District I
1625 N. French Dr., Hobbs, NM 88240
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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 C-101
August 1, 2011

Permit 319297

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

1. Operator Name and Address		2. OGRID Number
COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701		229137
		3. API Number 30-015-49630
4. Property Code 327322	5. Property Name Atticus State Com	6. Well No. 703H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
N	36	25S	27E		345	S	2618	W	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
B	24	25S	27E	B	200	N	2250	E	Eddy

9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	GAS		State	3120
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	24590	Wolfcamp		6/30/2022
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	17.5	13.375	54.5	500	500	0
Int1	12.25	9.625	40	8550	1000	0
Prod	8.75	5.5	20	24590	3500	0

Casing/Cement Program: Additional Comments

Drill 17-1/2” hole to ~500’ w/ fresh water spud mud. Run 13-3/8” 54.5# J-55 BTC casing to TD and cement to surface in one stage. Drill 12-1/4” hole to ~8,550’ with cut brine. Run 9-5/8 40# J-55 BTC to TD and cement to surface in one stage. Drill 8-3/4” vertical, curve and lateral to ~24,590’ with OBM. Run 5.5” 20# P110 BTC casing from TD to surface and cement to surface in one stage.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	Cameron

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.** Signature:		**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Robyn Russell	Approved By:	Katherine Pickford
Title:	Supervisor Delaware Regulatory	Title:	Geoscientist
Email Address:	robyn.m.russell@conocophillips.com	Approved Date:	6/16/2022 Expiration Date: 6/16/2024
Date:	6/15/2022 Phone: 432-685-4385	Conditions of Approval Attached	

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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	2 Pool Code	3 Pool Name
30-015- 49630	98220	Purple Sage; Wolfcamp

4 Property Code	5 Property Name	6 Well Number
327322	ATTICUS STATE COM	703H
7 OGRID No.	**8 Operator Name**	**9 Elevation**
229137	COG OPERATING LLC	3120'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	36	25-S	27-E		345'	SOUTH	2618'	WEST	EDDY

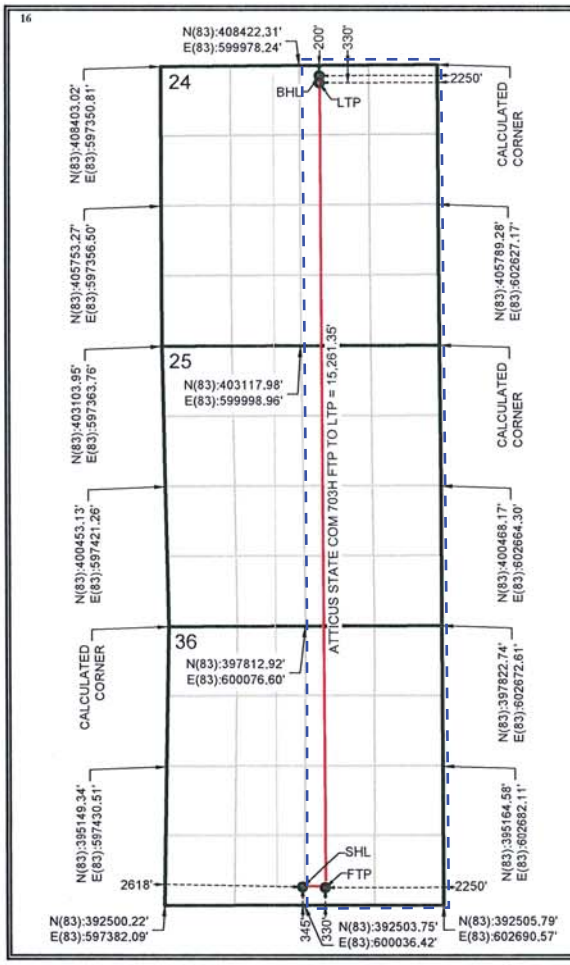
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	24	25-S	27-E		200'	NORTH	2250'	EAST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
960			

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.

16



BOTTOM HOLE LOCATION (BHL)
NEW MEXICO EAST - NAD 83
X=600364.47 LAT.= 32.12214663° N
Y=408225.23 LONG.= 104.14266337° W
200' FNL, 2250' FEL - SECTION 24

LAST TAKE POINT (LTP)
NEW MEXICO EAST - NAD 83
X=600365.15 LAT.= 32.12178926° N
Y=408095.23 LONG.= 104.14266193° W
330' FNL, 2250' FEL - SECTION 24

FIRST TAKE POINT (FTP)
NEW MEXICO EAST - NAD 83
X=600439.51 LAT.= 32.07983678° N
Y=392834.06 LONG.= 104.14250897° W
330' FSL, 2250' FEL - SECTION 36

SURFACE HOLE LOCATION (SHL)
NEW MEXICO EAST - NAD 83
X=600006.61 LAT.= 32.07987902° N
Y=392848.66 LONG.= 104.14390658° W
345' FSL, 2618' FWL - SECTION 36

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.

Signature 03/05/2020 Date

Robyn M. Russell
Printed Name

Rrussell@concho.com
E-mail Address

18 SURVEYOR CERTIFICATION

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.

Date of Survey 3-3-2020

Signature and Seal of Professional Surveyor

GARRETT J SMELKER
NEW MEXICO
25036
PROFESSIONAL SURVEYOR

Certificate Number

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

Form APD Comments

Permit 319297

PERMIT COMMENTS

Operator Name and Address:	API Number:
COG OPERATING LLC [229137] 600 W Illinois Ave Midland, TX 79701	30-015-49630
	Well: Atticus State Com #703H

Created By	Comment	Comment Date
mreyes4	OIL: COG Operating has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore we do not believe that an H2S Contingency Plan would be necessary.	6/15/2022

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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 319297

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
COG OPERATING LLC [229137] 600 W Illinois Ave Midland, TX 79701	30-015-49630
	Well: Atticus State Com #703H

OCD Reviewer	Condition
kpickford	Surface casing must be set 25' below top of Rustler Anhydrite or other competent layer in order to seal off protectable water
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	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

NORTHERN DELAWARE BASIN

EDDY COUNTY, NM
ATTICUS ST COM PROJECT
ATTICUS ST COM #703H

OWB

Plan: PWP1

Standard Survey Report

12 March, 2020

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well ATTICUS ST COM #703H
Project:	EDDY COUNTY, NM	**TVD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Site:	ATTICUS ST COM PROJECT	**MD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Well:	ATTICUS ST COM #703H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

