District I \* 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District II</u> 811 S. First St., Artesia, NM 88210

Phone: (575) 748-1283 Fax: (575) 748-9720

District III

1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Form C-101 Revised July 18, 2013

## NM OIL CONSERVATIONs and Natural Resources

ARTESIA DISTRICT Oil Conservation Division OCT 17 2017 1220 South St. Francis Dr.

AMENDED REPORT 2<sup>nd</sup> Revision

**RECEIVED** Santa Fe, NM 87505

# APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Property Name New Mexico ES State Com     "New Mexico ES State Com   "Well No.     "Surface Location   "Item in the image of the image o	<sup>1</sup> Operator Name and Address EOG Y Resources, Inc. 104 South Fourth Street Artesia, NM 88210								<sup>2</sup> OGRID Number 025575 <sup>3</sup> API Number 30-015-25272		
UL - Lot OSection 19STownship 24ERange Lot IdnLot IdnFeet from 660N/S Line SouthFeet From 1980E/W Line EastCounty Eddy* Proposed Bottom Hole LocationUL - LotSectionTownshipRangeLot IdnFeet fromN/S LineFeet FromE/W LineCountyUL - LotSectionTownshipRangeLot IdnFeet fromN/S LineFeet FromE/W LineCounty	<sup>4</sup> Prope 12	erty Code 2591			New N	Property Name Mexico ES State Co	om		<sup>6</sup> · Well No. 1		
O 7 19S 24E 660 South 1980 East Eddy   * Proposed Bottom Hole Location   UL - Lot Section Township Range Lot Idn Feet from N/S Line Feet From E/W Line County		<sup>7.</sup> Surface Location									
* Proposed Bottom Hole Location   UL - Lot Section Township Range Lot Idn Feet from N/S Line Feet From E/W Line County	UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County	
UL - Lot Section Township Range Lot Idn Feet from N/S Line Feet From E/W Line County	0	O 7 19S 24E 660 South							East	Eddy	
					<sup>8</sup> Propose	ed Bottom Hol	e Location				
Pool Information	UL - Lot Section Township Range Lot Idn Feet from N/S Line Feet From E/W Line County										
		· Pool Information									

Pool Name	
Wildcat; Abo	

Pool Code 98244

#### **Additional Well Information** 11. Work Type 12. Well Type 13. Cable/Rotary 14. Lease Type 15. Ground Level Elevation Р Ο N/A S 3814' 18. Formation 16. Multiple Spud Date Proposed Depth Contractor N N/A Chester N/A N/A Depth to Ground water N/A Distance from nearest fresh water well N/A Distance to nearest surface water N/A

 $\boxtimes_{\mathbf{W}\mathbf{e}}$  will be using a closed-loop system in lieu of lined pits

## <sup>21.</sup> Proposed Casing and Cement Program

Туре	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	17-1/2"	13-3/8"	54.5#	302'	765 sx (In Place)	0
Intermediate	12-1/4"	8-5/8"	24#	1718'	1000 sx (In Place)	0
Production	7-7/8"	5-1/2"	15.5#,17#,14#	8522'	1350 sx (In Place)	3940' (Temp Survey)

### **Casing/Cement Program: Additional Comments**

Refer to page 2 for details

### <sup>22.</sup> Proposed Blowout Prevention Program

Туре	Working Pressure	Test Pressure	Manufacturer					
Manual BOP	3000 psi	3000 psi	Whichever company is available					

<sup>23.</sup> I hereby certify that the information best of my knowledge and belief.		OIL CONSERVATION DIVISION			
I further certify that I have complied 19.15.14.9 (B) NMAC , if applicab	with 19.15.14.9 (A) NMAC 🗌 and/or le.	Approved By:			
Signature	ta	Title: Geologist.			
Printed name: Tina Huerta		Title: Geologist.			
Title: Regulatory Specialist		Approved Date: 10-20-17 Expiration Date: 10-20-19			
E-mail Address: tina_huerta@eogreso	urces.com				
Date: October 19, 2017	Phone: (575) 748-4168	Conditions of Approval Attached			

New Mexico ES State Com #1 Section 7-T19S-R24E Eddy County, New Mexico Page 2

#### Amended Form C-101 continued (2<sup>nd</sup> revision):

EOG Y Resources, Inc. plans to plugback and recomplete this well as follows:

1. MIRU WSU. ND Wellhead NU BOP. RU all H2S and safety equipment. POOH with the packer. Load the hole as necessary with fresh water.

