Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5 Lease Serial No. NMNM112935 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: 1b. Type of Well: ✓ Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone ALMOST EDDY 30 FED COM [330825] 509H 2. Name of Operator 9. API Well No. 30-025-49014 EOG RESOURCES INCORPORATED [7377] 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Explorator BRADLEY; BONE SPRING 1111 BAGBY SKY LOBBY 2, HOUSTON, TX 77002 (713) 651-7000 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 30/T25S/R32E/NMP At surface TR I / 2182 FSL / 692 FEL / LAT 32.1000683 / LONG -103.7081024 At proposed prod. zone TR P / 100 FSL / 330 FEL / LAT 32.0798502 / LONG -103.7069431 12. County or Parish 14. Distance in miles and direction from nearest town or post office\* 13 State NM LEA 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well 100 feet location to nearest 480.0 property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location\* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 33 feet FED: 10430 feet / 18015 feet applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 3362 feet 03/15/2021 25 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date (Electronic Submission) STAR HARRELL / Ph: (713) 651-7000 09/14/2020 Title Regulatory Specialist Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) 05/06/2021 Cody Layton / Ph: (575) 234-5959 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval 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. Conditions of approval, if any, are attached. 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. GCP Rec 05/07/2021

SL

(Continued on page 2)

APPROVED WITH CONDITIONS Released to Imaging: 6/14/2021 8:08:00 AM Approval Date: 05/06/2021

\*(Instructions on page 2)

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
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
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

FORM C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

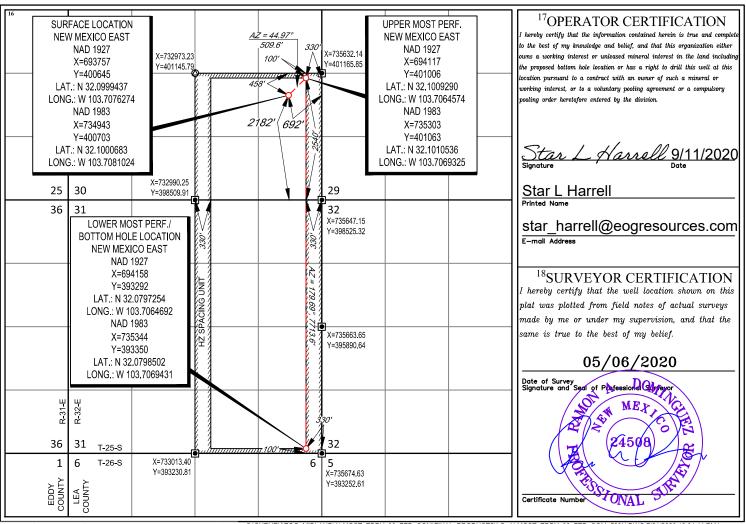
### WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025	– 49014	97903	WC-025 G-08 S253235G;LOWE	R BONE SPRING
<sup>4</sup> Property Code 330825			Operty Name ODY 30 FED COM	<sup>6</sup> Well Number 509H
<sup>7</sup> OGRID №. <b>7377</b>		-1	perator Name SOURCES, INC.	<sup>9</sup> Elevation 3362'

<sup>10</sup>Surface Location

UL or lot no.	Section 30	Township 25-S	Range 32-E	Lot Idn —	Feet from the 2182'	North/South line SOUTH	Feet from the 692'	East/West line EAST	County <b>LEA</b>					
	11Bottom Hole Location If Different From Surface													
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County					
P	31	25-S	32-E	-	100'	SOUTH	330'	EAST	LEA					
<sup>12</sup> Dedicated Acres 480	<sup>13</sup> Joint or I	nfill <sup>14</sup> Co	nsolidation Cod	le <sup>15</sup> Ord	er No.									

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



Released to Imaging: 6/14/2021 8:08:00 AM S:\SURVEYEOG\_MIDLAND\ALMOST\_EDDY\_30\_FED\_COM\FINAL\_PRODUCTS\LO\_ALMOST\_EDDY\_30\_FED\_COM\_509H.DWG 7/21/2020 12:04:44 PM bgregory

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

	GAS CAPTURE PLAN	
Date: 5/7/2021	Lea County, NM	
⊠ Original	Operator & OGRID No.:	EOG Resources, Inc. 7377
☐ Amended - Reason for Amendment:		

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

### Well(s)/Production Facility - Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name API		Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Almost Eddy 30 Fed Com 501H	30-025- ****	L-30-25S-32E	1936' FSL & 387' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 502H	30-025- ****	L-30-25S-32E	1903' FSL & 387' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 503H	30-025- ****	L-30-25S-32E	1870' FSL & 387' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 504H	30-025- ****	K-30-25S-32E	1948' FSL & 2390' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 505H	30-025- ****	K-30-25S-32E	1974' FSL & 2410' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 506H	30-025- ****	K-30-25S-32E	2000' FSL & 2430' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 507H	30-025- ****	I-30-25S-32E	2182' FSL & 758' FEL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 508H <b>30-025-49014</b>	30-025- ****	I-30-25S-32E	2182' FSL & 725' FEL	±3500	None Planned	APD Submission

### **Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to <a href="Enlink">Enlink</a>, <a href="MarkWest">MarkWest</a>, <a href="Enlink">Enterprise</a>, <a href="Enlink">Energy Transfer Company & Lucid</a> and will be connected to <a href="EOG Resources">EOG Resources</a> provides (periodically) to <a href="Enlink">Enlink</a>, <a href="MarkWest">MarkWest</a>, <a href="Enlink">Enterprise</a>, <a href="Energy Transfer Company & Lucid">Enlink</a>, <a href="MarkWest">MarkWest</a>, <a href="Enlink">Enterprise</a>, <a href="Energy Transfer Company & Lucid">Enlink</a>, <a href="MarkWest">MarkWest</a>, <a href="Enlink">Enterprise</a>, <a href="Enlink">Energy Transfer Company & Lucid</a></a> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <a href="Enlink">Enlink</a>, <a href="MarkWest">MarkWest</a>, <a href="Enlink">Enterprise</a>, <a href="Enlink">Energy Transfer Company & Lucid</a></a> Processing Plant located in Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

### Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on **Enlink, MarkWest, Enterprise, Energy Transfer Company & Lucid** system at that time. Based on current information, it is **EOG Resources**' belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

### **Alternatives to Reduce Flaring**

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
  - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
  - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

### 1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

### 2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

975'
1,045'
1,300'
4,180'
4,385'
4,410'
5,360'
6,865'
8,425'
8,525'
8,855'
9,355'
9,665'
10,050'
10,430'

## 3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	0- 400'	Fresh Water
Cherry Canyon	5,360'	Oil
Brushy Canyon	6,865'	Oil
Leonard A Shale	8,525'	Oil
Leonard B Shale	8,855'	Oil
1 <sup>st</sup> Bone Spring Sand	9,355'	Oil
2 <sup>nd</sup> Bone Spring Shale	9,665'	Oil
2 <sup>nd</sup> Bone Spring Sand	10,050'	Oil

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 13.375" casing at 1,070' and circulating cement back to surface.

