

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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 398338

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

1. Operator Name and Address Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202		2. OGRID Number 332195
		3. API Number 30-025-55334
4. Property Code 337810	5. Property Name Cosmo K Fee	6. Well No. 121H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
G	33	24S	35E	G	2352	N	1775	E	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
G	28	24S	35E	G	1325	N	1650	E	Lea

9. Pool Information

WC-025 G-07 S243517D;MIDDLE BONE SP	98294
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type Private	15. Ground Level Elevation 3289
16. Multiple N	17. Proposed Depth 17595	18. Formation 3rd Bone Spring Sand	19. Contractor	20. Spud Date 1/2/2026
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	14.75	11.75	47	901	499	0
Int1	10.625	8.625	32	5061	515	0
Prod	7.875	5.5	20	17595	1310	4561

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	CAMERON
Annular	2500	2500	Shaffer

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well. 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 Nathan S Bennett	Approved By: Jeffrey Harrison
Title: Director, Permitting & Compliance	Title: Petroleum Specialist III
Email Address: nbennett@civiresources.com	Approved Date: 10/8/2025 Expiration Date: 10/8/2027
Date: 9/17/2025 Phone: 303-312-8166	Conditions of Approval Attached

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	☒ Initial Submittal
			☐ Amended Report
		☐ As Drilled	

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025- 55334	Pool Code 98288 98294	Pool Name WC-025 G-07 S243533G, Middle Bone SP WC-025 G-07 S243517D:MIDDLE BONE SPRING
Property Code 337810	Property Name COSMO K FEE	Well Number 121H
OGRID No. 332195	Operator Name CIVITAS PERMIAN OPERATING, LLC	Ground Level Elevation 3289'
Surface Owner: ☐ State ☒ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☐ State ☒ Fee ☐ Tribal ☐ Federal

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
G	33	24-S	35-E	-	2352' N	1775' E	N 32.1747772	W 103.3696525	LEA

Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
G	28	24-S	35-E	-	1325' N	1650' E	N 32.1921132	W 103.3692631	LEA

Dedicated Acres 200	Infill or Defining Well Infill -	Defining Well API - 30-025-44969	Overlapping Spacing Unit (Y/N) -	Consolidated Code -
Order Numbers -			Well Setbacks are under Common Ownership: ☐ Yes ☐ No	

Kick Off Point (KOP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
G	33	24-S	35-E	-	2541' N	1650' E	N 32.1742577	W 103.3692481	LEA

First Take Point (FTP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
G	33	24-S	35-E	-	2541' N	1650' E	N 32.1742577	W 103.3692481	LEA

Last Take Point (LTP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
G	28	24-S	35-E	-	1420' N	1650' E	N 32.1918521	W 103.3692630	LEA

Unitized Area or Area of Uniform Intrest -	Spacing Unity Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation -
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OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief; and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received The consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.



9/15/2025

Signature
Ally Ota

Date

Print Name
aota@fieldinghillllc.com

E-mail Address

SURVEYORS 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.



7/29/2025 10:43:29 AM

Signature and Seal of Professional Surveyor

Date

Certificate Number

Date of Survey

05/02/2025

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION		Revised July 9, 2024	
			Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As Drilled	
	Property Name and Well Number COSMO K FEE 121H			

SURFACE LOCATION (SHL)

NEW MEXICO EAST
 NAD 1983
 X=839505 Y=428654
 LAT.: N 32.1747772
 LONG.: W 103.3696525
 NAD 1927
 X=798319 Y=428595
 LAT.: N 32.1746512
 LONG.: W 103.3691850
 2352' FNL 1775' FEL

**KICK OFF POINT (KOP)/
 FIRST TAKE POINT (FTP)**

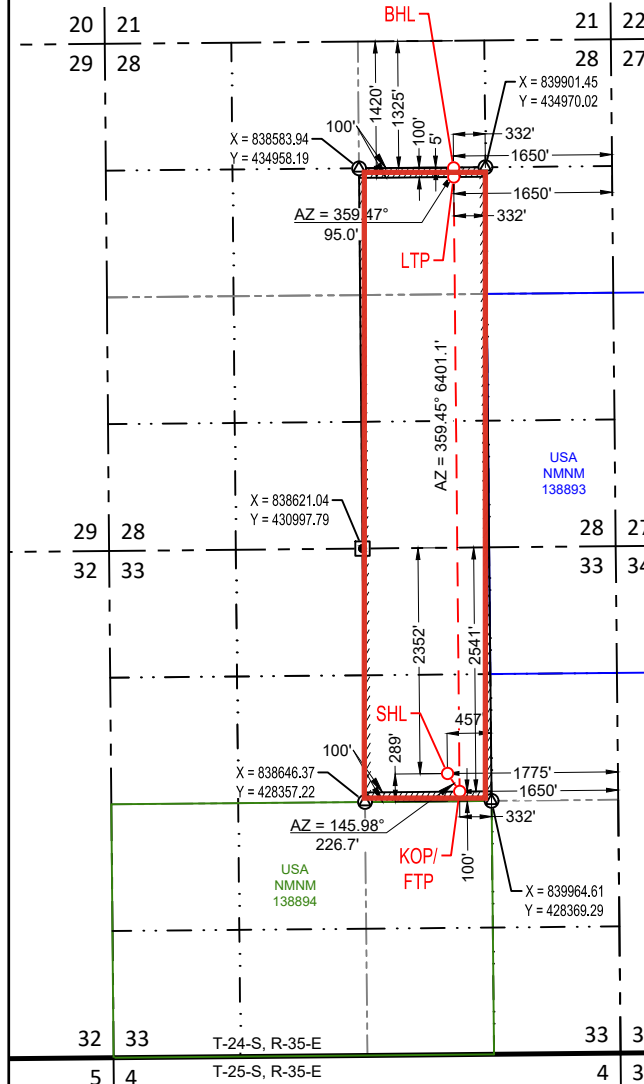
NEW MEXICO EAST
 NAD 1983
 X=839632 Y=428466
 LAT.: N 32.1742577
 LONG.: W 103.3692481
 NAD 1927
 X=798446 Y=428408
 LAT.: N 32.1741317
 LONG.: W 103.3687806
 2541' FNL 1650' FEL

LAST TAKE POINT (LTP)

NEW MEXICO EAST
 NAD 1983
 X=839570 Y=434867
 LAT.: N 32.1918521
 LONG.: W 103.3692630
 NAD 1927
 X=798384 Y=434808
 LAT.: N 32.1917262
 LONG.: W 103.3687946
 1420' FNL 1650' FEL

BOTTOM HOLE LOCATION (BHL)

NEW MEXICO EAST
 NAD 1983
 X=839569 Y=434962
 LAT.: N 32.1921132
 LONG.: W 103.3692631
 NAD 1927
 X=798383 Y=434903
 LAT.: N 32.1919873
 LONG.: W 103.3687947
 1325' FNL 1650' FEL

**SURVEYORS 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.

05/02/2025

Date of Survey

Signature and Seal of Professional Surveyor:



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1220 S. St Francis Dr.
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Form APD Comments

Permit 398338

PERMIT COMMENTS

Operator Name and Address: Civitas Permian Operating, LLC [332195] 555 17th Street Denver, CO 80202		API Number: 30-025-55334
		Well: Cosmo K Fee #121H
Created By	Comment	Comment Date
jeffrey.harrison	Infill to 30-025-44969.	10/3/2025

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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 398338

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: Civitas Permian Operating, LLC [332195] 555 17th Street Denver, CO 80202	API Number: 30-025-55334
	Well: Cosmo K Fee #121H

OCD Reviewer	Condition
jeffrey.harrison	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.
jeffrey.harrison	All logs run on the well must be submitted to NMOCD.
jeffrey.harrison	Cement is required to circulate on both surface and intermediate1 strings of casing.
jeffrey.harrison	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.
jeffrey.harrison	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
jeffrey.harrison	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.
jeffrey.harrison	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.

