

HOBBS OCD

NOV 06 2017

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2018

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM66925	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator OXY USA INCORPORATED (16696)		7. If Unit or CA Agreement, Name and No.	
3a. Address 5 Greenway Plaza, Suite 110 Houston TX 770		8. Lease Name and Well No. (319931) MESA VERDE 18-7 FEDERAL CO 4H	
3b. Phone No. (include area code) (713)366-5716		9. API Well No. 30-02444186	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface SESW / 280 FSL / 2563 FWL / LAT 32.210912 / LONG -103.714693 At proposed prod. zone NWSE / 2461 FSL / 2262 FEL / LAT 32.2314159 / LONG -103.7126337		10. Field and Pool, or Exploratory (76229) MESA VERDE BONE SPRING / 2ND BC	
14. Distance in miles and direction from nearest town or post office* 6 miles		11. Sec., T. R. M. or Blk. and Survey or Area SEC 18 / T24S / R32E / NMP	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 50 feet		12. County or Parish LEA	
16. No. of acres in lease 651.15		13. State NM	
17. Spacing Unit dedicated to this well 240			
18. Distance from proposed location* to nearest well, drilling, completed, 30 feet applied for, on this lease, ft.		19. Proposed Depth 10470 feet / 17968 feet	
20. BLM/BIA Bond No. on file FED: ESB000226			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3572 feet		22. Approximate date work will start* 07/13/2018	
		23. Estimated duration 20 days	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature (Electronic Submission)	Name (Printed Typed) David Stewart / Ph: (713)366-5716	Date 06/14/2017
Title Sr. Regulatory Advisor		
Approved by (Signature) (Electronic Submission)	Name (Printed Typed) Cody Layton / Ph: (575)234-5959	Date 10/30/2017
Title Supervisor Multiple Resources		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

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INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

1. SHL: SESW / 280 FSL / 2563 FWL / TWSP: 24S / RANGE: 32E / SECTION: 18 / LAT: 32.210912 / LONG: -103.714693 (TVD: 0 feet, MD: 0 feet)
PPP: SWSE / 340 FSL / 2262 FEL / TWSP: 24S / RANGE: 32E / SECTION: 18 / LAT: 32.2110838 / LONG: -103.7126035 (TVD: 10470 feet, MD: 10854 feet)
BHL: NWSE / 2461 FSL / 2262 FEL / TWSP: 24S / RANGE: 32E / SECTION: 7 / LAT: 32.2314159 / LONG: -103.7126337 (TVD: 10470 feet, MD: 17968 feet)

BLM Point of Contact

Name: Cody Layton

Title: Supervisor Multiple Resources

Phone: 5752345959

Email: clayton@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior.

Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.



U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Operator Certification Data Report

10/31/2017

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: David Stewart

Signed on: 06/14/2017

Title: Sr. Regulatory Advisor

Street Address: 5 Greenway Plaza, Suite 110

City: Houston

State: TX

Zip: 77046

Phone: (713)366-5716

Email address: David_stewart@oxy.com

Field Representative

Representative Name: Jim Wilson

Street Address: P.O. Box 50250

City: Midland

State: TX

Zip: 79710

Phone: (575)631-2442

Email address: jim_wilson@oxy.com



U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Application Data Report

10/31/2017

APD ID: 10400014960

Submission Date: 06/14/2017

Highlighted data
reflects the most
recent changes

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

APD ID: 10400014960

Tie to previous NOS?

Submission Date: 06/14/2017

BLM Office: CARLSBAD

User: David Stewart

Title: Sr. Regulatory Advisor

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM66925

Lease Acres: 651.15

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? NO

APD Operator: OXY USA INCORPORATED

Operator letter of designation:

Operator Info

Operator Organization Name: OXY USA INCORPORATED

Operator Address: 5 Greenway Plaza, Suite 110

Zip: 77046

Operator PO Box:

Operator City: Houston

State: TX

Operator Phone: (713)366-5716

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: MESA VERDE
BONE SPRING

Pool Name: 2ND BONE
SPRING

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Describe other minerals:

Is the proposed well in a Helium production area? N Use Existing Well Pad? NO New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name: MESA Number: 3H

