

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to abandon a well. Use form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMNM114979
Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

7. If Unit or CA/Agreement, Name and/or No.
NMNM137096X

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. Multiple--See Attached
2. Name of Operator OXY USA INCORPORATED Contact: SARAH CHAPMAN E-Mail: SARAH_CHAPMAN@OXY.COM		9. API Well No. Multiple--See Attached
3a. Address 5 GREENWAY PLAZA SUITE 110 HOUSTON, TX 77046-0521	3b. Phone No. (include area code) Ph: 713-350-4997	10. Field and Pool or Exploratory Area MESA VERDE-BONE SPRING
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Multiple--See Attached		11. County or Parish, State EDDY COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

OXY USA Inc. respectfully requests to amend the APD for the following wells:

The bulk sundry request for six Mesa Verde BS Unit wells in section 13. This sundry is to change the DV tool placement on all six wells and to change the production string on wells 18H and 19H. The wells related to this sundry request are below:

- Mesa Verde BS Unit 16H - 3001544551 - NMNM114979
- Mesa Verde BS Unit 17H - 3001544550 - NMNM114979
- Mesa Verde BS Unit 18H - 3001544549 - NMNM114979
- Mesa Verde BS Unit 19H - 3001544548 - NMNM114979
- Mesa Verde BS Unit 20H - 3001544547 - NMNM114979
- Mesa Verde BS Unit 21H - 3001544546 - NMNM114979

GC 8-13-18
Accepted for record - NMOC

RECEIVED

AUG 07 2018

SEE ATTACHED FOR
CONDITIONS OF APPROVAL
DISTRICT II-ARTESIA O.C.D.

14. I hereby certify that the foregoing is true and correct. Electronic Submission #427939 verified by the BLM Well Information System For OXY USA INCORPORATED, sent to the Carlsbad Committed to AFMS for processing by MUSTAFA HAQUE on 07/19/2018 (18MH0046SE)	
Name (Printed/Typed) DAVID STEWART	Title SR. REGULATORY ADVISOR
Signature (Electronic Submission)	Date 07/19/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>MUSTAFA HAQUE</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>07/18/2018</u>
Conditions of approval, if any, are attached. Approval of this notice 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.		Office <u>Carlsbad</u>

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional data for EC transaction #427939 that would not fit on the form

Wells/Facilities, continued

Agreement	Lease	Well/Fac Name, Number	API Number	Location
NMNM137096X	NMNM114979	MESA VERDE BS UNIT 16	30-015-44551-00-X1	Sec 13 T24S R31E SESE 170FSL 855FEL 32.210583 N Lat, 103.725746 W Lon
NMNM137096X	NMNM114979	MESA VERDE BS UNIT 17	30-015-44550-00-X1	Sec 13 T24S R31E SESE 170FSL 885FEL 32.210583 N Lat, 103.725838 W Lon
NMNM137096X	NMNM114979	MESA VERDE BS UNIT 18	30-015-44549-00-X1	Sec 13 T24S R31E SWSE 170FSL 2631FEL 32.210583 N Lat, 103.731483 W Lon
NMNM137096X	NMNM114979	MESA VERDE BS UNIT 19	30-015-44548-00-X1	Sec 13 T24S R31E SESW 170FSL 2623FWL 32.210583 N Lat, 103.731583 W Lon
NMNM137096X	NMNM114979	MESA VERDE BS UNIT 20	30-015-44547-00-X1	Sec 13 T24S R31E SWSW 170FSL 878FWL 32.210587 N Lat, 103.737221 W Lon
NMNM137096X	NMNM114979	MESA VERDE BS UNIT 21	30-015-44546-00-X1	Sec 13 T24S R31E SWSW 170FSL 848FWL 32.210587 N Lat, 103.737320 W Lon

32. Additional remarks, continued

The revised casing program reflects the change from tapered production string (5.5" X 4.5") on the 18H and 19H to long string of all 5.5" production casing. All depths are representative of the Mesa Verde BS Unit 14H.

