

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

**SUNDRY NOTICES AND REPORTS ON WORK ON AN
Abandoned well. Use form 3160-3 (APD) for such proposals.**

Carlsbad Field Office
 RECEIVED
 5/25/2018
 J. D. Hobbs

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Serial No. NMNM028881
2. Name of Operator EOG RESOURCES INCORPORATED Contact: STAN WAGNER E-Mail: stan_wagner@eogresources.com	6. If Indian, Allottee or Tribe Name
3a. Address MIDLAND, TX 79702	7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) Ph: 432-686-3689	8. Well Name and No. DIAMOND 31 FED COM 704H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 31 T24S R34E 731FSL 1443FWL 32.168804 N Lat, 103.512840 W Lon	9. API Well No. 30-025-44760-00-X1
10. Field and Pool or Exploratory Area WC025G09S243336I-UP WOLFCAMP	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 Change to Original APD
	<input type="checkbox"/> Change Plans	<input 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 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.

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

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

**Electronic Submission #421514 verified by the BLM Well Information System
 For EOG RESOURCES INCORPORATED, sent to the Hobbs
 Committed to AFMSS for processing by PRISCILLA PEREZ on 05/30/2018 (18PP1127SE)**

Name (Printed/Typed) STAN WAGNER	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 05/25/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By /s/ Jonathon Shepard Title Petroleum Engineer Date JUL 12 2018

Carlsbad Field Office

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.

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.

Revised Permit Information 5/24/18:

Well Name: Diamond 31 Fed Com No. 704H

Location:

SL: 731' FSL & 1443' FWL, Section 31, T-24-S, R-34-E, Lea Co., N.M.

BHL: 2410' FSL & 1264' FWL, Section 30, T-24-S, R-34-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 - 1,225'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4,100'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4,100' - 5,100'	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0 - 11,500'	7.625"	29.7#	HCP110	FXL	1.125	1.25	1.60
6.75"	0 - 11,000'	5.5"	20#	P110EC	DWC CIS MS	1.125	1.25	1.60
6.75"	11,000' - 19,951'	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 ³ /ft	Slurry Description
1,225'	697	13.5	1.74	Lead: Class 'C' + 4.00% Bentonite + 2.00% CaCl ₂ (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)
5,100'	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
11,500'	375	10.8	3.67	Lead: Class C + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ 4,600')
	400	14.8	2.38	Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800
19,951'	1000	14.8	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 11,000')

Mud Program:

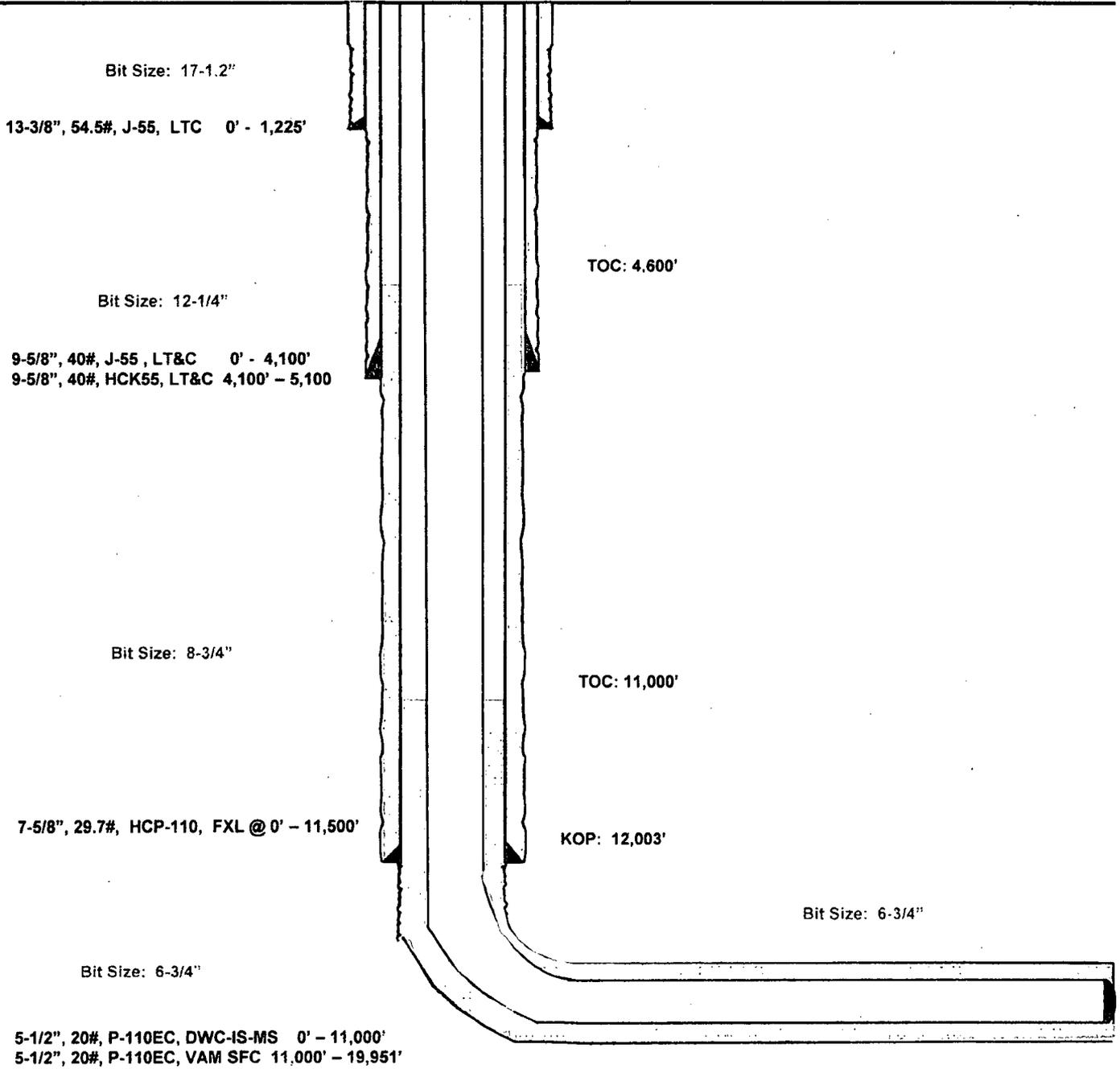
Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1225'	Fresh - Gel	8.6-8.8	28-34	N/c
1225' - 5,100'	Brine	10.0-10.2	28-34	N/c
5,100' - 11,500'	Oil Base	8.7-9.4	58-68	N/c - 6
11,500' - 19,951' Lateral	Oil Base	10.0-11.5	58-68	3 - 6