Project: Lea County, NM (NAD 83)
Site: Cosmo K Fee
Well: Cosmo K Fee 121H
Wellbore: OH
Design: Plan #1
Rig:



Azimuths to Grid North
True North: -0.51°
Magnetic North: 5.55°

Magnetic Field
Strength: 47104.6nT
Dip Angle: 59.60°
Date: 8/19/2025
Model: HDGM2025

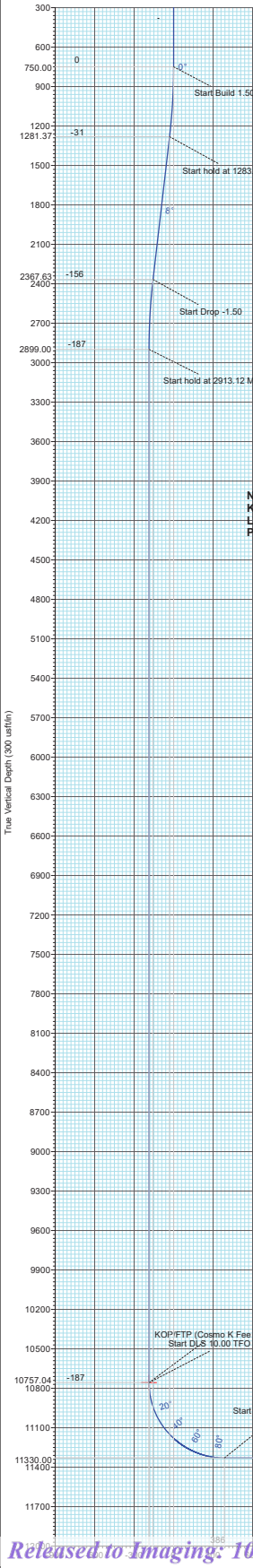


Total Magnetic Correction: 5.55°

PROJECT DETAILS: Lea County, NM (NAD 83)

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

Reference Datum: GE 3289' + KB 26' @ 3315.00usft

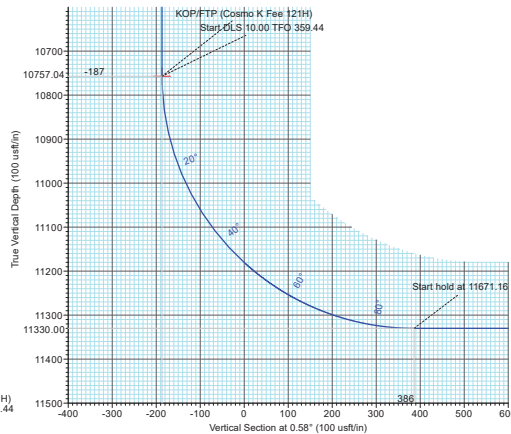


SHL					
RKB Elevation: GE 3289' + KB 26' @ 3315.00usft					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	428654.00	839505.00	32.1747769	-103.3696529

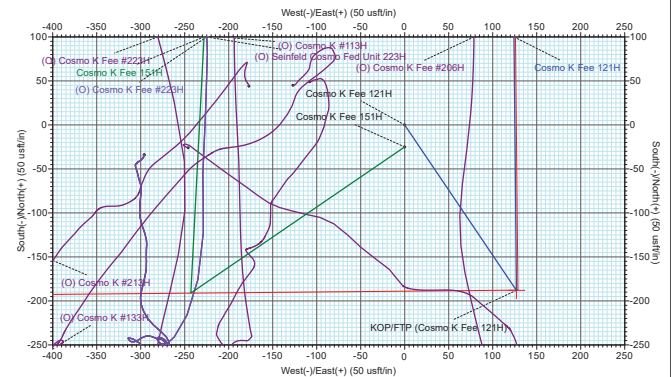
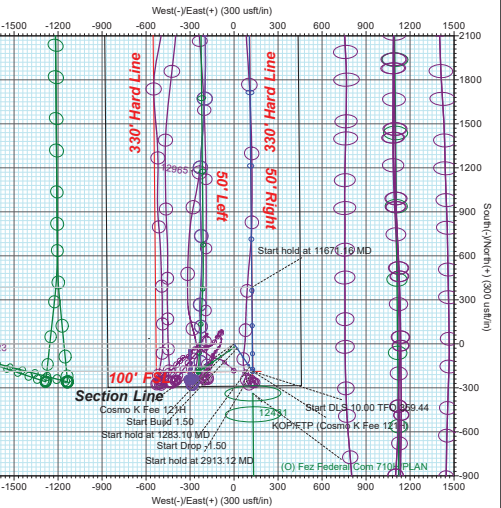
SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	
1283.10	8.00	145.96	1281.37	-30.78	20.79	1.50	145.96	-30.56	
2380.03	8.00	145.96	2367.63	-157.22	106.21	0.00	0.00	-156.14	
2913.12	0.00	0.00	2899.00	-188.00	127.00	1.50	180.00	-186.70	
10771.16	0.00	0.00	10757.04	-188.00	127.00	0.00	0.00	-186.70	
11671.16	90.00	359.44	11330.00	384.93	121.44	10.00	359.44	386.14	
17594.51	90.00	359.44	11330.00	6308.00	64.00	0.00	0.00	6308.32	PBHL (Cosmo K Fee 121H)

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
KOP/FTP (Cosmo K Fee 121H)	10757.04	-188.00	127.00	428466.00	839632.00	32.1742571	-103.3692480
LTP (Cosmo K Fee 121H)	11330.00	6213.00	65.00	434867.00	839570.00	32.1918520	-103.3692629
PBHL (Cosmo K Fee 121H)	11330.00	6308.00	64.00	434962.00	839569.00	32.1921131	-103.3692634



Do Not Cross SL



Civitas Resources

Lea County, NM (NAD 83)

Cosmo K Fee

Cosmo K Fee 121H

OH

Plan: Plan #1



Standard Plan Report

19 August, 2025

Total Report Version 1.80

COMPASS 5000.16 Build 97

ATTENTION

All annotation callouts related to distances are uncertified and are approximated footages using available software and measurement tools. They should not be mistaken as an official record, which can only be obtained via a certified land surveyor.

Total Directional Planned Survey Report



Company:	Civitas Resources	Local Co-ordinate Reference:	Well Cosmo K Fee 121H
Project:	Lea County, NM (NAD 83)	TVD Reference:	GE 3289' + KB 26' @ 3315.00usft
Site:	Cosmo K Fee	MD Reference:	GE 3289' + KB 26' @ 3315.00usft
Well:	Cosmo K Fee 121H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	.Total Directional Production DB

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

Site	Cosmo K Fee				
Site Position:		Northing:	428,654.00 usft	Latitude:	32.1747769
From:	Map	Easting:	839,505.00 usft	Longitude:	-103.3696529
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well	Cosmo K Fee 121H					
Well Position	+N-S	0.00 usft	Northing:	428,654.00 usft	Latitude:	32.1747769
	+E-W	0.00 usft	Easting:	839,505.00 usft	Longitude:	-103.3696529
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,289.00 usft
Grid Convergence:		0.51 °				

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2025	8/19/2025	6.07	59.60	47,104.60000000

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	0.58	

Survey Tool Program	Date	8/19/2025			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	17,594.51	Plan #1 (OH)	MWD+HRGM+SAG+FDIF OWSG MWD + HRGM + SAG + FDIR Correction		