2. Set a CIBP at 6094'. TIH with tubing to the CIBP and cap it with 25 sx Class "H" cement. Pull 5 stands and reverse circulate to clean out tubing. This will place a plug over open Wolfcamp perforations.

3. Set a 240' Class "C" cement plug across Wolfcamp top from 4963'-5203'.

4. WOC 8 hrs. Load the hole with treated water and pressure test the casing to 2000 psi. Pull a GR/CBL/CCL log to determine the TOC. Perforate 100' above the TOC at +/- 3900' and squeeze with 425 sx Class "C" cement. Test casing to 2000 psi.

5. Perforate Abo 3850'-4900' (225).

6. TIH with 10K packer, 2.25" profile nipple and 2.875" L-80 tubing. Set the packer at 60' above the top perf. 7. Swab the tubing dry. Breakdown the formation with treated water. Limit STP to 5000 psi. Monitor pressure decline until the surface pressure is 0 psi. Swab test and evaluate send samples to lab for analysis.

8. Acidize with 2000g 20% NEFE acid. Drop 105 1.3 SG RCN ball sealers spaced out evenly throughout the acid flush to the bottom perf with treated water. Limit STP to 5000 psi, Swab, flow test and evaluate. Consider turning the well over to production, or if the decision to frac is made, POOH with packer and tubing. TIH with 10K packer, O/O tool, 2.25" profile nipple and 3.5" 9.3#/ft P-110 frac string. Loading the hole as necessary with treated water. 9. Pump a fracturing treatment down the 3.5" tubing at 38-40 BPM while limiting the surface treating pressure to less than 8600 psi. Put 2000 psi on the 3.5" X 5.5" annulus and monitor pressure during the treatment. A pop off valve should be installed on the annulus and set at 2,500 psi.

Treating Schedule								
lb Proppant								
Stage	Stage	gal	Fluid	Prop Conc			-	
Numbe	r			lb/gal	Stage	Cumulative	Proppant	
1	Injectic	n 1500.	Slickwater	0.00	Ο.	Ο.		
2	Acid	2000.	20% HCL	0.00	0.	Ο.		
3	Pad	2000.	Slickwater	0.00	Ο.	Ο.		
4	ISIP	Ο.	Slickwater	0.00	Ο.	Ο.		
5	Pad	14000.	Slickwater	0.00	0.	Ο.		
6	SLF	33000.	Slickwater	0.50	16500.	16500.	100 Mesh	
7	SLF	25000.	Slickwater	1.00	25000.	41500.	100 Mesh	
8	SLF	22000.	Slickwater	1.50	33000.	74500.	100 Mesh	
9	SLF	17000.	Slickwater	2.00	34000.	108500.	100 Mesh	
10	SLF	6600.	Slickwater	2.50	16500.	125000.	100 Mesh	
11	Flush	1500.	Slickwater	0.00	0.	0.		

#### Estimated Surface Treating Pressure = 5100 psig.

Maximum Surface Treating Pressure = 8600 psig.

Fluid Specifications: Fresh water with 0.8 to 1.2 Gal/M FR, biocide and scale inhibitor. EOG will provide: 7 clean frac tanks with 480 bbls of fresh water for the treatment and flush.

10. Flow test and evaluate and let the well clean up, if the well is dead or the pressure is low bullhead 10# brine with biocide and POOH with tubing and packer. If the well head pressure is staying above 200 psi set a blanking plug in the O/O tool jay off the packer and POOH laying down the 3.5" frac string. TIH with 2.875" production tubing and jay back onto the packer and pull the blanking plug. 11. Swab the well in and turn over to Production.

Wellbore schematics attached

Regulatory Specialist October 19, 2017