### 4. CASING PROGRAM - NEW

Hole		Csg				DF <sub>min</sub>	DF <sub>min</sub>	DF <sub>min</sub>
Size	Interval	OD	Weight	Grade	Conn	Collapse	Burst	Tension
17.5"	0' - 1,070'	13.375"	54.5#	J-55	STC	1.125	1.25	1.60
12.25"	0'-4,000'	9.625"	40#	J-55	LTC	1.125	1.25	1.60
12.25"	4,000' - 4,280'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0'- 10,729'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60
8.5"	10,729'-	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60
	18,015'							

Variance is requested to waive the centralizer requirements for the 9-5/8" casing in the 12-1/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 12-1/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive any centralizer requirements for the 5-1/2" casing in the 8-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" hole interval to maximize cement bond and zonal isolation.

## **Cementing Program:**

	No.	Wt.	Yld	~ - · · ·
Depth	Sacks	ppg	Ft <sup>3</sup> /sk	Slurry Description
1,070'	470	13.5	1.73	Lead: Class C + 4.0% Bentonite + 0.5% CaCl <sub>2</sub> + 0.25 lb/sk
				Cello-Flake (TOC @ Surface)
	160	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2%
				Sodium Metasilicate (TOC @ 870')
4,280'	630	12.7	2.22	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx
				(TOC @ Surface)
	280	14.8	1.32	Tail: Class C + 10% NaCl + 3% MagOx (TOC @ 3,430')
18,015'	630	11.0	3.21	Lead: Class C + 3% CaCl2 + 3% Microbond (TOC @ 3,780')
	1,950	14.4	1.2	Tail: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3%
				Microbond (TOC @ 9,979')

Additive	Purpose
Bentonite Gel	Lightweight/Lost circulation prevention
Calcium Chloride	Accelerator
Cello-flake	Lost circulation prevention
Sodium Metasilicate	Accelerator
MagOx	Expansive agent
Sodium Chloride	Accelerator
FL-62	Fluid loss control
Halad-344	Fluid loss control
Halad-9	Fluid loss control
HR-601	Retarder
Microbond	Expansive Agent

Cement integrity tests will be performed immediately following plug bump.

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5,000-psi WP). Both units will be hydraulically operated and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

EOG will utilize wing unions on BOPE connections that can be isolated from wellbore pressure through means of a choke. All wing unions will be rated to a pressure that meets or exceeds the pressure rating of the BOPE system.

Variance is requested to use a 5,000 psi annular BOP with the 10,000 psi BOP stack.

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5,000/250 psig.

Pipe rams and blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

### 6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal.

The applicable depths and properties of the drilling fluid systems are as follows.

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0-1,070	Fresh - Gel	8.6-8.8	28-34	N/c
1,070' - 4,280'	Brine	8.6-8.8	28-34	N/c
4,280' - 18,015'	Oil Base	8.8-9.5	58-68	N/c - 6

An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

### 7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- (A) A kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C) H<sub>2</sub>S monitoring and detection equipment will be utilized from surface casing point to TD.

### **8. LOGGING, TESTING AND CORING PROGRAM:**

Open-hole logs are not planned for this well.

GR-CCL Will be run in cased hole during completions phase of operations.

# 9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND POTENTIAL HAZARDS:

The estimated bottom-hole temperature (BHT) at TD is 174 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 5,152 psig and a maximum anticipated surface pressure of 2,858 psig (based on 9.5 ppg MW). No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. Severe loss circulation is expected from 6,865' to TD.

### 10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The drilling operation should be finished in approximately one month. If the well is productive, an additional 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

(A) EOG Resources requests the option to contract a Surface Rig to drill, set surface casing, and cement on the subject well. After WOC 8 hours or 500 psi compressive strength (whichever is greater), the Surface Rig will move off so the wellhead can be installed. A welder will cut the casing to the proper height and weld on the wellhead (both "A" and "B" sections). The weld will be tested to 1000 psi. All valves will be closed and a wellhead cap will be installed (diagram attached). If the timing between rigs is such that EOG Resources would not be able to preset the surface, the Primary Rig will MIRU and drill the well in its entirety per the APD.

### 11. WELLHEAD:

A multi-bowl wellhead system will be utilized.

After running the 13-3/8" surface casing, a 13-3/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 10,000 psi pressure test. This pressure test will be repeated at least every 30 days, as per Onshore Order No. 2

The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be 10,000 psi.

The multi-bowl wellhead will be installed by vendor's representative(s). A copy of the installation instructions for the Cameron Multi-Bowl WH system has been sent to the NM BLM office in Carlsbad, NM.

The wellhead will be installed by a third party welder while being monitored by WH vendor's representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type. EOG Resources reserves the option to conduct BOPE testing during wait on cement periods provided a test plug is utilized.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

Casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

KB: 3,387'

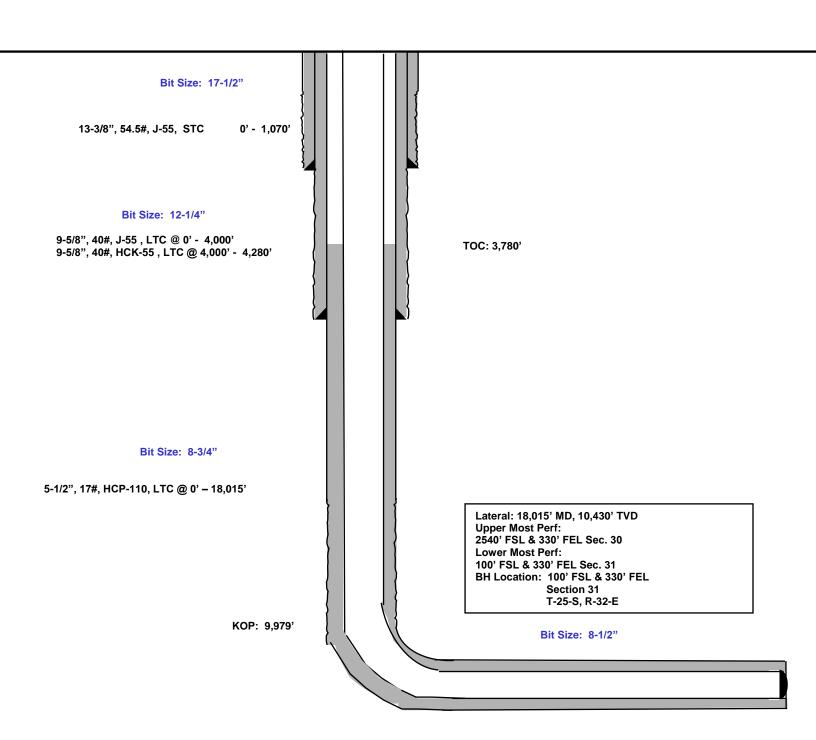
GL: 3,362'