Project EDDY COUNTY, NM

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Well ATTICUS ST COM #703H

Well Position	**+N/-S**	0.0 usft	**Northing:**	392,791.31 usft	**Latitude:**	32° 4' 47.124 N
	+E/-W	0.0 usft	**Easting:**	558,822.59 usft	**Longitude:**	104° 8' 36.295 W
Position Uncertainty		3.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,120.0 usft

Wellbore OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/12/2020	6.91	59.81	47,513.76226181

Design PWP1

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	1.33

Survey Tool Program **Date** 3/12/2020

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	8,521.3	PWP1 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
8,521.3	24,588.7	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction

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	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well ATTICUS ST COM #703H
Project:	EDDY COUNTY, NM	**TVD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Site:	ATTICUS ST COM PROJECT	**MD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Well:	ATTICUS ST COM #703H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
5,600.0	2.00	125.00	5,600.0	-1.0	1.4	-1.0	2.00	2.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well ATTICUS ST COM #703H
Project:	EDDY COUNTY, NM	**TVD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Site:	ATTICUS ST COM PROJECT	**MD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Well:	ATTICUS ST COM #703H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
5,700.0	4.00	125.00	5,699.8	-4.0	5.7	-3.9	2.00	2.00	0.00
5,750.0	5.00	125.00	5,749.7	-6.3	8.9	-6.0	2.00	2.00	0.00
Start 2938.2 hold at 5750.0 MD									
5,800.0	5.00	125.00	5,799.5	-8.8	12.5	-8.5	0.00	0.00	0.00
5,900.0	5.00	125.00	5,899.1	-13.8	19.6	-13.3	0.00	0.00	0.00
6,000.0	5.00	125.00	5,998.7	-18.8	26.8	-18.1	0.00	0.00	0.00
6,100.0	5.00	125.00	6,098.4	-23.7	33.9	-23.0	0.00	0.00	0.00
6,200.0	5.00	125.00	6,198.0	-28.7	41.1	-27.8	0.00	0.00	0.00
6,300.0	5.00	125.00	6,297.6	-33.7	48.2	-32.6	0.00	0.00	0.00
6,400.0	5.00	125.00	6,397.2	-38.7	55.3	-37.4	0.00	0.00	0.00
6,500.0	5.00	125.00	6,496.8	-43.7	62.5	-42.3	0.00	0.00	0.00
6,600.0	5.00	125.00	6,596.4	-48.7	69.6	-47.1	0.00	0.00	0.00
6,700.0	5.00	125.00	6,696.1	-53.7	76.8	-51.9	0.00	0.00	0.00
6,800.0	5.00	125.00	6,795.7	-58.7	83.9	-56.8	0.00	0.00	0.00
6,900.0	5.00	125.00	6,895.3	-63.7	91.0	-61.6	0.00	0.00	0.00
7,000.0	5.00	125.00	6,994.9	-68.7	98.2	-66.4	0.00	0.00	0.00
7,100.0	5.00	125.00	7,094.5	-73.7	105.3	-71.3	0.00	0.00	0.00
7,200.0	5.00	125.00	7,194.2	-78.7	112.5	-76.1	0.00	0.00	0.00
7,300.0	5.00	125.00	7,293.8	-83.7	119.6	-80.9	0.00	0.00	0.00
7,400.0	5.00	125.00	7,393.4	-88.7	126.7	-85.8	0.00	0.00	0.00
7,500.0	5.00	125.00	7,493.0	-93.7	133.9	-90.6	0.00	0.00	0.00
7,600.0	5.00	125.00	7,592.6	-98.7	141.0	-95.4	0.00	0.00	0.00
7,700.0	5.00	125.00	7,692.3	-103.7	148.1	-100.3	0.00	0.00	0.00
7,800.0	5.00	125.00	7,791.9	-108.7	155.3	-105.1	0.00	0.00	0.00
7,900.0	5.00	125.00	7,891.5	-113.7	162.4	-109.9	0.00	0.00	0.00
8,000.0	5.00	125.00	7,991.1	-118.7	169.6	-114.8	0.00	0.00	0.00
8,100.0	5.00	125.00	8,090.7	-123.7	176.7	-119.6	0.00	0.00	0.00
8,200.0	5.00	125.00	8,190.4	-128.7	183.8	-124.4	0.00	0.00	0.00
8,300.0	5.00	125.00	8,290.0	-133.7	191.0	-129.2	0.00	0.00	0.00
8,400.0	5.00	125.00	8,389.6	-138.7	198.1	-134.1	0.00	0.00	0.00
8,500.0	5.00	125.00	8,489.2	-143.7	205.3	-138.9	0.00	0.00	0.00
8,600.0	5.00	125.00	8,588.8	-148.7	212.4	-143.7	0.00	0.00	0.00
8,688.2	5.00	125.00	8,676.7	-153.1	218.7	-148.0	0.00	0.00	0.00
Start DLS 10.00 TFO -113.81									
8,700.0	4.65	111.56	8,688.5	-153.6	219.6	-148.5	10.00	-2.96	-113.88
8,800.0	10.23	37.43	8,787.8	-148.0	228.8	-142.7	10.00	5.58	-74.13
8,900.0	19.68	24.03	8,884.3	-125.5	241.0	-119.9	10.00	9.45	-13.39
9,000.0	29.48	19.24	8,975.1	-86.8	256.0	-80.9	10.00	9.81	-4.79
9,100.0	39.38	16.70	9,057.5	-33.1	273.3	-26.7	10.00	9.90	-2.54
9,200.0	49.31	15.05	9,128.9	34.1	292.3	40.9	10.00	9.93	-1.65
9,300.0	59.27	13.83	9,187.2	112.6	312.5	119.9	10.00	9.95	-1.22
9,400.0	69.23	12.85	9,230.6	200.2	333.2	207.9	10.00	9.96	-0.99
9,500.0	79.19	11.98	9,257.8	294.0	353.9	302.2	10.00	9.97	-0.86
9,600.0	89.16	11.18	9,267.9	391.4	373.8	400.0	10.00	9.97	-0.81

