

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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 re-enter a
abandoned well. Use form 3160-3 (APD) for such proposals.***Carlsbad Field Office**
OCD ArtesiaI was born on _____
NMNM81580

Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

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

8. Well Name and No.
CEDAR CANYON 23-24 FEDERAL 32H9. API Well No.
30-015-4418010. Field and Pool or Exploratory Area
PIERCE CROSSING BN SPRG E11. 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 A PD
	<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 recompleat 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 recompleat 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 approval for the following changes from the approved permit:

NM OIL CONSERVATION
ARTESIA DISTRICT

1. Change in Mud Program

a. Replace MMH with water based Spud Mud in Surface Hole

JUN 16 2017

b. Replace Brine & MMH system with Direct Emulsion Water Based Mud in Intermediate Hole from 400' to ICP.

RECEIVED

c. Raise expected Mud Weight range from 8.6-9.2 ppg to 9.5-11.5 ppg due to weights seen in recent offsets.

d. OXY will make the change contingent upon the vendor being ready to support the rig. If the

Accepted for record - NMOCD
6-16-17

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #377177 verified by the BLM Well Information System
For OXY USA INC., sent to the Carlsbad
Committed to AFMSS for processing by DEBORAH MCKINNEY on 05/30/2017 ()

Name (Printed/Typed) DAVID STEWART

Title SR. REGULATORY ADVISOR

Signature (Electronic Submission)

Date

05/24/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USEApproved By Mustafa Hagel

Title

JUN 8 2017
PETROLEUM ENGINEER

Date 6/08/2017

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

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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)

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Additional data for EC transaction #377177 that would not fit on the form

32. Additional remarks, continued

vendor is not ready to support the rig, OXY will continue with the current MMH system that was permitted.

e. As discussed on 04/12/17, Oxy proposes to drill out the surface casing shoe with a Direct Emulsion Water Based Mud which will consist of an external saturated brine phase with pH above 10 at all times, from 400' ICP. This will eliminate the need for two mud systems, to manage both the salt and losses circulation interval in the intermediate hole section.

2. 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. Please see the attached document for information on the spudder rig.

3. Request a variance from the 0.422" clearance requirement on each side of the casing.

a. Run 5-1/2" 20# P-110 DQX with a Connection OD of 6.05" inside of our 7-5/8" casing (Nominal ID: 6-7/8" and Drift ID: 6-3/4").

b. The 5-1/2" string will be used as a tie-back above the 4-1/2" liner and will remain un-cemented. The only cemented portion of the well will be the liner, which will be cemented a minimum of 100' back into the 7-5/8" casing.

Please see attached for detailed information.

- All previous CoAs still apply. Additional CoA is not required.

PERFORMANCE DATA

TMK UP DQX
Technical Data Sheet

5,500 ft

20.00 lbs/ft

P-110

Exhibits: 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			

Computer Systems

Connection OD	6.950	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

Highly Toxic

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	≤ 610	ft-lbs

Page 29 of 31

NOT

correct or is tested on Data Sheet 5 to give a format only and does not guarantee performance or success on a particular test. The format only does not help in guessing answers and determine considering specific instructions and operator parameters. The format is neither on low, grade 5 or longer could be used on TMK IF 100 and high for the test information. Anyone using the format herein does so at their own risk. Veritas Aircraft, Inc. 10000 K. 1500 Tedford Rd. Suite 100, Tempe, AZ 85284-1000. Tel: 480-838-2828. Fax: 480-838-2829.



17500

OXY USA Inc. - Cedar Canyon 23-24 Federal 32H

OXY respectfully requests approval for the following changes from the approved permit:

1. Change in Mud Program

- Replace MMH with water based Spud Mud in Surface Hole
- Replace Brine & MMH system with Direct Emulsion Water Based Mud in Intermediate Hole from 400ft to ICP.
- Raise expected Mud Weight range from 8.6-9.2 ppg to 9.5-11.5 ppg due to weights seen in recent offsets.
- OXY will make the change contingent upon the vendor being ready to support the rig. If the vendor is not ready to support the rig, OXY will continue with the current MMH system that was permitted.

Mud Program

Depth From (ft)	Depth To (ft)	Fluid Type	Mud Weight (ppg)	Funnel Visc (sec/qt)	API Fluid Loss
0	400	Spud Mud	8.4-8.6	40-50	N/C
400	9517	Direct Emulsion WBM	9.0-10.0	28-38	N/C
9517	17649	OBM	9.5-11.5	28-34	<15

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

As discussed on 04/12/17, Oxy proposes to drill out the surface casing shoe with a Direct Emulsion Water Based Mud which will consist of an external saturated brine phase with pH above 10 at all times, from 400' – ICP. This will eliminate the need for two mud systems, to manage both the salt and losses circulation interval in the intermediate hole section.

- 2.** 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. Please see the attached document for information on the spudder rig.
- 3.** Request a variance from the 0.422" clearance requirement on each side of the casing.
- Run 5-1/2" 20# P-110 DQX with a Connection OD of 6.05" inside of our 7-5/8" casing (Nominal ID: 6-7/8" and Drift ID: 6-3/4").
 - The 5-1/2" string will be used as a tie-back above the 4-1/2" liner and will remain uncemented. The only cemented portion of the well will be the liner, which will be cemented a minimum of 100' back into the 7-5/8" casing.

OXY USA Inc
APD ATTACHMENT: SPUDDER RIG DATA

OPERATOR NAME / NUMBER: OXY USA Inc

1. SUMMARY OF REQUEST:

Oxy USA respectfully requests approval for the following operations for the surface hole in the drill plan:

1. Utilize a spudder rig to pre-set surface casing for time and cost savings.

2. Description of Operations

1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
 - a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
 - b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
2. The wellhead will be installed and tested as soon as the surface casing is cut off and the WOC time has been reached.
3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wingvalves.
 - a. A means for intervention will be maintained while the drilling rig is not over the well.
4. Spudder rig operations are expected to take 2-3 days per well on the pad.
5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
6. Drilling operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nipped up and tested on the wellhead before drilling operations resume on each well.
 - a. The larger rig will move back onto the location within 90 days from the point at which the wells are secured and the spudder rig is moved off location.
 - b. The BLM will be contacted / notified 24 hours before the larger rig moves back on the pre-set locations.
7. Oxy will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
8. Once the rig is removed, Oxy will secure the wellhead area by placing a guard rail around the cellar area.

Spudder Rig Layout