### EOG RESOURCES, INC. ALMOST EDDY 30 FED COM #509H

2128' FSL 692' FEL Section 30 T-25-S, R-32-E

**Proposed Wellbore** 

API: 30-025-\*\*\*\*





# **EOG Resources - Midland**

Lea County, NM (NAD 83 NME) Almost Eddy 30 Fed Com #509H

OH

Plan: Plan #0.1 RT

# **Standard Planning Report**

17 July, 2020

# eog resources

### **EOG Resources**

#### Planning Report

EDM Database:

EOG Resources - Midland Company: Lea County, NM (NAD 83 NME) Project: Almost Eddy 30 Fed Com Site:

Well: #509H ОН Wellbore:

Plan #0.1 RT Design:

**Local Co-ordinate Reference** 

kb = 25' @ 3387.007ft TVD Reference: kb = 25' @ 3387.007ft MD Reference:

Well #509H

North Reference: Grid

**Survey Calculation Method:** Minimum Curvature

Lea County, NM (NAD 83 NME) Project

Map System: US State Plane 1983 North American Datum 1983

Geo Datum: New Mexico Eastern Zone Map Zone:

System Datum: Mean Sea Level

Almost Eddy 30 Fed Com

400,427.80 ft Site Position: Northing: 32.099377 Latitude: Мар 730,702.46 ft Longitude: -103.721805 From: Easting: **Position Uncertainty:** 0.000 ft Slot Radius: 13.20 in **Grid Convergence:** 0.325°

Well #509H

**Position Uncertainty** 

**Well Position** 

276.001 ft +N/-S +E/-W

Northing: 4,242.008 ft Easting:

Phase:

0.000 ft

Plan #0.1 RT (OH)

Wellhead Elevation:

400,703.80 ft 734,944.47 ft

Latitude: Longitude: **Ground Level:** 

0.000

32.100069 -103.708101 3,362.007 ft

ОН Wellbore

Declination Field Strength Magnetics **Model Name** Sample Date **Dip Angle** (nT) IGRF2020 7/16/2020 6.706 59.797 47,501.98809491

Plan #0.1 RT Design

**Audit Notes:** 

Site

Version:

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.000 0.000 0.000 176.878

PLAN

7/17/2020 **Plan Survey Tool Program** Date

Depth From Depth To

> Survey (Wellbore) (ft) (ft) 0.000 18,015.139

**Tool Name** 

Remarks

Tie On Depth:

EOG MWD+IFR1 MWD + IFR1

# eog resources

### **EOG Resources**

### **Planning Report**

Database: EDM

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Almost Eddy 30 Fed Com

Well: #509H Wellbore: 0H

Design: Plan #0.1 RT

**Local Co-ordinate Reference** 

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well #509H

kb = 25' @ 3387.007ft kb = 25' @ 3387.007ft

Grid

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.000	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.000	
1,170.002	0.00	0.000	1,170.002	0.000	0.000	0.00	0.00	0.00	0.000	
1,458.132	5.76	41.285	1,457.647	10.879	9.552	2.00	2.00	0.00	41.285	
6,603.858	5.76	41.285	6,577.369	399.122	350.449	0.00	0.00	0.00	0.000	
6,891.988	0.00	0.000	6,865.013	410.001	360.001	2.00	-2.00	0.00	180.000	
9,979.495	0.00	0.000	9,952.519	410.001	360.001	0.00	0.00	0.00	0.000	KOP(Almost Eddy 30
10,199.946	26.46	180.000	10,165.220	360.001	360.001	12.00	12.00	81.65	180.000	FTP(Almost Eddy 30
10,729.473	90.00	179.690	10,429.964	-67.455	361.600	12.00	12.00	-0.06	-0.346	
18,015.139	90.00	179.690	10,430.020	-7,353.014	401.001	0.00	0.00	0.00	0.000	PBHL(Almost Eddy 30



**Planning Report** 

Database: EDM

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Almost Eddy 30 Fed Com

Well: #509H Wellbore: OH

Design: Plan #0.1 RT

**Local Co-ordinate Reference** 

TVD Reference:
MD Reference:

North Reference:

Survey Calculation Method:

