

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

Form C-101

August 1, 2011

Permit 297813

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

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

1. Operator Name and Address EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702		2. OGRID Number 7377
		3. API Number 30-015-48648
4. Property Code 331158	5. Property Name SHERPA 12 STATE COM	6. Well No. 711H

7. Surface Location

UL - Lot A	Section 12	Township 25S	Range 27E	Lot Idn A	Feet From 631	N/S Line N	Feet From 1284	E/W Line E	County Eddy
---------------	---------------	-----------------	--------------	--------------	------------------	---------------	-------------------	---------------	----------------

8. Proposed Bottom Hole Location

UL - Lot P	Section 13	Township 25S	Range 27E	Lot Idn P	Feet From 230	N/S Line S	Feet From 333	E/W Line E	County Eddy
---------------	---------------	-----------------	--------------	--------------	------------------	---------------	------------------	---------------	----------------

9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220
----------------------------	-------

Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3076
16. Multiple N	17. Proposed Depth 19644	18. Formation Wolfcamp	19. Contractor	20. Spud Date 9/1/2021
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	9.625	36	700	300	0
Int1	8.75	7.625	29.7	8150	1470	0
Prod	6.75	5.5	17	19644	1020	7650

Casing/Cement Program: Additional Comments

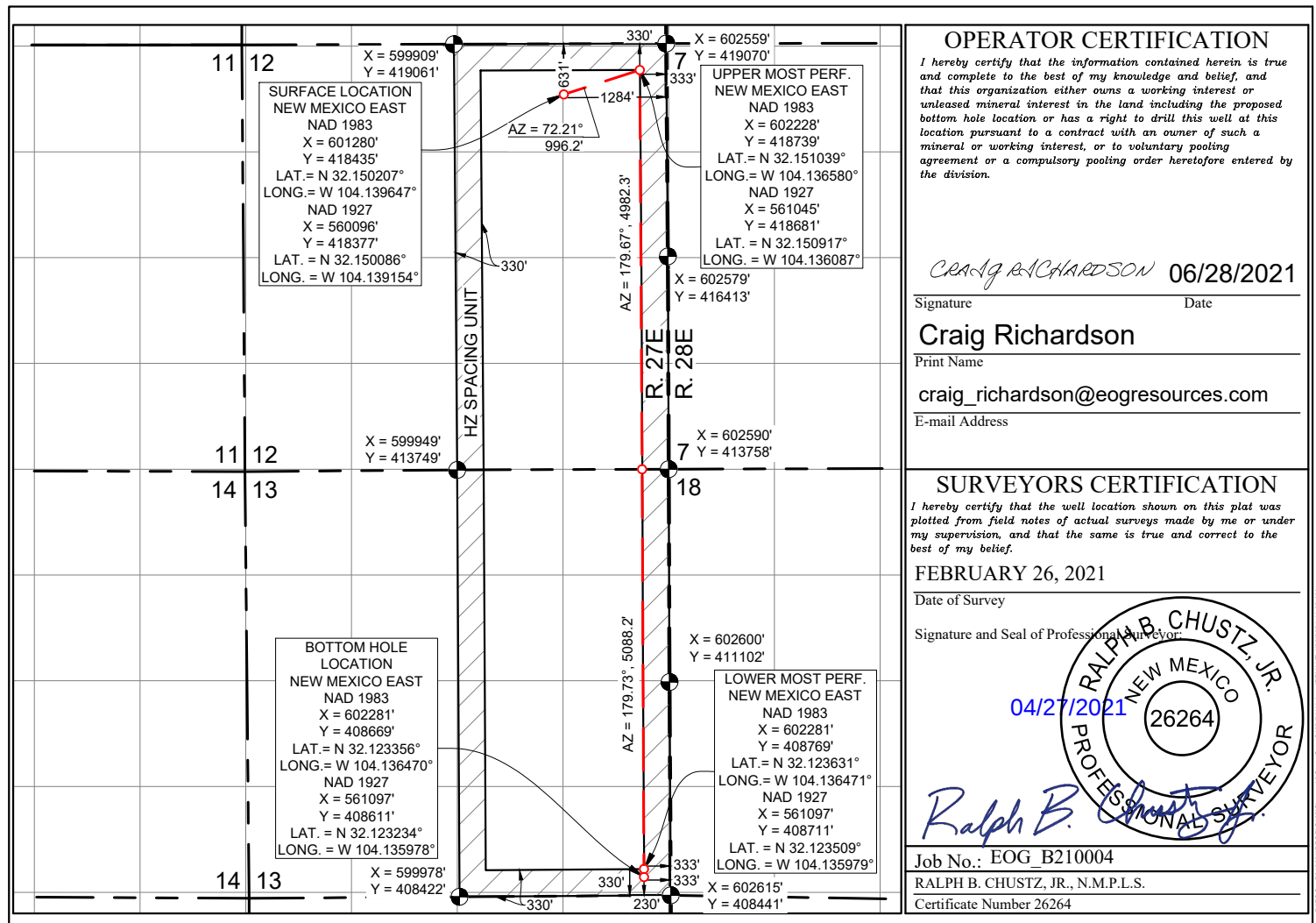
EOG respectfully requests the option to use the casing and cement program described in Design A of the drill plan. The NMOCDC will be notified of EOG's election at spud.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	3000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by Kay Maddox	Approved By: Kurt Simmons	
Title: Regulatory Agent	Title: Petroleum Specialist - A	
Email Address: kay_maddox@eogresources.com	Approved Date: 7/2/2021	Expiration Date: 7/2/2023
Date: 6/30/2021	Phone: 432-686-3658	Conditions of Approval Attached

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

☐ AMENDED REPORT

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

Form APD Conditions

Permit 297813

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: EOG RESOURCES INC [7377] P.O. Box 2267 Midland, TX 79702	API Number: 30-015-48648
	Well: SHERPA 12 STATE COM #711H

OCD Reviewer	Condition
ksimmons	Notify OCD 24 hours prior to casing & cement
ksimmons	Will require a File As Drilled C-102 and a Directional Survey with the C-104
ksimmons	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
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	Cement is required to circulate on both surface and intermediate1 strings of casing
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