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well ATTICUS ST COM #703H
Project:	EDDY COUNTY, NM	**TVD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Site:	ATTICUS ST COM PROJECT	**MD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Well:	ATTICUS ST COM #703H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
9,609.4	90.10	11.10	9,268.0	400.6	375.6	409.2	10.00	9.97	-0.80
Start DLS 2.00 TFO -89.97									
9,700.0	90.10	9.29	9,267.8	489.7	391.7	498.7	2.00	0.00	-2.00
9,800.0	90.10	7.29	9,267.7	588.7	406.1	598.0	2.00	0.00	-2.00
9,900.0	90.10	5.29	9,267.5	688.1	417.0	697.6	2.00	0.00	-2.00
10,000.0	90.10	3.29	9,267.3	787.8	424.5	797.5	2.00	0.00	-2.00
10,100.0	90.10	1.29	9,267.1	887.7	428.5	897.5	2.00	0.00	-2.00
10,178.6	90.10	359.72	9,267.0	966.3	429.2	976.0	2.00	0.00	-2.00
Start 14410.2 hold at 10178.6 MD									
10,200.0	90.10	359.72	9,266.9	987.7	429.1	997.4	0.00	0.00	0.00
10,300.0	90.10	359.72	9,266.8	1,087.7	428.6	1,097.4	0.00	0.00	0.00
10,400.0	90.10	359.72	9,266.6	1,187.7	428.1	1,197.4	0.00	0.00	0.00
10,500.0	90.10	359.72	9,266.4	1,287.7	427.6	1,297.3	0.00	0.00	0.00
10,600.0	90.10	359.72	9,266.2	1,387.7	427.1	1,397.3	0.00	0.00	0.00
10,700.0	90.10	359.72	9,266.0	1,487.7	426.6	1,497.2	0.00	0.00	0.00
10,800.0	90.10	359.72	9,265.9	1,587.7	426.1	1,597.2	0.00	0.00	0.00
10,900.0	90.10	359.72	9,265.7	1,687.7	425.6	1,697.2	0.00	0.00	0.00
11,000.0	90.10	359.72	9,265.5	1,787.7	425.1	1,797.1	0.00	0.00	0.00
11,100.0	90.10	359.72	9,265.3	1,887.7	424.6	1,897.1	0.00	0.00	0.00
11,200.0	90.10	359.72	9,265.1	1,987.7	424.1	1,997.0	0.00	0.00	0.00
11,300.0	90.10	359.72	9,265.0	2,087.7	423.7	2,097.0	0.00	0.00	0.00
11,400.0	90.10	359.72	9,264.8	2,187.7	423.2	2,197.0	0.00	0.00	0.00
11,500.0	90.10	359.72	9,264.6	2,287.7	422.7	2,296.9	0.00	0.00	0.00
11,600.0	90.10	359.72	9,264.4	2,387.7	422.2	2,396.9	0.00	0.00	0.00
11,700.0	90.10	359.72	9,264.2	2,487.7	421.7	2,496.8	0.00	0.00	0.00
11,800.0	90.10	359.72	9,264.1	2,587.7	421.2	2,596.8	0.00	0.00	0.00
11,900.0	90.10	359.72	9,263.9	2,687.7	420.7	2,696.8	0.00	0.00	0.00
12,000.0	90.10	359.72	9,263.7	2,787.7	420.2	2,796.7	0.00	0.00	0.00
12,100.0	90.10	359.72	9,263.5	2,887.7	419.7	2,896.7	0.00	0.00	0.00
12,200.0	90.10	359.72	9,263.3	2,987.7	419.2	2,996.6	0.00	0.00	0.00
12,300.0	90.10	359.72	9,263.2	3,087.7	418.7	3,096.6	0.00	0.00	0.00
12,400.0	90.10	359.72	9,263.0	3,187.7	418.2	3,196.6	0.00	0.00	0.00
12,500.0	90.10	359.72	9,262.8	3,287.7	417.7	3,296.5	0.00	0.00	0.00
12,600.0	90.10	359.72	9,262.6	3,387.7	417.2	3,396.5	0.00	0.00	0.00
12,700.0	90.10	359.72	9,262.4	3,487.7	416.7	3,496.4	0.00	0.00	0.00
12,800.0	90.10	359.72	9,262.3	3,587.7	416.3	3,596.4	0.00	0.00	0.00
12,900.0	90.10	359.72	9,262.1	3,687.7	415.8	3,696.4	0.00	0.00	0.00
13,000.0	90.10	359.72	9,261.9	3,787.7	415.3	3,796.3	0.00	0.00	0.00
13,100.0	90.10	359.72	9,261.7	3,887.7	414.8	3,896.3	0.00	0.00	0.00
13,200.0	90.10	359.72	9,261.5	3,987.7	414.3	3,996.2	0.00	0.00	0.00
13,300.0	90.10	359.72	9,261.4	4,087.7	413.8	4,096.2	0.00	0.00	0.00
13,400.0	90.10	359.72	9,261.2	4,187.7	413.3	4,196.2	0.00	0.00	0.00
13,500.0	90.10	359.72	9,261.0	4,287.7	412.8	4,296.1	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well ATTICUS ST COM #703H
Project:	EDDY COUNTY, NM	**TVD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Site:	ATTICUS ST COM PROJECT	**MD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Well:	ATTICUS ST COM #703H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
13,600.0	90.10	359.72	9,260.8	4,387.7	412.3	4,396.1	0.00	0.00	0.00
13,700.0	90.10	359.72	9,260.6	4,487.7	411.8	4,496.0	0.00	0.00	0.00
13,800.0	90.10	359.72	9,260.5	4,587.7	411.3	4,596.0	0.00	0.00	0.00
13,900.0	90.10	359.72	9,260.3	4,687.7	410.8	4,696.0	0.00	0.00	0.00
14,000.0	90.10	359.72	9,260.1	4,787.7	410.3	4,795.9	0.00	0.00	0.00
14,100.0	90.10	359.72	9,259.9	4,887.7	409.8	4,895.9	0.00	0.00	0.00
14,200.0	90.10	359.72	9,259.7	4,987.7	409.4	4,995.8	0.00	0.00	0.00
14,300.0	90.10	359.72	9,259.5	5,087.7	408.9	5,095.8	0.00	0.00	0.00
14,400.0	90.10	359.72	9,259.4	5,187.7	408.4	5,195.8	0.00	0.00	0.00
14,500.0	90.10	359.72	9,259.2	5,287.7	407.9	5,295.7	0.00	0.00	0.00
14,600.0	90.10	359.72	9,259.0	5,387.7	407.4	5,395.7	0.00	0.00	0.00
14,700.0	90.10	359.72	9,258.8	5,487.7	406.9	5,495.6	0.00	0.00	0.00
14,800.0	90.10	359.72	9,258.6	5,587.7	406.4	5,595.6	0.00	0.00	0.00
14,900.0	90.10	359.72	9,258.5	5,687.6	405.9	5,695.6	0.00	0.00	0.00
15,000.0	90.10	359.72	9,258.3	5,787.6	405.4	5,795.5	0.00	0.00	0.00
15,100.0	90.10	359.72	9,258.1	5,887.6	404.9	5,895.5	0.00	0.00	0.00
15,200.0	90.10	359.72	9,257.9	5,987.6	404.4	5,995.4	0.00	0.00	0.00
15,300.0	90.10	359.72	9,257.7	6,087.6	403.9	6,095.4	0.00	0.00	0.00
15,400.0	90.10	359.72	9,257.6	6,187.6	403.4	6,195.4	0.00	0.00	0.00
15,500.0	90.10	359.72	9,257.4	6,287.6	402.9	6,295.3	0.00	0.00	0.00
15,600.0	90.10	359.72	9,257.2	6,387.6	402.5	6,395.3	0.00	0.00	0.00
15,700.0	90.10	359.72	9,257.0	6,487.6	402.0	6,495.2	0.00	0.00	0.00
15,800.0	90.10	359.72	9,256.8	6,587.6	401.5	6,595.2	0.00	0.00	0.00
15,900.0	90.10	359.72	9,256.7	6,687.6	401.0	6,695.2	0.00	0.00	0.00
16,000.0	90.10	359.72	9,256.5	6,787.6	400.5	6,795.1	0.00	0.00	0.00
16,100.0	90.10	359.72	9,256.3	6,887.6	400.0	6,895.1	0.00	0.00	0.00
16,200.0	90.10	359.72	9,256.1	6,987.6	399.5	6,995.0	0.00	0.00	0.00
16,300.0	90.10	359.72	9,255.9	7,087.6	399.0	7,095.0	0.00	0.00	0.00
16,400.0	90.10	359.72	9,255.8	7,187.6	398.5	7,195.0	0.00	0.00	0.00
16,500.0	90.10	359.72	9,255.6	7,287.6	398.0	7,294.9	0.00	0.00	0.00
16,600.0	90.10	359.72	9,255.4	7,387.6	397.5	7,394.9	0.00	0.00	0.00
16,700.0	90.10	359.72	9,255.2	7,487.6	397.0	7,494.8	0.00	0.00	0.00
16,800.0	90.10	359.72	9,255.0	7,587.6	396.5	7,594.8	0.00	0.00	0.00
16,900.0	90.10	359.72	9,254.9	7,687.6	396.0	7,694.8	0.00	0.00	0.00
17,000.0	90.10	359.72	9,254.7	7,787.6	395.6	7,794.7	0.00	0.00	0.00
17,100.0	90.10	359.72	9,254.5	7,887.6	395.1	7,894.7	0.00	0.00	0.00
