

Form 3160-3
(June 2015)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM105533
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: ☐ Hydraulic Fracturing ☒ Single Zone ☐ Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator EOG RESOURCES INCORPORATED		8. Lease Name and Well No. FAIRLANE 22 FED 607H
3a. Address 1111 BAGBY SKY LOBBY2, HOUSTON, TX 77002	3b. Phone No. (include area code) (713) 651-7000	9. API Well No. 30 043 21398
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENW / 590 FSL / 953 FEL / LAT 36.029609 / LONG -107.345036 At proposed prod. zone NENW / 232 FNL / 1839 FWL / LAT 36.0414227 / LONG -107.3532914		10. Field and Pool, or Exploratory WILDCAT/OIL WC 21N4W6;GALLUP 11. Sec., T. R. M. or Blk. and Survey or Area SEC 22/T21N/R5W/NMP
14. Distance in miles and direction from nearest town or post office* 21 miles		12. County or Parish SANDOVAL
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 582 feet		13. State NM
16. No of acres in lease		17. Spacing Unit dedicated to this well 280.0
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 15 feet		20. BLM/BIA Bond No. in file FED: NM2308
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7254 feet		22. Approximate date work will start* 08/24/2020
		23. Estimated duration 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 Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the 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 BLM. |

25. Signature (Electronic Submission)	Name (Printed/Typed) TINA HUERTA / Ph: (713) 651-7000	Date 08/11/2020
Title Regulatory Specialist		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) DAVE MANKIEWICZ / Ph: (505) 564-7761	Date 12/21/2020
Title AFM-Minerals		
Office 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)



District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 3004321352	² Pool Code 98350	³ Pool Name WC 21N4W6;GALLUP WILDCAT OIL
⁴ Property Code 330001	⁵ Property Name FAIRLANE 22 FED	
⁷ OGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁶ Well Number 607H
		⁹ Elevation 7254'

¹⁰Surface Location

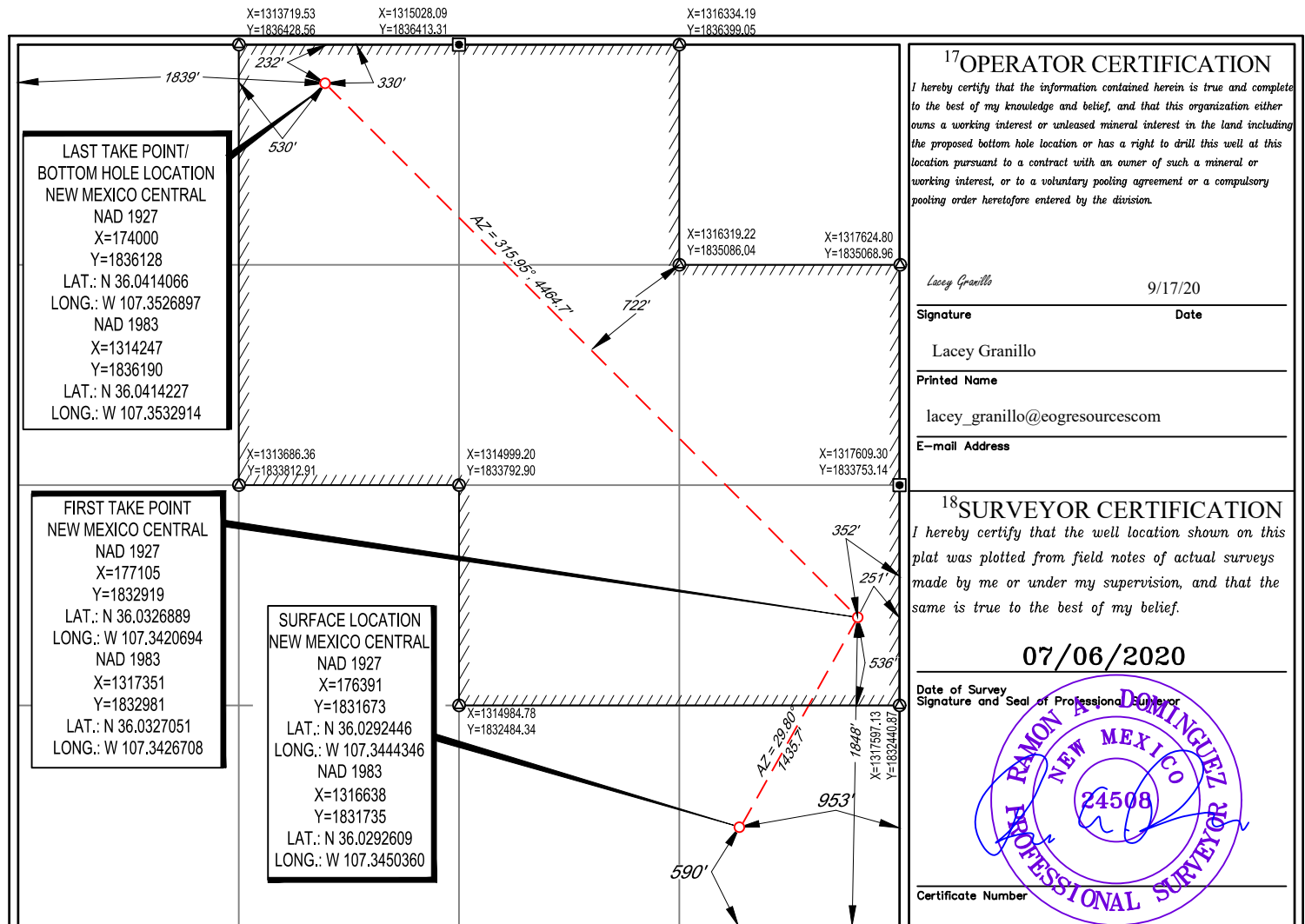
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	22	21-N	5-W	-	590'	SOUTH	953'	EAST	SANDOVAL

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	22	21-N	5-W	-	232'	NORTH	1839	WEST	SANDOVAL

¹² Dedicated Acres 280	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
---	-------------------------------	----------------------------------	-------------------------