Sherpa 12 State Com #711H
Eddy County, New Mexico
Proposed Wellbore
Design A

631' FNL
1284' FEL
Section 12
T-25-S, R-27-E

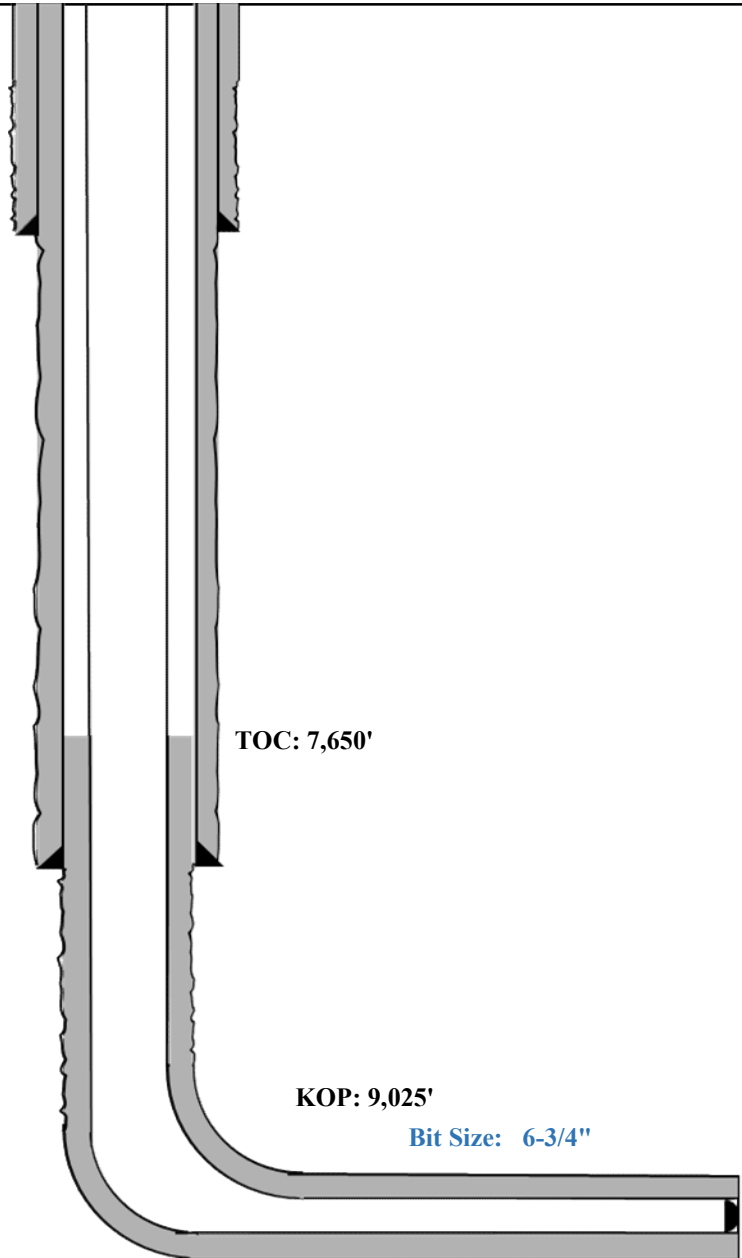
KB: 3101'
GL: 3076'

API: 30-015-*****

Bit Size: 12-1/4"
9-5/8", 36#, J-55, LTC, 0' - 700'

Bit Size: 8-3/4"
7-5/8", 29.7#, HCP-110, FXL, 0' - 8,150'

Bit Size: 6-3/4"
5-1/2", 17#, HCP-110, LTC, @ 0' - 19,644'



Lateral: 19,644' MD, 9,301' TVD
BH Location: 230' FSL & 333' FEL
Sec. 13
T-25-S R-27-E

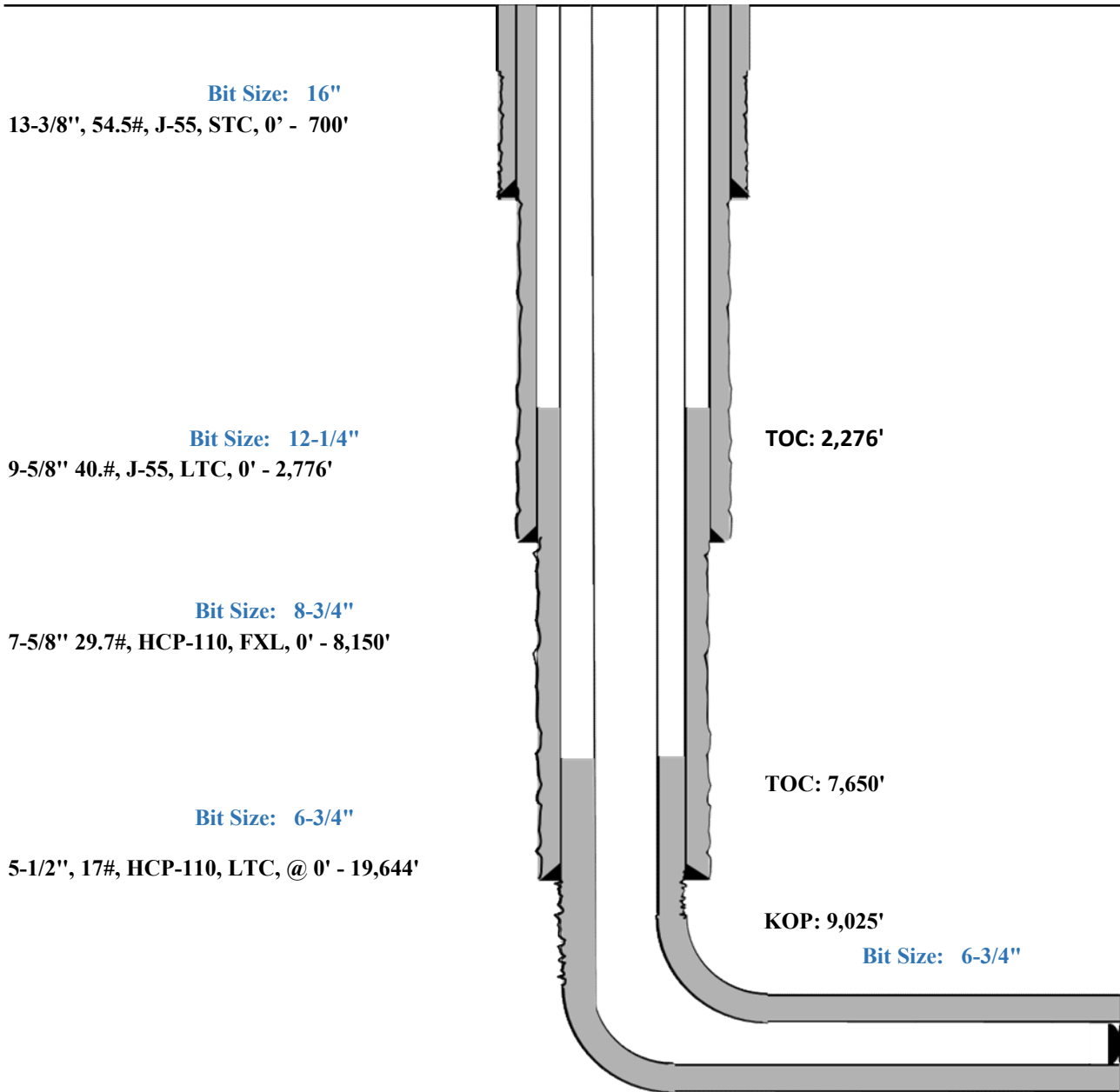


Sherpa 12 State Com #711H
Eddy County, New Mexico
Proposed Wellbore
Design B

631' FNL
1284' FEL
Section 12
T-25-S, R-27-E

KB: 3101'
GL: 3076'

API: 30-015-*****



Lateral: 19,644' MD, 9,301' TVD
BH Location: 230' FSL & 333' FEL
Sec. 13
T-25-S R-27-E



Sherpa 12 State Com #711H

Permit Information:

Well Name: Sherpa 12 State Com #711H

Location:

SHL: 631' FNL & 1284' FEL, Section 12, T-25-S, R-27-E, Eddy Co., N.M.

BHL: 230' FSL & 333' FEL, Section 13, T-25-S, R-27-E, Eddy Co., N.M.

Design A

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DFmin Collapse	DFmin Burst	Dfmin Tension
12.25"	0' - 700'	9.625"	36#	J-55	LTC	1.125	1.25	1.6
8.75"	0' - 8,150'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.6
6.75"	0' - 19,644'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.6

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
700'	220	13.5	1.73	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	80	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
8,150'	470	14.2	1.11	1st Stage (Tail): Class C + 5% Salt (TOC @ 4,208')
	1000	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
19,644'	1020	14.2	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 7,650')

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 700'	Fresh - Gel	8.6-8.8	28-34	N/c
700' – 8,150'	Brine	10.0-10.2	28-34	N/c
8,150' – 9,025'	Oil Base	8.7-9.4	58-68	N/c - 6
9,025' – 19,644' Lateral	Oil Base	10.0-14.0	58-68	4 - 6



Sherpa 12 State Com #711H

Design B**CASING PROGRAM**

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DFmin Collapse	DFmin Burst	DFmin Tension
16"	0' - 700'	13.375"	54.5#	J-55	STC	1.125	1.25	1.6
12.25"	0' - 2,776'	9.625"	40#	J-55	LTC	1.125	1.25	1.6
8.75"	0' - 8,150'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.6
6.75"	0' - 19,644'	5.5"	17#	HCP-110	FXL	1.125	1.25	1.6

Cementing Program:

Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
700'	210	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 2.0% CaCl ₂ (TOC @ Surface)
	100	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate + 2.0% KCl (1.06 lb/sk)
2,776'	410	12.7	2.22	Lead: Class C + 0.15% C-20 + 11.63 pps Salt + 0.1% C-51 + 0.75% C-41P (TOC @ Surface)
	180	10.8	1.32	Tail: Class C + 0.13% C-20
8,150'	170	14.8	3.67	Lead: Class H + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ 2,280')
	100	14.8	2.38	Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800 (TOC @ 6,649')
19,644'	1020	14.8	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 7,649')

As a contingency, EOG requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (4,408') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 1,000 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (1.5 yld, 14.8 ppg) will be executed.