17,200.0	90.10	359.72	9,254.3	7,987.6	394.6	7,994.6	0.00	0.00	0.00
17,300.0	90.10	359.72	9,254.1	8,087.6	394.1	8,094.6	0.00	0.00	0.00
17,400.0	90.10	359.72	9,254.0	8,187.6	393.6	8,194.6	0.00	0.00	0.00
17,500.0	90.10	359.72	9,253.8	8,287.6	393.1	8,294.5	0.00	0.00	0.00
17,600.0	90.10	359.72	9,253.6	8,387.6	392.6	8,394.5	0.00	0.00	0.00
17,700.0	90.10	359.72	9,253.4	8,487.6	392.1	8,494.4	0.00	0.00	0.00
17,800.0	90.10	359.72	9,253.2	8,587.6	391.6	8,594.4	0.00	0.00	0.00
17,900.0	90.10	359.72	9,253.1	8,687.6	391.1	8,694.4	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well ATTICUS ST COM #703H
Project:	EDDY COUNTY, NM	**TVD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Site:	ATTICUS ST COM PROJECT	**MD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Well:	ATTICUS ST COM #703H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
18,000.0	90.10	359.72	9,252.9	8,787.6	390.6	8,794.3	0.00	0.00	0.00
18,100.0	90.10	359.72	9,252.7	8,887.6	390.1	8,894.3	0.00	0.00	0.00
18,200.0	90.10	359.72	9,252.5	8,987.6	389.6	8,994.2	0.00	0.00	0.00
18,300.0	90.10	359.72	9,252.3	9,087.6	389.1	9,094.2	0.00	0.00	0.00
18,400.0	90.10	359.72	9,252.2	9,187.6	388.6	9,194.2	0.00	0.00	0.00
18,500.0	90.10	359.72	9,252.0	9,287.6	388.2	9,294.1	0.00	0.00	0.00
18,600.0	90.10	359.72	9,251.8	9,387.6	387.7	9,394.1	0.00	0.00	0.00
18,700.0	90.10	359.72	9,251.6	9,487.6	387.2	9,494.0	0.00	0.00	0.00
18,800.0	90.10	359.72	9,251.4	9,587.6	386.7	9,594.0	0.00	0.00	0.00
18,900.0	90.10	359.72	9,251.3	9,687.6	386.2	9,694.0	0.00	0.00	0.00
19,000.0	90.10	359.72	9,251.1	9,787.6	385.7	9,793.9	0.00	0.00	0.00
19,100.0	90.10	359.72	9,250.9	9,887.6	385.2	9,893.9	0.00	0.00	0.00
19,200.0	90.10	359.72	9,250.7	9,987.6	384.7	9,993.8	0.00	0.00	0.00
19,300.0	90.10	359.72	9,250.5	10,087.6	384.2	10,093.8	0.00	0.00	0.00
19,400.0	90.10	359.72	9,250.4	10,187.6	383.7	10,193.8	0.00	0.00	0.00
19,500.0	90.10	359.72	9,250.2	10,287.6	383.2	10,293.7	0.00	0.00	0.00
19,600.0	90.10	359.72	9,250.0	10,387.6	382.7	10,393.7	0.00	0.00	0.00
19,700.0	90.10	359.72	9,249.8	10,487.6	382.2	10,493.6	0.00	0.00	0.00
19,800.0	90.10	359.72	9,249.6	10,587.6	381.7	10,593.6	0.00	0.00	0.00
19,900.0	90.10	359.72	9,249.5	10,687.6	381.3	10,693.6	0.00	0.00	0.00
20,000.0	90.10	359.72	9,249.3	10,787.6	380.8	10,793.5	0.00	0.00	0.00
20,100.0	90.10	359.72	9,249.1	10,887.6	380.3	10,893.5	0.00	0.00	0.00
20,200.0	90.10	359.72	9,248.9	10,987.6	379.8	10,993.4	0.00	0.00	0.00
20,300.0	90.10	359.72	9,248.7	11,087.6	379.3	11,093.4	0.00	0.00	0.00
20,400.0	90.10	359.72	9,248.6	11,187.6	378.8	11,193.4	0.00	0.00	0.00
20,500.0	90.10	359.72	9,248.4	11,287.6	378.3	11,293.3	0.00	0.00	0.00
20,600.0	90.10	359.72	9,248.2	11,387.6	377.8	11,393.3	0.00	0.00	0.00
20,700.0	90.10	359.72	9,248.0	11,487.6	377.3	11,493.2	0.00	0.00	0.00
20,800.0	90.10	359.72	9,247.8	11,587.6	376.8	11,593.2	0.00	0.00	0.00
20,900.0	90.10	359.72	9,247.7	11,687.6	376.3	11,693.2	0.00	0.00	0.00
21,000.0	90.10	359.72	9,247.5	11,787.6	375.8	11,793.1	0.00	0.00	0.00
21,100.0	90.10	359.72	9,247.3	11,887.6	375.3	11,893.1	0.00	0.00	0.00
21,200.0	90.10	359.72	9,247.1	11,987.6	374.8	11,993.0	0.00	0.00	0.00
21,300.0	90.10	359.72	9,246.9	12,087.6	374.4	12,093.0	0.00	0.00	0.00
21,400.0	90.10	359.72	9,246.7	12,187.6	373.9	12,193.0	0.00	0.00	0.00
21,500.0	90.10	359.72	9,246.6	12,287.6	373.4	12,292.9	0.00	0.00	0.00
21,600.0	90.10	359.72	9,246.4	12,387.6	372.9	12,392.9	0.00	0.00	0.00
21,700.0	90.10	359.72	9,246.2	12,487.6	372.4	12,492.8	0.00	0.00	0.00
21,800.0	90.10	359.72	9,246.0	12,587.6	371.9	12,592.8	0.00	0.00	0.00
21,900.0	90.10	359.72	9,245.8	12,687.6	371.4	12,692.8	0.00	0.00	0.00
22,000.0	90.10	359.72	9,245.7	12,787.6	370.9	12,792.7	0.00	0.00	0.00
22,100.0	90.10	359.72	9,245.5	12,887.5	370.4	12,892.7	0.00	0.00	0.00
22,200.0	90.10	359.72	9,245.3	12,987.5	369.9	12,992.6	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well ATTICUS ST COM #703H
Project:	EDDY COUNTY, NM	**TVD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Site:	ATTICUS ST COM PROJECT	**MD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Well:	ATTICUS ST COM #703H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
22,300.0	90.10	359.72	9,245.1	13,087.5	369.4	13,092.6	0.00	0.00	0.00
22,400.0	90.10	359.72	9,244.9	13,187.5	368.9	13,192.6	0.00	0.00	0.00
22,500.0	90.10	359.72	9,244.8	13,287.5	368.4	13,292.5	0.00	0.00	0.00
22,600.0	90.10	359.72	9,244.6	13,387.5	367.9	13,392.5	0.00	0.00	0.00
22,700.0	90.10	359.72	9,244.4	13,487.5	367.5	13,492.4	0.00	0.00	0.00
22,800.0	90.10	359.72	9,244.2	13,587.5	367.0	13,592.4	0.00	0.00	0.00
22,900.0	90.10	359.72	9,244.0	13,687.5	366.5	13,692.4	0.00	0.00	0.00
23,000.0	90.10	359.72	9,243.9	13,787.5	366.0	13,792.3	0.00	0.00	0.00
23,100.0	90.10	359.72	9,243.7	13,887.5	365.5	13,892.3	0.00	0.00	0.00
23,200.0	90.10	359.72	9,243.5	13,987.5	365.0	13,992.2	0.00	0.00	0.00
23,300.0	90.10	359.72	9,243.3	14,087.5	364.5	14,092.2	0.00	0.00	0.00
23,400.0	90.10	359.72	9,243.1	14,187.5	364.0	14,192.2	0.00	0.00	0.00
23,500.0	90.10	359.72	9,243.0	14,287.5	363.5	14,292.1	0.00	0.00	0.00
23,600.0	90.10	359.72	9,242.8	14,387.5	363.0	14,392.1	0.00	0.00	0.00
23,700.0	90.10	359.72	9,242.6	14,487.5	362.5	14,492.0	0.00	0.00	0.00
23,800.0	90.10	359.72	9,242.4	14,587.5	362.0	14,592.0	0.00	0.00	0.00
23,900.0	90.10	359.72	9,242.2	14,687.5	361.5	14,692.0	0.00	0.00	0.00
24,000.0	90.10	359.72	9,242.1	14,787.5	361.0	14,791.9	0.00	0.00	0.00
24,100.0	90.10	359.72	9,241.9	14,887.5	360.5	14,891.9	0.00	0.00	0.00
24,200.0	90.10	359.72	9,241.7	14,987.5	360.1	14,991.8	0.00	0.00	0.00
24,300.0	90.10	359.72	9,241.5	15,087.5	359.6	15,091.8	0.00	0.00	0.00
24,400.0	90.10	359.72	9,241.3	15,187.5	359.1	15,191.8	0.00	0.00	0.00
24,500.0	90.10	359.72	9,241.2	15,287.5	358.6	15,291.7	0.00	0.00	0.00
24,588.7	90.10	359.72	9,241.0	15,376.3	358.1	15,380.4	0.00	0.00	0.00
TD at 24588.7									