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



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

Submit Original
to Appropriate
District Office

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

**EOG RESOURCES, INC.
FAIRLANE 22 FED NO. 607H**

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code		³ Pool Name WILDCAT OIL					
⁴ Property Code		⁵ Property Name FAIRLANE 22 FED						⁶ Well Number 607H	
⁷ OGRID No. 7377		⁸ Operator Name EOG RESOURCES, INC.						⁹ Elevation 7254'	
¹⁰ Surface Location									
UL or lot no. P	Section 22	Township 21-N	Range 5-W	Lot Idn -	Feet from the 590'	North/South line SOUTH	Feet from the 953'	East/West line EAST	County SANDOVAL
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. C	Section 22	Township 21-N	Range 5-W	Lot Idn -	Feet from the 232'	North/South line NORTH	Feet from the 1839	East/West line WEST	County SANDOVAL
¹² Dedicated Acres 280		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

1. GEOLOGIC NAME OF SURFACE FORMATION:

Nacimiento

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

	MD	TVD
Pictured Cliffs	1,489'	1,467'
Huerfanito Bentonite	1,777'	1,730'
Mesaverde	2,268'	2,144'
Menefee	3,225'	2,929'
Point Lookout	4,127'	3,789'
Mancos Shale	4,248'	3,909'
Gallup	4,763'	4,404'
Horizontal TD	9,676'	4,600'

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.

**EOG RESOURCES, INC.
FAIRLANE 22 FED NO. 607H**

4. CASING PROGRAM - NEW

Hole & Casing String:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Joint Tension	DF _{min} Body 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'- 5,212'	5 1/2"	17#	P-110	BTC	1.125	1.25	1.60	1.80
8.5"	5,215'-9,676'	5 1/2"	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 intermediate and 35% excess in production string.

Cement Design:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /sk	Volume Ft ³	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) (100% excess)
	200	14.8	1.33	266	Tail: Class C + 0.13% Anti Foam
9,676'	350	11.9	2.47	865	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
	935	13	1.48	1384	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.

EOG RESOURCES, INC.
FAIRLANE 22 FED NO. 607H

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' Vertical	WBM	8.8-9.4	30-34	N/c	
3,200' – 9,676' Curve/Lateral	WBM	8.8-9.4	30-34	<10	OBM 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.

**EOG RESOURCES, INC.
FAIRLANE 22 FED NO. 607H**

**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 2248 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.

**EOG RESOURCES, INC.
FAIRLANE 22 FED NO. 607H**

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: GRAND JUNCTION		Customer P.O. Number: 178755	
HOSE SPECIFICATIONS			
Type: CHOKER HOSE GRADE E / API 7K		Hose Length: 15 FEET	
I.D. 4 INCHES		O.D. 6.11 INCHES	
WORKING PRESSURE 10,000 PSI	TEST PRESSURE 15,000 PSI	BURST PRESSURE N/A PSI	
COUPLINGS			
Part Number E4.0X64WB E4.0X64WB	Stem Lot Number 8099764 8099764	Ferrule Lot Number N4406 N4406	
Type of Coupling: SWAGE-IT		Die Size: 6.62 INCHES	
PROCEDURE			
<u>Hose assembly pressure tested with water at ambient temperature.</u>			
TIME HELD AT TEST PRESSURE 9 3/4 MIN.		ACTUAL BURST PRESSURE: N/A PSI	
Hose Assembly Serial Number: 197000		Hose Serial Number: 10088	
Comments:			
Date: 4/10/2013	Tested: <i>Billy Belek</i>		Approved: <i>John Miller</i>

April 10, 2013

Internal Hydrostatic Test Graph

Midwest Hose
& Specialty, Inc.

Customer: Grand J

Pick Ticket #: 197000

Hose Specifications

Hose Type E
I.D. 4"
Working Pressure 10000 PSI

Length 15'
O.D. 6.11"

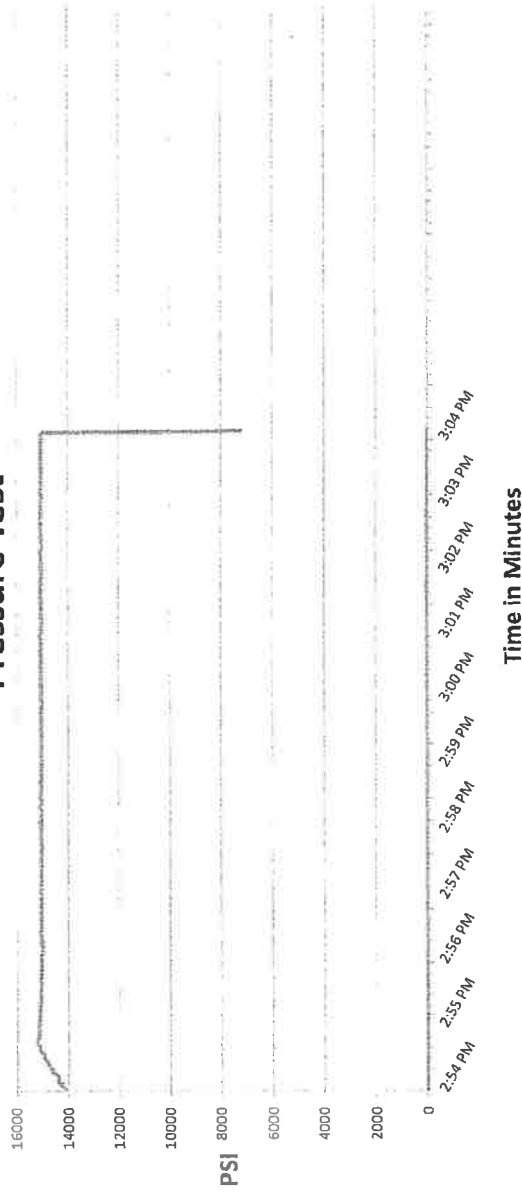
Verification

Type of Fitting 4 1/16 10K
Die Size 6.62
Hose Serial # 10088

Coupling Method Swage
Final O.D. 6.65"
Hose Assembly Serial # 197000

Standard Safety Multiplier Applies

Pressure Test



Test Pressure
15000 PSI

Time Held at Test Pressure
9 3/4 Minutes

Actual Burst Pressure

Peak Pressure
15263 PSI

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

Tested By: Billy Balak

Approved By: Joshua Dahlem



EOG Resources - Artesia

Sandoval County (NAD83)