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 700'	Fresh - Gel	8.6-8.8	28-34	N/c
700' – 2,776'	Brine	10.0-10.2	28-34	N/c
2,776' – 8,150'	Oil Base	8.7-9.4	58-68	N/c - 6
8,150' – 19,644' Lateral	Oil Base	10.0-14.0	58-68	4 - 6

**Sherpa 12 State Com #711H****Hydrogen Sulfide Plan Summary**

A. All personnel shall receive proper H₂S training in accordance with Onshore Order III.C.3.a.

B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.

C. Required Emergency Equipment:

■ Well control equipment

- a. Flare line 150' from wellhead to be ignited by flare gun.
- b. Choke manifold with a remotely operated choke.
- c. Mud/gas separator

■ Protective equipment for essential personnel.

Breathing apparatus:

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

Auxiliary Rescue Equipment:

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

■ H₂S detection and monitoring equipment:

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

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

■ Visual warning systems.

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



Sherpa 12 State Com #711H

■ Mud program:

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

■ Metallurgy:

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

■ Communication:

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



Sherpa 12 State Com #711H
Emergency Assistance Telephone List

PUBLIC SAFETY: **911 or**

Lea County Sheriff's Department	(575) 396-3611
Rod Coffman	
Fire Department:	
Carlsbad	(575) 885-3125
Artesia	(575) 746-5050
Hospitals:	
Carlsbad	(575) 887-4121
Artesia	(575) 748-3333
Hobbs	(575) 392-1979
Dept. of Public Safety/Carlsbad	(575) 748-9718
Highway Department	(575) 885-3281
New Mexico Oil Conservation	(575) 476-3440
U.S. Dept. of Labor	(575) 887-1174

EOG Resources, Inc.

EOG / Midland	Office	(432) 686-3600
---------------	--------	----------------

Company Drilling Consultants:

David Dominique	Cell	(985) 518-5839
Mike Vann	Cell	(817) 980-5507

Drilling Engineer

Esteban Del Valle	Cell	(432) 269-7063
Daniel Moose	Cell	(432) 312-2803

Drilling Manager

Aj Dach	Office	(432) 686-3751
	Cell	(817) 480-1167

Drilling Superintendent

Jason Townsend	Office	(432) 848-9209
	Cell	(210) 776-5131

H&P Drilling

H&P Drilling	Office	(432) 563-5757
H&P 651 Drilling Rig	Rig	(903) 509-7131

Tool Pusher:

Johnathan Craig	Cell	(817) 760-6374
Brad Garrett		

Safety:

Brian Chandler (HSE Manager)	Office	(432) 686-3695
	Cell	(817) 239-0251



EOG Resources - Midland

Eddy County, NM (NAD 83 NME)

Sherpa 12 State Com

#711H

OH

Plan: Plan #0.1

Standard Planning Report

10 May, 2021

EOG Resources

Planning Report



Database:	EDM 5000.14	Local Co-ordinate Reference	Well #711H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3101.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3101.0usft
Site:	Sherpa 12 State Com	North Reference:	Grid
Well:	#711H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Project	Eddy County, NM (NAD 83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sherpa 12 State Com		
Site Position:		Northing:	418,435.00 usft
From:	Map	Easting:	601,280.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 9' 0.749 N
		Longitude:	104° 8' 22.728 W
		Grid Convergence:	0.10 °

Well	#711H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	
		Latitude:	32° 9' 0.749 N
		Longitude:	104° 8' 22.728 W
		Ground Level:	3,076.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2020	5/10/2021	6.81
			Dip Angle
			(°)
			59.75
			Field Strength
			(nT)
			47,403.72893803

Design	Plan #0.1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			174.15

Plan Survey Tool Program	Date	5/10/2021		
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(usft)	(usft)			
1	0.0	19,644.4 Plan #0.1 (OH)	EOG MWD+IFR1	
			MWD + IFR1	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,905.6	24.11	58.50	1,870.3	130.6	213.1	2.00	2.00	0.00	58.50	
3,403.7	24.11	58.50	3,237.7	450.4	734.9	0.00	0.00	0.00	0.00	
4,609.2	0.00	0.00	4,408.0	581.0	948.0	2.00	-2.00	0.00	180.00	
9,024.7	0.00	0.00	8,823.5	581.0	948.0	0.00	0.00	0.00	0.00	KOP(sherpa 12 SC #;
9,774.7	90.00	179.71	9,301.0	103.5	950.4	12.00	12.00	23.96	179.71	
19,644.4	90.00	179.71	9,301.0	-9,766.0	1,001.0	0.00	0.00	0.00	0.00	PBHL(sherpa 12 SC #

