

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.***Carlsbad Field Office**  
**CCD Hobbs**  
**HOBBS**Serial No.  
0840

If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2****AUG 06 2018**

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

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.  
PHILLY 31 FED COM 704H

2. Name of Operator

EOG RESOURCES INCORPORATED

Contact: STAN WAGNER

E-Mail: stan\_wagner@eogresources.com

9. API Well No.  
30-025-44769-00-X1

3a. Address

MIDLAND, TX 79702

3b. Phone No. (include area code)

Ph: 432-686-3689

10. Field and Pool or Exploratory Area  
RED HILLS-WOLFCAMP, WEST (GAS)

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

Sec 31 T26S R34E 290FSL 2065FWL  
32.001064 N Lat, 103.510880 W Lon

11. County or Parish, State

LEA COUNTY, NM

**12. CHECK THE 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"/> 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 checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and 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 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.

EOG Resources requests an amendment to our approved APD for this well to reflect changing to a 4-string casing design as attached.

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

**Electronic Submission #420071 verified by the BLM Well Information System**  
**For EOG RESOURCES INCORPORATED, sent to the Hobbs**  
**Committed to AFMSS for processing by PRISCILLA PEREZ on 05/21/2018 (18PP1056SE)**

Name (Printed/Typed) STAN WAGNER

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 05/14/2018

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**Approved By /s/ Jonathon Shepard

Petroleum Engineer

**JUL 25 2018**  
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.

**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)

**\*\* M REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\****K2*

**Revised Permit Information 4/24/18:**

Well Name: Philly 31 Fed Com No. 704H

## Location:

SL: 290' FSL &amp; 2065' FWL, Section 31, T-26-S, R-34-E, Lea Co., N.M.

BHL: 230' FNL &amp; 1590' FWL, Section 30, T-26-S, R-34-E, Lea Co., N.M.

**Casing Program:**

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF <sub>min</sub> Collapse	DF <sub>min</sub> Burst	DF <sub>min</sub> Tension
17.5"	0 - 840'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4,000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4,000' - 5,300'	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0 - 11,600'	7.625"	29.7#	HCP110	FXL	1.125	1.25	1.60
6.75"	0 - 11,100'	5.5"	20#	P110EC	DWC CIS MS	1.125	1.25	1.60
6.75"	11,100' - 20,013'	5.5"	20#	P110EC	VAM SFC	1.125	1.25	1.60

Variance is requested for annular clearance of the 5-1/2" x 7-5/8" to the top of cement.

**Cement Program:**

Depth	No. Sacks	Wt. lb/gal	Yld Ft <sup>3</sup> /ft	Slurry Description
840'	697	13.5	1.74	Lead: Class 'C' + 4.00% Bentonite + 2.00% CaCl <sub>2</sub> (TOC @ Surface)
	333	14.8	1.35	Tail: Class 'C' + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate + 2.0% KCl (1.06 lb/sk)
5,300'	692	12.7	2.22	Lead: Class C + 0.15% C-20 + 11.63 pps Salt + 0.1% C-51 + 0.75% C-41P (TOC @ Surface)
	303	14.8	1.32	Tail: Class C + 0.13% C-20
11,600'	375	10.8	3.67	Lead: Class C + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ 4,800')
	400	14.8	2.38	Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800
20,013'	1000	14.8	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 11,100')

**Mud Program:**

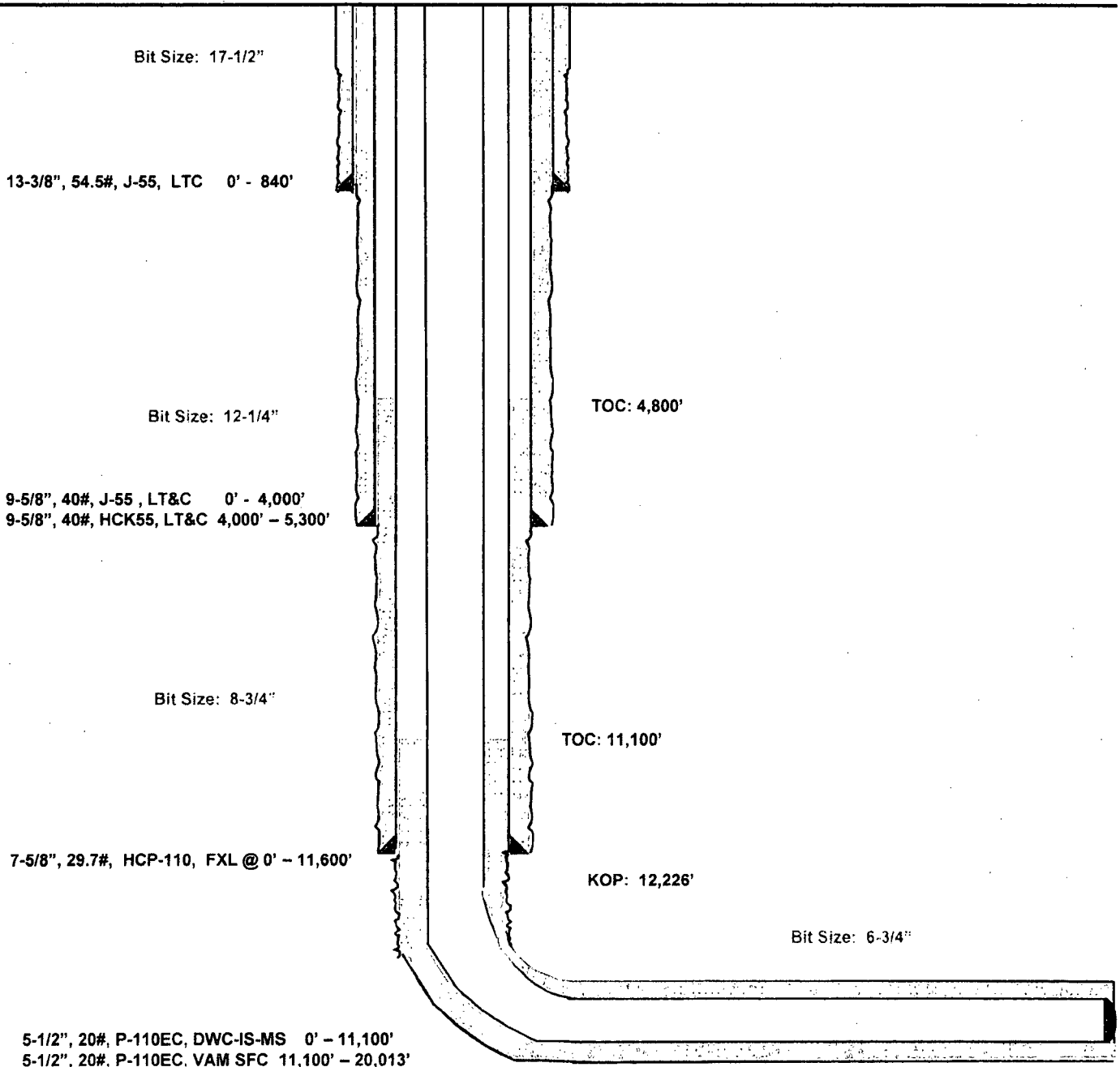
Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 840'	Fresh - Gel	8.6-8.8	28-34	N/c
840' - 5,300'	Brine	10.0-10.2	28-34	N/c
5,300' - 11,600'	Oil Base	8.7-9.4	58-68	N/c - 6
11,600' - 20,013' Lateral	Oil Base	10.0-11.5	58-68	3 - 6