VERDE 18 FEDERAL COM

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 6 Miles

Distance to nearest well: 30 FT

Distance to lease line: 50 FT

Reservoir well spacing assigned acres Measurement: 240 Acres

Well plat: MesaVerde18_7FdCom4H_C102_06-14-2017.pdf

Well work start Date: 07/13/2018

Duration: 20 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	280	FSL	256 3	FWL	24S	32E	18	Aliquot SESW 2	32.21091 2	- 103.7146 93	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 66925	357 2	0	0
KOP Leg #1	50	FSL	226 2	FEL	24S	32E	18	Aliquot SWSE 67	32.21028 67	- 103.7126 023	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 66925	- 632 5	995 4	989 7
PPP Leg #1	340	FSL	226 2	FEL	24S	32E	18	Aliquot SWSE 38	32.21108 38	- 103.7126 035	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 66925	- 689 8	108 54	104 70

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT Leg #1	230 6	FSL	226 2	FEL	24S	32E	7	Aliquot NWSE	32.23099	- 103.7126 331	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 55953	689 8	178 13	104 70
BHL Leg #1	246 1	FSL	226 2	FEL	24S	32E	7	Aliquot NWSE	32.23141 59	- 103.7126 337	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 55953	689 8	179 68	104 70

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. A multibowl wellhead or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system will be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015.

Choke Diagram Attachment:

MesaVerde18_7FdCom4H_ChkManifold_5M__06-07-2017.pdf

BOP Diagram Attachment:

MesaVerde18_7FdCom4H_FlexHoseCert_06-07-2017.pdf

MesaVerde18_7FdCom4H_BOP_5M13_58_Amd_20170920141211.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	14.75	10.75	NEW	API	N	0	971	0	971			971	J-55	45.5	BUTT	8.91	1.75	BUOY	3.56	BUOY	3.51
2	PRODUCTION	9.875	7.625	NEW	API	N	0	7500	0	7475			7500	L-80	29.7	BUTT	1.22	1.84	BUOY	2.16	BUOY	4.65
3	PRODUCTION	9.875	7.625	NEW	API	N	7500	9854	7475	9797			2354	HCL-80	29.7	BUTT	1.46	1.95	BUOY	2.15	BUOY	2.13
4	LINER	6.75	4.5	NEW	API	N	9754	17968	9697	10470			8214	P-110	11.6	OTHER - DQX	1.68	1.2	BUOY	2.28	BUOY	2.25

Casing Attachments

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

MesaVerde18_7FdCom4H_CsgCriteria_06-07-2017.pdf

Casing ID: 2 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

MesaVerde18_7FdCom4H_CsgCriteria_06-07-2017.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

MesaVerde18_7FdCom4H_CsgCriteria_06-07-2017.pdf

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Casing Attachments

Casing ID: 4 **String Type:** LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

MesaVerde18_7FdCom4H_CsgCriteria_06-07-2017.pdf

MesaVerde18_7FdCom4H_4.5_11.6_P110_DQX_06-07-2017.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	971	496	1.68	14.2	833	50	Class C	Accelerator

PRODUCTION	Lead	4682	0	4182	770	1.85	12.9	1425	75	Class C	Accelerator, Retarder
PRODUCTION	Tail		4182	4682	142	1.33	14.8	189	75	Class C Cement	none
PRODUCTION	Lead		4582	8854	362	3.05	10.2	1104	20	Pozzolan/C	Retarder
PRODUCTION	Tail		8854	9854	163	1.65	13.2	269	20	Class H	Retarder, Dispersant, Salt
LINER	Lead		9754	17968	802	1.63	13.2	1307	15	Class H	Retarder, Dispersant, Salt

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. OXY proposes to drill out the 10-3/4" surface casing shoe with a saturated brine system from 971-4682', which is the base of the salt system. At this point we will swap fluid systems to a high viscosity mixed metal hydroxide system or a fully saturated direct emulsion system. We will drill with this system to the production TD @ 9854'.

Describe the mud monitoring system utilized: PVT/MD Totco/Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
9854	1796 8	OIL-BASED MUD	8.8	9.6							
4682	9854	WATER-BASED MUD	8.8	9.6							
0	971	WATER-BASED MUD	8.4	8.6							
971	4682	OTHER : BRINE	9.8	10							

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

GR from TD to surface (horizontal well – vertical portion of hole). Mud Log from Surface Shoe to TD.

List of open and cased hole logs run in the well:

GR,MUDLOG

Coring operation description for the well:

No coring is planned at this time.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5227

Anticipated Surface Pressure: 2923.6

Anticipated Bottom Hole Temperature(F): 164

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

MesaVerde18_7FdCom4H_H2S1_06-07-2017.pdf

MesaVerde18_7FdCom4H_H2S2_06-07-2017.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

MesaVerde18_7FdCom4H_DirectPlot_06-07-2017.pdf

MesaVerde18_7FdCom4H_DirectPlan_06-14-2017.pdf

Other proposed operations facets description:

Well will be drilled with a walking/skidding operation. Plan to drill the two well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.