EOG Resources

Planning Report



Database:	EDM 5000.14	Local Co-ordinate Reference	Well #711H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3101.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3101.0usft
Site:	Sherpa 12 State Com	North Reference:	Grid
Well:	#711H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	2.00	58.50	800.0	0.9	1.5	-0.8	2.00	2.00	0.00
900.0	4.00	58.50	899.8	3.6	5.9	-3.0	2.00	2.00	0.00
1,000.0	6.00	58.50	999.5	8.2	13.4	-6.8	2.00	2.00	0.00
1,100.0	8.00	58.50	1,098.7	14.6	23.8	-12.1	2.00	2.00	0.00
1,200.0	10.00	58.50	1,197.5	22.7	37.1	-18.8	2.00	2.00	0.00
1,300.0	12.00	58.50	1,295.6	32.7	53.4	-27.1	2.00	2.00	0.00
1,400.0	14.00	58.50	1,393.1	44.5	72.6	-36.8	2.00	2.00	0.00
1,500.0	16.00	58.50	1,489.6	58.0	94.6	-48.0	2.00	2.00	0.00
1,600.0	18.00	58.50	1,585.3	73.3	119.5	-60.7	2.00	2.00	0.00
1,700.0	20.00	58.50	1,679.8	90.3	147.3	-74.8	2.00	2.00	0.00
1,800.0	22.00	58.50	1,773.2	109.0	177.9	-90.3	2.00	2.00	0.00
1,905.6	24.11	58.50	1,870.3	130.6	213.1	-108.2	2.00	2.00	0.00
2,000.0	24.11	58.50	1,956.5	150.8	246.0	-124.9	0.00	0.00	0.00
2,100.0	24.11	58.50	2,047.8	172.1	280.8	-142.6	0.00	0.00	0.00
2,200.0	24.11	58.50	2,139.0	193.5	315.7	-160.3	0.00	0.00	0.00
2,300.0	24.11	58.50	2,230.3	214.8	350.5	-177.9	0.00	0.00	0.00
2,400.0	24.11	58.50	2,321.6	236.1	385.3	-195.6	0.00	0.00	0.00
2,500.0	24.11	58.50	2,412.9	257.5	420.1	-213.3	0.00	0.00	0.00
2,600.0	24.11	58.50	2,504.1	278.8	455.0	-231.0	0.00	0.00	0.00
2,700.0	24.11	58.50	2,595.4	300.2	489.8	-248.7	0.00	0.00	0.00
2,800.0	24.11	58.50	2,686.7	321.5	524.6	-266.4	0.00	0.00	0.00
2,900.0	24.11	58.50	2,778.0	342.9	559.5	-284.0	0.00	0.00	0.00
3,000.0	24.11	58.50	2,869.2	364.2	594.3	-301.7	0.00	0.00	0.00
3,100.0	24.11	58.50	2,960.5	385.6	629.1	-319.4	0.00	0.00	0.00
3,200.0	24.11	58.50	3,051.8	406.9	664.0	-337.1	0.00	0.00	0.00
3,300.0	24.11	58.50	3,143.1	428.3	698.8	-354.8	0.00	0.00	0.00
3,403.7	24.11	58.50	3,237.7	450.4	734.9	-373.1	0.00	0.00	0.00
3,500.0	22.18	58.50	3,326.3	470.2	767.2	-389.5	2.00	-2.00	0.00
3,600.0	20.18	58.50	3,419.5	489.1	798.0	-405.1	2.00	-2.00	0.00
3,700.0	18.18	58.50	3,513.9	506.2	826.0	-419.4	2.00	-2.00	0.00
3,800.0	16.18	58.50	3,609.5	521.7	851.2	-432.2	2.00	-2.00	0.00
3,900.0	14.18	58.50	3,706.0	535.4	873.5	-443.5	2.00	-2.00	0.00
4,000.0	12.18	58.50	3,803.3	547.3	893.0	-453.4	2.00	-2.00	0.00
4,100.0	10.18	58.50	3,901.4	557.4	909.5	-461.8	2.00	-2.00	0.00
4,200.0	8.18	58.50	4,000.2	565.8	923.1	-468.7	2.00	-2.00	0.00
4,300.0	6.18	58.50	4,099.4	572.3	933.8	-474.1	2.00	-2.00	0.00
4,400.0	4.18	58.50	4,198.9	577.0	941.5	-478.0	2.00	-2.00	0.00
4,500.0	2.18	58.50	4,298.8	579.9	946.2	-480.4	2.00	-2.00	0.00
4,609.2	0.00	0.00	4,408.0	581.0	948.0	-481.3	2.00	-2.00	0.00
4,700.0	0.00	0.00	4,498.8	581.0	948.0	-481.3	0.00	0.00	0.00
4,800.0	0.00	0.00	4,598.8	581.0	948.0	-481.3	0.00	0.00	0.00
4,900.0	0.00	0.00	4,698.8	581.0	948.0	-481.3	0.00	0.00	0.00
5,000.0	0.00	0.00	4,798.8	581.0	948.0	-481.3	0.00	0.00	0.00
5,100.0	0.00	0.00	4,898.8	581.0	948.0	-481.3	0.00	0.00	0.00
5,200.0	0.00	0.00	4,998.8	581.0	948.0	-481.3	0.00	0.00	0.00

EOG Resources

Planning Report



Database:	EDM 5000.14	Local Co-ordinate Reference	Well #711H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3101.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3101.0usft
Site:	Sherpa 12 State Com	North Reference:	Grid
Well:	#711H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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)	
5,300.0	0.00	0.00	5,098.8	581.0	948.0	-481.3	0.00	0.00	0.00	
5,400.0	0.00	0.00	5,198.8	581.0	948.0	-481.3	0.00	0.00	0.00	
5,500.0	0.00	0.00	5,298.8	581.0	948.0	-481.3	0.00	0.00	0.00	
5,600.0	0.00	0.00	5,398.8	581.0	948.0	-481.3	0.00	0.00	0.00	
5,700.0	0.00	0.00	5,498.8	581.0	948.0	-481.3	0.00	0.00	0.00	
5,800.0	0.00	0.00	5,598.8	581.0	948.0	-481.3	0.00	0.00	0.00	
5,900.0	0.00	0.00	5,698.8	581.0	948.0	-481.3	0.00	0.00	0.00	
6,000.0	0.00	0.00	5,798.8	581.0	948.0	-481.3	0.00	0.00	0.00	
6,100.0	0.00	0.00	5,898.8	581.0	948.0	-481.3	0.00	0.00	0.00	
6,200.0	0.00	0.00	5,998.8	581.0	948.0	-481.3	0.00	0.00	0.00	
6,300.0	0.00	0.00	6,098.8	581.0	948.0	-481.3	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,198.8	581.0	948.0	-481.3	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,298.8	581.0	948.0	-481.3	0.00	0.00	0.00	
6,600.0	0.00	0.00	6,398.8	581.0	948.0	-481.3	0.00	0.00	0.00	
6,700.0	0.00	0.00	6,498.8	581.0	948.0	-481.3	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,598.8	581.0	948.0	-481.3	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,698.8	581.0	948.0	-481.3	0.00	0.00	0.00	
7,000.0	0.00	0.00	6,798.8	581.0	948.0	-481.3	0.00	0.00	0.00	
7,100.0	0.00	0.00	6,898.8	581.0	948.0	-481.3	0.00	0.00	0.00	
7,200.0	0.00	0.00	6,998.8	581.0	948.0	-481.3	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,098.8	581.0	948.0	-481.3	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,198.8	581.0	948.0	-481.3	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,298.8	581.0	948.0	-481.3	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,398.8	581.0	948.0	-481.3	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,498.8	581.0	948.0	-481.3	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,598.8	581.0	948.0	-481.3	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,698.8	581.0	948.0	-481.3	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,798.8	581.0	948.0	-481.3	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,898.8	581.0	948.0	-481.3	0.00	0.00	0.00	
8,200.0	0.00	0.00	7,998.8	581.0	948.0	-481.3	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,098.8	581.0	948.0	-481.3	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,198.8	581.0	948.0	-481.3	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,298.8	581.0	948.0	-481.3	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,398.8	581.0	948.0	-481.3	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,498.8	581.0	948.0	-481.3	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,598.8	581.0	948.0	-481.3	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,698.8	581.0	948.0	-481.3	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,798.8	581.0	948.0	-481.3	0.00	0.00	0.00	
9,024.7	0.00	0.00	8,823.5	581.0	948.0	-481.3	0.00	0.00	0.00	
KOP(sherpa 12 SC #711H)										
9,050.0	3.03	179.71	8,848.7	580.3	948.0	-480.6	12.00	12.00	0.00	
9,075.0	6.03	179.71	8,873.7	578.4	948.0	-478.7	12.00	12.00	0.00	
9,100.0	9.03	179.71	8,898.4	575.1	948.0	-475.4	12.00	12.00	0.00	
9,125.0	12.03	179.71	8,923.0	570.5	948.1	-470.9	12.00	12.00	0.00	
9,150.0	15.03	179.71	8,947.3	564.7	948.1	-465.1	12.00	12.00	0.00	
9,175.0	18.03	179.71	8,971.3	557.6	948.1	-458.0	12.00	12.00	0.00	
9,200.0	21.03	179.71	8,994.9	549.2	948.2	-449.7	12.00	12.00	0.00	
9,225.0	24.03	179.71	9,017.9	539.6	948.2	-440.1	12.00	12.00	0.00	
9,250.0	27.03	179.71	9,040.5	528.8	948.3	-429.4	12.00	12.00	0.00	
9,275.0	30.03	179.71	9,062.5	516.9	948.3	-417.5	12.00	12.00	0.00	
9,300.0	33.03	179.71	9,083.8	503.8	948.4	-404.5	12.00	12.00	0.00	
9,325.0	36.03	179.71	9,104.4	489.7	948.5	-390.4	12.00	12.00	0.00	
9,350.0	39.03	179.71	9,124.2	474.4	948.5	-375.2	12.00	12.00	0.00	

