

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

LM

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.

APR 20 2000

5	Lease Serial No.	19848
6	If Indian, Allottee or Tribe Name	
7	If Unit or CA/Agreement, Name and/or No	
8	Well Name and No.	Cypress 33 #3H
9	API Well No.	Federal
10	Field and Pool, or Exploratory Area	30-015- 36987
11	County or Parish, State	Cedar Canyon Bone Spring
		Eddy NM

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	
2. Name of Operator OXY USA Inc. 16696	
3a. Address P.O. Box 50250, Midland, TX 79710-0250	3b. Phone No (include area code) 432-685-5717
4. Location of Well (Footage, Sec., T, R., M, or Survey Description) SL - 1650 FSL 400 FEL NESE(I) Sec 33 T23S R29E BHL - 1650 FSL 400 FWL NWSW(L) Sec 33 T23S R29E	

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 Amend
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Csg-Cmt Program
	<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 shall 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 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 final site is ready for final inspection.)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

See Attached

14 I hereby certify that the foregoing is true and correct Name (Printed/Typed) David Stewart		Title Sr. Regulatory Analyst
		Date 4/15/09
THIS SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by	Title	<div style="border: 2px solid black; padding: 5px; text-align: center;"> APPROVED APR 15 2009 WESLEY W. INGRAM PETROLEUM ENGINEER </div>
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		

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DRILLING PROGRAM

Operator Name/Number:

OXY USA Inc.

16696

Lease Name/Number:

Cypress 33 Federal #3H

3. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>	<u>Condition</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
17-1/2"	550'	13-3/8"	48#	STC	H-40	New	3.57	1.7	2.45
12-1/4"	3050	9-5/8"	47#	BT&C	L-80	New	7.78	1.8	4.85
8-1/2"	11850' per operator 9/15/63	5-1/2"	17#	LTC	N or L-80	New	1.56	1.87	1.63
	DVT-4700'								
	DVT-3000'								

Note: The casing seat for the 9-5/8" intermediate string will be picked in the Lamar Limestone as determined by the penetration rate change from the salt section to anhydrite plus 225'.

4. Cement Program

- b. 9-5/8" Intermediate Circulate cement to surface w/ 800sx HES light PP w/ 1#/sx PhenoSeal, 12.4ppg 2.13 yield followed by 200sx PP w/ 1% CaCl₂, 14.8ppg 1.34 yield.

Intermediate -- Contingency

In the event that air pockets are encountered the following alternate cement design will be utilized. Circulate cement to surface w/DV & ECP tool @ +/-600'. A temperature survey is not planned in the event that a DV/ECP is utilized and cement is not circulated off of the stage collar.

- Stage 1: Lead: 620 sx of Light Premium Plus with 5% Salt, 0.25 lb/sk Pol-E-Flake, 5 lb/sk Gilsonite mixed at 12.4 ppg, 2.12 cu.ft./sk
Tail: 200 sx of Premium Plus with 1% CaCl mixed at 14.8 ppg, 1.33 cu.ft./sk
- Stage 2: Lead: 150 sx of Light Premium Plus with 5% Salt, 0.25 lb/sk Pol-E-Flake, 5 lb/sk Gilsonite mixed at 12.4 ppg, 2.12 cu.ft./sk

- c. 5-1/2" Production

- Stage 1: Lead: 2090 sx of Class H Cement w/0.5% LAP-1, 0.4% CFR-3, 0.25 lb/sk D-AIR 1, 0.3% HR-601 mixed at 13.2 ppg, 1.59 cuft/sk.
Stage 2: Lead: 370 sx of Interfill C w/0.5% LAP-1, 0.25 lb/sk D-AIR 1, 0.125 lb.sk Pol-E-Flake mixed at 11.7 ppg, 2.61 cuft/sk.
Tail: 100 sx of Premium Plus Cement w/ 1% CaCl mixed at 14.8 ppg, 1.34 cuft/sk.
Stage 3: Lead: 420 sx of Interfill C w/0.5% LAP-1, 0.25 lb/sk D-AIR 1, 0.125 lb.sk Pol-E-Flake mixed at 11.7 ppg, 2.61 cuft/sk.
Tail: 100 sx of Premium Plus Cement w/ 1% CaCl mixed at 14.8 ppg, 1.34 cuft/sk.

8. Logging, Coring and Testing Program:

- Drill stem tests are not anticipated but if done will be based on geological sample shows.
- The open hole logging program will consist of GR LWD only in the build section.
- No coring program is planned.
- No mud loggers will be utilized on this well.

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA Inc
LEASE NO.:	NM19848
WELL NAME & NO.:	3 Cypress 33 Federal
SURFACE HOLE FOOTAGE:	1650' FSL & 400' FEL
BOTTOM HOLE FOOTAGE:	1650' FSL & 400' FWL
LOCATION:	Section 33, T. 23 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

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

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Secretary's Potash

High cave/karst

Possible lost circulation in the Delaware Mountain Group and the Bone Spring formations.

- 1. The 13-3/8 inch surface casing shall be set at approximately 550 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.**
 - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.**
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.**

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

- ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Casing to be set in the Lamar Limestone, BLM pick is 2950-3000'. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash.**

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

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

a. First stage to DV tool, cement shall:

- ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.

Second DV tool to be set a minimum of 50 feet below the intermediate casing shoe. Seal is required across the shoe due to potash.

b. Second stage above DV tool, cement shall:

- ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with third stage cement job.

c. Third stage above DV tool, cement shall:

- ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

CONTINGENCY CEMENTING PROGRAM FOR INTERMEDIATE CASING

4. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

DV tool to be set a minimum of 50 feet below the surface casing shoe.

Casing to be set in the Lamar Limestone. BLM geologist picks the Lamar Limestone at a depth of 2950-3000'.

- a. First stage to DV tool, cement shall:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job. **In addition, if the cement does not circulate, a CBL will be required prior to drilling out of the intermediate casing.**

- b. Second stage above DV tool, cement shall:

☒ Cement to circulate. 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 potash.**

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

5. 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.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. **Variance approved to use flex line from BOP to choke manifold. Check condition of 4 1/16" flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends. Hose to be anchored per manufacturer's recommendations.**

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8"** intermediate casing shoe shall be **5000 (5M)** psi.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - e. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

WWI 041509