Well #509H

kb = 25' @ 3387.007ft kb = 25' @ 3387.007ft

Grid

Planned Survey									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
							, ,		, ,
0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00	0.00	0.00
100.000	0.00	0.000	100.000	0.000	0.000	0.000	0.00	0.00	0.00
200.000	0.00	0.000	200.000	0.000	0.000	0.000	0.00	0.00	0.00
300.001	0.00	0.000 0.000	300.001	0.000	0.000	0.000 0.000	0.00	0.00	0.00
400.001	0.00	0.000	400.001	0.000	0.000	0.000	0.00	0.00	0.00
500.001	0.00	0.000	500.001	0.000	0.000	0.000	0.00	0.00	0.00
600.001	0.00	0.000	600.001	0.000	0.000	0.000	0.00	0.00	0.00
700.001	0.00	0.000	700.001	0.000	0.000	0.000	0.00	0.00	0.00
800.002	0.00	0.000	800.002	0.000	0.000	0.000	0.00	0.00	0.00
900.002	0.00	0.000	900.002	0.000	0.000	0.000	0.00	0.00	0.00
1,000.002	0.00	0.000	1,000.002	0.000	0.000	0.000	0.00	0.00	0.00
1,100.002	0.00	0.000	1,100.002	0.000	0.000	0.000	0.00	0.00	0.00
1,170.002	0.00	0.000	1,170.002	0.000	0.000	0.000	0.00	0.00	0.00
1,200.002	0.60	41.285	1,200.002	0.118	0.104	-0.112	2.00	2.00	0.00
1,300.003	2.60	41.285	1,299.958	2.216	1.946	-2.107	2.00	2.00	0.00
1,400.003	4.60	41.285	1,399.756	6.934	6.089	-6.592	2.00	2.00	0.00
1,458.132	5.76	41.285	1,457.647	10.879	9.552	-10.343	2.00	2.00	0.00
1,500.003 1.600.003	5.76	41.285	1,499.306	14.038 21.583	12.326	-13.346	0.00	0.00	0.00
,	5.76	41.285	1,598.801		18.951	-20.519	0.00	0.00	0.00
1,700.003	5.76	41.285	1,698.295	29.128	25.576	-27.692	0.00	0.00	0.00
1,800.004	5.76	41.285	1,797.790	36.673	32.201	-34.865	0.00	0.00	0.00
1,900.004	5.76	41.285	1,897.285	44.218	38.825	-42.038	0.00	0.00	0.00
2,000.004	5.76	41.285	1,996.780	51.763	45.450	-49.211	0.00	0.00	0.00
2,100.004	5.76	41.285	2,096.275	59.308	52.075	-56.384	0.00	0.00	0.00
2,200.004	5.76	41.285	2,195.770	66.853	58.700	-63.557	0.00	0.00	0.00
2,300.004	5.76	41.285	2,295.265	74.398	65.325	-70.730	0.00	0.00	0.00
2,400.005	5.76	41.285	2,394.759	81.943	71.950	-77.903	0.00	0.00	0.00
2,500.005	5.76	41.285	2,494.254	89.488	78.575	-85.076	0.00	0.00	0.00
2,600.005	5.76	41.285	2,593.749	97.033	85.199	-92.249	0.00	0.00	0.00
2,700.005	5.76	41.285	2,693.244	104.578	91.824	-99.422	0.00	0.00	0.00
2,800.005	5.76	41.285	2,792.739	112.123	98.449	-106.595	0.00	0.00	0.00
2,900.005	5.76	41.285	2,792.739	112.123	105.074	-106.595	0.00	0.00	0.00
3,000.006	5.76	41.285	2,892.234	127.213	111.699	-120.941	0.00	0.00	0.00
3,100.006	5.76	41.285	3,091.223	134.758	118.324	-128.114	0.00	0.00	0.00
3,200.006	5.76	41.285	3,190.718	142.303	124.949	-135.287	0.00	0.00	0.00
3,300.006	5.76	41.285	3,290.213	149.848	131.573	-142.460	0.00	0.00	0.00
3,400.007	5.76	41.285	3,389.708	157.393	138.198	-149.633	0.00	0.00	0.00
3,500.007	5.76	41.285	3,489.203	164.938	144.823	-156.806	0.00	0.00	0.00
3,600.007	5.76	41.285	3,588.697	172.482	151.448	-163.980	0.00	0.00	0.00
3,700.007	5.76	41.285	3,688.192	180.027	158.073	-171.153	0.00	0.00	0.00
3,800.007	5.76	41.285	3,787.687	187.572	164.698	-178.326	0.00	0.00	0.00
3,900.008	5.76	41.285	3,887.182	195.117	171.323	-185.499	0.00	0.00	0.00
4,000.008	5.76	41.285	3,986.677	202.662	177.947	-192.672	0.00	0.00	0.00
4,100.008	5.76	41.285	4,086.172	210.207	184.572	-199.845	0.00	0.00	0.00
4,200.008	5.76	41.285	4,185.667	217.752	191.197	-207.018	0.00	0.00	0.00
4,300.008	5.76	41.285	4,285.161	225.297	197.822	-214.191	0.00	0.00	0.00
4,400.009	5.76	41.285	4,384.656	232.842	204.447	-221.364	0.00	0.00	0.00
4,500.009	5.76	41.285	4,484.151	240.387	211.072	-228.537	0.00	0.00	0.00
4,600.009	5.76	41.285	4,583.646	247.932	217.697	-235.710	0.00	0.00	0.00
4,700.009	5.76	41.285	4,683.141	255.477	224.321	-242.883	0.00	0.00	0.00
4,800.009	5.76	41.285	4,782.636	263.022	230.946	-250.056	0.00	0.00	0.00
4,900.010	5.76	41.285	4,882.130	270.567	237.571	-257.229	0.00	0.00	0.00
5,000.010	5.76	41.285	4,981.625	278.112	244.196	-264.402	0.00	0.00	0.00



**Planning Report** 

Database: EDM

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Almost Eddy 30 Fed Com

Well: #509H Wellbore: OH

Design: Plan #0.1 RT

**Local Co-ordinate Reference** 

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well #509H

kb = 25' @ 3387.007ft kb = 25' @ 3387.007ft

Grid

Planned Survey									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
5,100.010	5.76	41.285	5,081.120	285.657	250.821	-271.575	0.00	0.00	0.00
5,200.010	5.76	41.285	5,180.615	293.202	257.446	-278.748	0.00	0.00	0.00
5,300.010	5.76	41.285	5,280.110	300.747	264.071	-285.921	0.00	0.00	0.00
5,400.011	5.76	41.285	5,379.605	308.292	270.695	-293.094	0.00	0.00	0.00
5,500.011	5.76	41.285	5,479.099	315.837	277.320	-300.267	0.00	0.00	0.00
5,600.011	5.76	41.285	5,578.594	323.382	283.945	-307.440	0.00	0.00	0.00
5,700.011	5.76	41.285	5,678.089	330.927	290.570	-314.613	0.00	0.00	0.00
5,800.011	5.76	41.285	5,777.584	338.472	297.195	-321.786	0.00	0.00	0.00
5,900.012	5.76	41.285 41.285	5,877.079	346.017	303.820	-328.959	0.00 0.00	0.00	0.00
6,000.012 6,100.012	5.76 5.76	41.285 41.285	5,976.574 6,076.069	353.562 361.107	310.445 317.070	-336.132 -343.305	0.00	0.00 0.00	0.00 0.00
6,200.012	5.76	41.285	6,175.563	368.652	323.694	-350.478	0.00	0.00	0.00
6,300.012	5.76	41.285	6,275.058	376.197	330.319	-357.651	0.00	0.00	0.00
6,400.012	5.76 5.76	41.285	6,374.553	383.742	336.944	-364.824	0.00	0.00	0.00
6,500.013	5.76	41.285	6,474.048	391.287	343.569	-371.997	0.00	0.00	0.00
6,603.858	5.76	41.285	6,577.369	399.122	350.449	-379.446	0.00	0.00	0.00
6,700.013	3.84	41.285	6,673.182	405.169	355.758	-385.195	2.00	-2.00	0.00
6,800.013	1.84	41.285	6,773.054	408.891	359.027	-388.734	2.00	-2.00	0.00
6,891.988	0.00	0.000	6,865.013	410.001	360.001	-389.789	2.00	-2.00	0.00
6,900.013	0.00	0.000	6,873.038	410.001	360.001	-389.789	0.00	0.00	0.00
7,000.014	0.00	0.000	6,973.039	410.001	360.001	-389.789	0.00	0.00	0.00
7,100.014	0.00	0.000	7,073.039	410.001	360.001	-389.789	0.00	0.00	0.00
7,200.014	0.00	0.000	7,173.039	410.001	360.001	-389.789	0.00	0.00	0.00
7,300.014	0.00	0.000	7,273.039	410.001	360.001	-389.789	0.00	0.00	0.00
7,400.014 7,500.015	0.00 0.00	0.000 0.000	7,373.039 7,473.040	410.001 410.001	360.001 360.001	-389.789 -389.789	0.00 0.00	0.00 0.00	0.00 0.00
7,600.015	0.00	0.000	7,573.040	410.001	360.001	-389.789	0.00	0.00	0.00
							0.00		
7,700.015 7,800.015	0.00 0.00	0.000 0.000	7,673.040 7,773.040	410.001 410.001	360.001 360.001	-389.789 -389.789	0.00	0.00 0.00	0.00 0.00
7,900.015	0.00	0.000	7,873.040	410.001	360.001	-389.789	0.00	0.00	0.00
8,000.016	0.00	0.000	7,973.041	410.001	360.001	-389.789	0.00	0.00	0.00
8,100.016	0.00	0.000	8,073.041	410.001	360.001	-389.789	0.00	0.00	0.00
8,200.016	0.00	0.000	8,173.041	410.001	360.001	-389.789	0.00	0.00	0.00
8,300.016	0.00	0.000	8,273.041	410.001	360.001	-389.789	0.00	0.00	0.00
8,400.016	0.00	0.000	8,373.041	410.001	360.001	-389.789	0.00	0.00	0.00
8,500.017	0.00	0.000	8,473.042	410.001	360.001	-389.789	0.00	0.00	0.00
8,600.017	0.00	0.000	8,573.042	410.001	360.001	-389.789	0.00	0.00	0.00
8,700.017	0.00	0.000	8,673.042	410.001	360.001	-389.789	0.00	0.00	0.00
8,800.017	0.00	0.000	8,773.042	410.001	360.001	-389.789	0.00	0.00	0.00
8,900.017 9.000.018	0.00 0.00	0.000 0.000	8,873.042 8,973.042	410.001 410.001	360.001 360.001	-389.789 -389.789	0.00 0.00	0.00 0.00	0.00 0.00
9,100.018	0.00	0.000	9,073.042	410.001	360.001	-389.789	0.00	0.00	0.00
9,200.018	0.00	0.000	9,173.043	410.001	360.001	-389.789	0.00	0.00	0.00
9,300.018	0.00	0.000	9,173.043	410.001	360.001	-369.769 -389.789	0.00	0.00	0.00
9,400.018	0.00	0.000	9,373.043	410.001	360.001	-389.789	0.00	0.00	0.00
9,500.019	0.00	0.000	9,473.043	410.001	360.001	-389.789	0.00	0.00	0.00
9,600.019	0.00	0.000	9,573.044	410.001	360.001	-389.789	0.00	0.00	0.00
9,700.019	0.00	0.000	9,673.044	410.001	360.001	-389.789	0.00	0.00	0.00
9,800.019	0.00	0.000	9,773.044	410.001	360.001	-389.789	0.00	0.00	0.00
9,900.019	0.00	0.000	9,873.044	410.001	360.001	-389.789	0.00	0.00	0.00
9,979.495	0.00	0.000	9,952.519	410.001	360.001	-389.789	0.00	0.00	0.00
10,000.020	2.46	180.000	9,973.038	409.560	360.001	-389.348	12.00	12.00	0.00
10,025.020	5.46	180.000	9,997.976	407.832	360.001	-387.623	12.00	12.00	0.00



