

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM94651
2. Name of Operator OXY USA INCORPORATED		6. If Indian, Allottee or Tribe Name
3a. Address 5 GREENWAY PLAZA STE 110 HOUSTON, TX 77046-0521		7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) Ph: 432.685.5717		8. Well Name and No. CEDAR CANYON 28 FEDERAL 7H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 28 T24S R29E NESE 1760FSL 240FEL		9. API Well No. 30-015-43238-00-X1
		10. Field and Pool, or Exploratory PIERCE CROSSING
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK 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"/> Fracture Treat	<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
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall 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 to the drilling plan:

Proposed TD - 13603'M 8626'V

1. Request casing design modification, to set deep intermediate casing.

a. Add DV tool and ACP +/- 3000' for contingency second stage cement job. If cement comes to surface during first stage cement job we will inflate the ACP and then drop the cancellation cone for the DV tool.

b. Set the casing string within +/- 100' of the planned set point depending on how formation tops affect our planned KOP. If deeper, cement volumes will be increased appropriately.

Accepted for record
NMOC 9/3/15**SEE ATTACHED FOR
CONDITIONS OF APPROVAL****NM OIL CONSERVATION
ARTESIA DISTRICT****SEP 03 2015****RECEIVED**

14. I hereby certify that the foregoing is true and correct.			
Electronic Submission #313573 verified by the BLM Well Information System For OXY USA INCORPORATED, sent to the Carlsbad Committed to AFMSS for processing by CHRISTOPHER WALLS on 09/01/2015 (15CRW0110SE)			
Name (Printed/Typed)	DAVID STEWART	Title	REGULATORY ADVISOR
Signature	(Electronic Submission)	Date	08/24/2015
THIS SPACE FOR FEDERAL OR STATE OFFICE USE			
Approved By		Title	Date
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.		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.

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

Additional data for EC transaction #313573 that would not fit on the form

32. Additional remarks, continued

Intermediate Casing

7-5/8" 29.7# L-80 BT&C new csg @ 0-8000', 9-7/8" hole w/ 9.0# mud

Coll Rating (psi)-4790 Burst Rating (psi)-6890
SF Coll-2.48 SF Burst-1.42 SF Ten-2.29

Collapse and burst loads calculated using Stress Check with anticipated loads, see attached for design assumptions

2. Cement program modifications detailed below.

a. Intermediate - Circulate cement to surface w/ 1070sx Tuned Light (TM) system cmt w/ 3#/sx Kol-Seal + .125#/sx Poly-E-Flake + .8% HR-601, 10.2ppg.3.05 yield 500# in 15.07hr CS 125% Excess followed by 100sx Super H cmt w/ 3#/sx salt + .1% HR-800 + .3% CFR-3 + .5% Halad(R)-344 + 2#/sx Kol-Seal, 13.2ppg 1.65 yield 500# in 12.57hr CS 15% Excess.

Contingency 2nd Stage - Circulate cement to surface w/ 470sx HES light PP cmt w/ 5% Salt + .1% HR-800, 12.9ppg 1.85 yield 500# in 12.44hr CS 75% Excess followed by 180sx PP cmt, 14.8ppg 1.33 yield 500# in 6.31hr CS 125% Excess.

b. Production - Cement w/ 500sx Super H cmt w/ 3#/sx salt + .1% HR-800 + .3% CFR-3 + .5% Halad(R)-344 + 2#/sx Kol-Seal, 13.2ppg 1.65 yield 500# in 12.57hr CS 50% Excess. Estimated TOC @ 7000'.

Description of Cement Additives: Salt (Accelerator); CFR-3 (Dispersant); Kol-Seal, Poly-E-Flake (Lost Circulation Additive); Halad-344 (Low Fluid Loss Control); HR-601, HR-800 (Retarder)
The above cement volumes could be revised pending the caliper measurement.

3. Mud Program

Depth	Mud WT	Vis Sec	Fluid Loss	Type
0-500'	8.5-9.0	40-55	50-75cc/30min	EnerSeal Spud Mud (MMH)
500-3000'	9.8-10	28-32	NC	NaCl Brine
3000-8000'	9.0-9.4	38-50	50-75cc/30min	EnerSeal (MMH)
8000'-TD	8.8-9.6	28-32	NC	Cut Brine

Remarks: The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

Oxy proposes to drill out the 10-3/4" surface casing shoe with a saturated brine system from 500-3000', which is the base of the salt system. At this point we will swap fluid systems to a high viscosity mixed metal hydroxide system. We will drill with this system to the intermediate TD @ 8000'.

We are also proposing to change the production mud system back to a cut brine system.

OXY USA Inc.
Cedar Canyon 27/28 Federal

Casing Design Assumptions:

Burst Loads

CSG Test (Intermediate)

- Internal: Displacement fluid + 70% CSG Burst rating
- External: Pore Pressure from the Intermediate hole TD to Surface CSG shoe and MW of the drilling mud that was in the hole when the CSG was run to surface

CSG Test (Production)

- Internal: Fresh water displacement fluid + 80% CSG Burst rating
- External: Pore Pressure from the well TD the Intermediate CSG shoe and MW of the drilling mud that was in the hole when the CSG was run to surface

Gas Kick (Intermediate)

- Internal: Gas Kick based on Pore Pressure or Fracture Gradient @ CSG shoe with a gas 0.115psi/ft Gas gradient to surface while drilling the next hole section (e.g. Gas Kick while drilling the production hole section is a burst load used to design the intermediate CSG)
- External: Pore Pressure from section TD to previous CSG shoe and MW of the drilling mud that was in the hole when the CSG was run to surface

Stimulation (Production)

- Internal: Displacement fluid + Max Frac treating pressure (not to exceed 80% CSG Burst rating)
- External: Pore Pressure from the well TD to the Intermediate CSG shoe and 8.5 ppg MWE to surface

Collapse Loads

Lost Circulation (Intermediate)

- Internal: Losses experienced while drilling the next hole section (e.g. losses while drilling the production hole section are used as a collapse load to design the intermediate CSG). After losses there will be a column of mud inside the CSG with an equivalent weight to the Pore Pressure of the lost circulation zone
- External: MW of the drilling mud that was in the hole when the CSG was run

Cementing (Intermediate/Production)

- Internal: Displacement Fluid
- External: Cement Slurries to TOC, MW to surface

Full Evacuation (Production)

- Internal: Atmospheric Pressure
- External: MW of the drilling mud that was in the hole when the CSG was run

Tension Loads

Running CSG (Intermediate/Production)

- Axial load of the buoyant weight of the string plus either 100 klb over-pull or string weight in air, whichever is less

Green Cement (Intermediate/Production)

- Axial load of the buoyant weight of the string plus the cement plug bump pressure (Final displacement pressure + 500 psi)

Burst, Collapse and Tensile SF are calculated using Landmark's Stress Check (Casing Design) software.

Conditions of Approval

Oxy USA WTP LP

Cedar Canyon 28 Fed 7H

30-015-43238

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

a. First stage to DV tool:

- ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

Operator has proposed a contingency DV tool at 3000'. 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.

b. Second stage above DV tool:

- ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Cave/Karst.**