Form 3160-5
(April 2004)

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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 81586
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No.
8. Well Name and No. Cedar Canyon 23 #1H
9. API Well No. 30-015-40667
10. Field and Pool, or Exploratory Area Corral Draw Bone Spring
11. County or Parish, State Eddy NM

1. Type of Well: [✓] Oil Well [ ] Gas Well [ ] Other
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 *(Footage, Sec., T., R., M., or Survey Description)*
S - 2068 FNL 403 FWL SWNW (E) Sec 23 T24S R29E
BH - 1980 FNL 340 FEL SENE (H) " " "

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 Variance to Approved Csg Cmtg Program
	[ ] 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.)

OXY USA Inc. respectfully requests a variance from the agreed APD cementing program due to circulation problems encountered during the cementing process that have resulted in a section of poor cement bond behind the 5-1/2" casing. This can be clearly observed on the CBL, copy submitted 12/17/12. The risk of hydrocarbon migration as a result of the section of poor bond is therefore seen as minimal, thus no cement remediation is proposed for this well.

Excellent cement bond is observed over the reservoir (1st Bone Spring Sand) up to the DV Tool @ 6496' (~1500ft TVD above reservoir) thus sufficient reservoir isolation is thought to be achieved. Good cement bond is also present above the Post Tool (3205' TVD) up to ~1850' (~1350ft TVD above the 9-5/8" casing shoe), therefore the intermediate shoe is also sufficiently isolated.

To ensure integrity of the cement and casing, pressure testing of the 5-1/2" x 9-5/8" annulus and the 5-1/2" casing will be conducted both prior to and concluding the stimulation treatment. Chart recordings will be maintained and submitted to the BLM if requested. The pressure testing procedure is outlined in the completion procedure below.

A well schematic is included at the back of this program for your reference. The approved sundry notice with the proposed completion procedure is attaché.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Accepted for record
NMOCD 1/31/2013

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* David Stewart
Title Regulatory Advisor
Signature
Date 1/9/13

APPROVED
JAN 23 2013
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

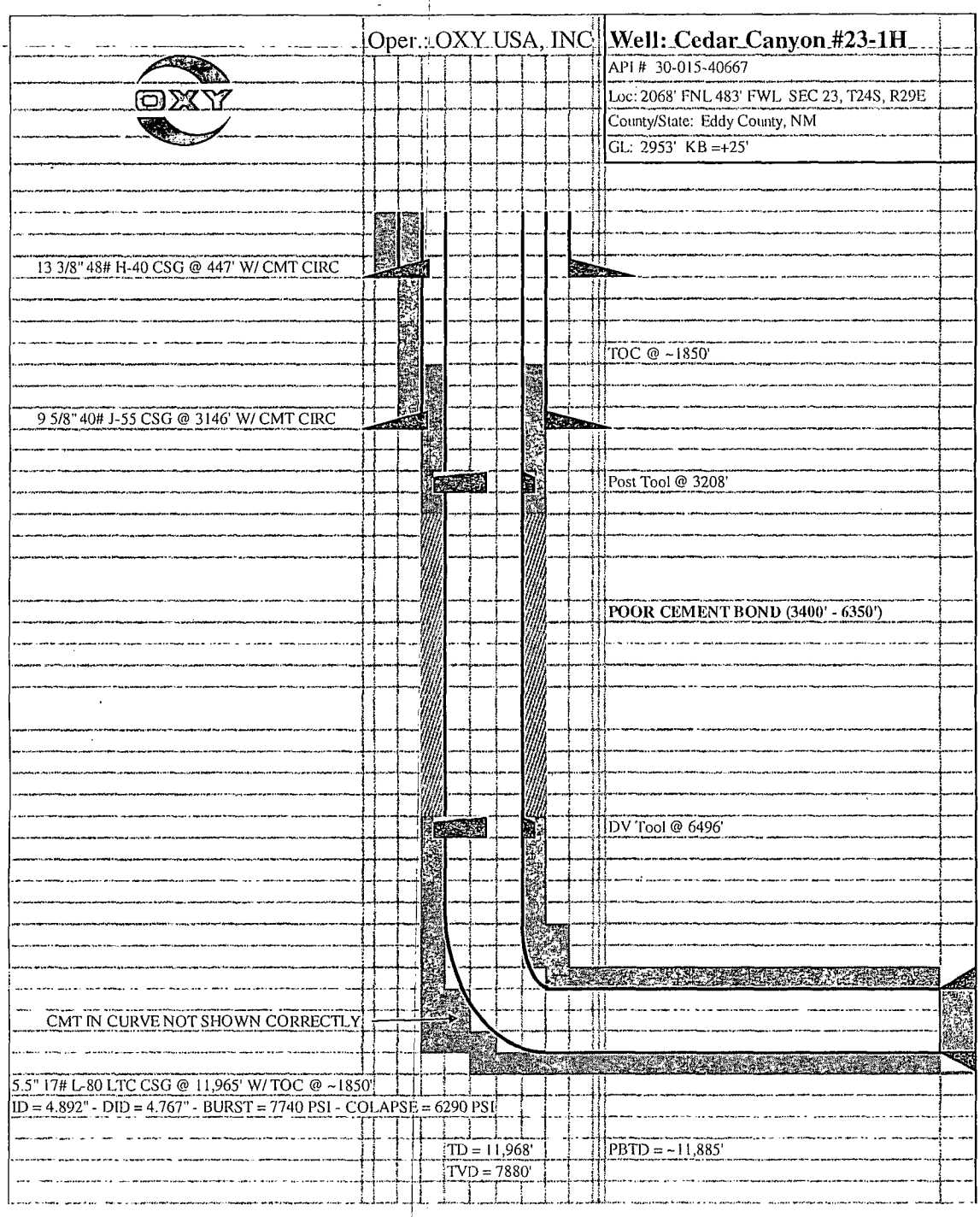
THIS SPACE FOR FEDERAL OR STATE OFFICE USE