Philly 31 Fed Com #704H  
Lea County, New Mexico

290' FSL  
2065' FWL  
Section 31  
T-26-S, R-34-E

Proposed Wellbore  
Revised 4/24/18  
API: 30-025-\*\*\*\*\*

KB: 3,389'  
GL: 3,364'



Lateral: 20,013' MD, 12,701' TVD  
Upper Most Perf:  
330' FSL & 1590' FWL Sec. 31  
Lower Most Perf:  
330' FNL & 1590' FWL Sec. 30  
BH Location: 230' FNL & 1590' FWL  
Section 30  
T-26-S, R-34-E

Operator	EOG
Well Name & No.	Philly 31 Fed Com 704H
County	Lea
Location (S/T/R)	31/26/34
Lease Number	NMNM110840

Name	Jonathon Shepard
Date	7/24/2018

Type of Casing	Size of Hole (in)	Size of Casing (in)	Weight per Foot (lbs/ft)	Grade	Yield	Thread	Top (ft)	Bottom (ft)	Setting Depth (ft)	Length (ft)	Collapse (psi)	Burst (psi)	Tension (psi)
Surface	17.500	13.375	54.5	J	55	ST&C (46)	0	840	840	840	1130	2730	854000
Intermediate 1	12.250	9.625	40.0	J	55	LT&C (21)	0	4000	4000	4000	2570	3950	630000
Intermediate 2	12.250	9.625	40.0	HCK	55	LT&C (21)	4000	5300	5300	1300	4230	3950	630000
Intermediate 3	8.750	7.625	29.7	HCP	110	LT&C (21)	0	11600	11600	11600	7150	9470	940000
Intermediate 4	6.750	5.500	20.0	P	110	BTC (4)	0	11100	11100	11100	11080	12360	642000
Production	6.750	5.500	20.0	P	110	BTC (4)	11100	20013	11100	8913	11080	12360	642000

Drilling Mud	Max Mud Weight (ppg)	Cement											
		Surface		Intermediate (1 & 2)		Intermediate (1;2;3 & 4)		Production					
		Top of Cement	0	Top of Cement	0	Top of Cement	4800	Top of Cement	0				
Surface	8.8	Sacks		Yield (ft <sup>3</sup> /sx)		Sacks		Yield (ft <sup>3</sup> /sx)		Sacks		Yield (ft <sup>3</sup> /sx)	
Intermediate 1	10.2	Lead	697	1.74	Lead	692	2.22	Lead	375	3.67	Lead	1000	1.31
Intermediate 2	10.2	Run 2	333	1.35	Run 2	303	1.32	Run 2	400	2.38	Run 2		
Intermediate 3	9.4	Run 3			Run 3			Run 3			Run 3		
Intermediate 4	9.4	Tail			Tail			Tail			Tail		
Production	11.5	Average Yield	1.61		Average Yield	1.95		Average Yield	3.00		Average Yield	1.31	
		Min. Sacks	460		Min. Sacks	1085		Min. Sacks	579		Min. Sacks	723	

Safety Factors				
Collapse	1.125		Tension	1.8
Burst	1.0		Buoyant Tension	1.6
	Collapse	Burst	Tension	Buoyant Tension
Surface	2.940	7.102	23.7	31.5
Intermediate 1	1.817	1.862	3.9	4.7
Intermediate 2	2.257	1.403	2.9	3.5
Intermediate 3	1.892	1.679	2.7	3.2
Intermediate 4	3.069	2.273	2.9	3.4
Production	1.669	1.862	3.6	4.4

BOP Requirements			
	Intermediate		Production
Max. Surf. Pressure	3118 psi	Max. Surf. Pressure	4196 psi
BOP Required	5M System	BOP Required	5M System