OXY requests the option to set casing shallower yet still below the salts if losses or hole conditions require this. Cement volumes may be adjusted if casing is set shallower and a DV tool will be run in case a contingency second stage is required for cement to reach surface. If cement circulated to surface during first stage we will drop a cancellation cone and not pump the second stage.

Cement Top and Liner Overlap

1. Oxy is requesting permission to have minimum fill of cement behind the 4-1/2" production liner to be 100' into previous casing string. The reason for this is so that we can come back and develop shallower benches from the same 7-5/8" mainbore in the future.

2. Our plan is to use a whipstock for our exit through the mainbore. Based on our lateral target, we are planning a whipstock cased/hole exit so that kick-off point will allow for roughly 10deg/100' doglegs needed

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

for the curve.

3. Cement will be brought to the top of this liner hanger.

4. See attached for additional casing tie-back information.

OXY requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that OXY would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. See attached for additional spudder rig information.

Other proposed operations facets attachment:

MesaVerde18_7FdCom4H_SpudRigData_06-07-2017.pdf

MesaVerde18_7FdCom4H_CsgTieBackDetail_06-14-2017.pdf

MesaVerde18_7FdCom4H_DrillPlan_06-14-2017.pdf

Other Variance attachment:

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Access road engineering design attachment:

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth: 0

Offsite topsoil source description:

Onsite topsoil removal process: If available

Access other construction information: None

Access miscellaneous information: The proposed access road will run 71.4 feet north through pasture to the southwest corner of the pad.

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: CULVERT

Drainage Control comments: Watershed Diversion every 200' if needed.

Road Drainage Control Structures (DCS) description: Watershed Diversion every 200' if needed.

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

MesaVerde18_7FdCom4H_ExistWells_06-14-2017.pdf

Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Estimated Production Facilities description:

Production Facilities description: a. In the event the well is found productive, the Mesa Verde Federal central tank battery would be utilized and the necessary production equipment will be installed at the well site. b. All flow lines will adhere to API standards. They will consist of 2 – 4" composite flowlines operating 75% MAWP on surface. Survey of a strip of land 30' wide and 3150.4' in length crossing USA Land in Section 18 T24S R32E NMPM, Lea County, NM and being 15' left and 15' right of the centerline survey. c. Electric line will follow a route approved by the BLM. Survey of a strip of land 30' wide and 225.2' in length crossing USA Land in Sections 18 T24S R32E NMPM, Lea County, NM and being 15' left and 15' right of the centerline survey. d. See attached for additional information on the Mesa Verde Development Surface Production Facilities.

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Production Facilities map:

MesaVerde18_7FdCom4H_FacilityPLEL_06-07-2017.pdf

MesaVerde18_7FdCom4H_MVSurfFac_06-07-2017.pdf

MesaVerde18_7FdCom4H_MVFWPond_06-14-2017.pdf

MesaVerde18_7FdCom4H_MVSurfFacDetailAmd_20170920142051.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: INTERMEDIATE/PRODUCTION CASING,
OTHER, SURFACE CASING

Water source type: GW WELL

Describe type:

Source latitude:

Source longitude:

Source datum:

Water source permit type: WATER WELL

Source land ownership: COMMERCIAL

Water source transport method: PIPELINE,TRUCKING

Source transportation land ownership: COMMERCIAL

Water source volume (barrels): 2000

Source volume (acre-feet): 0.25778618

Source volume (gal): 84000

Water source and transportation map:

MesaVerde18_7FdCom4H_GRRWtrSrc_06-07-2017.pdf

MesaVerde18_7FdCom4H_MesqWtrSrc_06-07-2017.pdf

Water source comments: This well will be drilled using a combination of water mud systems. It will be obtained from commercial water stations (Gregory Rockhouse, Mesquite, MMX) in the area and will be hauled to location by transport truck using existing and proposed roads.

