

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs

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.  
NMNM55149

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.  
CORBIN SOUTH FEDERAL 1

9. API Well No.  
30-025-41316

10. Field and Pool, or Exploratory  
CORBIN WOLFCAMP SOUTH

11. County or Parish, and State  
LEA COUNTY COUNTY, NM

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

**RECEIVED**  
DEC 19 2013

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
OXY USA WTP LP  
Contact: JESSICA SHELTON  
E-Mail: jessica\_shelton@oxy.com

3a. Address  
PO BOX 4292  
HOUSTON, TX 77210

3b. Phone No. (include area code)  
Ph: 713-840-3011

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 9 T18S R33E NWNW 830FNL 400FWL

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 Change to Original A PD
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<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 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 respectfully requests approval for the following changes and additions to the drilling plan:

1. Casing design modification, to drill the well with smaller bit sizes: 14 ?? surface hole, 10 5/8? intermediate hole and 7 7/8? production hole. Details are below.
2. Cement program adjustment to the new bit/casing sizes. Cement recipe modifications detailed below.
3. The Surface and Intermediate casings strings will be tested to 70% of their burst rating for 30 minutes. This will also test the seals of the lock down pins that hold the pack-off in place in the Multibowl wellhead system.

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct.  
Electronic Submission #227370 verified by the BLM Well Information System  
For OXY USA WTP LP, sent to the Hobbs  
Committed to AFMSS for processing by JOHNNY DICKERSON on 11/20/2013 ()

Name (Printed/Typed) JESSICA SHELTON Title REGULATORY TECHNICIAN

Signature (Electronic Submission) Date 11/20/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

**APPROVED**  
DEC 19 2013  
BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

Approved By \_\_\_\_\_ Title \_\_\_\_\_

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 *KA*

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.

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

DEC 30 2013

**OXY USA Inc**  
**Corbin South Federal #1**  
**APD SUNDRY DATA**

**OPERATOR NAME / NUMBER:** OXY USA Inc

**LEASE NAME / NUMBER:** Corbin South Federal #1

**STATE:** NM                      **COUNTY:** Lea

**SURFACE LOCATION:**                      830' FNL & 400' FWL, Sec 9, T18S, R33E

**C-102 PLAT APPROX GR ELEV:** 3950.4'    **EST KB ELEV:** 3974.4' (24' KB)

**1. SUMMARY OF CHANGES:**

Oxy USA respectfully requests approval for the following changes and additions to the drilling plan:

1. Casing design modification, to drill the well with smaller bit sizes: 14 3/4" surface hole, 10 5/8" intermediate hole and 7 7/8" production hole. Details are below.
2. Cement program adjustment to the new bit/casing sizes. Cement recipe modifications detailed below.
3. The Surface and Intermediate casings strings will be tested to 70% of their burst rating for 30 minutes. This will also test the seals of the lock down pins that hold the pack-off in place in the Multibowl wellhead system.

**2. CASING PROGRAM**

Surface Casing: 11.75" casing set at ± 1560' MD/1560' TVD in a 14.75" hole filled with 8.90 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-1560'	1560'	47	J-55	BT&C	1510	3070	737	11.000	10.844	2.77	1.42	4.52

Intermediate Casing: 8.625" casing set at 2925' MD / 2925' TVD in a 10.625" hole filled with 10 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'- 2925'	2925'	32	J-55	LT&C	2530	3930	417	7.921	7.875	2.38	1.38	2.33

Production Casing: 5.5" casing set at ± 11500' MD / 11500' TVD in a 7.875" hole filled with 9.0 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0' - 11500'	11500'	17	P-110	BT&C	7460	10640	546	4.892	4.767	1.41	1.23	1.98