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
LTP (ATTICUS ST CC	0.00	0.01	9,241.0	15,246.3	358.8	408,037.58	559,181.40	32° 7' 18.003 N	104° 8' 31.811 W
- plan misses target center by 0.2usft at 24458.8usft MD (9241.2 TVD, 15246.3 N, 358.8 E)									
- Point									
PBHL (ATTICUS ST C	0.10	179.72	9,241.0	15,376.3	358.1	408,167.57	559,180.73	32° 7' 19.289 N	104° 8' 31.816 W
- plan hits target center									
- Rectangle (sides W100.0 H15,396.4 D20.0)									
FTP (ATTICUS ST CC	0.00	0.00	9,268.0	-14.6	432.9	392,776.70	559,255.47	32° 4' 46.972 N	104° 8' 31.264 W
- plan misses target center by 189.5usft at 9271.4usft MD (9172.0 TVD, 89.1 N, 306.6 E)									
- Circle (radius 50.0)									

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well ATTICUS ST COM #703H
Project:	EDDY COUNTY, NM	**TVD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Site:	ATTICUS ST COM PROJECT	**MD Reference:**	KB=27' @ 3147.0usft (SCAN FREEDOM)
Well:	ATTICUS ST COM #703H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
5500	5500	0	0	Start Build 2.00
5750	5750	-6	9	Start 2938.2 hold at 5750.0 MD
8688	8677	-153	219	Start DLS 10.00 TFO -113.81
9609	9268	401	376	Start DLS 2.00 TFO -89.97
10,179	9267	966	429	Start 14410.2 hold at 10178.6 MD
24,589	9241	15,376	358	TD at 24588.7

