Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OM B No. 1004-0137
Expires: March 31, 2007

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.*

5. Lease Serial No. NMNM 29233

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No. Federal 12 #14H

2. Name of Operator OXY USA Inc. 16696

9. API Well No. 30-015-40821

3a. Address P.O. Box 50250 Midland, TX 79710

3b. Phone No. *(include area code)* 432-685-5717

10. Field and Pool, or Exploratory Area WC: B.S Livingston Ridge Bone Spring

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
S - 330FSL 405FEL SESE(P) Sec 12 T22S R31E
PBH - 660FSL 330FWL SWSW(M) " " "

11. County or Parish, State Eddy NM (96403)

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

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

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JAN 02 2013
NMOCD ARTESIA

SEE ATTACHED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Accepted for record
NMOCD
1/3/2013

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* David Stewart

Title Regulatory Advisor

Signature

Date 12/7/12

APPROVED
DEC 21 2012
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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.

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)

Attachment 3160-5
OXY USA Inc
Federal 12 #14H
API No. 30-015-40821

1. SUMMARY OF CHANGES

OXY respectfully requests approval for the following changes:

- 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.
- Cement volumes adjustment to the new bit/casing sizes. Cement program for the production string to be changed to a two stage cement job with TOC at surface (DV tool at 4550'.)
- Wellhead type to be changed to a conventional 13 5/8" 5M x 13 5/8" 5M x 7 1/16" 10M wellhead. It will be welded to the surface casing, and slips will be set on the intermediate and production casing. BOP will be tested to 5000psi (3500 for the annular) after running surface casing, and then after running the intermediate casing (since the conventional wellhead requires us to nipple down/nipple up BOP.)

2. CASING PROGRAM

Surface Casing 11-3/4" casing set at ± 895' MD/ 895' TVD in a 14-3/4" hole filled with 8.60 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'-895'	895'	42	H-40	ST&C	1070	1980	222	11.084	10.928	2.74	1.29	6.56

Intermediate Casing: 8-5/8" casing set at ± 4500'MD / 4500'TVD in a 10-5/8" hole filled with 10.2 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'- 4500'	4500'	32	J-55	LT&C	2530	3930	417	7.921	7.875	1.54	1.42	3.22

Production Casing: 5-1/2" casing set at ± 14681'MD / 10345'TVD in a 7-7/8" hole filled with 9.40 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'- 14681'	14681'	17	L-80	BT&C	6280	7740	397	4.89	4.767	1.33	2.09	1.60

Collapse and burst loads calculated using Stress Check with actual anticipated loads.

3. CEMENT PROGRAM

Surface Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft^3/sk	24 Hr Comp
Surface (TOC: 0' –895')							
Lead: 0' –695' (165% Excess)	460	695	Premium Plus cement with 2% Calcium Chloride, 4% Bentonite, 0.25 lbm/sk Poly-E-Flake	9.16	13.50	1.75	589 psi
Tail: 695' – 895' (165% Excess)	200	200	Premium Plus cement with 2% Calcium Chloride	6.37	14.80	1.35	1608 psi

Intermediate Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft^3/sk	24 Hr Comp
Intermediate (TOC: 0' –4500')							
Lead: 0' –4200' (10% Excess)	900	4200	Light Premium Plus Cement, with 5% Salt, 3lb-sk Kol Seal & 0.125 lb/sk Poly-E-Flake	9.68	12.9	1.87	625 psi
Tail: 4200' – 4500' (105 % Excess)	100	300	Premium Plus cement with 1% Calcium Chloride	6.36	14.80	1.34	2125 psi

Production Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft^3/sk	24 Hr Comp
Production (TOC: 3900' - 14681') 1st Stage							
Lead 2: 4500' – 7500' (100 % Excess)	420	3000	75.2 lb/sk Premium Cement, 14.8 lb/sk Silicalite (Additive material), 15lb/sk Scotchlite HGS-6000(Lightweight additive), 0.5lb/sk CFR3(Dispersant), 0.15lb/sk WG17 (Gelling agent), 1lb/sk Cal-Seal60(Accelerator), 1.5lb/sk Salt (Salt), 2% Calcium Chloride (Accelerator)	12.45	10.6	2.69	646 psi
Lead: 7500' – 9709' (65% Excess)	310	2209	Light Premium Plus Cement, with 3 lbm/sk Salt, 3lb-sk Kol Seal & 0.4% HR-601	11.48	12.4	2.09	500 psi
Tail: 9709' – 14681' (65% Excess)	900	4972	Super H Cement, 3 lbm/sk Kol-Seal, 0.125 lbm/sk Poly-E-Flake, 0.4 % CFR-3, 0.15 % and HR-601 & 0.5% Halad-344	8.09	13.2	1.61	1477 psi
DV Tool at 4550' TOC-0							
Lead: 0' – 4300' (10 % Excess)	320	4300'	Interfill H with 0.5% Halad 322 (Lightweight additive) and 0.3% HR 601 (Retarder)	13.87	11.9	2.49	390 psi
Lead: 4300' – 4550' (100 % Excess)	60	250'	Premium Plus cement with 2% Calcium Chloride	6.39	14.80	1.35	2100 psi

