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. NMNM139402 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 **DURANGO 14 FED** 607H 2. Name of Operator 9. API Well No. EOG RESOURCES INCORPORATED 30-043-21397 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory WILDCAT/OIL WC 21N4W6;GALLUP 1111 BAGBY ST., 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 14/T21N/R5W/NMP At surface NENE / 1056 FNL / 145 FEL / LAT 36.053496 / LONG -107.324567 At proposed prod. zone SESE / 242 FSL / 27 FEL / LAT 36.071547 / LONG -107.341694 12. County or Parish 14. Distance in miles and direction from nearest town or post office* 13 State SANDOVAL NM 20 miles 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 15 feet location to nearest 640.0 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, FED: NM2308 4581 feet / 12997 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 7116 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 LACEY GRANILLO / Ph: (713) 651-7000 (Electronic Submission) 10/05/2020 Title Contractor Regulatory Specialist Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) 01/14/2021 DAVE J MANKIEWICZ / Ph: (505) 564-7761 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



Received by OCD: 1/21/2021 12:50:42 PM District I 1625 N. French Drive, Hobbs, NM 88240 Phone: (575) 393–6161 Fax: (575) 393–0720

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

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District IV 1220 S. St. Francis Drive, Santa Fe, NM 87505 Phone: (505) 476–3460 Fax: (505) 476–3462

State of New Mexico Energy, Minerals & Natural Resources Department CONSERVATION DIVISION OIL 1220 South St. Francis Drive Santa Fe, NM 87505

NB9°21'W 2619.21 (RECORD)

N89°21'W 2619.21

(RECORD)

 $\begin{array}{c} Page 2 of 25 \\ \text{Form C-102} \end{array}$ Revised August 1, 2011

Submit one copy to Appropriate District Office

AMENDED REPORT

17 OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Lacy Gannille

| Document | Documen LOCATION AND ACREAGE DEDICATION PLAT ¹API Number ²Pool Code ³Pool Name 30-043-21397 WC 21N4W6;GALLUP 98350 WILDCAT OIL Well Numbe Property Code Property Name DURANGO 14 FED 607H 330000 OGRID No. Elevation Operator Name 7377 EOG RESOURCES, INC. 7116 Lacey Granillo Date ¹⁰ Surface Location UL or lot no Feet from the North/South line East/West line Feet from the Printed Name 14 21N 5W 1056 NORTH 145 EAST SANDOVAL lacey_granillo@eogresources.com Δ F-mail Address 11 Bottom Hole Location If Different From Surface SURVEYOR CERTIFICATION North/South line eet from th Feet from the East/West line I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Ρ 3 5W 242 SOUTH 27 EAST SANDOVAL 21N 12 Dedicated Acres ¹⁴ Consolidation Code Joint or Infill ⁵Order No 640.00 Date Revised: SEPTEMBER 30, 2020 Date of Survey: JUNE 30, 2020 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE Signature and Seal of Professional Surveyor C. EDWARDS BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION JASON MEXICO SEW. SAMEYOR REGISTERED 2626.14° CORD) 15269 73 NO °01'39"W 2625.06' (MEASURED) FEDERAL **FEDERAL** 25 (MEASURED) 1'24"E 2626.7 (RECORD) NO *48 W 2619.54 MMMM NMNM (MEASURED) "26'19"E 2628.2 *08 W 2628.78 (RECORD) 139397 139397 *29 W (REC POFESSIONAL (MEASURED) N89 °35 '47 "W 2623.08 60 8 (RECORD) N89 °45 W 2627.13 **DWARDS** N89 °45 W 2624.82 (RECORD) Ş 8 9 N89 °06 '12 "W 2621.86 (MEASURED) (MEASURED) Certificate Number 15269 2421 N89 °11 '01 'W 2627.43 (CALCULATED) N89 °29 '51 "W 2636.59 N89 °45 W 2627.13 (RECORD) (MEASURED) (MEASURED) N89 °07 '41 "W 2629.58 NO °55'31"E 2622.38' (MEASURED) FEDERAL FEDERAL (RECORD) NO °25 'E 2619.21 ' N88 °58 '28 "W 2626.03 9 N89 °45 W 2624.82 MMMM NMNM N89 °39 W 2628.78 (RECORD) N89 °39 'W 2628.78 ' (RECORD) (RECORD) ... NO2 °10 E 2640.00 NO2 "24'32"E 2629. (MEASURED) (RECORD) 139401 139401 (MEASURED) (RECORD) .84 BOTTOM-HOLE 242' FSL 27' FEL SECTION 3-T21N-R5W 62 (CALCULATED) NO1 °18'43"E 5245. 5251. CORD) 5254.63 . 88 N: 1847054.9707 E: 177552.0997 LAT: 36.071531°N LONG: 107.341092°W DATUM: NAD1927 5258. *34 E 11 N01°10'29"E 2621.14' (MEASURED) (RECORD) NO "25 'E 2619.21 ' **FEDERAL**) '52 "E 2634.57 (MEASURED) (RECORD) *25 W 2634.06 24 '54 "E ĮЦ 8 MMMM .48 139396 NEW MEXICO CENTRAL 8 N: 1847117.7005 E: 1317798.7681 LAT: 36.071547 °N LONG: 107.341694 °W N01 (MEASURED) N88 °59 '20 "W 2623.92 , (RECORD) N89 °29 W 2618.88 .29 9 *3*0, N89 °33 W 2620.53 DATUM: NAD1983 NEW MEXICO CENTRAL N88 °59 '07 "W 2611.10 (RECORD) N89 °29 W 2618.88 (RECORD) 8 (MEASURED) S89 °51 W 5240.40 '(RECORD) (CALCULATED) N88 °55 '24"W 2618.01 (MEASURED) 8 N89 °06 '29 'W 2615.86 056 N89 °31 '29 "W 5235.65 ' (CALC) **FEDERAL** *37'14"E 2619.07 (CALCULATED) AZ 30.09° N30°05.5'E 1199.1' (RECORD) *02 'E 2625.81 ' <u>4</u> N89 °33 W 2620.53 MMMM 9 3'18"E 2638.; (MEASURED) (RECORD) 139402 5229.40 ' (MEASURED) (RECORD) NO *23 'E 2646. (RECORD) (MEASURED) UPPERMOST PERF 8' FNL 444' FWL SECTION 13-T21N-R5W SURFACE LOCATION NO °37 '49 'E 2621.46 **FEDERAL** 1056 FNL 145 FEL SECTION 14-T21N-R5W . ES. ON 9 MMMM NORTH 2629.11 (RECORD) 42 9 139402 5238. N: 1841465.0922 N: 1840427.6237 E: 182540.9270 LAT: 36.053480 N LONG: 107.323966 W DATUM: NAD1927 N. 1641405.0922 E: 183142.1018 LAT: 36.056348 °N _ONG: 107.321971 °V DATUM: NAD1927 44 (RECORD) 2 'E 2625.81 ' (MEASURED) *38'45"E 2632.07 ıμ <u>Σ</u> l. 60. 6E. LONG: NO *48 '43 "E 2625. (MEASURED) (RECORD) NO °23 W 2628.12 NORTH 2629.11 (RECORD) NEW MEXICO CENTRAL NEW MEXICO CENTRAL 1841527.7089 1323388.7389 N: 1840490.2338 E: 1322787.5606 LAT: 36.053496 N LONG: 107.324567 W DATUM: NAD1983 NEW MEXICO CENTRAL ,05 LAT: 36.056364 °N LONG: 107.322572 °W DATUM: NAD1983 9 9 NEW MEXICO CENTRAL (MEASURED) N89 °23 '07 "W 2612.56 (MEASURED) N89 °20 '01 "W 2617.23 (MFASURED) (MEASURED) (MEASURED) (MEASURED) °47'06"W 2618.58 N88 °50 '50 'W 2629.25 N89 °03 '13 'W 2617.76 N88 °47 '14 'W 2616.54

