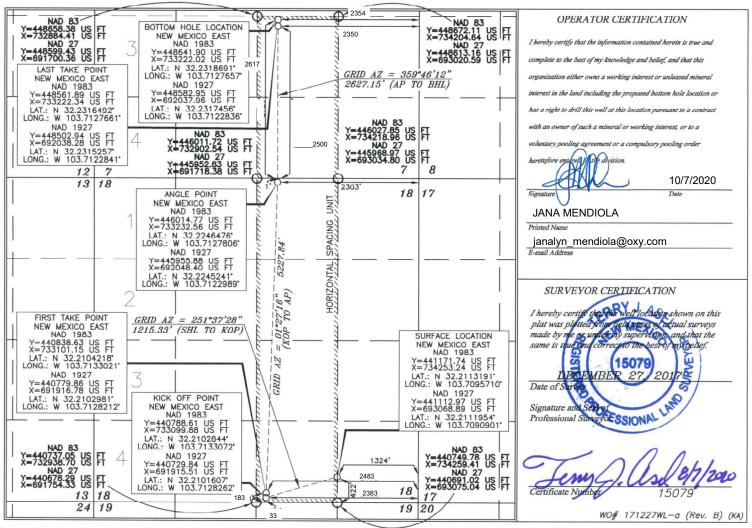
REC'D 10/7/2020 - NMOCD

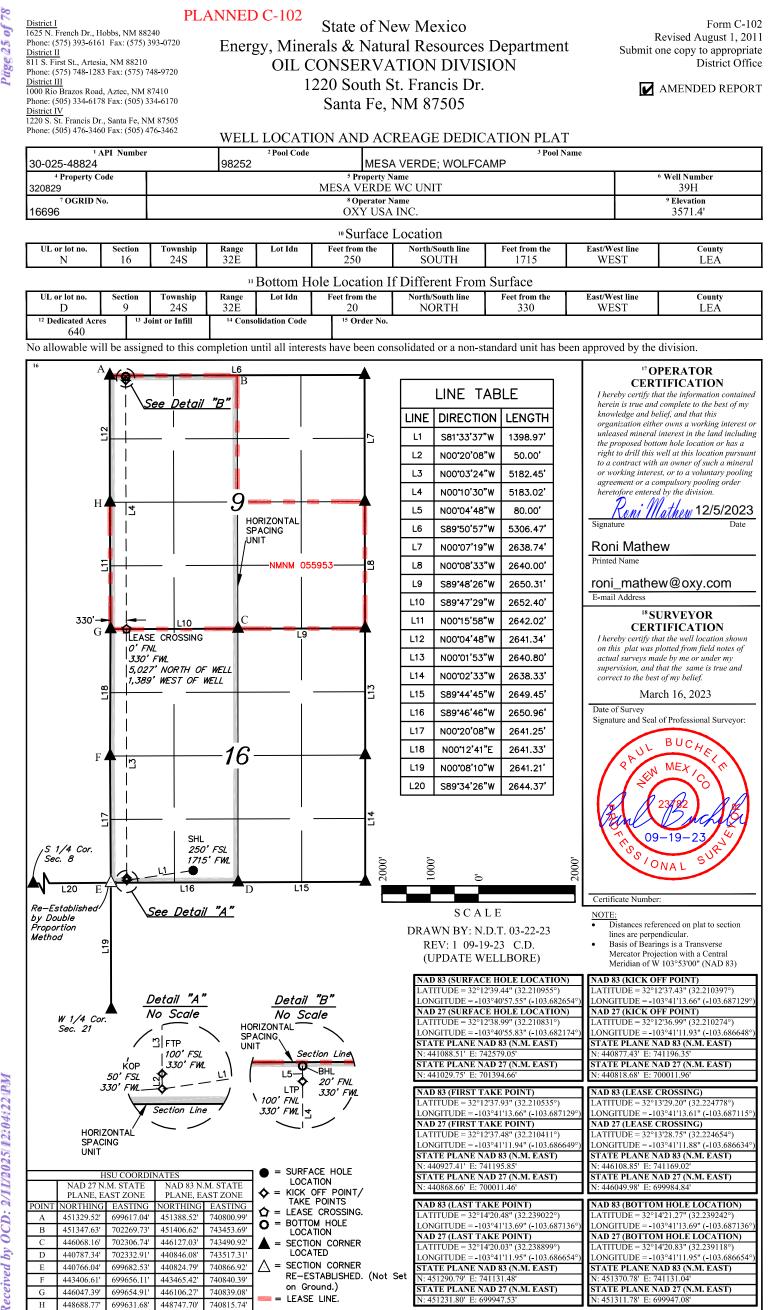
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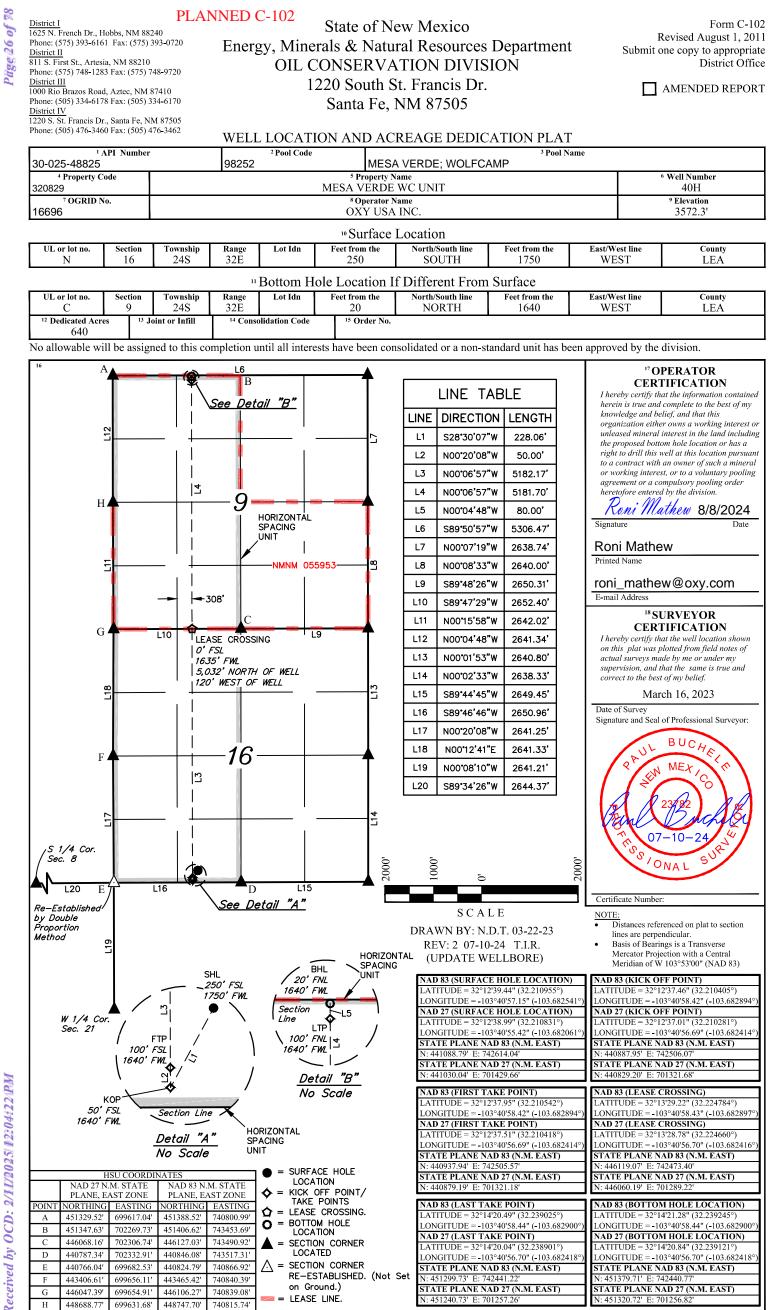
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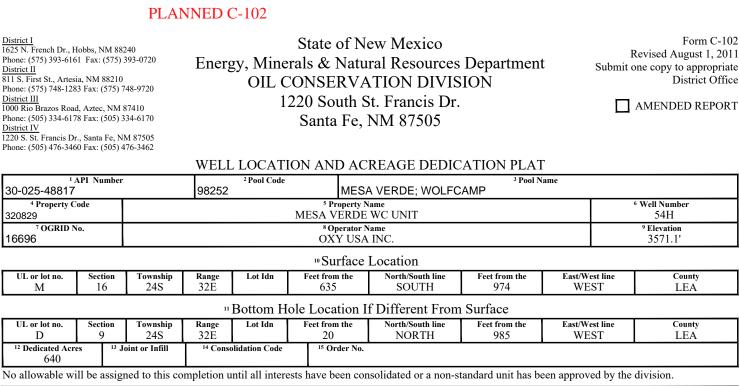
	WELL LOCATION AND ACREAGE DEDICATION PLAT										
		<i>Number</i> 5-45873	Pool 982	Code 252	Pool Name Mesa Verde; Wolfcamp						KZ
- î	<i>rty Code</i> 0829			MESA V	Property /ERD.	^{Name} E WC UI	NIT			V	Vell Number 11H
OGRID No. 16696					Operator Name Elevation OXY USA INC. 3568.0'						
	Surface Location										
UL or lot no.	Section	Township	Range		Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
0	18	24 SOUTH	32 EAST, N.	М. Р. М.		422'	SOUTH	1324'	EAS	Т	LEA
			Bottom Hol	le Locatio	on If l	Different H	From Surfac	e	SI	_	
UL or lot no.	Section	Township	Range		Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
J	J 7 24 SOUTH 32 EAST, N.M.P.M.					2617	SOUTH	2354	EAS	Т	LEA
	Dedicated Acres Joint or Infill Co			Order No.	FTP-	183' FSL 248	33' FEL LTP-	2500' FSL 23	350' FEL		

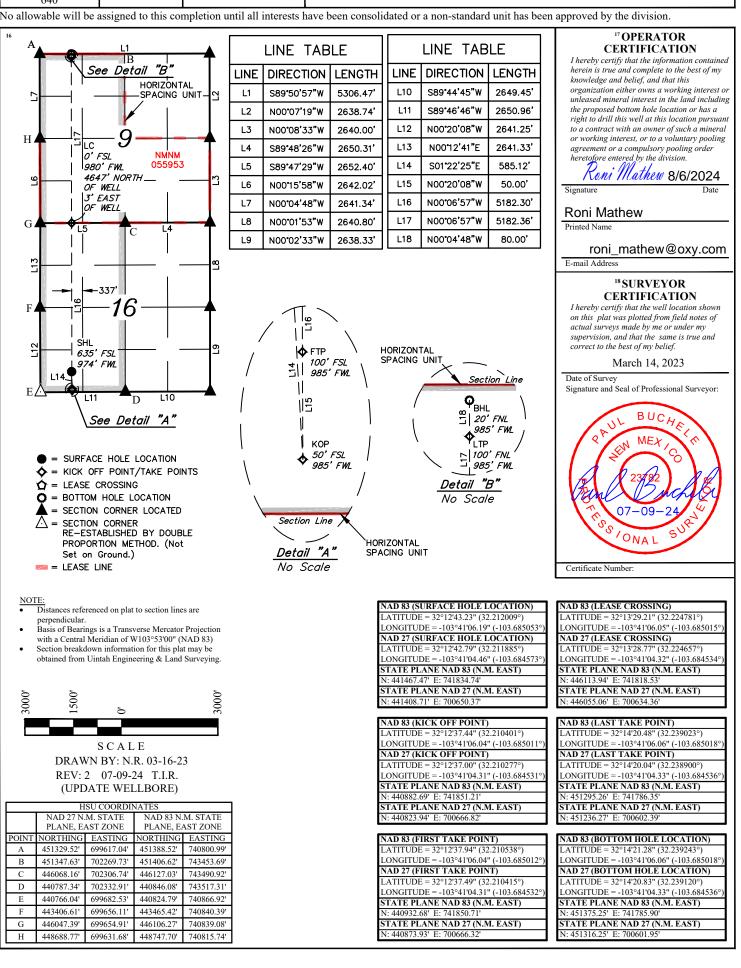
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.