Checked By: _____ Approved By: _____ Date: _____

Project: EDDY COUNTY, NM
Site: ATTICUS ST COM PROJECT
Well: ATTICUS ST COM #703H
Wellbore: OWB
Design: PWP1
GL: 3120.0
KB=27' @ 3147.0usft (SCAN FREEDOM)

WELL DETAILS: ATTICUS ST COM #703H

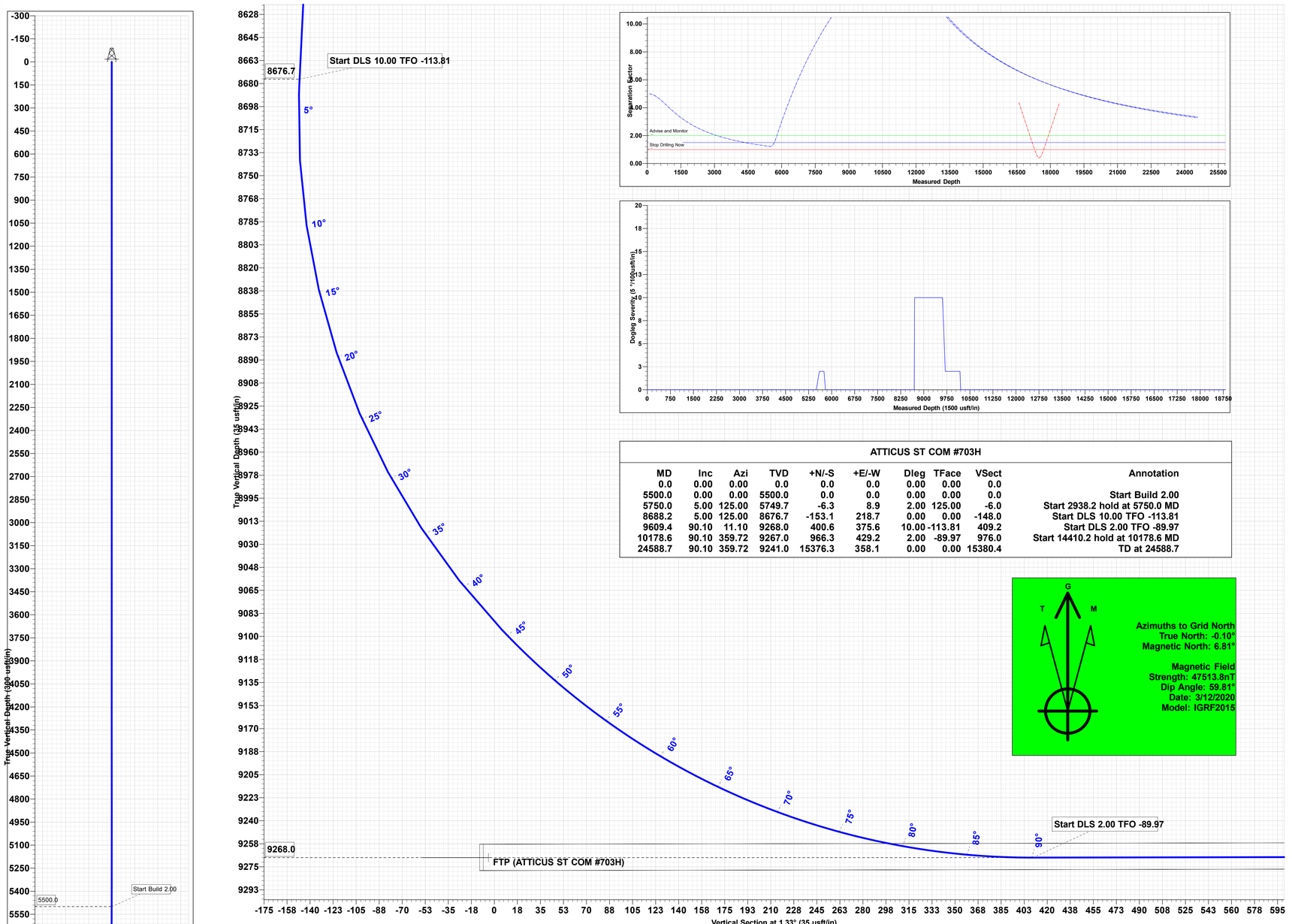
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	392791.31	558822.59	32° 4' 47.124 N	104° 8' 36.295 W