N89 °30 'W 2620.86 (RECORD)

N89 °30 W 2620.86

(RECORD)

N89 °53 W 2619.87

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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: 10/1/20		
⊠ Original	Operator & OGRID No.:	EOG Resources, Inc. 7377
☐ Amended - Reason for Amendment:	<u> </u>	
This Gas Capture Plan outlines actions new completion (new drill, recomplete	• •	well/production facility flaring/venting fo
Note: Form C-129 must be submitted and ap	proved prior to exceeding 60 days allowed by	y 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
DURANGO 14 FED 601H	PENDING	A-14-21N-5W	1101 FNL & 152 FEL	2000	Flared	
DURANGO 14 FED 602H	PENDING	A-14-21N-5W	1104 FNL & 127 FEL	2000	Flared	
DURANGO 14 FED 603H	PENDING	A-14-21N-5W	1086 FNL & 150 FEL	2000	Flared	
DURANGO 14 FED 604H	PENDING	A-14-21N-5W	1089 FNL & 125 FEL	2000	Flared	
DURANGO 14 FED 605H	PENDING	A-14-21N-5W	1071 FNL & 147 FEL	2000	Flared	
DURANGO 14 FED 606H	PENDING	A-14-21N-5W	1075 FNL & 123 FEL	2000	Flared	
DURANGO 14 FED 607H	PENDING	A-14-21N-5W	1056 FNL & 145 FEL	2000	Flared	
DURANGO 14 FED 608H	PENDING	A-14-21N-5W	1060 FNL & 121 FEL	2000	Flared	
DURANGO 14 FED 609H	PENDING	A-14-21N-5W	1042 FNL & 143 FEL	2000	Flared	
DURANGO 14 FED 610H	PENDING	A-14-21N-5W	1045 FNL & 118 FEL	2000	Flared	
DURANGO 14 FED 611H	PENDING	A-14-21N-5W	1027 FNL & 141 FEL	2000	Flared	
DURANGO 14 FED 612H	PENDING	A-14-21N-5W	1030 FNL & 116 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 $\geq 30,000^{\circ}$ 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
 - 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

'API Number	[®] Pool Code	³Pool Name WILDCAT OIL	
⁴Property Code		NGO 14 FED	°Well Number 607H
70GRID No. 7377	°op EOG RE	°Elevation 7116'	
	¹⁰ Surf	ace Location	

					- Surrace	Location			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
А	14	21N	5W		1056	NORTH	145	EAST	SANDOVAL
Bottom 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
Р	3	21N	5W		242	SOUTH	27	EAST	SANDOVAL

1. GEOLOGIC NAME OF SURFACE FORMATION:

Nacimiento

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

	MD	TVD
Pictured Cliffs	1,580'	1,555'
Huerfanito Bentonite	1,893'	1,839'
Mesaverde	2,388'	2,273'
Menefee	3,239'	3,028'
Point Lookout	4,006'	3,768'
Mancos Shale	4,163'	3,925'
Gallup	4,804'	4,497'
Horizontal TD	12,997'	4,581'