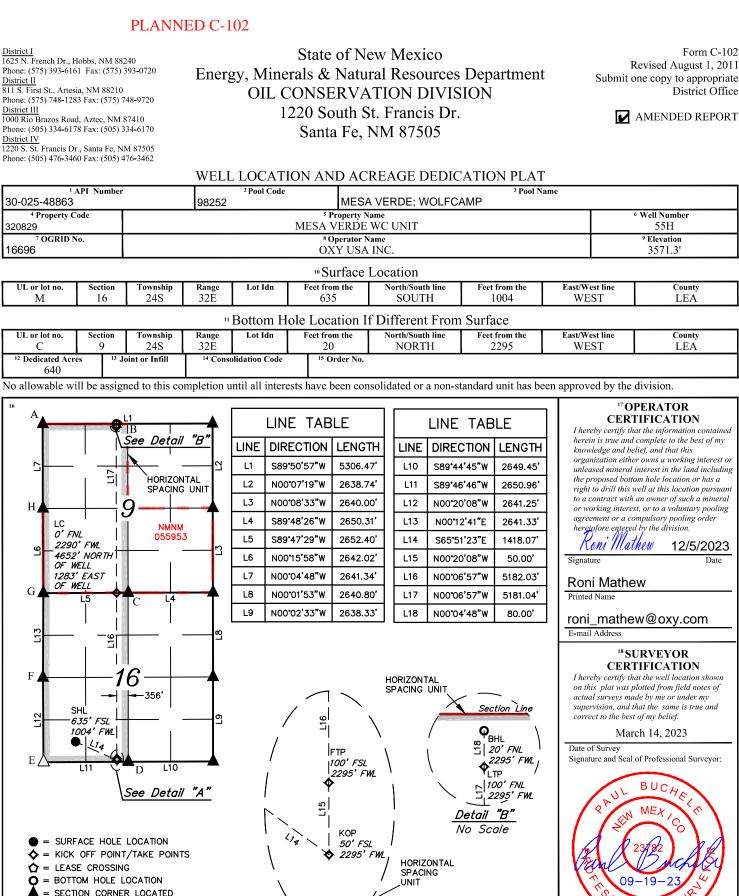






Form C-102

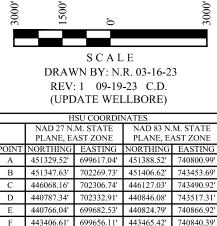
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= SECTION CORNER LOCATED SECTION CORNER RE-ESTABLISHED BY DOUBLE $\Lambda =$ PROPORTION METHOD. (Not Set on Ground.) = LEASE LINE

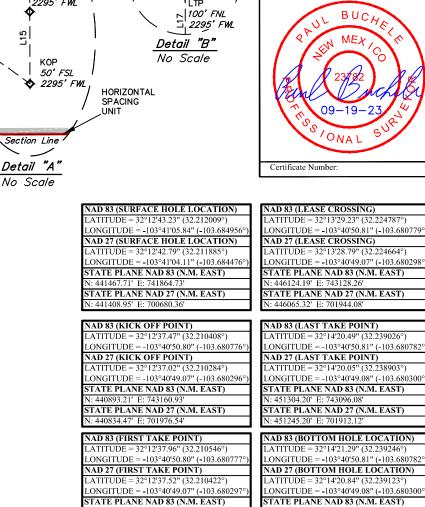
uge 28 of 78

- NOTE: Distances referenced on plat to section lines are
- perpendicular. Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°5100" (NAD 83) Section breakdown information for this plat may be obtained from Uintah Engineering & Land Surveying.



446106.27'

740839.08



1: 440943.20' E: 743160.43' TATE PLANE NAD 27 (N.M. EAST)

440884.45' E: 701976.04

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INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

Side 1

WELL NAME	& NUMBER:	ESA VERDE WOLFCAMP UNIT #001H		API 30-02	25-44195		
WELL LOCAT	TON: <u>241 FSL / 244</u>			17	TION	24S	32E
	FOOTA <u>Wellbore Sch</u>		NIT LETTER		TION <u>WELL COA</u> Surface Ca	TOWNSHIP NSTRUCTION DATA asing	RANGE <u>4</u>
	Wellbore Hole OD-17.5000		Hole Size: 17.5"			Casing Size: 13.375"	
	13 3/8" CSA 945' CMT CIRC TO SURFACE		Cemented with: 119	90	SX.	or	ft ³
			Top of Cement: <u>Sur</u>	face		Method Determined	: Circulated
				<u>I</u> 1	ntermediate	Casing	
			Hole Size: 12.25"			Casing Size: 9.625"	
			Cemented with: <u>362</u>	20	SX.	or	ft ³
			Top of Cement: Su	face		Method Determined	: Circulated
				<u>]</u>	Production	Casing	
			Hole Size: <u>8.5</u> "			Casing Size: 5.5"	
	ZXHD Liner Top Packer SA 1076 Wellbore Hole OD- 12.250	3'	Cemented with: 219	93	SX.	or	ft ³
	9 5/8" CSA 10,933' Cmt circ to surface	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"	Top of Cement: <u>10</u> ,	764'		Method Determined	: Circulated
	2 7/8" Tbg PKR SA 11,829'	TOC @ 10,763'	Total Depth: 22,281	1		Total Vertical Dep	th: <u>12,054'</u>
			4		Injection In	terval MD/TVD	
			12,240' MD / 12112	.2' TVD	feet	to 22,116' MD / 12,057	3' TVD

(Perforated or Open Hole; indicate which)

•

Side 2

.

INJECTION WELL DATA SHEET

Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)
Typ	be of Packer: 2.875" x 5.5" Nickle Coated (proposed)
Pac	ker Setting Depth: 12,000' MD / 11,957' TVD (proposed) (MD/TVD)
Oth	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>
	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:
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
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

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INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

Side 1

WELL NAME & NUMBER: _	MESA VERDE WOLFCAMP UNIT #002H		API 30-025-46110		
WELL LOCATION: 250 FSL / FOO		/ JNIT LETTER	16 SECTION	24S TOWNSHIP	32E RANGE
<u>WELLBORE S</u>	<u>CHEMATIC</u>		<u>WELL CO</u> Surface C	DISTRUCTION DAT Casing	<u>4</u>
Wellbore Hole OD-14.75000		Hole Size: <u>14.75</u> "		Casing Size: 10.75"	
10 3/4" CSA 979' CMT CIRC TO SURFACE		Cemented with: 975	SX.	0r	ft ³
		Top of Cement: <u>Sur</u>	face	Method Determined	: Circulated
			Intermediate	e Casing	
		Hole Size: <u>9.875</u> "		Casing Size: 7.625"	
		Cemented with: <u>301</u>	5 sx.	or	ft ³
		Top of Cement: <u>190</u>		Method Determined	: Theory
			Production	Casing	
		Hole Size: <u>6.75</u> "		Casing Size: 5.5"	
Wellbore Hole OD- 9.8750 7 5/8" CSA11,755' TOC @ 3976'		Cemented with: 855	SX.	0r	ft ³
	Wellbore Hole OD- 6.7500 5 1/2" 20# P-110 DQX CSA 0 - 22,562"	Top of Cement: <u>561</u>	8'	Method Determined	: Theory
2 7/8" Tbg PKR SA 12,000'	TOC @ 5618'	Total Depth: 22,566		Total Vertical Dep	oth: 12275.3'
		1	Injection I	nterval MD/TVD	
		_12,395' MD / 12,153	.2' TVD feet	to 22,413' MD / 12271.	7' TVD

(Perforated or Open Hole; indicate which)

•

Side 2

.

INJECTION WELL DATA SHEET

Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)
Typ	e of Packer: 2.875" x 5.5" Nickle Coated (proposed)
Pac	ker Setting Depth: 12,000' MD / 11,957' TVD (proposed) (MD/TVD)
Oth	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>
	Additional Data
1.	Is this a new well drilled for injection?Yes _XNo
	If no, for what purpose was the well originally drilled? Oil and Gas production
2.	Name of the Injection Formation:
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
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

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INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

Side 1

WELL NAME & NU	UMBER: ME	SA VERDE WOLFCAMP UNIT #003H		API 30-025-46111			
WELL LOCATION:			Μ	16	24S	32E	
FOOTAGE LOCATION UNI			UNIT LETTER	SECTION	TOWNSHIP	RANGE	
<u>WELLBORE SCHEMATIC</u>				<u>WELL CONSTRUCTION DATA</u> Surface Casing			
Velb.	bore Hole OD-14.75000		Hole Size: <u>14.75</u> "		Casing Size: 10.75"		
10 3/4	4" CSA 910' F CIRC TO SURFACE		Cemented with: 975	SX.	or	ft ³	
			Top of Cement: Surfa	ice	Method Determined	: Circulated	
				Intermediate	e Casing		
			Hole Size: <u>9.875</u> "		Casing Size: 7.625"		
			Cemented with: 2824	SX.	0r	ft ³	
			Top of Cement: Surfa	ice	Method Determined	: Circulated	
				Production	Casing		
			Hole Size: <u>6.75</u> "		Casing Size: 5.5"		
7 5/8"	oore Hole OD- 9.8750 "' CSA 11,420' Circ to Surface		Cemented with: <u>842</u>	SX.	or	ft ³	
		Vellbore Hole OD- 6.7500 5 1/2" 20# P-110 DQX CSA 22,351" TOC 9031', CALCULATED	Top of Cement: 9031		Method Determined	: Theory	
2 7/8" PKR :	" ТЬд I SA 11,700"		Total Depth: 22,351' M	MD	Total Vertical Dep	oth: 12,088.1' TVD	
	╇╼╫╫╫╫╫			Injection Interval MD/TVD			
			12,269' MD / 12,068'	TVD feet	to 22,236' MD / 12,090	.9' TVD	

(Perforated or Open Hole; indicate which)

•

Side 2

.

INJECTION WELL DATA SHEET

Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)
Тур	De of Packer: 2.875" x 5.5" Nickle Coated (proposed)
Pac	ker Setting Depth: <u>11,800' MD / 11,764.1' TVD (proposed)</u> (MD/TVD)
Oth	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>
	Additional Data
1.	Is this a new well drilled for injection?Yes _XNo
	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
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

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INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

Side 1

WELL NAME & NUMBER:	IESA VERDE WOLFCAMP UNIT #004H	API	30-025-46112		
WELL LOCATION: 250 FSL / 90	65 FWL	Μ	16	24S	32E
FOOTA	UNIT LETTER	SECTION	TOWNSHIP	RANGE	
<u>WELLBORE SCH</u>	<u>HEMATIC</u>		<u>WELL CO</u> Surface C	DNSTRUCTION DAT Casing	<u>4</u>
Wellbore Hole OD-14.75000		Hole Size: <u>14.75</u> "		Casing Size: 10.75"	
10 3/4" CSA 951' CMT CIRC TO SURFACE		Cemented with: 975	SX.	or	ft ³
		Top of Cement: Surface		Method Determined	: Circulated
			Intermediat	e Casing	
		Hole Size: <u>9.875</u> "		Casing Size: 7.625"	
		Cemented with: 2745	SX.	0ľ	ft ³
		Top of Cement: Surface		Method Determined	: Circulated
			Production	Casing	
		Hole Size: <u>6.75</u> "		Casing Size: 5.5"	
Wellbore Hole OD- 9.8750 7 5/8" CSA 11,545' Cmt Circ to Surface		Cemented with: <u>834</u>	SX.	0r	ft ³
	Wellbore Hole OD- 6.7500 5 1/2" 20# P-110 DQX CSA 22,534'	Top of Cement: 9,269'		Method Determined	: Theory
2 7/8" Tbg PKR SA 11,900'		Total Depth: 22,522		Total Vertical Dep	oth: 12,224.07'
			Injection I	nterval MD/TVD	
		12,668' MD / 12,259.3' TVI	<u> feet</u>	to_22,488' MD / 12224.	5' TVD

(Perforated or Open Hole; indicate which)

•

Side 2

.