Fairlane

Fairlane 22 Fed #607H

Lateral

Plan: Plan #1

Standard Planning Report

27 July, 2020



EOG Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Fairlane 22 Fed #607H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 7272.0usft
Project:	Sandoval County (NAD83)	MD Reference:	KB @ 7272.0usft
Site:	Fairlane	North Reference:	Grid
Well:	Fairlane 22 Fed #607H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Project	Sandoval County (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site	Fairlane					
Site Position:		Northing:	1,831,645.00 usft	Latitude:	36° 1' 44.449 N	
From:	Map	Easting:	1,316,678.00 usft	Longitude:	107° 20' 41.628 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.64 °

Well	Fairlane 22 Fed #607H					
Well Position	+N/-S	90.0 usft	Northing:	1,831,735.00 usft	Latitude:	36° 1' 45.335 N
	+E/-W	-40.0 usft	Easting:	1,316,638.00 usft	Longitude:	107° 20' 42.127 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	7,254.0 usft

Wellbore	Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/16/2020	8.71	62.68	49,336.55458985

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	331.78

Plan Survey Tool Program	Date	7/27/2020		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	9,676.1	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	
2,306.9	38.36	49.17	2,174.9	380.9	440.9	2.12	2.12	0.00	49.17	
2,654.7	38.36	49.17	2,447.6	522.1	604.1	0.00	0.00	0.00	0.00	
4,461.6	0.00	360.00	4,122.5	903.0	1,045.0	2.12	-2.12	0.00	180.00	
5,211.6	90.00	315.95	4,600.0	1,246.2	713.0	12.00	12.00	-5.87	315.95	
9,676.1	90.00	315.95	4,600.0	4,455.0	-2,391.0	0.00	0.00	0.00	0.00	[F22F#607H]PBHL

EOG Resources

Planning Report



Database:	EDM	Local Co-ordinate Reference:	Well Fairlane 22 Fed #607H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 7272.0usft
Project:	Sandoval County (NAD83)	MD Reference:	KB @ 7272.0usft
Site:	Fairlane	North Reference:	Grid
Well:	Fairlane 22 Fed #607H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
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)
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
NUDGE 2°/100'									
600.0	2.12	49.17	600.0	1.2	1.4	0.4	2.12	2.12	0.00
700.0	4.25	49.17	699.8	4.8	5.6	1.6	2.12	2.12	0.00
800.0	6.37	49.17	799.4	10.9	12.6	3.6	2.12	2.12	0.00
900.0	8.49	49.17	898.5	19.3	22.4	6.5	2.12	2.12	0.00
1,000.0	10.62	49.17	997.1	30.2	34.9	10.1	2.12	2.12	0.00
1,100.0	12.74	49.17	1,095.1	43.4	50.3	14.5	2.12	2.12	0.00
1,200.0	14.86	49.17	1,192.2	59.0	68.3	19.7	2.12	2.12	0.00
1,300.0	16.98	49.17	1,288.3	77.0	89.1	25.7	2.12	2.12	0.00
1,400.0	19.11	49.17	1,383.4	97.2	112.5	32.5	2.12	2.12	0.00
1,500.0	21.23	49.17	1,477.3	119.8	138.6	40.0	2.12	2.12	0.00
1,600.0	23.35	49.17	1,569.8	144.6	167.3	48.3	2.12	2.12	0.00
1,700.0	25.48	49.17	1,660.8	171.6	198.6	57.3	2.12	2.12	0.00
1,800.0	27.60	49.17	1,750.3	200.8	232.4	67.0	2.12	2.12	0.00
1,900.0	29.72	49.17	1,838.0	232.1	268.7	77.5	2.12	2.12	0.00
2,000.0	31.85	49.17	1,924.0	265.6	307.4	88.7	2.12	2.12	0.00
2,100.0	33.97	49.17	2,007.9	301.1	348.5	100.5	2.12	2.12	0.00
2,200.0	36.09	49.17	2,089.8	338.7	391.9	113.1	2.12	2.12	0.00
2,306.9	38.36	49.17	2,174.9	380.9	440.9	127.2	2.12	2.12	0.00
2,400.0	38.36	49.17	2,247.9	418.7	484.6	139.8	0.00	0.00	0.00
2,500.0	38.36	49.17	2,326.3	459.3	531.5	153.3	0.00	0.00	0.00
2,600.0	38.36	49.17	2,404.7	499.9	578.5	166.9	0.00	0.00	0.00
2,654.7	38.36	49.17	2,447.6	522.1	604.1	174.3	0.00	0.00	0.00
2,700.0	37.40	49.17	2,483.4	540.3	625.2	180.4	2.12	-2.12	0.00
2,800.0	35.28	49.17	2,563.9	579.0	670.0	193.3	2.12	-2.12	0.00
2,900.0	33.15	49.17	2,646.6	615.8	712.6	205.6	2.12	-2.12	0.00
3,000.0	31.03	49.17	2,731.3	650.5	752.8	217.2	2.12	-2.12	0.00
3,100.0	28.91	49.17	2,817.9	683.1	790.6	228.1	2.12	-2.12	0.00
3,200.0	26.78	49.17	2,906.4	713.7	825.9	238.3	2.12	-2.12	0.00
3,300.0	24.66	49.17	2,996.4	742.1	858.8	247.7	2.12	-2.12	0.00
3,400.0	22.54	49.17	3,088.1	768.2	889.0	256.5	2.12	-2.12	0.00
3,500.0	20.41	49.17	3,181.1	792.2	916.7	264.5	2.12	-2.12	0.00
3,600.0	18.29	49.17	3,275.5	813.8	941.8	271.7	2.12	-2.12	0.00
3,700.0	16.17	49.17	3,371.0	833.2	964.2	278.2	2.12	-2.12	0.00
3,800.0	14.05	49.17	3,467.5	850.2	983.9	283.9	2.12	-2.12	0.00
3,900.0	11.92	49.17	3,565.0	864.9	1,000.9	288.8	2.12	-2.12	0.00
4,000.0	9.80	49.17	3,663.2	877.3	1,015.2	292.9	2.12	-2.12	0.00
4,100.0	7.68	49.17	3,762.0	887.2	1,026.7	296.2	2.12	-2.12	0.00
4,200.0	5.55	49.17	3,861.3	894.7	1,035.4	298.7	2.12	-2.12	0.00
4,300.0	3.43	49.17	3,961.0	899.8	1,041.3	300.4	2.12	-2.12	0.00
4,400.0	1.31	49.17	4,060.9	902.5	1,044.5	301.3	2.12	-2.12	0.00
4,461.6	0.00	360.00	4,122.5	903.0	1,045.0	301.5	2.12	-2.12	0.00
KOP 12°/100'									
4,475.0	1.61	315.95	4,135.9	903.1	1,044.9	301.7	12.01	12.01	0.00
4,500.0	4.61	315.95	4,160.9	904.1	1,043.9	303.0	12.00	12.00	0.00
4,525.0	7.61	315.95	4,185.7	906.0	1,042.1	305.5	12.00	12.00	0.00
4,550.0	10.61	315.95	4,210.4	908.9	1,039.3	309.3	12.00	12.00	0.00