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: Primary - All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM/State/Fee approved pit or from prevailing deposits found on the location. Will use BLM recommended extra caliche from other locations close by for roads, if available. Secondary - The secondary way of obtaining caliche to build locations and roads will be by "turning over" the location. This means, caliche will be obtained from the actual well site. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cubic yards is max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel: a. The top 6" of topsoil is pushed off and stockpiled along the side of the location. b. An approximate 120' X 120' area is used within the proposed well site to remove caliche. c. Subsoil is removed and piled alongside the 120' X 120' within the pad site. d. When caliche is found, material will be stockpiled within the pad site to build the location and road. e. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road. f. Once the well is drilled the stockpiled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the edge of the pad. Caliche will be provided from a pit located in Section 6 T24S R32E Water will be provided from a frac pond located in Section 18 T24S R32E

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Water-Based Cuttings, Water-Based Mud, Oil-Based Cuttings, Oil-Based Mud, Produced Water

Amount of waste: 1405.8 barrels

Waste disposal frequency : Daily

Safe containment description: Haul-Off Bins

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Disposal type description:

Disposal location description: An approved facility that can process drill cuttings, drill fluids, flowback water, produced water, contaminated soils, and other non-hazardous wastes.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.)

Reserve pit width (ft.)

Operator Name: OXY USA INCORPORATED
Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? YES

Description of cuttings location A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins. Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility.

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

MesaVerde18_7FdCom4H_WellSiteCL_06-07-2017.pdf

Comments: V-Door-East - CL Tanks-North - 330' X 440' – Two Well Pad

Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

Drainage/Erosion control construction: Reclamation to be wind rowed as needed to control erosion

Drainage/Erosion control reclamation: Reclamation to be wind rowed as needed to control erosion

Wellpad long term disturbance (acres): 2.12

Wellpad short term disturbance (acres): 3.33

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Access road long term disturbance (acres): 0.02

Pipeline long term disturbance (acres): 0.7232323

Other long term disturbance (acres): 0

Total long term disturbance: 2.8632324

Access road short term disturbance (acres): 0.05

Pipeline short term disturbance (acres): 2.169697

Other short term disturbance (acres): 0.16

Total short term disturbance: 5.709697

Reconstruction method: If the well is deemed commercially productive, caliche from the areas of the pad site not required for operations will be reclaimed. The original topsoil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography, and the area will be seeded with an approved BLM mixture to re-establish vegetation. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The original topsoil will again be returned to the pad and contoured, as close as possible, to the original topography, and the area will be seeded with an approved BLM mixture to re-establish vegetation.

Topsoil redistribution: The original topsoil will be returned to the area of the drill pad not necessary to operate the well.

Soil treatment: To be determined by the BLM.

Existing Vegetation at the well pad: To be determined by the BLM at Onsite.

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: To be determined by the BLM at Onsite.

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: To be determined by the BLM at Onsite.

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: To be determined by the BLM at Onsite.

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Seed Summary	
Seed Type	Pounds/Acre

Total pounds/Acre:

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: JIM

Last Name: WILSON

Phone: (575)631-2442

Email: jim_wilson@oxy.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: To be determined by the BLM.

Weed treatment plan attachment:

Monitoring plan description: To be determined by the BLM.

Monitoring plan attachment:

Success standards: To be determined by the BLM.

Pit closure description: Not applicable.

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Disturbance type: PIPELINE

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Disturbance type: OTHER

Describe: ELECTRIC LINE

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

Section 12 - Other Information

Right of Way needed? YES

Use APD as ROW? YES

ROW Type(s): 281001 ROW - ROADS, 285003 ROW – POWER TRANS, 288100 ROW – O&G Pipeline, 289001 ROW- O&G Well Pad

ROW Applications

SUPO Additional Information: *Permian Basin MOA – see attached SUPO and to be determined by BLM. GIS Shapefiles furnished after APD submittal.

Use a previously conducted onsite? NO

Previous Onsite information:

