Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
OCD Artesia

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

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 page 2

5. Lease Serial No.
NMNM13996

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.
HEIGHT CC 6_7 FEDERAL COM 33H

2. Name of Operator
OXY USA INCORPORATED
Contact: DAVID STEWART
E-Mail: david_stewart@oxy.com

9. API Well No.
30-015-45561-00-X1

3a. Address
5 GREENWAY PLAZA SUITE 110
HOUSTON, TX 77046-0521

3b. Phone No. (include area code)
Ph: 432.685.5717

10. Field and Pool or Exploratory Area
PURPLE SAGE-WOLFCAMP (GAS)

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 6 T24S R29E 230FNL 2355FWL
32.253624 N Lat, 104.024727 W Lon

11. County or Parish, State
EDDY COUNTY, NM

12. CHECK THE 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	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must 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 to amend the casing/cementing program for the following wells.
The four wells will have a similar design and the specific details are for the 33H.

Height CC 6-7 Federal #33H - 30-015-45551 - NMNM013996
Height CC 6-7 Federal #34H - 30-015-45562 - NMNM077018
Height CC 6-7 Federal #35H - 30-015-45563 - NMNM077018
Height CC 6-7 Federal #36H - 30-015-45564 - NMNM117551

OXY also requests bradenhead squeeze and for a casing tie back liner, see attached for details.

RECEIVED

APR 01 2019

DISTRICT II-ARTESIA O.C.D.

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

Electronic Submission #455892 verified by the BLM Well Information System
For OXY USA INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 02/27/2019 (19PP1148SE)

Name *(Printed/Typed)* DAVID STEWART — Title REGULATORY ADVISOR

Signature (Electronic Submission) — Date 02/25/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Mustafa Haque — Title Petroleum Engineer — Date 03-14-2019

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional data for EC transaction #455892 that would not fit on the form

32. Additional remarks, continued

-Operator shall run CBL from TD of the intermediate casing to surface. Submit result to BLM.

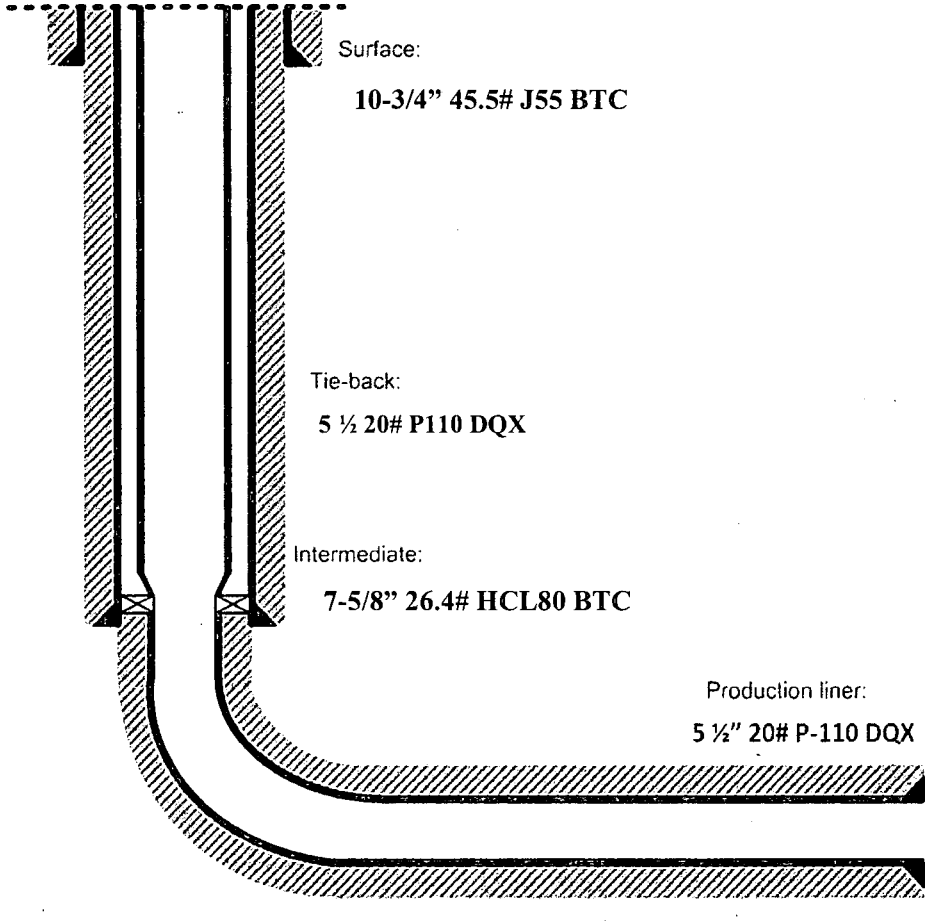
OXY USA Inc.
Height CC 6-7 Federal Com 33H, 34H, 35H, 36H

Below is a summary that describes the general operational steps to drill and complete the well.

- Drill 14-3/4" hole x 10-3/4" casing for surface section. Cement to surface.
- Drill 9-7/8" hole x 7-5/8" casing for intermediate section. Cement to surface.
- Drill 6-3/4" hole x 5-1/2" liner for production section. Cement to top of liner, 100' inside 7-5/8" shoe.
- Release drilling rig from location.
- Move in workover rig and run a 5-1/2" 20# P110 DQX tie-back frack string and seal assembly (see connection specs below). Tie into liner hanger Polished Bore Receptacle (PBR) with seal assembly.
- Pump hydraulic fracture job.
- Flowback and produce well.

When a decision is made to develop a secondary bench from this wellbore, a workover rig will be moved to location. The workover rig will then retrieve the tie-back frack string and seal assembly before temporarily abandoning the initial lateral.