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

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)

6.0 WELLBORE DIAGRAM



Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Operator Copy

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

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NMNM 81586

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.
Cedar Canyon 23 #1H

2. Name of Operator
OXY USA Inc. 16696

9. API Well No.
30-015-40667

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
Corral Draw Bone Spring

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
S - 2068 FNL 483 FWL SWNW(E) Sec 23 T24S R29E
PBH - 1980 FNL 340 FEL SENE(H) " " "

11. County or Parish, State
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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 Proposed Completion
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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SEE ATTACHED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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

Title Regulatory Advisor

Signature

Date 12/17/12

APPROVED
DEC 28 2012
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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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)

Rec Mid Res 1/8/13

Attachment 3160-5
OXY USA Inc.
Cedar Canyon 23 #1H
API No. 30-015-40667

Complete the horizontal well, stimulating with a multi-stage frac treatment using cross-linked gel and resin coated sand.

Casing:

SIZE	WEIGHT	GRADE	DEPTH	CMT VOL & Remarks
13 3/8"	48#	H-40 STC	447'	650sx (187bbl), Circ 315sx (97bbl) cmt to surface
9 5/8"	40#	J-55 LTC	3146'	1850sx (569bbl), Circ 369sx (123bbl) cmt to surface
5-1/2"	17#	L-80 LTC	11968 DVT-6498' PST-3205'	3000sx (978bbl), no cmt to surface, Run CBL TOC @ **~1850'**

Cement returns were lost during the 5-1/2" cement job. Drilling Engineer advised that both DV and Post Tool functioned correctly and are closed. CBL indicates no cement bond between the DV and Post Tool. Good cement bond over the reservoir interval and up to 6410ft. Indicates ~1800ft of good cement above the reservoir and thus isolation looks sufficient.

Perforations

3 1/8" TCP Guns, .43" EHD w/ 6 JSPF @ 60 degree phasing.