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

	TVD	
Pictured Cliffs	1,555'	Gas
Mesaverde	1,839'	Gas
Menefee	3,028'	Gas/Oil
Point Lookout	3,768'	Oil
Mancos Shale	3,925'	Oil
Gallup	4,497'	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 (MD)	Interval (TVD)	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Joint Tension	DF _{min} Body Tension
17.5"	0'-300'	300'	13 3/8"	48#	H-40	STC	1.125	1.25	1.60	1.80
12.25"	0' - 3,423'	3,200'	9 5/8"	36#	J-55	LTC	1.125	1.25	1.60	1.80
8.75"	0'- 5,092'	4,581'	5 ½"	17#	P-110	BTC	1.125	1.25	1.60	1.80
8.5"	5,092'-	4,581'	5 ½"	17#	P-110	BTC	1.125	1.25	1.60	1.80
	12,997'									

Cementing Program:

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

Cement Design:

Cuncii	t Desig	11.			
Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /sk	Volume Ft ³	Slurry Description
		0			y 1
300'	315	14.8	1.34	422	Tail: Class 'C' + 2% PF1(Calcium Chloride) (100% excess)
3,423'	1050	12.8	1.79	1879	Lead: 35:65 Poz C + .02 gal/sk Anti Foam + 1% Extender
					+ .13 lb/sk Lost Circulation (TOC @ Surface) (100%
					excess)
	200	14.8	1.33	266	Tail: Class C + 0.13% Anti Foam
12,997'	305	11.9	2.47	753	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 (Defoamer) (TOC @ 500' into previous
					casing string) 35% Excess
	1655	13	1.48	2449	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)

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' - 3,423	WBM	8.8-9.4	30-34	N/c	
Vertical					
3,423' – 12,997'	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) H₂S 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 2239 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 HYDROSTATIC TEST CERTIFICATE						
Customer:				Customer P.O	. Number:	
	GRAN	ID JUNCTION		17875	55	
		HOSE SPECI	FICATIONS			
Type: CHOK		DSE				
GRAD	EE	/ API 7K		Hose Length:	15 FEET	
I.D.	4	INCHES	O.D.	6.11	INCHES	
WORKING PRESSUI	RE	TEST PRESSU	RE	BURST PRESSU	RE	
10,000	PSI	15,000	PSI	N/A	PSI	
David No. 11	-		PLINGS	r		
Part Number		Stem Lot Nur		Ferrule Lot N		
E4.0X64WB E4.0X64WB		8099764 8099764		N4406		
Type of Couplin		009	Die Size:	N440	Б	
	•		Die Size:			
SW	AGE-I	T	6	6.62 INCHES		
		PROC	EDURE			
Hose as:	sembly	pressure tested w	rith water at ambier	of temperature		
		TEST PRESSURE				
	9 3/4	MIN.		N/A	PSI	
Hose Assembly	Seria	al Number:	Hose Serial N		, 0,	
19	7000			10088		
Comments:						
Date:		Tested:		Approved:	17.	
4/10/2013		Bille	Bolok	John L	Me -	

April 10, 2013

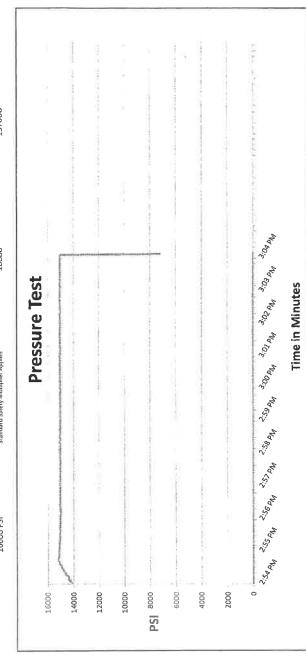
Internal Hydrostatic Test Graph

Customer: Grand J

Midwest Hose & Specialty, Inc.

Pick Ticket #: 197000

'erification	Coupling Method Swage Final O.D. 6.65." Hose Assembly Serial #
Veri	Type of Fitting 4 1/16 10K Die Size 6.62 Hose Serial #
<u>fications</u>	Length 15 0.D 6.11" Burst Pressure Standard Safety Multiplier Applies
Hose Speci	Hose Type E I.D. 4"" Working Pressure 10000 PSI



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

Tested By: Billy Balak

Approved By. Joshua Dahlem

Peak Pressure 15263 PSI

Actual Burst Pressure

Time Held at Test Pressure 93/4 Minutes

Test Pressure 15000 PSI

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EOG Resources - Artesia

Sandoval County (NAD83) Durango Durango 14 Fed #607H

Lateral

Plan: Plan #1

Standard Planning Report

05 October, 2020

EOG Resources

Planning Report

EDM Database:

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

Site:

Well:

Map Zone:

Durango Durango 14 Fed #607H

Wellbore: Lateral Plan #1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Durango 14 Fed #607H KB @ 7134.0usft (Planning Rig) KB @ 7134.0usft (Planning Rig)

Minimum Curvature

Project Sandoval County (NAD83)

US State Plane 1983 Map System: Geo Datum:

North American Datum 1983 New Mexico Central Zone

System Datum:

Mean Sea Level

Durango Site

Northing: 1,840,445.76 usft Site Position: Latitude: 36° 3' 12.145 N From: Мар Easting: 1,322,780.73 usft Longitude: 107° 19' 28.519 W **Position Uncertainty:** Slot Radius: 13-3/16 " **Grid Convergence:** -0.63 0.0 usft

Well Durango 14 Fed #607H

Well Position +N/-S 44.5 usft Northing: 1,840,490.24 usft Latitude: 36° 3' 12.586 N +E/-W 6.8 usft Easting: 1,322,787.56 usft Longitude: 107° 19' 28.442 W

Position Uncertainty 0.0 usft Wellhead Elevation: Ground Level: 7,116.0 usft

Wellbore Lateral Magnetics **Model Name** Sample Date Declination **Dip Angle** Field Strength (°) (°) (nT) 9/24/2020 49.334.35342350 IGRF2020 8.69 62.70

Plan #1 Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0.0 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 323.03 0.0 0.0 0.0