INJECTION WELL DATA SHEET

Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)
Typ	e of Packer: 2.875" x 5.5" Nickle Coated (proposed)
Pac	ker Setting Depth: 12,000' MD / 11,941' TVD (proposed) (MD/TVD)
Oth	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>
	Additional Data
1.	Is this a new well drilled for injection?Yes _XNo
	If no, for what purpose was the well originally drilled? Oil and Gas production
2.	Name of the Injection Formation:
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
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

OPERATOR: Oxy USA

Side 1

WELL NAME	& NUMBER:	MESA VERDE WOLFCAMP UNIT #005H	API	30-025-45862		
WELL LOCA	$\frac{1}{100} \frac{280 \text{ FSL } / 2}{100}$		IIT LETTER	17 SECTION	24S TOWNSHIP	32E RANGE
	<u>WELLBORE SC</u>	<u>HEMATIC</u>	<u>WELL CONSTRUCTION DATA</u> Surface Casing			
	Wellbore Hole OD-14.75000 10 3/4" CSA 967' CMT CIRC TO SURFACE		Hole Size: <u>14.75</u> "		Casing Size: 10.75"	
			Cemented with: 908	SX.	or	ft ³
			Top of Cement: Surface		Method Determined	: Circulated
				Intermediate	e Casing	
			Hole Size: <u>9.875</u> "		Casing Size: 7.625"	
			Cemented with: 3988	SX.	or	ft ³
			Top of Cement: Surface		Method Determined	: Circulated
				Production	Casing	
			Hole Size: <u>6.75</u> "		Casing Size: 5.5"	
	Wellbore Hole OD- 9.8750 7 5/8" CSA 11,567" CMT CIRC TO SURFACE		Cemented with: <u>840</u>	SX.	or	ft ³
		Wellbore Hole OD- 6.7500	Top of Cement: 11,050'		Method Determined	: Calc
	PKR SA 11,900'	5 1/2" 20# P-110 DQX CSA 0 - 22,435' TOC 11050', Calc	Total Depth: 22,479' MD		Total Vertical Dep	oth: <u>12,211.03' TVD</u>
×c /				Injection I	nterval MD/TVD	
			12,327' MD / 12,161.5' TV	Dfeet	to_22,387' MD / 12,212	.5' TVD
			(Perforated or Open Hole; indicate which)			

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Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)
Typ	be of Packer: 2.875" x 5.5" Nickle Coated (proposed)
Pac	ker Setting Depth: <u>12,000' MD / 11,915' TVD (proposed)</u> (MD/TVD)
Oth	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>
	Additional Data
1.	Is this a new well drilled for injection?Yes _XNo
	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):
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
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

OPERATOR: Oxy USA

Side 1

ELL NAME & NUMBER: _	MESA VERDE WOLFCAMP UNIT #(ООЕН АРІ	30-025-45863			
ELL LOCATION: 280 FSL / 2		Ν	17	24S	32E	
FOOT	AGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE	
<u>WELLBORE SC</u>	<u>HEMATIC</u>		<u>WELL Co</u> Surface	ONSTRUCTION DAT Casing	<u>74</u>	
Wellbore Hole OD-14.75000 10 3/4" CSA 945' CMT CIRC TO SURFACE		Hole Size: <u>14.75</u> "		Casing Size: 10.75"		
		Cemented with: <u>908</u>	SX.	or	f	
		Top of Cement: Surface		Method Determined	: Circulated	
			Intermedia	te Casing		
		Hole Size: <u>9.875</u> "		Casing Size: 7.625"		
		Cemented with: <u>1655</u>	SX.	0r	t	
		Top of Cement: Surface		Method Determined	1: Circulated	
			Production Casing			
		Hole Size: <u>6.75</u> "		Casing Size: 5.5"		
Wellbore Hole OD- 9.8750 7 5/8" CSA 11,461'		Cemented with: <u>887</u>	SX.	0r	f	
CMT CIRC TO SURFACE	Wellbore Hole OD- 6.7500	Top of Cement: 10,775'		Method Determined	1: Calc	
	5 1/2" 20# P-110 DQX CSA 0 - 22,394' TOC @ 10,775'	Total Depth: <u>22,314</u>		Total Vertical De	pth: <u>12,067</u> '	
PKR SA 11,700'			Injection	Interval MD/TVD		
		12,157' MD / 11,994' TVD	feet	to 22,218' MD / 12,069	9.1' TVD	
	(Perfe	orated or Open H	ole; indicate which)			

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Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)
Тур	e of Packer: 2.875" x 5.5" Nickle Coated (proposed)
Pac	ker Setting Depth: 11,800' MD / 11,746' TVD (proposed) (MD/TVD)
Oth	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>
	Additional Data
1.	Is this a new well drilled for injection?Yes _XNo
	If no, for what purpose was the well originally drilled? Oil and Gas production
2.	Name of the Injection Formation:
3.	Name of Field or Pool (if applicable):
4.	Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used No
5.	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
	OVERLYING: BONE SPRING, ~8600' TVD
	UNDERLYING: STRAWN, ~13874' TVD

INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

Side 1

ELL NAME & NUMBER	: MESA VERDE WOLFCAMP UN	IIT #007H Al	PI 30-025-45920)	
ELL LOCATION: 280 FS	L / 1421 FWL	Ν	17	24S	32E
FC	OOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
<u>WELLBORI</u>	<u>E SCHEMATIC</u>		<u>WELL C</u> Surface	<u>ONSTRUCTION DA1</u> Casing	<u>'A</u>
Wellbore Hole OD-14 10 3/4" CSA 954'	.75000	Hole Size: <u>14.75</u> "		Casing Size: 10.75"	
CMT CIRC TO SURFA	CE	Cemented with: 970	SX.	0r	t
		Top of Cement: Surface		Method Determined	1: Circulated
			Intermedia	te Casing	
		Hole Size: <u>9.875</u> "		Casing Size: 7.625"	
		Cemented with: <u>1530</u>	SX.	0ľ	
		Top of Cement: Surface	·	Method Determined	1: Circulated
			Productio	n Casing	
		Hole Size: <u>6.75</u> "		Casing Size: 5.5"	
Wellbore Hole OD- 9. 7 5/8" CSA 11,461' CMT CIRC TO SURFA		Cemented with: 805	SX.	0r	
	Wellbore Hole OD- 6.7500 5 1/2" 20# P-110 DQX CSA 0 - 22,433' TOC @ 10,960'	Top of Cement: <u>10,960'</u>		Method Determined	1: Calc
PKR SA 11,730'	100 @ 10,500	Total Depth: <u>22,458</u>		Total Vertical Dep	pth: 12,211'
			Injection	Interval MD/TVD	
		12,047' MD / 11,976.4' T	TVD fee	t to 22,108' MD / 12.208	3.8' TVD

(Perforated or Open Hole; indicate which)

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Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)
Тур	De of Packer: 2.875" x 5.5" Nickle Coated (proposed)
Pac	ker Setting Depth: <u>11,900' MD / 11,860.9' TVD (proposed)</u> (MD/TVD)
Oth	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>
	Additional Data
1.	Is this a new well drilled for injection?Yes _XNo
	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):
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
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

OPERATOR: Oxy USA

Side 1

/ELL NAME & NUMBER: _[MESA VERDE WOLFCAMP UNIT #008H	Al	PI 30-025-45921		
ELL LOCATION: 280 FSL / 1 FOOT		NIT LETTER	17 SECTION	24S TOWNSHIP	32E RANGE
<u>WELLBORE SC</u>	<u>HEMATIC</u>		<u>WELL CO</u> Surface C	NSTRUCTION DATA Casing	<u>l</u>
Wellbore Hole OD-14.75000 10 3/4" CSA 970' CMT CIRC TO SURFACE		Hole Size: <u>14.75</u> "		Casing Size: 10.75"	
		Cemented with: 970	SX.	0r	ft
		Top of Cement: Surface	·	Method Determined:	Circulated
			Intermediate	e Casing	
		Hole Size: <u>9.875</u> "		Casing Size: 7.625"	
		Cemented with: 1220	SX.	0r	f
		Top of Cement: Surface	·	Method Determined:	Circulated
			Production	Casing	
		Hole Size: <u>6.75</u> "		Casing Size: 5.5"	
Wellbore Hole OD- 9.8750		Cemented with: 780	SX.	or	f
7 5/8" CSA 11,445' CMT CIRC TO SURFACE		Top of Cement: 10940'		Method Determined:	
	Wellbore Hole OD- 6.7500 5 1/2" 20# P-110 DQX CSA 0 - 22,327"	Total Depth: 22,317		Total Vertical Dep	h: <u>12,009'</u>
PKR SA 11,700'	TOC 10940'		Injection In	nterval MD/TVD	
		12,137' MD / 11,904' TV	Dfeet	to_22,239' MD / 12,016'	TVD
		(Pe	erforated or Open Ho	ole; indicate which)	

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Tub	Ding Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)
Тур	De of Packer: 2.875" x 5.5" Nickle Coated (proposed)
Pac	eker Setting Depth: <u>11,800' MD / 11,671' TVD (proposed)</u> (MD/TVD)
Oth	ner Type of Tubing/Casing Seal (if applicable): <u>NA</u>
	Additional Data
1.	Is this a new well drilled for injection?Yes _XNo
	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) usedNo
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

INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

Side 1

WELL NAME	& NUMBER:	MESA VERDE WOLFCAMP UNIT #009H	A	PI 30-025-45871		
WELL LOCA	TION: 422 FSL / 12	254 FEL	P	18	24S	32E
			UNIT LETTER	SECTION	TOWNSHIP	RANGE
	<u>WELLBORE SCI</u>	<u>HEMATIC</u>		<u>WELL CO</u> Surface (DISTRUCTION DAT Casing	<u>A</u>
	Wellbore Hole OD-14.75000 10 3/4" CSA 860' CMT CIRC TO SURFACE	3/4" CSA 860'			Casing Size: 10.75"	
			Cemented with: 870	SX.	or	ft ³
			Top of Cement: Surfac	е	Method Determined	: Circulated
				Intermediat	e Casing	
			Hole Size: 9.875"		Casing Size: 7.625"	
			Cemented with: 2540	SX.	or	ft ³
		Top of Cement: Surfac	е	Method Determined	: Circulated	
				Production	Casing	
	Wellbore Hole OD- 9.8750	5/8" CSA 11,286'	Hole Size: 6.75"		Casing Size: 5.5"	
	7 5/8" CSA 11,286' Cmt circ to surface		Cemented with: 905	SX.	or	ft ³
	2 7/8" Tbg	5 1/2" 20# P-110 DQX CSA 22,605" TOC 10100'	Top of Cement: 10100		Method Determined	: Calc
	PKR SA 12,000'		Total Depth: 22,488' MI	D	Total Vertical Dep	oth: 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)

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Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)			
Typ	be of Packer: 2.875" x 5.5" Nickle Coated (proposed)			
Pac	ker Setting Depth: <u>12,000' MD / 11,917' TVD (proposed)</u> (MD/TVD)			
Oth	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>			
	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:			
3.	Name of Field or Pool (if applicable):			
4.	Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) usedNo			
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				

INJECTION WELL DATA SHEET

OPER A TOP: OWILISA

Side 1

ELL NAME & NUMBER:	MESA VERDE WOLFCAMP UNIT #010H	API	30-025-45872		
ELL LOCATION: 422 FSL	/ 1289 FEL	Ρ	18	24S	32E
FO	DTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
<u>WELLBORE</u>	<u>SCHEMATIC</u>		<u>WELL CO</u> Surface C	NSTRUCTION DAT Casing	<u>'A</u>
Wellbore Hole OD-14. 10 3/4" CSA 881' CMT CIRC TO SURFAC		Hole Size: <u>14.75</u> "		Casing Size: 10.75"	
		Cemented with: 870	SX.	or	ft
		Top of Cement: Surface		Method Determined	: Circulated
			Intermediate	e Casing	
		Hole Size: <u>9.875</u> "		Casing Size: 7.625"	
		Cemented with: 2975	SX.	or	fi
		Top of Cement: Surface		Method Determined	: Circulated
			Production	Casing	
		Hole Size: <u>6.75</u> "		Casing Size: 5.5"	
Wellbore Hole OD- 9.8 7 5/8" CSA 11,356'	'50	Cemented with: <u>652</u>	SX.	or	fi
Cmt circ to surface	Wellbore Hole OD- 6.7500	Top of Cement: 7865'		Method Determined	l: Calc
2 7/8" Tbg	5 1/2" 20# P-110 DQX CSA 19,681' TOC 7865'	Total Depth: 19,702'		Total Vertical Dep	oth: 12,064
PKR SA 11,800'			Injection I	nterval MD/TVD	
		12,017' MD / 11,925.6' TVD	feet	to_19,438' MD / 12,066	' TVD
		(Perfe	orated or Open Ho	ole; indicate which)	

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Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)
Тур	e of Packer: 2.875" x 5.5" Nickle Coated (proposed)
Pac	ker Setting Depth: 11,800' MD / 11,755' TVD (proposed) (MD/TVD)
Oth	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>
	Additional Data
1.	Is this a new well drilled for injection?Yes _XNo
	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
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

INJECTION WELL DATA SHEET

OPERATOR: Oxy USA

Side 1

ELL NAME &	& NUMBER:	IESA VERDE WOLFCAMP UNIT	#011Н АР	I 30-025-45873		
ELL LOCAT	ION: 422 FSL / 1		0	18	24S	32E
	FOOTA	AGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
	<u>WELLBORE SCI</u>	<u>HEMATIC</u>		<u>WELL Co</u> Surface	<u>ONSTRUCTION DA1</u> Casing	<u>74</u>
	Wellbore Hole OD-14.75000		Hole Size: <u>14.75</u> "		Casing Size: 10.75"	
	10 3/4" CSA 880' CMT CIRC TO SURFACE		Cemented with: 870	SX.	or	f
		Top of Cement: Surface		Method Determined	1: Circulated	
			Intermedia	te Casing		
			Hole Size: <u>9.875</u> "		Casing Size: 7.625"	
			Cemented with: 2242	SX.	or	1
			Top of Cement: Surface		Method Determined	1: Circulated
				Production	n Casing	
			Hole Size: 6.75"		Casing Size: 5.5"	
	Wellbore Hole OD- 9.8750 7 5/8" CSA 11,654' Cmt circ to surface		Cemented with: <u>648</u>	SX.	0r	1
		Wellbore Hole OD- 6.7500 5 1/2" 20# P-110 DQX CSA 22,562' TOC 11,137'	Top of Cement: <u>11,137</u>		Method Determined	1: Calc
	2 7/8" Tbg PKR SA 12,000'		Total Depth: 20,035'		Total Vertical Dep	pth: 12,267.5'
				Injection	Interval MD/TVD	
			12,258' MD / 12,110.6 ' T	VDfee	t to <u>19,918' MD / 12,268</u>	3.6' TVD