Oxy USA Inc. – Mesa Verde Unit – Casing Change and DV Tool Adjust

1. Bulk Sundry Details

This is a bulk sundry request for ten Mesa Verde Unit wells in sections 13. This sundry is to change the DV tool placement on all wells below and to change the production casing string on the 18H, and 19H. The wells related to this sundry request are:

Well Name	API	Lease Number
Mesa Verde BS Unit 16H	3001544551	NMNM114979
Mesa Verde BS Unit 17H	3001544550	NMNM114979
Mesa Verde BS Unit 18H	3001544549	NMNM114979
Mesa Verde BS Unit 19H	3001544548	NMNM114979
Mesa Verde BS Unit 20H	3001544547	NMNM114979
Mesa Verde BS Unit 21H	3001544546	NMNM114979

Information remaining the same from the original APD will not be included here. The information below is based on the Mesa Verde BS Unit 14H.

2. Casing Program

The revised casing program below reflects the change from a tapered production string (5.5" x 4.5") on the 18H, and 19H to a long string of all 5.5" production casing. The depths are representative of the Mesa Verde BS Unit 14H which was included in a similar sundry.

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)		Grade	Conn.	SF Collapse	SF Burst	Bouyant	Bouyant
	From (ft)	To (ft)								Body SF Tension	Joint SF Tension
14.75	0	970	10.75	40.5		J55	BTC	1.125	1.2	1.4	1.4
9.875	0	9797	7.625	26.4		L80	BTC	1.125	1.2	1.4	1.4
6.75	0	15671	5.5	20		P-110	DQX	1.125	1.2	1.4	1.4

SF Values will meet or exceed

Annular Clearance Variance Request

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow deviation from the 0.422" annular clearance requirement from Onshore Order #2 under the following conditions:

1. Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casings.
2. Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open-hole section.

3. Cementing Program

Oxy USA Inc. – Mesa Verde Unit – Casing Change and DV Tool Adjust

The cementing volumes below are calculated for the Mesa Verde BS Unit 14H based on the casing scheme in Section 1. The DV tool placement at 4,693ft is 50ft into the Lamar/Delaware. We are requesting to change the DV tool set point to this depth for all wells listed in Section 1. This is the anticipated set depth, but the drilling engineer will adjust final set position to meet first and second stage cementing objectives based on well conditions. The intermediate first and second stage volumes in the table below are representative of all wells listed in Section 1 with the new DV tool placement.

Casing	Slurry	#Sks	Wt. (Lb/gal)	Yld ft3/sack	H2O gal/sk	500# Comp. Strength	Slurry Description
Surface	Tail	961	14.8	1.33	6.365	5:26	Accelerator
1st Stage Intermediate	Lead	420	10.2	2.58	11.568	6:59	Retarder, Extender, Dispersant
	Tail	160	13.2	1.61	7.804	7:11	Retarder, Dispersant, Salt
DV/ECP Tool @ 4,693ft ft							
2nd Stage Intermediate	Tail	1,521	13.6	1.67	8.765	7:32	Extender, Accelerator, Dispersant
Production Liner	Tail	450	13.2	1.38	6.686	3:49	Retarder, Dispersant, Fluid Loss Control, Extender

Casing String	Top of Lead (ft)	Bottom of Lead (ft)	Top of Tail (ft)	Bottom of Tail (ft)	% Excess Lead	% Excess Tail
Surface	N/A	N/A	0	970	N/A	100%
1st Stage Intermediate Casing	4593	8797	8797	9797	20%	20%
2nd Stage Intermediate Casing	N/A	N/A	0	4693	N/A	150%
Production Casing	N/A	N/A	9297	15671	N/A	15%