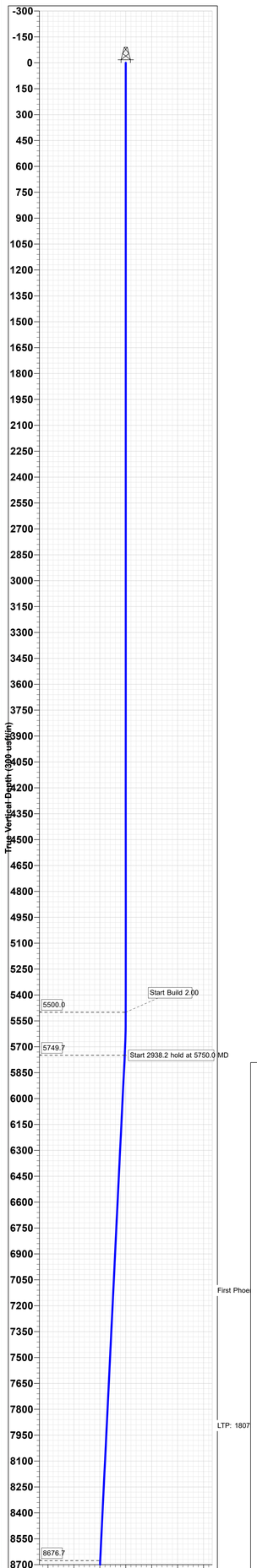
DESIGN TARGET DETAILS

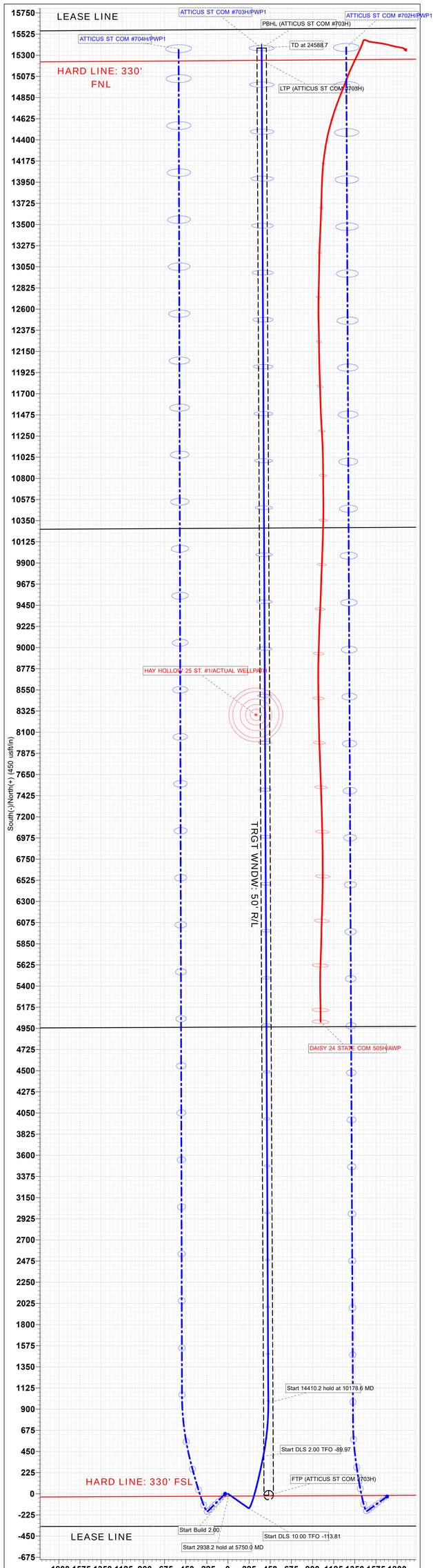
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LTP (ATTICUS ST COM #703H)	9241.0	15246.3	358.8	408037.58	559181.40	32° 7' 18.003 N	104° 8' 31.811 W
PBHL (ATTICUS ST COM #703H)	9241.0	15376.3	358.1	408167.57	559180.73	32° 7' 19.289 N	104° 8' 31.816 W
FTP (ATTICUS ST COM #703H)	9268.0	-14.6	432.9	392776.70	559255.47	32° 4' 46.972 N	104° 8' 31.264 W

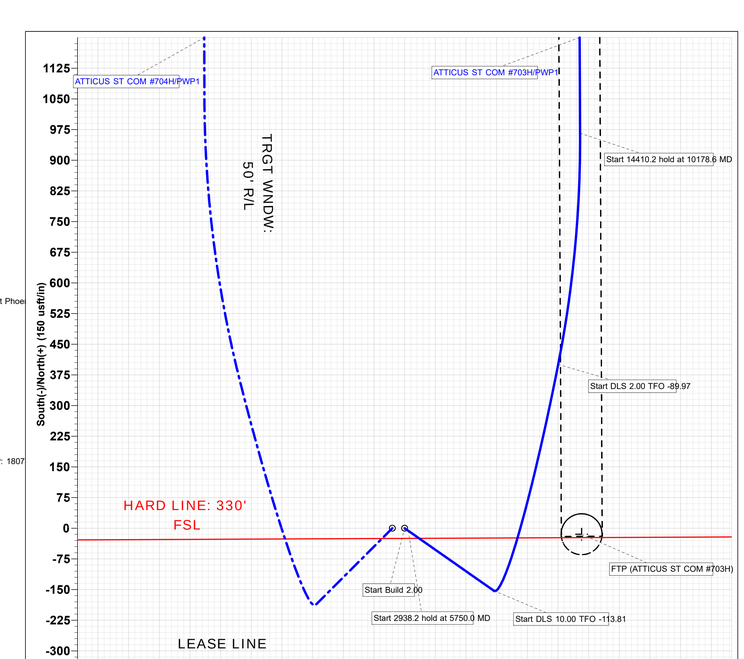
ATTICUS ST COM #703H

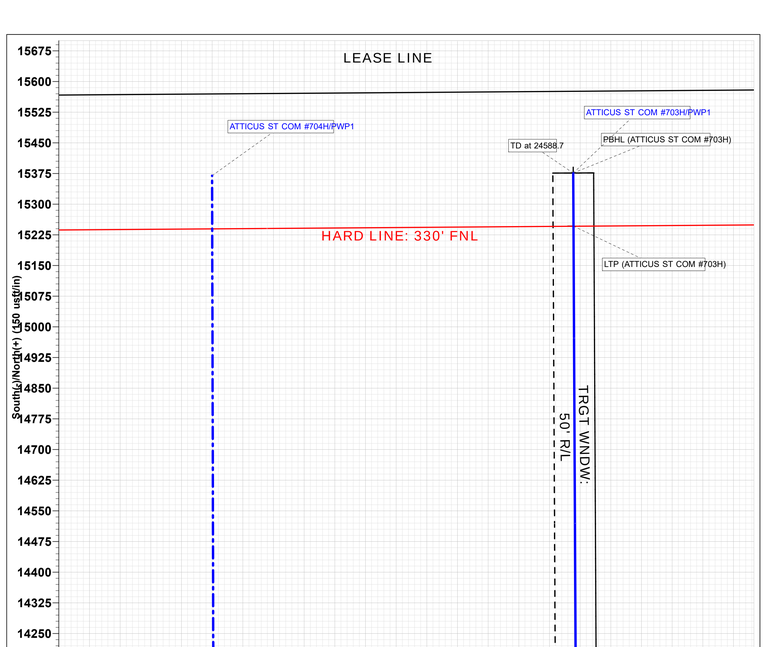
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
5500.0	0.00	0.00	5500.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
5750.0	5.00	125.00	5749.7	-6.3	8.9	2.00	125.00	-6.0	Start 2938.2 hold at 5750.0 MD
8688.2	5.00	125.00	8676.7	-153.1	218.7	0.00	0.00	-148.0	Start DLS 10.00 TFO -113.81
9609.4	90.10	11.10	9268.0	400.6	375.6	10.00	-113.81	409.2	Start DLS 2.00 TFO -89.97
10178.6	90.10	359.72	9267.0	966.3	429.2	2.00	-89.97	976.0	Start 14410.2 hold at 10178.6 MD
24588.7	90.10	359.72	9241.0	15376.3	358.1	0.00	0.00	15380.4	TD at 24588.7