Plan Summary										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,283.10	8.00	145.96	1,281.37	-30.78	20.79	1.50	1.50	0.00	145.96	
2,380.03	8.00	145.96	2,367.63	-157.22	106.21	0.00	0.00	0.00	0.00	
2,913.12	0.00	0.00	2,899.00	-188.00	127.00	1.50	-1.50	0.00	180.00	
10,771.16	0.00	0.00	10,757.04	-188.00	127.00	0.00	0.00	0.00	0.00	
11,671.16	90.00	359.44	11,330.00	384.93	121.44	10.00	10.00	-0.06	359.44	
17,594.51	90.00	359.44	11,330.00	6,308.00	64.00	0.00	0.00	0.00	0.00	PBHL (Cosmo K Fe

Total Directional Planned Survey Report



Company:	Civitas Resources	Local Co-ordinate Reference:	Well Cosmo K Fee 121H
Project:	Lea County, NM (NAD 83)	TVD Reference:	GE 3289' + KB 26' @ 3315.00usft
Site:	Cosmo K Fee	MD Reference:	GE 3289' + KB 26' @ 3315.00usft
Well:	Cosmo K Fee 121H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	.Total Directional Production DB

Planned Survey													
Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Map Coordinates Northing (usft)	Easting (usft)	Geo Coordinates Latitude (°)	Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	428,654.00	839,505.00	32.1747769	-103.3696529	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	428,654.00	839,505.00	32.1747769	-103.3696529	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	428,654.00	839,505.00	32.1747769	-103.3696529	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	428,654.00	839,505.00	32.1747769	-103.3696529	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	428,654.00	839,505.00	32.1747769	-103.3696529	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	428,654.00	839,505.00	32.1747769	-103.3696529	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	428,654.00	839,505.00	32.1747769	-103.3696529	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	428,654.00	839,505.00	32.1747769	-103.3696529	0.00	0.00	0.00	0.00
750.00	0.00	0.00	750.00	0.00	0.00	428,654.00	839,505.00	32.1747769	-103.3696529	0.00	0.00	0.00	0.00
800.00	0.75	145.96	800.00	-0.27	0.18	428,653.73	839,505.18	32.1747762	-103.3696523	-0.27	1.50	1.50	0.00
900.00	2.25	145.96	899.96	-2.44	1.65	428,651.56	839,506.65	32.1747702	-103.3696477	-2.42	1.50	1.50	0.00
1,000.00	3.75	145.96	999.82	-6.78	4.58	428,647.22	839,509.58	32.1747582	-103.3696383	-6.73	1.50	1.50	0.00
1,100.00	5.25	145.96	1,099.51	-13.28	8.97	428,640.72	839,513.97	32.1747402	-103.3696243	-13.19	1.50	1.50	0.00
1,200.00	6.75	145.96	1,198.96	-21.94	14.82	428,632.06	839,519.82	32.1747163	-103.3696057	-21.79	1.50	1.50	0.00
1,283.10	8.00	145.96	1,281.37	-30.78	20.79	428,623.22	839,525.79	32.1746918	-103.3695866	-30.56	1.50	1.50	0.00
1,300.00	8.00	145.96	1,298.11	-32.72	22.11	428,621.28	839,527.11	32.1746865	-103.3695824	-32.50	0.00	0.00	0.00
1,400.00	8.00	145.96	1,397.13	-44.25	29.89	428,609.75	839,534.89	32.1746546	-103.3695576	-43.95	0.00	0.00	0.00
1,500.00	8.00	145.96	1,496.16	-55.78	37.68	428,598.22	839,542.68	32.1746227	-103.3695328	-55.40	0.00	0.00	0.00
1,600.00	8.00	145.96	1,595.19	-67.31	45.47	428,586.69	839,550.47	32.1745908	-103.3695079	-66.84	0.00	0.00	0.00
1,700.00	8.00	145.96	1,694.22	-78.83	53.26	428,575.17	839,558.26	32.1745590	-103.3694831	-78.29	0.00	0.00	0.00
1,800.00	8.00	145.96	1,793.25	-90.36	61.04	428,563.64	839,566.04	32.1745271	-103.3694583	-89.74	0.00	0.00	0.00
1,900.00	8.00	145.96	1,892.27	-101.89	68.83	428,552.11	839,573.83	32.1744952	-103.3694334	-101.19	0.00	0.00	0.00
2,000.00	8.00	145.96	1,991.30	-113.42	76.62	428,540.58	839,581.62	32.1744633	-103.3694086	-112.64	0.00	0.00	0.00
2,100.00	8.00	145.96	2,090.33	-124.94	84.40	428,529.06	839,589.40	32.1744314	-103.3693838	-124.08	0.00	0.00	0.00
2,200.00	8.00	145.96	2,189.36	-136.47	92.19	428,517.53	839,597.19	32.1743996	-103.3693589	-135.53	0.00	0.00	0.00
2,300.00	8.00	145.96	2,288.38	-148.00	99.98	428,506.00	839,604.98	32.1743677	-103.3693341	-146.98	0.00	0.00	0.00
2,380.03	8.00	145.96	2,367.63	-157.22	106.21	428,496.78	839,611.21	32.1743422	-103.3693142	-156.14	0.00	0.00	0.00
2,400.00	7.70	145.96	2,387.42	-159.48	107.74	428,494.52	839,612.74	32.1743359	-103.3693094	-158.38	1.50	-1.50	0.00
2,500.00	6.20	145.96	2,486.68	-169.51	114.51	428,484.49	839,619.51	32.1743082	-103.3692878	-168.34	1.50	-1.50	0.00
2,600.00	4.70	145.96	2,586.23	-177.37	119.82	428,476.63	839,624.82	32.1742865	-103.3692708	-176.15	1.50	-1.50	0.00
2,700.00	3.20	145.96	2,685.99	-183.07	123.67	428,470.93	839,628.67	32.1742707	-103.3692586	-181.81	1.50	-1.50	0.00
2,800.00	1.70	145.96	2,785.89	-186.61	126.06	428,467.39	839,631.06	32.1742609	-103.3692509	-185.33	1.50	-1.50	0.00
2,900.00	0.20	145.96	2,885.88	-187.98	126.99	428,466.02	839,631.99	32.1742571	-103.3692480	-186.69	1.50	-1.50	0.00
2,913.12	0.00	0.00	2,899.00	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	1.50	-1.50	0.00
3,000.00	0.00	0.00	2,985.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
3,100.00	0.00	0.00	3,085.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
3,200.00	0.00	0.00	3,185.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00

Total Directional Planned Survey Report



Company:	Civitas Resources	Local Co-ordinate Reference:	Well Cosmo K Fee 121H
Project:	Lea County, NM (NAD 83)	TVD Reference:	GE 3289' + KB 26' @ 3315.00usft
Site:	Cosmo K Fee	MD Reference:	GE 3289' + KB 26' @ 3315.00usft
Well:	Cosmo K Fee 121H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Map Coordinates Northing (usft)	Easting (usft)	Geo Coordinates Latitude (°)	Longitude (°)	Vertical Dogleg Section (usft)	Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,300.00	0.00	0.00	3,285.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
3,400.00	0.00	0.00	3,385.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
3,500.00	0.00	0.00	3,485.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
3,600.00	0.00	0.00	3,585.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
3,700.00	0.00	0.00	3,685.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
3,800.00	0.00	0.00	3,785.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
3,900.00	0.00	0.00	3,885.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
4,000.00	0.00	0.00	3,985.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
4,100.00	0.00	0.00	4,085.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
4,200.00	0.00	0.00	4,185.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
4,300.00	0.00	0.00	4,285.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
4,400.00	0.00	0.00	4,385.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
4,500.00	0.00	0.00	4,485.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
4,600.00	0.00	0.00	4,585.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
4,700.00	0.00	0.00	4,685.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
4,800.00	0.00	0.00	4,785.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
4,900.00	0.00	0.00	4,885.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
5,000.00	0.00	0.00	4,985.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
5,100.00	0.00	0.00	5,085.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
5,200.00	0.00	0.00	5,185.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
5,300.00	0.00	0.00	5,285.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
5,400.00	0.00	0.00	5,385.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
5,500.00	0.00	0.00	5,485.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
5,600.00	0.00	0.00	5,585.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
5,700.00	0.00	0.00	5,685.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
5,800.00	0.00	0.00	5,785.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
5,900.00	0.00	0.00	5,885.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
6,000.00	0.00	0.00	5,985.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
6,100.00	0.00	0.00	6,085.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
6,200.00	0.00	0.00	6,185.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
6,300.00	0.00	0.00	6,285.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
6,400.00	0.00	0.00	6,385.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
6,500.00	0.00	0.00	6,485.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
6,600.00	0.00	0.00	6,585.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
6,700.00	0.00	0.00	6,685.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
6,800.00	0.00	0.00	6,785.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
6,900.00	0.00	0.00	6,885.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
7,000.00	0.00	0.00	6,985.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00

