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. NMNM105533 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 **FAIRLANE 22 FEDERAL** 601H 9. API Well No. 3004321339 2. Name of Operator EOG RESOURCES INCORPORATED 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 1111 BAGBY SKY LOBBY2, HOUSTON, TX 77002 (713) 651-7000 WILDCAT/OIL WC 21N4W6;GALLUP 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 22/T21N/R5W/NMP At surface SESE / 528 FSL / 1042 FEL / LAT 36.0290911 / LONG -107.3447352 At proposed prod. zone NWNW / 666 FSL / 1625 FEL / LAT 36.0388559 / LONG -107.3581279 12. County or Parish 14. Distance in miles and direction from nearest town or post office\* 13 State SANDOVAL NM 21 miles 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well 528 feet location to nearest 320.0 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, 243 feet 4955 feet / 10042 feet FED: NM2308 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 7255 feet 10/31/2020 60 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. SUPO must be filed with the appropriate Forest Service Office). 6. Such other site specific information and/or plans as may be requested by the 25. Signature Name (Printed/Typed) Date JEREMY HAASS / Ph: (713) 651-7000 (Electronic Submission) 10/22/2019 Title Regulatory Specialist Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) DAVE MANKIEWICZ / Ph: (505) 564-7761 12/21/2020 Title Office **AFM-Minerals** Farmington 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

(Continued on page 2)

\*(Instructions on page 2)

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

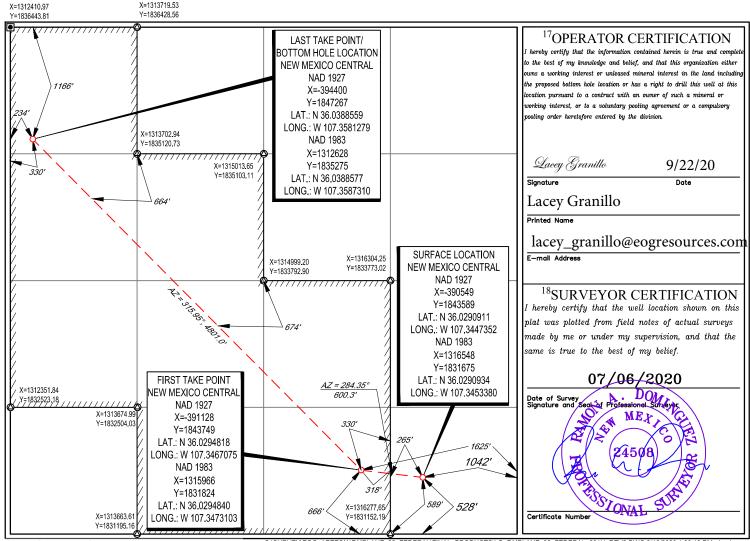
# WELL LOCATION AND ACREAGE DEDICATION PLAT

3004321339	2Pool Code 98350	98350 WC 21N4W6;GALLOPILOCAT OIL						
<sup>4</sup> Property Code	<sup>5</sup> Pı	<sup>5</sup> Property Name <sup>6</sup> Well Number						
330001	FAIRL	FAIRLANE 22 FED 601H						
<sup>7</sup> OGRID No.	<sup>8</sup> O <sub>1</sub>	<sup>8</sup> Operator Name <sup>9</sup> Elevation						
7377	EOG RES	EOG RESOURCES, INC. 7255						

<sup>10</sup>Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	22	21-N	5-W	-	528'	SOUTH	1042'	EAST	SANDOVAL
			11	Bottom Ho	le Location If I	Different From Su	rface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	22	21-N	5-W	-	1166'	NORTH	234'	WEST	SANDOVAL
12Dedicated Acres	<sup>13</sup> Joint or l	Infill 14Co	nsolidation Co	de <sup>15</sup> Ord	er No.				
320									

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: 1/29/2021 9:44:25 AM

S\SURVEYLEOG\_ARTESIA\FAIRLANE\_22\_FEDERAL\FINAL\_PRODUCTS\LO\_FAIRLANE\_22\_FEDERAL\_601H\_REV2.DWG 9/16/2020 1:00:10 PM rdomingu

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 CALLUNE LEAD	<b>GAS</b>	CAPTURE PLAN
------------------	------------	--------------

Date: 7/15/20		
□ 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
Fairlane 22 Fed 601H		P-22-21N-5W	528'FSL & 1042' FEL	2000	Flared	
Fairlane 22 Fed 603H		P-22-21N-5W	529'FSL & 1028'FEL	2000	Flared	
Fairlane 22 Fed 605H		P-22-21N-5W	589'FSL & 968'FEL	2000	Flared	
Fairlane 22 Fed 607H		P-22-21N-5W	590'FSL & 953'FEL	2000	Flared	
Fairlane 22 Fed 609H		P-22-21N-5W	590'FSL & 938'FEL	2000	Flared	

# **Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are completed. Harvest Midstream or Enterprise Products Partner and other local midstream providers are being evaluated for potential connections. It will require >30,000' of pipeline to connect the facility to a gas gathering system. The actual flow of the gas will be based on compression operating parameters and gathering system pressure.

#### 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 at that time. Based on current information, it is EOG Resources Inc. 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
  - o 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

# WELL LOCATION AND ACREAGE DEDICATION PLAT

,	API Number	r	Pool Code Prool Name 97029 WILDCAT OIL						
<sup>4</sup> Property C	Code			0.000	Property FAIRLANE		11220112		<sup>6</sup> Well Number 601 <b>H</b>
70GRID N 7377			*Operator Name *EOG RESOURCES, INC. *Z55						
			<sup>10</sup> Surface Location						
UL or lot no. P	Section 22	Township 21-N	Range 5-W	Lot Idn	Feet from th	North/South line	Feet from the 1042'	East/West EAST	County SANDOVAL

	l	i		
11	Dottom II.	la I agation If I	Sefonant Enam Co.	