**Planning Report** 

Database: EDM

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Almost Eddy 30 Fed Com

Well: #509H Wellbore: OH

Design: Plan #0.1 RT

**Local Co-ordinate Reference** 

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North Reference:

Survey Calculation Method:

Well #509H

kb = 25' @ 3387.007ft kb = 25' @ 3387.007ft

Grid

Planned Surve	y ·									
Meası	ured			Vertical			Vertical	Dogleg	Build	Turn
Dep	th	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)		(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
10,05		8.46	180.000	10,022.788	404.801	360.001	-384.597	12.00	12.00	0.00
	5.020	11.46	180.000	10,022.768	400.476	360.001	-380.278	12.00	12.00	0.00
	0.020	14.46	180.000	10,071.768	394.868	360.001	-374.678	12.00	12.00	0.00
	5.020	17.46	180.000	10,095.802	387.993	360.001	-367.813	12.00	12.00	0.00
·										
	0.020	20.47	180.000	10,119.442	379.869	360.001	-359.701	12.00	12.00	0.00
	5.020	23.47	180.000	10,142.624	370.519	360.001	-350.365	12.00	12.00	0.00
	9.946	26.46	180.000	10,165.220	360.001	360.001	-339.863	12.00	12.00	0.00
	5.020	29.47	179.963	10,187.364	348.245	360.005	-328.125	12.00	12.00	-0.15
10,25	0.020	32.47	179.932	10,208.799	335.384	360.017	-315.282	12.00	12.00	-0.12
10,27	5.020	35.47	179.907	10,229.531	321.418	360.036	-301.335	12.00	12.00	-0.10
10,30	0.020	38.47	179.884	10,249.503	306.386	360.064	-286.324	12.00	12.00	-0.09
	5.020	41.47	179.865	10,268.662	290.330	360.099	-270.290	12.00	12.00	-0.08
	0.020	44.47	179.847	10,286.954	273.293	360.142	-253.276	12.00	12.00	-0.07
10,37	5.020	47.47	179.832	10,304.329	255.322	360.192	-235.329	12.00	12.00	-0.06
10.40	0.020	50.47	179.817	10.320.740	236.466	360.250	-216.498	12.00	12.00	-0.06
	5.020	53.47	179.804	10,336.142	216.777	360.315	-196.835	12.00	12.00	-0.05
	0.020	56.47	179.792	10,350.492	196.310	360.387	-176.394	12.00	12.00	-0.05
10,47		59.47	179.781	10,363.751	175.119	360.466	-155.230	12.00	12.00	-0.04
10,50		62.47	179.771	10,375.883	153.263	360.552	-133.402	12.00	12.00	-0.04
40.50	E 004									
10,52		65.47	179.761	10,386.855	130.803	360.644	-110.970	12.00	12.00	-0.04
	0.022	68.47	179.751	10,396.636	107.799	360.742	-87.995	12.00	12.00	-0.04
	5.022	71.47	179.742 179.733	10,405.199	84.315	360.846	-64.540 -40.669	12.00	12.00 12.00	-0.04
	0.022 5.022	74.47 77.47	179.733	10,412.522 10,418.584	60.414 36.164	360.955 361.070	-40.669 -16.448	12.00 12.00	12.00	-0.04 -0.03
10,02	3.022		179.724	10,416.364						
10,65	0.022	80.47	179.716	10,423.368	11.629	361.190	8.057	12.00	12.00	-0.03
	5.022	83.47	179.708	10,426.862	-13.123	361.314	32.779	12.00	12.00	-0.03
	0.022	86.47	179.700	10,429.056	-38.023	361.443	57.649	12.00	12.00	-0.03
	5.022	89.47	179.692	10,429.943	-63.004	361.576	82.600	12.00	12.00	-0.03
10,72	9.473	90.00	179.690	10,429.964	-67.455	361.600	87.046	12.00	12.00	-0.03
10.80	0.022	90.00	179.690	10,429.965	-138.003	361.981	157.510	0.00	0.00	0.00
	0.022	90.00	179.690	10,429.966	-238.002	362.522	257.390	0.00	0.00	0.00
	0.022	90.00	179.690	10,429.966	-338.001	363.063	357.270	0.00	0.00	0.00
	0.023	90.00	179.690	10,429.967	-437.999	363.604	457.149	0.00	0.00	0.00
	0.023	90.00	179.690	10,429.968	-537.998	364.145	557.029	0.00	0.00	0.00
44.00	0.000	00.00	470.000	40,400,000	607.007	204 005	656.909	0.00	0.00	0.00
	0.023	90.00	179.690	10,429.969	-637.997	364.685		0.00	0.00	0.00
11,40	0.023	90.00 90.00	179.690 179.690	10,429.969 10,429.970	-737.996 -837.994	365.226 365.767	756.789 856.669	0.00 0.00	0.00 0.00	0.00 0.00
11,50		90.00	179.690	10,429.970	-837.994 -937.993	365.767 366.308	956.549	0.00	0.00	0.00
11,70		90.00	179.690	10,429.971	-1.037.992	366.849	1,056.428	0.00	0.00	0.00
·					,					
11,80		90.00	179.690	10,429.972	-1,137.991	367.389	1,156.308	0.00	0.00	0.00
11,90		90.00	179.690	10,429.973	-1,237.989	367.930	1,256.188	0.00	0.00	0.00
12,00		90.00	179.690	10,429.974	-1,337.988	368.471	1,356.068	0.00	0.00	0.00
	0.025	90.00	179.690	10,429.975	-1,437.987	369.012	1,455.948	0.00	0.00	0.00
12,20	0.025	90.00	179.690	10,429.976	-1,537.986	369.553	1,555.827	0.00	0.00	0.00
12,30	0.025	90.00	179.690	10,429.976	-1,637.984	370.093	1,655.707	0.00	0.00	0.00
	0.025	90.00	179.690	10,429.977	-1,737.983	370.634	1,755.587	0.00	0.00	0.00
	0.025	90.00	179.690	10,429.978	-1,837.982	371.175	1,855.467	0.00	0.00	0.00
	0.026	90.00	179.690	10,429.979	-1,937.980	371.716	1,955.347	0.00	0.00	0.00
	0.026	90.00	179.690	10,429.979	-2,037.979	372.257	2,055.226	0.00	0.00	0.00
12.90	0.026		170 600	10,429.980				0.00		0.00
,	0.026	90.00 90.00	179.690 179.690	10,429.980	-2,137.978 -2,237.977	372.797 373.338	2,155.106 2,254.986	0.00 0.00	0.00 0.00	0.00 0.00
	0.026	90.00	179.690	10,429.981	-2,237.977 -2,337.975	373.338 373.879	2,254.986	0.00	0.00	0.00
	0.026	90.00	179.690	10,429.962	-2,337.975 -2,437.974	374.420	2,354.666 2,454.746	0.00	0.00	0.00
13,10	0.021	90.00	179.090	10,429.902	-2,401.814	314.420	2,404.740	0.00	0.00	0.00