EOG Resources

Planning Report



Database:	EDM	Local Co-ordinate Reference:	Well Fairlane 22 Fed #607H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 7272.0usft
Project:	Sandoval County (NAD83)	MD Reference:	KB @ 7272.0usft
Site:	Fairlane	North Reference:	Grid
Well:	Fairlane 22 Fed #607H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
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	13.61	315.95	4,234.8	912.6	1,035.7	314.4	12.00	12.00	0.00
4,600.0	16.61	315.95	4,259.0	917.3	1,031.1	320.6	12.00	12.00	0.00
4,625.0	19.61	315.95	4,282.7	922.9	1,025.7	328.1	12.00	12.00	0.00
4,650.0	22.61	315.95	4,306.1	929.4	1,019.5	336.8	12.00	12.00	0.00
4,675.0	25.61	315.95	4,328.9	936.7	1,012.4	346.6	12.00	12.00	0.00
4,700.0	28.61	315.95	4,351.1	944.9	1,004.5	357.6	12.00	12.00	0.00
4,725.0	31.61	315.95	4,372.7	953.9	995.8	369.6	12.00	12.00	0.00
4,750.0	34.61	315.95	4,393.7	963.7	986.3	382.8	12.00	12.00	0.00
4,775.0	37.61	315.95	4,413.9	974.3	976.0	396.9	12.00	12.00	0.00
4,800.0	40.61	315.95	4,433.3	985.6	965.1	412.1	12.00	12.00	0.00
4,825.0	43.61	315.95	4,451.8	997.7	953.4	428.2	12.00	12.00	0.00
4,850.0	46.61	315.95	4,469.5	1,010.4	941.1	445.3	12.00	12.00	0.00
4,875.0	49.61	315.95	4,486.2	1,023.8	928.1	463.2	12.00	12.00	0.00
4,900.0	52.61	315.95	4,501.9	1,037.8	914.6	481.9	12.00	12.00	0.00
4,925.0	55.61	315.95	4,516.5	1,052.3	900.5	501.4	12.00	12.00	0.00
4,950.0	58.61	315.95	4,530.1	1,067.4	885.9	521.6	12.00	12.00	0.00
4,975.0	61.61	315.95	4,542.5	1,083.0	870.9	542.4	12.00	12.00	0.00
5,000.0	64.61	315.95	4,553.8	1,099.0	855.4	563.9	12.00	12.00	0.00
5,025.0	67.61	315.95	4,564.0	1,115.5	839.5	585.9	12.00	12.00	0.00
5,050.0	70.61	315.95	4,572.9	1,132.2	823.2	608.3	12.00	12.00	0.00
5,075.0	73.61	315.95	4,580.6	1,149.3	806.7	631.2	12.00	12.00	0.00
5,100.0	76.61	315.95	4,587.0	1,166.7	789.9	654.5	12.00	12.00	0.00
5,125.0	79.61	315.95	4,592.1	1,184.3	772.9	678.0	12.00	12.00	0.00
5,150.0	82.61	315.95	4,596.0	1,202.0	755.7	701.7	12.00	12.00	0.00
5,175.0	85.61	315.95	4,598.6	1,219.9	738.4	725.7	12.00	12.00	0.00
5,200.0	88.61	315.95	4,599.8	1,237.8	721.1	749.7	12.00	12.00	0.00
5,211.6	90.00	315.95	4,600.0	1,246.2	713.0	760.8	11.99	11.99	0.00
[F22F#607H]EOC 5212' (4600' TVD)									
5,300.0	90.00	315.95	4,600.0	1,309.7	651.6	845.9	0.00	0.00	0.00
5,400.0	90.00	315.95	4,600.0	1,381.6	582.0	942.1	0.00	0.00	0.00
5,500.0	90.00	315.95	4,600.0	1,453.5	512.5	1,038.3	0.00	0.00	0.00
5,600.0	90.00	315.95	4,600.0	1,525.3	443.0	1,134.5	0.00	0.00	0.00
5,700.0	90.00	315.95	4,600.0	1,597.2	373.5	1,230.7	0.00	0.00	0.00
5,800.0	90.00	315.95	4,600.0	1,669.1	303.9	1,326.9	0.00	0.00	0.00
5,900.0	90.00	315.95	4,600.0	1,741.0	234.4	1,423.2	0.00	0.00	0.00
6,000.0	90.00	315.95	4,600.0	1,812.8	164.9	1,519.4	0.00	0.00	0.00
6,100.0	90.00	315.95	4,600.0	1,884.7	95.3	1,615.6	0.00	0.00	0.00
6,200.0	90.00	315.95	4,600.0	1,956.6	25.8	1,711.8	0.00	0.00	0.00
6,300.0	90.00	315.95	4,600.0	2,028.5	-43.7	1,808.0	0.00	0.00	0.00
6,400.0	90.00	315.95	4,600.0	2,100.3	-113.2	1,904.2	0.00	0.00	0.00
6,500.0	90.00	315.95	4,600.0	2,172.2	-182.8	2,000.4	0.00	0.00	0.00
6,600.0	90.00	315.95	4,600.0	2,244.1	-252.3	2,096.6	0.00	0.00	0.00
6,700.0	90.00	315.95	4,600.0	2,316.0	-321.8	2,192.8	0.00	0.00	0.00
6,800.0	90.00	315.95	4,600.0	2,387.8	-391.3	2,289.0	0.00	0.00	0.00
6,900.0	90.00	315.95	4,600.0	2,459.7	-460.9	2,385.2	0.00	0.00	0.00
7,000.0	90.00	315.95	4,600.0	2,531.6	-530.4	2,481.5	0.00	0.00	0.00
7,100.0	90.00	315.95	4,600.0	2,603.5	-599.9	2,577.7	0.00	0.00	0.00
7,200.0	90.00	315.95	4,600.0	2,675.3	-669.5	2,673.9	0.00	0.00	0.00
7,300.0	90.00	315.95	4,600.0	2,747.2	-739.0	2,770.1	0.00	0.00	0.00
7,400.0	90.00	315.95	4,600.0	2,819.1	-808.5	2,866.3	0.00	0.00	0.00
7,500.0	90.00	315.95	4,600.0	2,891.0	-878.0	2,962.5	0.00	0.00	0.00
7,600.0	90.00	315.95	4,600.0	2,962.8	-947.6	3,058.7	0.00	0.00	0.00
7,700.0	90.00	315.95	4,600.0	3,034.7	-1,017.1	3,154.9	0.00	0.00	0.00
7,800.0	90.00	315.95	4,600.0	3,106.6	-1,086.6	3,251.1	0.00	0.00	0.00



