

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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.Lease Serial No.
NMNM13996

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
HEIGHT CC 6_7 FEDERAL COM 31H9. API Well No. ~~45557~~ 45574
30-015-45555-00-X110. Field and Pool or Exploratory Area
PURPLE SAGE-WOLFCAMP (GAS)11. County or Parish, State
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
OXY USA INCORPORATEDContact: DAVID STEWART
E-Mail: david_stewart@oxy.com

3a. Address

5 GREENWAY PLAZA SUITE 110
HOUSTON, TX 77046-0521

3b. Phone No. (include area code)

Ph: 432 685 5717

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

Sec 6 T24S R29E 456ENL 706FWL
32.253500 N Lat, 104.030319 W Lon

516' FNL 731 FNL

MAR 11 2019

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input 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 checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<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 type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" 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 recompleat 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 recompleat 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.

This is a subsequent report for the P&A of the Height CC 6-7 Fed Com 31H, API No. 30-015-45574. This document contains the slurry properties, procedure followed, and volumes and plugging schematic. The cement lab report is attached.

The Height CC 6-7 Fed Com 31H was plugged back to 80' and will be used as the mouse hole when drilling the Height CC 6-7 Fed Com 31Y. Oxy will fill the remaining 80' with cement after drilling the Height CC 6-7 Fed Com 31Y.

Pumped 230sx, 1.36 yield, 14.8ppg cement and had circulated approximately 86sx cmt to surface. Full returns were observed at surface. The job duration was 1.5 hours. The plug procedure is included below:

Accepted For Record
NMOCD 3/11-19

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

Electronic Submission #455505 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 (19PP1131SE)

Name (Printed/Typed) DAVID STEWART

Title REGULATORY ADVISOR

Signature

(Electronic Submission)

Date 02/21/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

ACCEPTEDMUSTAFA HAQUE
Title PETROLEUM ENGINEER

Date 02/28/2019

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

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 #455505 that would not fit on the form

32. Additional remarks, continued

1. Make up 4-1/2" drill pipe and a float sub and run in hole to 224' MD (bottom of plug). Fill pipe and break circulation as necessary.
2. Hold PJSM w/ cementing company, H&P and Oxy personnel. R/U cementing equipment, fill cement lines with fresh water and pressure test.
3. Circulate and condition wellbore w/ rig pumps in preparation for cement plug:
 - a. Gradually stage pumps up to match flow rate during drilling (350 gpm)
 - b. Monitor returns for H₂S or gas and ensure that well is stabilized (no losses or flow).
 - c. Reciprocate pipe to help condition wellbore and rotate at 80 rpm.
 - d. Circulate a minimum of 2 bottoms up.
4. Pump 224' cement plug from 224-80' MD as follows:
 - a. Pre-mix cement volume
 - b. Pump 56bbl of 14.8 ppg slurry @ 5 bpm.
 - c. Displace with 2.7 bbl of fresh water @ 2 bpm.
 - d. This displacement volume will leave 0.5 bbl of cement inside the drill string (35').
5. POOH wet to 80' MD
 - a. Cement top will fall as pipe is pulled. Clean drill pipe that has cement inside on surface.
 - b. Maximum speed of 45 fpm. Don't rotate out.
6. Circulate cement out at 350 gpm. Pump 50 bbls fresh water.
7. Do not top out with cement. Goal is to leave 80' of conductor un-cemented to serve as a mousehole for replacement well.

Sundry Notice to spud well was filed 2/21/19 - EC Transaction 455484 - Serial Number 950-27287

Sundry Notice to swap wells was filed 2/14/19 - EC Transaction 454723 - Serial Number 950-26499.

Sundry Notice to move surface location was filed 1/10/19 - EC Transaction 448669 - Serial No. 950-21048

OXY USA Inc. – Height CC 6-7 Federal Com 31H – P&A Subsequent Report

This is a subsequent report for the P&A of the Height CC 6-7 Fed Com 31H. This document contains the slurry properties, procedure followed, and volumes and plugging schematic. The cement lab report is attached. The following well is affected:

API Number	Well Name	Lease Serial Number
3001545574	Height CC 6-7 Fed Com 31H	NMNM013996

The Height CC 6-7 Fed Com 31H was plugged back to 80 ft and will be used as the mouse hole when drilling the Height CC 6-7 Fed Com 31Y. Oxy will fill the remaining 80' with cement after drilling the Height CC 6-7 Fed Com 31Y.