EOG Resources

Planning Report



Database:	EDM 5000.14	Local Co-ordinate Reference	Well #711H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3101.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3101.0usft
Site:	Sherpa 12 State Com	North Reference:	Grid
Well:	#711H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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)	
9,375.0	42.03	179.71	9,143.2	458.2	948.6	-359.1	12.00	12.00	0.00	
9,400.0	45.03	179.71	9,161.3	441.0	948.7	-341.9	12.00	12.00	0.00	
9,425.0	48.03	179.71	9,178.5	422.8	948.8	-323.9	12.00	12.00	0.00	
9,450.0	51.03	179.71	9,194.7	403.8	948.9	-305.0	12.00	12.00	0.00	
9,475.0	54.03	179.71	9,209.9	384.0	949.0	-285.2	12.00	12.00	0.00	
9,500.0	57.03	179.71	9,224.1	363.4	949.1	-264.7	12.00	12.00	0.00	
9,525.0	60.03	179.71	9,237.1	342.0	949.2	-243.5	12.00	12.00	0.00	
9,550.0	63.03	179.71	9,249.0	320.1	949.3	-221.6	12.00	12.00	0.00	
9,575.0	66.03	179.71	9,259.8	297.5	949.5	-199.1	12.00	12.00	0.00	
9,584.7	67.20	179.71	9,263.7	288.6	949.5	-190.2	12.00	12.00	0.00	
FTP(sherpa 12 SC #711H)										
9,600.0	69.03	179.71	9,269.3	274.4	949.6	-176.2	12.00	12.00	0.00	
9,625.0	72.03	179.71	9,277.7	250.8	949.7	-152.7	12.00	12.00	0.00	
9,650.0	75.03	179.71	9,284.8	226.9	949.8	-128.8	12.00	12.00	0.00	
9,675.0	78.03	179.71	9,290.6	202.6	949.9	-104.6	12.00	12.00	0.00	
9,700.0	81.03	179.71	9,295.1	178.0	950.1	-80.2	12.00	12.00	0.00	
9,725.0	84.03	179.71	9,298.4	153.2	950.2	-55.5	12.00	12.00	0.00	
9,750.0	87.03	179.71	9,300.3	128.3	950.3	-30.7	12.00	12.00	0.00	
9,774.7	90.00	179.71	9,301.0	103.5	950.4	-6.1	12.00	12.00	0.00	
9,800.0	90.00	179.71	9,301.0	78.3	950.6	19.1	0.00	0.00	0.00	
9,900.0	90.00	179.71	9,301.0	-21.7	951.1	118.6	0.00	0.00	0.00	
10,000.0	90.00	179.71	9,301.0	-121.7	951.6	218.1	0.00	0.00	0.00	
10,100.0	90.00	179.71	9,301.0	-221.7	952.1	317.6	0.00	0.00	0.00	
10,200.0	90.00	179.71	9,301.0	-321.7	952.6	417.2	0.00	0.00	0.00	
10,300.0	90.00	179.71	9,301.0	-421.7	953.1	516.7	0.00	0.00	0.00	
10,400.0	90.00	179.71	9,301.0	-521.7	953.6	616.2	0.00	0.00	0.00	
10,500.0	90.00	179.71	9,301.0	-621.7	954.2	715.8	0.00	0.00	0.00	
10,600.0	90.00	179.71	9,301.0	-721.7	954.7	815.3	0.00	0.00	0.00	
10,700.0	90.00	179.71	9,301.0	-821.7	955.2	914.8	0.00	0.00	0.00	
10,800.0	90.00	179.71	9,301.0	-921.7	955.7	1,014.3	0.00	0.00	0.00	
10,900.0	90.00	179.71	9,301.0	-1,021.7	956.2	1,113.9	0.00	0.00	0.00	
11,000.0	90.00	179.71	9,301.0	-1,121.7	956.7	1,213.4	0.00	0.00	0.00	
11,100.0	90.00	179.71	9,301.0	-1,221.7	957.2	1,312.9	0.00	0.00	0.00	
11,200.0	90.00	179.71	9,301.0	-1,321.7	957.7	1,412.5	0.00	0.00	0.00	
11,300.0	90.00	179.71	9,301.0	-1,421.7	958.3	1,512.0	0.00	0.00	0.00	
11,400.0	90.00	179.71	9,301.0	-1,521.7	958.8	1,611.5	0.00	0.00	0.00	
11,500.0	90.00	179.71	9,301.0	-1,621.7	959.3	1,711.1	0.00	0.00	0.00	
11,600.0	90.00	179.71	9,301.0	-1,721.7	959.8	1,810.6	0.00	0.00	0.00	
11,700.0	90.00	179.71	9,301.0	-1,821.7	960.3	1,910.1	0.00	0.00	0.00	
11,800.0	90.00	179.71	9,301.0	-1,921.7	960.8	2,009.6	0.00	0.00	0.00	
11,900.0	90.00	179.71	9,301.0	-2,021.7	961.3	2,109.2	0.00	0.00	0.00	
12,000.0	90.00	179.71	9,301.0	-2,121.7	961.8	2,208.7	0.00	0.00	0.00	
12,100.0	90.00	179.71	9,301.0	-2,221.7	962.4	2,308.2	0.00	0.00	0.00	
12,200.0	90.00	179.71	9,301.0	-2,321.7	962.9	2,407.8	0.00	0.00	0.00	
12,300.0	90.00	179.71	9,301.0	-2,421.7	963.4	2,507.3	0.00	0.00	0.00	
12,400.0	90.00	179.71	9,301.0	-2,521.7	963.9	2,606.8	0.00	0.00	0.00	
12,500.0	90.00	179.71	9,301.0	-2,621.7	964.4	2,706.4	0.00	0.00	0.00	
12,600.0	90.00	179.71	9,301.0	-2,721.7	964.9	2,805.9	0.00	0.00	0.00	
12,700.0	90.00	179.71	9,301.0	-2,821.7	965.4	2,905.4	0.00	0.00	0.00	
12,800.0	90.00	179.71	9,301.0	-2,921.7	965.9	3,004.9	0.00	0.00	0.00	
12,900.0	90.00	179.71	9,301.0	-3,021.7	966.5	3,104.5	0.00	0.00	0.00	
13,000.0	90.00	179.71	9,301.0	-3,121.7	967.0	3,204.0	0.00	0.00	0.00	
13,100.0	90.00	179.71	9,301.0	-3,221.7	967.5	3,303.5	0.00	0.00	0.00	