EOG Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Fairlane 22 Fed #607H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 7272.0usft
Project:	Sandoval County (NAD83)	MD Reference:	KB @ 7272.0usft
Site:	Fairlane	North Reference:	Grid
Well:	Fairlane 22 Fed #607H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

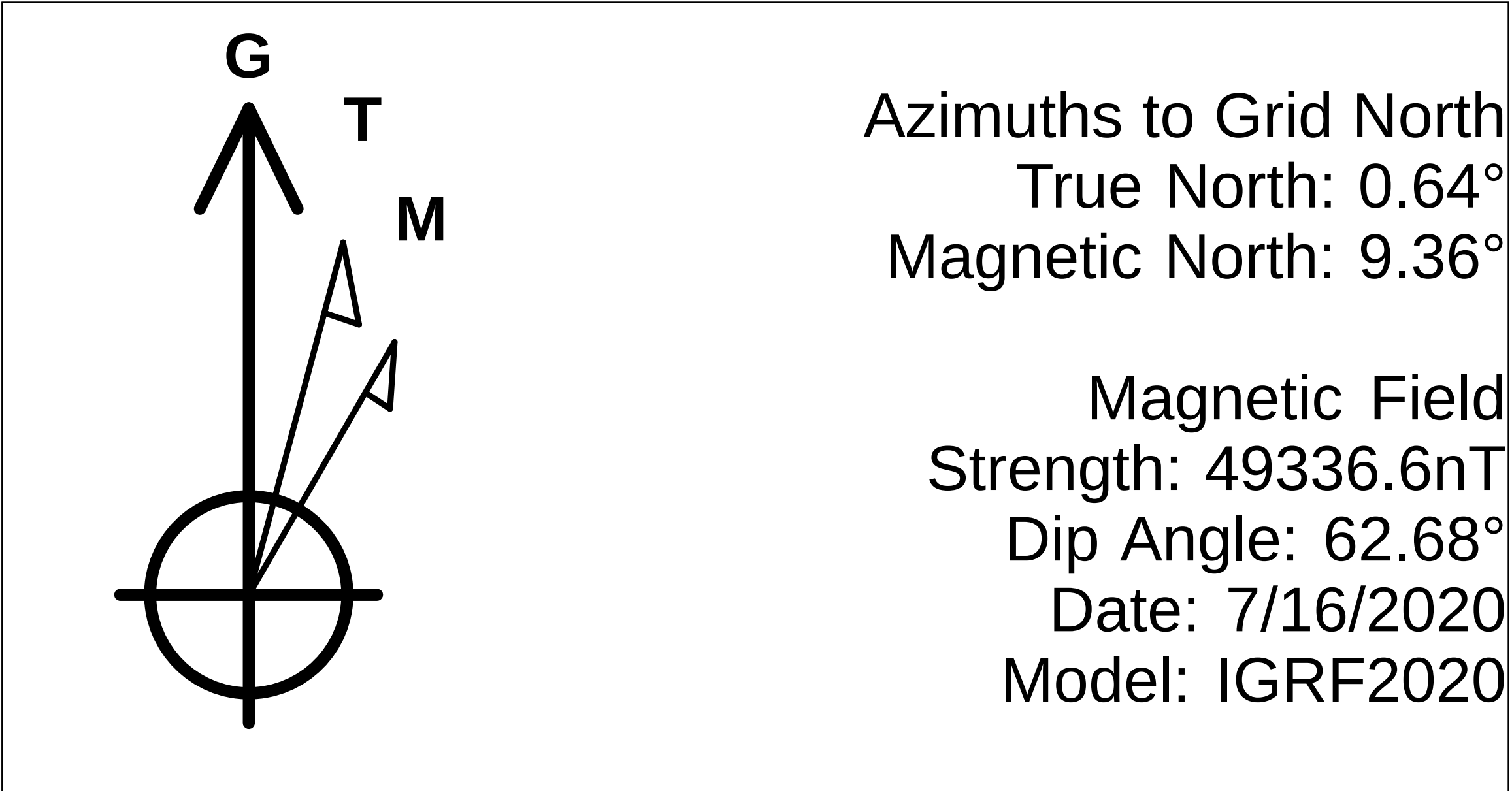
Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
7,900.0	90.00	315.95	4,600.0	3,178.5	-1,156.1	3,347.3	0.00	0.00	0.00	
8,000.0	90.00	315.95	4,600.0	3,250.3	-1,225.7	3,443.5	0.00	0.00	0.00	
8,100.0	90.00	315.95	4,600.0	3,322.2	-1,295.2	3,539.8	0.00	0.00	0.00	
8,200.0	90.00	315.95	4,600.0	3,394.1	-1,364.7	3,636.0	0.00	0.00	0.00	
8,300.0	90.00	315.95	4,600.0	3,466.0	-1,434.3	3,732.2	0.00	0.00	0.00	
8,400.0	90.00	315.95	4,600.0	3,537.8	-1,503.8	3,828.4	0.00	0.00	0.00	
8,500.0	90.00	315.95	4,600.0	3,609.7	-1,573.3	3,924.6	0.00	0.00	0.00	
8,600.0	90.00	315.95	4,600.0	3,681.6	-1,642.8	4,020.8	0.00	0.00	0.00	
8,700.0	90.00	315.95	4,600.0	3,753.5	-1,712.4	4,117.0	0.00	0.00	0.00	
8,800.0	90.00	315.95	4,600.0	3,825.3	-1,781.9	4,213.2	0.00	0.00	0.00	
8,900.0	90.00	315.95	4,600.0	3,897.2	-1,851.4	4,309.4	0.00	0.00	0.00	
9,000.0	90.00	315.95	4,600.0	3,969.1	-1,920.9	4,405.6	0.00	0.00	0.00	
9,100.0	90.00	315.95	4,600.0	4,041.0	-1,990.5	4,501.8	0.00	0.00	0.00	
9,200.0	90.00	315.95	4,600.0	4,112.8	-2,060.0	4,598.1	0.00	0.00	0.00	
9,300.0	90.00	315.95	4,600.0	4,184.7	-2,129.5	4,694.3	0.00	0.00	0.00	
9,400.0	90.00	315.95	4,600.0	4,256.6	-2,199.1	4,790.5	0.00	0.00	0.00	
9,500.0	90.00	315.95	4,600.0	4,328.5	-2,268.6	4,886.7	0.00	0.00	0.00	
9,600.0	90.00	315.95	4,600.0	4,400.3	-2,338.1	4,982.9	0.00	0.00	0.00	
9,676.1	90.00	315.95	4,600.0	4,455.0	-2,391.0	5,056.1	0.00	0.00	0.00	
[F22F#607H]EOL 9676' (4600' TVD)										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
[F22F#607H]FTP	0.00	0.00	4,600.0	1,246.0	713.0	1,832,981.00	1,317,351.00	36° 1' 57.735 N	107° 20' 33.618 W	
- plan misses target center by 0.1usft at 5211.5usft MD (4600.0 TVD, 1246.1 N, 713.1 E)										
- Point										
[F22F#607H]PBHL	0.00	0.00	4,600.0	4,455.0	-2,391.0	1,836,190.00	1,314,247.00	36° 2' 29.120 N	107° 21' 11.848 W	
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
500.0	500.0	0.0	0.0	NUDGE 2*/100'	
4,461.6	4,122.5	903.0	1,045.0	KOP 12*/100'	
5,211.6	4,600.0	1,246.2	713.0	[F22F#607H]EOC 5212' (4600' TVD)	
9,676.1	4,600.0	4,455.0	-2,391.0	[F22F#607H]EOL 9676' (4600' TVD)	