Plan Survey Tool Program Date 10/5/2020

Depth From Depth To

(usft) (usft) Survey (Wellbore)

Tool Name Remarks

0.0 12,997.2 Plan #1 (Lateral) 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	
1,937.2	28.74	53.30	1,877.6	211.0	283.0	2.00	2.00	0.00	53.30	
2,904.6	28.74	53.30	2,725.9	489.0	656.0	0.00	0.00	0.00	0.00	
4,341.8	0.00	0.00	4,103.5	700.0	939.0	2.00	-2.00	0.00	180.00	
5,091.8	90.00	315.00	4,581.0	1,037.6	601.4	12.00	12.00	-6.00	315.00	
12,997.2	90.00	315.00	4,581.0	6,627.5	-4,988.8	0.00	0.00	0.00	0.00 [D14F#607H]PBHL

EOG Resources Planning Report



Database: EDM

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

Site: Durango

Well: Durango 14 Fed #607H

Wellbore: Lateral Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Durango 14 Fed #607H KB @ 7134.0usft (Planning Rig) KB @ 7134.0usft (Planning Rig)

Grid

ned 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
500.0 BEGIN 2*/10	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	2.00	53.30	600.0	1.0	1.4	0.0	2.00	2.00	0.00
700.0	4.00	53.30	699.8	4.2	5.6	0.0	2.00	2.00	0.00
800.0	6.00	53.30	799.5	9.4	12.6	-0.1	2.00	2.00	0.00
900.0	8.00	53.30	898.7	16.7	22.4	-0.1 -0.1	2.00	2.00	0.00
1,000.0	10.00	53.30	997.5	26.0	34.9	-0.2	2.00	2.00	0.00
1,100.0	12.00	53.30	1,095.6	37.4	50.2	-0.3	2.00	2.00	0.00
1,200.0	14.00	53.30	1,193.1	50.9	68.2	-0.4	2.00	2.00	0.00
1,300.0	16.00	53.30	1,289.6	66.3	89.0	-0.5	2.00	2.00	0.00
1,400.0	18.00	53.30	1,385.3	83.8	112.4	-0.7	2.00	2.00	0.00
1,500.0	20.00	53.30	1.479.8	103.3	138.5	-0.8	2.00	2.00	0.00
1,580.4	21.61	53.30	1,555.0	120.3	161.4	-0.9	2.00	2.00	0.00
Pictured Cli		00.00	1,000.0	.20.0		0.0	2.00	2.00	0.00
1,600.0	22.00	53.30	1,573.2	124.7	167.2	-1.0	2.00	2.00	0.00
1,700.0	24.00	53.30	1,665.2	148.0	198.6	-1.0 -1.2	2.00	2.00	0.00
1,800.0	26.00	53.30	1,755.8	173.3	232.5	-1.2 -1.4	2.00	2.00	0.00
1,000.0						-1.4	2.00		
1,893.3	27.87	53.30	1,839.0	198.5	266.3	-1.5	2.00	2.00	0.00
Huerfanito E									
1,900.0	28.00	53.30	1,844.9	200.4	268.8	-1.6	2.00	2.00	0.00
1,937.2	28.74	53.30	1,877.6	211.0	283.0	-1.6	2.00	2.00	0.00
2,000.0	28.74	53.30	1,932.7	229.0	307.2	-1.8	0.00	0.00	0.00
2,100.0	28.74	53.30	2,020.4	257.8	345.8	-2.0	0.00	0.00	0.00
2,200.0	28.74	53.30	2,108.1	286.5	384.3	-2.2	0.00	0.00	0.00
2,300.0	28.74	53.30	2,195.8	315.3	422.9	-2.5	0.00	0.00	0.00
2,388.1	28.74	53.30	2,273.0	340.6	456.9	-2.7	0.00	0.00	0.00
Mesaverde									
2,400.0	28.74	53.30	2,283.4	344.0	461.5	-2.7	0.00	0.00	0.00
2,500.0	28.74	53.30	2,371.1	372.7	500.0	-2.9	0.00	0.00	0.00
			*						
2,600.0	28.74	53.30	2,458.8	401.5	538.6	-3.1	0.00	0.00	0.00
2,700.0	28.74	53.30	2,546.5	430.2	577.1	-3.4	0.00	0.00	0.00
2,800.0	28.74	53.30	2,634.2	459.0	615.7	-3.6	0.00	0.00	0.00
2,904.6	28.74	53.30	2,725.9	489.0 515.6	656.0	-3.8 4.0	0.00	0.00	0.00
3,000.0	26.84	53.30	2,810.3	515.6	691.7	-4.0	2.00	-2.00	0.00
3,100.0	24.84	53.30	2,900.3	541.7	726.6	-4.2	2.00	-2.00	0.00
3,200.0	22.84	53.30	2,991.7	565.8	759.0	-4.4	2.00	-2.00	0.00
3,239.2	22.05	53.30	3,028.0	574.8	771.0	-4.5	2.00	-2.00	0.00
Menefee									
3,300.0	20.84	53.30	3,084.5	588.0	788.8	-4.6	2.00	-2.00	0.00
3,400.0	18.84	53.30	3,178.6	608.3	816.0	-4.7	2.00	-2.00	0.00
3,500.0	16.84	53.30	3,273.8	626.6	840.6	-4.9	2.00	-2.00	0.00
3,600.0	14.84	53.30	3,370.0	642.9	862.4	-5.0	2.00	-2.00	0.00
3,700.0	12.84	53.30	3,467.1	657.2	881.6	-5.1	2.00	-2.00	0.00
3,800.0	10.84	53.30	3,565.0	669.5	898.1	-5.2	2.00	-2.00	0.00
3,900.0	8.84	53.30	3,663.5	679.7	911.7	-5.3	2.00	-2.00	0.00
4,000.0	6.84	53.30	3,762.6	687.8	922.7	-5.4	2.00	-2.00	0.00
4,005.5	6.73	53.30	3,768.0	688.2	923.2	-5.4	2.00	-2.00	0.00
1,000.0	out	00.00	5,7 00.0	300.E	020.2	J. F	2.00	2.00	0.00

