

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.*5. Lease Serial No.
NMNM94651

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
CEDAR CANYON 29 FEDERAL COM 2H9. API Well No.
30-015-42992-00-X110. Field and Pool, or Exploratory
PIERCE CROSSING11. County or Parish, and State
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
OXY USA INCORPORATEDContact: DAVID STEWART
E-Mail: david_stewart@oxy.com3a. Address
5 GREENWAY PLAZA SUITE 110
HOUSTON, TX 77046-05213b. Phone No. (include area code)
Ph: 432.685.5717

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 29 T24S R29E NENE 230FNL 320FEL
32.194454 N Lat, 103.998682 W Lon**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Fracture Treat☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☒ Other
Change to Original APD

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 recomple 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 recomple 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 approved APD:

1. Move Surface Location to a multi-well pad to accommodate skidding the rig.
2. Amend horizontal lateral
3. Amend casing/cementing/mud programs
4. Propose to run the wellhead through the rotary prior to cementing surface casing.
5. Pad Extension

Proposed TD - 13335'M 8542'V

1. Amended C-102 and plats attached
New - SL 200 FNL 319 FEL NENE Sec 29 - BHL 459 FNL 160 FWL NWNW Sec 29

NM OIL CONSERVATION
ARTESIA DISTRICT

APR 06 2016

RECEIVED

Engineering Review Okay. C. Nimmer. 3/17/16

NRSD Wilson OK 3/21/16

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

Electronic Submission #331149 verified by the BLM Well Information System

For OXY USA INCORPORATED, sent to the Carlsbad

Committed to AFMSS for processing by PRISCILLA PEREZ on 02/11/2016 (16PP0450SE)

Name (Printed/Typed) DAVID STEWART

Title REGULATORY ADVISOR

Signature (Electronic Submission)

Date 02/10/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

For FIELD MANAGER

Date

3/30/16

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

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 ****

Accepted for record - NMOCB

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Additional data for EC transaction #331149 that would not fit on the form

32. Additional remarks, continued

Old - SL 230 FNL 320 FEL NENE Sec 29 - BHL 991 FNL 181 FWL NWNW Sec 29

2. Amended Directional Plan attached

3. Amended casing/cementing/mud programs

a. Surface Casing

10-3/4" 40.5# J-55 BT&C new csg @ 0-400', 14-3/4" hole w/ 8.4# mud

SF Coll-8.05 SF Burst-1.40 SF Ten-3.98

b. Intermediate Casing - Deep

7-5/8" 26.4# L80 BT&C new csg @ 0-8100', 9-7/8" hole w/ 9.8# mud

SF Coll-2.82 SF Burst-1.25 SF Ten-2.01

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 at +/- 2850' in case a contingency second stage is required for cement to reach surface. If cement circulates on 1st stage, cancellation cone will be dropped.

c. Production Casing

5-1/2" 17# P-110 USF new csg @ 0-8800'M, 6-3/4" hole w/ 9.2# mud

SF Coll-1.70 SF Burst-1.20 SF Ten-2.23

4-1/2" 11.6# P-110 DQX new csg @ 8800-13335'M, 6-3/4" hole w/ 9.2# mud

SF Coll-1.70 SF Burst-1.20 SF Ten-1.96

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

Cement program modifications detailed below.

a. Surface - Circulate cement to surface w/ 260sx PP cmt w/ 2% CaCl₂, 14.8ppg 1.35 yield, 500# CS in 6.50hr, 50% Excess.

b. Intermediate - Circulate cement to surface w/ 910sx Tuned Light (TM) system cmt w/ 3#/sx Kol-Seal + .125#/sx Poly-E-Flake + .8% HR-601, 10.3ppg 3.05 yield, 500# CS in 15.07hr, 100% Excess followed by 250sx 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# CS in 12.57hr, 20% Excess.

Contingency 2nd Stage - Circulate cement to surface w/ 450sx HES light PP cmt w/ 5% Salt + .35% HR-800 + 3#/sx Kol-Seal + .125#/sx Poly-E-Flake, 12.9ppg 1.85 yield, 500# CS in 12.44hr, 75% Excess followed by 190sx PP cmt, 14.8ppg 1.33 yield, 500# CS in 6.31hr, 125% Excess.

c. Production - Cement w/ 550sx Super H cmt w/ 3#/sx salt + .1% HR-800 + .4% CFR-3 + .5% Halad(R)-344, 13.2ppg 1.63 yield, 500# CS in 15.15hr, 15% Excess. Estimated TOC @ 7100'.

Description of Cement Additives: Calcium Chloride, 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.

Mud Program

Depth	Mud WT	Vis Sec	Fluid Loss	Type
0-400'	8.4-8.8	28-38	NC	FW Gel
400-2850'	9.8-10	28-32	NC	Saturated Brine
2850-Int Shoe	8.8-9.6	38-50	NC	EnerSeal (MMH)
Int Shoe-TD	8.8-9.4	28-100	NC	Oil Based Mud

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 400-2850', which is the base of the salt system. At this point we will swap fluid systems to a high viscosity mixed metal hydroxide system and will drill with this system to the intermediate TD @ 8100'. We are also proposing to change the production mud system back to an oil based mud system.

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA Inc
LEASE NO.:	NM94651
WELL NAME & NO.:	Cedar Canyon 29 Fed Com 2H
SURFACE HOLE FOOTAGE:	200'/N & 319'/E
BOTTOM HOLE FOOTAGE	459'/N & 160'/W
LOCATION:	Section 29, T. 24 S., R. 29 E., NMPM
COUNTY:	Eddy County, New Mexico

The operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well as proposed after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well.

A. CASING

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.

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

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. (For surface casing the BOP can be nipped up after the cement has reached 500 psi compressive strength.)

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

Medium cave/karst

Possible water flows in Castile and Salado.

Possible lost circulation in Rustler, Salado and Delaware.

1. The 10 3/4 inch surface casing shall be set at approximately 400 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, the operator shall set the casing 25' above the salt.**
 - 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 surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - 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.

Formation below the 10-3/4" 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 and the mud weight for the bottom of the hole. Report results to BLM office.

The 7-5/8 inch intermediate casing must be kept liquid filled while running into hole to meet minimum BLM requirements for collapse.

2. 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 2850'. 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 see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

Formation below the 7-5/8" 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.

3. The minimum required fill of cement behind the 5-1/2 x 4-1/2 inch production casing is:

- ☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

4. 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.

CLN-031716