Interval Name / Depth (ft)	Shot Density (spf)	# of Perfs	Phase (DEG)	Hole Diam. (in)
Stage 1 – 1st Bone Springs / 11780 – 11782	6	9	60	0.43
Stage 1 - 1st Bone Springs / 11540 – 11542	6	8	60	0.43
Stage 1 - 1st Bone Springs / 11300 – 11302	6	7	60	0.43
Stage 1 - 1st Bone Springs / 11060 – 11062	6	6	60	0.43
Stage 2 - 1st Bone Springs / 10820 – 10822	6	9	60	0.43
Stage 2 - 1st Bone Springs / 10580 – 10582	6	8	60	0.43
Stage 2 - 1st Bone Springs / 10340 – 10342	6	7	60	0.43
Stage 2 - 1st Bone Springs / 10100 – 10102	6	6	60	0.43
Stage 3 - 1st Bone Springs / 9860 – 9862	6	9	60	0.43
Stage 3 - 1st Bone Springs / 9620 – 9622	6	8	60	0.43
Stage 3 - 1st Bone Springs / 9380 – 9382	6	7	60	0.43
Stage 3 - 1st Bone Springs / 9140 – 9142	6	6	60	0.43
Stage 4 – 1st Bone Springs / 8900 – 8902	6	9	60	0.43
Stage 4 – 1st Bone Springs / 8660 – 8662	6	8	60	0.43
Stage 4 – 1st Bone Springs / 8420 – 8422	6	7	60	0.43
Stage 4 – 1st Bone Springs / 8190 – 8192	6	6	60	0.43

PROPOSED PROCEDURE

NOTE: Please read the following program carefully as there are steps that have been included in bold that are unique to this well. BLM has advised in a prior completion program that no witness is required during the pressure testing stages, however chart recordings must be maintained and submitted if requested in the future.

NOTE 2: PLEASE CALL THE PUMPER TO INFORM THEM OF YOUR WORK ON THE WELL 48 HOURS PRIOR TO THE JOB, OR AS SOON AS POSSIBLE.

NOTE 3: MAKE SURE TO KEEP CASING OPEN WHILE RUNNING IN HOLE WITH CT GUNS

WARNING: A POISONOUS GAS - HYDROGEN SULFIDE (H2S) - A HIGHLY TOXIC COLORLESS GAS THAT IS HEAVIER THAN AIR MAY BE PRESENT AT THIS LOCATION AND/OR PRESENT IN THE GAS AND LIQUIDS INJECTED OR PRODUCED FROM THIS WELL. PLANS MUST BE REVIEWED DEALING WITH H2S SAFETY PRIOR TO WORKING ON THIS WELL. CHECK WITH FOREMAN CONCERNING LOCAL CONDITIONS.

1. Check location for hazardous conditions. MIRU CTU. Ensure the well is dead. NU frac stack.

2. RU 2" CTU & PU 2.88" motor w/ 4 5/8" mill. Total BHA to be less than 20' based on basic lock up calculations. RIH and clean out the lateral to PBTD @ **11,885 ft**, and circulate the well with inhibited water. POOH and LD motor. RD CTU.

3. RU HLB WLU. Run GR-CBL using wireline & log from 7500' (or as low as possible) to surface w/ 1000 psi on the casing. MAKE 1ST PASS OF ~ 500' FROM *7500'* W/ 0 PSI ON CASING **TIE INTO MWD GR RUN W/ LWD TOOLS**. Check the line tension every 100' from *6500'* to *7500'*, to make sure we can get to *7500'*. If necessary, log from as deep as possible. LOG GOING IN HOLE & ATTEMPT TO LOCATE & CALIBRATE CBL IN FREE PIPE.

4. **Set up a recording chart and perform a Braden Head pressure test of the 9-5/8" x 5-1/2" annulus. Pressure up to 500psi for 30min, then 1000psi for an additional 30min. If unsuccessful rig down tools and advise the RMT group.**

5. **Maintain 100psi on the annulus and continue chart monitoring through the entire frac program.**

6. **Test casing and wellhead to 5420psi. (70% of the casing burst pressure as per the BLM regulations. Test pressure should be greater than anticipated frac pressure based upon offset well (Goodnight #27-4 ~4800psi) frac pressures.)**

   5.5" 17# L-80 LTC CSG @ 11,965" W/ TOC @ **1850 ft**
   ID = 4.892" - DID = 4.767" - BURST = 7740 PSI - COLLAPSE = 6290 PSI

   Note: *BLM REGS FOR CASING TESTS: 0.22 PSI/ FT OF DEPTH W/ MINIMUM OF 1500 PSI NOT TO EXCEED 70% OF BURST – PRESSURE LOSS GREATER THAN 10% IN 30 MINUTES REQUIRES CORRECTIVE ACTION - CHART NOT REQUIRED – PRESSURE, TIME, & RESULTS TO BE REPORTED ON DAILY REPORTS.*

7. RU CTU. PU & RIH w/ TCP guns to perf first frac stage per above schedule.

   Note: If operation requires changing depth of Flow-thru plugs or perforating schedule, take into account the nearest collar depth reported in the final casing running tally – attached.