EOG Resources

Planning Report

Database: EDM

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

Site: Durango

Well: Durango 14 Fed #607H

Wellbore: Lateral Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Durango 14 Fed #607H KB @ 7134.0usft (Planning Rig) KB @ 7134.0usft (Planning Rig)

Grid

ed Survey									
au 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)
4,100.0 4,163.1	4.84 3.57	53.30 53.30	3,862.0 3,925.0	693.9 696.7	930.8 934.5	-5.4 -5.4	2.00 2.00	-2.00 -2.00	0.00 0.00
Mancos									
4,200.0	2.84	53.30	3,961.8	697.9	936.2	-5.4	2.00	-2.00	0.00
4,300.0 4,341.8	0.84 0.00	53.30 0.00	4,061.7 4,103.5	699.8 700.0	938.8 939.0	-5.5 -5.5	2.00 2.00	-2.00 -2.00	0.00 0.00
KOP 12*/100									
4,350.0 4,375.0 4,400.0	0.99 3.99 6.99	315.00 315.00 315.00	4,111.7 4,136.7 4,161.6	700.1 700.8 702.5	938.9 938.2 936.5	-5.4 -4.3 -1.9	12.06 12.00 12.00	12.06 12.00 12.00	0.00 0.00 0.00
4,425.0	9.99	315.00	4,186.3	705.1	933.9	1.7	12.00	12.00	0.00
4,450.0	12.99	315.00	4,210.8	708.6	930.4	6.6	12.00	12.00	0.00
4,475.0 4,500.0	15.99 18.99	315.00 315.00	4,235.0 4,258.9	713.1 718.4	925.9 920.6	12.8 20.3	12.00 12.00	12.00 12.00	0.00 0.00
4,525.0	21.99	315.00	4,282.3	724.6	914.4	28.9	12.00	12.00	0.00
4,550.0	24.99	315.00	4,305.2	731.6	907.4	38.8	12.00	12.00	0.00
4,575.0	27.99	315.00	4,327.6	739.5	899.5	49.8	12.00	12.00	0.00
4,600.0	30.99	315.00	4,349.3	748.2	890.8	62.0	12.00	12.00	0.00
4,625.0 4,650.0	33.99 36.99	315.00 315.00	4,370.4 4,390.8	757.7 767.9	881.3 871.1	75.3 89.7	12.00 12.00	12.00 12.00	0.00 0.00
4,675.0	39.99	315.00	4,410.3	778.9	860.1	105.1	12.00	12.00	0.00
4,700.0	42.99	315.00	4,429.1	790.7	848.3	121.5	12.00	12.00	0.00
4,725.0	45.99	315.00	4,446.9	803.0	836.0	138.8	12.00	12.00	0.00
4,750.0	48.99	315.00	4,463.8	816.1	822.9	157.1	12.00	12.00	0.00
4,775.0	51.99	315.00	4,479.7	829.7	809.3	176.2	12.00	12.00	0.00
4,800.0 4,804.3	54.99 55.50	315.00 315.00	4,494.6 4,497.0	843.9 846.4	795.1 792.6	196.1 199.6	12.00 12.00	12.00 12.00	0.00 0.00
Gallup									
4,825.0	57.99	315.00	4,508.4	858.6	780.3	216.7	12.00	12.00	0.00
4,850.0 4,875.0	60.99 63.99	315.00 315.00	4,521.1 4,532.6	873.9 889.6	765.1 749.4	238.0 260.0	12.00 12.00	12.00 12.00	0.00 0.00
4,900.0 4,925.0	66.99 69.99	315.00 315.00	4,543.0 4,552.1	905.6 922.1	733.4 716.9	282.5 305.5	12.00 12.00	12.00 12.00	0.00 0.00
4,950.0	72.99	315.00	4,560.1	938.8	700.1	329.0	12.00	12.00	0.00
4,975.0	75.99	315.00	4,566.8	955.9	683.1	352.9	12.00	12.00	0.00
5,000.0	78.99	315.00	4,572.2	973.1	665.9	377.0	12.00	12.00	0.00
5,025.0	81.99	315.00	4,576.3	990.6	648.4	401.4	12.00	12.00	0.00
5,050.0 5,075.0	84.99 87.99	315.00 315.00	4,579.1 4,580.7	1,008.1 1,025.8	630.9 613.2	426.0 450.7	12.00 12.00	12.00 12.00	0.00 0.00
5,073.0	90.00	315.00	4,581.0	1,023.6	601.3	467.4	11.97	11.97	0.00
	EOC 5092' MD (,	,					
5,100.0	90.00	315.00	4,581.0	1,043.4	595.5	475.5	0.00	0.00	0.00
5,200.0	90.00	315.00	4,581.0	1,114.1	524.8	574.5	0.00	0.00	0.00
5,300.0	90.00	315.00	4,581.0	1,184.9	454.1	673.5	0.00	0.00	0.00
5,400.0	90.00	315.00	4,581.0	1,255.6	383.4	772.5	0.00	0.00	0.00
5,500.0 5,600.0	90.00 90.00	315.00 315.00	4,581.0 4,581.0	1,326.3 1,397.0	312.7 242.0	871.6 970.6	0.00 0.00	0.00 0.00	0.00 0.00
5,700.0	90.00	315.00	4,581.0	1,467.7	171.3	1,069.6	0.00	0.00	0.00
5,800.0	90.00	315.00	4,581.0	1,538.4	100.6	1,168.6	0.00	0.00	0.00
5,900.0 6,000.0	90.00 90.00	315.00 315.00	4,581.0 4,581.0	1,609.1 1,679.8	29.8 -40.9	1,267.6 1,366.7	0.00 0.00	0.00 0.00	0.00 0.00
6,100.0	90.00	315.00	4,581.0	1,750.5	-111.6	1,465.7	0.00	0.00	0.00
	90.00	315.00	4,581.0	1,821.2	-182.3	1,564.7	0.00	0.00	0.00