UL or lot no.	Section 22	Township 21-N	Range 5-W	Lot Idn —	Feet from the 1166'	North/South line NORTH	Feet from the 234'	East/West line WEST	County SANDOVAL
<sup>12</sup> Dedicated Acres 315.05	<sup>13</sup> Joint or l	Infill 14Co	onsolidation Co	de <sup>15</sup> Ord	er No.				

# 1. GEOLOGIC NAME OF SURFACE FORMATION:

Nacimiento

# 2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

	MD	TVD
Pictured Cliffs	1,470'	1,467'
Huerfanito Bentonite	1,734'	1,730'
Mesaverde	2,149'	2,144'
Menefee	2,937'	2,929'
Point Lookout	3,800'	3,789'
Mancos Shale	3,921'	3,909'
Gallup	4,417'	4,404'
Horizontal TD	10,042'	4,955

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

Pictured Cliffs	1,467'	Gas
Mesaverde	2,144'	Gas
Menefee	2,929'	Gas/Oil
Point Lookout	3,789'	Oil
Mancos Shale	3,909'	Oil
Gallup	4,404'	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 300' and circulating cement back to surface.



# 4. CASING PROGRAM - NEW

# **Hole & Casing String:**

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF <sub>min</sub> Collapse	DF <sub>min</sub> Burst	DF <sub>min</sub> Joint	DF <sub>min</sub> Body
								Tension	Tension
17.5"	0'-300'	13 3/8"	48#	H-40	STC	1.125	1.25	1.60	1.80
12.25"	0' - 3,200'	9 5/8"	36#	J-55	LTC	1.125	1.25	1.60	1.80
8.75"	0'- 5,241'	5 ½"	17#	P-110	BTC	1.125	1.25	1.60	1.80
8.5"	5,241'-10,042'	5 ½"	17#	P-110	BTC	1.125	1.25	1.60	1.80

# **Cementing Program:**

Note: Cement volumes based on bit size plus at least 100% excess on surface, 100% excess in Contingency Intermediate and 35% excess in production string.

**Primary Cement Design:** 

	i i iiiiai j	Come	it Desig	,	
	No.	Wt.	Yld	Volume	
Depth	Sacks	lb/gal	Ft <sup>3</sup> /sk	Ft <sup>3</sup>	Slurry Description
300'	315	14.8	1.34	422	Tail: Class 'C' + 2%PF1(Calcium Chloride) (100% excess)
3,200'	980	12.8	1.79	1754	Lead: 35:65 Poz C + .02 gal/sk Anti Foam + 1% Extender + .13
					lb/sk Lost Circulation (TOC @ Surface)
	200	14.8	1.33	266	Tail: Class C + 0.13% Anti Foam
10,042'	610	11.9	2.47	1507	Lead: Class 50/50 PozC + 5%PF44(BWOW)(Salt) + 10% PF20(Bentonite Gel) +.2%PF153(Anti Settling Agent( + 3#/sk OF42(Kolseal) + 0.125#/sk PF29 (celloflake) + 0.4#/sk PF45
	1200	13	1.48	1776	(Defoamer) (TOC @ 500' into previous casing string) 35% Excess  Tail: Class PVL + 1.3% PF44(BWOW)(Salt) + 5% PF174  (Expanding Cement) + 0.5% PF606 (Fluid Loss) + 0.1% PF153  (Anti Settling Agent) + 0.4#/sk PF45 (Defoamer) 35% Excess

# 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

A variance is requested to use a co-flex line between the BOP and choke manifold, dependent on rig selection (instead of using a steel line). Certification and specs are attached at the end of the drilling plan.

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a double rams with blind rams & pipe rams preventer (3,000 psi WP) and an annular preventer (3,000-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.



Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 3,000/250 psig and the annular preventer to 1,500/250 psig. The surface casing will be tested to 1200 psi for 30 minutes.

Pipe rams will be operationally checked each 24-hour period. 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 surface 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	Comments
0 – 300'	Fresh Water	8.6-8.8	28-32	N/c	
300' - 3,200'	WBM	8.8-9.4	30-34	N/c	
Vertical					
3,200' - 10,042'	WBM	8.8-9.4	30-34	<10	OBM
Curve/Lateral					Requested as a
					contingency

The highest mud weight needed to balance formation is expected to be 9.4 ppg. In order to maintain hole stability, mud weights up to 9.4 ppg may be utilized.

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:

GR-Directional surveys will be run in open hole during drilling phase of operations.

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

The estimated bottom-hole temperature (BHT) at TD is 140 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 2422 psig (based on 9.4 ppg MW). Hydrogen sulfide has been encountered, reported or are known to exist at this depth in this area. Severe loss circulation is expected from spud to surface casing point.

#### 10. ANTICIPATED 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 3,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 3,000 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 3,000 psi.

The multi-bowl wellhead will be installed by vendor's representative(s).

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.

The surface casing string will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

# 12. COMPLETION AND PRODUCTION PLAN:

Frac: Lateral will be fracture stimulated with approximately 180,000 bbls slick water fluid. Flowback: Well will be flowed back through production tubing. An ESP may be used to assist in load water recovery.

Production: Well will produce up production tubing into production and storage facilities.





Midwest Hose & Specialty, Inc.