eog resources

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Well #509H

kb = 25' @ 3387.007ft kb = 25' @ 3387.007ft

Grid

Planned Survey									
Magaurad			Vertical			Vertical	Doglog	Duild	Turn
Measured Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Dogleg Rate	Build Rate	Rate
(ft)	(°)	(°)	(ft)	(ft)	+⊑/- <b>vv</b> (ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
							, ,	, ,	
13,200.027	90.00	179.690	10,429.983	-2,537.973	374.961	2,554.625	0.00	0.00	0.00
13,300.027	90.00	179.690	10,429.984	-2,637.972	375.501	2,654.505	0.00	0.00	0.00
13,400.027	90.00	179.690	10,429.985	-2,737.970	376.042	2,754.385	0.00	0.00	0.00
13,500.027	90.00	179.690	10,429.986	-2,837.969	376.583	2,854.265	0.00	0.00	0.00
13,600.028	90.00	179.690	10,429.986	-2,937.968	377.124	2,954.145	0.00	0.00	0.00
13,700.028	90.00	179.690	10,429.987	-3,037.967	377.665	3,054.025	0.00	0.00	0.00
13,800.028	90.00	179.690	10,429.988	-3,137.965	378.205	3,153.904	0.00	0.00	0.00
13,900.028	90.00	179.690	10,429.989	-3,237.964	378.746	3,253.784	0.00	0.00	0.00
14,000.028	90.00	179.690	10,429.989	-3,337.963	379.287	3,353.664	0.00	0.00	0.00
14,100.029	90.00	179.690	10,429.990	-3,437.961	379.828	3,453.544	0.00	0.00	0.00
14,200.029	90.00	179.690	10,429.991	-3,537.960	380.369	3,553.424	0.00	0.00	0.00
14,300.029	90.00	179.690	10,429.992	-3,637.959	380.909	3,653.303	0.00	0.00	0.00
14,400.029	90.00	179.690	10,429.993	-3,737.958	381.450	3,753.183	0.00	0.00	0.00
14,500.029	90.00	179.690	10,429.993	-3,837.956	381.991	3,853.063	0.00	0.00	0.00
14,600.030	90.00	179.690	10,429.994	-3,937.955	382.532	3,952.943	0.00	0.00	0.00
14,700.030	90.00	179.690	10,429.995	-4,037.954	383.073	4,052.823	0.00	0.00	0.00
14,800.030	90.00	179.690	10,429.996	-4,137.953	383.613	4,152.702	0.00	0.00	0.00
14,900.030	90.00	179.690	10,429.996	-4,237.951	384.154	4,252.582	0.00	0.00	0.00
15,000.030	90.00	179.690	10,429.997	-4,337.950	384.695	4,352.462	0.00	0.00	0.00
15,100.030	90.00	179.690	10,429.998	-4,437.949	385.236	4,452.342	0.00	0.00	0.00
15,200.031	90.00	179.690	10,429.999	-4,537.947	385.777	4,552.222	0.00	0.00	0.00
15,300.031	90.00	179.690	10,429.999	-4,637.946	386.317	4,652.101	0.00	0.00	0.00
15,400.031	90.00	179.690	10,430.000	-4,737.945	386.858	4,751.981	0.00	0.00	0.00
15,500.031	90.00	179.690	10,430.001	-4,837.944	387.399	4,851.861	0.00	0.00	0.00
15,600.031	90.00	179.690	10,430.002	-4,937.942	387.940	4,951.741	0.00	0.00	0.00
15,700.032	90.00	179.690	10,430.003	-5,037.941	388.481	5,051.621	0.00	0.00	0.00
15,800.032	90.00	179.690	10,430.003	-5,137.940	389.021	5,151.500	0.00	0.00	0.00
15,900.032	90.00	179.690	10,430.004	-5,237.939	389.562	5,251.380	0.00	0.00	0.00
16,000.032	90.00	179.690	10,430.005	-5,337.937	390.103	5,351.260	0.00	0.00	0.00
16,100.032	90.00	179.690	10,430.006	-5,437.936	390.644	5,451.140	0.00	0.00	0.00
16,200.033	90.00	179.690	10,430.006	-5,537.935	391.185	5,551.020	0.00	0.00	0.00
16,300.033	90.00	179.690	10,430.007	-5,637.934	391.725	5,650.900	0.00	0.00	0.00
16,400.033	90.00	179.690	10,430.008	-5,737.932	392.266	5,750.779	0.00	0.00	0.00
16,500.033	90.00	179.690	10,430.009	-5,837.931	392.807	5,850.659	0.00	0.00	0.00
16,600.033	90.00	179.690	10,430.009	-5,937.930	393.348	5,950.539	0.00	0.00	0.00
16,700.034	90.00	179.690	10,430.010	-6,037.928	393.889	6,050.419	0.00	0.00	0.00
16,800.034	90.00	179.690	10,430.011	-6,137.927	394.429	6,150.299	0.00	0.00	0.00
16,900.034	90.00	179.690	10,430.012	-6,237.926	394.970	6,250.178	0.00	0.00	0.00
17,000.034	90.00	179.690	10,430.013	-6,337.925	395.511	6,350.058	0.00	0.00	0.00
17,100.034	90.00	179.690	10,430.013	-6,437.923	396.052	6,449.938	0.00	0.00	0.00
17,200.035	90.00	179.690	10,430.014	-6,537.922	396.593	6,549.818	0.00	0.00	0.00
17,300.035	90.00	179.690	10,430.015	-6,637.921	397.134	6,649.698	0.00	0.00	0.00
17,400.035	90.00	179.690	10,430.016	-6,737.920	397.674	6,749.577	0.00	0.00	0.00
17,500.035	90.00	179.690	10,430.016	-6,837.918	398.215	6,849.457	0.00	0.00	0.00
17,600.035	90.00	179.690	10,430.017	-6,937.917	398.756	6,949.337	0.00	0.00	0.00
17,700.036	90.00	179.690	10,430.018	-7,037.916	399.297	7,049.217	0.00	0.00	0.00
17,800.036	90.00	179.690	10,430.019	-7,137.915	399.838	7,149.097	0.00	0.00	0.00
17,900.036	90.00	179.690	10,430.019	-7,237.913	400.378	7,248.976	0.00	0.00	0.00
18,000.036	90.00	179.690	10,430.020	-7,337.912	400.919	7,348.856	0.00	0.00	0.00
18,015.139	90.00	179.690	10,430.020	-7,353.014	401.001	7,363.941	0.00	0.00	0.00
18,015.139	90.00	179.690	10,430.020	-7,353.014	401.001	7,363.941	0.00	0.00	0.00