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
[F22F#607H]FTP	4600.0	1246.0	713.0	1832981.00	1317351.00
- plan misses target center by 0.1usft at 5211.5usft MD (4600.0 TVD, 1246.1 N, 713.1 E)					
[F22F#607H]PBHL	4600.0	4455.0	-2391.0	1836190.00	1314247.00
- plan hits target center					



SECTION DETAILS									
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	2306.9	38.36	49.17	2174.9	380.9	440.9	2.12	49.17	127.2
4	2654.7	38.36	49.17	2447.6	522.1	604.1	0.00	0.00	174.3
5	4461.6	0.00	360.00	4122.5	903.0	1045.0	2.12	180.00	301.5
6	5211.6	90.00	315.95	4600.0	1246.2	713.0	12.00	315.95	760.8
7	9676.1	90.00	315.95	4600.0	4455.0	-2391.0	0.00	0.00	5056.1



Project:Sandoval County (NAD83)
Site: Fairlane
Well: Fairlane 22 Fed #607H
Wellbore: Lateral
Design: Plan #1
Ground Elevation 7254.0
Northing 1831735.00
Easting 1316638.00
KB @ 7272.0usft

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

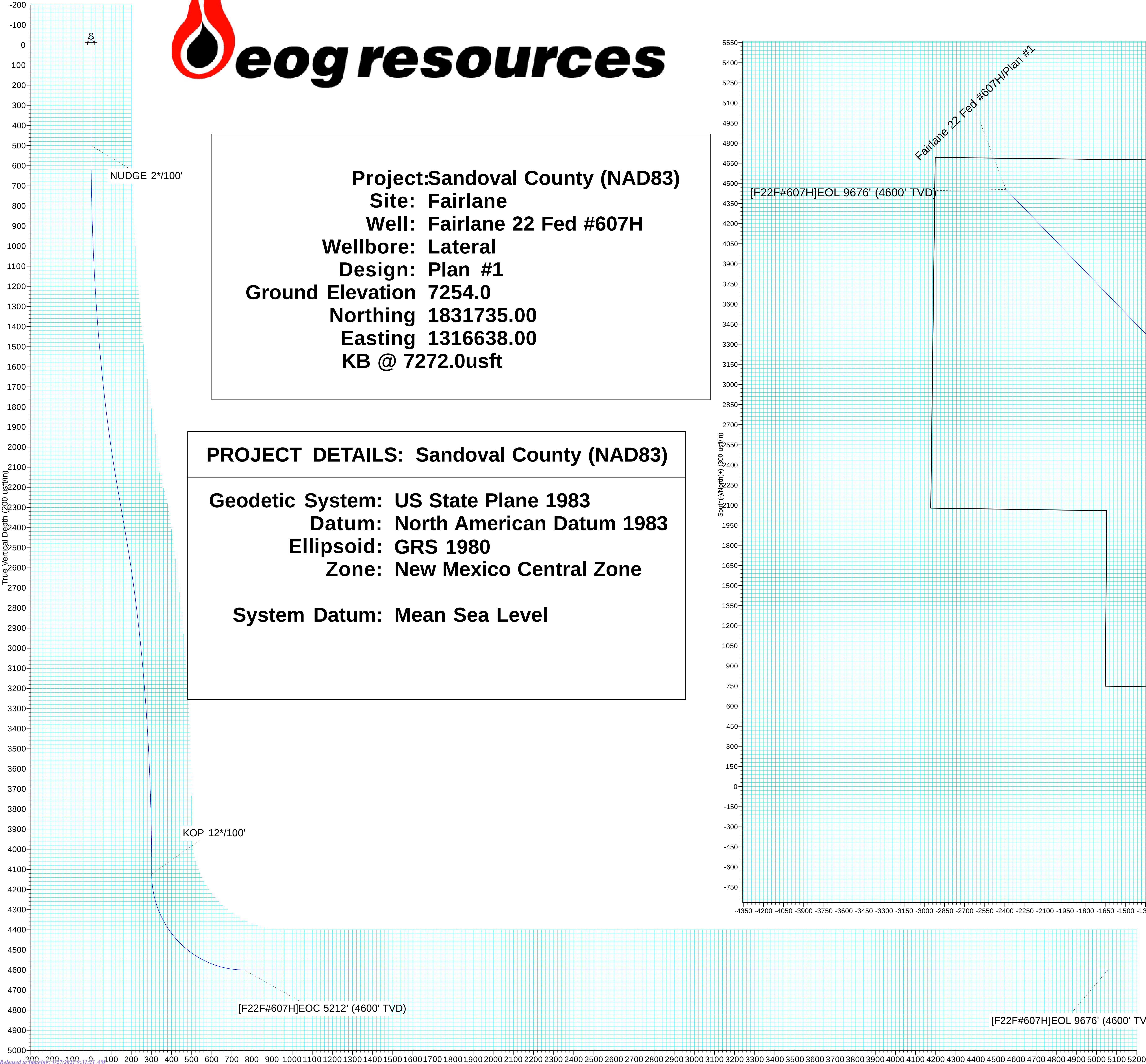
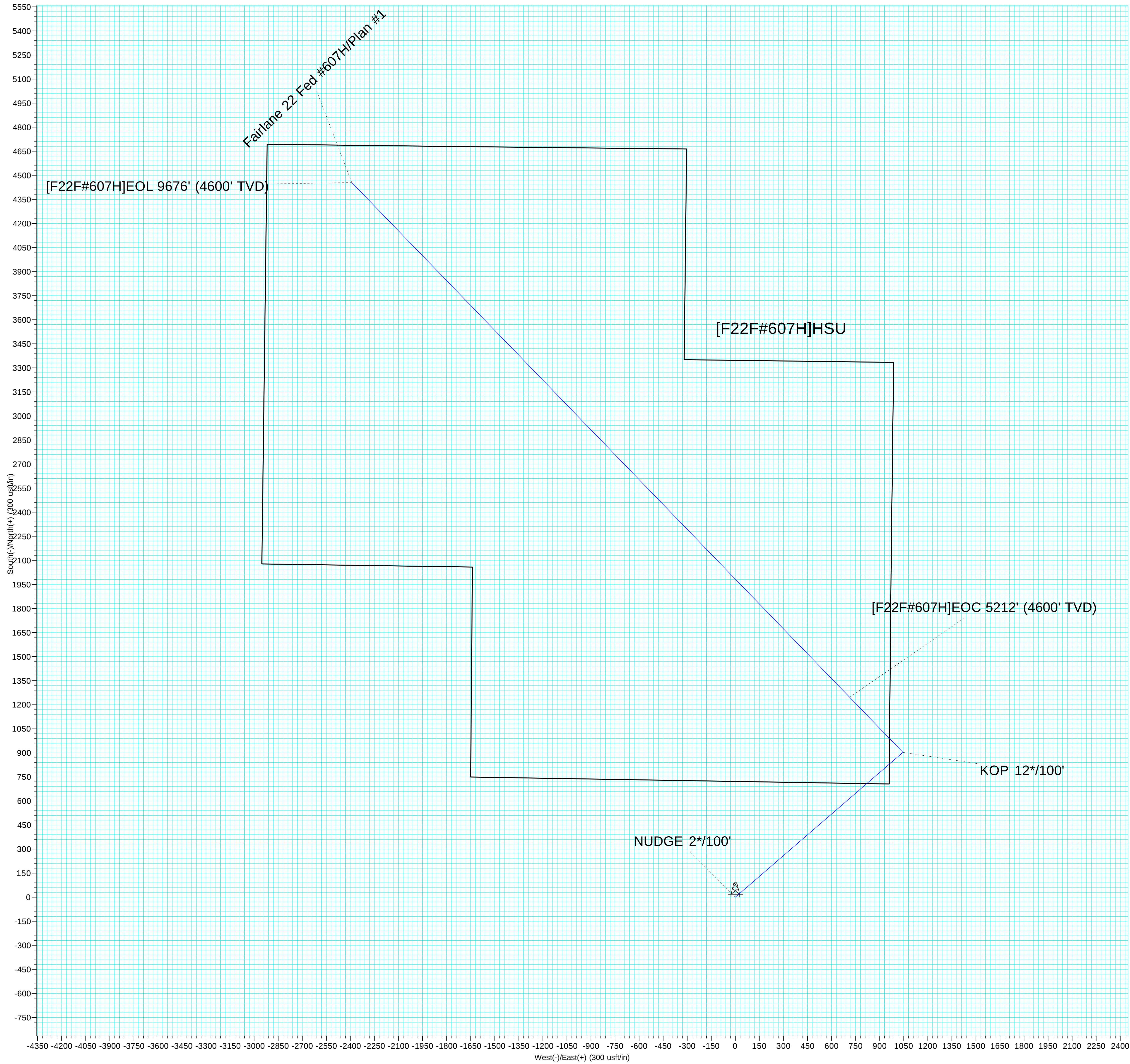