Diamond 31 Fed Com #704H

**731' FSL
1443' FWL
Section 31
T-24-S, R-34-E**

**Lea County, New Mexico
Proposed Wellbore
Revised 5/24/18
API: 30-025-44760**

**KB: 3,482'
GL: 3,457'**



**Lateral: 19,951' MD, 12,491' TVD
Upper Most Perf:
330' FSL & 1270' FWL Sec. 31
Lower Most Perf:
2310' FSL & 1264' FWL Sec. 30
BH Location: 2410' FSL & 1264' FWL
Section 30
T-24-S, R-34-E**

Operator	EOG
Well Name & No.	Diamond 31 Fed 704H
County	Lea
Location (S/T/R)	31/24/34
Lease Number	NMNM028881

Name	Jonathon Shepard
Date	7/11/2018

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	1225	1225	1225	1130	2730	854000
Intermediate 1	12.250	9.625	40.0	J	55	LT&C (21)	0	4100	4100	4100	2570	3950	630000
Intermediate 2	12.250	9.625	40.0	HCK	55	LT&C (21)	4100	5100	5100	1000	4230	3950	630000
Intermediate 3	8.750	7.625	29.7	HCP	110	LT&C (21)	0	11500	11500	11500	7150	9470	940000
Intermediate 4	6.750	5.500	20.0	P	110	BTC (4)	0	11000	11000	11000	11080	12360	642000
Production	6.750	5.500	20.0	P	110	BTC (4)	11000	19951	11500	8951	11080	12360	642000

Drilling Mud	Max Mud Weight (ppg)	Cement											
		Surface		Intermediate (1 & 2)		Intermediate (1,2,3 & 4)		Production					
		Top of Cement	0	Yield (ft ³ /sx)	Top of Cement	0	Yield (ft ³ /sx)	Top of Cement	4600	Yield (ft ³ /sx)	Top of Cement	2000	Yield (ft ³ /sx)
Surface	8.8	Sacks	Yield (ft ³ /sx)	Sacks	Yield (ft ³ /sx)	Sacks	Yield (ft ³ /sx)	Sacks	Yield (ft ³ /sx)	Sacks	Yield (ft ³ /sx)	Sacks	Yield (ft ³ /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	671		Min. Sacks	1044		Min. Sacks	586		Min. Sacks	564	

Safety Factors				
	Collapse	Burst	Tension	Buoyant Tension
	1.125		1.8	
	1.0		1.6	
	Collapse	Burst	Tension	Buoyant Tension
Surface	2.016	4.870	12.8	14.8
Intermediate 1	1.772	1.816	3.8	4.6
Intermediate 2	2.346	1.460	3.1	3.7
Intermediate 3	1.908	1.685	2.8	3.2
Intermediate 4	3.091	2.299	2.9	3.4
Production	1.611	1.797	3.6	4.2

BOP Requirements			
	Intermediate		Production
Max. Surf. Pressure	3091 psi	Max. Surf. Pressure	4347 psi
BOP Required	5M System	BOP Required	5M System