Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED
NOV 07 2019
DISTRICT II-ARTESIA O.C.D.

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO.
30-005-63207

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
LG-2621

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
Thunderhead TD State

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

8. Well Number
3

2. Name of Operator
EOG Resources, Inc.

9. OGRID Number
7377

3. Address of Operator
104 South Fourth Street, Artesia, NM 88210

10. Pool name or Wildcat
Pecos Slope; Abo

4. Well Location
Unit Letter K : 1980 feet from the South line and 1980 feet from the West line
Section 32 Township 8S Range 26E NMPM Chaves County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
3747'GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☒	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER:	☐		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

EOG Resources, Inc. plans to plug and abandon this well as follows:

1. MIRU all safety equipment as needed. NU BOP. POOH with production equipment.
2. Set a CIBP at 5105' with 35' Class "C" cement on top. WOC and tag. This will cover top of the Wolfcamp. – WOC + Tag
3. Set a CIBP at 4546' with 35' Class "C" cement on top. WOC and tag. This will cover Abo. – WOC + Tag
4. Perforate at 3689'. Attempt to establish circulation. Spot a 48 sx Class "C" in/out cement plug from 3689'-3559'. WOC and tag. This will cover top of Tubb. – WOC + Tag
5. Tag TOC. Perforate at 2229'. Attempt to establish circulation. Spot an 80 sx Class "C" in/out cement plug from 2229'-2012'. WOC and tag. This will cover top of the Yeso and Glorieta.
6. Tag TOC. Perforate at 1155'. Attempt to establish circulation. Spot a 58 sx Class "C" in/out cement plug from 1155'-944'. WOC and tag. This will cover top of the San Andres and 8-5/8" casing shoe.
7. Tag TOC. Perforate at 100'. Attempt to establish circulation. Spot a 25 sx Class "C" in/out cement plug from 100' up to surface. Backfill as needed.
8. Cut off wellhead and weld on dry hole marker. Clean location as per regulated.

Wellbore schematics attached

*** SEE ATTACHED COA'S

MUST BE PLUGGED BY 11/7/20

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Tina Huerta TITLE Regulatory Specialist DATE November 5, 2019

Type or print name Tina Huerta E-mail address: tina_huerta@eogresources.com PHONE: 575-748-4168

For State Use Only

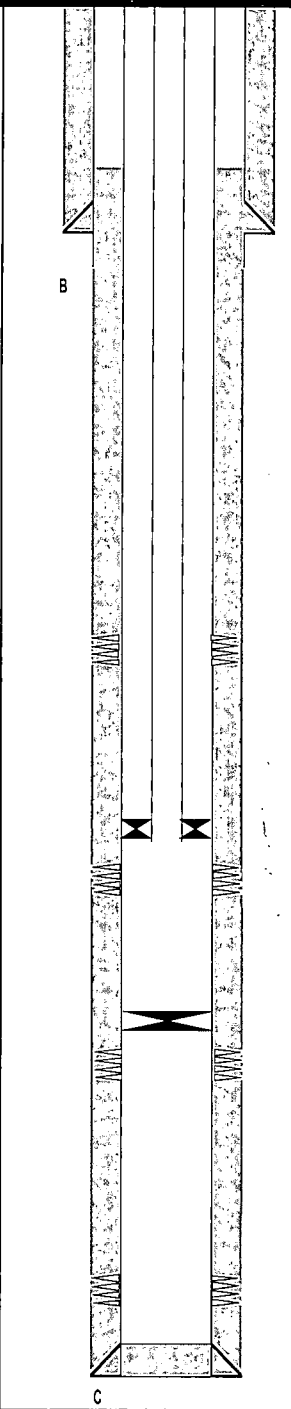
APPROVED BY: TITLE Staff Mgr DATE 11/7/19

Conditions of Approval (if any):

Thunderhead TD State #3

Sec-TWN-RNG:	Sec. 32-8S-26E	API:	30-005-63207
FOOTAGES:	1980' FSL & 1980' FWL	GL:	3747
CURRENT		KB:	

COMMENTS



Perfs 2834' - 2998'

PKR @ 4528

Perfs @ 4596' - 4707'

CIBP @ 5500'

Perfs 5560' - 5582'

Perfs @ 6964' - 6974'

PBTD: 5,500 MD

TD: 7,057 MD

CASING DETAIL

#	HOLE SIZE	SIZE	WGHT	GRADE	Top	Bottom	Sx Cmt	Circ/TOC	TOC Method
A	12.25"	8.625"	24	J-55	0	1,105	650	Circ	
B	7.875"	5.5"	15.5	J-55	0	7,057	1550	1100	Estimated