EXHIBIT 1a
EOG Resources, Inc.
3M Choke Manifold Equipment

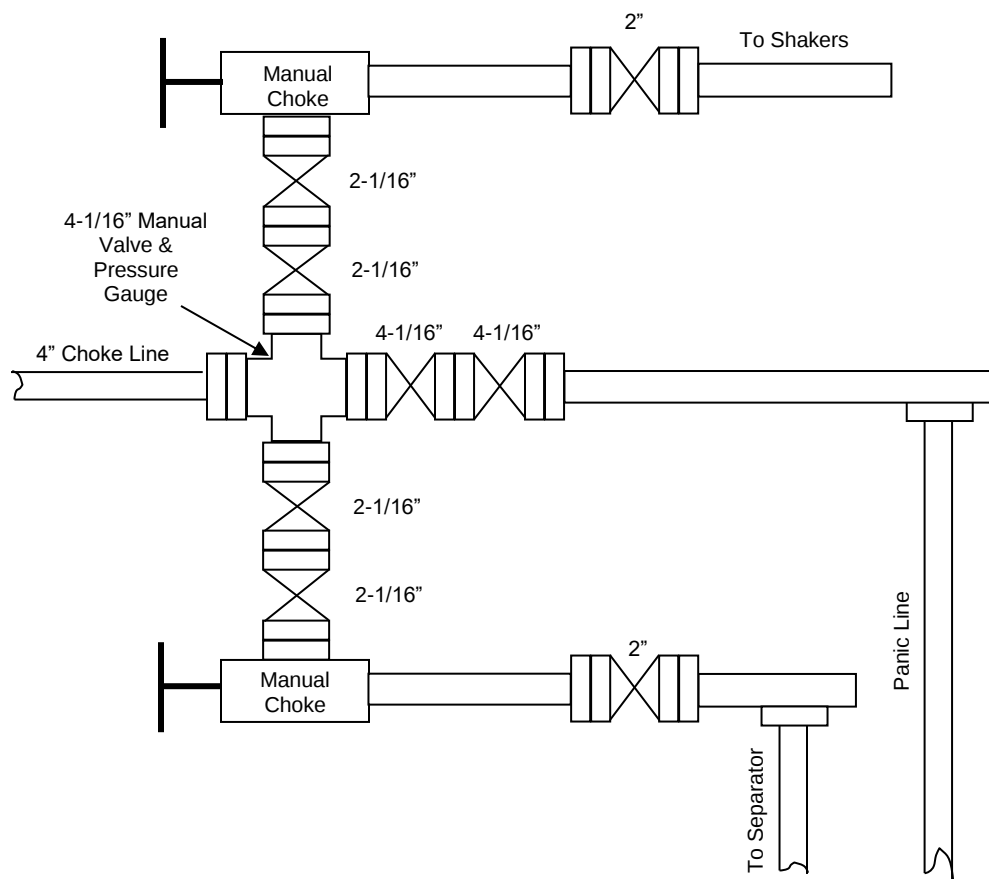
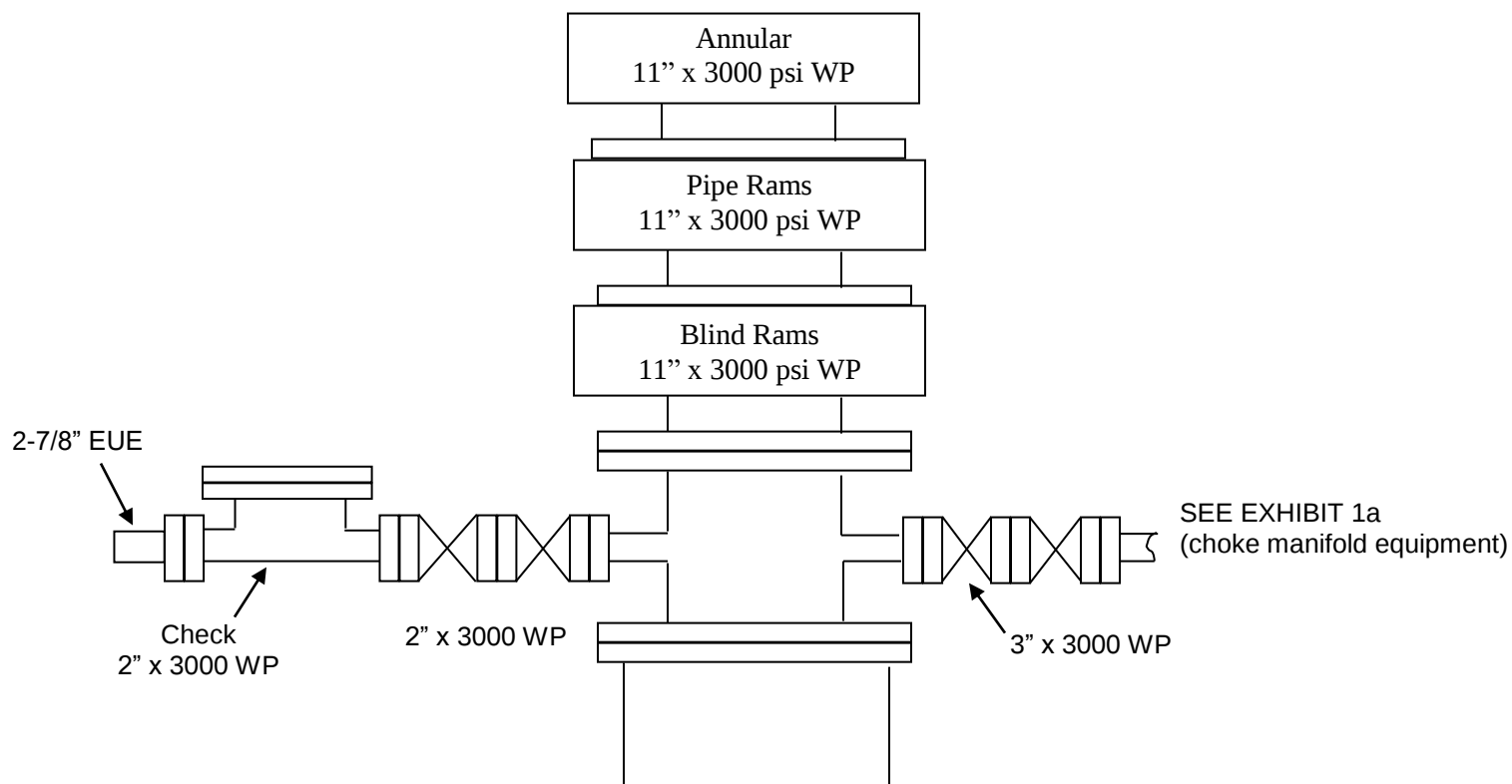


EXHIBIT 1

EOG Resources
3000 PSI BOPE



District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
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 12957

COMMENTS

Operator:	EOG RESOURCES INC	P.O. Box 2267	Midland, TX79702	OGRID:	7377	Action Number:	12957	Action Type:	FORM 3160-3
Created By	Comment						Comment Date		
kpickford	KP GEO Review 12/24/2020						12/24/2020		

District I

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

District II

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

District III

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

District IV

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 12957

CONDITIONS OF APPROVAL

Operator:	EOG RESOURCES INC	P.O. Box 2267	Midland, TX79702	OGRID:	7377	Action Number:	12957	Action Type:	FORM 3160-3
-----------	-------------------	---------------	------------------	--------	------	----------------	-------	--------------	-------------

OCD Reviewer	Condition
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'.