INTERNAL	HYDROSTA	ATIC TEST	CERTIFICA	ATE					
Customer:			Customer P.C	). Number:					
GRA	AND JUNCTION		1787	55					
	HOSE SPECI	FICATIONS							
Type: CHOKE H									
GRADE E	/ API 7K		Hose Length:	15 FEET					
	4 INCHES	O.D.	6.11	INCHES					
WORKING PRESSURE	TEST PRESSUR	RE	BURST PRESSU	JRE					
10,000 PSI	15,000	PSI	N/A	PSI					
10,000	10,000	1 01	I IVA	rai					
COUPLINGS									
Part Number	Stem Lot Nur		Ferrule Lot Number						
E4.0X64WB		9764	N440	, •					
E4.0X64WB	809	9764	N440	6					
Type of Coupling:		Die Size:							
SWAGE	i-IT	6	6.62 INCHES						
	PROC	EDURE							
Hose assemb	ly pressure tested w	ith water at ambier	nt temperature						
	T TEST PRESSURE		URST PRESSURE	:					
0.24	4								
9 3/4 Hose Assembly Ser		Hose Serial N	N/A	PSI					
19700		10088							
Comments:									
Date:	Tested:		Approved:	17.					
4/10/2013	Billi	.: Bole K 1	John !	Alex-					

April 10, 2013

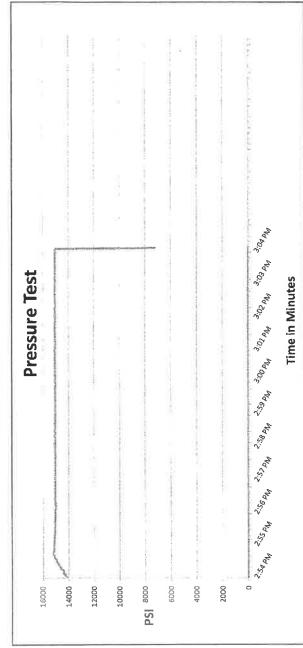
# Internal Hydrostatic Test Graph

Pick Ticket #: 197000

Customer: Grand J

Midwest Hose & Specialty, Inc.

Hose Assembly Serial # 197000 Coupling Method Final 0.D. 6.65" Verification Jie 2. 6.62 Hose Serial # 10088 Type of Fitting 4 1/16 10k Die Size Standard Safety Multiplier Applies **Burst Pressure** Length 15' 0.D. 6.11" Hose Specifications Working Pressure 10000 PSI I.D.



Time Held at Test Pressure 93/4 Minutes Test Pressure 15000 PSI

Actual Burst Pressure

Tested By: Billy Balak

Peak Pressure 15263 PSI

Approved By. Joshua Dahlem

Comments: Hose assembly pressure tested with water at ambient temperature.

Released to Imaging: 1/29/2021 9:44:25 AM

Received by OCD: 12/22/2020 3:05:18 PM

#<u>2400</u>

4900-

5200-

5300-

DESIGN TARGET DETAILS

TVD +N/-S +E/-W Northing Easting Name [F22F#601H]FTP -952.0 4955.0 531.0 1832206.00 1315596.00 - plan misses target center by 0.5usft at 5772.3usft MD (4955.0 TVD, 531.3 N, -951.6 E) <sup>7</sup>#601H]PBHL 4955.0 3600.0 [F22F#601H]PBHL 1835275.00 1312628.00 -3920.0 - plan hits target center

G T M

Azimuths to Grid North
True North: 0.64°
Magnetic North: 9.36°

Magnetic Field Strength: 49336.7nT Dip Angle: 62.68° Date: 7/15/2020 Model: IGRF2020

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0
3	742.1	4.84	232.19	741.8	-6.3	-8.1	2.00	232.19	1.7
4	4248.5	4.84	232.19	4235.7	-187.7	-241.9	0.00	0.00	51.2
5	4490.6	0.00	0.00	4477.5	-194.0	-250.0	2.00	180.00	52.9
6	5240.6	90.00	315.95	4955.0	149.2	-582.0	12.00	315.95	529.5
7	10041.7	90.00	315.95	4955.0	3600.0	-3920.0	0.00	0.00	5322.3

Page 11 of 24

# eogresources

Project:Sandoval County (NAD83)

Site: Fairlane

Well: Fairlane 22 Fed #601H

Wellbore: Lateral Design: Plan #1

**Ground Elevation 7255.0** 

Northing 1831675.00

**Easting 1316548.00** 

KB @ 7273.0usft (Planning Rig)

PROJECT DETAILS: Sandoval County (NAD83)

Geodetic System: US State Plane 1983

Datum: North American Datum 1983

Ellipsoid: GRS 1980

**Zone: New Mexico Central Zone** 

System Datum: Mean Sea Level

[F22F#601H]PBHL 10042' MD (4955' TVD) 2250 [F22F#601H]HSU#1 £ 2100-₹1950-တိ 1800 – 1500-1350-1200-1050-[F22F#601H]FTP 5241' MD (4955' TVD) BEGIN 12\*/100' BR -5400 -5250 -5100 -4950 -4800 -4650 -4500 -4350 -4200 -4050 -3900 -3750 -3600 -3450 -3000 -3150 -3000 -2850 -2700 -2550 -2400 -2250 -2100 -1950 -1800 -1650 -1500 -1350 -1200 -1050 -900 -750 -600 -450 -300 -150 0 150 300 450 600 West(-)/East(+) (300 usft/in)

BEGIN 12\*/100' BR

[F22F#601H]FTP 5241' MD (4955' TVD)

[F22F#601H]PBHL 10042' MD (4955' TVD)

 $\frac{5400}{Released to \ 1300} = \frac{290}{2100} = \frac{29$ 



# **EOG Resources - Artesia**

Sandoval County (NAD83) Fairlane Fairlane 22 Fed #601H

Lateral

Plan: Plan #1

# **Standard Planning Report**

15 July, 2020

# eog resources

## **EOG Resources**

#### Planning Report

EDM Database: Company:

EOG Resources - Artesia

Project: Sandoval County (NAD83) Site:

Fairlane

Plan #1

Well: Fairlane 22 Fed #601H Wellbore: Lateral

**Local Co-ordinate Reference:** 

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well Fairlane 22 Fed #601H

KB @ 7273.0usft (Planning Rig) KB @ 7273.0usft (Planning Rig)