Total Directional Planned Survey Report



Company:	Civitas Resources	Local Co-ordinate Reference:	Well Cosmo K Fee 121H
Project:	Lea County, NM (NAD 83)	TVD Reference:	GE 3289' + KB 26' @ 3315.00usft
Site:	Cosmo K Fee	MD Reference:	GE 3289' + KB 26' @ 3315.00usft
Well:	Cosmo K Fee 121H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Map Coordinates Northing (usft)	Easting (usft)	Geo Coordinates Latitude (°)	Longitude (°)	Vertical Dogleg Section (usft)	Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,100.00	0.00	0.00	7,085.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
7,200.00	0.00	0.00	7,185.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
7,300.00	0.00	0.00	7,285.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
7,400.00	0.00	0.00	7,385.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
7,500.00	0.00	0.00	7,485.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
7,600.00	0.00	0.00	7,585.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
7,700.00	0.00	0.00	7,685.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
7,800.00	0.00	0.00	7,785.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
7,900.00	0.00	0.00	7,885.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
8,000.00	0.00	0.00	7,985.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
8,100.00	0.00	0.00	8,085.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
8,200.00	0.00	0.00	8,185.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
8,300.00	0.00	0.00	8,285.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
8,400.00	0.00	0.00	8,385.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
8,500.00	0.00	0.00	8,485.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
8,600.00	0.00	0.00	8,585.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
8,700.00	0.00	0.00	8,685.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
8,800.00	0.00	0.00	8,785.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
8,900.00	0.00	0.00	8,885.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
9,000.00	0.00	0.00	8,985.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
9,100.00	0.00	0.00	9,085.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
9,200.00	0.00	0.00	9,185.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
9,300.00	0.00	0.00	9,285.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
9,400.00	0.00	0.00	9,385.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
9,500.00	0.00	0.00	9,485.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
9,600.00	0.00	0.00	9,585.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
9,700.00	0.00	0.00	9,685.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
9,800.00	0.00	0.00	9,785.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
9,900.00	0.00	0.00	9,885.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
10,000.00	0.00	0.00	9,985.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
10,100.00	0.00	0.00	10,085.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
10,200.00	0.00	0.00	10,185.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
10,300.00	0.00	0.00	10,285.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
10,400.00	0.00	0.00	10,385.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
10,500.00	0.00	0.00	10,485.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
10,600.00	0.00	0.00	10,585.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
10,700.00	0.00	0.00	10,685.88	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00

Total Directional Planned Survey Report



Company:	Civitas Resources	Local Co-ordinate Reference:	Well Cosmo K Fee 121H
Project:	Lea County, NM (NAD 83)	TVD Reference:	GE 3289' + KB 26' @ 3315.00usft
Site:	Cosmo K Fee	MD Reference:	GE 3289' + KB 26' @ 3315.00usft
Well:	Cosmo K Fee 121H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Map Coordinates Northing (usft)	Easting (usft)	Geo Coordinates Latitude (°)	Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,771.16	0.00	0.00	10,757.04	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480	-186.70	0.00	0.00	0.00
KOP/FTP (Cosmo K Fee 121H)													
10,800.00	2.88	359.44	10,785.86	-187.27	126.99	428,466.73	839,631.99	32.1742591	-103.3692480	-185.98	10.00	10.00	0.00
10,850.00	7.88	359.44	10,835.63	-182.59	126.95	428,471.41	839,631.95	32.1742720	-103.3692480	-181.29	10.00	10.00	0.00
10,900.00	12.88	359.44	10,884.79	-173.58	126.86	428,480.42	839,631.86	32.1742967	-103.3692480	-172.28	10.00	10.00	0.00
10,950.00	17.88	359.44	10,932.99	-160.32	126.73	428,493.68	839,631.73	32.1743332	-103.3692480	-159.03	10.00	10.00	0.00
11,000.00	22.88	359.44	10,979.84	-142.91	126.56	428,511.09	839,631.56	32.1743810	-103.3692481	-141.62	10.00	10.00	0.00
11,050.00	27.88	359.44	11,025.00	-121.48	126.35	428,532.52	839,631.35	32.1744399	-103.3692481	-120.20	10.00	10.00	0.00
11,100.00	32.88	359.44	11,068.12	-96.20	126.11	428,557.80	839,631.11	32.1745094	-103.3692482	-94.92	10.00	10.00	0.00
11,150.00	37.88	359.44	11,108.87	-67.26	125.83	428,586.74	839,630.83	32.1745890	-103.3692482	-65.98	10.00	10.00	0.00
11,200.00	42.88	359.44	11,146.94	-34.88	125.51	428,619.12	839,630.51	32.1746780	-103.3692483	-33.60	10.00	10.00	0.00
11,250.00	47.88	359.44	11,182.05	0.70	125.17	428,654.70	839,630.17	32.1747758	-103.3692484	1.97	10.00	10.00	0.00
11,300.00	52.88	359.44	11,213.92	39.20	124.80	428,693.20	839,629.80	32.1748816	-103.3692485	40.47	10.00	10.00	0.00
11,350.00	57.88	359.44	11,242.32	80.34	124.40	428,734.34	839,629.40	32.1749947	-103.3692486	81.59	10.00	10.00	0.00
11,400.00	62.88	359.44	11,267.02	123.79	123.98	428,777.79	839,628.98	32.1751141	-103.3692487	125.04	10.00	10.00	0.00
11,450.00	67.88	359.44	11,287.84	169.23	123.54	428,823.23	839,628.54	32.1752390	-103.3692488	170.47	10.00	10.00	0.00
11,500.00	72.88	359.44	11,304.62	216.31	123.08	428,870.31	839,628.08	32.1753684	-103.3692489	217.54	10.00	10.00	0.00
11,550.00	77.88	359.44	11,317.23	264.67	122.61	428,918.67	839,627.61	32.1755014	-103.3692490	265.90	10.00	10.00	0.00
11,600.00	82.88	359.44	11,325.58	313.95	122.13	428,967.95	839,627.13	32.1756368	-103.3692491	315.17	10.00	10.00	0.00
11,650.00	87.88	359.44	11,329.61	363.77	121.65	429,017.77	839,626.65	32.1757738	-103.3692493	364.99	10.00	10.00	0.00
11,671.16	90.00	359.44	11,330.00	384.93	121.44	429,038.93	839,626.44	32.1758319	-103.3692493	386.14	10.00	10.00	0.00
11,700.00	90.00	359.44	11,330.00	413.77	121.16	429,067.77	839,626.16	32.1759112	-103.3692494	414.97	0.00	0.00	0.00
11,800.00	90.00	359.44	11,330.00	513.76	120.19	429,167.76	839,625.19	32.1761861	-103.3692496	514.95	0.00	0.00	0.00
11,900.00	90.00	359.44	11,330.00	613.76	119.22	429,267.76	839,624.22	32.1764609	-103.3692499	614.93	0.00	0.00	0.00
12,000.00	90.00	359.44	11,330.00	713.75	118.25	429,367.75	839,623.25	32.1767358	-103.3692501	714.91	0.00	0.00	0.00
12,100.00	90.00	359.44	11,330.00	813.75	117.28	429,467.75	839,622.28	32.1770107	-103.3692503	814.89	0.00	0.00	0.00
12,200.00	90.00	359.44	11,330.00	913.74	116.32	429,567.74	839,621.31	32.1772855	-103.3692506	914.87	0.00	0.00	0.00
12,300.00	90.00	359.44	11,330.00	1,013.74	115.35	429,667.74	839,620.35	32.1775604	-103.3692508	1,014.85	0.00	0.00	0.00
12,400.00	90.00	359.44	11,330.00	1,113.73	114.38	429,767.73	839,619.38	32.1778353	-103.3692511	1,114.83	0.00	0.00	0.00
12,500.00	90.00	359.44	11,330.00	1,213.73	113.41	429,867.73	839,618.41	32.1781101	-103.3692513	1,214.81	0.00	0.00	0.00
12,600.00	90.00	359.44	11,330.00	1,313.72	112.44	429,967.72	839,617.44	32.1783850	-103.3692515	1,314.79	0.00	0.00	0.00
12,700.00	90.00	359.44	11,330.00	1,413.72	111.47	430,067.72	839,616.47	32.1786599	-103.3692518	1,414.77	0.00	0.00	0.00
12,800.00	90.00	359.44	11,330.00	1,513.71	110.50	430,167.71	839,615.50	32.1789347	-103.3692520	1,514.76	0.00	0.00	0.00
12,900.00	90.00	359.44	11,330.00	1,613.71	109.53	430,267.71	839,614.53	32.1792096	-103.3692522	1,614.74	0.00	0.00	0.00
13,000.00	90.00	359.44	11,330.00	1,713.70	108.56	430,367.70	839,613.56	32.1794844	-103.3692525	1,714.72	0.00	0.00	0.00
13,100.00	90.00	359.44	11,330.00	1,813.70	107.59	430,467.70	839,612.59	32.1797593	-103.3692527	1,814.70	0.00	0.00	0.00
13,200.00	90.00	359.44	11,330.00	1,913.70	106.62	430,567.70	839,611.62	32.1800342	-103.3692530	1,914.68	0.00	0.00	0.00
13,300.00	90.00	359.44	11,330.00	2,013.69	105.65	430,667.69	839,610.65	32.1803090	-103.3692532	2,014.66	0.00	0.00	0.00