(Perforated or Open Hole; indicate which)

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Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)			
Typ	be of Packer: 2.875" x 5.5" Nickle Coated (proposed)			
Pac	ker Setting Depth: <u>12,000' MD / 11,800' TVD (proposed)</u> (MD/TVD)			
Other Type of Tubing/Casing Seal (if applicable): <u>NA</u>				
	Additional Data			
1.	Is this a new well drilled for injection?Yes _XNo			
	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):			
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) usedNo			
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			

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Side 1 INJ	ECTION WELL DATA SHEET	ſ		
OPERATOR: Oxy USA				
WELL NAME & NUMBER: MESA VERDE WOLFCAMP U	JNIT #039H Al	PI 30-025-4882	24	
WELL LOCATION: 250 FSL, 1715 FWL FOOTAGE LOCATION	N UNIT LETTER	16 SECTION	24S TOWNSHIP	32E RANGE
<u>WELLBORE SCHEMATIC</u>		<u>WELL CO</u> Surface O	<u>ONSTRUCTION DAT</u> Casing	<u>74</u>
14.75" Hole 10.75" CSA 1158' Cmt w/807 Sx Circ to Surf	Hole Size: <u>14.75</u> "		Casing Size: 10.75"	
	Cemented with: 807	SX.	0r	ft ³
	Top of Cement: Surface		Method Determined	I: PROPOSED
		Intermediat	te Casing	
	Hole Size: <u>9.875</u> "		Casing Size: 7.625"	
	Cemented with: 1126	SX.	0r	ft ³
	Top of Cement: Surface		Method Determined	I: PROPOSED
		Production	n Casing	
	Hole Size: <u>6.75</u> "		Casing Size: 5.5"	
9 7/8" Hole 7 5/8" CSA 12,696' Cmt w/1126 sx TOC Circ to Surf	Cemented with: <u>648</u>	SX.	0r	ft ³
6.75" Hole 5.5" 20# CSA 23,126'	Top of Cement: 12196		Method Determined	I: PROPOSED
Cmt w/ 620 sx TOC 12,196'	Total Depth: <u>23,126</u>		Total Vertical Dep	oth: 12,267.5'
		Injection	Interval MD/TVD	
Perfs Not Completed	NOT YET COMPLET	TEDfeet	to NOT YET COMP	LETED

(Perforated or Open Hole; indicate which)

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Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)	
Тур	e of Packer: 2.875" x 5.5" Nickle Coated (proposed)	
Pac	ker Setting Depth: <u>NOT YET COMPLETED</u> (MD/TVD)	
Oth	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>	
	Additional Data	
1.	Is this a new well drilled for injection?Yes _XNo	
	If no, for what purpose was the well originally drilled? Oil and Gas production	
2.	Name of the Injection Formation: WCB/C	
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) usedNo	
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	

NOTE- THIS WELL WAS DRILLED IN LATE 2024. THE COMPLETION REPORT HAS NOT YET BEEN FILED. INFO IS BASED OFF APD.

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Side 1	INJECTION WELL DATA SHEET				
OPERATOR:	Oxy USA				
WELL NAMI	E & NUMBER: MESA VERDE WOLF	CAMP UNIT #040H	API 30-025-4882	25	
WELL LOCA	TION: 250 FSL, 1750 FWL FOOTAGE LOCATION	N UNIT LETTER	16 SECTION	24S TOWNSHIP	32E RANGE
	<u>WELLBORE SCHEMATIC</u>		<u>WELL CO</u> Surface (<u>ONSTRUCTION DA1</u> Casing	<u>[4</u>
	14.75" Hole 10.75" CSA 1158'	Hole Size: <u>14.75</u> "		Casing Size: 10.75"	
	Cmt w/ 819 Sx Circ to Surf	Cemented with: <u>81</u>	7sx.	0r	ft ³
		Top of Cement: <u>Su</u>	rface	Method Determine	d: PROPOSED
			Intermediat	te Casing	
		Hole Size: <u>9.875</u> "		Casing Size: 7.625"	
		Cemented with: <u>18</u>	27 sx.	or	ft ³
		Top of Cement: <u>Su</u>	rface	Method Determine	d: PROPOSED
			Production	n Casing	
		Hole Size: <u>6.75</u> "		Casing Size: 5.5"	
	9 7/8" Hole 7 5/8" CSA 12613' Cmt w/ 1827 sx TOC Circ to Surf	Cemented with: <u>62</u>	0 sx.	0r	ft ³
	6.75" Hole	Top of Cement: <u>12</u>	,113'	Method Determine	d: PROPOSED
	5.5" 20# CSA 23,957 Cmt w 620 Sx TOC @ 12,1	¹³ Total Depth: <u>23,95</u>	7'	Total Vertical De	pth: <u>12,851'</u>
			Injection	Interval MD/TVD	
	Perfs Not Completed		PLETED feet	to NOT YET COMP	PLETED
			(Perforated or Open H	ole; indicate which)	

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Tubi	ng Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)	
Тур	e of Packer: 2.875" x 5.5" Nickle Coated (proposed)	
Pack	ter Setting Depth: <u>NOT YET COMPLETED</u> (MD/TVD)	
Othe	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>	
	Additional Data	
1.	Is this a new well drilled for injection?Yes _XNo	
	If no, for what purpose was the well originally drilled? Oil and Gas production	
2.	Name of the Injection Formation: WCB/C	
3.	Name of Field or Pool (if applicable): [98252] MESA VERDE; WOLFCAMP	
	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) usedNo	
 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	

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Side 1		INJECTION WELL DATA SHEET			-
OPERATOR	: Oxy USA				
WELL NAM	IE & NUMBER: MESA VERDE WOLFCA	MP UNIT #054H API	30-025-4881	7	
WELL LOCA	ATION: <u>635 FSL, 865 FWL</u> FOOTAGE LOCATION	M UNIT LETTER	16 SECTION	24S TOWNSHIP	32E RANGE
	<u>WELLBORE SCHEMATIC</u>		<u>WELL CO</u> Surface C	DNSTRUCTION DA1 Casing	<u>- 74</u>
	14.75" Hole 10.75" CSA 971'	Hole Size: <u>14.75</u> "		Casing Size: 10.75"	
	Cmt w/812 Sx Circ to Surf	Cemented with: 812	SX.	or	ft ³
		Top of Cement: Surface		Method Determined	1: PROPOSED
			Intermediate	e Casing	
		Hole Size: <u>9.875</u> "		Casing Size: 7.625"	
		Cemented with: 1831	SX.	or	ft ³
		Top of Cement: Surface		Method Determined	1: PROPOSED
			Production	Casing	
		Hole Size: <u>6.75</u> "		Casing Size: 5.5"	
U U	9 7/8" Hole 7 5/8" CSA 12560'	Cemented with: <u>626</u>	SX.	or	ft ³
	Cmt w/ 1831 Sx, TOC Circ to Surface 6.75" Hole	Top of Cement: <u>12,060'</u>		Method Determined	1: PROPOSED
	5.5" 20# CSA 23,149' Cmt w/626 Sx TOC @ 12,060'	Total Depth: <u>23,149</u>		Total Vertical De	pth: <u>12,950'</u>
			Injection I	nterval MD/TVD	
	Perfs Not Completed		Dfeet	to NOT YET COMP	PLETED
	· · · · · · · · · · · · · · · · · · ·	(Perf	orated or Open Ho	ole; indicate which)	

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Tub	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)				
Тур	be of Packer: 2.875" x 5.5" Nickle Coated (proposed)				
Pac	ker Setting Depth: <u>NOT YET COMPLETED</u> (MD/TVD)				
Oth	Other Type of Tubing/Casing Seal (if applicable): <u>NA</u>				
	Additional Data				
1.	Is this a new well drilled for injection?Yes _XNo				
	If no, for what purpose was the well originally drilled? Oil and Gas production				
2.	Name of the Injection Formation: WCB/C				
3.	Name of Field or Pool (if applicable):				
4.	Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) usedNo				
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				

NOTE- THIS WELL WAS DRILLED IN LATE 2024. THE COMPLETION REPORT HAS NOT YET BEEN FILED. INFO IS BASED OFF APD. *ge 57 of 78*

Side 1 INJECTION V	VELL DATA SHEET
OPERATOR: Oxy USA	
WELL NAME & NUMBER: MESA VERDE WOLFCAMP UNIT #055H	API 30-025-48863
WELL LOCATION: 635 FSL, 1004 FWL M	16 24S 32E
FOOTAGE LOCATION UNI <u>WELLBORE SCHEMATIC</u>	F LETTER SECTION TOWNSHIP RANGE <u>WELL CONSTRUCTION DATA</u> Surface Casing Surface Casing
14.75" Hole 10.75" CSA 1156' Cmt w/ 823 Sx Circ to Surf	Hole Size: <u>14.75</u> " Casing Size: <u>10.75</u> "
	Cemented with: 823 sx. or ft ³
	Top of Cement: Surface Method Determined: PROPOSED
	Intermediate Casing
	Hole Size: <u>9.875</u> " Casing Size: <u>7.625</u> "
	Cemented with: 1843 sx. or ft^3
	Top of Cement: Surface Method Determined: PROPOSED
	Production Casing
	Hole Size: <u>6.75</u> " Casing Size: <u>5.5</u> "
9 7/8" Hole 7 5/8" CSA 12654" Cmt w/ 1843 sx, Circ to Surf	Cemented with: <u>626</u> sx. or ft ³
6.75" Hole 5.5" 20# CSA 23,242"	Top of Cement: 12,154' Method Determined: PROPOSED
Cmt w/ 626 Sx TOC @ 12,154'	Total Depth: 23,242' Total Vertical Depth: 12,950'
	Injection Interval MD/TVD
Perfs Not Completed	NOT YET COMPLETED feet to NOT YET COMPLETED

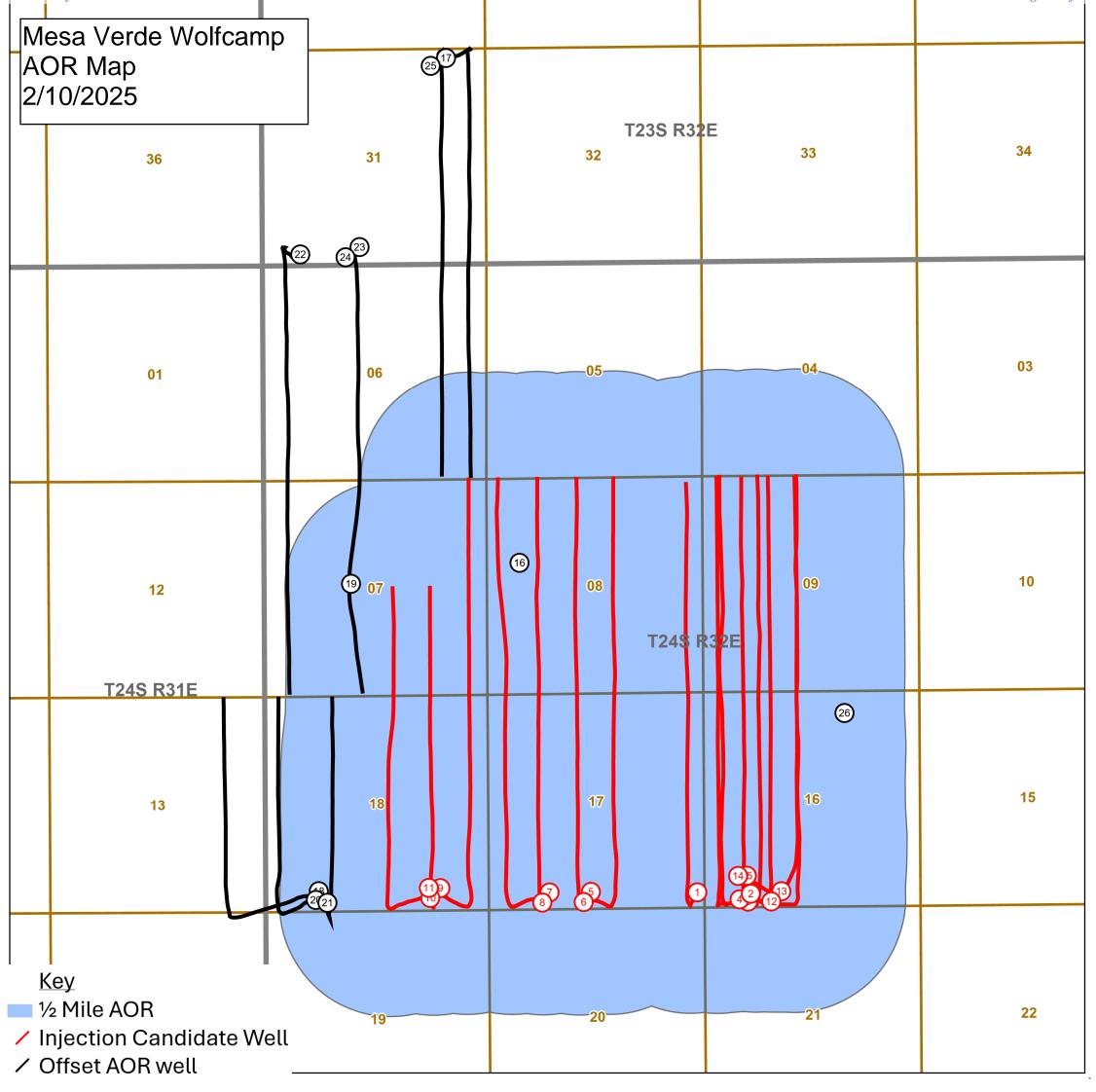
(Perforated or Open Hole; indicate which)