Minimum Curvature

Project

Design:

Sandoval County (NAD83)

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983 System Datum:

Mean Sea Level

Map Zone:

New Mexico Central Zone

Fairlane Site

Site Position: From: Мар **Position Uncertainty:** 

Northing: Easting: 0.0 usft Slot Radius: 1,831,645.00 usft 1,316,678.00 usft 13-3/16 "

Latitude: Longitude: **Grid Convergence:** 

36° 1' 44.449 N 107° 20' 41.628 W

-0.64

Well

**Well Position** 

Fairlane 22 Fed #601H

+N/-S +E/-W

30.0 usft -130.0 usft Northing: Easting:

1,831,675.00 usft 1,316,548.00 usft

Latitude: Longitude:

36° 1' 44.732 N 107° 20' 43.214 W

**Position Uncertainty** 0.0 usft Wellhead Elevation: **Ground Level:** 

7,255.0 usft

Wellbore

Lateral

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/15/2020	8.71	62.68	49,336.69345721

Plan #1 Design

**Audit Notes:** 

Version:

Phase:

10,041.7

PLAN

Tie On Depth:

0.0

0.0

312.56

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

Plan Survey Tool Program

Date 7/15/2020

0.0

**Depth From** Depth To (usft)

0.0

(usft) Survey (Wellbore)

Plan #1 (Lateral)

**Tool Name** 

0.0

Remarks

MWD

OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
742.1	4.84	232.19	741.8	-6.3	-8.1	2.00	2.00	0.00	232.19	
4,248.5	4.84	232.19	4,235.7	-187.7	-241.9	0.00	0.00	0.00	0.00	
4,490.6	0.00	0.00	4,477.5	-194.0	-250.0	2.00	-2.00	0.00	180.00	
5,240.6	90.00	315.95	4,955.0	149.2	-582.0	12.00	12.00	-5.87	315.95	
10,041.7	90.00	315.95	4,955.0	3,600.0	-3,920.0	0.00	0.00	0.00	0.00 [	F22F#601H]PBHL

# eog resources

# **EOG Resources**

Planning Report

Database: EDM

Company: EOG Resources - Artesia
Project: Sandoval County (NAD83)

Site: Fairlane

Well: Fairlane 22 Fed #601H
Wellbore: Lateral
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Fairlane 22 Fed #601H KB @ 7273.0usft (Planning Rig) KB @ 7273.0usft (Planning Rig)

Grid

Minimum Curvature

anned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
BEGIN 2* NUI	DGE								
600.0	2.00	232.19	600.0	-1.1	-1.4	0.3	2.00	2.00	0.00
700.0	4.00	232.19	699.8	-4.3	-5.5	1.2	2.00	2.00	0.00
742.1	4.84	232.19	741.8	-6.3	-8.1	1.7	2.00	2.00	0.00
0.008	4.84	232.19	799.5	-9.3	-11.9	2.5	0.00	0.00	0.00
900.0	4.84	232.19	899.1	-14.4	-18.6	3.9	0.00	0.00	0.00
1,000.0	4.84	232.19	998.8	-19.6	-25.3	5.3	0.00	0.00	0.00
1,100.0	4.84	232.19	1,098.4	-24.8	-31.9	6.8	0.00	0.00	0.00
1,200.0	4.84	232.19	1,198.1	-30.0	-38.6	8.2	0.00	0.00	0.00
1,300.0	4.84	232.19	1,297.7	-35.1	-45.3	9.6	0.00	0.00	0.00
1,400.0	4.84	232.19	1,397.4	-40.3	-52.0	11.0	0.00	0.00	0.00
1,500.0	4.84	232.19	1,497.0	-45.5	-58.6	12.4	0.00	0.00	0.00
1,600.0	4.84	232.19	1,596.6	-50.7	-65.3	13.8	0.00	0.00	0.00
1,700.0	4.84	232.19	1,696.3	-55.8	-72.0	15.2	0.00	0.00	0.00
1,800.0	4.84	232.19	1,795.9	-61.0	-78.6	16.6	0.00	0.00	0.00
1,900.0	4.84	232.19	1,895.6	-66.2	-85.3	18.1	0.00	0.00	0.00
2,000.0	4.84	232.19	1,995.2	-71.4	-65.5 -92.0	19.5	0.00	0.00	0.00
2,100.0	4.84	232.19	2,094.9	-76.5	-98.6	20.9	0.00	0.00	0.00
2,200.0	4.84	232.19	2,194.5	-81.7	-105.3	22.3	0.00	0.00	0.00
2,300.0	4.84	232.19	2,294.2	-86.9	-112.0	23.7	0.00	0.00	0.00
2,400.0	4.84	232.19	2,393.8	-92.1	-118.6	25.1	0.00	0.00	0.00
2,400.0 2,500.0	4.84 4.84	232.19	2,393.8 2,493.4	-92.1 -97.2	-118.6	25.1 26.5	0.00	0.00	0.00
2,600.0	4.84	232.19	2,593.1	-97.2 -102.4	-125.5	27.9	0.00	0.00	0.00
2,700.0	4.84	232.19	2,692.7	-102.4	-138.7	29.3	0.00	0.00	0.00
2,800.0	4.84	232.19	2,792.4	-112.8	-145.3	30.8	0.00	0.00	0.00
2,900.0	4.84	232.19	2,892.0	-117.9	-152.0	32.2	0.00	0.00	0.00
3,000.0	4.84	232.19	2,991.7	-123.1	-158.7	33.6	0.00	0.00	0.00
3,100.0	4.84 4.84	232.19 232.19	3,091.3	-128.3	-165.3	35.0 36.4	0.00 0.00	0.00	0.00
3,200.0 3,300.0	4.84 4.84	232.19	3,190.9 3,290.6	-133.5 -138.6	-172.0 -178.7	36.4 37.8	0.00	0.00 0.00	0.00 0.00
3,400.0	4.84	232.19	3,390.2	-143.8	-185.3	39.2	0.00	0.00	0.00
3,500.0	4.84	232.19	3,489.9	-149.0	-192.0	40.6	0.00	0.00	0.00
3,600.0	4.84	232.19	3,589.5	-154.2	-198.7	42.0	0.00	0.00	0.00
3,700.0 3,800.0	4.84	232.19 232.19	3,689.2 3,788.8	-159.3 164.5	-205.3	43.5	0.00 0.00	0.00 0.00	0.00
	4.84			-164.5	-212.0	44.9			0.00
3,900.0	4.84	232.19	3,888.4	-169.7	-218.7	46.3	0.00	0.00	0.00
4,000.0	4.84	232.19	3,988.1	-174.9	-225.4	47.7	0.00	0.00	0.00
4,100.0	4.84	232.19	4,087.7	-180.0	-232.0	49.1	0.00	0.00	0.00
4,200.0	4.84	232.19	4,187.4	-185.2	-238.7	50.5	0.00	0.00	0.00
4,248.5	4.84	232.19	4,235.7	-187.7	-241.9	51.2	0.00	0.00	0.00
4,300.0	3.81	232.19	4,287.0	-190.1	-245.0	51.8	2.00	-2.00	0.00
4,400.0	1.81	232.19	4,386.9	-193.1	-248.9	52.7	2.00	-2.00	0.00
4,490.6	0.00	0.00	4,477.5	-194.0	-250.0	52.9	2.00	-2.00	0.00
BEGIN 12*/10	0' BR								
4,500.0	1.13	315.95	4,486.9	-193.9	-250.1	53.0	12.01	12.01	0.00
4,525.0	4.13	315.95	4,511.9	-193.1	-250.9	54.1	12.00	12.00	0.00
4,550.0	7.13	315.95	4,536.8	-191.3	-252.6	56.6	12.00	12.00	0.00