EOG Resources

Planning Report



Database:	EDM 5000.14	Local Co-ordinate Reference	Well #711H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3101.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3101.0usft
Site:	Sherpa 12 State Com	North Reference:	Grid
Well:	#711H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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)	
13,200.0	90.00	179.71	9,301.0	-3,321.7	968.0	3,403.1	0.00	0.00	0.00	
13,300.0	90.00	179.71	9,301.0	-3,421.7	968.5	3,502.6	0.00	0.00	0.00	
13,400.0	90.00	179.71	9,301.0	-3,521.7	969.0	3,602.1	0.00	0.00	0.00	
13,500.0	90.00	179.71	9,301.0	-3,621.7	969.5	3,701.7	0.00	0.00	0.00	
13,600.0	90.00	179.71	9,301.0	-3,721.7	970.0	3,801.2	0.00	0.00	0.00	
13,700.0	90.00	179.71	9,301.0	-3,821.7	970.6	3,900.7	0.00	0.00	0.00	
13,800.0	90.00	179.71	9,301.0	-3,921.7	971.1	4,000.2	0.00	0.00	0.00	
13,900.0	90.00	179.71	9,301.0	-4,021.7	971.6	4,099.8	0.00	0.00	0.00	
14,000.0	90.00	179.71	9,301.0	-4,121.7	972.1	4,199.3	0.00	0.00	0.00	
14,100.0	90.00	179.71	9,301.0	-4,221.7	972.6	4,298.8	0.00	0.00	0.00	
14,200.0	90.00	179.71	9,301.0	-4,321.7	973.1	4,398.4	0.00	0.00	0.00	
14,300.0	90.00	179.71	9,301.0	-4,421.7	973.6	4,497.9	0.00	0.00	0.00	
14,400.0	90.00	179.71	9,301.0	-4,521.7	974.1	4,597.4	0.00	0.00	0.00	
14,500.0	90.00	179.71	9,301.0	-4,621.7	974.6	4,696.9	0.00	0.00	0.00	
14,600.0	90.00	179.71	9,301.0	-4,721.7	975.2	4,796.5	0.00	0.00	0.00	
14,700.0	90.00	179.71	9,301.0	-4,821.7	975.7	4,896.0	0.00	0.00	0.00	
14,800.0	90.00	179.71	9,301.0	-4,921.7	976.2	4,995.5	0.00	0.00	0.00	
14,900.0	90.00	179.71	9,301.0	-5,021.7	976.7	5,095.1	0.00	0.00	0.00	
15,000.0	90.00	179.71	9,301.0	-5,121.6	977.2	5,194.6	0.00	0.00	0.00	
15,100.0	90.00	179.71	9,301.0	-5,221.6	977.7	5,294.1	0.00	0.00	0.00	
15,200.0	90.00	179.71	9,301.0	-5,321.6	978.2	5,393.7	0.00	0.00	0.00	
15,300.0	90.00	179.71	9,301.0	-5,421.6	978.7	5,493.2	0.00	0.00	0.00	
15,400.0	90.00	179.71	9,301.0	-5,521.6	979.3	5,592.7	0.00	0.00	0.00	
15,500.0	90.00	179.71	9,301.0	-5,621.6	979.8	5,692.2	0.00	0.00	0.00	
15,600.0	90.00	179.71	9,301.0	-5,721.6	980.3	5,791.8	0.00	0.00	0.00	
15,700.0	90.00	179.71	9,301.0	-5,821.6	980.8	5,891.3	0.00	0.00	0.00	
15,800.0	90.00	179.71	9,301.0	-5,921.6	981.3	5,990.8	0.00	0.00	0.00	
15,900.0	90.00	179.71	9,301.0	-6,021.6	981.8	6,090.4	0.00	0.00	0.00	
16,000.0	90.00	179.71	9,301.0	-6,121.6	982.3	6,189.9	0.00	0.00	0.00	
16,100.0	90.00	179.71	9,301.0	-6,221.6	982.8	6,289.4	0.00	0.00	0.00	
16,200.0	90.00	179.71	9,301.0	-6,321.6	983.4	6,389.0	0.00	0.00	0.00	
16,300.0	90.00	179.71	9,301.0	-6,421.6	983.9	6,488.5	0.00	0.00	0.00	
16,400.0	90.00	179.71	9,301.0	-6,521.6	984.4	6,588.0	0.00	0.00	0.00	
16,500.0	90.00	179.71	9,301.0	-6,621.6	984.9	6,687.5	0.00	0.00	0.00	
16,600.0	90.00	179.71	9,301.0	-6,721.6	985.4	6,787.1	0.00	0.00	0.00	
16,700.0	90.00	179.71	9,301.0	-6,821.6	985.9	6,886.6	0.00	0.00	0.00	
16,800.0	90.00	179.71	9,301.0	-6,921.6	986.4	6,986.1	0.00	0.00	0.00	
16,900.0	90.00	179.71	9,301.0	-7,021.6	986.9	7,085.7	0.00	0.00	0.00	
17,000.0	90.00	179.71	9,301.0	-7,121.6	987.5	7,185.2	0.00	0.00	0.00	
17,100.0	90.00	179.71	9,301.0	-7,221.6	988.0	7,284.7	0.00	0.00	0.00	
17,200.0	90.00	179.71	9,301.0	-7,321.6	988.5	7,384.3	0.00	0.00	0.00	
17,300.0	90.00	179.71	9,301.0	-7,421.6	989.0	7,483.8	0.00	0.00	0.00	
17,400.0	90.00	179.71	9,301.0	-7,521.6	989.5	7,583.3	0.00	0.00	0.00	
17,500.0	90.00	179.71	9,301.0	-7,621.6	990.0	7,682.8	0.00	0.00	0.00	
17,600.0	90.00	179.71	9,301.0	-7,721.6	990.5	7,782.4	0.00	0.00	0.00	
17,700.0	90.00	179.71	9,301.0	-7,821.6	991.0	7,881.9	0.00	0.00	0.00	
17,800.0	90.00	179.71	9,301.0	-7,921.6	991.6	7,981.4	0.00	0.00	0.00	
17,900.0	90.00	179.71	9,301.0	-8,021.6	992.1	8,081.0	0.00	0.00	0.00	
18,000.0	90.00	179.71	9,301.0	-8,121.6	992.6	8,180.5	0.00	0.00	0.00	
18,100.0	90.00	179.71	9,301.0	-8,221.6	993.1	8,280.0	0.00	0.00	0.00	
18,200.0	90.00	179.71	9,301.0	-8,321.6	993.6	8,379.5	0.00	0.00	0.00	
18,300.0	90.00	179.71	9,301.0	-8,421.6	994.1	8,479.1	0.00	0.00	0.00	
18,400.0	90.00	179.71	9,301.0	-8,521.6	994.6	8,578.6	0.00	0.00	0.00	

EOG Resources

Planning Report



Database:	EDM 5000.14	Local Co-ordinate Reference	Well #711H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3101.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3101.0usft
Site:	Sherpa 12 State Com	North Reference:	Grid
Well:	#711H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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)	
18,500.0	90.00	179.71	9,301.0	-8,621.6	995.1	8,678.1	0.00	0.00	0.00	
18,600.0	90.00	179.71	9,301.0	-8,721.6	995.7	8,777.7	0.00	0.00	0.00	
18,700.0	90.00	179.71	9,301.0	-8,821.6	996.2	8,877.2	0.00	0.00	0.00	
18,800.0	90.00	179.71	9,301.0	-8,921.6	996.7	8,976.7	0.00	0.00	0.00	
18,900.0	90.00	179.71	9,301.0	-9,021.6	997.2	9,076.3	0.00	0.00	0.00	
19,000.0	90.00	179.71	9,301.0	-9,121.6	997.7	9,175.8	0.00	0.00	0.00	
19,100.0	90.00	179.71	9,301.0	-9,221.6	998.2	9,275.3	0.00	0.00	0.00	
19,200.0	90.00	179.71	9,301.0	-9,321.6	998.7	9,374.8	0.00	0.00	0.00	
19,300.0	90.00	179.71	9,301.0	-9,421.6	999.2	9,474.4	0.00	0.00	0.00	
19,400.0	90.00	179.71	9,301.0	-9,521.6	999.7	9,573.9	0.00	0.00	0.00	
19,500.0	90.00	179.71	9,301.0	-9,621.6	1,000.3	9,673.4	0.00	0.00	0.00	
19,600.0	90.00	179.71	9,301.0	-9,721.6	1,000.8	9,773.0	0.00	0.00	0.00	
19,644.4	90.00	179.71	9,301.0	-9,766.0	1,001.0	9,817.2	0.00	0.00	0.00	
PBHL(sherpa 12 SC #711H)										