A. SURFACE HOLE PLUGBACK

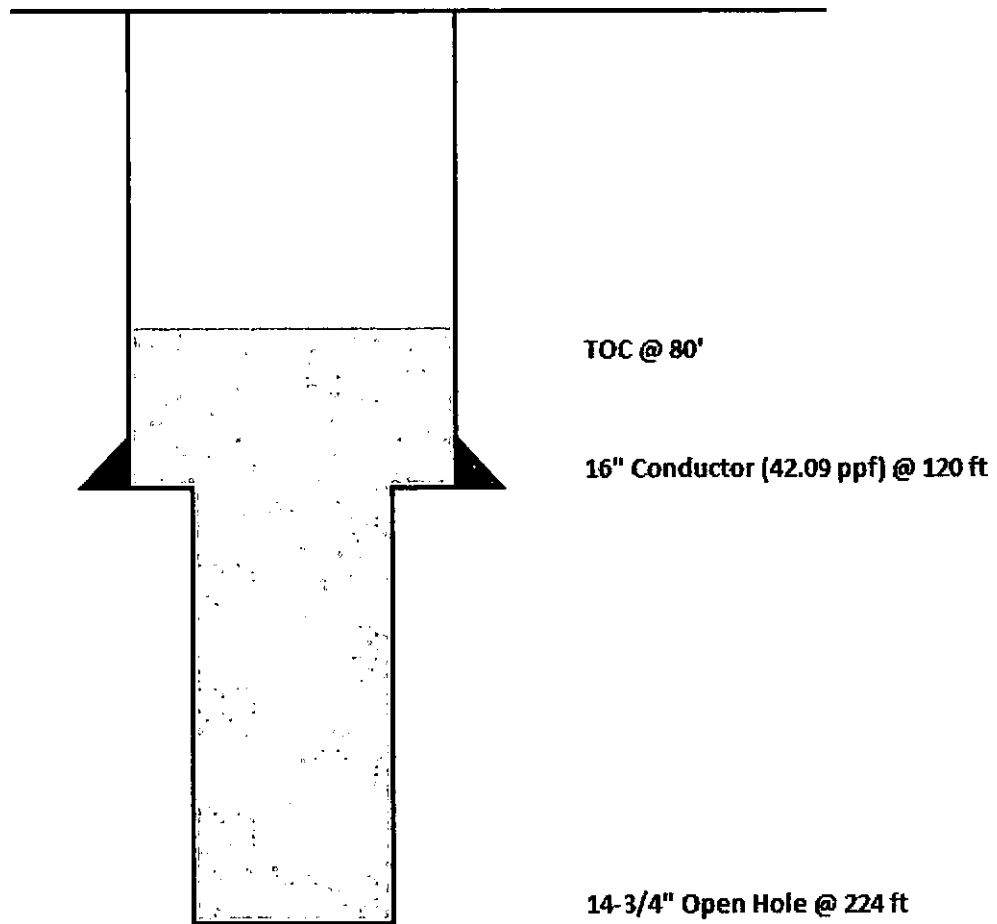
Description	Slurry Type	Weight (ppg)	Yield	Water Req	500psi Comp. Strength (Time)	OH Excess	Pumped Volume (bbls)	Top of Cement (MD)
Lead Cement	Cement	14.8	1.36	6.53	7:35	150%	55.7	80'
Displacement	Water	8.4	N/A	N/A	N/A	N/A	2.7	N/A

Pumped 230 sacks of lead cement and had approximately 86 sacks return to surface. Full returns were observed at surface. The job duration was 1.5 hours. The plug procedure is included below:

Ensure cement design is compliant with the COA. Obtain lab tests including UCA, Thickening Time, Free Fluid, Rheology and compatibility with spacers. Specifically demonstrate time required to achieve 500 psi compressive strength for all tail slurries. Provide cement vendor with a three day notice to deliver and fill silos / provide field blend lab tests and a twelve hour notice prior to pump cement jobs. Cement vendor shall rig up a T-piece from the cement head with an additional valve to ensure a means to bleed off pressure. Ensure mix water and cement slurry samples are retained until the end-of-well. Refer to Cement GDL 60.605.200 for detailed sampling guideline.