# **EOG Resources**Planning Report

**b**eog resources

Database: Company:

Well:

EDM

EOG Resources - Artesia

Fairlane 22 Fed #601H

Project: San Site: Fair

Sandoval County (NAD83) Fairlane

Wellbore: Lateral
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Fairlane 22 Fed #601H

KB @ 7273.0usft (Planning Rig) KB @ 7273.0usft (Planning Rig)

Grid

Minimum Curvature

Design:	Plan #1								
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
` '			, ,		, ,	, ,	, ,	, ,	` ,
4,575.0	10.13	315.95	4,561.5	-188.7	-255.2	60.3	12.00	12.00	0.00
4,600.0	13.13	315.95	4,586.0	-185.0	-258.7	65.4	12.00	12.00	0.00
4,625.0	16.13	315.95	4,610.1	-180.5	-263.1	71.7	12.00	12.00	0.00
4,650.0	19.13	315.95	4,634.0	-175.1	-268.3	79.2	12.00	12.00	0.00
4,675.0	22.13	315.95	4,657.4	-168.7	-274.5	88.0	12.00	12.00	0.00
4,700.0	25.13	315.95	4,680.3	-161.5	-281.4	98.0	12.00	12.00	0.00
4,725.0	28.13	315.95	4,702.6	-153.5	-289.2	109.2	12.00	12.00	0.00
4,750.0	31.13	315.95	4,724.3	-144.6	-297.8	121.5	12.00	12.00	0.00
4,775.0	34.13	315.95	4,745.4	-134.9	-307.2	135.0	12.00	12.00	0.00
4,773.0	34.13		4,743.4	-134.9	-307.2	133.0	12.00		0.00
4,800.0	37.13	315.95	4,765.7	-124.4	-317.3	149.5	12.00	12.00	0.00
4,825.0	40.13	315.95	4,785.2	-113.2	-328.1	165.1	12.00	12.00	0.00
4,850.0	43.13	315.95	4,803.9	-101.3	-339.7	181.7	12.00	12.00	0.00
4,875.0	46.13	315.95	4,821.7	-88.7	-351.9	199.2	12.00	12.00	0.00
4,900.0	49.13	315.95	4,838.6	-75.4	-364.7	217.7	12.00	12.00	0.00
4.005.0	EQ 40	245.05	4 OE 4 4	-61.5	270.0	226.0	10.00	12.00	0.00
4,925.0	52.13 55.13	315.95 315.05	4,854.4		-378.2	236.9	12.00		
4,950.0		315.95	4,869.2	-47.0 -32.0	-392.2 -406.7	257.0	12.00	12.00 12.00	0.00
4,975.0	58.13	315.95	4,883.0			277.9	12.00		0.00
5,000.0	61.13	315.95	4,895.6	-16.5	-421.7	299.4	12.00	12.00	0.00
5,025.0	64.13	315.95	4,907.1	-0.6	-437.1	321.6	12.00	12.00	0.00
5,050.0	67.13	315.95	4,917.4	15.8	-452.9	344.3	12.00	12.00	0.00
5,075.0	70.13	315.95	4,926.5	32.5	-469.1	367.5	12.00	12.00	0.00
5,100.0	73.13	315.95	4,934.4	49.6	-485.6	391.2	12.00	12.00	0.00
5,125.0	76.13	315.95	4,941.0	66.9	-502.4	415.3	12.00	12.00	0.00
5,150.0	79.13	315.95	4,946.4	84.5	-519.4	439.6	12.00	12.00	0.00
E 17E 0	00.10	215.05	4 050 F	100.0	E26 E	464.2	12.00	12.00	0.00
5,175.0	82.13	315.95	4,950.5	102.2	-536.5	464.3	12.00	12.00	0.00
5,200.0	85.13	315.95	4,953.2	120.0	-553.8	489.1	12.00	12.00	0.00
5,225.0	88.13	315.95	4,954.7	138.0	-571.1	514.0	12.00	12.00	0.00
5,240.6	90.00	315.95	4,955.0	149.2	-582.0	529.5	11.99	11.99	0.00
_	]FTP 5241' MD (4	•							
5,300.0	90.00	315.95	4,955.0	191.9	-623.3	588.8	0.00	0.00	0.00
5,400.0	90.00	315.95	4,955.0	263.8	-692.8	688.7	0.00	0.00	0.00
5,500.0	90.00	315.95	4,955.0	335.6	-762.3	788.5	0.00	0.00	0.00
5,600.0	90.00	315.95	4,955.0	407.5	-831.8	888.3	0.00	0.00	0.00
5,700.0	90.00	315.95	4,955.0	479.4	-901.4	988.1	0.00	0.00	0.00
5,800.0	90.00	315.95	4,955.0	551.3	-970.9	1,088.0	0.00	0.00	0.00
			,						
5,900.0	90.00	315.95	4,955.0	623.1	-1,040.4	1,187.8	0.00	0.00	0.00
6,000.0	90.00	315.95	4,955.0	695.0	-1,110.0	1,287.6	0.00	0.00	0.00
6,100.0	90.00	315.95	4,955.0	766.9	-1,179.5	1,387.4	0.00	0.00	0.00
6,200.0	90.00	315.95	4,955.0	838.8	-1,249.0	1,487.3	0.00	0.00	0.00
6,300.0	90.00	315.95	4,955.0	910.6	-1,318.5	1,587.1	0.00	0.00	0.00
6,400.0	90.00	315.95	4,955.0	982.5	-1,388.1	1,686.9	0.00	0.00	0.00
6,500.0	90.00	315.95	4,955.0	1,054.4	-1,457.6	1,786.7	0.00	0.00	0.00
6,600.0	90.00	315.95	4,955.0	1,126.3	-1,527.1	1,886.6	0.00	0.00	0.00
6,700.0	90.00	315.95	4,955.0	1,198.1	-1,596.6	1,986.4	0.00	0.00	0.00
6,800.0	90.00	315.95	4,955.0	1,270.0	-1,666.2	2,086.2	0.00	0.00	0.00
6,900.0	90.00	315.95	4,955.0	1,341.9	-1,735.7	2,186.0	0.00	0.00	0.00
7,000.0	90.00	315.95	4,955.0	1,413.8	-1,805.2	2,285.9	0.00	0.00	0.00
7,100.0	90.00	315.95	4,955.0	1,485.6	-1,874.7	2,385.7	0.00	0.00	0.00
7,200.0	90.00	315.95	4,955.0	1,557.5	-1,944.3	2,485.5	0.00	0.00	0.00
7,300.0	90.00	315.95	4,955.0	1,629.4	-2,013.8	2,585.3	0.00	0.00	0.00
7,400.0	90.00	315.95	4,955.0	1,701.3	-2,083.3	2,685.2	0.00	0.00	0.00
7,500.0	90.00	315.95	4,955.0	1,773.1	-2,152.8	2,785.0	0.00	0.00	0.00
7,600.0	90.00	315.95	4,955.0	1,845.0	-2,222.4	2,884.8	0.00	0.00	0.00
7,700.0	90.00	315.95	4,955.0	1,916.9	-2,291.9	2,984.6	0.00	0.00	0.00
.,	22.20		,	,	,==9	,			