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Tubi	ing Size: 2.875" (proposed) Lining Material: Plastic Lined (proposed)
Тур	e of Packer: 2.875" x 5.5" Nickle Coated (proposed)
Pacl	ker Setting Depth: <u>NOT YET COMPLETED</u> (MD/TVD)
Othe	er Type of Tubing/Casing Seal (if applicable): <u>NA</u>
	Additional Data
1.	Is this a new well drilled for injection?Yes _XNo
	If no, for what purpose was the well originally drilled? Oil and Gas production
2.	Name of the Injection Formation: WCB/C
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
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



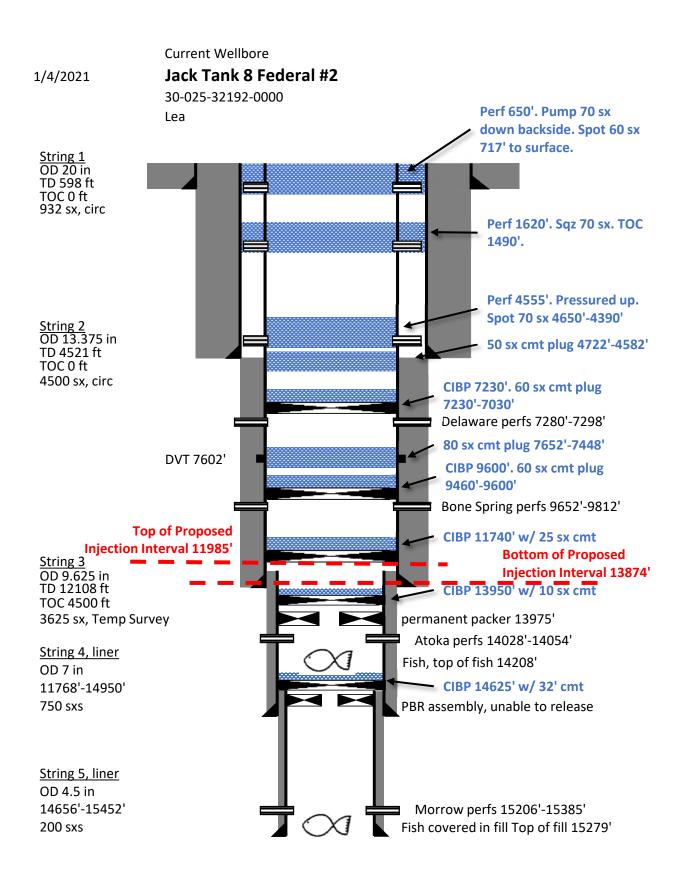
Wolfcamp AOR Table 2/6/2025 Red Text- Candidate EOR Injection well

Red Text-	Candidate	EORIN	jection	well

Wollcamp AON Tak	112 2/0/2025	Red Text- Candidate EOR Injection	well													
AOR ID API NUMBER	Current Operator	LEASE NAME	WELL NUMB Well 1 ER	Type: Status:	Footages N/S	Footag			Spud: \	True Current /ertical Completion Depth:	HOLE SIZE CS	G SIZE	SET AT	SX CMT	Top O CMT TO How Measur	nt Comment
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	13.375 9.625	922 10933	1190 3620	Surf Circ Surf Circ	8.5" Vertical pilot hole to 14150' MD. 5.5" Production Liner. 5.5" frac string from 0'-10764' [98
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	8.500 14.750 9.875	5.500 10.750 7.625	10764-22271 959 11725	2193 975 3015	10764 Circ Surf Circ 190 Calc	[9
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	6.750 14.750 9.875 6.750	5.500 10.750 7.625 5.500	22585 890 11420 22351	855 975 2824 842	5618 Calc Surf Circ Surf Circ 9031 Calc	[98
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 2745 834	Surf Circ 75 Calc 9269 Calc	[98]
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	[98
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	[98]
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	[98
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	[98
9 30-025-45871	OXY USA INC	MESA VERDE WOLFCAMP UNIT	009H Oil	Active	422 S	1254 E P	18 24S	32E		12316 12427-22488	9.875 6.750	10.750 7.625 5.500	860 11290 22605	870 2540 905	Surf Circ Surf Circ 10100 Calc	[98
10 30-025-45872	OXY USA INC	MESA VERDE WOLFCAMP UNIT	010H Oil 011H Oil	Active	422 S 422 S	1289 E P 1324 E O	18 24S	32E 	1/28/2020	12064 12017-19438 12267 12258-19918	14.750 9.875 6.750 14.750	10.750 7.625 5.500 10.750	861 11356 <u>19681</u> 860	870 2975 652 870	Surf Circ Surf Circ 7865 Calc Surf Circ	[98] [98]
12 30-025-48824	OXY USA INC	MESA VERDE WOLFCAMP UNIT	039H Oil	New	250 S	1715 W N	16 245	32E	9/22/2024	12851 Not Yet Complete	9.875 6.750 14.750	7.625 5.500 10.750	11662 20015 1158	2242 648 807	Surf Circ 11137 Calc Surf Planned	
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	9.875 6.750 14.750	7.625 5.500 10.750	12696 24030 1158	1851 620 819	Surf Planned 12196 Planned Surf Planned	
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	9.875 6.750	7.625 5.500 10.750	12613 23957 971	1827 620 812	Surf Planned 12113 Planned Surf Planned	
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	9.875 6.750 14.750	7.625 5.500 10.750	12560 23149 1156	1831 626 823	Surf Planned 12060 Planned Surf Planned	l
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	9.875 6.750 26.000	7.625 5.500 20.000	12654 23242 598	1843 626 932	Surf Planned 12154 Planned Surf Circ	
											17.000 12.250 9.625 9.625	13.325 9.625 7.000 4.500	4521 12108 11768-14950 14656-15452	4500 3625 750 200	Surf Circ 4500 TS ? ? ? ?	
17 30-025-48459	DEVON ENERGY PRODUCTION COMPANY, LP	RIGHT MEOW 31 6 FEDERAL COM	626H Oil	Active	350 N	1095 E A	31 235	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 3412 Circ ? ?	[98
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		10.750 7.625 5.500	970 11248 17065	890 2656 500	Surf Circ Surf Circ 10748 Calc	[98]
19 30-025-43473	NGL WATER SOLUTIONS PERMIAN, LLC	STATION SWD	001 Salt Water	r Disposal Active	2625 N	2315 W F	7 24S	32E	5/6/2018	18264 16763-18264	26.000 17.500 12.250	20.000 13.375 9.625	925 4475 11924	1530 2460 1760	Surf Circ Surf Circ Surf Circ	[97
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	9.875	7.625 10.750 7.625	<u>16763</u> 957 11617	250 890 2816	11405 Calc Surf Circ Surf Circ	[98
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	6.750 14.750 9.875 6.125 5.5	5.500 10.750 7.625	17286 960 11365 11275	485 890 2615 512	10000 Calc Surf Circ Surf Circ 10200 Calc	[98]
22 30-025-48486	DEVON ENERGY PRODUCTION COMPANY, LP	CATTY SHACK 6 7 FEDERAL COM	711H Oil	Active	150 S	800 W M	31 23\$	32E	5/4/2021	12131 12437-22787		13.375 8.625 5.500	999 11563 22801	630 2295 2700	Surf Circ 7000 Calc Surf Circ	[98]
23 30-025-48485	DEVON ENERGY PRODUCTION COMPANY, LP	CATTY SHACK 6 7 FEDERAL COM	623H Oil	Active	315 S	2255 W N	31 235	32E	4/7/2021	12007 12277-22657	17.500 9.625 7.875	13.375 8.625 5.500	978 11197 22672	850 1720 2609	Surf Circ 950 Circ Surf Circ	[98]
24 30-025-48487	DEVON ENERGY PRODUCTION COMPANY, LP	CATTY SHACK 6 7 FEDERAL COM	713H Oil	Active	315 S	2195 W N	31 23\$	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	[98
25 30-025-48460	DEVON ENERGY PRODUCTION COMPANY, LP	RIGHT MEOW 31 6 FEDERAL COM		Active	350 N	1155 E A	31 23\$	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	[98]
26 30-025-30746	COG OPERATING LLC	DOUBLE ABJ STATE	001 Gas	PA	660 N	1980 E B	16 24S	32E	7/31/1990	19800 NA	17.500 12.250 8.750 7.875	13.375 9.625 7.000 4 500	511 4975 13000 12749-15798	525 2700 1225 350	Surf Circ Surf Circ 6320 CBL 12749 Circ	NA
											7.875	4.500	12149-13/98	300	12/49 UIC	

0	Surf	Circ	from 0'-10764'	[98252] MESA VERDE; WOLFCAMP
0	Surf	Circ		
3	10764	Circ		
'5		Circ		[98252] MESA VERDE; WOLFCAMP
		Calc		
.5				
5	5618			
'5	Surf	Circ		[98252] MESA VERDE; WOLFCAMP
4	Surf	Circ		
2	9031	Calc		
2 '5	Surf	Circ		[98252] MESA VERDE; WOLFCAMP
		Calc		[]
.5				
4	9269			
8	Surf	Circ		[98252] MESA VERDE; WOLFCAMP
8	Surf	Circ		
0	11050	Calc		
8	Surf	Circ		[98252] MESA VERDE; WOLFCAMP
5		Circ		
7	10775			
0	Surf	Circ		[98252] MESA VERDE; WOLFCAMP
0	Surf	Circ		
5	10960	Calc		
'0	Surf	Circ		[98252] MESA VERDE; WOLFCAMP
20		Circ		[]
0	10940			
0	Surf	Circ		[98252] MESA VERDE; WOLFCAMP
0	Surf	Circ		
5	10100	Calc		
0	Surf	Circ		[98252] MESA VERDE; WOLFCAMP
'5		Circ		
2	7865			
0	Surf	Circ		[98252] MESA VERDE; WOLFCAMP
2	Surf	Circ		
8	11137	Calc		
8		Planned	Spud in late 2024. Completion report has not been filed.	[98252] MESA VERDE; WOLFCAMP
		Planned		
1				
20	12196	Planned		
.9	Surf	Planned	Spud in late 2024. Completion report has not been filed.	[98252] MESA VERDE; WOLFCAMP
7	Surf	Planned		
0	12113	Planned		
.2		Planned	Spud in late 2024. Completion report has not been filed.	[98252] MESA VERDE; WOLFCAMP
			Spud in tale 2024. Completion report has not been med.	[90232] MESA VERDE, WOLFCAMP
1		Planned		
6	12060	Planned		
-	Surf	Planned	Spud in late 2024. Completion report has not been filed.	[98252] MESA VERDE; WOLFCAMP
3	oun	rtannoa		
3	Surf	Planned		
.3 :6	Surf 12154	Planned Planned		
3 6 2	Surf 12154 Surf	Planned Planned Circ		ΝΑ
.3 :6	Surf 12154 Surf	Planned Planned		NA
3 6 2	Surf 12154 Surf	Planned Planned Circ Circ		NA
.3 :6 :2 :0	Surf 12154 Surf Surf 4500	Planned Planned Circ Circ		NA
.3 26 20 25 60	Surf 12154 Surf Surf 4500 ?	Planned Planned Circ Circ TS ?		NA
3 6 2 0 2 5 60 0	Surf 12154 Surf Surf 4500 ? ?	Planned Planned Circ Circ TS ? ?		
26 22 00 25 60 00 00	Surf 12154 Surf 4500 ? ? Surf	Planned Planned Circ Circ TS ? ? Circ		NA [98248] WC-025 G-08 S243217P; UPR WOLFCAMP
3 6 2 0 2 5 60 0	Surf 12154 Surf 4500 ? ? Surf 3412	Planned Planned Circ Circ TS ? ? Circ Circ Circ		
26 22 00 25 60 00 00	Surf 12154 Surf 4500 ? ? Surf 3412	Planned Planned Circ Circ TS ? ? Circ		
-3 -6 -0 -2 -5 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0	Surf 12154 Surf 4500 ? ? Surf 3412 ?	Planned Planned Circ Circ TS ? ? Circ Circ Circ		
3 26 32 30 25 30 30 30 30 30	Surf 12154 Surf 4500 ? ? Surf 3412 ? Surf	Planned Planned Circ TS ? ? Circ Circ ? Circ Circ ?		[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
.3 26 00 25 00 00 00 20 00 00 66	Surf 12154 Surf Surf 4500 ? ? Surf 3412 ? Surf Surf	Planned Planned Circ TS ? ? Circ Circ ? Circ Circ Circ Circ Circ		[98248] WC-025 G-08 S243217P; UPR WOLFCAMP
3 26 22 00 25 60 00 00 66 00	Surf 12154 Surf 4500 ? ? Surf 3412 ? Surf Surf 10748	Planned Planned Circ TS ? ? Circ Circ Circ Circ Circ Circ Circ Circ		[98248] WC-025 G-08 S243217P; UPR WOLFCAMP [98252] MESA VERDE; WOLFCAMP
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3 26 22 00 25 60 00 00 66 00	Surf 12154 Surf 4500 ? ? Surf 3412 ? Surf Surf 10748 Surf Surf	Planned Planned Circ Circ TS ? ? Circ Circ Circ Circ Circ Calc Circ Circ Circ Circ		[98248] WC-025 G-08 S243217P; UPR WOLFCAMP [98252] MESA VERDE; WOLFCAMP
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Pool