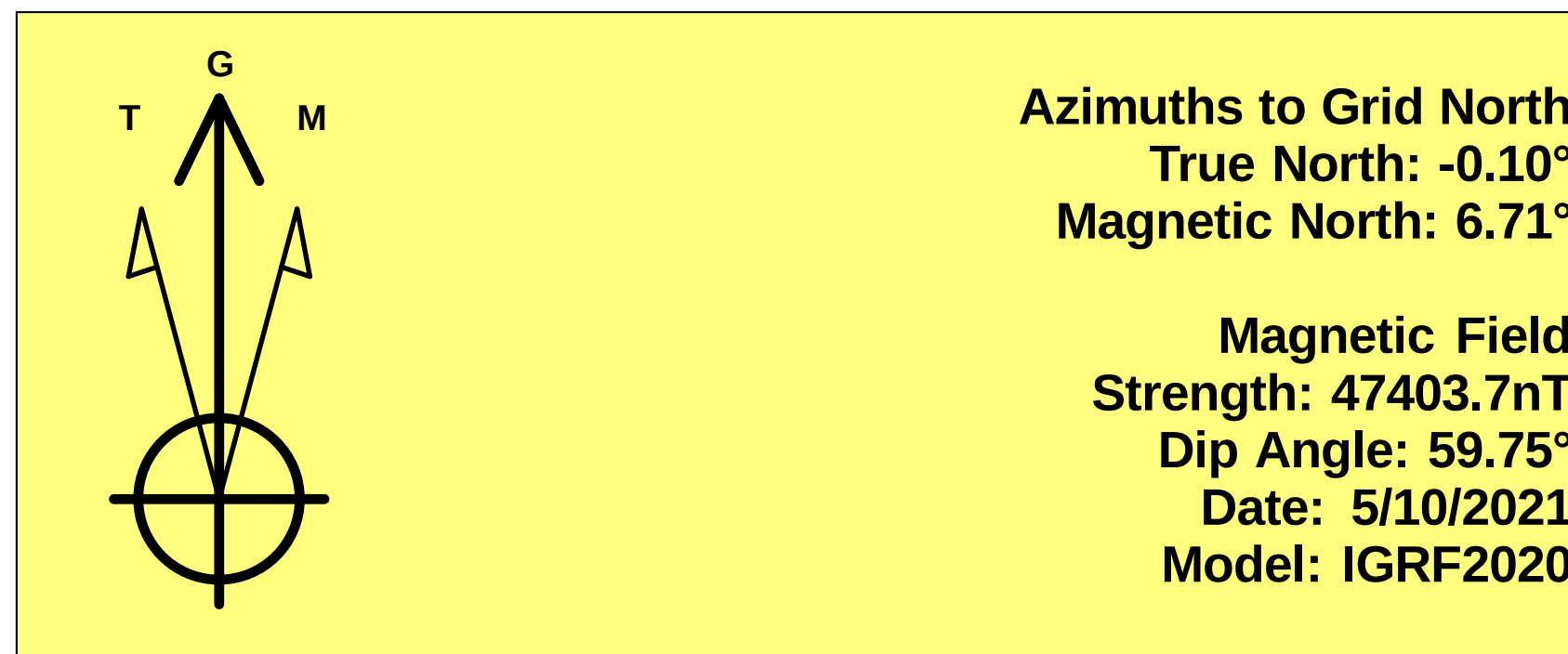
Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
KOP(sherpa 12 SC #711 - hit/miss target - Shape - Point	0.00	0.00	8,823.5	581.0	948.0	419,016.00	602,228.00	32° 9' 6.482 N	104° 8' 11.688 W	
PBHL(sherpa 12 SC #711 - plan hits target center - Point	0.00	0.00	9,301.0	-9,766.0	1,001.0	408,669.00	602,281.00	32° 7' 24.085 N	104° 8' 11.292 W	
FTP(sherpa 12 SC #711 - plan misses target center by 40.4usft at 9584.7usft MD (9263.7 TVD, 288.6 N, 949.5 E) - Point	0.00	0.00	9,301.0	304.0	948.0	418,739.00	602,228.00	32° 9' 3.741 N	104° 8' 11.694 W	



Eddy County, NM (NAD 83 NME)

Sherpa 12 State Com #711H

Plan #0.1



To convert a Magnetic Direction to a Grid Direction, Add 6.71°
To convert a Magnetic Direction to a True Direction, Add 6.81° East
To convert a True Direction to a Grid Direction, Subtract 0.10°

PROJECT DETAILS: Eddy County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #711H