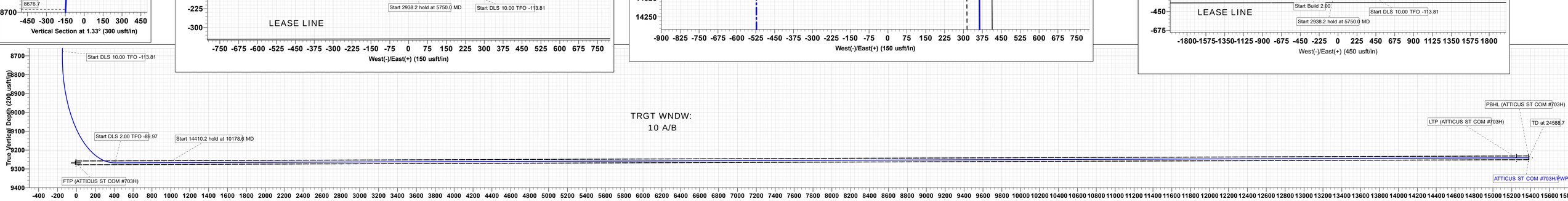












TRGT WNDW:
10 A/B

Atticus State Com 703H

Casing and Cement

String	Hole Size	Csg OD	PPF	Depth	Sx Cement	TOC
Surface	17-1/2”	13-3/8”	54.5#	500’	500	0’
Intermediate	12-1/4”	9-5/8”	40#	8550’	1000	0’
Production	8-3/4”	5.5”	20#	24590’	3500	0’

Well Plan

Drill 17-1/2” hole to ~500’ w/ fresh water spud mud. Run 13-3/8” 54.5# J-55 BTC casing to TD and cement to surface in one stage.

Drill 12-1/4” hole to ~8,550’ with cut brine. Run 9-5/8 40# J-55 BTC to TD and cement to surface in one stage.

Drill 8-3/4” vertical, curve and lateral to ~24,590’ with OBM. Run 5.5” 20# P110 BTC casing from TD to surface and cement to surface in one stage.

Well Control

After setting 13-3/8” casing and installing 3000 psi casing head, NU 13-5/8" Cameron BOP. Test annular and casing to 1500 psi and other BOP equipment to 3000 psi.

After setting 9-5/8” casing and installing 5000 psi casing spool, NU 13-5/8" Cameron BOP. Test annular to 2500 psi and other BOP equipment to 5000 psi.

Type	Working Pressure	Test Pressure	Manufacture
Double Ram	5000 psi	5000 psi	Cameron

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: COG Operating LLC **OGRID:** 229137 **Date:** 06 / 15 / 22

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
Atticus State Com 703H	30-015-	P-36-25S-27E	345' FSL & 2618' FWL	± 1233	± 5480	± 5232

IV. Central Delivery Point Name: _____ [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
Atticus State Com 703H	Pending	7/15/2023	± 25 days from spud	11/12/2023	11/22/2023	11/27/2023

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.

VI. Separation Equipment

How Operator will size separation equipment to optimize gas capture:

All ConocoPhillips production facility equipment will be sized per industry standards (API 12J) with adequate retention time to effectively separate all phases of production. Each project will take into consideration the number of wells and type curves for each formation pool to ensure adequate facility capacity. Design considerations will also include review of all piping, tanks, VRU's and associated equipment to ensure optimized gas capture minimized risk of release.

VII. Operational Practices

Actions Operator will take to comply with the requirements below:

B. Drilling Operations

- During drilling, flare stacks will be located a minimum of 100 feet from the nearest surface hole location. All gas is captured or combusted. If an emergency or malfunction occurs, gas will be flared or vented for public health, safety, and the environment and be properly reported to the NMOCD pursuant to 19.15.27.8.G.
- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.

C. Completion Operations

- During completion operations, operator does not produce oil or gas but maintains adequate well control through completion operations.
- Individual well test separators will be set to properly separate gas and liquids. A temporary test separator will be utilized initially to process volumes. In addition, separators will be tied into flowback tanks which will be tied into the gas processing equipment for sales down a pipeline.

D. Venting and flaring during production operations

- During each phase of well life (drilling, completion and production) of a ConocoPhillips well, COP personnel will follow all necessary procedures to ensure both the operation and the equipment are within the NMAC 19.15.27.8 Subsection D guidelines.
- During well operations that require unloading of the well to atmospheric pressure, all reasonable actions will be taken to minimize vented gas
- Through the life of the well all flaring shall be measured, and venting events quantified using the data available and industry best practice.

E. Performance standards for separation, storage tank and flare equipment

- All storage tanks and separation equipment are designed minimize risk of liquid or vapor release and optimize gas capture. This includes automation for automatic gauging and pressure monitoring.

- All flare stacks are equipped with auto ignition devices and/or continuous pilots and are designed to operate at maximum combustion efficiency pursuant NMAC 19.15.27.8 Subsection E. Flares will follow COP spacing guidelines to ensure they are a safe distance from combustibles and operations equipment.
- COP personnel will conduct routine AVO inspections on a regular basis per NMAC 19.15.27.8 Subsection E guidelines.

F. Measurement of vented and flared natural gas.

- Measurement equipment will be installed to quantify gas flared during drilling, completion and production of the well.
- All measurement devices installed will meet accuracy ratings per AGA and API standards.
- Measurement devices will be installed without manifolds that allow diversion of gas around the metering element, except for the sole purpose of inspection of servicing the measurement device.

VIII. Best Management Practices

- Operator will curtail or shut in production, within reasonable limits, during upset conditions to minimize venting and flaring.
- When feasible, Operator will use equipment to capture gas that would otherwise be vented or flared.
- During completions and production operations Operator will minimize blowdowns to atmosphere
- When feasible, Operator will use electric or air actuated equipment to reduce bleed emissions

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:	Mayte Reyes
Printed Name:	Mayte Reyes
Title:	Sr. Regulatory Coodinator
E-mail Address:	mayte.x.reyes@conocophillips.com
Date:	6/15/2022
Phone:	575-748-6945

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

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

Intent [X] As Drilled [ ]

API #

Operator Name:	Property Name:	Well Number
COG Operating LLC	Atticus State Com	703H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
N	36	25S	27E		345	FSL	2618	FEL	Eddy

Latitude	Longitude	NAD
32.07987902	-104.14390658	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
N	36	25S	27E		330	FSL	2250	FEL	Eddy

Latitude	Longitude	NAD
32.07983678	-104.14250897	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	24	25S	27E		330	FNL	2250	FEL	Eddy

Latitude	Longitude	NAD
32.12178926	-104.14266193	83

Is this well the defining well for the Horizontal Spacing Unit? [N]

Is this well an infill well? [Y]

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
COG Operating LLC	Atticus State Com	702H

KZ 06/29/2018