Total Directional Planned Survey Report



Company:	Civitas Resources	Local Co-ordinate Reference:	Well Cosmo K Fee 121H
Project:	Lea County, NM (NAD 83)	TVD Reference:	GE 3289' + KB 26' @ 3315.00usft
Site:	Cosmo K Fee	MD Reference:	GE 3289' + KB 26' @ 3315.00usft
Well:	Cosmo K Fee 121H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Map Coordinates Northing (usft)	Easting (usft)	Geo Coordinates Latitude (°)	Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,400.00	90.00	359.44	11,330.00	2,113.69	104.68	430,767.69	839,609.68	32.1805839	-103.3692534	2,114.64	0.00	0.00	0.00
13,500.00	90.00	359.44	11,330.00	2,213.68	103.71	430,867.68	839,608.71	32.1808588	-103.3692537	2,214.62	0.00	0.00	0.00
13,600.00	90.00	359.44	11,330.00	2,313.68	102.74	430,967.68	839,607.74	32.1811336	-103.3692539	2,314.60	0.00	0.00	0.00
13,700.00	90.00	359.44	11,330.00	2,413.67	101.77	431,067.67	839,606.77	32.1814085	-103.3692541	2,414.58	0.00	0.00	0.00
13,800.00	90.00	359.44	11,330.00	2,513.67	100.80	431,167.67	839,605.80	32.1816834	-103.3692544	2,514.56	0.00	0.00	0.00
13,900.00	90.00	359.44	11,330.00	2,613.66	99.83	431,267.66	839,604.83	32.1819582	-103.3692546	2,614.54	0.00	0.00	0.00
14,000.00	90.00	359.44	11,330.00	2,713.66	98.86	431,367.66	839,603.86	32.1822331	-103.3692549	2,714.52	0.00	0.00	0.00
14,100.00	90.00	359.44	11,330.00	2,813.65	97.89	431,467.65	839,602.89	32.1825080	-103.3692551	2,814.50	0.00	0.00	0.00
14,200.00	90.00	359.44	11,330.00	2,913.65	96.92	431,567.65	839,601.92	32.1827828	-103.3692553	2,914.48	0.00	0.00	0.00
14,300.00	90.00	359.44	11,330.00	3,013.64	95.95	431,667.64	839,600.95	32.1830577	-103.3692556	3,014.46	0.00	0.00	0.00
14,400.00	90.00	359.44	11,330.00	3,113.64	94.98	431,767.64	839,599.98	32.1833326	-103.3692558	3,114.44	0.00	0.00	0.00
14,500.00	90.00	359.44	11,330.00	3,213.63	94.01	431,867.63	839,599.01	32.1836074	-103.3692560	3,214.42	0.00	0.00	0.00
14,600.00	90.00	359.44	11,330.00	3,313.63	93.04	431,967.63	839,598.04	32.1838823	-103.3692563	3,314.40	0.00	0.00	0.00
14,700.00	90.00	359.44	11,330.00	3,413.62	92.07	432,067.62	839,597.07	32.1841571	-103.3692565	3,414.38	0.00	0.00	0.00
14,800.00	90.00	359.44	11,330.00	3,513.62	91.10	432,167.62	839,596.10	32.1844320	-103.3692568	3,514.36	0.00	0.00	0.00
14,900.00	90.00	359.44	11,330.00	3,613.62	90.13	432,267.62	839,595.13	32.1847069	-103.3692570	3,614.34	0.00	0.00	0.00
15,000.00	90.00	359.44	11,330.00	3,713.61	89.16	432,367.61	839,594.16	32.1849817	-103.3692572	3,714.32	0.00	0.00	0.00
15,100.00	90.00	359.44	11,330.00	3,813.61	88.19	432,467.61	839,593.19	32.1852566	-103.3692575	3,814.30	0.00	0.00	0.00
15,200.00	90.00	359.44	11,330.00	3,913.60	87.22	432,567.60	839,592.22	32.1855315	-103.3692577	3,914.28	0.00	0.00	0.00
15,300.00	90.00	359.44	11,330.00	4,013.60	86.25	432,667.60	839,591.25	32.1858063	-103.3692579	4,014.26	0.00	0.00	0.00
15,400.00	90.00	359.44	11,330.00	4,113.59	85.28	432,767.59	839,590.28	32.1860812	-103.3692582	4,114.24	0.00	0.00	0.00
15,500.00	90.00	359.44	11,330.00	4,213.59	84.31	432,867.59	839,589.31	32.1863561	-103.3692584	4,214.22	0.00	0.00	0.00
15,600.00	90.00	359.44	11,330.00	4,313.58	83.34	432,967.58	839,588.34	32.1866309	-103.3692587	4,314.21	0.00	0.00	0.00
15,700.00	90.00	359.44	11,330.00	4,413.58	82.37	433,067.58	839,587.37	32.1869058	-103.3692589	4,414.19	0.00	0.00	0.00
15,800.00	90.00	359.44	11,330.00	4,513.57	81.40	433,167.57	839,586.40	32.1871807	-103.3692591	4,514.17	0.00	0.00	0.00
15,900.00	90.00	359.44	11,330.00	4,613.57	80.43	433,267.57	839,585.43	32.1874555	-103.3692594	4,614.15	0.00	0.00	0.00
16,000.00	90.00	359.44	11,330.00	4,713.56	79.46	433,367.56	839,584.46	32.1877304	-103.3692596	4,714.13	0.00	0.00	0.00
16,100.00	90.00	359.44	11,330.00	4,813.56	78.49	433,467.56	839,583.49	32.1880052	-103.3692598	4,814.11	0.00	0.00	0.00
16,200.00	90.00	359.44	11,330.00	4,913.55	77.52	433,567.55	839,582.52	32.1882801	-103.3692601	4,914.09	0.00	0.00	0.00
16,300.00	90.00	359.44	11,330.00	5,013.55	76.55	433,667.55	839,581.55	32.1885550	-103.3692603	5,014.07	0.00	0.00	0.00
16,400.00	90.00	359.44	11,330.00	5,113.54	75.58	433,767.54	839,580.58	32.1888298	-103.3692606	5,114.05	0.00	0.00	0.00
16,500.00	90.00	359.44	11,330.00	5,213.54	74.61	433,867.54	839,579.61	32.1891047	-103.3692608	5,214.03	0.00	0.00	0.00
16,600.00	90.00	359.44	11,330.00	5,313.54	73.64	433,967.54	839,578.64	32.1893796	-103.3692610	5,314.01	0.00	0.00	0.00
16,700.00	90.00	359.44	11,330.00	5,413.53	72.67	434,067.53	839,577.67	32.1896544	-103.3692613	5,413.99	0.00	0.00	0.00
16,800.00	90.00	359.44	11,330.00	5,513.53	71.71	434,167.53	839,576.71	32.1899293	-103.3692615	5,513.97	0.00	0.00	0.00
16,900.00	90.00	359.44	11,330.00	5,613.52	70.74	434,267.52	839,575.74	32.1902042	-103.3692617	5,613.95	0.00	0.00	0.00
17,000.00	90.00	359.44	11,330.00	5,713.52	69.77	434,367.52	839,574.77	32.1904790	-103.3692620	5,713.93	0.00	0.00	0.00