FORMATION TOPS

Formation	Top
San Andres	994
Glorieta	2062
Yeso	2179
Tubb	3619
Abo	4409
Wolfcamp	5155
Cisco	5818
Penn Clastics	5962
Mississippian	6602
Ordovician	6964

TUBING DETAIL

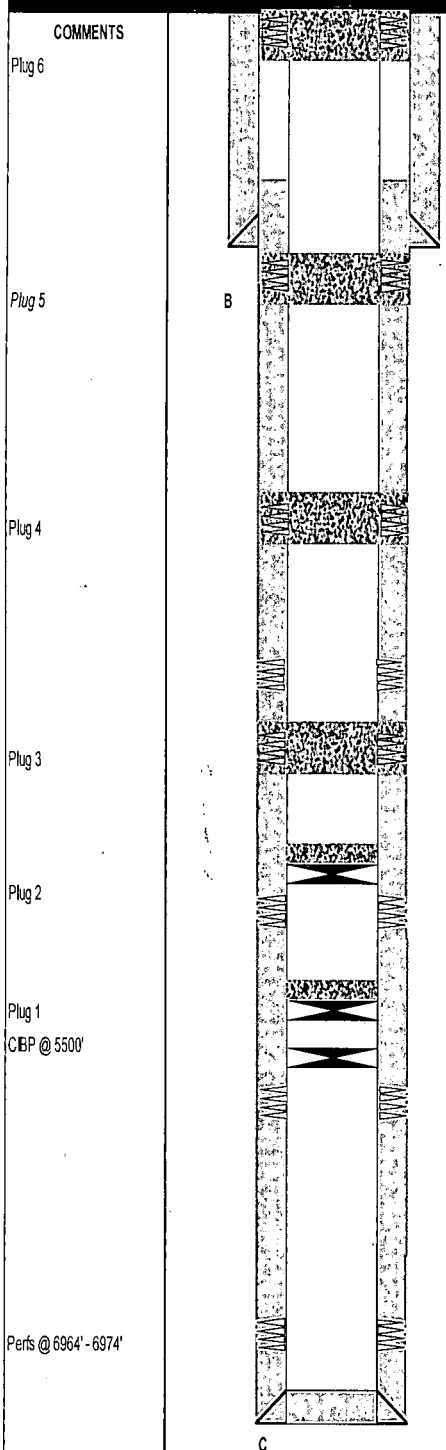
#	Joints	Description	Length	OD	ID	Grade	Wt (lb/ft):	Top (ftKB):	Btm (ftKB):
			4528						

Rod Detail

#	Joints	Description	Length	OD	ID	Grade	Wt (lb/ft):	Top (ftKB):	Btm (ftKB):

Thunderhead TD State #3

Sec-TWN-RNG:	Sec. 32-8S-26E	API:	30-005-63207
FOOTAGES:	1980' FSL & 1980' FWL	GL:	3747
CURRENT		KB:	



CASING DETAIL

#	HOLE SIZE	SIZE	WGHT	GRADE	Top	Bottom	Sx Cmt	Circ/TOC	TOC Method
A	12.25"	8.625"	24	J-55	0	1,105	650	Circ	
B	7.875"	5.5"	15.5	J-55	0	7,057	1550	1100	Estimated

FORMATION TOPS

Formation	Top
San Andres	994
Glorieta	2062
Yeso	2179
Tubb	3619
Abo	4409
Wolfcamp	5155
Cisco	5818
Penn Clastics	5962
Mississippian	6602
Ordovician	6964

TUBING DETAIL

#	Joints	Description	Length	OD	ID	Grade	Wt (lb/ft):	Top (ftKB):	Btm (ftKB):
			4528						

Plugs

1	CIBP @ 5105' + 35' cmt. WOC and tag.
2	CIBP @ 4546' + 35' cmt. WOC and tag
3	Perfs @ 3689'. In/out plug from 3689' - 3559' (48sxs) covering top of Tubb. WOC and tag.
4	Perfs @ 2229'. In/out plug from 2229/-2012' (80sxs) covering top of Yeso and Glorieta. WOC and tag.
5	Perfs @ 1155'. In/out plug from 1155' - 944' (58sxs) covering top of San Andres and 8-5/8" casing shoe. WOC and tag.
6	Pers @ 100'. In/out plug from 100' to surface (25sxs). Back fill as needed.

CONDITIONS FOR PLUGGING AND ABANDONMENT

District II / Artesia N.M.