COG			Plugg	jed]	Description	O.D.	Grade	Weight	Depth	Hole	Cmt Sx	TOC
Author: Well Name	Abby @ JMR Double ABJ State	Well No.		#1		Surface Csg	13 3/8	K55	54.5#	511	17 1/2	300	0
Field	Und. Lea Strawn Gas	API #:	-	30-025-30746	1	Inter Csg	9 5/8	K55	36 to 32#	4,975	12 1/4	875	0
County State	Lea NM	Location		FNL & 1980 FEL c 16, T24S, R32E									
Spud Date	5/1/1980	GL		3605		Prod Csg	7	P110	26#	13,000	8 3/4	1,225	6,320
					J	Liner	4 1/2	P110	15.1 to 13.5#	12,749-15,798'	7 7/8	350	12,749
											Formati	on Tops]
		l k	42.2/0			200							
4		6. Sp	13 3/8 cs otted 75 s	sg set @ 511 x class C cmt @ 310'	with & circu	300 lated to su	cmt sx rface in	side the	e 7".				
		5 Sn	ottod 50 si	x class C cmt @ 590-3	300' \\		ned @ '	810'					
				590'. POH w/ tbg & cut j			jeu @ 、	510.					
		4. Pe	rf'd @ 159	0'. Sqz'd 80 sx class (C cmt (@ 1590-11	00'. RII	Hw/wir	eline inside ti	bg, tagged plu	ıq @ 910	0'. RIH	
				d TOC @ 590'.	-					5, 55 1	J () *		
				0'. Sqz'd 84 sx class (ish out o	f hole.	
		RIHV	v/ wireline	in tbg, tagged @ 1600	J'. RIH	w/ wireline	e in 7° a	nnulus,	tagged @ 5	92'.			
		2. Pe	rf'd @ 502	5'. Set 7" CICR @ 45	67'. Sq	z'd 300 sx	class C	cmt fro	m 4567-502	5'.			
	1	9 5/8	csg set	4,975 with	875	cmt sx							
				lass C cmt @ 5512-5 32'. Ran CBL. CBL does no		-							
		Spotted	30 sx clas	ss H cmt @ 7805' & di	splace	d to 7649'.							
		Spotted	30 sx clas	ss H cmt @ 8679' & di	isplace	d to 8515'.							
			00 I				0.41						
		Spotted	30 sx clas	ss H cmt @ 10,365' &	displac	ed to 10,2	2011.						
		Spotted	30 sx clas	ss H cmt @ 12,175' &	displac	ed to 12.0	011'.						
					•	,							
	4	Snottod		sg set @ 13,000	with		cmt sx	0.6201					
		Spolled	40 SX Clas	ss H cmt @ 13,050-12	.,039.	ragged pit	ug @ 12	2,039.					
		•		ss H cmt @ 13,986' & OC & Tagged plug @	-		BBLs fr	esh brin	e H20 to 13,	621'. Circ'd ho	ole w/ 55	5 BBLs	
				from 13,975' to surface.			0'.						
		CIBP @ Perfs @ 14,		mp bailed 3 sx class H c	mt. WO	C & Taggeo	н тос @) 13,986 '.					
		Perfs @ 14, Dropped T											
			5,260' w 30' cr	nt on top									
		Perfs @ 15,	332-15,404'										
			4 1/2 cs	sg set @ 12,749-15,798'	with	350	cmt sx						

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 and CO2 based on PROSPER model
 - Various inputs for fluid composition, downhole equipment, bottomhole temperature, and injection rate.

		Wa	ater			Hydroc	arbon Gas			CO	2	
	Injection	Max Daily Injection Rate	Average Injection	Max Allowable Surface Pressure	Average Daily Injection Rate [MMSCFP	Max Daily Injection Rate [MMSCFP	Injection	Max Allowable Surface	Injection Rate		Average	Max Allowabl e Surface Pressure
Zone	[BWIPD]	[BWIPD]	[PSI]	[PSI]	D]	D]	[PSI]	[PSI]	D]	D]	[PSI]	[PSI]
WCXYA	5000	10000	2361	2361	22	50	5700	5700	22	50	3080	3080
WCB/C	5000	10000	2570	2570	22	50	6190	6190	22	50	3340	3340



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.

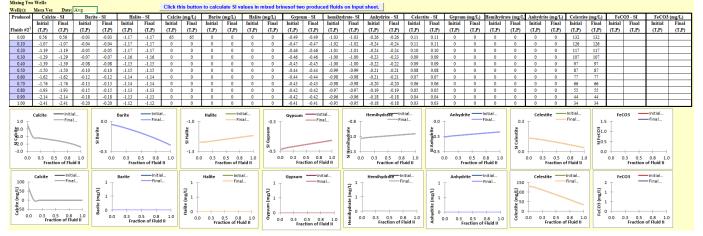
Below is supporting information and the SSP2025 results that were modeled. Additional files have the raw water chemistry information and the SSP2025 models that were ran.

Locations	Formation	Temperature (F)	Pressure (PSI)
Mesa Verde 18 CTB	СТВ		
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)

Mixing Tv	ro Wells																															
Well(s):	Mesa Ve	er Date:	9/2/2022				Click th	is button	to calcu	late SI va	alues in r	nixed bri	nesof tw	o produc	ed fluids	on Inpu	t sheet.															
Produced		cite - SI	Barit			ite - SI	Calcite	(mg/L)	Barite	(mg/L)	Halite	(mg/L)		ım - SI		drate- SI	Anhyd	rite - SI	Celes	tite - SI		n (mg/L)	Hemihydr	ate (mg/L)	Anhydri	te (mg/L)	Celestit			03 - SI	FeCO3	(mg/L)
	Initial		Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial		Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial		Initial	Final	Initial	Final
Fluids #2	1 (T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)
0.00	0.47	0.47	0.10	0.10	-1.16	-1.16	56	56	1	1	0	0	-0.46	-0.46	-1.08	-1.08	-0.32	-0.32	0.07	0.07	0	0	0	0	0	0	91	91				
0.10	-1.37	-1.37	0.11	0.11	-1.16	-1.16	0	0	1	1	0	0	-0.46	-0.46	-1.08	-1.08	-0.32	-0.32	0.09	0.09	0	0	0	0	0	0	102	102				
0.20	-1.45	-1.45	0.11	0.11	-1.15	-1.15	0	0	0	0	0	0	-0.47	-0.47	-1.09	-1.09	-0.33	-0.33	0.09	0.09	0	0	0	0	0	0	102	102				
0.30	-1.52	-1.52	0.11	0.11	-1.14	-1.14	0	0	0	0	0	0	-0.49	-0.49	-1.11	-1.11	-0.35	-0.35	0.09	0.09	0	0	0	0	0	0	99	99				
0.40	-1.59	-1.59	0.10	0.10	-1.13	-1.13	0	0	0	0	0	0	0 - 0.52 -0.52 -1.14 -1.14 -0.38 -0.38 0.09 0.09 0 0 0 0 0 0 0 0 94 94 0 -0.56 -0.56 -1.17 -1.17 -0.41 -0.41 0.09 0.09 0 0 0 0 0 0 0 0 86 86 																			
0.50	-1.67	-1.67	0.10	0.10	-1.12	-1.12	0	0	0	0	0 0 -0.60 -0.60 -1.22 -1.22 -0.46 -0.46 0.08 0.08 0 0 0 0 0 0 76 76																					
0.60	-1.76	-1.76	0.09	0.09	-1.11	-1.11	0	0	0	0		0 0.60 0.60 1.22 1.22 0.46 0.08 0.08 0 0 0 0 0 76 76 0 0 0.66 0.66 1.28 1.28 -0.52 0.07 0.07 0 0 0 0 65 65																				
0.70	-1.86	-1.86	0.08	0.08	-1.10	-1.10	0	0	0	0	0	0 -0.66 -1.28 -1.28 -0.52 -0.52 0.07 0.07 0 0 0 0 0 65 65 0 -0.75 -1.36 -1.36 -0.60 -0.66 0.06 0 0 0 0 51 51																				
0.80	-1.99	-1.99	0.07	0.07	-1.09	-1.09	0	0	0	0	0	0											· ·	0	0	~						
0.90	-2.15	-2.15	0.05	0.05	-1.09	-1.09	0	0	0	0	0	0	40.75 -4.75 -1.46 -1.46 -0.401																			
1.00	-2.39	-2.39	0.03	0.03	-1.08	-1.08	0	0	Q	0	0	0	-1.07	-1.0/	1.07 -1.68 -1.68 -0.92 -0.92 0.02 0.02 0 0 0 0 0 0 18 18																	
	Calcite				Barite				Halite	Init			Gypsum				Hemihye	Irate Ini	tial		Anhyd	rite	nitial		Celes		-Initial Final		FeO		-Initial Final	
1.0 T		-Fina	·	0.3		Filld	·	-1.0		- Fill	id I	0.0 T		Fin	ai	0.0		Pil	dl	0.0 -	Γ		inal	0.3	Т		rinal	1.9	5 T		- r ii id	
90.0 + 101.0 + 172.0 + -3.0 + 0.0	0.3 Fra	0.5 0.8 action of Flu	1.0	SI Barite	0.3 Frac	0.5 0.8 tion of Fluid	1.0	-1.3 +	0 0.3 Frae	0.5 0.8 ction of FI	3 1.0 uid II	91.0 - -1.5 + 0.0) 0.3 Fra	0.5 0.8 ction of Fl	1.0 uid II	Second Se	0 0.3 Fra	0.5 0.1 ction of F	3 1.0 uid II	- 2.0% 1.0 - 0.0%	.0 0.3 F	0.5 (raction of	0.8 1.0 Fluid II	o SI Celestite	0.0 0.3	3 0.5 Fraction o	0.8 1.0 f Fluid II	0.0 0.0 0.0	5 -	0.3 0.5 Fraction	0.8 1.0 of Fluid II	
100 0 csecific (mg/c) 0 csecif	Calcite	0.5 0.8 action of Flu		Barite (mg/t)	Barite 0.3 Frac	0.5 0.8 tion of Fluid	1.0	Halite (mg/t)	0.3	0.5 0.8 tion of Flu	1.0	1 - 1 - 1	Gypsum 0.3 Fra	0.5 0.8 ction of Fl	al	Hemihydrate (mg/L) - 0 - 0	0 0.3	0.5 0	nal 3 1.0	Anhydrite (mg/L) 0 0 1 1	0 03	0.5 raction of	Final	Celestite (mg/L) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0 0.3		Initial Final 0.8 1.0 f Fluid II	FeCO3 (mg/L)			Final Final 0.8 1.0 of Fluid II	