Total Directional Planned Survey Report



Company:	Civitas Resources	Local Co-ordinate Reference:	Well Cosmo K Fee 121H
Project:	Lea County, NM (NAD 83)	TVD Reference:	GE 3289' + KB 26' @ 3315.00usft
Site:	Cosmo K Fee	MD Reference:	GE 3289' + KB 26' @ 3315.00usft
Well:	Cosmo K Fee 121H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Map Coordinates Northing (usft)	Easting (usft)	Geo Coordinates Latitude (°)	Longituge (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,100.00	90.00	359.44	11,330.00	5,813.51	68.80	434,467.51	839,573.80	32.1907539	-103.3692622	5,813.91	0.00	0.00	0.00
17,200.00	90.00	359.44	11,330.00	5,913.51	67.83	434,567.51	839,572.83	32.1910287	-103.3692625	5,913.89	0.00	0.00	0.00
17,300.00	90.00	359.44	11,330.00	6,013.50	66.86	434,667.50	839,571.86	32.1913036	-103.3692627	6,013.87	0.00	0.00	0.00
17,400.00	90.00	359.44	11,330.00	6,113.50	65.89	434,767.50	839,570.89	32.1915785	-103.3692629	6,113.85	0.00	0.00	0.00
17,499.51	90.00	359.44	11,330.00	6,213.00	64.92	434,867.00	839,569.92	32.1918520	-103.3692632	6,213.34	0.00	0.00	0.00
LTP (Cosmo K Fee 121H)													
17,500.00	90.00	359.44	11,330.00	6,213.49	64.92	434,867.49	839,569.92	32.1918533	-103.3692632	6,213.83	0.00	0.00	0.00
17,594.51	90.00	359.44	11,330.00	6,308.00	64.00	434,962.00	839,569.00	32.1921131	-103.3692634	6,308.32	0.00	0.00	0.00
PBHL (Cosmo K Fee 121H)													

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
KOP/FTP (Cosmo K F - plan hits target center - Point	0.00	0.01	10,757.04	-188.00	127.00	428,466.00	839,632.00	32.1742571	-103.3692480
LTP (Cosmo K Fee 12 - plan misses target center by 0.08usft at 17499.51usft MD (11330.00 TVD, 6213.00 N, 64.92 E) - Point	0.00	0.00	11,330.00	6,213.00	65.00	434,867.00	839,570.00	32.1918520	-103.3692629
PBHL (Cosmo K Fee - plan hits target center - Point	0.00	0.00	11,330.00	6,308.00	64.00	434,962.00	839,569.00	32.1921131	-103.3692634

Checked By: _____ Approved By: _____ Date: _____

Hydrogen Sulfide Drilling

Operations Plan

Civitas Resources

1 H2S safety instructions to the following:

- Characteristics of H2S
- Physical effects and hazards
- Principal and operation of H2S detectors, warning system and briefing areas
- Evacuation procedures, routes and first aid
- Proper use of safety equipment & life support systems
- Essential personnel meeting medical evaluation criteria will receive additional training on the proper use of 30min pressure demand air packs

2 H2S Detection and Alarm Systems:

- H2S sensor/detectors to be located on the drilling rig floor, in the base of the sub structure / cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may be placed as deemed necessary
- An audio alarm system will be installed on the derrick floor and in the doghouse

3 Windssocks and / Wind Streamers:

- Windssocks at mud pit area should be high enough to be visible
- Windssock on the rig floor and / top of doghouse should be high enough to be visible

4 Condition Flags and Signs:

- Warning sign on access road to location
- Flags to be displayed on sign at entrance to location
 - Green Flag – Normal Safe Operation Condition
 - Yellow Flag – Potential Pressure and Danger
 - Red Flag – Danger (H2S present in dangerous concentrations) Only H2S trained personnel admitted on location

5 Well Control Equipment:

- See Drilling Operations Plan Schematics

6 Communication:

- While working under masks chalkboards will be used for communications
- Hand signals will be used where chalk board is inappropriate
- Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

7 Drilling Stem Testing:

- No DST cores are planned at this time

8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubulars good and other mechanical equipment

9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary

11 Emergency Contacts

Emergency Contacts		
Carlsbad Police Department	575.887.7551	911
Carlsbad Medical Center	575.887.4100	911
Eddy County Fire Service	575.628.5450	911
Eddy County Sherriff	575.887.7551	911
Lea County Fire Service	575.391.2983	911
Lea County Sherriff	575.396.3611	911
Jal Police Department	575.395.2121	911
Jal Fire Department	575.395.2221	911
Tap Rock - Doug Sproul - Drilling	303-653-3518	

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

Submit Electronically
Via E-permitting

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: Civitas Permian Operating, LLC **OGRID:** 332195 **Date:** 09 / 15 / 2025

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
Cosmo K Fee 151H	TBD	G-33-24S-35E	2377 FNL, 1775 FEL	675	1600	2200
Cosmo K Fee 121H	TBD	G-33-24S-35E	2352' FNL, 1775' FEL	675	1600	2200

IV. Central Delivery Point Name: Cosmo 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
Cosmo K Fee 151H	TBD	01/01/2026	01/17/2026	02/15/2026	02/21/2026	03/15/2026
Cosmo K Fee 121H	TBD	01/02/2026	01/26/2026	02/15/2026	02/21/2026	03/15/2026