The following is a guide or checklist in preparation of a plugging program, this is not all inclusive and care must be exercised in establishing special plugging programs in unique and unusual cases, **Notify NMOCD District Office II at (575)-748-1283 at least 24 hours before beginning work.**

1. A notice of intent to plug and abandon a wellbore is required to be approved before plugging operations are conducted. A cement evaluation tool is required in order to ensure isolation of producing formations, protection of water and correlative rights. A cement bond log or other accepted cement evaluation tool is to be provided to the division for evaluation if one has not been previously run or if the well did not have cement circulated to surface during the original casing cementing job or subsequent cementing jobs.
2. Closed loop system is to be used for entire plugging operation. Upon completion, contents of steel pits are to be hauled to a permitted disposal location.
3. Trucking companies being used to haul oilfield waste fluids to a disposal – commercial or private – shall have an approved NMOCD C-133 permit. A copy of this permit shall be available in each truck used to haul waste products. It is the responsibility of the operator as well as the contractor, to verify that this permit is in place prior to performing work. Drivers shall be able to produce a copy upon request of an NMOCD Field inspector.
4. Filing a subsequent C-103 will serve as notification that the well has been plugged.
5. A final C-103 shall be filed (and a site inspection by NMOCD Inspector to determine if the location is satisfactorily cleaned, all equipment, electric poles and trash has been removed to Meet NMOCD standards) before bonding can be released.
6. If the well is not plugged within 1
7. If work has not begun within 1 Year of the approval of this procedure, an extension request must be file stating the reason the well has not been plugged.
8. **Squeeze pressures are not to exceed 500 psi, unless approval is given by NMOCD.**
9. Produced water **will not** be used during any part of the plugging operation.
10. Mud laden fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.
11. All cement plugs will be a minimum of 100' in length or a minimum of 25 sacks of cement, whichever is greater. 50' of calculated cement excess required for inside casing plugs and 100% calculated cement excess required on outside casing plugs.
12. **Class 'C' cement will be used above 7500 feet.**
13. **Class 'H' cement will be used below 7500 feet.**
14. **A cement plug is required to be set 50' above and 50' below, casing stubs, DV tools, attempted casing cut offs, cement tops outside casing, salt sections and anywhere the casing is perforated, these plugs require a 4 hour WOC and then will be tagged**
15. **All Casing Shoes Will Be Perforated 50' below shoe depth and Attempted to be Squeezed, cement needs to be 50' above and 50' Below Casing Shoe inside the Production Casing**

16. When setting the top out cement plug in production, intermediate and surface casing, wellbores should remain full at least 30 minutes after plugs are set
17. **A CIBP is to be set within 100' of production perforations, capped with 100' of cement, WOC 4 hours and tag.**
18. A CIBP with 35' of cement may be used in lieu of the 100' plug if set with a bailer. This plug will be placed within 100' of the top perforation, **(WOC 4 hrs and tag).**
19. No more than **3000' is allowed between cement plugs in cased hole and 2000' in open hole.**
20. Some of the Formations to be isolated with cement plugs are: These plugs to be set to isolate formation tops
    A) Fusselman
    B) Devonian
    C) Morrow
    D) Wolfcamp
    E) Bone Springs
    F) Delaware
    G) Any salt sections
    H) Abo
    I) Glorieta
    J) Yates.
    K) **Potash**--- (In the R-111-P Area (Potash Mine Area), a solid cement plug must be set across the salt section. Fluid used to mix the cement shall be saturated with the salts that are common to the section penetrated and in suitable proportions, not more than 3% calcium chloride (by weight of cement) will be considered the desired mixture whenever possible, **WOC 4 hours and tag, this plug will be 50' below the bottom and 50' above the top of the Formation.**
21. **If cement does not exist behind casing strings at recommended formation depths,** the casing can be cut and pulled with plugs set at recommended depths. If casing is not pulled, perforations will be shot and cement squeezed behind casing, WOC and tagged. These plugs will be set 50' below formation bottom to 50' above formation top inside the casing

DRY HOLE MARKER REQUIRMENTS

The operator shall mark the exact location of the plugged and abandoned well with a steel marker not less than four inches in diameter, 3' below ground level with a plate of at least ¼" welded to the top of the casing and the dry hole marker welded on the plate with the following information welded on the dry hole marker:

1. Operator name 2. Lease and Well Number 3.API Number 4. Unit Letter 5. Quarter Section (feet from the North, South, East or West) 6. Section, Township and Range 7. Plugging Date 8. County (SPECIAL CASES)-------AGRICULTURE OR PRARIE CHICKEN BREEDING AREAS

In these areas, a below ground marker is required with all pertinent information mentioned above on a plate, set 3' below ground level, a picture of the plate will be supplied to NMOCD for record, the exact location of the marker (longitude and latitude by GPS) will be provided to NMOCD (We typically require a current survey to verify the GPS)