EOG Resources

Planning Report

Database: EDM

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

Site: Durango

Well: Durango 14 Fed #607H

Wellbore: Lateral Design: Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Durango 14 Fed #607H KB @ 7134.0usft (Planning Rig) KB @ 7134.0usft (Planning Rig)

Grid

sign:	FIdII#I								
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)
6,300.0	90.00	315.00	4,581.0	1,891.9	-253.0	1,663.7	0.00	0.00	0.00
6,400.0	90.00	315.00	4,581.0	1,962.7	-323.7	1,762.7	0.00	0.00	0.00
6,500.0	90.00	315.00	4,581.0	2,033.4	-394.4	1,861.8	0.00	0.00	0.00
6,600.0	90.00	315.00	4,581.0	2,104.1	-465.1	1,960.8	0.00	0.00	0.00
6,700.0	90.00	315.00	4,581.0	2,174.8	-535.9	2,059.8	0.00	0.00	0.00
6,800.0	90.00	315.00	4,581.0	2,245.5	-606.6	2,158.8	0.00	0.00	0.00
6,900.0	90.00	315.00	4,581.0	2,316.2	-677.3	2,150.0	0.00	0.00	0.00
7,000.0	90.00	315.00	4,581.0	2,386.9	-748.0	2,356.9	0.00	0.00	0.00
7,100.0	90.00	315.00	4,581.0	2,457.6	-818.7	2,455.9	0.00	0.00	0.00
7,200.0	90.00	315.00	4,581.0	2,528.3	-889.4	2,554.9	0.00	0.00	0.00
7,300.0	90.00	315.00	4,581.0	2,599.0	-960.1	2,653.9	0.00	0.00	0.00
7,400.0	90.00	315.00	4,581.0	2,669.7	-1,030.8	2,752.9	0.00	0.00	0.00
7,500.0	90.00	315.00	4,581.0	2,740.4	-1,101.6	2,851.9	0.00	0.00	0.00
7,600.0	90.00	315.00	4,581.0	2,811.2	-1,172.3	2,951.0	0.00	0.00	0.00
7,700.0	90.00	315.00	4,581.0	2,881.9	-1,243.0	3,050.0	0.00	0.00	0.00
7,800.0	90.00	315.00	4,581.0	2,952.6	-1,313.7	3,149.0	0.00	0.00	0.00
7,900.0	90.00	315.00	4,581.0	3,023.3	-1,384.4	3,248.0	0.00	0.00	0.00
8,000.0	90.00	315.00	4,581.0	3,094.0	-1,455.1	3,347.0	0.00	0.00	0.00
8,100.0	90.00	315.00	4,581.0	3,164.7	-1,433.1	3,446.1	0.00	0.00	0.00
8,200.0	90.00	315.00	4,581.0	3,235.4	-1,596.5	3,545.1	0.00	0.00	0.00
8,300.0	90.00	315.00	4,581.0	3,306.1	-1,667.3	3,644.1	0.00	0.00	0.00
8,400.0	90.00	315.00	4,581.0	3,376.8	-1,738.0	3,743.1	0.00	0.00	0.00
8,500.0	90.00	315.00	4,581.0	3,447.5	-1,808.7	3,842.1	0.00	0.00	0.00
8,600.0	90.00	315.00	4,581.0	3,518.2	-1,879.4	3,941.2	0.00	0.00	0.00
8,700.0	90.00	315.00	4,581.0	3,589.0	-1,950.1	4,040.2	0.00	0.00	0.00
8,800.0	90.00	315.00	4,581.0	3,659.7	-2,020.8	4,139.2	0.00	0.00	0.00
8,900.0	90.00	315.00	4,581.0	3,730.4	-2,091.5	4,238.2	0.00	0.00	0.00
9,000.0	90.00	315.00	4,581.0	3,801.1	-2,162.2	4,337.2	0.00	0.00	0.00
9,100.0	90.00	315.00	4,581.0	3,871.8	-2,233.0	4,436.3	0.00	0.00	0.00
9,200.0	90.00	315.00	4,581.0	3,942.5	-2,303.7	4,535.3	0.00	0.00	0.00
9,300.0	90.00	315.00	4,581.0	4,013.2	-2,303. <i>1</i> -2,374.4	4,634.3	0.00	0.00	0.00
9,400.0	90.00	315.00	4,581.0 4,581.0	4,013.2	-2,374.4 -2,445.1	4,733.3		0.00	
9,500.0	90.00	315.00	4,581.0 4,581.0			4,733.3	0.00	0.00	0.00
				4,154.6	-2,515.8		0.00		0.00
9,600.0	90.00	315.00	4,581.0	4,225.3	-2,586.5	4,931.4	0.00	0.00	0.00
9,700.0	90.00	315.00	4,581.0	4,296.0	-2,657.2	5,030.4	0.00	0.00	0.00
9,800.0	90.00	315.00	4,581.0	4,366.7	-2,727.9	5,129.4	0.00	0.00	0.00
9,900.0	90.00	315.00	4,581.0	4,437.5	-2,798.7	5,228.4	0.00	0.00	0.00
10,000.0	90.00	315.00	4,581.0	4,508.2	-2,869.4	5,327.4	0.00	0.00	0.00
10,100.0	90.00	315.00	4,581.0	4,578.9	-2,940.1	5,426.4	0.00	0.00	0.00
10,200.0	90.00	315.00	4,581.0	4,649.6	-3,010.8	5,525.5	0.00	0.00	0.00
10,300.0	90.00	315.00	4,581.0	4,720.3	-3,081.5	5,624.5	0.00	0.00	0.00
10,400.0	90.00	315.00	4,581.0	4,791.0	-3,152.2	5,723.5	0.00	0.00	0.00
10,500.0	90.00	315.00	4,581.0	4,861.7	-3,222.9	5,822.5	0.00	0.00	0.00
10,600.0	90.00	315.00	4,581.0	4,932.4	-3,222.9	5,921.5	0.00	0.00	0.00
10,700.0	90.00	315.00	4,581.0	5,003.1	-3,364.4	6,020.6	0.00	0.00	0.00
10,800.0	90.00	315.00	4,581.0	5,073.8	-3,435.1	6,119.6	0.00	0.00	0.00
10,900.0	90.00	315.00	4,581.0	5,144.5	-3,505.8	6,218.6	0.00	0.00	0.00
11,000.0	90.00	315.00	4,581.0	5,215.3	-3,576.5	6,317.6	0.00	0.00	0.00
11,100.0	90.00	315.00	4,581.0	5,286.0	-3,647.2	6,416.6	0.00	0.00	0.00
11,200.0	90.00	315.00	4,581.0	5,356.7	-3,717.9	6,515.7	0.00	0.00	0.00
11,300.0	90.00	315.00	4,581.0	5,427.4	-3,788.6	6,614.7	0.00	0.00	0.00
11,400.0	90.00	315.00	4,581.0	5,498.1	-3,859.4	6,713.7	0.00	0.00	0.00
11,500.0	90.00	315.00	4,581.0	5,568.8	-3,930.1	6,812.7	0.00	0.00	0.00
11,600.0	90.00	315.00	4,581.0	5,639.5	-4,000.8	6,911.7	0.00	0.00	0.00