# eog resources

### **EOG Resources**

### **Planning Report**

EDM Database:

EOG Resources - Midland Company: Lea County, NM (NAD 83 NME) Project: Almost Eddy 30 Fed Com Site:

#509H Well: ОН Wellbore:

Design: Plan #0.1 RT **Local Co-ordinate Reference** 

Well #509H kb = 25' @ 3387.007ft TVD Reference: kb = 25' @ 3387.007ft MD Reference:

Grid North Reference:

Minimum Curvature **Survey Calculation Method:** 

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
KOP(Almost Eddy 30 Fe - plan hits target cent - Point	0.00 er	0.000	9,952.519	410.001	360.001	401,113.80	735,304.47	32.101190	-103.706931
FTP(Almost Eddy 30 Fe - plan hits target cent - Point	0.00 er	0.000	10,165.220	360.001	360.001	401,063.80	735,304.47	32.101053	-103.706932
PBHL(Almost Eddy 30 F - plan hits target cent - Point	0.00 er	0.000	10,430.020	-7,353.014	401.001	393,350.79	735,345.47	32.079851	-103.706944

eogresources Lea County, NM (NAD 83 NME) Almost Eddy 30 Fed Com #509H KOP(Almost Eddy 30 Fed Com #509H) FTP(Almost Eddy 30 Fed Com #509H) Plan #0.1 RT **Azimuths to Grid North** True North: -0.33° Magnetic North: 6.37° **Magnetic Field** Strength: 47502.0nT Dip Angle: 59.80° Date: 7/16/2020 Model: IGRF2020 PROJECT DETAILS: Lea County, NM (NAD 83 NME) **Geodetic System: US State Plane 1983 Datum: North American Datum 1983** Ellipsoid: GRS 1980 **Zone: New Mexico Eastern Zone** -1200 System Datum: Mean Sea Level To convert a Magnetic Direction to a Grid Direction, Add 6.37°
To convert a Magnetic Direction to a True Direction, Add 6.71° East
To convert a True Direction to a Grid Direction, Subtract 0.33° -1800 2450 -2100 2800 **WELL DETAILS: #509H** 3362.0 -2400 kb = 25' @ 3387.0usft Northing Longitude 103.7081008°W **Easting** Latittude 32.1000688°N 400703.00 734943.00 -2700 3500 -3000 SECTION DETAILS -3300 TVD +N/-S +E/-W **VSect** MD **TFace Target** Sec Azi Inc 0.00 0.0 0.00 0.00 **4550** 0.00 0.00 1170.0 1458.1 5.76 41.28 1457.6 10.9 41.28 -10.3 5.76 41.28 6577.4 399.1 350.4 0.00 -379.4 6603.8 0.00 **\$ 4900** 410.0 360.0 -389.8 0.00 0.00 6865.0 2.00 6892.0 180.00 KOP(Almost Eddy 30 Fed Com #509H) 0.00 9952.5 360.0 -389.8 9979.5 410.0 0.00 FTP(Almost Eddy 30 Fed Com #509H) 180.00 10165.2 360.0 360.0 12.00 180.00 -339.9 -4200 -67.5 -0.35 10430.0 PBHL(Almost Eddy 30 Fed Com #509H) -7353.0 0.00 0.00 7363.9 -4500 -4800 6300 WELLBORE TARGET DETAILS (MAP CO-ORDINATES) CASING DETAILS No casing data is available -5400 +E/-W **Northing** +N/-S **Easting** 6650 KOP(Almost Eddy 30 Fed Com #509H) 9952.5 735303.00 401113.00 FTP(Almost Eddy 30 Fed Com #509H) 10165.2 360.0 360.0 401063.00 735303.00 PBHL(Almost Eddy 30 Fed Com #509H) 10430.0 -7353.0 393350.00 735344.00 -6000 **7350**+ -6300 **7700** -6600 8400 most Eddy 30 Fed Com/#509H/Plain #0.1 RT -7200 **-7500** PBHL(Almost Eddy 30 Fed Com #509H) -1500 West(-)/East(+) **10150** KOP(Almost Eddy 30 Fed Com #509H) FTP(Almost Eddy 30 Fed Com #509H) 10500 PBHL(Almost Eddy 30 Fed Com #509H) 1050 1400 2450 2800 3150 3500 3850 4200 4550 4900 5250 Vertical Section at 176.88° Lea County, NM (NAD 83 NME) Almost Eddy 30 Fed Com Plan #0.1 RT