1. Make up 4.5" drill pipe and a float sub and run in hole to 224' MD (bottom of plug). Fill pipe and break circulation as necessary.
2. Hold PJSM w/ cementing company, H&P and Oxy personnel.
 - a. R/U cementing equipment, fill cement lines with fresh water and pressure test.
3. Circulate and condition wellbore w/ rig pumps in preparation for cement plug:
 - a. Gradually stage pumps up to match flow rate during drilling (350 gpm)
 - b. Monitor returns for H₂S or gas and ensure that well is stabilized (no losses or flow).
 - c. Reciprocate pipe to help condition wellbore and rotate at 80 rpm.
 - d. Circulate a minimum of 2 bottoms up.
4. Pump 224' cement plug from 224' to 80' MD as follows:
 - a. Pre-mix cement volume
 - b. Pump 56 bbl of 14.8 ppg slurry @ 5 bpm.
 - c. Displace with 2.7 bbl of fresh water @ 2 bpm.
 - i. Note: This displacement volume will leave 0.5 bbl of cement inside the drill string (35').
5. POOH wet to 80' MD
 - a. Cement top will fall as pipe is pulled. Clean drill pipe that has cement inside on surface.
 - b. Maximum speed of 45 fpm. Don't rotate out.
6. Circulate cement out at 350 gpm. Pump 50 bbls fresh water.
7. Do not top out with cement. Goal is to leave 80' of conductor un-cemented to serve as a mousehole for replacement well.

B. PLUGGING SCHEMATIC



Note: Remaining 80' of conductor will be filled with cement after drilling the Height CC 6-7 Fed Com 31Y.

Report date	2/14/2019	County	Eddy	BHST (F)	80
Requestor	Justin Brawner	Rig	N/G	BHCT (F)	80
Analyst	Victor Edwards	Job	Surface-Tail	T. gradient (F/100ft)	0
Client	Quasar Energy Services	Casing size (in)	n/g	BHP (psi)	400
Operator	OXY	MD (ft)	450	Mud weight (ppg)	8.3
Well	Height CC 6-7 Fed Com 31H	TVD (ft)	450	Blend type	Referenced
Project No	MC190279R	Testing T. (F)	80		

Slurry Properties

Slurry density (ppg)	Blend yield (ft ³ /sk)	Porosity (%)	SVF (%)
14.8	1.35	63.18	36.82

Slurry Composition

Component	Concentration	Unit	Lot #
Buzzi Class C	100	%BWOB	B18255
Calcium Chloride	2	%BWOB	A18105
Cello-Flake	0.25	lb/sk	N/A

Base Fluid

Component	Blend ratio (gal/sk)
Fresh water	6.372

Comments

The slurry was conditioned for 30 minutes prior to setting the UCA. Referenced from MC181932-001.

Rheology

Temperature (F)	80	80
Pressure (psi)	0	0
Conditioning time (min)	0	20
RPM	Average	Average
300	65	80
200	57	72
100	48.5	61
60	44	55
30	38.5	49
6	25	27.5
3	18.5	18
10 sec gel (lb/100ft ²)		
10 min gel (lb/100ft ²)		
1 min stirring (lb/100ft ²)		
Rheology Model	Bingham plastic	Bingham plastic
PV (cP)	40.7	53.3
YP (lb/100ft ²)	28.8	34
n		
K (lb·s ⁿ /n/100ft ²)		