# eog resources

# **EOG Resources**

# **Planning Report**

Database: Company:

Project:

EDM

EOG Resources - Artesia Sandoval County (NAD83)

Egirlana

Site: Fairlane
Well: Fairlane 22 Fed #601H

Wellbore: Lateral Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Fairlane 22 Fed #601H

KB @ 7273.0usft (Planning Rig) KB @ 7273.0usft (Planning Rig)

Grid

Minimum Curvature

nned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,800.0	90.00	315.95	4,955.0	1,988.8	-2,361.4	3,084.5	0.00	0.00	0.00
7,900.0 8,000.0 8,100.0 8,200.0	90.00 90.00 90.00 90.00	315.95 315.95 315.95 315.95	4,955.0 4,955.0 4,955.0 4,955.0	2,060.6 2,132.5 2,204.4 2,276.3	-2,431.0 -2,500.5 -2,570.0 -2,639.5	3,184.3 3,284.1 3,383.9 3,483.8	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
8,300.0 8,400.0	90.00 90.00	315.95 315.95	4,955.0 4,955.0	2,348.1 2,420.0	-2,709.1 -2,778.6	3,583.6 3,683.4	0.00	0.00 0.00	0.00 0.00
8,500.0 8,600.0	90.00 90.00	315.95 315.95	4,955.0 4,955.0	2,491.9 2,563.8	-2,848.1 -2,917.6	3,783.2 3,883.1	0.00 0.00	0.00 0.00	0.00 0.00
8,700.0 8,800.0	90.00 90.00	315.95 315.95	4,955.0 4,955.0	2,635.6 2,707.5	-2,987.2 -3,056.7	3,982.9 4,082.7	0.00 0.00	0.00 0.00	0.00 0.00
8,900.0 9,000.0	90.00 90.00	315.95 315.95	4,955.0 4,955.0	2,779.4 2,851.3	-3,126.2 -3,195.7	4,182.6 4,282.4	0.00 0.00	0.00 0.00	0.00 0.00
9,100.0 9,200.0	90.00 90.00	315.95 315.95	4,955.0 4,955.0	2,923.1 2,995.0	-3,265.3 -3,334.8	4,382.2 4,482.0	0.00 0.00	0.00 0.00	0.00 0.00
9,300.0 9,400.0	90.00 90.00	315.95 315.95	4,955.0 4,955.0	3,066.9 3,138.8	-3,404.3 -3,473.8	4,581.9 4,681.7	0.00	0.00	0.00
9,500.0 9,600.0	90.00 90.00 90.00	315.95 315.95	4,955.0 4,955.0	3,210.7 3,282.5	-3,543.4 -3,612.9	4,781.5 4,881.3	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
9,700.0 9,700.0 9,800.0	90.00 90.00 90.00	315.95 315.95 315.95	4,955.0 4,955.0 4,955.0	3,354.4 3,426.3	-3,682.4 -3,752.0	4,981.2 5,081.0	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
9,900.0	90.00	315.95	4,955.0	3,498.2	-3,821.5	5,180.8	0.00	0.00	0.00
10,000.0 10,041.7	90.00 90.00	315.95 315.95	4,955.0 4,955.0	3,570.0 3,600.0	-3,891.0 -3,920.0	5,280.6 5,322.3	0.00 0.00	0.00 0.00	0.00 0.00
[F22F#601H]	PBHL 10042' ME	) (4955' TVD)							