8. Perforate first stage per attached procedure. Arm guns & break down perfs w/ treated water. POOH and check guns.

9. RD CTU. **Set maximum Pressure at 5420 psi**. Frac Stage # 1 as per attached vendor procedure.

10. RU WLU. PU guns and 5.5" CBP, RIH and set CBP at **10,940'**. Tst plug to **5420psi**. Perf stage 2 per the above perf schedule. POOH, check guns, and LD. RDMO WLU.

11. Frac Stage # 2 as per attached vendor procedure.

12. RU WLU. PU guns and 5.5" CBP, RIH and set CBP at **9980'**. Tst plug to **5420psi**. Perf stage 3 per the above perf schedule. POOH, check guns, and LD. RDMO WLU.

13. Frac Stage # 3 as per attached vendor procedure.

14. RU WLU. PU guns and 5.5" CBP, RIH and set CBP at **9020'**. Tst plug to **5420psi**. Perf stage 4 per the above perf schedule. POOH, check guns, and LD. RDMO WLU.

15. Frac Stage # 4 as per attached vendor procedure.

16. RU CTU. PU 2.88" motor w/ 4 5/8" mill. Drill out and clean the Flow – thru plugs at **9020'**, **9980'** and **10940'** per attached Best Practices procedure for cleaning. Be sure all recommendations in the Best Practices Procedure are implemented.

17. Continue cleaning to the PBTD @ **11,885'**. POOH w/ CT and rig down.

18. **RU WLU. RIH w/ 5-1/2" RBP and set @ 8000'. Test the 5-1/2" production casing to a CHP of 500psi, then 1000psi, holding for 30min each.**

19. **Redo the Braden Head pressure test of the 9-5/8" x 5-1/2" annulus. Pressure up to 500psi for 30min, then 1000psi for 30min. Ensure test is monitored on the recording chart. If unsuccessful rig down tools and advise the RMT group.**

20. Kill well with brine. ND frac stack. NU wellhead.

21. RU WLU. PU Arrow Set 1X packer, profile nipple, bottom half of on/off tool and set packer at **7100'** (100' above KOP).

22. PU and RIH with 2 7/8" 6.5# N-80 EUE tubing and top half of on/off tool. Circulate packer fluid. Land out on/off tool and tubing.

23. Flow back well through test manifold and separator as directed. Flow well to unload the water from frac job. Initially, let the well flow at high rate. Once it stars producing oil, gradually reduce the rate to maximum 700 bfpd and 1000 mcfd.

24. Demobilise flowback crew and direct produced fluids to production battery ASAP to keep flowback costs to a minimum.

Conditions of Approval

OXY USA Inc.
Cedar Canyon 23 #1H
API 30-015-40667
T24S-R29E, Sec 23
December 28, 2012

Work to be completed by March 28, 2013.

1. **No witness will be required for the Broden head pressure test. The records shall be submitted and maintained for future use.**
2. **A plan for remedial work on the 5 ½'' casing (due to insufficient cement circulation) shall be submitted to the BLM within 30 days of frac completion.**
3. Functional H_2S monitoring equipment shall be on location.
4. Surface disturbance beyond the originally approved pad must have prior approval.
5. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
6. A minimum of 3,000 (3M) BOPE shall be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (3M) Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
7. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over 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.
8. File **subsequent sundry** Form 3160-**5** within 30 days of completing work and submit test results.
9. Workover approval is good for 90 days (completion to be within 90 days of approval). A detailed justification is necessary for extension of that date.

JAM 122812

Conditions of Approval

OXY USA Inc.
Cedar Canyon 23 #1H
API 30-015-40667
T24S-R29E, Sec 23
January 23, 2013

1. **No witness will be required for the Braden head pressure test. These test records shall be maintained for submittal to the BLM if requested.**
2. **Operator shall submit a plan for BLM approval for monitoring the annulus during the life of the well.**

JAM 012313