Thickening Time

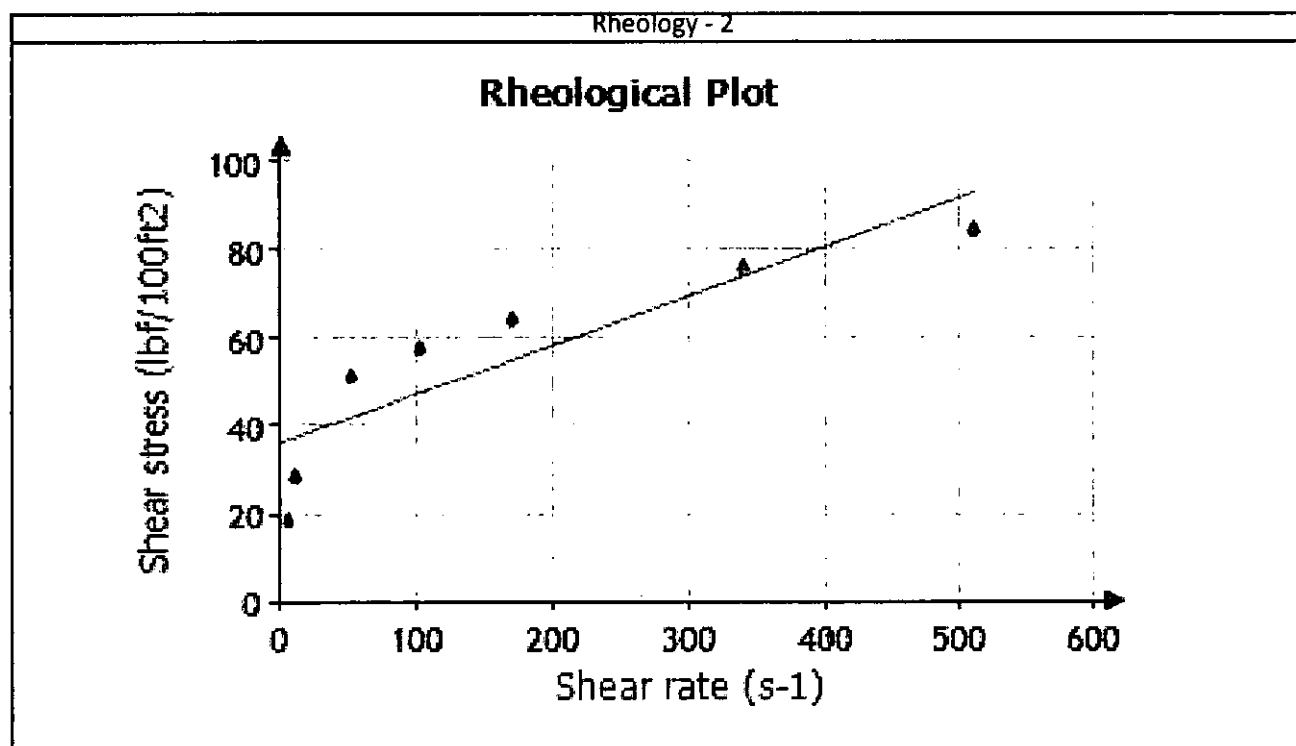
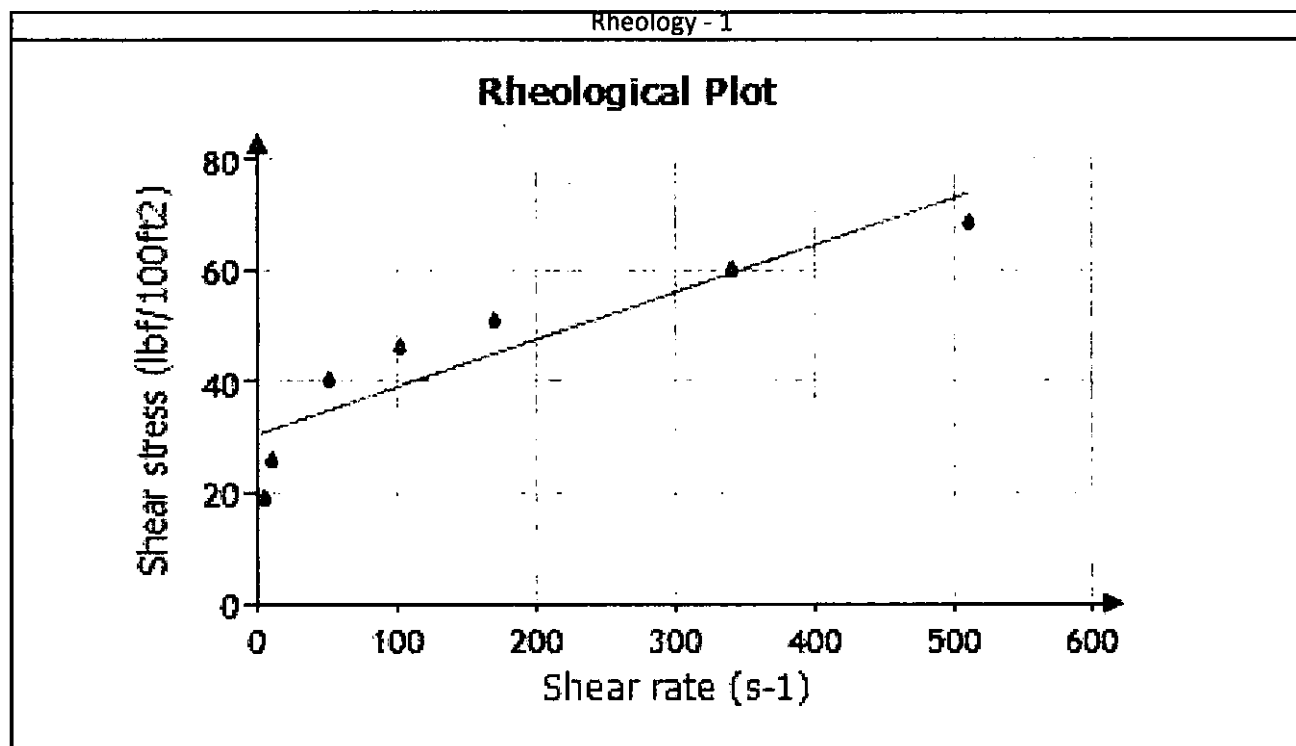
	Initial	Final
Temperature (F)	80	80
Pressure (psi)	700	700
Ramp time (hr:mm)	00:13	
Consistency (Bc)	8	70
Time (hr:mm)	00:00	02:55
Batch mixing		
Mixing time (hr:mm)		
Temperature (F)		