Note: All Casing is in new condition

### 3. CEMENT PROGRAM:

#### Surface Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft <sup>3</sup> /sk	24 Hr Comp
<b>Surface (TOC: 0' – 1560')</b>							
<b>Lead:</b> 0' – 1174' (165% Excess)	780	1174	Premium Plus cement with 1% Calcium Chloride, 4% Bentonite, 0.125 lbm/sl Poly-E-Flake	9.14	13.5	1.73	1006 psi
<b>Tail:</b> 1174' – 1560' (165 % Excess)	350	386	Premium Plus cement with 94 lbm/sk Premium Plus Cement, 2% Calcium Chloride	6.37	14.80	1.35	1326 psi

#### Intermediate Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft <sup>3</sup> /sk	24 Hr Comp
<b>Intermediate (TOC: 0' –2925')</b>							
<b>Lead:</b> 0' – 2220' (105% Excess)	390	2220'	Light Premium Plus Cement, with 5% Salt, 3lb-sk Kol Seal, 0.125 lb/sk Poly-E-Flake	9.68	12.9	1.87	500 psi
<b>Tail:</b> 2220' – 2925' (105 % Excess)	230	705'	Premium Plus cement with 1% Calcium Chloride	6.36	14.80	1.34	1650 psi

#### Production Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft <sup>3</sup> /sk	24 Hr Comp
<b>Production (TOC: 2600' - 11500') Single Stage</b>							
<b>Lead:</b> 2400' – 6800' (100% Excess)	500	4400'	Tuned Light (TM) System Class H Cement, 3 lbm/sk Kol-Seal, 0.125 lbm/sk Poly-E-Flake, 0.2 lbm/sk HR-800	14.04	10.20	2.94	947 psi
<b>Tail:</b> 6800' – 11500' (40% Excess)	770	4700'	Super H Cement, 3 lbm/sk Kol-Seal, 3 lbm/sk Salt, 0.125 lbm/sk Poly-E-Flake, 0.2 % and HR-601, & 0.5% Halad-344, 0.4% CFR 3.	8.40	13.2	1.66	1673 psi

**Cement Additives:** Bentonite (light weight additive), Calcium Chloride (accelerator), Halad-344 (low fluid loss control), HR-800 (retarder), HR-601 (retarder), Kol-Seal (lost circulation additive), Salt (salt), Poly-E-Flake (lost circulation additive), CFR-3 (Dispersant)

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**PECOS DISTRICT  
CONDITIONS OF APPROVAL**

<b>OPERATOR'S NAME:</b>	<b>OXY USA Inc.</b>
<b>LEASE NO.:</b>	<b>NMNM-55149</b>
<b>WELL NAME &amp; NO.:</b>	<b>Corbin South Federal 1</b>
<b>SURFACE HOLE FOOTAGE:</b>	<b>0830' FNL &amp; 0400' FWL</b>
<b>LOCATION:</b>	<b>Section 09, T. 18 S., R 33 E., NMPM</b>
<b>COUNTY:</b>	<b>Lea County, New Mexico</b>
<b>API:</b>	<b>30-025-41316</b>

## I. DRILLING

### A. DRILLING OPERATIONS 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)

**Lea County**

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

1. **A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated prior to drilling out the surface shoe. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
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 is located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

## **B. CASING**

**Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. 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.).**

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

**Wait on cement (WOC) time prior to drilling out 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. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. 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.**

**Possibility of water and brine flows in the Artesia and Salado Groups. Higher than normal pressures may be encountered in the Wolfcamp formation.**

**Surface casing shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.**

1. **The 11-3/4 inch surface casing shall be set at approximately 1560 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 feet 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 11-3/4" 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.**

- 2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing, which shall be set at approximately **2925** feet, is:

Cement to surface. If cement does not circulate see B.1.a, c-d above.

**Formation below the 8-5/8" 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** 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.

### 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 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 and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
3. **Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.**
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Operator shall perform the intermediate casing test to 70% of the casing burst. This will test the multi-bowl seals.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

**5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
  - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock.
  - d. The results of the test shall be reported to the appropriate BLM office.
  - e. 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.**
  - f. 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. This test shall be performed prior to the test at full stack pressure.

#### **D. DRILLING MUD**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

#### **E. DRILL STEM TEST**

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

## **F. WASTE MATERIAL AND FLUIDS**

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**JAM 121613**