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
[F22F#601H]PBHL - plan hits target center - Point	0.00 er	360.00	4,955.0	3,600.0	-3,920.0	1,835,275.00	1,312,628.00	36° 2' 19.890 N	107° 21' 31.433 W
[F22F#601H]FTP - plan misses target c - Point	0.00 enter by 0.5u	0.00 usft at 5772.3	4,955.0 Susft MD (495	531.0 55.0 TVD, 531	-952.0 I.3 N, -951.6 E	1,832,206.00	1,315,596.00	36° 1' 49.876 N	107° 20' 54.876 W

Plan Annotations				
Measured	l Vertical	Local Co	pordinates	
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
500	` ′	0.0	0.0	BEGIN 2* NUDGE
4,490		-194.0	-250.0	BEGIN 2*/100' BR
5,240	.6 4,955.0	149.2	-582.0	[F22F#601H]FTP 5241' MD (4955' TVD)
10,041	.7 4,955.0	3,600.0	-3,920.0	[F22F#601H]PBHL 10042' MD (4955' TVD)



# United States Department of the Interior



BUREAU OF LAND MANAGEMENT Farmington District Office 6251 College Blvd, Suite A Farmington, New Mexico 87402

In Reply Refer To: 3162.3-1(NMF0110)

\* EOG Resources, Inc.

#601H Fairlane 22 Federal

Lease: NMNM105533 Unit:

SH: SE¼SE¼ Section 22, T.21 N., R.5 W.

BH: NW¼NW¼ Section 22, T.21 N., R.5 W.

Sandoval County, New Mexico

\*Above Data Required on Well Sign

# GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL AND INDIAN LEASES

The following special requirements apply and are effective when **checked**:

A. Note all surface/drilling conditions of approval attached.
B. The required wait on cement (WOC) time will be a minimum of 500 psi compressive strength at 60 degrees. Blowout preventor (BOP) nipple-up operations may then be initiated
C. Test the surface casing to a minimum of psi for 30 minutes.
D. Test all casing strings below the surface casing to .22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield burst) for a minimum of 30 minutes.
E.  Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the Bureau of Land Management, Farmington District Office, Branch of Reservoir Management, 6251 College Blvd. Suite A, Farmington, New Mexico 87402. The effective date of the agreement must be <b>prior</b> to any sales.
F. \( \subseteq \text{ The use of co-flex hose is authorized contingent upon the following:} \)
<b>1.</b> From the BOP to the choke manifold: the co-flex hose must be hobbled on both ends and saddle to prevent whip.
INTERIOR REGION 7 UPPER COLOR FOO REGIN

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

- **2.** From the choke manifold to the discharge tank: the co-flex hoses must be as straight as practical, hobbled on both ends and anchored to prevent whip.
- **3**. The co-flex hose pressure rating must be at least commensurate with approved BOPE.

# I. GENERAL

- A. Full compliance with all applicable laws, regulations, and Onshore Orders, with the approved Permit to drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors. Failure to comply with these requirements and the filing of required reports will result in strict enforcement pursuant to 43 CFR 3163.1 or 3163.2.
- B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or Allotted, (See 43 CFR 3162.6(b)).
- C. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way.
- D. For Wildcat wells only, a drilling operations progress report is to be submitted, to the BLM-Field Office, weekly from the spud date until the well is completed and the Well Completion Report (Form 3160-4) is filed. The report should be on 8-1/2 x 11 inch paper, and each page should identify the well by; operator's name, well number, location and lease number.
- E. As soon as practical, notice is required of all blowouts, fires and accidents involving lifethreatening injuries or loss of life. (See NTL-3A).
- F. Prior approval by the BLM-Authorized Office (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a notice of intent (on a Sundry Notice, Form 3160-5) within three business days (original and three copies of Federal leases and an original and four copies on Indian leases). Any changes to the approved plan or any questions regarding drilling operations should be directed to BLM during regular business hours at 505-564-7600. Emergency program changes after hours should be directed to at Virgil Lucero at 505-793-1836.
- G. The Inspection and Enforcement Section (I&E), phone number (505-564-7750) is to be notified at least 24 hours in advance of BOP test, spudding, cementing, or plugging operations so that a BLM representative may witness the operations.
- H. Unless drilling operations are commenced within two years, approval of the Application for Permit to Drill will expire. A written request for a two years extension may be granted if submitted prior to expiration.
- I. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the tool pusher shall maintain rig surveillance at all time, unless the well is secured with blowout preventers or cement plugs.

J. If for any reason, drilling operations are suspended for more than 90 days, a written notice must be provided to this office outlining your plans for this well.