Free Fluid

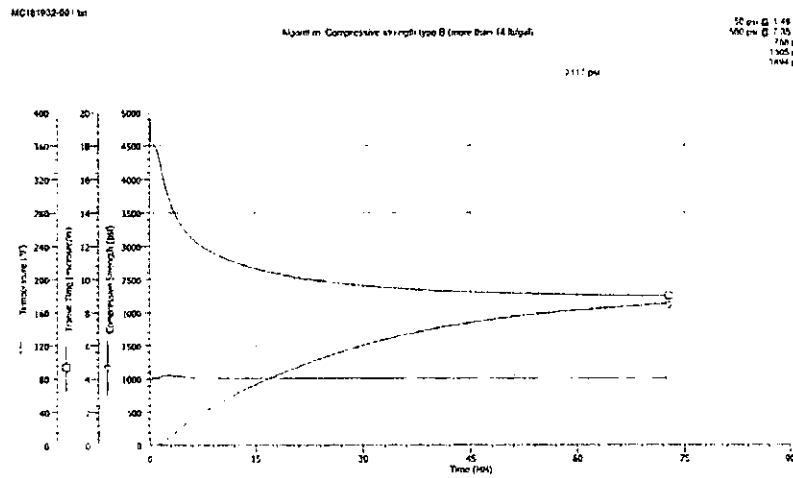
Conditioning temperature (F)	80
Conditioning time (min)	20
Static 2 hr temperature (F)	80
Inclination (deg)	90
Initial volume (ml)	250
Free fluid (ml)	0
% Free fluid	0
Settling (Y/N)	No

Compressive Strength

	Initial			Final		
Temperature (F)	80			80		
Pressure (psi)	3000			3000		
Ramp time (hr:mm)	00:13					
Time (hr:mm)	01:48	07:35	12:00	24:00	48:00	72:00
Comp. strength (psi)	50	500	758	1305	1894	2117
Crush type	Puck					
Time (hr:mm)	12:00	24:00	48:00	72:00		
Avg strength (psi)						



Compressive Strength - 1



Chemplex
SOLVAY GROUP
2811 E County 1257
Midland, TX 79706

Thickening Time