EOG Resources

Planning Report

Database: EDM

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

Site: Durango

Well: Durango 14 Fed #607H
Wellbore: Lateral
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Durango 14 Fed #607H KB @ 7134.0usft (Planning Rig) KB @ 7134.0usft (Planning Rig)

Grid

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)
11,700.0	90.00	315.00	4,581.0	5,710.2	-4,071.5	7,010.8	0.00	0.00	0.00
11,800.0	90.00	315.00	4,581.0	5,780.9	-4,142.2	7,109.8	0.00	0.00	0.00
11,900.0	90.00	315.00	4,581.0	5,851.6	-4,212.9	7,208.8	0.00	0.00	0.00
12,000.0	90.00	315.00	4,581.0	5,922.3	-4,283.6	7,307.8	0.00	0.00	0.00
12,100.0	90.00	315.00	4,581.0	5,993.0	-4,354.3	7,406.8	0.00	0.00	0.00
12,200.0	90.00	315.00	4,581.0	6,063.8	-4,425.1	7,505.9	0.00	0.00	0.00
12,300.0	90.00	315.00	4,581.0	6,134.5	-4,495.8	7,604.9	0.00	0.00	0.00
12,400.0	90.00	315.00	4,581.0	6,205.2	-4,566.5	7,703.9	0.00	0.00	0.00
12,500.0	90.00	315.00	4,581.0	6,275.9	-4,637.2	7,802.9	0.00	0.00	0.00
12,600.0	90.00	315.00	4,581.0	6,346.6	-4,707.9	7,901.9	0.00	0.00	0.00
12,700.0	90.00	315.00	4,581.0	6,417.3	-4,778.6	8,000.9	0.00	0.00	0.00
12,800.0	90.00	315.00	4,581.0	6,488.0	-4,849.3	8,100.0	0.00	0.00	0.00
12,900.0	90.00	315.00	4,581.0	6,558.7	-4,920.0	8,199.0	0.00	0.00	0.00
12,997.2	90.00	315.00	4,581.0	6,627.4	-4,988.8	8,295.2	0.00	0.00	0.00

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
[D14F#607H]FTP - plan hits target cent - Point	0.00 eer	360.00	4,581.0	1,037.6	601.3	1,841,527.87	1,323,388.90	36° 3' 22.912 N	107° 19' 21.259 W
[D14F#607H]PBHL - plan hits target cent - Point	0.00 er	0.00	4,581.0	6,627.5	-4,988.8	1,847,117.70	1,317,798.77	36° 4' 17.571 N	107° 20' 30.097 W

rmations							
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	1,580.4	1,555.0	Pictured Cliffs				
	1,893.3	1,839.0	Huerfanito Bentonite				
	2,388.1	2,273.0	Mesaverde				
	3,239.2	3,028.0	Menefee				
	4,005.5	3,768.0	Point Lookout				
	4,163.1	3,925.0	Mancos				
	4,804.3	4,497.0	Gallup				

Plan Annotations					
Mea	asured	Vertical	Local Coor	dinates	
	epth	Depth	+N/-S	+E/-W	
(ı	usft)	(usft)	(usft)	(usft)	Comment
	500.0	500.0	0.0	0.0	BEGIN 2*/100' NUDGE
	4,341.8	4,103.5	700.0	939.0	KOP 12*/100'
	5,091.8	4,581.0	1,037.6	601.3	[D14F#607H]EOC 5092' MD (4581' TVD)
1	12,997.2	4,581.0	6,627.4	-4,988.8	[D14F#607H]EOL 12997' MD (4581' TVD)