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



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

					- /			(-0/																			
Mixing Tw							Click th	in hutton	to coloui	lata SL w	alues in n	alword bri	non of two	. produo	od fluide	on Innu	tabaat															
Well(s):	Mesa V	er Date:	Avg				CIICK UI	is button	to calcu	late 31 v	alues III II	lixed bii	nesor tw	5 produc	eu nuius	on mpu	t sneet.															
Produced	Cal	lcite - SI	Bari	e - SI	Hal	ite - SI	Calcite	(mg/L)	Barite	(mg/L)	Halite	(mg/L)	Gypsu	m - SI	hemihy	drate- SI	Anhydi	ite - SI	Celest	tite - SI	Gypsun	n (mg/L)	Hemihydr	ate (mg/L)	Anhydri	te (mg/L)	Celestite	e (mg/L)	FeC	03 - SI	FeCO3	(mg/L)
	Initial	I Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final
Fluids #2 ¹	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)
0.00	0.59	0.59	-0.13	-0.13	-1.18	-1.18	68	68	0	0	0	0	-0.52	-0.52	-1.01	-1.01	-0.23	-0.23	0.12	0.12	0	0	0	0	0	0	143	143				
0.10	-1.07	-1.07	-0.14	-0.14	-1.21	-1.21	0	0	0	0	0	0	-0.52	-0.52	-1.01	-1.01	-0.23	-0.23	0.12	0.12	0	0	0	0	0	0	136	136				
0.20	-1.20		-0.15	-0.15	-1.24	-1.24	0	0	0	0	0	0	-0.52	-0.52	-1.01	-1.01	-0.23	-0.23	0.11	0.11	0	0	0	0	0	0	126	126				
0.30	-1.32		-0.16	-0.16	-1.26	-1.26	0	0	0	0	0	0	-0.52	-0.52	-1.01	-1.01	-0.23	-0.23	0.10	0.10	0	0	0	0	0	0	116	116				
0.40	-1.45		-0.17	-0.17	-1.29	-1.29	0	0	0	0	0	0	-0.52	-0.52	-1.02	-1.02	.02 -0.23 -0.23 0.09 0.09 0 0 0 0 0 0 96 96															
0.50	-1.59		-0.18	-0.18	-1.31	-1.31	0	0	0	0	0	0	-0.52 -0.52 -1.02 -1.02 -0.24 -0.24 0.08 0.08 0 0 0 0 0 0 0 86 86																			
0.60	-1.75		-0.20	-0.20	-1.34	-1.34	0	0	0	0	0	0		-0.52 -1.02 -0.24 -0.24 0.04 0.08 0 0 0 0 0 0 0 66 66 -0.52 -1.02 -1.02 -0.24 -0.24 0.07 0.07 0 0 0 0 0 0 0 7 77 -0.52 -1.02 -1.02 -0.24 -0.24 0.06 0.06 0 0 0 0 6 67 67																		
0.70	-1.93		-0.21	-0.21	-1.37	-1.37	0	0	0	0	0	0	-0.52			$ \begin{array}{cccccccccccccccccccccccccccccccccccc$																
0.80	-2.16		-0.23	-0.23	-1.40	-1.40	0	0	0	0	0	0	-0.52	-0.52 -1.02 -1.02 -0.24 -0.24 0.07 0.07 0 0 0 0 0 0 0 77 77 -0.52 -1.02 -1.02 -0.24 -0.24 0.06 0.06 0 0 0 0 0 67 67																		
0.90	-2.44		-0.25	-0.25	-1.43	-1.43	0	0	0	0	0	0	-0.52				02 -0.24 -0.24 0.07 0.07 0 0 0 0 0 0 77 77 02 -0.24 -0.24 0.06 0.06 0 0 0 0 0 67 67 67 02 -0.24 -0.24 0.06 0.06 0 0 0 0 67 67 67 02 -0.24 -0.24 0.06 0.0 0 0 0 58 58 02 -0.24 -0.24 0.05 0.05 0 0 0 0 49 49															
1.00	-2.82	-2.82	-0.27	-0.27	-1.45	-1.45	0	0	0	0	0	0	-0.52	-0.52	-1.02	-1.02	-0.24	4 0.21 0.06 0.06 0 0 0 0 0 0 0 58 53 4 0.21 0.05 0.05 0 0 0 0 0 0 0 8 99 hvt/dte														
1.0 - 90.0 - 91.0 -	Calcite	—— Initi —— Fina	l	0.0 6.0-garite	Barite	Fina		0.0 90.5	Halite	—— Ini —— Fir		-0.5 unsd	Gypsum			-1.0 quate	Hemihyd	rate Ini Fin	-0.24 0.05 0.05 0 0 0 0 0 49 49 ret_initial_ Final_ Anhydrite_initial_ 0.3 Celestite_initial_ 91.0 Is fector Fector Fector Final_ 0.3 Final_ 1.5 Final_ 51.0 Final_ Final_ <th></th> <th></th>													
-3.0 -		0.5 0.8 action of Flu	1.0	-0.5	0.3 Frac	0.5 0.8 tion of Fluid	1.0	-2.0 0.0	0.3 Fra).5 0.8 ction of Fl	3 1.0 uid II	-0.8 + 0.0		0.5 0.8 ction of Fl		N SI Hemily		0.5 0.8 tion of Fl		4444 150.3 - 0	.0 0.3 Fr	0.5 C raction of I	0.8 1.0 Fluid II	0.0 8	0.0 0.3	0.5 Fraction o	0.8 1.0 f Fluid II	0.1 0.1	o	1.3 0.5 Fraction	0.8 1.0 of Fluid II	2
100 0 0 0,0 0,0 0,0 0,0	Calcite	Fin	al 	Barite (mg/r)	Barite 0.3 Frac	0.5 0.8 tion of Fluid	1.0	Halite (mg/t)	0.3	0.5 0.8 tion of Flu	1.0	1 1 1 0.0 0.0	Gypsum 0 0.3 Fra	0.5 0.8 ction of Fl	al	Hemihydrate (mg/L)	0 0.3	0.5 0. ction of F	nal 8 1.0	Anhydrite (mg/L)	0 0.3	rite F	inal	Celestite (mg/L) 000 0 00	Celes	_	Final	FeCO3 (mg/L)	0		- Initial - Final 0.8 1.0 of Fluid II	

Mixing Two					'				•		,																					
Well(s):							Click th	is buttor	1 to calcu	late SI va	alues in r	nixed bri	nesof two	produc	ed fluids	on Inpu	t sheet.															
Well(s): Produced		er Date: tite - SI	Barit			ite - SI		<i>i</i> a 2	.		Halite		Gypsu			drate- SI	Anhyd	1. OT		tite - SI										03 - SI	FeCO3	
Produced	Initial		Barit	Final	Initial	ite - SI Final	Initial	(mg/L) Final	Barite Initial	(mg/L) Final	Initial	(mg/L) Final	Gypsu Initial	m - SI Final	Initial	drate- SI Final	Anhyd: Initial	rite - SI Final	Initial	Final	Gypsur Initial	n (mg/L) Final	Hemihydr: Initial	ite (mg/L) Final	Anhydri Initial	te (mg/L) Final	Celestit	e (mg/L) Final	Initial	03 - SI Final	FeCO3 Initial	(mg/L) Final
Fluids #2 ¹	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)
0.00	0.61	0.61	-0.13	-0.13	-1.18	-1.18	69	69	0	0	0	0	-0.52	-0.52	-1.01	-1.01	-0.23	-0.23	0.12	0.12	0	0	0	0	0	0	143	143	(44)	(44)	(44)	(44)
0.10	-1.04	-1.04	-0.13	-0.13	-1.21	-1.21	0	0	ů ů	ů.	ů.	ů.	-0.52	-0.52	-1.01	-1.01	-0.22	-0.22	0.12	0.12	ů ů	0	ů	0	ŏ	0	137	137				
0.20	-1.18	-1.18	-0.14	-0.14	-1.24	-1.24	0	0	0	0	0	0	-0.52	-0.52	-1.01	-1.01	-0.22	-0.22	0.11	0.11	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	-0.51	-0.51	-1.01	-1.01	-0.23	-0.23	0.10	0.10	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	-0.51	-0.51	-1.01	-1.01	-0.23	-0.23	0.10	0.10	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	-0.51	-0.51	-1.01	-1.01	-0.23	-0.23	0.09	0.09	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	-0.51	-0.51	-1.01	-1.01	-0.23	-0.23	0.08	0.08	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	-0.51	-0.51	-1.01	-1.01	-0.23	-0.23	0.08	0.08	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	-0.51	-0.51	-1.01	-1.01	-0.23	-0.23	0.07	0.07	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	-0.50	-0.50	-1.01	-1.01	-0.23	-0.23	0.06	0.06	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	-0.50	-0.50	-1.01	-1.01	-0.23	-0.23	0.05	0.05	0	0	0	0	0	0	53	53				_
1.0 -	Calcite			0.0 -	Barite			0.0 -	Halite			-0.5	Gypsum	Init	ial	-1.0 -	Hemihyo	Irate Ini		0.0 -	Anhyd	ritei		0.3		tite	Initial Final	1.5	FeC		-Initial Final	
90.0 91.0 72.0 -3.0		0.5 0.8 ction of Flu	1.0	0.0 si Barite		0.5 0.8 tion of Fluic	1.0	90.5 10.5 10.5 -2.0 -2.0	0 0.3 Fra	0.5 0.8 ction of Fl	1.0 uid II	-0.5 -0.5 -0.8 -0.0 -0.0	0.3 Fra	0.5 0.8 ction of Fl	1.0 uid II	SI Hemihydrate	0.3	0.5 0. ction of F	8 1.0 luid II	SI Anhydrite	0.0 0.3	0.5 (raction of	0.8 1.0 Fluid II	0.0 SI Celestite	0.0 0.5	3 0.5 Fraction o	0.8 1.0 f Fluid II	0.00 0.00 0.00		0.3 0.5 Fraction	0.8 1.0 of Fluid II	
100 0 calcite 0 0 0.0 0.0	Calcite	0.5 0.8 action of Flu		Barite (mg/r)	Barite 0.3 Frac	0.5 0.8 tion of Fluid	1.0	Halite (mg/t)	0.3	0.5 0.8 tion of Flu	1.0	1 1 1 0 0 0 0 0 0 0	Gypsum 0.3 Fra	0.5 0.8 ction of Fl	al	Hemihydrate (mg/L)	0 0.3	0.5 0 Inction of F	inal	Anhydrite (mg/L)	0.0 0.3	0.5 raction of	Final 	Celestite (mg/L) 0 007	0.0 0.3		Final	Feco3 (mg/L)	FeC		- Initial - Final 0.8 1.0 of Fluid II	

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

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

Mixing Tv	to Wells						Clink	to house	n to calcu	1-4- Cl	alexa da a	den al beat				and be as a																
Well(s):	Mesa Ve	r Date:	9/2/2022				Click th	iis buttoi	n to calcu	liate Si va	alues in r	nixea bri	nesor two	o produc	ea nulas	on inpu	t sneet.															
Produced		ite - SI	Barit			te - SI		(mg/L)	Barite		Halite		Gypsu		hemihy		Anhyd		Celest		Gypsun		Hemihydr				Celestit			03 - SI	FeCO3	
	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial		Initial	Final	Initial	Final
Fluids #2	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)	(T,P)
0.00	0.58	0.58	-0.13	-0.13	-1.18	-1.18	67	67	0	0	0	0	-0.52	-0.52	-1.01	-1.01	-0.23	-0.23	0.12	0.12	0	0	0	0	0	0	143	143				
0.10	-1.04	-1.04	-0.14	-0.14	-1.21	-1.21	0	0	0	0	0	0	-0.53	-0.53	-1.02	-1.02	-0.23	-0.23	0.11	0.11	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	-0.53	-0.53	-1.03	-1.03	-0.24	-0.24	0.10	0.10	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	-0.54	-0.54	-1.04	-1.04	-0.25	-0.25	0.09	0.09	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	-0.55	-0.55	-1.05	-1.05	-0.26	-0.26	0.08	0.08	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	-0.56	-0.56	-1.06	-1.06	-0.27	-0.27	0.07	0.07	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	-0.57	-0.57	-1.07	-1.07 -0.28 -0.28 0.05 0.05 0 0 0 0 0 60 60 -1.08 -0.29 -0.29 0.04 0.04 0 0 0 0 47 47																
0.70	-1.77	-1.77	-0.21	-0.21	-1.39	-1.39	0	0	0	0	0	0	-0.57	-0.57	-1.08	-1.09 -0.30 -0.30 0.03 0.03 0 0 0 0 0 0 34 34																
0.80	-1.93	-1.93	-0.22	-0.22	-1.42	-1.42	0	0	0	0	0	0	-0.58	-0.58	-1.09		-1.09 -0.30 -0.30 0.03 0.03 0 0 0 0 0 34 34 -1.09 -0.31 -0.31 0.02 0.02 0 0 0 0 0 22 22															
0.90	-2.12	-2.12	-0.24	-0.24	-1.45	-1.45	0	0	0	0	0	0	-0.59	-0.59	-1.09		9 -0.31 -0.31 0.02 0.02 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	-0.60	-0.60	-1.10	-1.10	-0.32 -0.32 0.01 0.01 0 0 0 0 0 0 0 10 10 10															
1.0	Calcite	— Initi — Fina	L	0.0 T	Barite			0.0	Halite			-0.5	Gypsum	Init		-1.0	Hemihyo	temihydräte														
40.0 - 0.1 - 0.2 - 3.0 - 3.0				4iug-0.3 -			-	90.5 F1.0 S1.5			_	80- SI Gypsur			_	emihydrat				SI Anhydrite			_	SI Celestit		_		SIFe	5 -			
-5.0 +		0.5 0.8 tion of Flu		-0.5 +		0.5 0.8 tion of Fluid		-2.0 +		0.5 0.8 ction of Fl	B 1.0 luid II	-0.8 +		0.5 0.8 ction of Fl	1.0 uid II	±1.3 + 5 0.0		0.5 0.1 ction of Fl	3 1.0 uid II			0.5 C action of I	0.8 1.0 Fluid II		0.0 0.3	0.5 Fraction o	0.8 1.0 f Fluid II	0.0		.3 0.5 Fraction of	0.8 1.0 of Fluid II	
100 (750	Calcite	— Init — Fina	d	1 - (7/3m)	Barite	Final		1 (1/8m)	Halite	Fina		1 - (1/Sm)	Gypsum			(1) ¹ (1) ² 1	Hemihy	drate In Fi	itial nal	1 (1/3m)	Anhyd	rite I	nitial Final	200 (1/30)	Celest	tite		(mg/L)	FeC		Initial Final	
0 Calcite	0 0.3 Fra	0.5 0.8 ction of Flu	1.0	Barite	0.3 Frac	0.5 0.8 tion of Fluid	1.0	Halite (1	0.3 Frac	0.5 0.8 tion of Flu	1.0 uid II	dypund (P	0.3 Fra	0.5 0.8 ction of Fl	1.0 uid II	Hemihydrate	0 0.3 Fra	0.5 0. Inction of F	8 1.0 luid II	o vdrite	.0 0.3 Fi	0.5 raction of	0.8 1.0 Fluid II	o	0.0 0.3	0.5 Fraction of	0.8 1.0 f Fluid II	ec03		.3 0.5 Fraction of	0.8 1.0 of Fluid II	