# II. REPORTING REQUIREMENTS

- A. For reporting purposes, all well Sundry notices, well completion and other well actions shall be referenced by the appropriate lease, communitization agreement and/or unit agreement numbers.
- B. The following reports shall be filed with the BLM-Authorized Officer within 30 days after the work is completed.
  - 1 .Original and three copies on Federal and an Original and five copies on Indian leases of Sundry Notice (Form 3150-5), giving complete information concerning.
    - a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of any and all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.
    - b. Intervals tested, perforated (include; size, number and location of perforations), acidized, or fractured; and results obtained. Provide date work was done on well completion report and completion sundry notice.
    - c. Subsequent Report of Abandonment, show the manner in which the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were replaced, and dates of the operations.
  - 2. Well Completion Report (Form 3160-4) will be submitted with 30 days after well has been completed.
    - a. Initial Bottom Hole Pressure (BHP) for the producing formations. Show the BHP on the completion report. The pressure may be: 1) measured with a bottom hole bomb, or; 2) calculated based on shut in surface pressures (minimum seven day buildup) and fluid level shot.
  - 3. Submit a cement evaluation log, if cement is not circulated to surface.

# III. DRILLER'S LOG

The following shall be entered in the daily driller's log: 1) Blowout preventer pressures tests, including test pressures and results. 2) Blowout preventer tests for proper functioning, 3) Blowout prevention drills conducted, 4) Casing run, including size, grade, weight, and depth set, 5) How pipe was cemented, including amount of cement, type, whether cement circulated to surface, location of cementing tools, etc., 6) Waiting on cement time for each casing string, 7) Casing pressure tests after cementing, including test pressure and results and 8) Estimated amounts of oil and gas recovered and/or produced during drill stem test.

# IV. GAS FLARING

Gas produced from this well may not be vented or flared beyond an initial, authorized test period of \*Days or 50 MMCF following its (completion)(recompletion), whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted. You shall be required to compensate the lessor for the portion of the gas vented or flared without approval which is determined to have been avoidably lost.

\*30 days, unless a longer test period is specifically approved by the authorized officer. The 30-day period will commence upon the first gas to surface.

#### V. SAFETY

- A. All rig heating stoves are to be of the explosion-proof type.
- B. Rig safety lines are to be installed.
- C. Hard hats and other Personal Protective Equipment (PPE) must be utilized.

# VI. CHANGE OF PLANS OR ABANDONMENT

- A. Any changes of plans required in order to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section 1.F.
- B. If the well is dry, it is to be plugged in accordance with 43 CFR 3162.3-4, approval of the proposed plugging program is required as set forth in Section 1.F. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed, type of plugging mud, etc. A Subsequent Report of Abandonment is required as set forth in Section II.B.1c.
- C. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drill site without prior approval from the BLM-Authorized Officer.

# VII. PHONE NUMBERS

- A. For BOPE tests, cementing, and plugging operations the phone number is 505-564-7750 and must be called 24 hours in advance in order that a BLM representative may witness the operations.
- B. Emergency program changes after hours contact:

Virgil Lucero (505) 793-1836 Joe Killins (505) 564-7736 John Hoffman (505) 564-7742

EXIBIT 1a
EOG Resources, Inc.
3M Choke Manifold Equipment

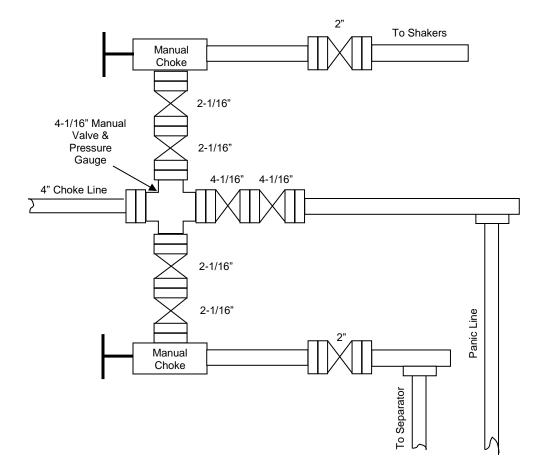
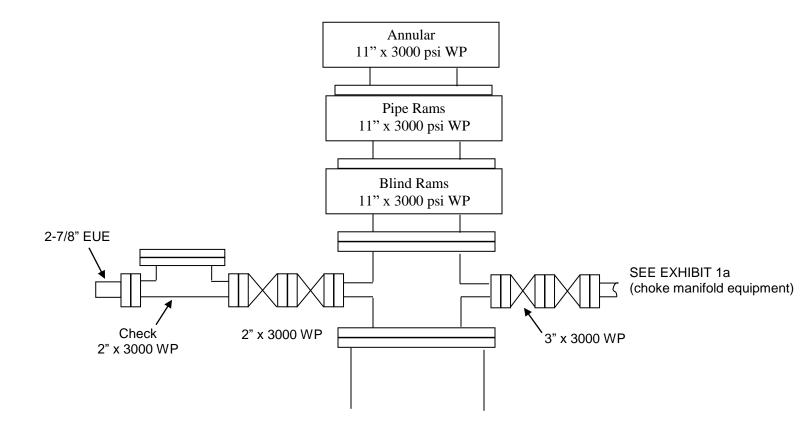


EXHIBIT 1

EOG Resources 3000 PSI BOPE



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

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** 

COMMENTS

Action 12962

#### **COMMENTS**

Operator:			OGRID:	Action Number:	Action Type:
EOG RESOURCES INC	P.O. Box 2267	Midland, TX79702	7377	12962	FORM 3160-3

Created By	Comment	Comment Date
kpickford	KP GEO Review 12/24/2020	12/24/2020

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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 12962

#### **CONDITIONS OF APPROVAL**

Operator:				Action Number:	Action Type:
EOG RESOURCES INC	P.O. Box 2267	Midland, TX79702	7377	12962	FORM 3160-3

OCD	Condition
Reviewer	
kpickford	Notify OCD 24 hours prior to casing & cement
kpickford	Will require a directional survey with the C-104
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
kpickford	Surface casing is required to go to 320'.