Pilot Hole Plug Back Cement Information:

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft^3/sk	24 Hr Comp
1st Plug: 11650' – 10850' 35% Excess	280	800	Class H Premium Cement 50/50 Poz with 0.3% CFR-3, 0.15% HR-601	5.8	14.4	1.25	1275
2nd Plug: 10850' – 10000' 35% Excess	300	850	Class H Premium Cement 50/50 Poz with 0.3% CFR-3, 0.1% HR-601	5.80	14.4	1.25	1275
3rd Plug: 10000' – 9500' 35% Excess	240	500	Premium Cement with 3% Potassium Chloride, 0.75% CFR-3, and 0.3% HR-601	3.52	17.5	0.96	4550

Description of Cement Additives: Calcium Chloride, Cal-Seal 60, Salt (Accelerator), Silicalite (Additive Material) CFR-3 (Dispersant), WG-17 (Gelling Agent), Bentonite, Schotchlite HGS-6000 (Light Weight Additive), Kol-Seal, Poly-E-Flake (Lost Circulation Additive), Halad-344 (Low Fluid Loss Control), HR-601 (Retarder)

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Secretary's Potash
OCD Artesia

12-881

Form 3160-3
(April 2004)

OCD Artesia

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMNM29233 JCS
6. If Indian, Allotee or Tribe Name 10/29/2012
7. If Unit or CA Agreement, Name and No.
8. Lease Name and Well No. Federal 12 #14H <30481>
9. API Well No. 30-015- 40821
10. Field and Pool, or Exploratory <96403> WILDCAT ~~Und Livingston Ridge Bone Spring~~
11. Sec., T. R. M. or Blk. and Survey or Area Sec 12 T22S R31E
12. County or Parish Eddy
13. State NM

1a. Type of work: [✓] DRILL [ ] REENTER

1b. Type of Well: [✓] Oil Well [ ] Gas Well [ ] Other [✓] Single Zone [ ] Multiple Zone

2. Name of Operator OXY USA Inc. 16696

3a. Address P.O. Box 50250 Midland, TX 79710

3b. Phone No. (include area code) 432-685-5717

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface 330 FSL 405 FEL SESE(P)
At proposed prod. zone 660 FSL 330 FWL SWSW(M)

14. Distance in miles and direction from nearest town or post office* 25 miles east from Carlsbad, NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'

16. No. of acres in lease ~~480ac~~ 1120 AC

17. Spacing Unit dedicated to this well 160ac

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1905'

19. Proposed Depth PH - 11650 HL - 14681'-M 10345'-V

20. BLM/BIA Bond No. on file ESB000226

21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3620.3' GL

22. Approximate date work will start* 09/01/2012

23. Estimated duration 45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature [signature] Name (Printed/Typed) David Stewart Date 6/21/12

Title Regulatory Advisor david_stewart@oxy.com

Approved by (Signature) /s/ Jesse J. Juen Name (Printed/Typed) /s/ Jesse J. Juen Date OCT 19 2012

Title STATE DIRECTOR Office NM STATE OFFICE

Application approval 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.
Conditions of approval, if any, are attached. APPROVAL FOR TWO YEARS

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)

Carlsbad Controlled Water Basin

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA INC
LEASE NO.:	NM29233
WELL NAME & NO.:	14H-FEDERAL 12
SURFACE HOLE FOOTAGE:	0330'/S. & 0405'/E.
BOTTOM HOLE FOOTAGE	0660'/S. & 0330'/W.
LOCATION:	Section 12, T. 22 S., R. 31 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. **Due to recent H2S encounters in the salt formation, it is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide prior to drilling out the surface shoe. If Hydrogen Sulfide is encountered, please report measurements 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 (horizontal well – vertical portion of hole) 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. 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.

R-111-P Potash
Possible high pressure gas burst when penetrating the Wolfcamp. (Pilot hole)
Possible lost circulation in the Delaware and Bone Spring formations.
Possible water and brine flows in the Salado and Castile Groups.

1. The **11-3/4** inch surface casing shall be set at approximately **895** feet (in a competent bed below the Magenta Dolomite, a Member of the Rustler, and if salt is encountered, set casing at least 25 feet 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 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 is to be set in the base of the Castile or within the Lamar Limestone at approximately 4500',** is:

    ☒ 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 potash concerns.**

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.

The pilot hole plugging procedure is approved as written.

3. The minimum required fill of cement behind the **5-1/2** inch production 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. **May need additional cement as excess calculates to 19%.**

   b. Second stage above DV tool:

   ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Additional cement will be required as excess calculates to 9%.**

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.

5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

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**. 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. 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. **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 potash areas, 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. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

   b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

   c. The results of the test shall be reported to the appropriate BLM office.

   d. 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.**

   e. 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.

   f. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2. **(Pilot Hole)**

D. DRILLING MUD (Pilot Hole)

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 122112