Certificate of Analysis

Number: 6030-20090036-004A

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

Sep. 08, 2020

Mesa Verde Field: Station Name: Mesa Verde Wolf Camp 4H Station Number: 15511T Sample Point: N/A API 30-025-46112 Meter Number: 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 09/03/2020 09:45 Effective Date: GPA-2261M Method: Cylinder No: 1111-002323 Instrument: 70104251 (Inficon GC-MicroFusion) Last Inst. Cal.: 08/31/2020 0:00 AM 09/08/2020 10:58:08 by PGS Analyzed:

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	Tota	I	C9+
Calculated Molecular	Weight	23.27	7	NIL
Compressibility Facto	r	0.9954	1	
Relative Density Real	Gas	0.8068	3	NIL
GPA 2172 Calculatio	on:			
Calculated Gross B1	ΓU per ft³ @ 14.65 ps	sia & 60°F		
Real Gas Dry BTU		1380.3	3	NIL
Water Sat. Gas Base	BTU	1356.7	7	NIL
Ideal, Gross HV - Dry	at 14.65 psia	1374.0)	NIL
Ideal, Gross HV - Wet	t	1349.9)	NIL
Comments: H2S Fie Mcf/day				

Hydrocarbon Laboratory Manager

Quality Assurance:

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



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	

Certificate of Analysis

Number: 6030-20110021-001A

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

Nov. 05, 2020

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 l	Jn-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 Pro	operties	Тс	otal	C6+		
Relative Density Real Ga	as	0.77	722	3.1348		
Calculated Molecular We	eight	22	.28	90.79		
Compressibility Factor		0.99	960			
GPA 2172 Calculation:						
Calculated Gross BTU	per ft3 @ 14.65 p	sia & 60°F				
Real Gas Dry BTU		12	298	4897		
Water Sat. Gas Base BT	Ū	12	275	4811		
Ideal, Gross HV - Dry at	14.65 psia	129	2.6	4896.9		
Ideal, Gross HV - Wet	-	1270.0		0.000		
Net BTU Dry Gas - real g	gas	11	179			
Net BTU Wet Gas - real	gas	11	58			

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.



Field:Mesa VerdeStation Name:Mesa Verde East CGLStation Number:N/ASample Point:Inlet to DehyMeter Number:County:County:LeaType of Sample:Spot-CylinderHeat Trace Used:N/ASampling Method: Fill and Purge

Certificate of Analysis

Number: 6030-20110021-001A

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

Nov. 05, 2020

Sampled By:Scott BeasleySample Of:GasSpotSample Date:10/30/2020 10:00Sample Conditions:1290 psig, @ 60 °FMethod:GPA 2286Cylinder No:1111-002316Analyzed:11/05/2020 14:31:50 by PGSSampling 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 Physica	I Properties		Total	C7+		
Relative Density Rea	-		0.7722	3.3040		
Calculated Molecular			22.28	95.69		
Compressibility Factor	•		0.9960			
GPA 2172 Calculati						
Calculated Gross B	TU per ft ³ @	2 14.65 psia	a & 60°F			
Real Gas Dry BTU	•	•	1298	5090		
Water Sat. Gas Base	e BTU		1275	5000		
Ideal, Gross HV - Dr	y at 14.65 ps	ia	1292.6	5089.5		
Ideal, Gross HV - We	• •		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.



Field:Mesa VerdeStation Name:Mesa Verde East CGLStation Number:N/ASample Point:Inlet to DehyMeter Number:County:County:LeaType of Sample:Spot-CylinderHeat Trace Used:N/ASampling Method: Fill and Purge

Certificate of Analysis

Number: 6030-20110021-001A

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

Nov. 05, 2020

Sampled By:Scott BeasleySample Of:GasSpotSample Date:10/30/2020 10:00Sample Conditions:1290 psig, @ 60 °FMethod:GPA 2286Cylinder No:1111-002316Analyzed:11/05/2020 14:31:50 by PGSSampling Company:OXY

Analytical Data GPM at Components Mol. % Wt. % 14.65 psia GPM TOTAL C2+ Nitrogen 1.189 1.495 6.645 Methane 74.177 53.401 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 0.099 n-Hexane 0.401 0.042 0.019 0.064 0.005 Benzene 0.059 Cyclohexane 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 0.003 0.026 Ethylbenzene 0.001 0.004 NIL **Xvlenes** 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 0.003 0.001 NIL Dodecanes NIL NIL NIL NIL Tridecanes NIL NIL **Tetradecanes Plus** NIL NIL NIL 100.000 100.000 6.645



Field:Mesa VerdeStation Name:Mesa Verde East CGLStation Number:N/ASample Point:Inlet to DehyMeter Number:County:County:LeaType of Sample:Spot-CylinderHeat Trace Used:N/ASampling Method: Fill and Purge

Certificate of Analysis

Number: 6030-20110021-001A

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

Nov. 05, 2020

Sampled By:Scott BeasleySample Of:GasSpotSample Date:10/30/2020 10:00Sample Conditions:1290 psig, @ 60 °FMethod:GPA 2286Cylinder No:1111-002316Analyzed:11/05/2020 14:31:50 by PGSSampling Company:OXY

Calculated Physical PropertiesTotalCalculated Molecular Weight22.284GPA 2172 Calculation:Calculated Gross BTU per ft³ @ 14.65 psia & 60°FCalculated Gross BTU per ft³ @ 14.65 psia & 60°F1297.8Water Sat. Gas Base BTU1297.8Water Sat. Gas Base BTU1275.1Relative Density Real Gas0.7722Compressibility Factor0.9960Comments:H2S Field Content 0 ppm

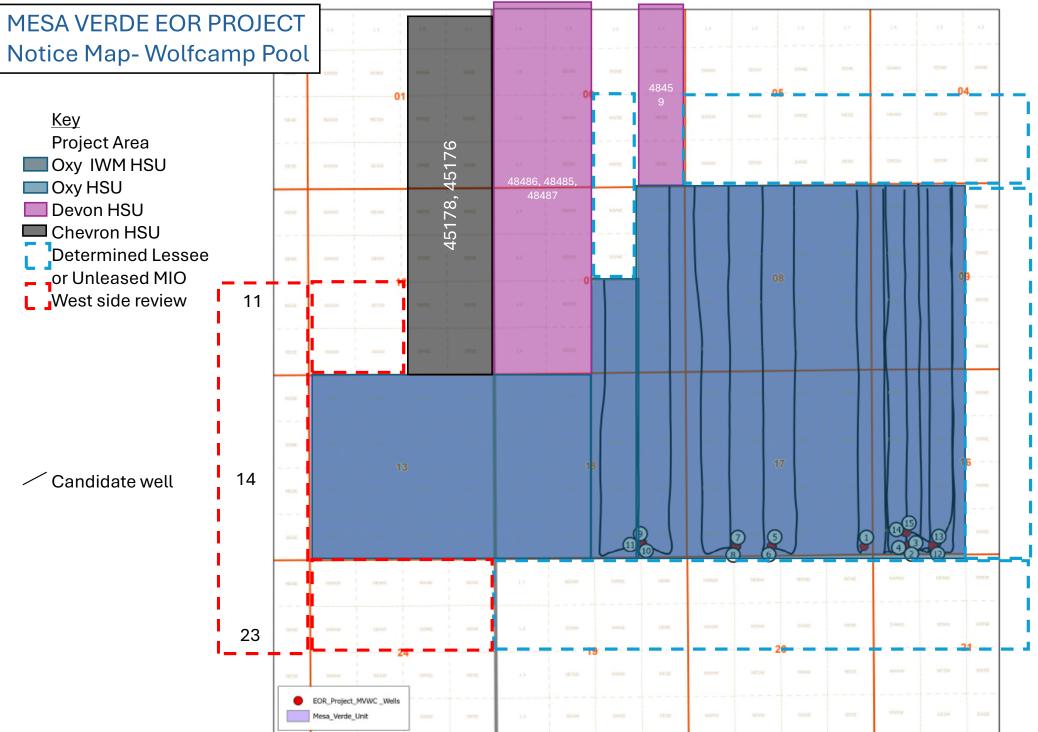
Quality Assurance:

Hydrocarbon Laboratory Manager The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

3spalley Released to Imaging: 2/11/2023



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

Party	Address
Agencies and Surfa	ice Owners
	620 E. Greene Street
Bureau of Land Mangment- Carlsbad Field Office	Carlsbad, New Mexico 88220-6292
	P.O. Box 1148
State Land Office	Santa Fe, NM 87504
Offset Opera	
BURLINGTON RESOURCES OIL & GAS CO	P.O. Box 51810
	Midland, TX 79710
BURLINGTON RESOURCES OIL & GAS COMPANY	600 W. Illinois Avenue
LP	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 Perso	
	5790 Saintsbury Drive
28TwentyEight Energy LLC	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

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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
Javenna Farthers	Fort Worth, TX 76102
LMS Limited Liability Company	Box 621402
LWS Limited Liability Company	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
	717 Texas Street
PXP Producing Company LLC	Suite 2100
	Houston, TX 77002
	1415 Louisiana Street
Sabine Oil & Gas Corporation	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
montas E. Jennings	Roswell, NM 88202
Timothy 7 Jonnings	P.O. Box 1797
Timothy Z. Jennings	
	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 A Lateral Wells:

Table 1. Mesa Verde Wolfcamp A Laterals (11).

Well Name	API
MESA VERDE WC UNIT 1H	3002544195
ST1	3002344195
MESA VERDE WC UNIT 2H	3002546110
MESA VERDE WC UNIT 3H	3002546111
MESA VERDE WC UNIT 4H	3002546112
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.

Stephonic Noonan

2/6/25

Stephanie Noonan Geologist Staff Sr. Date

Part VIII- Geologic Information for Mesa Verde – Wolfcamp BC

 Table 1. Mesa Verde Wolfcamp BC Laterals (4).

Well Name	ΑΡΙ
MESA VERDE WC UNIT 39H	3002548824
MESA VERDE WC UNIT 40H	3002548825
MESA VERDE WC UNIT 54H	3002548817
MESA VERDE WC UNIT 55H	3002548863

The Mesa Verde Wolfcamp BC lateral wells Table (1) will be injecting into the Wolfcamp B and Wolfcamp C zones of the Wolfcamp Formation. These wells have a subsea true vertical depth (SSTVD) of approximately -9250 to -9350 ft. with lateral lengths of approximately 10,000 ft. They will 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

2/6/25

Stephanie Noonan Geologist Staff Sr. Date