Page 17 of 25 Received by OCD: 1/21/2021 12:50:42 PM DESIGN TARGET DETAILS TVD Easting Northing +N/-S Name +E/-W [D14F#607H]FTP 4581.0 1841527.87 1323388.90 1037.6 601.3 - plan hits target center [D14F#607H]PBHL 6627.5 4581.0 -4988.8 1847117.70 1317798.77 - plan hits target center SECTION DETAILS **Project:Sandoval County (NAD83) VSect** +N/-S +E/-W TFace Sec MD TVD Dleg Inc Azi Site: Durango 0.0 0.00 0.00 0.0 0.00 Well: Durango 14 Fed #607H 0.0 0.00 500.0 0.0 0.00 500.0 0.00 53.30 283.0 -1.6 1937.2 28.74 1877.6 211.0 2.00 53.30 Wellbore: Lateral -3.8 0.00 53.30 2725.9 489.0 656.0 2904.6 28.74 Design: Plan #1 -5.5 0.00 4103.5 700.0 939.0 180.00 4341.8 0.00 **Ground Elevation 7116.0** 467.3 90.00 315.00 1037.6 12.00 315.00 5091.8 4581.0 601.4 8295.3 12997.2 90.00 6627.5 0.00 315.00 4581.0 -4988.8 0.00 Northing 1840490.23 **Easting 1322787.56** KB @ 7134.0usft (Planning Rig) 7950-7800-7500 PROJECT DETAILS: Sandoval County (NAD83) [D14F#607H]EOL 12997' MD (4581' TVD) Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 **Zone: New Mexico Central Zone** System Datum: Mean Sea Level eogresources 220-330-BEGIN 2*/100' NUDGE 550-660-770-880-Azimuths to Grid North 1100 True North: 0.63° 1210 Magnetic North: 9.32° 1320-1430 Magnetic Field 1540-Strength: 49334.4nT 1650-1760 Dip Angle: 62.70° 2550 1870-Date: 9/24/2020 2400 ⊊1980-Model: IGRF2020 2250 02090 (2090) [D14F#607H]HSU 2100-£2200-©2420-<u>2</u>2530 2640-KOP 12*/100' 2750 2860-2970-[D14F#607H]EOC 5092' MD (4581' TVD) 3080-3190 3300-3410 KOP 12*/100' 3520-3630 BEGIN 2*/100' NUDGE 3740 3850-3960-4070-[D14F#607H]EOC 5092' MD (4581' TVD) 4180-4290-West(-)/East(+) (300 usft/in) [D14F#607H]EOL 12997' MD (4581' TVD) 4400-4510 4620-Released to Imaging: 1/26/2021 1:0: 2/202 1:



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.

#607H Durango 14 Fed

Lease: NMNM0139402 Unit:

SH: NE¼NE¼ Section 14, T.21 N., R.5 W.

BH: SE¼SE¼ Section 3, 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 prior to any sales.
F. The use of co-flex hose is authorized contingent upon the following: 1. 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 - HIRER COLORADO RACIN

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

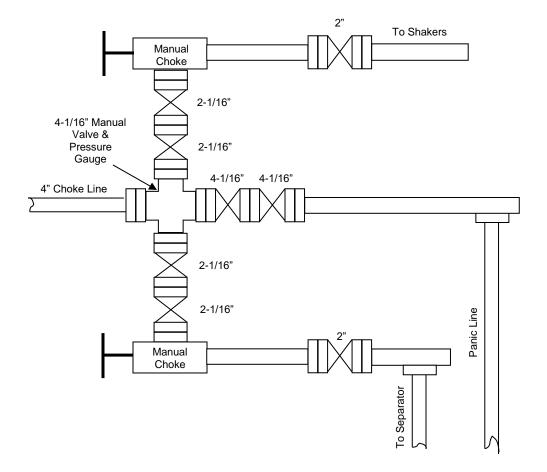
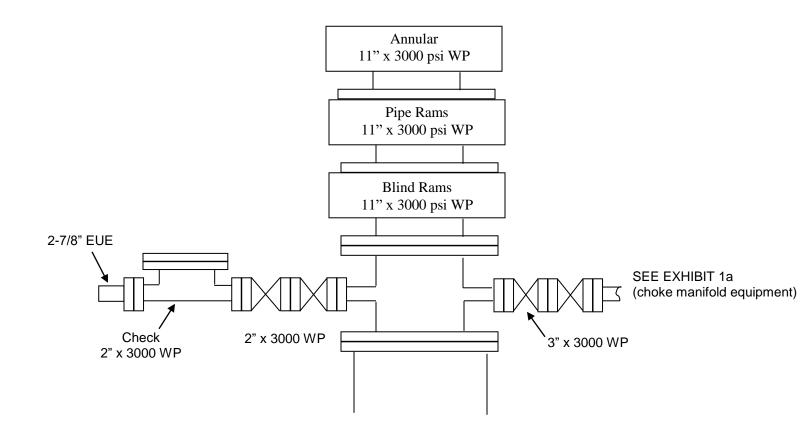


EXHIBIT 1

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 15258

COMMENTS

Operator:			OGRID:	Action Number:	Action Type:
EOG RESOURCES INC	P.O. Box 2267	Midland, TX79702	7377	15258	FORM 3160-3

Created By	Comment	Comment Date
kpickford	KP GEO Review 1/22/2020	01/22/2021

<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**

CONDITIONS

Action 15258

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
EOG RESOURCES INC	P.O. Box 2267	Midland, TX79702	7377	15258	FORM 3160-3

OCD Reviewer	Condition
kpickford	Surface Casing is required go to 320'
kpickford	Notify OCD 24 hours prior to casing & cement
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104
kpickford	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 zones and shall immediately set in cement the water protection string
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