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: 
Printed Name: Ally Ota
Title: Permitting Project Manager
E-mail Address: aota@fieldinghillllc.com
Date: 9/15/2025
Phone: 435-671-7477
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



Civitas Permian Operating Natural Gas Management Plan

VI. Separation Equipment:

Each surface facility design includes the following process equipment: Multiphase test measurement per upstream pad, 3-phase separators, a sales gas scrubber, heater treaters, a VRU compressor, multiple water and oil tanks, as well as flare knockouts (HP & LP), and flares (HP & LP - combined). All process vessels will be sized to separate oil, water, gas based upon typical/historical & predicted well performance. Each process vessel will be fitted with an appropriately sized PSV as per ASME code requirements to mitigate vessel rupture and loss of containment. Additionally, the process vessels will be fitted with pressure transmitters tied to the facility control system which will allow operations to monitor pressures and when necessary, shut in the facility to avoid vessel over-pressure and the potential vent of natural gas. Natural gas will preferentially be sold to pipeline, and only during upset/emergency conditions will gas be directed to the flare system. Aboveground steel oil tanks & water tanks will be fitted with 32 oz thief hatches as well as PRVs to protect the tanks from rupture/collapse. Additionally, the tank vapor outlets will preferentially be directed to the VRU and the sales gas pipeline. Only during process upsets/emergency conditions will tank vapors be directed to the LP flare system.

VII. Operational Practices:

- During drilling operations, gas meters will be installed at the shakers and Volume Totalizers will be installed on the pits. In the event that elevated gas levels, or a pit gain are observed, returns will be diverted to a gas buster. Gas coming off the gas buster will be combusted at the flare stack. A 10' or taller flare will be located at least 100' from the SHL.
- During completions operations, including stimulation and frac plug drill out operations, hydrocarbon production to surface is minimized. When gas production does occur, gas will be combusted at a flare stack. A 10' or taller flare will be located at least 100' from the SHL.
- During production operations, all process vessels (separators, heater treaters, tanks) will recompress (where necessary) and route gas outlets into the natural gas gathering pipeline. Gas will preferentially be routed to natural gas gathering pipeline and the flare system will be used only during emergencies, malfunction, or if the gas does not meet pipeline specifications. In the event of flaring off-specification gas, operations will pull gas samples twice a week and will also route gas back to pipeline as soon as the gas meets specification. Exceptions to this will include only those qualified emergencies as mentioned in the BLM Waste Prevention Rule.



- To comply with state performance standards, separation and storage equipment will be designed to handle the maximum anticipated throughput and pressure to minimize waste and reduce the likelihood of venting gas to atmosphere. Additionally, each storage tank (Oil & Water) will be fitted with a level transmitter to facilitate gauging of the tank without opening of the thief hatch. Any gas collected through the tank vent system is expected to be recompressed and routed to sales. However, in the event of an emergency, the tank vapor system will be designed to combust the gas using a flare stack fitted with a continuous or automatic ignitor. The flare stack will be properly anchored and will be located a minimum of 100 feet from the well and storage tanks. Operators will conduct weekly AVO inspections. These AVO inspection records will be stored for the required 5-year period and will be made available upon Division request.

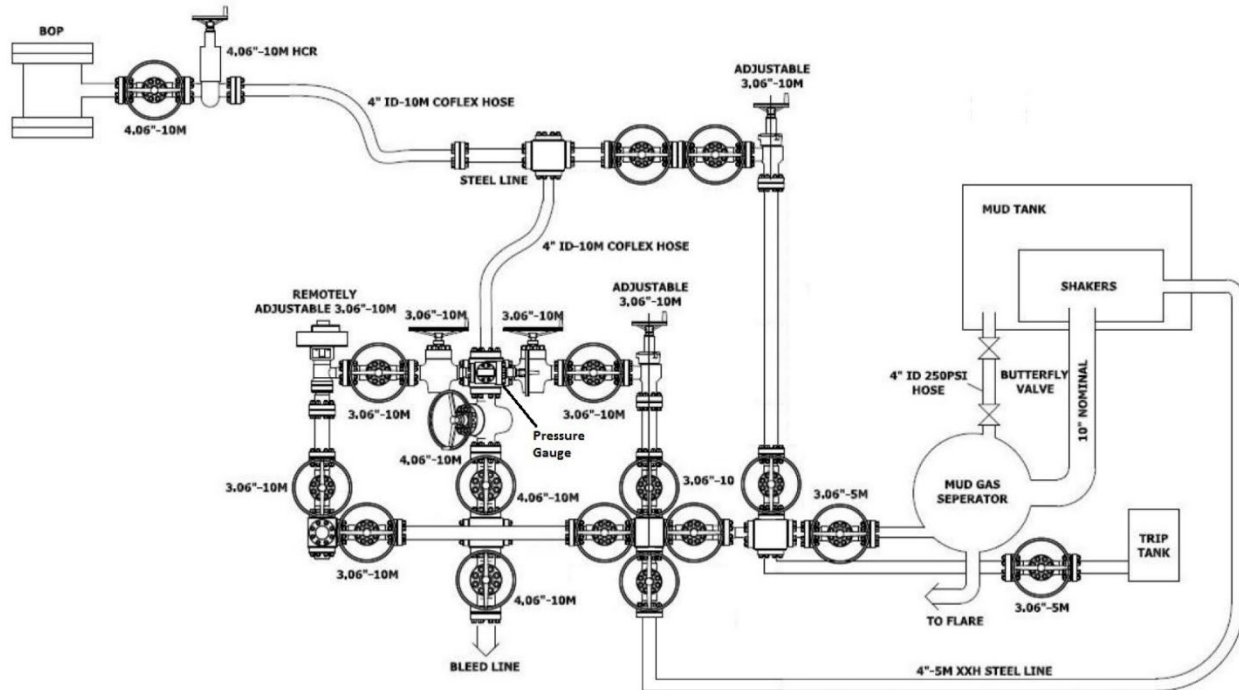
VIII. Best Management Practices:

When performing routine or preventive maintenance on a vessel or tank, initially all inlet valves are closed, and the vessel or tank is allowed to depressurize through the normal outlet connections to gas sales and/or liquid tanks. Once the vessel or tank is depressurized to lowest acceptable sales outlet pressure, usually around 20 psig, a temporary low-pressure flowline is connected from the vessel or tank to the Vapor Recovery Unit (VRU) for further pressure reduction. Once depressurized to less than 1-2 psig, the remaining natural gas in the vessel or tank is vented to atmosphere through a controlled pressure relief valve. Once the vessel or tank is depressurized to atmospheric pressure, the vessel or tank can be safely opened, and maintenance performed.