Released to Imaging: 6/14/2021 8:08:00 AM

8:16, August 28 2020

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | EOG RESOURCES | LEASE NO.: | NMNM112935

WELL NAME & NO.: ALMOST EDDY 30 FED COM 501H – 509H

LOCATION: | Section 30, T.25 S., R.32 E., NMPM

**COUNTY:** Lea County, New Mexico

COA

H2S	O Yes	No	
Potash	None	Secretary	© R-111-P
Cave/Karst Potential	• Low	Medium	O High
Cave/Karst Potential	Critical		
Variance	O None	Flex Hose	Other
Wellhead	Conventional	• Multibowl	O Both
Other	☐4 String Area	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	<b>☑</b> COM	□ Unit

### A. HYDROGEN SULFIDE

1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

### **B. CASING**

- 1. The 13-3/8 inch surface casing shall be set at approximately 1,070 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.
     Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least 200 feet into previous casing string.
     Operator shall provide method of verification. Excess cement calculates to 21%, additional cement may be required.

### C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

### D. SPECIAL REQUIREMENT (S)

### **Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

JJP03152021

# **GENERAL REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

  - Lea County
     Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
     393-3612
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig

- Notify the BLM when moving in and removing the Spudder Rig.
- Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
- BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

### A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

### B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
- e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
  - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
  - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall

have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

### C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

# **Hydrogen Sulfide Plan Summary**

- A. All personnel shall receive proper H2S training in accordance with Onshore Order III.C.3.a.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment:
  - Well control equipment
    - a. Flare line 150' from wellhead to be ignited by flare gun.
    - b. Choke manifold with a remotely operated choke.
    - c. Mud/gas separator
  - Protective equipment for essential personnel.

### Breathing apparatus:

- a. Rescue Packs (SCBA) 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- b. Work/Escape packs —4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
- c. Emergency Escape Packs —4 packs shall be stored in the doghouse for emergency evacuation.

### Auxiliary Rescue Equipment:

- a. Stretcher
- b. Two OSHA full body harness
- c. 100 ft 5/8 inch OSHA approved rope
- d. 1-20# class ABC fire extinguisher
- H2S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.

(Gas sample tubes will be stored in the safety trailer)

- Visual warning systems.
  - a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
  - b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
  - c. Two wind socks will be placed in strategic locations, visible from all angles.

### ■ Mud program:

The mud program has been designed to minimize the volume of H2S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H2S bearing zones.

### ■ Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

### ■ Communication:

Communication will be via cell phones and land lines where available.

**Emergency Assistance Telephone List** 

PUBLIC SAFETY:		911 or
Lea County Sheriff's Department		(575) 396-3611
Rod Coffman		
Fire Department:		
Carlsbad		(575) 885-3125
Artesia		(575) 746-5050
Hospitals:		
Carlsbad		(575) 887-4121
Artesia		(575) 748-3333
Hobbs		(575) 392-1979
Dept. of Public Safety/Carlsbad		(575) 748-9718
Highway Department		(575) 885-3281
New Mexico Oil Conservation		(575) 476-3440
U.S. Dept. of Labor		(575) 887-1174
EOG Resources, Inc.		
EOG / Midland	Office	(432) 686-3600
		,
Company Drilling Consultants:		
Jett Dueitt	Cell	(432) 230-4840
Blake Burney		
Drilling Engineer		
Steve Munsell	Office	(432) 686-3609
	Cell	(432) 894-1256
Drilling Manager		,
Aj Dach	Office	(432) 686-3751
·	Cell	(817) 480-1167
Drilling Superintendent		,
Jason Townsend	Office	(432) 848-9209
	Cell	(210) 776-5131
H&P Drilling		
H&P Drilling	Office	(432) 563-5757
H&P 415 Drilling Rig	Rig	(432) 230-4840
	Ü	
Tool Pusher:		
Johnathan Craig	Cell	(817) 760-6374
Brad Garrett		
Safety		
Brian Chandler (HSE Manager)	Office	(432) 686-3695
	Cell	(817) 239-0251
	C 011	(317) 237 0231

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

	Ons chi i didi i dini		
Date: 6/14/2021	Lea County, NM		
□ Original     □ Original	Operator & OGRID No.:	EOG Resources, Inc.	7377
☐ Amended - Reason for Amendment:			

CAS CAPTURE PLAN

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

### Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Almost Eddy 30 Fed Com 501H	30-025- ****	L-30-25S-32E	1936' FSL & 387' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 502H	30-025- ****	L-30-25S-32E	1903' FSL & 387' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 503H	30-025- ****	L-30-25S-32E	1870' FSL & 387' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 504H	30-025- ****	K-30-25S-32E	1948' FSL & 2390' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 505H	30-025- ****	K-30-25S-32E	1974' FSL & 2410' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 506H	30-025- ****	K-30-25S-32E	2000' FSL & 2430' FWL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 507H	30-025- ****	I-30-25S-32E	2182' FSL & 758' FEL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 508H	30-025- ****	I-30-25S-32E	2182' FSL & 725' FEL	±3500	None Planned	APD Submission
Almost Eddy 30 Fed Com 509H	30-025- 49014	I-30-25S-32E	2182' FSL & 692' FEL	±3500	None Planned	APD Submission

### **Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to <a href="Enlink"><u>Enlink</u></a>, <a href="MarkWest">MarkWest</a>, <a href="Enlink">Enterprise</a>, <a href="Enlink">Energy Transfer Company & Lucid</a> and will be connected to <a href="EOG Resources">EOG Resources</a> low/high pressure gathering system located in Lea County, New Mexico. <a href="EOG Resources">EOG Resources</a> provides (periodically) to <a href="Enlink">Enlink</a>, <a href="MarkWest">MarkWest</a>, <a href="Enlink">Enterprise</a>, <a href="Energy Transfer Company & Lucid">Enlink</a>, <a href="MarkWest">MarkWest</a>, <a href="Enlink">Enterprise</a>, <a href="Enlink">Energy Transfer Company & Lucid</a> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <a href="Enlink">Enlink</a>, <a href="MarkWest">MarkWest</a>, <a href="Enlink">Enterprise</a>, <a href="Enlink">Energy Transfer Company & Lucid</a></a> Processing Plant located in Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

### Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on **Enlink, MarkWest, Enterprise, Energy Transfer Company & Lucid** system at that time. Based on current information, it is **EOG Resources**' belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

### **Alternatives to Reduce Flaring**

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
  - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
  - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 27371

### **CONDITIONS**

Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	27371
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created	Condition	Condition
Ву		Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	6/14/2021
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or	6/14/2021
	zones and shall immediately set in cement the water protection string	