Other SUPO Attachment

MesaVerde18_7FdCom4H_StakeNotice_06-07-2017.pdf

MesaVerde18_7FdCom4H_MiscSvyPlats_06-07-2017.pdf

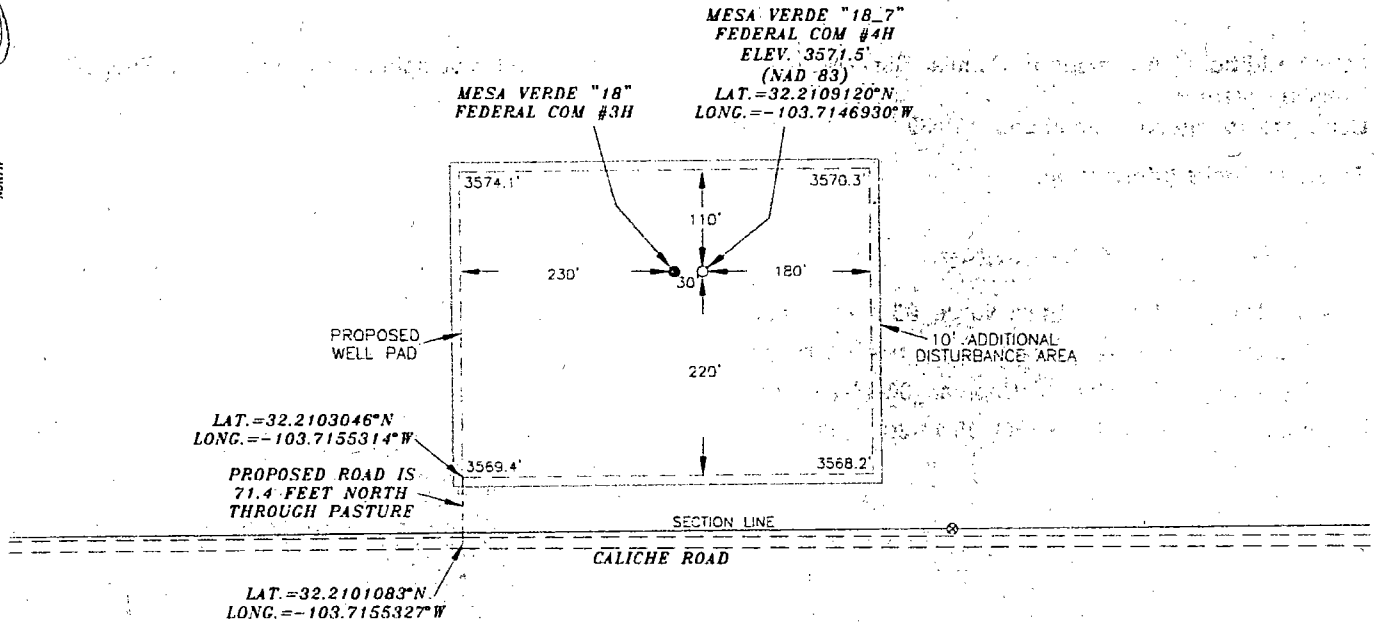
MesaVerde18_7FdCom4H_GasCapPlan_06-14-2017.pdf

MesaVerde18_7FdCom4H_SUPO_06-14-2017.pdf

OXY USA INC.

MESA VERDE "18_7" FEDERAL COM #4H SITE PLAN

FAA PERMIT: NO



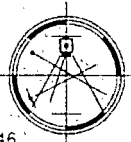
SURVEYORS CERTIFICATE

I, TERRY J. ASEL, NEW MEXICO PROFESSIONAL SURVEYOR NO. 15079, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEETS THE "MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO" AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS.

Terry J. Asel 10/4/2016
Terry J. Asel, N.M. R.P.L.S. No. 15079

Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR
HOBBS, NEW MEXICO - 575-393-9146



LEGEND

--- DENOTES PROPOSED WELL PAD
--- DENOTES PROPOSED ROAD

200' 0 200' 400' FEET
SCALE: 1"=200'

OXY USA INC.

MESA VERDE "18_7" FEDERAL COM #4H
LOCATED AT 280' FSL & 2563' FWL IN
SECTION 18, TOWNSHIP 24 SOUTH, RANGE 32
EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

Survey Date: 10/01/15	Sheet 1 of 1 Sheets
W.O. Number: 151001WL-b (Rev. A)	Drawn By: KA Rev: A
Date: 09/28/16	151001WL-b Scale: 1"=200'

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number:

Assigned injection well API number?

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Injection well name:

Injection well API number:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

PWD disturbance (acres):

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

PWD disturbance (acres):



U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Bond Info Data Report

10/31/2017

Bond Information

Federal/Indian APD: FED

BLM Bond number: ESB000226

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:



U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

SUPO Data Report

10/31/2017

APD ID: 10400014960

Submission Date: 06/14/2017

Highlighted data
reflects the most
recent changes

Operator Name: OXY USA INCORPORATED

Well Name: MESA VERDE 18-7 FEDERAL COM

Well Number: 4H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

MesaVerde18_7FdCom4H_ExistRoads_06-07-2017.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

MesaVerde18_7FdCom4H_NewRoad_06-07-2017.pdf

New road type: LOCAL

Length: 71.4

Feet

Width (ft.): 30

Max slope (%): 0

Max grade (%): 0

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: Watershed Diversion every 200' if needed.

New road access plan or profile prepared? YES

New road access plan attachment:

MesaVerde18_7FdCom4H_NewRoad_06-07-2017.pdf

Access road engineering design? NO