General well schematic:



5 ½" 20# P110 DQX Tie-back string specifications:

PERFORMANCE DATA

TMK UP DQX **5.500 in** **20.00 lbs/ft** **P-110**
Technical Data Sheet

Tubular Parameters

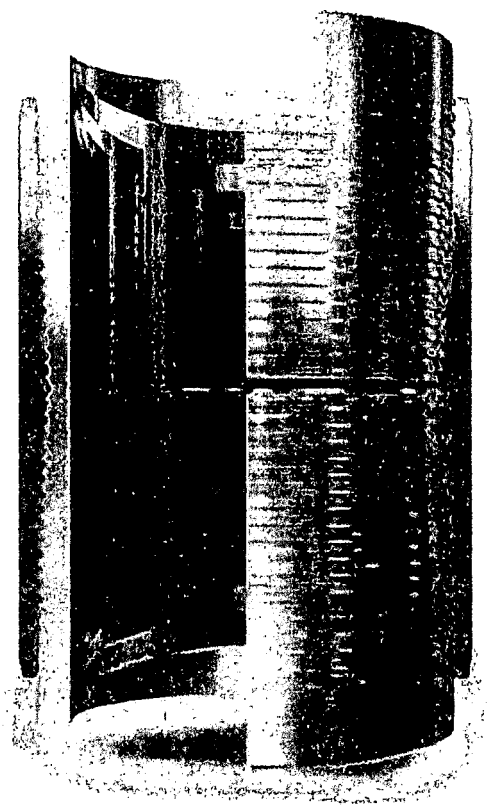
Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P-110		Yield Load	641,000	lbs
PE Weight	19.81	lbs/ft	Tensile Load	729,000	lbs
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,600	psi
Nominal ID	4.778	in	Collapse Pressure	11,100	psi
Drift Diameter	4.653	in			
Nom. Pipe Body Area	5.828	in²			

Connection Parameters

Connection OD	6.050	in
Connection ID	4.778	in
Make-Up Loss	4.122	in
Critical Section Area	5.828	in²
Tension Efficiency	100.0	%
Compression Efficiency	100.0	%
Yield Load In Tension	641,000	lbs
Min. Internal Yield Pressure	12,600	psi
Collapse Pressure	11,100	psi

Make-Up Torques

Min. Make-Up Torque	11,600	ft-lbs
Opt. Make-Up Torque	12,900	ft-lbs
Max. Make-Up Torque	14,100	ft-lbs
Yield Torque	20,600	ft-lbs



Printed on: July-29-2014

TMK IPSCO

OXY USA Inc. – Height CC 6-7 Federal Com 33H, 34H, 35H, 36H

This is a bulk sundry request for 4 wells in the Cedar Canyon area. The wells related to this sundry request are:

API #	Well Name	Lease Serial #
3001545561	Height CC 6-7 Fed Com 33H	NMNM013996
3001545562	Height CC 6-7 Fed Com 34H	NMNM077018
3001545563	Height CC 6-7 Fed Com 35H	NMNM077018
3001545564	Height CC 6-7 Fed Com 36H	NMNM117551

1. Casing Program

Oxy requests to run a production liner. The updated casing table is shown below:

Hole Size (in)	Casing Interval From (ft)	Casing Interval To (ft)	Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	Buoyant Body SF Tension	Buoyant Joint SF Tension
14.75	0	400	10.75	40.5	J-55	BTC	1.125	1.2	1.4	1.4
9.875	0	9163	7.625	26.4	HC L-80	BTC	1.125	1.2	1.4	1.4
6.75	9063	20098	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
							SF Values will meet or exceed			

*Oxy requests the option to run DQX or SF-Torq connections for the 5.5" 20# P-110 production liner

2. Cementing Program

Oxy requests to change the production cement job. The tables below highlight the changes.

Casing	Slurry	#Sks	Wt. (Lb/gal)	Yld ft3/sack	H20 gal/sk	500# Comp. Strength	Slurry Description
1st Stage Production Casing	Tail	318	13.2	1.61	7.804	7:11	Class H Cement, Retarder, Dispersant, Salt
Production Casing 2nd Stage (Tail Slurry) to be pumped as Bradenhead Squeeze from surface, down the Production Casing annulus							
2nd Stage Production Casing	Tail	1,106	12.9	1.92	10.41	23:10	Class C Cement, Accelerator, Dispersant
Production Liner	Tail	702	13.2	1.38	6.686	3:49	Class H Cement, Retarder, Dispersant, Salt

Casing String	Top of Lead (ft)	Bottom of Lead (ft)	Top of Tail (ft)	Bottom of Tail (ft)	% Excess Lead	% Excess Tail
1st Stage Production Casing	N/A	N/A	6780	9163	0%	0%
2nd Stage Production Casing	N/A	N/A	0	6780	N/A	50%
Production Liner	N/A	N/A	9063	20098	N/A	5%

OXY requests to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated TOC @ the Bone Spring and the second stage performed as a bradenhead squeeze with planned cement from the top of the Bone Spring to surface

Cement Top and Liner Overlap

1. Oxy is requesting permission to have minimum fill of cement behind the 5-1/2" production liner to be 100' into previous casing string. The reason for this is so that we can come back and develop shallower benches from the same 9-5/8" mainbore in the future.
2. Our plan is to use a whipstock for our exit through the mainbore. Based on our lateral target, we are planning a whipstock cased/hole exit so that kick-off point will allow for roughly 10deg/100' doglegs needed for the curve.
3. Cement will be brought to the top of this liner hanger.
4. See attached for additional casing tie-back information.