PERFORMANCE DATA

TMK UP DQX
Technical Data Sheet

5.500 in

20.00 lbs/ft

P-110

Tubular Parameters

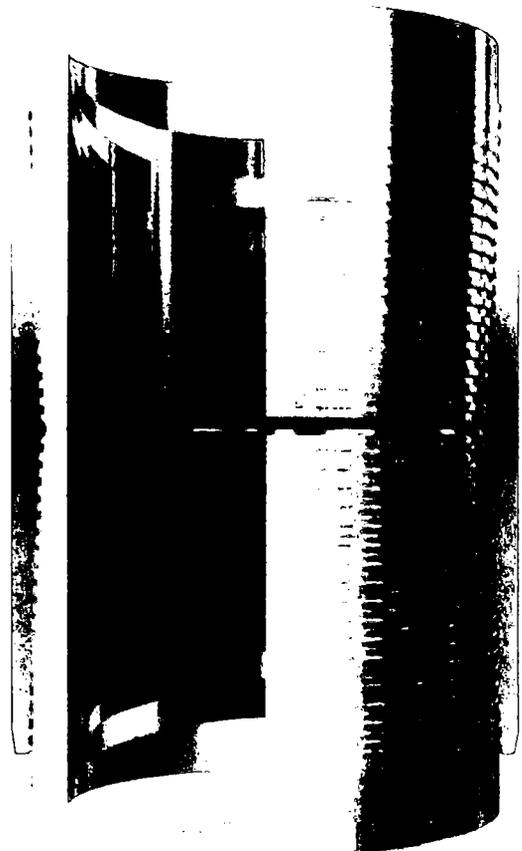
Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P-110		Yield Load	641,000	lbs
PE Weight	19.81	lbs/ft	Tensile Load	729,000	lbs
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,600	psi
Nominal ID	4.778	in	Collapse Pressure	11,100	psi
Drift Diameter	4.653	in			
Nom. Pipe Body Area	5.828	in ²			

Connection Parameters

Connection OD	6.050	in
Connection ID	4.778	in
Make-Up Loss	4.122	in
Critical Section Area	5.828	in ²
Tension Efficiency	100.0	%
Compression Efficiency	100.0	%
Yield Load In Tension	641,000	lbs
Min. Internal Yield Pressure	12,600	psi
Collapse Pressure	11,100	psi

Make-Up Torques

Min. Make-Up Torque	11,600	ft-lbs
Opt. Make-Up Torque	12,900	ft-lbs
Max. Make-Up Torque	14,100	ft-lbs
Yield Torque	20,600	ft-lbs



Printed on: July-29-2014

NOTES

The content of this Technical Data Sheet is for general information only and does not guarantee performance or application for a particular purpose. It is not intended for drilling production or well completion operations in the same manner as the equipment or materials it is produced or applied. It is the responsibility of the user to verify the TMK UP DQX and consult the latest information. Anyone using this information does so at their own risk. For more information, contact TMK UP DQX, 11111 SCD, 11111 SCD, Houston, TX 77036. Sales Office: 1-813-933-0000.



IPSCO

**PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL**

**Mesa Verde BS Unit 16H – Multiple Wells
NMNM114979
Oxy USA**

All previous COAs still apply except for the following:

A. CASING

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

1. The minimum required fill of cement behind the 7 5/8 inch intermediate casing is:

Operator has proposed a contingency DV tool at 4693'. If operator circulates cement on the first stage, operator is approved to inflate the ACP and run the DV tool cancellation plug and cancel the second stage of the proposed cement plan. If cement does not circulate, operator will inflate ACP and proceed with the second stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job. **Excess calculates to 21% - additional might be required.**
- b. Second stage above DV tool:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office.

2. The minimum required fill of cement behind the 5 1/2 inch production casing is:

- Cement should tie-back at least 100 feet into previous casing string. Operator shall provide method of verification. **Excess calculates to 14% - additional cement will be required.**

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Chaves and Roosevelt Counties
Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
During office hours call (575) 627-0272.
After office hours call (575)

Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
393-3612

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.