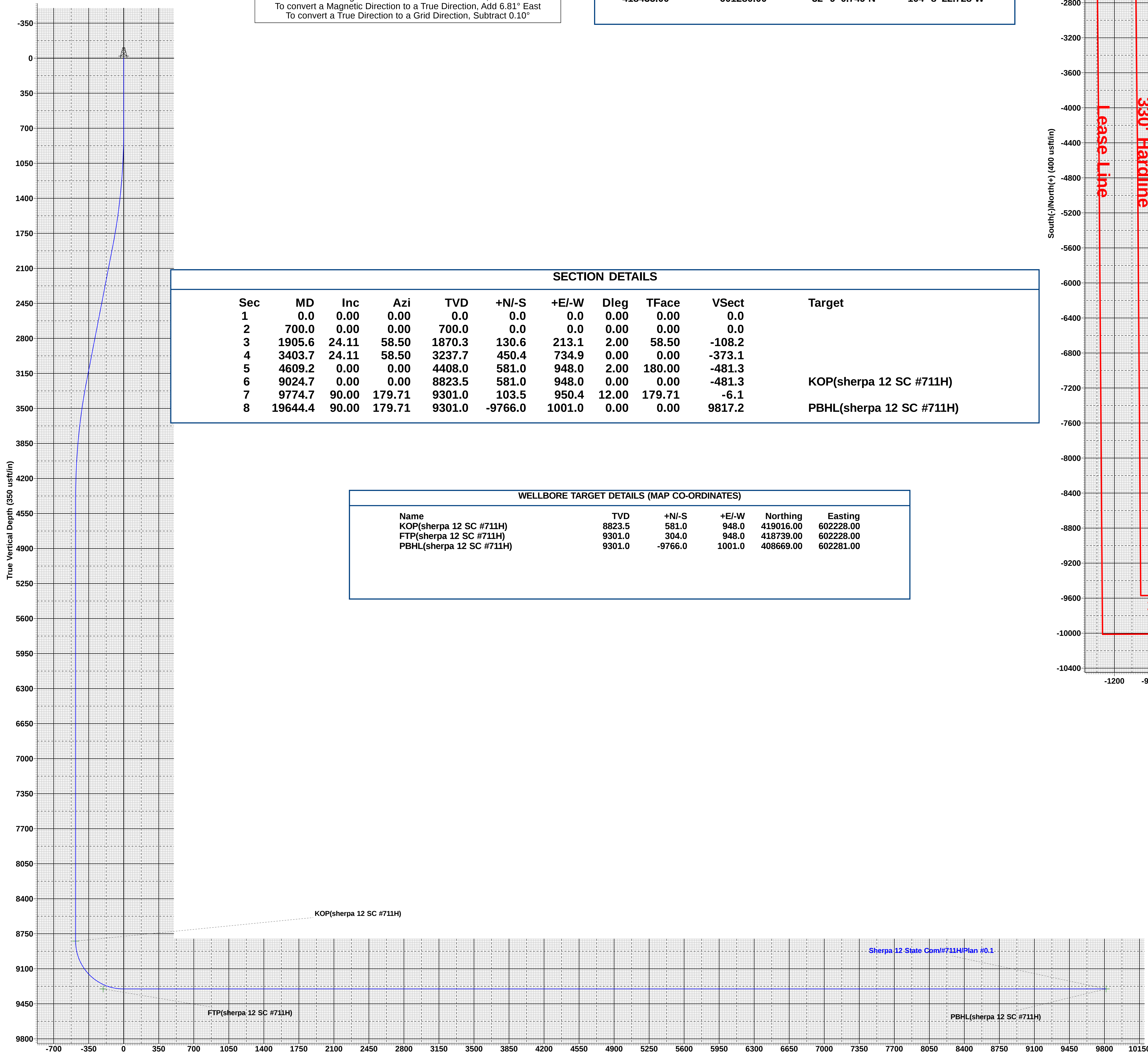
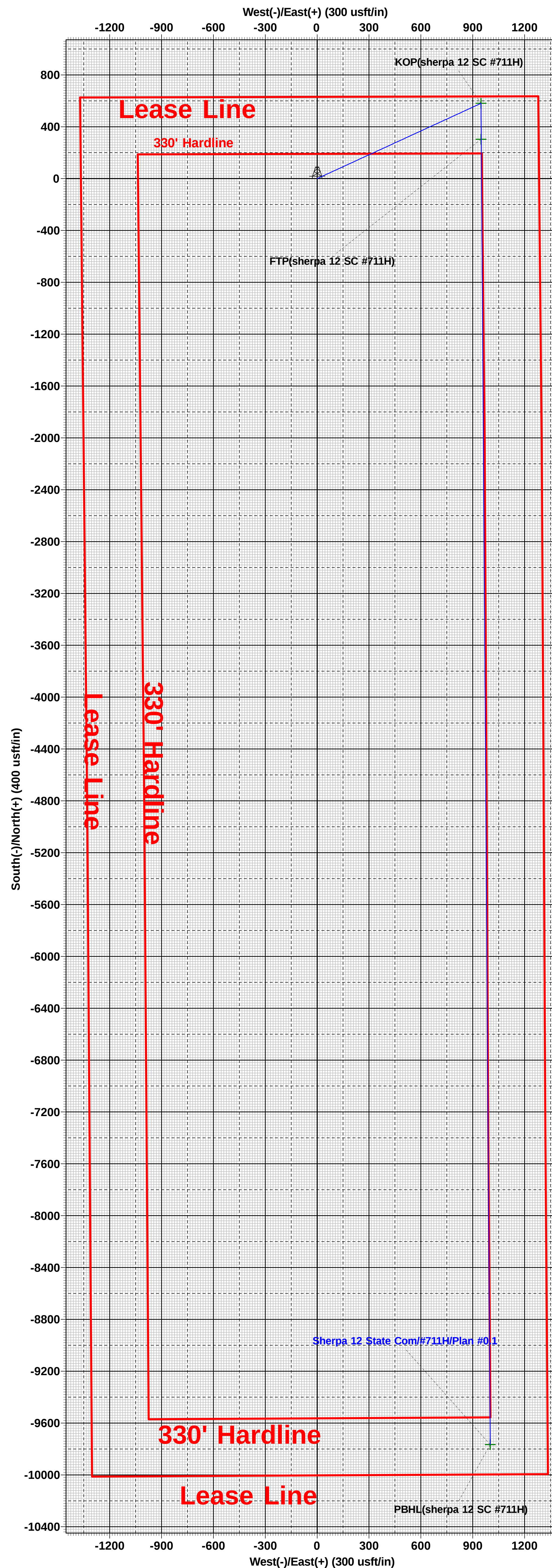
KB = 25 @ 3101.0usft 3076.0
Northing 418435.00 Easting 601280.00 Latitude 32° 9' 0.749 N Longitude 104° 8' 22.728 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.0	
3	1905.6	24.11	58.50	1870.3	130.6	213.1	2.00	58.50	-108.2	
4	3403.7	24.11	58.50	3237.7	450.4	734.9	0.00	0.00	-373.1	
5	4609.2	0.00	0.00	4408.0	581.0	948.0	2.00	180.00	-481.3	
6	9024.7	0.00	0.00	8823.5	581.0	948.0	0.00	0.00	-481.3	KOP(sherpa 12 SC #711H)
7	9774.7	90.00	179.71	9301.0	103.5	950.4	12.00	179.71	-6.1	
8	19644.4	90.00	179.71	9301.0	-9766.0	1001.0	0.00	0.00	9817.2	PBHL(sherpa 12 SC #711H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(sherpa 12 SC #711H)	8823.5	581.0	948.0	419016.00	602228.00
FTP(sherpa 12 SC #711H)	9301.0	304.0	948.0	418739.00	602228.00
PBHL(sherpa 12 SC #711H)	9301.0	-9766.0	1001.0	408669.00	602281.00



Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: EOG Resources, Inc. **OGRID:** 7377 **Date:** 06/ 28 /2021

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
SHERPA 12 STATE COM 711H		A-12-25S-27E	631' FNL & 1284' FEL	+/- 1000	+/- 3500	+/- 3000

IV. Central Delivery Point Name: Magnolia 15 Fed Com CTB [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
SHERPA 12 STATE COM 711H		9/1/21	9/16/21	11/1/21	12/1/21	1/1/22

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☐ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: *Craig RICHARDSON*

Printed Name: Craig Richardson

Title: Regulatory Specialist

E-mail Address: craig_richardson@eogresources.com

Date: 6/28/2021

Phone: (432) 848-6677

OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)

Approved By:

Title:

Approval Date:

Conditions of Approval:

Natural Gas Management Plan**Items VI-VIII****VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.**

- Separation equipment will be sized to provide adequate separation for anticipated rates.
- Adequate separation relates to retention time for Liquid – Liquid separation and velocity for Gas-Liquid separation.
- Collection systems are appropriately sized to handle facility production rates on all (3) phases.
- Ancillary equipment and metering is selected to be serviced without flow interruptions or the need to release gas from the well.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F 19.15.27.8 NMAC.**Drilling Operations**

- All flare stacks will be properly sized. The flare stacks will be located at a minimum 100' from the nearest surface hole location on the pad.
- All natural gas produced during drilling operations will be flared, unless there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety and the environment, at which point the gas will be vented.

Completions/Recompletions Operations

- New wells will not be flowed back until they are connected to a properly sized gathering system.
- The facility will be built/sized for maximum anticipated flowrates and pressures to minimize waste.
- For flowback operations, multiple stages of separation will be used as well as excess VRU and blowers to make sure waste is minimized off the storage tanks and facility.
- During initial flowback, the well stream will be routed to separation equipment.
- At an existing facility, when necessary, post separation natural gas will be flared until it meets pipeline specifications, at which point it will be turned into a collection system.
- At a new facility, post separation natural gas will be vented until storage tanks can safely function, at which point it will be flared until it meets pipeline spec.

Production Operations

- Weekly AVOs will be performed on all facilities.
- All flares will be equipped with auto-ignition systems and continuous pilot operations.
- After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- All plunger lift systems will be optimized to limit the amount of waste.
- All tanks will have automatic gauging equipment installed.
- Leaking thief hatches found during AVOs will be cleaned and properly re-sealed.

Performance Standards

- Production equipment will be designed to handle maximum anticipated rates and pressure.
- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- Weekly AVOs will be performed on all wells and facilities that produce more than 60 Mcfd.

Measurement & Estimation

- All volume that is flared and vented that is not measured will be estimated.
- All measurement equipment for flared volumes will conform to API 14.10.
- No meter bypasses will be installed.

- When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated.

VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

- During downhole well maintenance, EOG will use best management practices to vent as minimally as possible.
- Prior to the commencement of any maintenance, the tank or vessel will be isolated from the rest of the facilities.
- All valves upstream of the equipment will be closed and isolated.
- After equipment has been isolated, the equipment will be blown down to as low a pressure as possible into the collection system.
- If the equipment being maintained cannot be relieved into the collection system, it shall be released to a tank where the vapor can either be captured or combusted if possible.
- After downhole well maintenance, natural gas will be flared until it reaches pipeline specification.