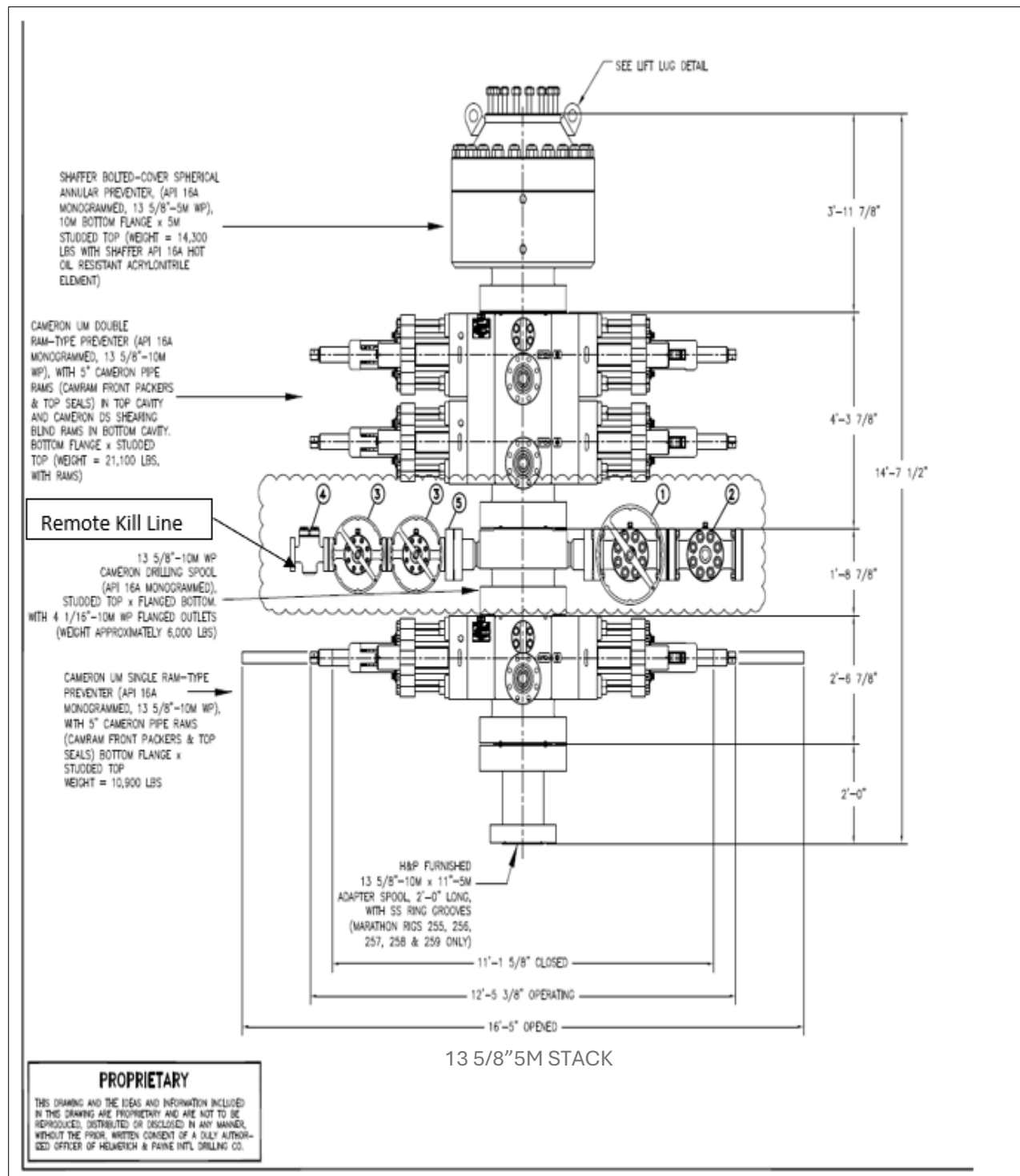
- For surface casing, no change to cement procedures to offline cement surface casing is anticipated.
- For intermediate casing, during the drilling of the 10 5/8" hole section (all intermediate strings will be TD'd above the WCA top), hole conditions will be monitored and addressed to ensure for a successful casing run. In the event hole conditions change after running casing and/or the well is not in a static state, Civitas Resources can elect to pump the cement job online.
- Equipment for the offline cement job will include a tested/charted 5M working pressure dual manifold cement head system will be used with a standard offline cement tool that is packed off and tested through a port between the upper valve and packoff assembly (diagram below). Returns from the manifold will be taken to an auxiliary mud-gas separator during cement job. The operational scope is described in the following steps: the casing will be landed on the mandrel, pull tested, packoff installed and tested to 80% of collapse of casing on the top and bottom seals, nipple down BOP and install offline cement tool/manifold. The offline cement tool screws into the top of the packoff assembly. During the cement job, all returns will be taken through the A-Section valve (flanged). An example diagram of the 8-5/8" tool is shown below:

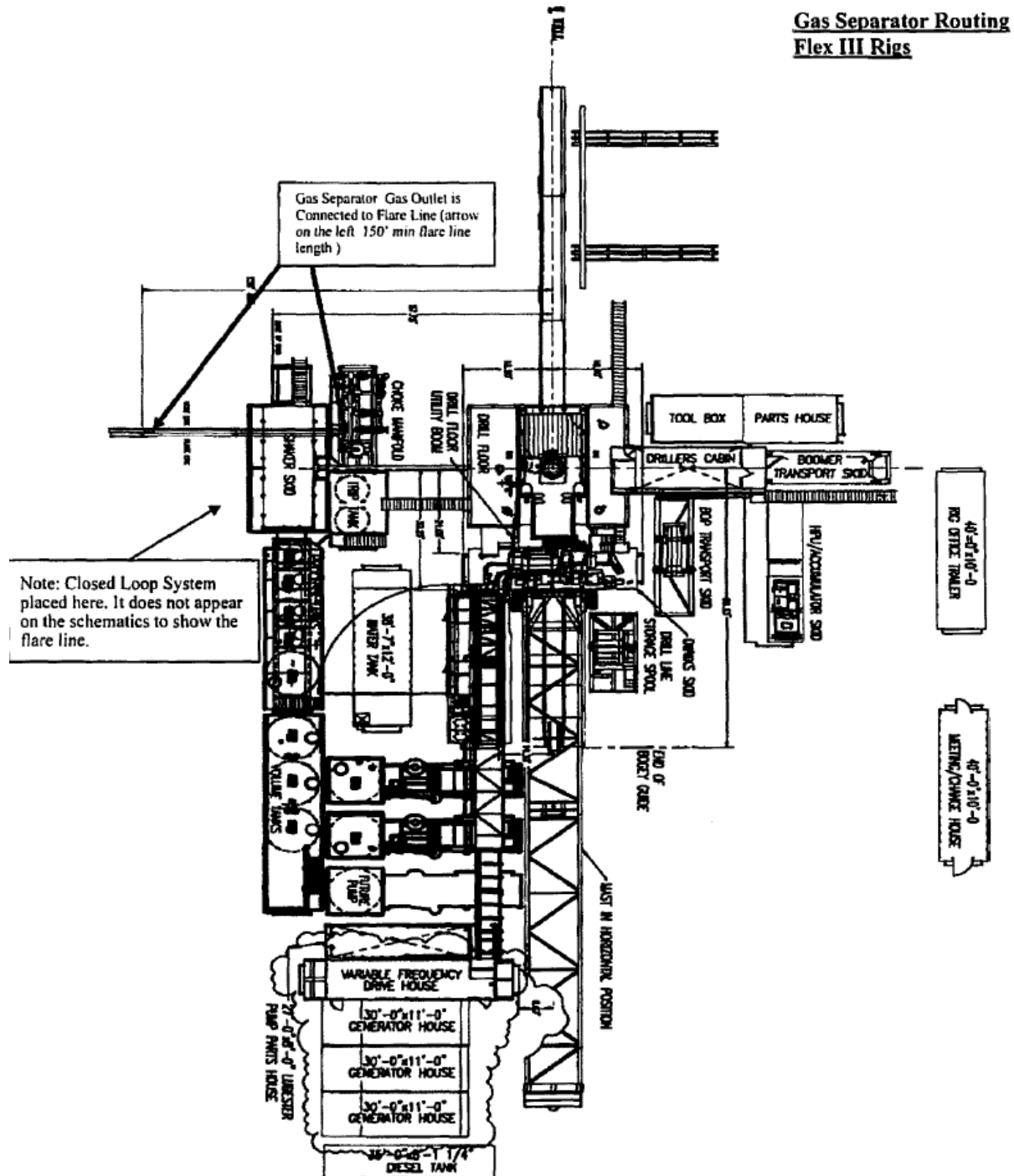


10M Choke Layout



5,000 psi BOP Stack





Multi-bowl Wellhead Design – 5M

